



**HANSA FLEX**

Industrial Technology



## 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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Your machines must be running, around the clock. Preventative maintenance of the HANSA-FLEX Industrial Services helps you to save money and guarantees maximum machine uptime. We will advise you from the selection of the right hydraulic components to the optimisation of your plant and machinery.

[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.”

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



## 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)

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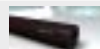
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# Products

## 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



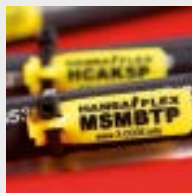
Scheduled activities to avoid unscheduled stoppages

### Plant-in-plant production



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

### Hose codes

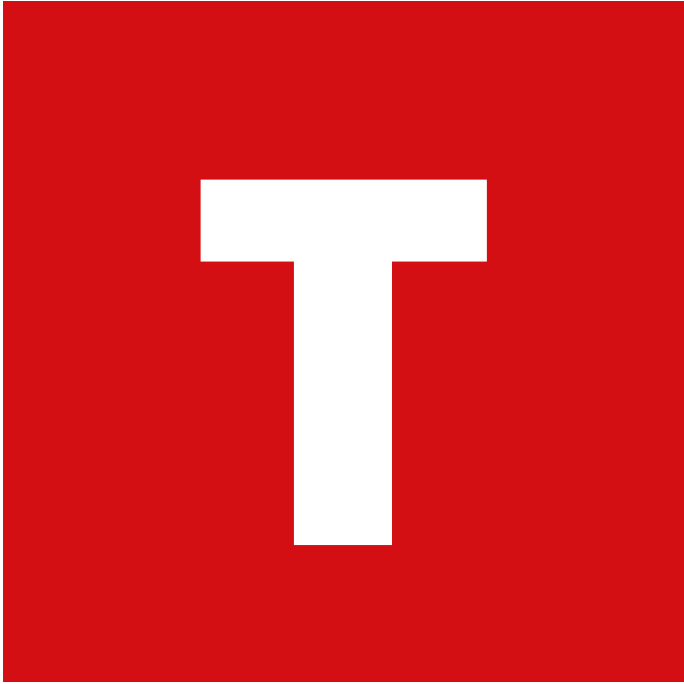


Replacement parts procurement without delay with X-CODE – unique, fast

### 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 INDUSTRIE HOSE LINES

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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 / industrial hoses
- 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.

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 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 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 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
- 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.

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.

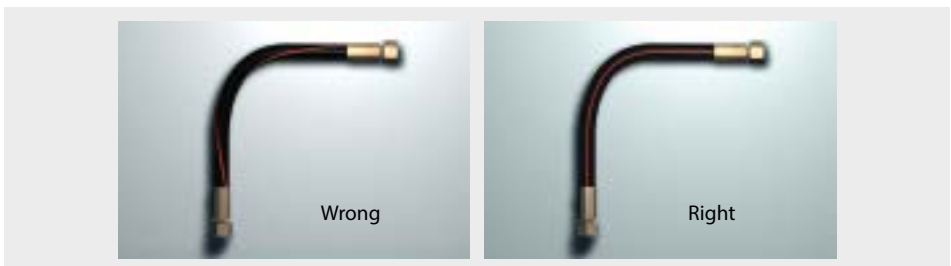
### 1.2.5 NOMINAL SIZES

In a 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

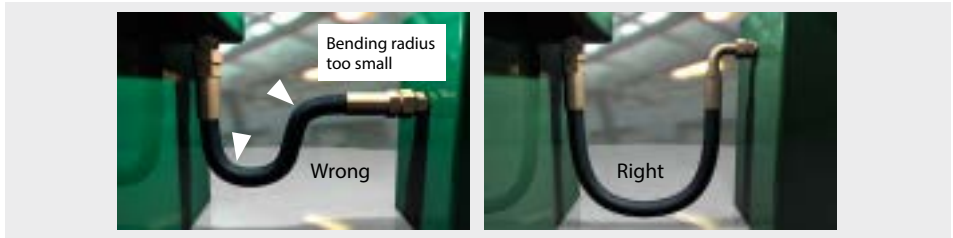
If a hose line is installed so that it is twisted in itself, the service life is significantly reduced by the constant rubbing together of the plies. Under pressure pulses, the plies try to return to their neutral starting position. A particular load occurs in the area of the connection.



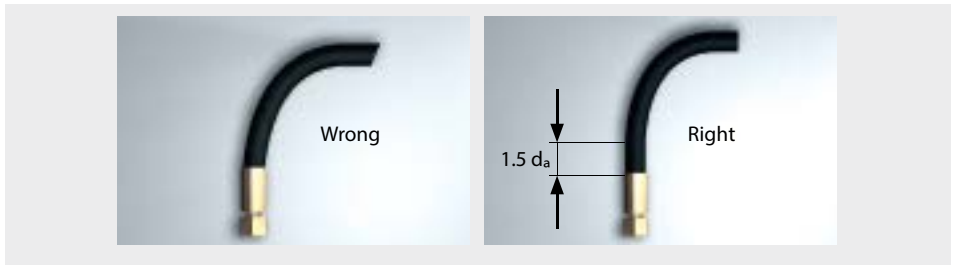
As an indicative value: A twist of 7° reduces the service life by 80%. Attention should therefore always be paid that the hose line is not twisted in itself, e.g. when tightening the union nuts.

### 1.2.7 MINIMUM BENDING RADIUS

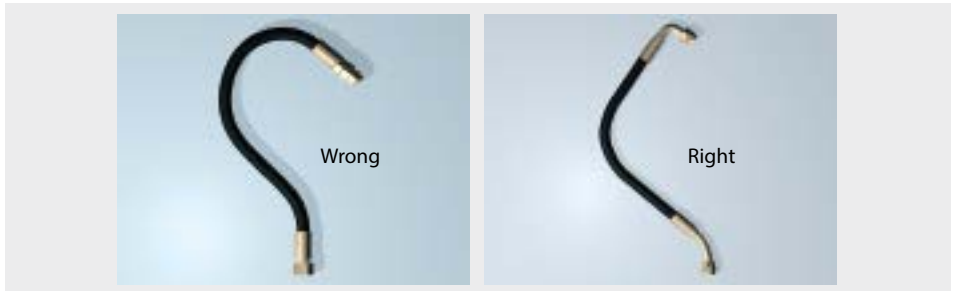
A permissible bending radius is prescribed for each hose type, depending on its nominal size. If the minimum bending radius is exceeded, the service life and the load-bearing capacity of the hose line is reduced, as gaps can be caused in the braiding on the outside of the bend due to the larger area 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.



### 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 braiding is no longer protected against external influences and failure of the hose is only a question of time. Should it not be possible to rule out abrasion, it is possible e.g. to use hoses with abrasion protection.

### 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.



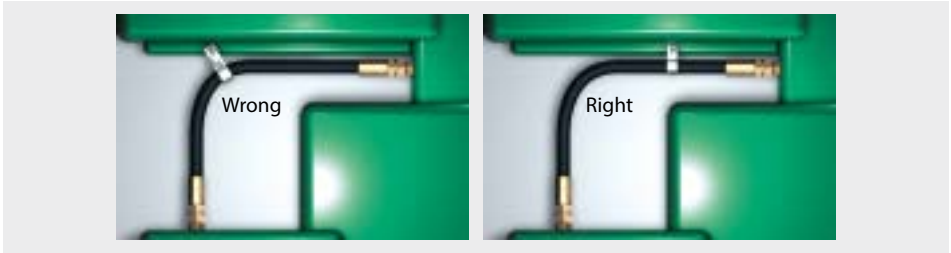
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**Note:** With certain applications, e.g. spring-loaded tensioner rollers, tensile loads cannot be avoided. In such cases the permissible operational loads must be agreed upon with HANSA-FLEX.

### 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. The screws of clamp fittings or screw clamps should be checked at regular intervals.

### 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 or for hot water hoses.

## 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 as a recommendation: 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) stipulate that the function of hose lines must be assessed at intervals to be stipulated. 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

For chemicals hoses, T002 / BGI 572 must also be observed.

### 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 to be recommended. 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

By reference to the currently valid issue of DIN 20066 for hydraulic hose lines:

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

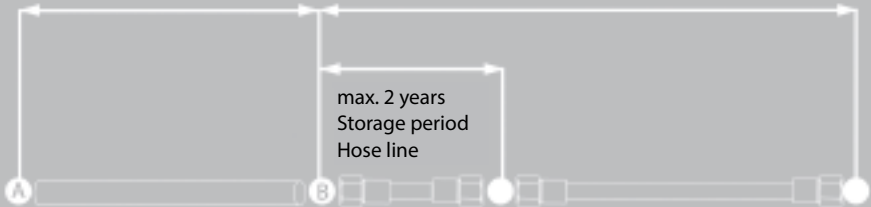
The following diagram illustrates this principle:

## Recommendation of DIN 20066

How long can hose lines be used?

max. 4 years  
Age of hose items

max. 6 years  
Service period of the hose line



A = Date of manufacture of hose material    B = Date of manufacture of hose line

In practice, 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



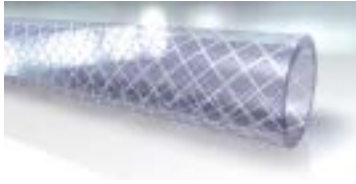
<b>Industrial hoses</b>		<b>Air conditioning technology</b>	
Air hoses	32	Air conditioning hoses	95
Water hoses	43	Fittings for air conditioning hoses (AC-CLIP system)	97
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## PSG

## PVC hose with braided insert



<b>Application:</b>	general application for air, water etc.
<b>Special features:</b>	Hardness: approx. 77° Shore A, environmentally and free of heavy metals, abrasion and aging resistant, sterilisable, permanently transparent, very flexible
<b>Inner layer:</b>	Soft PVC
<b>Insert:</b>	one braided textile insert
<b>Outer layer:</b>	Soft PVC
<b>Colour:</b>	clear
<b>Temp. min.:</b>	-5 °C
<b>Temp. max.:</b>	60 °C
<b>Media:</b>	Water, Air

Identification	Internal Ø	External Ø	Wall thickness	BD* at 20 °C	Min. bending radius	Roll length
	mm	mm	mm	bar	mm	m
PSG 04-3	4,0	10,0	3,0	20	15	50
PSG 05-3	5,0	11,0	3,0	20	20	50
PSG 06-3	6,0	12,0	3,0	20	25	50
PSG 08-3	8,0	14,0	3,0	20	30	50
PSG 09-3	9,0	15,0	3,0	15	35	50
PSG 10-3	10,0	16,0	3,0	15	40	50
PSG 12-3	12,0	18,0	3,0	15	50	50
PSG 12-4.5	12,0	21,0	4,5	15	50	50
PSG 12.5-3	12,5	18,5	3,0	15	50	50
PSG 13-3	13,0	19,0	3,0	15	60	50
PSG 13-3.5	13,0	20,0	3,5	15	60	50
PSG 15-3	15,0	21,0	3,0	10	75	50
PSG 16-3.5	16,0	23,0	3,5	10	80	50
PSG 16-4	16,0	24,0	4,0	10	80	50
PSG 19-3.5	19,0	26,0	3,5	10	80	50
PSG 19-4	19,0	27,0	4,0	10	100	25/50
PSG 19-5	19,0	29,0	5,0	10	100	25/50
PSG 22-4	22,0	30,0	4,0	8	180	25/50
PSG 25-4	25,0	33,0	4,0	8	200	25/50
PSG 25-4.5	25,0	34,0	4,5	8	120	25/50
PSG 30-4	30,0	38,0	4,0	7	170	25/50
PSG 32-5	32,0	42,0	5,0	7	180	25/50
PSG 38-5	38,0	48,0	5,0	6	200	25/50
PSG 45-5	45,0	55,0	5,0	4	300	25
PSG 50-5	50,0	60,0	5,0	4	350	25

BD = Working pressure

**Product versions:**

PSG BLAU - PVC hose with braided insert, blue

PSG GRUEN - PVC hose with braided insert, green

PSG ROT - PVC hose with braided insert, red

PSG SCHWARZ - PVC hose with braided insert, black

PSK

## PVC hose, transparent

<b>Special features:</b>	Hardness: approx. 77° Shore A
<b>Inner layer:</b>	Soft PVC
<b>Insert:</b>	none
<b>Outer layer:</b>	Soft PVC
<b>Colour:</b>	clear
<b>Temp. min.:</b>	-5 °C
<b>Temp. max.:</b>	60 °C
<b>Media:</b>	Water, Air



1

**Note:** The pressure figures relate to a short-term pressure load without pressure surges at +20 °C.

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	BD* at 20°C bar	Roll length m
PSK 02-1	2	4	1,0	13,0	50
PSK 03-1	3	5	1,0	9,5	50
PSK 03-1.5	3	6	1,5	12,5	50
PSK 04-1	4	6	1,0	7,5	50
PSK 04-1.5	4	7	1,5	10,5	50
PSK 04-2	4	8	2,0	12,5	50
PSK 05-1	5	7	1,0	6,0	50
PSK 05-1.5	5	8	1,5	8,5	50
PSK 05-2	5	9	2,0	10,5	50
PSK 05-3.5	5	12	3,5	12,5	50
PSK 06-1	6	8	1,0	5,5	50
PSK 06-1.5	6	9	1,5	7,5	50
PSK 06-2	6	10	2,0	9,5	50
PSK 06-3	6	12	3,0	12,5	50
PSK 07-1	7	9	1,0	4,5	50
PSK 07-1.5	7	10	1,5	6,5	50
PSK 07-2	7	11	2,0	8,5	50
PSK 08-1	8	10	1,0	4,0	50
PSK 08-1.5	8	11	1,5	6,0	50
PSK 08-2	8	12	2,0	7,5	50
PSK 08-3	8	14	3,0	10,5	50
PSK 09-1	9	11	1,0	3,5	50
PSK 09-1.5	9	12	1,5	5,0	50
PSK 09-2	9	13	2,0	6,5	50
PSK 09-2.5	9	14	2,5	7,0	50
PSK 09-3.5	9	16	3,5	10,5	50
PSK 10-1.5	10	13	1,5	4,5	50
PSK 10-2	10	14	2,0	6,0	50
PSK 10-3	10	16	3,0	8,5	50
PSK 11-2	11	15	2,0	5,5	50
PSK 12-1.5	12	15	1,5	4,0	50
PSK 12-2	12	16	2,0	5,0	50
PSK 12-2.5	12	17	2,5	6,5	50
PSK 12-3	12	18	3,0	7,5	50

BD = Working pressure



**PSK****PVC hose, transparent****(Continued)**

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	BD* at 20°C bar	Roll length m
PSK 13-2	13	17	2,0	5,0	50
PSK 13-3	13	19	3,0	7,0	50
PSK 14-2	14	18	2,0	4,5	50
PSK 14-2.5	14	19	2,5	5,5	50
PSK 14-3	14	20	3,0	6,0	50
PSK 15-2	15	19	2,0	7,5	50
PSK 15-3	15	21	3,0	6,0	50
PSK 16-2	16	20	2,0	4,0	50
PSK 16-2.5	16	21	2,5	5,0	50
PSK 16-3	16	22	3,0	6,0	50
PSK 18-2	18	22	2,0	3,5	50
PSK 18-3	18	24	3,0	5,0	50
PSK 19-2.5	19	24	2,5	4,5	50
PSK 19-3	19	25	3,0	5,0	50
PSK 19-3.5	19	26	3,5	5,5	50
PSK 19-4	19	27	4,0	6,5	50
PSK 20-2	20	24	2,0	3,0	50
PSK 20-3	20	26	3,0	4,5	50
PSK 22-3	22	28	3,0	4,5	50
PSK 22-4	22	30	4,0	4,5	50
PSK 24-2	24	28	2,0	2,5	50
PSK 24-3	24	30	3,0	4,0	50
PSK 25-3	25	31	3,0	4,0	50
PSK 25-4	25	33	4,0	5,0	50
PSK 25-4.5	25	34	4,5	5,5	50
PSK 27-3	27	33	3,0	3,5	50
PSK 28-4	28	36	4,0	4,5	50
PSK 30-3.5	30	37	3,5	4,0	50
PSK 30-4	30	38	4,0	4,0	50
PSK 30-4.5	30	39	4,5	4,5	50
PSK 30-5	30	40	5,0	5,0	50
PSK 32-3.5	32	39	3,5	3,0	50
PSK 32-4	32	40	4,0	4,0	50
PSK 32-5	32	42	5,0	5,0	50
PSK 35-3.5	35	42	3,5	3,5	50
PSK 35-5	35	45	5,0	4,5	50
PSK 38-5	38	48	5,0	4,0	50
PSK 40-4	40	48	4,0	3,0	50
PSK 40-5	40	50	5,0	4,0	50
PSK 42-5	42	52	5,0	3,5	50
PSK 45-5	45	55	5,0	3,5	25
PSK 50-5	50	60	5,0	3,0	25
PSK 55-4.5	55	64	4,5	2,5	25
PSK 60-5	60	70	5,0	2,5	25
PSK 65-5	65	70	5,0	2,5	25
PSK 70-5	70	80	5,0	2,5	25
PSK 75-7.5	75	90	7,5	3,4	25
PSK 80-5	80	90	5,0	2,3	25
PSK 90-5	90	100	5,0	2,1	25

BD = Working pressure

## TR WS

## PA 11/12 plastic pipe, soft

<b>Application:</b>	Control lines in hydraulics and pneumatics, automotive technology, laboratories and food industry
<b>Special features:</b>	resistant to temperature and weatherproof, low weight
<b>Inner layer:</b>	Polyamide
<b>Insert:</b>	none
<b>Outer layer:</b>	Polyamide
<b>Colour:</b>	black
<b>Temp. min.:</b>	-60 °C
<b>Temp. max.:</b>	100 °C
<b>Temp. range:</b>	Temperature peaks up to 120°C
<b>Media:</b>	Mineral oil, Grease, Propellants, resistant to aqueous acids, alkalis and salts



1

**Note:** From 20°C the pressure reduction factor is to be taken into account.

(Max. operating pressure = operating pressure x factor).

Temp.: 20°C / 30°C / 40°C / 50°C / 60°C / 70°C / 80°C / 90°C / 100°C / 110°C / 120°C

Factor: 1.00 / 0.83 / 0.72 / 0.64 / 0.57 / 0.52 / 0.47 / 0.44 / 0.36 / 0.32 / 0.28

Identification	Internal Ø	External Ø	Wall thickness	BD* at 20°C	Min. bending radius
	mm	mm	mm	bar	mm
TR 04-0.5 WS	3,0	4,0	0,50	19,0	20
TR 04-0.65 WS	2,7	4,0	0,65	26,0	20
TR 04-1 WS	2,0	4,0	1,00	45,0	20
TR 05-0.85 WS	3,3	5,0	0,85	28,0	25
TR 05-1 WS	3,0	5,0	1,00	34,0	25
TR 06-1 WS	4,0	6,0	1,00	27,0	30
TR 06-1.5 WS	3,0	6,0	1,50	45,0	30
TR 08-1 WS	6,0	8,0	1,00	19,0	40
TR 08-1.25 WS	5,5	8,0	1,25	26,0	40
TR 08-1.5 WS	5,0	8,0	1,50	31,0	40
TR 08-2 WS	4,0	8,0	2,00	45,0	40
TR 09-1.5 WS	6,0	9,0	1,50	27,0	45
TR 10-1 WS	8,0	10,0	1,00	15,0	60
TR 10-1.25 WS	7,5	10,0	1,25	19,0	60
TR 10-1.5 WS	7,0	10,0	1,50	23,0	50
TR 10-2 WS	6,0	10,0	2,00	34,0	50
TR 11-1.5 WS	8,0	11,0	1,50	21,0	55
TR 12-1 WS	10,0	12,0	1,00	12,0	55
TR 12-1.5 WS	9,0	12,0	1,50	19,0	60
TR 12-2 WS	8,0	12,0	2,00	27,0	60
TR 12.5-1.25 WS	10,0	12,5	1,25	15,0	75
TR 14-1.5 WS	11,0	14,0	1,50	16,0	80
TR 14-2 WS	10,0	14,0	2,00	22,0	75
TR 15-1.5 WS	12,0	15,0	1,50	15,0	90
TR 16-2 WS	12,0	16,0	2,00	19,0	95
TR 18-2 WS	14,0	18,0	2,00	16,0	100
TR 20-2 WS	16,0	20,0	2,00	14,0	120
TR 22-2 WS	18,0	22,0	2,00	13,0	150
TR 25-2.5 WS	20,0	25,0	2,50	14,0	150
TR 28-2.5 WS	23,0	28,0	2,50	13,0	150

BD = Working pressure

**TR WS****PA 11/12 plastic pipe, soft****(Continued)**

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	BD* at 20°C bar	Min. bending radius mm
TR 30-2.5 WS	25,0	30,0	2,50	8,0	260

BD = Working pressure

**Product versions:**

TR WB - PA 11/12 plastic pipe, soft, blue

TR WGE - PA 11/12 plastic pipe, soft, yellow

TR WR - PA 11/12 plastic pipe, soft, red

TR WT - PA 11/12 plastic pipe, soft, Transparent

1

**TRPE WS****Polyethylene hose**

<b>Application:</b>	Control lines in hydraulics and pneumatics, tank and equipment manufacture, laboratory technology
<b>Special features:</b>	resistant to temperature and weatherproof, low weight
<b>Inner layer:</b>	Polyethylene
<b>Insert:</b>	none
<b>Outer layer:</b>	Polyethylene
<b>Colour:</b>	black
<b>Temp. min.:</b>	-10 °C
<b>Temp. max.:</b>	60 °C
<b>Media:</b>	Mineral oil, Grease, Propellants, resistant against aqueous acids, alkalis and salts and a variety of solvents



