



**HANSA FLEX**

Hose Technology

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## Hose Replacement Service – 24h hour rapid response

Our 280 service vans from the hydraulic emergency service are always just a call away. Whether on the construction site, during the harvest or in industrial applications: in case of a machine failure the job is carried out on site – and around the clock.

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## Industrial Service – maintain and optimise

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[www.hansa-flex.com/en/industrial\\_service](http://www.hansa-flex.com/en/industrial_service)



## Power Unit Construction – engineering from the specialist

Units are the heart of any hydraulic system. In order to produce a state of the art power unit a high degree of engineering skill is required. The HANSA-FLEX power unit construction offers all services as a single source: from planning, design to installation and commissioning at the customer site.

[www.hansa-flex.com/en/unit\\_manufacture](http://www.hansa-flex.com/en/unit_manufacture)



## Online Shop – 24/7 convenient shopping

In our online shop you will find the same variety and quality of products that our customers have been used to for over 50 years: from hydraulic hoses and hose fittings to couplings, ball valves and cylinders – “everything from a single source.”

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## X-CODE – hose management

Our customer portal My.HANSA-FLEX offers the perfect solution for preventative maintenance. Users can see the technical data of a hose line at a glance: Manufacturing date, period of use, proposed replacement date, as well as machine and location. Thus, inspection and maintenance intervals can be planned well ahead.

[www.hansa-flex.com/en/hose\\_line\\_management](http://www.hansa-flex.com/en/hose_line_management)









## HANSA-FLEX – always close to our customers

Through our tight-knit network of branches we are always close to our customers. At each of our 400 locations we offer the complete range of hydraulics: from the standard replacement of a hose line to powerful hydraulic cylinders – personal, fast and reliable.

[www.hansa-flex.com/en/subsidiaries](http://www.hansa-flex.com/en/subsidiaries)

# Catalogue 1: Hose Technology

	Technical information Page 16	T
	Hoses Page 32	1
	Hose fittings Page 116	2
	Couplings Page 442	3
	Measuring equipment Page 650	4
	Subject index, index Page 678	I

# 1. Hoses

## Hydraulics



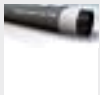
Braided hoses  
Page 34



Spiral hoses  
Page 46



Medium pressure hoses  
Page 54



Low pressure hoses,  
textile- and plug-lok hoses  
Page 55



Suction hoses  
Page 65



Thermoplastic hoses  
Page 69

## Hose protection



Antikink protection  
Page 93



Heat protection  
Page 96



Abrasion protection  
Page 99



Shrink hoses  
Page 105



Hose bundling  
Page 108



Accessories  
Page 110

## Industrial hoses



PTFE hoses  
Page 87



Water hoses,  
cleaning equipment hoses  
Page 89

## Safety technology



KIT made up of cable, lug, hook  
Page 111



Textile protection  
Page 115

## 2. Hose fittings

### Standard fittings for TE, KP, HD 100 bis HD 400 hoses



Hose ferrules  
Page 118



Metric series  
Page 127



BSP  
Page 154



NPT  
Page 169



JIC  
Page 170



JIS  
Page 175



SAE  
Page 185



ORFS  
Page 188



Flanges  
Page 192



French series  
Page 206



Banjos  
Page 215



Hose connectors  
Page 217



Plug connectors  
Page 218



Other  
Page 223

### Interlock fittings for 4SP (HD 400 hoses, with pull-out)



Metric series  
Page 225



BSP  
Page 233



JIC  
Page 237



ORFS  
Page 241



Flanges  
Page 245

## 2. Hose fittings

### Interlock fittings for 4SH (HD 500 hoses)



Metric series  
Page 253



BSP  
Page 265



NPT  
Page 270



JIC  
Page 271



ORFS  
Page 276



Flanges  
Page 279

### Interlock fittings for SAE R13 (HD 600 hoses)



BSP  
Page 291



NPT  
Page 295



JIC  
Page 296



Flanges  
Page 300

### Interlock fittings for SAE R15 (HD 700 hoses)



Metric series  
Page 306



BSP  
Page 316



NPT  
Page 324



JIC  
Page 325



ORFS  
Page 333



Flanges  
Page 337

## 2. Hose fittings

### Interlock fittings for HD 800 hoses



Metric series  
Page 349



Flanges  
Page 352



SAE  
Page 375



JIC  
Page 376



ORFS  
Page 379



Hose connectors  
Page 380



Banjos  
Page 381

### For SG hoses



Hose ferrules  
Page 356

### For thermoplastic hoses



Hose ferrules  
Page 383

### For low-pressure plug-in hoses



Metric series  
Page 359



BSP  
Page 368



NPT  
Page NPT



## 2. Hose fittings

### For thermoplastic hoses (hose fittings for NY 300 hoses)



Metric series  
Page 388



BSP  
Page 393



NPT  
Page 395



JIC  
Page 397



Flanges  
Page 399



French series  
Page 405

### For thermoplastic hoses (hose fittings for NY 2100 hoses)



Metric series  
Page 407



BSP  
Page 409



NPT  
Page 410

### For TAF and TBF hoses



Hose ferrules  
Page 411



Metric series  
Page 413



BSP  
Page 425



NPT  
Page 428



JIC  
Page 429

## 2. Hose fittings

### Individual parts



SAE flange halves  
Page 430



SAE full flanges  
Page 433

### Industry (for HF and HW hoses)



Metric series  
Page 435



Connectors for Kärcher washing  
equipment  
Page 438

### Industry (for TF hoses)



Hose ferrules  
Page 440

## 3. Couplings

### Quick release couplings



Sleeves  
Page 444



Fixed halves  
Page 446



Loose halves  
Page 447



Accessories for fixed halves  
Page 448



Accessories for loose halves  
Page 449



Spare parts for fixed halves  
Page 450



Spare parts for loose halves  
Page 452

## 3. Couplings

### Pipe couplings



Fixed halves  
Page 454



Loose halves  
Page 455



Accessories for fixed halves  
Page 456



Accessories for loose halves  
Page 458



Spare parts for fixed halves  
Page 460



Spare parts for loose halves  
Page 462



For EDBRO  
Page 475



For Pioneer  
Page 476



For JUKO  
Page 478



For Stucchi  
Page 479



RO couplings  
Page 480



Snap-tite series 75  
Page 481



Snap-tite series 78  
Page 482



Accessories for fixed halves  
Page 503



Spare parts for fixed halves  
Page 524

### Screw couplings (fixed halves)



Standard couplings  
Page 465



For Aeroquip  
Page 474



## 3. Couplings

### Screw couplings (loose halves)



Standard couplings  
Page 484



For Aeroquip  
Page 491



For EDBRO  
Page 492



For Pioneer  
Page 493



For JUKO  
Page 495



For Stucchi  
Page 496



RO couplings  
Page 497



Snap-tite series 75  
Page 498



Snap-tite series 78  
Page 499



Accessories for loose halves  
Page 513



Spare parts for loose halves  
Page 534

### Plug-in couplings (sleeve)



Standard couplings  
Page 539



For John Deere  
Page 545



Tema  
Page 546



For Aeroquip  
Page 547



For Argus  
Page 550



For CEJN  
Page 552



For Pioneer  
Page 555



## 3. Couplings



For Unimog  
Page 559



Snap-tite series 72  
Page 562



Snap-tite series H  
Page 563



Accessories for sleeves  
Page 588



Spare parts for sleeves  
Page 609

### Plug-in couplings (connectors)



Standard couplings  
Page 565



For John Deere  
Page 571



Tema  
Page 572



For Aeroquip  
Page 573



For Argus  
Page 576



For CEJN  
Page 578



For Pioneer  
Page 581



Snap-tite series 72  
Page 585



Snap-tite series H  
Page 586



Accessories for connectors  
Page 601

## 3. Couplings

### Flat seal plug-in couplings (sleeves)



For Stucchi  
Page 613



Snap-tite  
Page 618



For DNP 700 bar  
Page 620



Accessories for sleeves  
Page 636

### Flat seal plug-in couplings (connectors)



For Stucchi  
Page 623



Snap-tite  
Page 631



For DNP 700 bar  
Page 633



Accessories for connectors  
Page 638

### Multi couplings (rectangular)



Loose halves BSP  
Page 640



Fixed halves BSP  
Page 642



Loose halves metric  
Page 644



Fixed halves metric  
Page 645



Accessories  
Page 546

### Multi couplings (square)



Loose halves BSP  
Page 647



Fixed halves BSP  
Page 648

## 4. Measuring equipment

### Measuring hoses



Hoses  
Page 652

### Measuring hose fittings



Hose ferrules  
Page 653



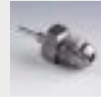
Metric series  
Page 654



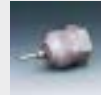
BSP  
Page 660



NPT  
Page 663



JIC  
Page 664



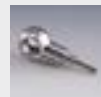
Screw connections for Minimesh  
Page 666



Plug-in connections for Minimesh  
Page 669



Pressure gauge connections  
Page 672



Banjos  
Page 675



# Products

## Hydraulic hoses



Hose lines in all nominal diameters and for every field of application

## Pipelines



Precision pipes conforming to DIN EN 10305, deliverable as single items or in series

## Fittings production



Comprehensive range of fittings in stock, custom designs at very short notice

## Fittings



On hand in many different dimensions and shapes; available in both steel and stainless steel

## Adapters



Wide range of adapters for optimum flow conditions

## High pressure flanges



Many designs in all standard alloys permanently in stock

## Measuring systems



Extensive range of measuring systems for fluid technology

## Mounting technology



Deliverable materials: Polypropylene, polyamide, solid rubber and aluminium

## Bellows & expansion joints



Comprehensive warehouse inventory – fast delivery

## Industrial hoses



Hoses, nipples, couplings for industrial applications in many sectors

## Preformed hoses



Many standard sizes ex warehouse, custom designs for all geometries

## Hydraulic cylinders



Many variants available in standard inventory, custom designs at short notice

## Hydraulic components



More than 4,500 components available from stock – supply of ready-to-install groups

## Plant construction



Innovative solutions in hydraulic drive and control technology

## Services

### Couplings



Available immediately from stock: couplings for every conceivable purpose

### Metal & PTFE hoses



Special hose lines for solid, liquid and gaseous media

### Seals



Over 8,000 sealing systems in stock, custom designs available at short notice

### Rapid hydraulics service



Full-service mobile rapid hydraulics service – contactable at no charge, any time

### Cylinder repair



Manufacturer-independent repair of cylinders, pumps, motors and valves

### Kitting



Ready-to-install, pre-assembled sets – individually adapted to the customer's needs

### Technical consulting



Individual solutions tuned precisely to the needs of our customers

### Fluid service



Professional consulting and oil care, provision of filter systems and elements

### Workshop containers



Mobile workshop containers for extreme application areas

### Kanban



All types permanently in stock – structured inventory maintained at customer's site.

### Engineering & Project planning



Planning for entire hydraulic systems – all from a single source

### Industrial assembly



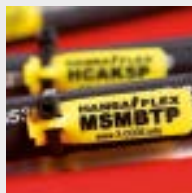
Scheduled activities to avoid unscheduled stoppages

### Plant-in-plant production



Production facility at the customer's site – perfect synchronisation, rapid response times

### Hose codes



Replacement parts procurement without delay with X-CODE – unique, fast

### Customer training



Wide-ranging seminar programme on all aspects of fluid technology, also conducted at customer's site



## Technical information

# SAFETY GUIDELINES AND INFORMATION ON THE ASSEMBLY, OPERATION, MAINTENANCE AND INSPECTION OF HANSA-FLEX HOSE LINES

T

## CONTENTS

### 1. ASSEMBLY

- 1.1 Fundamental Guidelines for the Assembly of Hose Lines
- 1.2 Additional Information on the Assembly of Hose Lines

### 2. OPERATION

- 2.1 Commissioning and Intended Use of Hose Lines
- 2.2 Storage of Hose Lines
- 2.3 Additional Information on the Storage of Hose Lines

### 3. MAINTENANCE

- 3.1 Inspection Intervals for Hose Lines
- 3.2 Inspection Criteria for Hose Lines
- 3.3 Repair and Painting of Hose Lines
- 3.4 Additional Information on the Maintenance of Hose Lines



Hydraulic lines are capable of causing serious personal injury and environmental damage, but this danger is very often underestimated in practice. The wrong choice of hoses or improper use of hoses, hose lines, fittings and accessories can impair the functional safety of the product and lead to failure and hence personal injury or material damage. In extreme cases, violently spraying oil and ruptured lines can even cause fatal injuries.

**We therefore recommend most strongly that these safety guidelines are strictly observed!**



The owner of machines also bears a particular responsibility.

He is responsible for:

- Observance of the intended use of the hose lines
- Scheduled monitoring and systematic inspections by authorised personnel with the appropriate qualification and knowledge of hose line equipment
- Identifying and eliminating defects
- Scheduled replacement of hose lines

This active assumption of responsibility is enshrined in the legal framework. Based on the principles of industrial safety, the equipment and product safety act, the machine and pressure device directive and the ordinance on industrial safety and health, tasks are specified further and set out in procedural regulations for those concerned. Hydraulic hose lines are expressly mentioned in these regulations.

This guideline supplements the pertinent standards, guidelines and regulations which also have to be observed. It makes no claim to exhaustiveness.

# 1. ASSEMBLY

## 1.1 FUNDAMENTAL GUIDELINES FOR THE ASSEMBLY OF HOSE LINES

In order to ensure the safe function of hose lines and to avoid shortening their service lives by additional loads, the following requirements have to be satisfied:

- Hose lines may be assembled only by appropriately qualified personnel
- Hose lines must be installed in such a way that they are accessible at all times and are not obstructed in their natural position and movement
- Hose lines must generally not be subjected to tension, torsion or compression by external influences during operation
- The smallest bending radius of the hose stipulated by the manufacturer must not be exceeded
- Hose lines must be protected against damage caused by external mechanical, thermal or chemical influences
- Before starting operation, check separable connections for tightness
- Do not put the hose line into operation in the event of obvious external damage
- If necessary, clean the hose line in a suitable manner before starting operation
- For hose lines requiring equipotential bonding in accordance with TRBS 2153 (formerly BGR 132), check the equipotential bond and establish, if necessary
- The hose line length must be determined according to the installation conditions
- The possible shortening or lengthening under pressure indicated by the supplier or in the respective hose standard must be taken into consideration

**Please note:** Operation conditions with simultaneous maximum working pressure, maximum temperature and minimum bending radius shorten the service life of hose lines!

## 1.2 ADDITIONAL INFORMATION ON THE ASSEMBLY OF HOSE LINES

### 1.2.1 SELECTION OF THE HOSE LINE

The right choice of hose lines is of crucial importance for safe and cost-effective operation of a hydraulic system. Criteria for the choice and design of the hose line are:

- Resistance to the medium – and not forgetting the cleaning processes!
- Temperature resistance – check also the temperature/pressure behaviour!
- Special environmental conditions and influences from the outside
- Pressure resistance, including required safety margins (also vacuum behaviour)
- Nominal sizes and the resulting flow velocities
- Bending radii
- Changes in length and outside diameter
- Exceptional loads due to external forces or pressure surges
- Abrasion behaviour and possible protection
- Availability of the hose as yard goods and of the fittings
- Installation conditions, e.g. movements, kinking, whipping, marking, torque angle of elbow fittings, leg lengths
- Safe seal shapes (sealing head form)
- Demanded approvals

## 1.2.2 MEDIA COMPATIBILITY

The compatibility of the hose and fitting materials used with the media to be transported must always be tested. The surrounding media must also be taken into consideration in the selection.

## 1.2.3 TEMPERATURE AND ENVIRONMENT

The operating and also the ambient temperatures to be expected must be taken into consideration when selecting a hose line. If hose lines are used outside their permissible temperature range, a significant reduction in their service life is to be expected.

The rubber blends of the HANSA-FLEX Standard hydraulic hoses are generally set such that the hoses, depending on the configuration, are suitable for continuous operation in a temperature range from  $-40^{\circ}\text{C}$  to max.  $+100^{\circ}\text{C}$  (briefly up to  $+120^{\circ}\text{C}$ ). The valid data can be found in the data sheets. Different temperatures apply for media differing from the standard application (e.g. compressed air or water).

At very low temperatures, rubber blends reach their "glass transition temperature". The glass transition temperature describes a temperature at which the elastic behaviour of the material is practically zero, i.e. the material becomes brittle and breaks like glass under mechanical load. A typical characteristic of a hose line destroyed by glass transition are fine radial cracks in the surface of the hose inner and outer layer. Operation at excessive temperatures also shortens the service life of a hose line, as rubber materials age prematurely as a result. However, the HANSA-FLEX product range also includes hose types for elevated temperature ranges.

Note also that the outer layer of a rubber hose is susceptible to environmental influences, such as ozone or strong UV radiation. Ozone and UV radiation can break down the chain molecules of the elastomer material. As a result, the material loses its elasticity. It becomes hard and brittle and breaks at points subject to higher loads, e.g. the outer radii. Characteristics of this behaviour are radial cracks that extend down to the braiding.

### 1.2.4 PERMISSIBLE PRESSURE

The maximum working pressure (dynamic working pressure) determines the structure and the choice of the hose. Depending on the application, hoses are available with textile braiding, with wire braiding, with wire spiral inserts or also as special hoses of metal or PTFE.

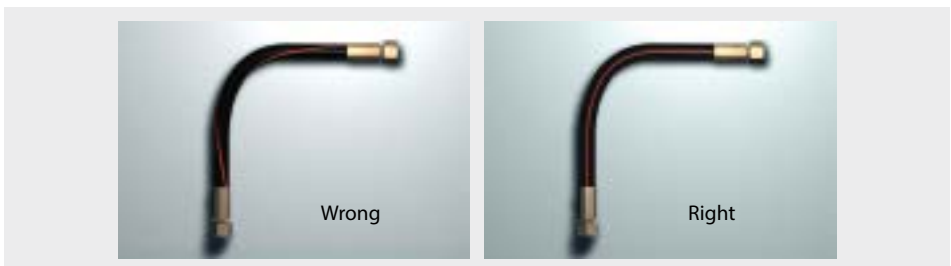
### 1.2.5 NOMINAL SIZES

In a hydraulic system, the hose or pipe inside diameter plays an important role. When a liquid flows through a line, it undergoes a pressure loss that depends on the type of flow, the roughness of the line inner wall, the line length, the inside diameter, the specific gravity of the liquid and its flow velocity. This applies for a continuous pipe flow. Also to be observed, however, is a "starting distance" which has a significant influence on the velocity distribution. Pressure losses also occur when the liquid flows through fittings, valves, elbows and other constrictions.

As a rule of thumb: In order to minimise losses, the inside diameter or free cross-section of the pipe / hose should be chosen large enough. If in doubt, decide in favour of the next-larger diameter. This reduces the flow velocity, and hence also the pressure losses in the line.

### 1.2.6 TORSION

If a hose line is installed so that it is twisted in itself, the service life is significantly reduced by the constant rubbing together of the plies. Under pressure pulses, the plies try to return to their neutral starting position. A particular load occurs in the area of the connection.



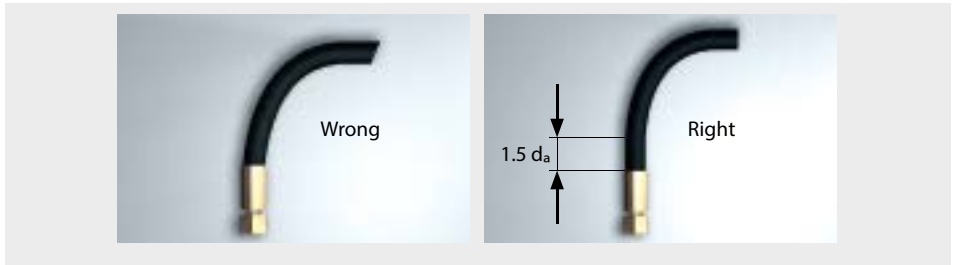
As an indicative value: A twist of 7° reduces the service life by 80%. Attention should therefore always be paid that the hose line is not twisted in itself, e.g. when tightening the union nuts.

### 1.2.7 MINIMUM BENDING RADIUS

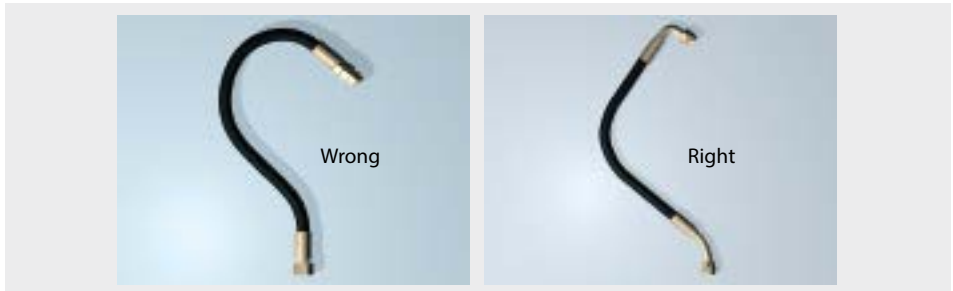
A permissible bending radius is prescribed for each hose type, depending on its nominal size. If the minimum bending radius is exceeded, the service life and the load-bearing capacity of the hose line is reduced, as gaps can be caused in the wire mesh braiding on the outside of the bend due to the larger area to be covered. These can then result in violently spraying oil. On the inside of the bend, the opposite effect occurs: The plies are compressed and therefore no longer lie close enough to the inner layer of the hose and thus lose their pressure-bearing properties. Exceeding of the minimum bending radius occurs particularly immediately behind the connection when a hose is bent too sharply.



If the installation conditions allow, the bending of a hose line should start after a straight section with a length of 1.5 times the outside diameter. If necessary, kink protection or similar must be provided in such cases.



In some cases it is also possible to avoid exceeding the minimum bending radius by the use of suitable fittings.





**Caution:** Wildly spraying oil occurs when fine jets of oil penetrate the hose wall under high pressure. In such cases, switch off the machine immediately. On no account come into contact with these oil jets.

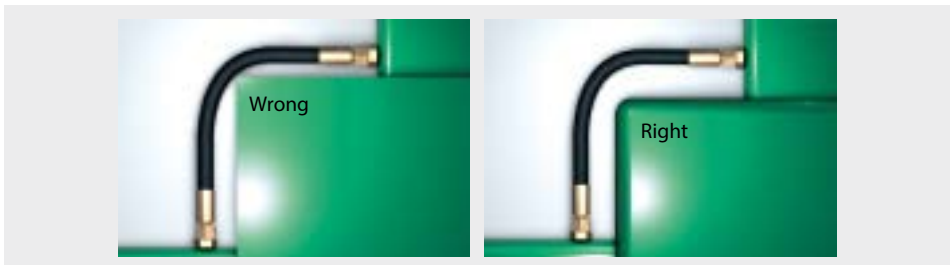
They can immediately penetrate the human skin and spread inside the body! Hydraulic fluids may be contaminated with bacteria which in such cases can result in serious or even fatal blood poisoning. Due to the small size and high pressure, such injuries are often not even painful.



**Consult a doctor immediately if hydraulic oil has penetrated human tissue!**

### 1.2.8 ABRASION

If a hose is laid over an edge, the outer layer can wear through due to the movement of the hose during operation.

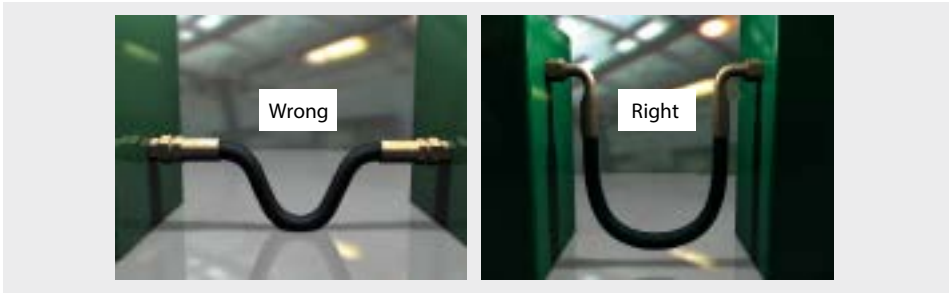


The same applies to hoses that are laid too close together. The hoses rub against one another. The wire braiding is no longer protected against corrosion and failure of the hose is only a question of time. Should it not be possible to rule out abrasion, it is possible to use hoses with highly abrasion-resistant outer covers.

### 1.2.9 TENSILE LOAD

Tensile loads on hose lines must be avoided, as this endangers the secure connection to the fittings. Please note that hose lines can shorten under pressure (by up to 4% under maximum permissible working pressure), so that they should always be laid with a certain amount of slack. Possible movements of the hose lines must also be considered.

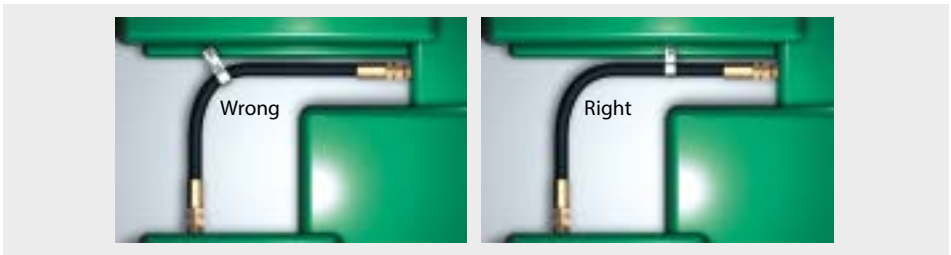
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**Note:** With certain applications, e.g. spring-loaded tensioner rollers, tensile loads cannot be avoided. In such cases the permissible operational loads must be agreed upon with HANSA-FLEX.

### 1.2.10 HOSE HOLDERS

Hose holders should not be used where they hinder the natural movement and change in length of the hose. The outer layer will be destroyed in the long term by the rubbing movements in the holder. Hose holders should therefore only be installed on straight sections.



### 1.2.11 WHIPPING

If damage to a hose line is likely to present a hazard due to whipping, the hose line must be restrained or shielded. The hazardous whipping in the event of a hose line fracture can be prevented by design engineering measures. The HANSA-FLEX Stopflex safety system that permits a safe connection between hose and machine parts is particularly suitable for both proactive and subsequent installation.

### 1.2.12 LEAKS

If damage to a hose line creates a hazard due to the escape of the pressurised medium, the hose must be shielded.

### 1.2.13 COLD FLOW

Despite the chemical and physical cross-linking, creeping of the rubber material between nipple and fitting is also to be observed. This viscoelastic behaviour leads to leaks in the fitting area and to "wandering" of the hose fitting. Peeling of the upper rubber (outer layer) in the prescribed area can help to minimise this uncertainty factor at the hose.

### 1.2.14 GASES AND VAPOURS

When selecting the hose, attention must be paid to permeation or effusion, i.e. the possible wandering of the gas molecules through the inner layer. Media losses or undesirable concentrations of gases or gaseous fuels are the result. These gases are potentially flammable, explosive or toxic. A selective discharge of possible gas concentrations below the outer layer can be achieved by pricking, as employed e.g. for compressed air lines above 16 bar.

## 2. OPERATION

### 2.1 COMMISSIONING AND INTENDED USE OF HOSE LINES

Before commissioning, the tests prescribed by the relevant laws and directives (e.g. acceptance test, pressure test, etc.) and technical, organisational and personal protection measures have to be carried out. Technical and organisational measures always have priority. If all the hazards can nevertheless not be ruled out, effective personal protection equipment must be provided and used. The owner must test the suitability of the hose lines and their components with respect to the operating parameters, such as operating temperature, vacuum, pressure and material resistance. Where abrasion is possible, wear of the hose line must be assessed and examined.

## 2.2 STORAGE OF HOSE LINES

- Store cool, dry and away from dust. Protect from direct sunshine and/or UV radiation. Shield from nearby heat sources. Do not allow hoses and hose lines to come into contact with materials that could damage them
- Store hoses and hose lines horizontally in a stress-free and kink-free condition. When stored as rings, the radius must be not smaller than the minimum recommended by the manufacturer
- Hose ends must be sealed with caps to protect the inside of the hose from dirt, ozone and corrosion
- Maximum storage period in accordance with DIN 20 066 recommendations: 4 years for hose material and 2 years for hose lines
- Metal and PTFE hose lines must be protected in particular from exposure to chlorides, bromides, iodides and from rust

## 2.3 ADDITIONAL INFORMATION ON THE STORAGE OF HOSE LINES

### 2.3.1 GENERAL

Under unfavourable storage conditions or with improper handling, most products made from rubber change their physical properties. This can lead to a shortening of their service life. The changes can be caused by the effects of e.g. oxygen, ozone, heat, light, moisture, solvents or storage under strain. Properly stored and handled rubber products retain their properties almost unchanged over a long period of times (several years). The same does not apply, however, to non-vulcanised rubber blends.

### 2.3.2 STORAGE AREA

The storage area should be cool, dry, dust-free and moderately ventilated. Storage outdoors protected from the weather is not permitted. Solvents, fuels, lubricants, chemicals, acids, disinfectants, etc. must not be stored in the same area.

### 2.3.3 TEMPERATURE

The temperature for the storage of rubber products depends on the goods to be stored and the elastomers used. Rubber products should not be stored below  $-10^{\circ}\text{C}$  and not above  $+15^{\circ}\text{C}$ . In exceptional cases the storage temperature may be as high as  $+25^{\circ}\text{C}$  by agreement with the manufacturer. Higher temperatures are only permitted for short periods. In deviation from this, a storage temperature that must not be lower than  $+12^{\circ}\text{C}$  may be required for rubber products made from certain rubber types, e.g. chloroprene rubber.

### 2.3.4 HEATING

In heated storage areas, the rubber products must be shielded from the heat source. The distance between heat source and stored goods must be at least 1 m. A larger distance is necessary for air-heated areas.

### 2.3.5 MOISTURE

The storage of rubber products in damp rooms should be avoided. Ensure that no condensation occurs. The relative humidity should preferably be below 65%.

### 2.3.6 LIGHTING

Rubber products should be protected from light, in particular from direct sunlight and strong artificial light with a high ultraviolet level. The windows of the storage areas should therefore be painted with a red or orange (on no account blue) protective coating. Lighting with normal bulbs should be preferred.

### 2.3.7 OXYGEN AND OZONE

Rubber products should be protected from air circulation, but particularly from draughts, by sheathing, by storage in airtight containers or by other means. This applies in particular to articles with a large surface area in relation to their volume, e.g. rubberised fabrics or cellular articles. As ozone is particularly harmful, the storage areas must contain no ozone-generating equipment, such as electric motors or other machines that may generate sparks or other electric discharges. Combustion gases and vapours that may result in the formation of ozone due to photochemical processes must be removed.

## 3. MAINTENANCE

### 3.1 INSPECTION INTERVALS FOR HOSE LINES



The inspection intervals for hose lines must be stipulated by the owner in accordance with the provisions of the Industrial Safety Regulation as part of the risk assessment according to § 3 BetrSichV. The safe working condition of hose lines must be tested by an authorised person in accordance with § 2 (7) of the Industrial Safety Regulation:

- Before commissioning
- At regular intervals after commissioning (recommended e.g. for thermoplastic and elastomer hose lines at least 1x per year. More severe loading due e.g. to higher mechanical, dynamic, thermal or chemical loads requires shorter inspection intervals)
- After a repair
- After major modifications (revamping) of the machine
- After accidents or after longer periods of non-operation

### 3.2 INSPECTION CRITERIA FOR HOSE LINES



The safety regulations for hydraulic hose lines from the Federation of Institutions for Statutory Accident Insurance and Prevention (HVBG) and the currently valid issue of DIN 20066 stipulate that the function of hose lines must be assessed at intervals to be stipulated.

The relevant rules clearly lay down the criteria for replacement of hose lines.

Hose lines must be replaced when during an inspection, the following damage is discovered:

- Damage to the outer layer down to the ply, e.g. by abrasion marks, cuts or cracks
- Brittleness of the outer layer or cracking of the hose material
- Deformations not consistent with the natural form of the hose or hose line, both in pressure-free and pressurised state or during bending (e.g. delamination or blistering)
- Leaks
- Damage or deformation of the hose fitting (sealing function impaired)
- Detachment of the hose from the fitting
- Fitting tightness and function impaired by corrosion
- Demands on the installation not observed (e.g. to DIN 20066)
- Storage and/or service period of the hose or hose line exceeded

### 3.3 REPAIR AND PAINTING OF HOSE LINES



A repair of the hose line involving the continued use of the installed hose and/or fitting (integration area) is not permitted. Recoating of hose lines violates the identification requirement.

## 3.4 ADDITIONAL INFORMATION ON THE MAINTENANCE OF HOSE LINES

### 3.4.1 CLEANING

Rubber products can be cleaned with soap or warm water. The cleaned articles must be dried at room temperature. After prolonged storage (6 to 8 months), the products can be cleaned using a 1.5% bicarbonate of soda solution. Rinse off the residues of the cleaning fluid with clean water. Effective and particularly gentle cleansing agents are recommended by the manufacturer. Solvents such as trichloroethylene, carbon tetrachloride and hydrocarbons must not be used for cleaning. The use of sharp objects, wire brushes, emery cloth, etc. is also forbidden for cleaning. Rubber/metal compounds should be cleaned with a glycerine/ethyl alcohol mixture (1:10). If disinfection is necessary, this should be carried out after thorough cleaning of the rubber products. The disinfectant must not be used at the same time as a cleansing agent. Pay attention to the compatibility with the rubber when selecting the disinfectant. Oxygen-releasing or halogen-releasing agents such as potassium permanganate or bleaching powder, in particular, can cause damage especially to thin-walled products. Only the disinfectants recommended by the manufacturer may be used for rubber products for medical applications. The serviceability of certain rubber products can be prolonged by a special coating (wax emulsion, shellac, etc.). Such coatings are not to be recommended for rubber products for medical applications. We should point out that special cleaning and storage processes are necessary in the case of demands for silicon-free materials.

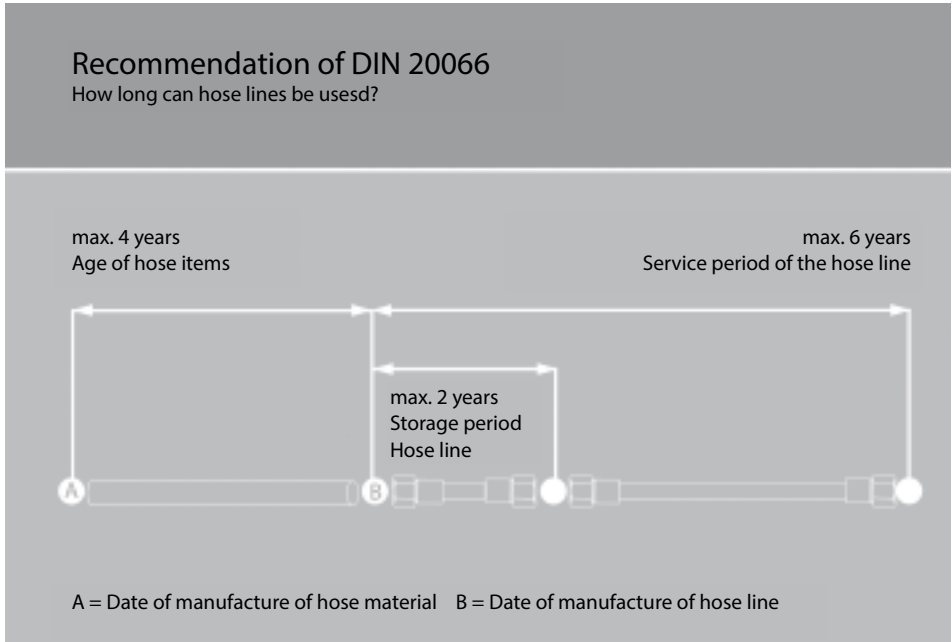
### 3.4.2 SERVICE PERIOD

The currently valid issue of DIN 20066 stipulates as follows:

Even with proper storage and admissible loading, hoses and hose lines are subject to natural ageing. Their service period is therefore limited. Improper storage, mechanical damage and overloading are the most frequent causes of failure. In individual cases, the service period can be defined on the basis of empirical values and in deviation from the following indicative values:

- During production of the hose line, the hose material should not be older than four years
- The service period of a hose line, including a possible storage period of the hose line, should not exceed six years
- The storage period of the hose line should therefore not exceed two years

The following diagram illustrates this principle:



In practice, hydraulic hoses are stored according to the First In-First Out (FIFO) principle. FIFO defines a storage principle where the date of storage determines the date of retrieval from storage. This means that the hose that has been in storage longest is retrieved from storage first.

Information on the storage and service periods of hose lines can be found in the following publications:

- DIN EN ISO 4413, point 5.4.6.5.1 - Hose lines (General requirements)
- DIN 20 066, point 14.1.2 - Storage and service period (recommendation)





## Hoses

<b>Hydraulics</b>		<b>Hose protection</b>	
Braided hoses	34	Antikink protection	93
Spiral hoses	46	Heat protection	96
Medium pressure hoses	54	Abrasion protection	99
Low pressure hoses, textile- and plug-lok hoses	55	Shrink hoses	105
Suction hoses	65	Hose bundling	107
Thermoplastic hoses	69	Accessories	110
<b>Industrial hoses</b>		<b>Safety technology</b>	
PTFE hoses	87	KIT made up of cable, lug, hook	111
Water hoses, cleaning equipment hoses	89	Textile protection	115

**HD 100 (1SN)****HD hose**

<b>Application:</b>	Low and medium high pressure circuits, Return hoses
<b>Standard:</b>	EN 853 1 SN
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	one high tensile steel wire braided insert
<b>Outer layer:</b>	synthetic rubber with high temperature, ozone and weather resistance
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 2 % to - 4 %
<b>Media:</b>	Mineral oil, Polyglycol based oil, Water (0°C to +70°C), Water-oil emulsions

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Ø Insert min. mm	Ø Insert max. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
HD 104	5	3	3/16"	4,6	5,4	9,0	10,0	12,5	250	500	1000	90
HD 106	6	4	1/4"	6,2	7,0	10,6	11,6	14,1	225	450	900	100
HD 108	8	5	5/16"	7,7	8,5	12,1	13,3	15,7	215	430	850	115
HD 110	10	6	3/8"	9,3	10,1	14,5	15,7	18,1	180	360	720	130
HD 113	12	8	1/2"	12,3	13,5	17,5	19,1	21,4	160	320	640	180
HD 116	16	10	5/8"	15,5	16,7	20,6	22,2	24,5	130	260	520	200
HD 120	19	12	3/4"	18,6	19,8	24,6	26,2	28,5	105	210	420	240
HD 125	25	16	1"	25,0	26,4	32,5	34,1	36,6	88	175	350	300
HD 132	31	20	1.1/4"	31,4	33,0	39,3	41,7	44,8	63	150	250	420
HD 140	38	24	1.1/2"	37,7	39,3	45,6	48,0	52,1	50	100	200	500
HD 150	51	32	2"	50,4	52,0	58,7	61,7	65,5	40	80	160	630

DN = Nominal diameter, nominal width

**HD 100 T (1SN)****HD hose, high thermal resistance**

<b>Application:</b>	Low and medium pressure circuits with extreme temperatures (e.g. foundries, compressors), Hydraulics in mechanical engineering
<b>Special features:</b>	outstanding ozone, weather, UV and temperature resistance
<b>Standard:</b>	EN 853 1 SN
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	one high tensile steel wire braided insert
<b>Outer layer:</b>	synthetic rubber with high temperature, ozone and weather resistance
<b>Colour:</b>	blue
<b>Temp. min.:</b>	-55 °C
<b>Temp. max.:</b>	135 °C
<b>Elongation:</b>	+ 2 % to - 4 %
<b>Media:</b>	Mineral oil, Gear oil, Glycol and polyglycol, Air-oil vapour, Water-oil emulsion (0°C to +100°C)



1

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402. Operation with compressed air requires a perforated outer cover.

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Ø Insert min. mm	Ø Insert max. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
HD 106 T	6	4	1/4"	6,2	7,0	10,6	11,6	14,1	225	450	900	100
HD 108 T	8	5	5/16"	7,7	8,5	12,1	13,3	15,7	215	430	850	115
HD 110 T	10	6	3/8"	9,3	10,1	14,5	15,7	18,1	180	360	720	130
HD 113 T	12	8	1/2"	12,3	13,5	17,5	19,1	21,4	160	320	640	180
HD 116 T	16	10	5/8"	15,5	16,7	20,6	22,2	24,5	130	260	520	200
HD 120 T	19	12	3/4"	18,6	19,8	24,6	26,2	28,5	105	210	420	240
HD 125 T	25	16	1"	25,0	26,4	32,5	34,1	36,6	88	175	350	300

DN = Nominal diameter, nominal width

**KP 100 (1SC)****HD hose in compact design**

<b>Application:</b>	Medium pressure circuits with restricted installation spaces, Pre-control hoses, Return hoses
<b>Special features:</b>	narrow bending radius
<b>Standard:</b>	EN 857 1 SC
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	one high tensile steel wire braided insert
<b>Outer layer:</b>	oil resistant and weatherproof synthetic rubber
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 2 % to - 4 %
<b>Media:</b>	Mineral oil, Polyglycol based oil, Water (0°C to +70°C), Water-oil emulsions

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Ø Insert min. mm	Ø Insert max. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
KP 106	6	4	1/4"	6,1	6,9	9,6	10,8	13,5	225	450	900	75
KP 108	8	5	5/16"	7,7	8,5	10,9	12,1	14,5	215	430	860	85
KP 110	10	6	3/8"	9,3	10,1	12,7	14,5	16,9	180	360	720	90
KP 113	12	8	1/2"	12,3	13,5	15,9	18,1	20,4	160	320	640	130
KP 116	16	10	5/8"	15,5	16,7	19,8	21,0	23,0	130	260	520	150
KP 120	19	12	3/4"	18,6	19,8	23,2	24,4	26,7	105	210	420	180
KP 125	25	16	1"	25,0	26,4	30,7	31,9	34,9	88	176	352	230

DN = Nominal diameter, nominal width

**KP 100 P****HD hose, compact, Pilot**

<b>Application:</b>	Medium pressure circuits with restricted installation spaces, Pre-control hoses, Return hoses
<b>Special features:</b>	narrow bending radius, kink resistant
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	one high tensile steel wire braided insert
<b>Outer layer:</b>	environmentally safe synthetic rubber
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Mineral oil, Polyglycol based oil, Water (0°C to +70°C), Water-oil emulsions



1

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
KP 106 P	6	4	1/4"	6,4	11,5	120	480	25
KP 108 P	8	5	5/16"	7,9	13,1	120	480	30
KP 110 P	10	6	3/8"	9,5	14,8	100	400	40
KP 113 P	12	8	1/2"	12,7	18,0	100	400	50

DN = Nominal diameter, nominal width

## HD 200 (2SN)

### HD hose



<b>Application:</b>	medium high pressure circuits
<b>Standard:</b>	EN 853 2 SN
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	two high tensile steel wire braided inserts
<b>Outer layer:</b>	synthetic rubber with high temperature, ozone and weather resistance
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 2 % to - 4 %
<b>Media:</b>	Mineral oil, Polyglycol based oil, Water (0°C to +70°C), Water-oil emulsions

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Ø Insert min. mm	Ø Insert max. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
HD 204	5	3	3/16"	4,6	5,4	10,6	11,6	14,1	415	830	1650	90
HD 206	6	4	1/4"	6,2	7,0	12,1	13,3	15,7	400	800	1600	100
HD 208	8	5	5/16"	7,7	8,5	13,7	14,9	17,3	350	700	1400	115
HD 210	10	6	3/8"	9,3	10,1	16,1	17,3	19,7	330	660	1320	130
HD 213	12	8	1/2"	12,3	13,5	19,0	20,6	23,0	275	550	1100	180
HD 216	16	10	5/8"	15,5	16,7	22,2	23,8	26,2	250	500	1000	200
HD 220	19	12	3/4"	18,6	19,8	26,2	27,8	30,1	215	430	850	240
HD 225	25	16	1"	25,0	26,4	34,1	35,7	38,9	165	325	650	300
HD 232	31	20	1.1/4"	31,4	33,0	43,3	45,7	49,5	125	250	500	420
HD 240	38	24	1.1/2"	37,7	39,3	49,6	52,0	55,9	90	180	360	500
HD 250	51	32	2"	50,4	52,0	62,3	64,7	68,6	80	160	320	630
HD 260	60	40	2.3/8"	59,6	61,2	67,4	70,2	73,1	90	180	360	630
HD 276	76	48	3"	75,6	77,2	85,4	88,4	92,6	45	90	180	912

DN = Nominal diameter, nominal width

**HD 200 RM (2SN)****HD hose, harsh conditions**

<b>Application:</b>	medium high pressure range under extreme usage conditions, Installations with high abrasion, Ship-building, Mining and opencast mining
<b>Special features:</b>	high ozone and abrasion resistance, weatherproof
<b>Standard:</b>	EN 853 2 SN
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	two high tensile steel wire braided inserts
<b>Outer layer:</b>	flame-retardant to MSHA, Synthetic rubber with high ozone, abrasion, weather and salt water resistance
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Mineral oil, Glycol, Polyglycol based oil, Water (0°C to +70°C), Water-oil emulsion (0°C to +100°C)



1

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø		Ø Insert		External Ø	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
				min. mm	max. mm	min. mm	max. mm					
HD 206 RM	6	4	1/4"	6,2	7,0	12,1	13,3	15,7	400	800	1600	100
HD 208 RM	8	5	5/16"	7,7	8,5	13,7	14,9	17,3	350	700	1400	115
HD 210 RM	10	6	3/8"	9,3	10,1	16,1	17,3	19,7	330	660	1320	125
HD 213 RM	12	8	1/2"	12,3	13,5	19,0	20,6	23,0	275	550	1100	180
HD 216 RM	16	10	5/8"	15,5	16,7	22,2	23,8	26,2	250	500	1000	200
HD 220 RM	19	12	3/4"	18,6	19,8	26,2	27,8	30,1	215	430	850	240
HD 225 RM	25	16	1"	25,0	26,4	34,1	35,7	38,9	165	325	650	300
HD 232 RM	31	20	1.1/4"	31,4	33,0	43,3	45,7	49,5	125	250	500	420
HD 240 RM	38	24	1.1/2"	37,7	39,3	49,6	52,0	55,9	90	180	360	500
HD 250 RM	51	32	2"	50,4	52,0	62,3	64,7	68,6	80	160	320	630

DN = Nominal diameter, nominal width

**HD 200 S (2SN)****HD hose, harsh conditions**

<b>Application:</b>	medium high pressure range under extreme usage conditions.
<b>Standard:</b>	exceeds EN 853 2SN
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	two high tensile steel wire braided inserts
<b>Outer layer:</b>	oil resistant and weatherproof synthetic rubber
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Glyco!, Water-oil emulsion (0°C to +100°C), Water (0°C to + 70°C), Mineral oil

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
HD 213 S	12	8	1/2"	12,7	22,0	380	760	1520	130
HD 216 S	16	10	5/8"	15,9	24,7	350	700	1400	180
HD 220 S	19	12	3/4"	19,0	29,3	310	620	1240	240
HD 225 S	25	16	1"	25,4	35,6	230	460	920	240
HD 232 S	31	20	1.1/4"	31,8	47,6	175	350	700	419

DN = Nominal diameter, nominal width

## HD 200 T (2SN)

## HD hose, high thermal resistance

<b>Application:</b>	Low and medium pressure circuits with extreme temperatures (e.g. foundries, compressors), Hydraulics in mechanical engineering
<b>Special features:</b>	outstanding ozone, weather, UV and temperature resistance
<b>Standard:</b>	EN 853 2 SN
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	two high tensile steel wire braided inserts
<b>Outer layer:</b>	synthetic rubber with high temperature, ozone and weather resistance
<b>Colour:</b>	blue
<b>Temp. min.:</b>	-55 °C
<b>Temp. max.:</b>	135 °C
<b>Elongation:</b>	+ 2 % to - 4 %
<b>Media:</b>	Mineral oil, Gear oil, Glycol and polyglycol, Air-oil vapour, Water-oil emulsion (0°C to +100°C)



1

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402. Operation with compressed air requires a perforated outer cover.

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Ø Insert min. mm	Ø Insert max. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
HD 206 T	6	4	1/4"	6,2	7,0	12,1	13,3	15,7	400	800	1600	100
HD 208 T	8	5	5/16"	7,7	8,5	13,7	14,9	17,3	350	700	1400	115
HD 210 T	10	6	3/8"	9,3	10,1	16,1	17,3	19,7	330	660	1320	130
HD 213 T	12	8	1/2"	12,3	13,5	19,0	20,6	23,0	275	550	1100	180
HD 216 T	16	10	5/8"	15,5	16,7	22,2	23,8	26,2	250	500	1000	200
HD 220 T	19	12	3/4"	18,6	19,8	26,2	27,8	30,1	215	430	850	240
HD 225 T	25	16	1"	25,0	26,4	34,1	35,7	38,9	165	325	650	300
HD 232 T	31	20	1.1/4"	31,4	33,0	43,3	45,7	49,5	125	250	500	420
HD 240 T	38	24	1.1/2"	37,7	39,3	49,6	52,0	55,9	90	180	360	500
HD 250 T	51	32	2"	50,4	52,0	62,3	64,7	68,6	80	160	320	630

DN = Nominal diameter, nominal width

**KP 200 (2SC)****HD hose in compact design**

<b>Application:</b>	Medium pressure circuits with restricted installation spaces
<b>Special features:</b>	narrow bending radius
<b>Standard:</b>	EN 857 2 SC
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	two high tensile steel wire braided inserts
<b>Outer layer:</b>	oil resistant and weatherproof synthetic rubber
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 2 % to - 4 %
<b>Media:</b>	Mineral oil, Polyglycol based oil, Water (0°C to +70°C), Water-oil emulsions

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Ø Insert min. mm	Ø Insert max. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
KP 206	6	4	1/4"	6,1	6,9	10,6	11,7	14,2	400	800	1600	75
KP 208	8	5	5/16"	7,7	8,5	12,1	13,3	16,0	350	700	1400	85
KP 210	10	6	3/8"	9,3	10,1	14,4	15,6	18,3	330	660	1320	90
KP 213	12	8	1/2"	12,3	13,5	17,5	19,1	21,5	275	550	1100	130
KP 216	16	10	5/8"	15,5	16,7	20,5	22,3	24,7	250	500	1000	170
KP 220	19	12	3/4"	18,6	19,8	24,6	26,4	28,6	215	430	860	200
KP 225	25	16	1"	25,0	26,4	32,5	34,3	36,6	165	330	660	250

DN = Nominal diameter, nominal width

**KP 200 NO (2SC)****Compact hose**

<b>Application:</b>	Medium pressure circuits with restricted installation spaces and extreme environmental conditions
<b>Standard:</b>	EN 857 2 SC
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	Two high-tensile steel wire braids
<b>Outer layer:</b>	synthetic rubber with high ozone, abrasion, and weather resistance
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 2 % to - 4 %



1

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
KP 206 NO	6	4	1/4"	6,4	14,0	400	800	1600	75
KP 208 NO	8	5	5/16"	7,9	15,6	350	700	1400	85
KP 210 NO	10	6	3/8"	9,5	17,8	330	660	1320	90
KP 213 NO	12	8	1/2"	12,7	21,3	275	550	1100	130

DN = Nominal diameter, nominal width

**KP 200 PRO (2SC)****HD hose, compact, abrasion resistant**

<b>Application:</b>	Medium pressure circuits with restricted installation spaces and high abrasion.
<b>Special features:</b>	narrow bending radius, extremely abrasion resistant top cover
<b>Standard:</b>	EN 857 2 SC
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	two high tensile steel wire braided inserts
<b>Outer layer:</b>	synthetic rubber with additional plastic cover, with more than 300 x the abrasion properties of standard outer covers
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 2 % to - 4 %
<b>Media:</b>	Mineral oil, Polyglycol based oil, Water (0°C to +70°C), Water-oil emulsions

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
KP 206 PRO	6	4	1/4"	6,4	13,7	400	800	1600	75
KP 208 PRO	8	5	5/16"	7,9	15,6	350	700	1400	85
KP 210 PRO	10	6	3/8"	9,5	17,8	330	660	1320	90
KP 213 PRO	12	8	1/2"	12,7	21,5	275	550	1100	130
KP 216 PRO	16	10	5/8"	15,9	25,1	250	500	1000	170
KP 220 PRO	19	12	3/4"	19,4	28,6	215	430	860	200
KP 225 PRO	25	16	1"	25,7	34,9	165	330	660	250

DN = Nominal diameter, nominal width

**KP 200 S****HD hose in compact design**

<b>Application:</b>	Medium pressure circuits with restricted installation spaces
<b>Special features:</b>	Pulse-tested with up to 1 million cycles!
<b>Standard:</b>	exceeds EN 857 2SC
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	two high tensile steel wire braided inserts
<b>Outer layer:</b>	oil resistant and weatherproof synthetic rubber
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Glycol, Water-oil emulsions, Water (0°C to + 70°C), Mineral oil



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Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
KP 206 S	6	4	1/4"	6,4	13,4	450	900	1800	45
KP 208 S	8	5	5/16"	7,9	15,0	420	840	1680	60
KP 210 S	10	6	3/8"	9,5	17,4	385	770	1540	70
KP 213 S	12	8	1/2"	12,7	20,6	345	690	1380	90
KP 216 S	16	10	5/8"	15,9	23,7	290	580	1160	130
KP 220 S	19	12	3/4"	19,0	27,7	280	560	1120	160
KP 225 S	25	16	1"	25,4	35,6	200	400	800	210

DN = Nominal diameter, nominal width

## HD 400 (4SP)

### HD hose



<b>Application:</b>	High pressure circuits
<b>Standard:</b>	EN 856 4 SP
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	four high tensile steel wire spiral inserts
<b>Outer layer:</b>	synthetic rubber with high temperature, ozone and abrasion resistance
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 2 % to - 4 %
<b>Media:</b>	Mineral oil, Glycol, Water (0°C to + 70°C), Water-oil emulsions

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø		Ø Insert		External Ø		Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
				min. mm	max. mm	min. mm	max. mm	min. mm	max. mm				
HD 406	6	4	1/4"	6,2	7,0	14,1	15,3	17,1	18,7	450	900	1800	150
HD 410	10	6	3/8"	9,3	10,1	16,9	18,1	20,6	22,2	445	890	1780	180
HD 413	12	8	1/2"	12,3	13,5	19,4	21,0	23,8	25,4	415	830	1660	230
HD 416	16	10	5/8"	15,5	16,7	23,0	24,6	27,4	29,0	350	700	1400	250
HD 420	19	12	3/4"	18,5	19,8	27,4	29,0	31,4	33,0	350	700	1400	300
HD 425	25	16	1"	25,0	26,4	34,5	36,1	38,5	40,9	280	560	1120	340
HD 432	31	20	1.1/4"	31,4	33,0	45,0	47,0	49,2	52,4	210	420	840	460

DN = Nominal diameter, nominal width

**HDB 400 (4SP)****HD hose, with mining approval**

<b>Application:</b>	medium high pressure range under extreme usage conditions., Installations with high abrasion, Ship-building, Mining and opencast mining
<b>Special features:</b>	Mining approval
<b>Standard:</b>	EN 856 4 SP
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	four high tensile steel wire spiral inserts
<b>Outer layer:</b>	flame retardant synthetic rubber with high ozone, abrasion, weather and temperature resistance
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Mineral oil, Glycol, Water (0°C to + 70°C), Water-oil emulsions



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**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
HDB 406	6	4	1/4"	6,4	17,8	450	1800	150
HDB 410	10	6	3/8"	9,5	21,4	445	1780	180
HDB 413	12	8	1/2"	12,7	24,7	415	1660	230
HDB 416	16	10	5/8"	15,9	28,3	350	1400	250
HDB 420	19	12	3/4"	19,0	32,1	350	1400	300
HDB 425	25	16	1"	25,4	39,8	280	1120	340
HDB 432	31	20	1.1/4"	31,8	50,8	210	840	460
HDB 440	38	24	1.1/2"	38,1	57,2	185	740	560
HDB 450	51	32	2"	50,8	69,8	165	660	660

DN = Nominal diameter, nominal width

**KP 400****Compact hose**

<b>Application:</b>	Medium and high pressure circuit with restricted installation space
<b>Standard:</b>	EN 856 R12
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	four maximum strength steel wire spiral layers
<b>Outer layer:</b>	synthetic rubber with high ozone, abrasion, and weather resistance
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	121 °C
<b>Media:</b>	Mineral oil, Glycol, Water-glycol emulsions, Water (0°C to + 70°C)

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
KP 410	10	6	3/8"	9,5	20,3	280	560	1120	65
KP 413	12	8	1/2"	12,7	23,8	280	560	1120	90
KP 416	16	10	5/8"	15,9	27,4	280	560	1120	100
KP 420	19	12	3/4"	19,0	30,7	280	560	1120	120
KP 425	25	16	1"	25,4	38,0	280	560	1120	155

DN = Nominal diameter, nominal width

**HD 500 (4SH)**

## HD hose

<b>Application:</b>	High pressure circuits
<b>Standard:</b>	EN 856 4 SH
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	four high tensile steel wire spiral inserts
<b>Outer layer:</b>	synthetic rubber with high temperature, ozone and abrasion resistance
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 2 % to - 4 %
<b>Media:</b>	Mineral oil, Glycol, Water (0°C to + 70°C), Water-oil emulsions



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**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø		Ø Insert		External Ø		Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
				min. mm	max. mm	min. mm	max. mm	min. mm	max. mm				
HD 520	19	12	3/4"	18,6	19,8	27,6	29,2	31,4	33,0	420	840	1680	280
HD 525	25	16	1"	25,0	26,4	34,4	36,0	37,5	39,9	380	760	1520	340
HD 532	31	20	1.1/4"	31,4	33,0	40,9	42,9	43,9	47,1	325	650	1300	460
HD 540	38	24	1.1/2"	37,7	39,3	47,8	49,8	51,9	55,1	290	580	1160	560
HD 550	51	32	2"	50,4	52,0	62,2	64,2	66,5	69,7	250	500	1000	700

DN = Nominal diameter, nominal width

**HD 600 (R13)****HD hose**

<b>Application:</b>	High pressure circuits with high loads, hydrostatic drives
<b>Standard:</b>	EN 856 R 13
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	six high tensile steel wire spiral inserts
<b>Outer layer:</b>	synthetic rubber with high temperature, ozone and abrasion resistance
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	121 °C
<b>Elongation:</b>	+ 2 % to - 2 %
<b>Media:</b>	Mineral oil, Glycol, Water (0°C to + 70°C), Water-oil emulsions

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	Ø Insert min. mm	Ø Insert max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
HD 650	51	32	2"	50,4	52,0	66,9	69,3	69,5	72,7	345	690	1379	630

DN = Nominal diameter, nominal width

## HD 700 (R15)

## HD hose

<b>Application:</b>	High pressure circuits with high loads, hydrostatic gearboxes, Shipbuilding, Mining and opencast mining
<b>Standard:</b>	SAE 100 R 15
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	four (up to NW 25) or six (from NW 32) high tensile steel wire spirals
<b>Outer layer:</b>	synthetic rubber with high temperature, ozone and abrasion resistance
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	121 °C
<b>Elongation:</b>	+ 2 % to - 2 %
<b>Media:</b>	Mineral oil, Glycol, Water (0°C to + 70°C), Water-oil emulsions



1

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
HD 720	19	12	3/4"	19,0	32,0	420	1680	265
HD 725	25	16	1"	25,4	38,2	420	1680	330
HD 732 S	31	20	1.1/4"	31,8	50,4	420	1680	445
HD 740	38	24	1.1/2"	38,1	57,3	420	1680	530
HD 750	51	32	2"	50,8	71,5	420	1680	700

DN = Nominal diameter, nominal width

## HD 700 PRO

### HD hose, extremely abrasion resistant outer cover



<b>Application:</b>	High pressure circuits with high loads, hydrostatic gearboxes, Shipbuilding, particularly suitable for restricted installation space and high abrasion
<b>Special features:</b>	extremely abrasion resistant top cover
<b>Standard:</b>	from DN 19: SAE 100 R15, DN 10 + 12: EN 856 4SP, DN 16: EN 856 4SH
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	four (up to NW 25) or six (from NW 32) high tensile steel wire spirals
<b>Outer layer:</b>	synthetic rubber with additional plastic cover, with more than 300 x the abrasion properties of standard outer covers
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	121 °C
<b>Elongation:</b>	+ 2 % to - 2 %
<b>Media:</b>	Mineral oil, Glycol, Water (0°C to + 70°C), Water-oil emulsions

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
HD 710 PRO	10	6	3/8"	9,5	21,4	445	1780	180
HD 713 PRO	12	8	1/2"	12,7	24,6	415	1660	230
HD 716 PRO	16	10	5/8"	16,2	29,2	420	1680	250
HD 720 PRO	19	12	3/4"	19,0	32,0	420	1680	265
HD 725 PRO	25	16	1"	25,4	38,2	420	1680	330
HD 732 PRO	31	20	1.1/4"	31,8	50,4	420	1680	445
HD 740 PRO	38	24	1.1/2"	38,1	57,3	420	1680	530
HD 750 PRO	51	32	2"	50,8	71,5	420	1680	700

DN = Nominal diameter, nominal width

**HD 800****HD hose**

<b>Application:</b>	Mineral oil-based high pressure hydraulic systems, hydrostatic drives, Construction industry, Agricultural technology
<b>Special features:</b>	narrow bending radius
<b>Standard:</b>	DN16 exceeds EN 856 4SP, DN 19 - DN 31 exceeds SAE 100 R15
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	NW 16-25 four from NW 32 six high-tensile steel wire spiral inserts
<b>Outer layer:</b>	synthetic rubber with high abrasion resistance
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Hydraulic oils (mineral oil base)
<b>impulse test:</b>	DN16, DN19 Qualified under laboratory conditions with 3 million bending cycles



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Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	kg/metre kg
HD 816	16	10	5/8"	15,9	29,0	500	2000	200	1,23
HD 820	19	12	3/4"	19,1	33,3	500	2000	215	1,52
HD 825	25	16	1"	24,4	40,4	500	2000	270	2,31
HD 832	31	20	1.1/4"	31,8	50,9	500	2000	380	4,01

DN = Nominal diameter, nominal width

**MD 100****Medium pressure hose****Application:**

Low and medium pressure circuits

**Standard:**

SAE 100 R 5

**Inner layer:**

oil resistant synthetic rubber

**Insert:**

one textile braided insert and one steel wire braid

**Outer layer:**

one textile braided insert embedded in synthetic rubber

**Colour:**

black

**Temp. min.:**

-40 °C

**Temp. max.:**

100 °C

**Media:**

Mineral oil, Polyglycol based oil, Water (0°C to +70°C), Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
MD 104	5	3	3/16"	4,8	5,5	12,7	13,7	207	414	827	76
MD 106	6	5	1/4"	6,4	7,2	14,3	15,3	207	414	827	95
MD 108	8	6	5/16"	7,9	8,7	16,7	17,6	155	310	620	102
MD 110	10	6		10,3	11,1	18,9	20,0	138	276	552	117
MD 113	12	8	1/2"	12,7	13,7	22,8	24,0	121	241	483	140
MD 116	16	10	5/8"	15,9	17,0	26,8	28,0	103	207	414	165
MD 120	19	12	7/8"	22,2	23,3	30,6	32,2	55	110	221	187
MD 125	25	16		28,6	29,8	37,3	38,9	43	86	172	229
MD 132	31	20	1.3/8"	34,9	36,1	43,7	45,2	34	69	138	267
MD 140	38	24		46,0	47,2	55,2	57,6	24	48	97	337

DN = Nominal diameter, nominal width

**TE 100 (1TE)****Low pressure hose with textile insert**

<b>Application:</b>	Low pressure hose for general applications.
<b>Standard:</b>	EN 854 1 TE
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	one braided textile insert
<b>Outer layer:</b>	oil resistant and weatherproof synthetic rubber
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 2 % to - 4 %
<b>Media:</b>	Mineral oil, Glycol, Water (0°C to + 70°C), Water-oil emulsions



1

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
TE 104	5	3	3/16"	4,4	5,2	10,0	11,6	25	50	100	35
TE 106	6	4	1/4"	5,9	6,9	11,6	13,2	25	50	100	45
TE 108	8	5	5/16"	7,4	8,4	13,1	14,7	20	40	80	65
TE 110	10	6	3/8"	9,0	10,0	14,7	16,3	20	40	80	75
TE 113	12	8	1/2"	12,1	13,3	17,7	19,7	16	32	64	90
TE 116	16	10	5/8"	15,3	16,5	21,9	23,9	16	32	64	115
TE 120	19	12	3/4"	18,2	19,8		26,0	12	24	48	165
TE 125	25	16	1"	24,6	26,2		33,4	12	24	48	220

DN = Nominal diameter, nominal width

**TE 200 (2TE)****Low pressure hose with textile insert****Application:**

Low pressure hose for general applications.

**Standard:**

EN 854 2 TE

**Inner layer:**

oil resistant synthetic rubber

**Insert:**

one or two textile braided inserts

**Outer layer:**

oil resistant and weatherproof synthetic rubber

**Colour:**

black

**Temp. min.:**

-40 °C

**Temp. max.:**

100 °C

**Elongation:**

+ 2 % to - 4 %

**Media:**

Glycol, Mineral oil, Water (0°C to + 70°C), Water-oil emulsions

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
TE 225	25	16	1"	24,6	26,2	32,9	35,9	40	80	160	130
TE 232	31	20	1.1/4"	30,8	32,8		42,3	35	70	140	140

DN = Nominal diameter, nominal width

**TE 200 B (2TE)****Low pressure hose with textile insert**

<b>Application:</b>	Low pressure hose for general applications.
<b>Special features:</b>	Fire tested to DIN 54 837 with DIN 5510 Part 2 classification, (test reports on request)
<b>Standard:</b>	EN 854 2 TE
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	one or two textile braided inserts
<b>Outer layer:</b>	flame retardant, oil resistant, weatherproof synthetic rubber
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Mineral oil, Glycol, Water (0°C to + 70°C), Water-oil emulsions



1

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
TE 204 B	5	3	3/16"	4,5	5,2	10,0	11,6	80	160	320	35
TE 206 B	6	4	1/4"	5,9	6,9	12,6	14,2	75	150	300	40
TE 208 B	8	5	5/16"	7,4	8,4	14,1	15,7	68	136	272	50
TE 210 B	10	6	3/8"	9,0	10,0	15,7	17,3	63	126	252	60
TE 213 B	12	8	1/2"	12,1	13,3	18,7	20,7	58	116	232	70
TE 216 B	16	10	5/8"	15,3	16,5	22,9	24,9	50	100	200	90
TE 220 B	19	12	3/4"	18,2	19,8	26,0	28,0	45	90	180	110
TE 225 B	25	16	1"	24,6	26,2	32,9	35,9	40	80	160	150

DN = Nominal diameter, nominal width

**TE 300 (3TE)****Low pressure hose with textile insert**

<b>Application:</b>	Low pressure hose for general applications.
<b>Standard:</b>	EN 854 3 TE
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	two textile braided inserts
<b>Outer layer:</b>	oil resistant and weatherproof synthetic rubber
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	to DN 32 +2 % to -4 %, to DN 50 +5 % to -0 %
<b>Media:</b>	Mineral oil, Glycol, Water (0°C to + 70°C), Water-oil emulsions

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
TE 304	5	3	3/16"	4,4	5,2	12,0	13,6	160	320	640	40
TE 306	6	4	1/4"	5,9	6,9	13,6	15,2	145	290	580	45
TE 308	8	5	5/16"	7,4	8,4	16,1	17,7	130	260	520	55
TE 310	10	6	3/8"	9,0	10,0	17,7	19,3	110	220	440	70
TE 313	12	8	1/2"	12,1	13,3	20,7	22,7	93	186	372	85
TE 316	16	10	5/8"	15,3	16,5	24,9	26,9	80	160	320	105
TE 320	19	12	3/4"	18,2	19,8	28,0	30,0	70	140	280	130
TE 325	25	16	1"	24,6	26,2	34,4	37,4	55	110	220	150
TE 332	31	20	1.1/4"	30,8	32,8	40,8	43,8	45	90	180	190
TE 340	38	24	1.1/2"	37,1	39,1	47,6	51,6	40	80	160	240
TE 350	51	32	2"	49,8	51,8	60,3	64,3	33	66	132	300
TE 360	60	40	2.3/8"	58,5	61,2	70,0	74,0	25	50	100	400

DN = Nominal diameter, nominal width

**TE 300 B (3TE)****Low pressure hose with textile insert**

<b>Application:</b>	Low pressure hose for general applications.
<b>Special features:</b>	Fire tested to DIN 54 837 with DIN 5510 Part 2 classification, (test reports on request)
<b>Standard:</b>	EN 854 3 TE
<b>Inner layer:</b>	synthetic rubber NBR
<b>Insert:</b>	two textile braided inserts
<b>Outer layer:</b>	flame retardant, oil resistant, weatherproof synthetic rubber
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Mineral oil base, light heating oil, Lubricating oil, Water, Air (up to + 70°C), Water-glycol emulsions



1

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm	Colour
TE 306 B	6	4	1/4"	6,4	14,4	145	290	580	45	black
TE 308 B	8	5	5/16"	7,9	16,9	130	260	260	55	black
TE 310 B	10	6	3/8"	9,5	18,5	110	220	440	70	black
TE 313 B	12	8	1/2"	12,7	21,7	93	189	370	85	black
TE 316 B	16	10	5/8"	15,6	25,9	80	160	320	105	black
TE 320 B	19	12	3/4"	19,0	29,0	70	140	280	130	black
TE 325 B	25	16	1"	25,4	35,9	55	110	220	150	black
TE 332 B	31	20	1.1/4"	31,8	42,3	45	90	180	190	black

DN = Nominal diameter, nominal width

**ND 300****Low pressure hose with textile insert**

<b>Application:</b>	Low pressure circuits (no pressure surge loads or critical applications), Return hoses, Pneumatic controllers
<b>Standard:</b>	EN 854 R6, SAE 100 R 6, DN 25 is not specified in the standard
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	one braided textile insert
<b>Outer layer:</b>	oil resistant and weatherproof synthetic rubber
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Mineral oil, Air, Polyglycol based oil, Water (0°C to +70°C), Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
ND 306	6	4	1/4"	5,9	6,9	11,9	13,5	28	56	112	65
ND 310	10	6	3/8"	9,0	10,0	15,1	16,7	28	56	112	80
ND 313	12	8	1/2"	12,1	13,3	19,0	20,6	28	56	112	100
ND 316	16	10	5/8"	15,3	16,5	22,2	23,8	24	48	96	125
ND 320	19	12	3/4"	18,2	19,8	25,4	27,8	21	41	83	150
ND 325	25	16	1"	24,6	26,2		32,5	13		97	152

DN = Nominal diameter, nominal width

**ND 100****Low pressure and plug-in hose**

<b>Application:</b>	Low pressure circuits (no pressure surge loads or critical applications), Return hoses, Pneumatic controllers
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	one braided textile insert
<b>Outer layer:</b>	oil resistant and weatherproof synthetic rubber
<b>Colour:</b>	grey
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Mineral oil, Antifreeze solutions, Air (up to + 70°C), Water (0°C to + 85°C), Water-oil emulsions



1

Identification	DN*	Size	Inches	Internal Ø min. mm	Internal Ø max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
ND 106	6	4	1/4"	5,9	6,9	11,9	13,5	17	42	68	65
ND 110	10	6	3/8"	9,0	10,0	15,1	16,7	17	42	68	80
ND 113	12	8	1/2"	12,1	13,3	19,0	20,6	17	42	68	100

DN = Nominal diameter, nominal width

**ND 300 BL, GRN, R****Low pressure and plug-in hose****Application:**

Systems engineering, general application for air, water etc.

**Inner layer:**

NBR (nitrile) base

**Insert:**

one braided textile insert

**Outer layer:**

Synthetic rubber

**Temp. min.:**

-40 °C

**Temp. max.:**

100 °C

**Media:**

Water, Air, Hydraulic oils (mineral oil base), Anti-freeze solutions

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Colour
ND 306 BL	6	4	1/4"	6	11,9	21	84	45	blue
ND 310 BL	10	6	3/8"	10	15,9	21	84	75	blue
ND 313 BL	12	8	1/2"	13	19,6	21	84	80	blue
ND 316 BL	16	10	5/8"	16	23,9	21	84	115	blue
ND 320 BL	19	12	3/4"	19	26,9	21	84	135	blue
ND 306 GRN	6	4	1/4"	6	11,9	21	84	45	green
ND 310 GRN	10	6	3/8"	10	15,9	21	84	75	green
ND 313 GRN	12	8	1/2"	13	19,6	21	84	80	green
ND 316 GRN	16	10	5/8"	16	23,9	21	84	115	green
ND 320 GRN	19	12	3/4"	19	26,9	21	84	135	green
ND 306 R	6	4	1/4"	6	11,9	21	84	45	red
ND 310 R	10	6	3/8"	10	15,9	21	84	75	red
ND 313 R	12	8	1/2"	13	19,6	21	84	80	red
ND 316 R	16	10	5/8"	16	23,9	21	84	115	red
ND 320 R	19	12	3/4"	19	26,9	21	84	135	red

DN = Nominal diameter, nominal width

**ND 300 T****Low pressure and plug-in hose**

<b>Application:</b>	High temperature applications
<b>Inner layer:</b>	Synthetic PKR rubber
<b>Insert:</b>	High strength textile yarn braided insert
<b>Outer layer:</b>	Synthetic PKR rubber
<b>Colour:</b>	blue
<b>Temp. min.:</b>	-48 °C
<b>Temp. max.:</b>	150 °C
<b>Media:</b>	Liquids based on mineral oil and glycol, Antifreeze agent, Coolant, Air (up to + 70°C), Lubricating oil, Water (0°C to + 85°C), Water-oil emulsions



1

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
ND 306 T	6	4	1/4"	6,3	12,7	17	68	65
ND 310 T	10	6	3/8"	9,5	15,7	17	68	75
ND 313 T	12	8	1/2"	12,7	19,8	17	68	130
ND 316 T	16	10	5/8"	15,9	23,1	17	68	150

DN = Nominal diameter, nominal width

**NP 300****Plug-in hose****Application:**

Low pressure range, Return hoses, Pneumatic controllers, Systems engineering, general application for air, water etc.

**Inner layer:**

NBR (nitrile) base

**Insert:**

one braided textile insert

**Outer layer:**

Synthetic rubber

**Colour:**

black

**Temp. min.:**

-40 °C

**Temp. max.:**

100 °C

**Media:**

Water, Air, Hydraulic oils (mineral oil base), Anti-freeze solutions

**Note:** Unsuitable with pressure surges or critical applications

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NP 306	6	4	1/4"	6,0	11,9	21	84	45
NP 310	10	6	3/8"	10,0	15,9	21	84	75
NP 313	12	8	1/2"	13,0	19,6	21	84	80
NP 316	16	10	5/8"	16,0	23,9	21	84	115
NP 320	19	12	3/4"	19,0	26,9	21	84	135

DN = Nominal diameter, nominal width

**SGB 100****Suction hose**

<b>Application:</b>	Hose for suction and return lines with restricted installation space
<b>Standard:</b>	similar to SAE 100 R4
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	two high tensile textile inserts and one embedded spring steel spiral
<b>Outer layer:</b>	synthetic rubber with high ozone, abrasion, and weather resistance
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Mineral oil, Water-glycol emulsions, Water-oil emulsions



1

**Note:** The recommended flow velocity for media in suction hoses is a maximum 1m/s.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Burst pressure bar	Min. bending radius mm
SGB 120	19	12	3/4"	19,0	29	63	40
SGB 125	25	16	1"	25,4	35	51	55
SGB 132	31	20	1.1/4"	32,0	42	42	70
SGB 140	38	24	1.1/2"	38,0	50	30	80
SGB 145	45	28	1.3/4"	45,0	56	30	100
SGB 150	51	32	2"	50,8	62	30	100
SGB 160	60	40	2.3/8"	60,0	72	30	145
SGB 163	63	40	2.1/2"	63,5	75	30	170
SGB 170	70	44	2.3/4"	70,0	82	30	210
SGB 176	76	48	3"	76,2	88	30	225
SGB 180	80	50	3.1/8"	80,0	94	30	240
SGB 1102	100	64	4"	102,0	116	30	305
SGB 1110	110	69	4.3/8"	110,0	125	30	335
SGB 1127	125	80	5"	127,0	145	30	460
SGB 1152	150	96	6"	152,0	170	30	580

DN = Nominal diameter, nominal width    Burst pressure: Safety factor = 3:1

**SG 100 RI****Suction hose**

<b>Application:</b>	Hose for suction and return lines
<b>Special features:</b>	chequered outer cover
<b>Standard:</b>	similar to SAE 100 R4
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	two high tensile textile inserts and one spring steel spiral
<b>Outer layer:</b>	synthetic rubber
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	80 °C
<b>Media:</b>	Mineral oil, Water-glycol emulsions, Water-oil emulsions

**Note:** The recommended flow velocity for media in suction hoses is a maximum 1m/s.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Burst pressure bar	Min. bending radius mm
SG 120 RI	19	12	3/4"	19,0	29	30	50
SG 125 RI	25	16	1"	25,4	34	30	60
SG 132 RI	31	20	1.1/4"	32,0	42	30	75
SG 140 RI	38	24	1.1/2"	38,0	48	30	100
SG 150 RI	51	32	2"	50,8	62	30	130
SG 160 RI	60	40	2.3/8"	60,0	72	30	165
SG 163 RI	63	40	2.1/2"	63,5	75	30	175
SG 176 RI	76	48	3"	76,2	89	30	210
SG 190 RI	90	56	3.1/2"	90,0	103	21	270
SG 1102 RI	100	64	4"	101,6	116	21	300
SG 1127 RI	125	80	5"	127,0	142	12	400
SG 1152 RI	150	96	6"	152,4	169	12	600
SG 1203 RI	200	128	8"	203,0	223	12	810

DN = Nominal diameter, nominal width    Burst pressure: Safety factor = 3:1

**SG 100 RI EP****Suction hose**

<b>Application:</b>	Hose for suction and return lines with restricted installation space
<b>Inner layer:</b>	EPDM
<b>Insert:</b>	two high tensile textile inserts and one spring steel spiral
<b>Outer layer:</b>	EPDM
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	125 °C
<b>Media:</b>	Water



1

**Note:** Unsuitable for use with swage fittings.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
SG 120 RI EP	19	12	3/4"	19,0	28	10	30	40
SG 125 RI EP	25	16	1"	25,0	35	10	30	60
SG 132 RI EP	31	20	1.1/4"	32,0	42	10	30	85
SG 140 RI EP	38	24	1.1/2"	38,0	48	10	30	110
SG 150 RI EP	51	32	2"	50,8	62	8	24	150
SG 157 RI EP	60	36	2.1/4"	57,0	69	10	30	143
SG 163 RI EP	63	38	2.1/2"	63,5	77	10	30	159
SG 176 RI EP	76	48	3"	76,2	90	10	30	191
SG 190 RI EP	90	56	3.1/2"	90,0	104	10	30	225
SG 1102 RI EP	100	102	4"	101,6	116	8	24	310
SG 1127 RI EP	125	96	5"	127,0	145	8	24	500

DN = Nominal diameter, nominal width

**SGD 100****Suction and pressure hose**

<b>Application:</b>	Low pressure suction and pressure systems
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	highly tear-resistant synthetic textile insert and steel wire spiral
<b>Outer layer:</b>	synthetic rubber with high ozone, abrasion, and weather resistance
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Mineral oil, Water-oil emulsions

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Vacuum bar	Min. bending radius mm
SGD 125	25	16	1"	25,4	40	25	75	0,9	152
SGD 132	31	20	1.1/4"	32,0	46	25	75	0,9	192
SGD 140	38	24	1.1/2"	38,0	54	25	75	0,9	228
SGD 150	51	32	2"	50,8	67	25	75	0,9	305
SGD 163	63	40	2.1/2"	63,5	82	25	75	0,9	381
SGD 176	76	48	3"	76,2	96	25	75	0,9	457
SGD 1102	100	64	4"	101,6	125	25	75	0,9	610

DN = Nominal diameter, nominal width

## NY 100

## Thermoplastic high pressure hose

<b>Application:</b>	medium high pressure circuits, High pressure lubrication lines, Agricultural machines, Forklift trucks
<b>Special features:</b>	high ozone and abrasion resistance, good chemical resistance, low volumetric expansion
<b>Inner layer:</b>	Polyester elastomer
<b>Insert:</b>	one high tensile steel wire braided insert
<b>Outer layer:</b>	Polyurethane
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 2 % to - 4 %
<b>Media:</b>	Mineral oil, Polyglycol based oil, Water (0°C to +60°C), Water-oil emulsions (up to 60 °C)



1

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NY 104	5	3	3/16"	5,0	9,3	300	1200	25
NY 106	6	4	1/4"	6,0	11,5	300	1200	35
NY 108	8	5	5/16"	8,0	13,3	225	900	40
NY 110	10	6	3/8"	10,0	15,0	225	900	60
NY 113	12	8	1/2"	12,0	18,3	180	655	70
NY 116	16	10	5/8"	16,0	21,6	140	540	110
NY 120	19	12	3/4"	19,4	26,7	125	500	170
NY 125	25	16	1"	25,0	33,5	100	400	230

DN = Nominal diameter, nominal width

**NYZ 100****Thermoplastic high pressure twin hose**

<b>Application:</b>	medium high pressure circuits, High pressure lubrication lines, Agricultural machines, Forklift trucks
<b>Special features:</b>	high ozone and abrasion resistance, good chemical resistance, low volumetric expansion
<b>Inner layer:</b>	Polyester elastomer
<b>Insert:</b>	one high tensile steel wire braided insert
<b>Outer layer:</b>	Polyurethane
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 2 % to - 4 %
<b>Media:</b>	Mineral oil, Polyglycol based oil, Water (0°C to + 60°C), Water-oil emulsions (up to 60°C)

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NYZ 104	5	3	3/16"	5	9,3	300	1200	25
NYZ 106	6	4	1/4"	6	11,5	300	1200	35
NYZ 108	8	5	5/16"	8	13,3	225	900	40
NYZ 110	10	6	3/8"	10	15,0	225	900	60
NYZ 113	12	8	1/2"	12	18,3	180	655	70

DN = Nominal diameter, nominal width

**TAF 100****HD hose, type TAF**

<b>Application:</b>	High pressure hydraulics and as supply line for technical media.
<b>Special features:</b>	favourable flow properties, high resistance to light, weathering, aging, chemical media
<b>Inner layer:</b>	Polyamide
<b>Insert:</b>	one polyester braided insert
<b>Outer layer:</b>	NW 4: Polyamide; from NW 6: Polyurethane
<b>Colour:</b>	black
<b>Temp. min.:</b>	-60 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 3 % to - 1 %



1

**Note:** Fitting with press-fit and screw connections. The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	BD* at 20°C bar	BD* at 50°C bar	BD* at 80°C bar	Min. bending radius mm
TAF 104	4	3	3/16"	4,0	8,4	370,0	325	280	40
TAF 106	6	4	1/4"	6,3	11,2	255,0	225	190	63
TAF 108	8	5	5/16"	8,0	13,3	225,0	200	170	80
TAF 110	10	6	3/8"	10,0	16,7	190,0	170	145	100
TAF 113	12	8	1/2"	13,0	21,4	160,0	140	120	130

DN = Nominal diameter, nominal width    BD = Working pressure

**TAFZ 100****HD hose, type TAF, twin**

<b>Application:</b>	High pressure hydraulics and as supply line for technical media.
<b>Special features:</b>	Twin hose, favourable flow properties, high resistance to light, weathering, aging, chemical media
<b>Inner layer:</b>	Polyamide
<b>Insert:</b>	one polyester braided insert
<b>Outer layer:</b>	NW 4: Polyamide; from NW 6: Polyurethane
<b>Colour:</b>	black
<b>Temp. min.:</b>	-60 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 3 % to - 1 %

**Note:** Fitting with press-fit and screw connections. The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	BD* at 20°C bar	BD* at 50°C bar	BD* at 80°C bar	Min. bending radius mm
TAFZ 104	4	3	3/4"	4,0	8,1	370,0	325	280	40
TAFZ 106	6	4	1/4"	6,3	11,2	255,0	255	190	63
TAFZ 108	8	5	5/16"	8,0	13,3	225,0	200	170	80
TAFZ 110	10	6	3/8"	10,0	16,7	190,0	170	145	100
TAFZ 113	12	8	1/2"	13,0	21,4	160,0	140	120	130

DN = Nominal diameter, nominal width    BD = Working pressure

**TAF 100 CU****HD hose, type TAF CU, copper braid**

<b>Application:</b>	Electrically conductive paint spraying hose with high flexibility and low weight
<b>Special features:</b>	with copper braid, favourable flow properties, high resistance to light, weathering, aging, chemical media
<b>Inner layer:</b>	Polyamide
<b>Insert:</b>	one polyester braided insert with interwoven copper braid for dissipating electrostatic charge
<b>Outer layer:</b>	NW 4: Polyamide; from NW 6: Polyurethane
<b>Colour:</b>	black
<b>Temp. min.:</b>	-60 °C
<b>Temp. max.:</b>	80 °C
<b>Elongation:</b>	+ 3 % to - 1 %
<b>Media:</b>	Resistant to many technical media, particularly the paints and solvents used in paint spraying



**Note:** Fitting with press-fit and screw connections. The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402. Paint spraying hoses are subject to the guidelines for liquid jet equipment (ZH 1-406) by the employers' liability insurance association. Follow these guidelines when fitting.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	BD* at 20°C bar	BD* at 50°C bar	BD* at 80°C bar	Min. bending radius mm
TAF 104 CU	4	3	3/16"	4,0	8,1	370,0	325	280	40
TAF 106 CU	6	4	1/4"	6,3	11,2	255,0	225	190	63

DN = Nominal diameter, nominal width    BD = Working pressure

**TAFZ 100 CU****HD hose, type TAFZ CU, twin, copper braid**

<b>Application:</b>	Electrically conductive paint spraying hose with high flexibility and low weight
<b>Special features:</b>	Twin hose with copper braid, favourable flow properties, high resistance to light, weathering, aging, chemical media
<b>Inner layer:</b>	Polyamide
<b>Insert:</b>	one polyester braided insert with interwoven copper braid for dissipating electrostatic charge
<b>Outer layer:</b>	NW 4: Polyamide; from NW 6: Polyurethane
<b>Colour:</b>	black
<b>Temp. min.:</b>	-60 °C
<b>Temp. max.:</b>	80 °C
<b>Elongation:</b>	+ 3 % to - 1 %
<b>Media:</b>	Resistant to many technical media, particularly the paints and solvents used in paint spraying

**Note:** Fitting with press-fit and screw connections. The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402. Paint spraying hoses are subject to the guidelines for liquid jet equipment (ZH 1-406) by the employers' liability insurance association. Follow these guidelines when fitting.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	BD* at 20°C bar	BD* at 50°C bar	BD* at 80°C bar	Min. bending radius mm
TAFZ 104 CU	4	3	3/16"	4,0	8,1	370,0	325	280	40
TAFZ 106 CU	6	4	1/4"	6,3	11,2	255,0	225	190	63

DN = Nominal diameter, nominal width    BD = Working pressure

**TBF 200****HD hose, type TBF**

<b>Application:</b>	High pressure hydraulics and as supply line for technical media., Fitting with press-fit and screw connection hose
<b>Special features:</b>	favourable flow properties, high resistance to light, weathering, aging, chemical media
<b>Inner layer:</b>	Polyamide
<b>Insert:</b>	two polyester braided inserts
<b>Outer layer:</b>	NW 4: Polyamide; from NW 6: Polyurethane
<b>Colour:</b>	black
<b>Temp. min.:</b>	-60 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 3 % to - 1 %



1

**Note:** Fitting with press-fit and screw connections. The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	BD* at 20°C bar	BD* at 50°C bar	BD* at 80°C bar	Min. bending radius mm
TBF 204	4	3	3/16"	4,0	9,2	485,0	425	380	40
TBF 206	6	4	1/4"	6,3	13,0	455,0	400	360	63
TBF 208	8	5	5/16"	8,0	14,9	375,0	330	300	80
TBF 210	10	6	3/8"	10,0	18,0	340,0	300	270	100
TBF 213	12	8	1/2"	13,0	21,9	280,0	245	220	130
TBF 220	19	12	3/4"	19,0	28,1	215,0	190	170	190

DN = Nominal diameter, nominal width    BD = Working pressure

**TBFZ 200****HD hose, type TBF, twin**

<b>Application:</b>	Double hose for high pressure hydraulics and as supply line for technical media, Fitting with press-fit and screw connection hose
<b>Special features:</b>	Twin hose, favourable flow properties, high resistance to light, weathering, aging, chemical media
<b>Inner layer:</b>	Polyamide
<b>Insert:</b>	two polyester braided inserts
<b>Outer layer:</b>	NW 4: Polyamide; from NW 6: Polyurethane
<b>Colour:</b>	black
<b>Temp. min.:</b>	-60 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 3 % to - 1 %

**Note:** Fitting with press-fit and screw connections. The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	BD* at 20°C bar	BD* at 50°C bar	BD* at 80°C bar	Min. bending radius mm
TBFZ 204	4	3	3/16"	4,0	9,2	485,0	452	380	40
TBFZ 206	6	4	1/4"	6,3	13,0	455,0	400	360	63
TBFZ 208	8	5	5/16"	8,0	14,9	375,0	330	300	80
TBFZ 210	10	6	3/8"	10,0	18,0	340,0	300	270	100
TBFZ 213	12	8	1/2"	13,0	21,9	280,0	245	220	130
TBFZ 220	19	12	3/4"	19,0	28,1	215,0	190	170	190

DN = Nominal diameter, nominal width    BD = Working pressure

**TBF 200 CU****HD hose, type TBF, copper braid**

<b>Application:</b>	Electrically conductive paint spraying hose with high flexibility and low weight
<b>Special features:</b>	with copper braid, favourable flow properties, high resistance to light, weathering, aging, chemical media
<b>Inner layer:</b>	Polyamide
<b>Insert:</b>	two polyester braided inserts with interwoven copper braid for dissipating electrostatic charge
<b>Outer layer:</b>	NW 4: Polyamide; from NW 6: Polyurethane
<b>Colour:</b>	black
<b>Temp. min.:</b>	-60 °C
<b>Temp. max.:</b>	80 °C
<b>Elongation:</b>	+ 3 % to - 1 %
<b>Media:</b>	Resistant to many technical media, particularly the paints and solvents used in paint spraying



**Note:** Fitting with press-fit and screw connections. The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402. Paint spraying hoses are subject to the guidelines for liquid jet equipment (ZH 1-406) by the employers' liability insurance association. Follow these guidelines when fitting.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	BD* at 20°C bar	BD* at 50°C bar	BD* at 80°C bar	Min. bending radius mm
TBF 204 CU	4	3	3/16"	4,0	9,2	485,0	425	380	40
TBF 206 CU	6	4	1/4"	6,3	13,0	455,0	400	360	63

DN = Nominal diameter, nominal width    BD = Working pressure

**TBFZ 200 CU****HD hose, type TBFZ CU, twin, copper braid**

<b>Application:</b>	Electrically conductive paint spraying hose with high flexibility and low weight
<b>Special features:</b>	favourable flow properties, high resistance to light, weathering, aging, chemical media, Twin hose with copper braid
<b>Inner layer:</b>	Polyamide
<b>Insert:</b>	two polyester braided inserts with interwoven copper braid for dissipating electrostatic charge
<b>Outer layer:</b>	NW 4: Polyamide; from NW 6: Polyurethane
<b>Colour:</b>	black
<b>Temp. min.:</b>	-60 °C
<b>Temp. max.:</b>	80 °C
<b>Elongation:</b>	+ 3 % to - 1 %
<b>Media:</b>	Resistant to many technical media, particularly the paints and solvents used in paint spraying

**Note:** Fitting with press-fit and screw connections. The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402. Paint spraying hoses are subject to the guidelines for liquid jet equipment (ZH 1-406) by the employers' liability insurance association. Follow these guidelines when fitting.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	BD* at 20°C bar	BD* at 50°C bar	BD* at 80°C bar	Min. bending radius mm
TBFZ 204 CU	4	3	3/16"	4,0	9,2	485,0	425	380	40
TBFZ 206 CU	6	4	1/4"	6,3	13,0	455,0	400	360	63
TBFZ 210 CU	10	6	3/8"	10,0	17,8	340,0	300	270	100

DN = Nominal diameter, nominal width    BD = Working pressure

## NY 700 (R7)

## Thermoplastic high pressure hose

<b>Application:</b>	medium high pressure systems, Forklift trucks, Lubrication line
<b>Special features:</b>	high ozone and abrasion resistance, no swelling or brittleness when used with solvents or alkaline media, very good reverse bending fatigue strength, slight volumetric expansion
<b>Standard:</b>	SAE 100 R 7
<b>Inner layer:</b>	Polyester elastomer
<b>Insert:</b>	two high tensile polyester braided inserts
<b>Outer layer:</b>	Polyurethane
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	93 °C
<b>Elongation:</b>	+ 3 % to - 3 %
<b>Media:</b>	Mineral oil, ASTM1, ASTM3, Polyglycol based oil, Synthetic oils, Water (0°C to + 60°C), Water-oil emulsions (up to 60°C)



1

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NY 704	5	3	3/16"	5	9,7	210	840	75
NY 706	6	4	1/4"	6	12,1	215	860	100
NY 708	8	5	5/16"	8	13,8	190	760	115
NY 710	10	6	3/8"	10	16,1	160	640	125
NY 713	12	8	1/2"	12	19,4	140	560	175

DN = Nominal diameter, nominal width

**NYZ 700 (R7)****Thermoplastic high pressure twin hose**

<b>Application:</b>	medium high pressure systems, Forklift trucks, Lubrication line
<b>Special features:</b>	high ozone and abrasion resistance, no swelling or brittleness when used with solvents or alkaline media, Twin hose, very good reverse bending fatigue strength, slight volumetric expansion
<b>Standard:</b>	SAE 100 R 7
<b>Inner layer:</b>	NW 4 - 13: Polyester elastomer; from NW 16: Polyamide
<b>Insert:</b>	two high tensile polyester braided inserts
<b>Outer layer:</b>	Polyurethane
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 3 % to - 3 %
<b>Media:</b>	Mineral oil, ASTM1, ASTM3, Polyglycol based oil, Synthetic oils, Water (0°C to + 60°C), Water-oil emulsions (up to 60°C)

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NYZ 704	5	3	3/16"	5	9,7	210	840	75
NYZ 706	6	4	1/4"	6	12,1	215	860	100
NYZ 708	8	5	5/16"	8	13,8	190	760	115
NYZ 710	10	6	3/8"	10	16,1	160	640	125
NYZ 713	12	8	1/2"	12	19,4	140	560	175

DN = Nominal diameter, nominal width

## NY 800 (R8)

## Thermoplastic high pressure hose

<b>Application:</b>	High pressure circuits, general application
<b>Special features:</b>	high ozone and abrasion resistance, no swelling or brittleness when used with solvents or alkaline media, very good reverse bending fatigue strength, slight volumetric expansion
<b>Standard:</b>	SAE 100 R 8
<b>Inner layer:</b>	Polyester elastomer
<b>Insert:</b>	one aramide braided insert
<b>Outer layer:</b>	Polyurethane
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 3 % to - 3 %
<b>Media:</b>	Mineral oil, Applications with gaseous or chemical media, Synthetic oils, Water (0°C to + 60°C), Water-oil emulsions (up to 60°C)