1

**Note:** From 20 °C the pressure reduction factor is to be taken into account.  
(Max. operating pressure = operating pressure x factor).  
Temp.: 20 °C / 30 °C / 40 °C / 50 °C / 60 °C  
Factor: 1.00 / 0.83 / 0.72 / 0.64 / 0.57

Identification	Internal Ø	External Ø	Wall thickness	BD* at 20 °C	Min. bending radius
	mm	mm	mm	bar	mm
TRPE 04-0.5 WS	3,0	4	0,50	9	20
TRPE 04-0.65 WS	2,7	4	0,65	13	20
TRPE 04-1 WS	2,0	4	1,00	20	20
TRPE 05-1 WS	3,0	5	1,00	15	25
TRPE 06-1 WS	4,0	6	1,00	13	30
TRPE 08-1 WS	6,0	8	1,00	8	40
TRPE 08-1.5 WS	5,0	8	1,50	13	40
TRPE 10-1 WS	8,0	10	1,00	6	60
TRPE 10-1.5 WS	7,0	10	1,50	10	50
TRPE 10-2 WS	6,0	10	2,00	15	50
TRPE 12-1 WS	10,0	12	1,00	5	85
TRPE 12-1.5 WS	9,0	12	1,50	9	60
TRPE 12-2 WS	8,0	12	2,00	12	60
TRPE 14-1.5 WS	11,0	14	1,50	8	80
TRPE 14-2 WS	10,0	14	2,00	9	80
TRPE 15-1.5 WS	12,0	15	1,50	7	90
TRPE 16-2 WS	12,0	16	2,00	8	120
TRPE 18-2 WS	14,0	18	2,00	7	120
TRPE 20-2 WS	16,0	20	2,00	6	120
TRPE 22-2 WS	18,0	22	2,00	5	150
TRPE 25-2.5 WS	20,0	25	2,50	6	150
TRPE 30-2.5 WS	25,0	30	2,50	5	260

BD = Working pressure

**Product versions:**

- TRPE WB - Polyethylene hose, blue
- TRPE WGE - Polyethylene hose, yellow
- TRPE WR - Polyethylene hose, red
- TRPE WT - Polyethylene hose, Transparent

**TRPU S****Polyurethane hose**

<b>Special features:</b>	Hardness: 95-98° Shore A, very good cold flexibility, high abrasion resistance
<b>Inner layer:</b>	Polyurethane
<b>Insert:</b>	none
<b>Outer layer:</b>	Polyurethane
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	60 °C
<b>Media:</b>	aging resistant in oxygen and ozone, resistant to aliphatic hydrocarbons and most lubricating oils, resistant to hydrolysis and microbes

**Note:** From 20 °C the pressure reduction factor is to be taken into account.  
 (Max. operating pressure = operating pressure x factor).  
 Temp.: 20 °C / 30 °C / 40 °C / 50 °C / 60 °C  
 Factor: 1.00 / 0.83 / 0.72 / 0.64 / 0.57

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	BD* at 20 °C bar	Min. bending radius mm
TRPU 04-0.65 S	2,7	4	0,65	8	20
TRPU 04-1 S	2,0	4	1,00	14	20
TRPU 05-1 S	3,0	5	1,00	17	20
TRPU 06-1 S	4,0	6	1,00	14	30
TRPU 08-1 S	6,0	8	1,00	10	35
TRPU 08-1.25 S	5,5	8	1,25	13	30
TRPU 10-1 S	8,0	10	1,00	7	50
TRPU 10-1.25 S	7,5	10	1,25	10	40
TRPU 10-1.5 S	7,0	10	1,50	12	40

BD = Working pressure

**Product versions:**

- TRPU B - Polyurethane hose, blue
- TRPU GE - Polyurethane hose, yellow
- TRPU R - Polyurethane hose, red
- TRPU T - Polyurethane hose, Transparent



**KOMP****Compressor hose**

<b>Application:</b>	Low pressure range, for compressors
<b>Special features:</b>	resistant to aging and weatherproof
<b>Inner layer:</b>	SBR
<b>Insert:</b>	one high tensile synthetic thread braided insert
<b>Outer layer:</b>	SBR smooth
<b>Colour:</b>	black
<b>Temp. min.:</b>	-25 °C
<b>Temp. max.:</b>	70 °C
<b>Media:</b>	Water, Compressed air containing oil mist



1

Identification	Internal Ø mm	External Ø mm	BD* for air bar	Burst pressure bar	Min. bending radius mm	Roll length m
KOMP 6-3.5	6	13	20	60	30	40
KOMP 9-3.5	8	15	20	60	35	40
KOMP 10-5	10	18	20	60	40	40
KOMP 13-5	13	22	20	60	60	40
KOMP 15-6	16	25	20	60	75	40
KOMP 19-6	19	29	20	60	90	40
KOMP 25-7	25	37	20	60	120	40

BD = Working pressure

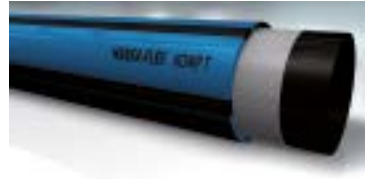
**KOMP G****Compressor hose**

<b>Application:</b>	Mining, Compressors
<b>Special features:</b>	smooth outer cover
<b>Inner layer:</b>	Natural and synthetic rubber
<b>Insert:</b>	highly tear-resistant synthetic textile insert
<b>Outer layer:</b>	Natural and synthetic rubber, abrasion, ozone and weather resistant
<b>Colour:</b>	yellow
<b>Temp. min.:</b>	-25 °C
<b>Temp. max.:</b>	70 °C
<b>Media:</b>	Compressed air

Identification	Inches	Internal Ø mm	External Ø mm	Wall thickness mm	Working pressure		Min. bending radius mm	Roll length m
					bar	bar		
KOMP 13-5 G	1/2"	13,0	23	5,0	20	60	125	40
KOMP 19-5 G	3/4"	19,0	29	5,0	20	60	190	40
KOMP 19-6 G	3/4"	19,0	31	6,0	20	60	190	40
KOMP 25-5,5 G	1"	25,4	36	5,5	20	60	254	40
KOMP 25-7 G	1"	25,4	39	7,0	20	60	254	40
KOMP 38-5 G	1.1/2"	38,0	48	5,0	20	60	380	40
KOMP 38-7 G	1.1/2"	38,0	52	7,0	20	60	380	40
KOMP 51-7,5 G	2"	50,8	66	7,5	20	60	510	40
KOMP 75-9 G	3"	76,2	92	9,0	20	60	762	40

**KOMPT****Compressor hose**

<b>Application:</b>	for compressors, in harsh operating conditions in mining,, quarrying, construction, shipyards, petrol stations, Low pressure range
<b>Standard:</b>	DIN 20018, EN ISO 2398
<b>Inner layer:</b>	NBR
<b>Insert:</b>	synthetic yarn braids
<b>Outer layer:</b>	NBR
<b>Colour:</b>	black with blue stripes
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	70 °C
<b>Media:</b>	Water, Compressed air containing oil mist



1

Identification	Inches	Internal Ø mm	External Ø mm	Wall thickness mm	Working pressure bar	Min. bending radius mm
KOMP 19-6 T	3/4"	19	31	6	25	95
KOMP 25-7 T	1"	25	39	7	25	125

**BREMS****Brake hose for compressed air brakes**

<b>Application:</b>	Compressed air brake systems
<b>Special features:</b>	weather proof and aging resistant
<b>Standard:</b>	DIN 74310
<b>Inner layer:</b>	EPDM
<b>Insert:</b>	one braided textile insert
<b>Outer layer:</b>	EPDM
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	70 °C
<b>Media:</b>	Compressed air

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	Working pressure bar	Burst pressure bar	Roll length m
BREMS 11-3.5	11	18	3,5	10	25	100
BREMS 13-6	13	25	6,0	10	20	100

**PVC WAS****PVC water hose**

<b>Application:</b>	Construction industry, Agricultural technology
<b>Special features:</b>	extremely durable, flexible, resistant to pressure and abrasion, UV and weatherproof, slightly ribbed outer cover
<b>Inner layer:</b>	stable, high flexibility, smooth plasticised PVC
<b>Insert:</b>	impact and pressure resistant PVC reinforcing spiral
<b>Outer layer:</b>	stable, high flexibility, smooth plasticised PVC
<b>Temp. min.:</b>	-5 °C
<b>Temp. max.:</b>	60 °C
<b>Media:</b>	Water



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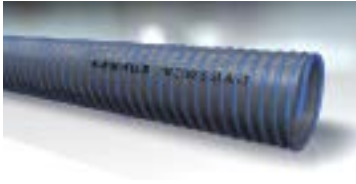
**Note:** All "-6" designations for example do not refer to the wall thickness

Identification	Inches	Internal Ø mm	Wall thickness mm	BD* at 20°C bar	Burst pressure bar	Vacuum bar	Min. bending radius mm	Roll length m
PVC WAS 19-6	3/4"	19	3,0	8,0	25	0,7	85	50
PVC WAS 25-7	1"	25	3,0	7,0	21	0,6	105	50
PVC WAS 32-6	1.1/4"	32	3,0	6,0	21	0,6	125	50
PVC WAS 38-6	1.1/2"	38	3,5	6,0	18	0,6	150	50
PVC WAS 50-5	2"	51	4,5	5,0	15	0,6	205	50
PVC WAS 60-4.5	2.1/2"	60	4,5	4,5	13	0,6	248	50
PVC WAS 76-3.5	3"	76	4,5	3,5	12	0,6	320	50
PVC WAS 90-3.5	3.1/2"	90	5,0	3,0	11	0,6	395	50

BD = Working pressure

## PVC WAS ELAST

### PVC water hose



<b>Application:</b>	Agricultural technology
<b>Special features:</b>	durable, resistant to pressure and abrasion, flexible, weatherproof
<b>Standard:</b>	ISO 1307
<b>Inner layer:</b>	stable, high flexibility, smooth plasticised PVC
<b>Insert:</b>	impact and pressure resistant PVC reinforcing spiral
<b>Outer layer:</b>	slightly ribbed outer surface
<b>Temp. min.:</b>	-20 °C
<b>Temp. max.:</b>	50 °C
<b>Media:</b>	Water

Identification	Inches	Internal Ø mm	BD* at 20°C bar	Burst pressure bar	Vacuum bar	Min. bending radius mm	Roll length m
PVC WAS 25 ELAST	1"	25	7,0	20	0,9	90	50
PVC WAS 32 ELAST	1.1/4"	32	6,0	17	0,9	130	50
PVC WAS 38 ELAST	1.1/2"	38	6,0	16	0,9	140	50
PVC WAS 51 ELAST	2"	51	5,0	15	0,9	200	50
PVC WAS 63 ELAST	2.1/2"	63	4,5	14	0,9	275	50
PVC WAS 76 ELAST	3"	76	4,0	12	0,9	310	50
PVC WAS 90 ELAST	3.1/2"	90	3,5	10	0,9	375	50
PVC WAS 102 ELAST	4"	102	3,0	10	0,9	410	20/30
PVC WAS 110 ELAST	4.3/8"	110	3,0	10	0,9	450	20/30
PVC WAS 127 ELAST	5"	127	2,5	9	0,9	520	20/30
PVC WAS 152 ELAST	6"	152	2,0	9	0,9	610	15

BD = Working pressure

**PVC SPIRAL****PVC spiral hose**

<b>Temp. min.:</b>	-5 °C
<b>Temp. max.:</b>	60 °C
<b>Media:</b>	Fresh water, Seawater, Oil-containing water, Contaminated water, Liquid manure
<b>Description:</b>	flexible, dimensionally stable spiral suction and pressure hose made from soft PVC with hard PVC helix.

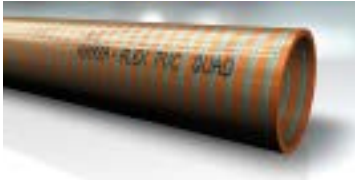


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Identification	Internal Ø mm	Wall thickness mm	Working pressure bar	Vacuum bar	Min. bending radius mm
PVC SPIRAL 19	19	3,1	5	0,7	110
PVC SPIRAL 38	38	3,7	5	0,7	210
PVC SPIRAL 45	45	4,0	5	0,7	200
PVC SPIRAL 60	60	4,5	5	0,7	330
PVC SPIRAL 70	70	5,2	4	0,7	500

## PVC QUAD

### PVC suction and delivery hose



<b>Application:</b>	Agricultural technology
<b>Special features:</b>	considerable weight reduction, smooth outer cover, extremely versatile
<b>Inner layer:</b>	PVC
<b>Insert:</b>	rectangular PVC spiral, anthracite
<b>Outer layer:</b>	PVC
<b>Colour:</b>	orange
<b>Temp. min.:</b>	-25 °C
<b>Temp. max.:</b>	60 °C
<b>Media:</b>	Water, etc.
<b>Description:</b>	Plastic suction and pressure hose for cleaning and draining for use with process water and liquid manure

Identification	Inches	Internal Ø mm	External Ø mm	Wall thickness mm	BD* at 20°C bar	Vacuum bar	Min. bending radius mm	Roll length m
PVC QUAD 51-4	2"	51	59	4,00	6,5	0,9	204	50
PVC QUAD 76-5	3"	76	85	5,00	5,5	0,9	304	50
PVC QUAD 102-7.5	4"	102	112	7,50	4,5	0,9	408	50
PVC QUAD 110-5.5	4.3/8"	110	121	5,50	4,0	0,9	440	20
PVC QUAD 127-6.5	5"	127	140	6,50	3,5	0,9	508	20
PVC QUAD 152-7	6"	152	166	7,00	3,0	0,9	608	20

BD = Working pressure



**PVC KANAL****PVC-BUNA ditch suction hose, grey**

<b>Special features:</b>	especially for use in very cold climates
<b>Standard:</b>	ISO 1307
<b>Inner layer:</b>	stable, high flexibility, smooth plasticised PVC
<b>Insert:</b>	impact and pressure resistant PVC reinforcing spiral
<b>Outer layer:</b>	stable, high flexibility, smooth plasticised PVC
<b>Colour:</b>	grey
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	50 °C



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Identification	Inches	Internal Ø	Wall thickness	Burst pressure	Vacuum	Min. bending radius
		mm	mm	bar	bar	mm
PVC KANAL DN 25	1"	25	4,2	18	0,9	115
PVC KANAL DN 32	1.1/4"	32	4,2	15	0,9	125
PVC KANAL DN 38	1.1/2"	38	4,5	14	0,9	145
PVC KANAL DN 40		40	4,5	13	0,9	160
PVC KANAL DN 51	2"	51	5,0	13	0,9	180
PVC KANAL DN 60		60	5,0	13	0,9	200
PVC KANAL DN 63	2.1/2"	63	5,5	12	0,9	220
PVC KANAL DN 76	3"	76	5,5	10	0,9	250
PVC KANAL DN 80		80	6,0	10	0,9	260
PVC KANAL DN 90		90	6,0	9	0,8	305
PVC KANAL DN 102	4"	102	6,5	9	0,8	335

**KANAL S 250**

## Drain cleaning hose



<b>Application:</b>	High pressure cleaning and sewage cleaning
<b>Special features:</b>	abrasion and ozone resistant, weatherproof
<b>Inner layer:</b>	NR/SBR, abrasion resistant, black
<b>Insert:</b>	two high-tensile synthetic textile braids
<b>Outer layer:</b>	NR/SBR
<b>Colour:</b>	black
<b>Temp. min.:</b>	-35 °C
<b>Temp. max.:</b>	70 °C
<b>Media:</b>	Water

1

Identification	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
KANAL DN13 S 250	1/2"	13,0	25,0	250	625	70	40/60/80/120/160/180/200
KANAL DN 20 S 250	3/4"	19,0	31,0	250	625	95	40/60/80/120/160/180/200
KANAL DN25 S 250	1"	25,0	39,0	250	625	110	40/60/80/120/160/180/200
KANAL DN32 S 250	1.1/4"	32,0	48,0	250	625	150	40/60/80/120/160/180/200

**Additional info:** These hoses are also available with fittings, in lengths 80, 120, 160, 180, 200 meters.

**KUEHLER SBL****Silicone radiator hose, blue**

<b>Application:</b>	Cooler hose
<b>Special features:</b>	very highly resistant to high and low temperatures, very good resistance to coolants, oils and cleaning agents, very good resistance to ozone, UV and classic aging processes, the suppleness of the silicone enables easy installation
<b>Standard:</b>	complies with SAE 20 R3
<b>Inner layer:</b>	Silicone blue
<b>Insert:</b>	Textile insert
<b>Outer layer:</b>	Silicone blue
<b>Colour:</b>	blue
<b>Temp. range:</b>	Water + Antifreeze agent -50 °C to +150 °C, Hot air +180 °C
<b>Media:</b>	Cooling fluids, hot air



1

Identification	Internal Ø		External Ø		Burst pressure	Roll length
	mm	mm	mm	bar		
KUEHLER 08-4 SBL	8	16	24	24	1/10/20	
KUEHLER 10-4 SBL	10	18	24	24	1/10/20	
KUEHLER 12-4 SBL	12	20	24	24	1/10/20	
KUEHLER 14-4 SBL	14	22	20	20	1/10/20	
KUEHLER 16-4 SBL	16	24	18	18	1/10/20	
KUEHLER 18-4 SBL	18	26	18	18	1/10/20	
KUEHLER 20-4 SBL	20	28	14	14	1/10/20	
KUEHLER 22-4 SBL	22	30	14	14	1/10/20	
KUEHLER 25-4.5 SBL	25	34	14	14	1/10/20	
KUEHLER 28-4.5 SBL	28	37	14	14	1/10/20	
KUEHLER 30-4.5 SBL	30	39	14	14	1	
KUEHLER 32-4.5 SBL	32	41	12	12	1	
KUEHLER 35-4.5 SBL	35	44	12	12	1	
KUEHLER 38-4.5 SBL	38	47	10	10	1	
KUEHLER 40-4.5 SBL	40	49	10	10	1	
KUEHLER 45-4.5 SBL	45	54	10	10	1	
KUEHLER 48-5.5 SBL	48	59	8	8	1	
KUEHLER 50-4.5 SBL	50	59	8	8	1	
KUEHLER 57-4.5 SBL	57	66	8	8	1	
KUEHLER 60-4.5 SBL	60	69	8	8	1	
KUEHLER 65-5.5 SBL	65	76	8	8	1	
KUEHLER 70-5.5 SBL	70	81	8	8	1	
KUEHLER 80-6 SBL	80	92	8	8	1	

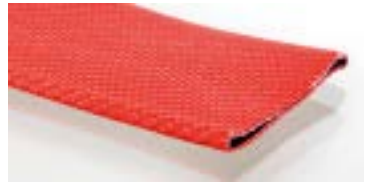
**KUEHLER****Radiator hose**

<b>Application:</b>	Radiator hose
<b>Standard:</b>	DIN 73411
<b>Inner layer:</b>	EPDM
<b>Insert:</b>	up to ID 19: one polyester braided insert; from ID 20: one Rayon braided insert
<b>Outer layer:</b>	EPDM (from ID 20 mm patterned material)
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	120 °C
<b>Media:</b>	Cooling water

Identification	ID x Wall thickness	Working pressure		Burst pressure		Roll length m
		bar	bar	bar	bar	
KUEHLER 08-3.5	8 x 3.5	4		12		40
KUEHLER 10-3.5	10 x 3.5	4		12		40
KUEHLER 12-3.5	12 x 3.5	4		12		40
KUEHLER 13-3.5	13 x 3.5	4		12		40
KUEHLER 15-3.5	15 x 3.5	4		12		40
KUEHLER 16-3.5	16 x 3.5	4		12		40
KUEHLER 18-3.5	18 x 3.5	4		12		40
KUEHLER 20-3.5	20 x 3.5	4		12		40
KUEHLER 22-3.5	22 x 3.5	4		12		40
KUEHLER 25-3.5	25 x 3.5	4		12		40
KUEHLER 28-4	28 x 4	4		12		40
KUEHLER 30-4	30 x 4	4		12		40
KUEHLER 32-4	32 x 4	4		12		40
KUEHLER 35-4	35 x 4	4		12		40
KUEHLER 38-5	38 x 5	4		12		40
KUEHLER 40-5	40 x 5	4		12		40
KUEHLER 42-5	42 x 5	4		12		40
KUEHLER 45-5	45 x 5	4		12		40
KUEHLER 50-5	50 x 5	4		12		40
KUEHLER 55-5	55 x 5	4		12		40
KUEHLER 60-5	60 x 5	4		12		40
KUEHLER 70-5	70 x 5	4		12		40
KUEHLER 90-6	90 x 6	4		12		40

**PYRO WAS RT****Fire service folding hose**

<b>Application:</b>	Fire brigade
<b>Special features:</b>	aging and ozone resistant EPDM compound, highly elastic and ductile, exceptionally good adhesion values, produced using special vulcanisation method, exceptionally abrasion resistant
<b>Standard:</b>	DIN 14,811, BS6391
<b>Inner layer:</b>	very strong multifilament polyester fibres, double-twisted thread, round woven
<b>Colour:</b>	red
<b>Media:</b>	Water



1

Identification	Inches	Internal Ø mm	Working pressure bar	Test pressure bar	Burst pressure bar	Roll length m
PYRO WAS 38 RT	1.1/2"	38	16	25	50	15/20/30
PYRO WAS 52 RT	2"	52	16	25	50	15/20/30
PYRO WAS 63 RT	2.1/2"	63	16	25	50	15/20/30
PYRO WAS 75 RT	3"	75	16	25	50	15/20/30

**AGRI WAS LR****Flat water hose**

<b>Application:</b>	Agricultural technology, Industry and construction
<b>Special features:</b>	extremely durable due to inserts with high tear strength
<b>Inner layer:</b>	PVC
<b>Insert:</b>	Textile insert
<b>Outer layer:</b>	NBR, with longitudinal protective ribs
<b>Colour:</b>	black
<b>Temp. min.:</b>	-20 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Water, Air, Oil, petrol

**Note:** Also suitable for air, oil, petrol

Identification	Inches	Internal Ø mm	Wall thickness mm	Working pressure bar	Roll length m
AGRI WAS 19 LR	3/4"	19	1,5	25	100
AGRI WAS 25 LR	1"	25	1,5	25	100
AGRI WAS 32 LR	1.1/4"	32	1,5	20	100
AGRI WAS 38 LR	1.1/2"	38	1,5	16	100
AGRI WAS 52 LR	2"	52	2,0	16	100
AGRI WAS 65 LR	2.1/2"	65	2,0	16	100
AGRI WAS 76 LR	3"	75	2,5	16	100
AGRI WAS 90 LR	3.1/2"	90	2,5	16	100
AGRI WAS 102 LR	4"	102	2,5	16	100
AGRI WAS 127 LR	5"	127	3,0	16	100
AGRI WAS 152 LR	6"	152	3,0	16	100

BD = Working pressure

**EURO WAS BL****Flat water hose**

<b>Application:</b>	Agricultural technology, Construction industry, Mining, Shipbuilding
<b>Special features:</b>	maximum tensile and cohesive strength, no expansion under pressure, flat rollable with no interconnections
<b>Inner layer:</b>	PVC
<b>Insert:</b>	one polyester braided insert
<b>Outer layer:</b>	PVC
<b>Colour:</b>	blue
<b>Temp. min.:</b>	-10 °C
<b>Temp. max.:</b>	60 °C
<b>Media:</b>	Water



1

Identification	Inches	Internal Ø mm	BD* at 20°C bar	Burst pressure bar	Roll length m
EURO WAS 1 BL	1"	25	8,5	25,5	100
EURO WAS 1 1/4 BL	1.1/4"	32	8,5	25,5	100
EURO WAS 1 1/2 BL	1.1/2"	38	8,5	25,5	100
EURO WAS 2 BL	2"	51	6,5	19,5	100
EURO WAS 2 1/2 BL	2.1/2"	63	6,5	19,5	100
EURO WAS 3 BL	3"	76	5,5	16,5	100
EURO WAS 4 BL	4"	102	5,5	16,5	100
EURO WAS 5 BL	5"	127	3,0	9,0	100
EURO WAS 6 BL	6"	152	3,0	9,0	100
EURO WAS 8 BL	8"	204	2,5	7,0	100

BD = Working pressure

**FALTBAU****Construction and industry hose**

<b>Application:</b>	Industry and construction, Agricultural technology
<b>Special features:</b>	attached on both sides with light metal Storz couplings
<b>Connection 1 + 2:</b>	Claw coupling
<b>Inner layer:</b>	NBR
<b>Outer layer:</b>	round woven polyester fabric
<b>Colour:</b>	Natural white
<b>Media:</b>	Cold water

1

Identification	Inches	Internal Ø mm	Working pressure bar	Cog space mm	Nominal size Storz	Roll length m
FALTBAU 52X10 M	2"	52	10	66	52-C	10
FALTBAU 52X15 M	2"	52	10	66	52-C	15
FALTBAU 52X20 M	2"	52	10	66	52-C	20
FALTBAU 52X30 M	2"	52	10	66	52-C	30
FALTBAU 76X10 M	3"	76	10	89	75-B	10
FALTBAU 76X15 M	3"	76	10	89	75-B	15
FALTBAU 76X20 M	3"	76	10	89	75-B	20
FALTBAU 76X30 M	3"	76	10	89	75-B	30
FALTBAU 102X10 M	4"	102	10	133	110-A	10
FALTBAU 102X15 M	4"	102	10	133	110-A	15
FALTBAU 102X20 M	4"	102	10	133	110-A	20
FALTBAU 102X30 M	4"	102	10	133	110-A	30



**INDU WAS****Industrial water hose**

<b>Application:</b>	As low pressure hose in industry and construction sector
<b>Inner layer:</b>	Natural and synthetic rubber
<b>Insert:</b>	highly tear-resistant synthetic textile insert
<b>Outer layer:</b>	Synthetic rubber, weather resistant
<b>Colour:</b>	black
<b>Temp. min.:</b>	-25 °C
<b>Temp. max.:</b>	70 °C
<b>Media:</b>	Water



1

Identification	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
INDU WAS 25-5	1"	25,4	33	10	30	254	40
INDU WAS 32-5.5	1.1/4"	32,0	41	10	30	320	40
INDU WAS 38-6	1.1/2"	38,0	47	10	30	380	40
INDU WAS 45-7	1.3/4"	44,5	54	10	30	445	40
INDU WAS 50-7	2"	51,0	60	10	30	510	40
INDU WAS 63-7	2.1/2"	63,5	74	10	30	635	40
INDU WAS 70-7	2.3/4"	70,0	82	10	30	700	40
INDU WAS 75-7	3"	76,2	88	10	30	762	40
INDU WAS 102-7	4"	101,6	115	10	30	1016	40
INDU WAS 127-9	5"	127,0	140	10	30	1270	40
INDU WAS 152-11	6"	152,4	165	10	30	1524	40
INDU WAS 203-11	8"	203,2	222	10	30	2032	20
INDU WAS 254-10.5	10"	254,0	270	10	30	2540	10

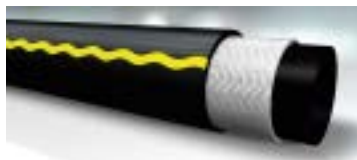
**INDU WAS SD****Suction pressure water hose**

<b>Application:</b>	Low pressure suction and pressure systems, Industry and construction
<b>Standard:</b>	ISO 1307
<b>Inner layer:</b>	Natural and synthetic rubber
<b>Insert:</b>	highly tear-resistant synthetic textile insert and steel wire spiral
<b>Outer layer:</b>	Synthetic rubber
<b>Colour:</b>	black
<b>Temp. min.:</b>	-25 °C
<b>Temp. max.:</b>	70 °C
<b>Media:</b>	Water

Identification	Inches	Internal Ø		External Ø		Wall thickness	Working pressure	Burst pressure	Vacuum	Min. bending radius		Roll length
		mm	mm	mm	mm					bar	mm	
INDU WAS 25-5 SD	1"	25,4	35	5,0	10	30	0,93	153	40			
INDU WAS 32-5 SD	1.1/4"	32,0	42	5,0	10	30	0,93	192	40			
INDU WAS 38-5 SD	1.1/2"	38,0	48	5,0	10	30	0,93	228	40			
INDU WAS 45-5 SD	1.3/4"	44,5	55	5,0	10	30	0,93	267	40			
INDU WAS 51-5.5 SD	2"	51,0	62	5,5	10	30	0,93	306	40			
INDU WAS 63-6 SD	2.1/2"	63,5	75	6,0	10	30	0,93	381	40			
INDU WAS 70-8 SD	2.3/4"	70,0	86	8,0	10	30	0,93	420	40			
INDU WAS 76-6.5 SD	3"	76,2	89	6,5	10	30	0,93	458	40			
INDU WAS 102-6.5 SD	4"	101,6	115	6,5	10	30	0,93	610	40			
INDU WAS 127-8.5 SD	5"	127,0	144	8,5	10	30	0,93	762	40			
INDU WAS 152-8.5 SD	6"	152,4	169	8,5	10	30	0,93	915	40			
INDU WAS 203-10.5 SD	8"	203,2	224	10,5	10	30	0,93	1219	40			
INDU WAS 254-16 SD	10"	254,0	275	16,0	10	30	0,93	1524	40			

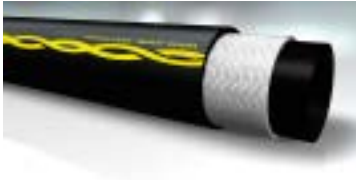
**GOLDSCHLANGE****Water and cleaning hose**

<b>Application:</b>	Agricultural technology, Construction industry, Systems engineering
<b>Special features:</b>	ozone and abrasion resistance, weatherproof, Wide range of chemical media, kink and impact resistant, traversable, UV resistant, steam up to +130°C (approx. 30 minutes)
<b>Inner layer:</b>	black, porous, smooth EPDM lining
<b>Insert:</b>	two synthetic thread braided inserts
<b>Outer layer:</b>	oil, grease and chemical resistant CR rubber
<b>Colour:</b>	black with yellow wavy line
<b>Temp. min.:</b>	-30 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Water



1

Identification	Inches	Internal Ø		Wall thickness		Working pressure		Burst pressure		Min. bending radius		Roll length	
		mm	mm	mm	mm	bar	bar	mm	mm	m	m		
GOLDSCHLANGE 10	3/8"	10	3,5	30	90	45	40						
GOLDSCHLANGE 13	1/2"	13	3,9	30	90	50	40						
GOLDSCHLANGE 16	5/8"	16	3,6	25	70	70	40						
GOLDSCHLANGE 19	3/4"	19	4,4	25	75	80	40						
GOLDSCHLANGE 22	7/8"	22	4,5	20	60	100	40						
GOLDSCHLANGE 25	1"	25	4,5	20	60	110	40						
GOLDSCHLANGE 32	1.1/4"	32	5,5	12	36	175	40						
GOLDSCHLANGE 38	1.1/2"	38	6,5	12	36	250	40						
GOLDSCHLANGE 50	2"	50	7,5	10	30	300	40						

**MULTI EPDM****Universal hose**

<b>Application:</b>	Agricultural technology, Construction industry, Systems engineering
<b>Special features:</b>	ozone, oil resistant and weatherproof
<b>Inner layer:</b>	EPDM
<b>Insert:</b>	synthetic threads
<b>Outer layer:</b>	Chloroprene rubber
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	120 °C

1

Identification	Inches	Internal Ø mm	External Ø mm	Wall thickness mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
MULTI 13-3.2 EPDM	1/2"	13,0	19,4	3,2	30	90	130
MULTI 19-4.2 EPDM	3/4"	19,0	27,4	4,2	25	75	190
MULTI 25-4.5 EPDM	1"	25,0	34,0	4,5	20	60	250
MULTI 32-5.5 EPDM	1.1/4"	32,0	43,0	5,5	12	36	320
MULTI 38-6 EPDM	1.1/2"	38,0	50,0	6,0	12	36	380

**WAS STRAHL****Construction water hose**

<b>Special features:</b>	highly flexible and sturdy, free from LABS, separating agents and grease, low flow resistance
<b>Inner layer:</b>	black, porous, smooth EPDM lining
<b>Insert:</b>	synthetic threads
<b>Outer layer:</b>	EPDM, resistant to ozone and UV radiation
<b>Colour:</b>	black + red
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Temp. range:</b>	Temperature peaks up to 110°C
<b>Media:</b>	Water



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**Note:** Working pressure is relative to room temperature

Identification	Inches	Internal Ø mm	Wall thickness mm	Working pressure bar	Min. bending radius mm	Roll length m
WAS 13-3 STRAHL	1/2"	13	3,0	20	80	40
WAS 16-3.5 STRAHL	5/8"	16	3,5	20	100	40
WAS 19-4 STRAHL	3/4"	19	4,0	20	120	40
WAS 25-4.5 STRAHL	1"	25	4,5	20	150	40

**INDUSTRIE****Rubber industrial hose**

- Application:** Shipyards and shipping, Cleaning systems, Nurseries, agriculture, Industry and construction
- Special features:** seawater and ozone resistant, weather proof and aging resistant
- Inner layer:** synthetic rubber
- Insert:** highly tear-resistant synthetic cord fabric
- Outer layer:** synthetic rubber
- Colour:** black
- Temp. min.:** -35 °C
- Temp. max.:** 70 °C
- Media:** Freshwater, seawater, contaminated water, weakly acidic and alkaline liquids in pH range 5 to 8

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	Working pressure bar	Roll length m
INDUSTRIE 25-5	25	35	5	15	40
INDUSTRIE 32-6	32	44	6	15	40
INDUSTRIE 35-6	35	47	6	15	40
INDUSTRIE 38-6	38	50	6	15	40

**TEX WAS****Lightweight hose, dimensionally stable, woven**

<b>Application:</b>	Industry and construction, Agricultural technology
<b>Special features:</b>	exceptionally light, kink resistant and flexible (even when cold), very high continuous operating pressure possible, low space requirement due to thin wall, reel storage capability, outstanding resistance to aging and ozone
<b>Inner layer:</b>	high-quality EPDM rubber
<b>Insert:</b>	very strong polyester yarn, dyed, circular woven.
<b>Outer layer:</b>	EPDM (patterned material)
<b>Colour:</b>	black with blue stripes
<b>Temp. min.:</b>	-30 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Water
<b>Description:</b>	industrial hose can be stored on reels (also suitable for hot water)



1

Identification	Inches	Internal Ø mm	Wall thickness mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
TEX 20-2 WAS	3/4"	20	2,0	40	120	120	50/100
TEX 26-2 WAS	1"	26	2,0	40	120	140	50/100
TEX 32-3 WAS	1.1/4"	32	3,3	40	120	170	50/100

**DAMPF G****Steam hose**

<b>Application:</b>	Hot water or saturated steam applications
<b>Special features:</b>	high temperature, abrasion and ozone resistance
<b>Inner layer:</b>	EPDM
<b>Insert:</b>	two textile braided inserts
<b>Outer layer:</b>	EPDM
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	165 °C
<b>Media:</b>	Hot water, Steam

**Note:** Please observe the guidelines of BG CHEMIE T002; Hose lines - safe application / 6.3.3 Additional notes for the use of hose lines for steam and hot water. Bleed water or steam after use.

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	Working pressure bar	Min. bending radius mm	Roll length m
DAMPF 13-5 G	13	23	5	6	104	61
DAMPF 16-5 G	16	26	5	6	128	61
DAMPF 19-6 G	19	29	5	6	152	61
DAMPF 25-6 G	25	35	5	6	200	61
DAMPF 32-7 G	32	46	7	6	256	61
DAMPF 38-7 G	38	52	7	6	304	61
DAMPF 51-8 G	51	67	8	6	408	61



**DAMPF B****Steam hose**

<b>Application:</b>	Hot water or saturated steam applications
<b>Special features:</b>	electrically conductive
<b>Standard:</b>	ISO 6134 TYPE2, CLASS:A
<b>Inner layer:</b>	EPDM
<b>Insert:</b>	two steel wire braided inserts
<b>Outer layer:</b>	EPDM (patterned material)
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	210 °C
<b>Media:</b>	Steam, Hot water



1

**Note:** Please observe the guidelines of BG CHEMIE T002; Hose lines - safe application / 6.3.3 Additional notes for the use of hose lines for steam and hot water. Bleed water or steam after use. Appropriate hose fittings on request.

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
DAMPF 13-6 B	12,7	25	6,0	18	180	130	40
DAMPF 16-6 B	16,0	29	6,5	18	180	160	40
DAMPF 19-6 B	19,0	33	7,0	18	180	190	40
DAMPF 25-6.5 B	25,4	40	7,5	18	180	250	40
DAMPF 32-7 B	32,0	48	8,0	18	180	320	40
DAMPF 38-8 B	38,0	54	8,0	18	180	380	40
DAMPF 50-9 B	50,8	69	9,0	18	180	500	40

**DAMPF LM****Steam hose, suitable for use with foodstuffs**

<b>Application:</b>	Cleaning systems, Food industry, Hot water or saturated steam applications
<b>Special features:</b>	steam up to 165°C
<b>Inner layer:</b>	oil and steam resistant synthetic rubber, suitable for use with foodstuffs, odour-neutral, white
<b>Insert:</b>	two textile braided inserts
<b>Outer layer:</b>	synthetic rubber with high ozone, abrasion, and weather resistance
<b>Colour:</b>	blue
<b>Water temp. min.:</b>	-20 °C
<b>Water temp. max.:</b>	100 °C
<b>Media:</b>	Hot water, Saturated steam

Identification	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
DAMPF 13-6 LM	1/2"	12,7	25	7	70	230	40
DAMPF 19-7 LM	3/4"	19,0	31	7	70	270	40
DAMPF 25-7.5 LM	1"	25,4	37	7	70	305	40

**PVC TRANSP ST**

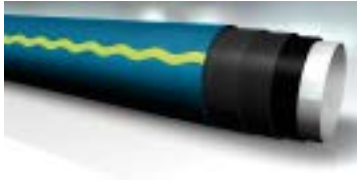
## Soft PVC hose

<b>Application:</b>	Food industry
<b>Special features:</b>	extremely durable, flexible, resistant to pressure and abrasion, UV and weatherproof
<b>Inner layer:</b>	PVC suitable for use with foodstuffs
<b>Insert:</b>	embedded steel wire helix
<b>Outer layer:</b>	PVC suitable for use with foodstuffs
<b>Colour:</b>	Transparent
<b>Temp. min.:</b>	-5 °C
<b>Temp. max.:</b>	60 °C
<b>Media:</b>	Fruit juices, Mineral water, Wines, liquid foodstuffs containing up to 15% alcohol



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Identification	Inches	Internal Ø mm	External Ø mm	Burst pressure bar	Vacuum bar	Min. bending radius mm	Roll length m
PVC 10 TRANSP ST	3/8"	10,0	16,0	21	0,90	20	50
PVC 12 TRANSP ST	1/2"	12,0	17,8	21	0,90	25	50
PVC 16 TRANSP ST	5/8"	16,0	21,7	18	0,90	35	50
PVC 19 TRANSP ST	3/4"	20,0	27,1	15	0,90	50	50
PVC 25 TRANSP ST	1"	25,4	33,3	15	0,90	60	50
PVC 32 TRANSP ST	1.1/4"	31,8	40,1	13	0,90	75	50
PVC 38 TRANSP ST	1.1/2"	38,1	46,7	12	0,90	90	50
PVC 51 TRANSP ST	2"	50,8	61,1	9	0,80	125	50
PVC 76 TRANSP ST	3"	76,0	89,9	6	0,70	195	30
PVC 102 TRANSP ST	4"	101,6	116,3	6	0,60	300	30

**AQUAPAL****Drinking water hose**

<b>Application:</b>	Food industry
<b>Special features:</b>	highly flexible and traversable, totally neutral odour and taste, homogeneous, smooth and unplasticised, steam up to 130°C
<b>Approval:</b>	KTW guideline "Pipes", DVGW-W270 and DVGW-VP 549 (DVGW reg. no.: DW-0309BT0079)
<b>Inner layer:</b>	special transparent, plastomer coating
<b>Insert:</b>	PES intermediate layer and two cord inserts
<b>Outer layer:</b>	NBR resistant to abrasion, UV, greases and oils
<b>Colour:</b>	blue with yellow wavy line
<b>Temp. min.:</b>	-20 °C
<b>Temp. max.:</b>	90 °C
<b>Media:</b>	Water

Identification	Inches	Internal Ø mm	Wall thickness mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
AQUAPAL 10-3.6	3/8"	10	3,6	20	60	60	40
AQUAPAL 13-3.6	1/2"	13	3,6	20	60	75	40
AQUAPAL 16-3.6	5/8"	16	3,6	20	60	95	40
AQUAPAL 19-4.2	3/4"	19	4,2	20	60	110	40
AQUAPAL 22-4.5	7/8"	22	4,5	20	60	130	40
AQUAPAL 25-4.5	1"	25	4,5	20	60	145	40
AQUAPAL 32-4.5	1.1/4"	32	5,5	20	60	280	40
AQUAPAL 38-6.5	1.1/2"	38	6,5	20	60	330	40
AQUAPAL 50-7.5	2"	50	7,5	20	60	435	40

**MILK****Food hose**

<b>Application:</b>	Food industry
<b>Inner layer:</b>	odourless, toxin-free special NBR rubber, generally suitable for use with foodstuffs, white
<b>Insert:</b>	highly tear-resistant synthetic textile insert
<b>Outer layer:</b>	synthetic rubber with high ozone, abrasion, and weather resistance
<b>Standard:</b>	In keeping with European standards and FDA guideline
<b>Colour:</b>	blue
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	80 °C
<b>Media:</b>	Milk, Cooking oil, etc.



1

**Note:** For cleaning with detergents, the hose is capable of withstanding temperatures up to 110°C for short periods.

Identification	Inches	Internal Ø mm	External Ø mm	Wall thickness mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
MILK 38-7.5	1.1/2"	38,0	51,0	7,5	6	30	380	40
MILK 45-7.5	1.3/4"	44,5	57,5	7,5	6	30	445	40
MILK 51-8.5	2"	50,8	68,0	8,5	6	30	510	40

**MILK SD****Food hose**

<b>Application:</b>	Food industry
<b>Inner layer:</b>	odourless, toxin-free special NBR rubber, generally suitable for use with foodstuffs, white
<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>Standard:</b>	In keeping with European standards and FDA guideline
<b>Colour:</b>	blue
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	80 °C
<b>Media:</b>	Milk, Cooking oil, etc.