1

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NY 804	5	3	3/16"	5,0	9,0	350	1400	75
NY 806	6	4	1/4"	6,0	12,3	350	1400	100
NY 808	8	5	5/16"	8,0	13,8	300	1400	125
NY 810	10	6	3/8"	10,0	16,0	275	1100	125
NY 813	12	8	1/2"	12,0	19,5	240	960	175
NY 820	19	12	3/4"	19,5	26,9	165	660	150
NY 825	25	16	1"	25,9	34,2	140	560	200

DN = Nominal diameter, nominal width

**NYZ 800 (R8)****Thermoplastic high pressure twin hose**

<b>Application:</b>	High pressure circuits, general application
<b>Special features:</b>	high ozone and abrasion resistance, no swelling or brittleness when used with solvents or alkaline media, Twin hose, very good reverse bending fatigue strength, slight volumetric expansion
<b>Standard:</b>	SAE 100 R 8
<b>Inner layer:</b>	Polyester elastomer
<b>Insert:</b>	one aramide braided insert
<b>Outer layer:</b>	Polyurethane
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 3 % to - 3 %
<b>Media:</b>	Mineral oil, Applications with gaseous or chemical media, Synthetic oils, Water (0°C to + 60°C), Water-oil emulsions (up to 60°C)

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NYZ 804	5	3	3/16"	5	9,0	350	1400	75
NYZ 806	6	4	1/4"	6	12,3	350	1400	100
NYZ 808	8	5	5/16"	8	13,8	300	1400	125
NYZ 810	10	6	3/8"	10	16,0	275	1100	125
NYZ 813	12	8	1/2"	12	19,5	240	960	175

DN = Nominal diameter, nominal width

**NY 800 NC (R8)****Thermoplastic high pressure hose, electrically nonconductive**

<b>Application:</b>	High pressure circuits, general application
<b>Special features:</b>	high ozone and abrasion resistance, very good reverse bending fatigue strength, slight volumetric expansion
<b>Standard:</b>	SAE J517 - 100 R8 Non Conductive
<b>Inner layer:</b>	Polyester elastomer
<b>Insert:</b>	one aramide braided insert
<b>Outer layer:</b>	Polyurethane
<b>Colour:</b>	orange
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Elongation:</b>	+ 0 % to - 1 %
<b>Media:</b>	Mineral oil, Synthetic oils, Water-oil emulsions (up to 60°C), Water (0°C to + 60°C)



1

**Note:** Electrical conductivity < 50µA to DIN EN 855

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NY 804 NC	5	3	3/16"	5,0	8,9	350	1400	30
NY 806 NC	6	4	1/4"	6,5	11,5	350	1400	50
NY 808 NC	8	5	5/16"	8,1	13,4	300	1200	55
NY 810 NC	10	6	3/8"	9,7	15,5	275	1120	60
NY 813 NC	12	8	1/2"	13,0	19,9	240	980	80
NY 820 NC	19	12	3/4"	19,5	26,9	165	660	150
NY 825 NC	25	16	1"	25,9	34,2	140	560	200

DN = Nominal diameter, nominal width

**NY 300****Thermoplastic high pressure hose**

<b>Application:</b>	High pressure hydraulic systems, hydraulic tools, Compressors
<b>Special features:</b>	high kink resistance, maximum flexibility
<b>Standard:</b>	Pressure values from EN 853, SAE 100 R9, SAE 100 R10
<b>Inner layer:</b>	Polyamide
<b>Insert:</b>	Two high tensile steel wire spiral inserts and one steel wire braid
<b>Outer layer:</b>	up to NW 13: Polyurethane; from NW 16: Polyamide
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Mineral oil, Applications with gaseous and aggressive media, Synthetic oils

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
NY 306	6	4	1/4"	6,3	12,5	450	1800	70
NY 308	8	5	5/16"	8,2	14,3	400	1600	100
NY 310	10	6	3/8"	9,7	17,0	375	1500	120
NY 313	12	8	1/2"	12,8	20,7	350	1400	165
NY 316	16	10	5/8"	16,0	24,5	330	1320	200
NY 320	19	12	3/4"	19,6	28,5	300	1200	240
NY 325	25	16	1"	25,0	34,0	275	1100	280
NY 332	31	20	1.1/4"	32,0	44,0	275	1100	400

DN = Nominal diameter, nominal width

## NY 2100

## Thermoplastic extreme pressure hose

<b>Application:</b>	Extreme pressure applications, high pressure tools, emergency rescue systems, The jaws of life
<b>Special features:</b>	Extremely kink-resistant hose, good flexibility at low temperatures
<b>Inner layer:</b>	Polyamide
<b>Insert:</b>	one aramide braided insert and one high tensile steel wire braided insert
<b>Outer layer:</b>	Polyurethane
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Mineral oil, Synthetic oils



1

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Colour
NY 2106	6	4	1/4"	6,3	13,3	700	2800	70	black
NY 2106 B	6	4	1/4"	6,3	13,3	700	2800	70	blue
NY 2106 GE	6	4	1/4"	6,3	13,3	700	2800	70	yellow
NY 2106 R	6	4	1/4"	6,3	13,3	700	2800	70	red

DN = Nominal diameter, nominal width

**NYZ 2100****Thermoplastic high pressure twin hose**

<b>Application:</b>	Extreme pressure applications, high pressure tools, emergency rescue systems, The jaws of life
<b>Special features:</b>	Twin hose, Extremely kink-resistant hose, good flexibility at low temperatures
<b>Inner layer:</b>	Polyester elastomer
<b>Insert:</b>	one aramide braided insert and one high tensile steel wire braided insert
<b>Outer layer:</b>	Polyurethane
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Mineral oil, Synthetic oils, Water (0°C to + 60°C), Water-oil emulsions (up to 60°C)

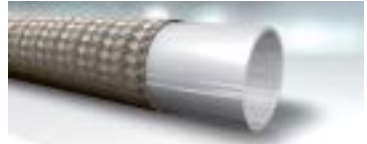
Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Colour
NYZ 2106 B	6	4	1/4"	6,3	13,3	700	2800	70	blue
NYZ 2106 BGE	6	4	1/4"	6,3	13,3	700	2800	70	blue + yellow
NYZ 2106 BR	6	4	1/4"	6,3	13,3	700	2800	70	blue + red
NYZ 2106 GE	6	4	1/4"	6,3	13,3	700	2800	70	yellow
NYZ 2106 R	6	4	1/4"	6,3	13,3	700	2800	70	red

DN = Nominal diameter, nominal width

## TF 100

## PTFE hose, smooth, 1 braiding

<b>Application:</b>	Medium pressure applications with hydraulic fluids (high temperatures) and aggressive media for the chemical industry, Surface technology, 2-component systems
<b>Design:</b>	Smooth inliner in white PTFE
<b>Braiding:</b>	1 braiding with 1.4301 / 1.4306
<b>Inner layer:</b>	PTFE
<b>Outer layer:</b>	none
<b>Colour:</b>	metallic
<b>Temp. min.:</b>	-70 °C
<b>Temp. max.:</b>	260 °C
<b>Material:</b>	PTFE (polytetrafluoroethylene)



**Note:** Not recommended for high dynamic pressure loads.  
 From 120 °C the pressure reduction factor is to be taken into account.  
 (Max. operating pressure = operating pressure x factor).  
 Temp.: 120 °C / 140 °C / 160 °C / 180 °C / 200 °C / 220 °C  
 Factor: 1,00 / 0,80 / 0,60 / 0,40 / 0,20 / 0,00

Identification	DN*	Inches	Size	Internal Ø min. mm	Internal Ø max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
TF 104	5	3/16"	3	5,0	5,4	7,5	8,6	264	396	793	64
TF 106	6	1/4"	4	6,5	7,0	8,8	9,9	224	336	672	76
TF 108	8	5/16"	5	8,2	8,7	10,5	11,6	207	311	621	102
TF 110	10	3/8"	6	9,9	10,6	12,8	14,1	183	275	552	133
TF 113	12	1/2"	8	13,1	13,4	15,9	17,2	161	242	483	152
TF 116	16	5/8"	10	16,0	17,1	19,0	20,6	114	171	345	178
TF 120	19	3/4"	12	19,3	20,3	22,2	23,8	103	155	310	203
TF 125	25	1"	16	25,8	26,6	28,5	30,1	80	120	241	305

DN = Nominal diameter, nominal width

**TF 200****PTFE hose, smooth, 2 braidings**

<b>Application:</b>	Medium pressure applications with hydraulic fluids (high temperatures) and aggressive media for the chemical industry, Surface technology, 2-component systems
<b>Design:</b>	Smooth inliner in white PTFE
<b>Braiding:</b>	2 braidings with 1.4301 / 1.4306
<b>Inner layer:</b>	PTFE
<b>Outer layer:</b>	none
<b>Colour:</b>	metallic
<b>Temp. min.:</b>	-70 °C
<b>Temp. max.:</b>	260 °C
<b>Material:</b>	PTFE (polytetrafluoroethylene)

**Note:** Not recommended for high dynamic pressure loads.  
 From 120 °C the pressure reduction factor is to be taken into account.  
 (Max. operating pressure = operating pressure x factor).  
 Temp.: 120 °C / 140 °C / 160 °C / 180 °C / 200 °C / 220 °C  
 Factor: 1,00 / 0,80 / 0,60 / 0,40 / 0,20 / 0,00

Identification	DN*	Inches	Size	Internal Ø min. mm	Internal Ø max. mm	External Ø min. mm	External Ø max. mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
TF 206	6	1/4"	4	6,3	7,1	9,9	11,1	247	371	741	76
TF 208	8	5/16"	5	8,0	8,8	12,0	13,2	230	345	690	102
TF 210	10	3/8"	6	9,6	10,4	14,0	15,2	207	345	621	133
TF 213	12	1/2"	8	12,8	13,6	17,2	19,9	183	275	552	152
TF 216	16	5/8"	10	16,1	17,1	20,3	21,7	138	207	414	178
TF 220	19	3/4"	12	19,2	20,4	23,5	25,2	126	189	379	203
TF 225	25	1"	16	25,5	26,7	29,9	31,6	103	155	310	305

DN = Nominal diameter, nominal width

**HF 100 (1SN)****Hot water hose**

<b>Application:</b>	High pressure cleaning equipment
<b>Standard:</b>	EN 853 1 SN
<b>Inner layer:</b>	water, oil and heat resistant synthetic rubber
<b>Insert:</b>	one high tensile steel wire braided insert
<b>Outer layer:</b>	environmentally safe synthetic rubber
<b>Colour:</b>	blue
<b>Temp. min.:</b>	-10 °C
<b>Temp. max.:</b>	150 °C
<b>Elongation:</b>	+ 2 % to - 4 %
<b>Media:</b>	Water, Mineral oil (up to + 100°C), Water-oil emulsions



1

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Inches	Size	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
HF 106	6	1/4"	4	6,4	14,1	225	900	100
HF 108	8	5/16"	5	8,0	15,7	215	850	115
HF 110	10	3/8"	6	9,5	18,1	180	720	130
HF 113	12	1/2"	8	12,7	21,4	160	640	180

DN = Nominal diameter, nominal width

**HF 200 (2SN)****Hot water hose**

<b>Application:</b>	High pressure cleaning equipment
<b>Standard:</b>	EN 853 2 SN
<b>Inner layer:</b>	water, oil and heat resistant synthetic rubber
<b>Insert:</b>	two high tensile steel wire braided inserts
<b>Outer layer:</b>	environmentally safe synthetic rubber
<b>Colour:</b>	blue
<b>Temp. min.:</b>	-10 °C
<b>Temp. max.:</b>	150 °C
<b>Elongation:</b>	+ 2 % to - 4 %
<b>Media:</b>	Water, Mineral oil (up to + 100°C), Water-oil emulsions

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Inches	Size	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
HF 206	6	1/4"	4	6,4	15,7	400	1600	100
HF 208	8	5/16"	5	7,9	17,3	400	1470	115
HF 210	10	3/8"	6	9,5	19,7	400	1320	130
HF 213	12	1/2"	8	12,7	23,0	400	1100	180

DN = Nominal diameter, nominal width

**HW 100 (1SN)****Hot water hose**

<b>Application:</b>	High pressure cleaning equipment
<b>Standard:</b>	EN 853 1 SN
<b>Inner layer:</b>	water, oil and heat resistant synthetic rubber
<b>Insert:</b>	one high tensile steel wire braided insert
<b>Outer layer:</b>	environmentally safe synthetic rubber
<b>Colour:</b>	black
<b>Temp. min.:</b>	-10 °C
<b>Temp. max.:</b>	150 °C
<b>Elongation:</b>	+ 2 % to - 4 %
<b>Media:</b>	Water, Mineral oil (up to + 100°C), Water-oil emulsions



1

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Inches	Size	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
HW 106	6	1/4"	4	6,4	13,4	225	900	100
HW 108	8	5/16"	5	8,0	15,0	215	850	115
HW 110	10	3/8"	6	9,5	17,4	180	720	130
HW 113	12	1/2"	8	12,7	20,6	160	640	180

DN = Nominal diameter, nominal width

**HW 200 (2SN)****Hot water hose**

<b>Application:</b>	High pressure cleaning equipment
<b>Standard:</b>	EN 853 2 SN
<b>Inner layer:</b>	water, oil and heat resistant synthetic rubber
<b>Insert:</b>	two high tensile steel wire braided inserts
<b>Outer layer:</b>	environmentally safe synthetic rubber
<b>Colour:</b>	black
<b>Temp. min.:</b>	-10 °C
<b>Temp. max.:</b>	150 °C
<b>Elongation:</b>	+ 2 % to - 4 %
<b>Media:</b>	Water, Mineral oil (up to + 100°C), Water-oil emulsions

**Note:** The change in length of the hose is determined at max. working pressure during testing to EN ISO 1402.

Identification	DN*	Inches	Size	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
HW 206	6	1/4"	4	6,4	15,0	400	1840	100
HW 208	8	5/16"	5	7,9	16,6	400	1470	115
HW 210	10	3/8"	6	9,5	19,0	400	1320	130
HW 213	12	1/2"	8	12,7	22,2	400	1200	180

DN = Nominal diameter, nominal width

## Rubber antikink protection

**Application:** High pressure cleaning equipment  
**Temp. min.:** -50 °C  
**Temp. max.:** 135 °C  
**Material:** Rubber  
**Description:** Prevents the hose from kinking behind the ferrule.



1

Identification	DN*	Inches	Internal Ø mm	Length mm	Colour
GKS 06	6	1/4"	14,3	120	black
GKS 08	8	5/16"	17,0	148	black
GKS 08 BLAU	8	5/16"	17,0	148	blue
GKS 08 GELB	8	5/16"	17,0	148	yellow
GKS 08 GRAU	8	5/16"	17,0	148	grey
GKS 08 ORANGE	8	5/16"	17,0	148	orange
GKS 08 ROT	8	5/16"	17,0	148	red
GKS 10	10	3/8"	19,5	148	black
GKS 10 BLAU	10	3/8"	19,5	148	blue
GKS 10 GELB	10	3/8"	19,5	148	yellow
GKS 10 GRAU	10	3/8"	19,5	148	grey
GKS 10 ORANGE	10	3/8"	19,5	148	orange
GKS 10 ROT	10	3/8"	19,5	148	red
GKS 13 BLAU	12	1/2"	23,9	148	blue
GKS 13 GRAU	12	1/2"	23,9	148	grey

DN = Nominal diameter, nominal width

**PKF****Antikink protection spring****Material:** Spring steel**Surface:** electro galvanised**Description:** The spring steel spiral with narrow and wide coil spacing is pushed over the swage ferrule and prevents the hose from kinking at the ferrule.

Identification	Internal Ø mm	Length mm	Wire Ø mm
PKF 17	18,0	210	2,5
PKF 22	22,3	210	2,5
PKF 23	23,0	210	2,5
PKF 26	25,7	210	3,0
PKF 29	29,3	230	3,5
PKF 34	34,0	250	3,5
PKF 42	42,0	280	3,5
PKF 52	53,1	360	4,0

**RKS****Pipe antikink protection**

**Material:** Steel  
**Surface:** electro galvanised  
**Description:** The moulded steel pipe is pressed onto the mount and prevents the hose from kinking at the mount.



1

Identification	DN*	Internal Ø mm	External Ø mm	Length mm
RKS 20	19	38,5	42	140
RKS 25	25	44,0	48	160
RKS 32	31	56,5	60	190
RKS 40	38	64,5	70	205

DN = Nominal diameter, nominal width

**FBS****Silicate fabric heat protection hose**

- Application:** Foundries, steelworks, glassworks, shipyards etc.  
**Properties:** excellent resistance to liquid metals, flying sparks, dross, resistant against oils, greases and solvents  
**Application:** as contact protection for hot and cold hoses, for protection in the high temperature range,, also particularly against liquid metals and splashed metal in the iron industry  
**Colour:** bluish  
**Temp. min.:** -25 °C  
**Temp. max.:** 750 °C  
**Material:** Calcium silicate fibres  
**Description:** Abrasion resistant and tear proof insulating fabric, asbestos free, loss on ignition approx. 2%, good insulating properties due to low heat storage

Identification	Internal Ø mm
FBS 014	14
FBS 016	16
FBS 018	18
FBS 020	20
FBS 022	22
FBS 024	24
FBS 025	25
FBS 026	26
FBS 028	28
FBS 030	30
FBS 032	32
FBS 035	35
FBS 038	38
FBS 040	40
FBS 042	42
FBS 045	45
FBS 047	47
FBS 050	50
FBS 055	55
FBS 056	56
FBS 060	60
FBS 068	70
FBS 080	80

**FBSB****Heat protection hose, silicate, silicone**

<b>Application:</b>	Foundries, steelworks, glassworks, shipyards etc.
<b>Application:</b>	as contact protection for hot and cold hoses
<b>Colour:</b>	smooth, rust red
<b>Temp. min.:</b>	-65 °C
<b>Temp. max.:</b>	260 °C
<b>Temp.:</b>	from inner diameter 6 mm to 127 mm: 1090°C for 15-20 min. ; 1650°C for 15-30 sec.
<b>Material:</b>	Calcium silicate fibres
<b>Description:</b>	Provides outstanding protection against liquid metals and metal sprays.



**Note:** Permit from Germanischer Lloyd, DIN 5510-2; MSHA for internal diameter between 13 mm and 127 mm Permit from Germanischer Lloyd for internal diameter above 160 mm.  
Above internal diameter 160 mm: Max. temperature: 300 °C

Identification	Internal Ø mm
FBSB 006	6
FBSB 008	8
FBSB 010	10
FBSB 013	13
FBSB 016	16
FBSB 019	19
FBSB 022	22
FBSB 025	25
FBSB 029	29
FBSB 032	32
FBSB 035	35
FBSB 038	38
FBSB 041	41
FBSB 044	44
FBSB 051	51
FBSB 057	57
FBSB 064	64
FBSB 070	70
FBSB 076	76
FBSB 083	83
FBSB 089	89
FBSB 095	95
FBSB 102	102
FBSB 114	114
FBSB 127	127
FBSB 160	160
FBSB 170	170
FBSB 180	180
FBSB 200	200
FBSB 220	220
FBSB 250	250
FBSB 300	300

**Additional info:** good light, UV and weather proof, water and oil repellent effect.

**FBSS****Heat protection hose, glass-fibre, silicone**

<b>Application:</b>	Foundries, steelworks, glassworks, shipyards etc.
<b>Standard:</b>	IEC 60684-1 and 60684-2
<b>Colour:</b>	brown
<b>Temp. min.:</b>	-60 °C
<b>Temp. max.:</b>	250 °C
<b>Material:</b>	Glass silk fabric coated with colourless silicone lacquer
<b>Description:</b>	Provides outstanding protection against liquid metals and metal sprays.

Identification	Internal Ø mm	External Ø mm	Wall thickness mm
FBSS 015	15	16,2	0,6
FBSS 018	18	18,4	0,7
FBSS 020	20	21,4	0,7
FBSS 025	25	26,4	0,7
FBSS 030	30	31,4	0,7
FBSS 035	35	36,4	0,7
FBSS 040	40	41,6	0,8
FBSS 042	42	43,6	0,8
FBSS 045	45	46,6	0,8
FBSS 050	50	51,6	0,8

**Additional info:** Good resistance to UV radiation, ozone, oxygen and thermal shocks, excellent aging resistance in hot environments.

SSK

## Plastic abrasion protection

<b>Application:</b>	Hose lines that are subjected to a shearing load during movement.
<b>Colour:</b>	black
<b>Temp. max.:</b>	120 °C
<b>Material:</b>	Polyamide 6
<b>Description:</b>	Flat plastic profile protective helix protects the hose against external abrasion.



1

Identification	Internal Ø mm	External Ø mm
SSK 07	7,5	10,0
SSK 09	9,5	12,0
SSK 13	13,0	16,0
SSK 16	15,0	18,0
SSK 20	20,0	24,0
SSK 25	25,0	29,0
SSK 30	30,0	35,4

**Additional info:** Also suitable for retrofitting and for bundling hose lines.

**SSK C****Plastic abrasion protection**

- Application:** Hose lines that are subjected to a shearing load during movement.
- Colour:** black
- Temp. min.:** -20 °C
- Temp. max.:** 60 °C
- Material:** Hard PVC
- Description:** Flat plastic profile protective helix protects the hose against external abrasion.

Identification	Internal Ø mm	External Ø mm	Wall thickness mm
SSK C 07	7,5		
SSK C 09	9,5		
SSK C 13	13,0	16,2	1,6
SSK C 16	16,0	19,5	1,7
SSK C 23	20,0	25,0	2,3
SSK C 30	27,0	32,2	2,6
SSK C 40	35,0	40,0	2,8
SSK C 50	43,5	49,5	3,0
SSK C 60	64,0	72,5	4,3
SSK C 80	81,0	91,0	5,0

**Additional info:** Also suitable for retrofitting and for bundling hose lines.

## Protective braiding

**Application:** Foundries, steelworks, glassworks, shipyards etc.  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Zinc-plated steel wire protective braiding protects the hose against external damage such as flying sparks.



1

Identification	Internal Ø mm	External Ø mm	Min. bending radius mm
SGF 06	6	8,0	20
SGF 08	8	10,0	25
SGF 10	10	13,0	25
SGF 13	13	16,0	35
SGF 15	15	18,0	40
SGF 18	18	21,3	45
SGF 20	20	24,0	50
SGF 22	23	27,0	55
SGF 24	25	29,0	60
SGF 28	28	32,0	63
SGF 30	30	34,0	65
SGF 35	35	39,5	80
SGF 42	42	47,5	88
SGF 44	44	49,5	90
SGF 45	45	50,5	90
SGF 48	48	53,5	95
SGF 50	50	56,0	115
SGF 52	52	58,0	115
SGF 55	55	61,0	115
SGF 58	58	64,0	117
SGF 60	60	66,0	120
SGF 62	62	69,0	125
SGF 65	65	72,0	130
SGF 70	70	77,0	150
SGF 72	72	79,0	160
SGF 76	76	83,0	166
SGF 80	80	87,0	170

**SSF****Abrasion protection, flat****Application:**

Hose lines that are subjected to a shearing load during movement.

**Material:**

Steel

**Surface:**

electro galvanised

**Description:**

Flat spring steel band protective helix protects the hose against external abrasion.

1

Identification	Internal Ø mm
SSF 13-1	13
SSF 15-1	15
SSF 17-1	17
SSF 19-1	19
SSF 21-1	21
SSF 23-1	23
SSF 26-1	26
SSF 29-1	29
SSF 33-1	34
SSF 41-1	41
SSF 48-1	48
SSF 54-1	54

## SSR

## Abrasion protection, round

- Application:** Hose lines that are subjected to a shearing load during movement.
- Material:** Steel
- Surface:** electro galvanised
- Description:** Round spring steel wire protective helix protects the hose against extreme external abrasion.



1

Identification	Internal Ø mm	External Ø mm	Wire Ø mm
SSR 14-2	14	18	2,0
SSR 18-2	18	22	2,0
SSR 20-2	20	24	2,0
SSR 23-2	23	27	2,0
SSR 25-2	25	29	2,0
SSR 27-2	27	31	2,0
SSR 27-2.5	27	32	2,5
SSR 30-2	30	34	2,0
SSR 34-3	34	40	3,0
SSR 41-3	41	47	3,0
SSR 48-3	48	54	3,0
SSR 51-3	51	57	3,0
SSR 52-3	52	58	3,0
SSR 54-3	54	60	3,0
SSR 56-3	56	62	3,0
SSR 68-3	68	74	3,0
SSR 73-3	73	79	3,0

**Product versions:**

SSR VA - Abrasion protection, round, VA, Stainless steel

**SSR E****Round abrasion protection, tightly wound**

- Application:** Hose lines that are subjected to a shearing load during movement.
- Material:** Steel
- Surface:** electro galvanised
- Description:** Round spring steel wire protective helix protects the hose against extreme external abrasion. The narrow winding distance provides excellent hose coverage.

1

Identification	Internal Ø mm	External Ø mm	Wire Ø mm
SSR 20-2 E	20	24	2,0
SSR 26-2 E	26	30	2,0
SSR 28-2 E	28	32	2,0

## SST

## Shrink hose

<b>Properties:</b>	Flame retardant in accordance with MVSS and UL 224
<b>Colour:</b>	black
<b>Temp. min.:</b>	-55 °C
<b>Temp. max.:</b>	135 °C
<b>Temp. range:</b>	Shrinking temperature above 90°C to 200°C
<b>Material:</b>	crosslinked modified polyolefin
<b>Description:</b>	Shrink hose usable in the widest possible range of applications, flame-retardant for additional protection against weather influences (e.g., swage fittings in seawater areas).



1

Identification	Internal Ø mm	Wall thickness mm	Min. shrinkage Ø mm	Shrinking rate
SST 25	25,4	0,9	12,7	
SST 38	38,0	1,0	19,0	
SST 50	51,0	1,1	25,4	

**SSTK****Shrink hose with adhesive coating**

<b>Properties:</b>	flame retardant and not self-extinguishing, complies with DIN VDE 0278
<b>Colour:</b>	black
<b>Temp. min.:</b>	-55 °C
<b>Temp. max.:</b>	110 °C
<b>Temp. range:</b>	Min. shrinking temperature of 110 °C
<b>Material:</b>	crosslinked modified polyolefin
<b>Description:</b>	Shrink hose usable in the widest possible range of applications, flame-retardant with interior adhesive coating for better bonding.

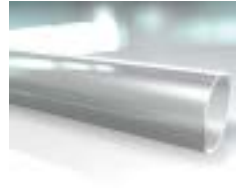
1

Identification	Internal Ø mm	Wall thickness mm	Min. shrinkage Ø mm	Shrinking rate
SSTK 2006	20	2	6,0	to 3,5:1
SSTK 3010	30	2	10,0	to 3,5:1
SSTK 4012	40	2	12,0	to 3,5:1
SSTK 5018	54	2	18,0	to 3,5:1

**Additional info:** Provides additional protection against climatic influences (e.g. swage fittings for use near sea water) or used for cable bundling

**SSTK-T****Shrink hose with adhesive coating**

- Properties:** Provides added protection against humidity, Dielectric strength: min. 12 kV/mm to IEC 243-1, Specifications: UL 224 105°C outer sheath only
- Colour:** Transparent
- Temp. min.:** -55 °C
- Temp. max.:** 110 °C
- Temp. range:** Min. shrinking temperature of 125 °C
- Material:** crosslinked modified polyolefin
- Description:** A flexible, lined shrink hose made from polyolefin coated with a special thermoplastic adhesive.



1

Identification	Internal Ø mm	Wall thickness mm	Min. shrinkage Ø mm	Shrinking rate
SSTK 1906 T	19	2,25	6,0	3:1
SSTK 3208 T	32	2,54	8,0	4:1
SSTK 3913 T	39	2,54	13,0	3:1
SSTK 2408 T	24	2,54	8,0	3:1
SSTK 5213 T	52	2,54	13,0	4:1

**TGF BAND****Hose bundling****Application:**

for bundling multiple hose lines

**Colour:**

black

**Description:**

High tensile nylon fabric retaining band with Velcro fastener and mounting loop.

1

Identification	Bundle Ø min. mm	Bundle Ø max. mm	Circumference mm
TGF BAND 102	31	33	102
TGF BAND 152	47	49	152
TGF BAND 203	63	67	203
TGF BAND 254	79	83	254
TGF BAND 305	95	99	305
TGF BAND 356	111	115	356
TGF BAND 406	127	131	406
TGF BAND 457	144	148	457
TGF BAND 508	160	164	508
TGF BAND 560	176	180	560
TGF BAND 610	192	196	610
TGF BAND 660	208	212	660

**TGF ISO K****Hose bundling with velcro**

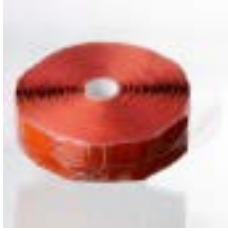
<b>Application:</b>	Hose bundling
<b>Inner layer:</b>	special nylon
<b>Colour:</b>	black
<b>Additional feature:</b>	with Velcro fastener
<b>Temp. max.:</b>	100 °C
<b>Description:</b>	Simple fitting or retrofitting using individual or bundled hose lines.



1

**Note:** Extremely abrasion resistant, flame retardant.

Identification	Internal Ø mm
TGF ISO K 050	50
TGF ISO K 075	75
TGF ISO K 100	100
TGF ISO K 125	125
TGF ISO K 150	150
TGF ISO K 175	175
TGF ISO K 200	200

**FBSB-TAPE****Silicone winding band for FBSB**

**Colour:** red  
**Temp. max.:** 246 °C  
**Material:** Iron oxide red silicone rubber

1

Identification	Width mm	Roll length m	Strength mm
FBSB-TAPE 25	25,0	11	0,50
FBSB-TAPE 38	38,0	11	1,50

**Accessory for following products:**

FBSB - Heat protection hose, silicate, silicone

**STOP FS****Stopflex hose clamp**

**Application:** Personal protection against whipping hose  
**Inner layer:** Steel and rubber  
**Surface:** electro galvanised  
**Description:** High tensile steel clip with rubber insert for fitting on the hose.



1

Identification	Clamoing range (mm)	fixing bolt
STOP FS 11 11.5	11 - 11,9	M 6
STOP FS 12 12.5	12 - 12,9	M 6
STOP FS 13 13.5	13 - 13,9	M 6
STOP FS 14 15	14 - 15,5	M 6
STOP FS 16 17	16 - 17,9	M 6
STOP FS 17 18	17 - 18,9	M 6
STOP FS 18 19	18 - 19,9	M 6
STOP FS 20 21	20 - 21,9	M 6
STOP FS 21 22	21 - 22,9	M 6
STOP FS 22 23	22 - 23,9	M 6
STOP FS 24 25	24 - 25,9	M 6
STOP FS 25 26	25 - 26,9	M 6
STOP FS 26 27	26 - 27,9	M 6
STOP FS 27 28	27 - 28,9	M 6
STOP FS 28 29	28 - 29,9	M 6
STOP FS 30 31	30 - 31,9	M 6
STOP FS 32 33	32 - 33,9	M 6
STOP FS 34 35	34 - 35,9	M 6
STOP FS 36 37	36 - 37,9	M 6
STOP FS 38 39	38 - 39,9	M 6
STOP FS 39 40	39 - 40,9	M 6
STOP FS 40 41	40 - 41,9	M 6
STOP FS 42 43	42 - 43,9	M 6
STOP FS 43 44	43 - 44,9	M 6
STOP FS 44 45	44 - 45,9	M 6
STOP FS 45 47	45 - 47,9	M 8
STOP FS 48 50	48 - 50,9	M 8
STOP FS 51 53	51 - 53,9	M 8
STOP FS 53 54	53 - 54,9	M 8
STOP FS 54 56	54 - 56,9	M 8
STOP FS 57 59	57 - 59,9	M 8
STOP FS 60 62	60 - 62,9	M 8
STOP FS 63 65	63 - 65,9	M 8
STOP FS 66 68	66 - 68,9	M 8
STOP FS 69 71	69 - 71,9	M 8
STOP FS 72 74	72 - 74,9	M 8
STOP FS 75 77	75 - 77,9	M 8
STOP FS 78 80	78 - 80,9	M 8
STOP FS 81 83	81 - 83,9	M 8
STOP FS 84 86	84 - 86,9	M 8
STOP FS 87 89	87 - 89,9	M 8
STOP FS 90 92	90 - 92,9	M 8

## STOP FS

### Stopflex hose clamp

(Continued)

Identification	Clamping range (mm)	fixing bolt
STOP FS 93 95	93 - 95,6	M 8

1

**STOP ROV****Stopflex mounting, pipe fitting**

**Application:** Personal protection against whipping hose  
**Material:** Steel  
**Description:** A high tensile steel cable with lug and hooks fitted.



1

Identification	Mounting hole mm	Length mm	Bore mm
STOP ROV 145 L 300	14,5	300	6,4
STOP ROV 170 L 300	17,0	300	6,4
STOP ROV 185 L 300	18,5	300	6,4
STOP ROV 205 L 300	20,5	300	6,4
STOP ROV 225 L 300	22,5	300	6,4
STOP ROV 245 L 300	24,5	300	6,4
STOP ROV 265 L 300	26,5	300	6,4
STOP ROV 305 L 300	30,5	300	6,4
STOP ROV 340 L 450	34,0	450	8,4
STOP ROV 365 L 450	36,5	450	8,4
STOP ROV 425 L 450	42,5	450	8,4
STOP ROV 455 L 450	45,5	450	8,4
STOP ROV 490 L 450	49,0	450	8,4
STOP ROV 525 L 450	52,5	450	8,4
STOP ROV 600 L 450	60,0	450	8,4

**Additional info:** The steel cable is anchored with an appropriate STOP-FS clamp on the hose and at a fixed point. This prevents the hose from whipping around.

**STOP SAE****Stopflex fittings, flange and others**

**Application:** Personal protection against whipping hose

**Material:** Steel

**Description:** A high tensile steel cable with lug and hooks fitted. The steel cable is anchored with an appropriate STOP-FS clamp on the hose and at a fixed point. This prevents the hose from whipping around.

**Note:** For flange fitting, one screw must be 4 mm longer.

Identification	Mounting hole mm	Length mm	Bore mm
STOP SAE 085 L 300	8,5	300	6,4
STOP SAE 105 L 300	10,5	300	6,4
STOP SAE 105 L 450	10,5	450	8,4
STOP SAE 125 L 450	12,5	450	8,4
STOP SAE 130 L 450	13,0	450	8,4
STOP SAE 145 L 450	14,5	450	8,4
STOP SAE 165 L 450	16,5	450	8,4
STOP SAE 205 L 450	20,5	450	8,4

**TGF ISO****Protective hose**

<b>Application:</b>	Personal protection against oil jet injuries
<b>Inner layer:</b>	special nylon
<b>Colour:</b>	black
<b>Temp. max.:</b>	100 °C
<b>Description:</b>	Interweaved nylon threads with maximum tensile strength atomise the hazardous oil jet that emerges when a hose bursts.



1

**Note:** Extremely abrasion resistant, flame retardant.

Identification	Internal Ø mm
TGF ISO 17	17
TGF ISO 20	20
TGF ISO 23	23
TGF ISO 25	25
TGF ISO 27	27
TGF ISO 31	31
TGF ISO 33	33
TGF ISO 36	36
TGF ISO 40	40
TGF ISO 44	44
TGF ISO 47	47
TGF ISO 53	53
TGF ISO 55	55
TGF ISO 60	60
TGF ISO 66	66
TGF ISO 73	73
TGF ISO 93	93
TGF ISO 112	112
TGF ISO 127	127



## Hose fittings

<b>Standard fittings for TE, KP, HD 100 to HD 400 hoses</b>	
Hose ferrules	118
Metric series	127
BSP	154
NPT	169
JIC	170
JIS	175
SAE	185
ORFS	188
Flanges	192
French series	206
Banjos	215
Hose connectors	217
Plug connections	218
Other	223

<b>Interlock fittings for 4SP (HD 400 hoses, with pull-out protection)</b>	
Metric series	225
BSP	233
JIC	237
ORFS	241
Flanges	245

<b>Interlock fittings for 4SH (HD 500 hoses)</b>	
Metric series	253
BSP	265
NPT	270
JIC	271
ORFS	276
Flanges	279

<b>Interlock fittings for SAE R13 (HD 600 hoses)</b>	
BSP	291
NPT	295
JIC	296
Flanges	300

<b>Interlock fittings for SAE R15 (HD 700 hoses)</b>	
Metric series	233
BSP	316
NPT	324
JIC	325
ORFS	333
Flanges	337

<b>Interlock fittings for HD 800 hoses</b>	
Metric series	349
Flanges	352

<b>For SG hoses</b>	
Hose ferrules	356

<b>For low-pressure plug-in hoses</b>	
Metric series	359
BSP	368
NPT	374
SAE	375
JIC	376
ORFS	379
Hose connectors	380
Banjos	381

<b>For thermoplastic hoses</b>	
Hose ferrules	383

<b>For thermoplastic hoses (for NY 300 hoses)</b>	
Metric series	388
BSP	393
NPT	395
JIC	397
Flanges	399
French series	405

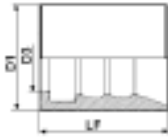
<b>for thermoplastic hoses (for NY 2100 hoses)</b>	
Metric series	407
BSP	409
NPT	410

<b>For TAF and TBF hoses</b>	
Hose ferrules	411
Metric series	413
BSP	425
NPT	428
JIC	429

<b>Individual parts</b>	
SAE flange halves	430
SAE full flanges	433

<b>Industry (for HF and HW hoses)</b>	
Metric series	435
Connectors for Kärcher washing equipment	438

<b>Industry (for TF hoses)</b>	
Hose ferrules	440

**PHD 100****Swage ferrule for braided hose**

**Ferrule type:** Skive ferrule  
**suitable for:** 1SN (HD 100, HD 100T, HF 100, HW 100), 1SC (KP 100), 2SC (KP 200, KP 200PRO, KP 200S)  
**Material:** Steel  
**Surface:** electro galvanised

2

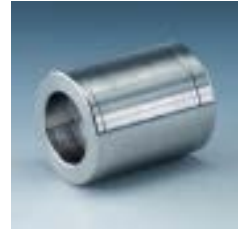
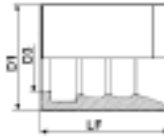
**Note:** The ferrule assignment depends on the hose type.

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHD 104	5	3	3/16"	17	8,5	26,0
PHD 106	6	4	1/4"	20	10,9	31,0
PHD 108	8	5	5/16"	21	12,8	31,0
PHD 110	10	6	3/8"	24	14,0	31,0
PHD 113	12	8	1/2"	28	18,3	35,0
PHD 116	16	10	5/8"	31	21,6	36,0
PHD 120	19	12	3/4"	35	24,8	42,5
PHD 125	25	16	1"	42	30,5	50,5
PHD 132	31	20	1.1/4"	52	37,7	59,0
PHD 140	38	24	1.1/2"	58	44,2	63,0
PHD 150	51	32	2"	71	57,2	70,0

DN = Nominal diameter, nominal width

**PHD 100 VA****Swage ferrule for braided hose**

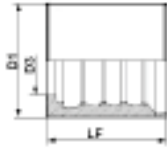
**Ferrule type:** Skive ferrule / non-skive ferrule  
**suitable for:** Skive ferrule:  
 1SN (HD 100, HD 100T, HF 100, HW 100), 1SC (KP 100), 2SC (KP 200, KP 200PRO, KP 200S)  
 non-skive ferrule:  
 1SN (HD 100), 1SC (DN 16, 19, 25)  
 2TE (TE 200B, DN 06 to DN 25)  
**Material:** Stainless steel



**Note:** The ferrule assignment depends on the hose type.

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHD 106 VA	6	4	1/4"	20	10,4	34,5
PHD 108 VA	8	5	5/16"	22	12,0	34,5
PHD 110 VA	10	6	3/8"	25	14,0	35,0
PHD 113 VA	12	8	1/2"	28	17,3	37,0
PHD 116 VA	16	10	5/8"	32	20,3	40,0
PHD 120 VA	19	12	3/4"	36	24,3	45,0
PHD 125 VA	25	16	1"	45	32,3	50,0
PHD 132 VA	31	20	1.1/4"	55	37,8	70,0
PHD 140 VA	38	24	1.1/2"	60	45,0	70,0
PHD 150 VA	51	32	2"	76	57,5	80,0

DN = Nominal diameter, nominal width

**PHD 200****Swage ferrule for braided hose**

**Ferrule type:** Skive ferrule  
**suitable for:** 2SN (HD 200, HD 200T, HD 200RM, HD 200S, HF 200, HW 200), KP 400, 4SP (HD 400)  
**Material:** Steel  
**Surface:** electro galvanised

2

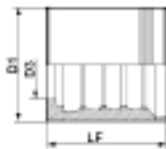
**Note:** The ferrule assignment depends on the hose type.

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHD 204	5	3	3/16"	21	8,5	26,0
PHD 206	6	4	1/4"	22	11,4	30,0
PHD 208	8	5	5/16"	23	12,5	30,0
PHD 210	10	6	3/8"	26	14,5	31,0
PHD 213	12	8	1/2"	30	18,3	32,0
PHD 416	16	10	5/8"	33	21,7	38,0
PHD 220	19	12	3/4"	38	24,4	42,5
PHD 225	25	16	1"	46	30,5	51,0
PHD 232	31	20	1.1/4"	57	38,0	58,0
PHD 240	38	24	1.1/2"	65	44,3	62,0
PHD 250	51	32	2"	79	57,0	73,5
PHD 260	60	40	2.3/8"	84	67,1	79,0
PHD 276	76	48	3"	105	81,8	80,0

DN = Nominal diameter, nominal width

**PHD 200 VA****Swage ferrule for braided hose**

**Ferrule type:** Skive ferrule  
**suitable for:** 4SP (HD 400 above DN 10)  
 2SN (HD 200, HD 200T, HD 200RN,  
 HF 200, HW 200)  
**Material:** Stainless steel



**Note:** The ferrule assignment depends on the hose type. PHD406VA only for 4SP DN06

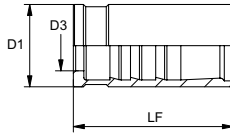
Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHD 206 VA	6	4	1/4"	22,0	10,4	34,5
PHD 406 VA	6	4	1/4"	22,0	10,4	34,5
PHD 208 VA	8	5	5/16"	24,0	12,0	34,5
PHD 210 VA	10	6	3/8"	26,0	14,0	35,0
PHD 213 VA	12	8	1/2"	30,0	17,3	37,0
PHD 216 VA	16	10	5/8"	33,0	20,2	40,0
PHD 220 VA	19	12	3/4"	38,0	24,3	45,0
PHD 225 VA	25	16	1"	46,0	31,5	50,0
PHD 232 VA	31	20	1.1/4"	58,0	37,8	70,0
PHD 240 VA	38	24	1.1/2"	64,2	44,9	70,0
PHD 250 VA	51	32	2"	76,0	57,5	80,0

DN = Nominal diameter, nominal width

2

## PKN 100

### Swage ferrule for braided hose



**Ferrule type:** Non-skive ferrule  
**suitable for:** KP 100 P  
**Material:** Steel  
**Surface:** electro galvanised

2

**Note:** The ferrule assignment depends on the hose type.

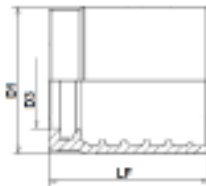
Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PKN 106	6	4	1/4"	18,0	11,2	30,5
PKN 108	8	5	5/16"	19,0	12,7	32,0
PKN 110	10	6	3/8"	22,0	14,5	33,0
PKN 113	12	8	1/2"	26,0	18,3	34,0

DN = Nominal diameter, nominal width

## PHN 200

## Swage ferrule for braided hose

**Ferrule type:** Non-skive ferrule  
**suitable for:** 15N (HD 100), 25N (HD 200), 2SC (KP 200)  
**Material:** Steel  
**Surface:** electro galvanised

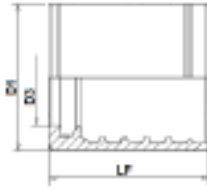


**Note:** The ferrule assignment depends on the hose type.

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHN 204	5	3	3/16"	21,0	9,5	23,5
PHN 206	6	4	1/4"	23,0	11,4	30,0
PHN 208	8	5	5/16"	24,0	13,2	30,0
PHN 210	10	6	3/8"	26,0	14,5	31,0
PHN 213	12	8	1/2"	29,0	18,3	32,0
PHN 216	16	10	5/8"	33,0	21,6	36,0
PHN 220	19	12	3/4"	37,0	24,4	42,5
PHN 225	25	16	1"	46,0	31,0	51,0
PHN 232	31	20	1.1/4"	59,0	38,3	57,5
PHN 240	38	24	1.1/2"	67,0	44,0	60,5
PHN 250	51	32	2"	80,0	57,0	74,0

DN = Nominal diameter, nominal width

2

**PHN 200 VA****Swage ferrule for braided hose**

**Ferrule type:** Non-skive ferrule  
**suitable for:** 2SN (HD 200), 3TE (TE 300)  
**Material:** Stainless steel

2

**Note:** The ferrule assignment depends on the hose type.

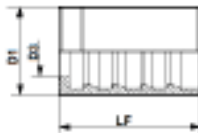
Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHN 206 VA	6	4	1/4"	22,0	10,3	34,5
PHN 208 VA	8	5	5/16"	24,0	12,0	34,5
PHN 210 VA	10	6	3/8"	26,0	14,0	35,0
PHN 213 VA	12	8	1/2"	30,0	17,2	37,0
PHN 216 VA	16	10	5/8"	33,0	20,2	40,0
PHN 220 VA	19	12	3/4"	38,0	24,2	45,0
PHN 225 VA	25	16	1"	46,0	31,5	50,0

DN = Nominal diameter, nominal width

## PHT

## Pressed holder for textile braid hose

**Ferrule type:** Non-skive ferrule  
**suitable for:** 2TE (TE 200, TE 200B,), 3TE (TE 300), SI 200 RME  
**Material:** Steel  
**Surface:** electro galvanised



**Note:** The ferrule assignment depends on the hose type. PHT204 for 2TE (TE200, TE200B)  
 PHT304 for 3TE (TE300)

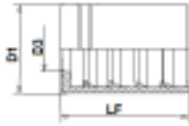
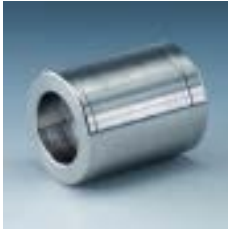
Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHT 204	5	3	3/16"	17,0	9,8	27,3
PHT 304	5	3	3/16"	18,6	9,8	27,3
PHT 06	6	4	1/4"	19,0	11,6	28,0
PHT 08	8	5	5/16"	22,3	12,6	30,2
PHT 10	10	6	3/8"	23,0	14,9	29,5
PHT 13	12	8	1/2"	27,0	18,5	31,0
PHT 16	16	10	5/8"	32,0	21,8	33,0
PHT 20	19	12	3/4"	35,0	24,6	37,5
PHT 25	25	16	1"	42,0	30,8	45,5
PHT 32	31	20	1.1/4"	48,0	37,9	55,0
PHT 40	38	24	1.1/2"	57,2	44,2	63,2
PHT 50	51	32	2"	76,0	56,8	78,5

DN = Nominal diameter, nominal width

2

## PHT 300 VA

### Pressed holder for textile braid hose



**Ferrule type:** Non-skive ferrule  
**suitable for:** 3TE (TE 300)  
**Material:** Stainless steel

2

**Note:** The ferrule assignment depends on the hose type.

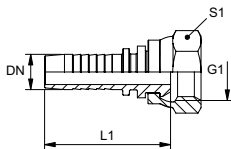
Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHT 340 VA	38	24	1.1/2"	60,0	45,1	70,0
PHT 350 VA	51	32	2"	76,0	57,4	80,0

DN = Nominal diameter, nominal width

## PN AFL

## Swage nipple, DKL

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	24°/60° Universal sealing head
<b>Short code:</b>	DKL
<b>Series:</b>	light
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

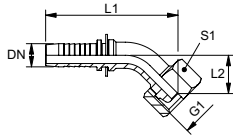


**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1
PN 04 AFL	5	3	3/16"	M 12 x 1.5	6	41,2	14
PN 06 AFL 04	6	4	1/4"	M 12 x 1.5	6	45,0	14
PN 06 AFL	6	4	1/4"	M 14 x 1.5	8	47,0	17
PN 06 AFL 08	6	4	1/4"	M 16 x 1.5	10	47,5	19
PN 06 AFL 10	6	4	1/4"	M 18 x 1.5	12	48,5	22
PN 08 AFL	8	5	5/16"	M 16 x 1.5	10	47,5	19
PN 08 AFL 10	8	5	5/16"	M 18 x 1.5	12	48,5	22
PN 10 AFL 06	10	6	3/8"	M 14 x 1.5	8	49,5	17
PN 10 AFL 08	10	6	3/8"	M 16 x 1.5	10	49,0	19
PN 10 AFL	10	6	3/8"	M 18 x 1.5	12	50,0	22
PN 10 AFL 13	10	6	3/8"	M 22 x 1.5	15	50,5	27
PN 13 AFL	12	8	1/2"	M 22 x 1.5	15	51,5	27
PN 13 AFL 16	12	8	1/2"	M 26 x 1.5	18	54,0	32
PN 16 AFL 13	16	10	5/8"	M 22 x 1.5	15	56,0	27
PN 16 AFL	16	10	5/8"	M 26 x 1.5	18	58,5	32
PN 20 AFL	19	12	3/4"	M 30 x 2	22	66,0	36
PN 20 AFL 25	19	12	3/4"	M 36 x 2	28	67,0	41
PN 25 AFL	25	16	1"	M 36 x 2	28	75,0	41
PN 32 AFL	31	20	1.1/4"	M 45 x 2	35	88,0	50
PN 40 AFL	38	24	1.1/2"	M 52 x 2	42	92,5	60

**Product versions:**

PN AFL VA - Swage nipple, DKL, Stainless steel

**PN AFL 45****Swage nipple, DKL angle 45°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** metric nut thread

**Sealing form 1:** 24°/60° Universal sealing head

**Short code:** DKL

**Series:** light

**Material:** Steel

**Surface:** electro galvanised

**Note:** Choose the appropriate ferrule based on the hose type.

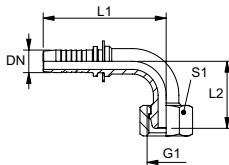
Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1
PN 04 AFL 45	5	3	3/16"	M 12 x 1.5	6	56,0	15,0	14
PN 06 AFL 04 45	6	4	1/4"	M 12 x 1.5	6	62,0	17,0	14
PN 06 AFL 45	6	4	1/4"	M 14 x 1.5	8	62,5	14,5	17
PN 06 AFL 08 45	6	4	1/4"	M 16 x 1.5	10	63,0	15,5	19
PN 06 AFL 10 45	6	4	1/4"	M 18 x 1.5	12	65,0	15,5	22
PN 08 AFL 45	8	5	5/16"	M 16 x 1.5	10	64,5	15,0	19
PN 08 AFL 10 45	8	5	5/16"	M 18 x 1.5	12	65,0	15,5	22
PN 10 AFL 08 45	10	6	3/8"	M 16 x 1.5	10	72,5	19,5	19
PN 10 AFL 45	10	6	3/8"	M 18 x 1.5	12	71,0	18,0	22
PN 10 AFL 13 45	10	6	3/8"	M 22 x 1.5	15	71,5	18,5	27
PN 13 AFL 45	12	8	1/2"	M 22 x 1.5	15	79,5	18,5	27
PN 13 AFL 16 45	12	8	1/2"	M 26 x 1.5	18	90,5	24,0	32
PN 16 AFL 45	16	10	5/8"	M 26 x 1.5	18	95,0	24,0	32
PN 20 AFL 45	19	12	3/4"	M 30 x 2	22	106,0	27,0	36
PN 20 AFL 25 45	19	12	3/4"	M 36 x 2	28	124,0	29,5	41
PN 25 AFL 45	25	16	1"	M 36 x 2	28	132,0	29,5	41
PN 32 AFL 45	31	20	1.1/4"	M 45 x 2	35	159,0	38,5	50
PN 40 AFL 45	38	24	1.1/2"	M 52 x 2	42	181,5	42,5	60

**Product versions:**

**PN AFL 45 VA** - Swage nipple, DKL angle 45°, Stainless steel

**PN AFL 90****Swage nipple, DKL angle 90°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24°/60° Universal sealing head  
**Short code:** DKL  
**Series:** light  
**Material:** Steel  
**Surface:** electro galvanised

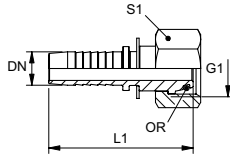


**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1
PN 04 AFL 90	5	3	3/16"	M 12 x 1.5	6	48,5	29,0	14
PN 06 AFL 04 90	6	4	1/4"	M 12 x 1.5	6	57,0	30,5	14
PN 06 AFL 90	6	4	1/4"	M 14 x 1.5	8	55,0	30,0	17
PN 06 AFL 08 90	6	4	1/4"	M 16 x 1.5	10	55,0	31,0	19
PN 06 AFL 10 90	6	4	1/4"	M 18 x 1.5	12	62,5	35,0	22
PN 08 AFL 90	8	5	5/16"	M 16 x 1.5	10	58,0	30,0	19
PN 08 AFL 10 90	8	5	5/16"	M 18 x 1.5	12	58,0	30,5	22
PN 10 AFL 08 90	10	6	3/8"	M 16 x 1.5	10	63,0	38,0	19
PN 10 AFL 90	10	6	3/8"	M 18 x 1.5	12	64,0	35,0	22
PN 10 AFL 13 90	10	6	3/8"	M 22 x 1.5	15	64,0	35,5	27
PN 13 AFL 90	12	8	1/2"	M 22 x 1.5	15	72,5	39,5	27
PN 13 AFL 16 90	12	8	1/2"	M 26 x 1.5	18	83,5	49,5	32
PN 16 AFL 13 90	16	10	5/8"	M 22 x 1.5	15	87,0	49,5	27
PN 16 AFL 90	16	10	5/8"	M 26 x 1.5	18	88,0	49,5	32
PN 20 AFL 90	19	12	3/4"	M 30 x 2	22	99,5	54,5	36
PN 25 AFL 90	25	16	1"	M 36 x 2	28	127,0	66,0	41
PN 32 AFL 90	31	20	1.1/4"	M 45 x 2	35	151,5	82,0	50
PN 40 AFL 90	38	24	1.1/2"	M 52 x 2	42	176,5	95,0	60

**Product versions:**

**PN AFL 90 VA** - Swage nipple, DKL angle 90°, Stainless steel

**PN AOL****Swage nipple, DKOL**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** metric nut thread

**Sealing form 1:** 24° outer cone with O-ring

**Short code:** DKOL

**Standard:** ISO 8434-1

**Series:** light

**Material:** Steel

**Surface:** electro galvanised

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PN 04 AOL	5	3	3/16"	M 12 x 1.5	6	45,5	14	4.0 x 1.5
PN 04 AOL 06	5	3	3/16"	M 14 x 1.5	8	45,5	17	6.0 x 1.5
PN 06 AOL 04	6	4	1/4"	M 12 x 1.5	6	46,5	14	4.0 x 1.5
PN 06 AOL	6	4	1/4"	M 14 x 1.5	8	52,0	17	6.0 x 1.5
PN 06 AOL 08	6	4	1/4"	M 16 x 1.5	10	52,0	19	7.5 x 1.5
PN 06 AOL 10	6	4	1/4"	M 18 x 1.5	12	53,0	22	9.0 x 1.5
PN 08 AOL 06	8	5	5/16"	M 14 x 1.5	8	47,0	17	6.0 x 1.5
PN 08 AOL	8	5	5/16"	M 16 x 1.5	10	52,0	19	7.5 x 1.5
PN 08 AOL 10	8	5	5/16"	M 18 x 1.5	12	53,0	22	9.0 x 1.5
PN 10 AOL 06	10	6	3/8"	M 14 x 1.5	8	50,5	17	6.0 x 1.5
PN 10 AOL 08	10	6	3/8"	M 16 x 1.5	10	51,5	19	7.5 x 1.5
PN 10 AOL	10	6	3/8"	M 18 x 1.5	12	54,5	22	9.0 x 1.5
PN 10 AOL 13	10	6	3/8"	M 22 x 1.5	15	56,5	27	12.0 x 2.0
PN 13 AOL 10	12	8	1/2"	M 18 x 1.5	12	54,5	22	9.0 x 1.5
PN 13 AOL	12	8	1/2"	M 22 x 1.5	15	57,5	27	12.0 x 2.0
PN 13 AOL 16	12	8	1/2"	M 26 x 1.5	18	59,0	32	15.0 x 2.0
PN 16 AOL 13	16	10	5/8"	M 22 x 1.5	15	58,0	27	12.0 x 2.0
PN 16 AOL	16	10	5/8"	M 26 x 1.5	18	64,0	32	15.0 x 2.0
PN 16 AOL 20	16	10	5/8"	M 30 x 2	22	64,5	36	20.0 x 2.0
PN 20 AOL 16	19	12	3/4"	M 26 x 1.5	18	66,5	32	15.0 x 2.0
PN 20 AOL	19	12	3/4"	M 30 x 2	22	71,0	36	20.0 x 2.0
PN 20 AOL 25	19	12	3/4"	M 36 x 2	28	73,0	41	26.0 x 2.0
PN 25 AOL 20	25	16	1"	M 30 x 2	22	75,5	36	20.0 x 2.0
PN 25 AOL	25	16	1"	M 36 x 2	28	81,0	41	26.0 x 2.0
PN 25 AOL 32	25	16	1"	M 45 x 2	35	85,5	50	32.0 x 2.5
PN 32 AOL 25	31	20	1.1/4"	M 36 x 2	28	87,0	41	26.0 x 2.0
PN 32 AOL	31	20	1.1/4"	M 45 x 2	35	94,5	50	32.0 x 2.5
PN 32 AOL 40	31	20	1.1/4"	M 52 x 2	42	94,5	60	38.0 x 2.5
PN 40 AOL 32	38	24	1.1/2"	M 45 x 2	35	94,0	50	32.0 x 2.5
PN 40 AOL	38	24	1.1/2"	M 52 x 2	42	98,0	60	38.0 x 2.5
PN 50 AOL 40	51	32	2"	M 52 x 2	42	112,5	60	38.0 x 2.5

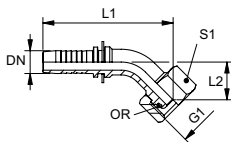
**Product versions:**

**PN AOL VA** - Swage nipple, DKOL, Stainless steel

## PN AOL 45

## Swage nipple, DKOL angle 45°

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	24° outer cone with O-ring
<b>Short code:</b>	DKOL
<b>Standard:</b>	ISO 8434-1
<b>Series:</b>	light
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

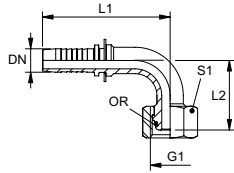


**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PN 04 AOL 45	5	3	3/16"	M 12 x 1.5	6	56,0	15,0	14	4.0 x 1.5
PN 06 AOL 04 45	6	4	1/4"	M 12 x 1.5	6	62,0	17,0	14	4.0 x 1.5
PN 06 AOL 45	6	4	1/4"	M 14 x 1.5	8	63,0	15,0	17	6.0 x 1.5
PN 06 AOL 08 45	6	4	1/4"	M 16 x 1.5	10	64,5	17,0	19	7.5 x 1.5
PN 06 AOL 10 45	6	4	1/4"	M 18 x 1.5	12	71,0	19,5	22	9.0 x 1.5
PN 08 AOL 06 45	8	5	5/16"	M 14 x 1.5	8	62,0	16,5	17	6.0 x 1.5
PN 08 AOL 45	8	5	5/16"	M 16 x 1.5	10	66,0	16,5	19	7.5 x 1.5
PN 08 AOL 10 45	8	5	5/16"	M 18 x 1.5	12	71,0	19,5	22	9.0 x 1.5
PN 10 AOL 08 45	10	6	3/8"	M 16 x 1.5	10	74,0	22,0	19	7.5 x 1.5
PN 10 AOL 45	10	6	3/8"	M 18 x 1.5	12	72,5	19,5	22	9.0 x 1.5
PN 10 AOL 13 45	10	6	3/8"	M 22 x 1.5	15	80,0	20,0	27	12.0 x 2.0
PN 13 AOL 10 45	12	8	1/2"	M 18 x 1.5	12	80,0	24,5	22	9.0 x 1.5
PN 13 AOL 45	12	8	1/2"	M 22 x 1.5	15	81,0	20,0	27	12.0 x 2.0
PN 13 AOL 16 45	12	8	1/2"	M 26 x 1.5	18	91,5	24,5	32	15.0 x 2.0
PN 16 AOL 13 45	16	10	5/8"	M 22 x 1.5	15	84,5	24,5	27	12.0 x 2.0
PN 16 AOL 45	16	10	5/8"	M 26 x 1.5	18	96,0	24,5	32	15.0 x 2.0
PN 16 AOL 20 45	16	10	5/8"	M 30 x 2	22	99,5	27,0	36	20.0 x 2.0
PN 20 AOL 16 45	19	12	3/4"	M 26 x 1.5	18	101,5	27,0	32	15.0 x 2.0
PN 20 AOL 45	19	12	3/4"	M 30 x 2	22	106,0	27,0	36	20.0 x 2.0
PN 20 AOL 25 45	19	12	3/4"	M 36 x 2	28	124,0	29,5	41	26.0 x 2.0
PN 25 AOL 20 45	25	16	1"	M 30 x 2	22	113,0	29,5	36	20.0 x 2.0
PN 25 AOL 45	25	16	1"	M 36 x 2	28	132,0	29,5	41	26.0 x 2.0
PN 25 AOL 32 45	25	16	1"	M 45 x 2	35	150,0	38,5	50	32.0 x 2.5
PN 32 AOL 25 45	31	20	1.1/4"	M 36 x 2	28	140,0	38,5	41	26.0 x 2.0
PN 32 AOL 45	31	20	1.1/4"	M 45 x 2	35	159,0	38,5	50	32.0 x 2.5
PN 40 AOL 45	38	24	1.1/2"	M 52 x 2	42	181,5	42,5	60	38.0 x 2.5

**Product versions:**

PN AOL 45 VA - Swage nipple, DKOL angle 45°, Stainless steel

**PN AOL 90****Swage nipple, DKOL angle 90°**

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	24° outer cone with O-ring
<b>Short code:</b>	DKOL
<b>Standard:</b>	ISO 8434-1
<b>Series:</b>	light
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PN 04 AOL 90	5	3	3/16"	M 12 x 1.5	6	48,5	29,0	14	4.0 x 1.5
PN 06 AOL 04 90	6	4	1/4"	M 12 x 1.5	6	57,0	30,5	14	4.0 x 1.5
PN 06 AOL 90	6	4	1/4"	M 14 x 1.5	8	55,0	30,5	17	6.0 x 1.5
PN 06 AOL 90 L 50	6	4	1/4"	M 14 x 1.5	8	55,0	50,0	17	6.0 x 1.5
PN 06 AOL 90 L 55	6	4	1/4"	M 14 x 1.5	8	55,0	55,0	17	6.0 x 1.5
PN 06 AOL 08 90	6	4	1/4"	M 16 x 1.5	10	55,0	33,0	19	7.5 x 1.5
PN 06 AOL 08 90 L 60	6	4	1/4"	M 16 x 1.5	10	55,0	60,0	19	7.5 x 1.5
PN 06 AOL 10 90	6	4	1/4"	M 18 x 1.5	12	62,5	32,0	22	9.0 x 1.5
PN 08 AOL 06 90	8	5	5/16"	M 14 x 1.5	8	54,0	31,5	17	6.0 x 1.5
PN 08 AOL 90	8	5	5/16"	M 16 x 1.5	10	58,0	31,5	19	7.5 x 1.5
PN 08 AOL 90 L 42	8	5	5/16"	M 16 x 1.5	10	58,0	42,0	19	7.5 x 1.5
PN 08 AOL 10 90	8	5	5/16"	M 18 x 1.5	12	58,0	32,5	22	9.0 x 1.5
PN 10 AOL 08 90	10	6	3/8"	M 16 x 1.5	10	63,0	40,5	19	7.5 x 1.5
PN 10 AOL 90	10	6	3/8"	M 18 x 1.5	12	64,0	37,0	22	9.0 x 1.5
PN 10 AOL 90 L 50	10	6	3/8"	M 18 x 1.5	12	64,0	50,0	22	9.0 x 1.5
PN 10 AOL 90 L 60	10	6	3/8"	M 18 x 1.5	12	64,0	60,0	22	9.0 x 1.5
PN 10 AOL 90 L 75	10	6	3/8"	M 18 x 1.5	12	64,0	75,0	22	9.0 x 1.5
PN 10 AOL 13 90	10	6	3/8"	M 22 x 1.5	15	71,5	41,5	27	12.0 x 2.0
PN 13 AOL 10 90	12	8	1/2"	M 18 x 1.5	12	71,5	50,5	22	9.0 x 1.5
PN 13 AOL 90	12	8	1/2"	M 22 x 1.5	15	72,5	41,5	27	12.0 x 2.0
PN 13 AOL 90 L 60	12	8	1/2"	M 22 x 1.5	15	88,0	60,0	27	12.0 x 2.0
PN 13 AOL 90 L 77	12	8	1/2"	M 22 x 1.5	15	72,5	77,0	27	12.0 x 2.0
PN 13 AOL 16 90	12	8	1/2"	M 26 x 1.5	18	83,5	50,5	32	15.0 x 2.0
PN 16 AOL 13 90	16	10	5/8"	M 22 x 1.5	15	87,0	50,5	27	12.0 x 2.0
PN 16 AOL 90	16	10	5/8"	M 26 x 1.5	18	88,0	50,5	32	15.0 x 2.0
PN 16 AOL 20 90	16	10	5/8"	M 30 x 2	22	93,0	54,5	36	20.0 x 2.0
PN 20 AOL 16 90	19	12	3/4"	M 26 x 1.5	18	93,5	66,0	32	15.0 x 2.0
PN 20 AOL 90	19	12	3/4"	M 30 x 2	22	99,5	54,5	36	20.0 x 2.0
PN 20 AOL 90 L 60	19	12	3/4"	M 30 x 2	22	109,0	60,0	36	20.0 x 2.0
PN 20 AOL 90 L 75	19	12	3/4"	M 30 x 2	22	111,0	75,0	36	20.0 x 2.0
PN 20 AOL 90 L 100	19	12	3/4"	M 30 x 2	22	109,0	100,0	36	20.0 x 2.0
PN 20 AOL 25 90	19	12	3/4"	M 36 x 2	28	119,0	66,0	41	26.0 x 2.0
PN 25 AOL 20 90	25	16	1"	M 30 x 2	22	106,5	66,0	36	20.0 x 2.0
PN 25 AOL 90	25	16	1"	M 36 x 2	28	127,0	66,0	41	26.0 x 2.0
PN 25 AOL 90 L 72	25	16	1"	M 36 x 2	28	125,0	72,0	41	26.0 x 2.0
PN 25 AOL 90 L 100	25	16	1"	M 36 x 2	28	125,0	100,0	41	26.0 x 2.0
PN 25 AOL 90 L 150	25	16	1"	M 36 x 2	28	125,0	150,0	41	26.0 x 2.0
PN 25 AOL 32 90	25	16	1"	M 45 x 2	35	142,5	82,0	50	32.0 x 2.5
PN 32 AOL 25 90	31	20	1.1/4"	M 36 x 2	28	135,0	82,0	41	26.0 x 2.0
PN 32 AOL 90	31	20	1.1/4"	M 45 x 2	35	151,5	82,0	50	32.0 x 2.5
PN 32 AOL 90 L 98	31	20	1.1/4"	M 45 x 2	35	144,0	98,0	50	32.0 x 2.5
PN 32 AOL 40 90	31	20	1.1/4"	M 52 x 2	42	173,0	95,0	60	38.0 x 2.5

**PN AOL 90**

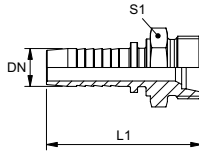
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Swage nipple, DKOL angle 90°

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PN 40 AOL 32 90	38	24	1.1/2"	M 45 x 2	35	154,0	95,0	50	32.0 x 2.5
PN 40 AOL 90	38	24	1.1/2"	M 52 x 2	42	176,5	95,0	60	38.0 x 2.5

**Product versions:**

PN AOL 90 VA - Swage nipple, DKOL angle 90°, Stainless steel

**PN HL****Swage nipple, CEL**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** metric cylindrical outer thread

**Sealing form 1:** 24° inner cone

**Short code:** CEL

**Standard:** ISO 8434-1

**Series:** light

**Material:** Steel

**Surface:** electro galvanised

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1
PN 04 HL	5	3	3/16"	M 12 x 1.5	6	43,0	14
PN 06 HL 04	6	4	1/4"	M 12 x 1.5	6	49,0	14
PN 06 HL	6	4	1/4"	M 14 x 1.5	8	49,0	17
PN 06 HL 08	6	4	1/4"	M 16 x 1.5	10	50,0	17
PN 06 HL 10	6	4	1/4"	M 18 x 1.5	12	51,0	19
PN 08 HL	8	5	5/16"	M 16 x 1.5	10	50,0	17
PN 08 HL 10	8	5	5/16"	M 18 x 1.5	12	51,0	19
PN 08 HL 13	8	5	5/16"	M 22 x 1.5	15	52,0	24
PN 10 HL 08	10	6	3/8"	M 16 x 1.5	10	52,5	17
PN 10 HL	10	6	3/8"	M 18 x 1.5	12	52,5	19
PN 10 HL 13	10	6	3/8"	M 22 x 1.5	15	53,5	24
PN 13 HL 10	12	8	1/2"	M 18 x 1.5	12	53,5	22
PN 13 HL	12	8	1/2"	M 22 x 1.5	15	54,5	24
PN 13 HL 16	12	8	1/2"	M 26 x 1.5	18	55,5	27
PN 16 HL 13	16	10	5/8"	M 22 x 1.5	15	59,0	24
PN 16 HL	16	10	5/8"	M 26 x 1.5	18	60,0	27
PN 16 HL 20	16	10	5/8"	M 30 x 2	22	62,0	32
PN 20 HL 16	19	12	3/4"	M 26 x 1.5	18	66,5	27
PN 20 HL	19	12	3/4"	M 30 x 2	22	68,5	32
PN 20 HL 25	19	12	3/4"	M 36 x 2	28	70,0	41
PN 25 HL	25	16	1"	M 36 x 2	28	77,5	41
PN 32 HL	31	20	1.1/4"	M 45 x 2	35	91,0	46
PN 40 HL	38	24	1.1/2"	M 52 x 2	42	95,5	55

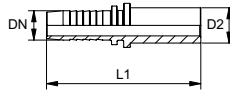
**Product versions:**

PN HL VA - Swage nipple, CEL, Stainless steel

## PN FL

## Swage nipple, BEL

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	Pipe sockets
<b>Sealing form 1:</b>	Cutting ring connection
<b>Short code:</b>	BEL
<b>Standard:</b>	ISO 8434-1
<b>Series:</b>	light
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



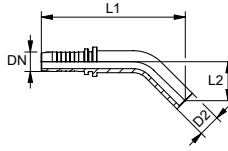
**Note:** Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...). Do not use for new designs; we recommend: PN...AOL. Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	D2 mm	L1 mm
PN 04 FL	5	3	3/16"	6,0	50,5
PN 06 FL 04	6	4	1/4"	6,0	57,5
PN 06 FL	6	4	1/4"	8,0	58,5
PN 08 FL 06	8	5	5/16"	8,0	58,0
PN 08 FL	8	5	5/16"	10,0	59,5
PN 10 FL 08	10	6	3/8"	10,0	62,0
PN 10 FL	10	6	3/8"	12,0	62,5
PN 10 FL 13	10	6	3/8"	15,0	61,0
PN 13 FL 10	12	8	1/2"	12,0	60,0
PN 13 FL	12	8	1/2"	15,0	63,0
PN 13 FL 16	12	8	1/2"	18,0	65,0
PN 16 FL	16	10	5/8"	18,0	69,5
PN 16 FL 20	16	10	5/8"	22,0	71,5
PN 20 FL 16	19	12	3/4"	18,0	74,5
PN 20 FL	19	12	3/4"	22,0	79,0
PN 20 FL 25	19	12	3/4"	28,0	79,0
PN 25 FL	25	16	1"	28,0	87,0
PN 32 FL	31	20	1.1/4"	35,0	103,0
PN 40 FL	38	24	1.1/2"	42,0	110,5

**Product versions:**

PN FL VA - Swage nipple, BEL, Stainless steel

PN FL MG - Swage nipple, BEL, Brass

**PN FL 45****Swage nipple, BEL angle 45°**

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	Pipe sockets
<b>Sealing form 1:</b>	Cutting ring connection
<b>Short code:</b>	BEL
<b>Standard:</b>	ISO 8434-1
<b>Series:</b>	light
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

**Note:** Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...). Choose the appropriate ferrule based on the hose type. Do not use for new designs; we recommend: PN...AOL...45.

Identification	DN	Size	Inches	D2 mm	L1 mm	L2 mm
PN 04 FL 45	5	3	3/16"	6,0	68,5	19,0
PN 06 FL 04 45	6	4	1/4"	6,0	77,0	19,0
PN 06 FL 45	6	4	1/4"	8,0	71,5	19,0
PN 08 FL 06 45	8	5	5/16"	8,0	77,0	20,0
PN 08 FL 45	8	5	5/16"	10,0	80,5	23,0
PN 10 FL 08 45	10	6	3/8"	10,0	88,0	25,0
PN 10 FL 45	10	6	3/8"	12,0	88,0	25,0
PN 10 FL 13 45	10	6	3/8"	15,0	89,0	24,5
PN 13 FL 10 45	12	8	1/2"	12,0	87,0	22,0
PN 13 FL 45	12	8	1/2"	15,0	98,0	27,0
PN 13 FL 16 45	12	8	1/2"	18,0	95,5	26,0
PN 16 FL 45	16	10	5/8"	18,0	103,5	41,5
PN 16 FL 20 45	16	10	5/8"	22,0	107,0	29,0
PN 20 FL 16 45	19	12	3/4"	18,0	108,5	41,5
PN 20 FL 45	19	12	3/4"	22,0	112,0	29,0
PN 25 FL 45	25	16	1"	28,0	130,0	34,0
PN 32 FL 45	31	20	1.1/4"	35,0	155,5	41,0
PN 40 FL 45	38	24	1.1/2"	42,0	174,5	44,0

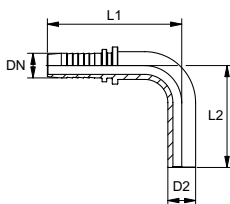
**Product versions:**

**PN FL 45 VA** - Swage nipple, BEL angle 45°, Stainless steel

## PN FL 90

## Swage nipple, BEL angle 90°

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	Pipe sockets
<b>Sealing form 1:</b>	Cutting ring connection
<b>Short code:</b>	BEL
<b>Standard:</b>	ISO 8434-1
<b>Series:</b>	light
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

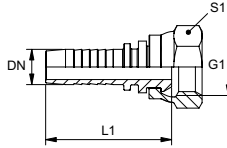


**Note:** Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...). Choose the appropriate ferrule based on the hose type. Do not use for new designs; we recommend: PN...AOL...90.

Identification	DN	Size	Inches	D2 mm	L1 mm	L2 mm
PN 04 FL 90	5	3	3/16"	6,0	47,5	41,5
PN 06 FL 04 90	6	4	1/4"	6,0	56,5	42,5
PN 06 FL 90	6	4	1/4"	8,0	56,5	43,5
PN 08 FL 06 90	8	5	5/16"	8,0	56,5	43,5
PN 08 FL 90	8	5	5/16"	10,0	58,5	44,0
PN 10 FL 08 90	10	6	3/8"	10,0	61,5	53,5
PN 10 FL 90	10	6	3/8"	12,0	62,0	52,5
PN 10 FL 13 90	10	6	3/8"	15,0	77,5	48,0
PN 13 FL 10 90	12	8	1/2"	12,0	62,0	52,5
PN 13 FL 90	12	8	1/2"	15,0	72,5	55,0
PN 13 FL 16 90	12	8	1/2"	18,0	72,5	58,5
PN 16 FL 90	16	10	5/8"	18,0	83,0	70,0
PN 16 FL 20 90	16	10	5/8"	22,0	83,0	74,0
PN 20 FL 16 90	19	12	3/4"	18,0	88,0	70,0
PN 20 FL 90	19	12	3/4"	22,0	100,0	73,5
PN 25 FL 90	25	16	1"	28,0	127,5	84,5
PN 32 FL 90	31	20	1.1/4"	35,0	149,5	106,0
PN 40 FL 90	38	24	1.1/2"	42,0	167,0	99,0

**Product versions:**

PN FL 90 VA - Swage nipple, BEL angle 90°, Stainless steel

**PN AFS****Swage nipple, DKS**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** metric nut thread

**Sealing form 1:** 24°/60° Universal sealing head

**Short code:** DKS

**Series:** heavy

**Material:** Steel

**Surface:** electro galvanised

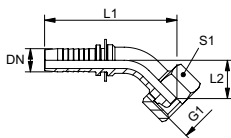
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1
PN 04 AFS 03	5	3	3/16"	M 14 x 1.5	6	44,5	17
PN 04 AFS	5	3	3/16"	M 16 x 1.5	8	44,5	19
PN 06 AFS 04	6	4	1/4"	M 16 x 1.5	8	51,5	19
PN 06 AFS	6	4	1/4"	M 18 x 1.5	10	52,5	22
PN 08 AFS 06	8	5	5/16"	M 18 x 1.5	10	52,5	22
PN 08 AFS	8	5	5/16"	M 20 x 1.5	12	52,5	24
PN 10 AFS 08	10	6	3/8"	M 20 x 1.5	12	54,0	24
PN 10 AFS	10	6	3/8"	M 22 x 1.5	14	57,0	27
PN 13 AFS	12	8	1/2"	M 24 x 1.5	16	58,0	30
PN 16 AFS	16	10	5/8"	M 30 x 2	20	66,0	36
PN 20 AFS	19	12	3/4"	M 36 x 2	25	75,5	46
PN 25 AFS	25	16	1"	M 42 x 2	30	85,5	50
PN 32 AFS	31	20	1.1/4"	M 52 x 2	38	98,0	60

## PN AFS 45

## Swage nipple, DKS angle 45°

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	24°/60° Universal sealing head
<b>Short code:</b>	DKS
<b>Series:</b>	heavy
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



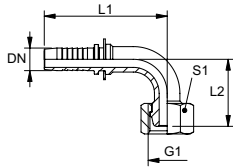
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1
PN 06 AFS 04 45	6	4	1/4"	M 16 x 1.5	8	79,0	21,0	19
PN 06 AFS 45	6	4	1/4"	M 18 x 1.5	10			
PN 08 AFS 45	8	5	5/16"	M 20 x 1.5	12			
PN 20 AFS 45	19	12	3/4"	M 36 x 2	25	129,0	39,0	46

2

## PN AFS 90

### Swage nipple, DKS angle 90°



**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** metric nut thread

**Sealing form 1:** 24°/60° Universal sealing head

**Short code:** DKS

**Series:** heavy

**Material:** Steel

**Surface:** electro galvanised

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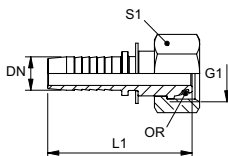
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1
PN 06 AFS 04 90	6	4	1/4"	M 16 x 1.5	8	63,0	35,0	19
PN 08 AFS 90	8	5	5/16"	M 20 x 1.5	12			

## PN AOS

## Swage nipple, DKOS

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	24° outer cone with O-ring
<b>Short code:</b>	DKOS
<b>Standard:</b>	ISO 8434-1
<b>Series:</b>	heavy
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

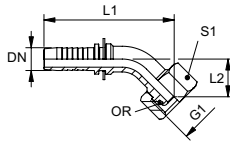


**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PN 04 AOS	5	3	3/16"	M 16 x 1.5	8	47,5	19	6.0 x 1.5
PN 04 AOS 06	5	3	3/16"	M 18 x 1.5	10	48,0	22	7.5 x 1.5
PN 06 AOS 03	6	4	1/4"	M 14 x 1.5	6	53,0	17	4.0 x 1.5
PN 06 AOS 04	6	4	1/4"	M 16 x 1.5	8	54,0	19	6.0 x 1.5
PN 06 AOS	6	4	1/4"	M 18 x 1.5	10	55,0	22	7.5 x 1.5
PN 06 AOS 08	6	4	1/4"	M 20 x 1.5	12	55,0	24	9.0 x 1.5
PN 08 AOS 06	8	5	5/16"	M 18 x 1.5	10	54,0	22	7.5 x 1.5
PN 08 AOS	8	5	5/16"	M 20 x 1.5	12	55,0	24	9.0 x 1.5
PN 10 AOS 06	10	6	3/8"	M 18 x 1.5	10	54,0	22	7.5 x 1.5
PN 10 AOS 08	10	6	3/8"	M 20 x 1.5	12	56,5	24	9.0 x 1.5
PN 10 AOS	10	6	3/8"	M 22 x 1.5	14	60,0	27	10.0 x 2.0
PN 10 AOS 13	10	6	3/8"	M 24 x 1.5	16	61,0	30	12.0 x 2.0
PN 13 AOS 10	12	8	1/2"	M 22 x 1.5	14	56,0	27	10.0 x 2.0
PN 13 AOS	12	8	1/2"	M 24 x 1.5	16	61,0	30	12.0 x 2.0
PN 13 AOS 16	12	8	1/2"	M 30 x 2	20	66,5	36	16.0 x 2.5
PN 16 AOS 13	16	10	5/8"	M 24 x 1.5	16	60,5	30	12.0 x 2.0
PN 16 AOS	16	10	5/8"	M 30 x 2	20	71,0	36	16.0 x 2.5
PN 16 AOS 20	16	10	5/8"	M 36 x 2	25	74,5	46	20.0 x 2.5
PN 16 AOS 20 SW41	16	10	5/8"	M 36 x 2	25	74,5	41	20.0 x 2.5
PN 20 AOS 16	19	12	3/4"	M 30 x 2	20	78,0	36	16.0 x 2.5
PN 20 AOS	19	12	3/4"	M 36 x 2	25	81,0	46	20.0 x 2.5
PN 20 AOS SW41	19	12	3/4"	M 36 x 2	25	81,0	41	20.0 x 2.5
PN 20 AOS 25	19	12	3/4"	M 42 x 2	30	84,0	50	25.0 x 2.5
PN 25 AOS 20	25	16	1"	M 36 x 2	25	89,0	46	20.0 x 2.5
PN 25 AOS	25	16	1"	M 42 x 2	30	92,0	50	25.0 x 2.5
PN 25 AOS 32	25	16	1"	M 52 x 2	38	95,5	60	33.0 x 2.5
PN 32 AOS 25	31	20	1.1/4"	M 42 x 2	30	92,5	50	25.0 x 2.5
PN 32 AOS	31	20	1.1/4"	M 52 x 2	38	104,5	60	33.0 x 2.5
PN 40 AOS 32	38	24	1.1/2"	M 52 x 2	38	107,0	60	33.0 x 2.5

**Product versions:**

PN AOS VA - Swage nipple, DKOS, Stainless steel

**PN AOS 45****Swage nipple, DKOS angle 45°**

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	24° outer cone with O-ring
<b>Short code:</b>	DKOS
<b>Standard:</b>	ISO 8434-1
<b>Series:</b>	heavy
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PN 04 AOS 45	5	3	3/16"	M 16 x 1.5	8	56,5	15,5	19	6.0 x 1.5
PN 04 AOS 06 45	5	3	3/16"	M 18 x 1.5	10	58,0	17,0	22	7.0 x 2.0
PN 06 AOS 03 45	6	4	1/4"	M 14 x 1.5	6	64,5	16,5	17	4.0 x 1.5
PN 06 AOS 04 45	6	4	1/4"	M 16 x 1.5	8	64,5	16,5	19	6.0 x 1.5
PN 06 AOS 45	6	4	1/4"	M 18 x 1.5	10	65,0	17,0	22	7.5 x 1.5
PN 06 AOS 08 45	6	4	1/4"	M 20 x 1.5	12	67,5	18,0	24	9.0 x 1.5
PN 08 AOS 06 45	8	5	5/16"	M 18 x 1.5	10	64,0	17,0	22	7.5 x 1.5
PN 08 AOS 45	8	5	5/16"	M 20 x 1.5	12	67,5	18,0	24	9.0 x 1.5
PN 10 AOS 06 45	10	6	3/8"	M 18 x 1.5	10	72,0	21,0	22	7.5 x 1.5
PN 10 AOS 08 45	10	6	3/8"	M 20 x 1.5	12	73,0	20,0	24	9.0 x 1.5
PN 10 AOS 45	10	6	3/8"	M 22 x 1.5	14	73,5	20,5	27	10.0 x 2.0
PN 10 AOS 13 45	10	6	3/8"	M 24 x 1.5	16	81,0	21,0	30	12.0 x 2.0
PN 13 AOS 10 45	12	8	1/2"	M 22 x 1.5	14	81,0	27,5	27	10.0 x 2.0
PN 13 AOS 45	12	8	1/2"	M 24 x 1.5	16	82,0	21,0	30	12.0 x 2.0
PN 16 AOS 13 45	16	10	5/8"	M 24 x 1.5	16	85,5	27,5	30	12.0 x 2.0
PN 16 AOS 45	16	10	5/8"	M 30 x 2	20	98,5	27,5	36	16.0 x 2.5
PN 16 AOS 20 45	16	10	5/8"	M 36 x 2	25	103,0	30,5	46	20.0 x 2.5
PN 20 AOS 16 45	19	12	3/4"	M 30 x 2	20	109,0	30,0	36	16.0 x 2.5
PN 20 AOS 45	19	12	3/4"	M 36 x 2	25	109,5	30,5	46	20.0 x 2.5
PN 20 AOS 45 SW41	19	12	3/4"	M 36 x 2	25	109,5	30,5	41	20.0 x 2.5
PN 25 AOS 20 45	25	16	1"	M 36 x 2	25	141,5	39,5	46	20.0 x 2.5
PN 25 AOS 45	25	16	1"	M 42 x 2	30	135,5	33,0	50	25.0 x 2.5
PN 32 AOS 45	31	20	1.1/4"	M 52 x 2	38	161,5	40,5	60	33.0 x 2.5
PN 40 AOS 32 45	38	24	1.1/2"	M 52 x 2	38	165,0	40,5	60	33.0 x 2.5

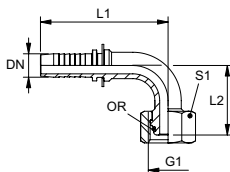
**Product versions:**

PN AOS 45 VA - Swage nipple, DKOS angle 45°, Stainless steel

## PN AOS 90

## Swage nipple, DKOS angle 90°

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	24° outer cone with O-ring
<b>Short code:</b>	DKOS
<b>Standard:</b>	ISO 8434-1
<b>Series:</b>	heavy
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

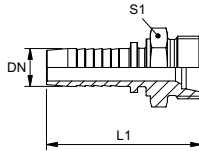


**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PN 04 AOS 90	5	3	3/16"	M 16 x 1.5	8	48,5	29,5	19	6.0 x 1.5
PN 04 AOS 90 L 37	5	3	3/16"	M 16 x 1.5	8	48,5	37,0	19	6.0 x 1.5
PN 06 AOS 03 90	6	4	1/4"	M 14 x 1.5	6	58,0	34,0	17	4.0 x 1.5
PN 06 AOS 04 90	6	4	1/4"	M 16 x 1.5	8	55,0	32,5	19	6.0 x 1.5
PN 06 AOS 90	6	4	1/4"	M 18 x 1.5	10	55,0	33,5	22	7.5 x 1.5
PN 06 AOS 08 90	6	4	1/4"	M 20 x 1.5	12	58,0	34,0	24	9.0 x 1.5
PN 08 AOS 06 90	8	5	5/16"	M 18 x 1.5	10	61,5	38,5	22	7.5 x 1.5
PN 08 AOS 90	8	5	5/16"	M 20 x 1.5	12	58,0	34,0	24	9.0 x 1.5
PN 08 AOS 90 L 45	8	5	5/16"	M 20 x 1.5	12	58,0	45,0	24	9.0 x 1.5
PN 10 AOS 06 90	10	6	3/8"	M 18 x 1.5	10	63,0	38,5	22	7.5 x 1.5
PN 10 AOS 08 90	10	6	3/8"	M 20 x 1.5	12	64,0	37,5	24	9.0 x 1.5
PN 10 AOS 90	10	6	3/8"	M 22 x 1.5	14	64,0	38,5	27	10.0 x 2.0
PN 10 AOS 13 90	10	6	3/8"	M 24 x 1.5	16	71,5	43,0	30	12.0 x 2.0
PN 13 AOS 10 90	12	8	1/2"	M 22 x 1.5	14	71,5	55,0	27	10.0 x 2.0
PN 13 AOS 90	12	8	1/2"	M 24 x 1.5	16	72,5	43,0	30	12.0 x 2.0
PN 13 AOS 16 90	12	8	1/2"	M 30 x 2	20	83,5	55,0	36	16.0 x 2.5
PN 16 AOS 13 90	16	10	5/8"	M 24 x 1.5	16	76,0	55,0	30	12.0 x 2.0
PN 16 AOS 90	16	10	5/8"	M 30 x 2	20	88,0	55,0	36	16.0 x 2.5
PN 16 AOS 90 L 100	16	10	5/8"	M 30 x 2	20	88,0	100,0	36	16.0 x 2.5
PN 16 AOS 20 90	16	10	5/8"	M 36 x 2	25	93,0	59,5	46	20.0 x 2.5
PN 20 AOS 16 90	19	12	3/4"	M 30 x 2	20	99,5	58,5	36	16.0 x 2.5
PN 20 AOS 90	19	12	3/4"	M 36 x 2	25	99,5	59,5	46	20.0 x 2.5
PN 20 AOS 90 SW41	19	12	3/4"	M 36 x 2	25	99,5	59,5	41	20.0 x 2.5
PN 20 AOS 90 L 110	19	12	3/4"	M 36 x 2	25	99,5	110,0	46	20.0 x 2.5
PN 20 AOS 90 L 130	19	12	3/4"	M 36 x 2	25	99,5	130,0	46	20.0 x 2.5
PN 20 AOS 90 L 150	19	12	3/4"	M 36 x 2	25	99,5	150,0	46	20.0 x 2.5
PN 20 AOS 25 90	19	12	3/4"	M 42 x 2	30	119,0	71,0	50	25.0 x 2.5
PN 25 AOS 20 90	25	16	1"	M 36 x 2	25	126,0	80,5	46	20.0 x 2.5
PN 25 AOS 90	25	16	1"	M 42 x 2	30	127,0	71,0	50	25.0 x 2.5
PN 32 AOS 25 90	31	20	1.1/4"	M 42 x 2	30	135,0	85,0	50	25.0 x 2.5
PN 32 AOS 90	31	20	1.1/4"	M 52 x 2	38	151,5	85,0	60	33.0 x 2.5
PN 40 AOS 32 90	38	24	1.1/2"	M 52 x 2	38	155,0	95,0	60	33.0 x 2.5

**Product versions:**

PN AOS 90 VA - Swage nipple, DKOS angle 90°, Stainless steel

**PN HS****Swage nipple, CES**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** metric cylindrical outer thread

**Sealing form 1:** 24° inner cone

**Short code:** CES

**Standard:** ISO 8434-1

**Series:** heavy

**Material:** Steel

**Surface:** electro galvanised

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1
PN 04 HS	5	3	3/16"	M 16 x 1.5	8	48,0	17
PN 06 HS 03	6	4	1/4"	M 14 x 1.5	6	52,0	14
PN 06 HS 04	6	4	1/4"	M 16 x 1.5	8	54,0	17
PN 06 HS	6	4	1/4"	M 18 x 1.5	10	54,0	19
PN 08 HS 06	8	5	5/16"	M 18 x 1.5	10	54,0	19
PN 08 HS	8	5	5/16"	M 20 x 1.5	12	56,0	22
PN 08 HS 13	8	5	5/16"	M 24 x 1.5	16	58,0	27
PN 10 HS 06	10	6	3/8"	M 18 x 1.5	10	55,5	19
PN 10 HS 08	10	6	3/8"	M 20 x 1.5	12	57,5	22
PN 10 HS	10	6	3/8"	M 22 x 1.5	14	59,5	24
PN 10 HS 13	10	6	3/8"	M 24 x 1.5	16	59,5	27
PN 13 HS 10	12	8	1/2"	M 22 x 1.5	14	60,5	24
PN 13 HS	12	8	1/2"	M 24 x 1.5	16	60,5	27
PN 13 HS 16	12	8	1/2"	M 30 x 2	20	64,5	32
PN 16 HS	16	10	5/8"	M 30 x 2	20	69,0	32
PN 20 HS 16	19	12	3/4"	M 30 x 2	20	75,5	32
PN 20 HS	19	12	3/4"	M 36 x 2	25	79,5	36
PN 25 HS 20	25	16	1"	M 36 x 2	25	87,5	36
PN 25 HS	25	16	1"	M 42 x 2	30	89,5	46
PN 32 HS	31	20	1.1/4"	M 52 x 2	38	104,0	55
PN 40 HS 32	38	24	1.1/2"	M 52 x 2	38	107,5	55

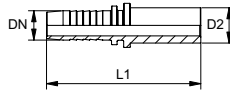
**Product versions:**

PN HS VA - Swage nipple, CES, Stainless steel

## PN FS

## Swage nipple, BES

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	Pipe sockets
<b>Sealing form 1:</b>	Cutting ring connection
<b>Short code:</b>	BES
<b>Standard:</b>	ISO 8434-1
<b>Series:</b>	heavy
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



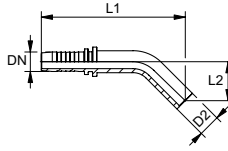
**Note:** Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...). Choose the appropriate ferrule based on the hose type. Do not use for new designs; we recommend: PN...AOS.

Identification	DN	Size	Inches	D2 mm	L1 mm
PN 04 FS	5	3	3/16"	8,0	51,5
PN 06 FS 04	6	4	1/4"	8,0	58,5
PN 06 FS	6	4	1/4"	10,0	60,5
PN 06 FS 08	6	4	1/4"	12,0	59,5
PN 08 FS	8	5	5/16"	12,0	60,0
PN 10 FS	10	6	3/8"	14,0	66,0
PN 10 FS 13	10	6	3/8"	16,0	70,0
PN 13 FS 08	12	8	1/2"	12,0	61,5
PN 13 FS 10	12	8	1/2"	14,0	67,0
PN 13 FS	12	8	1/2"	16,0	70,0
PN 16 FS 13	16	10	5/8"	16,0	74,5
PN 16 FS	16	10	5/8"	20,0	78,5
PN 16 FS 20	16	10	5/8"	25,0	85,0
PN 20 FS 13	19	12	3/4"	16,0	79,5
PN 20 FS 16	19	12	3/4"	20,0	86,0
PN 20 FS	19	12	3/4"	25,0	90,0
PN 25 FS 20	25	16	1"	25,0	97,0
PN 25 FS	25	16	1"	30,0	102,0
PN 25 FS 32	25	16	1"	38,0	109,5
PN 32 FS 25	31	20	1.1/4"	30,0	113,0
PN 32 FS	31	20	1.1/4"	38,0	117,0
PN 40 FS 32	38	24	1.1/2"	38,0	120,5

**Product versions:**

PN FS MG - Swage nipple, BES, Brass

PN FS VA - Swage nipple, BES, Stainless steel

**PN FS 45****Swage nipple, BES angle 45°**

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	Pipe sockets
<b>Sealing form 1:</b>	Cutting ring connection
<b>Short code:</b>	BES
<b>Standard:</b>	ISO 8434-1
<b>Series:</b>	heavy
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

**Note:** Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...). Choose the appropriate ferrule based on the hose type. Do not use for new designs; we recommend: PN...AOS...45.