**Note:** For cleaning with detergents, the hose is capable of withstanding temperatures up to 110°C for short periods.

Identification	Inches	Internal Ø mm	External Ø mm	Wall thickness mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
MILK SD 38-7	1.1/2"	38,0	52	7,0	10	30	120	40
MILK SD 45-7	1.3/4"	44,5	59	7,0	10	30	140	40
MILK SD 51-7.5	2"	50,8	66	7,5	10	30	160	40

**CHEM EPDM****Chemical supply hose**

<b>Application:</b>	chemical industries, Sea and industrial waste water
<b>Special features:</b>	suitable for use as pressure hose in the chemical industry
<b>Inner layer:</b>	chemical resistant, black, smooth EPDM rubber
<b>Insert:</b>	two highly resistant textile inserts and two antistatic copper braids
<b>Outer layer:</b>	abrasion resistant, flame-retardant, ozone and weather resistant CR rubber
<b>Colour:</b>	black
<b>Temp. range:</b>	min. flexible to -35°C, max. depending on the medium 95°C, Temperature peaks up to 120°C



1

Identification	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
CHEM 19-6 EPDM	3/4"	19,0	31	16	48	125	40
CHEM 25-6 EPDM	1"	25,4	37	16	48	150	40
CHEM 32-6 EPDM	1.1/4"	32,0	44	16	48	175	40
CHEM 38-6.5 EPDM	1.1/2"	38,0	51	16	48	225	40
CHEM 51-8 EPDM	2"	50,8	67	16	48	275	40
CHEM 63-8 EPDM	2.1/2"	63,5	79	16	48	300	40
CHEM 76-8 EPDM	3"	76,2	92	16	48	350	40
CHEM 102-8 EPDM	4"	101,6	118	16	48	450	40

**CHEM EPDM SD****Chemical supply/suction hose**

- Application:** chemical industries, Sea and industrial waste water  
**Special features:** suitable for use as pressure hose in the chemical industry  
**Inner layer:** chemical resistant, black, smooth EPDM rubber  
**Insert:** two highly resistant textile inserts, two steel wire spirals, and two antistatic copper braids  
**Outer layer:** abrasion resistant, flame-retardant, ozone and weather resistant CR rubber  
**Colour:** black  
**Temp. range:** min. flexible to -35°C, max. depending on the medium 95°C, Temperature peaks up to 120°C

Identification	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Vacuum bar	Min. bending radius mm	Roll length m
CHEM 19-6 EPDM SD	3/4"	19,0	31	16	48	0,9	125	40
CHEM 25-6 EPDM SD	1"	25,4	37	16	48	0,9	150	40
CHEM 32-6 EPDM SD	1.1/4"	32,0	44	16	48	0,9	175	40
CHEM 38-6.5 EPDM SD	1.1/2"	38,0	51	16	48	0,9	225	40
CHEM 50-7 EPDM SD	2"	50,8	67	16	48	0,9	275	40
CHEM 63-8 EPDM SD	2.1/2"	63,5	79	16	48	0,9	300	40
CHEM 76-8 EPDM SD	3"	76,2	92	16	48	0,8	350	40
CHEM 102-8 EPDM SD	4"	101,6	118	16	48	0,8	450	40



**CHEM UPE SD****Chemical supply/suction hose**

<b>Application:</b>	chemical industries
<b>Special features:</b>	suitable for use as suction/pressure hose in the chemical industry
<b>Standard:</b>	DIN EN 12115
<b>Inner layer:</b>	XLPE coating, resistant to chemicals, acids, corrosive media and solvents
<b>Insert:</b>	two highly resistant textile inserts, two steel wire spirals, and two antistatic copper braids
<b>Outer layer:</b>	abrasion resistant, ozone and weather resistant EPDM rubber
<b>Colour:</b>	blue
<b>Temp. min.:</b>	-30 °C
<b>Temp. max.:</b>	70 °C
<b>Media:</b>	Acids, Solvents



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Identification	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Vacuum bar	Min. bending radius mm	Roll length m
CHEM 19-6 UPE SD	3/4"	19,0	32,5	16	48	0,9	125	40
CHEM 25-6 UPE SD	1"	25,4	39,0	16	48	0,9	150	40
CHEM 32-6 UPE SD	1.1/4"	32,0	47,0	16	48	0,9	175	40
CHEM 38-6.5 UPE SD	1.1/2"	38,0	53,0	16	48	0,9	225	40
CHEM 50-8 UPE SD	2"	50,8	67,5	16	48	0,9	275	40
CHEM 63-8 UPE SD	2.1/2"	63,5	81,5	16	48	0,9	300	40
CHEM 76-8 UPE SD	3"	76,2	94,5	16	48	0,9	350	40
CHEM 102-8 UPE SD	4"	101,6	120,5	16	48	0,9	450	40

**FARBSPRITZ****Paint spraying hose**

<b>Application:</b>	Painting applications
<b>Special features:</b>	sturdy, durable, exceptionally flexible
<b>Inner layer:</b>	EPDM (smooth)
<b>Insert:</b>	one high tensile synthetic thread braided insert
<b>Outer layer:</b>	EPDM (smooth)
<b>Colour:</b>	green
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Water soluble paints, Fresh and sea water, ketonic solvents and a range of chemicals, Synthetic resin paints and polyester lacquers, Alkalis, Acids

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	Working pressure bar
FARBSPRITZ 06-3.5	6	13	3,5	20
FARBSPRITZ 09-3.5	9	16	3,5	20
FARBSPRITZ 11-4	11	19	4,0	20

**AUTOGEN BLAU****Blue autogenous hose**

<b>Application:</b>	Autogenous applications
<b>Special features:</b>	smooth outer cover
<b>Standard:</b>	EN ISO 3821 (formerly EN 559)
<b>Inner layer:</b>	synthetic rubber
<b>Insert:</b>	one braided textile insert
<b>Outer layer:</b>	synthetic rubber
<b>Colour:</b>	blue
<b>Media:</b>	gas-phase oxygen



1

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	Working pressure bar	Burst pressure bar	Roll length m
AUTOGEN BLAU 6-3.5	6	13	3,5	20	60	100
AUTOGEN BLAU 6-5	6	16	5,0	20	60	100

## AUTOGEN ROT

### Red autogenous hose



<b>Application:</b>	Autogenous applications
<b>Special features:</b>	smooth outer cover
<b>Standard:</b>	EN ISO 3821 (formerly EN 559)
<b>Inner layer:</b>	synthetic rubber
<b>Insert:</b>	one braided textile insert
<b>Outer layer:</b>	synthetic rubber
<b>Colour:</b>	red
<b>Media:</b>	gas-phase acetylene

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Identification	Internal Ø mm	External Ø mm	Wall thickness mm	Working pressure bar	Burst pressure bar	Roll length m
AUTOGEN ROT 6-3.5	6	13	3,5	20	60	100
AUTOGEN ROT 9-3.5	9	16	3,5	20	60	50

**AUTOGEN-ZWILLING****Twin autogenous hose (blue + red)**

<b>Application:</b>	Autogenous applications
<b>Special features:</b>	smooth outer cover
<b>Standard:</b>	EN ISO 3821 (formerly EN 559)
<b>Inner layer:</b>	synthetic rubber
<b>Insert:</b>	one braided textile insert
<b>Outer layer:</b>	synthetic rubber
<b>Colour:</b>	blue + red
<b>Media:</b>	Blue: Oxygen gas, Red: Acetylene gas



1

Identification	Working pressure bar	ID x Wall thickness	Burst pressure bar	Roll length m
AUTOGEN ZWILLING	20	Red: 9.0 x 3.5; Blue: 6.0 x 5.0	60	50

**PROPAN**

## Propane gas hose



<b>Application:</b>	Propane gas burners
<b>Standard:</b>	EN ISO 3821 (formerly EN 559)
<b>Inner layer:</b>	NBR
<b>Insert:</b>	one braided textile insert
<b>Outer layer:</b>	synthetic rubber
<b>Colour:</b>	orange
<b>Temp. min.:</b>	-20 °C
<b>Temp. max.:</b>	70 °C
<b>Media:</b>	Butane, Propane

1

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
PROPAN 6-3.5	6	13	3,5	20	60	65	100
PROPAN 6-5	6	14	4,0	20	60	75	100
PROPAN 9-3.5	9	16	3,5	20	60	85	100

**TG S****Propellant hose**

<b>Application:</b>	Fuel gas systems in vehicles and mobile equipment e.g. industrial trucks
<b>Standard:</b>	DIN 4815
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	one braided textile insert
<b>Outer layer:</b>	synthetic rubber
<b>Colour:</b>	black
<b>Temp. min.:</b>	-30 °C
<b>Temp. max.:</b>	85 °C
<b>Approval:</b>	meets the requirements of BGV D34, DVGW approval
<b>Media:</b>	Liquid gas



1

Identification	DN*	Inches	Size	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
TG 306 S	6	1/4"	4	6,3	16,4	30	125	45	100

**PVC ANTI AB PU****PVC suction and delivery hose**

<b>Application:</b>	Construction industry, Agricultural technology
<b>Special features:</b>	weatherproof, exceptionally abrasion resistant, flexible .
<b>Inner layer:</b>	Polyurethane
<b>Insert:</b>	Hard PVC spiral
<b>Outer layer:</b>	Polyurethane
<b>Colour:</b>	metallic green
<b>Temp. min.:</b>	-25 °C
<b>Temp. max.:</b>	55 °C
<b>Media:</b>	Cereals, Cement, Gravel, Granulates

1

Identification	Inches	Internal Ø mm	Wall thickness mm	BD* at 20°C bar	Vacuum bar	Min. bending radius mm	Roll length m
PVC ANTI AB 63-6 PU	2.1/2"	63	5,5	4,0	0,7	250	30/50
PVC ANTI AB 76-6.5 PU	3"	76	6,7	4,0	0,7	300	30/50
PVC ANTI AB 102-7 PU	4"	102	8,5	3,0	0,7	400	30/50
PVC ANTI AB 127-8 PU	5"	127	9,5	2,5	0,7	510	30
PVC ANTI AB 152-9 PU	6"	152	11,0	2,0	0,7	610	20

BD = Working pressure



## POLY L

## Polyurethane suction / delivery hose, lightweight

<b>Application:</b>	for dedusting and extraction systems, gas-phase and fluid media, Oil mist extraction, Extracting textile fibres
<b>Inner layer:</b>	Polyurethane
<b>Insert:</b>	spring steel wire spiral
<b>Outer layer:</b>	Polyurethane
<b>Colour:</b>	Transparent
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	90 °C
<b>Media:</b>	fine-grain particles such as dust, chippings, powder, fibres



1

**Note:** Wall thickness between the coils 0.75 mm

Identification	Inches	Internal Ø mm	External Ø mm	BD* at 20°C bar	Vacuum bar	Min. bending radius mm	Weight per m kg	Roll length m
POLY 25 L	1"	25	31	3,2	0,80	31	0,250	10/15
POLY 32 L	1.1/4"	32	40	2,5	0,73	40	0,350	10/15
POLY 38 L		38	46	2,1	0,68	46	0,390	10/15
POLY 40 L	1.1/2"	40	48	2,1	0,68	48	0,400	10/15
POLY 45 L	1.3/4"	45	53	1,8	0,60	53	0,420	10/15
POLY 50 L	2"	50	58	1,7	0,53	58	0,450	10/15
POLY 60 L		60	68	1,4	0,45	68	0,530	10/15
POLY 65 L		65	73	1,3	0,38	73	0,640	10/15
POLY 70 L	2.3/4"	70	78	1,1	0,38	78	0,680	10/15
POLY 75 L	3"	75	84	1,1	0,30	84	0,720	10/15
POLY 80 L		80	88	1,0	0,30	88	0,760	10/15
POLY 100 L	4"	100	110	0,8	0,23	110	0,950	10/15
POLY 110 L	4.3/8"	110	119	0,7	0,23	119	1,030	10/15
POLY 120 L	4.3/4"	120	129	0,7	0,23	129	1,120	10/15
POLY 125 L	5"	125	135	0,7	0,23	135	1,180	10/15
POLY 130 L	5.1/4"	130	139	0,6	0,23	139	1,200	10/15
POLY 140 L	5.1/2"	140	149	0,6	0,15	149	1,380	10/15
POLY 150 L	6"	150	161	0,6	0,15	161	1,480	10/15
POLY 160 L		160	170	0,6	0,15	170	1,740	10/15
POLY 175 L	7"	175	185	0,4	0,15	185	1,850	10/15
POLY 180 L		180	190	0,4	0,15	190	1,900	10/15
POLY 200 L	8"	200	214	0,4	0,15	214	2,300	10/15
POLY 225 L	9"	225	235	0,3	0,08	235	2,550	10/15
POLY 250 L	10"	250	260	0,3	0,08	260	3,020	10/15
POLY 275 L		275	284	0,3	0,08	284	3,110	10
POLY 300 L		300	310	0,3	0,07	310	3,200	10

BD = Working pressure

**Additional info:** Also available in the version microbe-resistant, suitable for use with foodstuffs, flame-resistant or electrically conductive.

**POLY H****Polyurethane suction / delivery hose**

<b>Application:</b>	Granulate supply equipment, Industrial vacuum cleaners
<b>Special features:</b>	high abrasion resistance, flexible, oil and petrol resistant, smooth flow channel, vacuum resistant
<b>Inner layer:</b>	Polyurethane
<b>Insert:</b>	embedded steel wire helix
<b>Outer layer:</b>	Polyurethane
<b>Colour:</b>	Transparent
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	90 °C
<b>Media:</b>	Granulates, Air, Water

**Note:** Wall thickness between the coils 1.45 mm

Identification	Inches	Internal Ø mm	External Ø mm	BD* at 20°C bar	Vacuum bar	Min. bending radius mm	Weight per m kg	Roll length m
POLY 25 H	1"	25	33	4,1	0,94	37	0,290	10/15
POLY 40 H	1.1/2"	40	49	3,0	0,84	60	0,490	10/15
POLY 45 H	1.3/4"	45	55	3,0	0,83	80	0,550	10/15
POLY 50 H	2"	50	61	2,9	0,80	75	0,710	10/15
POLY 60 H	2.1/2"	60	70	2,5	0,75	90	0,840	10/15
POLY 100 H	4"	100	112	1,5	0,45	150	1,480	10/15
POLY 110 H	4.3/8"	110	121	1,3	0,45	165	1,610	10/15
POLY 120 H	5"	120	131	1,3	0,31	180	1,750	10/15
POLY 125 H	5"	125	138	1,3	0,31	187	1,910	10/15
POLY 150 H	6"	150	163	1,0	0,25	225	2,290	10/15
POLY 200 H	8"	200	215	0,7	0,19	300	3,300	10/15

BD = Working pressure

**Additional info:** Also available in the version microbe-resistant, suitable for use with foodstuffs, flame-resistant or electrically conductive.

**POLY XL****Polyurethane suction / delivery hose**

<b>Application:</b>	Agricultural technology, Industry and construction
<b>Special features:</b>	high abrasion resistance, flexible, oil and petrol resistant, smooth flow channel, vacuum resistant
<b>Inner layer:</b>	Polyurethane
<b>Insert:</b>	embedded steel wire helix
<b>Outer layer:</b>	Polyurethane
<b>Colour:</b>	Transparent
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	90 °C
<b>Media:</b>	Gravel, Cereals, Sand, etc.



1

**Note:** Wall thickness between the coils 2.5 mm

Identification	Inches	Internal Ø mm	External Ø mm	BD* at 20°C bar	Vacuum bar	Min. bending radius mm	Weight per m kg	Roll length m
POLY 40 XL	1.1/2"	40	50	4,2	0,95	160	0,830	10/15
POLY 50 XL	2"	50	61	3,8	0,95	200	1,040	10/15
POLY 75 XL	3"	75	87	2,7	0,95	300	1,500	10/15
POLY 100 XL	4"	100	115	1,9	0,90	400	2,600	10/15
POLY 125 XL	5"	125	140	1,5	0,90	500	3,440	10/15
POLY 150 XL	6"	150	167	1,3	0,85	600	4,130	10/15

BD = Working pressure

**Additional info:** Also available in the version microbe-resistant, suitable for use with foodstuffs, flame-resistant or electrically conductive.

**SILO****Silo hose**

- Application:** for unloading cement, sand, gravel and granulates from silo transport vehicles.
- Special features:** abrasion value according to DIN 53516 < 65 mm<sup>3</sup>
- Standard:** ISO 1307
- Inner layer:** highly abrasion resistant insulating natural rubber
- Insert:** highly tear-resistant synthetic textile insert and copper braid
- Outer layer:** special synthetic rubber, highly resistant to abrasion, ozone and weather, pricked.
- Colour:** black
- Temp. min.:** -40 °C
- Temp. max.:** 70 °C
- Media:** Cement, Sand, Gravel, Granulates

Identification	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
SILO 25-6	1"	25,4	37,0	10	30	254	40
SILO 32-6	1.1/4"	32,0	44,0	10	30	320	40
SILO 38-6	1.1/2"	38,0	50,0	10	30	380	40
SILO 51-6.5	2"	50,8	64,5	10	30	508	40
SILO 63-7	2.1/2"	63,5	77,0	10	30	635	40
SILO 76-7	3"	76,2	90,0	10	30	762	40
SILO 90-7	3.1/2"	90,0	104,0	10	30	900	40
SILO 102-8	4"	101,6	118,0	10	30	1016	40
SILO 127-9.5	5"	127,0	146,0	10	30	1270	40
SILO 152-10	6"	152,4	172,0	10	30	1524	40
SILO 203-11	8"	203,2	225,0	10	30	2032	20
SILO 254-11	10"	254,0	276,0	10	30	2540	20

## SILO SD

## Silo hose for suction and pressure applications

<b>Application:</b>	for loading and unloading cement, sand, gravel and granulates from silo transport vehicles.
<b>Special features:</b>	abrasion value according to DIN 53516 < 65 mm3
<b>Standard:</b>	ISO 1307
<b>Inner layer:</b>	highly abrasion resistant insulating natural rubber
<b>Insert:</b>	highly tear-resistant synthetic textile insert, steel wire spiral and copper braid.
<b>Outer layer:</b>	special synthetic rubber, highly resistant to abrasion, ozone and weather, pricked.
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	70 °C
<b>Media:</b>	Cement, Sand, Gravel, Granulates



1

Identification	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Vacuum bar	Min. bending radius mm	Roll length m
SILO 25-7 SD	1"	25,4	39,0	10	30	0,93	155	40
SILO 32-6.5 SD	1.1/4"	32,0	45,0	10	30	0,93	190	40
SILO 38-7 SD	1.1/2"	38,0	52,0	10	30	0,93	230	40
SILO 51-7.5 SD	2"	50,8	66,0	10	30	0,93	305	40
SILO 63-7.5 SD	2.1/2"	63,5	78,5	10	30	0,93	380	40
SILO 76-8 SD	3"	76,2	92,0	10	30	0,93	460	40
SILO 90-8.5 SD	3.1/2"	90,0	107,0	10	30	0,93	540	40
SILO 102-9 SD	4"	101,6	120,0	10	30	0,93	610	40
SILO 127-11 SD	5"	127,0	149,0	10	30	0,93	765	40
SILO 152-11 SD	6"	152,4	174,5	10	30	0,93	915	40
SILO 203-13 SD	8"	203,2	229,0	10	30	0,93	1220	20
SILO 254-13.5 SD	10"	254,0	281,0	10	30	0,93	1525	20

**SANDSTRAHL****Sandblasting hose**

<b>Application:</b>	for cleaning metal, stone and other surfaces, and supplying highly abrasive media
<b>Inner layer:</b>	highly abrasion resistant insulating natural rubber
<b>Insert:</b>	highly tear-resistant synthetic textile insert and copper braid
<b>Outer layer:</b>	Natural and synthetic rubber, abrasion, ozone and weather resistant, pricked
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	70 °C
<b>Media:</b>	Sand

Identification	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
SANDSTRAHL 13-7	13	27	12	36	127	40
SANDSTRAHL 19-7	19	33	12	36	190	40
SANDSTRAHL 25-7	25	39	12	36	254	40
SANDSTRAHL 32-8	32	48	12	36	320	40
SANDSTRAHL 38-9	38	56	12	36	380	40
SANDSTRAHL 51-11	51	69	12	36	510	40
SANDSTRAHL 63-9.5	63	82	12	36	635	40

**BETON 40**

## Concrete supply hose

<b>Application:</b>	Construction industry
<b>Special features:</b>	pricked
<b>Standard:</b>	DIN 53516 < 60 mm3
<b>Inner layer:</b>	highly abrasion resistant insulating natural rubber
<b>Insert:</b>	four highly tear-resistant synthetic textile inserts with copper 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>	70 °C
<b>Media:</b>	Mortar, concrete, screed



1

Identification	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
BETON 40-25-38	1"	25,4	38,0	40	120	110	40
BETON 40-32-46	1.1/4"	32,0	46,0	40	120	160	40
BETON 40-35-49	1.3/8"	35,0	49,0	40	120	175	40
BETON 40-38-54	1.1/2"	38,0	54,0	40	120	190	40
BETON 40-50-68	2"	50,8	68,0	40	120	280	40
BETON 40-63.5-83.5	2.1/2"	63,5	83,5	40	120	375	40

**BETON 85****Concrete supply hose**

<b>Application:</b>	Construction industry
<b>Special features:</b>	pricked
<b>Standard:</b>	DIN 53516 < 65 mm <sup>3</sup>
<b>Inner layer:</b>	highly abrasion resistant insulating NBR/CBR rubber
<b>Insert:</b>	four highly tear-resistant braided steel wires
<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>	70 °C
<b>Media:</b>	Mortar, concrete, screed

Identification	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
BETON 85-50-10	2"	50,8	70	85	200	508
BETON 85-65-11	2.1/2"	63,5	88	85	200	635
BETON 85-75-11.5	3"	76,2	102	85	200	762
BETON 85-80-13	3.1/4"	80,0	106	85	200	
BETON 85-100-14	4"	101,6	130	85	200	1016
BETON 85-127-14	5"	127,0	155	85	200	1270
BETON 85-152-16	6"	152,4	184	85	200	1524



**SI 100****Fuel hose with braiding**

<b>Application:</b>	Low pressure hose for fuel lines
<b>Standard:</b>	DIN EN ISO 6806
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	one zinc plated steel wire braided insert
<b>Outer layer:</b>	none
<b>Colour:</b>	metallic
<b>Temp. min.:</b>	-35 °C
<b>Temp. max.:</b>	80 °C
<b>Media:</b>	Diesel, Crude oil, Lubricating oil, not suitable for petrol fuels



1

Identification	DN*	Inches	Size	Internal Ø mm	External Ø mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
SI 103	3	1/8"	2	4,5	9,5	20	30	60	25
SI 104	4	3/16"	3	5,5	10,5	20	30	60	25
SI 106	6	1/4"	4	7,5	12,5	15	25	50	30
SI 108	8	5/16"	5	9,0	14,0	15	25	50	40
SI 110	10	3/8"	6	11,5	18,0	15	25	50	45
SI 113	12	1/2"	8	14,5	22,0	15	25	50	50
SI 116	16	5/8"	10	17,0	25,0	15	25	50	70

DN = Nominal diameter, nominal width

**SI 200****Fuel hose with braiding**

<b>Application:</b>	Low pressure hose for fuel lines
<b>Standard:</b>	DIN 73379
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	one braided textile insert
<b>Outer layer:</b>	none
<b>Colour:</b>	black
<b>Temp. min.:</b>	-35 °C
<b>Temp. max.:</b>	80 °C
<b>Media:</b>	Petrol fuels, Diesel, Crude oil, Lubricating oil

1

Identification	DN*	Inches	Size	Internal Ø mm	External Ø mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
SI 202	2	3/32"	1	3,2	7,0	20	30	60	20
SI 203	3	1/8"	2	4,5	9,5	20	30	60	25
SI 204	4	3/16"	3	5,5	10,5	20	30	60	25
SI 206	6	1/4"	4	7,5	12,5	15	25	50	30
SI 208	8	5/16"	5	9,5	15,0	15	25	50	40
SI 210	10	3/8"	6	11,5	17,0	15	25	50	45
SI 213	12	1/2"	8	15,0	22,0	12	20	40	50
SI 216	16	5/8"	10	18,0	26,0	12	20	38	70

DN = Nominal diameter, nominal width

**SI 300****Fuel hose with braiding**

<b>Application:</b>	Low pressure hose for fuel lines
<b>Standard:</b>	DIN 73379
<b>Inner layer:</b>	oil resistant synthetic rubber
<b>Insert:</b>	one textile braided insert and one zinc plated steel wire braided insert
<b>Outer layer:</b>	none
<b>Colour:</b>	metallic
<b>Temp. min.:</b>	-35 °C
<b>Temp. max.:</b>	80 °C
<b>Media:</b>	Petrol fuels, Diesel, Crude oil, Lubricating oil



1

Identification	DN*	Inches	Size	Internal Ø mm	External Ø mm	Working pressure bar	Test pressure bar	Burst pressure bar	Min. bending radius mm
SI 304	4	3/16"	3	5,5	11,5	30	40	60	40
SI 306	6	1/4"	4	7,5	13,5	30	40	60	50
SI 308	8	5/16"	5	9,0	16,0	25	35	45	60
SI 310	10	3/8"	6	11,5	18,5	25	35	45	80
SI 313	12	1/2"	8	15,0	23,0	25	35	45	80
SI 316	16	5/8"	10	17,5	26,0	25	35	45	120

DN = Nominal diameter, nominal width

**SI 200 RME****Fuel hose**

<b>Application:</b>	Low pressure hose for fuel lines
<b>Special features:</b>	antistatic inner and outer rubber
<b>Inner layer:</b>	NBR
<b>Insert:</b>	spiral synthetic textile threads
<b>Outer layer:</b>	BNBR/EPDM, smooth
<b>Colour:</b>	black
<b>Temp. min.:</b>	-30 °C
<b>Temp. max.:</b>	100 °C
<b>Media:</b>	Biodiesel, diesel and petrol fuels

1

Identification	DN*	Inches	Size	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
SI 206 RME	6	1/4"	4	6,0	13	10	30	55
SI 208 RME	8	5/16"	5	7,5	14	10	30	65
SI 210 RME	10	3/8"	6	10,0	16	10	30	75

DN = Nominal diameter, nominal width

TW

## Tanker hose

<b>Application:</b>	Tankers
<b>Special features:</b>	electrical resistance R less than 10,000,000 Ohm, oil and petrol resistant pressure hose
<b>Standard:</b>	EN 12115, TRBF131 Part 2
<b>Inner layer:</b>	NBR
<b>Insert:</b>	one steel wire spiral insert with copper braid
<b>Outer layer:</b>	NBR / SBR (patterned material)
<b>Colour:</b>	black
<b>Temp. min.:</b>	-20 °C
<b>Temp. max.:</b>	65 °C
<b>Media:</b>	All types of mineral oil products with a max. aromatic content of 50%



1

Identification	Internal Ø mm	External Ø mm	Wall thickness mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
TW 25	25	37	6,0	16	64	150	40
TW 32	32	44	6,0	16	64	175	40
TW 38	38	51	6,5	16	64	225	40
TW 50	50	64	7,0	16	64	275	40
TW 60	60	75	7,5	16	64	300	40
TW 63	63	78	7,5	16	64	300	40

**TW OW****Tanker hose without helix**

- Application:** Winding hose for tankers
- Special features:** oil and petrol resistant pressure hose, electrical resistance R less than 10,000,000 Ohm
- Standard:** NW 25: EN 1360; NW 32-40: EN 12115, NW 32-40: TRbF 131 Part 2
- Inner layer:** NBR
- Insert:** one textile braided insert with copper braid
- Outer layer:** NBR / SBR (patterned material)
- Colour:** black
- Temp. min.:** -20 °C
- Temp. max.:** 65 °C
- Media:** All types of mineral oil products with a max. aromatic content of 50%

Identification	Inches	Internal Ø mm	Wall thickness mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
TW OW 25	1"	25	6,0	16	64	150	40
TW OW 32	1.1/4"	32	6,0	16	64	190	40
TW OW 38	1.1/2"	38	6,5	16	64	230	40

**ZSS OW****Bleeding hose**

<b>Application:</b>	Bleeding hose
<b>Special features:</b>	antistatic inner and outer rubber
<b>Standard:</b>	EN 1360
<b>Inner layer:</b>	NBR
<b>Insert:</b>	one braided textile insert
<b>Outer layer:</b>	NBR
<b>Colour:</b>	black
<b>Temp. min.:</b>	-25 °C
<b>Temp. max.:</b>	55 °C
<b>Media:</b>	All types of mineral oil products with a max. aromatic content of 60%



1

Identification	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm	Roll length m
ZSS OW 20	19,0	31	16	48	95	40
ZSS OW 25	25,4	38	16	48	152	40

**FP 104****Grease gun hose line**

<b>Application:</b>	Grease guns
<b>Inner layer:</b>	Polyester
<b>Insert:</b>	one polyester braided insert
<b>Outer layer:</b>	PVC
<b>Colour:</b>	black
<b>Media:</b>	Lubricating grease
<b>Connection 1:</b>	metric cylindrical outer thread or imperial cylindrical outer thread
<b>Connection 2:</b>	Lubricating nipple H DIN 71412
<b>Sealing form 1:</b>	metallic
<b>Hose standard:</b>	DIN 1283

Identification	G1	Burst pressure bar	Length mm
FP 104-300 HM	M 10 x 1	1000	300
FP 104-500 HM	M 10 x 1	1000	500
FP 104-300 HR	R 1/8"	1000	300
FP 104-500 HR	R 1/8"	1000	500

G1 = Thread of connection 1



**KLIMA****Universal coolant hose**

<b>Application:</b>	Coolant (air conditioning technology)
<b>Standard:</b>	exceeds SAEJ2064 Type E
<b>Inner layer:</b>	Polyamide = R134a effusion values 75% lower than required according to SAEJ2064
<b>Rubber intermediate layer:</b>	Butyl group = Moisture absorption values, 70% lower than required according to SAEJ2064
<b>Insert:</b>	polyester braid
<b>Outer layer:</b>	Butyl group = Moisture absorption values, 70% lower than required according to SAEJ2064
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	125 °C
<b>Media:</b>	Compressor oils: PAG, ester, mineral oil, alkyl benzene, Coolants: R134a, R404a



1

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
KLIMA 04	5	3	3/16"	5,1	11,2	35	175	40
KLIMA 08	8	5	5/16"	8,0	14,9	35	175	51
KLIMA 10	10	6	3/8"	10,5	17,9	35	175	63
KLIMA 13	12	8	1/2"	13,1	19,9	35	175	76
KLIMA 16	16	10	5/8"	16,3	24,8	35	175	101
KLIMA 20	19	12	3/4"	22,6	30,6	35	140	178

DN = Nominal diameter, nominal width

**MD 100 AC****Coolant hose**

<b>Application:</b>	Coolant (air conditioning technology)
<b>Design:</b>	for screw fittings
<b>Standard:</b>	SAE J2064
<b>Inner layer:</b>	Butyl = R134a effusion values 65% lower than required according to SAEJ2064.
<b>Insert:</b>	very strong steel wire braid
<b>Outer layer:</b>	CR = Moisture absorption values 75% lower than required according to SAEJ2064
<b>Colour:</b>	black
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	120 °C
<b>Media:</b>	Compressor oils: PAG, ester only for TRITON SE55, SEZ80, Solest oil 35 / 68, Coolants: R134a

Identification	DN*	Size	Inches	Internal Ø mm	External Ø mm	Working pressure bar	Burst pressure bar	Min. bending radius mm
MD 120 AC	19	12	3/4"	22,8	31,3	35	175	160
MD 125 AC	25	16	1"	29,3	38,3	35	175	195
MD 132 AC	31	20	1.1/4"	35,5	45,6	35	175	225

DN = Nominal diameter, nominal width

**ACN AO 90****AC clip nipples, pipe connection, angle 90°**

<b>Application:</b>	nipple for air conditioning hoses, clip system
<b>Connection 1:</b>	UN/UNF nut threads
<b>Sealing form 1:</b>	flat sealing
<b>Design:</b>	O-ring sealed pipe connection, long pilot
<b>Construction:</b>	Angle 90°
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



1

**Note:** Order O-ring separately, not included in scope of supply.

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L2 mm	S1
ACN 08 AO 5/8 90	8	5	5/16"	5/8"-18 UNF	5,5	85,7	39,8	19
ACN 10 AO 90	10	6	3/8"	5/8"-18 UNF	8,0	85,9	46,9	19
ACN 10 AO 13 90	10	6	3/8"	3/4"-16 UNF	8,0	92,8	41,0	22
ACN 13 AO 90	12	8	1/2"	3/4"-16 UNF	9,5	92,3	41,0	22
ACN 13 AO 16 90	12	8	1/2"	7/8"-14 UNF	9,5	101,0	47,1	27
ACN 16 AO 90	16	10	5/8"	7/8"-14 UNF	11,9	100,0	47,1	27
ACN 16 AO 20 90	16	10	5/8"	1.1/16" -14 UNS	11,9	108,5	57,7	32
ACN 20 AO 90	19	12	3/4"	1.1/16" -14 UNS	16,4	111,4	57,7	32

DN = Nominal diameter, nominal width

**Accessories:**

**AC OR TUBO GR** - O-ring, TUBO air conditioning

**ACN AO 45****AC clip nipples, pipe connection, angle 45°**

<b>Application:</b>	nipple for air conditioning hoses, clip system
<b>Connection 1:</b>	UN/UNF nut threads
<b>Sealing form 1:</b>	flat sealing
<b>Design:</b>	O-ring sealed pipe connection, long pilot
<b>Construction:</b>	Angle 45°
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

**Note:** Order O-ring separately, not included in scope of supply.

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L2 mm	S1
ACN 08 AO 5/8 45	8	5	5/16"	5/8"-18 UNF	5,5	93,0	20,3	19
ACN 10 AO 45	10	6	3/8"	5/8"-18 UNF	8,0	93,1	20,3	19
ACN 10 AO 13 45	10	6	3/8"	3/4"-16 UNF	8,0	97,2	21,0	22
ACN 13 AO 45	12	8	1/2"	3/4"-16 UNF	9,5	97,0	21,0	22
ACN 13 AO 16 45	12	8	1/2"	7/8"-14 UNF	9,5	108,0	23,0	27
ACN 16 AO 45	16	10	5/8"	7/8"-14 UNF	11,9	108,0	23,0	27
ACN 16 AO 20 45	16	10	5/8"	1.1/16" -14 UNS	11,9	120,7	28,5	32
ACN 20 AO 45	19	12	3/4"	1.1/16" -14 UNS	16,4	123,3	35,4	32

DN = Nominal diameter, nominal width

**Accessories:**

**AC OR TUBO GR** - O-ring, TUBO air conditioning

**ACN AO****AC clip nipples, pipe connection**

<b>Application:</b>	nipple for air conditioning hoses, clip system
<b>Connection 1:</b>	UN/UNF nut threads
<b>Sealing form 1:</b>	flat sealing
<b>Design:</b>	O-ring sealed pipe connection, long pilot
<b>Construction:</b>	straight
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



1

**Note:** Order O-ring separately, not included in scope of supply.

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	S1
ACN 08 AO 5/8	8	5	5/16"	5/8"-18 UNF	5,5	72,7	19
ACN 10 AO	10	6	3/8"	5/8"-18 UNF	8,0	72,9	19
ACN 10 AO 13	10	6	3/8"	3/4"-16 UNF	8,0	73,1	22
ACN 13 AO	12	8	1/2"	3/4"-16 UNF	9,5	73,3	22
ACN 13 AO 16	12	8	1/2"	7/8"-14 UNF	9,5	78,1	27
ACN 16 AO	16	10	5/8"	7/8"-14 UNF	11,9	77,8	27
ACN 16 AO 20	16	10	5/8"	1.1/16" -14 UNS	11,9	79,8	32
ACN 20 AO	19	12	3/4"	1.1/16" -14 UNS	16,4	92,2	32

DN = Nominal diameter, nominal width

**Accessories:**

**AC OR TUBO GR** - O-ring, TUBO air conditioning

**ACN AO 45 BN****AC clip nipples, pipe connection with LP filling valve, angle 45°**

<b>Application:</b>	nipple for air conditioning hoses, clip system
<b>Connection 1:</b>	UN/UNF nut threads
<b>Sealing form 1:</b>	flat sealing
<b>Design:</b>	O-ring sealed pipe connection and filling valve (low side), long pilot
<b>Construction:</b>	Angle 45°
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

**Note:** Order O-ring separately, not included in scope of supply.

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L2 mm	L3 mm	S1
ACN 13 AO 16 45 BN	12	8	1/2"	7/8"-14 UNF	9,5	108	23	38,9	27

DN = Nominal diameter, nominal width

**Accessories:**

AC OR TUBO GR - O-ring, TUBO air conditioning

**ACN AO 90 BNL****AC clip nipples, pipe connection with LP filling valve, angle 90°**

<b>Application:</b>	nipple for air conditioning hoses, clip system
<b>Connection 1:</b>	UN/UNF nut threads
<b>Sealing form 1:</b>	flat sealing
<b>Connection 2:</b>	Filling valve
<b>Design:</b>	O-ring sealed pipe connection and filling valve, long pilot
<b>Construction:</b>	Angle 90°
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



1

**Note:** Order O-ring separately, not included in scope of supply.

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L2 mm	L3 mm	S1
ACN 13 AO 16 90 BN L 32	12	8	1/2"	7/8"-14 UNF	9,5	104,0	32,0	32,0	27
ACN 13 AO 16 90 BN L 47	12	8	1/2"	7/8"-14 UNF	9,5	100,4	47,2	31,0	27
ACN 16 AO 90 BN L 47	16	10	5/8"	7/8"-14 UNF	11,9	100,3	47,2	31,0	27

DN = Nominal diameter, nominal width

**Accessories:**

**AC OR TUBO GR** - O-ring, TUBO air conditioning

**ACN AO 90 BHL****AC clip nipples, pipe connection with HP filling valve, angle 90°**

<b>Application:</b>	nipple for air conditioning hoses, clip system
<b>Connection 1:</b>	UN/UNF nut threads
<b>Sealing form 1:</b>	flat sealing
<b>Connection 2:</b>	Filling valve
<b>Design:</b>	O-ring sealed pipe connection and filling valve, long pilot
<b>Construction:</b>	Angle 90°
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

**Note:** Order O-ring separately, not included in scope of supply.

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L2 mm	L3 mm	S1
ACN 10 AO 13 90 BH L 29	10	6	3/8"	3/4"-16 UNF	8,0	92,8	29,0	27,5	22
ACN 10 AO 13 90 BH L 41	10	6	3/8"	3/4"-16 UNF	8,0	92,4	41,2	24,5	22
ACN 13 AO 90 BH L 41	12	8	1/2"	3/4"-16 UNF	9,5	92,6	41,2	24,5	22

DN = Nominal diameter, nominal width

**Accessories:**

**AC OR TUBO GR** - O-ring, TUBO air conditioning



**ACN AO BN****AC clip nipples, pipe connection with high-pressure filling valve**

<b>Application:</b>	nipple for air conditioning hoses, clip system
<b>Connection 1:</b>	UN/UNF nut threads
<b>Sealing form 1:</b>	flat sealing
<b>Connection 2:</b>	Filling valve
<b>Design:</b>	O-ring sealed pipe connection and filling valve, long pilot
<b>Construction:</b>	straight
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



1

**Note:** Order O-ring separately, not included in scope of supply.

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L3 mm	S1
ACN 13 AO 16 BN	12	8	1/2"	7/8"-14 UNF	9,5	95,3	24,2	27
ACN 16 AO BN	16	10	5/8"	7/8"-14 UNF	11,9	95,0	24,2	27
ACN 16 AO 20 BN	16	10	5/8"	1.1/16" -14 UNS	11,9	97,0	25,2	32

DN = Nominal diameter, nominal width

**Accessories:**

**AC OR TUBO GR** - O-ring, TUBO air conditioning

**ACN AO BH****AC clip nipples, pipe connection with high-pressure filling valve**

<b>Application:</b>	nipple for air conditioning hoses, clip system
<b>Connection 1:</b>	UN/UNF nut threads
<b>Sealing form 1:</b>	flat sealing
<b>Connection 2:</b>	Filling valve
<b>Design:</b>	O-ring sealed pipe connection and filling valve, long pilot
<b>Construction:</b>	straight
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

**Note:** Order O-ring separately, not included in scope of supply.

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L3 mm	S1
ACN 08 AO 5/8 BH	8	5	5/16"	5/8"-18 UNF	5,5	99,3	33,5	19
ACN 10 AO 13 BH	10	6	3/8"	3/4"-16 UNF	8,0	103,5	35,0	22
ACN 13 AO BH	12	8	1/2"	3/4"-16 UNF	9,5	103,3	35,0	22
ACN 13 AO 16 BH	12	8	1/2"	7/8"-14 UNF	9,5	95,3	24,2	27

DN = Nominal diameter, nominal width

**Accessories:**

AC OR TUBO GR - O-ring, TUBO air conditioning

**ACN HO****AC clip nipples, connector, O-ring sealed external thread**

<b>Application:</b>	nipple for air conditioning hoses, clip system
<b>Connection 1:</b>	UN/UNF external threads
<b>Sealing form 1:</b>	O-ring sealed
<b>Design:</b>	Connector, O-ring sealed outer thread
<b>Construction:</b>	straight
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



1

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	S1
ACN 08 HO 5/8	8	5	5/16"	5/8"-18 UNF	5,5	91,4	17
ACN 10 HO 13	10	6	3/8"	3/4"-16 UNF	8,0	95,4	22
ACN 13 HO 16	12	8	1/2"	7/8"-14 UNF	9,7	99,0	22
ACN 16 HO 20	16	10	5/8"	1.1/16" -14 UNS	11,9	106,3	27

DN = Nominal diameter, nominal width

**ACN HJ****AC clip nipples, SAE external thread, 45° sealing cone**

**Application:** nipple for air conditioning hoses, clip system  
**Connection 1:** UN/UNF external threads  
**Sealing form 1:** 45° outer cone  
**Construction:** straight  
**Material:** Steel  
**Surface:** electro galvanised

1

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	S1
ACN 04 HJ	5	3	3/16"	7/16"-20 UNF	3,1	44,4	12

DN = Nominal diameter, nominal width

**ACN FO 90****AC clip nipples, for flange mounting, angle 90°**

<b>Application:</b>	nipple for air conditioning hoses, clip system
<b>Connection 1:</b>	for flange assembly, long pilot
<b>Sealing form 1:</b>	O-ring seal
<b>Design:</b>	O-ring sealed pipe connection for flange assembly, long pilot
<b>Construction:</b>	Angle 90°
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



1

**Note:** Order O-ring separately, not included in scope of supply.

Identification	DN*	Size	Inches	for internal pipe Ø mm	Ø d2 mm	L1 mm	L2 mm
ACN 08 FO 90	8	5	5/16"	8,4	5,5	85,7	39,8
ACN 10 FO 08 90	10	6	3/8"	8,4	8,0	85,9	39,8
ACN 16 FO 90	16	10	5/8"	17,5	11,9	108,5	57,7