Identification	DN	Size	Inches	D2 mm	L1 mm	L2 mm
PN 04 FS 45	5	3	3/16"	8,0	59,0	20,0
PN 06 FS 45	6	4	1/4"	10,0	80,0	23,5
PN 06 FS 08 45	6	4	1/4"	12,0	82,5	22,0
PN 08 FS 45	8	5	5/16"	12,0	90,0	25,0
PN 10 FS 45	10	6	3/8"	14,0	82,5	27,0
PN 13 FS 10 45	12	8	1/2"	14,0	82,5	27,0
PN 13 FS 45	12	8	1/2"	16,0	97,0	30,0
PN 16 FS 13 45	16	10	5/8"	16,0	101,5	30,0
PN 16 FS 45	16	10	5/8"	20,0	106,0	34,0
PN 20 FS 16 45	19	12	3/4"	20,0	113,0	34,0
PN 20 FS 45	19	12	3/4"	25,0	126,0	39,0
PN 25 FS 20 45	25	16	3/4"	25,0	135,0	39,0
PN 25 FS 45	25	16	1"	30,0	146,0	44,0
PN 32 FS 25 45	31	20	1.1/4"	30,0	153,5	44,0
PN 32 FS 45	31	20	1.1/4"	38,0	172,5	51,0
PN 40 FS 32 45	38	24	1.1/2"	38,0	176,5	51,0

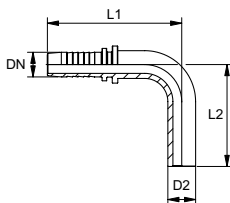
**Product versions:**

**PN FS 45 VA** - Swage nipple, BES angle 45°, Stainless steel

## PN FS 90

## Swage nipple, BES angle 90°

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	Pipe sockets
<b>Sealing form 1:</b>	Cutting ring connection
<b>Short code:</b>	BES
<b>Standard:</b>	ISO 8434-1
<b>Series:</b>	heavy
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

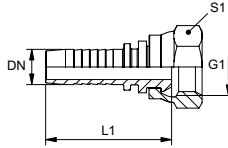


**Note:** Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...). Choose the appropriate ferrule based on the hose type. Do not use for new designs; we recommend: PN...AOS...90.

Identification	DN	Size	Inches	D2 mm	L1 mm	L2 mm
PN 04 FS 90	5	3	3/16"	8,0	59,0	37,0
PN 06 FS 04 90	6	4	1/4"	8,0	56,5	43,5
PN 06 FS 90	6	4	1/4"	10,0	56,5	44,5
PN 06 FS 08 90	6	4	1/4"	12,0	56,5	44,5
PN 08 FS 90	8	5	5/16"	12,0	57,0	46,5
PN 10 FS 90	10	6	3/8"	14,0	58,5	60,5
PN 13 FS 08 90	12	8	1/2"	12,0	58,5	46,5
PN 13 FS 10 90	12	8	1/2"	14,0	70,5	61,5
PN 13 FS 90	12	8	1/2"	16,0	71,5	63,5
PN 16 FS 13 90	16	10	5/8"	16,0	76,0	63,5
PN 16 FS 90	16	10	5/8"	20,0	83,0	80,5
PN 20 FS 16 90	19	12	3/4"	20,0	100,0	80,0
PN 20 FS 90	19	12	3/4"	25,0	100,0	85,5
PN 25 FS 20 90	25	16	1"	25,0	127,5	94,5
PN 25 FS 90	25	16	1"	30,0	127,5	99,5
PN 32 FS 25 90	31	20	1.1/4"	30,0	135,0	99,5
PN 32 FS 90	31	20	1.1/4"	38,0	156,0	105,0
PN 40 FS 32 90	38	24	1.1/2"	38,0	159,5	105,0

**Product versions:**

PN FS 90 VA - Swage nipple, BES angle 90°, Stainless steel

**PN A****Swage nipple, DKM**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** metric nut thread

**Sealing form 1:** 60° sealing head

**Short code:** DKM

**Standard:** DIN 3863

**Material:** Steel

**Surface:** electro galvanised

2

**Note:** Choose the appropriate ferrule based on the hose type.

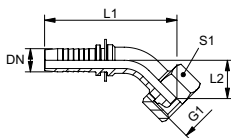
Identification	DN	Size	Inches	G1	L1 mm	S1
PN 20 A	19	12	3/4"	M 30 x 1.5	65,5	36
PN 25 A	25	16	1"	M 38 x 1.5	75,5	46
PN 25 A 32	25	16	1"	M 45 x 1.5	76,0	50
PN 32 A	31	20	1.1/4"	M 45 x 1.5	85,0	50
PN 40 A	38	24	1.1/2"	M 52 x 1.5	89,0	60
PN 50 A	51	32	2"	M 65 x 2	107,0	75
PN 60 A	60	40	2.3/8"	M 78 x 2	112,0	90

**Product versions:**

PN A VA - Swage nipple, DKM, Stainless steel

**PN A 45****Swage nipple, DKM angle 45°**

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	60° sealing head
<b>Short code:</b>	DKM
<b>Standard:</b>	DIN 3863
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

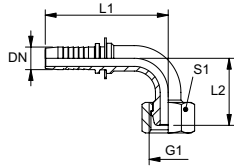
Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 20 A 45	19	12	3/4"	M 30 x 1.5	119,0	29,0	36
PN 25 A 45	25	16	1"	M 38 x 1.5	148,0	39,0	46
PN 32 A 45	31	20	1.1/4"	M 45 x 1.5			
PN 40 A 45	38	24	1.1/2"	M 52 x 1.5	172,0	44,0	60
PN 50 A 45	51	32	2"	M 65 x 2	209,0	53,0	75

**Product versions:**

PN A 45 VA - Swage nipple, DKM angle 45°, Stainless steel

## PN A 90

### Swage nipple, DKM angle 90°



**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 60° sealing head  
**Short code:** DKM  
**Standard:** DIN 3863  
**Material:** Steel  
**Surface:** electro galvanised

2

**Note:** Choose the appropriate ferrule based on the hose type.

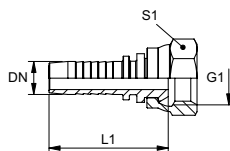
Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 20 A 90	19	12	3/4"	M 30 x 1.5	109,0	61,0	36
PN 25 A 90	25	16	1"	M 38 x 1.5	125,0	71,0	46
PN 25 A 32 90	25	16	1"	M 45 x 1.5	125,0	74,0	50
PN 32 A 90	31	20	1.1/4"	M 45 x 1.5	144,0	83,0	50
PN 40 A 90	38	24	1.1/2"	M 52 x 1.5	159,0	94,0	60
PN 50 A 90	51	32	2"	M 65 x 2	199,0	118,0	75

**Product versions:**

PN A 90 VA - Swage nipple, DKM angle 90°, Stainless steel

**PN AM****Swage nipple, DKM-Flat**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** flat sealing  
**Short code:** DKM flat  
**Material:** Steel  
**Surface:** electro galvanised



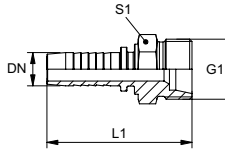
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 13 AM	12	8	1/2"	M 22 x 1.5	55,0	27

2

## PN H

### Swage nipple, AGM



**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 60° inner cone  
**Short code:** AGM  
**Material:** Steel  
**Surface:** electro galvanised

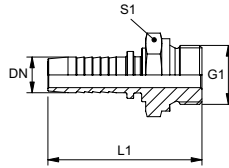
2

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 20 H	19	12	3/4"	M 30 x 1.5	72,5	32

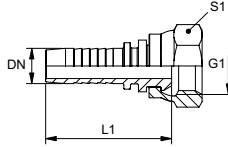
**PN HM****Swage nipple, AGM-Flat**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** flat sealing  
**Short code:** AGM-Flat  
**Standard:** DIN 3852  
**Material:** Steel  
**Surface:** electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 06 HM 02	6	4	1/4"	M 10 x 1	50,5	14
PN 06 HM	6	4	1/4"	M 14 x 1.5	53,0	19
PN 08 HM	8	5	5/16"	M 16 x 1.5	54,5	22
PN 08 HM 10	8	5	5/16"	M 18 x 1.5	56,0	24
PN 10 HM 08	10	6	3/8"	M 16 x 1.5	55,5	22
PN 10 HM	10	6	3/8"	M 18 x 1.5	57,0	24
PN 13 HM	12	8	1/2"	M 22 x 1.5	59,5	27
PN 16 HM	16	10	5/8"	M 26 x 1.5	65,0	32
PN 20 HM	19	12	3/4"	M 30 x 1.5	74,5	36
PN 25 HM	25	16	1"	M 38 x 1.5	83,0	46
PN 32 HM	31	20	1.1/4"	M 45 x 1.5	95,0	55
PN 40 HM	38	24	1.1/2"	M 52 x 1.5	101,0	60

**PN AB****Swage nipple, DKR**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** BSP nut thread

**Sealing form 1:** 60° outer cone

**Short code:** DKR

**Standard:** ISO 8434-6, BS 5200

**Material:** Steel

**Surface:** electro galvanised

**Note:** Choose the appropriate ferrule based on the hose type.

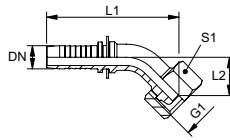
Identification	DN	Size	Inches	G1	L1 mm	S1
PN 04 AB	5	3	3/16"	G 1/8" -28	37,0	14
PN 04 AB 06	5	3	3/16"	G 1/4" -19	37,5	19
PN 06 AB 02	6	4	1/4"	G 1/8" -28	43,0	14
PN 06 AB	6	4	1/4"	G 1/4" -19	44,5	19
PN 06 AB 10	6	4	1/4"	G 3/8" -19	46,5	22
PN 08 AB 06	8	5	5/16"	G 1/4" -19	45,0	19
PN 08 AB 10	8	5	5/16"	G 3/8" -19	47,0	22
PN 08 AB 13	8	5	5/16"	G 1/2" -14	48,5	27
PN 10 AB 06	10	6	3/8"	G 1/4" -19	46,5	19
PN 10 AB	10	6	3/8"	G 3/8" -19	48,0	22
PN 10 AB 13	10	6	3/8"	G 1/2" -14	49,5	27
PN 13 AB 10	12	8	1/2"	G 3/8" -19	48,0	22
PN 13 AB	12	8	1/2"	G 1/2" -14	50,5	27
PN 13 AB 16	12	8	1/2"	G 5/8" -14	49,5	30
PN 13 AB 20	12	8	1/2"	G 3/4" -14	52,0	32
PN 16 AB 13	16	10	5/8"	G 1/2" -14	55,0	27
PN 16 AB	16	10	5/8"	G 5/8" -14	54,0	30
PN 16 AB 20	16	10	5/8"	G 3/4" -14	57,0	32
PN 16 AB 25	16	10	5/8"	G 1" -11	62,0	38
PN 20 AB 13	19	12	3/4"	G 1/2" -14	62,0	27
PN 20 AB 16	19	12	3/4"	G 5/8" -14	61,0	30
PN 20 AB	19	12	3/4"	G 3/4" -14	64,0	32
PN 20 AB 25	19	12	3/4"	G 1" -11	67,0	38
PN 25 AB	25	16	1"	G 1" -11	75,0	38
PN 25 AB 32	25	16	1"	G 1.1/4" -11	80,5	50
PN 32 AB	31	20	1.1/4"	G 1.1/4" -11	88,0	50
PN 40 AB	38	24	1.1/2"	G 1.1/2" -11	92,0	55
PN 50 AB	51	32	2"	G 2" -11	110,5	70

**Product versions:**

**PN AB VA** - Swage nipple, DKR, Stainless steel

**PN AB 45****Swage nipple, DKR angle 45°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone  
**Short code:** DKR  
**Standard:** ISO 8434-6, BS 5200  
**Material:** Steel  
**Surface:** electro galvanised

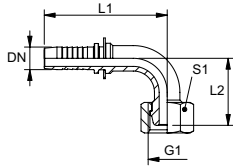


**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 04 AB 45	5	3	3/16"	G 1/8" -28	54,0	14,0	14
PN 04 AB 06 45	5	3	3/16"	G 1/4" -19	54,5	12,5	19
PN 06 AB 02 45	6	4	1/4"	G 1/8" -28	62,5	14,0	14
PN 06 AB 45	6	4	1/4"	G 1/4" -19	60,5	12,5	19
PN 06 AB 10 45	6	4	1/4"	G 3/8" -19	62,0	14,0	22
PN 08 AB 06 45	8	5	5/16"	G 1/4" -19	64,0	14,5	17
PN 08 AB 10 45	8	5	5/16"	G 3/8" -19	64,0	14,5	22
PN 10 AB 06 45	10	6	3/8"	G 1/4" -19	69,5	16,5	19
PN 10 AB 45	10	6	3/8"	G 3/8" -19	69,5	16,5	22
PN 10 AB 13 45	10	6	3/8"	G 1/2" -14	70,5	17,5	27
PN 13 AB 10 45	12	8	1/2"	G 3/8" -19	78,5	17,5	22
PN 13 AB 45	12	8	1/2"	G 1/2" -14	78,5	17,5	27
PN 13 AB 16 45	12	8	1/2"	G 5/8" -14	80,5	20,5	30
PN 13 AB 20 45	12	8	1/2"	G 3/4" -14	82,5	22,5	32
PN 16 AB 45	16	10	5/8"	G 5/8" -14	96,0	24,5	30
PN 16 AB 20 45	16	10	5/8"	G 3/4" -14	97,5	26,0	32
PN 20 AB 45	19	12	3/4"	G 3/4" -14	108,0	28,5	32
PN 20 AB 25 45	19	12	3/4"	G 1" -11	111,0	31,5	38
PN 25 AB 45	25	16	1"	G 1" -11	137,0	35,0	38
PN 25 AB 32 45	25	16	1"	G 1.1/4" -11	134,5	32,0	50
PN 32 AB 45	31	20	1.1/4"	G 1.1/4" -11	165,0	45,5	50
PN 50 AB 45	51	32	2"	G 2" -11	231,5	67,0	70

**Product versions:**

**PN AB 45 VA** - Swage nipple, DKR angle 45°, Stainless steel

**PN AB 90****Swage nipple, DKR angle 90°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** BSP nut thread

**Sealing form 1:** 60° outer cone

**Short code:** DKR

**Standard:** ISO 8434-6, BS 5200

**Material:** Steel

**Surface:** electro galvanised

**Note:** Choose the appropriate ferrule based on the hose type.

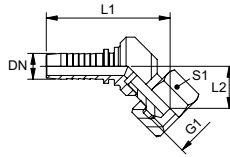
Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 04 AB 90	5	3	3/16"	G 1/8" -28	47,5	27,5	14
PN 04 AB 06 90	5	3	3/16"	G 1/4" -19	49,0	27,0	19
PN 06 AB 02 90	6	4	1/4"	G 1/8" -28	57,0	27,5	14
PN 06 AB 90	6	4	1/4"	G 1/4" -19	55,0	27,0	19
PN 06 AB 10 90	6	4	1/4"	G 3/8" -19	56,0	29,0	22
PN 08 AB 06 90	8	5	5/16"	G 1/4" -19	55,0	31,0	17
PN 08 AB 10 90	8	5	5/16"	G 3/8" -19	58,0	29,0	22
PN 08 AB 13 90	8	5	5/16"	G 1/2" -14	62,5	34,0	27
PN 10 AB 06 90	10	6	3/8"	G 1/4" -19	64,0	36,5	19
PN 10 AB 90	10	6	3/8"	G 3/8" -19	64,0	33,0	22
PN 10 AB 13 90	10	6	3/8"	G 1/2" -14	64,0	34,0	27
PN 13 AB 10 90	12	8	1/2"	G 3/8" -19	72,5	40,0	22
PN 13 AB 90	12	8	1/2"	G 1/2" -14	72,5	38,0	27
PN 13 AB 16 90	12	8	1/2"	G 5/8" -14	71,5	42,5	30
PN 13 AB 20 90	12	8	1/2"	G 3/4" -14	71,5	45,5	32
PN 16 AB 90	16	10	5/8"	G 5/8" -14	87,0	52,5	30
PN 16 AB 20 90	16	10	5/8"	G 3/4" -14	87,0	55,0	32
PN 20 AB 90	19	12	3/4"	G 3/4" -14	99,0	58,0	32
PN 20 AB 25 90	19	12	3/4"	G 1" -11	99,0	62,0	38
PN 25 AB 90	25	16	1"	G 1" -11	126,0	74,0	38
PN 25 AB 32 90	25	16	1"	G 1.1/4" -11	127,0	69,5	50
PN 32 AB 90	31	20	1.1/4"	G 1.1/4" -11	150,5	92,0	50

**Product versions:**

**PN AB 90 VA** - Swage nipple, DKR angle 90°, Stainless steel

**PN ABK 45****Swage nipple, DKR Comp. angle 45°**

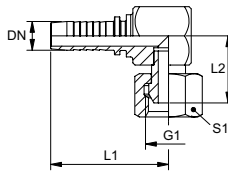
<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	BSP nut thread
<b>Sealing form 1:</b>	60° outer cone
<b>Supplementary design information:</b>	Compact form
<b>Short code:</b>	DKR
<b>Standard:</b>	BS 5200
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 06 ABK 45	6	4	1/4"	G 1/4" -19	65,0	12,0	19
PN 10 ABK 45	10	6	3/8"	G 3/8" -19	60,0	19,0	22
PN 13 ABK 45	12	8	1/2"	G 1/2" -14	74,0	15,0	27
PN 16 ABK 45	16	10	5/8"	G 5/8" -14			
PN 20 ABK 45	19	12	3/4"	G 3/4" -14			
PN 25 ABK 45	25	16	1"	G 1" -11			

2

**PN ABK 90****Swage nipple, DKR Comp. angle 90°****Application:**

Swage nipple for HD 100 to HD 400, KP and TE hoses  
BSP nut thread  
60° outer cone

**Connection 1:**  
**Sealing form 1:**  
**Supplementary design information:**

Compact form

**Short code:**

DKR

**Standard:**

BS 5200

**Material:**

Steel

**Surface:**

electro galvanised

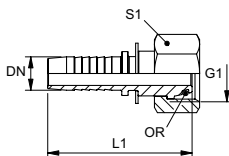
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 04 ABK 90	5	3	3/16"	G 1/8" -28	47,0	17,0	14
PN 06 ABK 90	6	4	1/4"	G 1/4" -19	50,0	20,0	19
PN 06 ABK 10 90	6	4	1/4"	G 3/8" -19	53,5	23,0	22
PN 08 ABK 10 90	8	5	5/16"	G 3/8" -19	54,0	23,0	22
PN 10 ABK 06 90	10	6	3/8"	G 1/4" -19	52,0	20,0	19
PN 10 ABK 90	10	6	3/8"	G 3/8" -19	55,5	23,0	22
PN 10 ABK 13 90	10	6	3/8"	G 1/2" -14	57,6	26,0	27
PN 13 ABK 90	12	8	1/2"	G 1/2" -14	59,6	26,0	27
PN 16 ABK 90	16	10	5/8"	G 5/8" -14	64,1	27,0	30
PN 20 ABK 90	19	12	3/4"	G 3/4" -14	74,8	32,0	32
PN 25 ABK 90	25	16	1"	G 1" -11	92,2	36,0	38

## PN AOB

## Swage nipple, DKOR

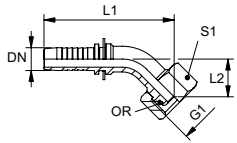
**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone with O-ring  
**Short code:** DKOR  
**Standard:** ISO 8434-6, BS 5200  
**Material:** Steel  
**Surface:** electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PN 06 AOB	6	4	1/4"	G 1/4" -19	44,5	19	6.0 x 1.0
PN 10 AOB	10	6	3/8"	G 3/8" -19	48,5	22	8.1 x 1.6
PN 13 AOB	12	8	1/2"	G 1/2" -14	51,0	27	12.1 x 1.6
PN 16 AOB	16	10	5/8"	G 5/8" -14	54,0	30	13.1 x 1.6
PN 20 AOB	19	12	3/4"	G 3/4" -14	63,5	32	17.1 x 1.6
PN 25 AOB	25	16	1"	G 1" -11	75,5	38	22.1 x 1.6
PN 25 AOB 32	25	16	1"	G 1.1/4" -11	78,0	50	29.1 x 1.6
PN 32 AOB	31	20	1.1/4"	G 1.1/4" -11	87,0	50	29.1 x 1.6
PN 32 AOB 40	31	20	1.1/4"	G 1.1/2" -11	88,5	55	35.1 x 1.6
PN 40 AOB	38	24	1.1/2"	G 1.1/2" -11	92,0	55	35.1 x 1.6
PN 40 AOB 50	38	24	1.1/2"	G 2" -11	97,0	70	48.1 x 1.6
PN 50 AOB	51	32	2"	G 2" -11	110,0	70	48.1 x 1.6

2

**PN AOB 45****Swage nipple, DKOR angle 45°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** BSP nut thread

**Sealing form 1:** 60° outer cone with O-ring

**Short code:** DKOR

**Standard:** ISO 8434-6, BS 5200

**Material:** Steel

**Surface:** electro galvanised

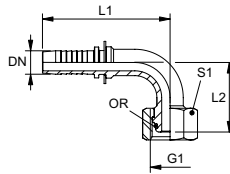
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**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PN 06 AOB 45	6	4	1/4"	G 1/4" -19	60,5	12,5	19	6.0 x 1.0
PN 10 AOB 45	10	6	3/8"	G 3/8" -19	69,5	16,5	22	8.1 x 1.6
PN 13 AOB 45	12	8	1/2"	G 1/2" -14	78,5	17,5	27	12.1 x 1.6
PN 16 AOB 45	16	10	5/8"	G 5/8" -14	96,0	24,5	30	13.1 x 1.6
PN 20 AOB 45	19	12	3/4"	G 3/4" -14	108,0	28,5	32	17.1 x 1.6
PN 25 AOB 45	25	16	1"	G 1" -11	137,0	35,0	38	22.1 x 1.6
PN 25 AOB 32 45	25	16	1"	G 1.1/4" -11	134,5	32,0	50	29.1 x 1.6
PN 32 AOB 45	31	20	1.1/4"	G 1.1/4" -11	165,0	45,5	50	29.1 x 1.6
PN 32 AOB 40 45	31	20	1.1/4"	G 1.1/2" -11	165,0	45,0	55	35.1 x 1.6
PN 40 AOB 45	38	24	1.1/2"	G 1.1/2" -11	187,5	49,5	55	35.1 x 1.6
PN 40 AOB 50 45	38	24	1.1/2"	G 2" -11	189,5	51,5	70	48.1 x 1.6
PN 50 AOB 45	51	32	2"	G 2" -11	231,5	67,0	70	48.1 x 1.6

**PN AOB 90****Swage nipple, DKOR angle 90°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone with O-ring  
**Short code:** DKOR  
**Standard:** ISO 8434-6, BS 5200  
**Material:** Steel  
**Surface:** electro galvanised

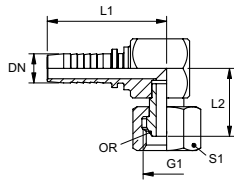


**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PN 06 AOB 90	6	4	1/4"	G 1/4" -19	55,0	27,0	19	6.0 x 1.0
PN 10 AOB 90	10	6	3/8"	G 3/8" -19	64,0	33,0	22	8.1 x 1.6
PN 13 AOB 90	12	8	1/2"	G 1/2" -14	72,5	38,0	27	12.1 x 1.6
PN 16 AOB 90	16	10	5/8"	G 5/8" -14	87,0	52,5	30	13.1 x 1.6
PN 20 AOB 90	19	12	3/4"	G 3/4" -14	99,0	58,0	32	17.1 x 1.6
PN 25 AOB 90	25	16	1"	G 1" -11	126,0	74,0	38	22.1 x 1.6
PN 25 AOB 32 90	25	16	1"	G 1.1/4" -11	127,0	69,5	50	29.1 x 1.6
PN 32 AOB 90	31	20	1.1/4"	G 1.1/4" -11	150,5	92,0	50	29.1 x 1.6
PN 32 AOB 40 90	31	20	1.1/4"	G 1.1/2" -11	150,5	91,5	55	35.1 x 1.6
PN 40 AOB 90	38	24	1.1/2"	G 1.1/2" -11	175,5	105,0	55	35.1 x 1.6
PN 40 AOB 50 90	38	24	1.1/4"	G 2" -11	175,5	105,0	70	48.1 x 1.6
PN 50 AOB 90	51	32	2"	G 2" -11	216,5	135,5	70	48.1 x 1.6

## PN AOBK 90

### Swage nipple, DKOR Comp. angle 90°



**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** BSP nut thread

**Sealing form 1:** 60° outer cone with O-ring

**Supplementary design information:** Compact form

**Short code:** DKOR

**Standard:** BS 5200

**Material:** Steel

**Surface:** electro galvanised

2

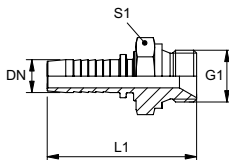
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PN 06 AOBK 90	6	4	1/4"	G 1/4" -19	46,0	22,5	19	6.0 x 1.0
PN 10 AOBK 90	10	6	3/8"	G 3/8" -19	50,0	27,0	22	8.1 x 1.6
PN 13 AOBK 90	12	8	1/2"	G 1/2" -14	54,5	28,5	27	12.1 x 1.6
PN 16 AOBK 90	16	10	5/8"	G 5/8" -14				14.1 x 1.6
PN 20 AOBK 90	19	12	3/4"	G 3/4" -14	68,5	38,5	32	22.1 x 1.6
PN 25 AOBK 90	25	16	1"	G 1" -11				22.1 x 1.6

## PN HB

## Swage nipple, AGR

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Short code:** AGR  
**Standard:** ISO 8434-6, BS 5200  
**Material:** Steel  
**Surface:** electro galvanised

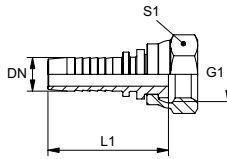


**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 04 HB	5	3	3/16"	G 1/8" -28	42,5	14
PN 04 HB 06	5	3	3/16"	G 1/4" -19	46,0	19
PN 06 HB 02	6	4	1/4"	G 1/8" -28	48,5	14
PN 06 HB	6	4	1/4"	G 1/4" -19	52,0	19
PN 06 HB 10	6	4	1/4"	G 3/8" -19	54,0	22
PN 06 HB 13	6	4	1/4"	G 1/2" -14	57,5	27
PN 08 HB 06	8	5	5/16"	G 1/4" -19	52,0	19
PN 08 HB 10	8	5	5/16"	G 3/8" -19	54,0	22
PN 08 HB 13	8	5	5/16"	G 1/2" -14	57,5	27
PN 10 HB 02	10	6	3/8"	G 1/8" -28	50,0	17
PN 10 HB 06	10	6	3/8"	G 1/4" -19	53,5	19
PN 10 HB	10	6	3/8"	G 3/8" -19	55,5	22
PN 10 HB 13	10	6	3/8"	G 1/2" -14	59,5	27
PN 13 HB 10	12	8	1/2"	G 3/8" -19	56,5	22
PN 13 HB	12	8	1/2"	G 1/2" -14	60,5	27
PN 13 HB 16	12	8	1/2"	G 5/8" -14	62,5	30
PN 13 HB 20	12	8	1/2"	G 3/4" -14	62,5	32
PN 16 HB 13	16	10	5/8"	G 1/2" -14	65,0	27
PN 16 HB	16	10	5/8"	G 5/8" -14	67,0	30
PN 16 HB 20	16	10	5/8"	G 3/4" -14	67,0	32
PN 20 HB	19	12	3/4"	G 3/4" -14	73,5	32
PN 20 HB 25	19	12	3/4"	G 1" -11	78,5	41
PN 25 HB	25	16	1"	G 1" -11	86,5	41
PN 25 HB 32	25	16	1"	G 1.1/4" -11	87,5	50
PN 32 HB	31	20	1.1/4"	G 1.1/4" -11	97,0	50
PN 32 HB 40	31	20	1.1/4"	G 1.1/2" -11	100,0	55
PN 40 HB 32	38	24	1.1/2"	G 1.1/4" -11	100,5	50
PN 40 HB	38	24	1.1/2"	G 1.1/2" -11	103,5	55
PN 40 HB 50	38	24	1.1/2"	G 2" -11	109,0	70
PN 50 HB	51	32	2"	G 2" -11	124,5	70

**Product versions:**

PN HB VA - Swage nipple, AGR, Stainless steel

**PN AR****Swage nipple, DKR-Flat**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** BSP nut thread

**Sealing form 1:** flat sealing

**Short code:** DKR flat

**Material:** Steel

**Surface:** electro galvanised

**Note:** Choose the appropriate ferrule based on the hose type. LM = long nut

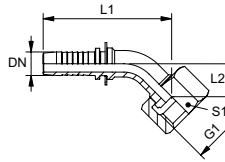
Identification	DN	Size	Inches	G1	L1 mm	S1
PN 06 AR 02	6	4	1/4"	G 1/8" -28	43,0	14
PN 06 AR	6	4	1/4"	G 1/4" -19	43,5	19
PN 06 AR 10	6	4	1/4"	G 3/8" -19	44,5	22
PN 08 AR 06	8	5	5/16"	G 1/4" -19	44,0	19
PN 08 AR 10	8	5	5/16"	G 3/8" -19	44,5	22
PN 08 AR 13	8	5	5/16"	G 1/2" -14	46,5	27
PN 10 AR 06	10	6	3/8"	G 1/4" -19	46,0	19
PN 10 AR	10	6	3/8"	G 3/8" -19	47,0	22
PN 10 AR 13	10	6	3/8"	G 1/2" -14	48,0	27
PN 10 AR 13 LM	10	6	3/8"	G 1/2" -14	48,0	27
PN 13 AR 10	12	8	1/2"	G 3/8" -19	48,5	22
PN 13 AR	12	8	1/2"	G 1/2" -14	50,0	27
PN 13 AR 16	12	8	1/2"	G 5/8" -14	49,5	30
PN 13 AR 20	12	8	1/2"	G 3/4" -14	49,5	32
PN 16 AR	16	10	5/8"	G 5/8" -14	55,0	30
PN 16 AR 20	16	10	5/8"	G 3/4" -14	54,0	32
PN 16 AR 25	16	10	5/8"	G 1" -11	56,5	41
PN 20 AR	19	12	3/4"	G 3/4" -14	61,5	32
PN 20 AR 25	19	12	3/4"	G 1" -11	63,0	41
PN 20 AR 32	19	12	3/4"	G 1.1/4" -11	66,5	50
PN 25 AR	25	16	1"	G 1" -11	72,0	38
PN 25 AR 32	25	16	1"	G 1.1/4" -11	74,5	50
PN 32 AR	31	20	1.1/4"	G 1.1/4" -11	84,5	50
PN 40 AR	38	24	1.1/2"	G 1.1/2" -11	88,0	55

**Product versions:**

**PN AR VA** - Swage nipple, DKR-Flat, Stainless steel

**PN AR 45****Swage nipple, DKR-Flat angle 45°**

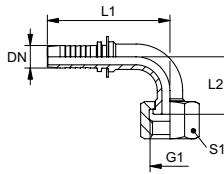
**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** BSP nut thread  
**Sealing form 1:** flat sealing  
**Short code:** DKR flat  
**Material:** Steel  
**Surface:** electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 10 AR 13 45	10	6	3/8"	G 1/2" -14	89,0	23,0	27
PN 13 AR 45	12	8	1/2"	G 1/2" -14	91,0	23,0	27
PN 16 AR 20 45	16	10	5/8"	G 3/4" -14	98,0	25,0	32
PN 20 AR 25 45	19	12	3/4"	G 1" -11	121,0	31,0	41

2

**PN AR 90****Swage nipple, DKR-Flat angle 90°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** BSP nut thread

**Sealing form 1:** flat sealing

**Short code:** DKR flat

**Material:** Steel

**Surface:** electro galvanised

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 06 AR 90	6	4	1/4"	G 1/4" -19	59,0	32,0	19
PN 10 AR 90	10	6	3/8"	G 3/8" -19	67,0	31,0	22
PN 10 AR 13 90	10	6	3/8"	G 1/2" -14	73,0	39,0	27
PN 13 AR 90	12	8	1/2"	G 1/2" -14	71,0	35,0	27
PN 13 AR 20 90	12	8	1/2"	G 3/4" -14	87,0	54,0	32
PN 16 AR 20 90	16	10	5/8"	G 3/4" -14	91,0	54,0	32
PN 20 AR 90	19	12	3/4"	G 3/4" -14	98,0	54,0	32
PN 20 AR 25 90	19	12	3/4"	G 1" -11	109,0	64,0	41
PN 25 AR 90	25	16	1"	G 1" -11	114,0	64,0	41
PN 32 AR 90	31	20	1.1/4"	G 1.1/4" -11	132,0	74,0	50

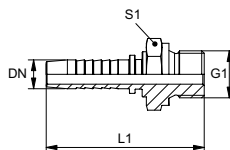
**Product versions:**

PN AR 90 VA - Swage nipple, DKR-Flat angle 90°, Stainless steel

## PN HR

## Swage nipple, AGR-Flat

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** flat sealing  
**Short code:** AGR-Flat  
**Material:** Steel  
**Surface:** electro galvanised

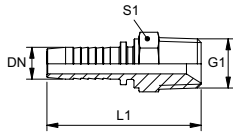


**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 04 HR	5	3	3/16"	G 1/8" -28	43,5	14
PN 06 HR	6	4	1/4"	G 1/4" -19	51,5	19
PN 06 HR 10	6	4	1/4"	G 3/8" -19	54,5	22
PN 08 HR 06	8	5	5/16"	G 1/4" -19	52,0	19
PN 08 HR 10	8	5	5/16"	G 3/8" -19	55,0	22
PN 10 HR	10	6	3/8"	G 3/8" -19	56,0	22
PN 10 HR 13	10	6	3/8"	G 1/2" -14	61,0	27
PN 13 HR 10	12	8	1/2"	G 3/8" -19	57,0	22
PN 13 HR	12	8	1/2"	G 1/2" -14	62,0	27
PN 13 HR 16	12	8	1/2"	G 5/8" -14	63,0	30
PN 13 HR 20	12	8	1/2"	G 3/4" -14	66,0	32
PN 16 HR	16	10	5/8"	G 5/8" -14	67,5	30
PN 16 HR 20	16	10	5/8"	G 3/4" -14	70,5	32
PN 16 HR 25	16	10	5/8"	G 1" -11	77,0	41
PN 20 HR	19	12	3/4"	G 3/4" -14	78,0	32
PN 20 HR 25	19	12	3/4"	G 1" -11	84,5	41
PN 20 HR 32	19	12	3/4"	G 1.1/4" -11	90,5	50
PN 25 HR	25	16	1"	G 1" -11	92,0	41
PN 25 HR 32	25	16	1"	G 1.1/4" -11	98,0	50
PN 32 HR	31	20	1.1/4"	G 1.1/4" -11	107,0	50
PN 40 HR	38	24	1.1/2"	G 1.1/2" -11	112,5	55
PN 50 HR	51	32	2"	G 2" -11	134,5	70

**Product versions:**

**PN HR VA** - Swage nipple, AGR-Flat, Stainless steel

**PN HBK****Swage nipple, AGR-K**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** BSPT conical external threads

**Sealing form 1:** thread seal

**Short code:** AGR-K

**Material:** Steel

**Surface:** electro galvanised

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 04 HBK 02	5	3	3/16"	R 1/8" K	43,0	12
PN 04 HBK 06	5	3	3/16"	R 1/4" K	47,5	14
PN 06 HBK 02	6	4	1/4"	R 1/8" K	49,0	12
PN 06 HBK	6	4	1/4"	R 1/4" K	53,5	14
PN 06 HBK 10	6	4	1/4"	R 3/8" K	54,0	19
PN 08 HBK 06	8	5	5/16"	R 1/4" K	53,5	14
PN 08 HBK 10	8	5	5/16"	R 3/8" K	54,0	19
PN 10 HBK 06	10	6	3/8"	R 1/4" K	56,0	14
PN 10 HBK	10	6	3/8"	R 3/8" K	56,5	19
PN 10 HBK 13	10	6	3/8"	R 1/2" K	61,0	22
PN 13 HBK 10	12	8	1/2"	R 3/8" K	58,0	19
PN 13 HBK	12	8	1/2"	R 1/2" K	62,0	22
PN 13 HBK 20	12	8	1/2"	R 3/4" K	64,5	27
PN 16 HBK 13	16	10	5/8"	R 1/2" K	67,5	22
PN 16 HBK	16	10	5/8"	R 5/8" K	70,5	24
PN 16 HBK 20	16	10	5/8"	R 3/4" K	69,0	27
PN 20 HBK	19	12	3/4"	R 3/4" K	76,5	27
PN 20 HBK 25	19	12	3/4"	R 1" K	80,5	36
PN 25 HBK	25	16	1"	R 1" K	88,5	36
PN 25 HBK 32	25	16	1"	R 1.1/4" K	91,5	46
PN 32 HBK	31	20	1.1/4"	R 1.1/4" K	101,0	46
PN 32 HBK 40	31	20	1.1/4"	R 1.1/2" K	102,0	50
PN 40 HBK	38	24	1.1/2"	R 1.1/2" K	105,5	50
PN 40 HBK 50	38	24	1.1/2"	R 2" K	113,0	65
PN 50 HBK	51	32	2"	R 2" K	127,5	65

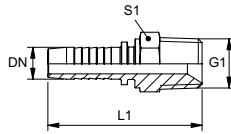
**Product versions:**

**PN HBK VA** - Swage nipple, AGR-K, Stainless steel

## PN HN

## Swage nipple, AGN

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** NPT external threads  
**Sealing form 1:** thread seal, additional 60° inner cone.  
**Short code:** AGN  
**Material:** Steel  
**Surface:** electro galvanised

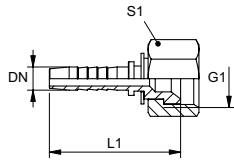


**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 04 HN	5	3	3/16"	1/8" -27 NPT	44,0	12
PN 04 HN 06	5	3	3/16"	1/4" -18 NPT	47,5	14
PN 06 HN 02	6	4	1/4"	1/8" -27 NPT	50,0	12
PN 06 HN	6	4	1/4"	1/4" -18 NPT	53,5	14
PN 06 HN 10	6	4	1/4"	3/8" -18 NPT	54,0	19
PN 08 HN 06	8	5	5/16"	1/4" -18 NPT	53,5	14
PN 08 HN 10	8	5	5/16"	3/8" -18 NPT	54,0	19
PN 10 HN 06	10	6	3/8"	1/4" -18 NPT	55,0	16
PN 10 HN	10	6	3/8"	3/8" -18 NPT	56,5	19
PN 10 HN 13	10	6	3/8"	1/2" -14 NPT	61,0	22
PN 13 HN 10	12	8	1/2"	3/8" -18 NPT	57,5	19
PN 13 HN	12	8	1/2"	1/2" -14 NPT	62,0	22
PN 13 HN 20	12	8	1/2"	3/4" -14 NPT	64,5	27
PN 16 HN 13	16	10	5/8"	1/2" -14 NPT	68,0	24
PN 16 HN 20	16	10	5/8"	3/4" -14 NPT	68,0	27
PN 20 HN 13	19	12	3/4"	1/2" -14 NPT	74,5	27
PN 20 HN	19	12	3/4"	3/4" -14 NPT	76,5	27
PN 20 HN 25	19	12	3/4"	1" -11.5 NPT	80,5	36
PN 25 HN 20	25	16	1"	3/4" -14 NPT	84,5	36
PN 25 HN	25	16	1"	1" -11.5 NPT	88,5	36
PN 25 HN 32	25	16	1"	1.1/4" -11.5 NPT	91,5	46
PN 32 HN	31	20	1.1/4"	1.1/4" -11.5 NPT	101,0	46
PN 40 HN	38	24	1.1/2"	1.1/2" -11.5 NPT	105,5	50
PN 50 HN	51	32	2"	2" -11.5 NPT	127,5	65

**Product versions:**

PN HN VA - Swage nipple, AGN, Stainless steel

**PN AJ****Swage nipple, DKJ**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** UN/UNF nut threads

**Sealing form 1:** 74° inner cone

**Short code:** DKJ

**Standard:** ISO 8434-2

**Material:** Steel

**Surface:** electro galvanised

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 04 AJ 06	5	3	3/16"	7/16"-20 UNF	36,0	14
PN 06 AJ	6	4	1/4"	7/16"-20 UNF	42,0	14
PN 06 AJ 08	6	4	1/4"	1/2"-20 UNF	43,0	17
PN 06 AJ 10	6	4	1/4"	9/16"-18 UNF	44,5	19
PN 06 AJ 3/8	6	4	1/4"	3/8"-24 UNF	43,5	14
PN 08 AJ	8	5	5/16"	1/2"-20 UNF	43,0	17
PN 08 AJ 10	8	5	5/16"	9/16"-18 UNF	45,0	19
PN 08 AJ 13	8	5	5/16"	3/4"-16 UNF	46,5	24
PN 10 AJ 08	10	6	3/8"	1/2"-20 UNF	47,0	17
PN 10 AJ	10	6	3/8"	9/16"-18 UNF	46,0	19
PN 10 AJ 13	10	6	3/8"	3/4"-16 UNF	48,5	24
PN 10 AJ 16	10	6	3/8"	7/8"-14 UNF	49,5	27
PN 13 AJ	12	8	1/2"	3/4"-16 UNF	48,0	24
PN 13 AJ 10	12	8	1/2"	9/16"-18 UNF	49,0	19
PN 13 AJ 16	12	8	1/2"	7/8"-14 UNF	50,5	27
PN 13 AJ 20	12	8	1/2"	1.1/16"-12 UN	51,0	32
PN 16 AJ	16	10	5/8"	7/8"-14 UNF	53,5	27
PN 16 AJ 20	16	10	5/8"	1.1/16"-12 UN	56,0	32
PN 20 AJ 14	19	12	3/4"	1.3/16"-12 UN	64,0	36
PN 20 AJ 16	19	12	3/4"	7/8"-14 UNF	62,5	27
PN 20 AJ	19	12	3/4"	1.1/16"-12 UN	63,0	32
PN 20 AJ 25	19	12	3/4"	1.5/16"-12 UN	64,0	41
PN 25 AJ 20	25	16	1"	1.1/16"-12 UN	71,0	32
PN 25 AJ	25	16	1"	1.5/16"-12 UN	72,0	41
PN 25 AJ 32	25	16	1"	1.5/8"-12 UN	74,0	50
PN 32 AJ 25	31	20	1.1/4"	1.5/16"-12 UN	83,5	41
PN 32 AJ	31	20	1.1/4"	1.5/8"-12 UN	82,0	50
PN 32 AJ 40	31	20	1.1/4"	1.7/8"-12 UN	84,0	60
PN 40 AJ 32	38	24	1.1/2"	1.5/8"-12 UN	88,0	50
PN 40 AJ	38	24	1.1/2"	1.7/8"-12 UN	87,5	60
PN 50 AJ	51	32	2"	2.1/2"-12 UN	108,0	75

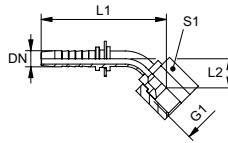
**Product versions:**

**PN AJ VA** - Swage nipple, DKJ, Stainless steel

## PN AJ 45

## Swage nipple, DKJ angle 45°

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone  
**Short code:** DKJ  
**Standard:** ISO 8434-2  
**Material:** Steel  
**Surface:** electro galvanised

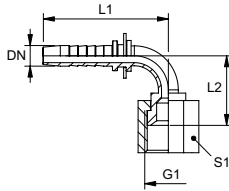


**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 04 AJ 06 45	5	3	3/16"	7/16"-20 UNF	54,5	12,5	14
PN 06 AJ 45	6	4	1/4"	7/16"-20 UNF	61,5	14,0	14
PN 06 AJ 08 45	6	4	1/4"	1/2"-20 UNF	62,0	13,5	17
PN 06 AJ 10 45	6	4	1/4"	9/16"-18 UNF	62,5	14,0	19
PN 08 AJ 45	8	5	5/16"	1/2"-20 UNF	68,5	18,5	17
PN 08 AJ 10 45	8	5	5/16"	9/16"-18 UNF	64,0	15,0	19
PN 10 AJ 08 45	10	6	3/8"	1/2"-20 UNF	73,0	18,5	17
PN 10 AJ 45	10	6	3/8"	9/16"-18 UNF	70,5	17,5	19
PN 10 AJ 13 45	10	6	3/8"	3/4"-16 UNF	72,0	19,0	24
PN 10 AJ 16 45	10	6	3/8"	7/8"-14 UNF	72,5	19,5	27
PN 13 AJ 45	12	8	1/2"	3/4"-16 UNF	80,5	20,5	24
PN 13 AJ 16 45	12	8	1/2"	7/8"-14 UNF	81,5	21,5	27
PN 13 AJ 20 45	12	8	1/2"	1.1/16" -12 UN	82,5	22,5	32
PN 16 AJ 14 45	16	10	5/8"	1.3/16" -12 UN	93,5	30,0	36
PN 16 AJ 45	16	10	5/8"	7/8"-14 UNF	96,5	25,5	27
PN 16 AJ 20 45	16	10	5/8"	1.1/16" -12 UN	97,0	26,0	32
PN 20 AJ 14 45	19	12	3/4"	1.3/16" -12 UN	108,5	29,0	36
PN 20 AJ 45	19	12	3/4"	1.1/16" -12 UN	108,0	28,5	32
PN 20 AJ 25 45	19	12	3/4"	1.5/16" -12 UN	108,5	29,0	41
PN 25 AJ 14 45	25	16	1"	1.3/16" -12 UN	117,5	32,5	36
PN 25 AJ 45	25	16	1"	1.5/16" -12 UN	134,5	32,5	41
PN 25 AJ 32 45	25	16	1"	1.5/8" -12 UN	135,5	34,0	50
PN 32 AJ 45	31	20	1.1/4"	1.5/8" -12 UN	161,0	41,0	50
PN 32 AJ 40 45	31	20	1.1/4"	1.7/8" -12 UN	162,0	42,0	60
PN 40 AJ 45	38	24	1.1/2"	1.7/8" -12 UN	184,5	46,5	60
PN 50 AJ 45	51	32	2"	2.1/2" -12 UN	231,0	67,0	75

**Product versions:**

**PN AJ 45 VA** - Swage nipple, DKJ angle 45°, Stainless steel

**PN AJ 90****Swage nipple, DKJ angle 90°**

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	UN/UNF nut threads
<b>Sealing form 1:</b>	74° inner cone
<b>Short code:</b>	DKJ
<b>Standard:</b>	ISO 8434-2
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

2

**Note:** Choose the appropriate ferrule based on the hose type.

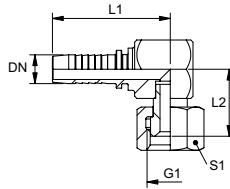
Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 04 AJ 06 90	5	3	3/16"	7/16"-20 UNF	47,5	26,0	14
PN 06 AJ 90	6	4	1/4"	7/16"-20 UNF	57,0	26,0	14
PN 06 AJ 08 90	6	4	1/4"	1/2"-20 UNF	57,0	27,0	17
PN 06 AJ 10 90	6	4	1/4"	9/16"-18 UNF	57,0	28,0	19
PN 08 AJ 90	8	5	5/16"	1/2"-20 UNF	56,5	33,0	17
PN 08 AJ 10 90	8	5	5/16"	9/16"-18 UNF	57,5	30,5	19
PN 10 AJ 08 90	10	6	3/8"	1/2"-20 UNF	66,5	37,5	17
PN 10 AJ 90	10	6	3/8"	9/16"-18 UNF	63,0	35,0	19
PN 10 AJ 13 90	10	6	3/8"	3/4"-16 UNF	63,0	37,0	24
PN 10 AJ 16 90	10	6	3/8"	7/8"-14 UNF	63,0	38,0	27
PN 13 AJ 90	12	8	1/2"	3/4"-16 UNF	71,5	42,5	24
PN 13 AJ 16 90	12	8	1/2"	7/8"-14 UNF	71,5	43,5	27
PN 13 AJ 20 90	12	8	1/2"	1.1/16" -12 UN	71,5	45,0	32
PN 16 AJ 90	16	10	5/8"	7/8"-14 UNF	87,0	54,0	27
PN 16 AJ 20 90	16	10	5/8"	1.1/16" -12 UN	87,0	54,5	32
PN 20 AJ 90	19	12	3/4"	1.1/16" -12 UN	99,0	57,5	32
PN 20 AJ 90 L 100	19	12	3/4"	1.1/16" -12 UN	99,0	100,0	32
PN 20 AJ 14 90	19	12	3/4"	1.3/16" -12 UN	108,5	69,5	36
PN 20 AJ 25 90	19	12	3/4"	1.5/16" -12 UN	99,0	58,5	41
PN 25 AJ 14 90	25	16	1"	1.3/16" -12 UN	108,5	69,5	36
PN 25 AJ 90	25	16	1"	1.5/16" -12 UN	126,0	70,5	41
PN 25 AJ 32 90	25	16	1"	1.5/8" -12 UN	126,0	72,5	50
PN 32 AJ 90	31	16	1.1/4"	1.5/8" -12 UN	150,5	86,0	50
PN 32 AJ 40 90	31	20	1.1/4"	1.7/8" -12 UN	150,5	87,0	60
PN 40 AJ 90	38	24	1.1/2"	1.7/8" -12 UN	175,5	100,5	60
PN 50 AJ 90	51	32	2"	2.1/2" -12 UN	216,5	135,0	75

**Product versions:**

PN AJ 90 VA - Swage nipple, DKJ angle 90°, Stainless steel

**PN AJK 90****Swage nipple, DKJ Comp. angle 90°**

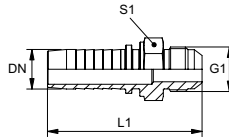
<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	UN/UNF nut threads
<b>Sealing form 1:</b>	74° inner cone
<b>Supplementary design information:</b>	
<b>Short code:</b>	Compact form DKJ-K
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 06 AJK 90	6	4	1/4"	7/16"-20 UNF	50,0	17,0	14
PN 06 AJK 08 90	6	4	1/4"	1/2"-20 UNF	51,1	19,0	17
PN 06 AJK 10 90	6	4	1/4"	9/16"-18 UNF	53,5	20,0	19
PN 08 AJK 10 90	8	5	5/16"	9/16"-18 UNF	54,0	20,0	19
PN 10 AJK 90	10	6	3/8"	9/16"-18 UNF	55,5	20,0	19
PN 10 AJK 13 90	10	6	3/8"	3/4"-16 UNF	57,6	21,0	24
PN 13 AJK 90	12	8	1/2"	3/4"-16 UNF	59,6	21,0	24
PN 13 AJK 16 90	12	8	1/2"	7/8"-14 UNF	59,6	25,0	27
PN 16 AJK 90	16	10	5/8"	7/8"-14 UNF	64,1	25,0	27
PN 16 AJK 20 90	16	10	5/8"	1.1/16" -12 UN	69,8	28,0	32
PN 20 AJK 90	19	12	3/4"	1.1/16" -12 UN	74,8	28,0	32
PN 25 AJK 90	25	16	1"	1.5/16" -12 UN	92,2	34,0	41

2

**PN HJ****Swage nipple, AGJ**

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	UN/UNF external threads
<b>Sealing form 1:</b>	74° outer cone
<b>Short code:</b>	AGJ
<b>Standard:</b>	ISO 8434-2
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 04 HJ 06	5	3	3/16"	7/16"-20 UNF	47,5	14
PN 06 HJ	6	4	1/4"	7/16"-20 UNF	53,5	14
PN 06 HJ 08	6	4	1/4"	1/2"-20 UNF	54,0	17
PN 06 HJ 10	6	4	1/4"	9/16"-18 UNF	53,5	17
PN 08 HJ	8	5	5/16"	1/2"-20 UNF	53,5	14
PN 08 HJ 10	8	5	5/16"	9/16"-18 UNF	53,5	19
PN 08 HJ 13	8	5	5/16"	3/4"-16 UNF	58,5	22
PN 10 HJ 08	10	6	3/8"	1/2"-20 UNF	55,0	17
PN 10 HJ	10	6	3/8"	9/16"-18 UNF	55,5	19
PN 10 HJ 13	10	6	3/8"	3/4"-16 UNF	59,0	22
PN 10 HJ 16	10	6	3/8"	7/8"-14 UNF	62,5	24
PN 13 HJ	12	8	1/2"	3/4"-16 UNF	60,0	22
PN 13 HJ 16	12	8	1/2"	7/8"-14 UNF	63,5	24
PN 13 HJ 20	12	8	1/2"	1.1/16" -12 UN	67,5	27
PN 16 HJ 14	16	10	5/8"	1.3/16" -12 UN	74,5	36
PN 16 HJ	16	10	5/8"	7/8"-14 UNF	68,0	24
PN 16 HJ 20	16	10	5/8"	1.1/16" -12 UN	72,0	32
PN 20 HJ 14	19	12	3/4"	1.3/16" -12 UN	79,5	32
PN 20 HJ 16	19	12	3/4"	7/8"-14 UNF	77,0	27
PN 20 HJ	19	12	3/4"	1.1/16" -12 UN	79,0	27
PN 20 HJ 25	19	12	3/4"	1.5/16" -12 UN	80,0	34
PN 25 HJ 14	25	16	1"	1.3/16" -12 UN	89,0	36
PN 25 HJ 20	25	16	1"	1.1/16" -12 UN	87,0	34
PN 25 HJ	25	16	1"	1.5/16" -12 UN	88,5	36
PN 25 HJ 32	25	16	1"	1.5/8" -12 UN	90,0	42
PN 32 HJ	31	20	1.1/4"	1.5/8" -12 UN	100,5	46
PN 32 HJ 40	31	20	1.1/4"	1.7/8" -12 UN	105,0	50
PN 40 HJ	38	24	1.1/2"	1.7/8" -12 UN	109,0	50
PN 50 HJ	51	32	2"	2.1/2" -12 UN	133,5	65

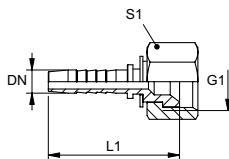
**Product versions:**

PN HJ VA - Swage nipple, AGJ, Stainless steel

## PN ALI

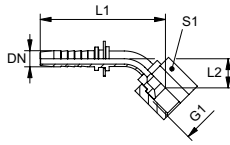
## Swage nipple, JIS

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 60° inner cone  
**Standard:** JIS 8363  
**suitable for:** Komatsu  
**Material:** Steel  
**Surface:** electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 06 ALI	6	4	1/4"	M 14 x 1.5	44,0	19
PN 06 ALI 08	6	4	1/4"	M 16 x 1.5	45,0	22
PN 08 ALI	8	5	5/16"	M 16 x 1.5	44,0	22
PN 10 ALI 06	10	6	3/8"	M 14 x 1.5	48,0	19
PN 10 ALI 08	10	6	3/8"	M 16 x 1.5	47,5	22
PN 10 ALI	10	6	3/8"	M 18 x 1.5	47,8	24
PN 13 ALI	12	8	1/2"	M 22 x 1.5	50,5	27
PN 13 ALI 16	12	8	1/2"	M 24 x 1.5	50,5	30
PN 16 ALI	16	10	5/8"	M 24 x 1.5	55,0	30
PN 20 ALI	19	12	3/4"	M 30 x 1.5	63,0	36
PN 25 ALI	25	16	1"	M 33 x 1.5	71,6	41
PN 32 ALI	31	20	1.1/4"	M 36 x 1.5	84,0	46
PN 40 ALI	38	24	1.1/2"	M 42 x 1.5	90,5	50

**PN ALI 45****Swage nipple, JIS angle 45°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** metric nut thread

**Sealing form 1:** 60° inner cone

**Standard:** JIS 8363

**suitable for:** Komatsu

**Material:** Steel

**Surface:** electro galvanised

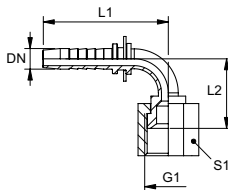
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**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 10 ALI 06 45	10	6	3/8"	M 14 x 1.5	77,0	18,0	19
PN 10 ALI 08 45	10	6	3/8"	M 16 x 1.5	90,0	25,0	22
PN 10 ALI 45	10	6	3/8"	M 18 x 1.5	91,0	25,0	22
PN 13 ALI 45	12	8	1/2"	M 22 x 1.5	99,0	29,0	27
PN 16 ALI 45	16	10	5/8"	M 24 x 1.5			
PN 20 ALI 45	19	12	3/4"	M 30 x 1.5	124,0	34,0	36
PN 25 ALI 45	25	16	1"	M 33 x 1.5	146,0	41,0	41

**PN ALI 90****Swage nipple, JIS angle 90°**

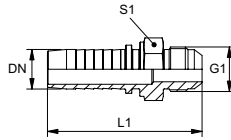
**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 60° inner cone  
**Standard:** JIS 8363  
**suitable for:** Komatsu  
**Material:** Steel  
**Surface:** electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 06 ALI 90	6	4	1/4"	M 14 x 1.5	63,0	31,0	17
PN 08 ALI 90	8	5	5/16"	M 16 x 1.5	70,0	42,0	19
PN 10 ALI 06 90	10	6	3/8"	M 14 x 1.5	64,0	31,0	19
PN 10 ALI 08 90	10	6	3/8"	M 16 x 1.5	72,0	42,0	22
PN 10 ALI 90	10	6	3/8"	M 18 x 1.5	73,0	42,0	22
PN 10 ALI 13 90	10	6	3/8"	M 22 x 1.5	89,0	58,0	27
PN 13 ALI 90	12	8	1/2"	M 22 x 1.5	88,0	58,0	27
PN 16 ALI 90	16	10	5/8"	M 24 x 1.5	92,0	58,0	30
PN 20 ALI 90	19	12	3/4"	M 30 x 1.5	109,0	67,0	36
PN 25 ALI 90	25	16	1"	M 33 x 1.5	118,0	70,0	41

2

**PN HJL****Swage nipple, JIS**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** metric cylindrical outer thread

**Sealing form 1:** 60° outer cone

**Standard:** JIS 8363

**suitable for:** Komatsu

**Material:** Steel

**Surface:** electro galvanised

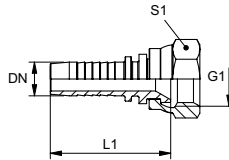
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**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 06 HJL	6	4	1/4"	M 14 x 1.5	57,0	14
PN 06 HJL 08	6	4	1/4"	M 16 x 1.5	58,0	17
PN 10 HJL 08	10	6	3/8"	M 16 x 1.5	60,0	17
PN 10 HJL	10	6	3/8"	M 18 x 1.5	61,5	19
PN 13 HJL	12	8	1/2"	M 22 x 1.5	66,5	22
PN 13 HJL 16	12	8	1/2"	M 24 x 1.5	68,5	24
PN 16 HJL	16	10	5/8"	M 24 x 1.5	73,0	24
PN 20 HJL	19	12	3/4"	M 30 x 1.5	86,0	30
PN 25 HJL	25	16	1"	M 33 x 1.5	100,5	36
PN 32 HJL	31	20	1.1/4"	M 36 x 1.5	112,0	46
PN 40 HJL	38	24	1.1/2"	M 42 x 1.5	119,0	46

**PN ARI****Swage nipple, JIS**

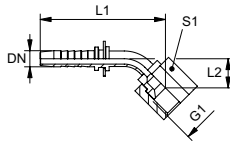
**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**suitable for:** Toyota  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° inner cone  
**Standard:** JIS 8363  
**Material:** Steel  
**Surface:** electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 06 ARI 02	6	4	1/4"	G 1/8" -28	41,5	14
PN 06 ARI	6	4	1/4"	G 1/4" -19	42,5	19
PN 08 ARI 06	8	5	5/16"	G 1/4" -19	42,5	19
PN 08 ARI 10	8	5	5/16"	G 3/8" -19	43,0	22
PN 10 ARI	10	6	3/8"	G 3/8" -19	45,5	22
PN 13 ARI	12	8	1/2"	G 1/2" -14	48,0	27
PN 20 ARI	19	12	3/4"	G 3/4" -14	60,0	32
PN 25 ARI	25	16	1"	G 1" -11	71,0	38
PN 32 ARI	31	20	1.1/4"	G 1.1/4" -11	84,0	50
PN 40 ARI	38	24	1.1/2"	G 1.1/2" -11	88,5	55

2

**PN ARI 45****Swage nipple, JIS angle 45°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**suitable for:** Toyota

**Connection 1:** BSP nut thread

**Sealing form 1:** 60° inner cone

**Standard:** JIS 8363

**Material:** Steel

**Surface:** electro galvanised

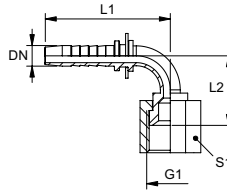
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**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 06 ARI 45	6	4	1/4"	G 1/4" -19	80,0	23,0	19
PN 08 ARI 10 45	8	5	5/16"	G 3/8" -19	70,0	50,0	22
PN 13 ARI 45	12	8	1/2"	G 1/2" -14	93,0	25,0	27

**PN ARI 90****Swage nipple, JIS angle 90°**

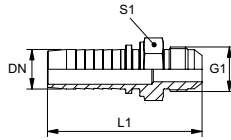
**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**suitable for:** Toyota  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° inner cone  
**Standard:** JIS 8363  
**Material:** Steel  
**Surface:** electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 06 ARI 90	6	4	1/4"	G 1/4" -19	63,0	37,0	19
PN 08 ARI 10 90	8	5	5/16"	G 3/8" -19	70,0	41,0	22
PN 13 ARI 90	12	8	1/2"	G 1/2" -14	73,0	40,0	27

2

**PN HJR****Swage nipple, JIS**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**suitable for:** Toyota  
**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° outer cone  
**Standard:** JIS 8363  
**Material:** Steel  
**Surface:** electro galvanised

2

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 06 HJR	6	4	1/4"	G 1/4" -19	56,0	17
PN 08 HJR 10	8	5	5/16"	G 3/8" -19	58,5	19
PN 10 HJR	10	6	3/8"	G 3/8" -19	60,0	19
PN 13 HJR	12	8	1/2"	G 1/2" -14	63,5	22
PN 20 HJR	19	12	3/4"	G 3/4" -14	78,0	30

**PN HJR 45****Swage nipple, JIS angle 45°**

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>suitable for:</b>	Toyota
<b>Connection 1:</b>	BSP external thread, cylindrical
<b>Sealing form 1:</b>	60° outer cone
<b>Standard:</b>	JIS 8363
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 06 HJR 45	6	4	1/4"	G 1/4" -19	86,0	29,0	
PN 08 HJR 10 45	8	5	5/16"	G 3/8" -19			
PN 10 HJR 45	10	6	3/8"	G 3/8" -19			
PN 13 HJR 45	12	8	1/2"	G 1/2" -14	101,0	34,0	22
PN 20 HJR 45	19	12	3/4"	G 3/4" -14			

2

**PN HJR 90****Swage nipple, JIS angle 90°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**suitable for:** Toyota  
**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° outer cone  
**Standard:** JIS 8363  
**Material:** Steel  
**Surface:** electro galvanised

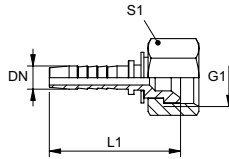
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**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm
PN 06 HJR 90	6	4	1/4"	G 1/4" -19		
PN 08 HJR 10 90	8	5	5/16"	G 3/8" -19		
PN 10 HJR 90	10	6	3/8"	G 3/8" -19	73,0	58,0
PN 13 HJR 90	12	8	1/2"	G 1/2" -14		
PN 20 HJR 90	19	12	3/4"	G 3/4" -14		

**PN ASA****Swage nipple, SAE**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 45° inner cone  
**Material:** Steel  
**Surface:** electro galvanised



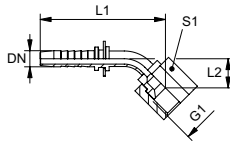
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 06 ASA 10	6	4	1/4"	5/8"-18 UNF	43,7	22
PN 10 ASA	10	6	3/8"	5/8"-18 UNF	45,7	22

2

## PN ASA 45

### Swage nipple, SAE angle 45°



**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 45° inner cone  
**Material:** Steel  
**Surface:** electro galvanised

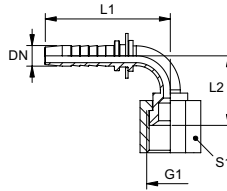
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**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 10 ASA 45	10	6	3/8"	5/8"-18 UNF	88,0	23,0	22

**PN ASA 90****Swage nipple, SAE angle 90°**

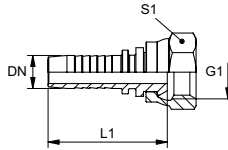
**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 45° inner cone  
**Material:** Steel  
**Surface:** electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 10 ASA 90	10	6	3/8"	5/8"-18 UNF	72,0	40,0	22

2

**PN AJF****Swage nipple, ORFS**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** UN/UNF nut threads

**Sealing form 1:** flat sealing

**Short code:** ORFS

**Standard:** ISO 8434-3

**Material:** Steel

**Surface:** electro galvanised

**Note:** Choose the appropriate ferrule based on the hose type.

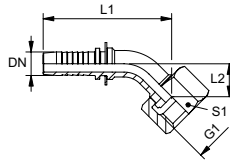
Identification	DN	Size	Inches	G1	L1 mm	S1
PN 06 AJF	6	4	1/4"	9/16"-18 UNF	49,5	17
PN 06 AJF 10	6	4	1/4"	11/16"-16 UN	51,5	22
PN 08 AJF 10	8	5	5/16"	11/16"-16 UN	51,5	22
PN 10 AJF	10	6	3/8"	11/16"-16 UN	53,0	22
PN 10 AJF 13	10	6	3/8"	13/16"-16 UN	56,0	24
PN 13 AJF	12	8	1/2"	13/16"-16 UN	57,0	24
PN 13 AJF 16	12	8	1/2"	1" -14 UNS	61,0	30
PN 13 AJF 20	12	8	1/2"	1.3/16"-12 UN	65,5	36
PN 16 AJF	16	10	5/8"	1" -14 UNS	65,5	30
PN 16 AJF 20	16	10	5/8"	1.3/16"-12 UN	70,0	36
PN 20 AJF 16	19	12	3/4"	1" -14 UNS	76,0	30
PN 20 AJF	19	12	3/4"	1.3/16"-12 UN	74,5	36
PN 20 AJF 25	19	12	3/4"	1.7/16"-12 UN	77,5	41
PN 25 AJF	25	16	1"	1.7/16"-12 UN	83,5	41
PN 32 AJF	31	20	1.1/4"	1.11/16"-12 UN	92,5	50
PN 40 AJF	38	24	1.1/2"	2"-12 UN	96,0	60

**Product versions:**

**PN AJF VA** - Swage nipple, ORFS, Stainless steel

**PN AJF 45****Swage nipple, ORFS angle 45°**

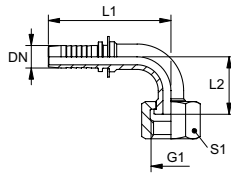
**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** flat sealing  
**Short code:** ORFS  
**Standard:** ISO 8434-3  
**Material:** Steel  
**Surface:** electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 06 AJF 45	6	4	1/4"	9/16"-18 UNF	60,0	12,0	17
PN 06 AJF 10 45	6	4	1/4"	11/16"-16 UN	61,0	13,5	22
PN 08 AJF 10 45	8	5	5/16"	11/16"-16 UN	80,0	21,0	22
PN 10 AJF 45	10	6	3/8"	11/16"-16 UN	69,0	16,0	22
PN 10 AJF 13 45	10	6	3/8"	13/16"-16 UN	69,5	16,5	24
PN 13 AJF 45	12	8	1/2"	13/16"-16 UN	78,0	17,0	24
PN 13 AJF 16 45	12	8	1/2"	1"-14 UNS	80,5	19,5	30
PN 16 AJF 45	16	10	5/8"	1"-14 UNS	93,5	22,5	30
PN 20 AJF 45	19	12	3/4"	1.3/16"-12 UN	104,0	25,0	36
PN 25 AJF 45	25	16	1"	1.7/16"-12 UN	130,5	27,5	41
PN 32 AJF 45	31	20	1.1/4"	1.11/16"-12 UN	155,0	34,0	50
PN 40 AJF 45	38	24	1.1/2"	2"-12 UN	177,0	38,0	60

2

**PN AJF 90****Swage nipple, ORFS angle 90°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** UN/UNF nut threads

**Sealing form 1:** flat sealing

**Short code:** ORFS

**Standard:** ISO 8434-3

**Material:** Steel

**Surface:** electro galvanised

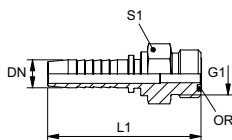
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 06 AJF 90	6	4	1/4"	9/16"-18 UNF	55,0	26,5	17
PN 06 AJF 90 L 58	6	4	1/4"	9/16"-18 UNF	55,0	58,0	17
PN 06 AJF 10 90	6	4	1/4"	11/16"-16 UN	55,0	28,0	22
PN 08 AJF 10 90	8	5	5/16"	11/16"-16 UN	58,0	28,0	22
PN 10 AJF 90	10	6	3/8"	11/16"-16 UN	64,0	32,0	22
PN 10 AJF 90 L 69	10	6	3/8"	11/16"-16 UN	64,0	69,0	22
PN 10 AJF 13 90	10	6	3/8"	13/16"-16 UN	64,0	33,0	24
PN 13 AJF 90	12	8	1/2"	13/16"-16 UN	72,5	37,0	24
PN 13 AJF 90 L 82	12	8	1/2"	13/16"-16 UN	72,5	82,0	24
PN 13 AJF 16 90	12	8	1/2"	1"-14 UNS	72,5	41,0	30
PN 13 AJF 20 90	12	8	1/2"	1.3/16"-12 UN	71,5	43,5	36
PN 16 AJF 90	16	10	5/8"	1"-14 UNS	88,0	47,5	30
PN 16 AJF 90 L 94	16	10	5/8"	1"-14 UNS	88,0	94,0	30
PN 16 AJF 20 90	16	10	5/8"	1.3/16"-12 UN	89,5	49,0	36
PN 20 AJF 90	19	12	3/4"	1.3/16"-12 UN	99,5	52,0	36
PN 20 AJF 90 L 96	19	12	3/4"	1.3/16"-12 UN	99,5	96,0	36
PN 20 AJF 25 90	19	12	3/4"	1.7/16"-12 UN	98,5	56,0	41
PN 25 AJF 90	25	16	1"	1.7/16"-12 UN	127,0	63,5	41
PN 25 AJF 90 L 114	25	16	1"	1.7/16"-12 UN	127,0	114,0	41
PN 32 AJF 90	31	20	1.1/4"	1.11/16"-12 UN	151,5	76,0	50
PN 32 AJF 90 L 129	31	20	1.1/4"	1.11/16"-12 UN	151,5	129,0	50
PN 40 AJF 90	38	24	1.1/2"	2"-12 UN	176,5	89,0	60
PN 40 AJF 90 L 146	38	24	1.1/2"	2"-12 UN	176,5	146,0	60

## PN HJOF

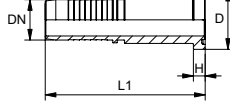
## Swage nipple, ORFS

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	UN/UNF external threads
<b>Sealing form 1:</b>	flat seal with O-ring
<b>Short code:</b>	ORFS
<b>Standard:</b>	ISO 8434-3
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PN 06 HJOF	6	4	1/4"	9/16"-18 UNF	52,5	17	7.65 x 1.78
PN 06 HJOF 10	6	4	1/4"	11/16"-16 UN	54,0	19	9.25 x 1.78
PN 08 HJOF 10	8	5	5/16"	11/16"-16 UN	54,0	19	9.25 x 1.78
PN 10 HJOF	10	6	3/8"	11/16"-16 UN	56,0	19	9.25 x 1.78
PN 10 HJOF 13	10	6	3/8"	13/16"-16 UN	58,5	22	12.42 x 1.78
PN 10 HJOF 16	10	6	3/8"	1"-14 UNS	62,0	27	15.60 x 1.78
PN 13 HJOF	12	8	1/2"	13/16"-16 UN	60,0	22	12.42 x 1.78
PN 13 HJOF 16	12	8	1/2"	1"-14 UNS	63,5	27	15.60 x 1.78
PN 13 HJOF 20	12	8	1/2"	1.3/16"-12 UN	66,5	32	18.77 x 1.78
PN 16 HJOF	16	10	5/8"	1"-14 UNS	68,0	27	15.60 x 1.78
PN 16 HJOF 20	16	10	5/8"	1.3/16"-12 UN	71,0	32	18.77 x 1.78
PN 20 HJOF	19	12	3/4"	1.3/16"-12 UN	78,0	32	18.77 x 1.78
PN 20 HJOF 25	19	12	3/4"	1.7/16"-12 UN	82,5	41	23.52 x 1.78
PN 25 HJOF	25	16	1"	1.7/16"-12 UN	90,5	41	23.52 x 1.78
PN 32 HJOF	31	20	1.1/4"	1.11/16"-12 UN	101,5	46	29.87 x 1.78
PN 40 HJOF	38	24	1.1/2"	2"-12 UN	109,0	55	37.82 x 1.78

**PN SF****Swage nipple, SFL**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** SAE flange connection 3000 PSI

**Sealing form 1:** flat seal with SF O-ring

**Short code:** SFL

**Standard:** SAE J518, ISO 6162-1

**Material:** Steel

**Surface:** electro galvanised

2

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PN 13 SF	12	8	1/2"	1/2"	30,2	6,80	80,5
PN 13 SF 20	12	8	1/2"	3/4"	38,1	6,80	85,5
PN 16 SF 13	16	10	5/8"	1/2"	30,2	6,80	85,0
PN 16 SF 20	16	10	5/8"	3/4"	38,1	6,80	90,0
PN 16 SF 25	16	10	5/8"	1"	44,4	8,10	97,5
PN 20 SF	19	12	3/4"	3/4"	38,1	6,80	96,5
PN 20 SF 25	19	12	3/4"	1"	44,4	8,10	99,5
PN 25 SF 20	25	16	1"	3/4"	38,1	6,80	104,5
PN 25 SF	25	16	1"	1"	44,4	8,10	110,5
PN 25 SF 32	25	16	1"	1.1/4"	50,8	8,10	113,5
PN 32 SF 25	31	20	1.1/4"	1"	44,4	8,10	118,0
PN 32 SF	31	20	1.1/4"	1.1/4"	50,8	8,10	125,5
PN 32 SF 40	31	20	1.1/4"	1.1/2"	60,3	8,10	128,5
PN 40 SF 32	38	24	1.1/2"	1.1/4"	50,8	8,10	129,0
PN 40 SF	38	24	1.1/2"	1.1/2"	60,3	8,10	135,0
PN 40 SF 50	38	24	1.1/2"	2"	71,4	9,60	138,0
PN 50 SF 40	51	32	2"	1.1/2"	60,3	8,10	149,5
PN 50 SF	51	32	2"	2"	71,4	9,60	153,0
PN 50 SF 60	51	32	2"	2.1/2"	84,0	9,60	156,0
PN 60 SF 50	60	40	2.3/8"	2"	71,4	9,60	155,5
PN 60 SF	60	40	2.3/8"	2.1/2"	84,0	9,60	158,5
PN 76 SF	76	48	3"	3"	101,6	9,53	150,0
PN 76 SF 60	76	48	3"	2.1/2"	84,0	9,53	166,0

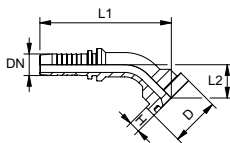
**Product versions:**

PN SF VA - Swage nipple, SFL, Stainless steel

## PN SF 45

## Swage nipple, SFL angle 45°

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	SAE flange connection 3000 PSI
<b>Sealing form 1:</b>	flat seal with SF O-ring
<b>Short code:</b>	SFL
<b>Standard:</b>	SAE J518, ISO 6162-1
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

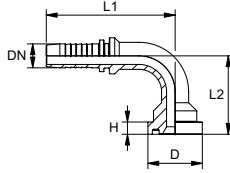


**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PN 13 SF 45	12	8	1/2"	1/2"	30,2	6,80	81,0	21,0
PN 13 SF 20 45	12	8	1/2"	3/4"	38,1	6,80	84,5	24,5
PN 16 SF 13 45	16	10	5/8"	1/2"	30,2	6,80	100,0	26,5
PN 16 SF 20 45	16	10	5/8"	3/4"	38,1	6,80	96,5	27,5
PN 20 SF 45	19	12	3/4"	3/4"	38,1	6,80	107,5	28,0
PN 20 SF 25 45	19	12	3/4"	1"	44,4	8,10	109,5	30,0
PN 25 SF 20 45	25	16	1"	3/4"	38,1	6,70	128,0	30,0
PN 25 SF 45	25	16	1"	1"	44,4	8,00	132,0	30,5
PN 25 SF 32 45	25	16	1"	1.1/4"	50,8	8,10	134,0	32,0
PN 32 SF 25 45	31	20	1.1/4"	1"	44,4	8,10	156,0	41,0
PN 32 SF 45	31	20	1.1/4"	1.1/4"	50,8	8,10	156,0	36,0
PN 32 SF 40 45	31	20	1.1/4"	1.1/2"	60,3	8,10	160,0	40,0
PN 40 SF 45	38	24	1.1/2"	1.1/2"	60,3	8,10	184,0	46,0
PN 40 SF 50 45	38	24	1.1/2"	2"	71,4	9,60	184,0	46,0
PN 50 SF 40 45	51	32	2"	1.1/2"	60,3	8,10	182,0	42,0
PN 50 SF 45	51	32	2"	2"	71,4	9,60	219,0	50,0
PN 50 SF 60 45	51	32	2"	2.1/2"	84,0	9,60	212,0	57,0
PN 60 SF 45	60	40	2.3/8"	2.1/2"	84,0	9,60	237,0	50,0
PN 60 SF 45 L 60	60	40	2.3/8"	2.1/2"	84,0	9,60	237,0	60,0
PN 76 SF 60 45	76	48	3"	2.1/2"	84,0	9,53	230,0	56,3
PN 76 SF 45	76	48	3"	3"	101,6	9,53	228,0	55,0

**Product versions:**

PN SF 45 VA - Swage nipple, SFL angle 45°, Stainless steel

**PN SF 90****Swage nipple, SFL angle 90°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** SAE flange connection 3000 PSI

**Sealing form 1:** flat seal with SF O-ring

**Short code:** SFL

**Standard:** SAE J518, ISO 6162-1

**Material:** Steel

**Surface:** electro galvanised

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PN 13 SF 90	12	8	1/2"	1/2"	30,2	6,80	71,5	43,5
PN 13 SF 20 90	12	8	1/2"	3/4"	38,1	6,80	71,5	48,5
PN 13 SF 25 90	12	8	1/2"	1"	44,5	8,10	94,0	65,0
PN 16 SF 13 90	16	10	5/8"	1/2"	30,2	6,80	91,0	56,0
PN 16 SF 20 90	16	10	5/8"	3/4"	38,1	6,80	87,0	55,0
PN 16 SF 25 90	16	10	5/8"	1"	44,5	8,10	106,0	66,0
PN 20 SF 90	19	12	3/4"	3/4"	38,1	6,80	99,0	57,0
PN 20 SF 25 90	19	12	3/4"	1"	44,5	8,10	99,0	60,0
PN 20 SF 32 90	19	12	3/4"	1.1/4"	50,8	8,10	121,0	74,0
PN 25 SF 20 90	25	16	1"	3/4"	38,1	6,80	115,0	66,0
PN 25 SF 90	25	16	1"	1"	44,5	8,10	126,0	67,5
PN 25 SF 32 90	25	16	1"	1.1/4"	50,8	8,10	126,0	70,0
PN 25 SF 40 90	25	16	1"	1.1/2"	60,3	8,10	148,0	95,0
PN 32 SF 25 90	31	20	1.1/4"	1"	44,5	8,10	134,0	74,0
PN 32 SF 90	31	20	1.1/4"	1.1/4"	50,8	8,10	150,5	79,0
PN 32 SF 90 L 88	31	20	1.1/4"	1.1/4"	50,8	8,10	150,5	88,0
PN 32 SF 90 L 120	31	20	1.1/4"	1.1/4"	50,8	8,10	150,5	120,0
PN 32 SF 40 90	31	20	1.1/4"	1.1/2"	60,3	8,10	150,5	84,5
PN 40 SF 90	38	24	1.1/2"	1.1/2"	60,3	8,10	169,0	99,0
PN 40 SF 90 L 80	38	24	1.1/2"	1.1/2"	60,3	8,10	169,0	80,0
PN 40 SF 90 L 124	38	24	1.1/2"	1.1/2"	60,3	8,10	169,0	124,0
PN 40 SF 90 L 144	38	24	1.1/2"	1.1/2"	60,3	8,10	169,0	144,0
PN 40 SF 90 L 150	38	24	1.1/2"	1.1/2"	60,3	8,10	169,0	150,0
PN 40 SF 50 90	38	24	1.1/2"	2"	71,4	9,60	175,5	100,0
PN 40 SF 50 90 L 150	38	24	1.1/2"	2"	71,4	9,60	175,5	150,0
PN 50 SF 40 90	51	32	2"	1.1/2"	60,3	8,10	197,0	116,0
PN 50 SF 40 90 L 115	51	32	2"	1.1/2"	60,3	8,10	197,0	115,0
PN 50 SF 90	51	32	2"	2"	71,4	9,60	219,5	115,5
PN 50 SF 90 L 120	51	32	2"	2"	71,4	9,60	219,5	120,0
PN 50 SF 90 L 140	51	32	2"	2"	71,4	9,60	219,5	140,0
PN 50 SF 90 L 160	51	32	2"	2"	71,4	9,60	216,5	160,0
PN 50 SF 90 L 170	51	32	2"	2"	71,4	9,60	219,5	170,0
PN 50 SF 90 L 220	51	32	2"	2"	71,4	9,60	219,5	220,0
PN 50 SF 60 90	51	32	2"	2.1/2"	84,1	9,60	198,0	122,0
PN 50 SF 60 90 L 200	51	32	2"	2.1/2"	84,1	9,60	168,0	200,0
PN 60 SF 50 90	60	40	2.3/8"	2"	71,4	9,60	223,0	115,5
PN 60 SF 90	60	40	2.3/8"	2.1/2"	84,1	9,60	237,0	128,0
PN 60 SF 90 L 118	60	40	2.3/8"	2.1/2"	84,1	9,60	237,0	118,0
PN 76 SF 90	76	48	3"	3"	101,6	9,53	230,0	135,0

**PN SF 90**

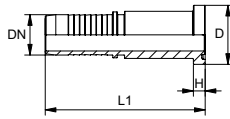
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Swage nipple, SFL angle 90°

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PN 76 SF 90 L 120	76	48	3"	3"	101,6	9,53	240,0	120,0

**Product versions:**

PN SF 90 VA - Swage nipple, SFL angle 90°, Stainless steel

**PN SF6****Swage nipple, SFS**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** SAE flange connection 6000 PSI

**Sealing form 1:** flat seal with SF O-ring

**Short code:** SFS

**Standard:** SAE J518, ISO 6162-2

**Material:** Steel

**Surface:** electro galvanised

2

**Note:** Choose the appropriate ferrule based on the hose type.

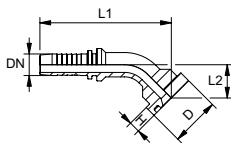
Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PN 13 SF6	12	8	1/2"	1/2"	31,8	7,8	81,5
PN 13 SF6 20	12	8	1/2"	3/4"	41,3	8,8	89,5
PN 16 SF6 13	16	10	5/8"	1/2"	31,8	7,8	86,0
PN 16 SF6 20	16	10	5/8"	3/4"	41,3	8,8	97,0
PN 16 SF6 25	16	10	5/8"	1"	47,6	9,6	104,0
PN 20 SF6 13	19	12	3/4"	1/2"	31,8	7,8	93,5
PN 20 SF6	19	12	3/4"	3/4"	41,3	8,8	104,5
PN 20 SF6 25	19	12	3/4"	1"	47,6	9,6	109,0
PN 25 SF6 20	25	16	1"	3/4"	41,3	8,8	112,5
PN 25 SF6	25	16	1"	1"	47,6	9,6	121,5
PN 25 SF6 32	25	16	1"	1.1/4"	54,0	10,4	126,0
PN 32 SF6 25	31	20	1.1/4"	1"	47,6	9,6	131,5
PN 32 SF6	31	20	1.1/4"	1.1/4"	54,0	10,4	138,0
PN 32 SF6 40	31	20	1.1/4"	1.1/2"	63,5	12,7	142,5
PN 40 SF6	38	24	1.1/2"	1.1/2"	63,5	12,7	150,5
PN 40 SF6 32	38	24	1.1/2"	1.1/4"	54,0	10,4	141,5
PN 40 SF6 50	38	24	1.1/2"	2"	79,4	12,7	155,0
PN 50 SF6	51	32	2"	2"	79,4	12,7	174,0

**Product versions:**

**PN SF6 VA** - Swage nipple, SFS, Stainless steel

**PN SF6 45****Swage nipple, SFS angle 45°**

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	SAE flange connection 6000 PSI
<b>Sealing form 1:</b>	flat seal with SF O-ring
<b>Short code:</b>	SFS
<b>Standard:</b>	SAE J518, ISO 6162-2
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

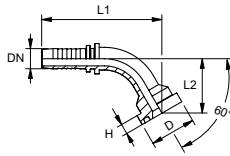
Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PN 13 SF6 45	12	8	1/2"	1/2"	31,8	7,8	82,0	22,0
PN 13 SF6 20 45	12	8	1/2"	3/4"	41,3	8,8	87,5	27,5
PN 16 SF6 13 45	16	10	5/8"	1/2"	31,8	7,8	105,0	29,0
PN 16 SF6 20 45	16	10	5/8"	3/4"	41,3	8,8	100,5	30,5
PN 16 SF6 25 45	16	10	5/8"	1"	47,6	9,6	123,0	33,0
PN 20 SF6 45	19	12	3/4"	3/4"	41,3	8,8	110,0	30,5
PN 20 SF6 25 45	19	12	3/4"	1"	47,6	9,6	114,5	35,0
PN 25 SF6 20 45	25	16	1"	3/4"	41,3	8,8	129,0	31,0
PN 25 SF6 45	25	16	1"	1"	47,6	9,6	137,0	35,5
PN 25 SF6 32 45	25	16	1"	1.1/4"	54,0	10,4	142,0	40,5
PN 32 SF6 45	31	20	1.1/4"	1.1/4"	54,0	10,4	164,0	44,0
PN 32 SF6 40 45	31	20	1.1/4"	1.1/2"	63,5	12,7	170,0	50,5
PN 40 SF6 32 45	38	24	1.1/2"	1.1/4"	54,0	10,4	168,5	44,0
PN 40 SF6 45	38	24	1.1/2"	1.1/2"	63,5	12,7	190,0	52,0
PN 40 SF6 50 45	38	24	1.1/2"	2"	79,4	12,7	201,0	63,5
PN 50 SF6 45	51	32	2"	2"	79,4	12,7	236,0	67,5

**Product versions:**

**PN SF6 45 VA** - Swage nipple, SFS angle 45°, Stainless steel

## PN SF6 60

### Swage nipple, SFS angle 60°



- Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses
- Connection 1:** SAE flange connection 6000 PSI
- Sealing form 1:** flat seal with SF O-ring
- Short code:** SFS
- Standard:** SAE J518, ISO 6162-2
- Material:** Steel
- Surface:** electro galvanised

2

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PN 20 SF6 25 60 L 80	19	12	3/4"	1"	47,6	9,5	141,0	80,0

**PN SF6 90****Swage nipple, SFS angle 90°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** SAE flange connection 6000 PSI

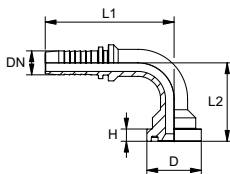
**Sealing form 1:** flat seal with SF O-ring

**Short code:** SFS

**Standard:** SAE J518, ISO 6162-2

**Material:** Steel

**Surface:** electro galvanised

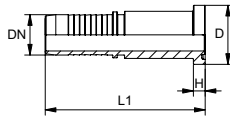


**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PN 13 SF6 90	12	8	1/2"	1/2"	31,8	7,8	71,5	44,5
PN 13 SF6 20 90	12	8	1/2"	3/4"	41,3	8,8	71,5	52,5
PN 16 SF6 13 90	16	10	5/8"	1/2"	31,8	7,8	91,0	60,0
PN 16 SF6 20 90	16	10	5/8"	3/4"	41,3	8,8	87,0	59,0
PN 16 SF6 25 90	16	10	5/8"	1"	47,6	9,6	106,0	72,0
PN 20 SF6 13 90	19	12	3/4"	1/2"	31,8	7,8	97,0	61,0
PN 20 SF6 90	19	12	3/4"	3/4"	41,3	8,8	99,0	61,0
PN 20 SF6 25 90	19	12	3/4"	1"	47,6	9,6	99,0	67,0
PN 25 SF6 20 90	25	16	1"	3/4"	41,3	8,8	115,0	67,0
PN 25 SF6 90	25	16	1"	1"	47,6	9,6	126,0	74,5
PN 25 SF6 32 90	25	16	1"	1.1/4"	54,0	10,4	126,0	81,5
PN 32 SF6 90 L 80	31	20	1.1/4"	1.1/4"	54,0	10,4	150,5	80,0
PN 32 SF6 25 90	31	20	1.1/4"	1"	47,6	9,6	134,0	79,0
PN 32 SF6 90	31	20	1.1/4"	1.1/4"	54,0	10,4	150,5	90,5
PN 32 SF6 40 90	31	20	1.1/4"	1.1/2"	63,5	12,7	150,5	99,0
PN 40 SF6 32 90 L 120	38	24	1.1/2"	1.1/4"	54,0	10,4	155,0	120,0
PN 40 SF6 90	38	24	1.1/2"	1.1/2"	63,5	12,7	175,5	108,5
PN 40 SF6 50 90	38	24	1.1/2"	2"	79,4	12,7	175,5	124,5
PN 50 SF6 90	51	32	2"	2"	79,4	12,7	219,5	140,0

**Product versions:**

**PN SF6 90 VA** - Swage nipple, SFS angle 90°, Stainless steel

**PN SF9****Swage nipple, SFS-CAT**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** SAE flange connection 6000 PSI

**Sealing form 1:** flat seal with SF O-ring

**Short code:** SFS-CAT

**suitable for:** Caterpillar

**Material:** Steel

**Surface:** electro galvanised

2

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PN 20 SF9	19	12	3/4"	3/4"	41,3	14,6	110,0
PN 20 SF9 25	19	12	3/4"	1"	47,6	14,6	114,5
PN 25 SF9	25	16	1"	1"	47,6	14,6	127,0
PN 25 SF9 32	25	16	1"	1.1/4"	54,0	14,6	131,5
PN 32 SF9	31	20	1.1/4"	1.1/4"	54,0	14,6	143,5
PN 32 SF9 40	31	20	1.1/4"	1.1/2"	63,5	14,6	148,0
PN 40 SF9	38	24	1.1/2"	1.1/2"	63,5	14,6	156,0

**PN SF9 45****Swage nipple, SFS-CAT angle 45°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** SAE flange connection 6000 PSI

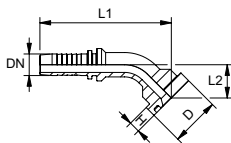
**Sealing form 1:** flat seal with SF O-ring

**Short code:** SFS-CAT

**suitable for:** Caterpillar

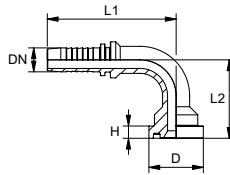
**Material:** Steel

**Surface:** electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PN 20 SF9 45	19	12	3/4"	3/4"	41,3	14,6	114,0	34,5
PN 20 SF9 25 45	19	12	3/4"	1"	47,6	14,6	118,0	38,5
PN 25 SF9 45	25	16	1"	1"	47,6	14,6	140,5	38,5
PN 25 SF9 32 45	25	16	1"	1.1/4"	54,0	14,6	145,0	43,0
PN 32 SF9 45	31	20	1.1/4"	1.1/4"	54,0	14,6	167,0	47,0
PN 32 SF9 40 45	31	20	1.1/4"	1.1/2"	63,5	14,6	171,0	51,5
PN 40 SF9 45	38	24	1.1/2"	1.1/2"	63,5	14,6	191,0	53,0

**PN SF9 90****Swage nipple, SFS-CAT angle 90°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** SAE flange connection 6000 PSI

**Sealing form 1:** flat seal with SF O-ring

**Short code:** SFS-CAT

**suitable for:** Caterpillar

**Material:** Steel

**Surface:** electro galvanised

2

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PN 20 SF9 90	19	12	3/4"	3/4"	41,3	14,6	99,0	66,5
PN 20 SF9 25 90	19	12	3/4"	1"	47,6	14,6	99,0	71,5
PN 25 SF9 90	25	16	1"	1"	47,6	14,6	126,0	79,0
PN 25 SF9 32 90	25	16	1"	1.1/4"	54,0	14,6	126,0	85,5
PN 32 SF9 90	31	20	1.1/4"	1.1/4"	54,0	14,6	150,5	94,5
PN 32 SF9 40 90	31	20	1.1/4"	1.1/2"	63,5	14,6	150,5	100,5
PN 40 SF9 90	38	24	1.1/2"	1.1/2"	63,5	14,6	175,5	110,0

## PN SFK

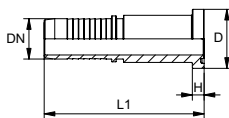
## Swage nipple, SFK

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** SAE flange connection for Komatsu flat seal with SF O-ring

**Material:** Steel

**Surface:** electro galvanised



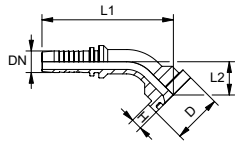
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PN 16 SFK	16	10	5/8"	5/8"	34,0	8,2	90,0

2

## PN SFK 45

### Swage nipple, SFK angle 45°



**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** SAE flange connection for Komatsu flat seal with SF O-ring

**Sealing form 1:** suitable for: Komatsu

**Material:** Steel

**Surface:** electro galvanised

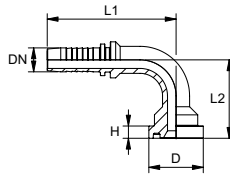
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**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PN 16 SFK 45	16	10	5/8"	5/8"	34,0	8,1	100,0	27,0

**PN SFK 90****Swage nipple, SFK angle 90°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** SAE flange connection for Komatsu  
**Sealing form 1:** flat seal with SF O-ring  
**suitable for:** Komatsu  
**Material:** Steel  
**Surface:** electro galvanised



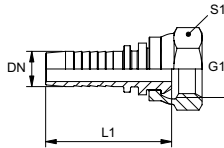
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PN 16 SFK 90	16	10	5/8"	5/8"	34,0	8,1	91,0	56,0

2

## PN AFLF / PN AFSF

### Swage nipple, DKFM



**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** metric nut thread

**Sealing form 1:** 24° outer cone for French series metric pipe.

**Short code:** DKFM

**Series:** French (metric pipe)

**Material:** Steel

**Surface:** electro galvanised

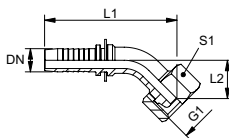
2

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	Series	for external pipe Ø mm	L1 mm	S1
PN 16 AFLF	16	10	5/8"	M 27 x 1.5	L	18	56,5	32
PN 20 AFLF	19	12	3/4"	M 30 x 1.5	L	22	66,0	36
PN 16 AFSF	16	10	5/8"	M 27 x 1.5	S	20	56,5	32
PN 20 AFSF	19	12	3/4"	M 33 x 1.5	S	25	66,0	41
PN 25 AFSF	25	16	1"	M 39 x 1.5	S	30	75,5	46

**PN AFLF 45 / PN AFSF 45****Swage nipple, DKFM angle 45°**

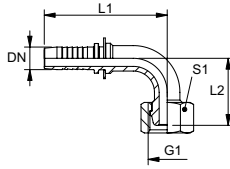
<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	24° outer cone for French series metric pipe.
<b>Short code:</b>	DKFM
<b>Series:</b>	French (metric pipe)
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	Series	for external pipe Ø mm	L1 mm	L2 mm	S1
PN 20 AFLF 45	19	12	3/4"	M 30 x 1.5	L	22	123,0	33,0	36
PN 25 AFLF 45	25	16	1"	M 36 x 1.5	L	28	148,0	39,0	46
PN 16 AFSF 45	16	10	5/8"	M 27 x 1.5	S	20	100,0	27,0	
PN 20 AFSF 45	19	12	3/4"	M 33 x 1.5	S	25			
PN 25 AFSF 45	25	16	1"	M 39 x 1.5	S	30	149,0	40,0	46

2

**PN AFLF 90 / PN AFSF 90****Swage nipple, DKFM angle 90°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** metric nut thread

**Sealing form 1:** 24° outer cone for French series metric pipe.

**Short code:** DKFM

**Series:** French (metric pipe)

**Material:** Steel

**Surface:** electro galvanised

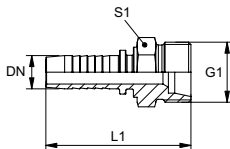
2

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	Series	for external pipe Ø mm	L1 mm	L2 mm	S1
PN 16 AFLF 90	16	10	5/8"	M 27 x 1.5	L	18	91,0	57,0	32
PN 20 AFLF 90	19	12	3/4"	M 30 x 1.5	L	22	108,0	65,0	36
PN 25 AFLF 90	25	16	1"	M 36 x 1.5	L	28	125,0	73,0	46
PN 16 AFSF 90	16	10	5/8"	M 27 x 1.5	S	20	91,0	57,0	46
PN 20 AFSF 90	19	12	3/4"	M 33 x 1.5	S	25	109,0	66,0	41
PN 25 AFSF 90	25	16	1"	M 39 x 1.5	S	30	125,0	63,0	46

**PN HLF / PN HSF****Swage nipple, AGFM**

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>Connection 1:</b>	metric cylindrical outer thread
<b>Sealing form 1:</b>	24° inner cone for French series metric pipe.
<b>Short code:</b>	AGFM
<b>Series:</b>	French (metric pipe)
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



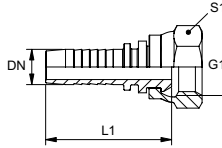
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	Series	for external pipe Ø mm	L1 mm	S1
PN 16 HLF	16	10	5/8"	M 27 x 1.5	L	18	62,7	28
PN 20 HLF	19	12	3/4"	M 30 x 1.5	L	22	68,5	30
PN 25 HLF	25	16	1"	M 36 x 1.5	L	28	78,5	36
PN 16 HSF	16	10	5/8"	M 27 x 1.5	S	20	62,7	28
PN 20 HSF	19	12	3/4"	M 33 x 1.5	S	25	69,5	34
PN 25 HSF	25	16	1"	M 39 x 1.5	S	30	80,5	41

2

## PN AF

### Swage nipple, DKF



**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** metric nut thread

**Sealing form 1:** 24° outer cone for French series imperial pipe.

**Short code:** DKF

**Series:** French (imperial pipe - series gas)

**Material:** Steel

**Surface:** electro galvanised

2

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1
PN 06 AF 10	6	4	1/4"	M 20 x 1.5	13,25	51,5	24
PN 08 AF 10	8	5	5/16"	M 20 x 1.5	13,25	51,5	24
PN 10 AF	10	6	3/8"	M 20 x 1.5	13,25	53,0	24
PN 10 AF 13	10	6	3/8"	M 24 x 1.5	16,75	54,0	30
PN 13 AF	12	8	1/2"	M 24 x 1.5	16,75	55,0	30
PN 13 AF 16	12	8	1/2"	M 30 x 1.5	21,26	58,0	36
PN 16 AF	16	10	5/8"	M 30 x 1.5	21,26	62,5	36
PN 20 AF	19	12	3/4"	M 36 x 1.5	26,75	70,0	41
PN 25 AF	25	16	1"	M 45 x 1.5	33,50	80,0	50

**PN AF 45****Swage nipple, DKF angle 45°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** metric nut thread

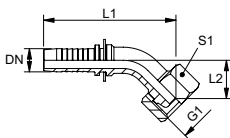
**Sealing form 1:** 24° outer cone for French series imperial pipe.