DN = Nominal diameter, nominal width

**Accessories:**

**AC OR TUBO GR** - O-ring, TUBO air conditioning

**ACN FO 45****AC clip nipples, for flange mounting, angle 45°**

<b>Application:</b>	nipple for air conditioning hoses, clip system
<b>Connection 1:</b>	for flange assembly, long pilot
<b>Sealing form 1:</b>	O-ring seal
<b>Design:</b>	O-ring sealed pipe connection for flange assembly, long pilot
<b>Construction:</b>	Angle 45°
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

**Note:** Order O-ring separately, not included in scope of supply.

Identification	DN*	Size	Inches	for internal pipe Ø mm	Ø d2 mm	L1 mm	L2 mm
ACN 08 FO 45	8	5	5/16"	8,4	5,5	93	20,3

DN = Nominal diameter, nominal width

**Accessories:**

AC OR TUBO GR - O-ring, TUBO air conditioning

**ACN FO****AC clip nipples, for flange mounting**

<b>Application:</b>	nipple for air conditioning hoses, clip system
<b>Connection 1:</b>	for flange assembly, long pilot
<b>Sealing form 1:</b>	O-ring seal
<b>Design:</b>	O-ring sealed pipe connection for flange assembly, long pilot
<b>Construction:</b>	straight
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



1

**Note:** Order O-ring separately, not included in scope of supply.

Identification	DN*	Size	Inches	for internal pipe Ø mm	Ø d2 mm	L1 mm
ACN 08 FO	8	5	5/16"	8,4	5,5	72,7

DN = Nominal diameter, nominal width

**Accessories:**

AC OR TUBO GR - O-ring, TUBO air conditioning

**ACN DF 90****AC clip nipples for DENSO compressor flange, angle 90°**

<b>Application:</b>	nipple for air conditioning hoses, clip system
<b>Connection 1:</b>	DENSO compressor flange
<b>Sealing form 1:</b>	O-ring sealed pin
<b>Design:</b>	45° SAE connection
<b>Construction:</b>	Angle 90°
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

**Note:** Order O-ring separately, not included in scope of supply.

Identification	DN*	Size	Inches	for internal pipe Ø mm	Ø d2 mm	L1 mm
ACN 10 DF 90	10	6	3/8"	12,9	8,0	84,4
ACN 16 DF 90	16	10	5/8"	15,7	11,9	81,8

DN = Nominal diameter, nominal width

**Accessories:**

**AC OR TUBO GR** - O-ring, TUBO air conditioning



**ACN FO MF 90****AC clip nipples, pipe connection with flange, angle 90°**

<b>Application:</b>	nipple for air conditioning hoses, clip system
<b>Connection 1:</b>	Pipe connection with flange
<b>Sealing form 1:</b>	O-ring seal
<b>Design:</b>	O-ring sealed pipe connection with flange, long pilot
<b>Construction:</b>	Angle 90°
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



1

**Note:** Order O-ring separately, not included in scope of supply.

Identification	DN*	Size	Inches	for internal pipe Ø mm	Ø d2 mm	L1 mm	L2 mm
ACN 13 FO MF 20 90	12	8	1/2"	17,5	9,5	110,6	57,7
ACN 16 FO MF 20 90	16	10	5/8"	17,5	11,9	108,8	57,7

DN = Nominal diameter, nominal width

**Accessories:**

**AC OR TUBO GR** - O-ring, TUBO air conditioning

**ACN FO MF 45****AC clip nipples, pipe connection with flange, angle 45°**

<b>Application:</b>	nipple for air conditioning hoses, clip system
<b>Connection 1:</b>	Pipe connection with flange
<b>Sealing form 1:</b>	O-ring seal
<b>Design:</b>	O-ring sealed pipe connection with flange, long pilot
<b>Construction:</b>	Angle 45°
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

**Note:** Order O-ring separately, not included in scope of supply.

Identification	DN*	Size	Inches	for internal pipe Ø mm	Ø d2 mm	L1 mm	L2 mm
ACN 13 FO MF 20 45	12	8	1/2"	17,5	9,5	122,6	28,5

DN = Nominal diameter, nominal width

**Accessories:**

AC OR TUBO GR - O-ring, TUBO air conditioning

**ACN DF****AC clip nipples for DENSO compressor flange**

<b>Application:</b>	nipple for air conditioning hoses, clip system
<b>Connection 1:</b>	DENSO compressor flange
<b>Sealing form 1:</b>	O-ring sealed pin
<b>Design:</b>	45° SAE connection
<b>Construction:</b>	straight
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



1

**Note:** Order O-ring separately, not included in scope of supply.

Identification	DN*	Size	Inches	for internal pipe Ø mm	Ø d2 mm	L1 mm
ACN 10 DF	10	6	3/8"	12,9	8,0	99,0
ACN 16 DF	16	10	5/8"	15,7	11,9	95,8

DN = Nominal diameter, nominal width

**Accessories:**

**AC OR TUBO GR** - O-ring, TUBO air conditioning

**ACN FO MF****AC clip nipples, pipe connection with flange**

<b>Application:</b>	nipple for air conditioning hoses, clip system
<b>Connection 1:</b>	Pipe connection with flange
<b>Sealing form 1:</b>	O-ring seal
<b>Design:</b>	O-ring sealed pipe connection with flange, long pilot
<b>Construction:</b>	straight
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

**Note:** Order O-ring separately, not included in scope of supply.

Identification	DN*	Size	Inches	for internal pipe Ø mm	Ø d2 mm	L1 mm
ACN 13 FO MF 20	12	8	1/2"	17,5	9,5	81,6

DN = Nominal diameter, nominal width

**Accessories:**

AC OR TUBO GR - O-ring, TUBO air conditioning

**ACN AOL****AC clip nipples, DKOL**

**Application:** nipple for air conditioning hoses, clip system  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Construction:** straight  
**Short code:** DKOL  
**Material:** Steel  
**Surface:** electro galvanised



1

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	S1	OR
ACN 20 AOL	19	12	3/4"	M 30 x 2	16,4	71,1	36	20 x 2

DN = Nominal diameter, nominal width

**ACN AOL 45****AC clip nipples, DKOL, angle 45°**

**Application:** nipple for air conditioning hoses, clip system  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Construction:** Angle 45°  
**Short code:** DKOL  
**Material:** Steel  
**Surface:** electro galvanised

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L2 mm	S1	OR
ACN 20 AOL 45	19	12	3/4"	M 30 x 2	16,4	104,1	26,6	36	20 x 2

DN = Nominal diameter, nominal width

**ACN AJ 90****AC clip nipples, SAE sealing head, angle 90°**

**Application:** nipple for air conditioning hoses, clip system  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 45° inner cone  
**Design:** 45° SAE connection  
**Construction:** Angle 90°  
**Material:** Steel  
**Surface:** electro galvanised



1

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L2 mm	S1
ACN 04 AJ 90	5	3	3/16"	7/16"-20 UNF	3,1	37,3	19,1	14

DN = Nominal diameter, nominal width

**ACN AJ 45****AC clip nipples, SAE sealing head, angle 45°**

**Application:** nipple for air conditioning hoses, clip system  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 45° inner cone  
**Design:** 45° SAE connection  
**Construction:** Angle 45°  
**Material:** Steel  
**Surface:** electro galvanised

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	L2 mm	S1
ACN 04 AJ 45	5	3	3/16"	7/16"-20 UNF	3,1	46,9	11,8	14

DN = Nominal diameter, nominal width



**ACN AJ****AC clip nipples, SAE sealing head**

**Application:** nipple for air conditioning hoses, clip system  
**Connection 1:** UN/UNF nut threads  
**Sealing form 1:** 45° inner cone  
**Design:** 45° SAE connection  
**Construction:** straight  
**Material:** Steel  
**Surface:** electro galvanised



1

Identification	DN*	Size	Inches	G1	Ø d2 mm	L1 mm	S1
ACN 04 AJ	5	3	3/16"	7/16"-20 UNF	3,1	34	14

DN = Nominal diameter, nominal width

**ACN VB BH****AC clip nipples, straight connectors with valve (high side)**

**Application:** nipple for air conditioning hoses, clip system  
**Connection 1 + 3:** Hose connection  
**Connection 2:** Filling valve  
**Construction:** straight  
**Material:** Steel  
**Surface:** electro galvanised

Identification	DN*	Size	Inches	Ø d3 mm	L1 mm	L2 mm
ACN 08 VB BH	8	5	5/16"	5,5	124,9	38,7
ACN 10 VB BH	10	6	3/8"	8,0	125,8	39,2

DN = Nominal diameter, nominal width

**ACN VB BN****AC clip nipples, straight connectors with valve (low side)**

**Application:** nipple for air conditioning hoses, clip system  
**Connection 1 + 3:** Hose connection  
**Connection 2:** Filling valve  
**Construction:** straight  
**Material:** Steel  
**Surface:** electro galvanised



1

Identification	DN*	Size	Inches	Ø d3 mm	L1 mm	L2 mm
ACN 13 VB BN	12	8	1/2"	9,5	126,1	39,4
ACN 16 VB BN	16	10	5/8"	11,9	125,5	40,1

DN = Nominal diameter, nominal width

**ACN VB****AC clip nipples, straight connector**

**Application:** nipple for air conditioning hoses, clip system  
**Connection 2:** Hose connection  
**Construction:** straight  
**Material:** Steel  
**Surface:** electro galvanised

1

Identification	DN*	Size	Inches	Ø d3 mm	L1 mm	L2 mm
ACN 08 VB	8	5	5/16"	5,5	124,9	38,7
ACN 10 VB	10	6	3/8"	8,0	125,8	39,2
ACN 13 VB	12	8	1/2"	9,5	126,1	39,4
ACN 16 VB	16	10	5/8"	11,9	125,5	40,1

DN = Nominal diameter, nominal width

**AC BUEGEL**

## Clip for AC clip nipple

**Application:** Coolant (air conditioning technology)  
**Design:** AC clip system  
**Material:** Stainless steel



1

Identification	DN*	Size	Inches	L1 mm
AC BUEGEL 04	5	3	3/16"	20,4
AC BUEGEL 08	8	5	5/16"	40,4
AC BUEGEL 10	10	6	3/8"	40,4
AC BUEGEL 13	12	8	1/2"	40,4
AC BUEGEL 16	16	10	5/8"	40,4
AC BUEGEL 20	19	12	3/4"	40,4

DN = Nominal diameter, nominal width

**AC SCHELLE****Clamps for AC clip nipple**

**Application:** Coolant (air conditioning technology)  
**Design:** AC clip system  
**Material:** Stainless steel

1

Identification	DN*	Size	Inches	D mm
AC SCHELLE 04	5	3	3/16"	14,0
AC SCHELLE 08	8	5	5/16"	18,0
AC SCHELLE 10	10	6	3/8"	20,5
AC SCHELLE 13	12	8	1/2"	23,0
AC SCHELLE 16	16	10	5/8"	27,5
AC SCHELLE 20	19	12	3/4"	33,0

DN = Nominal diameter, nominal width

**MDH 100 AC****Screw ferrule for air conditioning hoses**

**Application:** Coolant (air conditioning technology)  
**Material:** Steel  
**Surface:** electro galvanised



1

Identification	DN*	Size	Inches
MDH 120 AC	19	12	3/4"
MDH 125 AC	25	16	1"
MDH 132 AC	31	20	1.1/4"

DN = Nominal diameter, nominal width    SW = Width across flats

**MDN AOL 90 AC****Screw nipple, DKOL for air conditioning hose, angle 90°**

**Application:** Screw ferrule for air conditioning hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Construction:** Angle 90°  
**Material:** Steel  
**Surface:** electro galvanised

Identification	DN*	Size	Inches	Ø d2 mm	G1	L1 mm	L2 mm	SW mm	S1	OR
MDN 20 AOL 90 AC	19	12	3/4"	20,5	M 30 x 2	89,5	55,0	30	36	20.0 x 2.0
MDN 25 AOL 90 AC	25	16	1"	26,5	M 36 x 2	97,0	64,5	36	41	26.0 x 2.0
MDN 32 AOL 90 AC	31	20	1.1/4"	32,5	M 45 x 2	107,5	76,0	46	50	32.0 x 2.5

SW = Width across flats    DN = Nominal diameter, nominal width



**MDN AOL 45 AC****Screw nipple, DKOL for air conditioning hose, angle 45°**

**Application:** Screw ferrule for air conditioning hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Construction:** Angle 45°  
**Material:** Steel  
**Surface:** electro galvanised



1

Identification	DN*	Size	Inches	Ø d2 mm	G1	L1 mm	L2 mm	SW mm	S1	OR
MDN 20 AOL 45 AC	19	12	3/4"	20,5	M 30 x 2	98,4	26,5	30	36	20.0 x 2.0
MDN 25 AOL 45 AC	25	16	1"	26,5	M 36 x 2	110,3	29,8	36	41	26.0 x 2.0
MDN 32 AOL 45 AC	31	20	1.1/4"	32,5	M 45 x 2	110,5	32,5	46	50	32.0 x 2.5

SW = Width across flats    DN = Nominal diameter, nominal width

**MDN AOL AC****Screw nipple, DKOL for air conditioning hose**

**Application:** Screw ferrule for air conditioning hoses  
**Connection 1:** metric nut thread  
**Sealing form 1:** 24° outer cone with O-ring  
**Construction:** straight  
**Material:** Steel  
**Surface:** electro galvanised

Identification	DN*	Size	Inches	Ø d2 mm	G1	L1 mm	SW mm	S1	OR
MDN 20 AOL AC	19	12	3/4"	20,5	M 30 x 2	69,5	36	36	20.0 x 2.0
MDN 25 AOL AC	25	16	1"	26,5	M 36 x 2	74,9	41	41	26.0 x 2.0
MDN 32 AOL AC	31	20	1.1/4"	32,5	M 45 x 2	77,3	50	50	32.0 x 2.5

SW = Width across flats    DN = Nominal diameter, nominal width

**MDN BOCK 90****Screw nipple, block connection for air conditioning hose, angle 90°**

**Application:** Screw ferrule for air conditioning hoses  
**Connection 1:** Block connection  
**Construction:** Angle 90°  
**Material:** Steel  
**Surface:** electro galvanised



1

Identification	DN*	Size	Inches	Ø d2 mm	L1 mm	L2 mm	SW mm
MDN 20 BOCK 90	19	12	3/4"	20,5	81,0	76,5	30
MDN 25 BOCK 90	25	16	1"	26,5	97,0	86,5	36
MDN 32 BOCK 90	31	20	1.1/4"	32,5	108,5	90,5	46
SW = Width across flats    DN = Nominal diameter, nominal width							

**MDN BOCK 45****Screw nipple, block connection for air conditioning hose, angle 45°**

**Application:** Screw ferrule for air conditioning hoses  
**Connection 1:** Block connection  
**Construction:** Angle 45°  
**Material:** Steel  
**Surface:** electro galvanized

1

Identification	DN*	Size	Inches	Ø d2 mm	L1 mm	L2 mm	SW mm
MDN 20 BOCK 45	19	12	3/4"	20,5	114,3	46,0	30
MDN 25 BOCK 45	25	16	1"	26,5	123,2	45,7	36
MDN 32 BOCK 45	31	20	1.1/4"	32,5	133,7	38,0	46

SW = Width across flats    DN = Nominal diameter, nominal width

**MDN BOCK****Screw nipple, block connection for air conditioning hose**

**Application:** Screw ferrule for air conditioning hoses  
**Connection 1:** Block connection  
**Construction:** straight  
**Material:** Steel  
**Surface:** electro galvanised



1

Identification	DN*	Size	Inches	Ø d2 mm	L1 mm	SW mm
MDN 20 BOCK	19	12	3/4"	20,5	95,5	30
MDN 25 BOCK	25	16	1"	26,5	102,5	36
MDN 32 BOCK	31	20	1.1/4"	32,5	95,0	46

SW = Width across flats    DN = Nominal diameter, nominal width

**G TUBO****Connector adapter, TUBO**

**Connection 1:** UNEF external thread  
**Connection 2:** UN/UNF external threads  
**Design:** 45° SAE external thread, outer cone long pilot for 5400 coupling  
**Construction:** straight  
**Material:** Steel  
**Surface:** electro galvanised

1

Identification	G1	G2	L1 mm	SW mm
G 08 TUBO 7/8-20	7/8"-20 UNEF	5/8"-18 UNF	26,7	27
G 10 TUBO 7/8-20	7/8"-20 UNEF	3/4"-16 UNF	28,7	27
G 13 TUBO 1 1/4-18	1.1/4"-18 UNFE	7/8"-14 UNF	34,3	36
G 16 TUBO 1 1/4-18	1.1/4"-18 UNFE	1.1/16" -14 UNS	35,6	36

SW = Width across flats

**ADAPTER M****Adapter for air conditioning system**

**Connection 1:** metric cylindrical inner thread  
**Construction:** straight  
**Material:** Brass



1

Identification	G1	L1 mm	SW mm	Design
ADAPTER M13X1	M 13 x 1	15,8	17	Low side
ADAPTER M15X1	M 15 x 1	15,8	19	High side

SW = Width across flats

**VZ M**

## Valve mounting



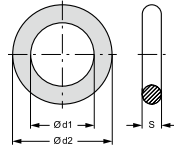
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** O-ring sealed  
**Construction:** straight  
**Material:** Steel

1

Identification	G1	SW mm	Design
VZ M 13X1	M 13 x 1	15	Low side
VZ M 15X1	M 15 x 1	17	High side

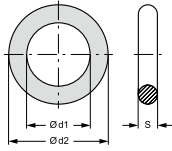
SW = Width across flats



**AC OR****O-ring for AC clip nipple****Design:** Sealing ring for AC clip nipple

1

Identification	for hose DN	Ø d1 mm	Ø d2 mm	S mm
AC OR 05	05	3,5	5,5	1,0
AC OR 08	08	5,5	7,5	1,0
AC OR 10	10	8,0	10,0	1,0
AC OR 13	12	9,5	12,5	1,5
AC OR 16	16	12,0	16,0	2,0
AC OR 20	19	15,5	19,5	2,0

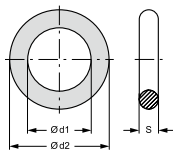
**AC OR AOL****O-ring for DKOL air conditioning**

Temp. min.: -40 °C  
 Temp. max.: 125 °C  
 Material: NBR

Identification	for hose DN	$\varnothing d1$ mm	$\varnothing d2$ mm	S mm
AC OR AOL 20	19	20	24	2,0
AC OR AOL 25	25	26	30	2,0
AC OR AOL 32	31	32	37	2,5

**AC OR TUBO GR****O-ring, TUBO air conditioning**

**Design:** Sealing ring  
**suitable for:** for following coolants, R134a, R404a  
**Temp. min.:** -40 °C  
**Temp. max.:** 150 °C  
**Material:** Chloroprene (neoprene)



1

Identification	Ø d1 mm	Ø d2 mm	S mm
AC OR TUBO 08 GR	7,6	11,16	1,78
AC OR TUBO 10 GR	10,8	14,36	1,78
AC OR TUBO 13 GR	14,0	17,56	1,78
AC OR TUBO 16 GR	17,2	20,76	1,78

**Accessory for following products:**

- ACN AO - AC clip nipples, pipe connection
- ACN AO 45 - AC clip nipples, pipe connection, angle 45°
- ACN AO 45 BN - AC clip nipples, pipe connection with LP filling valve, angle 45°
- ACN AO 90 - AC clip nipples, pipe connection, angle 90°
- ACN AO 90 BHL - AC clip nipples, pipe connection with HP filling valve, angle 90°
- ACN AO 90 BNL - AC clip nipples, pipe connection with LP filling valve, angle 90°
- ACN AO BH - AC clip nipples, pipe connection with high-pressure filling valve
- ACN AO BN - AC clip nipples, pipe connection with high-pressure filling valve
- ACN DF - AC clip nipples for DENSO compressor flange
- ACN DF 90 - AC clip nipples for DENSO compressor flange, angle 90°
- ACN FO - AC clip nipples, for flange mounting
- ACN FO 45 - AC clip nipples, for flange mounting, angle 45°
- ACN FO 90 - AC clip nipples, for flange mounting, angle 90°
- ACN FO MF - AC clip nipples, pipe connection with flange
- ACN FO MF 45 - AC clip nipples, pipe connection with flange, angle 45°
- ACN FO MF 90 - AC clip nipples, pipe connection with flange, angle 90°

## AC ZANGE

### Pliers for AC clip



**Application:** Pliers for air-conditioning hose clip system

1

Identification	for hose DN
AC ZANGE	05 - 16
AC ZANGE	05 - 16
AC ZANGE 16	19
AC ZANGE 16	19

## OEL PAG46

### Fitting oil

**Application:** Assembly oil for air conditioning hoses



1

#### Identification

OEL PAG 46

## AC GLASFASER

### Protective hose against radiation heat



**Application:** thermal protection for air conditioning and hydraulic hose lines  
**Colour:** silver  
**Temp. min.:** -50 °C  
**Temp. max.:** 220 °C

1

Identification	Internal Ø mm	Wall thickness mm
AC GLASFASER 22	22	0,65
AC GLASFASER 32	32	0,65

## AC AF 2

## Condensation protection

**Application:**

Coolant (air conditioning technology)  
black

**Colour:****Description:**

ACAF2 provides reliable condensation protection with long-term effects. This is achieved with the unique combination of a particularly low heat conductivity with a high resistance to water vapour diffusion. Your additional benefits: a longer service life and higher energy efficiency of the insulated system resulting in additional energy cost savings during operation. In addition, the unique micro cell structure of ACAF2 provides added stability and easier processing.