**Short code:** DKF

**Series:** French (imperial pipe - series gas)

**Material:** Steel

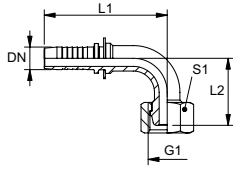
**Surface:** electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1
PN 08 AF 10 45	8	5	5/16"	M 20 x 1.5	13,25	92,0	25,0	24
PN 10 AF 45	10	6	3/8"	M 20 x 1.5	13,25	91,0	25,0	24
PN 10 AF 13 45	10	6	3/8"	M 24 x 1.5	16,75	100,0	28,0	30
PN 13 AF 45	12	8	1/2"	M 24 x 1.5	16,75	98,0	28,0	30
PN 13 AF 16 45	12	8	1/2"	M 30 x 1.5	21,26	89,0	21,0	36
PN 16 AF 45	16	10	5/8"	M 30 x 1.5	21,26	94,0	21,0	36
PN 20 AF 45	19	12	3/4"	M 36 x 1.5	26,75	123,0	33,0	41
PN 25 AF 45	25	16	1"	M 45 x 1.5	33,50	150,0	41,0	55

2

**PN AF 90****Swage nipple, DKF angle 90°**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** metric nut thread

**Sealing form 1:** 24° outer cone for French series imperial pipe.

**Short code:** DKF

**Series:** French (imperial pipe - series gas)

**Material:** Steel

**Surface:** electro galvanised

2

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1
PN 08 AF 10 90	8	5	5/16"	M 20 x 1.5	13,25	74,0	42,0	24
PN 10 AF 90	10	6	3/8"	M 20 x 1.5	13,25	73,0	42,0	24
PN 10 AF 13 90	10	6	3/8"	M 24 x 1.5	16,75	89,0	56,0	30
PN 13 AF 90	12	8	1/2"	M 24 x 1.5	16,75	88,0	56,0	30
PN 13 AF 16 90	12	8	1/2"	M 30 x 1.5	21,26	87,0	57,0	37
PN 16 AF 90	16	10	5/8"	M 30 x 1.5	21,26	91,0	57,0	36
PN 20 AF 90	19	12	3/4"	M 36 x 1.5	26,75	109,0	66,0	41
PN 25 AF 90	25	16	1"	M 45 x 1.5	33,50	125,0	75,0	55

**PN HF****Swage nipple, AGF**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** metric cylindrical outer thread

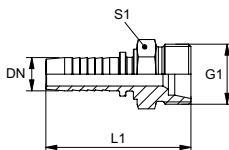
**Sealing form 1:** 24° inner cone for French series imperial pipe.

**Short code:** AGF

**Series:** French (imperial pipe - series gas)

**Material:** Steel

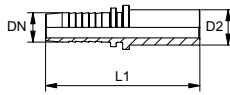
**Surface:** electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1
PN 06 HF 10	6	4	1/4"	M 20 x 1.5	13,25	53,0	22
PN 08 HF 10	8	5	5/16"	M 20 x 1.5	13,25	55,0	22
PN 10 HF	10	6	3/8"	M 20 x 1.5	13,25	56,5	22
PN 10 HF 13	10	6	3/8"	M 24 x 1.5	16,75	58,0	24
PN 13 HF	12	8	1/2"	M 24 x 1.5	16,75	58,0	24
PN 16 HF	16	10	5/8"	M 30 x 1.5	21,26	65,7	30
PN 20 HF	19	12	3/4"	M 36 x 1.5	26,75	72,5	36
PN 25 HF	25	16	1"	M 45 x 1.5	33,50	85,5	46

2

**PN FF****Swage nipple, BEF**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** Pipe sockets

**Sealing form 1:** Cutting ring connection - French series.

**Short code:** BEF

**Series:** French (imperial pipe - series gas)

**Material:** Steel

**Surface:** electro galvanised

**Note:** Choose the appropriate ferrule based on the hose type. Do not use for new designs; we recommend: PN...AF.

Identification	DN	Size	Inches	D2 mm	L1 mm
PN 10 FF	10	6	3/8"	13,25	62,5
PN 13 FF	12	8	1/2"	16,75	63,0
PN 16 FF	16	10	5/8"	21,25	69,5
PN 20 FF	19	12	3/4"	26,75	79,0
PN 25 FF	25	16	1"	33,50	87,0

**PN B****Swage nipple, RGN**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** Banjo for metric hollow screw

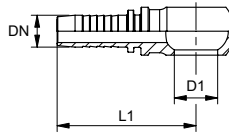
**Sealing form 1:** Sealed by copper ring

**Short code:** RGN

**Standard:** DIN 7642

**Material:** Steel

**Surface:** electro galvanised

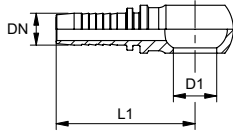


**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	D1 mm	for hollow screw	L1 mm
PN 04 B	5	3	3/16"	10,1	M 10	42,0
PN 06 B 02	6	4	1/4"	8,1	M 8	48,0
PN 06 B 04	6	4	1/4"	10,1	M 10	48,0
PN 06 B	6	4	1/4"	12,1	M 12	46,5
PN 06 B 08	6	4	1/4"	14,1	M 14	49,5
PN 06 B 10	6	4	1/4"	16,1	M 16	52,5
PN 08 B 04	8	5	5/16"	10,1	M 10	48,0
PN 08 B 06	8	5	5/16"	12,1	M 12	54,5
PN 08 B	8	5	5/16"	14,1	M 14	54,5
PN 08 B 10	8	5	5/16"	16,1	M 16	52,5
PN 08 B 13	8	5	5/16"	18,1	M 18	55,5
PN 10 B 08	10	6	3/8"	14,1	M 14	56,0
PN 10 B	10	6	3/8"	16,1	M 16	54,0
PN 10 B 13	10	6	3/8"	18,1	M 18	57,0
PN 13 B	12	8	1/2"	18,1	M 18	58,0
PN 13 B 16	12	8	1/2"	22,1	M 22	60,5
PN 16 B 13	16	10	5/8"	18,1	M 18	68,5
PN 16 B	16	10	5/8"	22,1	M 22	69,5
PN 16 B 20	16	10	5/8"	26,1	M 26	72,0
PN 20 B 16	19	12	3/4"	22,1	M 22	76,0
PN 20 B	19	12	3/4"	26,1	M 26	78,5
PN 20 B 25	19	12	3/4"	30,1	M 30	82,0
PN 25 B	25	16	1"	30,1	M 30	90,0

**Product versions:**

**PN B VA** - Swage nipple, RGN, Stainless steel

**PN BR****Swage nipple, RGN**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses

**Connection 1:** Banjo for imperial hollow screw

**Sealing form 1:** Sealed by copper ring

**Short code:** RNR

**Material:** Steel

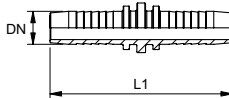
**Surface:** electro galvanised

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	D1 mm	for hollow screw	L1 mm
PN 04 BR	5	3	3/16"	10,1	R 1/8"	42,5
PN 04 BR 06	5	3	3/16"	13,2	R 1/4"	43,5
PN 06 BR 02	6	4	1/4"	10,1	R 1/8"	48,5
PN 06 BR	6	4	1/4"	13,2	R 1/4"	49,5
PN 06 BR 10	6	4	1/4"	16,7	R 3/8"	52,5
PN 08 BR 06	8	5	5/16"	13,2	R 1/4"	49,5
PN 08 BR 10	8	5	5/16"	16,7	R 3/8"	52,5
PN 10 BR 06	10	6	3/8"	13,2	R 1/4"	58,5
PN 10 BR	10	6	3/8"	16,7	R 3/8"	54,0
PN 10 BR 13	10	6	3/8"	21,0	R 1/2"	59,5
PN 13 BR 10	12	8	1/2"	16,7	R 3/8"	58,0
PN 13 BR	12	8	1/2"	21,0	R 1/2"	60,5
PN 13 BR 16	12	8	1/2"	23,0	R 5/8"	63,0
PN 16 BR	16	10	5/8"	23,0	R 5/8"	67,5
PN 16 BR 20	16	10	5/8"	26,5	R 3/4"	72,0
PN 20 BR	19	12	3/4"	26,5	R 3/4"	78,5
PN 20 BR 25	19	12	3/4"	33,3	R 1"	87,0
PN 25 BR	25	16	1"	33,3	R 1"	95,0

**PN VB****Swage nipple, VB**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** Hose connectors  
**Material:** Steel  
**Surface:** electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

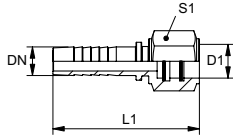
Identification	DN	Size	Inches	L1 mm
PN 04 VB	5	3	3/16"	53,4
PN 06 VB	6	4	1/4"	67,5
PN 08 VB	8	5	5/16"	67,5
PN 10 VB	10	6	3/8"	71,0
PN 13 VB	12	8	1/2"	73,5
PN 16 VB	16	10	5/8"	83,0
PN 20 VB	19	12	3/4"	97,0
PN 25 VB	25	16	1"	113,0
PN 32 VB	31	20	1.1/4"	131,0
PN 40 VB	38	24	1.1/2"	139,0
PN 50 VB	51	32	2"	171,0

**Product versions:**

**PN VB VA** - Swage nipple, VB, Stainless steel

## PN WEO SB

### Swage nipple, bushing for WEO plug-in connection



- Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses
- Connection 1:** Bushing
- Sealing form 1:** O-ring sealed
- Material:** Steel
- Surface:** electro galvanised
- Description:** Self-aligning to prevent torsional stress.

2

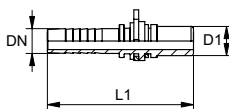
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Working pressure bar	Size	Ø D1 mm	L1 mm	S1
PN 06 WEO 10 SB	6	4	1/4"	PN 350	1/4"	10,0	62,0	19
PN 10 WEO 13 SB	10	6	3/8"	PN 350	3/8"	13,0	66,0	22
PN 13 WEO 16 SB	12	8	1/2"	PN 350	1/2"	16,0	67,0	27
PN 20 WEO 23 SB	19	12	3/4"	PN 350	3/4"	23,0	87,0	32
PN 25 WEO 30 SB	25	16	1"	PN 250	1"	30,0	105,0	41

## PN WEO S

### Swage nipple, WEO S

- Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses
- Connection 1:** WEO plug
- Sealing form 1:** O-ring sealed pin
- Material:** Steel
- Surface:** electro galvanised
- Description:** Self-aligning to prevent torsional stress.



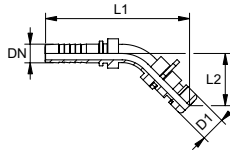
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Working pressure bar	Size	Ø D1 mm	L1 mm
PN 04 WEO 10 S	5	3	3/16"	PN 350	3/16"	10,0	54,5
PN 06 WEO 10 S	6	4	1/4"	PN 350	1/4"	10,0	58,0
PN 06 WEO 13 S	6	4	1/4"	PN 350	3/8"	13,0	61,0
PN 08 WEO 13 S	8	5	5/16"	PN 350	3/8"	13,0	61,9
PN 10 WEO 13 S	10	6	3/8"	PN 350	3/8"	13,0	63,0
PN 10 WEO 16 S	10	6	3/8"	PN 350	1/2"	16,0	63,0
PN 13 WEO 16 S	12	8	1/2"	PN 350	1/2"	16,0	64,0
PN 13 WEO 23 S	12	8	1/2"	PN 350	3/4"	23,0	73,5
PN 16 WEO 23 S	16	10	5/8"	PN 350	3/4"	23,0	77,5
PN 20 WEO 23 S	19	12	3/4"	PN 350	3/4"	23,0	82,0
PN 25 WEO 30 S	25	16	1"	PN 250	1"	30,0	100,5

2

## PN WEO S 45

### Swage nipple, WEO S angle 45°



- Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses
- Connection 1:** WEO plug
- Sealing form 1:** O-ring sealed pin
- Material:** Steel
- Surface:** electro galvanised
- Description:** Self-aligning to prevent torsional stress.

2

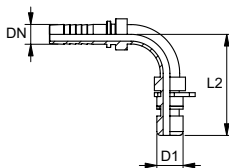
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Working pressure bar	Size	Ø D1 mm	L2 mm
PN 06 WEO 10 S 45	6	4	1/4"	PN 350	1/4"	10,0	27,0
PN 06 WEO 13 S 45	6	4	1/4"	PN 350	3/8"	13,0	30,5
PN 08 WEO 13 S 45	8	5	5/16"	PN 350	3/8"	13,0	31,5
PN 10 WEO 13 S 45	10	6	3/8"	PN 350	3/8"	13,0	31,5
PN 10 WEO 16 S 45	10	6	3/8"	PN 350	1/2"	16,0	33,5
PN 13 WEO 16 S 45	12	8	1/2"	PN 350	1/2"	16,0	36,5
PN 13 WEO 23 S 45	12	8	1/2"	PN 350	3/4"	23,0	45,0
PN 16 WEO 23 S 45	16	10	5/8"	PN 350	3/4"	23,0	49,5
PN 20 WEO 23 S 45	19	12	3/4"	PN 350	3/4"	23,0	49,5

## PN WEO S 90

### Swage nipple, WEO S angle 90°

- Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses
- Connection 1:** WEO plug
- Sealing form 1:** O-ring sealed pin
- Material:** Steel
- Surface:** electro galvanised
- Description:** Self-aligning to prevent torsional stress.

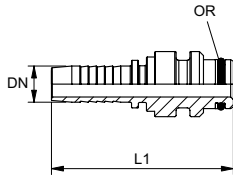


**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Working pressure bar	Size	Ø D1 mm	L2 mm
PN 06 WEO 10 S 90	6	4	1/4"	PN 350	1/4"	10,0	48,5
PN 06 WEO 13 S 90	6	4	1/4"	PN 350	3/8"	13,0	54,0
PN 08 WEO 13 S 90	8	5	5/16"	PN 350	3/8"	13,0	58,0
PN 10 WEO 13 S 90	10	6	3/8"	PN 350	3/8"	13,0	58,0
PN 10 WEO 16 S 90	10	6	3/8"	PN 350	1/2"	16,0	59,5
PN 13 WEO 16 S 90	12	8	1/2"	PN 350	1/2"	16,0	68,0
PN 13 WEO 23 S 90	12	8	1/2"	PN 350	3/4"	23,0	82,0
PN 16 WEO 23 S 90	16	10	5/8"	PN 350	3/4"	23,0	100,0
PN 20 WEO 23 S 90	19	12	3/4"	PN 350	3/4"	23,0	100,0

## PN SO

### Swage nipple, SO



**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**Connection 1:** Plug-in O port  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Self-aligning to prevent torsional stress.

2

**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	L1 mm	OR
PN 06 SO	6	4	1/4"	63,5	6.0 x 2.0
PN 10 SO	10	6	3/8"	65,5	10.0 x 2.0
PN 13 SO	12	8	1/2"	67,0	13.2 x 2.5
PN 16 SO	16	10	5/8"	71,5	16.0 x 2.5
PN 20 SO	19	12	3/4"	78,5	19.0 x 2.5
PN 25 SO	25	16	1"	92,5	25.0 x 2.5
PN 32 SO	31	20	1.1/4"	102,0	33.0 x 2.5
PN 40 SO	38	24	1.1/2"	110,5	40.0 x 3.0
PN 50 SO	51	32	2"	126,0	49.0 x 3.0

**PN ARG****Swage nipple, gas connection**

**Application:** Swage nipple for HD 100 to HD 400, KP and TE hoses  
**suitable for:** Nitrogen  
**Connection 1:** Gas connection nut thread  
**Sealing form 1:** flat sealing  
**Material:** Steel  
**Surface:** electro galvanised  
**Special features:** Right-hand thread



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	for medium	G1	L1 mm
PN 06 ARG 20	6	4	1/4"		G 3/4"	
PN 06 ARG 21	6	4	1/4"	argon / CO2		62,5
PN 06 ARG 24	6	4	1/4"	nitrogen		
PN 10 ARG 20	10	6	3/8"		G 3/4"	
PN 10 ARG 21	10	6	3/8"	argon / CO2		66,5
PN 10 ARG 24	10	6	3/8"	nitrogen		
PN 13 ARG 20	12	8	1/2"		G 3/4"	
PN 13 ARG 21	12	8	1/2"	argon / CO2		66,0
PN 13 ARG 24	12	8	1/2"	nitrogen		

2

**PN ARG LH****Swage nipple, gas connection**

<b>Application:</b>	Swage nipple for HD 100 to HD 400, KP and TE hoses
<b>suitable for:</b>	Hydrogen
<b>Connection 1:</b>	Gas connection nut thread
<b>Sealing form 1:</b>	flat sealing
<b>Media:</b>	Propane, hydrogen, methane
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Special features:</b>	Left-hand thread

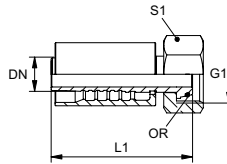
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**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1
PN 06 ARG 21 LH	6	4	1/4"	
PN 10 ARG 21 LH	10	6	3/8"	
PN 13 ARG 21 LH	12	8	1/2"	

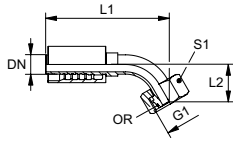
**PA 700 AOL****Swage fitting, DKOL**

**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOL  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised  
**Series:** light



2

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	OR
PA 710 AOL	10	6	3/8"	M 18 x 1.5	12	69,3	9.0 x 1.5
PA 713 AOL	12	8	1/2"	M 22 x 1.5	15	70,8	12.0 x 2.0
PA 716 AOL	16	10	5/8"	M 26 x 1.5	18	88,2	15.0 x 2.0
PA 716 AOL 20	16	10	5/8"	M 30 x 2	22	86,0	20.0 x 2.0

**PA 700 AOL 45****Swage fitting, DKOL angle 45°**

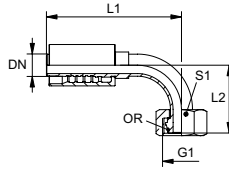
**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOL  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised  
**Series:** light

2

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	OR
PA 710 AOL 45	10	6	3/8"	M 18 x 1.5	12	82,5	19,5	9.0 x 1.5
PA 713 AOL 45	12	8	1/2"	M 22 x 1.5	15	93,5	21,0	12.0 x 2.0
PA 716 AOL 45	16	10	5/8"	M 26 x 1.5	18	115,0	26,5	15.0 x 2.0

**PA 700 AOL 90****Swage fitting, DKOL angle 90°**

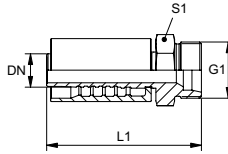
**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOL  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised  
**Series:** light



Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	OR
PA 710 AOL 90	10	6	3/8"	M 18 x 1.5	12	77,5	37,0	9.0 x 1.5
PA 713 AOL 90	12	8	1/2"	M 22 x 1.5	15	85,5	42,0	12.0 x 2.0
PA 716 AOL 90	16	10	5/8"	M 26 x 1.5	18	106,5	52,5	15.0 x 2.0

## PA 700 HL

### Swage fitting, CEL



**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Short code:** CEL  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

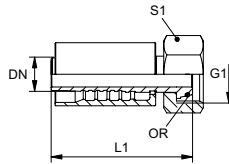
2

Identification	DN	Size	Inches	G1	for external pipe Ø mm
PA 710 HL	10	6	3/8"	M 18 x 1.5	12
PA 713 HL	12	8	1/2"	M 22 x 1.5	15
PA 716 HL	16	10	5/8"	M 26 x 1.5	18

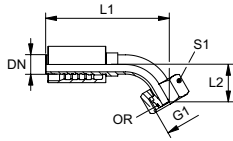
## PA 700 AOS

## Swage fitting, DKOS

**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOS  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised  
**Series:** heavy



Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PA 710 AOS 08	10	6	3/8"	M 20 x 1.5	12		24	10.0 x 1.5
PA 710 AOS	10	6	3/8"	M 22 x 1.5	14	67,6	27	12.0 x 2.0
PA 713 AOS	12	8	1/2"	M 24 x 1.5	16	72,8	30	13.0 x 2.0
PA 713 AOS 16	12	8	1/2"	M 30 x 2	20	75,8	36	17.5 x 2.5
PA 716 AOS 13	16	10	5/8"	M 24 x 1.5	16	83,5	30	13.0 x 2.0
PA 716 AOS	16	10	5/8"	M 30 x 2	20	86,0	36	17.5 x 2.5
PA 716 AOS 20	16	10	5/8"	M 36 x 2	25	89,0	46	20.0 x 2.5
PA 720 AOS 16	19	12	3/4"	M 30 x 2	20	96,0	36	17.5 x 2.5
PA 720 AOS	19	12	3/4"	M 36 x 2	25	99,0	46	20.0 x 2.5
PA 720 AOS 25	19	12	3/4"	M 42 x 2	30	100,0	50	27.0 x 2.5
PA 725 AOS 20	25	16	1"	M 36 x 2	25	112,0	46	22.0 x 2.5
PA 725 AOS	25	16	1"	M 42 x 2	30	113,0	50	25.0 x 2.5
PA 725 AOS 32	25	16	1"	M 52 x 2	38	131,0	60	33.0 x 2.5

**PA 700 AOS 45****Swage fitting, DKOS angle 45°**

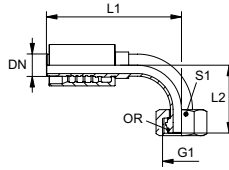
**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOS  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised  
**Series:** heavy

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	L2 mm	OR
PA 710 AOS 08 45	10	6	3/8"	M 20 x 1.5	12		24		10.0 x 1.5
PA 710 AOS 45	10	6	3/8"	M 22 x 1.5	14	94,2	27		12.0 x 2.0
PA 713 AOS 45	12	8	1/2"	M 24 x 1.5	16	95,0	30	21,5	13.0 x 2.0
PA 713 AOS 16 45	12	8	1/2"	M 30 x 2	20	108,0	36	27,0	17.5 x 2.5
PA 716 AOS 45	16	10	3/8"	M 30 x 2	20	118,0	36	27,0	17.5 x 2.5
PA 720 AOS 16 45	19	12	3/4"	M 30 x 2	20	133,0	36	27,0	16.0 x 2.5
PA 720 AOS 45	19	12	3/4"	M 36 x 2	25	136,0	46	30,0	20.0 x 2.5
PA 720 AOS 25 45	19	12	3/4"	M 42 x 2	30	142,0	50	35,0	27.0 x 2.5
PA 725 AOS 20 45	25	16	1"	M 36 x 2	25	156,5	41	34,5	20.0 x 2.5
PA 725 AOS 45	25	16	1"	M 42 x 2	30	164,0	50	34,5	25.0 x 2.5
PA 725 AOS 32 45	25	16	1"	M 52 x 2	38	170,0	60	41,0	33.0 x 2.5

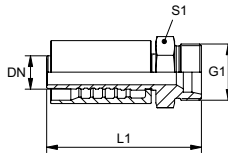
## PA 700 AOS 90

## Swage fitting, DKOS angle 90°

<b>Application:</b>	Swage fitting for HD 400 hoses
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	24° outer cone with O-ring
<b>Short code:</b>	DKOS
<b>Standard:</b>	ISO 8434-1
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Series:</b>	heavy



Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	L2 mm	OR
PA 710 AOS 08 90	10	6	3/8"	M 20 x 1.5	12		24		10.0 x 1.5
PA 710 AOS 90	10	6	3/8"	M 22 x 1.5	14	71,7	27		12.0 x 2.0
PA 713 AOS 90	12	8	1/2"	M 24 x 1.5	16	87,0	30	45,0	13.0 x 2.0
PA 713 AOS 16 90	12	8	1/2"	M 30 x 2	20	86,5	36	49,5	17.5 x 2.5
PA 716 AOS 90	16	10	3/8"	M 30 x 2	20	106,5	36	49,5	17.5 x 2.5
PA 720 AOS 16 90	19	12	3/4"	M 30 x 2	20	125,5	36	57,5	17.5 x 2.5
PA 720 AOS 90	19	12	3/4"	M 36 x 2	25	125,5	46	62,0	20.0 x 2.5
PA 720 AOS 90 SW41	19	12	3/4"	M 36 x 2	25	125,5	41	62,0	20.0 x 2.5
PA 720 AOS 25 90	19	12	3/4"	M 42 x 2	30	129,0	50	71,5	25.0 x 2.5
PA 725 AOS 20 90	25	16	1"	M 36 x 2	25	144,0	46	71,0	20.0 x 2.5
PA 725 AOS 90	25	16	1"	M 42 x 2	30	157,5	50	72,5	25.0 x 2.5
PA 725 AOS 32 90	25	16	1"	M 52 x 2	38	154,5	60	84,5	33.0 x 2.5

**PA 700 HS****Swage fitting, CES**

**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Short code:** CES  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

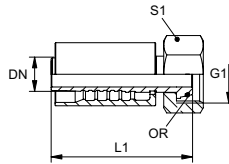
2

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1
PA 710 HS 08	10	6	3/8"	M 20 x 1.5	12	67,8	22
PA 710 HS	10	6	3/8"	M 22 x 1.5	14	69,7	22
PA 713 HS	12	8	1/2"	M 24 x 1.5	16	75,0	24
PA 713 HS 16	12	8	1/2"	M 30 x 2	20		
PA 716 HS	16	10	5/8"	M 30 x 2	20	90,5	30
PA 720 HS 16	19	12	3/4"	M 30 x 2	20	97,0	32
PA 720 HS	19	12	3/4"	M 36 x 2	25	99,0	41
PA 725 HS	25	16	1"	M 42 x 2	30	117,0	46

## PA 700 AOB

## Swage fitting, DKOR

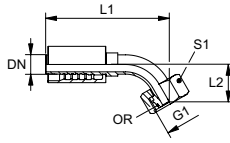
**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone with O-ring  
**Short code:** DKOR  
**Standard:** ISO 8434-6, BS 5200  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PA 713 AOB	12	8	1/2"	G 1/2" -14	69,3	27	12.1 x 1.6
PA 720 AOB	19	12	3/4"	G 3/4" -14	96,5	32	17.1 x 1.6
PA 725 AOB	25	16	1"	G 1" -11	113,0	41	22.1 x 1.6

## PA 700 AOB 45

### Swage fitting, DKOR angle 45°



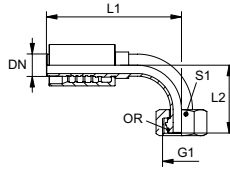
**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone with O-ring  
**Short code:** DKOR  
**Standard:** ISO 8434-6, BS 5200  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 713 AOB 45	12	8	1/2"	G 1/2" -14	91,5	20,0	27	12.1 x 1.6
PA 720 AOB 45	19	12	3/4"	G 3/4" -14	140,0	34,5	32	17.1 x 1.6
PA 725 AOB 45	25	16	1"	G 1" -11	169,5	39,0	41	22.1 x 1.6

**PA 700 AOB 90****Swage fitting, DKOR angle 90°**

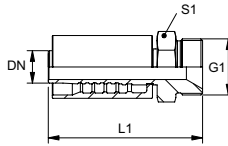
<b>Application:</b>	Swage fitting for HD 400 hoses
<b>Connection 1:</b>	BSP nut thread
<b>Sealing form 1:</b>	60° outer cone with O-ring
<b>Short code:</b>	DKOR
<b>Standard:</b>	ISO 8434-6, BS 5200
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 713 AOB 90	12	8	1/2"	G 1/2" -14	87,0	40,5	27	12.1 x 1.6
PA 720 AOB 90	19	12	3/4"	G 3/4" -14	127,5	68,2	32	17.1 x 1.6
PA 725 AOB 90	25	16	1"	G 1" -11	158,0	81,7	41	22.1 x 1.6

## PA 700 HB

### Swage fitting, AGR



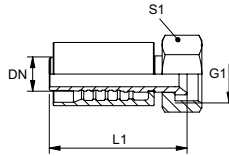
**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Short code:** AGR  
**Standard:** ISO 8434-6, BS 5200  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	G1	L1 mm	S1
PA 713 HB	12	8	1/2"	G 1/2" -14	79,3	27
PA 716 HB	16	10	5/8"	G 5/8" -14	92,8	30
PA 720 HB	19	12	3/4"	G 3/4" -14	97,5	32
PA 725 HB	25	16	1"	G 1" -11	114,5	41

**PA 700 AJ****Swage fitting, DKJ**

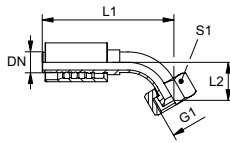
**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone  
**Short code:** DKJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	S1
PA 713 AJ	12	8	1/2"	3/4"-16 UNF	67,4	24
PA 713 AJ 16	12	8	1/2"	7/8"-14 UNF	66,5	25
PA 716 AJ	16	10	5/8"	7/8"-14 UNF	79,5	25
PA 716 AJ 20	16	10	5/8"	1.1/16" -12 UN	81,0	30

## PA 700 AJ 45

### Swage fitting, DKJ angle 45°



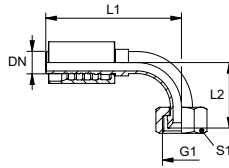
**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone  
**Short code:** DKJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PA 713 AJ 45	12	8	1/2"	3/4"-16 UNF	92,8	21,5	24
PA 713 AJ 16 45	12	8	5/8"	7/8"-14 UNF	92,8	20,0	25
PA 716 AJ 45	16	10	5/8"	7/8"-14 UNF	116,5	25,0	25
PA 716 AJ 20 45	16	10	5/8"	1.1/16"-12 UN	114,0	23,5	32

**PA 700 AJ 90****Swage fitting, DKJ angle 90°**

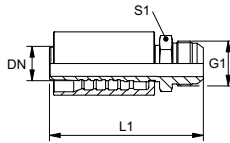
**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone  
**Short code:** DKJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PA 713 AJ 90	12	8	1/2"	3/4"-16 UNF	87,0	43,5	24
PA 713 AJ 16 90	12	8	1/2"	7/8"-14 UNF	87,0	40,0	25
PA 716 AJ 90	16	10	5/8"	7/8"-14 UNF	109,0	51,0	25
PA 716 AJ 20 90	16	10	5/8"	1.1/16" -12 UN	107,5	50,0	32

## PA 700 HJ

### Swage fitting, AGJ



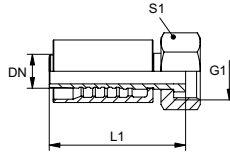
**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** UN/UNF external threads  
**Sealing form 1:** 74° outer cone  
**Short code:** AGJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	G1	L1 mm	S1
PA 713 HJ	12	8	1/2"	3/4"-16 UNF	77,2	22
PA 713 HJ 16	12	8	1/2"	7/8"-14 UNF	80,4	24
PA 716 HJ	16	10	5/8"	7/8"-14 UNF	92,0	24

**PA 700 AJF****Swage fitting, ORFS**

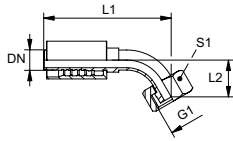
**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** flat sealing  
**Short code:** ORFS  
**Standard:** ISO 8434-3  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	S1
PA 713 AJF	12	8	1/2"	13/16" -16 UN	65,8	27
PA 716 AJF	16	10	5/8"	1" -14 UNS	82,0	30
PA 716 AJF 20	16	10	5/8"	1.3/16" -12 UN	82,0	36
PA 720 AJF	19	12	3/4"	1.3/16" -12 UN	107,0	36
PA 720 AJF 25	19	12	3/4"	1.7/16" -12 UN	108,4	41
PA 725 AJF	25	16	1"	1.7/16" -12 UN	122,0	41

## PA 700 AJF 45

### Swage fitting, ORFS angle 45°



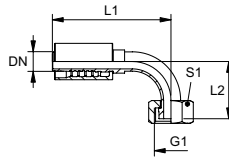
**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** flat sealing  
**Short code:** ORFS  
**Standard:** ISO 8434-3  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PA 713 AJF 45	12	8	1/2"	11/16" -16 UN	91,5	21,5	27
PA 716 AJF 45	16	10	5/8"	1" -14 UNS	111,0	20,0	30
PA 720 AJF 45	19	12	3/4"	1.3/16" -12 UN	133,0	26,5	36
PA 725 AJF 45	25	16	1"	1.7/16" -12 UN	160,5	31,0	41

**PA 700 AJF 90****Swage fitting, ORFS angle 90°**

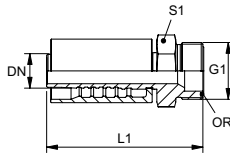
**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** flat sealing  
**Short code:** ORFS  
**Standard:** ISO 8434-3  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PA 713 AJF 90	12	8	1/2"	13/16" -16 UN	85,5	43,5	27
PA 716 AJF 90	16	10	5/8"	1" -14 UNS	106,5	47,5	30
PA 720 AJF 90	19	12	3/4"	1.3/16" -12 UN	126,0	56,0	36
PA 725 AJF 90	25	16	1"	1.7/16" -12 UN	157,5	68,0	41

## PA 700 HJOF

### Swage fitting, ORFS



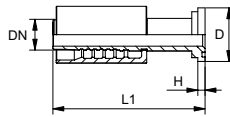
**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** UN/UNF external threads  
**Sealing form 1:** flat seal with O-ring  
**Short code:** ORFS  
**Standard:** ISO 8434-3  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

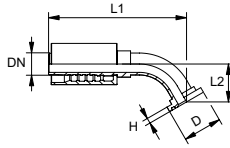
Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PA 713 HJOF	12	8	1/2"	13/16" -16 UN	73,8	22	12.42 x 1.78
PA 716 HJOF	16	10	5/8"	1" -14 UNS	89,4	27	15.60 x 1.78
PA 720 HJOF	19	12	3/4"	1.3/16" -12 UN	101,0	32	18.77 x 1.78
PA 725 HJOF	25	16	1"	1.7/16" -12 UN	117,5	36	23.52 x 1.78

**PA 700 SF****Swage fitting, SFL**

**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** SAE flange connection 3000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFL  
**Standard:** SAE J518, ISO 6162-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 713 SF	12	8	1/2"	1/2"	30,2	6,7	90,4
PA 713 SF 20	12	8	1/2"	3/4"	38,1	6,7	91,6
PA 716 SF 20	16	10	3/8"	3/4"	38,1	6,7	102,6
PA 720 SF	19	12	3/4"	3/4"	38,1	6,7	116,5
PA 720 SF 25	19	12	3/4"	1"	44,5	8,0	119,5
PA 725 SF 20	25	16	1"	3/4"	38,1	6,7	132,0
PA 725 SF	25	16	1"	1"	44,5	8,0	135,5
PA 725 SF 32	25	16	1"	1.1/4"	50,8	8,0	138,5

**PA 700 SF 45****Swage fitting, SFL angle 45°**

**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** SAE flange connection 3000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFL  
**Standard:** SAE J518, ISO 6162-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

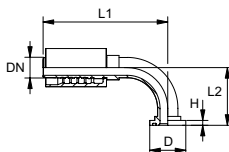
2

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 713 SF 45	12	8	1/2"	1/2"	30,2	6,7	94,5	22,5
PA 713 SF 20 45	12	8	1/2"	3/4"	38,1	6,7	126,0	26,5
PA 720 SF 45	19	12	3/4"	3/4"	38,1	6,8	132,5	27,5
PA 720 SF 25 45	19	12	3/4"	1"	44,5	8,1	134,5	29,5
PA 725 SF 45	25	16	1"	1"	44,5	8,1	159,0	28,5

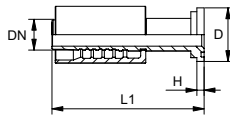
## PA 700 SF 90

## Swage fitting, SFL angle 90°

**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** SAE flange connection 3000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFL  
**Standard:** SAE J518, ISO 6162-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 713 SF 90	12	8	1/2"	1/2"	30,2	6,7	85,9	45,0
PA 713 SF 20 90	12	8	1/2"	3/4"	38,1	6,7	96,0	51,0
PA 720 SF 90	19	12	3/4"	3/4"	38,1	6,8	127,5	58,0
PA 725 SF 20 90	25	16	1"	3/4"	38,1	6,8	144,0	64,5
PA 720 SF 25 90	19	12	3/4"	1"	44,5	8,1	127,5	61,0
PA 725 SF 90	25	16	1"	1"	44,5	8,1	158,0	67,0
PA 725 SF 32 90	25	16	1"	1.1/4"	50,8	8,1	158,0	69,5

**PA 700 SF6****Swage fitting, SFS**

**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
 with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

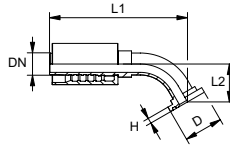
2

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 713 SF6	12	8	1/2"	1/2"	31,8	7,7	90,4
PA 713 SF6 20	12	8	1/2"	3/4"	41,3	8,8	93,9
PA 716 SF6 13	16	10	5/8"	1/2"	31,8	7,7	108,0
PA 716 SF6 20	16	10	5/8"	3/4"	41,3	8,8	102,0
PA 716 SF6 25	16	10	5/8"	1"	47,6	9,5	103,0
PA 720 SF6	19	12	3/4"	3/4"	41,3	8,8	124,5
PA 720 SF6 25	19	12	3/4"	1"	47,6	9,5	129,0
PA 725 SF6 20	25	16	1"	3/4"	41,3	8,8	134,0
PA 725 SF6	25	16	1"	1"	47,6	9,5	146,5
PA 725 SF6 32	25	16	1"	1.1/4"	54,0	10,3	151,0

## PA 700 SF6 45

## Swage fitting, SFS angle 45°

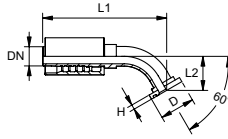
<b>Application:</b>	Swage fitting for HD 400 hoses
<b>Connection 1:</b>	SAE flange connection 6000 PSI
<b>Sealing form 1:</b>	flat seal with SF O-ring
<b>Short code:</b>	SFS
<b>Standard:</b>	SAE J518, ISO 6162-2
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 713 SF6 45	12	8	1/2"	1/2"	31,8	7,7	95,5	23,0
PA 713 SF6 20 45	12	8	1/2"	3/4"	41,3	8,8	99,9	23,0
PA 716 SF6 13 45	16	10	5/8"	1/2"	31,8	7,7	114,0	21,5
PA 716 SF6 20 45	16	10	5/8"	3/4"	41,3	8,8	117,5	25,0
PA 716 SF6 25 45	16	10	5/8"	1"	47,6	9,5	121,0	29,0
PA 720 SF6 45	19	12	3/4"	3/4"	41,3	8,8	135,5	30,0
PA 720 SF6 25 45	19	12	3/4"	1"	47,6	9,6	139,5	34,5
PA 725 SF6 20 45	25	16	1"	3/4"	41,3	8,8	164,0	36,5
PA 725 SF6 45	25	16	1"	1"	47,6	9,6	164,0	33,5
PA 725 SF6 32 45	25	16	1"	1.1/4"	54,0	10,4	169,0	38,5

## PA 700 SF6 60

### Swage fitting, SFS angle 60°



**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

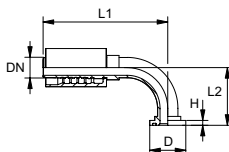
2

Identification	DN	Size	Inches	Flange size	D mm	H mm
PA 725 SF6 60	25	16	1"	1"	47,6	9,5

## PA 700 SF6 90

## Swage fitting, SFS angle 90°

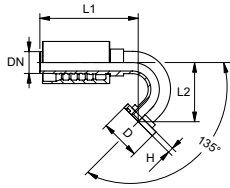
<b>Application:</b>	Swage fitting for HD 400 hoses
<b>Connection 1:</b>	SAE flange connection 6000 PSI
<b>Sealing form 1:</b>	flat seal with SF O-ring
<b>Short code:</b>	SFS
<b>Standard:</b>	SAE J518, ISO 6162-2
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 713 SF6 90	12	8	1/2"	1/2"	31,8	7,7	86,0	46,0
PA 713 SF6 20 90	12	8	1/2"	3/4"	41,3	8,8	92,5	46,0
PA 716 SF6 13 90	16	10	5/8"	1/2"	31,8	7,7	108,0	48,0
PA 716 SF6 20 90	16	10	5/8"	3/4"	41,3	8,8	107,5	52,5
PA 716 SF6 25 90	16	10	5/8"	1"	47,6	9,5	108,0	57,0
PA 720 SF6 90	19	12	3/4"	3/4"	41,3	8,8	127,5	62,0
PA 720 SF6 25 90	19	12	3/4"	1"	47,6	9,6	127,5	68,0
PA 725 SF6 20 90	25	16	1"	3/4"	41,3	8,8	152,5	70,5
PA 725 SF6 90	25	16	1"	1"	47,6	9,6	158,0	74,0
PA 725 SF6 32 90	25	16	1"	1.1/4"	54,0	10,4	156,0	83,5

## PA 700 SF6 135

### Swage fitting, SFS angle 135°



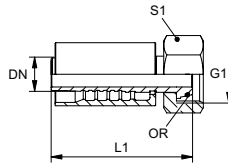
**Application:** Swage fitting for HD 400 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
 with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 725 SF6 135	25	16	1"	1"	47,6	9,5	170,0	100,0

**PA 500 AOL A****Swage fitting, DKOL**

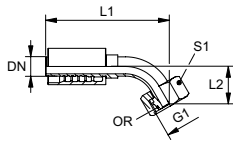
**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOL  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PA 540 AOL A	38	24	1.1/2"	M 52 x 2	42	133,5	60	38.0 x 2.5
PA 532 AOL A	31	20	1.1/4"	M 45 x 2	35	122,5	50	32.0 x 2.5

**Product versions:**

PA 500 AOL VA - Swage fitting, DKOL, Stainless steel

**PA 500 AOL 45 A****Swage fitting DKOL W45°**

<b>Application:</b>	Swage fitting for HD 500 hoses
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	24° outer cone with O-ring
<b>Short code:</b>	DKOL
<b>Standard:</b>	ISO 8434-1
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

2

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PA 532 AOL 45 A	31	20	1.1/4"	M 45 x 2	35	194,0	47,0	50	32.0 x 2.5
PA 540 AOL 45 A	38	24	1.1/2"	M 52 x 2	42	210,0	48,0	60	38.0 x 2.5

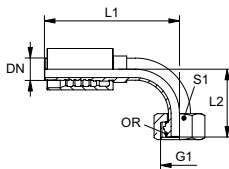
**Product versions:**

PA 500 AOL 45 VA - Swage fitting, DKOL angle 45°, Stainless steel

## PA 500 AOL 90 A

## Swage fitting DKOL W90°

<b>Application:</b>	Swage fitting for HD 500 hoses
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	24° outer cone with O-ring
<b>Short code:</b>	DKOL
<b>Standard:</b>	ISO 8434-1
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



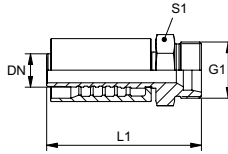
Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PA 532 AOL 90 A	31	20	1.1/4"	M 45 x 2	35	170,0	88,0	50	32.0 x 2.5
PA 540 AOL 90 A	38	24	1.1/2"	M 52 x 2	42	193,0	99,0	60	38.0 x 2.5

**Product versions:**

PA 500 AOL 90 VA

## PA 500 HL A

### Swage fitting CEL



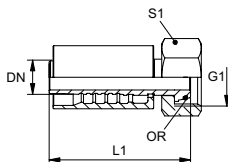
**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Short code:** CEL  
**Standard:** ISO 8434-1  
**Integration:** without pull-out protection  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm
PA 532 HL A	31	20	1.1/4"	M 45 x 2	35	115,0

**PA 500 AOS A****Swage fitting, DKOS**

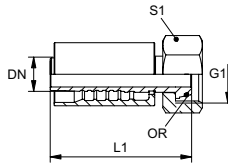
**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOS  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PA 720 AOS 16	19	12	3/4"	M 30 x 2	20	101,8	36	17.5 x 2.5
PA 720 AOS	19	12	3/4"	M 36 x 2	25	99,0	46	20.0 x 2.5
PA 725 AOS 20	25	16	1"	M 36 x 2	25	112,0	46	22.0 x 2.5
PA 725 AOS	25	16	1"	M 42 x 2	30	113,0	50	25.0 x 2.5
PA 725 AOS 32	25	16	1"	M 52 x 2	38	131,0	60	33.0 x 2.5
PA 532 AOS 25 A	31	20	1.1/4"	M 42 x 2	30	120,0	50	25.0 x 2.5
PA 532 AOS A	31	20	1.1/4"	M 52 x 2	38	124,5	60	33.0 x 2.5

**Product versions:**

PA 500 AOS VA - Swage fitting, DKOS, Stainless steel

**PA 500 AOS A H****Swage fitting, DKOS**

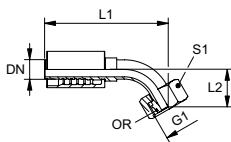
**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOS  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Additional feature:** for breaker operation  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Reinforced design for extreme loads, e.g. use in hammers.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PA 720 AOS H	19	12	3/4"	M 36 x 2	25	104,0	46	20.0 x 2.5
PA 725 AOS H	25	16	1"	M 42 x 2	30	111,0	50	25.0 x 2.5
PA 532 AOS A H	31	20	1.1/4"	M 52 x 2	38	112,5	60	33.0 x 2.5

## PA 500 AOS 45 A

## Swage fitting, DKOS angle 45°

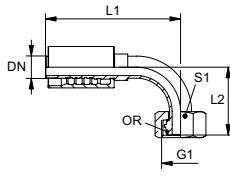
<b>Application:</b>	Swage fitting for HD 500 hoses
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	24° outer cone with O-ring
<b>Short code:</b>	DKOS
<b>Standard:</b>	ISO 8434-1
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PA 720 AOS 16 45	19	12	3/4"	M 30 x 2	20	133,0	27,0	36	16.0 x 2.5
PA 720 AOS 45	19	12	3/4"	M 36 x 2	25	136,0	30,0	46	20.0 x 2.5
PA 720 AOS 25 45	19	12	3/4"	M 42 x 2	30	142,0	35,0	50	27.0 x 2.5
PA 725 AOS 20 45	25	16	1"	M 36 x 2	25	156,5	34,5	41	22.0 x 2.5
PA 725 AOS 45	25	16	1"	M 42 x 2	30	164,0	34,5	50	25.0 x 2.5
PA 725 AOS 32 45	25	16	1"	M 52 x 2	38	170,0	41,0	60	33.0 x 2.5
PA 532 AOS 25 45 A	31	20	1"	M 42 x 2	30	175,0	39,5	50	27.0 x 2.5
PA 532 AOS 45 A	31	20	1.1/4"	M 52 x 2	38	192,5	41,0	60	33.0 x 2.5

**Product versions:**

PA 500 AOS 45 VA - Swage fitting, DKOS angle 45°, Stainless steel

**PA 500 AOS 90 A****Swage fitting, DKOS angle 90°**

**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOS  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

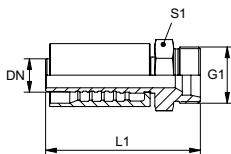
Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PA 720 AOS 16 90	19	12	3/4"	M 30 x 2	20	125,5	57,5	36	17.5 x 2.5
PA 720 AOS 90	19	12	3/4"	M 36 x 2	25	125,5	62,0	46	22.0 x 2.5
PA 720 AOS 25 90	19	12	3/4"	M 42 x 2	30	129,0	71,5	50	27.0 x 2.5
PA 725 AOS 20 90	25	16	1"	M 36 x 2	25	144,0	71,0	46	22.0 x 2.5
PA 725 AOS 90	25	16	1"	M 42 x 2	30	157,5	72,5	50	27.0 x 2.5
PA 725 AOS 32 90	25	16	1"	M 52 x 2	38	154,5	84,5	60	33.0 x 2.5
PA 532 AOS 25 90 A	31	20	1.1/4"	M 42 x 2	30	162,0	82,0	50	27.0 x 2.5
PA 532 AOS 90 A	31	20	1.1/4"	M 52 x 2	38	182,0	91,0	60	33.0 x 2.5

**Product versions:**

PA 500 AOS 90 VA - Swage fitting, DKOS angle 90°, Stainless steel

**PA 500 HS A****Swage fitting, CES**

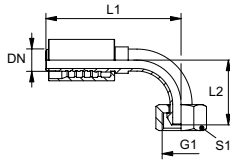
**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Short code:** CES  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Series	G1	for external pipe Ø mm	L1 mm	S1
PA 720 HS 16	19	12	3/4"	S	M 30 x 2	20	97,0	32
PA 720 HS	19	12	3/4"	S	M 36 x 2	25	99,0	41
PA 725 HS	25	16	1"	S	M 42 x 2	30	117,0	46
PA 532 HS A	31	20	1.1/4"	S	M 52 x 2	38	126,0	55

**Product versions:**

PA 500 HS VA - Swage fitting, CES

**PA 500 A 90 A****Swage fitting, DKM angle 90°**

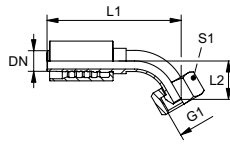
**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 60° sealing head  
**Short code:** DKM  
**Standard:** DIN 3863  
**Integration:** without pull-out protection  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

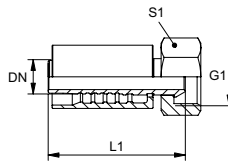
Identification	DN	Size	Inches	Working pressure bar	G1	L1 mm	L2 mm	S1
PA 532 A 90 A	31	20	1.1/4"	WP 63 bar	M 45 x 1.5	112,5	81,0	50
PA 540 A 90 A	38	24	1.1/2"	WP 63 bar	M 52 x 1.5	125,5	92,0	60
PA 550 A 90 A	51	32	2"	WP 40 bar	M 65 x 2	142,0	116,0	75

**PA 500 A 45 A****Swage fitting, DKM angle 45°**

<b>Application:</b>	Swage fitting for HD 500 hoses
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	60° sealing head
<b>Short code:</b>	DKM
<b>Standard:</b>	DIN 3863
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	DN	Size	Inches	Working pressure bar	G1	L1 mm	L2 mm	S1
PA 532 A 45 A	31	20	1.1/4"	WP 63 bar	M 45 x 1.5	112,5	41,7	50
PA 540 A 45 A	38	24	1.1/2"	WP 63 bar	M 52 x 1.5	125,5	43,1	60
PA 550 A 45 A	51	32	2"	WP 40 bar	M 65 x 2	142,0	51,6	75

**PA 500 A A****Swage fitting, DKM**

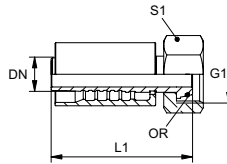
**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 60° sealing head  
**Short code:** DKM  
**Standard:** DIN 3863  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	Working pressure bar	G1	L1 mm	S1
PA 532 A A	31	20	1.1/4"	WP 63 bar	M 45 x 1.5	105,5	50
PA 540 A A	38	24	1.1/2"	WP 63 bar	M 52 x 1.5	118,5	60
PA 550 A A	51	32	2"	WP 40 bar	M 65 x 2	133,5	75

**PA 500 AOB A****Swage fitting, DKOR**

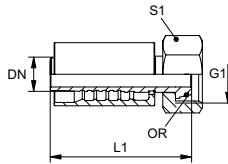
**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone with O-ring  
**Short code:** DKOR  
**Standard:** ISO 8434-6, BS 5200  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PA 720 AOB	19	12	3/4"	G 3/4" -14	88,0	32	17.1 x 1.6
PA 725 AOB	25	16	1"	G 1" -11	102,5	41	22.1 x 1.6
PA 532 AOB A	31	20	1.1/4"	G 1.1/4" -11	116,0	50	29.1 x 1.6
PA 540 AOB A	38	24	1.1/2"	G 1.1/2" -11	133,5	55	35.1 x 1.6
PA 550 AOB A	51	32	2"	G 2" -11	147,0	70	48.1 x 1.6

**Product versions:**

PA 500 AOB VA - Swage fitting, DKOR, Stainless steel

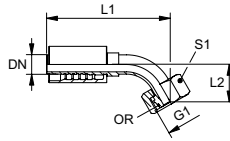
**PA 500 AOB A H****Swage fitting, DKOR**

**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone with O-ring  
**Short code:** DKOR  
**Standard:** ISO 8434-6, BS 5200  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Additional feature:** for breaker operation  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Reinforced design for extreme loads, e.g. use in hammers.

Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PA 720 AOB H	19	12	3/4"	G 3/4" -14	96,5	32	17.1 x 1.6
PA 725 AOB H	25	16	1"	G 1" -11	103,0	41	22.1 x 1.6
PA 532 AOB A H	31	20	1.1/4"	G 1.1/4" -11	114,0	50	29.1 x 1.6

**PA 500 AOB 45 A****Swage fitting, DKOR angle 45°**

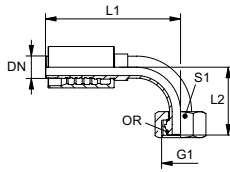
<b>Application:</b>	Swage fitting for HD 500 hoses
<b>Connection 1:</b>	BSP nut thread
<b>Sealing form 1:</b>	60° outer cone with O-ring
<b>Short code:</b>	DKOR
<b>Standard:</b>	ISO 8434-6, BS 5200
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 720 AOB 45	19	12	3/4"	G 3/4" -14	140,0	34,5	32	17.1 x 1.6
PA 725 AOB 45	25	16	1"	G 1" -11	169,5	39,0	41	22.1 x 1.6
PA 532 AOB 45 A	31	20	1.1/4"	G 1.1/4" -11	201,0	51,5	50	29.1 x 1.6
PA 540 AOB 45 A	38	24	1.1/2"	G 1.1/2" -11	235,0	60,0	60	35.1 x 1.6
PA 550 AOB 45 A	51	32	2"	G 2" -11	279,0	68,5	70	48.1 x 1.6

**Product versions:**

PA 500 AOB 45 VA - Swage fitting, DKOR angle 45°, Stainless steel

**PA 500 AOB 90 A****Swage fitting, DKOR angle 90°**

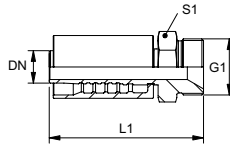
**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone with O-ring  
**Short code:** DKOR  
**Standard:** ISO 8434-6, BS 5200  
 with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

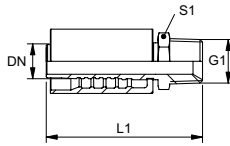
Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 720 AOB 90	19	12	3/4"	G 3/4" -14	127,5	68,2	32	17.1 x 1.6
PA 725 AOB 90	25	16	1"	G 1" -11	158,0	81,7	41	22.1 x 1.6
PA 532 AOB 90 A	31	20	1.1/4"	G 1.1/4" -11	182,0	106,5	50	29.1 x 1.6
PA 540 AOB 90 A	38	24	1.1/2"	G 1.1/2" -11	215,5	123,5	60	35.1 x 1.6
PA 550 AOB 90 A	51	32	2"	G 2" -11	250,5	146,0	70	48.1 x 1.6

**PA 500 HB A****Swage fitting, AGR**

**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Short code:** AGR  
**Standard:** ISO 8434-6, BS 5200  
 with pull-out protection (interlock)  
**Integration:**  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	S1
PA 720 HB	19	12	3/4"	G 3/4" -14	97,5	32
PA 725 HB	25	16	1"	G 1" -11	114,5	41
PA 532 HB A	31	20	1.1/4"	G 1.1/4" -11	125,5	50
PA 540 HB A	38	24	1.1/2"	G 1.1/2" -11	143,5	55
PA 550 HB A	51	32	2"	G 2" -11	162,0	70

**PA 500 HN A****Swage fitting, AGN****Application:****Connection 1:****Sealing form 1:****Short code:****Integration:****Included in scope****of supply:****Material:****Surface:**

Swage fitting for HD 500 hoses

NPT external threads

thread seal, additional 60° inner cone.

AGN  
with pull-out protection (interlock)

Swage nipple + swage ferrule

Steel

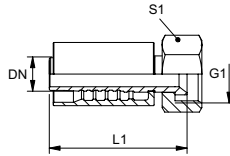
electro galvanised

Identification	DN	Size	Inches	G1	L1 mm	S1
PA 720 HN	19	12	3/4"	3/4" -14 NPT	98,0	27
PA 725 HN	25	16	1"	1" -11.5 NPT	116,0	36
PA 725 HN 32	25	16	1"	1.1/4" -11.5 NPT	118,0	46
PA 532 HN A	31	20	1.1/4"	1.1/4" -11.5 NPT	124,5	46
PA 540 HN A	38	24	1.1/2"	1.1/2" -11.5 NPT	139,5	50
PA 550 HN A	51	32	2"	2" -11.5 NPT	157,0	65

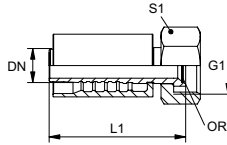
**Product versions:****PA 500 HN VA** - Swage fitting, AGN, Stainless steel

**PA 500 AJ A H****Swage fitting, DKJ**

**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone  
**Short code:** DKJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Additional feature:** for breaker operation  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Reinforced design for extreme loads, e.g. use in hammers.



Identification	DN	Size	Inches	G1	L1 mm	S1
PA 720 AJ H	19	12	3/4"	1.1/16" -12 UN	91,5	32
PA 725 AJ H	25	16	1"	1.5/16" -12 UN	98,2	41
PA 725 AJ 32 H	25	16	1"	1.5/8" -12 UN	111,0	50
PA 532 AJ AH	31	20	1.1/4"	1.5/8" -12 UN		

**PA 500 AOJ A****Swage fitting, DKOJ**

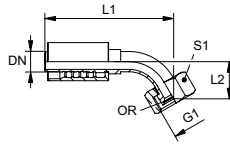
**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone with O-ring  
**Short code:** DKOJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

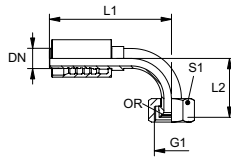
Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PA 720 AOJ	19	12	3/4"	1.1/16" -12 UN	90,0	32	19.00 x 1.50
PA 725 AOJ	25	16	1"	1.5/16" -12 UN	103,5	41	25.00 x 1.50
PA 532 AOJ A	31	20	1.1/4"	1.5/8" -12 UN	115,0	50	31.47 x 1.78
PA 540 AOJ A	38	24	1.1/2"	1.7/8" -12 UN	132,0	55	37.82 x 1.78
PA 550 AOJ A	51	32	2"	2.1/2" -12 UN	146,0	75	50.00 x 2.00

**PA 500 AOJ 45 A****Swage fitting, DKOJ angle 45°**

<b>Application:</b>	Swage fitting for HD 500 hoses
<b>Connection 1:</b>	UN/UNF nut threads
<b>Sealing form 1:</b>	74° inner cone with O-ring
<b>Short code:</b>	DKOJ
<b>Standard:</b>	ISO 8434-2
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 720 AOJ 45	19	12	3/4"	1.1/16" -12 UN	140,0	34,5	32	19.00 x 1.50
PA 725 AOJ 45	25	16	1"	1.5/16" -12 UN	169,5	39,0	41	25.00 x 1.50
PA 532 AOJ 45 A	31	20	1.1/4"	1.5/8" -12 UN	199,0	49,5	50	31.47 x 1.78
PA 540 AOJ 45 A	38	24	1.1/2"	1.7/8" -12 UN	233,0	58,0	55	37.82 x 1.78
PA 550 AOJ 45 A	51	32	2"	2.1/2" -12 UN	275,0	64,0	75	50.00 x 2.00

**PA 500 AOJ 90 A****Swage fitting, DKOJ angle 90°**

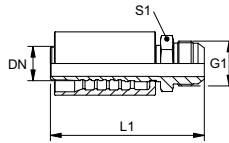
**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone with O-ring  
**Short code:** DKOJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 720 AOJ 90	19	12	3/4"	1.1/16" -12 UN	127,5	68,2	32	19.00 x 1.50
PA 725 AOJ 90	25	16	1"	1.5/16" -12 UN	158,0	81,7	41	25.00 x 1.50
PA 532 AOJ 90 A	31	20	1.1/4"	1.5/8" -12 UN	182,0	104,0	50	31.47 x 1.78
PA 540 AOJ 90 A	38	24	1.1/2"	1.7/8" -12 UN	215,5	120,5	55	37.82 x 1.78
PA 550 AOJ 90 A	51	32	2"	2.1/2" -12 UN	250,5	140,0	75	50.00 x 2.00

**PA 500 HJ A****Swage fitting, AGJ**

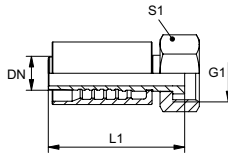
**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** UN/UNF external threads  
**Sealing form 1:** 74° outer cone  
**Short code:** AGJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	S1
PA 720 HJ	19	12	3/4"	1.1/16" -12 UN	102,5	27
PA 725 HJ	25	16	1"	1.5/16" -12 UN	117,0	36
PA 532 HJ A	31	20	1.1/4"	1.5/8" -12 UN	127,0	46
PA 532 HJ 40 A	31	20	1.1/4"	1.7/8" -12 UN		
PA 540 HJ A	38	24	1.1/2"	1.7/8" -12 UN	145,5	50
PA 540 HJ 50 A	38	24	1.1/2"	2.1/2" -12 UN		
PA 550 HJ A	51	32	2"	2.1/2" -12 UN	169,5	65

**Product versions:**

**PA 500 HJ VA** - Swage fitting, AGJ, Stainless steel

**PA 500 AJF A****Swage fitting, ORFS**

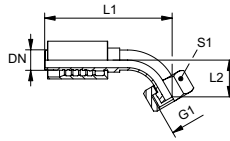
<b>Application:</b>	Swage fitting for HD 500 hoses
<b>Connection 1:</b>	UN/UNF nut threads
<b>Sealing form 1:</b>	flat sealing
<b>Short code:</b>	ORFS
<b>Standard:</b>	ISO 8434-3
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

2

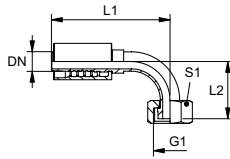
Identification	DN	Size	Inches	G1	L1 mm	S1
PA 720 AJF	19	12	3/4"	1.3/16" -12 UN	108,0	36
PA 720 AJF 25	19	12	3/4"	1.7/16" -12 UN	98,0	41
PA 725 AJF	25	16	1"	1.7/16" -12 UN	122,0	41
PA 532 AJF A	31	20	1.1/4"	1.11/16" -12 UN	129,0	50
PA 540 AJF A	38	24	1.1/2"	2" -12 UN	141,0	60

**PA 500 AJF 45 A****Swage fitting, ORFS angle 45°**

**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** flat sealing  
**Short code:** ORFS  
**Standard:** ISO 8434-3  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PA 720 AJF 45	19	12	3/4"	1.3/16" -12 UN	133,0	26,5	36
PA 725 AJF 45	25	16	1"	1.7/16" -12 UN	160,5	31,0	41
PA 532 AJF 45 A	31	20	1.1/4"	1.11/16" -12 UN	171,5	76,0	50
PA 540 AJF 45 A	38	24	1.1/2"	2" -12 UN	207,0	88,5	60

**PA 500 AJF 90 A****Swage fitting, ORFS angle 90°**

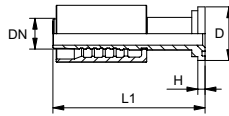
**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** flat sealing  
**Short code:** ORFS  
**Standard:** ISO 8434-3  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PA 720 AJF 90	19	12	3/4"	1.3/16" -12 UN	126,0	56,0	36
PA 725 AJF 90	25	16	1"	1.7/16" -12 UN	157,5	68,0	41
PA 532 AJF 90 A	31	20	1.1/4"	1.11/16" -12 UN	178,0	34,0	50
PA 540 AJF 90 A	38	24	1.1/2"	2" -12 UN	209,0	32,0	60

**PA 500 SF A****Swage fitting, SFL**

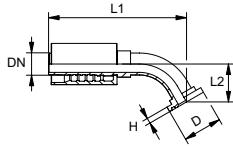
**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** SAE flange connection 3000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFL  
**Standard:** SAE J518, ISO 6162-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 720 SF	19	12	3/4"	3/4"	38,1	6,8	116,5
PA 720 SF 25	19	12	3/4"	1"	44,5	8,1	119,5
PA 725 SF 20	25	16	1"	3/4"	38,1	6,8	132,0
PA 725 SF	25	16	1"	1"	44,5	8,1	135,5
PA 725 SF 32	25	16	1"	1.1/4"	50,8	8,1	138,5
PA 532 SF 25 A	31	20	1.1/4"	1"	44,5	8,1	145,0
PA 532 SF A	31	20	1.1/4"	1.1/4"	50,8	8,1	148,5
PA 532 SF 40 A	31	20	1.1/4"	1.1/2"	60,3	8,1	151,5
PA 540 SF 32 A	38	24	1.1/2"	1.1/4"	50,8	8,1	158,0
PA 540 SF A	38	24	1.1/2"	1.1/2"	60,3	8,1	166,5
PA 540 SF 50 A	38	24	1.1/2"	2"	71,4	9,6	169,5
PA 550 SF A	51	32	2"	2"	71,4	9,6	183,5

**Product versions:**

PA 500 SF VA - Swage fitting, SFL, Stainless steel

**PA 500 SF 45 A****Swage fitting, SFL angle 45°**

**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** SAE flange connection 3000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFL  
**Standard:** SAE J518, ISO 6162-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

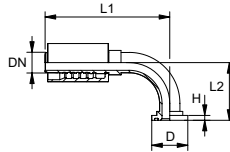
Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 720 SF 45	19	12	3/4"	3/4"	38,1	6,8	132,5	27,5
PA 720 SF 25 45	19	12	3/4"	1"	44,5	8,1	134,5	29,5
PA 725 SF 20 45	25	16	1"	3/4"	38,1	6,8	153,0	30,0
PA 725 SF 45	25	16	1"	1"	44,5	8,1	159,0	28,5
PA 725 SF 32 45	25	16	1"	1.1/4"	50,8	8,1	161,0	30,5
PA 532 SF 25 45 A	31	20	1.1/4"	1"	44,5	8,0	170,5	35,0
PA 532 SF 45 A	31	20	1.1/4"	1.1/4"	50,8	8,0	182,0	34,5
PA 532 SF 40 45 A	31	20	1.1/4"	1.1/2"	60,3	8,0	187,0	37,5
PA 540 SF 32 45 A	38	24	1.1/2"	1.1/4"	50,8	8,0	202,5	43,0
PA 540 SF 45 A	38	24	1.1/2"	1.1/2"	60,3	8,0	215,0	41,5
PA 540 SF 50 45 A	38	24	1.1/2"	2"	71,4	9,5	230,5	55,5
PA 550 SF 45 A	51	32	2"	2"	71,4	9,5	263,0	58,5

**Product versions:**

PA 500 SF 45 VA - Swage fitting, SFL angle 45°, Stainless steel

**PA 500 SF 90 A****Swage fitting, SFL angle 90°**

**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** SAE flange connection 3000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFL  
**Standard:** SAE J518, ISO 6162-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

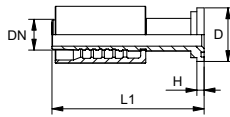


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Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 720 SF 90	19	12	3/4"	3/4"	38,1	6,8	127,5	58,0
PA 720 SF 25 90	19	12	3/4"	1"	44,5	8,1	127,5	61,0
PA 725 SF 20 90	25	16	1"	3/4"	38,1	6,8	144,0	64,5
PA 725 SF 90	25	16	1"	1"	44,5	8,1	158,0	67,0
PA 725 SF 32 90	25	16	1"	1.1/4"	50,8	8,1	158,0	69,5
PA 532 SF 25 90 A	31	20	1.1/4"	1"	44,5	8,0	162,0	76,0
PA 532 SF 90 A	31	20	1.1/4"	1.1/4"	50,8	8,0	181,0	79,5
PA 532 SF 40 90 A	31	20	1.1/4"	1.1/2"	60,3	8,0	182,0	86,7
PA 540 SF 32 90 A	38	24	1.1/2"	1.1/4"	50,8	8,0	193,0	94,0
PA 540 SF 90 A	38	24	1.1/2"	1.1/2"	60,3	8,0	211,0	99,0
PA 540 SF 50 90 A	38	24	1.1/2"	2"	71,4	9,5	218,0	100,0
PA 550 SF 90 A	51	32	2"	2"	71,4	9,5	250,0	112,5

**Product versions:**

PA 500 SF 90 VA - Swage fitting, SFL angle 90°, Stainless steel

**PA 500 SF6 A****Swage fitting, SFS**

**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
 with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

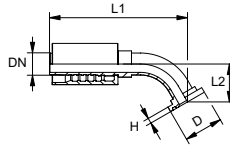
Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 720 SF6	19	12	3/4"	3/4"	41,3	8,8	124,5
PA 720 SF6 25	19	12	3/4"	1"	47,6	9,6	129,0
PA 725 SF6 20	25	16	1"	3/4"	41,3	8,8	134,0
PA 725 SF6	25	16	1"	1"	47,6	9,6	146,5
PA 725 SF6 32	25	16	1"	1.1/4"	54,0	10,4	151,0
PA 532 SF6 25 A	31	20	1.1/4"	1"	47,6	9,6	149,0
PA 532 SF6 A	31	20	1.1/4"	1.1/4"	54,0	10,4	162,5
PA 532 SF6 40 A	31	20	1.1/4"	1.1/2"	63,5	12,7	167,0
PA 540 SF6 32 A	38	24	1.1/2"	1.1/4"	54,0	10,4	162,0
PA 540 SF6 A	38	24	1.1/2"	1.1/2"	63,5	12,7	183,5
PA 540 SF6 50 A	38	24	1.1/2"	2"	79,4	12,7	188,0
PA 550 SF6 A	51	32	2"	2"	79,4	12,7	202,0

**Product versions:**

**PA 500 SF6 VA** - Swage fitting, SFS, Stainless steel

**PA 500 SF6 45 A****Swage fitting, SFS angle 45°**

**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



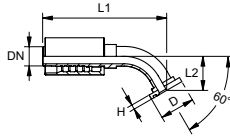
Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 720 SF6 45	19	12	3/4"	3/4"	41,3	8,8	135,5	30,0
PA 720 SF6 25 45	19	12	3/4"	1"	47,6	9,6	139,5	34,5
PA 725 SF6 45	25	16	1"	1"	47,6	9,6	164,0	33,5
PA 725 SF6 32 45	25	16	1"	1.1/4"	54,0	10,4	169,0	38,5
PA 532 SF6 25 45 A	31	20	1.1/4"	1"	47,6	9,5		
PA 532 SF6 45 A	31	20	1.1/4"	1.1/4"	54,0	10,3	191,0	41,5
PA 532 SF6 40 45 A	31	20	1.1/4"	1.1/2"	63,5	12,6	197,0	47,5
PA 540 SF6 45 A	38	24	1.1/2"	1.1/2"	63,5	12,6	222,5	49,0
PA 540 SF6 32 45 A	38	24	1.1/2"	1.1/4"	54,0	10,3		
PA 540 SF6 50 45 A	38	24	1.1/2"	2"	79,4	12,6	236,0	61,0
PA 550 SF6 45 A	51	32	2"	2"	79,4	12,6	275,0	64,5

**Product versions:**

PA 500 SF6 45 VA - Swage fitting, SFS angle 45°, Stainless steel

## PA 700 SF6 60

### Swage fitting, SFS angle 60°



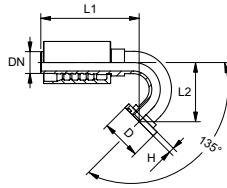
**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	Flange size	D mm	H mm
PA 725 SF6 60	25	16	1"	1"	47,6	9,5

**PA 700 SF6 135****Swage fitting, SFS angle 135°**

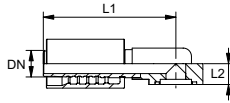
**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 725 SF6 135	25	16	1"	1"	47,6	9,5	170,0	100,0

## PA 500 SF6 90 4 K A

### Swage fitting, SFS angle 90°



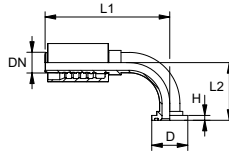
**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	Flange size
PA 720 SF6 90 4 K	19	12	3/4"	-
PA 725 SF6 90 4 K	25	16	1"	-

**PA 500 SF6 90 A****Swage fitting, SFS angle 90°**

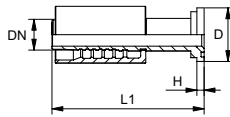
**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 720 SF6 90	19	12	3/4"	3/4"	41,3	8,8	127,5	62,0
PA 720 SF6 25 90	19	12	3/4"	1"	47,6	9,6	127,5	68,0
PA 725 SF6 20 90	25	16	1"	3/4"	41,3	8,8	152,5	70,5
PA 725 SF6 90	25	16	1"	1"	47,6	9,6	158,0	74,0
PA 532 SF6 25 90 A	31	20	1.1/4"	1"	47,6	9,5	162,0	80,0
PA 532 SF6 90 A	31	20	1.1/4"	1.1/4"	54,0	10,3	182,0	92,7
PA 532 SF6 40 90 A	31	20	1.1/4"	1.1/2"	63,5	12,6	182,0	101,2
PA 540 SF6 32 90 A	38	24	1.1/2"	1.1/4"	54,0	10,3	193,0	100,0
PA 540 SF6 90 A	38	24	1.1/2"	1.1/2"	63,5	12,6	215,5	110,0
PA 540 SF6 50 90 A	38	24	1.1/2"	2"	79,4	12,6	215,5	126,0
PA 550 SF6 90 A	51	32	2"	2"	79,4	12,6	250,5	141,0

**Product versions:**

**PA 500 SF6 90 VA** - Swage fitting, SFS angle 90°, Stainless steel

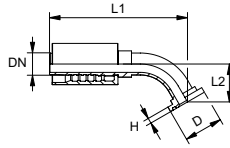
**PA 500 SF9 A****Swage fitting, SFS-CAT**

**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS-CAT  
**suitable for:** Caterpillar  
 with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

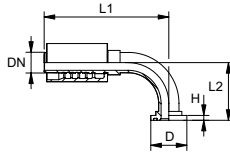
Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 720 SF9	19	12	3/4"	3/4"	41,3	14,3	130,0
PA 720 SF9 25	19	12	3/4"	1"	47,6	14,6	133,5
PA 725 SF9 20	25	16	1"	3/4"	41,3	14,6	137,0
PA 725 SF9	25	16	1"	1"	47,6	14,6	150,0
PA 725 SF9 32	25	16	1"	1.1/4"	54,0	14,6	155,0
PA 532 SF9 25 A	31	20	1.1/4"	1"	47,6	14,6	150,0
PA 532 SF9 A	31	20	1.1/4"	1.1/4"	54,0	14,6	166,5
PA 532 SF9 40 A	31	20	1.1/4"	1.1/4"	63,5	14,6	168,5
PA 540 SF9 32 A	38	24	1.1/2"	1.1/4"	54,0	14,6	163,0
PA 540 SF9 A	38	24	1.1/2"	1.1/2"	63,5	14,6	185,0

**PA 500 SF9 45 A****Swage fitting, SFS-CAT angle 45°**

**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS-CAT  
**suitable for:** Caterpillar  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 720 SF9 45	19	12	3/4"	3/4"	41,3	14,2	139,0	34,0
PA 720 SF9 25 45	19	12	3/4"	1"	47,6	14,2	143,0	37,5
PA 725 SF9 20 45	25	16	1"	3/4"	41,3	14,2	157,0	35,0
PA 725 SF9 45	25	16	1"	1"	47,6	14,2	167,0	36,5
PA 725 SF9 32 45	25	16	1"	1.1/4"	54,0	14,2	172,0	41,5
PA 532 SF9 25 45 A	31	20	1.1/4"	1"	47,6	14,0	174,0	39,5
PA 532 SF9 45 A	31	20	1.1/4"	1.1/4"	54,0	14,0	194,0	44,5
PA 532 SF9 40 45 A	31	20	1.1/4"	1.1/2"	63,5	14,0	198,0	48,5
PA 540 SF9 32 45 A	38	24	1.1/2"	1.1/4"	54,0	14,0	205,5	47,0
PA 540 SF9 45 A	38	24	1.1/2"	1.1/2"	63,5	14,0	226,0	51,0

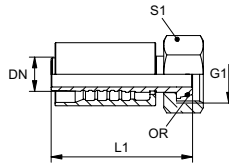
**PA 500 SF9 90 A****Swage fitting, SFS-CAT angle 90°**

**Application:** Swage fitting for HD 500 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS-CAT  
**suitable for:** Caterpillar  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 720 SF9 90	19	12	3/4"	3/4"	41,3	14,2	127,5	67,5
PA 720 SF9 25 90	19	12	3/4"	1"	47,6	14,2	127,5	72,5
PA 725 SF9 20 90	25	16	1"	3/4"	41,3	14,2	144,0	83,5
PA 725 SF9 90	25	16	1"	1"	47,6	14,2	158,0	78,5
PA 725 SF9 32 90	25	16	1"	1.1/4"	54,0	14,2	158,0	85,0
PA 532 SF9 25 90 A	31	20	1.1/4"	1"	47,6	14,0	161,0	82,0
PA 532 SF9 90 A	31	20	1.1/4"	1.1/4"	54,0	14,0	182,0	97,0
PA 532 SF9 40 90 A	31	20	1.1/4"	1.1/2"	63,5	14,0	182,0	103,0
PA 540 SF9 32 90 A	38	24	1.1/2"	1.1/4"	54,0	14,0	192,0	100,0
PA 540 SF9 90 A	38	24	1.1/2"	1.1/2"	63,5	14,0	215,5	112,0

**PA 600 AOB****Swage fitting, DKOR**

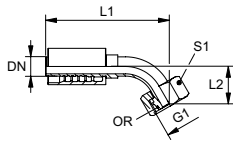
**Application:** Swage fitting for HD 600 hoses  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone with O-ring  
**Short code:** DKOR  
**Standard:** ISO 8434-6, BS 5200  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PA 650 AOB	51	32	2"	G 2"-11	163,0	70	48.1 x 1.6

**Product versions:**

PA 600 AOB VA - Swage fitting, DKOR, Stainless steel

**PA 600 AOB 45****Swage fitting, DKOR angle 45°**

<b>Application:</b>	Swage fitting for HD 600 hoses
<b>Connection 1:</b>	BSP nut thread
<b>Sealing form 1:</b>	60° outer cone with O-ring
<b>Short code:</b>	DKOR
<b>Standard:</b>	ISO 8434-6, BS 5200
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

2

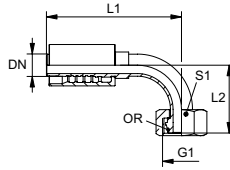
Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 650 AOB 45	51	32	2"	G 2" -11	279,0	68,5	70	48.1 x 1.6

**Product versions:**

PA 600 AOB 45 VA - Swage fitting, DKOR angle 45°, Stainless steel

**PA 600 AOB 90****Swage fitting, DKOR angle 90°**

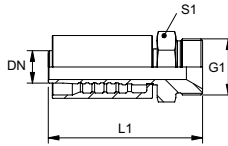
<b>Application:</b>	Swage fitting for HD 600 hoses
<b>Connection 1:</b>	BSP nut thread
<b>Sealing form 1:</b>	60° outer cone with O-ring
<b>Short code:</b>	DKOR
<b>Standard:</b>	ISO 8434-6, BS 5200
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 650 AOB 90	51	32	2"	G 2" -11	250,0	146,0	70	48.1 x 1.6

**Product versions:**

PA 600 AOB 90 VA - Swage fitting, DKOR angle 90°, Stainless steel

**PA 600 HB****Swage fitting, AGR**

**Application:** Swage fitting for HD 600 hoses  
**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Short code:** AGR  
**Standard:** ISO 8434-6, BS 5200  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

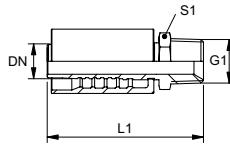
Identification	DN	Size	Inches	G1	L1 mm	S1
PA 650 HB	51	32	2"	G 2" -11	143,5	55

**Product versions:**

PA 600 HB VA - Swage fitting, AGR, Stainless steel

**PA 600 HN****Swage fitting, AGN**

**Application:** Swage fitting for HD 600 hoses  
**Connection 1:** NPT external threads  
**Sealing form 1:** thread seal, additional 60° inner cone.  
**Short code:** AGN  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



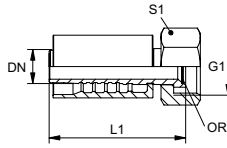
Identification	DN	Size	Inches	G1	L1 mm	S1
PA 650 HN	51	32	2"	2" -11.5 NPT	157,0	65

**Product versions:**

PA 600 HN VA - Swage fitting, AGN, Stainless steel

## PA 600 AOJ

### Swage fitting, DKOJ



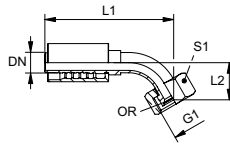
**Application:** Swage fitting for HD 600 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone with O-ring  
**Short code:** DKOJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PA 650 AOJ	51	32	2"	2.1/2" -12 UN	170,0	75	50.0 x 2.0

**PA 600 AOJ 45****Swage fitting, DKOJ angle 45°**

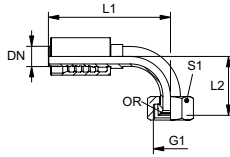
**Application:** Swage fitting for HD 600 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone with O-ring  
**Short code:** DKOJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 650 AOJ 45	51	32	2"	2.1/2"-12 UN	275,0	64,0	75	50.0 x 2.0

## PA 600 AOJ 90

### Swage fitting, DKOJ angle 90°



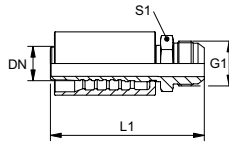
**Application:** Swage fitting for HD 600 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone with O-ring  
**Short code:** DKOJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 650 AOJ 90	51	32	2"	2.1/2" -12 UN	250,5	140,0	75	50.0 x 2.0

**PA 600 HJ****Swage fitting, AGJ**

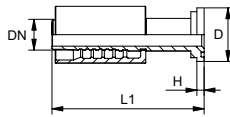
**Application:** Swage fitting for HD 600 hoses  
**Connection 1:** UN/UNF external threads  
**Sealing form 1:** 74° outer cone  
**Short code:** AGJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	S1
PA 650 HJ	51	32	2"	2.1/2" -12 UN	169,0	65

**Product versions:**

PA 600 HJ VA - Swage fitting, AGJ, Stainless steel

**PA 600 SF****Swage fitting, SFL**

**Application:** Swage fitting for HD 600 hoses  
**Connection 1:** SAE flange connection 3000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFL  
**Standard:** SAE J518, ISO 6162-1  
 with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

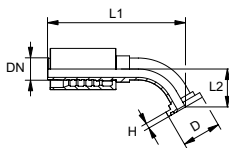
Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 650 SF	51	32	2"	2"	71,4	9,6	183,5

**Product versions:**

PA 600 SF VA - Swage fitting, SFL, Stainless steel

**PA 600 SF 45****Swage fitting, SFL angle 45°**

**Application:** Swage fitting for HD 600 hoses  
**Connection 1:** SAE flange connection 3000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFL  
**Standard:** SAE J518, ISO 6162-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 650 SF 45	51	32	2"	2"	71,4	9,6	261,5	58,5

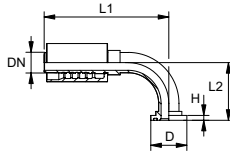
**Product versions:**

PA 600 SF 45 VA - Swage fitting, SFL angle 45°, Stainless steel

2

## PA 600 SF 90

### Swage fitting, SFL angle 90°



**Application:** Swage fitting for HD 600 hoses  
**Connection 1:** SAE flange connection 3000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFL  
**Standard:** SAE J518, ISO 6162-1 with pull-out protection (interlock)  
**Integration:**  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

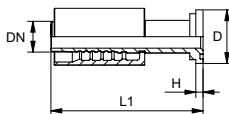
Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 650 SF 90	51	32	2"	2"	71,4	9,6	248,5	122,5

**Product versions:**

PA 600 SF 90 VA - Swage fitting, SFL angle 90°, Stainless steel

**PA 600 SF6****Swage fitting, SFS**

**Application:** Swage fitting for HD 600 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

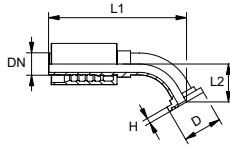


Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 650 SF6	51	32	2"	2"	79,4	12,7	202,0

**Product versions:**

PA 600 SF6 VA - Swage fitting, SFS, Stainless steel

2

**PA 600 SF6 45****Swage fitting, SFS angle 45°**

<b>Application:</b>	Swage fitting for HD 600 hoses
<b>Connection 1:</b>	SAE flange connection 6000 PSI
<b>Sealing form 1:</b>	flat seal with SF O-ring
<b>Short code:</b>	SFS
<b>Standard:</b>	SAE J518, ISO 6162-2
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

2

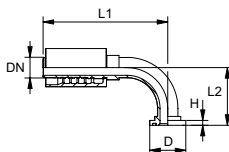
Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 650 SF6 45	51	32	2"	2"	79,4	12,6	275,0	64,5

**Product versions:**

PA 600 SF6 45 VA - Swage fitting, SFS angle 45°, Stainless steel

**PA 600 SF6 90****Swage fitting, SFS angle 90°**

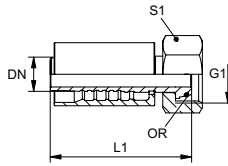
**Application:** Swage fitting for HD 600 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 650 SF6 90	51	32	2"	2"	79,4	12,6	250,0	141,0

**Product versions:**

PA 600 SF6 90 VA - Swage fitting, SFS angle 90°, Stainless steel

**PA 700 AOL****Swage fitting, DKOL**

**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOL  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

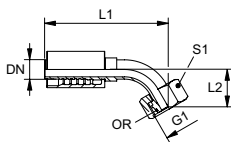
Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PA 710 AOL	10	6	3/8"	M 18 x 1.5	12	69,3	22	9.0 x 1.5
PA 713 AOL	12	8	1/2"	M 22 x 1.5	15	70,8	27	12.0 x 2.0
PA 716 AOL	16	10	5/8"	M 26 x 1.5	18	88,2	32	15.0 x 2.0
PA 716 AOL 20	16	10	5/8"	M 30 x 2	22	86,0	36	20.0 x 2.0

**Product versions:**

PA 700 AOL VA - Swage fitting, DKOL, Stainless steel

**PA 700 AOL 45****Swage fitting, DKOL angle 45°**

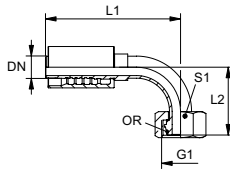
**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOL  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PA 710 AOL 45	10	6	3/8"	M 18 x 1.5	12	82,5	19,5	22	10.5 x 1.5
PA 713 AOL 45	12	8	1/2"	M 22 x 1.5	15	93,5	21,0	27	12.0 x 2.0
PA 716 AOL 45	16	10	5/8"	M 26 x 1.5	18	115,0	26,5	32	15.0 x 2.0

**Product versions:**

**PA 700 AOL 45 VA** - Swage fitting, DKOL angle 45°, Stainless steel

**PA 700 AOL 90****Swage fitting, DKOL angle 90°**

<b>Application:</b>	Swage fitting for HD 700 hoses
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	24° outer cone with O-ring
<b>Short code:</b>	DKOL
<b>Standard:</b>	ISO 8434-1
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

2

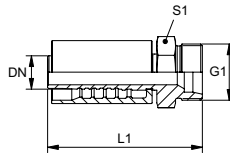
Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PA 710 AOL 90	10	6	3/8"	M 18 x 1.5	12	77,5	37,0	22	10.5 x 1.5
PA 713 AOL 90	12	8	1/2"	M 22 x 1.5	15	85,5	42,0	27	12.0 x 2.0
PA 716 AOL 90	16	10	5/8"	M 26 x 1.5	18	106,5	52,5	32	15.0 x 2.0

**Product versions:**

**PA 700 AOL 90 VA** - Swage fitting, DKOL angle 90°, Stainless steel

**PA 700 HL****Swage fitting, CEL**

**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Short code:** CEL / CES  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



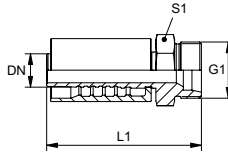
Identification	DN	Size	Inches	Series	G1	for external pipe Ø mm
PA 710 HL	10	6	3/8"	L	M 18 x 1.5	12
PA 713 HL	12	8	1/2"	L	M 22 x 1.5	15
PA 716 HL	16	10	5/8"	L	M 26 x 1.5	18

**Product versions:**

**PA 700 HS VA** - Swage fitting, CES, Stainless steel

## PA 700 HL KO

### Swage fitting, CEL



**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**suitable for:** Kobelco  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

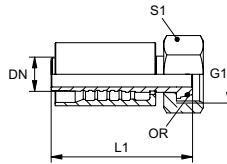
2

Identification	DN	Size	Inches	Series	G1	for external pipe Ø mm	S1
PA 725 HL KO	25	16	1"	L	M 36 x 1.5	28	36
PA 725 HL KO 32	25	16	1"	L	M 45 x 1.5	35	46

## PA 700 AOS

## Swage fitting, DKOS

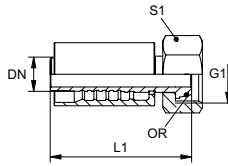
**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOS  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	for external pipe Ø mm	S1	L1 mm	OR
PA 710 AOS 08	10	6	3/8"	M 20 x 1.5		24		10.0 x 1.5
PA 710 AOS	10	6	3/8"	M 22 x 1.5	14	27	67,6	12.0 x 2.0
PA 713 AOS	12	8	1/2"	M 24 x 1.5	16	30	72,8	13.0 x 2.0
PA 713 AOS 16	12	8	1/2"	M 30 x 2	20	36	75,8	17.5 x 2.5
PA 716 AOS 13	16	10	5/8"	M 24 x 1.5	16	30	83,5	13.0 x 2.0
PA 716 AOS	16	10	5/8"	M 30 x 2	20	36	86,0	17.5 x 2.5
PA 716 AOS 20	16	10	5/8"	M 36 x 2	25	46	89,0	20.0 x 2.5
PA 720 AOS 16	19	12	3/4"	M 30 x 2	20	36	96,0	16.0 x 2.5
PA 720 AOS	19	12	3/4"	M 36 x 2	25	46	99,0	20.0 x 2.5
PA 720 AOS SW41	19	12	3/4"	M 36 x 2	25	41	99,0	20.0 x 2.5
PA 720 AOS 25	19	12	3/4"	M 42 x 2	30	50	100,0	25.0 x 2.5
PA 725 AOS 20	25	16	1"	M 36 x 2	25	46	112,0	20.0 x 2.5
PA 725 AOS	25	16	1"	M 42 x 2	30	50	113,0	25.0 x 2.5
PA 725 AOS 32	25	16	1"	M 52 x 2	38	60	131,0	33.0 x 2.5
PA 732 AOS 25 S	31	20	1.1/4"	M 42 x 2	30	50	151,0	27.0 x 2.5
PA 732 AOS S	31	20	1.1/4"	M 52 x 2	38	60	112,5	33.0 x 2.5
PA 740 AOS 32	38	24	1.1/2"	M 52 x 2	38	60	136,5	33.0 x 2.5

**Product versions:**

PA 700 AOS VA - Swage fitting, DKOS, Stainless steel

**PA 700 AOS H****Swage fitting, DKOS**

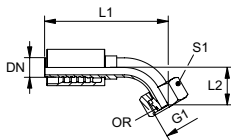
**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOS  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Additional feature:** for breaker operation  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Reinforced design for extreme loads, e.g. use in hammers.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PA 720 AOS H	19	12	3/4"	M 36 x 2	25	104,0	46	20.0 x 2.5
PA 725 AOS H	25	16	1"	M 42 x 2	30	111,0	50	25.0 x 2.5
PA 732 AOS SH	31	20	1.1/4"	M 52 x 2	38	114,0	60	33.0 x 2.5

## PA 700 AOS 45

## Swage fitting, DKOS angle 45°

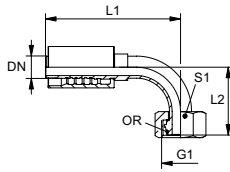
<b>Application:</b>	Swage fitting for HD 700 hoses
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	24° outer cone with O-ring
<b>Short code:</b>	DKOS
<b>Standard:</b>	ISO 8434-1
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	L2 mm	OR
PA 710 AOS 08 45	10	6	3/8"	M 20 x 1.5	12		24		10.0 x 1.5
PA 710 AOS 45	10	6	3/8"	M 22 x 1.5	14	94,2	27		12.0 x 2.0
PA 713 AOS 45	12	8	1/2"	M 24 x 1.5	16	95,0	30	21,5	13.0 x 2.0
PA 713 AOS 16 45	12	8	1/2"	M 30 x 2	20	108,0	36	27,0	17.5 x 2.5
PA 716 AOS 45	16	10	3/8"	M 30 x 2	20	118,0	36	27,0	17.5 x 2.5
PA 720 AOS 16 45	19	12	3/4"	M 30 x 2	20	133,0	36	27,0	16.0 x 2.5
PA 720 AOS 45 SW41	19	12	3/4"	M 36 x 2	25	136,0	41	30,0	20.0 x 2.5
PA 720 AOS 45	19	12	3/4"	M 36 x 2	25	136,0	46	30,0	20.0 x 2.5
PA 720 AOS 25 45	19	12	3/4"	M 42 x 2	30	142,0	50	35,0	27.0 x 2.5
PA 725 AOS 20 45	25	16	1"	M 36 x 2	25	156,5	41	34,5	20.0 x 2.5
PA 725 AOS 45	25	16	1"	M 42 x 2	30	164,0	50	34,5	25.0 x 2.5
PA 725 AOS 32 45	25	16	1"	M 52 x 2	38	170,0	60	41,0	33.0 x 2.5
PA 732 AOS 25 45 S	31	20	1.1/4"	M 42 x 2	30	175,0	50	39,5	27.0 x 2.5
PA 732 AOS 45 S	31	20	1.1/4"	M 52 x 2	38	200,0	60	43,0	33.0 x 2.5

**Product versions:**

PA 700 AOS 45 VA - Swage fitting, DKOS angle 45°, Stainless steel

**PA 700 AOS 90****Swage fitting, DKOS angle 90°**

**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOS  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	L2 mm	OR
PA 710 AOS 08 90	10	6	3/8"	M 20 x 1.5	12		24		10.0 x 1.5
PA 710 AOS 90	10	6	3/8"	M 22 x 1.5	14	71,7	27		12.0 x 2.0
PA 713 AOS 90	12	8	1/2"	M 24 x 1.5	16	87,0	30	45,0	13.0 x 2.0
PA 713 AOS 16 90	12	8	1/2"	M 30 x 2	20	86,5	36	49,5	17.5 x 2.5
PA 716 AOS 90	16	10	3/8"	M 30 x 2	20	106,5	36	49,5	17.5 x 2.5
PA 720 AOS 16 90	19	12	3/4"	M 30 x 2	20	125,5	36	57,5	17.5 x 2.5
PA 720 AOS 90	19	12	3/4"	M 36 x 2	25	125,5	46	62,0	20.0 x 2.5
PA 720 AOS 90 SW41	19	12	3/4"	M 36 x 2	25	125,5	41	62,0	20.0 x 2.5
PA 720 AOS 25 90	19	12	3/4"	M 42 x 2	30	129,0	50	71,5	25.0 x 2.5
PA 725 AOS 20 90	25	16	1"	M 36 x 2	25	144,0	46	71,0	20.0 x 2.5
PA 725 AOS 90	25	16	1"	M 42 x 2	30	157,5	50	72,5	25.0 x 2.5
PA 725 AOS 32 90	25	16	1"	M 52 x 2	38	154,5	60	84,5	33.0 x 2.5
PA 732 AOS 25 90 S	31	20	1.1/4"	M 42 x 2	30	162,0	50	82,0	27.0 x 2.5
PA 732 AOS 90 S	31	20	1.1/4"	M 52 x 2	38	235,0	60	95,0	33.0 x 2.5

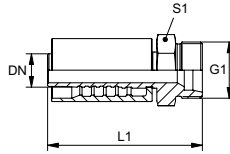
**Product versions:**

PA 700 AOS 90 VA - Swage fitting, DKOS angle 90°, Stainless steel

## PA 700 HS

## Swage fitting, CES

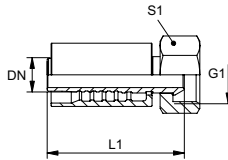
**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Short code:** CEL / CES  
**Standard:** ISO 8434-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Series	G1	for external pipe Ø mm	L1 mm	S1
PA 710 HS 08	10	6	3/8"	S	M 20 x 1.5	12	67,8	22
PA 710 HS	10	6	3/8"	S	M 22 x 1.5	14	69,7	22
PA 713 HS	12	8	1/2"	S	M 24 x 1.5	16	75,0	24
PA 713 HS 16	12	8	1/2"	S	M 30 x 2	20		
PA 716 HS	16	10	5/8"	S	M 30 x 2	20	90,5	30
PA 720 HS 16	19	12	3/4"	S	M 30 x 2	20	97,0	32
PA 720 HS	19	12	3/4"	S	M 36 x 2	25	99,0	41
PA 725 HS	25	16	1"	S	M 42 x 2	30	117,0	46
PA 732 HS S	31	20	1.1/4"	S	M 52 x 2	38	123,0	55

**Product versions:**

PA 700 HS VA - Swage fitting, CES, Stainless steel

**PA 700 AB****Swage fitting, DKR**

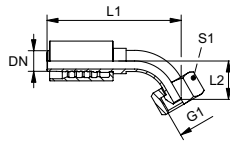
**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone  
**Short code:** DKR  
**Standard:** ISO 8434-6, BS 5200  
 with pull-out protection (interlock)  
**Integration:**  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	G1	S1
PA 716 AB 13	16	10	5/8"	G 1/2" -14	27
PA 716 AB	16	10	5/8"	G 5/8" -14	30
PA 716 AB 20	16	10	5/8"	G 3/4" -14	32

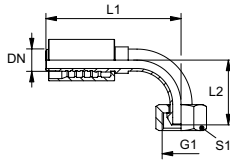
**PA 700 AB 45****Swage fitting, DKR angle 45°**

<b>Application:</b>	Swage fitting for HD 700 hoses
<b>Connection 1:</b>	BSP nut thread
<b>Sealing form 1:</b>	60° outer cone
<b>Short code:</b>	DKR
<b>Standard:</b>	ISO 8434-6, BS 5200
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



2

Identification	DN	Size	Inches	G1	S1
PA 716 AB 45	16	10	5/8"	G 5/8" -14	30
PA 716 AB 20 45	16	10	5/8"	G 3/4" -14	32

**PA 700 AB 90****Swage fitting, DKR angle 90°**

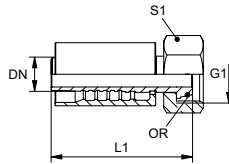
**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone  
**Short code:** DKR  
**Standard:** ISO 8434-6, BS 5200  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	SW mm	S1
PA 716 AB 90	16	10	5/8"	G 5/8" -14	115,0	50,0	50	30
PA 716 AB 20 90	16	10	5/8"	G 3/4" -14	115,0	54,0		32

**PA 700 AOB****Swage fitting, DKOR**

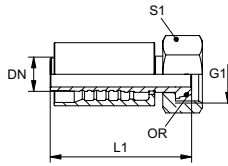
**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone with O-ring  
**Short code:** DKOR  
**Standard:** ISO 8434-6, BS 5200  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PA 713 AOB	12	8	1/2"	G 1/2" -14	69,3	27	12.1 x 1.6
PA 720 AOB	19	12	3/4"	G 3/4" -14	88,0	32	17.1 x 1.6
PA 725 AOB	25	16	1"	G 1" -11	102,5	41	22.1 x 1.6
PA 732 AOB	31	20	1.1/4"	G 1.1/4" -11	116,0	50	29.1 x 1.6
PA 740 AOB	38	24	1.1/2"	G 1.1/2" -11	133,5	55	35.1 x 1.6
PA 740 AOB 50	38	24	1.1/2"	G 2" -11	143,2	70	48.1 x 1.6

**Product versions:**

**PA 700 AOB VA** - Swage fitting, DKOR, Stainless steel

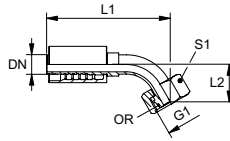
**PA 700 AOB H****Swage fitting, DKOR**

**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone with O-ring  
**Short code:** DKOR  
**Standard:** ISO 8434-6, BS 5200  
 with pull-out protection (interlock)  
**Integration:**  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Additional feature:** for breaker operation  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Reinforced design for extreme loads, e.g. use in hammers.

Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PA 720 AOB H	19	12	3/4"	G 3/4" -14	96,5	32	17.1 x 1.6
PA 725 AOB H	25	16	1"	G 1" -11	103,0	41	22.1 x 1.6

**PA 700 AOB 45****Swage fitting, DKOR angle 45°**

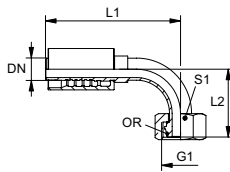
<b>Application:</b>	Swage fitting for HD 700 hoses
<b>Connection 1:</b>	BSP nut thread
<b>Sealing form 1:</b>	60° outer cone with O-ring
<b>Short code:</b>	DKOR
<b>Standard:</b>	ISO 8434-6, BS 5200
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 713 AOB 45	12	8	1/2"	G 1/2" -14	91,5	20,0	27	12.1 x 1.6
PA 720 AOB 45	19	12	3/4"	G 3/4" -14	140,0	34,5	32	17.1 x 1.6
PA 725 AOB 45	25	16	1"	G 1" -11	169,5	39,0	41	22.1 x 1.6
PA 732 AOB 45	31	20	1.1/4"	G 1.1/4" -11	201,0	51,5	50	29.1 x 1.6
PA 740 AOB 45	38	24	1.1/2"	G 1.1/2" -11	235,0	60,0	60	35.1 x 1.6

**Product versions:**

PA 700 AOB 45 VA - Swage fitting, DKOR angle 45°, Stainless steel

**PA 700 AOB 90****Swage fitting, DKOR angle 90°**

**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone with O-ring  
**Short code:** DKOR  
**Standard:** ISO 8434-6, BS 5200  
 with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

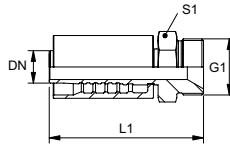
Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 713 AOB 90	12	8	1/2"	G 1/2" -14	87,0	40,5	27	12.1 x 1.6
PA 720 AOB 90	19	12	3/4"	G 3/4" -14	127,5	68,2	32	17.1 x 1.6
PA 725 AOB 90	25	16	1"	G 1" -11	158,0	81,7	41	22.1 x 1.6
PA 732 AOB 90	31	20	1.1/4"	G 1.1/4" -11	182,0	106,5	50	29.1 x 1.6
PA 740 AOB 90	38	24	1.1/2"	G 1.1/2" -11	215,5	123,5	60	35.1 x 1.6

**Product versions:**

**PA 700 AOB 90 VA** - Swage fitting, DKOR angle 90°, Stainless steel

**PA 700 HB****Swage fitting, AGR**

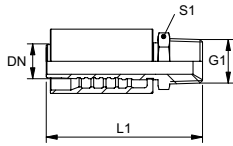
**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Short code:** AGR  
**Standard:** ISO 8434-6, BS 5200  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	S1
PA 713 HB	12	8	1/2"	G 1/2" -14	79,3	27
PA 716 HB	16	10	5/8"	G 5/8" -14	92,8	30
PA 720 HB	19	12	3/4"	G 3/4" -14	97,5	32
PA 725 HB	25	16	1"	G 1" -11	114,5	41
PA 732 HB	31	20	1.1/4"	G 1.1/4" -11	125,5	50
PA 740 HB	38	24	1.1/2"	G 1.1/2" -11	143,5	55
PA 750 HB	51	32	2"	G 2" -11		

**Product versions:**

PA 700 HB VA - Swage fitting, AGR, Stainless steel

**PA 700 HN****Swage fitting, AGN****Application:****Connection 1:****Sealing form 1:****Short code:****Integration:****Included in scope****of supply:****Material:****Surface:**

Swage fitting for HD 700 hoses

NPT external threads

thread seal, additional 60° inner cone.

AGN

with pull-out protection (interlock)

Swage nipple + swage ferrule

Steel

electro galvanised

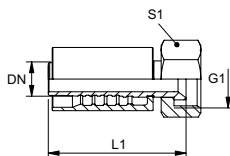
Identification	DN	Size	Inches	G1	L1 mm	S1
PA 720 HN	19	12	3/4"	3/4" -14 NPT	98,0	27
PA 725 HN	25	16	1"	1" -11.5 NPT	116,0	36
PA 732 HN	31	20	1.1/4"	1.1/4" -11.5 NPT	124,5	46
PA 740 HN	38	24	1.1/2"	1.1/2" -11.5 NPT	139,5	50

**Product versions:**

PA 700 HN VA - Swage fitting, AGN, Stainless steel

**PA 700 AJ****Swage fitting, DKJ**

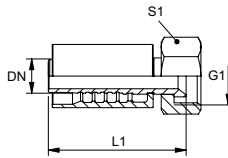
**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone  
**Short code:** DKJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	S1
PA 713 AJ	12	8	1/2"	3/4"-16 UNF	67,4	24
PA 713 AJ 16	12	8	1/2"	7/8"-14 UNF	66,5	25
PA 716 AJ	16	10	5/8"	7/8"-14 UNF	79,5	25
PA 716 AJ 20	16	10	5/8"	1.1/16" -12 UN	81,0	30

**Product versions:**

PA 700 AJ VA - Swage fitting, DKJ, Stainless steel

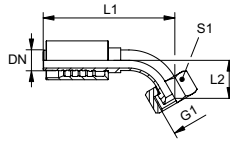
**PA 700 AJ H****Swage fitting, DKJ**

**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone  
**Short code:** DKJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Additional feature:** for breaker operation  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Reinforced design for extreme loads, e.g. use in hammers.

Identification	DN	Size	Inches	G1	L1 mm	S1
PA 720 AJ H	19	12	3/4"	1.1/16" -12 UN	91,5	32
PA 725 AJ H	25	16	1"	1.5/16" -12 UN	98,2	41
PA 725 AJ 32 H	25	16	1"	1.5/8" -12 UN	111,0	50

**PA 700 AJ 45****Swage fitting, DKJ angle 45°**

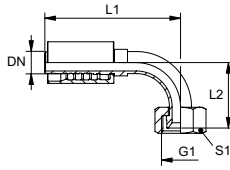
**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone  
**Short code:** DKJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PA 713 AJ 45	12	8	1/2"	3/4"-16 UNF	92,8	21,5	24
PA 713 AJ 16 45	12	8	5/8"	7/8"-14 UNF	92,8	20,0	25
PA 716 AJ 45	16	10	5/8"	7/8"-14 UNF	116,5	25,0	25
PA 716 AJ 20 45	16	10	5/8"	1.1/16" -12 UN	114,0	23,5	32

**Product versions:**

PA 700 AJ 45 VA - Swage fitting, DKJ angle 45°, Stainless steel

**PA 700 AJ 90****Swage fitting, DKJ angle 90°**

<b>Application:</b>	Swage fitting for HD 700 hoses
<b>Connection 1:</b>	UN/UNF nut threads
<b>Sealing form 1:</b>	74° inner cone
<b>Short code:</b>	DKJ
<b>Standard:</b>	ISO 8434-2
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

2

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PA 713 AJ 90	12	8	1/2"	3/4"-16 UNF	87,0	43,5	24
PA 713 AJ 16 90	12	8	1/2"	7/8"-14 UNF	87,0	40,0	25
PA 716 AJ 90	16	10	5/8"	7/8"-14 UNF	109,0	51,0	25
PA 716 AJ 20 90	16	10	5/8"	1.1/16"-12 UN	107,5	50,0	32

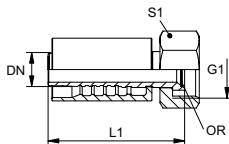
**Product versions:**

PA 700 AJ 90 VA - Swage fitting, DKJ angle 90°, Stainless steel

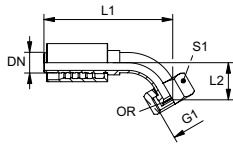
## PA 700 AOJ

## Swage fitting, DKOJ

**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone with O-ring  
**Short code:** DKOJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PA 720 AOJ	19	12	3/4"	1.1/16" -12 UN	90,0	32	19.00 x 1.50
PA 725 AOJ	25	16	1"	1.5/16" -12 UN	103,5	41	25.00 x 1.50
PA 732 AOJ	31	20	1.1/4"	1.5/8" -12 UN	115,0	50	31.47 x 1.78
PA 740 AOJ	38	24	1.1/2"	1.7/8" -12 UN	132,0	55	37.82 x 1.78

**PA 700 AOJ 45****Swage fitting, DKOJ angle 45°**

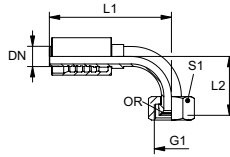
**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone with O-ring  
**Short code:** DKOJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

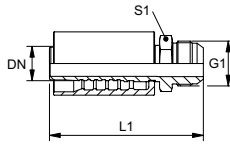
Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 720 AOJ 45	19	12	3/4"	1.1/16" -12 UN	140,0	34,5	32	19.00 x 1.50
PA 725 AOJ 45	25	16	1"	1.5/16" -12 UN	169,5	39,0	41	25.00 x 1.50
PA 732 AOJ 45	31	20	1.1/4"	1.5/8" -12 UN	199,0	49,5	50	31.47 x 1.78
PA 740 AOJ 45	38	24	1.1/2"	1.7/8" -12 UN	233,0	58,0	55	37.82 x 1.78

**PA 700 AOJ 90****Swage fitting, DKOJ angle 90°**

**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone with O-ring  
**Short code:** DKOJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1	OR
PA 720 AOJ 90	19	12	3/4"	1.1/16" -12 UN	127,5	68,2	32	19.00 x 1.50
PA 725 AOJ 90	25	16	1"	1.5/16" -12 UN	158,0	81,7	41	25.00 x 1.50
PA 732 AOJ 90	31	20	1.1/4"	1.5/8" -12 UN	182,0	104,0	50	31.47 x 1.78
PA 740 AOJ 90	38	24	1.1/2"	1.7/8" -12 UN	215,5	120,5	55	37.82 x 1.78

**PA 700 HJ****Swage fitting, AGJ**

**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** UN/UNF external threads  
**Sealing form 1:** 74° outer cone  
**Short code:** AGJ  
**Standard:** ISO 8434-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

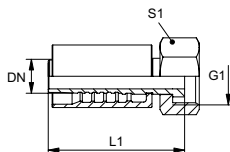
Identification	DN	Size	Inches	G1	L1 mm	S1
PA 713 HJ	12	8	1/2"	3/4"-16 UNF	77,2	22
PA 713 HJ 16	12	8	1/2"	7/8"-14 UNF	80,4	24
PA 716 HJ	16	10	5/8"	7/8"-14 UNF	92,0	24
PA 720 HJ	19	12	3/4"	1.1/16"-12 UN	102,5	27
PA 725 HJ	25	16	1"	1.5/16"-12 UN	117,0	36
PA 732 HJ	31	20	1.1/4"	1.5/8"-12 UN	127,0	46
PA 740 HJ	38	24	1.1/2"	1.7/8"-12 UN	145,5	50

**Product versions:**

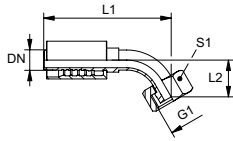
PA 700 HJ VA - Swage fitting, AGJ, Stainless steel

**PA 700 AJF****Swage fitting, ORFS**

**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** flat sealing  
**Short code:** ORFS  
**Standard:** ISO 8434-3  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	S1
PA 713 AJF	12	8	1/2"	13/16" -16 UN	65,8	27
PA 716 AJF	16	10	5/8"	1" -14 UNS	82,0	30
PA 716 AJF 20	16	10	5/8"	1.3/16" -12 UN	82,0	36
PA 720 AJF	19	12	3/4"	1.3/16" -12 UN	94,5	36
PA 725 AJF	25	16	1"	1.7/16" -12 UN	108,5	41
PA 732 AJF	31	20	1.1/4"	1.11/16" -12 UN	115,5	50
PA 740 AJF	38	24	1.1/2"	2" -12 UN	127,5	60

**PA 700 AJF 45****Swage fitting, ORFS angle 45°**

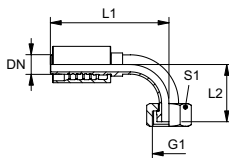
**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** flat sealing  
**Short code:** ORFS  
**Standard:** ISO 8434-3  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

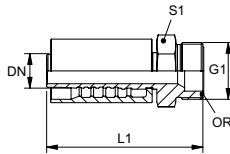
Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PA 713 AJF 45	12	8	1/2"	11/16" -16 UN	91,5	21,5	27
PA 716 AJF 45	16	10	5/8"	1" -14 UNS	111,0	20,0	30
PA 720 AJF 45	19	12	3/4"	1.3/16" -12 UN	133,0	26,5	36
PA 725 AJF 45	25	16	1"	1.7/16" -12 UN	160,5	31,0	41
PA 732 AJF 45	31	20	1.1/4"	1.11/16" -12 UN	178,0	34,0	50
PA 740 AJF 45	38	24	1.1/2"	2" -12 UN	209,0	32,0	60

**PA 700 AJF 90****Swage fitting, ORFS angle 90°**

**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** flat sealing  
**Short code:** ORFS  
**Standard:** ISO 8434-3  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PA 713 AJF 90	12	8	1/2"	13/16" -16 UN	85,5	43,5	27
PA 716 AJF 90	16	10	5/8"	1" -14 UNS	106,5	47,5	30
PA 720 AJF 90	19	12	3/4"	1.3/16" -12 UN	126,0	56,0	36
PA 725 AJF 90	25	16	1"	1.7/16" -12 UN	157,5	68,0	41
PA 732 AJF 90	31	20	1.1/4"	1.11/16" -12 UN	171,5	76,0	50
PA 740 AJF 90	38	24	1.1/2"	2" -12 UN	207,0	88,5	60

**PA 700 HJOF****Swage fitting, ORFS**

**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** UN/UNF external threads  
**Sealing form 1:** flat seal with O-ring  
**Short code:** ORFS  
**Standard:** ISO 8434-3  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

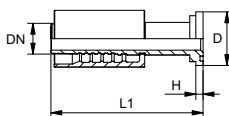
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Identification	DN	Size	Inches	G1	L1 mm	S1	OR
PA 713 HJOF	12	8	1/2"	13/16" -16 UN	73,8	22	12.42 x 1.78
PA 716 HJOF	16	10	5/8"	1" -14 UNS	89,4	27	15.60 x 1.78
PA 720 HJOF	19	12	3/4"	1.3/16" -12 UN	101,0	32	18.77 x 1.78
PA 725 HJOF	25	16	1"	1.7/16" -12 UN	117,5	36	23.52 x 1.78

## PA 700 SF

## Swage fitting, SFL

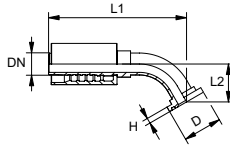
**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** SAE flange connection 3000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFL  
**Standard:** SAE J518, ISO 6162-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 713 SF	12	8	1/2"	1/2"	30,2	6,7	90,4
PA 713 SF 20	12	8	1/2"	3/4"	38,1	6,7	91,6
PA 716 SF 20	16	10	3/8"	3/4"	38,1	6,7	102,6
PA 720 SF	19	12	3/4"	3/4"	38,1	6,8	116,5
PA 720 SF 25	19	12	3/4"	1"	44,5	8,1	119,5
PA 725 SF 20	25	16	1"	3/4"	38,1	6,8	132,0
PA 725 SF	25	16	1"	1"	44,5	8,1	135,5
PA 725 SF 32	25	16	1"	1.1/4"	50,8	8,1	138,5
PA 732 SF 25 S	31	20	1.1/4"	1"	44,5	8,0	145,0
PA 732 SF 40 S	31	20	1.1/4"	1.1/2"	60,3	8,0	129,0
PA 732 SF S	31	20	1.1/4"	1.1/4"	50,8	8,0	144,5
PA 740 SF 32	38	24	1.1/2"	1.1/4"	50,8	8,1	158,0
PA 740 SF	38	24	1.1/2"	1.1/2"	60,3	8,1	166,5
PA 740 SF 50	38	24	1.1/2"	2"	71,4	9,6	169,5

**Product versions:**

PA 700 SF VA - Swage fitting, SFL, Stainless steel

**PA 700 SF 45****Swage fitting, SFL angle 45°**

**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** SAE flange connection 3000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFL  
**Standard:** SAE J518, ISO 6162-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

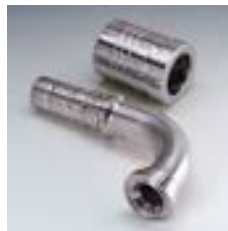
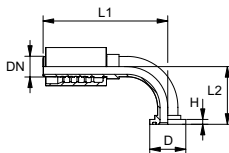
Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 713 SF 45	12	8	1/2"	1/2"	30,2	6,7	94,5	22,5
PA 713 SF 20 45	12	8	1/2"	3/4"	38,1	6,7	126,0	26,5
PA 720 SF 45	19	12	3/4"	3/4"	38,1	6,8	132,5	27,5
PA 720 SF 25 45	19	12	3/4"	1"	44,5	8,1	134,5	29,5
PA 725 SF 20 45	25	16	1"	3/4"	38,1	6,8	153,0	30,0
PA 725 SF 45	25	16	1"	1"	44,5	8,1	159,0	28,5
PA 725 SF 32 45	25	16	1"	1.1/4"	50,8	8,1	161,0	30,5
PA 732 SF 25 45 S	31	20	1.1/4"	1"	44,5	8,0	170,5	35,0
PA 732 SF 45 S	31	20	1.1/4"	1.1/4"	50,8	8,0	181,5	41,5
PA 732 SF 40 45 S	31	20	1.1/4"	1.1/2"	60,3	8,0	188,0	43,5
PA 740 SF 32 45	38	24	1.1/2"	1.1/4"	50,8	8,1	199,5	42,0
PA 740 SF 45	38	24	1.1/2"	1.1/2"	60,3	8,1	212,5	41,5
PA 740 SF 50 45	38	24	1.1/2"	2"	71,4	9,6	233,5	58,5

**Product versions:**

**PA 700 SF 45 VA** - Swage fitting, SFL angle 45°, Stainless steel

**PA 700 SF 90****Swage fitting, SFL angle 90°**

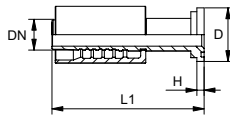
**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** SAE flange connection 3000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFL  
**Standard:** SAE J518, ISO 6162-1  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 713 SF 90	12	8	1/2"	1/2"	30,2	6,7	85,9	45,0
PA 713 SF 20 90	12	8	1/2"	3/4"	38,1	6,7	96,0	51,0
PA 720 SF 90	19	12	3/4"	3/4"	38,1	6,8	127,5	58,0
PA 720 SF 90 L 95	19	12	3/4"	3/4"	38,1	6,8	127,5	95,0
PA 720 SF 90 L 100	19	12	3/4"	3/4"	38,1	6,8	127,5	100,0
PA 720 SF 90 L 120	19	12	3/4"	3/4"	38,1	6,8	127,5	120,0
PA 720 SF 25 90	19	12	3/4"	1"	44,5	8,1	127,5	61,0
PA 720 SF 25 90 L 82	19	12	3/4"	1"	44,5	8,1	127,5	82,0
PA 725 SF 20 90	25	16	1"	3/4"	38,1	6,8	144,0	64,5
PA 725 SF 90	25	16	1"	1"	44,5	8,1	158,0	67,0
PA 725 SF 32 90	25	16	1"	1.1/4"	50,8	8,1	158,0	69,5
PA 732 SF 25 90 S	31	20	1.1/4"	1"	44,5	8,0	162,0	76,0
PA 732 SF 90 S	31	20	1.1/4"	1.1/4"	50,8	8,0	173,0	88,0
PA 732 SF 40 90 S	31	20	1.1/4"	1.1/2"	60,3	8,0	177,0	95,0
PA 740 SF 32 90	38	24	1.1/2"	1.1/4"	50,8	8,1	190,5	93,0
PA 740 SF 90	38	24	1.1/2"	1.1/2"	60,3	8,1	208,5	99,0
PA 740 SF 50 90	38	24	1.1/2"	2"	71,4	9,6	218,0	104,0

**Product versions:**

PA 700 SF 90 VA - Swage fitting, SFL angle 90°, Stainless steel

**PA 700 SF6****Swage fitting, SFS**

**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
 with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 713 SF6	12	8	1/2"	1/2"	31,8	7,7	90,4
PA 713 SF6 20	12	8	1/2"	3/4"	41,3	8,8	93,9
PA 716 SF6 13	16	10	5/8"	1/2"	31,8	7,7	108,0
PA 716 SF6 20	16	10	5/8"	3/4"	41,3	8,8	102,0
PA 716 SF6 25	16	10	5/8"	1"	47,6	9,5	103,0
PA 720 SF6	19	12	3/4"	3/4"	41,3	8,8	124,5
PA 720 SF6 25	19	12	3/4"	1"	47,6	9,6	129,0
PA 725 SF6 20	25	16	1"	3/4"	41,3	8,8	134,0
PA 725 SF6	25	16	1"	1"	47,6	9,6	146,5
PA 725 SF6 32	25	16	1"	1.1/4"	54,0	10,4	151,0
PA 732 SF6 S	31	20	1.1/4"	1.1/4"	54,0	10,3	147,6
PA 732 SF6 25 S	31	20	1.1/4"	1"	47,6	9,5	149,0
PA 732 SF6 40 S	31	20	1.1/4"	1.1/2"	63,5	12,6	162,0
PA 740 SF6 32	38	24	1.1/2"	1.1/4"	54,0	10,4	162,0
PA 740 SF6	38	24	1.1/2"	1.1/2"	63,5	12,7	183,5
PA 740 SF6 50	38	24	1.1/2"	2"	79,4	12,7	188,0
PA 750 SF6	51	32	2"	2"	79,4	12,6	233,0

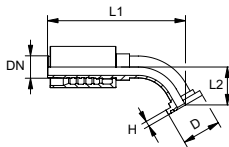
**Product versions:**

PA 700 SF6 VA - Swage fitting, SFS, Stainless steel

## PA 700 SF6 45

## Swage fitting, SFS angle 45°

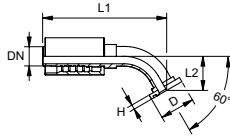
**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 713 SF6 45	12	8	1/2"	1/2"	31,8	7,7	95,5	23,0
PA 713 SF6 20 45	12	8	1/2"	3/4"	41,3	8,8	99,9	23,0
PA 716 SF6 13 45	16	10	5/8"	1/2"	31,8	7,7	114,0	21,5
PA 716 SF6 20 45	16	10	5/8"	3/4"	41,3	8,8	117,5	25,0
PA 716 SF6 25 45	16	10	5/8"	1"	47,6	9,5	121,0	29,0
PA 720 SF6 45	19	12	3/4"	3/4"	41,3	8,8	135,5	30,0
PA 720 SF6 45 L 52	19	12	3/4"	3/4"	41,3	8,8	217,0	52,0
PA 720 SF6 45 L 75	19	12	3/4"	3/4"	41,3	8,8	252,0	75,0
PA 720 SF6 45 L 100	19	12	3/4"	3/4"	41,3	8,8	268,0	100,0
PA 720 SF6 25 45	19	12	3/4"	1"	47,6	9,6	139,5	34,5
PA 725 SF6 20 45	25	16	1"	3/4"	41,3	8,8	164,0	36,5
PA 725 SF6 45	25	16	1"	1"	47,6	9,6	164,0	33,5
PA 725 SF6 32 45	25	16	1"	1.1/4"	54,0	10,4	169,0	38,5
PA 732 SF6 25 45 S	31	20	1.1/4"	1"	47,6	9,5	173,5	38,0
PA 732 SF6 45 S	31	20	1.1/4"	1.1/4"	54,0	10,3	187,0	44,0
PA 732 SF6 40 45 S	31	20	1.1/4"	1.1/2"	63,5	12,6	191,5	47,5
PA 740 SF6 32 45	38	24	1.1/2"	1.1/4"	54,0	10,4	217,5	51,5
PA 740 SF6 45	38	24	1.1/2"	1.1/2"	63,5	12,6	222,0	49,0
PA 740 SF6 50 45	38	24	1.1/2"	2"	79,4	12,6	236,0	61,0
PA 750 SF6 45	51	32	2"	2"	79,4	12,6	274,0	56,0

**Product versions:**

PA 700 SF6 45 VA - Swage fitting, SFS angle 45°, Stainless steel

**PA 700 SF6 60****Swage fitting, SFS angle 60°**

**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
 with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

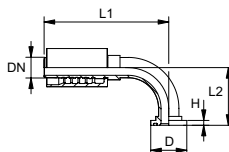
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Identification	DN	Size	Inches	Flange size	D mm	H mm
PA 725 SF6 60	25	16	1"	1"	47,6	9,5

## PA 700 SF6 90

## Swage fitting, SFS angle 90°

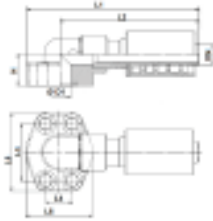
**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 713 SF6 90	12	8	1/2"	1/2"	31,8	7,7	86,0	46,0
PA 713 SF6 20 90	12	8	1/2"	3/4"	41,3	8,8	92,5	46,0
PA 716 SF6 13 90	16	10	5/8"	1/2"	31,8	7,7	108,0	48,0
PA 716 SF6 20 90	16	10	5/8"	3/4"	41,3	8,8	107,5	52,5
PA 716 SF6 25 90	16	10	5/8"	1"	47,6	9,5	108,0	57,0
PA 720 SF6 13 90 L 80	19	12	3/4"	1/2"	31,8	7,8	117,0	80,0
PA 720 SF6 13 90 L 100	19	12	3/4"	1/2"	31,8	7,8	117,0	100,0
PA 720 SF6 90	19	12	3/4"	3/4"	41,3	8,8	127,5	62,0
PA 720 SF6 90 L 52	19	12	3/4"	3/4"	41,3	8,8	127,5	52,0
PA 720 SF6 90 L 80	19	12	3/4"	3/4"	41,3	8,8	127,5	80,0
PA 720 SF6 90 L 85	19	12	3/4"	3/4"	41,3	8,8	127,5	85,0
PA 720 SF6 90 L 100	19	12	3/4"	3/4"	41,3	8,8	127,5	100,0
PA 720 SF6 90 L 150	19	12	3/4"	3/4"	41,3	8,8	127,5	150,0
PA 720 SF6 25 90	19	12	3/4"	1"	47,6	9,6	127,5	68,0
PA 725 SF6 20 90	25	16	1"	3/4"	41,3	8,8	152,5	70,5
PA 725 SF6 90	25	16	1"	1"	47,6	9,6	158,0	74,0
PA 725 SF6 90 L 100	25	16	1"	1"	47,6	9,6	158,0	100,0
PA 725 SF6 90 L 200	25	16	1"	1"	47,6	9,6	158,0	200,0
PA 725 SF6 32 90	25	16	1"	1.1/4"	54,0	10,4	156,0	83,5
PA 732 SF6 25 90 S	31	20	1.1/4"	1"	47,6	9,5	162,0	80,0
PA 732 SF6 90 S	31	20	1.1/4"	1.1/4"	54,0	10,3	173,5	94,5
PA 732 SF6 90 L 120 S	31	20	1.1/4"	1.1/4"	54,0	10,3	173,5	120,0
PA 732 SF6 40 90 S	31	20	1.1/4"	1.1/2"	63,5	12,6	174,5	100,0
PA 740 SF6 32 90	38	24	1.1/2"	1.1/4"	54,0	10,3	193,0	100,0
PA 740 SF6 90	38	24	1.1/2"	1.1/2"	63,5	12,6	213,5	110,0
PA 740 SF6 50 90	38	24	1.1/2"	2"	79,4	12,6	215,5	126,0
PA 750 SF6 90	51	32	2"	2"	79,4	12,6	268,0	138,0

**Product versions:**

PA 700 SF6 90 VA - Swage fitting, SFS angle 90°, Stainless steel

**PA 700 SF6 90 4 K****Swage fitting, SFS angle 90°**

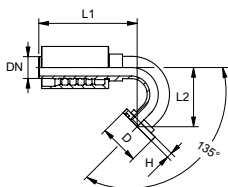
**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	Flange size	Ø d mm	H mm	L1 mm	L2 mm	L3 mm	L4 mm	L5 mm	L6 mm
PA 720 SF6 90 4 K	19	12	3/4"	-	19,0	28,0	155,5	125,5	50,8	23,8	70,0	60,0
PA 725 SF6 90 4 K	25	16	1"	-	25,0	34,0	185,5	150,5	57,2	27,8	79,0	70,0

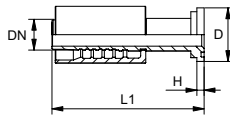
**PA 700 SF6 135****Swage fitting, SFS angle 135°**

**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 725 SF6 135	25	16	1"	1"	47,6	9,5	170,0	100,0

2

**PA 700 SF9****Swage fitting, SFS-CAT**

**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS-CAT  
**suitable for:** Caterpillar  
with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

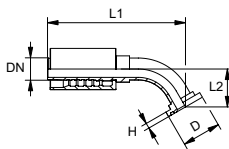
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Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 720 SF9	19	12	3/4"	3/4"	41,3	14,6	130,0
PA 720 SF9 25	19	12	3/4"	1"	47,6	14,6	133,5
PA 725 SF9 20	25	16	1"	3/4"	41,3	14,6	137,0
PA 725 SF9	25	16	1"	1"	47,6	14,6	150,0
PA 725 SF9 32	25	16	1"	1.1/4"	54,0	14,6	155,0
PA 732 SF9 25 S	31	20	1.1/4"	1"	47,6	14,6	150,0
PA 732 SF9 S	31	20	1.1/4"	1.1/4"	54,0	14,6	151,3
PA 732 SF9 40 S	31	20	1.1/4"	1.1/2"	63,5	14,6	140,0
PA 740 SF9 32	38	24	1.1/2"	1.1/4"	54,0	14,6	163,0
PA 740 SF9	38	24	1.1/2"	1.1/2"	63,5	14,6	185,0

## PA 700 SF9 45

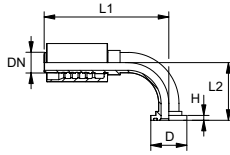
## Swage fitting, SFS-CAT angle 45°

**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS-CAT  
**suitable for:** Caterpillar  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 720 SF9 45	19	12	3/4"	3/4"	41,3	14,2	139,0	34,0
PA 720 SF9 25 45	19	12	3/4"	1"	47,6	14,2	143,0	37,5
PA 725 SF9 20 45	25	16	1"	3/4"	41,3	14,2	157,0	35,0
PA 725 SF9 45	25	16	1"	1"	47,6	14,2	167,0	36,5
PA 725 SF9 32 45	25	16	1"	1.1/4"	54,0	14,2	172,0	41,5
PA 732 SF9 25 45 S	31	20	1.1/4"	1"	47,6	14,0	174,0	39,5
PA 732 SF9 45 S	31	20	1.1/4"	1.1/4"	54,0	14,0	187,0	44,0
PA 732 SF9 40 45 S	31	20	1.1/4"	1.1/2"	63,5	14,0	195,5	52,0
PA 740 SF9 32 45	38	24	1.1/2"	1.1/4"	54,0	14,0	205,5	47,0
PA 740 SF9 45	38	24	1.1/2"	1.1/2"	63,5	14,2	224,0	51,0

2

**PA 700 SF9 90****Swage fitting, SFS-CAT angle 90°**

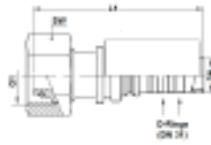
**Application:** Swage fitting for HD 700 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS-CAT  
**suitable for:** Caterpillar  
with pull-out protection (interlock)  
**Integration:**  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 720 SF9 90	19	12	3/4"	3/4"	41,3	14,2	127,5	67,5
PA 720 SF9 25 90	19	12	3/4"	1"	47,6	14,2	127,5	72,5
PA 725 SF9 20 90	25	16	1"	3/4"	41,3	14,2	144,0	83,5
PA 725 SF9 90	25	16	1"	1"	47,6	14,2	158,0	78,5
PA 725 SF9 32 90	25	16	1"	1.1/4"	54,0	14,2	158,0	85,0
PA 732 SF9 25 90 S	31	20	1.1/4"	1"	47,6	14,0	161,0	82,0
PA 732 SF9 90 S	31	20	1.1/4"	1.1/4"	54,0	14,0	169,5	96,0
PA 732 SF9 40 90 S	31	20	1.1/4"	1.1/2"	63,5	14,0	177,0	107,0
PA 740 SF9 32 90	38	24	1.1/2"	1.1/4"	54,0	14,0	192,0	100,0
PA 740 SF9 90	38	24	1.1/2"	1.1/2"	63,5	14,1	214,0	111,5

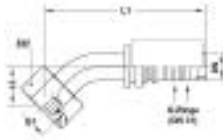
## PA 800 AOS

## Swage fitting, DKOS

**Application:** Swage fitting for HD 800 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Standard:** ISO 8434-1  
**Short code:** DKOS  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN*	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PA 816 AOS	16	10	5/8"	M 30 x 2	20	80,5	36	17.5 x 2.5
PA 820 AOS	19	12	3/4"	M 36 x 2	25	103,2	46	20.0 x 2.5
PA 825 AOS	25	16	1"	M 42 x 2	30	120,6	50	25.0 x 2.5
PA 832 AOS	31	20	1.1/4"	M 52 x 2	38	134,9	60	33.0 x 2.5

**PA 800 AOS 45****Swage fitting, DKOS angle 45°**

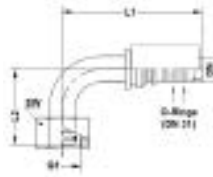
**Application:** Swage fitting for HD 800 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Standard:** ISO 8434-1  
**Short code:** DKOS  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

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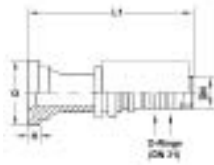
Identification	DN*	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PA 816 AOS 45	16	10	3/8"	M 30 x 2	20	112,8	31,0	36	17.5 x 2.5
PA 820 AOS 45	19	12	3/4"	M 36 x 2	25	135,1	32,0	46	20.0 x 2.5
PA 825 AOS 45	35	16	1"	M 42 x 2	30	163,6	35,0	50	25.0 x 2.5
PA 832 AOS 45	31	20	1.1/4"	M 52 x 2	38	190,0	39,0	60	33.0 x 2.5

**PA 800 AOS 90****Swage fitting, DKOS angle 90°**

<b>Application:</b>	Swage fitting for HD 800 hoses
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	24° outer cone with O-ring
<b>Standard:</b>	ISO 8434-1
<b>Short code:</b>	DKOS
<b>Integration:</b>	with pull-out protection (interlock)
<b>Included in scope of supply:</b>	Swage nipple + swage ferrule
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	DN*	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PA 816 AOS 90	16	10	5/8"	M 30 x 2	20	99,2	61,5	36	17.5 x 2.5
PA 820 AOS 90	19	12	3/4"	M 36 x 2	25	124,8	65,0	46	20.0 x 2.5
PA 825 AOS 90	25	16	1"	M 42 x 2	30	155,6	76,0	50	25.0 x 2.5
PA 832 AOS 90	31	20	1.1/4"	M 52 x 2	38	185,0	89,0	60	33.0 x 2.5

**PA 800 SF6****Swage fitting, SFS**

**Application:** Swage fitting for HD 800 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PA 820 SF6	19	12	3/4"	3/4"	41,3	8,8	110,6
PA 825 SF6	25	16	1"	1"	47,6	9,6	134,0
PA 825 SF6 32	25	16	1"	1.1/4"	54,0	10,4	134,9
PA 832 SF6	31	20	1.1/4"	1.1/4"	54,0	10,5	145,2

**PA 800 SF6 45****Swage fitting, SFS angle 45°**

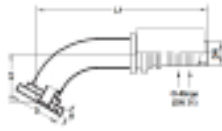
**Application:** Swage fitting for HD 800 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 820 SF6 45	19	12	3/4"	3/4"	41,3	8,8	130,1	27,0
PA 825 SF6 45	25	16	1"	1"	47,6	9,6	160,6	31,0
PA 825 SF6 32 45	25	16	1"	1.1/4"	54,0	10,4	179,6	39,0
PA 832 SF6 45	31	20	1.1/4"	1.1/4"	54,0	10,4	190,0	39,0

## PA 800 SF6 60

### Swage fitting, SFS angle 60°



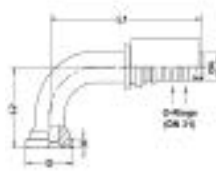
**Application:** Swage fitting for HD 800 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

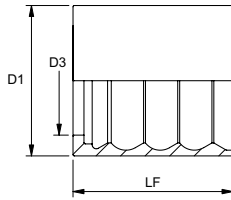
Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 832 SF6 60	31	20	1.1/4"	1.1/4"	54,0	10,4	224,1	60,0

**PA 800 SF6 90****Swage fitting, SFS angle 90°**

**Application:** Swage fitting for HD 800 hoses  
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Integration:** with pull-out protection (interlock)  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PA 820 SF6 90	19	12	3/4"	3/4"	41,3	8,8	124,8	59,0
PA 825 SF6 90	25	16	1"	1"	47,6	9,6	155,6	71,0
PA 825 SF6 32 90	25	16	1"	1.1/4"	54,0	10,4	174,7	89,0
PA 832 SF6 90	31	20	1.1/4"	1.1/4"	54,0	10,4	185,0	89,0

**PSGB 100****Swage ferrule, SGB 100****Ferrule type:****Material:****Surface:**

Non-skive ferrule

Steel

electro galvanised

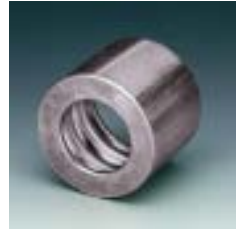
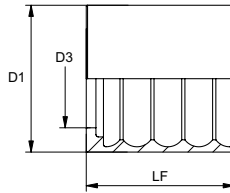
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Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PSGB 120	19	12	3/4"	39,5	25,0	35,0
PSGB 125	25	16	1"	46,0	32,7	44,0
PSGB 132	31	20	1.1/4"	55,0	39,8	58,5
PSGB 140	38	24	1.1/2"	65,0	45,8	63,0
PSGB 150	51	32	2"	75,0	59,8	78,0
PSGB 160	60	40	2.3/8"	85,0	67,1	79,0

DN = Nominal diameter, nominal width

**PSG 100 RI****Swage ferrule, R 4**

**Ferrule type:** Non-skive ferrule  
**Material:** Steel  
**Surface:** electro galvanised

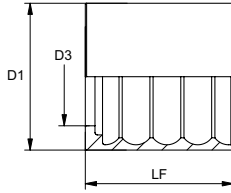


Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PSG 150 RI	51	32	2"	73,0	57,2	70,0
PSG 160 RI	60	38	2.1/2"	85,0	69,5	80,0
PSG 176 RI	76	48	3"	105,0	84,0	80,0
PSG 190 RI	90	56	3.1/2"			

DN = Nominal diameter, nominal width

## PSGD 100

### Swage ferrule, SGD 100



**Ferrule type:**

**Material:**

**Surface:**

Non-skive ferrule

Steel

electro galvanised

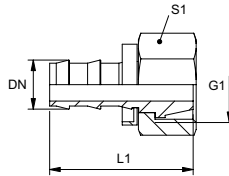
2

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PSGD 125	25	16	1"	46,0	31,5	50,0
PSGD 150	51	32	2"	80,0	58,0	80,0
PSGD 176	76	48	3"	108,0	85,5	80,0

DN = Nominal diameter, nominal width

**ND AFL****Plug-in nipple, DKL**

**Connection 1:** metric nut thread  
**Sealing form 1:** 24°/60° Universal sealing head  
**Short code:** DKL  
**Material:** Steel  
**Surface:** electro galvanised



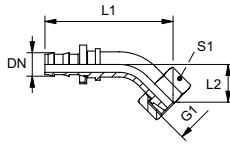
**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1
ND 06 AFL 04	6	4	1/4"	M 12 x 1.5	6	33,0	14
ND 06 AFL	6	4	1/4"	M 14 x 1.5	8	33,0	17
ND 06 AFL 08	6	4	1/4"	M 16 x 1.5	10	34,0	19
ND 10 AFL 08	10	6	3/8"	M 16 x 1.5	10	38,0	19
ND 10 AFL	10	6	3/8"	M 18 x 1.5	12	38,0	22
ND 13 AFL 10	12	8	1/2"	M 18 x 1.5	12		
ND 13 AFL	12	8	1/2"	M 22 x 1.5	15	43,5	27
ND 16 AFL 13	16	10	5/8"	M 22 x 1.5	15	56,0	27
ND 16 AFL	16	10	5/8"	M 26 x 1.5	18	53,0	32
ND 20 AFL	19	12	3/4"	M 30 x 2	22	53,5	36
ND 25 AFL	25	16	1"	M 36 x 2	28	58,0	41

2

## ND AFL 45

### Plug-in nipple, DKL angle 45°



**Connection 1:** metric nut thread  
**Sealing form 1:** 24°/60° Universal sealing head  
**Short code:** DKL  
**Material:** Steel  
**Surface:** electro galvanised

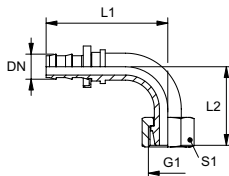
2

**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1
ND 06 AFL 04 45	6	4	1/4"	M 12 x 1.5	6	51,0	16,0	14
ND 06 AFL 45	6	4	1/4"	M 14 x 1.5	8	51,0	16,0	17
ND 10 AFL 08 45	10	6	3/8"	M 16 x 1.5	10	58,0	18,0	19
ND 10 AFL 45	10	6	3/8"	M 18 x 1.5	12	59,0	18,0	22
ND 13 AFL 45	12	8	1/2"	M 22 x 1.5	15	68,0	19,0	27
ND 16 AFL 45	16	10	5/8"	M 26 x 1.5	18	81,0	21,0	32
ND 20 AFL 45	19	12	3/4"	M 30 x 2	22	88,0	23,0	36
ND 25 AFL 45	25	16	1"	M 36 x 2	28	105,0	30,0	41

**ND AFL 90****Plug-in nipple, DKL angle 90°**

**Connection 1:** metric nut thread  
**Sealing form 1:** 24°/60° Universal sealing head  
**Short code:** DKL  
**Material:** Steel  
**Surface:** electro galvanised

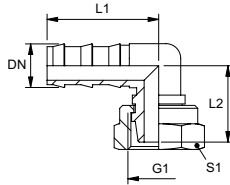


**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1
ND 06 AFL 04 90	6	4	1/4"	M 12 x 1.5	6	42,0	29,0	14
ND 06 AFL 90	6	4	1/4"	M 14 x 1.5	8	42,0	29,0	17
ND 06 AFL 08 90	6	4	1/4"	M 16 x 1.5	10	42,0	29,0	19
ND 10 AFL 08 90	10	6	3/8"	M 16 x 1.5	10	49,0	33,0	19
ND 10 AFL 90	10	6	3/8"	M 18 x 1.5	12	49,0	34,0	22
ND 13 AFL 90	12	8	1/2"	M 22 x 1.5	15	60,0	39,0	27
ND 16 AFL 90	16	10	5/8"	M 26 x 1.5	18	74,0	43,0	32
ND 20 AFL 90	19	12	3/4"	M 30 x 2	22	88,0	50,0	36
ND 25 AFL 90	25	16	1"	M 36 x 2	28	99,0	70,0	41

## ND AFL K 90

### Plug-in nipple, DKL comp. angle 90°



**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone  
**Design:** Compact form  
**Short code:** DKL  
**Material:** Brass

2

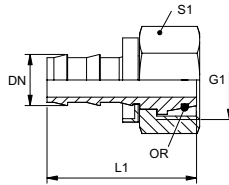
**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1
ND 06 AFL K 04 90	6	4	1/4"	M 12 x 1.5	6	30,0	22,0	14
ND 06 AFL K 90	6	4	1/4"	M 14 x 1.5	8	30,0	22,0	19
ND 10 AFL K 08 90	10	6	3/8"	M 16 x 1.5	10	34,0	25,0	19
ND 10 AFL K 90	10	6	3/8"	M 18 x 1.5	12	34,0	25,0	22
ND 13 AFL K 90	12	8	1/2"	M 22 x 1.5	15	43,0	32,0	27

## ND AOL

## Plug-in nipple, DKOL

**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOL  
**Standard:** ISO 8434-1  
**Material:** Steel  
**Surface:** electro galvanised

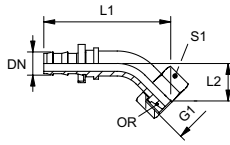


**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
ND 06 AOL 04	6	4	1/4"	M 12 x 1.5	6	40,0	14	4.5 x 1.5
ND 06 AOL	6	4	1/4"	M 14 x 1.5	8	36,0	17	6.5 x 1.5
ND 06 AOL 08	6	4	1/4"	M 16 x 1.5	10	36,0	19	8.5 x 1.5
ND 10 AOL 08	10	6	3/8"	M 16 x 1.5	10	40,0	19	8.5 x 1.5
ND 10 AOL	10	6	3/8"	M 18 x 1.5	12	40,0	22	10.5 x 1.5
ND 13 AOL	12	8	1/2"	M 22 x 1.5	15	44,0	27	12.5 x 1.5
ND 16 AOL	16	10	5/8"	M 26 x 1.5	18	56,0	32	16.0 x 2.0
ND 20 AOL	19	12	3/4"	M 30 x 2	22	58,0	36	20.0 x 2.0

## ND AOL 45

### Plug-in nipple, DKOL angle 45°



**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOL  
**Standard:** ISO 8434-1  
**Material:** Steel  
**Surface:** electro galvanised

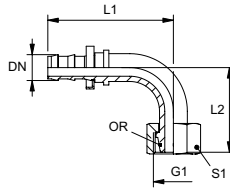
2

**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
ND 10 AOL 08 45	10	6	3/8"	M 16 x 1.5	10	59,0	19,0	19	8.5 x 1.5
ND 10 AOL 45	10	6	3/8"	M 18 x 1.5	12	60,0	19,0	22	10.5 x 1.5
ND 13 AOL 45	12	8	1/2"	M 22 x 1.5	15	69,0	21,0	27	12.5 x 1.5

**ND AOL 90****Plug-in nipple, DKOL angle 90°**

**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOL  
**Standard:** ISO 8434-1  
**Material:** Steel  
**Surface:** electro galvanised



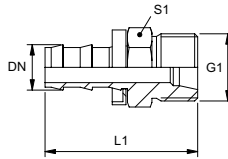
**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
ND 06 AOL 04 90	6	4	1/4"	M 12 x 1.5	6	42,0	36,0	14	4.5 x 1.5
ND 10 AOL 08 90	10	6	3/8"	M 16 x 1.5	10	49,0	35,0	19	8.5 x 1.5
ND 10 AOL 90	10	6	3/8"	M 18 x 1.5	12	49,0	36,0	22	10.5 x 1.5
ND 13 AOL 90	12	8	1/2"	M 22 x 1.5	15	58,0	41,0	27	12.5 x 1.5
ND 16 AOL 90	16	10	5/8"	M 26 x 1.5	18	74,0	45,0	32	16.0 x 2.0

2

## ND HL

### Plug-in nipple, CEL



**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Short code:** CEL  
**Standard:** ISO 8434-1  
**Material:** Steel  
**Surface:** electro galvanised

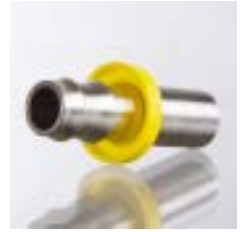
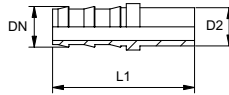
2

**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1
ND 06 HL 04	6	4	1/4"	M 12 x 1.5	6	35,0	12
ND 06 HL	6	4	1/4"	M 14 x 1.5	8	36,0	14
ND 10 HL 08	10	6	3/8"	M 16 x 1.5	10	41,5	17
ND 10 HL	10	6	3/8"	M 18 x 1.5	12	41,0	19
ND 13 HL	12	8	1/2"	M 22 x 1.5	15	49,0	22
ND 16 HL	16	10	3/8"	M 26 x 1.5	18	58,0	27
ND 20 HL	19	12	3/4"	M 30 x 2	22	63,0	30

**ND FL / ND FS****Plug-in nipple, BEL / BES**

**Connection 1:** Pipe sockets  
**Sealing form 1:** Cutting ring connection  
**Short code:** BEL / BES  
**Standard:** ISO 8434-1  
**Material:** Steel  
**Surface:** electro galvanised



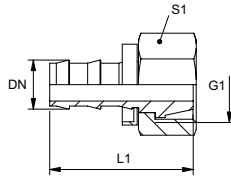
**Note:** Undamaged nipples can be reused. Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...). Do not use for new designs; for ND...FL we recommend: ND...AOL.

Identification	DN	Size	Inches	Series	D2 mm	L1 mm
ND 06 FL 04	6	4	1/4"	L	6,0	44,0
ND 06 FL	6	4	1/4"	L	8,0	44,0
ND 10 FL 08	10	6	3/8"	L	10,0	49,0
ND 10 FL	10	6	3/8"	L	12,0	49,0
ND 13 FL 10	12	8	1/2"	L	12,0	54,0
ND 13 FL	12	8	1/2"	L	15,0	55,0
ND 16 FL	16	10	5/8"	L	18,0	67,0
ND 20 FL	19	12	3/4"	L	22,0	69,0
ND 06 FS	6	4	1/4"	S	10,0	

2

## ND AB

### Plug-in nipple, DKR



**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° outer cone  
**Short code:** DKR  
**Standard:** ISO 8434-6, BS 5200  
**Material:** Steel  
**Surface:** electro galvanised

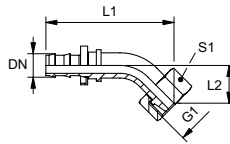
2

**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	L1 mm	S1
ND 06 AB	6	4	1/4"	G 1/4" -19	33,0	17
ND 10 AB	10	6	3/8"	G 3/8" -19	37,0	19
ND 13 AB	12	8	1/2"	G 1/2" -14	42,0	27
ND 16 AB	16	10	5/8"	G 5/8" -14	53,0	30
ND 20 AB	19	12	3/4"	G 3/4" -14	58,0	32
ND 25 AB	25	16	1"	G 1" -11	57,0	41

**ND AB 45****Plug-in nipple, DKR angle 45°**

**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone  
**Short code:** DKR  
**Standard:** ISO 8434-6, BS 5200  
**Material:** Steel  
**Surface:** electro galvanised

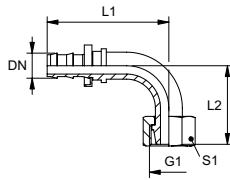


**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
ND 06 AB 45	6	4	1/4"	G 1/4" -19	51,0	16,0	17
ND 10 AB 45	10	6	3/8"	G 3/8" -19	58,0	18,0	19
ND 13 AB 45	12	8	1/2"	G 1/2" -14	68,0	19,0	27
ND 16 AB 45	16	10	5/8"	G 5/8" -14	81,0	21,0	30

## ND AB 90

### Plug-in nipple, DKR angle 90°



**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone  
**Short code:** DKR  
**Standard:** ISO 8434-6, BS 5200  
**Material:** Steel  
**Surface:** electro galvanised

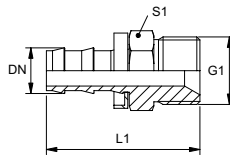
2

**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
ND 06 AB 90	6	4	1/4"	G 1/4" -19	42,0	29,0	17
ND 10 AB 90	10	6	3/8"	G 3/8" -19	49,0	33,0	19
ND 13 AB 90	12	8	1/2"	G 1/2" -14	60,0	39,0	27
ND 16 AB 90	16	10	5/8"	G 5/8" -14	74,0	43,0	30
ND 20 AB 90	19	12	3/4"	G 3/4" -14	88,0	53,0	32

**ND HB****Plug-in nipple, AGR**

**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Short code:** AGR  
**Standard:** ISO 8434-6, BS 5200  
**Material:** Steel  
**Surface:** electro galvanised

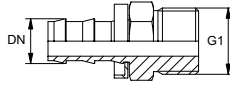


**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	L1 mm	S1
ND 06 HB 02	6	4	1/4"	G 1/8" -28	36,0	17
ND 06 HB	6	4	1/4"	G 1/4" -19	41,0	19
ND 10 HB 06	10	6	3/8"	G 1/4" -19	44,0	19
ND 10 HB	10	6	3/8"	G 3/8" -19	45,0	22
ND 13 HB	12	8	1/2"	G 1/2" -14	53,0	27
ND 16 HB 13	16	10	5/8"	G 1/2" -14		
ND 16 HB	16	10	5/8"	G 5/8" -14	65,0	30
ND 20 HB	19	12	3/4"	G 3/4" -14	65,0	32

## ND HR

### Plug-in nipple, AGR flat



**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** flat sealing  
**Short code:** AGR-Flat  
**Standard:** ISO 8434-6, BS 5200  
**Material:** Steel  
**Surface:** electro galvanised

2

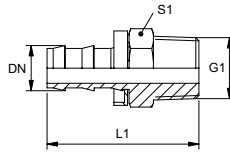
**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1
ND 06 HR	6	4	1/4"	G 1/4" -19
ND 16 HR	16	10	5/8"	G 5/8" -14

## ND HBK

## Plug-in nipple, AGR-K

**Connection 1:** BSPT conical external threads  
**Sealing form 1:** thread seal  
**Short code:** AGR-K  
**Standard:** BS 5200  
**Material:** Steel  
**Surface:** electro galvanised

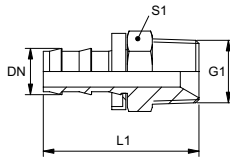


**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	L1 mm	S1
ND 06 HBK 02	6	4	1/4"	R 1/8" K	37,0	12
ND 06 HBK	6	4	1/4"	R 1/4" K	40,0	14
ND 10 HBK 06	10	6	3/8"	R 1/4" K	44,0	14
ND 10 HBK	10	6	3/8"	R 3/8" K	45,0	19
ND 13 HBK	12	8	1/2"	R 1/2" K	55,0	22
ND 20 HBK	19	12	3/4"	R 3/4" K	68,0	27

## ND HN

### Plug-in nipple, AGN



**Connection 1:**  
**Sealing form 1:**

NPT external threads  
thread seal, additional 60° inner  
cone.

**Short code:**

AGN

**Material:**

Steel

**Surface:**

electro galvanised

2

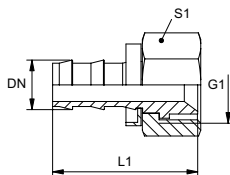
**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	L1 mm	S1
ND 06 HN 02	6	4	1/4"	1/8" -27 NPT	35,0	12
ND 06 HN	6	4	1/4"	1/4" -18 NPT	40,0	14
ND 10 HN 06	10	6	3/8"	1/4" -18 NPT	45,0	14
ND 10 HN	10	6	3/8"	3/8" -18 NPT	45,0	22
ND 10 HN 13	10	6	3/8"	1/2" -14 NPT	52,0	22
ND 13 HN 10	12	8	1/2"	3/8" -18 NPT	49,0	22
ND 13 HN	12	8	1/2"	1/2" -14 NPT	55,0	22
ND 16 HN 13	16	10	5/8"	1/2" -14 NPT	66,0	22
ND 20 HN	19	12	3/4"	3/4" -14 NPT	66,0	32

## ND ASA

## Plug-in nipple, DKJ

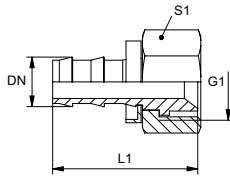
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 90° inner cone  
**Standard:** SAE J516/J513  
**Material:** Brass



**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	L1 mm	S1
ND 10 ASA	10	6	3/8"	5/8"-18 UNF	46,0	19

2

**ND AJ****Plug-in nipple, DKJ**

**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone  
**Short code:** DKJ  
**Standard:** ISO 8434-2  
**Material:** Steel  
**Surface:** electro galvanised

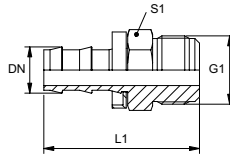
2

**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	L1 mm	S1
ND 06 AJ	6	4	1/4"	7/16"-20 UNF	40,0	14
ND 06 AJ 08	6	4	1/4"	1/2"-20 UNF	40,0	17
ND 10 AJ	10	6	3/8"	9/16"-18 UNF	45,0	19
ND 13 AJ	12	8	1/2"	3/4"-16 UNF	51,0	22
ND 13 AJ 16	12	8	1/2"	7/8"-14 UNF	65,0	27
ND 16 AJ	16	10	5/8"	7/8"-14 UNF	65,0	27
ND 20 AJ	19	12	3/4"	1.1/16" -12 UN	67,0	32
ND 25 AJ	25	16	1"	1.5/16" -12 UN	70,0	41

**ND HJ****Plug-in nipple, AGJ**

**Connection 1:** UN/UNF external threads  
**Sealing form 1:** 74° outer cone  
**Short code:** AGJ  
**Standard:** ISO 8434-2  
**Material:** Steel  
**Surface:** electro galvanised



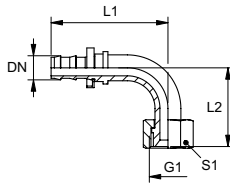
**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	L1 mm	S1
ND 10 HJ	10	6	3/8"	9/16"-18 UNF	45,0	16
ND 13 HJ	12	8	1/2"	3/4"-16 UNF	52,0	19

2

## ND AJ 90

### Plug-in nipple, DKJ angle 90°



**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone  
**Short code:** DKJ  
**Standard:** ISO 8434-2  
**Material:** Steel  
**Surface:** electro galvanised

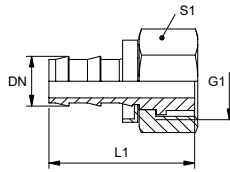
2

**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
ND 06 AJ 90	6	4	1/4"	7/16"-20 UNF	39,0	17,0	16
ND 10 AJ 90	10	6	3/8"	9/16"-18 UNF	47,0	23,0	19
ND 20 AJ 90	19	12	3/4"	1.1/16"-12 UN	83,0	48,0	32

**ND AJF****Plug-in nipple, ORFS**

**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** flat sealing  
**Short code:** ORFS  
**Standard:** ISO 8434-3  
**Material:** Steel  
**Surface:** electro galvanised



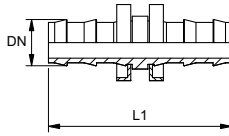
**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	G1	L1 mm	S1
ND 06 AJF	6	4	1/4"	9/16"-18 UNF	36,0	18
ND 10 AJF	10	6	3/8"	11/16"-16 UN	40,0	22
ND 10 AJF 13	10	6	3/8"	13/16"-16 UN	43,0	24
ND 13 AJF	12	8	1/2"	13/16"-16 UN	47,0	24
ND 20 AJF	19	12	3/4"	1.3/16"-12 UN	67,0	35

2

## ND VB

### Plug-in nipple, VB



**Connection 1 + 2:** Hose connection  
**Design:** Hose connectors  
**Material:** Steel  
**Surface:** electro galvanised

2

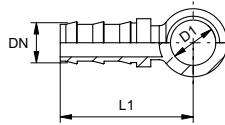
**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	L1 mm
ND 06 VB	6	4	1/4"	45,0
ND 10 VB	10	6	3/8"	54,0
ND 13 VB	12	8	1/2"	64,0
ND 16 VB	16	10	5/8"	84,0
ND 20 VB	19	12	3/4"	84,0

## NDB

## Plug-in nipple, RGN

**Connection 1:** Banjo for metric hollow screw  
**Sealing form 1:** Sealed by copper ring  
**Connection 2:** Hose connection  
**Short code:** RGN  
**Standard:** DIN 7642  
**Material:** Steel  
**Surface:** electro galvanised

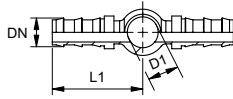


**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	D1 mm	for hollow screw	L1 mm
ND 06 B 02	6	4	1/4"	8,1	M 8	36,0
ND 06 B 04	6	4	1/4"	10,1	M 10	38,0
ND 06 B	6	4	1/4"	12,1	M 12	40,0
ND 06 B 08	6	4	1/4"	14,1	M 14	42,0
ND 10 B 06	10	6	3/8"	12,1	M 12	44,0
ND 10 B 08	10	6	3/8"	14,1	M 14	47,0
ND 10 B	10	6	3/8"	16,1	M 16	49,0
ND 13 B 08	12	8	1/2"	14,1	M 14	51,0
ND 13 B 16	12	8	1/2"	22,1	M 22	58,0
ND 16 B	16	10	5/8"	22,1	M 22	68,0

## ND BD

### Plug-in nipple, RGN



**Connection 1:** Banjo for metric hollow screw  
**Sealing form 1:** Sealed by copper ring  
**Connection 2 + 3:** Hose connection  
**Design:** Double hose connection  
**Short code:** RGN  
**Standard:** DIN 7642  
**Material:** Steel  
**Surface:** electro galvanised

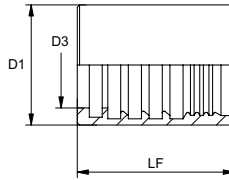
2

**Note:** Undamaged nipples can be reused.

Identification	DN	Size	Inches	D1 mm	for hollow screw	L1 mm
ND 06 BD 04	6	4	1/4"	10,1	M 10	42,0
ND 06 BD	6	4	1/4"	12,1	M 12	45,0
ND 10 BD 08	10	6	3/8"	14,1	M 14	49,0

**PHY 100****Swage ferrule, NY 100**

**Ferrule type:** Non-skive ferrule  
**Material:** Steel  
**Surface:** electro galvanised

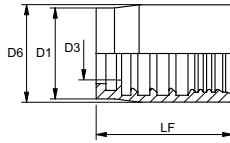


Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHY 104	5	3	3/16"	16,0	9,5	28,0
PHY 106	6	4	1/4"	19,0	11,6	29,5
PHY 108	8	5	5/16"	22,0	12,7	29,5
PHY 110	10	6	3/8"	23,0	14,3	32,8
PHY 113	12	8	1/2"	26,0	18,6	34,0
PHY 116	16	10	5/8"	30,0	22,0	36,5
PHY 120	19	12	3/4"	33,0	25,7	41,0
PHY 125	25	16	1"	40,0	31,8	41,0

DN = Nominal diameter, nominal width

## PHY 2100

### Swage ferrule, NY 2100



**Ferrule type:** Non-skive ferrule  
**Material:** Steel  
**Surface:** electro galvanised

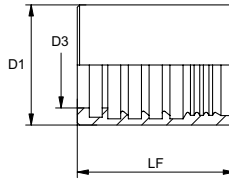
2

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHY 2106	6	4	1/4"	22,0	9,2	43,0

DN = Nominal diameter, nominal width

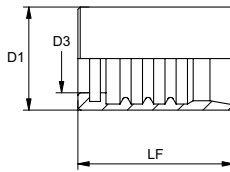
**PHY 300****Swage ferrule, NY 300**

**Ferrule type:** Non-skive ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHY 306	6	4	1/4"	18,0	11,3	43,0
PHY 308	8	5	5/16"	20,0	11,3	40,0
PHY 310	10	6	3/8"	23,0	13,7	47,0
PHY 313	12	8	1/2"	29,0	16,6	50,0
PHY 316	16	10	5/8"	32,0	19,9	60,0
PHY 320	19	12	3/4"	37,0	24,5	60,0
PHY 325	25	16	1"	42,0	29,5	60,0

DN = Nominal diameter, nominal width

**PHY 700 N****Swage ferrule, NY 700****Ferrule type:****Material:****Surface:**

Non-skive ferrule

Steel

electro galvanised

2

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHY 704 N	5	3	3/16"	15,0	9,5	29,0
PHY 706 N	6	4	1/4"	18,0	10,8	31,0
PHY 708 N	8	5	5/16"	20,0	12,5	31,0
PHY 710 N	10	6	3/8"	22,0	14,6	33,2
PHY 713 N	12	8	1/2"	27,0	18,3	37,0

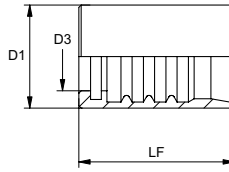
DN = Nominal diameter, nominal width

**Product versions:**

PHY 700 VA - Swage ferrule, NY 700, Stainless steel

**PHY 800 N****Swage ferrule, NY 800**

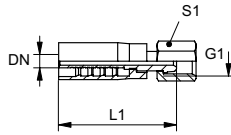
**Ferrule type:** Non-skive ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHY 806 N	6	4	1/4"	19,0	11,9	31,0
PHY 808 N	8	5	5/16"	21,0	12,7	31,0
PHY 810 N	10	6	3/8"	23,0	14,8	33,0

DN = Nominal diameter, nominal width

2

**PAY 300 AFL****Swage fitting, DKL**

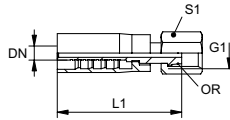
**Connection 1:** metric nut thread  
**Sealing form 1:** 24°/60° Universal sealing head  
**Short code:** DKL  
**Standard:** ISO 8434-1  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

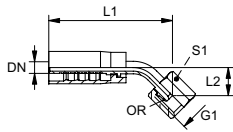
Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1
PAY 306 AFL	6	4	1/4"	M 14 x 1.5	8	46,0	17
PAY 306 AFL 08	6	4	1/4"	M 16 x 1.5	10	46,0	19
PAY 308 AFL	8	5	5/16"	M 16 x 1.5	10	46,0	19
PAY 310 AFL 08	10	6	3/8"	M 16 x 1.5	10	49,0	22
PAY 310 AFL	10	6	3/8"	M 18 x 1.5	12	48,0	22
PAY 313 AFL	12	8	1/2"	M 22 x 1.5	15	51,0	27
PAY 313 AFL 16	12	8	1/2"	M 26 x 1.5	18		
PAY 316 AFL	16	10	5/8"	M 26 x 1.5	18		
PAY 320 AFL	19	12	3/4"	M 30 x 2	22		

**PAY 300 AOS****Swage fitting, DKOS**

**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOS  
**Standard:** ISO 8434-1  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1	OR
PAY 306 AOS 04	6	4	1/4"	M 16 x 1.5	8	60,0	19	6.0 x 1.5
PAY 306 AOS	6	4	1/4"	M 18 x 1.5	10	65,0	22	7.5 x 1.5
PAY 308 AOS	8	5	5/16"	M 20 x 1.5	12	63,0	24	9.0 x 1.5
PAY 308 AOS 13	8	5	5/16"	M 24 x 1.5	16			12.0 x 2.0
PAY 310 AOS 08	10	6	3/8"	M 20 x 1.5	12			9.0 x 1.5
PAY 310 AOS	10	6	3/8"	M 22 x 1.5	14	71,0	27	12.0 x 2.0
PAY 313 AOS	12	8	1/2"	M 24 x 1.5	16	78,0	30	12.0 x 2.0
PAY 313 AOS 16	12	8	1/2"	M 30 x 2	20			16.0 x 2.5
PAY 316 AOS	16	10	5/8"	M 30 x 2	20	91,0	36	16.0 x 2.5
PAY 320 AOS	19	12	3/4"	M 36 x 2	25	96,0	46	20.0 x 2.5
PAY 325 AOS	25	16	1"	M 42 x 2	30	98,0	50	25.0 x 2.5
PAY 332 AOS	31	20	1.1/4"	M 52 x 2	38	113,0	60	33.0 x 2.5

**PAY 300 AOS 45****Swage fitting, DKOS angle 45°**

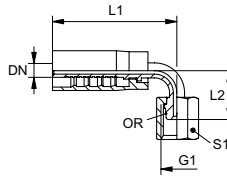
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOS  
**Standard:** ISO 8434-1  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PAY 306 AOS 45	6	4	1/4"	M 18 x 1.5	10	82,0	24,0	22	7.5 x 1.5
PAY 308 AOS 45	8	5	5/16"	M 20 x 1.5	12	76,0	20,0	24	9.0 x 1.5
PAY 310 AOS 08 45	10	6	3/8"	M 20 x 1.5	12	81,0	19,0	24	9.0 x 1.5
PAY 313 AOS 45	12	8	1/2"	M 24 x 1.5	16	96,0	23,0	30	12.0 x 2.0
PAY 316 AOS 45	16	10	5/8"	M 30 x 2	20	120,0	30,0	36	16.0 x 2.5
PAY 320 AOS 45	19	12	3/4"	M 36 x 2	25	137,0	37,0	46	20.0 x 2.5
PAY 325 AOS 45	25	16	1"	M 42 x 2	30	136,0	43,0	50	25.0 x 2.5

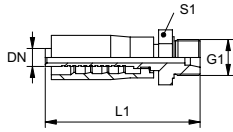
**PAY 300 AOS 90****Swage fitting, DKOS angle 90°**

**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOS  
**Standard:** ISO 8434-1  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1	OR
PAY 308 AOS 90	8	5	5/16"	M 20 x 1.5	12	64,0	36,0	24	9.0 x 1.5
PAY 313 AOS 90	12	8	1/2"	M 24 x 1.5	16	85,0	44,0	30	12.0 x 2.0
PAY 316 AOS 90	16	10	5/8"	M 30 x 2	20	105,0	61,0	36	16.0 x 2.5

2

**PAY 300 HS****Swage fitting, CES**

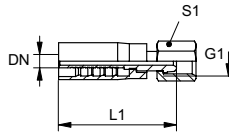
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Short code:** CES  
**Standard:** ISO 8434-1  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1
PAY 306 HS	6	4	1/4"	M 18 x 1.5	10	65,0	19
PAY 308 HS	8	5	5/16"	M 20 x 1.5	12	62,0	22
PAY 310 HS	10	6	3/8"	M 22 x 1.5	14	71,0	22
PAY 313 HS	12	8	1/2"	M 24 x 1.5	16	74,0	24
PAY 316 HS	16	10	5/8"	M 30 x 2	20	88,0	30
PAY 320 HS	19	12	3/4"	M 36 x 2	25	90,0	36
PAY 325 HS	25	16	1"	M 42 x 2	30	92,0	46

**PAY 300 AB****Swage fitting, DKR**

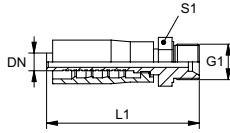
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone  
**Short code:** DKR  
**Standard:** ISO 8434-6, BS 5200  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	S1
PAY 306 AB	6	4	1/4"	G 1/4" -19	58,0	19
PAY 306 AB 10	6	4	1/4"	G 3/8" -19	58,0	27
PAY 308 AB 10	8	5	5/16"	G 3/8" -19	59,0	19
PAY 310 AB	10	6	3/8"	G 3/8" -19	61,0	22
PAY 310 AB 13	10	6	3/8"	G 1/2" -14	61,0	27
PAY 313 AB	12	8	1/2"	G 1/2" -14	61,0	27
PAY 316 AB 20	16	10	5/8"	G 3/4" -14	75,0	32
PAY 320 AB	19	12	3/4"	G 3/4" -14	78,0	32
PAY 320 AB 25	19	12	3/4"	G 1" -11	78,0	41
PAY 325 AB	25	16	1"	G 1" -11	88,0	41
PAY 325 AB 32	25	16	1"	G 1.1/4" -11	77,0	50
PAY 332 AB 40	31	20	1.1/4"	G 1.1/2" -11		

## PAY 300 HB

### Swage fitting, AGR



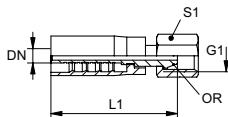
**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Short code:** AGR  
**Standard:** ISO 8434-6, BS 5200  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

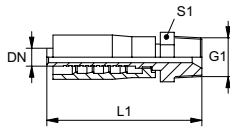
Identification	DN	Size	Inches	G1	L1 mm	S1
PAY 306 HB	6	4	1/4"	G 1/4" -19	64,0	17
PAY 308 HB 10	8	5	5/16"	G 3/8" -19	64,0	22
PAY 310 HB	10	6	3/8"	G 3/8" -19	71,0	22
PAY 310 HB 13	10	6	3/8"	G 1/2" -14	76,0	22
PAY 313 HB	12	8	1/2"	G 1/2" -14	79,0	24
PAY 316 HB 20	16	10	5/8"	G 3/4" -14	92,0	32
PAY 320 HB	19	12	3/4"	G 3/4" -14	92,0	32
PAY 320 HB 25	19	12	3/4"	G 1" -11	100,0	36
PAY 325 HB	25	16	1"	G 1" -11	100,0	36
PAY 325 HB 32	25	16	1"	G 1.1/4" -11	103,0	50
PAY 332 HB 40	31	20	1.1/4"	G 1.1/2" -11	118,0	55

**PAY 300 AN****Swage fitting, DKN**

**Connection 1:** NPT nut thread (NPSM)  
**Sealing form 1:** 60° outer cone  
**Short code:** DKN  
**Standard:** ANSI B 1.20.0  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	S1
PAY 306 AN	6	4	1/4"	1/4" -18 NPT	47,0	19
PAY 308 AN 10	8	5	5/16"	3/8" -18 NPT	48,0	22
PAY 310 AN	10	6	3/8"	3/8" -18 NPT	50,0	22
PAY 313 AN	12	8	1/2"	1/2" -14 NPT	50,0	27
PAY 316 AN 20	16	10	5/8"	3/4" -14 NPT	53,0	32
PAY 320 AN	19	12	3/4"	3/4" -14 NPT	59,0	32
PAY 325 AN	25	16	1"	1" -11.5 NPT		

**PAY 300 HN****Swage fitting, AGN**

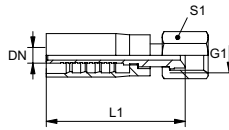
**Connection 1:** NPT external threads  
**Sealing form 1:** thread seal, additional 60° inner cone.  
**Short code:** AGN  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

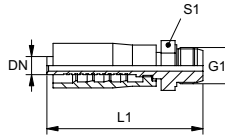
Identification	DN	Size	Inches	G1	L1 mm	S1
PAY 306 HN	6	4	1/4"	1/4" -18 NPT	65,0	14
PAY 306 HN 10	6	4	1/4"	3/8" -18 NPT		
PAY 310 HN	10	6	3/8"	3/8" -18 NPT	71,0	19
PAY 310 HN 13	10	6	3/8"	1/2" -14 NPT	76,0	22
PAY 313 HN	12	8	1/2"	1/2" -14 NPT	79,0	22
PAY 320 HN	19	12	3/4"	3/4" -14 NPT	91,0	27
PAY 325 HN	25	16	1"	1" -11.5 NPT	96,0	36
PAY 325 HN 32	25	16	1"	1.1/4" -11.5 NPT	97,0	46

**PAY 300 AJ****Swage fitting, DKJ**

**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone  
**Short code:** DKJ  
**Standard:** ISO 8434-2  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	S1
PAY 306 AJ	6	4	1/4"	7/16"-20 UNF		
PAY 306 AJ 08	6	4	1/4"	1/2"-20 UNF	55,0	19
PAY 310 AJ	10	6	3/8"	9/16"-18 UNF	59,0	22
PAY 310 AJ 13	10	6	3/8"	3/4"-16 UNF	59,0	24
PAY 313 AJ	12	8	1/2"	3/4"-16 UNF	64,0	27
PAY 313 AJ 16	12	8	1/2"	7/8"-14 UNF	62,0	27
PAY 316 AJ	16	10	5/8"	7/8"-14 UNF	73,0	27
PAY 320 AJ	19	12	3/4"	1.1/16" -12 UN	79,0	36
PAY 325 AJ	25	16	1"	1.5/16" -12 UN	77,0	41
PAY 325 AJ 32	25	16	1"	1.5/8" -12 UN	75,0	50
PAY 332 AJ	31	20	1.1/4"	1.5/8" -12 UN		

**PAY 300 HJ****Swage fitting, AGJ**

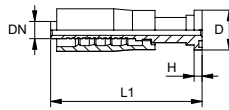
**Connection 1:** UN/UNF external threads  
**Sealing form 1:** 74° outer cone  
**Short code:** AGJ  
**Standard:** ISO 8434-2  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	G1	L1 mm	S1
PAY 306 HJ 08	6	4	1/4"	1/2"-20 UNF	67,0	14
PAY 308 HJ 10	8	5	5/16"	9/16"-18 UNF	64,0	17
PAY 308 HJ 13	8	5	5/16"	3/4"-16 UNF		
PAY 316 HJ 20	16	10	5/8"	1.1/16" -12 UN	94,0	30
PAY 320 HJ 25	19	12	3/4"	1.5/16" -12 UN	95,0	36
PAY 325 HJ 32	25	16	1"	1.5/8" -12 UN	97,0	46
PAY 332 HJ 40	31	20	1.1/4"	1.7/8" -12 UN	110,0	50

**PAY 300 SF****Swage fitting, SFL**

**Connection 1:** SAE flange connection 3000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFL  
**Standard:** SAE J518, ISO 6162-1  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

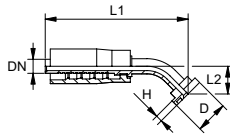


Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PAY 316 SF 20	16	10	5/8"	3/4"	38,1	6,7	95,5
PAY 332 SF	31	20	1.1/4"	1.1/4"	50,8	8,0	117,0

2

## PAY 300 SF 45

### Swage fitting, SFL angle 45°



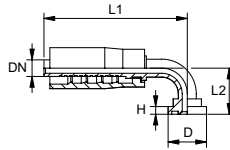
**Connection 1:** SAE flange connection 3000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFL  
**Standard:** SAE J518, ISO 6162-1  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PAY 316 SF 20 45	16	10	5/8"	3/4"	38,1	6,7	113,5	24,0
PAY 325 SF 45	25	16	1"	1"	44,4	8,0	125,0	32,0
PAY 332 SF 45	31	20	1.1/4"	1.1/4"	50,8	8,0	174,0	37,0

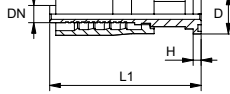
**PAY 300 SF 90****Swage fitting, SFL angle 90°**

**Connection 1:** SAE flange connection 3000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFL  
**Standard:** SAE J518, ISO 6162-1  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



2

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PAY 316 SF 20 90	16	10	5/8"	3/4"	38,1	6,7	98,5	54,0
PAY 325 SF 90	25	16	1"	1"	44,4	8,0	116,0	69,0
PAY 332 SF 90	31	20	1.1/4"	1.1/4"	50,8	8,0	165,0	82,0

**PAY 300 SF6****Swage fitting, SFS**

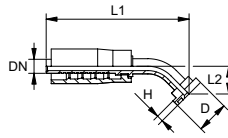
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm
PAY 313 SF6	12	8	1/2"	1/2"	31,8	7,7	88,0
PAY 316 SF6 20	16	10	5/8"	3/4"	41,3	8,8	103,0
PAY 320 SF6	19	12	3/4"	3/4"	41,3	8,8	103,5
PAY 325 SF6	25	16	1"	1"	47,6	9,5	113,0
PAY 332 SF6	31	20	1.1/4"	1.1/4"	54,0	10,3	126,0

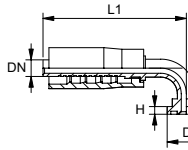
**PAY 300 SF6 45****Swage fitting, SFS angle 45°**

**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PAY 313 SF6 45	12	8	1/2"	1/2"	31,8	7,7	95,0	21,0
PAY 316 SF6 20 45	16	10	5/8"	3/4"	41,3	8,8	117,5	28,0
PAY 320 SF6 45	19	12	3/4"	3/4"	41,3	8,8	130,5	32,0
PAY 325 SF6 45	25	16	1"	1"	47,6	9,5	130,0	37,0
PAY 332 SF6 45	31	20	1.1/4"	1.1/4"	54,0	10,3	180,5	44,0

2

**PAY 300 SF6 90****Swage fitting, SFS angle 90°**

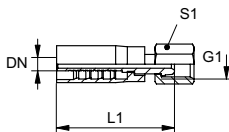
**Connection 1:** SAE flange connection 6000 PSI  
**Sealing form 1:** flat seal with SF O-ring  
**Short code:** SFS  
**Standard:** SAE J518, ISO 6162-2  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

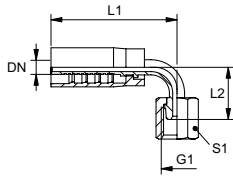
Identification	DN	Size	Inches	Flange size	D mm	H mm	L1 mm	L2 mm
PAY 313 SF6 90	12	8	1/2"	1/2"	31,8	7,7	87,0	41,0
PAY 316 SF6 20 90	16	10	5/8"	3/4"	41,3	8,8	104,5	54,0
PAY 320 SF6 90	19	12	3/4"	3/4"	41,3	8,8	116,5	63,0
PAY 325 SF6 90	25	16	1"	1"	47,6	9,5	116,0	75,0
PAY 332 SF6 90	31	20	1.1/4"	1.1/4"	54,0	10,3	165,0	91,0

**PAY 300 AF****Swage fitting, DKF**

**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone for French series imperial pipe.  
**Short code:** DKF  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	S1
PAY 306 AF 10	6	4	1/4"	M 20 x 1.5	13,25	60,0	24
PAY 308 AF 10	8	5	5/16"	M 20 x 1.5	13,25	57,0	24
PAY 308 AF 13	8	5	5/16"	M 24 x 1.5	16,75	61,0	30
PAY 310 AF	10	6	3/8"	M 20 x 1.5	13,25	64,0	24
PAY 310 AF 13	10	6	3/8"	M 24 x 1.5	16,75	68,0	30
PAY 313 AF	12	8	1/2"	M 24 x 1.5	16,75	71,0	30
PAY 313 AF 16	12	8	1/2"	M 30 x 1.5	21,26	70,0	36
PAY 316 AF	16	10	5/8"	M 30 x 1.5	21,26	80,0	36
PAY 320 AF	19	12	3/4"	M 36 x 1.5	26,75	81,0	42
PAY 325 AF	25	16	1"	M 45 x 1.5	33,50	83,0	55

**PAY 300 AF 90****Swage fitting, DKF angle 90°**

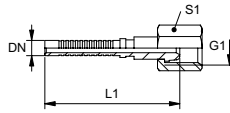
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone for French series imperial pipe.  
**Short code:** DKF  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm	L2 mm	S1
PAY 306 AF 10 90	6	4	1/4"	M 20 x 1.5	13,25	60,0	31,0	24
PAY 308 AF 10 90	8	5	5/16"	M 20 x 1.5	13,25	67,0	35,0	24
PAY 308 AF 13 90	8	5	5/16"	M 24 x 1.5	16,75	67,0	35,0	30
PAY 310 AF 90	10	6	3/8"	M 20 x 1.5	13,25	77,0	40,0	24
PAY 310 AF 13 90	10	6	3/8"	M 24 x 1.5	16,75	77,0	41,0	30
PAY 313 AF 16 90	12	8	1/2"	M 30 x 1.5	21,26	85,0	49,0	36
PAY 313 AF 90	12	8	1/2"	M 24 x 1.5	16,75	85,0	45,0	30
PAY 316 AF 90	16	10	5/8"	M 30 x 1.5	21,26	102,0	54,0	36
PAY 320 AF 90	19	12	3/4"	M 36 x 1.5	26,75	108,0	67,0	42
PAY 325 AF 90	25	16	1"	M 45 x 1.5	33,50	116,0	74,0	55

**PNY 2100 AFL****Swage nipple, DKL**

**Connection 1:** metric nut thread  
**Sealing form 1:** 24°/60° Universal sealing head  
**Short code:** DKL  
**Standard:** ISO 8434-1  
**Material:** Steel  
**Surface:** electro galvanised



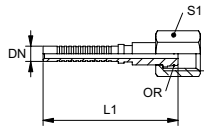
**Note:** Appropriate ferrule: PHY 2106.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	S1
PNY 2106 AFL	6	4	1/4"	M 14 x 1.5	8	17

2

## PNY 2100 AOS

### Swage nipple, DKOS



**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOS  
**Standard:** ISO 8434-1  
**Material:** Steel  
**Surface:** electro galvanised

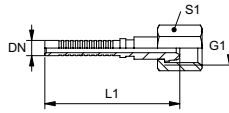
2

**Note:** Appropriate ferrule: PHY 2106.

Identification	DN	Size	Inches	G1	for external pipe Ø mm	S1	OR
PNY 2106 AOS 04	6	4	1/4"	M 16 x 1.5	8	19	6.0 x 1.5
PNY 2106 AOS	6	4	1/4"	M 18 x 1.5	10	22	7.5 x 1.5

**PNY 2100 AB****Swage nipple, DKR**

**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone  
**Short code:** DKR  
**Standard:** ISO 8434-6, BS 5200  
**Material:** Steel  
**Surface:** electro galvanised



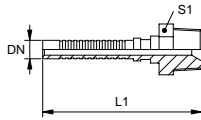
**Note:** Appropriate ferrule: PHY 2106.