1

Identification	Internal Ø min. mm	Internal Ø max. mm	Wall thickness mm
AC AF 2-012	13,0	14,5	11,00
AC AF 2-015	16,0	17,5	11,50
AC AF 2-018	19,0	20,5	11,50
AC AF 2-022	23,0	24,5	12,00
AC AF 2-025	26,0	27,5	12,50
AC AF 2-030	31,0	33,0	12,50
AC AF 2-042	43,5	45,5	13,50
AC AF 2-045	46,0	47,5	13,50

**AC AF 2 E****Condensation protection****Application:**Coolant (air conditioning technology)  
black**Colour:****Description:**

ACAF2 provides reliable condensation protection with long-term effects. This is achieved with the unique combination of a particularly low heat conductivity with a high resistance to water vapour diffusion. Your additional benefits: a longer service life and higher energy efficiency of the insulated system resulting in additional energy cost savings during operation. In addition, the unique micro cell structure of ACAF2 provides added stability and easier processing.

Identification	Internal Ø min. mm	Internal Ø max. mm	Wall thickness mm
AC AF 2-015 E	16,0	17,5	11,50
AC AF 2-018 E	19,0	20,5	11,50
AC AF 2-022 E	23,0	24,5	12,00



**ZURRGURT ROT****Red lashing strap**

<b>Application:</b>	Hose bundling
<b>Colour:</b>	red
<b>Additional feature:</b>	must not be used for lifting
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	100 °C
<b>Material:</b>	Polyester
<b>Description:</b>	One-part lashing strap with clamp lock to bundle multiple hose lines. Easy handling, low weight, resistant. Permissible effective load 200 daN in ger. Zug.



1

Identification	Band width mm	Length mm
ZURRGURT 800 ROT	25	800

## TECALANSCHERE

### Cutter for plastic pipes



**suitable for:**

Plastic pipes and hoses

**Material:**

Steel

1

#### Identification

TECALAN SCHERE

#### for external pipe Ø mm

4 - 28

#### Spare parts:

ERSATZKLINGE TS - Spare blade for Tecalan cutter

## ERSATZKLINGE TS

Spare blade for Tecalan cutter

**Material:** Steel



1

### Identification

ERSATZKLINGE

### Spare part for following products:

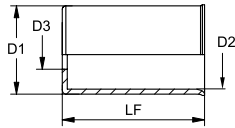
TECALANSCHERE - Cutter for plastic pipes



## Hose fittings

**Industry hose fittings**

For SI hoses	148
For TR hoses	168
For duct hoses	174
For steam hoses	177
For concrete hoses	179
Kamlock connections	188
Sandblasting connections	198
Perrot couplings	202
For POLY hoses	217
For tanker hoses	218
Clamp ring fittings	227
Individual parts	229

**SIH 100 - SIH 700****Swage ferrule for SI + textile hose****Ferrule type:****Material:****Surface:**

Non-skive ferrule

Steel

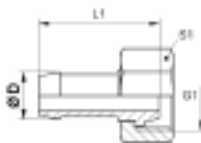
electro galvanised

Identification	DN*	Size	Inches	D1 mm	D2 mm	D3 mm	LF mm
SIH 103	3	2	-	11,3	10,0	6,5	17
SIH 104	4	3	3/16"	13,2	12,0	7,5	20
SIH 106	6	4	1/4"	14,8	13,5	10,0	20
SIH 108	8	5	5/16"	17,0	16,0	11,7	20
SIH 110	10	6	3/8"	20,6	19,0	13,8	26
SIH 113	12	8	1/2"	26,5	24,5	17,0	33
SIH 116	16	10	5/8"	30,0	28,0	20,5	34
SIH 204	4	3	3/16"	13,2	12,0	7,5	17
SIH 206	6	4	1/4"	14,8	13,5	10,0	20
SIH 304	4	3	3/16"	14,6	13,5	7,5	20
SIH 306	6	4	1/4"	16,3	15,0	10,0	20
SIH 308	8	5	5/16"	18,5	17,0	11,7	21
SIH 310	10	6	3/8"	23,9	22,0	15,6	32
SIH 404	4	3	3/16"	14,6	13,5	7,5	20
SIH 408	8	5	5/16"	19,6	18,0	13,8	21
SIH 413	12	8	1/2"	28,3	26,5	19,5	33
SIH 504	4	3	3/16"	10,3	10,3	5,5	17
SIH 510	10	6	3/8"	16,1	15,0	11,7	20
SIH 513	12	8	1/2"	19,6	18,0	13,8	21
SIH 605	4	3	3/16"	12,1	11,0	6,5	17
SIH 606	6	4	1/4"	14,6	13,5	7,5	20
SIH 706	6	4	1/4"	16,4	15,0	7,5	20
SIH 713	12	8	1/2"	25,0	23,0	17,0	32

DN = Nominal diameter, nominal width

**SIN AFL****Swage nipple, DKL**

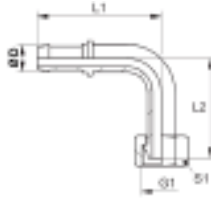
**Connection 1:** metric nut thread  
**Sealing form 1:** 24°/60° Universal sealing head  
**Short code:** DKL  
**Standard:** similar to DIN 3863  
**Material:** Steel  
**Surface:** electro galvanised



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

Identification	DN	Size	Inches	Ø D mm	G1	L1 mm	S1
SIN 03 AFL 02	3	2	1/8"	5,0	M 10 x 1	27	12
SIN 04 AFL	4	3	3/16"	6,0	M 12 x 1.5	30	14
SIN 04 AFL 06	4	3	3/16"	6,0	M 14 x 1.5	31	17
SIN 04 AFL 08	4	3	3/16"	6,0	M 16 x 1.5	31	19
SIN 06 AFL	6	4	1/4"	8,0	M 14 x 1.5	32	17
SIN 06 AFL 08	6	4	1/4"	8,0	M 16 x 1.5	33	19
SIN 08 AFL	8	5	5/16"	10,0	M 16 x 1.5	33	19
SIN 08 AFL 10	8	5	5/16"	10,0	M 18 x 1.5	33	22
SIN 10 AFL	10	6	3/8"	12,0	M 18 x 1.5	35	22
SIN 13 AFL	12	8	1/2"	15,0	M 22 x 1.5	43	27
SIN 13 AFL 16	12	8	1/2"	15,0	M 26 x 1.5	41	32
SIN 16 AFL	16	10	5/8"	18,0	M 26 x 1.5	42	32

2

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

**Connection 1:** metric nut thread  
**Sealing form 1:** 24°/60° Universal sealing head  
**Short code:** DKL  
**Standard:** similar to DIN 3863  
**Material:** Steel  
**Surface:** electro galvanised

2

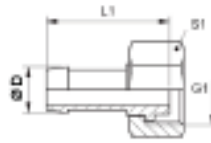
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Ø D mm	G1	L1 mm	L2 mm	S1
SIN 03 AFL 02 90	3	2	1/8"	5,0	M 10 x 1	37	27	12
SIN 04 AFL 90	4	3	3/16"	6,0	M 12 x 1.5	51	31	14
SIN 06 AFL 90	6	4	1/4"	8,0	M 14 x 1.5	52	38	17
SIN 08 AFL 90	8	5	5/16"	10,0	M 16 x 1.5	58	45	19
SIN 10 AFL 90	10	6	3/8"	12,0	M 18 x 1.5	66	49	22
SIN 13 AFL 90	12	8	1/2"	15,0	M 22 x 1.5	79	62	27



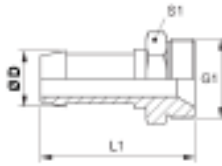
**SIN AM****Swage nipple, DKM-Flat**

**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	Ø D mm	G1	S1
SIN 03 AM 02	3	2	1/8"	5,0	M 10 x 1	12
SIN 04 AM	4	3	3/16"	6,0	M 12 x 1.5	14
SIN 06 AM	6	4	1/4"	8,0	M 14 x 1.5	17
SIN 08 AM	8	5	5/16"	10,0	M 16 x 1.5	19
SIN 10 AM	10	6	3/8"	12,0	M 18 x 1.5	22
SIN 13 AM	12	8	1/2"	15,0	M 22 x 1.5	27
SIN 13 AM 16	12	8	1/2"	15,0	M 26 x 1.5	32
SIN 16 AM	16	10	5/8"	18,0	M 26 x 1.5	32

**SIN H****Swage nipple, AGM**

**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 60° inner cone  
**Short code:** AGM  
**Material:** Steel  
**Surface:** electro galvanised

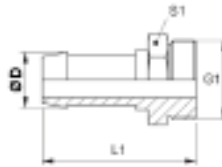
2

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

Identification	DN	Size	Inches	Ø D mm	G1
SIN 03 H 02	3	2	1/8"	5,0	M 10 x 1
SIN 04 H	4	3	3/16"	6,0	M 12 x 1.5
SIN 06 H	6	4	1/4"	8,0	M 14 x 1.5
SIN 08 H	8	5	5/16"	10,0	M 16 x 1.5
SIN 10 H	10	6	3/8"	12,0	M 18 x 1.5
SIN 13 H	12	8	1/2"	15,0	M 22 x 1.5
SIN 13 H 16	12	8	1/2"	15,0	M 26 x 1.5
SIN 16 H	16	10	5/8"	18,0	M 26 x 1.5

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

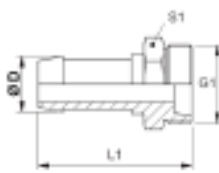
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** flat sealing  
**Short code:** AGM  
**Standard:** DIN 3852, ISO 724  
**Material:** Steel  
**Surface:** electro galvanised



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

Identification	DN	Size	Inches	Ø D mm	G1
SIN 13 HM	12	8	1/2"	15,0	M 22 x 1.5
SIN 13 HM 16	12	8	1/2"	15,0	M 26 x 1.5
SIN 16 HM	16	10	5/8"	18,0	M 26 x 1.5

2

**SIN HL****Swage nipple, CEL**

**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Short code:** CEL  
**Standard:** DIN 3861, DIN ISO 12151-2  
**Material:** Steel  
**Surface:** electro galvanised

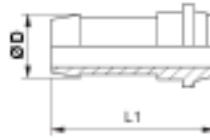
2

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

Identification	DN	Size	Inches	Ø D mm	G1	for external pipe Ø mm
SIN 03 HL	3	2	1/8"	5,0	M 10 x 1	5
SIN 04 HL	4	3	3/16"	6,0	M 12 x 1.5	6
SIN 06 HL	6	4	1/4"	8,0	M 14 x 1.5	8
SIN 08 HL	8	5	5/16"	10,0	M 16 x 1.5	10
SIN 10 HL	10	6	3/8"	12,0	M 18 x 1.5	12
SIN 13 HL	12	8	1/2"	15,0	M 22 x 1.5	15
SIN 13 HL 16	12	8	1/2"	15,0	M 26 x 1.5	18
SIN 16 HL	16	10	5/8"	18,0	M 26 x 1.5	18

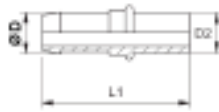
**SIN DK****Swage nipple, DK**

**Sealing form 1:** 24°/60° outer cone  
**Standard:** similar to DIN 3863  
**Included in scope of supply:** Nipple without union nut  
**Material:** Steel  
**Surface:** electro galvanised



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

Identification	DN	Size	Inches	Ø D mm	for metric union nut	for BSP union nut
SIN 03 DK	3	2	1/8"	5,0	SUEM02L	SUEM03R04
SIN 04 DK	4	3	3/16"	6,0	SUEM04L	SUEM04R06
SIN 04 DK 06	4	3	3/16"	6,0	SUEM06L	-
SIN 04 DK 08	4	3	3/16"	6,0	SUEM08L	-
SIN 06 DK	6	4	1/4"	8,0	SUEM06L	SUEM06R
SIN 06 DK 08	6	4	1/4"	8,0	SUEM08L	-
SIN 08 DK	8	5	5/16"	10,0	SUEM08L	SUEM08R10
SIN 08 DK 10	8	5	5/16"	10,0	SUEM10L	-
SIN 10 DK	10	6	3/8"	12,0	SUEM10L	-
SIN 13 DK	12	8	1/2"	15,0	SUEM13L	-
SIN 13 DK 16	12	8	1/2"	15,0	SUEM16L	-
SIN 16 DK	16	10	5/8"	18,0	SUEM16L	-

**SIN FL****Swage nipple, BEL**

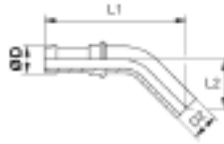
**Connection 1:** Pipe sockets  
**Sealing form 1:** Cutting ring connection  
**Short code:** BEL  
**Standard:** ISO 8434-1  
**Material:** Steel  
**Surface:** electro galvanised

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

Identification	DN	Size	Inches	Ø D mm	Ø d2 mm	L1 mm
SIN 03 FL 02	3	2	1/8"		4	54
SIN 04 FL 03	4	3	3/16"	6,0	5	48
SIN 04 FL	4	3	3/16"	6,0	6	54
SIN 06 FL	6	4	1/4"	8,0	8	51
SIN 08 FL	8	5	5/16"	10,0	10	51
SIN 10 FL	10	6	3/8"	12,0	12	57
SIN 13 FL	12	8	1/2"	15,0	15	61
SIN 16 FL	16	10	5/8"	18,0	18	76

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

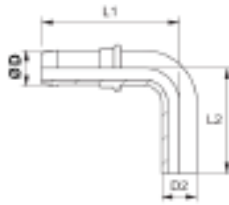
**Connection 1:** Pipe sockets  
**Sealing form 1:** Cutting ring connection  
**Short code:** BEL  
**Standard:** ISO 8434-1  
**Material:** Steel  
**Surface:** electro galvanised



**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.

Identification	DN	Size	Inches	Ø D mm	Ø d2 mm	L1 mm	L2 mm
SIN 04 FL 45	4	3	3/16"	6,0	6	53	15
SIN 06 FL 45	6	4	1/4"	8,0	8	62	23
SIN 08 FL 45	8	5	5/16"	10,0	10	79	25
SIN 10 FL 45	10	6	3/8"	12,0	12	88	32
SIN 13 FL 45	12	8	1/2"	15,0	15		

2

**SIN FL 90****Swage 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

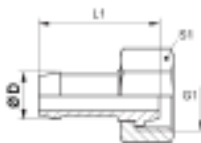
**Note:** Do not use for new designs; we recommend: SIN...AFL...90. Choose the appropriate ferrule based on the hose type. Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...).

Identification	DN	Size	Inches	Ø D mm	Ø d2 mm	L1 mm	L2 mm
SIN 04 FL 90	4	3	3/16"	6,0	6	46	30
SIN 06 FL 90	6	4	1/4"	8,0	8	52	34
SIN 08 FL 90	8	5	5/16"	10,0	10	58	40
SIN 10 FL 90	10	6	3/8"	12,0	12	66	46
SIN 13 FL 90	12	8	1/2"	15,0	15	79	57
SIN 16 FL 90	16	10	5/8"	18,0	18	94	64



**SIN AB****Swage nipple, DKR**

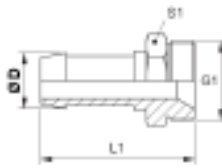
**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone  
**Short code:** DKR  
**Standard:** ISO 228-1, ISO 8434-6, BS 5200  
**Material:** Steel  
**Surface:** electro galvanised



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

Identification	DN	Size	Inches	Ø D mm	G1
SIN 04 AB	4	3	3/16"	6,0	G 1/8" -28
SIN 04 AB 06	4	3	3/16"	6,0	G 1/4" -19
SIN 06 AB	6	4	1/4"	8,0	G 1/4" -19
SIN 08 AB 10	8	5	5/16"	10,0	G 3/8" -19
SIN 10 AB 13	10	6	3/8"	12,0	G 1/2" -14

2

**SIN HB****Swage nipple, AGR**

**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Short code:** AGR  
**Standard:** ISO 228-1, ISO 8434-6, BS 5200  
**Material:** Brass

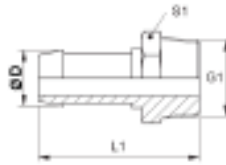
2

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

Identification	DN	Size	Inches	Ø D mm	G1
SIN 03 HB 04	3	2	1/8"	5,0	G 1/8" -28
SIN 04 HB 06	4	3	3/16"	6,0	G 1/4" -19
SIN 06 HB	6	4	1/4"	8,0	G 1/4" -19
SIN 06 HB 10	6	4	1/4"	8,0	G 3/8" -19
SIN 08 HB 10	8	5	5/16"	10,0	G 3/8" -19
SIN 10 HB 13	10	6	3/8"	12,0	G 1/2" -14
SIN 13 HB	12	8	1/2"	15,0	G 1/2" -14

**SIN HN****Swage nipple, AGN**

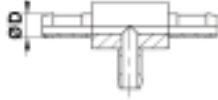
**Connection 1:** NPT external threads  
**Sealing form 1:** thread seal  
**Short code:** AGN  
**Standard:** SAE J516, SAE J514  
**Material:** Steel  
**Surface:** electro galvanised



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

Identification	DN	Size	Inches	Ø D mm	G1
SIN 03 HN 04	3	2	1/8"	5,0	1/8" -27 NPT
SIN 04 HN	4	3	3/16"	6,0	1/8" -27 NPT
SIN 04 HN 06	4	3	3/16"	6,0	1/4" -18 NPT
SIN 06 HN	6	4	1/4"	8,0	1/4" -18 NPT
SIN 08 HN 10	8	5	5/16"	10,0	3/8" -18 NPT

2

**SIN T VB****Swage nipple, VB, T shaped**

**Connection 1 - 3:** Hose connection  
**Material:** Steel  
**Surface:** electro galvanised

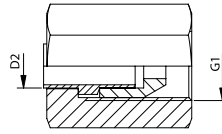
2

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

Identification	DN	Size	Inches	Ø D mm
SIN 03 T VB	3	2	1/8"	5,0
SIN 04 T VB	4	3	3/16"	6,0
SIN 06 T VB	6	4	1/4"	8,0
SIN 08 T VB	8	5	5/16"	10,0
SIN 10 T VB	10	6	3/8"	12,0

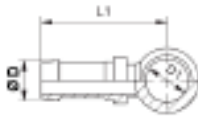
**SIN DES****Swage nipple, DES**

**Connection 1:** metric cylindrical inner thread  
**suitable for:** Diesel quick connector  
**Material:** Steel  
**Surface:** electro galvanised



Identification	G1	for external pipe Ø mm
SIN 12 DES	M 12 x 1.5	6
SIN 14 DES	M 14 x 1.5	6

2

**SIN B****Swage nipple, RGN**

**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

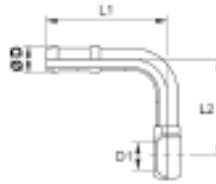
2

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

Identification	DN	Size	Inches	Ø D mm	D1 mm	for hollow screw
SIN 03 B 02	3	2	1/8"	5,0	8	M 8
SIN 04 B	4	3	3/16"	6,0	10	M 10
SIN 04 B 06	4	3	3/16"	6,0	12	M 12
SIN 04 B 08	4	3	3/16"	6,0	14	M 14
SIN 06 B 04	6	4	1/4"	8,0	10	M 10
SIN 06 B	6	4	1/4"	8,0	12	M 12
SIN 06 B 08	6	4	1/4"	8,0	14	M 14
SIN 08 B 06	8	5	5/16"	10,0	12	M 12
SIN 08 B	8	5	5/16"	10,0	14	M 14
SIN 08 B 10	8	5	5/16"	10,0	16	M 16
SIN 08 B 13	8	5	5/16"	10,0	18	M 18
SIN 10 B	10	6	3/8"	12,0	16	M 16
SIN 10 B 13	10	6	3/8"	12,0	18	M 18
SIN 13 B	12	8	1/2"	15,0	18	M 18
SIN 13 B 16	12	8	1/2"	15,0	22	M 22
SIN 13 B 20	12	8	1/2"	15,0	26	M 26
SIN 16 B	16	10	5/8"	18,0	22	M 22
SIN 16 B 20	16	10	5/8"	18,0	26	M 26

**SIN B 90****Swage nipple, RGN angle 90°**

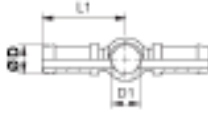
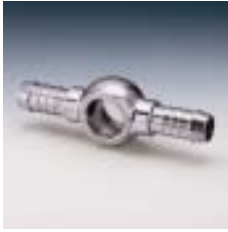
**Connection 1:** Banjo for metric hollow screw  
**Sealing form 1:** Sealed by copper ring  
**Short code:** RGN  
**Standard:** DIN 7642  
**Material:** Steel  
**Surface:** electro galvanised



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

Identification	DN	Size	Inches	Ø D mm	D1 mm	for hollow screw	L1 mm	L2 mm
SIN 03 B 02 90	3	2	1/4"	5,0	8	M 8	45	27
SIN 04 B 90	4	3	3/16"	6,0	10	M 10	45	45
SIN 06 B 90	6	4	1/4"	8,0	12	M 12	52	42
SIN 08 B 90	8	5	5/16"	10,0	14	M 14	58	54

2

**SIN BD****Swage nipple, RGN**

**Connection 1:** Banjo for metric hollow screw  
**Connection 2 + 3:** Hose connection  
**Sealing form 1:** Sealed by copper ring  
**Design:** Double hose connection  
**Short code:** RGN  
**Standard:** DIN 7642  
**Material:** Steel  
**Surface:** electro galvanised

2

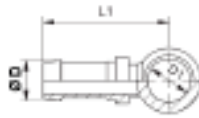
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Ø D mm	D1 mm	for hollow screw
SIN 03 BD 02	3	2	1/8"	5,0	8	M 8
SIN 04 BD	4	3	3/16"	6,0	10	M 10
SIN 06 BD	6	4	1/4"	8,0	12	M 12
SIN 08 BD	8	5	5/16"	10,0	14	M 14



**SIN BR****Swage nipple, RGN**

**Connection 1:** Banjo for imperial hollow screw  
**Sealing form 1:** Sealed by copper ring  
**Short code:** RNR  
**Standard:** DIN 7642  
**Material:** Steel  
**Surface:** electro galvanised



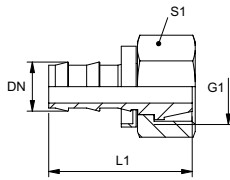
**Note:** Choose the appropriate ferrule based on the hose type.