Identification	DN	Size	Inches	G1	S1
PNY 2106 AB	6	4	1/4"	G 1/4" -19	19

2

## PNY 2100 HN

### Swage nipple, AGN



**Connection 1:** NPT external threads  
**Sealing form 1:** thread seal, additional 60° inner cone.

**Short code:** AGN

**Material:** Steel

**Surface:** electro galvanised

AGN  
 Steel  
 electro galvanised

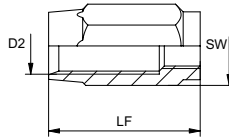
2

**Note:** Appropriate ferrule: PHY 2106.

Identification	DN	Size	Inches	G1	S1
PNY 2106 HN	6	4	1/4"	1/4" -18 NPT	14
PNY 2106 HN 10	6	4	1/4"	3/8" -18 NPT	19

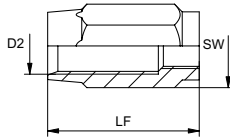
**AFH 100****Screw ferrule, TAF 100**

**Ferrule type:** Screw ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN*	Size	Inches	D2 mm	LF mm	SW mm
AFH 104	4	3	3/16"	7,9	25,0	12
AFH 106	6	4	1/4"	11,0	36,0	17
AFH 108	8	5	5/16"	13,0	38,0	19
AFH 110	10	6	3/8"	15,5	44,5	22
AFH 113	12	8	1/2"	20,1	51,0	27

DN = Nominal diameter, nominal width

**BFH 200****Screw ferrule, TBF 200**

**Ferrule type:** Screw ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

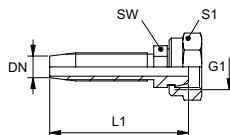
Identification	DN*	Size	Inches	D2 mm	LF mm	SW mm
BFH 204	4	3	3/16"	8,8	25,0	12
BFH 206	6	4	1/4"	12,4	36,0	17
BFH 208	8	5	5/16"	14,0	38,0	19
BFH 210	10	6	3/8"	17,5	44,5	22
BFH 213	12	8	1/2"	21,0	51,0	27
BFH 220	19	12	3/4"	26,5	57,0	30

DN = Nominal diameter, nominal width

## TRN A

## Screw nipple, DKM

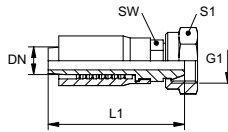
**Connection 1:** metric nut thread  
**Sealing form 1:** 60° sealing head  
**Short code:** DKM  
**Standard:** DIN 3863  
**Material:** Steel  
**Surface:** electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	SW mm	S1
TRN 04 A	5	3	3/16"	M 12 x 1.5	42,5	10	17
TRN 06 A	6	4	1/4"	M 14 x 1.5	58,5	12	17
TRN 06 A 08	6	4	1/4"	M 16 x 1.5	59,5	14	19
TRN 08 A 10	8	5	5/16"	M 18 x 1.5	63,0	17	22
TRN 10 A	10	6	3/8"	M 18 x 1.5	69,5	17	22
TRN 10 A 13	10	6	3/8"	M 22 x 1.5	70,5	22	27

2

**TRP A****Swage fitting, DKM**

**Connection 1:** metric nut thread  
**Sealing form 1:** 60° sealing head  
**Short code:** DKM  
**Standard:** DIN 3863  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

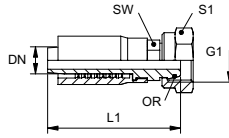
2

Identification	DN	Size	Inches	G1	L1 mm	SW mm	S1
TRP 04 A	5	3	3/16"	M 12 x 1.5	55,0	10	17
TRP 04 A 08	5	3	3/16"	M 16 x 1.5	55,0	14	22
TRP 06 A	6	4	1/4"	M 14 x 1.5	61,0	14	19
TRP 06 A 08	6	4	1/4"	M 16 x 1.5	61,0	14	22
TRP 08 A	8	5	5/16"	M 16 x 1.5	64,0	17	22
TRP 10 A	10	6	3/8"	M 18 x 1.5	69,0	19	22
TRP 13 A	12	8	1/2"	M 22 x 1.5	75,0	24	27

## TRP AOL

## Swage fitting, DKOL

**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOL  
**Standard:** ISO 8434-1  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

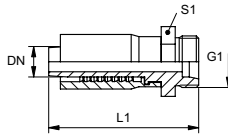


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Identification	DN	Size	Inches	Series	G1	for external pipe Ø mm	L1 mm	SW mm	S1	OR
TRP 06 AOL 10	6	4	1/4"	L	M 18 x 1.5	12	57,0	17	22	9.0 x 1.5

## TRP HL

### Swage fitting, CEL



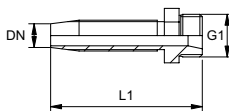
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Short code:** CEL  
**Standard:** ISO 8434-1  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	Series	G1	for external pipe Ø mm	L1 mm	S1
TRP 04 HL	5	3	3/16"	L	M 12 x 1.5	6	47,0	17
TRP 06 HL	6	4	1/4"	L	M 14 x 1.5	8	53,0	17
TRP 08 HL	8	5	5/16"	L	M 16 x 1.5	10	57,0	19
TRP 08 HL 10	8	5	5/16"	L	M 18 x 1.5	12	57,0	22
TRP 10 HL	10	6	3/8"	L	M 18 x 1.5	12	63,0	22
TRP 10 HL 13	10	6	3/8"	L	M 22 x 1.5	15	64,0	27
TRP 13 HL	12	8	1/2"	L	M 22 x 1.5	15	70,0	27

**TRN HL****Screw nipple, CEL**

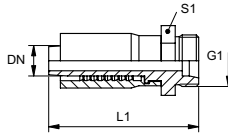
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Short code:** CEL  
**Standard:** ISO 8434-1  
**Material:** Steel  
**Surface:** electro galvanised



**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Series	G1	for external pipe Ø mm	L1 mm	S1
TRN 04 HL	5	3	3/16"	L	M 12 x 1.5	6	39,5	12
TRN 06 HL	6	4	1/4"	L	M 14 x 1.5	8	56,5	14
TRN 08 HL	8	5	5/16"	L	M 16 x 1.5	10	59,0	17
TRN 08 HL 10	8	5	5/16"	L	M 18 x 1.5	12	59,0	19
TRN 10 HL	10	6	3/8"	L	M 18 x 1.5	12	65,5	19
TRN 20 HL	19	12	3/4"	L	M 30 x 2	22	85,0	30

2

**TRP HS****Swage fitting, CES**

**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Short code:** CES  
**Standard:** ISO 8434-1  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

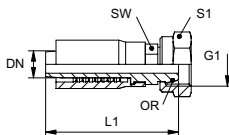
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Identification	DN	Size	Inches	Series	G1	for external pipe Ø mm	L1 mm	S1
TRP 04 HS 03	5	3	3/16"	S	M 14 x 1.5	6	49,0	17
TRP 04 HS	5	3	3/16"	S	M 16 x 1.5	8	49,0	19
TRP 06 HS	6	4	1/4"	S	M 18 x 1.5	10	55,0	22
TRP 06 HS 08	6	4	1/4"	S	M 20 x 1.5	12	55,0	24
TRP 08 HS	8	5	5/16"	S	M 20 x 1.5	12	64,0	24
TRP 10 HS 08	10	6	3/8"	S	M 20 x 1.5	12		
TRP 10 HS	10	6	3/8"	S	M 22 x 1.5	14	66,0	27
TRP 13 HS	12	8	1/2"	S	M 24 x 1.5	16	71,0	27

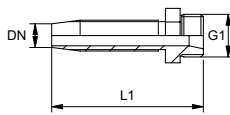
## TRP AOS

## Swage fitting, DKOS

**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOS  
**Standard:** ISO 8434-1  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	Series	G1	for external pipe Ø mm	L1 mm	SW mm	S1	OR
TRP 04 AOS	5	3	3/16"	S	M 16 x 1.5	8	55,0	14	22	6.0 x 1.5
TRP 06 AOS 04	6	4	1/4"	S	M 16 x 1.5	8	61,0	17	22	6.0 x 1.5
TRP 06 AOS	6	4	1/4"	S	M 18 x 1.5	10	61,0	17	22	7.5 x 1.5
TRP 08 AOS 06	8	5	5/16"	S	M 18 x 1.5	10	64,0	19	22	7.5 x 1.5
TRP 08 AOS	8	5	5/16"	S	M 20 x 1.5	12	64,0	19	24	9.0 x 1.5
TRP 10 AOS 08	10	6	3/8"	S	M 20 x 1.5	12	68,0	19	24	9.0 x 1.5
TRP 10 AOS	10	6	3/8"	S	M 22 x 1.5	14	68,0	22	27	10.0 x 2.0
TRP 13 AOS	12	8	1/2"	S	M 24 x 1.5	16	75,0	24	30	12.0 x 2.0

**TRN HS****Screw nipple, CES**

**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Short code:** CES  
**Standard:** ISO 8434-1  
**Material:** Steel  
**Surface:** electro galvanised

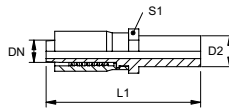
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**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Series	G1	for external pipe Ø mm	L1 mm	S1
TRN 04 HS 03	5	3	3/16"	S	M 14 x 1.5	6	42,0	14
TRN 04 HS	5	3	3/16"	S	M 16 x 1.5	8	42,0	14
TRN 06 HS	6	4	1/4"	S	M 18 x 1.5	10	59,5	19
TRN 08 HS	8	5	5/16"	S	M 20 x 1.5	12	60,0	22

**TRP FL****Swage fitting, BEL**

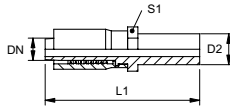
**Connection 1:** Pipe sockets  
**Sealing form 1:** Cutting ring connection  
**Short code:** BEL  
**Standard:** ISO 8434-1  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



**Note:** Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...).

Identification	DN	Size	Inches	Series	D2 mm	L1 mm	SW mm
TRP 04 FL	5	3	3/16"	L	6,0	57,0	10
TRP 10 FL 13	10	6	3/8"	L	15,0	77,0	19
TRP 13 FL	12	8	1/2"	L	15,0	83,0	24
TRP 13 FL 16	12	8	1/2"	L	18,0	83,0	24

2

**TRP FS****Swage fitting, BES**

**Connection 1:** Pipe sockets  
**Sealing form 1:** Cutting ring connection  
**Short code:** BES  
**Standard:** ISO 8434-1  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

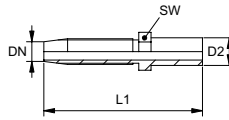
**Note:** Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...).

Identification	DN	Size	Inches	Series	D2 mm	L1 mm	SW mm
TRP 04 FS	5	3	3/16"	S	8,0	59,0	14
TRP 06 FS	6	4	1/4"	S	10,0	67,0	14
TRP 06 FS 04	6	4	1/4"	S	8,0	65,0	14
TRP 06 FS 08	6	4	1/4"	S	12,0	68,0	17
TRP 08 FS	8	5	5/16"	S	12,0	71,0	17
TRP 08 FS 06	8	5	5/16"	S	10,0	70,0	17
TRP 10 FS	10	6	3/8"	S	14,0	79,0	19
TRP 10 FS 06	10	6	3/8"	S	10,0	75,0	19
TRP 10 FS 08	10	6	3/8"	S	12,0	77,0	19
TRP 13 FS	12	8	1/2"	S	16,0	87,0	24

## TRN FL / TRN FS

## Screw nipple, BEL / BES

**Connection 1:** Pipe sockets  
**Sealing form 1:** Cutting ring connection  
**Short code:** BEL  
**Standard:** ISO 8434-1  
**Material:** Steel  
**Surface:** electro galvanised

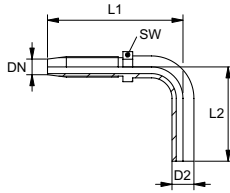


**Note:** Choose the appropriate ferrule based on the hose type. Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...).

Identification	DN	Size	Inches	Series	D2 mm	L1 mm	SW mm
TRN 04 FL	5	3	3/16"	L	6,0	49,5	10
TRN 06 FL	6	4	1/4"	L	8,0	67,5	12
TRN 08 FL	8	5	5/16"	L	10,0	72,0	12
TRN 10 FL	10	6	3/8"	L	12,0	79,5	14
TRN 10 FL 13	10	6	3/8"	L	15,0	79,5	17
TRN 13 FL	12	8	1/2"	L	15,0	86,0	17
TRN 13 FL 16	12	8	1/2"	L	18,0	86,0	19
TRN 20 FL	19	10	5/8"	L	22,0	96,0	27
TRN 04 FS	5	3	3/16"	S	8,0	51,5	10
TRN 06 FS 04	6	4	1/4"	S	8,0	67,5	12
TRN 06 FS	6	4	1/4"	S	10,0	69,5	12
TRN 06 FS 08	6	4	1/4"	S	12,0	69,5	14
TRN 08 FS	8	5	5/16"	S	12,0	72,0	14
TRN 20 FS	19	12	3/4"	S	25,0	105,0	27

## TRN FL 90

### Screw nipple, BEL angle 90°



**Connection 1:** Pipe sockets  
**Sealing form 1:** Cutting ring connection  
**Short code:** BEL  
**Standard:** ISO 8434-1  
**Material:** Steel  
**Surface:** electro galvanised

2

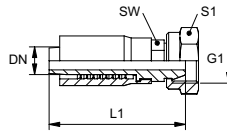
**Note:** Choose the appropriate ferrule based on the hose type. Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...).

Identification	DN	Size	Inches	Series	D2 mm	L2 mm	L1 mm	SW mm
TRN 04 FL 90	5	3	3/16"	L	6,0	44,0	45,0	10

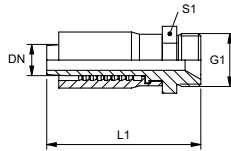
## TRP AB

## Swage fitting, DKR

**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone  
**Short code:** DKR  
**Standard:** ISO 8434-6, BS 5200  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	SW mm	S1
TRP 04 AB 02	5	3	3/16"	G 1/8" -28	54,0	10	17
TRP 04 AB 06	5	3	3/16"	G 1/4" -19	54,0	14	19
TRP 06 AB	6	4	1/4"	G 1/4" -19	60,0	14	19
TRP 13 AB	12	8	3/8"	G 1/2" -14	74,0	24	27

**TRP HB****Swage fitting, AGR**

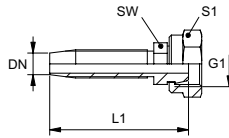
**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Short code:** AGR  
**Standard:** ISO 8434-6, BS 5200  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

2

Identification	DN	Size	Inches	G1	L1 mm	S1
TRP 04 HB 02	5	3	3/16"	G 1/8" -28	49,0	14
TRP 13 HB	12	8	1/2"	G 1/2" -14	73,0	24

**TRN AB****Screw nipple, DKR**

**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone  
**Short code:** DKR  
**Standard:** ISO 8434-6, BS 5200  
**Material:** Steel  
**Surface:** electro galvanised



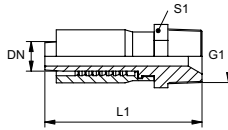
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	L1 mm	SW mm	S1
TRN 04 AB 06	5	3	3/16"	G 1/4" -19	42,5	12	17
TRN 06 AB	6	4	1/4"	G 1/4" -19	58,5	12	17
TRN 10 AB	10	6	3/8"	G 3/8" -19	68,5	17	22

2

## TRP HN

### Swage fitting, AGN



**Connection 1:** NPT external threads  
**Sealing form 1:** thread seal, additional 60° inner cone.  
**Short code:** AGN  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised

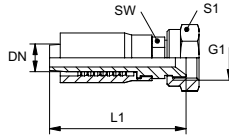
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Identification	DN	Size	Inches	G1	L1 mm	S1
TRP 06 HN	6	4	1/4"	1/4" -18 NPT	58,0	17
TRP 10 HN	10	6	3/8"	3/8" -18 NPT	67,0	22
TRP 13 HN	12	8	1/2"	1/2" -14 NPT	76,0	24

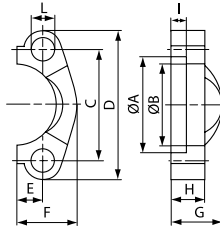
## TRP AJ

## Swage fitting, DKJ

**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone  
**Short code:** DKJ  
**Standard:** ISO 8434-2  
**Included in scope of supply:** Swage nipple + swage ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L1 mm	SW mm	S1
TRP 04 AJ 06	5	3	3/16"	7/16"-20 UNF	55,0	14	17
TRP 06 AJ	6	4	1/4"	7/16"-20 UNF	61,0	14	17
TRP 06 AJ 08	6	4	1/4"	1/2"-20 UNF	61,0	14	17
TRP 06 AJ 10	6	4	1/4"	9/16"-18 UNF	61,0	14	19
TRP 08 AJ 10	8	5	5/16"	9/16"-18 UNF	64,0	17	19
TRP 10 AJ	10	6	3/8"	9/16"-18 UNF	69,0	19	19

**FH (3000 PSI)****SAE flange half**

<b>Pressure series:</b>	3000 psi
<b>Design:</b>	SAE flange half
<b>Standard:</b>	SAE J518, ISO 6162-1 /-2
<b>Included in scope of supply:</b>	flange only
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Mounting:</b>	Screw bore hole

**Note:** Recommended screws are listed in the columns M (metr) and M (unc).

Identification	PB 10.9 bar	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M metr.	M unc
FH 3001	350	1/2"	31,0	24,3	38,1	54	8,7	22,8	19	13	6,2	8,7	M 8 x 25	5/16" x 1.1/4"
FH 3002	350	3/4"	38,9	32,1	47,6	65	11,1	25,9	22	14	6,2	10,7	M 10 x 30	3/8" x 1.1/4"
FH 3003	315	1"	45,2	38,5	52,4	70	13,1	29,2	24	16	7,5	10,7	M 10 x 30	3/8" x 1.1/4"
FH 3004	250	1.1/4"	51,6	43,7	58,7	79	15,1	36,3	22	16	7,5	12,0	M 10 x 30	7/16" x 1.1/2"
FH 3005	200	1.1/2"	61,1	50,8	69,9	94	17,9	41,1	25	16	7,5	13,5	M 12 x 35	1/2" x 1.1/2"
FH 3006	200	2"	72,2	62,7	77,8	102	21,4	48,2	26	16	9,0	13,5	M 12 x 35	1/2" x 1.1/2"
FH 3007	160	2.1/2"	84,9	74,9	88,9	114	25,4	54,1	38	19	9,0	13,5	M 12 x 40	1/2" x 1.1/2"
FH 3008	160	3"	102,4	90,9	106,4	135	31,0	65,3	41	22	9,0	17,0	M 16 x 50	5/8" x 2"
FH 3009	35	3.1/2"	115,1	102,4	120,7	152	34,9	69,5	28	22	10,7	17,0	M 16 x 50	5/8" x 2"
FH 3010	35	4"	127,8	115,1	130,2	162	38,9	76,0	35	25	10,7	17,0	M 16 x 50	5/8" x 2"
FH 3011	35	5"	153,2	140,5	152,4	184	46,0	90,0	41	28	10,7	17,0	M 16 x 55	5/8" x 2"
FH 3014	250	1.1/4"	51,6	43,7	58,7	79	15,1	36,3	22	16	7,5	10,7	M 10 x 30	-
FH 3044	250	1.1/4"	51,6	43,7	58,7	79	15,1	36,3	22	16	7,5	12,7	M 12 x 35	-

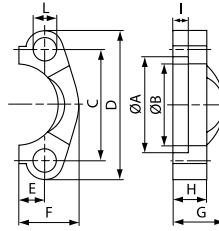
PN = Nominal pressure PB = Max. operating pressure Series: LL = Very light L = Light S = Heavy Ø = External pipe diameter

**Product versions:**

**SFH (3000 PSI / 6000 PSI) VA** - SAE flange half, Stainless steel

**FH (6000 PSI)****SAE flange half**

**Pressure series:** 6000 psi  
**Design:** SAE flange half  
**Standard:** SAE J518, ISO 6162-1 /-2  
**Included in scope of supply:** flange only  
**Material:** Steel  
**Surface:** electro galvanised  
**Mounting:** Screw bore hole



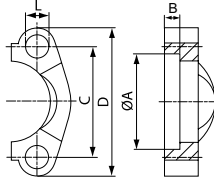
**Note:** Recommended screws are listed in the columns M (metr) and M (unc).

Identification	PB 10.9 bar	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M metr.	M unc
FH 6001	400	1/2"	32,5	24,6	40,5	56	9,1	23,6	22	16	7,2	8,7	M 8 x 30	5/16" x 1.1/4"
FH 6002	400	3/4"	42,1	32,5	50,8	71	11,9	30,0	28	19	8,3	10,7	M 10 x 35	3/8" x 1.1/2"
FH 6003	400	1"	48,4	38,9	57,2	81	13,9	34,8	33	24	9,0	13,0	M 12 x 45	-
FH 6004	400	1.1/4"	54,8	44,5	66,7	95	15,9	38,6	38	27	9,8	14,7	M 14 x 45	-
FH 6005	400	1.1/2"	64,3	51,6	79,4	113	18,3	47,5	43	30	12,1	17,0	M 16 x 55	5/8" x 2"
FH 6006	400	2"	80,2	67,6	96,8	133	22,2	56,9	52	37	12,1	21,0	M 20 x 70	3/4" x 2.1/2"
FH 6013	400	1"	48,4	38,9	57,2	81	13,9	34,8	33	24	9,0	12,0	-	7/16" x 1.3/4"
FH 6044	400	1.1/4"	54,8	44,5	66,7	95	15,9	38,6	38	27	9,8	13,5	-	1/2" x 1.3/4"

Ø = External pipe diameter    Series: LL = Very light    L = Light    S = Heavy    PN = Nominal pressure    PB = Max. operating pressure

**Product versions:**

SFH (3000 PSI / 6000 PSI) VA - SAE flange half, Stainless steel

**SFH (6000 PSI) CAT****Flange clamp 6000 PSI (CAT)**

suitable for:

Material:

Surface:

Caterpillar

Steel

electro galvanised

2

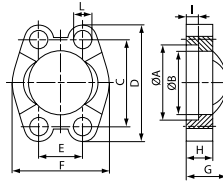
**Note:** Recommended screws are listed in the columns M (metr) and M (unc).

Identification	Flange size	PB 10.9 bar	A mm	B mm	C mm	D mm	L mm	M metr.	M unc
SFH9 20	3/4"	400	42,1	13,3	50,8	71	10,7	M 10 x 35	3/8" x 1.1/2"
SFH9 25	1"	400	48,4	13,3	57,2	81	13,0	M 12 x 45	-
SFH9 32	1.1/4"	400	54,8	13,3	66,7	95	15,0	M 14 x 45	-
SFH9 40	1.1/2"	400	64,3	13,3	79,4	111	17,0	M 16 x 55	5/8" x 2"

## VF (3000 PSI)

## SAE full flange

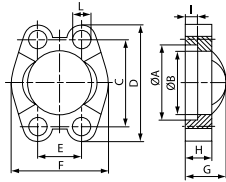
**Pressure series:** 3000 psi  
**Design:** SAE full flange  
**Standard:** SAE J518, ISO 6162-1 /-2  
**Mounting:** Screw bore hole  
**Included in scope of supply:** flange only  
**Material:** Steel  
**Surface:** electro galvanised



**Note:** Recommended screws are listed in the columns M (metr) and M (unc).

Identification	Flange size	PB 10.9 bar	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M metr.	M unc
VF 3001	1/2"	350	31,0	24,3	38,1	54	17,5	45,6	19	13	6,2	8,7	M 8 x 25	5/16" x 1.1/4"
VF 3002	3/4"	350	38,9	32,1	47,6	65	22,2	51,8	22	14	6,2	10,7	M 10 x 30	3/8" x 1.1/4"
VF 3003	1"	315	45,2	38,5	52,4	70	26,2	58,4	24	16	7,5	10,7	M 10 x 30	3/8" x 1.1/4"
VF 3003-6000	1"	400	45,2	38,5	52,4	71	26,2	60,0	26	26	7,5	10,5	M 10 x 45	-
VF 3004	1.1/4"	250	51,6	43,7	58,7	79	30,2	72,6	22	16	7,5	12,0	M 10 x 30	7/16" x 1.1/2"
VF 3004-6000	1.1/4"	400	51,6	43,7	58,7	80	30,2	73,0	33	24	7,5	12,5	M 12 x 45	-
VF 3005	1.1/2"	200	61,1	50,8	69,9	94	35,7	82,2	25	16	7,5	13,5	M 12 x 35	1/2" x 1.1/2"
VF 3005-6000	1.1/2"	400	61,1	50,8	69,9	95	35,7	83,0	37	27	7,5	13,5	M 12 x 50	-
VF 3006	2"	200	72,2	62,7	77,8	102	42,9	96,4	26	16	9,0	13,5	M 12 x 35	1/2" x 1.1/2"
VF 3006-6000	2"	400	72,2	62,7	77,8	103	42,9	97,0	43	30	9,0	13,5	M 12 x 50	-
VF 3007	2.1/2"	160	84,9	74,9	88,9	114	50,8	108,2	38	19	9,0	13,5	M 12 x 40	1/2" x 1.1/2"
VF 3007-6000	2.1/2"	400	84,9	74,9	88,9	114	50,8	108,2	49	30	9,0	15,0	M 14 x 50	-
VF 3008	3"	160	102,4	90,9	106,4	135	61,9	130,6	41	22	9,0	17,0	M 16 x 50	5/8" x 2"
VF 3009	3.1/2"	35	115,1	102,4	120,7	152	69,9	139,0	28	22	10,7	17,0	M 16 x 50	5/8" x 2"
VF 3010	4"	35	127,8	115,1	130,2	162	77,8	152,0	35	25	10,7	17,0	M 16 x 50	5/8" x 2"
VF 3011	5"	35	153,2	140,5	152,4	184	92,1	180,0	41	28	10,7	17,0	M 16 x 55	5/8" x 2"

Series: LL = Very light L = Light S = Heavy Ø = External pipe diameter PN = Nominal pressure PB = Max. operating pressure

**VF (6000 PSI)****SAE full flange**

**Pressure series:** 6000 psi  
**Design:** SAE full flange  
**Standard:** SAE J518, ISO 6162-1 /-2  
**Mounting:** Screw bore hole  
**Included in scope of supply:** flange only  
**Material:** Steel  
**Surface:** electro galvanised

2

**Note:** Recommended screws are listed in the columns M (metr) and M (unc).

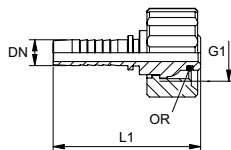
Identification	Flange size	PB 10.9 bar	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	L mm	M metr.	M unc
VF 6001	1/2"	400	32,5	24,6	40,5	56	18,2	47,2	22	16	7,2	8,7	M 8 x 30	5/16" x 1.1/4"
VF 6002	3/4"	400	42,1	32,5	50,8	71	23,8	60,0	28	19	8,3	10,7	M 10 x 35	3/8" x 1.1/2"
VF 6003	1"	400	48,4	38,9	57,2	81	27,8	69,9	33	24	9,0	13,0	M 12 x 45	-
VF 6003-12	1"	400	48,4	38,9	57,2	81	27,8	69,9	33	24	9,0	12,0	-	7/16" x 1.3/4"
VF 6004	1.1/4"	400	54,8	44,5	66,7	95	31,8	77,2	38	27	9,8	14,7	M 14 x 45	1/2" x 1.3/4"
VF 6005	1.1/2"	400	64,3	51,6	79,4	113	36,5	95,0	43	30	12,1	17,0	M 16 x 55	5/8" x 2"
VF 6006	2"	400	80,2	67,6	96,8	133	44,5	113,8	52	37	12,1	21,0	M 20 x 70	3/4" x 2.1/2"

PN = Nominal pressure    PB = Max. operating pressure    Series: LL = Very light    L = Light    S = Heavy    Ø = External pipe diameter

## PN KAE

## Swage nipple, KAE

**Application:** for HF/HW 100 and HF/HW 200 hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** Outer cone with O-ring  
**suitable for:** Kärcher high pressure cleaners (up to 12/1997)  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Union nut with heat protection



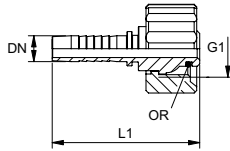
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	OR
PN 06 KAE	6	4	1/4"	M 22 x 1.5	10.0 x 2.0
PN 08 KAE	8	5	5/16"	M 22 x 1.5	10.0 x 2.0
PN 10 KAE	10	6	3/8"	M 22 x 1.5	10.0 x 2.0

**Product versions:**

PN KAE VA - Swage nipple, KAE, Stainless steel

2

**PN KAE 97****Swage nipple, KAE 97**

- Application:** for HF/HW 100 and HF/HW 200 hoses
- Connection 1:** metric nut thread
- Sealing form 1:** Outer cone with O-ring
- suitable for:** Kärcher high pressure cleaners (from 12/1997)
- Material:** Steel
- Surface:** electro galvanised
- Description:** Union nut with heat protection

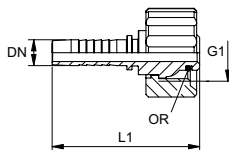
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**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	OR
PN 06 KAE 97	6	4	1/4"	M 22 x 1.5	11.0 x 1.5
PN 08 KAE 97	8	5	5/16"	M 22 x 1.5	11.0 x 1.5
PN 10 KAE 97	10	6	3/8"	M 22 x 1.5	11.0 x 1.5

**PN WAP****Swage nipple, WAP**

<b>Application:</b>	for HF/HW 100 and HF/HW 200 hoses
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	Outer cone with O-ring
<b>suitable for:</b>	WAP high pressure cleaners
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Union nut with heat protection



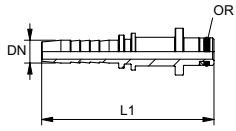
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	G1	OR
PN 08 WAP	8	5	5/16"	M 21 x 1.5	10.0 x 2.0
PN 10 WAP	10	6	3/8"	M 21 x 1.5	10.0 x 2.0

2

## PN KAE ST

### Swage nipple, KAE ST



**Application:** for HF/HW 100 and HF/HW 200 hoses  
**Connection 1:** Plug connection  
**Sealing form 1:** O-ring sealed pin  
**suitable for:** Kärcher high pressure cleaners  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Self-aligning to prevent torsional stress.

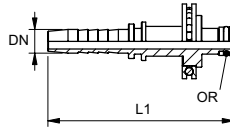
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**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	D1 mm	OR
PN 06 KAE ST	6	4	1/4"	10,0	6.75 x 1.78
PN 08 KAE ST	8	5	5/16"	10,0	6.75 x 1.78

**PN KAE STD****Swage nipple, KAE STD**

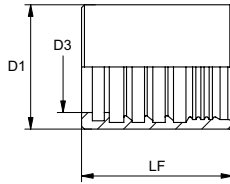
- Application:** for HF/HW 100 and HF/HW 200 hoses  
**Connection 1:** Rotating plug-in connection with ball bearing  
**Sealing form 1:** O-ring sealed pin  
**suitable for:** Kärcher high pressure cleaners  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Self-aligning to prevent torsional stress.



**Note:** Not suitable for use as rotary fitting. Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	D1 mm	OR
PN 08 KAE STD	8	5	5/16"	11,0	7.65 x 1.78

2

**PHF 100****Swage ferrule, TF 100****Ferrule type:****Material:****Surface:**

Non-skive ferrule

Steel

electro galvanised

2

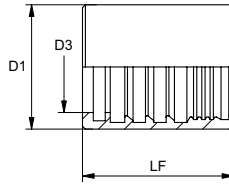
Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHF 104	5	3	3/16"	13	8,3	30
PHF 106	6	4	1/4"	15	10,6	32
PHF 108	8	5	5/16"	17	12,2	33
PHF 110	10	6	3/8"	19	13,7	33
PHF 113	12	8	1/2"	24	18,0	37
PHF 116	16	10	5/8"	27	21,5	37
PHF 120	19	12	3/4"	32	25,0	41
PHF 125	25	16	1"	38	31,0	41

DN = Nominal diameter, nominal width

**Product versions:****PHF 100 VA** - Swage ferrule, TF 100, Stainless steel

**PHF 200****Swage ferrule, TF 200**

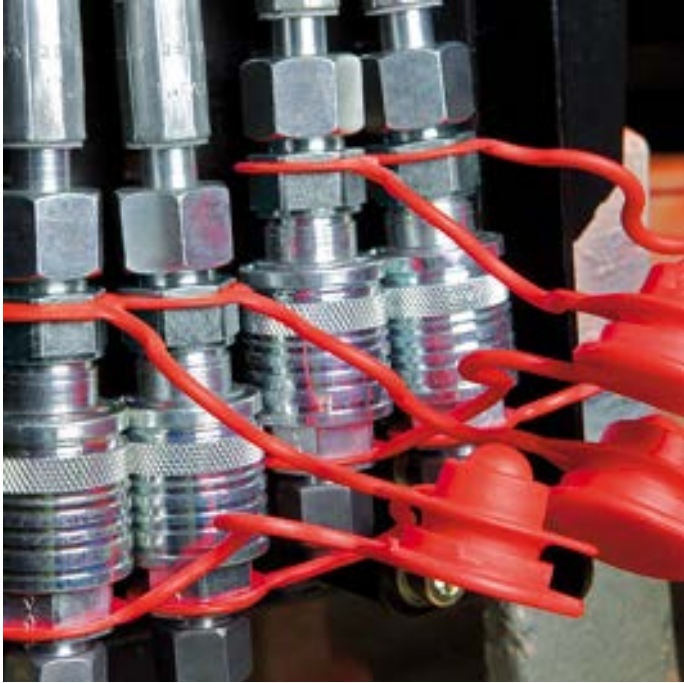
**Ferrule type:** Non-skive ferrule  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHF 206	6	4	1/4"	16	10,6	33
PHF 208	8	5	5/16"	19	12,3	33
PHF 210	10	6	3/8"	21	13,7	35
PHF 213	12	8	1/2"	26	18,5	37

DN = Nominal diameter, nominal width

2



## Couplings

<b>Quick release couplings</b>		<b>Plug-in couplings (connectors)</b>	
Sleeves	444	Standard couplings	565
Fixed halves	446	For John Deere	571
Loose halves	447	Tema	572
Accessories for fixed halves	448	For Aeroquip	573
Accessories for loose halves	449	For Argus	576
Spare parts for fixed halves	450	For CEJN	578
Spare parts for loose halves	452	For Pioneer	581
<b>Pipe couplings</b>		Snap-tite series 72	585
Fixed halves	454	Snap-tite series H	586
Loose halves	455	Accessories for connectors	601
Accessories for fixed halves	456	<b>Flat seal plug-in couplings (sleeves)</b>	
Accessories for loose halves	458	For Stucchi	613
Spare parts for fixed halves	560	Snap-tite	618
Spare parts for loose halves	462	For DNP 700 bar	620
<b>Screw couplings (fixed halves)</b>		Accessories for sleeves	636
Standard couplings	465	<b>Flat seal plug-in couplings (connectors)</b>	
For Aeroquip	474	For Stucchi	623
For EDBRO	475	Snap-tite	631
For Pioneer	476	For DNP 700 bar	633
For JUKO	478	Accessories for connectors	638
For Stucchi	479	<b>Multi couplings (rectangular)</b>	
RO couplings	480	Loose halves BSP	640
Snap-tite series 75	481	Fixed halves BSP	642
Snap-tite series 78	482	Loose halves metric	644
Accessories for fixed halves	503	Fixed halves metric	645
Spare parts for fixed halves	524	Accessories	646
<b>Screw couplings (loose halves)</b>		<b>Multi couplings (square)</b>	
Standard couplings	484	Loose halves BSP	647
For Aeroquip	491	Fixed halves BSP	648
For EDBRO	492		
For Pioneer	493		
For JUKO	495		
For Stucchi	496		
RO couplings	497		
Snap-tite series 75	498		
Snap-tite series 78	499		
Accessories for loose halves	513		
Spare parts for loose halves	534		
<b>Plug-in couplings (sleeves)</b>			
Standard couplings	539		
For John Deere	545		
Tema	546		
For Aeroquip	547		
For Argus	550		
For CEJN	552		
For Pioneer	555		
For Unimog	559		
Snap-tite series 72	562		
Snap-tite series H	563		
Accessories for sleeves	588		
Spare parts for sleeves	609		

**AKM HL ME****Quick release coupling sleeve**

<b>Application:</b>	Meiler automotive engineering
<b>Connection 1:</b>	metric cylindrical outer thread
<b>Sealing form 1:</b>	24° inner cone
<b>Included in scope of supply:</b>	with dust protection
<b>Temp. range:</b>	Mineral oil -30° C to 100° C, Vegetable oil -15° C to 80° C
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Quick release couplings uncouple automatically under excessive tensile load, preventing separation of the hose lines.

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Bulkhead thread	S1	S2	Size	Working pressure bar	SF*
AKM 13 HL 3 ME	12	L	15	M 22 x 1.5	M 38 x 1.5	30	46	3	250	4,0

DN = Nominal diameter, nominal width SF = Safety factor

**AKM IM ME****Quick release coupling sleeve**

<b>Application:</b>	Meiler automotive engineering
<b>Connection 1:</b>	metric cylindrical inner thread
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>Included in scope of supply:</b>	with dust protection
<b>Temp. range:</b>	Mineral oil -30° C to 100° C, Vegetable oil -15° C to 80° C
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Quick release couplings uncouple automatically under excessive tensile load, preventing separation of the hose lines.



Identification	DN*	Connecting thread	Bulkhead thread	S1	S2	Size	Working pressure bar	SF*
AKM 13 IM 3 ME	12	M 22 x 1.5	M 38 x 1.5	27	46	3	250	4,0

DN = Nominal diameter, nominal width    SF = Safety factor

## AKF HL / AKF HS

## Quick release coupling (fixed)



<b>Application:</b>	Automotive engineering
<b>Connection 1:</b>	metric cylindrical outer thread
<b>Sealing form 1:</b>	24° inner cone
<b>Residual pressure:</b>	Coupling under residual pressure is possible
<b>Mineral oil temp. min.:</b>	-40 °C
<b>Mineral oil temp. max.:</b>	100 °C
<b>Material:</b>	Steel coupling, steel housing, malleable cast iron above DN 12.
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Quick release couplings uncouple automatically under excessive tensile load, preventing separation of the hose lines.

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Coupling thread	Working pressure bar	BD* uncoup. bar	SF coup.*
AKF 08 HL 1	8	L	10	M 16 x 1.5	1	Rd. 32 x 3	315	250	4,0
AKF 10 HL 1	10	L	12	M 18 x 1.5	1	Rd. 32 x 3	315	250	4,0
AKF 13 HL 3	12	L	15	M 22 x 1.5	3	Rd. 48 x 3	315	250	4,0
AKF 16 HL 3	16	L	18	M 26 x 1.5	3	Rd. 48 x 3	315	250	4,0
AKF 20 HL 5	19	L	22	M 30 x 2	5	Rd. 60 x 3	160	160	4,0
AKF 06 HS 1	6	S	10	M 18 x 1.5	1	Rd. 32 x 3	315	250	4,0
AKF 08 HS 1	8	S	12	M 20 x 1.5	1	Rd. 32 x 3	315	250	4,0
AKF 10 HS 1	10	S	14	M 22 x 1.5	1	Rd. 32 x 3	315	250	4,0
AKF 13 HS 3	12	S	16	M 24 x 1.5	3	Rd. 48 x 3	315	250	4,0
AKF 16 HS 3	16	S	20	M 30 x 2	3	Rd. 48 x 3	315	250	4,0
AKF 20 HS 5	19	S	25	M 36 x 2	5	Rd. 60 x 3	160	160	4,0
AKF 25 HS 5	25	S	30	M 42 x 2	5	Rd. 60 x 3	160	160	4,0

DN = Nominal diameter, nominal width    BD uncoup. = Operating pressure uncoupled    SF gek. = Safety factor coupled

**Additional info:** Flat seal tappets ensure minimal oil leakages and air admittance when coupling. The robust construction makes them ideal for use in harsh conditions.

**Spare parts:**

**AKF ZUB HÜLSE** - Spring sleeve for quick release coupling

**AKF ZUB FEDER** - Spring for quick release coupling

**Accessories:**

**AKF ZUB GEHÄUSE** - Dust protection housing

**AKL HL / AKL HS****Quick release coupling (loose)**

<b>Application:</b>	Automotive engineering
<b>Connection 1:</b>	metric cylindrical outer thread
<b>Sealing form 1:</b>	24° inner cone
<b>Residual pressure:</b>	Coupling under residual pressure is possible
<b>Properties:</b>	DN 19 + 25 with hand wheel
<b>Mineral oil temp. min.:</b>	-40 °C
<b>Mineral oil temp. max.:</b>	100 °C
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Quick release couplings uncouple automatically under excessive tensile load, preventing separation of the hose lines.



Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Coupling thread	Working pressure bar	BD* uncoup. bar	SF coup.*
AKL 06 HL 1	6	L	8	M 14 x 1.5	1	Rd. 32 x 3	315	250	4,0
AKL 08 HL 1	8	L	10	M 16 x 1.5	1	Rd. 32 x 3	315	250	4,0
AKL 10 HL 1	10	L	12	M 18 x 1.5	1	Rd. 32 x 3	315	250	4,0
AKL 13 HL 3	12	L	15	M 22 x 1.5	3	Rd. 48 x 3	315	250	4,0
AKL 16 HL 3	16	L	18	M 26 x 1.5	3	Rd. 48 x 3	315	250	4,0
AKL 20 HL 5	19	L	22	M 30 x 2	5	Rd. 60 x 3	160	100	4,0
AKL 08 HS 1	8	S	12	M 20 x 1.5	1	Rd. 32 x 3	315	250	4,0
AKL 10 HS 1	10	S	14	M 22 x 1.5	1	Rd. 32 x 3	315	250	4,0
AKL 13 HS 3	12	S	16	M 24 x 1.5	3	Rd. 48 x 3	315	250	4,0
AKL 16 HS 3	16	S	20	M 30 x 2	3	Rd. 48 x 3	315	250	4,0
AKL 20 HS 5	19	S	25	M 36 x 2	5	Rd. 60 x 3	160	100	4,0
AKL 25 HS 5	25	S	30	M 42 x 2	5	Rd. 60 x 3	160	100	4,0

DN = Nominal diameter, nominal width    BD uncoup. = Operating pressure uncoupled    SF gek. = Safety factor coupled

**Additional info:** Flat seal tappets ensure minimal oil leakages and air admittance when coupling. The robust construction makes them ideal for use in harsh conditions.

**Spare parts:**

**AKL ZUB BLINDSTUTZEN** - Dummy sockets for quick release coupling

**Accessories:**

**AKL ZUB DOSE** - Dust protection container

**AKF ZUB GEHÄUSE****Dust protection housing**

suitable for: Quick release coupling (fixed)

Identification	Size	LK mm
AKF ZUB 3 09	3	95,0
LK = Pitch circle diameter		

**Accessory for following products:**

AKF HL / AKF HS - Quick release coupling (fixed)

**AKL ZUB DOSE****Dust protection container**

**suitable for:** Quick release coupling (loose)



Identification	DN*	Size	SW mm
AKL ZUB 1 09	6	1	46
AKL ZUB 3 09	12	3	70

DN = Nominal diameter, nominal width    SW = Width across flats

**Accessory for following products:**

**AKL HL / AKL HS** - Quick release coupling (loose)

3

## AKF ZUB FEDER

### Spring for quick release coupling



suitable for: Quick release coupling (fixed)

Identification	Size
AKF ZUB 1 06	1
AKF ZUB 3 06	3

Spare part for following products:

AKF HL / AKF HS - Quick release coupling (fixed)

**AKF ZUB HÜLSE**

## Spring sleeve for quick release coupling

**suitable for:** Quick release coupling (fixed)



Identification	Size
AKF ZUB 1 14	1
AKF ZUB 3 14	3

**Spare part for following products:**

AKF HL / AKF HS - Quick release coupling (fixed)

3

**AKL ZUB BLINDSTUTZEN****Dummy sockets for quick release coupling**

<b>suitable for:</b>	Quick release coupling (loose)
<b>Included in scope of supply:</b>	Size 1 with lock nut, Size 3 without lock nut
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

Identification	DN*	Connecting thread	Coupling thread	SW mm	Size
AKL ZUB 1 11	6	M 30 x 1	Rd. 32 x 3	36	1
AKL ZUB 3 10	12	M 45 x 1.5	Rd. 48 x 3	55	3

DN = Nominal diameter, nominal width    SW = Width across flats

**Spare parts:**

**AKL ZUB KONTERMUTTER** - Counter nut

**Accessory for following products:**

**SK ZUB GEHÄUSE** - Dust protection housing

**AKL ZUB KONTERMUTTER****Counter nut**

**suitable for:** Quick release coupling (loose)



Identification	DN*	Connecting thread	SW mm	Size
AKL ZUB 1 12	6	M 30 x 1	36	1
AKL ZUB 3 11	12	M 45 x 1.5	55	3

DN = Nominal diameter, nominal width    SW = Width across flats

**Spare part for following products:**

**AKL ZUB BLINDSTUTZEN** - Dummy sockets for quick release coupling

3

**RKF HL / RKF HS****Pipe coupling (fixed)**

**Application:** Automotive engineering  
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Residual pressure:** Coupling under residual pressure is possible  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Pipe couplings are designed for high pressures and pressure pulses.

Identification	DN*	Series for external pipe	Ø	Connecting thread	Size	Coupling thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
RKF 06 HL 1	6	L	8	M 14 x 1.5	1	Rd. 32 x 3	315	4,0	-25	85
RKF 08 HL 1	8	L	10	M 16 x 1.5	1	Rd. 32 x 3	315	4,0	-25	85
RKF 10 HL 1	10	L	12	M 18 x 1.5	1	Rd. 32 x 3	315	4,0	-25	85
RKF 13 HL 1	12	L	15	M 22 x 1.5	1	Rd. 32 x 3	315	4,0	-25	85
RKF 13 HL 2	12	L	15	M 22 x 1.5	2	Rd. 36 x 3	300	4,0	-25	85
RKF 13 HL 3	12	L	15	M 22 x 1.5	3	Rd. 48 x 3	300	3,5	-25	100
RKF 16 HL 2	16	L	18	M 26 x 1.5	2	Rd. 36 x 3	300	4,0	-25	100
RKF 16 HL 3	16	L	18	M 26 x 1.5	3	Rd. 48 x 3	300	3,5	-25	100
RKF 16 HL 4	16	L	18	M 26 x 1.5	4	Rd. 54 x 4	300	3,5	-25	85
RKF 20 HL 4	19	L	22	M 30 x 2	4	Rd. 54 x 4	160	4,0	-25	85
RKF 20 HL 5	19	L	22	M 30 x 2	5	Rd. 60 x 3	160	4,0	-40	100
RKF 25 HL 4	25	L	28	M 36 x 2	4	Rd. 54 x 4	160	4,0	-25	85
RKF 25 HL 5	25	L	28	M 36 x 2	5	Rd. 60 x 3	160	4,0	-40	100
RKF 32 HL 6	31	L	35	M 45 x 2	6	Rd. 79 x 4	160	4,0	-25	85
RKF 06 HS 1	6	S	10	M 18 x 1.5	1	Rd. 32 x 3	400	4,0	-25	85
RKF 08 HS 1	8	S	12	M 20 x 1.5	1	Rd. 32 x 3	400	4,0	-25	85
RKF 10 HS 1	10	S	14	M 22 x 1.5	1	Rd. 32 x 3	400	4,0	-25	85
RKF 13 HS 2	12	S	16	M 24 x 1.5	2	Rd. 36 x 3	300	4,0	-25	85
RKF 13 HS 3	12	S	16	M 24 x 1.5	3	Rd. 48 x 3	300	3,5	-25	100
RKF 16 HS 3	16	S	20	M 30 x 2	3	Rd. 48 x 3	300	3,5	-25	100
RKF 16 HS 4	16	S	20	M 30 x 2	4	Rd. 54 x 4	300	3,5	-25	85
RKF 20 HS 4	19	S	25	M 36 x 2	4	Rd. 54 x 4	300	3,5	-25	85
RKF 20 HS 5	19	S	25	M 36 x 2	5	Rd. 60 x 3	160	4,0	-40	100
RKF 25 HS 4	25	S	30	M 42 x 2	4	Rd. 54 x 4	300	3,5	-25	85
RKF 25 HS 5	25	S	30	M 42 x 2	5	Rd. 60 x 3	160	4,0	-40	100
RKF 32 HS 6	31	S	38	M 52 x 2	6	Rd. 79 x 4	420	2,5	-25	85

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Additional info:** Flat seal tappets ensure minimal oil leakages and air admittance when coupling. The robust construction makes them ideal for use in harsh conditions with major pressure fluctuations.

**Spare parts:**

RKF STUETZRING - Support ring for pipe coupling

RKF ORING - O-ring

**Accessories:**

RKF ZUB - Dust protection container

RKF ZUBS - Cap

## RKL HL / RKL HS

## Pipe coupling (loose)

<b>Application:</b>	Automotive engineering
<b>Connection 1:</b>	metric cylindrical outer thread
<b>Sealing form 1:</b>	24° inner cone
<b>Residual pressure:</b>	Coupling under residual pressure is possible
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Pipe couplings are designed for high pressures and pressure pulses.



**Note:** Size 5 with hand wheel

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Coupling thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
RKL 06 HL 1	6	L	8	M 14 x 1.5	1	Rd. 32 x 3	315	4,0	-25	85
RKL 08 HL 1	8	L	10	M 16 x 1.5	1	Rd. 32 x 3	315	4,0	-25	85
RKL 10 HL 1	10	L	12	M 18 x 1.5	1	Rd. 32 x 3	315	4,0	-25	85
RKL 13 HL 1	12	L	15	M 22 x 1.5	1	Rd. 32 x 3	315	4,0	-25	85
RKL 13 HL 2	12	L	15	M 22 x 1.5	2	Rd. 36 x 3	300	4,0	-25	85
RKL 13 HL 3	12	L	15	M 22 x 1.5	3	Rd. 48 x 3	300	3,5	-25	100
RKL 16 HL 3	16	L	18	M 26 x 1.5	3	Rd. 48 x 3	300	3,5	-25	100
RKL 16 HL 4	16	L	18	M 26 x 1.5	4	Rd. 54 x 4	300	3,5	-25	85
RKL 20 HL 4	19	L	22	M 30 x 2	4	Rd. 54 x 4	160	4,0	-25	85
RKL 20 HL 5	19	L	22	M 30 x 2	5	Rd. 60 x 3	160	4,0	-40	100
RKL 25 HL 4	25	L	28	M 36 x 2	4	Rd. 54 x 4	160	4,0	-25	85
RKL 25 HL 5	25	L	28	M 36 x 2	5	Rd. 60 x 3	160	4,0	-40	100
RKL 32 HL 6	31	L	35	M 45 x 2	6	Rd. 79 x 4	160	4,0	-25	85
RKL 06 HS 1	6	S	10	M 18 x 1.5	1	Rd. 32 x 3	400	4,0	-25	85
RKL 08 HS 1	8	S	12	M 20 x 1.5	1	Rd. 32 x 3	400	4,0	-25	85
RKL 10 HS 1	10	S	14	M 22 x 1.5	1	Rd. 32 x 3	400	4,0	-25	85
RKL 13 HS 2	12	S	16	M 24 x 1.5	2	Rd. 36 x 3	300	4,0	-25	85
RKL 13 HS 3	12	S	16	M 24 x 1.5	3	Rd. 48 x 3	300	3,5	-25	100
RKL 16 HS 3	16	S	20	M 30 x 2	3	Rd. 48 x 3	300	3,5	-25	100
RKL 16 HS 4	16	S	20	M 30 x 2	4	Rd. 54 x 4	300	3,5	-25	85
RKL 20 HS 4	19	S	25	M 36 x 2	4	Rd. 54 x 4	300	3,5	-25	85
RKL 20 HS 5	19	S	25	M 36 x 2	5	Rd. 60 x 3	160	4,0	-40	100
RKL 25 HS 4	25	S	30	M 42 x 2	4	Rd. 54 x 4	300	3,5	-25	85
RKL 25 HS 5	25	S	30	M 42 x 2	5	Rd. 60 x 3	160	4,0	-40	100
RKL 32 HS 6	31	S	38	M 52 x 2	6	Rd. 79 x 4	420	2,5	-25	85

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Additional info:** Flat seal tappets ensure minimal oil leakages and air admittance when coupling.

#### Spare parts:

RKL STUETZRING - Support ring for pipe coupling

RKL ÖRING - O-ring

RKL DICHTUNG - Sealing washer

#### Accessories:

SK ZUB GEHÄUSE - Dust protection housing

RKL ZUBS - Blanking screw

## RKF ZUB

### Dust protection container



**suitable for:**

Pipe coupling (fixed)

**Material:**

Brass

**Identification**

**Size**

RKF ZUB 2 10

2

3

**Accessory for following products:**

RKF HL / RKF HS - Pipe coupling (fixed)

**RKF ZUBS****Cap**

suitable for: Pipe coupling (fixed)



Identification	Size	Coupling thread	Material
RKF ZUBS 1 K	1	Rd. 32 x 3	Plastic
RKF ZUBS 2 K	2	Rd. 36 x 3	Plastic
RKF ZUBS 2 ALU	2	Rd. 36 x 3	Aluminium
RKF ZUBS 4 ALU	4	Rd. 54 x 4	Aluminium
RKF ZUBS 6	6	Rd. 79 x 4	Aluminium

**Accessory for following products:**

RKF HL / RKF HS - Pipe coupling (fixed)

3

**RKL ZUBS****Blanking screw**

suitable for: Pipe coupling (loose)

Identification	Size	Coupling thread	Material
RKL ZUBS 1 K	1	Rd. 32 x 3	Plastic
RKL ZUBS 2K	2	Rd. 36 x 3	Plastic
RKL ZUBS 2 ALU	2	Rd. 36 x 3	Aluminium
RKL ZUBS 4 ALU	4	Rd. 54 x 4	Aluminium
RKL ZUBS 6	6	Rd. 79 x 4	Aluminium

Accessory for following products:

RKL HL / RKL HS - Pipe coupling (loose)

**SK ZUB GEHÄUSE**

## Dust protection housing

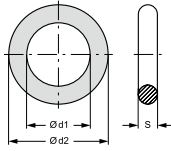


Identification	Size
SK ZUB 3 16	3

**Accessory for following products:**

RKL HL / RKL HS - Pipe coupling (loose)

3

**RKF ORING****O-ring**

suitable for:

Pipe coupling (fixed)

Material:

NBR

Identification	Size	Ø d1 mm	Ø d2 mm	S mm
RKF ORING 1-17-2	1	17	21	2,0
RKF ORING 1-22-1.5	1	22	25	1,5
RKF ORING 2-20-2	2	20	24	2,0
RKF ORING 2-25-1.5	2	25	28	1,5
RKF ORING 3-37-2	3	37	41	2,0
RKF ORING 4-32-3	4	32	38	3,0
RKF ORING 4-35-2.5	4	35	40	2,5
RKF ORING 5-40-3	5	50	56	3,0
RKF ORING 5-47-2.5	5	47	52	2,5

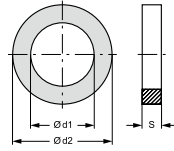
**Spare part for following products:**

RKF HL / RKF HS - Pipe coupling (fixed)

**RKF STUETZRING**

## Support ring for pipe coupling

**suitable for:** Pipe coupling (fixed)  
**Material:** PVC



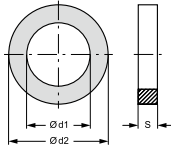
Identification	Size	Ø d1 mm	Ø d2 mm	S mm
RKF STUETZRING 1	1	17,5	20,8	1,0
RKF STUETZRING 2	2	20,0	23,4	1,0
RKF STUETZRING 4	4	32,0	37,2	1,0

**Spare part for following products:**

RKF HL / RKF HS - Pipe coupling (fixed)

**RKL DICHTUNG**

## Sealing washer



suitable for:

Pipe coupling (loose)

Material:

NBR

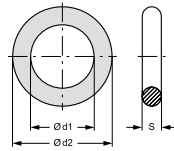
Identification	Size	$\varnothing d1$ mm	$\varnothing d2$ mm	S mm
RKL DICHTUNG 1	1	15,5	17,1	1,6
RKL DICHTUNG 2	2	15,0	18,0	1,5
RKL DICHTUNG 3	3	20,0	27,0	2,0
RKL DICHTUNG 4	4	25,0	29,3	1,7

Spare part for following products:

RKL HL / RKL HS - Pipe coupling (loose)

**RKL ORING****O-ring**

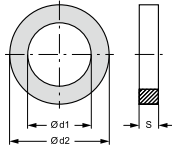
**suitable for:** Pipe coupling (loose)  
**Material:** NBR



Identification	Size	Ø d1 mm	Ø d2 mm	S mm
RKL ORING 1-17-2	1	17,5	21,5	2
RKL ORING 2-20-2	2	22,0	26,0	2
RKL ORING 4-24-3	4	24,0	30,0	3
RKL ORING 4-32-3	4	32,0	38,0	3

**Spare part for following products:**  
**RKL HL / RKL HS - Pipe coupling (loose)**

3

**RKL STUETZRING****Support ring for pipe coupling**

suitable for:

Pipe coupling (loose)

Material:

PVC

Identification	Size	Ø d1 mm	Ø d2 mm	S mm
RKL STUETZRING 1	1	17,5	20,8	1,0
RKL STUETZRING 2	2	20,0	23,4	1,0
RKL STUETZRING 4	4	32,0	37,2	1,0

Spare part for following products:

RKL HL / RKL HS - Pipe coupling (loose)

## SKF HL / SKF HS

## Screw coupling (fixed)

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** metric cylindrical outer thread
- Sealing form 1:** 24° inner cone
- Residual pressure:** Coupling under residual pressure is possible
- Material:** Steel
- Surface:** electro galvanised
- Description:** Screw couplings are designed for high pressures and pressure pulses.



Identification	Size	DN*	Series for external pipe	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*	
SKF 04 HL 1	1	4	L	6	M 12 x 1.5	Rd. 24 x 2	315	-25	100	4
SKF 06 HL 1	1	6	L	8	M 14 x 1.5	Rd. 24 x 2	450	-30	100	4
SKF 06 HL 2	2	6	L	8	M 14 x 1.5	Rd. 28 x 2	325	-30	100	4
SKF 06 HL 3	3	6	L	8	M 14 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 08 HL 2	2	8	L	10	M 16 x 1.5	Rd. 28 x 2	325	-30	100	4
SKF 08 HL 3	3	8	L	10	M 16 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 10 HL 3	3	10	L	12	M 18 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 10 HL 4	4	10	L	12	M 18 x 1.5	Rd. 42 x 2	250	-30	100	4
SKF 13 HL 3	3	12	L	15	M 22 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 13 HL 4	4	12	L	15	M 22 x 1.5	Rd. 42 x 2	250	-30	100	4
SKF 16 HL 3	3	16	L	18	M 26 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 16 HL 4	4	16	L	18	M 26 x 1.5	Rd. 42 x 2	250	-30	100	4
SKF 16 HL 5	5	16	L	18	M 26 x 1.5	Rd. 48 x 3	250	-30	100	4
SKF 20 HL 5	5	19	L	22	M 30 x 2	Rd. 48 x 3	250	-30	100	4
SKF 25 HL 5	5	25	L	28	M 36 x 2	Rd. 48 x 3	250	-30	100	4
SKF 32 HL 5	5	31	L	35	M 45 x 2	Rd. 48 x 3	250	-30	100	4
SKF 32 HL 6	6	31	L	35	M 45 x 2	Rd. 70 x 3	160	-25	100	4
SKF 40 HL 6	6	38	L	42	M 52 x 2	Rd. 70 x 3	160	-25	100	4
SKF 04 HS 1	1	4	S	8	M 16 x 1.5	Rd. 24 x 2	450	-25	100	4
SKF 06 HS 1	1	6	S	10	M 18 x 1.5	Rd. 24 x 2	450	-25	100	4
SKF 06 HS 2	2	6	S	10	M 18 x 1.5	Rd. 28 x 2	325	-30	100	4
SKF 06 HS 3	3	6	S	10	M 18 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 08 HS 2	2	8	S	12	M 20 x 1.5	Rd. 28 x 2	325	-30	100	4
SKF 08 HS 3	3	8	S	12	M 20 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 10 HS 3	3	10	S	14	M 22 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 10 HS 4	4	10	S	14	M 22 x 1.5	Rd. 42 x 2	250	-30	100	4
SKF 13 HS 3	3	12	S	16	M 24 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 13 HS 4	4	12	S	16	M 24 x 1.5	Rd. 42 x 2	250	-30	100	4
SKF 16 HS 3	3	16	S	20	M 30 x 2	Rd. 36 x 2	300	-30	100	4
SKF 16 HS 4	4	16	S	20	M 30 x 2	Rd. 42 x 2	250	-30	100	4
SKF 16 HS 5	5	16	S	20	M 30 x 2	Rd. 48 x 3	250	-30	100	4
SKF 20 HS 5	5	19	S	25	M 36 x 2	Rd. 48 x 3	250	-30	100	4
SKF 25 HS 5	5	25	S	30	M 42 x 2	Rd. 48 x 3	250	-30	100	4
SKF 25 HS 6	6	25	S	30	M 42 x 2	Rd. 70 x 3	300	-30	100	4

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**SKF HL / SKF HS****Screw coupling (fixed)****(Continued)**

Identification	Size	DN*	Series	for external pipe Ø mm	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKF 32 HS 6	6	31	S	38	M 52 x 2	Rd. 70 x 3	300	-30	100	4

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Additional info:** If fitted correctly, the screw sleeve completely covers the brake ring. The self-locking thread prevents unwanted loosening due to vibrations. The robust construction makes them ideal for use in harsh conditions.

**Spare parts:**

SKF BREMSRING - Brake ring for screw coupling

SKF STUETZRING - Support ring for SKF

SKF ORING - O-ring for SKF

**Accessories:**

SKF ZUBS - Dust protection for SKF

## SKFS HL / SKFS HS

## Screw coupling (fixed)

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Design:** Coupling with bulkhead connection
- Connection 1:** metric cylindrical outer thread
- Sealing form 1:** 24° inner cone
- Residual pressure:** Coupling under residual pressure is possible
- Material:** Steel
- Surface:** electro galvanised
- Description:** Screw couplings are designed for high pressures and pressure pulses.



Identification	Size	DN*	Series	for external pipe Ø mm	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKFS 04 HL 1	1	4	L	6	M 12 x 1.5	Rd. 24 x 2	315	-25	100	4
SKFS 06 HL 1	1	6	L	8	M 14 x 1.5	Rd. 24 x 2	450	-30	100	4
SKFS 06 HL 2	2	6	L	8	M 14 x 1.5	Rd. 28 x 2	325	-30	100	4
SKFS 06 HL 3	3	6	L	8	M 14 x 1.5	Rd. 36 x 2	300	-30	100	4
SKFS 08 HL 2	2	8	L	10	M 16 x 1.5	Rd. 28 x 2	325	-30	100	4
SKFS 08 HL 3	3	8	L	10	M 16 x 1.5	Rd. 36 x 2	300	-30	100	4
SKFS 10 HL 3	3	10	L	12	M 18 x 1.5	Rd. 36 x 2	300	-30	100	4
SKFS 10 HL 4	4	10	L	12	M 18 x 1.5	Rd. 42 x 2	250	-30	100	4
SKFS 13 HL 3	3	12	L	15	M 22 x 1.5	Rd. 36 x 2	300	-30	100	4
SKFS 13 HL 4	4	12	L	15	M 22 x 1.5	Rd. 42 x 2	250	-30	100	4
SKFS 16 HL 3	3	16	L	18	M 26 x 1.5	Rd. 36 x 2	300	-30	100	4
SKFS 16 HL 4	4	16	L	18	M 26 x 1.5	Rd. 42 x 2	250	-30	100	4
SKFS 16 HL 5	5	16	L	18	M 26 x 1.5	Rd. 48 x 3	250	-30	100	4
SKFS 20 HL 5	5	19	L	22	M 30 x 2	Rd. 48 x 3	250	-30	100	4
SKFS 25 HL 5	5	25	L	28	M 36 x 2	Rd. 48 x 3	250	-30	100	4
SKFS 32 HL 6	6	31	L	35	M 45 x 2	Rd. 70 x 3	160	-25	100	4
SKFS 40 HL 6	6	38	L	42	M 52 x 2	Rd. 70 x 3	160	-25	100	4
SKFS 04 HS 1	1	4	S	8	M 16 x 1.5	Rd. 24 x 2	450	-25	100	4
SKFS 06 HS 2	2	6	S	10	M 18 x 1.5	Rd. 28 x 2	325	-30	100	4
SKFS 06 HS 3	3	6	S	10	M 18 x 1.5	Rd. 36 x 2	300	-30	100	4
SKFS 08 HS 2	2	8	S	12	M 20 x 1.5	Rd. 28 x 2	325	-30	100	4
SKFS 08 HS 3	3	8	S	12	M 20 x 1.5	Rd. 36 x 2	300	-30	100	4
SKFS 10 HS 3	3	10	S	14	M 22 x 1.5	Rd. 36 x 2	300	-30	100	4
SKFS 10 HS 4	4	10	S	14	M 22 x 1.5	Rd. 42 x 2	250	-30	100	4
SKFS 13 HS 3	3	12	S	16	M 24 x 1.5	Rd. 36 x 2	300	-30	100	4
SKFS 13 HS 4	4	12	S	16	M 24 x 1.5	Rd. 42 x 2	250	-30	100	4
SKFS 16 HS 4	4	16	S	20	M 30 x 2	Rd. 42 x 2	250	-30	100	4
SKFS 16 HS 5	5	16	S	20	M 30 x 2	Rd. 48 x 3	250	-30	100	4
SKFS 20 HS 5	5	19	S	25	M 36 x 2	Rd. 48 x 3	250	-30	100	4
SKFS 25 HS 5	5	25	S	30	M 42 x 2	Rd. 48 x 3	250	-30	100	4
SKFS 25 HS 6	6	25	S	30	M 42 x 2	Rd. 70 x 3	300	-30	100	4
SKFS 32 HS 5	5	31	S	38	M 52 x 2	Rd. 48 x 3	300	-30	100	4

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**SKFS HL / SKFS HS****Screw coupling (fixed)****(Continued)**

Identification	Size	DN*	Series	for external pipe Ø mm	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKFS 32 HS 6	6	31	S	38	M 52 x 2	Rd. 70 x 3	300	-30	100	4

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Additional info:** If fitted correctly, the screw sleeve completely covers the brake ring. The self-locking thread prevents unwanted loosening due to vibrations. The robust construction makes them ideal for use in harsh conditions.

**Spare parts:**

SKF BREMSRING - Brake ring for screw coupling

SKF STUETZRING - Support ring for SKF

SKF ORING - O-ring for SKF

**Accessories:**

SKF ZUBS - Dust protection for SKF

**SKF HJ****Screw coupling (fixed)**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Connection 1:</b>	UN/UNF external threads
<b>Sealing form 1:</b>	74° outer cone
<b>Residual pressure:</b>	Coupling under residual pressure is possible
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Screw couplings are designed for high pressures and pressure pulses.



Identification	Size	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKF 13 HJ 2	2	12	UNF 3/4" -16	Rd. 28 x 2	450	-25	100	4

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Spare parts:**

SKF BREMSRING - Brake ring for screw coupling

SKF STUETZRING - Support ring for SKF

SKF ORING - O-ring for SKF

**Accessories:**

SKF ZUBS - Dust protection for SKF

**SKF IM****Screw coupling (fixed)**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** metric cylindrical inner thread
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Residual pressure:** Coupling under residual pressure is possible
- Material:** Steel
- Surface:** electro galvanised
- Description:** Screw couplings are designed for high pressures and pressure pulses.

Identification	Size	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKF 06 IM 1	1	6	M 14 x 1.5	Rd. 24 x 2	450	-25	100	4
SKF 08 IM 2	2	8	M 16 x 1.5	Rd. 28 x 2	325	-30	100	4
SKF 10 IM 3	3	10	M 18 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 13 IM 3	3	12	M 22 x 1.5	Rd. 36 x 2	300	-30	100	4
SKF 13 IM 4	4	12	M 22 x 1.5	Rd. 42 x 2	250	-30	100	4
SKF 20 IM 5	5	19	M 30 x 1.5	Rd. 48 x 3	250	-25	125	4

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Additional info:** If fitted correctly, the screw sleeve completely covers the brake ring. The self-locking thread prevents unwanted loosening due to vibrations. The robust construction makes them ideal for use in harsh conditions.

**Spare parts:**

**SKF BREMSRING** - Brake ring for screw coupling

**SKF ORING** - O-ring for SKF

**SKF STUETZRING** - Support ring for SKF

**Accessories:**

**SKF ZUBS** - Dust protection for SKF

## Screw coupling (fixed)

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>Residual pressure:</b>	Coupling under residual pressure is possible
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Screw couplings are designed for high pressures and pressure pulses.



Identification	Size	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKF 06 IR 1	1	6	G 1/4" -19	Rd. 24 x 2	450	-30	100	4
SKF 10 IR 2	2	10	G 3/8" -19	Rd. 28 x 2	450	-30	100	4
SKF 10 IR 3	3	10	G 3/8" -19	Rd. 36 x 2	400	-30	100	4
SKF 13 IR 3	3	12	G 1/2" -14	Rd. 36 x 2	400	-30	100	4
SKF 20 IR 4	4	19	G 3/4" -14	Rd. 42 x 2	400	-30	100	4
SKF 20 IR 5	5	19	G 3/4" -14	Rd. 48 x 3	300	-30	100	4
SKF 25 IR 5	5	25	G 1" -11	Rd. 48 x 3	300	-30	100	4
SKF 32 IR 6	6	31	G 1.1/4" -11	Rd. 70 x 3	300	-25	100	4
SKF 40 IR 6	6	38	G 1.1/2" -11	Rd. 70 x 3	300	-25	100	4

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Additional info:** If fitted correctly, the screw sleeve completely covers the brake ring. The self-locking thread prevents unwanted loosening due to vibrations. The robust construction makes them ideal for use in harsh conditions.

**Product versions:**

SKF IR VA - Screw coupling (fixed), Stainless steel

**Spare parts:**

SKF BREMSRING - Brake ring for screw coupling

SKF ORING - O-ring for SKF

SKF STUETZRING - Support ring for SKF

**Accessories:**

SKF ZUBS - Dust protection for SKF

## SKF IR VA

### Screw coupling (fixed)



- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Residual pressure:** Coupling under residual pressure is possible
- Material:** Stainless steel
- Description:** Screw couplings are designed for high pressures and pressure pulses. If fitted correctly, the screw sleeve completely covers the brake ring.

Identification	Size	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKF 10 IR 2 VA	2	10	G 3/8" -19	Rd. 28 x 2	250	-25	200	4
SKF 13 IR 3 VA	3	12	G 1/2" -14	Rd. 36 x 2	250	-25	200	4
SKF 20 IR 4 VA	4	19	G 3/4" -14	Rd. 42 x 2	150	-25	200	4
SKF 25 IR 5 VA	5	25	G 1" -11	Rd. 48 x 3	150	-25	200	4
SKF 32 IR 6 VA	6	31	G 1.1/4" -11	Rd. 70 x 3	100	-25	200	4

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Additional info:** The self-locking thread prevents unwanted loosening due to vibrations. The robust construction makes them ideal for use in harsh conditions.

**Product versions:**

SKF IR - Screw coupling (fixed), Steel, electro galvanised

**Accessories:**

SKF ZUBS - Dust protection for SKF

**SKF SF6****Screw coupling (fixed)**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Connection 1:</b>	SAE flange 6000 PSI
<b>Sealing form 1:</b>	flat seal with SF O-ring
<b>Residual pressure:</b>	Coupling under residual pressure is possible
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Screw couplings are designed for high pressures and pressure pulses.



Identification	Size	DN*	Flange size	Coupling thread	Working pressure bar	Mineral oil temp.		SF coup.*	Vegetable oil temp.	
						min. °C	max. °C		min. °C	max. °C
SKF 20 SF6 5	5	19	3/4"	Rd. 48 x 3	300	-30	100	4	-15	80
SKF 25 SF6 5	5	25	1"	Rd. 48 x 3	300	-30	100	4	-15	80

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Additional info:** The self-locking thread prevents unwanted loosening due to vibrations. If fitted correctly, the screw sleeve completely covers the brake ring. The robust construction makes them ideal for use in harsh conditions.

**Spare parts:**

**SKF BREMSRING** - Brake ring for screw coupling

**SKF ORING** - O-ring for SKF

**SKF STUETZRING** - Support ring for SKF

**Accessories:**

**SKF ZUBS** - Dust protection for SKF

**SKF IM AE****Screw coupling (fixed)**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** metric cylindrical inner thread
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Residual pressure:** Coupling under residual pressure is possible
- compatible with:** Aeroquip
- Material:** Steel
- Surface:** electro galvanised
- Description:** Screw couplings are designed for high pressures and pressure pulses.

Identification	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKF 13 IM AE	12	M 22 x 1.5	Rd. 35 x 2	350	-30	100	4
SKF 16 IM AE	16	M 26 x 1.5	Rd. 42 x 2	350	-30	100	
SKF 20 IM AE	19	M 30 x 1.5	Rd. 54 x 3	350	-30	100	4
SKF 25 IM AE	25	M 38 x 1.5	Rd. 64 x 3	350	-40	150	

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Additional info:** If fitted correctly, the screw sleeve completely covers the brake ring. The self-locking thread prevents unwanted loosening due to vibrations. The robust construction makes them ideal for use in harsh conditions.

**Accessories:**

**SKF ZUBS AE** - Dust protection for SKF...AE

**SKFS IR E****Screw coupling (fixed)**

<b>Application:</b>	Automotive engineering
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Screw couplings are designed for high pressures and pressure pulses. Can be coupled with up to 100 bar residual pressure on one side and up to 50 bar residual pressure on both sides.



Identification	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKFS 20 IR E	19	G 3/4" -14	Rd. 44 x 2.5	250	-25	100	3
SKFS 25 IR E	25	G 1" -11	Rd. 54 x 2.5	230	-25	100	3

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**Accessories:**

**SKF ZUBS E** - Dust protection for SKF...E

3

**SKF IN SP****Screw coupling (fixed)**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** NPT internal thread
- Sealing form 1:** thread seal
- Residual pressure:** Coupling under residual pressure is possible
- compatible with:** Pioneer
- Additional feature:** with ball valve
- Material:** High resistance special steel
- Surface:** galvanised, white chromised
- Description:** Screw couplings are designed for high pressures and pressure pulses.

Identification	Size	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKF 06 IN SP	1	6	NPT 1/4" -18	700	3	-25	125
SKF 10 IN 06 SP	2	10	NPT 1/4" -18	700	3	-25	125
SKF 10 IN SP	2	10	NPT 3/8" -18	700	3	-30	80

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**Accessories:**

SKF ZUBS SP - Dust protection for SKF...SP

**SKF IN SP KE****Screw coupling (fixed)**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Connection 1:</b>	NPT internal thread
<b>Sealing form 1:</b>	thread seal
<b>Residual pressure:</b>	Coupling under residual pressure is possible
<b>compatible with:</b>	Pioneer
<b>Additional feature:</b>	with plug valve
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Screw couplings are designed for high pressures and pressure pulses.



Identification	Size	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKF 06 IN SP KE	1	6	NPT 1/4" -18	1050	3	-25	125
SKF 10 IN SP KE	2	10	NPT 3/8" -18	1000	3	-25	125

SF gek. = Safety factor coupled    DN = Nominal diameter, nominal width

**Additional info:** If fitted correctly, the screw sleeve completely covers the brake ring. The robust construction makes them ideal for use in harsh conditions.

3

**SKF IN SK VA****Screwed coupling fixed half**

- Application:** hydraulic tools, Industry and construction, mobile hydraulic pumps, hydraulic winches, hydraulic presses, rescue equipment, machinery subjected to cyclic loading with lockable safety latch
- Design:**
- Supplementary design information:** single-handed operation
- Connection 1:** NPT internal thread
- Material:** Stainless steel, NBR, PTFE

Identification	Size	DN*	Connecting thread	Working pressure bar
SKF 06 IN SK VA	1i	6	NPT 1/4" -18	700
SKF 10 IN SK VA	2i	10	NPT 3/8" -18	700

DN = Nominal diameter, nominal width

**Accessories:**

**SKF ZUBS SK** - Dust protector for SKF..SK

**SKF IR FS****Screwed coupling fixed half, flat sealing**

<b>Design:</b>	flat sealing
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>compatible with:</b>	Stucchi
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	Size	DN*	Connecting thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKF 06 IR 1 FS	1	6	G 1/4" -19	400	-25	100
SKF 10 IR 2 FS	2	10	G 3/8" -19	350	-25	100
SKF 13 IR 2F S	2	12	G 1/2" -14	350	-25	100
SKF 13 IR 3 FS	3	12	G 1/2" -14	350	-25	100
SKF 20 IR 3 FS	3	19	G 3/4" -14	350	-25	100
SKF 20 IR 4 FS	4	19	G 3/4" -14	350	-25	100
SKF 25 IR 4 FS	4	25	G 1" -11	325	-25	100
SKF 25 IR 5 FS	5	25	G 1" -11	325	-25	100
SKF 32 IR 5 FS	5	31	G 1.1/4" -11	300	-25	100

DN = Nominal diameter, nominal width

**Accessories:**

**SKF ZUBS FS ALU** - Dust protector for SKF FS

**SKF IR RO****Screw coupling (fixed)**

- Application:** Hydraulic hammers, rams etc.  
**Connection 1:** BSP cylindrical internal threads  
**Sealing form 1:** for screw-in pins with shapes A, B and if necessary E  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** This coupling has been specially designed for use in the toughest conditions and can withstand severe vibrations and compression. The inner parts can be replaced when worn (repair possible).

Identification	DN*	Connecting thread	SW mm	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKF 10 IR RO	10	G 3/8" -19	22	Rd. 36 x 3	500	-30	120	4
SKF 13 IR RO	12	G 1/2" -14	26	Rd. 40 x 3	450	-30	120	4
SKF 20 IR RO	19	G 3/4" -14	30	Rd. 45 x 3	400	-30	120	4
SKF 25 IR RO	25	G 1" -11	40	Rd. 58 x 4	350	-30	120	4
SKF 32 IR RO	31	G 1.1/4" -11	48	Rd. 65 x 5	320	-30	120	4
SKF 40 IR RO	38	G 1.1/2" -11	55	Rd. 75 x 5	300	-30	120	4
SKF 50 IR RO	51	G 2" -11	76	Rd. 108 x 5	250	-30	120	4

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

**Spare parts:**

- SK ZUB 14 RO** - Circlip for RO coupling  
**SK ZUB 13 RO** - Sealing spring for RO coupling  
**SK ZUB 12 RO** - Conical nipple for RO coupling  
**SK ZUB 15 RO** - Threaded ring for RO coupling  
**SKF ZUB 10 RO** - O-ring for SKF...RO  
**SKF ZUB 11 RO** - Support ring for SKF...RO  
**SK ZUB 04 RO** - Tool kit (3 piece), for RO coupling

**Accessories:**

- SKF ZUBS 08 RO** - Dust protection for SKF...RO  
**SK ZUB 01 RO** - Welded on clip for RO coupling

**SKF IR SN75****Screw coupling (fixed)**

<b>Application:</b>	Offshore applications, oilfields, tools etc.
<b>Design:</b>	Snap-tite series 75
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>Residual pressure:</b>	Coupling under residual pressure is possible
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Screw couplings are designed for high pressures and pressure pulses.



Identification	DN*	Connecting thread	Coupling thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKF 20 IR SN75	19	G 3/4" -14	1.3/4" -8	345	4	-40	90
SKF 25 IR SN75	25	G 1" -11	2.1/4" -6	345	4	-40	90
SKF 32 IR SN75	31	G 1.1/4" -11	2.5/8" -6	345	3	-40	90
SKF 40 IR SN75	38	G 1.1/2" -11	3.1/4" -4	345	3	-40	90
SKF 50 IR SN75	51	G 2" -11	4" -4	345	3	-40	90
SKF 75 IR SN75	76	G 3" -11	6" -4	207	2	-40	90

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**Accessories:**

**SKF ZUBS SN75** - Dust protection for SKF...SN 75

**SKF IN F SN78****Screw coupling (fixed)**

<b>Application:</b>	Industry and automotive engineering
<b>Design:</b>	Snap-tite series 78
<b>Connection 1:</b>	NPT internal thread
<b>Sealing form 1:</b>	thread seal
<b>Residual pressure:</b>	Coupling under residual pressure is possible
<b>Material:</b>	Brass
<b>Description:</b>	Screw couplings are designed for high pressures and pressure pulses.

Identification	DN*	Connecting thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKF 20 IN F SN78	19	NPT 3/4" -14	207	-40	90	2
SKF 25 IN F SN78	25	NPT 1" -11.5	207	-40	90	2
SKF 32 IN F SN78	31	NPT 1.1/4" -11.5	190	-40	90	2

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**Accessories:**

**SKF ZUBS F SN78** - Dust protection for SKF...SN 78

**SKF IR F SN78****Screw coupling (fixed)**

<b>Application:</b>	Industry and automotive engineering
<b>Design:</b>	Snap-tite series 78
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>Residual pressure:</b>	Coupling under residual pressure is possible
<b>Material:</b>	Brass
<b>Description:</b>	Screw couplings are designed for high pressures and pressure pulses.



Identification	DN*	Connecting thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKF 20 IR F SN78	19	G 3/4" -14	207	-40	90	2
SKF 32 IR F SN78	31	G 1.1/4" -11	190	-40	90	2

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**Accessories:**

**SKF ZUBS F SN78** - Dust protection for SKF...SN 78

**SKL HL / SKL HS****Screw coupling (loose)**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** metric cylindrical outer thread
- Sealing form 1:** 24° inner cone
- Residual pressure:** Coupling under residual pressure is possible
- Material:** Steel
- Surface:** electro galvanised
- Description:** Screw couplings are designed for high pressures and pressure pulses.

Identification	Size	DN*	Series for external pipe	Ø pipe mm	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKL 04 HL 1	1	4	L	6	M 12 x 1.5	Rd. 24 x 2	315	-25	100	4
SKL 06 HL 1	1	6	L	8	M 14 x 1.5	Rd. 24 x 2	450	-30	100	4
SKL 06 HL 2	2	6	L	8	M 14 x 1.5	Rd. 28 x 2	325	-30	100	4
SKL 06 HL 3	3	6	L	8	M 14 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 08 HL 2	2	8	L	10	M 16 x 1.5	Rd. 28 x 2	325	-30	100	4
SKL 08 HL 3	3	8	L	10	M 16 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 10 HL 3	3	10	L	12	M 18 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 10 HL 4	4	10	L	12	M 18 x 1.5	Rd. 42 x 2	250	-30	100	4
SKL 13 HL 3	3	12	L	15	M 22 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 13 HL 4	4	12	L	15	M 22 x 1.5	Rd. 42 x 2	250	-30	100	4
SKL 16 HL 3	3	16	L	18	M 26 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 16 HL 4	4	16	L	18	M 26 x 1.5	Rd. 42 x 2	250	-30	100	4
SKL 16 HL 5	5	16	L	18	M 26 x 1.5	Rd. 48 x 3	250	-30	100	4
SKL 20 HL 5	5	19	L	22	M 30 x 2	Rd. 48 x 3	250	-30	100	4
SKL 25 HL 5	5	25	L	28	M 36 x 2	Rd. 48 x 3	250	-30	100	4
SKL 32 HL 5	5	31	L	35	M 45 x 2	Rd. 48 x 3	250	-30	100	4
SKL 32 HL 6	6	31	L	35	M 45 x 2	Rd. 70 x 3	160	-25	100	4
SKL 40 HL 6	6	38	L	42	M 52 x 2	Rd. 70 x 3	160	-25	100	4
SKL 04 HS 1	1	4	S	8	M 16 x 1.5	Rd. 24 x 2	450	-25	100	4
SKL 06 HS 1	1	6	S	10	M 18 x 1.5	Rd. 24 x 2	450	-25	100	4
SKL 06 HS 2	2	6	S	10	M 18 x 1.5	Rd. 28 x 2	325	-30	100	4
SKL 06 HS 3	3	6	S	10	M 18 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 08 HS 2	2	8	S	12	M 20 x 1.5	Rd. 28 x 2	325	-30	100	4
SKL 08 HS 3	3	8	S	12	M 20 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 10 HS 3	3	10	S	14	M 22 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 10 HS 4	4	10	S	14	M 22 x 1.5	Rd. 42 x 2	250	-25	125	4
SKL 13 HS 3	3	12	S	16	M 24 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 13 HS 4	4	12	S	16	M 24 x 1.5	Rd. 42 x 2	250	-30	100	4
SKL 16 HS 3	3	16	S	20	M 30 x 2	Rd. 36 x 2	300	-25	125	4
SKL 16 HS 4	4	16	S	20	M 30 x 2	Rd. 42 x 2	250	-30	100	4
SKL 16 HS 5	5	16	S	20	M 30 x 2	Rd. 48 x 3	250	-30	100	4
SKL 20 HS 5	5	19	S	25	M 36 x 2	Rd. 48 x 3	250	-30	100	4
SKL 25 HS 5	5	25	S	30	M 42 x 2	Rd. 48 x 3	250	-30	100	4
SKL 25 HS 6	6	25	S	30	M 42 x 2	Rd. 70 x 3	300	-30	100	4

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

## SKL HL / SKL HS

(Continued)

## Screw coupling (loose)

Identification	Size	DN*	Series for external pipe	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*	
SKL 32 HS 6	6	31	S	38	M 52 x 2	Rd. 70 x 3	300	-30	100	4

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**Product versions:**

**SKL HL SI / SKL HS SI** - Screw coupling with locking mechanism (loose), Steel, electro galvanised, electro galvanised

**Accessories:**

**SKL ZUBS** - Dust protection for SKL

**SKLS HL / SKLS HS****Screw coupling (loose)**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Design:** Coupling with bulkhead connection
- Connection 1:** metric cylindrical outer thread
- Sealing form 1:** 24° inner cone
- Residual pressure:** Coupling under residual pressure is possible
- Material:** Steel
- Surface:** electro galvanized
- Description:** Screw couplings are designed for high pressures and pressure pulses.

Identification	Size	DN*	Series	for external pipe Ø mm	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKLS 04 HL 1	1	4	L	6	M 12 x 1.5	Rd. 24 x 2	315	-25	100	4
SKLS 06 HL 1	1	6	L	8	M 14 x 1.5	Rd. 24 x 2	450	-30	100	4
SKLS 06 HL 2	2	6	L	8	M 14 x 1.5	Rd. 28 x 2	270	-30	100	4
SKLS 06 HL 3	3	6	L	8	M 14 x 1.5	Rd. 36 x 2	300	-30	100	4
SKLS 08 HL 2	2	8	L	10	M 16 x 1.5	Rd. 28 x 2	270	-30	100	4
SKLS 08 HL 3	3	8	L	10	M 16 x 1.5	Rd. 36 x 2	300	-30	100	4
SKLS 10 HL 3	3	10	L	12	M 18 x 1.5	Rd. 36 x 2	300	-30	100	4
SKLS 10 HL 4	4	10	L	12	M 18 x 1.5	Rd. 42 x 2	250	-30	100	4
SKLS 13 HL 3	3	12	L	15	M 22 x 1.5	Rd. 36 x 2	300	-30	100	4
SKLS 13 HL 4	4	12	L	15	M 22 x 1.5	Rd. 42 x 2	250	-30	100	4
SKLS 16 HL 3	3	16	L	18	M 26 x 1.5	Rd. 36 x 2	300	-30	100	4
SKLS 16 HL 4	4	16	L	18	M 26 x 1.5	Rd. 42 x 2	250	-30	100	4
SKLS 16 HL 5	5	16	L	18	M 26 x 1.5	Rd. 48 x 3	250	-30	100	4
SKLS 20 HL 5	5	19	L	22	M 30 x 2	Rd. 48 x 3	250	-30	100	4
SKLS 25 HL 5	5	25	L	28	M 36 x 2	Rd. 48 x 3	250	-30	100	4
SKLS 32 HL 6	6	31	L	38	M 45 x 2	Rd. 70 x 3	160	-25	100	4
SKLS 40 HL 6	6	38	L	42	M 52 x 2	Rd. 70 x 3	160	-25	100	4
SKLS 04 HS 1	1	4	S	8	M 16 x 1.5	Rd. 24 x 2	450	-25	100	4
SKLS 06 HS 1	1	6	S	10	M 18 x 1.5	Rd. 24 x 2	450	-25	100	4
SKLS 06 HS 2	2	6	S	10	M 18 x 1.5	Rd. 28 x 2	325	-30	100	4
SKLS 06 HS 3	3	6	S	10	M 18 x 1.5	Rd. 36 x 2	300	-30	100	4
SKLS 08 HS 2	2	8	S	12	M 20 x 1.5	Rd. 28 x 2	325	-30	100	4
SKLS 08 HS 3	3	8	S	12	M 20 x 1.5	Rd. 36 x 2	300	-30	100	4
SKLS 10 HS 3	3	10	S	14	M 22 x 1.5	Rd. 36 x 2	300	-30	100	4
SKLS 10 HS 4	4	10	S	14	M 22 x 1.5	Rd. 42 x 2	250	-25	125	4
SKLS 13 HS 3	3	12	S	16	M 24 x 1.5	Rd. 36 x 2	300	-30	100	4
SKLS 13 HS 4	4	12	S	16	M 24 x 1.5	Rd. 42 x 2	250	-30	100	4
SKLS 16 HS 4	4	16	S	20	M 30 x 2	Rd. 42 x 2	250	-30	100	4
SKLS 16 HS 5	5	16	S	20	M 30 x 2	Rd. 48 x 3	250	-30	100	4
SKLS 20 HS 5	5	19	S	25	M 36 x 2	Rd. 48 x 3	250	-30	100	4
SKLS 25 HS 5	5	25	S	30	M 42 x 2	Rd. 48 x 3	250	-30	100	4
SKLS 25 HS 6	6	25	S	30	M 42 x 2	Rd. 70 x 3	300	-25	100	4
SKLS 32 HS 6	6	31	S	38	M 52 x 2	Rd. 70 x 3	300	-30	100	4

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**Accessories:**

**SKL ZUBS** - Dust protection for SKL

**SKL HJ****Screw coupling (loose)**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Connection 1:</b>	UN/UNF external threads
<b>Sealing form 1:</b>	74° outer cone
<b>Residual pressure:</b>	Coupling under pressure to approx. 200 bar
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Screw couplings are designed for high pressures and pressure pulses.



Identification	Size	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKL 13 HJ 2	2	12	UNF 3/4" -16	Rd. 28 x 2	450	-25	100	4

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**Accessories:**

SKL ZUBS - Dust protection for SKL

**SKL IM****Screw coupling (loose)**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** metric cylindrical inner thread
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Residual pressure:** Coupling under residual pressure is possible
- Material:** Steel
- Surface:** electro galvanised
- Description:** Screw couplings are designed for high pressures and pressure pulses.

Identification	Size	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKL 06 IM 1	1	6	M 14 x 1.5	Rd. 24 x 2	450	-25	100	4
SKL 08 IM 2	2	8	M 16 x 1.5	Rd. 28 x 2	325	-30	100	4
SKL 10 IM 3	3	10	M 18 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 13 IM 3	3	12	M 22 x 1.5	Rd. 36 x 2	300	-30	100	4
SKL 13 IM 4	4	12	M 22 x 1.5	Rd. 42 x 2	250	-30	100	4
SKL 16 IM 4	4	16	M 26 x 1.5	Rd. 42 x 2	250	-25	100	4
SKL 20 IM 5	5	19	M 30 x 1.5	Rd. 48 x 3	250	-25	125	4

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**Accessories:**

**SKL ZUBS** - Dust protection for SKL

## SKL IR

## Screw coupling (loose)

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>Residual pressure:</b>	Coupling under residual pressure is possible
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Screw couplings are designed for high pressures and pressure pulses.



Identification	Size	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKL 06 IR 1	1	6	G 1/4" -19	Rd. 24 x 2	450	-30	100	4
SKL 10 IR 2	2	10	G 3/8" -19	Rd. 28 x 2	450	-30	100	4
SKL 10 IR 3	3	10	G 3/8" -19	Rd. 36 x 2	400	-30	100	4
SKL 13 IR 3	3	12	G 1/2" -14	Rd. 36 x 2	400	-30	100	4
SKL 20 IR 4	4	19	G 3/4" -14	Rd. 42 x 2	400	-30	100	4
SKL 20 IR 5	5	19	G 3/4" -14	Rd. 48 x 3	300	-30	100	4
SKL 25 IR 5	5	25	G 1" -11	Rd. 48 x 3	300	-30	100	4
SKL 32 IR 6	6	31	G 1.1/4" -11	Rd. 70 x 3	300	-25	100	4
SKL 40 IR 6	6	38	G 1.1/2" -11	Rd. 70 x 3	300	-25	100	4

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**Product versions:**

SKL IR VA - Screw coupling (loose), Stainless steel

**Accessories:**

SKL ZUBS - Dust protection for SKL

**SKL IR VA****Screw coupling (loose)**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Residual pressure:** Coupling under residual pressure is possible
- Material:** Stainless steel
- Description:** Screw couplings are designed for high pressures and pressure pulses.

Identification	Size	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKL 10 IR 2 VA	2	10	G 3/8" -19	Rd. 28 x 2	250	-25	200	4
SKL 13 IR 3 VA	3	12	G 1/2" -14	Rd. 36 x 2	250	-25	200	4
SKL 20 IR 4 VA	4	19	G 3/4" -14	Rd. 42 x 2	150	-25	200	4
SKL 25 IR 5 VA	5	25	G 1" -11	Rd. 48 x 3	150	-25	200	4
SKL 32 IR 6 VA	6	31	G 1.1/4" -11	Rd. 70 x 3	100	-25	200	4

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**Product versions:**

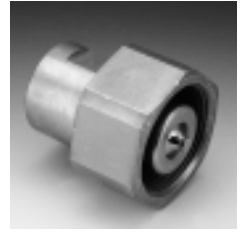
SKL IR - Screw coupling (loose), Steel, electro galvanised

**Accessories:**

SKL ZUBS - Dust protection for SKL

**SKL IM AE****Screw coupling (loose)**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Connection 1:</b>	metric cylindrical inner thread
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>Residual pressure:</b>	Coupling under residual pressure is possible
<b>compatible with:</b>	Aeroquip
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Screw couplings are designed for high pressures and pressure pulses.



Identification	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKL 13 IM AE	12	M 22 x 1.5	Rd. 35 x 2	350	-30	100	4
SKL 16 IM AE	16	M 26 x 1.5	Rd. 42 x 2	350	-30	100	
SKL 20 IM AE	19	M 30 x 1.5	Rd. 54 x 3	350	-30	100	4
SKL 25 IM AE	25	M 38 x 1.5	Rd. 64 x 3	350	-40	150	

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**Accessories:**

SKL ZUBS AE - Dust protection for SKL...AE

**SKL IR E****Screw coupling (loose)**

**Application:** Automotive engineering  
**Connection 1:** BSP cylindrical internal threads  
**Sealing form 1:** for screw-in pins with shapes A, B and if necessary E  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Screw couplings are designed for high pressures and pressure pulses. Can be coupled with up to 100 bar residual pressure on one side and up to 50 bar residual pressure on both sides.

Identification	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKL 20 IR E	19	G 3/4" -14	Rd. 44 x 2.5	250	-25	100	3
SKL 25 IR E	25	G 1" -11	Rd. 54 x 2.5	230	-25	100	3

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**Accessories:**

SKL ZUBS E - Dust protection for SKL...E

**SKL HN SP****Screw coupling (loose)**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Connection 1:</b>	NPT external threads
<b>Sealing form 1:</b>	thread seal
<b>Residual pressure:</b>	Coupling under residual pressure is possible
<b>compatible with:</b>	Pioneer
<b>Additional feature:</b>	with ball valve
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	DN*	Connecting thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKL 06 HN SP	6	NPT 1/4" -18	700	-25	110	3
SKL 10 HN 06 SP	10	NPT 1/4" -18	700	-25	125	3
SKL 10 HN SP	10	NPT 3/8" -18	700	-30	80	3

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**Accessories:**

SKL ZUBS SP - Dust protection for SKL...SP

**SKL HN SP KE****Screw coupling (loose)**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** NPT external threads
- Sealing form 1:** thread seal
- Residual pressure:** Coupling under residual pressure is possible
- compatible with:** Pioneer
- Additional feature:** with plug valve
- Material:** Steel
- Surface:** electro galvanised
- Description:** Screw couplings are designed for high pressures and pressure pulses.

Identification	DN*	Connecting thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKL 06 HN SP KE	6	NPT 1/4" -18	1050	-25	125	3
SKL 10 HN SP KE	10	NPT 3/8" -18	1000	-25	125	3

BD = Working pressure SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**Accessories:**

**SKF ZUBS SP** - Dust protection for SKF...SP

**SKL HN SK VA****Screwed coupling, loose half**

<b>Application:</b>	hydraulic tools, Industry and construction, mobile hydraulic pumps, hydraulic winches, hydraulic presses, rescue equipment, machinery subjected to cyclic loading with lockable safety latch
<b>Design:</b>	
<b>Supplementary design information:</b>	single-handed operation
<b>Connection 1:</b>	NPT external threads
<b>Material:</b>	Stainless steel, NBR, PTFE



Identification	Size	DN*	Connecting thread	Working pressure bar
SKL 06 HN SK VA	1i	6	NPT 1/4" -18	700
SKL 10 HN SK VA	2i	10	NPT 3/8" -18	700

DN = Nominal diameter, nominal width

**Accessories:**

SKL ZUBS SK - Dust protector for SKL...SK

**SKL IR FS****Screwed coupling, loose half, flat sealing**

**Design:** flat sealing  
**Connection 1:** BSP cylindrical internal threads  
**Sealing form 1:** for screw-in pins with shapes A, B and if necessary E  
**compatible with:** Stucchi  
**Material:** Steel  
**Surface:** electro galvanised

Identification	Size	DN*	Connecting thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKL 06 IR 1 FS	1	6	G 1/4" -19	400	-25	100
SKL 10 IR 2 FS	2	10	G 3/8" -19	350	-25	100
SKL 13 IR 2 FS	2	12	G 1/2" -14	350	-25	100
SKL 13 IR 3 FS	3	12	G 1/2" -14	350	-25	100
SKL 20 IR 3 FS	3	19	G 3/4" -14	350	-25	100
SKL 20 IR 4 FS	4	19	G 3/4" -14	350	-25	100
SKL 25 IR 4 FS	4	25	G 1" -11	325	-25	100
SKL 25 IR 5 FS	5	25	G 1" -11	325	-25	100
SKL 32 IR 5 FS	5	31	G 1.1/4" -11	300	-25	100

DN = Nominal diameter, nominal width

**Accessories:**

**SKL ZUBS FS ALU** - Dust protector for SKL FS

**SKL IR RO****Screw coupling (loose)**

<b>Application:</b>	Hydraulic hammers, rams etc.
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	This coupling has been specially designed for use in the toughest conditions and can withstand severe vibrations and compression. The inner parts can be replaced when worn (repair possible).



**Note:** To prevent the hexagonal nuts from coming loose if vibrations occur, they must be securely tightened with a flat spanner.

Identification	DN*	Connecting thread	SW mm	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKL 10 IR RO	10	G 3/8" -19	45	Rd. 36 x 3	500	-30	120	4
SKL 13 IR RO	12	G 1/2" -14	50	Rd. 40 x 3	450	-30	120	4
SKL 20 IR RO	19	G 3/4" -14	55	Rd. 45 x 3	400	-30	120	4
SKL 25 IR RO	25	G 1" -11	70	Rd. 58 x 4	350	-30	120	4
SKL 32 IR RO	31	G 1.1/4" -11	80	Rd. 65 x 5	320	-30	120	4
SKL 40 IR RO	38	G 1.1/2" -11	87	Rd. 75 x 5	300	-30	120	4
SKL 50 IR RO	51	G 2" -11	130	Rd. 108 x 5	250	-30	120	4

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

**Spare parts:**

- SK ZUB 15 RO - Threaded ring for RO coupling
- SK ZUB 04 RO - Tool kit (3 piece), for RO coupling
- SK ZUB 12 RO - Conical nipple for RO coupling
- SK ZUB 13 RO - Sealing spring for RO coupling
- SK ZUB 14 RO - Circlip for RO coupling

**Accessories:**

- SKL ZUB 03 RO - Flat spanner for SKL...RO
- SKL ZUBS 09 RO - Dust protection for SKL...RO
- SK ZUB 01 RO - Welded on clip for RO coupling

**SKL IR SN75****Screw coupling (loose)**

- Application:** Offshore applications, oilfields, tools etc.  
**Design:** Snap-tite series 75  
**Connection 1:** BSP cylindrical internal threads  
**Sealing form 1:** for screw-in pins with shapes A, B and if necessary E  
**Residual pressure:** Coupling under residual pressure is possible  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Screw couplings are designed for high pressures and pressure pulses.

Identification	DN*	Connecting thread	Coupling thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKL 20 IR SN75	19	G 3/4" -14	1.3/4" -8	345	-40	90	4
SKL 25 IR SN75	25	G 1" -11	2.1/4" -6	345	-40	90	4
SKL 32 IR SN75	31	G 1.1/4" -11	2.5/8" -6	345	-40	90	3
SKL 40 IR SN75	38	G 1.1/2" -11	3.1/4" -4	345	-40	90	3
SKL 50 IR SN75	51	G 2" -11	4" -4	345	-40	90	3
SKL 75 IR SN75	76	G 3" -11	6" -4	207	-40	90	2

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**SKL IN F SN78****Screw coupling (loose)**

<b>Application:</b>	Industry and automotive engineering
<b>Design:</b>	Snap-tite series 78
<b>Connection 1:</b>	NPT internal thread
<b>Sealing form 1:</b>	thread seal
<b>Residual pressure:</b>	Coupling under residual pressure is possible
<b>Additional feature:</b>	with wing nut
<b>Material:</b>	Brass
<b>Description:</b>	Screw couplings are designed for high pressures and pressure pulses.



Identification	DN*	Connecting thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKL 20 IN F SN78	19	NPT 3/4" -14	207	-40	90	2
SKL 25 IN F SN78	25	NPT 1" -11.5	207	-40	90	2
SKL 32 IN F SN78	31	NPT 1.1/4" -11.5	190	-40	90	2
SKL 40 IN F SN78	38	NPT 1.1/2" -11.5	175	-40	90	2

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**SKL IN F SN78 SK****Screw coupling (loose)**

<b>Application:</b>	Industry and automotive engineering
<b>Connection 1:</b>	NPT internal thread
<b>Sealing form 1:</b>	thread seal
<b>Residual pressure:</b>	Coupling under residual pressure is possible
<b>Additional feature:</b>	Hexagonal design
<b>Material:</b>	Brass
<b>Description:</b>	Screw couplings are designed for high pressures and pressure pulses.

Identification	DN*	Connecting thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKL 20 IN F SN78 SK	19	NPT 3/4" -14	207	-40	90	2
SKL 25 IN F SN78 SK	25	NPT 1" -11.5	207	-40	90	2
SKL 32 IN F SN78 SK	31	NPT 1.1/4" -11.5	190	-40	90	2
SKL 40 IN F SN78 SK	38	NPT 1.1/2" -11.5	175	-40	90	2

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**SKL IR F SN78****Screw coupling (loose)**

<b>Application:</b>	Industry and automotive engineering
<b>Design:</b>	Snap-tite series 78
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>Residual pressure:</b>	Coupling under residual pressure is possible
<b>Additional feature:</b>	with wing nut
<b>Material:</b>	Brass
<b>Description:</b>	Screw couplings are designed for high pressures and pressure pulses.



Identification	DN*	Connecting thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKL 25 IR F SN78	25	G 1" -11	207	-40	90	2
SKL 32 IR F SN78	31	G 1.1/4" -11	190	-40	90	2

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**SKL IR F SN78 SK****Screw coupling (loose)**

- Application:** Industry and automotive engineering  
**Design:** Snap-tite series 78  
**Connection 1:** BSP cylindrical internal threads  
**Sealing form 1:** for screw-in pins with shapes A, B and if necessary E  
**Residual pressure:** Coupling under residual pressure is possible  
**Additional feature:** Hexagonal design  
**Material:** Brass  
**Description:** Screw couplings are designed for high pressures and pressure pulses.

Identification	DN*	Connecting thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SF coup.*
SKL 20 IR F SN78 SK	19	G 3/4" -14	207	-40	90	2
SKL 25 IR F SN78 SK	25	G 1" -11	207	-40	90	2

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Additional info:** The robust construction makes them ideal for use in harsh conditions.

**SK ZUB 01 RO****Welded on clip for RO coupling****Included in scope****of supply:**

Retainer with screw and nut

**suitable for:**

Screw coupling loose half SKL...RO and fixed half SKF...RO.

**Material:**

Steel



Identification	DN*	for RO coupling
SK ZUB 01 RO 03	10	3/8"
SK ZUB 01 RO 04	12	1/2"
SK ZUB 01 RO 05	19	3/4"
SK ZUB 01 RO 06	25	1"
SK ZUB 01 RO 07	31	1.1/4"
SK ZUB 01 RO 08	38	1.1/2"
SK ZUB 01 RO 09	51	2"

DN = Nominal diameter, nominal width

**Accessory for following products:**

SKL IR RO - Screw coupling (loose)

SKF IR RO - Screw coupling (fixed)

**SKF ZUBS****Dust protection for SKF**

suitable for:

Screw coupling (fixed)

Material:

Plastic

Identification	Size	for coupling thread	Colour
SKF ZUBS 1	1	Rd. 24 x 2	red
SKF ZUBS 2	2	Rd. 28 x 2	red
SKF ZUBS 2 BLAU	2	Rd. 28 x 2	blue
SKF ZUBS 2 GELB	2	Rd. 28 x 2	yellow
SKF ZUBS 2 GRUEN	2	Rd. 28 x 2	green
SKF ZUBS 3	3	Rd. 36 x 2	red
SKF ZUBS 3 BLAU	3	Rd. 36 x 2	blue
SKF ZUBS 3 GELB	3	Rd. 36 x 2	yellow
SKF ZUBS 3 GRUEN	3	Rd. 36 x 2	green
SKF ZUBS 4	4	Rd. 42 x 2	red
SKF ZUBS 5	5	Rd. 48 x 3	red
SKF ZUBS 6	6	Rd. 70 x 3	red

**Product versions:**

SKF ZUBS AL - Cap, Aluminium

**Accessory for following products:**

SKF HL / SKF HS - Screw coupling (fixed)

SKFS HL / SKFS HS - Screw coupling (fixed)

SKF IR - Screw coupling (fixed)

SKF IM - Screw coupling (fixed)

SKF SF6 - Screw coupling (fixed)

SKF HJ - Screw coupling (fixed)

**SKF ZUBS 08 RO****Dust protection for SKF...RO**

**suitable for:** Screw coupling (fixed) SKF...RO  
**Material:** Plastic



Identification	DN*	for coupling thread
SKF ZUBS 08 RO 03	10	Rd. 36 x 3
SKF ZUBS 08 RO 04	12	Rd. 40 x 3
SKF ZUBS 08 RO 05	19	Rd. 45 x 3
SKF ZUBS 08 RO 06	25	Rd. 58 x 4
SKF ZUBS 08 RO 07	31	Rd. 65 x 5
SKF ZUBS 08 RO 08	38	Rd. 75 x 5
SKF ZUBS 08 RO 09	51	Rd. 108 x 5

DN = Nominal diameter, nominal width

**Accessory for following products:**

SKF IR RO - Screw coupling (fixed)

**SKF ZUBS AE****Dust protection for SKF...AE**

suitable for:

Screw coupling (fixed) SKF...AE

Material:

Aluminium

Identification	DN*	for coupling thread
SKF ZUBS 13 AE	12	Rd. 35 x 2
SKF ZUBS 16 AE	16	Rd. 42 x 2
SKF ZUBS 20 AE	19	Rd. 54 x 3
SKF ZUBS 25 AE	25	Rd. 64 x 3

DN = Nominal diameter, nominal width

**Accessory for following products:**

SKF IM AE - Screw coupling (fixed)

**SKF ZUBS E****Dust protection for SKF...E**

**suitable for:** Screw coupling (fixed) SKF...E  
**Material:** Steel



Identification	DN*	for coupling thread
SKF ZUBS 20 E	19	Rd. 44 x 2.5
SKF ZUBS 25 E	25	Rd. 54 x 2.5

DN = Nominal diameter, nominal width

**Accessory for following products:**

**SKFS IR E** - Screw coupling (fixed)

3

**SKF ZUBS F SN78****Dust protection for SKF...SN 78****suitable for:**

Screw coupling (fixed), Snap-tite series 78

**Material:**

Steel

Identification	DN*
SKF ZUBS 20 F SN78	19
SKF ZUBS 25 F SN78	25
SKF ZUBS 32 F SN78	31
DN = Nominal diameter, nominal width	

**Accessory for following products:**

SKF IR F SN78 - Screw coupling (fixed)

SKF IN F SN78 - Screw coupling (fixed)

**SKF ZUBS FS ALU****Dust protector for SKF FS**

**suitable for:** Screw coupling fixed half SKF...FS  
**Material:** Aluminium



Identification	Size
SKF ZUBS 1 FS ALU	1
SKF ZUBS 2 FS ALU	2
SKF ZUBS 3 FS ALU	3
SKF ZUBS 4 FS ALU	4
SKF ZUBS 5 FS ALU	5

**Accessory for following products:**

**SKF IR FS** - Screwed coupling fixed half, flat sealing

3

**SKF ZUBS SK****Dust protector for SKF..SK**

suitable for:

Screw coupling fixed half SKF...SK

Material:

Plastic

Identification	DN*	for coupling thread
SKF ZUBS 06 SK	6	1/4" NPT
SKF ZUBS 10 SK	10	3/8" NPT
DN = Nominal diameter, nominal width		

**Accessory for following products:**

SKF IN SK VA - Screwed coupling fixed half

**SKF ZUBS SN75****Dust protection for SKF...SN 75**

**suitable for:** Screw coupling (fixed), Snap-tite series 75  
**Material:** Steel



Identification	DN*	for coupling thread
SKF ZUBS 20 SN75	19	1.3/4" -8
SKF ZUBS 25 SN75	25	2.1/4" -6
SKF ZUBS 32 SN75	31	2.5/8" -6
SKF ZUBS 40 SN75	38	3.1/4" -4
SKF ZUBS 50 SN75	51	4" -4
DN = Nominal diameter, nominal width		

**Accessory for following products:**

**SKF IR SN75** - Screw coupling (fixed)

3

**SKF ZUBS SP****Dust protection for SKF...SP****suitable for:**

Screw coupling (fixed), SKF...SP

**Material:**

Aluminium

Identification	DN*
SKF ZUBS SP 04	6
SKF ZUBS SP 06	10
DN = Nominal diameter, nominal width	

**Accessory for following products:**

SKF IN SP - Screw coupling (fixed)

SKL HN SP KE - Screw coupling (loose)

**SK ZUB 01 RO****Welded on clip for RO coupling****Included in scope****of supply:**

Retainer with screw and nut

**suitable for:**

Screw coupling loose half SKL...RO and fixed half SKF...RO.

**Material:**

Steel



Identification	DN*	for RO coupling
SK ZUB 01 RO 03	10	3/8"
SK ZUB 01 RO 04	12	1/2"
SK ZUB 01 RO 05	19	3/4"
SK ZUB 01 RO 06	25	1"
SK ZUB 01 RO 07	31	1.1/4"
SK ZUB 01 RO 08	38	1.1/2"
SK ZUB 01 RO 09	51	2"

DN = Nominal diameter, nominal width

**Accessory for following products:**

SKL IR RO - Screw coupling (loose)

SKF IR RO - Screw coupling (fixed)

**SKL ZUB 03 RO****Flat spanner for SKL...RO****suitable for:**

Screw coupling (loose) SKL...RO

**Material:**

Steel

Identification	DN*	SW mm
SKL ZUB 03 RO 03	10	45
SKL ZUB 03 RO 04	12	50
SKL ZUB 03 RO 05	19	55
SKL ZUB 03 RO 06	25	70
SKL ZUB 03 RO 07	31	80
SKL ZUB 03 RO 08	38	87
SKL ZUB 03 RO 09	51	130

DN = Nominal diameter, nominal width    SW = Width across flats

**Accessory for following products:**

SKL IR RO - Screw coupling (loose)

## SKL ZUBS

## Dust protection for SKL

**suitable for:** Screw coupling (loose)  
**Material:** Plastic



Identification	Size	for coupling thread	Colour
SKL ZUBS 1	1	Rd. 24 x 2	red
SKL ZUBS 2	2	Rd. 28 x 2	red
SKL ZUBS 2 BLAU	2	Rd. 28 x 2	blue
SKL ZUBS 2 GELB	2	Rd. 28 x 2	yellow
SKL ZUBS 2 GRUEN	2	Rd. 28 x 2	green
SKL ZUBS 3	3	Rd. 36 x 2	red
SKL ZUBS 3 BLAU	3	Rd. 36 x 2	blue
SKL ZUBS 3 GELB	3	Rd. 36 x 2	yellow
SKL ZUBS 3 GRUEN	3	Rd. 36 x 2	green
SKL ZUBS 4	4	Rd. 42 x 2	red
SKL ZUBS 5	5	Rd. 48 x 3	red
SKL ZUBS 6	6	Rd. 70 x 3	red

**Product versions:**

SKL ZUBS AL - Dust protector, Aluminium

**Accessory for following products:**

SKL IR - Screw coupling (loose)

SKL HL / SKL HS - Screw coupling (loose)

SKLS HL / SKLS HS - Screw coupling (loose)

SKL IM - Screw coupling (loose)

SKL HJ - Screw coupling (loose)

**SKL ZUBS 09 RO****Dust protection for SKL...RO**

**suitable for:**  
**Material:**

Screw coupling (loose) SKL...RO  
Plastic

Identification	DN*	for coupling thread
SKL ZUBS 09 RO 03	10	Rd. 36 x 3
SKL ZUBS 09 RO 04	12	Rd. 40 x 3
SKL ZUBS 09 RO 05	19	Rd. 45 x 3
SKL ZUBS 09 RO 06	25	Rd. 58 x 4
SKL ZUBS 09 RO 07	31	Rd. 65 x 5
SKL ZUBS 09 RO 08	38	Rd. 75 x 5
SKL ZUBS 09 RO 09	51	Rd. 108 x 5

DN = Nominal diameter, nominal width

**Accessory for following products:**

**SKL IR RO** - Screw coupling (loose)

**SKL ZUBS AE****Dust protection for SKL...AE**

**suitable for:** Screw coupling (loose) SKL...AE  
**Material:** Aluminium



Identification	DN*	for coupling thread
SKL ZUBS 13 AE	12	Rd. 35 x 2
SKL ZUBS 16 AE	16	Rd. 42 x 2
SKL ZUBS 20 AE	19	Rd. 54 x 3
SKL ZUBS 25 AE	25	Rd. 64 x 3

DN = Nominal diameter, nominal width

**Accessory for following products:**

**SKL IM AE** - Screw coupling (loose)

3

**SKL ZUBS E****Dust protection for SKL...E****suitable for:**

Screw coupling (loose) SKL...E

**Material:**

Steel

Identification	DN*	for coupling thread
SKL ZUBS 20 E	19	Rd. 44 x 2.5
SKL ZUBS 25 E	25	Rd. 54 x 2.5
DN = Nominal diameter, nominal width		

**Accessory for following products:**

SKL IR E - Screw coupling (loose)

**SKL ZUBS FS ALU****Dust protector for SKL FS**

**suitable for:** Screw coupling loose half SKL...FS  
**Material:** Aluminium



Identification	Size
SKL ZUBS 1 FS ALU	1
SKL ZUBS 2 FS ALU	2
SKL ZUBS 3 FS ALU	3
SKL ZUBS 4 FS ALU	4
SKL ZUBS 5 FS ALU	5

**Accessory for following products:**

**SKL IR FS** - Screwed coupling, loose half, flat sealing

3

**SKL ZUBS SK****Dust protector for SKL..SK**

**suitable for:**  
**Material:**

Screw coupling loose half SKL...SK  
Plastic

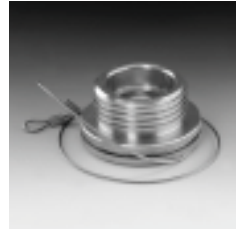
Identification	DN*	for coupling thread
SKL ZUBS 06 SK	6	1/4" NPT
SKL ZUBS 10 SK	10	3/8" NPT
DN = Nominal diameter, nominal width		

**Accessory for following products:**

**SKL ZUBS SK** - Dust protector for SKL..SK

**SKL ZUBS SN75****Dust protection for SKF...SN 75**

**suitable for:** Screw coupling (loose), Snap-tite series 75  
**Material:** Steel



Identification	DN*	for coupling thread
SKL ZUBS 20 SN75	19	1.3/4" -8
SKL ZUBS 25 SN75	25	2.1/4" -6
SKL ZUBS 32 SN75	31	2.5/8" -6
SKL ZUBS 40 SN75	38	3.1/4" -4
SKL ZUBS 50 SN75	51	4" -4

DN = Nominal diameter, nominal width

3

## SKL ZUBS SN78

### Dust protection for SKF...SN 78



**suitable for:**

Screw coupling (loose), Snap-tite series 78

**Material:**

Steel

Identification	DN*
SKL ZUBS 20 F SN78	19
SKL ZUBS 25 F SN78	25
SKL ZUBS 32 F SN78	31

DN = Nominal diameter, nominal width

3

**SKL ZUBS SP****Dust protection for SKL...SP**

**suitable for:** Screw coupling (loose) SKL...SP  
**Material:** Aluminium



Identification	DN*	Size
SKL ZUBS SP 04	6	4
SKL ZUBS SP 06	10	6

DN = Nominal diameter, nominal width

**Accessory for following products:**

**SKL HN SP** - Screw coupling (loose)

3

**SK ZUB 04 RO****Tool kit (3 piece), for RO coupling**

**suitable for:** Screw coupling loose half SKL...RO and fixed half SKF...RO.  
**Included in scope of supply:** 1 toggle, 1 chisel, 1 washer  
**Material:** Steel

Identification	DN*	for thread	Toggle	Chisel
SK ZUB 04 RO 04	12	G 1/2"	Foot, square 10.5	18 x 4
SK ZUB 04 RO 05	19	G 3/4"	Foot, square 13.5	24 x 5
SK ZUB 04 RO 06	25	G 1"	Foot, square 19.5	29 x 6
SK ZUB 04 RO 07	31	G 1.1/4"	Foot, square 26.0	38 x 6
SK ZUB 04 RO 08	38	G 1.1/2"	Foot, square 32.0	44 x 6
SK ZUB 04 RO 09	51	G 2"	Foot, square 38.0	56 x 6

DN = Nominal diameter, nominal width

**Spare part for following products:**

SKF IR RO - Screw coupling (fixed)

SKL IR RO - Screw coupling (loose)

**SK ZUB 12 RO****Conical nipple for RO coupling**

**suitable for:** Screw coupling loose half SKL...RO and fixed half SKF...RO.  
**Material:** Steel



Identification	DN*	for thread	External Ø mm
SK ZUB 12 RO 03	10	G 3/8"	14
SK ZUB 12 RO 04	12	G 1/2"	18
SK ZUB 12 RO 05	19	G 3/4"	22
SK ZUB 12 RO 06	25	G 1"	30
SK ZUB 12 RO 07	31	G 1.1/4"	36
SK ZUB 12 RO 08	38	G 1.1/2"	44
SK ZUB 12 RO 09	51	G 2"	55

DN = Nominal diameter, nominal width

**Spare part for following products:**

**SKF IR RO** - Screw coupling (fixed)

**SKL IR RO** - Screw coupling (loose)

**SK ZUB 13 RO****Sealing spring for RO coupling****suitable for:**

Screw coupling loose half SKL...RO and fixed half SKF...RO.

**Material:**

Steel

Identification	DN*	for thread	External Ø mm
SK ZUB 13 RO 03	10	G 3/8"	12
SK ZUB 13 RO 04	12	G 1/2"	15
SK ZUB 13 RO 05	19	G 3/4"	19
SK ZUB 13 RO 06	25	G 1"	27
SK ZUB 13 RO 07	31	G 1.1/4"	33
SK ZUB 13 RO 08	38	G 1.1/2"	40
SK ZUB 13 RO 09	51	G 2"	47

DN = Nominal diameter, nominal width

**Spare part for following products:**

SKL IR RO - Screw coupling (loose)

SKF IR RO - Screw coupling (fixed)

**SK ZUB 14 RO****Circlip for RO coupling**

**suitable for:** Screw coupling loose half SKL...RO and fixed half SKF...RO.  
**Material:** Steel



Identification	DN*	for thread
SK ZUB 14 RO 03	10	G 3/8"
DN = Nominal diameter, nominal width		

**Spare part for following products:**

**SKF IR RO** - Screw coupling (fixed)

**SKL IR RO** - Screw coupling (loose)

3

**SK ZUB 15 RO****Threaded ring for RO coupling**

**suitable for:**

Screw coupling loose half SKL...RO and fixed half SKF...RO.

**Material:**

Steel

Identification	DN*	for thread
SK ZUB 15 RO 04	12	G 1/2"
SK ZUB 15 RO 05	19	G 3/4"
SK ZUB 15 RO 06	25	G 1"
SK ZUB 15 RO 07	31	G 1.1/4"
SK ZUB 15 RO 08	38	G 1.1/2"
SK ZUB 15 RO 09	51	G 2"

DN = Nominal diameter, nominal width

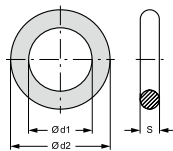
**Spare part for following products:**

SKL IR RO - Screw coupling (loose)

SKF IR RO - Screw coupling (fixed)

**SKF BREMSRING****Brake ring for screw coupling**

**suitable for:** Screw coupling (fixed)  
**Material:** NBR



Identification	Size	Ø d1 mm	Ø d2 mm	S mm
SKF BREMSRING 1	1	19	25	3,0
SKF BREMSRING 2	2	23	29	3,0
SKF BREMSRING 3	3	31	37	3,0
SKF BREMSRING 4	4	36	42	3,0
SKF BREMSRING 5	5	43	50	3,5
SKF BREMSRING 6	6	64	72	4,0

**Spare part for following products:**

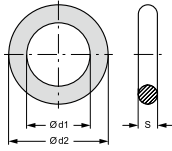
**SKFS HL / SKFS HS** - Screw coupling (fixed)

**SKF HL / SKF HS** - Screw coupling (fixed)

**SKF IM** - Screw coupling (fixed)

**SKF IR** - Screw coupling (fixed)

**SKF SF6** - Screw coupling (fixed)

**SKF ORING****O-ring for SKF**

suitable for:

Screw coupling (fixed)

Material:

NBR

Identification	Size	Ø d1 mm	Ø d2 mm	S mm
SKF ORING 1	1	12,5	16,5	2,0
SKF ORING 2	2	17,0	21,0	2,0
SKF ORING 3	3	22,0	28,0	3,0
SKF ORING 4	4	28,0	34,0	3,0
SKF ORING 5	5	35,0	40,0	2,5
SKF ORING 6	6	54,0	60,0	3,0

**Spare part for following products:**

SKF HL / SKF HS - Screw coupling (fixed)

SKFS HL / SKFS HS - Screw coupling (fixed)

SKF IR - Screw coupling (fixed)

SKF IM - Screw coupling (fixed)

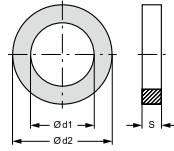
SKF HJ - Screw coupling (fixed)

SKF SF6 - Screw coupling (fixed)

**SKF STUETZRING**

## Support ring for SKF

**suitable for:** Screw coupling (fixed)  
**Material:** PVC



Identification	Size	Ø d1 mm	Ø d2 mm	S mm
SKF STUETZRING 1	1	13,0	16,1	1,0
SKF STUETZRING 2	2	17,5	20,7	1,0
SKF STUETZRING 3	3	22,0	27,4	1,0
SKF STUETZRING 4	4	28,0	33,2	1,0
SKF STUETZRING 5	5	35,0	39,0	1,0
SKF STUETZRING 6	6	54,0	58,6	1,0

**Spare part for following products:**

**SKFS HL / SKFS HS** - Screw coupling (fixed)

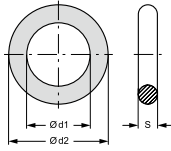
**SKF HL / SKF HS** - Screw coupling (fixed)

**SKF IM** - Screw coupling (fixed)

**SKF IR** - Screw coupling (fixed)

**SKF HJ** - Screw coupling (fixed)

**SKF SF6** - Screw coupling (fixed)

**SKF ZUB 10 RO****O-ring for SKF...RO**

suitable for:

Screw coupling (fixed) SKF...RO

Material:

NBR

Identification	DN*	Ø d1 mm	Ø d2 mm	S mm
SKF ZUB 10 RO 03	10	22,00	29,00	3,50
SKF ZUB 10 RO 04	12	26,00	33,00	3,50
SKF ZUB 10 RO 05	19	28,00	35,00	3,50
SKF ZUB 10 RO 06	25	37,00	44,00	3,50
SKF ZUB 10 RO 07	31	46,50	57,10	5,30
SKF ZUB 10 RO 08	38	57,15	64,21	3,53
SKF ZUB 10 RO 09	51	85,00	95,60	5,30

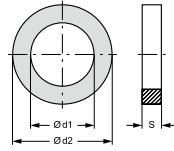
DN = Nominal diameter, nominal width

**Spare part for following products:**

SKF IR RO - Screw coupling (fixed)

**SKF ZUB 11 RO****Support ring for SKF...RO**

**suitable for:** Screw coupling (fixed) SKF...RO  
**Material:** PVC



Identification	DN*	Ø d1 mm	Ø d2 mm	S mm
SKF ZUB 11 RO 04	12	26,0	32,0	1,5
SKF ZUB 11 RO 05	19	28,0	34,0	1,5
SKF ZUB 11 RO 06	25	38,0	44,0	1,5
SKF ZUB 11 RO 07	31	46,5	56,0	2,0
SKF ZUB 11 RO 08	38	57,5	63,7	1,5
SKF ZUB 11 RO 09	51	74,5	83,5	2,0

DN = Nominal diameter, nominal width

**Spare part for following products:**

**SKF IR RO** - Screw coupling (fixed)

**SK ZUB 04 RO****Tool kit (3 piece), for RO coupling**

**suitable for:** Screw coupling loose half SKL...RO and fixed half SKF...RO.  
**Included in scope of supply:** 1 toggle, 1 chisel, 1 washer  
**Material:** Steel

Identification	DN*	for thread	Toggle	Chisel
SK ZUB 04 RO 04	12	G 1/2"	Foot, square 10.5	18 x 4
SK ZUB 04 RO 05	19	G 3/4"	Foot, square 13.5	24 x 5
SK ZUB 04 RO 06	25	G 1"	Foot, square 19.5	29 x 6
SK ZUB 04 RO 07	31	G 1.1/4"	Foot, square 26.0	38 x 6
SK ZUB 04 RO 08	38	G 1.1/2"	Foot, square 32.0	44 x 6
SK ZUB 04 RO 09	51	G 2"	Foot, square 38.0	56 x 6

DN = Nominal diameter, nominal width

**Spare part for following products:**

SKF IR RO - Screw coupling (fixed)

SKL IR RO - Screw coupling (loose)

**SK ZUB 12 RO****Conical nipple for RO coupling**

**suitable for:** Screw coupling loose half SKL...RO and fixed half SKF...RO.  
**Material:** Steel



Identification	DN*	for thread	External Ø mm
SK ZUB 12 RO 03	10	G 3/8"	14
SK ZUB 12 RO 04	12	G 1/2"	18
SK ZUB 12 RO 05	19	G 3/4"	22
SK ZUB 12 RO 06	25	G 1"	30
SK ZUB 12 RO 07	31	G 1.1/4"	36
SK ZUB 12 RO 08	38	G 1.1/2"	44
SK ZUB 12 RO 09	51	G 2"	55

DN = Nominal diameter, nominal width

**Spare part for following products:**

**SKF IR RO** - Screw coupling (fixed)

**SKL IR RO** - Screw coupling (loose)

**SK ZUB 13 RO****Sealing spring for RO coupling****suitable for:**

Screw coupling loose half SKL...RO and fixed half SKF...RO.

**Material:**

Steel

Identification	DN*	for thread	External Ø mm
SK ZUB 13 RO 03	10	G 3/8"	12
SK ZUB 13 RO 04	12	G 1/2"	15
SK ZUB 13 RO 05	19	G 3/4"	19
SK ZUB 13 RO 06	25	G 1"	27
SK ZUB 13 RO 07	31	G 1.1/4"	33
SK ZUB 13 RO 08	38	G 1.1/2"	40
SK ZUB 13 RO 09	51	G 2"	47

DN = Nominal diameter, nominal width

**Spare part for following products:**

SKL IR RO - Screw coupling (loose)

SKF IR RO - Screw coupling (fixed)

**SK ZUB 14 RO****Circlip for RO coupling**

**suitable for:** Screw coupling loose half SKL...RO and fixed half SKF...RO.  
**Material:** Steel



Identification	DN*	for thread
SK ZUB 14 RO 03	10	G 3/8"
DN = Nominal diameter, nominal width		

**Spare part for following products:**

**SKF IR RO** - Screw coupling (fixed)  
**SKL IR RO** - Screw coupling (loose)

3

**SK ZUB 15 RO****Threaded ring for RO coupling**

**suitable for:**

Screw coupling loose half SKL...RO and fixed half SKF...RO.

**Material:**

Steel

Identification	DN*	for thread
SK ZUB 15 RO 04	12	G 1/2"
SK ZUB 15 RO 05	19	G 3/4"
SK ZUB 15 RO 06	25	G 1"
SK ZUB 15 RO 07	31	G 1.1/4"
SK ZUB 15 RO 08	38	G 1.1/2"
SK ZUB 15 RO 09	51	G 2"

DN = Nominal diameter, nominal width

**Spare part for following products:**

SKL IR RO - Screw coupling (loose)

SKF IR RO - Screw coupling (fixed)

## SKM HL / SKM HS

## Plug-in coupling sleeve

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** metric cylindrical outer thread
- Sealing form 1:** 24° inner cone
- Standard:** complies with ISO 7241-1 Series A
- Material:** Steel
- Surface:** electro galvanised
- Description:** The sliding sleeve can be fitted in a bulkhead wall with snap rings and then acts as a quick release coupling. The double acting sliding sleeve provides a push/pull function when coupling. Plug-in couplings allow quick coupling.



Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp.	
								min. °C	max. °C
SKM 04 HL 2	4	L	6	M 12 x 1.5	2	250	4	-30	100
SKM 06 HL 2	6	L	8	M 14 x 1.5	2	250	4	-30	100
SKM 06 HL 3	6	L	8	M 14 x 1.5	3	225	4	-30	100
SKM 08 HL 2	8	L	10	M 16 x 1.5	2	250	4	-30	100
SKM 08 HL 3	8	L	10	M 16 x 1.5	3	225	4	-30	100
SKM 10 HL 3	10	L	12	M 18 x 1.5	3	225	4	-30	100
SKM 10 HL 4	10	L	12	M 18 x 1.5	4	225	4	-30	100
SKM 13 HL 3	12	L	15	M 22 x 1.5	3	225	4	-30	100
SKM 13 HL 4	12	L	15	M 22 x 1.5	4	225	4	-30	100
SKM 16 HL 3	16	L	18	M 26 x 1.5	3	225	4	-30	100
SKM 16 HL 4	16	L	18	M 26 x 1.5	4	225	4	-30	100
SKM 16 HL 5	16	L	18	M 26 x 1.5	5	225	4	-30	100
SKM 20 HL 4	19	L	22	M 30 x 2	4	225	4	-30	100
SKM 20 HL 5	19	L	22	M 30 x 2	5	225	4	-30	100
SKM 25 HL 5	25	L	28	M 36 x 2	5	225	4	-30	100
SKM 04 HS 2	4	S	8	M 16 x 1.5	2	250	4	-30	100
SKM 06 HS 1	6	S	10	M 18 x 1.5	1	300	4	-25	100
SKM 06 HS 2	6	S	10	M 18 x 1.5	2	250	4	-30	100
SKM 06 HS 3	6	S	10	M 18 x 1.5	3	225	4	-30	100
SKM 08 HS 2	8	S	12	M 20 x 1.5	2	250	4	-30	100
SKM 08 HS 3	8	S	12	M 20 x 1.5	3	225	4	-30	100
SKM 10 HS 3	10	S	14	M 22 x 1.5	3	225	4	-30	100
SKM 10 HS 4	10	S	14	M 22 x 1.5	4	225	4	-25	125
SKM 13 HS 3	12	S	16	M 24 x 1.5	3	225	4	-30	100
SKM 13 HS 4	12	S	16	M 24 x 1.5	4	225	4	-30	100
SKM 16 HS 3	16	S	20	M 30 x 2	3	225	4	-25	100
SKM 16 HS 4	16	S	20	M 30 x 2	4	225	4	-30	100
SKM 16 HS 5	16	S	20	M 30 x 2	5	225	4	-30	100
SKM 20 HS 5	19	S	25	M 36 x 2	5	225	4	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**SKM HL / SKM HS****Plug-in coupling sleeve****(Continued)**

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 25 HS 5	25	S	30	M 42 x 2	5	225	4	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Spare parts:****SKM STUETZRING** - Support ring for SKM**SKM ORING** - O-ring for SKM**Accessories:****SKM ZUBS 3 C** - Dust protection coupling sleeve, SKM..**SKM ZUB 3 12** - Quick release clip with spring**SKM ZUBS** - Dust protection coupling sleeve, SKM..**SKM ZUB BLINDSTECKER** - Dummy connector for plug-in coupling sleeve**SKM ZUB 3 11** - Quick release clip with dust protection**SKM ZUBS 3 CB** - Dust protection coupling sleeve, SKM..

## SKMS HL / SKMS HS

## Plug-in coupling sleeve (bulkhead connection)

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Design:** Coupling with bulkhead connection
- Connection 1:** metric cylindrical outer thread
- Sealing form 1:** 24° inner cone
- Standard:** complies with ISO 7241-1 Series A
- Material:** Steel
- Surface:** electro galvanised
- Description:** The sliding sleeve can be fitted in a bulkhead wall with snap rings and then acts as a quick release coupling. The double acting sliding sleeve provides a push/pull function when coupling. Plug-in couplings allow quick coupling.



Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure SF coup.*	Mineral oil temp. min. Mineral oil temp. max.		
							bar	°C	°C
SKMS 04 HL 2	4	L	6	M 12 x 1.5	2	300	4	-25	125
SKMS 06 HL 2	6	L	8	M 14 x 1.5	2	250	4	-30	100
SKMS 06 HL 3	6	L	8	M 14 x 1.5	3	225	4	-30	100
SKMS 08 HL 2	8	L	10	M 16 x 1.5	2	250	4	-30	100
SKMS 08 HL 3	8	L	10	M 16 x 1.5	3	225	4	-30	100
SKMS 10 HL 3	10	L	12	M 18 x 1.5	3	225	4	-30	100
SKMS 10 HL 4	10	L	12	M 18 x 1.5	4	225	4	-30	100
SKMS 13 HL 3	12	L	15	M 22 x 1.5	3	225	4	-30	100
SKMS 13 HL 4	12	L	15	M 22 x 1.5	4	225	4	-30	100
SKMS 16 HL 3	16	L	18	M 26 x 1.5	3	225	4	-30	100
SKMS 16 HL 4	16	L	18	M 26 x 1.5	4	225	4	-30	100
SKMS 16 HL 5	16	L	18	M 26 x 1.5	5	225	4	-30	100
SKMS 20 HL 4	19	L	22	M 30 x 2	4	225	4	-30	100
SKMS 20 HL 5	19	L	22	M 30 x 2	5	225	4	-30	100
SKMS 25 HL 5	25	L	28	M 36 x 2	5	225	4	-30	100
SKMS 04 HS 2	4	S	8	M 16 x 1.5	2	250	4	-30	100
SKMS 06 HS 1	6	S	10	M 18 x 1.5	1	300	4	-25	100
SKMS 06 HS 2	6	S	10	M 18 x 1.5	2	250	4	-30	100
SKMS 06 HS 3	6	S	10	M 18 x 1.5	3	225	4	-30	100
SKMS 08 HS 2	8	S	12	M 20 x 1.5	2	250	4	-30	100
SKMS 08 HS 3	8	S	12	M 20 x 1.5	3	225	4	-30	100
SKMS 10 HS 3	10	S	14	M 22 x 1.5	3	225	4	-30	100
SKMS 10 HS 4	10	S	14	M 22 x 1.5	4	225	4	-25	125
SKMS 13 HS 3	12	S	16	M 24 x 1.5	3	225	4	-30	100
SKMS 13 HS 4	12	S	16	M 24 x 1.5	4	225	4	-30	100
SKMS 16 HS 3	16	S	20	M 30 x 2	3	225	4	-25	100
SKMS 16 HS 4	16	S	20	M 30 x 2	4	225	4	-30	100
SKMS 16 HS 5	16	S	20	M 30 x 2	5	225	4	-30	100
SKMS 20 HS 5	19	S	25	M 36 x 2	5	225	4	-30	100
SKMS 25 HS 5	25	S	30	M 42 x 2	5	225	4	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Spare parts:**

**SKM ORING** - O-ring for SKM

**SKM STUETZRING** - Support ring for SKM

**Accessories:**

**SKM ZUBS** - Dust protection coupling sleeve, SKM..

**SKM ZUBS 3 CB** - Dust protection coupling sleeve, SKM..

**SKM ZUBS 3 C** - Dust protection coupling sleeve, SKM..

**SKM HL 3 UDK****Push-in coupling female**

**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Additional feature:** for coupling under residual pressure  
**Material:** Steel  
**Surface:** electro galvanised

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	SW mm	Size	Working pressure bar	D1 mm	D2 mm	L mm	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 10 HL 3 UDK	10	L	12	M 18 x 1.5	30	3	225	38	23,8	70	4	25	125
SKM 13 HL 3 UDK	12	L	15	M 22 x 1.5	30	3	225	38	23,8	71	4	25	125

BD = Working pressure    SF gek. = Safety factor coupled    SW = Width across flats

## Plug-in coupling sleeve

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** metric cylindrical inner thread
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Standard:** complies with ISO 7241-1 Series A
- Material:** Steel
- Surface:** electro galvanised
- Description:** The sliding sleeve can be fitted in a bulkhead wall with snap rings and then acts as a quick release coupling. The double acting sliding sleeve provides a push/pull function when coupling. Plug-in couplings allow quick coupling.



Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 04 IM 1	4	M 12 x 1.5	1	300	4	-25	100
SKM 06 IM 1	6	M 14 x 1.5	1	300	4	-25	100
SKM 08 IM 2	8	M 16 x 1.5	2	250	4	-30	100
SKM 08 IM 3	8	M 16 x 1.5	3	225	4	-25	125
SKM 10 IM 2	10	M 18 x 1.5	2	250	4	-30	100
SKM 10 IM 3	10	M 18 x 1.5	3	225	4	-30	100
SKM 10 IM 4	10	M 18 x 1.5	4	225	4	-25	125
SKM 13 IM 3	12	M 22 x 1.5	3	225	4	-30	100
SKM 13 IM 4	12	M 22 x 1.5	4	225	4	-30	100
SKM 20 IM 5	19	M 30 x 1.5	5	225	4	-25	125

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Spare parts:**

**SKM ORING** - O-ring for SKM

**SKM STUETZRING** - Support ring for SKM

**Accessories:**

**SKM ZUBS** - Dust protection coupling sleeve, SKM..

**SKM ZUB BLINDSTECKER** - Dummy connector for plug-in coupling sleeve

**SKM ZUB 3 12** - Quick release clip with spring

**SKM ZUBS 3 C** - Dust protection coupling sleeve, SKM..

**SKM ZUBS 3 CB** - Dust protection coupling sleeve, SKM..

**SKM ZUB 3 11** - Quick release clip with dust protection

**SKM IR****Plug-in coupling sleeve**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Standard:** complies with ISO 7241-1 Series A
- Material:** Steel
- Surface:** electro galvanised
- Description:** The sliding sleeve can be fitted in a bulkhead wall with snap rings and then acts as a quick release coupling. The double acting sliding sleeve provides a push/pull function when coupling. Plug-in couplings allow quick coupling.

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 04 IR 1	4	G 1/8" -28	1	300	4	-25	100
SKM 06 IR 1	6	G 1/4" -19	1	250	4	-30	100
SKM 10 IR 2	10	G 3/8" -19	2	250	4	-30	100
SKM 10 IR 3	10	G 3/8" -19	3	225	4	-30	100
SKM 13 IR 3	12	G 1/2" -14	3	225	4	-30	100
SKM 20 IR 4	19	G 3/4" -14	4	225	4	-30	100
SKM 20 IR 5	19	G 3/4" -14	5	225	4	-30	100
SKM 25 IR 5	25	G 1" -11	5	225	4	-30	100

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Spare parts:**

SKM ORING - O-ring for SKM

SKM STUETZRING - Support ring for SKM

**Accessories:**

SKM ZUBS 3 CB - Dust protection coupling sleeve, SKM..

SKM ZUB 3 12 - Quick release clip with spring

SKM ZUBS - Dust protection coupling sleeve, SKM..

SKM ZUBS 3 C - Dust protection coupling sleeve, SKM..

SKM ZUB 3 11 - Quick release clip with dust protection

SKM ZUB BLINDSTECKER - Dummy connector for plug-in coupling sleeve

**SKM IJ JD****Plug-in coupling sleeve**

<b>Application:</b>	Agricultural technology
<b>Connection 1:</b>	UN/UNF inner thread
<b>Sealing form 1:</b>	for screw-in pins with shape F
<b>compatible with:</b>	John Deere
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Plug-in couplings allow quick coupling.



**Note:** Interchangeable with couplings to ISO 7241-1, Series A.

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 13 IJ 3 JD	12	UNF 3/4" -16	3	250	4	-25	125

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Spare parts:**

**SKM STUETZRING** - Support ring for SKM

**SKM ORING** - O-ring for SKM

**Accessories:**

**SKM ZUBS 3 CB** - Dust protection coupling sleeve, SKM..

**SKM ZUB 3 12** - Quick release clip with spring

**SKM ZUB 3 11** - Quick release clip with dust protection

**SKM ZUBS** - Dust protection coupling sleeve, SKM..

**SKM ZUBS 3 C** - Dust protection coupling sleeve, SKM..

**SKM ZUB BLINDSTECKER** - Dummy connector for plug-in coupling sleeve

**SKM IR T****Plug-in coupling sleeve**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- compatible with:** Tema
- Description:** Plug-in couplings allow quick coupling. For a high flow with minimal pressure loss. Increased security due to double O-ring seal. The safety retaining ring prevents unwanted uncoupling.

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 06 IR T	6	G 1/4" -19	450	2,5	-30	100
SKM 10 IR T	10	G 3/8" -19	350	3,0	-30	100
SKM 13 IR T	12	G 1/2" -14	300	3,0	-30	100
SKM 20 IR T	19	G 3/4" -14	280	2,5	-30	100
SKM 25 IR T	25	G 1" -11	250	3,5	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Accessories:**

**SKM ZUBS T** - Dust protection coupling sleeve, SKM..T

**SKM IM AE****Plug-in coupling sleeve**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Connection 1:</b>	metric cylindrical inner thread
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>compatible with:</b>	Aeroquip
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Plug-in couplings allow quick coupling.



Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 10 IM AE	10	M 18 x 1.5	210	4	-25	100
SKM 13 IM AE	12	M 22 x 1.5	210	4	-25	100

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Spare parts:**

**SKM ORING AE** - O-ring for SKM...AE

**SKM STUETZRING AE** - Support ring for SKM...AE

**Accessories:**

**SKM ZUBS AE** - Dust protection coupling sleeve, SKM...AE

**SKM IN AE****Plug-in coupling sleeve**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** NPT internal thread
- Sealing form 1:** thread seal
- compatible with:** Aeroquip
- Material:** Steel
- Surface:** electro galvanised
- Description:** Plug-in couplings allow quick coupling.

**Note:** Interchangeable with couplings to ISO 7241-1, Series A.

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 06 IN AE	6	NPT 1/4" -18	210	4	-25	100
SKM 10 IN AE	10	NPT 3/8" -18	210	4	-25	100
SKM 13 IN AE	12	NPT 1/2" -14	210	4	-25	100
SKM 20 IN AE	19	NPT 3/4" -14	210	4	-25	100
SKM 25 IN AE	25	NPT 1" -11.5	200	4	-25	100

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Spare parts:**

**SKM STUETZRING AE** - Support ring for SKM...AE

**SKM ORING AE** - O-ring for SKM...AE

**Accessories:**

**SKM ZUBS AE** - Dust protection coupling sleeve, SKM..AE

**SKM IR AE****Plug-in coupling sleeve**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>Standard:</b>	complies with ISO 7241-1 Series A
<b>compatible with:</b>	Aeroquip
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Plug-in couplings allow quick coupling.



Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 10 IR AE	10	G 3/8" -19	210	4	-25	100
SKM 13 IR AE	12	G 1/2" -14	210	4	-25	100
SKM 20 IR AE	19	G 3/4" -14	250	4	-25	100
SKM 25 IR AE	25	G 1" -11	200	4	-25	100

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Spare parts:**

**SKM STUETZRING AE** - Support ring for SKM...AE

**SKM ORING AE** - O-ring for SKM...AE

**Accessories:**

**SKM ZUBS AE** - Dust protection coupling sleeve, SKM...AE

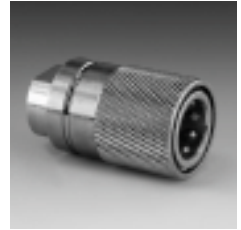
**SKM IM ARG****Plug-in coupling sleeve**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** metric cylindrical inner thread
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Material:** Steel
- Surface:** electro galvanised
- Description:** Plug-in couplings allow quick coupling. Complies with the standards ISO 5675 and SAE J1036. The double acting sliding sleeve provides a push/pull function when coupling.

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 08 IM 2 ARG	8	M 16 x 1.5	2	400	4	-40	100
DN = Nominal diameter, nominal width		SF gek. = Safety factor coupled					

**SKM IR ARG****Plug-in coupling sleeve**

- Connection 1:** BSP cylindrical internal threads  
**Sealing form 1:** for screw-in pins with shapes A, B and if necessary E  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Complies with the standards ISO 5675 and SAE J1036. Plug-in couplings allow quick coupling. The double acting sliding sleeve provides a push/pull function when coupling.



Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 10 IR 2 ARG	10	G 3/8" -19	2	250	4	-30	100

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**SKM IN HC****Plug-in coupling sleeve**

**Application:** Emergency tools, clamping tools, presses etc.  
**Connection 1:** NPT internal thread  
**Sealing form 1:** thread seal  
**Included in scope of supply:** with dust protection  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Plug-in coupling for quick coupling in the extreme pressure range. Coupling and uncoupling with minimal drips.

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 06 IN HC	6	NPT 1/4" -18	1000	2,5	-30	100
SKM 10 IN HC	10	NPT 3/8" -18	1000	2,5	-30	100

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**SKM IR HC****Plug-in coupling sleeve**

<b>Application:</b>	Emergency tools, clamping tools, presses etc.
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>Included in scope of supply:</b>	with dust protection
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Plug-in coupling for quick coupling in the extreme pressure range. Coupling and uncoupling with minimal drips.



Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 04 IR HC	4	G 1/8" -28	1000	2,5	-30	100
SKM 06 IR HC	6	G 1/4" -19	1000	2,5	-30	100
SKM 10 IR HC	10	G 3/8" -19	1000	2,5	-30	100

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

3

**SKM IR MC****Plug-in coupling sleeve for medium pressure**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Included in scope of supply:** with dust protection
- Material:** Steel
- Surface:** electro galvanised
- Description:** The small size saves space in use. For a high flow with minimal pressure loss. Plug-in couplings allow quick coupling.

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 06 IR MC	6	G 1/4" -19	250	4	-30	100
SKM 10 IR MC	10	G 3/8" -19	250	4	-30	100
SKM 13 IR MC	12	G 1/2" -14	250	4	-30	100
SKM 20 IR MC	19	G 3/4" -14	320	3	-30	100
SKM 25 IR MC	25	G 1" -11	320	3	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**SKM IN SP****Plug-in coupling sleeve**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Connection 1:</b>	NPT internal thread
<b>Sealing form 1:</b>	thread seal
<b>compatible with:</b>	Pioneer
<b>Additional feature:</b>	with ball valve
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Plug-in couplings allow quick coupling.



Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 06 IN SP	6	NPT 1/4" -18	200	4	-25	110
SKM 10 IN SP	10	NPT 3/8" -18	200	4	-25	110
SKM 13 IN SP	12	NPT 1/2" -14	200	4	-25	125
SKM 13 IN 20 SP	12	NPT 3/4" -14	200		-40	110
SKM 20 IN SP	19	NPT 3/4" -14	200	4	-25	110
SKM 25 IN SP	25	NPT 1" -11.5	200	4	-25	110

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Accessories:**

**SKM ZUBS SP** - Dust protection coupling sleeve, SKM..SP

**SKM IN SP KE****Plug-in coupling sleeve**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** NPT internal thread
- Sealing form 1:** thread seal
- compatible with:** Pioneer
- Additional feature:** with plug valve
- Material:** Steel
- Surface:** electro galvanised
- Description:** Plug-in couplings allow quick coupling.

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 06 IN SP KE	6	NPT 1/4" -18	350	4	-25	125
SKM 10 IN SP KE	10	NPT 3/8" -18	300	4	-25	125
SKM 13 IN SP KE	12	NPT 1/2" -14	300	4	-25	125
SKM 25 IN SP KE	25	NPT 1" -11.5	230	4	-25	125

BD = Working pressure SF gek. = Safety factor coupled

**Accessories:**

SKM ZUBS SP - Dust protection coupling sleeve, SKM..SP

**SKM IR SP****Plug-in coupling sleeve**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>compatible with:</b>	Pioneer
<b>Additional feature:</b>	with ball valve
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Plug-in couplings allow quick coupling.



Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 06 IR SP	6	G 1/4" -19	200	4	-25	110
SKM 10 IR SP	10	G 3/8" -19	200	4	-25	110
SKM 13 IR SP	12	G 1/2" -14	200	4	-25	125
SKM 20 IR SP	19	G 3/4" -14	200	4	-25	125

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Accessories:**

**SKM ZUBS SP** - Dust protection coupling sleeve, SKM..SP

**SKM IR SP KE****Plug-in coupling sleeve**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- compatible with:** Pioneer
- Additional feature:** with plug valve
- Material:** Steel
- Surface:** electro galvanised
- Description:** Plug-in couplings allow quick coupling.

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 06 IR SP KE	6	G 1/4" -19	350	4	-25	125
SKM 10 IR SP KE	10	G 3/8" -19	300	4	-25	125
SKM 13 IR SP KE	12	G 1/2" -14	300	4	-25	125
SKM 20 IR SP KE	19	G 3/4" -14	250	4	-25	125

BD = Working pressure SF gek. = Safety factor coupled

**Accessories:**

SKM ZUBS SP - Dust protection coupling sleeve, SKM..SP

**SKM HL 3 U****Plug-in coupling sleeve**

**Application:** Automotive engineering (UNIMOG)  
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Standard:** complies with ISO 7241-1 Series A  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** The double acting sliding sleeve provides a push/pull function when coupling. Plug-in couplings allow quick coupling.



Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	Vegetable oil temp. min. °C	Vegetable oil temp. max. °C
SKM 10 HL 3 U	10	L	12	M 18 x 1.5	3	250	4	-30	100	-15	80
SKM 13 HL 3 U	12	L	15	M 22 x 1.5	3	250	4	-30	100	-15	80

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Spare parts:****SKM ORING** - O-ring for SKM**SKM STUETZRING** - Support ring for SKM**Accessories:****SKM ZUB BLINDSTECKER** - Dummy connector for plug-in coupling sleeve**SKM ZUBS** - Dust protection coupling sleeve, SKM..

**SKMS HL 3 U****Plug-in coupling sleeve (bulkhead connection)**

**Application:** Automotive engineering (UNIMOG)  
**Design:** Coupling with bulkhead connection  
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Standard:** complies with ISO 7241-1 Series A  
**Material:** Steel  
**Surface:** electro galvanized  
**Description:** The double acting sliding sleeve provides a push/pull function when coupling. Plug-in couplings allow quick coupling.

Identification	DN*	Series	for external pipe Ø	Connecting thread	Size	Working	SF	Mineral oil	Mineral oil	Vegetable oil	Vegetable oil
						pressure					
						bar		°C	°C	°C	°C
SKMS 10 HL 3 U	10	L	12	M 18 x 1.5	3	250	4	-30	100	-15	80
SKMS 13 HL 3 U	12	L	15	M 22 x 1.5	3	250	4	-30	100	-15	80

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Spare parts:**

SKM ORING - O-ring for SKM

SKM STUETZRING - Support ring for SKM

**Accessories:**

SKM ZUBS - Dust protection coupling sleeve, SKM..

**SKM IM U****Plug-in coupling sleeve**

<b>Application:</b>	Automotive engineering (UNIMOG)
<b>Connection 1:</b>	metric cylindrical inner thread
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>Standard:</b>	complies with ISO 7241-1 Series A
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	The double acting sliding sleeve provides a push/pull function when coupling. Plug-in couplings allow quick coupling.



Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp.		Vegetable oil temp.	
						min. °C	max. °C	min. °C	max. °C
SKM 13 IM 3 U	12	M 22 x 1.5	3	250	4	-30	100	-15	80
DN = Nominal diameter, nominal width				SF gek. = Safety factor coupled					

**Spare parts:**

**SKM STUETZRING** - Support ring for SKM

**SKM ORING** - O-ring for SKM

**Accessories:**

**SKM ZUB BLINDSTECKER** - Dummy connector for plug-in coupling sleeve

**SKM ZUBS** - Dust protection coupling sleeve, SKM..

**SKM IR SN72****Plug-in coupling sleeve**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Design:** Snap-tite series 72
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Standard:** ISO 7241-1 Series B
- Material:** Steel
- Surface:** electro galvanised
- Description:** Plug-in couplings allow quick coupling.

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 04 IR SN72	5	G 1/8" -28	500	4	-40	90
SKM 06 IR SN72	6	G 1/4" -19	250	4	-25	90
SKM 10 IR SN72	10	G 3/8" -19	250	4	-25	90
SKM 13 IR SN72	12	G 1/2" -14	250	4	-25	90
SKM 20 IR SN72	19	G 3/4" -14	250	4	-25	90
SKM 25 IR SN72	25	G 1" -11	200	4	-25	90

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Product versions:**

**SKM IR SN72 VA** - Plug-in coupling sleeve, Stainless steel

**Accessories:**

**SKM ZUBS SN72** - Dust protection coupling sleeve, SKM..SN 72

**SKM IN SN H****Plug-in coupling sleeve**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Design:</b>	Snap-tite series H
<b>Connection 1:</b>	NPT internal thread
<b>Sealing form 1:</b>	thread seal
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Plug-in couplings allow quick coupling.



Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 06 IN SN H	6	NPT 1/4" -18	450	2	-40	90
SKM 10 IN SN H	10	NPT 3/8" -18	310	2	-40	90
SKM 13 IN SN H	12	NPT 1/2" -14	280	2	-40	90
SKM 20 IN SN H	19	NPT 3/4" -14	245	2	-40	90
SKM 25 IN SN H	25	NPT 1" -11.5	140	2	-40	90
SKM 32 IN SN H	31	NPT 1.1/4" -11.5	125	2	-40	90
SKM 40 IN SN H	38	NPT 1.1/2" -11.5	105	2	-40	90
SKM 65 IN SN H	65	NPT 2.1/2" -8	70	2	-40	90
SKM 75 IN SN H	76	NPT 3" -8	55	2	-40	90

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Accessories:**

**SKM ZUBS SN H** - Dust protection coupling sleeve, SKM..SN H

**SKM IR SN H****Plug-in coupling sleeve**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Design:** Snap-tite series H
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Material:** Steel
- Surface:** electro galvanised
- Description:** Plug-in couplings allow quick coupling.

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 06 IR SN H	6	G 1/4" -19	450	2	-40	90
SKM 10 IR SN H	10	G 3/8" -19	310	2	-40	90
SKM 13 IR SN H	12	G 1/2" -14	280	2	-40	90
SKM 20 IR SN H	19	G 3/4" -14	245	2	-40	90
SKM 25 IR SN H	25	G 1" -11	140	2	-40	90
SKM 32 IR SN H	31	G 1.1/4" -11	125	2	-40	90
SKM 40 IR SN H	38	G 1.1/2" -11	105	2	-40	90
SKM 50 IR SN H	51	G 2" -11	105	2	-40	90
SKM 65 IR SN H	65	G 2.1/2" -11	70	2	-40	90
SKM 75 IR SN H	76	G 3" -11	55	2	-40	90

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Product versions:**

**SKM IR SN H VA** - Plug-in coupling sleeve, Stainless steel

**Accessories:**

**SKM ZUBS SN H** - Dust protection coupling sleeve, SKM..SN H

## SKS HL / SKS HS

## Plug-in coupling connector

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Connection 1:</b>	metric cylindrical outer thread
<b>Sealing form 1:</b>	24° inner cone
<b>Standard:</b>	complies with ISO 7241-1 Series A
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Plug-in couplings allow quick coupling.



**Note:** nominal width 10, size 3 also available in ED version

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 04 HL 2	4	L	6	M 12 x 1.5	2	250	4	-30	100
SKS 06 HL 2	6	L	8	M 14 x 1.5	2	250	4	-30	100
SKS 06 HL 3	6	L	8	M 14 x 1.5	3	225	4	-30	100
SKS 08 HL 2	8	L	10	M 16 x 1.5	2	250	4	-30	100
SKS 08 HL 3	8	L	10	M 16 x 1.5	3	225	4	-30	100
SKS 10 HL 3	10	L	12	M 18 x 1.5	3	225	4	-30	100
SKS 10 HL 3 ED	10	L	12	M 18 x 1.5	3	225	4	-30	100
SKS 10 HL 4	10	L	12	M 18 x 1.5	4	225	4	-30	100
SKS 13 HL 3	12	L	15	M 22 x 1.5	3	225	4	-30	100
SKS 13 HL 4	12	L	15	M 22 x 1.5	4	225	4	-30	100
SKS 16 HL 3	16	L	18	M 26 x 1.5	3	225	4	-30	100
SKS 16 HL 4	16	L	18	M 26 x 1.5	4	225	4	-30	100
SKS 16 HL 5	16	L	18	M 26 x 1.5	5	225	4	-30	100
SKS 20 HL 4	19	L	22	M 30 x 2	4	225	4	-30	100
SKS 20 HL 5	19	L	22	M 30 x 2	5	225	4	-30	100
SKS 25 HL 5	25	L	28	M 36 x 2	5	225	4	-30	100
SKS 04 HS 2	4	S	8	M 16 x 1.5	2	250	4	-30	100
SKS 06 HS 1	6	S	10	M 18 x 1.5	1	300	4	-25	100
SKS 06 HS 2	6	S	10	M 18 x 1.5	2	250	4	-30	100
SKS 06 HS 3	6	S	10	M 18 x 1.5	3	225	4	-30	100
SKS 08 HS 2	8	S	12	M 20 x 1.5	2	250	4	-30	100
SKS 08 HS 3	8	S	12	M 20 x 1.5	3	225	4	-30	100
SKS 10 HS 3	10	S	14	M 22 x 1.5	3	225	4	-30	100
SKS 10 HS 4	10	S	14	M 22 x 1.5	4	225	4	-30	100
SKS 13 HS 3	12	S	16	M 24 x 1.5	3	225	4	-30	100
SKS 13 HS 4	12	S	16	M 24 x 1.5	4	225	4	-30	100
SKS 16 HS 3	16	S	20	M 30 x 2	3	225	4	-25	100
SKS 16 HS 4	16	S	20	M 30 x 2	4	225	4	-30	100
SKS 16 HS 5	16	S	20	M 30 x 2	5	225	4	-30	100
SKS 20 HS 5	19	S	25	M 36 x 2	5	225	4	-30	100
SKS 25 HS 5	25	S	30	M 42 x 2	5	225	4	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Accessories:**

**SKS ZUBS** - Dust protection coupling connector, SKS..

**SKS ZUB 3** - Connector clip for coupling connector SKS..3

**SKS ZUB 3 S** - Connector clip for coupling connector SKS..3

**SKSS HL / SKSS HS****Plug-in coupling connector (bulkhead connection)**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** metric cylindrical outer thread
- Sealing form 1:** 24° inner cone
- Standard:** complies with ISO 7241-1 Series A
- Material:** Steel
- Surface:** electro galvanised
- Description:** Plug-in couplings allow quick coupling.

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure SF coup.* bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C	
SKSS 04 HL 2	5	L	6	M 12 x 1.5	2	250	4	-30	100
SKSS 06 HL 2	6	L	8	M 14 x 1.5	2	250	4	-30	100
SKSS 06 HL 3	6	L	8	M 14 x 1.5	3	225	4	-30	100
SKSS 08 HL 2	8	L	10	M 16 x 1.5	2	250	4	-30	100
SKSS 08 HL 3	8	L	10	M 16 x 1.5	3	225	4	-30	100
SKSS 10 HL 3	10	L	12	M 18 x 1.5	3	225	4	-30	100
SKSS 10 HL 4	10	L	12	M 18 x 1.5	4	225	4	-30	100
SKSS 13 HL 3	12	L	15	M 22 x 1.5	3	225	4	-30	100
SKSS 13 HL 4	12	L	15	M 22 x 1.5	4	225	4	-30	100
SKSS 16 HL 3	16	L	18	M 26 x 1.5	3	225	4	-30	100
SKSS 16 HL 4	16	L	18	M 26 x 1.5	4	225	4	-30	100
SKSS 16 HL 5	16	L	18	M 26 x 1.5	5	225	4	-30	100
SKSS 20 HL 4	16	L	22	M 30 x 2	4	225	4	-30	100
SKSS 20 HL 5	19	L	22	M 30 x 2	5	225	4	-30	100
SKSS 25 HL 5	25	L	28	M 36 x 2	5	225	4	-30	100
SKSS 04 HS 2	5	S	8	M 16 x 1.5	2	250	4	-30	100
SKSS 06 HS 2	6	S	10	M 18 x 1.5	2	250	4	-30	100
SKSS 06 HS 3	6	S	10	M 18 x 1.5	3	225	4	-30	100
SKSS 08 HS 2	8	S	12	M 20 x 1.5	2	300	4	-25	125
SKSS 08 HS 3	8	S	12	M 20 x 1.5	3	225	4	-30	100
SKSS 10 HS 3	10	S	14	M 22 x 1.5	3	225	4	-30	100
SKSS 10 HS 4	10	S	14	M 22 x 1.5	4	225	4	-30	100
SKSS 13 HS 3	12	S	16	M 24 x 1.5	3	225	4	-30	100
SKSS 13 HS 4	12	S	16	M 24 x 1.5	4	225	4	-30	100
SKSS 16 HS 3	16	S	20	M 30 x 2	3	225	4	-25	100
SKSS 16 HS 4	16	S	20	M 30 x 2	4	225	4	-30	100
SKSS 16 HS 5	16	S	20	M 30 x 2	5	225	4	-30	100
SKSS 20 HS 5	19	S	25	M 36 x 2	5	225	4	-30	100
SKSS 25 HS 5	25	S	30	M 42 x 2	5	225	4	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Accessories:**

**SKS ZUBS** - Dust protection coupling connector, SKS..

**SKS ZUB 3** - Connector clip for coupling connector SKS..3

**SKS ZUB 3 S** - Connector clip for coupling connector SKS..3

## SKS HL UDK / SKS HS UDK

## Plug-in coupling connector

- Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Residual pressure:** Coupling under residual pressure is possible  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Plug-in couplings allow quick coupling.



Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 06 HL 3 UDK	6	L	8	M 14 x 1.5	3	225	4	-25	125
SKS 08 HL 3 UDK	8	L	10	M 16 x 1.5	3	225	4	-25	125
SKS 10 HL 3 UDK	10	L	12	M 18 x 1.5	3	225	4	-25	125
SKS 13 HL 3 UDK	12	L	15	M 22 x 1.5	3	225	4	-25	125
SKS 16 HL 3 UDK	16	L	18	M 26 x 1.5	3	225	4	-25	125
SKS 06 HS 3 UDK	6	S	10	M 18 x 1.5	3	225	4	-25	125
SKS 08 HS 3 UDK	8	S	12	M 20 x 1.5	3	225	4	-25	125
SKS 10 HS 3 UDK	10	S	14	M 22 x 1.5	3	225	4	-25	125
SKS 13 HS 3 UDK	12	S	16	M 24 x 1.5	3	225	4	-25	125

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Accessories:**

**SKS ZUBS** - Dust protection coupling connector, SKS..

**SKSS HL UDK / SKSS HS UDK****Plug-in coupling connector (bulkhead connection)**

- Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Residual pressure:** Coupling under residual pressure is possible  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Plug-in couplings allow quick coupling.

Identification	DN*	Series	for external pipe ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKSS 06 HL 3 UDK	6	L	8	M 14 x 1.5	3	225	4	-25	125
SKSS 08 HL 3 UDK	8	L	10	M 16 x 1.5	3	225	4	-25	125
SKSS 10 HL 3 UDK	10	L	12	M 18 x 1.5	3	225	4	-25	125
SKSS 13 HL 3 UDK	12	L	15	M 22 x 1.5	3	225	4	-25	125
SKSS 16 HL 3 UDK	16	L	18	M 26 x 1.5	3	225	4	-25	125
SKSS 06 HS 3 UDK	6	S	10	M 18 x 1.5	3	225	4	-25	125
SKSS 08 HS 3 UDK	8	S	12	M 18 x 1.5	3	225	4	-25	125
SKSS 10 HS 3 UDK	10	S	14	M 22 x 1.5	3	225	4	-25	125
SKSS 13 HS 3 UDK	12	S	16	M 24 x 1.5	3	225	4	-25	125

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Accessories:**

SKS ZUBS - Dust protection coupling connector, SKS..

## Plug-in coupling connector

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** metric cylindrical inner thread
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Standard:** complies with ISO 7241-1 Series A
- Material:** Steel
- Surface:** electro galvanised
- Description:** Plug-in couplings allow quick coupling.



Identification	DN*	Connecting thread	L mm	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 04 IM 1	5	M 12 x 1.5	45,0	1	300	4	-25	100
SKS 06 IM 1	6	M 14 x 1.5	45,0	1	300	4	-25	100
SKS 08 IM 2	8	M 16 x 1.5	49,0	2	250	4	-30	100
SKS 08 IM 3	8	M 16 x 1.5	59,0	3	225	4	-25	125
SKS 10 IM 2	10	M 18 x 1.5	49,0	2	300	4	-25	125
SKS 10 IM 3	10	M 18 x 1.5	60,0	3	225	4	-30	100
SKS 10 IM 4	10	M 18 x 1.5	63,5	4	225	4	-25	125
SKS 13 IM 3	12	M 22 x 1.5	48,0	3	225	4	-30	100
SKS 13 IM 4	12	M 22 x 1.5	63,5	4	225	4	-30	100
SKS 20 IM 5	19	M 30 x 1.5	76,0	5	225	4	-25	125

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Accessories:**

**SKS ZUBS** - Dust protection coupling connector, SKS..

**SKS ZUB 3** - Connector clip for coupling connector SKS..3

**SKS ZUB 3 S** - Connector clip for coupling connector SKS..3

**SKS IR****Plug-in coupling connector**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Standard:** complies with ISO 7241-1 Series A
- Material:** Steel
- Surface:** electro galvanised
- Description:** Plug-in couplings allow quick coupling.

Identification	DN*	Connecting thread	L mm	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 04 IR 1	5	G 1/8" -28	42,0	1	300	4	-25	100
SKS 06 IR 1	6	G 1/4" -19	44,0	1	250	4	-30	100
SKS 10 IR 2	10	G 3/8" -19	49,0	2	250	4	-30	100
SKS 10 IR 3	10	G 3/8" -19	60,0	3	225	4	-30	100
SKS 13 IR 3	12	G 1/2" -14	48,0	3	225	4	-30	100
SKS 20 IR 4	19	G 3/4" -14	67,5	4	225	4	-30	100
SKS 20 IR 5	19	G 3/4" -14	76,0	5	225	4	-30	100
SKS 25 IR 5	25	G 1" -11	76,0	5	225	4	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Accessories:**

**SKS ZUBS** - Dust protection coupling connector, SKS..

**SKS ZUB 3** - Connector clip for coupling connector SKS..3

**SKS ZUB 3 S** - Connector clip for coupling connector SKS..3

## SKS IJ JD

## Plug-in coupling connector

**Application:** Agricultural technology  
**Connection 1:** UN/UNF inner thread  
**Sealing form 1:** for screw-in pins with shape F  
**compatible with:** John Deere  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Plug-in couplings allow quick coupling.



**Note:** Interchangeable with couplings to ISO 7241-1, Series A.

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 13 IJ 3 JD	12	UNF 3/4" -16	3	200	4	-25	125

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Accessories:**

SKS ZUBS - Dust protection coupling connector, SKS..

**SKS IRT****Plug-in coupling connector**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- compatible with:** Tema
- Material:** Steel
- Surface:** electro galvanised
- Description:** Plug-in couplings allow quick coupling. For a high flow with minimal pressure loss.

Identification	DN*	Size	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 06 IRT	6	4	G 1/4" -19	450	2,5	-30	100
SKS 10 IRT	10	6	G 3/8" -19	350	3,0	-30	100
SKS 13 IRT	12	8	G 1/2" -14	300	3,0	-30	100
SKS 20 IRT	19	12	G 3/4" -14	280	2,5	-30	100
SKS 25 IRT	25	16	G 1" -11	250	3,5	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Accessories:**

**SKS ZUBS T** - Dust protection coupling connector, SKS..T

## SKS IM AE

## Plug-in coupling connector

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Connection 1:</b>	metric cylindrical inner thread
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>compatible with:</b>	Aeroquip
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Plug-in couplings allow quick coupling.



**Note:** Interchangeable with couplings to ISO 7241-1, Series A.

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 10 IM AE	10	M 18 x 1.5	210	4	-25	100
SKS 13 IM AE	12	M 22 x 1.5	210	4	-25	100

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Accessories:**

SKS ZUBS AE - Dust protection coupling connector, SKS..AE

**SKS IN AE****Plug-in coupling connector**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** NPT internal thread
- Sealing form 1:** thread seal
- compatible with:** Aeroquip
- Additional feature:** ISO 7241-1 A
- Material:** Steel
- Surface:** electro galvanized
- Description:** Plug-in couplings allow quick coupling.

**Note:** Interchangeable with couplings to ISO 7241-1, Series A.

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 06 IN AE	6	NPT 1/4" -18	210	4	-25	100
SKS 10 IN AE	10	NPT 3/8" -18	210	4	-25	100
SKS 13 IN AE	12	NPT 1/2" -14	210	4	-25	100
SKS 20 IN AE	19	NPT 3/4" -14	210	4	-25	100
SKS 25 IN AE	25	NPT 1" -11.5	200	4	-25	100

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Accessories:**

**SKS ZUBS AE** - Dust protection coupling connector, SKS..AE

## SKS IR AE

## Plug-in coupling connector

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>compatible with:</b>	Aeroquip
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Plug-in couplings allow quick coupling.



**Note:** Interchangeable with couplings to ISO 7241-1, Series A.

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 10 IR AE	10	G 3/8" -19	210	4,0	-25	100
SKS 13 IR AE	12	G 1/2" -14	210	4,0	-25	100
SKS 20 IR AE	19	G 3/4" -14	250	3,5	-25	100
SKS 25 IR AE	25	G 1" -11	200	4,0	-25	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Accessories:**

SKS ZUBS AE - Dust protection coupling connector, SKS..AE

**SKS IR ARG****Plug-in coupling connector**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- compatible with:** ARGUS
- Material:** Steel
- Surface:** electro galvanised
- Description:** Complies with the standards ISO 5675 and SAE J1036. Plug-in couplings allow quick coupling.

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 10 IR 2 ARG	10	G 3/8" -19	2	250	4	-30	100
DN = Nominal diameter, nominal width		SF gek. = Safety factor coupled					

**SKS IM ARG****Plug-in coupling connector**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** metric cylindrical inner thread
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- compatible with:** ARGUS
- Material:** Steel
- Surface:** electro galvanised
- Description:** Complies with the standards ISO 5675 and SAE J1036. Plug-in couplings allow quick coupling.



Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 08 IM 2 ARG	8	M 16 x 1.5	2	400	4	-40	100

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**SKS IN HC****Plug-in coupling connector**

<b>Application:</b>	Emergency tools, clamping tools, presses etc.
<b>Connection 1:</b>	NPT internal thread
<b>Sealing form 1:</b>	thread seal
<b>Included in scope of supply:</b>	with dust protection
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Coupling and uncoupling with minimal drips. Plug-in coupling for quick coupling in the extreme pressure range.

**Note:** The connector may not be placed under load when uncoupled.

Identification	DN*	Connecting thread	L mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 04 IN HC	5	NPT 1/8" -27	33,3	1000	2,5	-30	100
SKS 06 IN HC	6	NPT 1/4" -18	35,7	1000	2,5	-30	100
SKS 10 IN HC	10	NPT 3/8" -18	37,0	1000	2,5	-30	100

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**SKS IR HC****Plug-in coupling connector**

<b>Application:</b>	Emergency tools, clamping tools, presses etc.
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>Included in scope of supply:</b>	with dust protection
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Coupling and uncoupling with minimal drips. Plug-in coupling for quick coupling in the extreme pressure range.



**Note:** The connector may not be placed under load when uncoupled.

Identification	DN*	Connecting thread	L mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 04 IR HC	5	G 1/8" -28	33,3	1000	2,5	-30	100
SKS 06 IR HC	6	G 1/4" -19	38,0	1000	2,5	-30	100
SKS 10 IR HC	10	G 3/8" -19	39,5	1000	2,5	-30	100

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

3

**SKS IR MC****Plug-in coupling connector for medium pressure**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Material:** Steel
- Surface:** electro galvanised
- Description:** The small size saves space in use. For a high flow with minimal pressure loss. Plug-in couplings allow quick coupling.

Identification	DN*	Connecting thread	L mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 06 IR MC	6	G 1/4" -19	52,1	250	4	-30	100
SKS 10 IR MC	10	G 3/8" -19	58,6	250	4	-30	100
SKS 13 IR MC	12	G 1/2" -14	62,5	250	4	-30	100
SKS 20 IR MC	19	G 3/4" -14	80,0	320	3	-30	100
SKS 25 IR MC	25	G 1" -11	86,0	320	3	-30	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**SKS IN SP****Plug-in coupling connector**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** NPT internal thread
- Sealing form 1:** thread seal
- compatible with:** Pioneer
- Additional feature:** with ball valve
- Material:** Steel
- Surface:** electro galvanised
- Description:** Plug-in couplings allow quick coupling.



Identification	DN*	Connecting thread	L mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 06 IN SP	6	NPT 1/4" -18	35,3	200	4	-25	110
SKS 10 IN SP	10	NPT 3/8" -18	38,0	200	4	-25	110
SKS 13 IN SP	12	NPT 1/2" -14	51,4	200	4	-25	125
SKS 13 IN 20 SP	12	NPT 3/4" -14	54,4	200		-40	110
SKS 20 IN SP	19	NPT 3/4" -14	46,0	200	4	-25	110
SKS 25 IN SP	25	NPT 1" -11.5	64,3	200	4	-25	110

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Accessories:**

**SKS ZUBS SP** - Dust protection coupling connector, SKS..SP

**SKS IN SP KE****Plug-in coupling connector**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** NPT internal thread
- Sealing form 1:** thread seal
- compatible with:** Pioneer
- Additional feature:** with plug valve
- Material:** Steel
- Surface:** electro galvanized
- Description:** Plug-in couplings allow quick coupling.

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 06 IN SP KE	6	NPT 1/4" -18	350	4	-25	125
SKS 10 IN SP KE	10	NPT 3/8" -18	300	4	-25	125
SKS 13 IN SP KE	12	NPT 1/2" -14	300	4	-25	125
SKS 25 IN SP KE	25	NPT 1" -11.5	230	4	-25	125

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Accessories:**

**SKS ZUBS SP** - Dust protection coupling connector, SKS..SP

**SKS IR SP****Plug-in coupling connector**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>compatible with:</b>	Pioneer
<b>Additional feature:</b>	with ball valve
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Plug-in couplings allow quick coupling.



Identification	DN*	Connecting thread	L mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 06 IR SP	6	G 1/4" -19	35,3	200	4	-25	110
SKS 10 IR SP	10	G 3/8" -19	38,0	200	4	-25	110
SKS 13 IR SP	12	G 1/2" -14	51,4	200	4	-25	125
SKS 20 IR SP	19	G 3/4" -14	46,0	200	4	-25	125

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Accessories:**

SKS ZUBS SP - Dust protection coupling connector, SKS..SP

**SKS IR SP KE****Plug-in coupling connector**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- compatible with:** Pioneer
- Additional feature:** with plug valve
- Material:** Steel
- Surface:** electro galvanised
- Description:** Plug-in couplings allow quick coupling.

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 06 IR SP KE	6	G 1/4" -19	350	4	-25	125
SKS 10 IR SP KE	10	G 3/8" -19	300	4	-25	125
SKS 13 IR SP KE	12	G 1/2" -14	300	4	-25	125
SKS 20 IR SP KE	19	G 3/4" -14	250	4	-25	125

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Accessories:**

**SKS ZUBS SP** - Dust protection coupling connector, SKS..SP

**SKS IR SN72****Plug-in coupling connector**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Design:</b>	Snap-tite series 72
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>Additional feature:</b>	ISO 7241-1 Series B
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Plug-in couplings allow quick coupling.



Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 04 IR SN72	5	G 1/8" -28	500	4	-40	90
SKS 06 IR SN72	6	G 1/4" -19	250	4	-25	90
SKS 10 IR SN72	10	G 3/8" -19	250	4	-25	90
SKS 13 IR SN72	12	G 1/2" -14	250	4	-25	90
SKS 20 IR SN72	19	G 3/4" -14	250	4	-25	90
SKS 25 IR SN72	25	G 1" -11	200	4	-25	90

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Product versions:**

SKS IR SN72 VA - Plug-in coupling connector, Stainless steel

**Accessories:**

SKS ZUBS SN72 - Dust protection coupling connector, SKS..SN 72

**SKS IN SN H****Plug-in coupling connector**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Design:** Snap-tite series H
- Connection 1:** NPT internal thread
- Sealing form 1:** thread seal
- Material:** Steel
- Surface:** electro galvanised
- Description:** Plug-in couplings allow quick coupling.

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 06 IN SN H	6	NPT 1/4" -18	450	2	-40	90
SKS 10 IN SN H	10	NPT 3/8" -18	310	2	-40	90
SKS 13 IN SN H	12	NPT 1/2" -14	280	2	-40	90
SKS 20 IN SN H	19	NPT 3/4" -14	245	2	-40	90
SKS 25 IN SN H	25	NPT 1" -11.5	140	2	-40	90
SKS 32 IN SN H	31	NPT 1.1/4" -11.5	125	2	-40	90
SKS 40 IN SN H	38	NPT 1.1/2" -11.5	105	2	-40	90
SKS 50 IN SN H	51	NPT 2" -11.5	105	2	-40	90
SKS 65 IN SN H	65	NPT 2.1/2" -8	70	2	-40	90
SKS 75 IN SN H	76	NPT 3" -8	55	2	-40	90

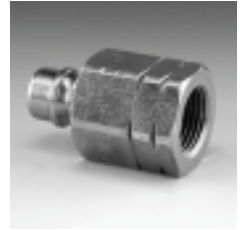
DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Accessories:**

**SKS ZUBS SN H** - Dust protection coupling connector, SKS..SN H

**SKS IR SN H****Plug-in coupling connector**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Design:** Snap-tite series H
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Material:** Steel
- Surface:** electro galvanised
- Description:** Plug-in couplings allow quick coupling.



Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 06 IR SN H	6	G 1/4" -19	450	2	-40	90
SKS 10 IR SN H	10	G 3/8" -19	310	2	-40	90
SKS 13 IR SN H	12	G 1/2" -14	280	2	-40	90
SKS 20 IR SN H	19	G 3/4" -14	245	2	-40	90
SKS 25 IR SN H	25	G 1" -11	140	2	-40	90
SKS 32 IR SN H	31	G 1.1/4" -11	125	2	-40	90
SKS 40 IR SN H	38	G 1.1/2" -11	105	2	-40	90
SKS 50 IR SN H	51	G 2" -11	105	2	-40	90
SKS 65 IR SN H	65	G 2.1/2" -11	70	2	-40	90
SKS 75 IR SN H	76	G 3" -11	55	2	-40	90

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Product versions:**

SKS IR SN H VA - Stainless steel plug-in coupling connector, Stainless steel

**Accessories:**

SKS ZUBS SN H - Dust protection coupling connector, SKS..SN H

**SKM ZUB 3 11**

## Quick release clip with dust protection



**suitable for:** Plug-in coupling sleeve  
**Material:** Steel

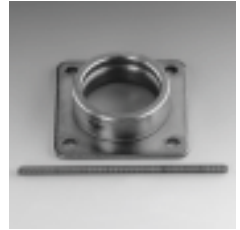
Identification	Size	Bulkhead thread	SW mm
SKM ZUB 3 11	3	M 48 x 1.5	55
SW = Width across flats			

**Accessory for following products:**

SKM IR - Plug-in coupling sleeve  
 SKM HL / SKM HS - Plug-in coupling sleeve  
 SKM IM - Plug-in coupling sleeve  
 SKM IJ JD - Plug-in coupling sleeve

**SKM ZUB 3 12****Quick release clip with spring**

**suitable for:** Plug-in coupling sleeve  
**Material:** Steel



Identification	Size	Mounting hole mm
SKM ZUB 3 12	3	7,5

**Spare parts:**

**SKM ZUB FEDER** - Spring for SKM ZUB 312

**Accessory for following products:**

**SKM HL / SKM HS** - Plug-in coupling sleeve

**SKM IJ JD** - Plug-in coupling sleeve

**SKM IM** - Plug-in coupling sleeve

**SKM IR** - Plug-in coupling sleeve

3

**SKM ZUB 3 M CLIP****Marking clip for SKM 3 C B**

**suitable for:** Plug-in coupling sleeve  
**Colour:** red  
**Material:** Plastic  
**Description:** Marking clips are used for marking coupling sleeves.

Identification	Labelling
SKM ZUB 3 MC	without
SKM ZUB 3 MC 1	1
SKM ZUB 3 MC 2	2

**Accessory for following products:**

SKM ZUBS 3 CB - Dust protection coupling sleeve, SKM..

**SKM ZUBS****Dust protection coupling sleeve, SKM..**

**suitable for:** Plug-in coupling sleeve  
**Material:** Plastic



Identification	Size	Colour
SKM ZUBS 1	1	blue
SKM ZUBS 2	2	red
SKM ZUBS 3 99	3	red
SKM ZUBS 3 99 GE	3	yellow
SKM ZUBS 3 99 GRU	3	green
SKM ZUBS 3 99 SC	3	black
SKM ZUBS 3 99 BL	3	blue
SKM ZUBS 4	4	red
SKM ZUBS 5	5	red

**Accessory for following products:**

- SKM HL 3 U** - Plug-in coupling sleeve
- SKMS HL / SKMS HS** - Plug-in coupling sleeve (bulkhead connection)
- SKM HL / SKM HS** - Plug-in coupling sleeve
- SKM IM** - Plug-in coupling sleeve
- SKM IR** - Plug-in coupling sleeve
- SKM IM U** - Plug-in coupling sleeve
- SKMS HL 3 U** - Plug-in coupling sleeve (bulkhead connection)
- SKM IJ JD** - Plug-in coupling sleeve

3

**SKM ZUBS 3 C****Dust protection coupling sleeve, SKM..**

- suitable for:** Plug-in coupling sleeve  
**Material:** Plastic  
**Description:** Snap-on dust protector (clip) for plug-in coupling sleeves. Available in various colours for marking cable systems.

Identification	Size	Colour
SKM ZUBS 3 C	3	red
SKM ZUBS 3 C BL	3	blue
SKM ZUBS 3 C GE	3	yellow
SKM ZUBS 3 C GR	3	green
SKM ZUBS 3 C SC	3	black

**Accessory for following products:**

- SKM HL / SKM HS** - Plug-in coupling sleeve  
**SKMS HL / SKMS HS** - Plug-in coupling sleeve (bulkhead connection)  
**SKM UJ JD** - Plug-in coupling sleeve  
**SKM IM** - Plug-in coupling sleeve  
**SKM IR** - Plug-in coupling sleeve

**SKM ZUBS 3 CB****Dust protection coupling sleeve, SKM..**

- suitable for:** Plug-in coupling sleeve  
**Material:** Plastic  
**Description:** Snap-on dust protector (clip) for plug-in coupling sleeves. The cover includes a small hole for mounting an additional marking clip. The housing is available in various colours; the cover is always black.



Identification	Size	Colour
SKM ZUBS 3 CB	3	red
SKM ZUBS 3 CB SC	3	black

**Accessories** Accessory for following products:

**SKM ZUB 3 M CLIP** - Marking clip for SKM 3 C B

3

**SKM ZUBS AE****Dust protection coupling sleeve, SKM...AE**

suitable for: Plug-in coupling sleeve SKM...AE

Identification	DN*	Material	Colour
SKM ZUBS AE 04	6	Plastic	red
SKM ZUBS AE 06	10	Plastic	red
SKM ZUBS AE 08	12	Plastic	red
SKM ZUBS AE 12	19	Plastic	red
SKM ZUBS AE 16 AL	25	Aluminium	metallic

DN = Nominal diameter, nominal width

**Accessory for following products:**

SKM IR AE - Plug-in coupling sleeve

SKM IM AE - Plug-in coupling sleeve

SKM IN AE - Plug-in coupling sleeve

**SKM ZUBS SN H****Dust protection coupling sleeve, SKM..SN H**

**suitable for:** Plug-in coupling sleeve, Snap-tite series H  
**Material:** Plastic



Identification	for thread
SKM ZUBS 06 SN H	G 1/4"
SKM ZUBS 10 SN H	G 3/8"
SKM ZUBS 13 SN H	G 1/2"
SKM ZUBS 20 SN H	G 3/4"
SKM ZUBS 25 SN H	G 1"
SKM ZUBS 32 SN H	G 1.1/4"

**Accessory for following products:**

**SKM IR SN H** - Plug-in coupling sleeve

**SKM IN SN H** - Plug-in coupling sleeve

3

**SKM ZUBS SN72****Dust protection coupling sleeve, SKM..SN 72****suitable for:**

Plug-in coupling sleeve, Snap-tite series 72

**Material:**

Plastic

Identification	DN*	for thread
SKM ZUBS 06 SN72	6	G 1/4"
SKM ZUBS 10 SN72	10	G 3/8"
SKM ZUBS 13 SN72	12	G 1/2"
SKM ZUBS 25 SN72	25	G 1"

DN = Nominal diameter, nominal width

**Accessory for following products:**

SKM IR SN72 - Plug-in coupling sleeve

**SKM ZUBS SP****Dust protection coupling sleeve, SKM..SP**

**suitable for:** Plug-in coupling sleeve SKM...SP  
**Material:** Plastic



Identification	DN*	Size
SKM ZUBS SP 04	6	4
SKM ZUBS SP 06	10	6
SKM ZUBS SP 08	12	8

DN = Nominal diameter, nominal width

**Accessory for following products:**

**SKM IN SP** - Plug-in coupling sleeve

**SKM IR SP** - Plug-in coupling sleeve

**SKM IR SP KE** - Plug-in coupling sleeve

**SKM IN SP KE** - Plug-in coupling sleeve

**SKM ZUBS T****Dust protection coupling sleeve, SKM..T****suitable for:**

Plug-in coupling sleeve SKM...T

**Material:**

Plastic

Identification	DN*
SKM ZUBS T 06	6
SKM ZUBS T 10	10
SKM ZUBS T 13	12
SKM ZUBS T 20	19
SKM ZUBS T 25	25
DN = Nominal diameter, nominal width	

**Accessory for following products:**

SKM IR T - Plug-in coupling sleeve

**SKM ZUB BLINDSTECKER****Dummy connector for plug-in coupling sleeve**

**suitable for:** Plug-in coupling sleeve  
**Included in scope of supply:** with counter nut  
**Material:** Steel



Identification	Size	Bulkhead thread	SW mm
SKM ZUB 3 17	3	M 30 x 1	36
SW = Width across flats			

**Accessory for following products:**

SKM HL / SKM HS - Plug-in coupling sleeve  
 SKM IM - Plug-in coupling sleeve  
 SKM IJ JD - Plug-in coupling sleeve  
 SKM HL 3 U - Plug-in coupling sleeve  
 SKM IM U - Plug-in coupling sleeve  
 SKM IR - Plug-in coupling sleeve

3

## SKM ZUB FEDER

### Spring for SKM ZUB 312



suitable for:

Quick release clip with spring

Identification	External Ø mm	Length mm
SKM ZUB 3 19	4	101

Spare part for following products:

SKM ZUB 3 12 - Quick release clip with spring

**SKS ZUB 3****Connector clip for coupling connector SKS..3**

**suitable for:** Plug-in coupling connector



Identification	Size	Bulkhead thread	Material	Included in scope of supply
SKS ZUB 3 10	3	M 18 x 1.5	Plastic	with counter nut

**Accessory for following products:**

- SKS HL / SKS HS - Plug-in coupling connector
- SKSS HL / SKSS HS - Plug-in coupling connector (bulkhead connection)
- SKS IM - Plug-in coupling connector
- SKS IR - Plug-in coupling connector

3

**SKS ZUB 3 S****Connector clip for coupling connector SKS..3**

**suitable for:** Plug-in coupling connector  
**Material:** Steel

Identification	Size	Bulkhead thread	Material	Included in scope of supply
SKS ZUB 3 10 S	3	M 18 x 1.5	Steel	without counter nut

3

**Accessory for following products:**

SKS HL / SKS HS - Plug-in coupling connector  
 SKSS HL / SKSS HS - Plug-in coupling connector (bulkhead connection)  
 SKS IM - Plug-in coupling connector  
 SKS IR - Plug-in coupling connector

**SKS ZUBS****Dust protection coupling connector, SKS..**

**suitable for:** Plug-in coupling connector  
**Material:** Plastic



Identification	Size	Colour
SKS ZUBS 1	1	blue
SKS ZUBS 2	2	red
SKS ZUBS 399	3	red
SKS ZUBS 399 BL	3	blue
SKS ZUBS 399 GE	3	yellow
SKS ZUBS 399 GRU	3	green
SKS ZUBS 399 SC	3	black
SKS ZUBS 4	4	red
SKS ZUBS 5	5	red

**Accessory for following products:**

**SKSS HL / SKSS HS** - Plug-in coupling connector (bulkhead connection)

**SKS HL UDK / SKS HS UDK** - Plug-in coupling connector

**SKS IM** - Plug-in coupling connector

**SKS HL / SKS HS** - Plug-in coupling connector

**SKS IJ JD** - Plug-in coupling connector

**SKSS HL UDK / SKSS HS UDK** - Plug-in coupling connector (bulkhead connection)

**SKS IR** - Plug-in coupling connector

**SKS ZUBS AE****Dust protection coupling connector, SKS..AE**

**suitable for:** Plug-in coupling connector SKS...AE  
**Material:** Plastic

Identification	DN*
SKS ZUBS AE 04	6
SKS ZUBS AE 06	10
SKS ZUBS AE 08	12
SKS ZUBS AE 12	19
SKS ZUBS AE 16	25
DN = Nominal diameter, nominal width	

**Accessory for following products:**

**SKS IR AE** - Plug-in coupling connector

**SKS IN AE** - Plug-in coupling connector

**SKS IM AE** - Plug-in coupling connector

**SKS ZUBS SN H****Dust protection coupling connector, SKS..SN H**

**suitable for:** Plug-in coupling connector, Snap-tite series H  
**Material:** Plastic



Identification	for thread
SKS ZUBS 06 SN H	G 1/4"
SKS ZUBS 10 SN H	G 3/8"
SKS ZUBS 13 SN H	G 1/2"
SKS ZUBS 20 SN H	G 3/4"
SKS ZUBS 25 SN H	G 1"
SKS ZUBS 32 SN H	G 1.1/4"

**Accessory for following products:**

SKS IR SN H - Plug-in coupling connector

SKS IN SN H - Plug-in coupling connector

**SKS ZUBS SN72****Dust protection coupling connector, SKS..SN 72****suitable for:**

Plug-in coupling connector, Snap-tite series 72

**Material:**

Plastic

Identification	DN*	for thread
SKS ZUBS 06 SN72	6	G 1/4"
SKS ZUBS 10 SN72	10	G 3/8"
SKS ZUBS 13 SN72	12	G 1/2"
SKS ZUBS 25 SN72	25	G 1"

DN = Nominal diameter, nominal width

**Accessory for following products:**

SKS IR SN72 - Plug-in coupling connector

**SKS ZUBS SP****Dust protection coupling connector, SKS..SP**

**suitable for:** Plug-in coupling connector SKS...SP  
**Material:** Plastic



Identification	DN*	Size
SKS ZUBS SP 04	6	4
SKS ZUBS SP 06	10	6
SKS ZUBS SP 08	12	8

DN = Nominal diameter, nominal width

**Accessory for following products:**

SKS IR SP - Plug-in coupling connector

SKS IN SP KE - Plug-in coupling connector

SKS IN SP - Plug-in coupling connector

SKS IR SP KE - Plug-in coupling connector

**SKS ZUBS T****Dust protection coupling connector, SKS..T****suitable for:**

Plug-in coupling connector SKS...T

**Material:**

Plastic

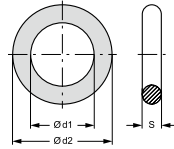
Identification	DN*
SKS ZUBS T 06	6
SKS ZUBS T 10	10
SKS ZUBS T 13	12
SKS ZUBS T 20	19
SKS ZUBS T 25	25
DN = Nominal diameter, nominal width	

**Accessory for following products:**

SKS IR T - Plug-in coupling connector

**SKM ORING****O-ring for SKM**

**suitable for:** Plug-in coupling sleeve  
**Material:** NBR



Identification	Ø d1 mm	Ø d2 mm	S mm
SKM ORING 1	12,00	16,50	2,25
SKM ORING 2	17,00	22,00	2,50
SKM ORING 3	20,22	27,28	3,53
SKM ORING 3 99	20,29	25,53	2,62
SKM ORING 4	29,60	34,40	2,40
SKM ORING 5	35,00	40,00	2,50

**Spare part for following products:**

**SKMS HL / SKMS HS** - Plug-in coupling sleeve (bulkhead connection)

**SKM IR** - Plug-in coupling sleeve

**SKM IM** - Plug-in coupling sleeve

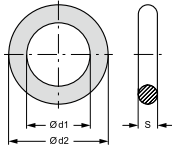
**SKM HL / SKM HS** - Plug-in coupling sleeve

**SKM HL 3 U** - Plug-in coupling sleeve

**SKM IM U** - Plug-in coupling sleeve

**SKMS HL 3 U** - Plug-in coupling sleeve (bulkhead connection)

**SKM IJ JD** - Plug-in coupling sleeve

**SKM ORING AE****O-ring for SKM...AE**

**suitable for:**  
**Material:**

Plug-in coupling sleeve SKM...AE  
NBR

Identification	Ø d1 mm	Ø d2 mm	S mm
SKM ORING 3 AE	20,22	27,28	3,53

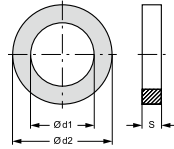
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**Spare part for following products:**  
 SKM IM AE - Plug-in coupling sleeve  
 SKM IR AE - Plug-in coupling sleeve  
 SKM IN AE - Plug-in coupling sleeve

**SKM STUETZRING**

## Support ring for SKM

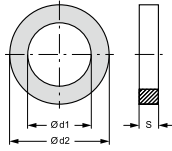
**suitable for:** Plug-in coupling sleeve  
**Material:** PVC



Identification	Ø d1 mm	Ø d2 mm	S mm
SKM STUETZRING 1	12,2	15,8	1,0
SKM STUETZRING 2	17,7	21,5	1,0
SKM STUETZRING 3	20,6	26,7	1,0
SKM STUETZRING 4	30,0	33,5	1,0
SKM STUETZRING 5	34,8	38,8	1,0

**Spare part for following products:**

- SKM HL / SKM HS - Plug-in coupling sleeve
- SKMS HL / SKMS HS - Plug-in coupling sleeve (bulkhead connection)
- SKMS HL 3 U - Plug-in coupling sleeve (bulkhead connection)
- SKM IM - Plug-in coupling sleeve
- SKM IR - Plug-in coupling sleeve
- SKM IJ JD - Plug-in coupling sleeve
- SKM HL 3 U - Plug-in coupling sleeve
- SKM IM U - Plug-in coupling sleeve

**SKM STUETZRING AE****Support ring for SKM...AE**

**suitable for:**  
**Material:**

Plug-in coupling sleeve SKM...AE  
PVC

Identification	Ø d1 mm	Ø d2 mm	S mm
SKM STUETZRING 3 AE	21,0	26,5	1,0

3

**Spare part for following products:**

SKM IM AE - Plug-in coupling sleeve

SKM IN AE - Plug-in coupling sleeve

SKM IR AE - Plug-in coupling sleeve

**SKM HL FS****Plug-in coupling sleeve**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** metric cylindrical outer thread
- Sealing form 1:** 24° inner cone
- compatible with:** Stucchi
- Material:** Steel
- Surface:** electro galvanised
- Description:** Flat seal plug-in coupling for minimal oil leakages and air admittance when coupling. For a high flow with minimal pressure loss. Suitable for use in environmentally sensitive areas.



**Note:** With standard threaded connections in determining the operating pressure of the maximum rated pressure is taken into account. Interchangeable with couplings to ISO 16028.

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 08 HL 2 FS	8	L	10	M 16 x 1.5	2	350	4,0	-20	100
SKM 10 HL 2 FS	10	L	12	M 18 x 1.5	2	350	4,0	-20	100
SKM 10 HL 3 FS	10	L	12	M 18 x 1.5	3	350	4,0	-20	100
SKM 13 HL 2 FS	12	L	15	M 22 x 1.5	2	350	4,0	-20	100
SKM 13 HL 3 FS	12	L	15	M 22 x 1.5	3	350	4,0	-20	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Accessories:**

**SKM ZUBS FS** - Dust protection coupling sleeve, SKM..FS

**SKMS HL FS****Plug-in coupling sleeve (bulkhead connection)**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Design:** Coupling with bulkhead connection
- Connection 1:** metric cylindrical outer thread
- Sealing form 1:** 24° inner cone
- compatible with:** Stucchi
- Material:** Steel
- Surface:** electro galvanised
- Description:** Flat seal plug-in coupling for minimal oil leakages and air admittance when coupling. For a high flow with minimal pressure loss. Suitable for use in environmentally sensitive areas.

**Note:** With standard threaded connections in determining the operating pressure of the maximum rated pressure is taken into account. Interchangeable with couplings to ISO 16028.

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKMS 08 HL 2 FS	8	L	10	M 16 x 1.5	2	350	4	-20	100
SKMS 10 HL 2 FS	10	L	12	M 18 x 1.5	2	350	4	-20	100
SKMS 10 HL 3 FS	10	L	12	M 18 x 1.5	3	350	4	-20	100
SKMS 13 HL 2 FS	12	L	15	M 22 x 1.5	2	350	4	-20	100
SKMS 13 HL 3 FS	12	L	15	M 22 x 1.5	3	350	4	-20	100

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Accessories:**

**SKM ZUBS FS** - Dust protection coupling sleeve, SKM..FS

**SKM IJ FS****Plug-in coupling sleeve**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Connection 1:</b>	UN/UNF inner thread
<b>Sealing form 1:</b>	for screw-in pins with shape F
<b>compatible with:</b>	Stucchi
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Flat seal plug-in coupling for minimal oil leakages and air admittance when coupling. For a high flow with minimal pressure loss.



**Note:** Interchangeable with couplings to ISO 16028.

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 10 IJ 1 FS	10	UNF 9/16" -18	1	350	4	-20	100
SKM 13 IJ 2 FS	12	UNF 3/4" -16	2	350	4	-20	100
SKM 16 IJ 3 FS	16	UNF 7/8" -14	3	350	4	-20	100
SKM 20 IJ 3 FS	19	UN 1.1/16" -12	3	350	4	-20	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Accessories:**

**SKM ZUBS FS** - Dust protection coupling sleeve, SKM..FS

**SKM IN FS****Plug-in coupling boot, flat sealing**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Design:** flat sealing
- Connection 1:** NPT internal thread
- compatible with:** Stucchi
- Material:** Steel
- Surface:** electro galvanised
- Description:** Flat seal plug-in coupling for minimal oil leakages and air admittance when coupling. For a high flow with minimal pressure loss. Suitable for use in environmentally sensitive areas.

**Note:** Interchangeable with couplings to ISO 16028.

Identification	DN*	Size	Connecting thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 10 IN 2 FS	10	2	NPT 3/8" -18	350	-25	100
SKM 13 IN 2 FS	12	2	NPT 1/2" -14	350	-25	100
SKM 13 IN 3 FS	12	3	NPT 1/2" -14	350	-25	100

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**SKM IR FS****Plug-in coupling sleeve**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Design:** flat sealing
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- compatible with:** Stucchi
- Material:** Steel
- Surface:** electro galvanised
- Description:** Flat seal plug-in coupling for minimal oil leakages and air admittance when coupling. For a high flow with minimal pressure loss. Suitable for use in environmentally sensitive areas.



**Note:** Interchangeable with couplings to ISO 16028.

Identification	DN*	Size	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 06 IR 1 FS	6	1	G 1/4" -19	400	4	-20	100
SKM 10 IR 2 FS	10	2	G 3/8" -19	350	4	-20	100
SKM 13 IR 2 FS	12	2	G 1/2" -14	350	4	-20	100
SKM 13 IR 3 FS	12	3	G 1/2" -14	350	4	-20	100
SKM 20 IR 3 FS	19	3	G 3/4" -14	350	4	-20	100
SKM 20 IR 4 FS	19	4	G 3/4" -14	350	4	-20	100
SKM 25 IR 5 FS	25	5	G 1" -11	350	4	-20	100
SKM 32 IR 6 FS	31	6	G 1.1/4" -11	300	4	-20	100
SKM 40 IR 7 FS	38	7	G 1.1/2" -11	200	4	-20	100
SKM 50 IR 8 FS	51	8	G 2" -11	200	4	-20	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Product versions:**

**SKM IR FS VA** - Plug-in coupling sleeve, Stainless steel

**Accessories:**

**SKM ZUBS FS** - Dust protection coupling sleeve, SKM..FS

**SKM IR SN71-3****Plug-in coupling sleeve**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Material:** Steel
- Surface:** electro galvanised
- Description:** Used for high pressures and severe pressure pulses. Single handed operation when coupling (if the counter piece is fitted securely). Flat seal plug-in coupling for minimal oil leakages and air admittance when coupling.

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 06 IR SN71-3	6	G 1/4" -19	690	2	-40	90
SKM 10 IR SN71-3	10	G 3/8" -19	690	2	-40	90
SKM 13 IR SN71-3	12	G 1/2" -14	690	2	-40	90
SKM 20 IR SN71-3	19	G 3/4" -14	520	2	-40	90
SKM 25 IR SN71-3	25	G 1" -11	520	2	-40	90

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**Accessories:**

**SKM ZUBS SN71** - Dust protection coupling sleeve, SKM..SN 71

**SKM IR F SN74****Plug-in coupling sleeve**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Design:** Snap-tite series 74
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Material:** Steel
- Surface:** electro galvanised
- Description:** For a high flow with minimal pressure loss. Suitable for use in environmentally sensitive areas. Flat seal plug-in coupling for minimal oil leakages and air admittance when coupling.



**Note:** Interchangeable with couplings to ISO 16028.

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp.	
					min. °C	max. °C
SKM 10 IR F SN74	10	G 3/8" -19	250	4	-40	90
SKM 13 IR F SN74	12	G 1/2" -14	250	4	-40	90

DN = Nominal diameter, nominal width

**SKM HN FS 700****Plug-in coupling boot, flat sealing, 700 bar**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Design:</b>	flat sealing
<b>Connection 1:</b>	NPT external threads
<b>Sealing form 1:</b>	thread seal
<b>compatible with:</b>	Stucchi HP
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

Identification	DN*	Size	Connecting thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 06 HN FS 700	6	1	NPT 1/4" -18	700	-25	100
DN = Nominal diameter, nominal width						

**Accessories:**

SKM ZUBS FS - Dust protection coupling sleeve, SKM..FS

**SKM IN FS 700****Plug-in coupling boot, flat sealing, 700 bar**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Design:</b>	flat sealing
<b>Connection 1:</b>	NPT internal thread
<b>Sealing form 1:</b>	thread seal
<b>compatible with:</b>	Stucchi HP
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	DN*	Size	Connecting thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 06 IN FS 700	6	1	NPT 1/4" -18	700	-25	100
SKM 06 IN 10 FS 700	6	1	NPT 3/8" -18	700	-25	100

DN = Nominal diameter, nominal width

**Accessories:**

**SKM ZUBS FS** - Dust protection coupling sleeve, SKM..FS

**SKM IR FS 700****Plug-in coupling boot, flat sealing, 700 bar**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Design:</b>	flat sealing
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>compatible with:</b>	Stucchi HP
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

Identification	DN*	Size	Connecting thread	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKM 06 IR FS 700	6	1	G 1/4" -19	700	-25	100
DN = Nominal diameter, nominal width						

**Accessories:**

SKM ZUBS FS - Dust protection coupling sleeve, SKM..FS

**SKS HL FS****Plug-in coupling connector**

**suitable for:** Plug-in coupling connector SKS...FS  
**Design:** flat sealing  
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**compatible with:** Stucchi  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Flat seal plug-in coupling for minimal oil leakages and air admittance when coupling. For a high flow with minimal pressure loss. Suitable for use in environmentally sensitive areas.



**Note:** With standard threaded connections in determining the operating pressure of the maximum rated pressure is taken into account. nominal width 10, size 2 also available in ED version Interchangeable with couplings to ISO 16028.

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 08 HL 2 FS	8	L	10	M 16 x 1.5	2	350	4,0	-20	100
SKS 10 HL 2 FS	10	L	12	M 18 x 1.5	2	350	4,0	-20	100
SKS 10 HL 2 FS ED	10	L	12	M 18 x 1.5	2	350	4,0	-20	100
SKS 10 HL 3 FS	10	L	12	M 18 x 1.5	3	350	4,0	-20	100
SKS 13 HL 2 FS	12	L	15	M 22 x 1.5	2	350	4,0	-20	100
SKS 13 HL 3 FS	12	L	15	M 22 x 1.5	3	350	4,0	-20	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled BD = Working pressure

**Accessories:**

**SKS ZUBS FS** - Dust protection coupling connector, SKS..FS

**SKSS HL FS****Plug-in coupling connector (bulkhead connection)**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Design:** Coupling with bulkhead connection
- Connection 1:** metric cylindrical outer thread
- Sealing form 1:** 24° inner cone
- compatible with:** Stucchi
- Material:** Steel
- Surface:** electro galvanised
- Description:** Flat seal plug-in coupling for minimal oil leakages and air admittance when coupling. For a high flow with minimal pressure loss. Suitable for use in environmentally sensitive areas.

**Note:** With standard threaded connections in determining the operating pressure of the maximum rated pressure is taken into account. Interchangeable with couplings to ISO 16028.

Identification	DN*	Series	for external pipe Ø mm	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKSS 08 HL 2 FS	8	L	10	M 16 x 1.5	2	350	4,0	-20	100
SKSS 10 HL 2 FS	10	L	12	M 18 x 1.5	2	350	4,0	-20	100
SKSS 10 HL 3 FS	10	L	12	M 18 x 1.5	3	350	4,0	-20	100
SKSS 13 HL 2 FS	12	L	15	M 22 x 1.5	2	350	4,0	-20	100
SKSS 13 HL 3 FS	12	L	15	M 22 x 1.5	3	350	4,0	-20	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Accessories:**

**SKS ZUBS FS** - Dust protection coupling connector, SKS..FS

**SKS IJ FS****Plug-in coupling connector**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** UN/UNF inner thread
- Sealing form 1:** for screw-in pins with shape F
- compatible with:** Stucchi
- Material:** Steel
- Surface:** electro galvanised
- Description:** Flat seal plug-in coupling for minimal oil leakages and air admittance when coupling. For a high flow with minimal pressure loss. Suitable for use in environmentally sensitive areas.



**Note:** Interchangeable with couplings to ISO 16028.

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 10 IJ 1 FS	10	UNF 9/16" -18	1	350	4	-20	100
SKS 13 IJ 2 FS	12	UNF 3/4" -16	2	350	4	-20	100
SKS 16 IJ 3 FS	16	UNF 7/8" -14	3	350	4	-20	100
SKS 20 IJ 3 FS	19	UN 1.1/16" -12	3	350	4	-20	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Accessories:**

**SKS ZUBS FS** - Dust protection coupling connector, SKS..FS

**SKS IJ FS HA****Plug-in coupling plug**

<b>Application:</b>	in construction, mining and tunnel building
<b>Design:</b>	flat sealing
<b>Connection 1:</b>	UN/UNF inner thread
<b>Sealing form 1:</b>	for screw-in pins with shape F
<b>Standard:</b>	ISO 16028
<b>Additional feature:</b>	for breaker operation
<b>compatible with:</b>	Stucchi
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 20 IJ 5 FS HA	19	UN 1.1/16" -12	5	350	4	-25	100
SKS 25 IJ 5 FS HA	25	UN 1 5/16" -12	5	350	4	-25	100

DN = Nominal diameter, nominal width

**SKS IN FS****Plug-in coupling plug, flat sealing**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Design:</b>	flat sealing
<b>Connection 1:</b>	NPT internal thread
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Flat seal plug-in coupling for minimal oil leakages and air admittance when coupling. For a high flow with minimal pressure loss. Suitable for use in environmentally sensitive areas.



**Note:** Interchangeable with couplings to ISO 16028.

Identification	DN*	Connecting thread	Size	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 10 IN 2 FS	10	NPT 3/8" -18	2	350	-25	100
SKS 13 IN 2 FS	12	NPT 1/2" -14	2	350	-25	100
SKS 13 IN 3 FS	12	NPT 1/2" -14	3	350	-25	100

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

3

**SKS IR FS****Plug-in coupling connector**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Design:** flat sealing
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- compatible with:** Stucchi
- Material:** Steel
- Surface:** electro galvanised
- Description:** Flat seal plug-in coupling for minimal oil leakages and air admittance when coupling. For a high flow with minimal pressure loss. Suitable for use in environmentally sensitive areas.

**Note:** Interchangeable with couplings to ISO 16028.

Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 06 IR 1 FS	6	G 1/4" -19	1	400	4	-30	100
SKS 10 IR 2 FS	10	G 3/8" -19	2	350	4	-30	100
SKS 13 IR 2 FS	12	G 1/2" -14	2	350	4	-30	100
SKS 13 IR 3 FS	12	G 1/2" -14	3	350	4	-30	100
SKS 20 IR 3 FS	19	G 3/4" -14	3	350	4	-30	100
SKS 20 IR 4 FS	19	G 3/4" -14	4	350	4	-30	100
SKS 25 IR 5 FS	25	G 1" -11	5	350	4	-30	100
SKS 32 IR 6 FS	31	G 1.1/4" -11	6	300	4	-20	100
SKS 40 IR 7 FS	38	G 1.1/2" -11	7	200	4	-20	100
SKS 50 IR 8 FS	51	G 2" -11	8	200	4	-20	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Product versions:**

**SKS IR FS VA** - Plug-in coupling connector, Stainless steel

**Accessories:**

**SKS ZUBS FS** - Dust protection coupling connector, SKS..FS

**SKS IR FS HA****Plug-in coupling plug**

<b>Application:</b>	in construction, mining and tunnel building
<b>Design:</b>	flat sealing
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>Standard:</b>	ISO 16028
<b>Additional feature:</b>	for breaker operation
<b>compatible with:</b>	Stucchi
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	DN*	Connecting thread	Size	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 20 IR 5 FS HA	19	G 3/4" -14	5	350	4	-25	100
SKS 25 IR 5 FS HA	25	G 1" -11	5	350	4	-25	100

DN = Nominal diameter, nominal width

3

**SKS IR FS UDK****Plug-in coupling plug**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Design:** flat sealing
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Standard:** ISO 16028
- Residual pressure:** Coupling under pressure is possible. (only plug side)
- Additional feature:** can be coupled with 250 bar residual pressure
- compatible with:** Stucchi
- Material:** Steel
- Surface:** electro galvanised

Identification	DN*	Connecting thread	Size	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 06 IR 1 FS UDK	6	G 1/4" -19	1	400	-25	100
SKS 10 IR 2 FS UDK	10	G 3/8" -19	2	350	-25	100
SKS 13 IR 2 FS UDK	12	G 1/2" -14	2	350	-25	100
SKS 13 IR 3 FS UDK	12	G 1/2" -14	3	350	-25	100
SKS 13 IR 4 FS UDK	12	G 1/2" -14	4	350	-25	100
SKS 20 IR 3 FS UDK	19	G 3/4" -14	3	350	-25	100
SKS 20 IR 4 FS UDK	19	G 3/4" -14	4	350	-25	100
SKS 20 IR 5 FS UDK	19	G 3/4" -14	5	300	-25	100
SKS 25 IR 5 FS UDK	25	G 1" -11	5	300	-25	100

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**SKS IR SN71-3****Plug-in coupling connector**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Material:** Steel
- Surface:** electro galvanised
- Description:** Used for high pressures and severe pressure pulses. Single handed operation when coupling (if the counter piece is fitted securely). Flat seal plug-in coupling for minimal oil leakages and air admittance when coupling.



Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 06 IR SN71-3	6	G 1/4" -19	690	2	-40	90
SKS 10 IR SN71-3	10	G 3/8" -19	690	2	-40	90
SKS 13 IR SN71-3	12	G 1/2" -14	690	2	-40	90
SKS 20 IR SN71-3	19	G 3/4" -14	520	2	-40	90
SKS 25 IR SN71-3	25	G 1" -11	520	2	-40	90

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**Accessories:**

SKS ZUBS SN71 - Dust protection coupling connector, SKS..SN 71

**SKS IR F SN74****Plug-in coupling connector**

- Application:** General application, e.g. in industry, construction machinery, agricultural technology etc.
- Design:** Snap-tite series 74
- Connection 1:** BSP cylindrical internal threads
- Sealing form 1:** for screw-in pins with shapes A, B and if necessary E
- Material:** Steel
- Surface:** electro galvanised
- Description:** Flat seal plug-in coupling for minimal oil leakages and air admittance when coupling. For a high flow with minimal pressure loss. Suitable for use in environmentally sensitive areas.

Identification	DN*	Connecting thread	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 10 IR F SN74	10	G 3/8" -19	250	4	-40	90
SKS 13 IR F SN74	12	G 1/2" -14	250	4	-40	90

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**SKS HN FS 700****Plug-in coupling plug, flat sealing, 700 bar**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Design:</b>	flat sealing
<b>Connection 1:</b>	NPT external threads
<b>Sealing form 1:</b>	thread seal
<b>compatible with:</b>	Stucchi HP
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	DN*	Connecting thread	Size	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 06 HN FS 700	6	NPT 1/4" -18	1	700	-25	100

DN = Nominal diameter, nominal width

**Accessories:**

SKS ZUBS FS - Dust protection coupling connector, SKS..FS

**SKS IN FS 700****Plug-in coupling plug, flat sealing, 700 bar**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Design:</b>	flat sealing
<b>Connection 1:</b>	NPT internal thread
<b>Sealing form 1:</b>	thread seal
<b>compatible with:</b>	Stucchi HP
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

Identification	DN*	Connecting thread	Size	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 06 IN FS 700	6	NPT 1/4" -18	1	700	-25	100
SKS 06 IN 10 FS 700	6	NPT 3/8" -18	1	700	-25	100

DN = Nominal diameter, nominal width

**Accessories:**

**SKS ZUBS FS** - Dust protection coupling connector, SKS..FS

**SKS IR FS 700****Plug-in coupling plug, flat sealing, 700 bar**

<b>Application:</b>	General application, e.g. in industry, construction machinery, agricultural technology etc.
<b>Design:</b>	flat sealing
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>compatible with:</b>	Stucchi HP
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	DN*	Connecting thread	Size	Working pressure bar	Mineral oil temp. min. °C	Mineral oil temp. max. °C
SKS 06 IR FS 700	6	G 1/4" -19	1	700	-25	100

DN = Nominal diameter, nominal width

**Accessories:**

SKS ZUBS FS - Dust protection coupling connector, SKS..FS

3

**SKM ZUBS FS****Dust protection coupling sleeve, SKM..FS**

**suitable for:** Plug-in coupling sleeve SKM...FS  
**Material:** Plastic

Identification	Size
SKM ZUBS 1 FS	1
SKM ZUBS 2 FS	2
SKM ZUBS 3 FS	3
SKM ZUBS 4 FS	4
SKM ZUBS 5 FS	5

**Accessory for following products:**

**SKM IR FS** - Plug-in coupling sleeve

**SKM HL FS** - Plug-in coupling sleeve

**SKM IJ FS** - Plug-in coupling sleeve

**SKMS HL FS** - Plug-in coupling sleeve (bulkhead connection)

**SKM HN FS 700** - Plug-in coupling boot, flat sealing, 700 bar

**SKM IN FS 700** - Plug-in coupling boot, flat sealing, 700 bar

**SKM IR FS 700** - Plug-in coupling boot, flat sealing, 700 bar

**SKM ZUBS SN71****Dust protection coupling sleeve, SKM..SN 71**

**suitable for:** Plug-in coupling sleeve, Snap-tite series 71  
**Material:** Plastic



Identification	DN*	for thread
SKM ZUBS 06 SN71	6	G 1/4"
SKM ZUBS 10 SN71	10	G 3/8"
SKM ZUBS 13 SN71	12	G 1/2"
SKM ZUBS 20 SN71	19	G 3/4"
SKM ZUBS 25 SN71	25	G 1"
DN = Nominal diameter, nominal width		

**Accessory for following products:**

**SKM IR SN71-3** - Plug-in coupling sleeve

3

**SKS ZUBS FS****Dust protection coupling connector, SKS..FS****suitable for:**

Plug-in coupling connector SKS...FS

**Material:**

Plastic

Identification	Size
SKS ZUBS 1 FS	1
SKS ZUBS 2 FS	2
SKS ZUBS 3 FS	3
SKS ZUBS 4 FS	4
SKS ZUBS 5 FS	5

**Accessory for following products:**

SKS IR FS - Plug-in coupling connector

SKS IJ FS - Plug-in coupling connector

SKS HL FS - Plug-in coupling connector

SKSS HL FS - Plug-in coupling connector (bulkhead connection)

SKS HN FS 700 - Plug-in coupling plug, flat sealing, 700 bar

SKS IN FS 700 - Plug-in coupling plug, flat sealing, 700 bar

SKS IR FS 700 - Plug-in coupling plug, flat sealing, 700 bar

**SKS ZUBS SN71****Dust protection coupling connector, SKS..SN 71**

**suitable for:** Plug-in coupling connector, Snap-tite series 71  
**Material:** Plastic



Identification	DN*	for thread
SKS ZUBS 06 SN71	6	G 1/4"
SKS ZUBS 10 SN71	10	G 3/8"
SKS ZUBS 13 SN71	12	G 1/2"
SKS ZUBS 20 SN71	19	G 3/4"
SKS ZUBS 25 SN71	25	G 1"

DN = Nominal diameter, nominal width

**Accessory for following products:**

**SKS IR SN71-3** - Plug-in coupling connector

3

**SKS IR 2 MULTI R****Multicoupling loose half, rectangular**

- Application:** Industry, Transport and municipal vehicles, Agricultural technology
- Connection 1:** BSP cylindrical internal threads
- Connection 2:** Connectors
- Standard:** complies with ISO 16028
- Residual pressure:** for coupling under residual pressure up to 40 bar on the plug side
- Design:** Multicoupling
- Supplementary design information:** Panel construction as quick-change system
- max: Flow:** 100 L/min
- Description:** Quick release couplings are used when add-on parts need to be replaced frequently.

**Note:** Working pressure: 200 bar for each coupling, but no more than 600 bar for the multicoupler

Identification	Connecting thread	Working pressure bar	Size
SKS 10 IR 2 MULTI R	G 3/8" -19	200	2
SKS 13 IR 2 MULTI R	G 1/2" -14	200	2

**Additional info:** Multi couplings offer considerable benefits

over bundled screw and plug-in couplings:

- Time saving factor due to fast and convenient exchange of add-on parts
- Convenient handling with simultaneous coupling of multiple connections
- Trouble-free coupling even if system pressures are applied
- No confusion between connections, no reversal of flow paths
- Flat seal valves prevent oil leakages, air admittance and allows efficient cleaning even in soiled working environments

**SKS IR FS MULTI FL****Multi-coupling loose half flat**

<b>Application:</b>	construction plant
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Connection 2:</b>	Connectors
<b>Residual pressure:</b>	Coupling under pressure to approx. 200 bar
<b>Design:</b>	Multicoupling
<b>Supplementary design information:</b>	quick change system, 2 fold
<b>Properties:</b>	extremely flat - optimal mechanics, Stable design, high-strength and hardened materials, Modular construction, Couple with one throw of a lever
<b>max: Flow:</b>	90 L/min
<b>Material:</b>	Steel
<b>Surface:</b>	Zinc-nickel
<b>Description:</b>	Quick release couplings are used when add-on parts need to be replaced frequently.



Identification	Connecting thread	Working pressure bar	Size
SKS 20 IR 3 FS MULTI FL	G 3/4" -14	330	3

**Accessories:**

SKS ZUBS MULTI FL - Holder for multi-coupling

**SKM IR 2 MULTI R****Square multi-coupling (fixed)**

- Application:** Industry, Transport and municipal vehicles, Agricultural technology
- Connection 1:** BSP cylindrical internal threads
- Connection 2:** Plug in sleeve
- Standard:** complies with ISO 16028
- Residual pressure:** for coupling under residual pressure up to 40 bar on the plug side
- Design:** Multicoupling
- Supplementary design information:** Panel construction as quick-change system
- max: Flow:** 100 L/min
- Description:** Quick release couplings are used when add-on parts need to be replaced frequently.

**Note:** Working pressure: 200 bar for each coupling, but no more than 600 bar for the multicoupler

Identification	Connecting thread	Working pressure bar	Size
SKM 10 IR 2 MULTI R	G 3/8" -19	200	2
SKM 13 IR 2 MULTI R	G 1/2" -14	200	2

**Additional info:** Multi couplings offer considerable benefits

over bundled screw and plug-in couplings:

- Time saving factor due to fast and convenient exchange of add-on parts
- Convenient handling with simultaneous coupling of multiple connections
- Trouble-free coupling even if system pressures are applied
- No confusion between connections, no reversal of flow paths
- Flat seal valves prevent oil leakages, air admittance and allows efficient cleaning even in soiled working environments

**SKM IR FS MULTI FL****Multi-coupling fixed half flat**

<b>Application:</b>	construction plant
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Connection 2:</b>	Plug in sleeve
<b>Residual pressure:</b>	Coupling under pressure to approx. 200 bar
<b>Design:</b>	Multicoupling
<b>Supplementary design information:</b>	quick change system, 2 fold
<b>Included in scope of supply:</b>	with weatherproof dust plate
<b>max: Flow:</b>	90 L/min
<b>Material:</b>	Steel
<b>Surface:</b>	Zinc-nickel
<b>Description:</b>	extremely flat - optimal mechanics Stable design, high-strength and hardened materials Couple with one throw of a lever Modular construction



Identification	Connecting thread	Working pressure bar	Size
SKM 20 IR 3 FS MULTI FL	G 3/4" -14	330	3

**Additional info:** Multi couplings offer considerable benefits

over bundled screw and plug-in couplings:

- Time saving factor due to fast and convenient exchange of add-on parts
- Convenient handling with simultaneous coupling of multiple connections
- Trouble-free coupling even if system pressures are applied
- No confusion between connections, no reversal of flow paths
- Flat seal valves prevent oil leakages, air admittance and allows efficient cleaning even in soiled working environments

3

**SKS HL 2 MULTI R****Multicoupling loose half, rectangular**

<b>Application:</b>	Industry, Transport and municipal vehicles, Agricultural technology
<b>Connection 1:</b>	metric cylindrical outer thread
<b>Sealing form 1:</b>	24° inner cone
<b>Connection 2:</b>	Connectors
<b>Standard:</b>	complies with ISO 16028
<b>Residual pressure:</b>	for coupling under residual pressure up to 40 bar on the plug side
<b>Design:</b>	Multicoupling
<b>Supplementary design information:</b>	Panel construction as quick-change system
<b>max: Flow:</b>	100 L/min
<b>Description:</b>	Quick release couplings are used when add-on parts need to be replaced frequently.

Identification	for external pipe Ø mm	Series	Working pressure bar	Size
SKS 08 HL 2 MULTI R	10	L	200	2
SKS 10 HL 2 MULTI R	12	L	200	2
SKS 13 HL 2 MULTI R	15	L	200	2
SKS 16 HL 2 MULTI R	18	L	200	2

**Additional info:** Multi couplings offer considerable benefits over bundled screw and plug-in couplings:

- Time saving factor due to fast and convenient exchange of add-on parts
- Convenient handling with simultaneous coupling of multiple connections
- Trouble-free coupling even if system pressures are applied
- No confusion between connections, no reversal of flow paths
- Flat seal valves prevent oil leakages, air admittance and allows efficient cleaning even in soiled working environments

**SKM HL 2 MULTIR****Square multi-coupling (fixed)**

<b>Application:</b>	Industry, Transport and municipal vehicles, Agricultural technology
<b>Connection 1:</b>	metric cylindrical outer thread
<b>Sealing form 1:</b>	24° inner cone
<b>Connection 2:</b>	Plug in sleeve
<b>Standard:</b>	complies with ISO 16028
<b>Residual pressure:</b>	for coupling under residual pressure up to 40 bar on the plug side
<b>Design:</b>	Multicoupling
<b>Supplementary design information:</b>	Panel construction as quick-change system
<b>max: Flow:</b>	100 L/min
<b>Description:</b>	Quick release couplings are used when add-on parts need to be replaced frequently.



Identification	for external pipe Ø mm	Series	Working pressure bar	Size
SKM 08 HL 2 MULTIR	10	L	200	2
SKM 10 HL 2 MULTIR	12	L	200	2
SKM 13 HL 2 MULTIR	15	L	200	2
SKM 16 HL 2 MULTIR	18	L	200	2

**Additional info:** Multi couplings offer considerable benefits

over bundled screw and plug-in couplings:

- Time saving factor due to fast and convenient exchange of add-on parts
- Convenient handling with simultaneous coupling of multiple connections
- Trouble-free coupling even if system pressures are applied
- No confusion between connections, no reversal of flow paths
- Flat seal valves prevent oil leakages, air admittance and allows efficient cleaning even in soiled working environments

## SKS ZUBS MULTI FL

### Holder for multi-coupling



**Design:**

Holder for loose half

**Material:**

Plastic

#### Identification

SKS ZUBS 3 MULTI FL

3

**Accessory for following products:**

SKS IR FS MULTI FL - Multi-coupling loose half flat

**SKS IR 2 MULTI Q****Square multi coupling (loose)**

<b>Application:</b>	Industry, Transport and municipal vehicles, Agricultural technology
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Connection 2:</b>	Connectors
<b>Design:</b>	Multicoupling
<b>Supplementary design information:</b>	Panel construction as quick-change system
<b>max: Flow:</b>	40 L/min
<b>Description:</b>	Quick release couplings are used when add-on parts need to be replaced frequently.



Identification	Connecting thread	Working pressure bar
SKS 13 IR 2 MULTI Q	G 1/2" -14	250

**Additional info:** Multi couplings offer considerable benefits over bundled screw and plug-in couplings:

- Time saving factor due to fast and convenient exchange of add-on parts
- Convenient handling with simultaneous coupling of multiple connections
- Trouble-free coupling even if system pressures are applied
- No confusion between connections, no reversal of flow paths
- Flat seal valves prevent oil leakages, air admittance and allows efficient cleaning even in soiled working environments

3

**SKM IR 2 MULTI Q****Square multi-coupling (fixed)**

- Application:** Industry, Transport and municipal vehicles, Agricultural technology
- Connection 1:** BSP cylindrical internal threads
- Connection 2:** Plug in sleeve
- Design:** Multicoupling
- Supplementary design information:** Panel construction as quick-change system
- max: Flow:** 40 L/min
- Description:** Quick release couplings are used when add-on parts need to be replaced frequently.

Identification	Connecting thread	Working pressure bar
SKM 13 IR 2 MULTI Q	G 1/2" -14	250

**Additional info:** Multi couplings offer considerable benefits over bundled screw and plug-in couplings:

- Time saving factor due to fast and convenient exchange of add-on parts
- Convenient handling with simultaneous coupling of multiple connections
- Trouble-free coupling even if system pressures are applied
- No confusion between connections, no reversal of flow paths
- Flat seal valves prevent oil leakages, air admittance and allows efficient cleaning even in soiled working environments





## Measuring equipment

**Measuring hoses**

Hoses 652

**Measuring Hose fittings**

Hose ferrules	653
Metric series	654
BSP	660
NPT	663
JIC	664
Screw connections for Minimes	666
Plug-in connections for Minimes	669
Pressure gauge connections	672
Banjós	675

**HM****High pressure measuring hose**

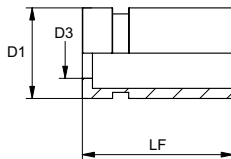
<b>Application:</b>	Measuring equipment
<b>Inner layer:</b>	Polyamide
<b>Insert:</b>	one aramide braided insert
<b>Outer layer:</b>	Polyurethane
<b>Colour:</b>	black
<b>Temp. min.:</b>	-35 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Liquids based on mineral oil and glycol

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
HM 102	2	1	5/64"	2,0	5,1	630	2000	35

DN = Nominal diameter, nominal width

**PMH 100****Swage ferrule for measuring hose HM 102**

**Ferrule type:** Non-skive ferrule  
**Material:** Steel  
**Surface:** electro galvanised

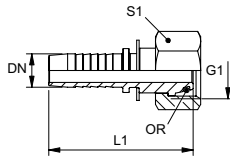


Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PMH 102	2	1	5/64"	8	4,8	15,3

DN = Nominal diameter, nominal width

## PN 02 AOL / PN 02 AOS

### Swage nipple, DKOL / DKOS



**Application:** Measuring equipment  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOL  
**Standard:** ISO 8434-1  
**Material:** Steel  
**Surface:** electro galvanised

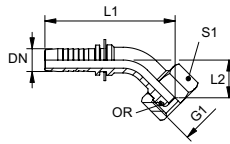
**Note:** Appropriate ferrule: PMH 102.

Identification	DN	Size	Inches	Series	for external pipe Ø mm	G1	L1 mm	S1	OR
PN 02 AOL 04	2	1	5/64"	L	6	M 12 x 1.5	35,0	14	4.0 x 1.5
PN 02 AOL 06	2	1	5/64"	L	8	M 14 x 1.5	35,0	17	6.0 x 1.5
PN 02 AOL 08	2	1	5/64"	L	10	M 16 x 1.5	36,5	19	7.5 x 1.5
PN 02 AOL 10	2	1	5/64"	L	12	M 18 x 1.5	37,5	22	9.0 x 1.5
PN 02 AOS 03	2	1	5/64"	S	6	M 14 x 1.5	35,0	17	4.0 x 1.5
PN 02 AOS 04	2	1	5/64"	S	8	M 16 x 1.5	35,0	19	6.0 x 1.5
PN 02 AOS 06	2	1	5/64"	S	10	M 18 x 1.5	36,5	22	7.5 x 1.5
PN 02 AOS 08	2	1	5/64"	S	12	M 20 x 1.5	37,5	24	9.0 x 1.5

DN = Nominal diameter, nominal width Series: LL = Very light L = Light S = Heavy

**PN 02 AOL 45 / PN 02 AOS 45****Swage nipple, DKOL angle 45° / DKOS angle 45°**

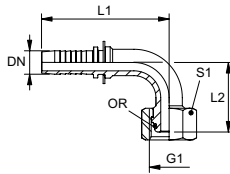
**Application:** Measuring equipment  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Short code:** DKOL  
**Standard:** ISO 8434-1  
**Material:** Steel  
**Surface:** electro galvanised



**Note:** Appropriate ferrule: PMH 102.

Identification	DN	Size	Inches	Series	for external pipe Ø mm	G1	L1 mm	L2 mm	S1	OR
PN 02 AOL 04 45	2	1	5/64"	L	6	M 12 x 1.5	46,0	15,8	14	4.0 x 1.5
PN 02 AOL 06 45	2	1	5/64"	L	8	M 14 x 1.5	50,5	18,0	17	6.0 x 1.5
PN 02 AOL 08 45	2	1	5/64"	L	10	M 16 x 1.5	56,0	22,5	19	7.5 x 1.5
PN 02 AOS 03 45	2	1	5/64"	S	6	M 14 x 1.5	46,0	15,8	17	4.0 x 1.5
PN 02 AOS 04 45	2	1	5/64"	S	8	M 16 x 1.5	50,5	18,0	19	6.0 x 1.5
PN 02 AOS 06 45	2	1	5/64"	S	10	M 18 x 1.5	56,0	22,5	22	7.5 x 1.5

DN = Nominal diameter, nominal width    Series: LL = Very light    L = Light    S = Heavy

**PN 02 AOL 90 / PN 02 AOS 90**
**Swage nipple, DKOL angle 90° / DKOS angle 90°**


<b>Application:</b>	Measuring equipment
<b>Connection 1:</b>	metric nut thread
<b>Sealing form 1:</b>	24° outer cone with O-ring
<b>Short code:</b>	DKOL
<b>Standard:</b>	ISO 8434-1
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

**Note:** Appropriate ferrule: PMH 102.

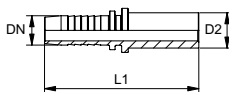
Identification	DN	Size	Inches	Series	for external pipe Ø mm	G1	L1 mm	L2 mm	S1	OR
PN 02 AOL 04 90	2	1	5/64"	L	6	M 12 x 1.5	35,5	27	14	4.0 x 1.5
PN 02 AOL 06 90	2	1	5/64"	L	8	M 14 x 1.5	38,0	30	17	6.0 x 1.5
PN 02 AOL 08 90	2	1	5/64"	L	10	M 16 x 1.5	41,5	40	19	7.5 x 1.5
PN 02 AOS 03 90	2	1	5/64"	S	6	M 14 x 1.5	35,5	27	17	4.0 x 1.5
PN 02 AOS 04 90	2	1	5/64"	S	8	M 16 x 1.5	38,0	30	19	6.0 x 1.5
PN 02 AOS 06 90	2	1	5/64"	S	10	M 18 x 1.5	41,5	40	22	7.5 x 1.5

DN = Nominal diameter, nominal width    Series: LL = Very light    L = Light    S = Heavy

## PN 02 FL

## Swage nipple, BEL

**Application:** Measuring equipment  
**Series:** light  
**Connection 1:** Pipe sockets  
**Sealing form 1:** Cutting ring connection  
**Short code:** BEL  
**Standard:** ISO 8434-1  
**Material:** Steel  
**Surface:** electro galvanised



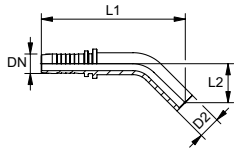
**Note:** Appropriate ferrule: PMH 102. Do not use for new designs; we recommend: PN 02 AOL. Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...).

Identification	DN	Size	Inches	Ø D2 mm	L1 mm
PN 02 FL	2	1	5/64"	4	36,0
PN 02 FL 04	2	1	5/64"	6	36,0
PN 02 FL 06	2	1	5/64"	8	37,5

DN = Nominal diameter, nominal width

## PN 02 FL 45

### Swage nipple, BEL angle 45°



<b>Application:</b>	Measuring equipment
<b>Series:</b>	light
<b>Connection 1:</b>	Pipe sockets
<b>Sealing form 1:</b>	Cutting ring connection
<b>Short code:</b>	BEL
<b>Standard:</b>	ISO 8434-1
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

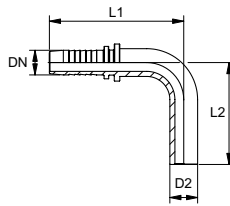
**Note:** Appropriate ferrule: PMH 102. Do not use for new designs; we recommend: PN 02 AOL...45. Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...).

Identification	DN	Size	Inches	Ø D2 mm	L1 mm	L2 mm
PN 02 FL 45	2	1	5/64"	4	43	14,5
PN 02 FL 04 45	2	1	5/64"	6	44	16,5
PN 02 FL 06 45	2	1	5/64"	8	52	20,0

DN = Nominal diameter, nominal width

**PN 02 FL 90****Swage nipple, BEL angle 90°**

**Application:** Measuring equipment  
**Series:** light  
**Connection 1:** Pipe sockets  
**Sealing form 1:** Cutting ring connection  
**Short code:** BEL  
**Standard:** ISO 8434-1  
**Material:** Steel  
**Surface:** electro galvanised



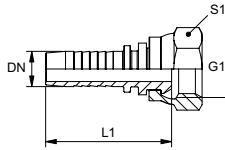
**Note:** Appropriate ferrule: PMH 102. Do not use for new designs; we recommend: PN 02 AOL...90. Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...).

Identification	DN	Size	Inches	Ø D2 mm	L1 mm	L2 mm
PN 02 FL 90	2	1	5/64"	4	33	25,5
PN 02 FL 04 90	2	1	5/64"	6	32	28,0
PN 02 FL 06 90	2	1	5/64"	8	41	37,0

DN = Nominal diameter, nominal width

## PN 02 AB

### Swage nipple, DKR



**Application:** Measuring equipment  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone  
**Short code:** DKR  
**Standard:** BS 5200, ISO 228-1  
**Material:** Steel  
**Surface:** electro galvanised

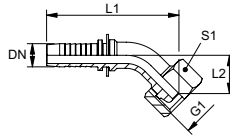
**Note:** Appropriate ferrule: PMH 102.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 02 AB	2	1	5/64"	G 1/8" -28	27,5	14
PN 02 AB 06	2	1	5/64"	G 1/4" -19	29,0	17

DN = Nominal diameter, nominal width

**PN 02 AB 45****Swage nipple, DKR angle 45°**

**Application:** Measuring equipment  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone  
**Short code:** DKR  
**Standard:** BS 5200, ISO 228-1  
**Material:** Steel  
**Surface:** electro galvanised



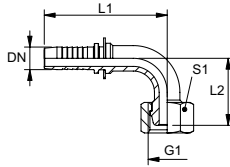
**Note:** Appropriate ferrule: PMH 102.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 02 AB 45	2	1	5/64"	G 1/8" -28	44,5	15,0	14
PN 02 AB 06 45	2	1	5/64"	G 1/4" -19	47,5	16,0	17

DN = Nominal diameter, nominal width

## PN 02 AB 90

### Swage nipple, DKR angle 90°



**Application:** Measuring equipment  
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone  
**Short code:** DKR  
**Standard:** BS 5200, ISO 228-1  
**Material:** Steel  
**Surface:** electro galvanised

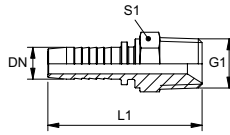
**Note:** Appropriate ferrule: PMH 102.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 02 AB 90	2	1	5/64"	G 1/8" -28	34,0	26,0	14
PN 02 AB 06 90	2	1	5/64"	G 1/4" -19	36,5	27,5	17

DN = Nominal diameter, nominal width

**PN 02 HN****Swage nipple, AGN**

**Application:** Measuring equipment  
**Connection 1:** NPT external threads  
**Sealing form 1:** thread seal, additional 60° inner cone.  
**Short code:** AGN  
**Material:** Steel  
**Surface:** electro galvanised



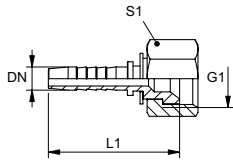
**Note:** Appropriate ferrule: PMH 102.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 02 HN	2	1	5/64"	1/8" -27 NPT	30,0	12
PN 02 HN 06	2	1	5/64"	1/4" -18 NPT	35,5	17

DN = Nominal diameter, nominal width

## PN 02 AJ

### Swage nipple, DKJ



**Application:** Measuring equipment  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 74° inner cone  
**Short code:** DKJ  
**Standard:** ISO 8434-2  
**Material:** Steel  
**Surface:** electro galvanised

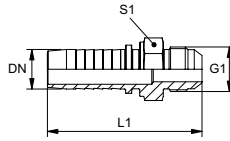
**Note:** Appropriate ferrule: PMH 102.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 02 AJ 04	2	1	5/64"	3/8"-24 UNF	24,5	12
PN 02 AJ 06	2	1	5/64"	7/16"-20 UNF		14
PN 02 AJ 08	2	1	5/64"	1/2"-20 UNF	28,5	17
PN 02 AJ 10	2	1	5/64"	9/16"-18 UNF	28,5	19

DN = Nominal diameter, nominal width

**PN 02 HJ****Swage nipple, AGJ**

**Application:** Measuring equipment  
**Connection 1:** UN/UNF external threads  
**Sealing form 1:** 74° outer cone  
**Short code:** AGJ  
**Standard:** ISO 8434-2  
**Material:** Steel  
**Surface:** electro galvanised



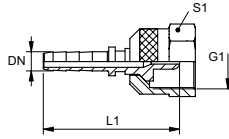
**Note:** Appropriate ferrule: PMH 102.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 02 HJ 04	2	1	5/64"	3/8"-24 UNF	34,0	12
PN 02 HJ 06	2	1	5/64"	7/16"-20 UNF	34,5	12
PN 02 HJ 08	2	1	5/64"	1/2"-20 UNF	36,0	14

DN = Nominal diameter, nominal width

## PN SKE

### Swage nipple, measuring hose



**Application:** Measuring equipment  
**Connection 1:** metric nut thread  
**Material:** Steel  
**Surface:** electro galvanised

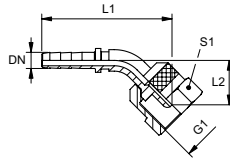
**Note:** Appropriate ferrule: PMH 102. PN 02 SKE 12 without hex.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 02 SKE	2	1	5/64"	M 16 x 2	32,5	19
PN 02 SKE 12	2	1	5/64"	S 12.65 x 1.5	32,5	-
PN 02 SKE 16	2	1	5/64"	M 16 x 1.5	32,5	19

DN = Nominal diameter, nominal width

**PN SKE 45**
**Swage nipple, measuring hose angle 45°**

**Application:** Measuring equipment  
**Connection 1:** metric nut thread  
**Material:** Steel  
**Surface:** electro galvanised



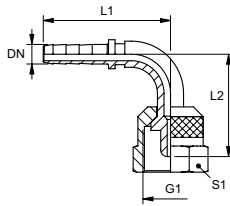
**Note:** Appropriate ferrule: PMH 102. PN 02 SKE 12 without hex.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 02 SKE 45	2	1	5/64"	M 16 x 2	48,0	18,5	19
PN 02 SKE 12 45	2	1	5/64"	S 12,65 x 1,5	48,0	19,0	-
PN 02 SKE 16 45	2	1	5/64"	M 16 x 1,5	48,0	18,5	19

DN = Nominal diameter, nominal width

## PN SKE 90

### Swage nipple, measuring hose angle 90°



**Application:**

**Connection 1:**

**Material:**

**Surface:**

Measuring equipment  
metric nut thread  
Steel  
electro galvanised

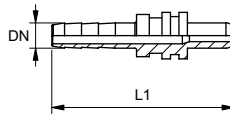
**Note:** Appropriate ferrule: PMH 102. PN 02 SKE 12 without hex.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 02 SKE 90	2	1	5/64"	M 16 x 2	34,5	31,0	19
PN 02 SKE 12 90	2	1	5/64"	S 12.65 x 1.5	34,0	31,5	-
PN 02 SKE 16 90	2	1	5/64"	M 16 x 1.5	34,5	31,5	19

DN = Nominal diameter, nominal width

**PN S****Swage nipple, measuring hose**

**Design:** O-ring sealed pin  
**Connection 1:** Plug connection  
**Sealing form 1:** O-ring sealed pin  
**Included in scope of supply:** with dust protection  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Self-aligning to prevent torsional stress.



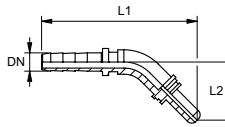
**Note:** Appropriate ferrule: PMH 102.

Identification	DN	Size	Inches	L1 mm
PN 02 S	2	1	5/64"	27

DN = Nominal diameter, nominal width

## PN S 45

### Swage nipple, measuring hose angle 45°



**Design:** O-ring sealed pin  
**Connection 1:** Plug connection  
**Sealing form 1:** O-ring sealed pin  
**Included in scope of supply:** without dust protection  
**Material:** Steel  
**Surface:** electro galvanised  
**Description:** Self-aligning to prevent torsional stress.

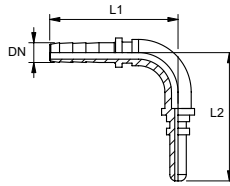
**Note:** Appropriate ferrule: PMH 102.

Identification	DN	Size	Inches	L1 mm	L2 mm
PN 02 S 45	2	1	5/64"	55	24

DN = Nominal diameter, nominal width

**PN S 90****Swage nipple, measuring hose angle 90°**

<b>Design:</b>	O-ring sealed pin
<b>Connection 1:</b>	Plug connection
<b>Sealing form 1:</b>	O-ring sealed pin
<b>Included in scope of supply:</b>	without dust protection
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Self-aligning to prevent torsional stress.



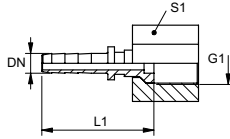
**Note:** Appropriate ferrule: PMH 102.

Identification	DN	Size	Inches	L1 mm	L2 mm
PN 02 S 90	2	1	5/64"	32	41

DN = Nominal diameter, nominal width

## PN MMA

### Swage nipple, measuring hose



**Connection 1:** BSP nut thread with pressure gauge connection

**Material:** Steel

**Surface:** electro galvanised

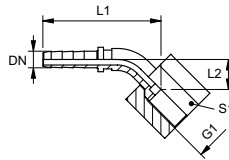
**Note:** Appropriate ferrule: PMH 102.

Identification	DN	Size	Inches	G1	L1 mm	S1
PN 02 MMA 1/4	2	1	5/64"	G 1/4" -19	26,5	17
PN 02 MMA 1/2	2	1	5/64"	G 1/2" -14	31,5	27

DN = Nominal diameter, nominal width

**PN MMA 45****Swage nipple, measuring hose angle 45°**

**Connection 1:** BSP nut thread with pressure gauge connection  
**Material:** Steel  
**Surface:** electro galvanised



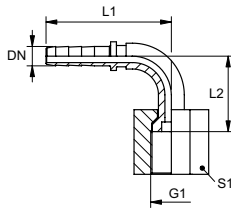
**Note:** Appropriate ferrule: PMH 102.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 02 MMA 1/4 45	2	1	5/64"	G 1/4" -19	47,0	14	17
PN 02 MMA 1/2 45	2	1	5/64"	G 1/2" -14	54,5	21	27

DN = Nominal diameter, nominal width

## PN MMA 90

### Swage nipple, measuring hose angle 90°



**Connection 1:**

BSP nut thread with pressure gauge connection

**Material:**

Steel

**Surface:**

electro galvanised

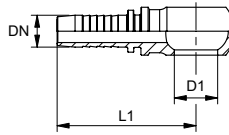
**Note:** Appropriate ferrule: PMH 102.

Identification	DN	Size	Inches	G1	L1 mm	L2 mm	S1
PN 02 MMA 1/4 90	2	1	5/64"	G 1/4" -19	38,0	25,0	17
PN 02 MMA 1/2 90	2	1	5/64"	G 1/2" -14	41,5	38,5	27

DN = Nominal diameter, nominal width

**PN 02 B****Swage nipple, RGN**

**Application:** Measuring equipment  
**Connection 1:** Banjo for metric hollow screw  
**Sealing form 1:** Sealed by copper ring  
**Short code:** RGN  
**Standard:** DIN 7642  
**Material:** Steel  
**Surface:** electro galvanised



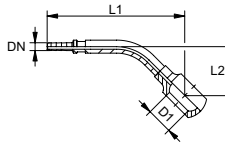
**Note:** Appropriate ferrule: PMH 102.

Identification	DN	Size	Inches	D1 mm	for hollow screw	L1 mm
PN 02 B	2	1	5/64"	8,1	M 8	29,5
PN 02 B 04	2	1	5/64"	10,1	M 10	31,5

DN = Nominal diameter, nominal width

## PN 02 B 45

### Swage nipple, RGN angle 45°



**Application:** Measuring equipment  
**Connection 1:** Banjo for metric hollow screw  
**Sealing form 1:** Sealed by copper ring  
**Short code:** RGN  
**Standard:** DIN 7642  
**Material:** Steel  
**Surface:** electro galvanised

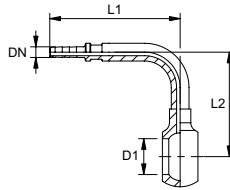
**Note:** Appropriate ferrule: PMH 102.

Identification	DN	Size	Inches	D1 mm	for hollow screw	L1 mm	L2 mm
PN 02 B 45	2	1	5/64"	8,1	M 8	46,5	15,0
PN 02 B 04 45	2	1	5/64"	10,1	M 10	51,0	23,5

DN = Nominal diameter, nominal width

**PN 02 B 90****Swage nipple, RGN angle 90°**

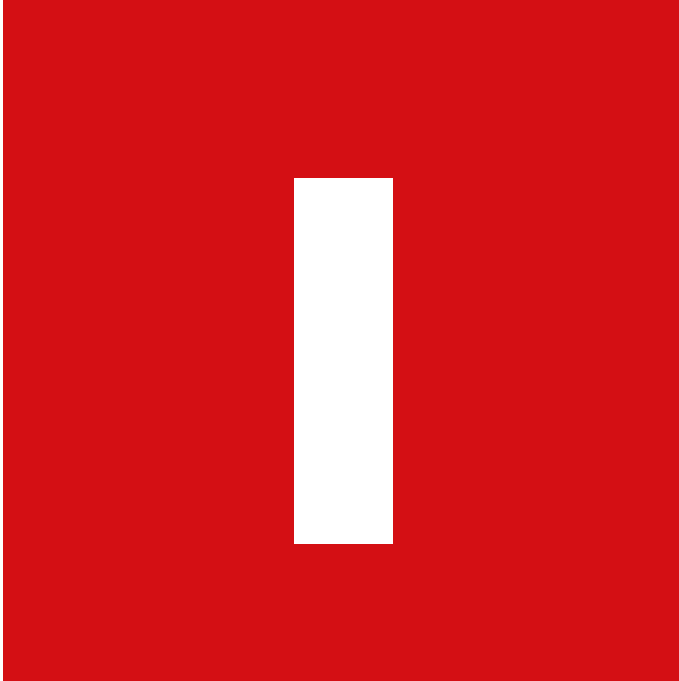
**Application:** Measuring equipment  
**Connection 1:** Banjo for metric hollow screw  
**Sealing form 1:** Sealed by copper ring  
**Short code:** RGN  
**Standard:** DIN 7642  
**Material:** Steel  
**Surface:** electro galvanised



**Note:** Appropriate ferrule: PMH 102.

Identification	DN	Size	Inches	D1 mm	for hollow screw	L1 mm	L2 mm
PN 02 B 90	2	1	5/64"	8,1	M 8	36,0	26,0
PN 02 B 04 90	2	1	5/64"	10,1	M 10	32,0	38,0

DN = Nominal diameter, nominal width



# Subject index Index

<b>A</b>		Dust protector for SKL FS	519
Abrasion protection, flat	102	Dust protector for SKL...SK	520
Abrasion protection, round	103	<b>F</b>	
AFH 100	411	FBS	96
AKF HL / AKF HS	446	FBSB	97
AKF ZUB FEDER	450	FBSB-TAPE	110
AKF ZUB GEHÄUSE	448	FBSS	98
AKF ZUB HÜLSE	451	FH (3000 PSI)	430
AKL HL / AKL HS	447	FH (6000 PSI)	431
AKL ZUB BLINDSTUTZEN	452	Flange clamp 6000 PSI (CAT)	432
AKL ZUB DOSE	449	Flat spanner for SKL...RO	514
AKL ZUB KONTERMUTTER	453	<b>G</b>	
AKM HL ME	444	GKS	93
AKM IM ME	445	<b>H</b>	
Antikink protection spring	94	HD 100 (1SN)	34
<b>B</b>		HD 100 T (1SN)	35
BFH 200	412	HD 200 (2SN)	38
Blanking screw	458	HD 200 RM (2SN)	39
Brake ring for screw coupling	529	HD 200 S (2SN)	40
<b>C</b>		HD 200 T (2SN)	41
Cap	457	HD 400 (4SP)	46
Circlip for RO coupling	527, 537	HD 500 (4SH)	49
Compact hose	43, 48	HD 600 (R13)	50
Conical nipple for RO coupling	525, 535	HD 700 PRO	52
Connector clip for coupling connector SKS...3	601 - 602	HD 700 (R15)	51
Counter nut	453	HD 800	53
<b>D</b>		HDB 400 (4SP)	47
Dummy connector for plug-in coupling sleeve	599	HD hose	34, 38, 46, 49 - 51, 53
Dummy sockets for quick release coupling	452	HD hose, compact, abrasion resistant	44
Dust protection container	449, 456	HD hose, compact, Pilot	37
Dust protection coupling connector, SKS..	603	HD hose, extremely abrasion resistant outer cover	52
Dust protection coupling connector, SKS..AE	604	HD hose, harsh conditions	39 - 40
Dust protection coupling connector, SKS..FS	638	HD hose, high thermal resistance	35, 41
Dust protection coupling connector, SKS..SN 71	639	HD hose in compact design	36, 42, 45
Dust protection coupling connector, SKS..SN 72	606	HD hose, type TAF	71
Dust protection coupling connector, SKS..SN H	605	HD hose, type TAF CU, copper braid	73
Dust protection coupling connector, SKS..SP	607	HD hose, type TAF, twin	72
Dust protection coupling connector, SKS..T	608	HD hose, type TAFZ CU, twin, copper braid	74
Dust protection coupling sleeve, SKM..	591 - 593	HD hose, type TBF	75
Dust protection coupling sleeve, SKM..AE	594	HD hose, type TBF, copper braid	77
Dust protection coupling sleeve, SKM..FS	636	HD hose, type TBF, twin	76
Dust protection coupling sleeve, SKM..SN 71	637	HD hose, type TBFZ CU, twin, copper braid	78
Dust protection coupling sleeve, SKM..SN 72	596	HD hose, with mining approval	47
Dust protection coupling sleeve, SKM..SN H	595	Heat protection hose, glass-fibre, silicone	98
Dust protection coupling sleeve, SKM..SN SP	597	Heat protection hose, silicate, silicone	97
Dust protection coupling sleeve, SKM..T	598	HF 100 (1SN)	89
Dust protection for SKF	504	HF 200 (2SN)	90
Dust protection for SKF...AE	506	High pressure measuring hose	652
Dust protection for SKF...E	507	HM	652
Dust protection for SKF...RO	505	Holder for multi-coupling	646
Dust protection for SKF...SN 75	511, 521	Hose bundling	108
Dust protection for SKF...SN 78	508, 522	Hose bundling with velcro	109
Dust protection for SKF...SP	512	Hot water hose	89 - 92
Dust protection for SKL	515	HW 100 (1SN)	91
Dust protection for SKL...AE	517	HW 200 (2SN)	92
Dust protection for SKL...E	518	<b>K</b>	
Dust protection for SKL...RO	516	KP 100 (1SC)	36
Dust protection for SKL...SP	523	KP 100 P	37
Dust protection housing	448, 459	KP 200 (2SC)	42
Dust protector for SKF FS	509	KP 200 NO (2SC)	43
Dust protector for SKF...SK	510		

KP 200 PRO (25C)	44	<b>P</b>	
KP 200 S	45	PA 500 A 45 A	263
KP 400	48	PA 500 A 90 A	262
		PA 500 A A	264
		PA 500 AJ A H	271
		PA 500 AJF 45 A	277
		PA 500 AJF 90 A	278
		PA 500 AJF A	276
		PA 500 AOB 45 A	267
		PA 500 AOB 90 A	268
		PA 500 AOB A	265
		PA 500 AOB A H	266
		PA 500 AOJ 45 A	273
		PA 500 AOJ 90 A	274
		PA 500 AOJ A	272
		PA 500 AOL 45 A	254
		PA 500 AOL 90 A	255
		PA 500 AOL A	253
		PA 500 AOS 45 A	259
		PA 500 AOS 90 A	260
		PA 500 AOS A	257
		PA 500 AOS A H	258
		PA 500 HB A	269
		PA 500 HJ A	275
		PA 500 HL A	256
		PA 500 HN A	270
		PA 500 HS A	261
		PA 500 SF6 45 A	283
		PA 500 SF6 90 4 K A	286
		PA 500 SF6 90 A	287
		PA 500 SF6 A	282
		PA 500 SF9 45 A	289
		PA 500 SF9 90 A	290
		PA 500 SF9 A	288
		PA 500 SF 45 A	280
		PA 500 SF 90 A	281
		PA 500 SF A	279
		PA 600 AOB	291
		PA 600 AOB 45	292
		PA 600 AOB 90	293
		PA 600 AOJ	296
		PA 600 AOJ 45	297
		PA 600 AOJ 90	298
		PA 600 HB	294
		PA 600 HJ	299
		PA 600 HN	295
		PA 600 SF	300
		PA 600 SF6	303
		PA 600 SF6 45	304
		PA 600 SF6 90	305
		PA 600 SF 45	301
		PA 600 SF 90	302
		PA 700 AB	316
		PA 700 AB 45	317
		PA 700 AB 90	318
		PA 700 AJ	237, 325
		PA 700 AJ 45	238, 327
		PA 700 AJ 90	239, 329
		PA 700 AJF	241, 333
		PA 700 AJF 45	242, 334
		PA 700 AJF 90	243, 335
		PA 700 AJ H	326
		PA 700 AOB	233, 319
		PA 700 AOB 45	234
<b>L</b>			
Low pressure and plug-in hose	61 - 63		
Low pressure hose with textile insert	55 - 60		
<b>M</b>			
Marking clip for SKM 3 C B	590		
MD 100	54		
Medium pressure hose	54		
Multi-coupling fixed half flat	643		
Multi-coupling loose half flat	641		
Multicoupling loose half, rectangular	640, 644		
<b>N</b>			
ND 100	61		
ND 300	60		
ND 300 BL, GRN, R	62		
ND 300 T	63		
ND AB	368		
ND AB 45	369		
ND AB 90	370		
ND AFL	359		
ND AFL 45	360		
ND AFL 90	361		
ND AFL K 90	362		
ND AJ	376		
ND AJ 90	378		
ND AJF	379		
ND AOL	363		
ND AOL 45	364		
ND AOL 90	365		
ND ASA	375		
ND B	381		
ND BD	382		
ND FL / ND FS	367		
ND HB	371		
ND HBK	373		
ND HJ	377		
ND HL	366		
ND HN	374		
ND HR	372		
ND VB	380		
NP 300	64		
NY 100	69		
NY 300	84		
NY 700 (R7)	79		
NY 800 NC (R8)	83		
NY 800 (R8)	81		
NY 2100	85		
NYZ 100	70		
NYZ 700 (R7)	80		
NYZ 800 (R8)	82		
NYZ 2100	86		
<b>O</b>			
O-ring	460, 463		
O-ring for SKF	530		
O-ring for SKF...RO	532		
O-ring for SKM	609		
O-ring for SKM...AE	610		

PA 700 AOB 45	321	PHN 200	123
PA 700 AOB 90	235, 322	PHN 200 VA	124
PA 700 AOB H	320	PHT	125
PA 700 AOJ	329	PHT 300 VA	126
PA 700 AOJ 45	330	PHY 100	383
PA 700 AOJ 90	331	PHY 300	385
PA 700 AOL	225, 306	PHY 700 N	386
PA 700 AOL 45	226, 307	PHY 800 N	387
PA 700 AOL 90	227, 308	PHY 2100	384
PA 700 AOS	229, 311	Pipe antikink protection	95
PA 700 AOS 45	230, 313	Pipe coupling (fixed)	454
PA 700 AOS 90	231, 314	Pipe coupling (loose)	455
PA 700 AOS H	312	PKF	94
PA 700 HB	236, 323	PKN 100	122
PA 700 HJ	240, 332	Plastic abrasion protection	99 - 100
PA 700 HJOF	244, 336	Plug-in coupling boot, flat sealing	616
PA 700 HL	228, 309	Plug-in coupling boot, flat sealing, 700 bar	620 - 622
PA 700 HL KO	310	Plug-in coupling connector	565, 567, 569 - 579, 581 - 587, 623, 625, 628, 631 - 632
PA 700 HN	324	Plug-in coupling connector (bulkhead connection)	566, 568, 624
PA 700 HS	232, 315	Plug-in coupling connector for medium pressure	580
PA 700 SF	245, 337	Plug-in coupling plug	626, 629 - 630
PA 700 SF6	248, 340	Plug-in coupling plug, flat sealing	627
PA 700 SF6 45	249, 341	Plug-in coupling plug, flat sealing, 700 bar	633 - 635
PA 700 SF6 60	250, 284, 342	Plug-in coupling sleeve	539, 540, 543 - 553, 555 - 559, 561 - 564, 613, 615, 617 - 619
PA 700 SF6 90	251, 343	Plug-in coupling sleeve (bulkhead connection)	541, 560, 614
PA 700 SF6 90 4 K	344	Plug-in coupling sleeve for medium pressure	554
PA 700 SF6 135	252, 285, 345	Plug-in hose	64
PA 700 SF9	346	Plug-in nipple, AGJ	377
PA 700 SF9 45	347	Plug-in nipple, AGN	374
PA 700 SF9 90	348	Plug-in nipple, AGR	371
PA 700 SF 45	246, 338	Plug-in nipple, AGR flat	372
PA 700 SF 90	247, 339	Plug-in nipple, AGR-K	373
PA 800 AOS	349	Plug-in nipple, BEL / BES	367
PA 800 AOS 45	350	Plug-in nipple, CEL	366
PA 800 AOS 90	351	Plug-in nipple, DKJ	375 - 376
PA 800 SF6	352	Plug-in nipple, DKJ angle 90°	378
PA 800 SF6 45	353	Plug-in nipple, DKL	359
PA 800 SF6 60	354	Plug-in nipple, DKL angle 45°	360
PA 800 SF6 90	355	Plug-in nipple, DKL angle 90°	361
PAY 300 AB	393	Plug-in nipple, DKL comp. angle 90°	362
PAY 300 AF	405	Plug-in nipple, DKOL	363
PAY 300 AF 90	406	Plug-in nipple, DKOL angle 45°	364
PAY 300 AFL	388	Plug-in nipple, DKOL angle 90°	365
PAY 300 AJ	397	Plug-in nipple, DKR	368
PAY 300 AN	395	Plug-in nipple, DKR angle 45°	369
PAY 300 AOS	389	Plug-in nipple, DKR angle 90°	370
PAY 300 AOS 45	390	Plug-in nipple, ORFS	379
PAY 300 AOS 90	391	Plug-in nipple, RGN	381 - 382
PAY 300 HB	394	Plug-in nipple, VB	380
PAY 300 HJ	398	PMH 100	653
PAY 300 HN	396	PN 02 AB	660
PAY 300 HS	392	PN 02 AB 45	661
PAY 300 SF	399	PN 02 AB 90	662
PAY 300 SF6	402	PN 02 AJ	664
PAY 300 SF6 45	403	PN 02 AOL 45 / PN 02 AOS 45	655
PAY 300 SF6 90	404	PN 02 AOL 90 / PN 02 AOS 90	656
PAY 300 SF 45	400	PN 02 AOL / PN 02 AOS	654
PAY 300 SF 90	401	PN 02 B	675
PHD 100	118	PN 02 B 45	676
PHD 100 VA	119	PN 02 B 90	677
PHD 200	120	PN 02 FL	657
PHD 200 VA	121	PN 02 FL 45	658
PHF 100	440		
PHF 200	441		

PN 02 FL 90	659	PN H	152
PN 02 HJ	665	PN HB	163
PN 02 HN	663	PN HBK	168
PN A	148	PN HF	213
PN A 45	149	PN HJ	174
PN A 90	150	PN HJL	178
PN AB	154	PN HJOF	191
PN AB 45	155	PN HJR	182
PN AB 90	156	PN HJR 45	183
PN ABK 45	157	PN HJR 90	184
PN ABK 90	158	PN HL	134
PN AF	210	PN HLF / PN HSF	209
PN AF 45	211	PN HM	153
PN AF 90	212	PN HN	169
PN AFL	127	PN HR	167
PN AFL 45	128	PN HS	144
PN AFL 90	129	PN KAE	435
PN AFLF 45 / PN AFSF 45	207	PN KAE 97	436
PN AFLF 90 / PN AFSF 90	208	PN KAE ST	438
PN AFLF / PN AFSF	206	PN KAE STD	439
PN AFS	138	PN MMA	672
PN AFS 45	139	PN MMA 45	673
PN AFS 90	140	PN MMA 90	674
PN AJ	170	PN S	669
PN AJ 45	171	PN S 45	670
PN AJ 90	172	PN S 90	671
PN AJF	188	PN SF	192
PN AJF 45	189	PN SF6	196
PN AJF 90	190	PN SF6 45	197
PN AJK 90	173	PN SF6 60	198
PN ALI	175	PN SF6 90	199
PN ALI 45	176	PN SF9	200
PN ALI 90	177	PN SF9 45	201
PN AM	151	PN SF9 90	202
PN AOB	159	PN SF 45	193
PN AOB 45	160	PN SF 90	194 - 195
PN AOB 90	161	PN SFK	203
PN AOBK 90	162	PN SFK 45	204
PN AOL	130	PN SFK 90	205
PN AOL 45	131	PN SKE	666
PN AOL 90	132 - 133	PN SKE 45	667
PN AOS	141	PN SKE 90	668
PN AOS 45	142	PN SO	222
PN AOS 90	143	PN VB	217
PN AR	164	PN WAP	437
PN AR 45	165	PN WEO S	219
PN AR 90	166	PN WEO S 45	220
PN ARG	223	PN WEO S 90	221
PN ARG LH	224	PN WEO SB	218
PN ARI	179	PNY 2100 AB	409
PN ARI 45	180	PNY 2100 AFL	407
PN ARI 90	181	PNY 2100 AOS	408
PN ASA	185	PNY 2100 HN	410
PN ASA 45	186	Pressed holder for textile braid hose	125 - 126
PN ASA 90	187	Protective braiding	101
PN B	215	Protective hose	115
PN BR	216	PSG 100 RI	357
PN FF	214	PSGB 100	356
PN FL	135	PSGD 100	358
PN FL 45	136	PTFE hose, smooth, 1 braiding	87
PN FL 90	137	PTFE hose, smooth, 2 braidings	88
PN FS	145	Push-in coupling female	542
PN FS 45	146		
PN FS 90	147		

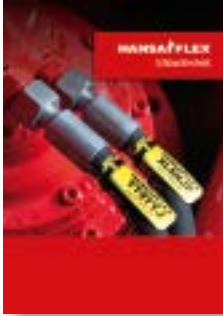
<b>Q</b>			
Quick release clip with dust protection	588	SKF IR RO	480
Quick release clip with spring	589	SKF IR SN75	481
Quick release coupling (fixed)	446	SKF IR VA	472
Quick release coupling (loose)	447	SKF ORING	530
Quick release coupling sleeve	444 - 445	SKF SF6	473
		SKFS HL / SKFS HS	467 - 468
		SKFS IR E	475
		SKF STUETZRING	531
<b>R</b>		SKF ZUB 10 RO	532
RKF HL / RKF HS	454	SKF ZUB 11 RO	533
RKF ORING	460	SKF ZUBS	504
RKF STUETZRING	461	SKF ZUBS 08 RO	505
RKF ZUB	456	SKF ZUBS AE	506
RKF ZUBS	457	SKF ZUBS E	507
RKL DICHTUNG	462	SKF ZUBS FS ALU	509
RKL HL / RKL HS	455	SKF ZUBS F SN78	508
RKL ORING	463	SKF ZUBS SK	510
RKL STUETZRING	464	SKF ZUBS SN75	511
RKL ZUBS	458	SKF ZUBS SP	512
RKS	95	SKL HJ	487
Round abrasion protection, tightly wound	104	SKL HL / SKL HS	484 - 485
Rubber antikink protection	93	SKL HN SK VA	495
		SKL HN SP	493
<b>S</b>		SKL HN SP KE	494
SAE flange half	430 - 431	SKL IM	488
SAE full flange	433 - 434	SKL IM AE	491
Screw coupling (fixed)	465 - 477, 480 - 483	SKL IN F SN78	499
Screw coupling (loose)	484 - 494, 497 - 502	SKL IN F SN78 SK	500
Screwed coupling fixed half	478	SKL IR	489
Screwed coupling fixed half, flat sealing	479	SKL IR E	492
Screwed coupling, loose half	495	SKL IR FS	496
Screwed coupling, loose half, flat sealing	496	SKL IR F SN78	501
Screw ferrule, TAF 100	411	SKL IR F SN78 SK	502
Screw ferrule, TBF 200	412	SKL IR RO	497
Screw nipple, BEL angle 90°	424	SKL IR SN75	498
Screw nipple, BEL / BES	423	SKL IR VA	490
Screw nipple, CEL	417	SKLS HL / SKLS HS	486
Screw nipple, CES	420	SKL ZUB 03 RO	514
Screw nipple, DKM	413	SKL ZUBS	515
Screw nipple, DKR	427	SKL ZUBS 09 RO	516
Sealing spring for RO coupling	526, 536	SKL ZUBS AE	517
Sealing washer	462	SKL ZUBS E	518
SFH (6000 PSI) CAT	432	SKL ZUBS FS ALU	519
SG 100 RI	66	SKL ZUBS SK	520
SG 100 RI EP	67	SKL ZUBS SN75	521
SGB 100	65	SKL ZUBS SN78	522
SGD 100	68	SKL ZUBS SP	523
SGF	101	SKM HL 2 MULTI R	645
Shrink hose	105	SKM HL 3 U	559
Shrink hose with adhesive coating	106 - 107	SKM HL 3 UDK	542
Silicate fabric heat protection hose	96	SKM HL FS	613
Silicone winding band for FBSB	110	SKM HL / SKM HS	539 - 540
SKF BREMSRING	529	SKM HN FS 700	620
SKF HJ	469	SKM IJ FS	615
SKF HL / SKF HS	465	SKM IJ JD	545
SKF HL / SKF HS	466	SKM IM	543
SKF IM	470	SKM IM AE	547
SKF IM AE	474	SKM IM ARG	550
SKF IN F SN78	482	SKM IM U	561
SKF IN SK VA	478	SKM IN AE	548
SKF IN SP	476	SKM IN FS	616
SKF IN SP KE	477	SKM IN FS 700	621
SKF IR	471	SKM IN HC	552
SKF IR FS	479	SKM IN SN H	563
SKF IR F SN78	483		

SKM IN SP	555	SKS IR FS	628
SKM IN SP KE	556	SKS IR FS 700	635
SKM IR	544	SKS IR FS HA	629
SKM IR 2 MULTI Q	648	SKS IR FS MULTI FL	641
SKM IR 2 MULTI R	642	SKS IR F SN74	632
SKM IR AE	549	SKS IR FS UDK	630
SKM IR ARG	551	SKS IR HC	579
SKM IR FS	617	SKS IR MC	580
SKM IR FS 700	622	SKS IR SN71-3	631
SKM IR FS MULTI FL	643	SKS IR SN72	585
SKM IR F SN74	619	SKS IR SN H	587
SKM IR HC	553	SKS IR SP	583
SKM IR MC	554	SKS IR SP KE	584
SKM IR SN71-3	618	SKS IR T	572
SKM IR SN72	562	SKSS HL FS	624
SKM IR SN H	564	SKSS HL / SKSS HS	566
SKM IR SP	557	SKSS HL UDK / SKSS HS UDK	568
SKM IR SP KE	558	SKS ZUB 3	601
SKM IR T	546	SKS ZUB 3 S	602
SKM ORING	609	SKS ZUBS	603
SKM ORING AE	610	SKS ZUBS AE	604
SKMS HL 3 U	560	SKS ZUBS FS	638
SKMS HL FS	614	SKS ZUBS MULTI FL	646
SKMS HL / SKMS HS	541	SKS ZUBS SN71	639
SKM STUETZRING	611	SKS ZUBS SN72	606
SKM STUETZRING AE	612	SKS ZUBS SN H	605
SKM ZUB 3 11	588	SKS ZUBS SP	607
SKM ZUB 3 12	589	SKS ZUBS T	608
SKM ZUB 3 M CLIP	590	SK ZUB 01 RO	503, 513
SKM ZUB BLINDSTECKER	599	SK ZUB 04 RO	524, 534
SKM ZUB FEDER	600	SK ZUB 12 RO	525, 535
SKM ZUBS	591	SK ZUB 13 RO	526, 536
SKM ZUBS 3 C	592	SK ZUB 14 RO	527, 537
SKM ZUBS 3 CB	593	SK ZUB 15 RO	528, 538
SKM ZUBS AE	594	SK ZUB GEHÄUSE	459
SKM ZUBS FS	636	Spring for quick release coupling	450
SKM ZUBS SN71	637	Spring for SKM ZUB 312	600
SKM ZUBS SN72	596	Spring sleeve for quick release coupling	451
SKM ZUBS SN H	595	Square multi-coupling (fixed)	642, 645, 648
SKM ZUBS SP	597	Square multi coupling (loose)	647
SKM ZUBS T	598	SSF	102
SKS HL 2 MULTI R	644	SSK	99
SKS HL FS	623	SSK C	100
SKS HL / SKS HS	565	SSR	103
SKS HL UDK / SKS HS UDK	567	SSR E	104
SKS HN FS 700	633	SST	105
SKS IJ FS	625	SSTK	106
SKS IJ FS HA	626	SSTK-T	107
SKS IJ JD	571	Stopflex fittings, flange and others	114
SKS IM	569	Stopflex hose clamp	111 - 112
SKS IM AE	573	Stopflex mounting, pipe fitting	113
SKS IM ARG	577	STOP FS	111 - 112
SKS IN AE	574	STOP ROV	113
SKS IN FS	627	STOP SAE	114
SKS IN FS 700	634	Suction and pressure hose	68
SKS IN HC	578	Suction hose	65 - 67
SKS IN SN H	586	Support ring for pipe coupling	461, 464
SKS IN SP	581	Support ring for SKF	531
SKS IN SP KE	582	Support ring for SKF...RO	533
SKS IR	570	Support ring for SKM	611
SKS IR 2 MULTI Q	647	Support ring for SKM...AE	612
SKS IR 2 MULTI R	640	Swage ferrule for braided hose	118 - 124
SKS IR AE	575	Swage ferrule for measuring hose HM 102	653
SKS IR ARG	576	Swage ferrule, NY 100	383

Swage ferrule, NY 300	385	Swage nipple, AGR-Flat	167
Swage ferrule, NY 700	386	Swage nipple, AGR-K	168
Swage ferrule, NY 800	387	Swage nipple, BEF	214
Swage ferrule, NY 2100	384	Swage nipple, BEL	135, 657
Swage ferrule, R 4	357	Swage nipple, BEL angle 45°	136, 658
Swage ferrule, SGB 100	356	Swage nipple, BEL angle 90°	137, 659
Swage ferrule, SGD 100	358	Swage nipple, BES	145
Swage ferrule, TF 100	440	Swage nipple, BES angle 45°	146
Swage ferrule, TF 200	441	Swage nipple, BES angle 90°	147
Swage fitting, AGJ	240, 275, 299, 332, 398	Swage nipple, bushing for WEO plug-in connection	218
Swage fitting, AGN	270, 295, 324, 396, 428	Swage nipple, CEL	134
Swage fitting, AGR	236, 269, 294, 323, 394, 426	Swage nipple, CES	144
Swage fitting, BEL	421	Swage nipple, DKF	210
Swage fitting, BES	422	Swage nipple, DKF angle 45°	211
Swage fitting, CEL	256, 228, 309 - 310, 416	Swage nipple, DKL angle 90°	212
Swage fitting, CES	232, 261, 315, 392, 418	Swage nipple, DKFM	206
Swage fitting, DKF	405	Swage nipple, DKFM angle 45°	207
Swage fitting, DKF angle 90°	406	Swage nipple, DKFM angle 90°	208
Swage fitting, DKJ	237, 271, 325 - 326, 397, 429	Swage nipple, DKJ	170, 664
Swage fitting, DKJ angle 45°	238, 327	Swage nipple, DKJ angle 45°	171
Swage fitting, DKJ angle 90°	239, 328	Swage nipple, DKJ angle 90°	172
Swage fitting, DKL	388	Swage nipple, DKJ Comp. angle 90°	173
Swage fitting, DKM	264, 414	Swage nipple, DKL	127, 407
Swage fitting, DKM angle 45°	263	Swage nipple, DKL angle 45°	128
Swage fitting, DKM angle 90°	262	Swage nipple, DKL angle 90°	129
Swage fitting, DKN	395	Swage nipple, DKM	148
Swage fitting, DKOJ	272, 296, 329	Swage nipple, DKM angle 45°	149
Swage fitting, DKOJ angle 45°	273, 297, 330	Swage nipple, DKM angle 90°	150
Swage fitting, DKOJ angle 90°	274, 298, 331	Swage nipple, DKM-Flat	151
Swage fitting, DKOL	225, 253, 306, 415	Swage nipple, DKOL	130
Swage fitting, DKOL angle 45°	226, 307	Swage nipple, DKOL angle 45°	131
Swage fitting, DKOL angle 90°	227, 398	Swage nipple, DKOL angle 45° / DKOS angle 45°	655
Swage fitting DKOL W45°	254	Swage nipple, DKOL angle 90°	132 - 133
Swage fitting DKOL W90°	255	Swage nipple, DKOL angle 90° / DKOS angle 90°	656
Swage fitting, DKOR	233, 265 - 266, 291, 319 - 320	Swage nipple, DKOL / DKOS	654
Swage fitting, DKOR angle 45°	234, 267, 292, 321	Swage nipple, DKOR	159
Swage fitting, DKOR angle 90°	235, 268, 293, 322	Swage nipple, DKOR angle 45°	160
Swage fitting, DKOS	229, 257 - 258, 311 - 312, 349, 389, 419	Swage nipple, DKOR angle 90°	161
Swage fitting, DKOS angle 45°	230, 259, 313, 350, 390	Swage nipple, DKOR Comp. angle 90°	162
Swage fitting, DKOS angle 90°	231, 260, 314, 351, 391	Swage nipple, DKOS	141, 408
Swage fitting, DKR	316, 393, 425	Swage nipple, DKOS angle 45°	142
Swage fitting, DKR angle 45°	317	Swage nipple, DKOS angle 90°	143
Swage fitting, DKR angle 90°	318	Swage nipple, DKR	154, 409, 660
Swage fitting, ORFS	241, 244, 276, 333, 336	Swage nipple, DKR angle 45°	155, 661
Swage fitting, ORFS angle 45°	242, 277, 334	Swage nipple, DKR angle 90°	156, 662
Swage fitting, ORFS angle 90°	243, 278, 335	Swage nipple, DKR Comp. angle 45°	157
Swage fitting, SFL	245, 279, 300, 337, 399	Swage nipple, DKR Comp. angle 90°	158
Swage fitting, SFL angle 45°	246, 280, 301, 338, 400	Swage nipple, DKR-Flat	164
Swage fitting, SFL angle 90°	247, 281, 302, 339, 401	Swage nipple, DKR-Flat angle 45°	165
Swage fitting, SFS	248, 282, 303, 340, 352, 402	Swage nipple, DKR-Flat angle 90°	166
Swage fitting, SFS angle 45°	249, 283, 304, 341, 353, 403	Swage nipple, DKR-FS	138
Swage fitting, SFS angle 60°	250, 284, 342, 354	Swage nipple, DKS angle 45°	139
Swage fitting, SFS angle 90°	251, 286 - 287, 305, 343 - 344, 355, 404	Swage nipple, DKS angle 90°	140
Swage fitting, SFS angle 135°	252, 285, 345	Swage nipple, gas connection	223 - 224
Swage fitting, SFS-CAT	288, 346	Swage nipple, JIS	175, 178 - 179, 182
Swage fitting, SFS-CAT angle 45°	289, 347	Swage nipple, JIS angle 45°	176, 180, 183
Swage fitting, SFS-CAT angle 90°	290, 348	Swage nipple, JIS angle 90°	177, 181, 184
Swage nipple, AGF	213	Swage nipple, KAE	435
Swage nipple, AGFM	209	Swage nipple, KAE 97	436
Swage nipple, AGJ	174, 665	Swage nipple, KAE ST	438
Swage nipple, AGM	152	Swage nipple, KAE STD	439
Swage nipple, AGM-Flat	153	Swage nipple, measuring hose	666, 669, 672
Swage nipple, AGN	169, 410, 663	Swage nipple, measuring hose angle 45°	667, 670, 673
Swage nipple, AGR	163	Swage nipple, measuring hose angle 90°	668, 671, 674

Swage nipple, ORFS	188, 191	TRP AOS	419
Swage nipple, ORFS angle 45°	189	TRP FL	421
Swage nipple, ORFS angle 90°	190	TRP FS	422
Swage nipple, RGN	215 - 216, 675	TRP HB	426
Swage nipple, RGN angle 45°	676	TRP HL	416
Swage nipple, RGN angle 90°	677	TRP HN	428
Swage nipple, SAE	185	TRP HS	418
Swage nipple, SAE angle 45°	186		
Swage nipple, SAE angle 90°	187	<b>V</b>	
Swage nipple, SFK	203	VF (3000 PSI)	433
Swage nipple, SFK angle 45°	204	VF (6000 PSI)	434
Swage nipple, SFK angle 90°	205		
Swage nipple, SFL	192	<b>W</b>	
Swage nipple, SFL angle 45°	193	Welded on clip for RO coupling	503
Swage nipple, SFL angle 90°	194 - 195	Welded on clip for RO coupling	513
Swage nipple, SFS	196		
Swage nipple, SFS angle 45°	197		
Swage nipple, SFS angle 60°	198		
Swage nipple, SFS angle 90°	199		
Swage nipple, SFS-CAT	200		
Swage nipple, SFS-CAT angle 45°	201		
Swage nipple, SFS-CAT angle 90°	202		
Swage nipple, SO	222		
Swage nipple, VB	217		
Swage nipple, WAP	437		
Swage nipple, WEO S	219		
Swage nipple, WEO S angle 45°	220		
Swage nipple, WEO S angle 90°	221		
<b>T</b>			
TAF 100	71		
TAF 100 CU	73		
TAFZ 100	72		
TAFZ 100 CU	74		
TBF 200	75		
TBF 200 CU	77		
TBFZ 200	76		
TBFZ 200 CU	78		
TE 100 (1TE)	55		
TE 200 (2TE)	56		
TE 200 B (2TE)	57		
TE 300 (3TE)	58		
TE 300 B (3TE)	59		
TF 100	87		
TF 200	88		
TGF BAND	108		
TGF ISO	115		
TGF ISO K	109		
Thermoplastic extreme pressure hose	85		
Thermoplastic high pressure hose	69, 79, 81, 84		
Thermoplastic high pressure hose, electrically nonconductive	83		
Thermoplastic high pressure twin hose	70, 80, 82, 86		
Threaded ring for RO coupling	528, 538		
Tool kit (3 piece), for RO coupling	524, 534		
TRN A	413		
TRN AB	427		
TRN FL 90	424		
TRN FL / TRN FS	423		
TRN HL	417		
TRN HS	420		
TRP A	414		
TRP AB	425		
TRP AJ	429		
TRP AOL	415		





**Catalogue 1:  
Hose Technology**



Hoses



Hose fittings



Couplings



Measuring equipment

**Catalogue 2:  
Connection Technology**



Pipe fittings ISO 8434-1



Pipes



Adapters



Flanges



Ball valves



Measuring equipment



Mounting technology



Accessories and tools

**Catalogue 3:  
Industrial Technology**



Hoses



Hose fittings



Couplings



Ball valves



Mounting technology



Water technology



Compressed air technology



Fluid service














Accessories and tools



### Metallschläuche

	Ringwellschläuche
	Wickelschläuche
	Schlauchschutz
	Informationen zu statischer Aufladung
	Erklärung zur Verwendung von Materialien im Lebensmittelbereich
	PTFE-Schläuche
	PTFE-Schläuche
	Kompensatoren

### Hydraulikkomponenten

	Pumpen
	Motoren
	Ventile
	Speicher
	Kühler
	Tanks
	Filter
	Messgeräte
	700 bar
	Zylinder
	Aggregate

### Dichtungstechnik

	Hydraulikdichtungen
	Pneumatikdichtungen
	Dichtsätze und Messmittel
	Statische Dichtungen
	Flachdichtungen
	Dichtungs-Sofortservice
	Dichtungsprofile
	Werkstoffdaten