Identification	DN	Size	Inches	Ø D mm	D1 mm	for hollow screw
SIN 04 BR 06	4	3	3/16"	6,0	13,5	R 1/4"
SIN 06 BR 10	6	4	1/4"	8,0	16,8	R 3/8"

2

## TRA

### Drive type nipple, DKM



**Connection 1:** metric nut thread  
**Sealing form 1:** 60° sealing head  
**Standard:** DIN 3863  
**Material:** Steel  
**Surface:** electro galvanised

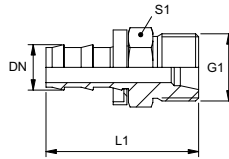
2

Identification	DN	Size	Inches	G1	L1 mm	S1
TR 04 A	5	3	3/16"	M 12 x 1.5	28	14
TR 06 A	6	4	1/4"	M 14 x 1.5	28	17
TR 06 A 08	6	4	1/4"	M 16 x 1.5	28	19
TR 08 A 06	8	5	5/16"	M 14 x 1.5	34	19
TR 08 A	8	5	5/16"	M 16 x 1.5	34	19
TR 10 A 08	10	6	3/8"	M 16 x 1.5	34	19
TR 10 A	10	6	3/8"	M 18 x 1.5	34	22
TR 13 A	12	8	1/2"	M 22 x 1.5	45	27

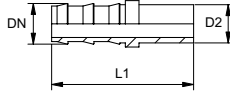
## TR HL

## Drive type nipple, CEL

**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 24° inner cone  
**Standard:** ISO 8434-1  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	for external pipe Ø mm	L1 mm
TR 04 HL	5	3	3/16"	M 12 x 1.5	6	30
TR 06 HL	6	4	1/4"	M 14 x 1.5	8	31
TR 08 HL 06	8	5	5/16"	M 14 x 1.5	8	38
TR 08 HL	8	5	5/16"	M 16 x 1.5	10	38
TR 10 HL 08	10	6	3/8"	M 16 x 1.5	10	38
TR 10 HL	10	6	3/8"	M 18 x 1.5	12	39
TR 13 HL	12	8	1/2"	M 22 x 1.5	15	52

**TR FL / TR FS****Drive type 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

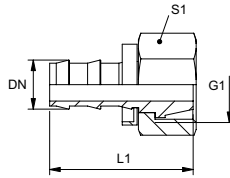
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**Note:** Final cutting ring assembly must be carried out in the hardened pre-assembly socket (VOM...).

Identification	DN	Size	Inches	Series	D2 mm	L1 mm
TR 04 FL	5	3	3/16"	L	6	36
TR 06 FL	6	4	1/4"	L	8	38
TR 08 FL 06	8	5	5/16"	L	8	45
TR 08 FL	8	5	5/16"	L	10	47
TR 10 FL 08	10	6	3/8"	L	10	48
TR 10 FL	10	6	3/8"	L	12	47
TR 13 FL	12	8	1/2"	L	15	57
TR 16 FL	16	10	5/8"	L	18	57
TR 06 FS	6	4	1/4"	S	10	41
TR 08 FS	8	5	5/16"	S	12	47

**TR AB****Drive type 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

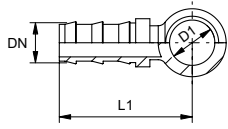


Identification	DN	Size	Inches	G1	L1 mm	S1
TR 04 AB 06	5	3	3/16"	G 1/4" -19	28	17
TR 10 AB	10	6	3/8"	G 3/8" -19	34	20
TR 10 AB 13	10	6	3/8"	G 1/2" -14		

2

## TR B

### Drive type nipple, RGN



**Connection 1:** Metric banjos  
**Sealing form 1:** Sealed by copper ring  
**Short code:** RGN  
**Standard:** DIN 7642  
**Material:** Steel  
**Surface:** electro galvanised

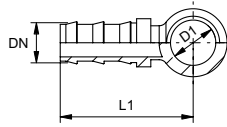
2

Identification	DN	Size	Inches	D1 mm	L1 mm
TR 04 B 02	5	3	3/16"	8	24
TR 04 B	5	3	3/16"	10	26
TR 06 B 04	6	4	1/4"	10	26
TR 06 B	6	4	1/4"	12	28
TR 06 B 08	6	4	1/4"	14	28
TR 06 B 10	6	4	1/4"	16	30
TR 08 B 06	8	5	5/16"	12	34
TR 08 B	8	5	5/16"	14	34
TR 08 B 10	8	5	5/16"	16	36
TR 10 B 08	10	6	3/8"	14	34
TR 10 B	10	6	3/8"	16	36

## TR BR

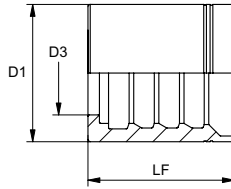
## Drive type nipple, RGN

**Connection 1:** imperial banjo  
**Standard:** DIN 7642  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	Size	Inches	D1 mm
TR 08 BR 10	8	5	5/16"	17

2

**PHD KANA****Pressed holder for channel rinsing hose****Ferrule type:**

Non-skive ferrule

**Material:**

Steel

**Surface:**

electro galvanised

Identification	DN*	Size	Inches	D1 mm	D3 mm	LF mm
PHD 13 KANA	13	8	1/2"	34,8	20,0	35,0
PHD 20 KANA	19	12	3/4"	41,1	26,5	46,5
PHD 25 KANA	25	16	1"	49,7	33,8	53,0
PHD 32 KANA	31	20	1.1/4"	59,5	41,8	63,0

DN = Nominal diameter, nominal width



**KANA AB****Screw fitting for drain cleaning hose**

**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° outer cone  
**Short code:** DKR  
**Included in scope of supply:** Screw nipple + screw mount  
**Material:** Steel  
**Surface:** electro galvanised  
**Standard:** ISO 228-1, ISO 8434-6, BS 5200



Identification	DN*	Size	Inches	G1
KANA 13 AB	12	8	1/2"	G 1/2" -14
KANA 20 AB	19	12	3/4"	G 3/4" -14
KANA 20 AB 25	19	12	3/4"	G 1" -11
KANA 25 AB	25	16	1"	G 1" -11

DN = Nominal diameter, nominal width

**KANA HB****Screw fitting for drain cleaning hose**

**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Short code:** AGR  
**Included in scope of supply:** Screw nipple + screw mount  
**Material:** Steel  
**Surface:** electro galvanised  
**Standard:** ISO 228-1, ISO 8434-6, BS 5200

2

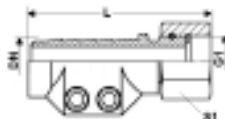
Identification	DN*	Size	Inches	G1
KANA 13 HB	12	8	1/2"	G 1/2" -14
KANA 20 HB	19	12	3/4"	G 3/4" -14
KANA 25 HB	25	16	1"	G 1" -11

DN = Nominal diameter, nominal width

**DAMPF AR****Steam fittings AR, with steel clamping shell**

**Application:** Hot water or saturated steam applications  
**Connection 1:** BSP nut thread  
**Sealing form 1:** flat sealing  
**Working pressure:** up to 18 bar  
**Short code:** DKR flat  
**Standard:** DIN EN 14423, thread standard ISO 228/DIN 2999

**Included in scope of supply:** with clamping shells and seal  
**Temp. range:** saturated steam up to +210 °C, hot water up to +120 °C  
**Material:** Steel, Pressed brass clamping shells  
**Surface:** electro galvanised



Identification	DN	Size	Inches	G1	L mm	Clamping range (mm)	S1 mm
DAMPF 13 AR	12	8	1/2"	G 1/2" -14	88,0	24 - 26	27
DAMPF 19 AR	19	12	3/4"	G 3/4" -14	92,0	32 - 34	32
DAMPF 25 AR	25	16	1"	G 1" -11	93,0	39 - 41	41
DAMPF 32 AR	31	20	1.1/4"	G 1.1/4" -11	97,5	47 - 50	50
DAMPF 38 AR	38	24	1.1/2"	G 1.1/2" -11	120,0	53 - 56	55
DAMPF 50 AR	51	32	2"	G 2" -11	131,0	67 - 69	70

DN = Nominal diameter, nominal width

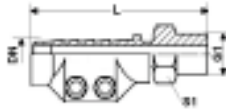
**Product versions:**

**DAMPF AR MG** - Steam fittings AR, with clamping brass shell, Brass

**DAMPF AR VA** - Steam fittings AR, with stainless steel clamping shell, Stainless steel

## DAMPF HR

### Steam fittings HR, with steel clamping shell



**Application:** Hot water or saturated steam applications

**Connection 1:** BSP external thread, cylindrical flat sealing

**Sealing form 1:**

**Working pressure:** up to 18 bar

**Short code:** AGR-Flat

**Standard:** DIN EN 14423, thread standard ISO 228/DIN 2999

**Included in scope of supply:**

**Temp. range:** with clamping shells saturated steam up to +210 °C, hot water up to +120 °C

**Material:** Steel, Pressed brass clamping shells

**Surface:** electro galvanised

Identification	DN	Size	Inches	G1	L mm	Clamping range (mm)	S1 mm
DAMPF 13 HR	12	8	1/2"	G 1/2" -14	95,0	24 - 26	22
DAMPF 19 HR	19	12	3/4"	G 3/4" -14	95,0	32 - 34	27
DAMPF 25 HR	25	16	1"	G 1" -11	100,0	39 - 41	36
DAMPF 32 HR	31	20	1.1/4"	G 1.1/4" -11	105,0	47 - 50	46
DAMPF 38 HR	38	24	1.1/2"	G 1.1/2" -11	125,0	53 - 56	50
DAMPF 50 HR	51	32	2"	G 2" -11	140,0	67 - 69	60

DN = Nominal diameter, nominal width

#### Product versions:

**DAMPF AR MG** - Steam fittings AR, with clamping brass shell, Brass

**DAMPF AR VA** - Steam fittings AR, with stainless steel clamping shell, Stainless steel

**MM TUELLE****Mortar coupling, female part with hose nozzle**

<b>Application:</b>	for mortar, concrete, screed supply on pumps, sprayers and plastering machines
<b>Connection 1:</b>	Hose connection
<b>Connection 2:</b>	Coupling female connection
<b>Special features:</b>	TÜV tested
<b>Media:</b>	Mortar, concrete, screed
<b>Material:</b>	Steel, Malleable cast iron
<b>Surface:</b>	electro galvanised



**Note:** Type size 25 has one lever, all other type sizes have 2 levers. Note: Parts must only be replaced with parts of the same type sizes!

Identification	for hose ID mm	Type size	Ident dimension	Max. working pressure bar	System
MM TUELLE 25	25,0	25	35,5	50	22 / 23,5
MM TUELLE-X25	25,0	X25	42,0	50	22 / 23,5
MM TUELLE 35	35,0	35	51,0	50	22
MM TUELLE 38	38,0	35	51,0	50	22
MM TUELLE 42	42,0	42	54,0	50	22 / 23,5
MM TUELLE 50	50,0	50	64,0	50	22
MM TUELLE 65	65,0	65	74,0	25	22 / 23,5

**Spare parts:**

**MDR** - Seal for mortar coupling

**MM AG****Mortar coupling, female part AGR**

<b>Application:</b>	for mortar, concrete, screed supply on pumps, sprayers and plastering machines
<b>Connection 1:</b>	BSP external thread, cylindrical
<b>Connection 2:</b>	Coupling female connection
<b>Special features:</b>	TÜV tested
<b>Media:</b>	Mortar, concrete, screed
<b>Material:</b>	Steel, Malleable cast iron
<b>Surface:</b>	electro galvanised

**Note:** Type size 25 has one lever, all other type sizes have 2 levers. Note: Parts must only be replaced with parts of the same type sizes!

Identification	G1	Type size	Ident dimension	Max. working pressure bar	System
MM AG 10/25	G 1" -11	25	35,5	50	22 / 23,5
MM AG 10-X25	G 1" -11	X25	42,0	50	22 / 23,5
MM AG 54/35	G 1.1/4" -11	35	51,0	50	22
MM AG 15/42	G 1.1/2" -11	42	54,0	50	22 / 23,5
MM AG 20/50	G 2" -11	50	64,0	50	22
MM AG 25/50	G 2.1/2" -11	50	64,0	50	22

**Spare parts:**

**MDR** - Seal for mortar coupling

**MM IG****Mortar coupling, female part IGR**

<b>Application:</b>	for mortar, concrete, screed supply on pumps, sprayers and plastering machines
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Connection 2:</b>	Coupling female connection
<b>Special features:</b>	TÜV tested
<b>Media:</b>	Mortar, concrete, screed
<b>Material:</b>	Steel, Malleable cast iron
<b>Surface:</b>	electro galvanised



**Note:** Type size 25 and MMIG10-MA have one lever, all other type sizes have 2 levers. Note: Parts must only be replaced with parts of the same type sizes!

Identification	G1	Type size	Ident dimension	Max. working pressure bar	System
MM IG 10/25	G 1" -11	25	35,5	50	22 / 23,5
MM IG 10-MA	G 1" -11		38,0	50	May
MM IG 10-X25	G 1" -11	X25	42,0	50	22 / 23,5
MM IG 10/35	G 1" -11	35	51,0	50	22
MM IG 54/35	G 1.1/4" -11	35	51,0	50	22
MM IG 15/35	G 1.1/2" -11	35	51,0	50	22
MM IG 15/42	G 1.1/2" -11	42	54,0	50	22 / 23,5
MM IG 20/50	G 2" -11	50	64,0	50	22
MM IG 25/65	G 2.1/2" -11	65	74,0	25	22 / 23,5

**Spare parts:**

**MDR** - Seal for mortar coupling

**MM V****Mortar coupling, female-male part reduction**

<b>Application:</b>	for mortar, concrete, screed supply on pumps, sprayers and plastering machines
<b>Connection 1:</b>	Coupling female connection
<b>Connection 2:</b>	Coupling male connection
<b>Special features:</b>	TÜV tested
<b>Media:</b>	Mortar, concrete, screed
<b>Material:</b>	Steel, Malleable cast iron
<b>Surface:</b>	electro galvanised

**Note:** Type size 25 has one lever, all other type sizes have 2 levers. Note: Parts must only be replaced with parts of the same type sizes!

Identification	Type size	Ident dimension	Max. working pressure bar	System
MM V-X25/25	X25 / 25	42,0 / 35,5	50	22 / 23,5
MM V 35/X25	35 / X25	51,0 / 42,0	50	22
MM V 42/35	42 / 35	54,0 / 35,0	50	22
MM V 50/35	50 / 35	64,0 / 51,0	50	22
MM V 50/42	50 / 42	64,0 / 42,0	50	22

**Spare parts:**

MDR - Seal for mortar coupling



**MV TUELLE****Mortar coupling, male part with hose nozzle**

<b>Application:</b>	for mortar, concrete, screed supply on pumps, sprayers and plastering machines
<b>Connection 1:</b>	Hose connection
<b>Connection 2:</b>	Coupling male connection
<b>Special features:</b>	TÜV tested
<b>Media:</b>	Mortar, concrete, screed
<b>Material:</b>	Steel, Malleable cast iron
<b>Surface:</b>	electro galvanised



**Note:** Type size 25 and MMIG10-MA have one lever, all other type sizes have 2 levers. Note: Parts must only be replaced with parts of the same type sizes!

Identification	for hose ID mm	Type size	Ident dimension	Max. working pressure bar	System
MV TUELLE 25	25	25	35,0	50	22 / 23,5
MV TUELLE-X25	25	X25	41,0	50	22 / 23,5
MV TUELLE 35	35	35	49,5	50	22
MV TUELLE 38	38	35	49,5	50	22
MV TUELLE 42	42	42	53,0	50	22 / 23,5
MV TUELLE 50	50	50	63,0	50	22
MV TUELLE 65	65	65	73,0	25	22 / 23,5

2

**MV AG****Mortar coupling, male part AGR**

<b>Application:</b>	for mortar, concrete, screed supply on pumps, sprayers and plastering machines
<b>Connection 1:</b>	BSP external thread, cylindrical
<b>Connection 2:</b>	Coupling male connection
<b>Special features:</b>	TÜV tested
<b>Media:</b>	Mortar, concrete, screed
<b>Material:</b>	Steel, Malleable cast iron
<b>Surface:</b>	electro galvanised

2

**Note:** Note: Parts must only be replaced with parts of the same type sizes!

Identification	G1	Type size	Ident dimension	Max. working pressure bar	System
MV AG 10/25	G 1" -11	25	35,0	50	22 / 23,5
MV AG 10-X25	G 1" -11	X25	41,0	50	22 / 23,5
MV AG 54/35	G 1.1/4" -11	35	49,5	50	22
MV AG 15/42	G 1.1/2" -11	42	53,0	50	22 / 23,5
MV AG 20/50	G 2" -11	50	63,0	50	22

**MV IG****Mortar coupling, male part IGR**

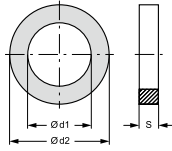
<b>Application:</b>	for mortar, concrete, screed supply on pumps, sprayers and plastering machines
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Connection 2:</b>	Coupling male connection
<b>Special features:</b>	TÜV tested
<b>Media:</b>	Mortar, concrete, screed
<b>Material:</b>	Steel, Malleable cast iron
<b>Surface:</b>	electro galvanised



**Note:** Type size 25 and MMIG10-MA have one lever, all other type sizes have 2 levers. Note: Parts must only be replaced with parts of the same type sizes!

Identification	G1	Type size	Ident dimension	Max. working pressure bar	System
MV IG 10/25	G 1" -11	25	35,0	50	22 / 23,5
MV IG 10-MA	G 1" -11		37,5	50	May
MV IG 10-X25	G 1" -11	X25	41,0	50	22 / 23,5
MV IG 10/35	G 1" -11	35	49,5	50	22
MV IG 54-X25	G 1.1/4" -11	X25	41,0	50	22 / 23,5
MV IG 54/35	G 1.1/4" -11	35	49,5	50	22
MV IG 54/50	G 1.1/4" -11	50	63,0	50	22
MV IG 15/35	G 1.1/2" -11	35	49,5	50	22
MV IG 15/42	G 1.1/2" -11	42	53,0	50	22 / 23,5
MV IG 15/50	G 1.1/2" -11	50	63,0	50	22
MV IG 20/35	G 2" -11	35	49,5	50	22
MV IG 20/50	G 2" -11	50	63,0	50	22
MV IG 25/50	G 2.1/2" -11	50	63,0	50	22
MV IG 25/65	G 2.1/2" -11	65	73,0	25	22 / 23,5

2

**MDR****Seal for mortar coupling****Material:**

Perbunan 55° Shore A

2

Identification	Type size	Ø d1 mm	Ø d2 mm	S mm
MDR 25	25	24,5	36,0	6,0
MDR -X25	X25	28,5	43,5	6,0
MDR 35	35	36,5	53,5	6,0
MDR 42	42	41,0	55,0	6,5
MDR 50	50	51,0	67,0	6,0
MDR 65	65	61,0	76,0	6,3

**Spare part for following products:****MM AG** - Mortar coupling, female part AGR**MM IG** - Mortar coupling, female part IGR**MM TUELLE** - Mortar coupling, female part with hose nozzle**MM V** - Mortar coupling, female-male part reduction

**BETON-VIC****Swage fitting Victaulic for concrete hose**

**Application:** for concrete transportation hoses  
**Connection 1:** flange for Victaulic coupling  
**Material:** Steel  
**Surface:** electro galvanised



Identification	DN	for hose ID mm
BETON-VIC-2	51	50,0
BETON-VIC-3	76	75,0
BETON-VIC-3.1/4	80	80,0
BETON-VIC-4	100	100,0
BETON-VIC-4.1/2	110	
BETON-VIC-5	127	125,0
BETON-VIC-5.1/2		140,0
BETON-VIC-6	150	150,0

DN = Nominal diameter, nominal width

2

**KML M AL****Kamlock coupling female part, aluminium nozzle**

**Connection 1:** Hose connection  
**Connection 2:** Coupling female connection  
**Sealing form 2:** BUNA N rubber sealing ring  
**Material:** Aluminium, Stainless steel 304 lever

2

Identification	DN	Size	Inches	for hose ID mm
KML M DN 20 AL	19	12	3/4"	20
KML M DN 25 AL	25	16	1"	25
KML M DN 32 AL	31	20	1.1/4"	32
KML M DN 38 AL	38	24	1.1/2"	38
KML M DN 51 AL	51	32	2"	51
KML M DN 63 AL	63	40	2.1/2"	63
KML M DN 76 AL	76	48	3"	76
KML M DN 102 AL	100	64	4"	102

**Product versions:**

**KML M VA** - Kamlock coupling female part, stainless steel nozzle, Stainless steel

**KML S AL****Kamlock coupling male part, aluminium nozzle**

**Connection 1:** Hose connection  
**Connection 2:** Coupling male connection  
**Material:** Aluminium



Identification	DN	Size	Inches	for hose ID mm
KML S DN 20 AL	19	12	3/4"	20
KML S DN 25 AL	25	16	1"	25
KML S DN 32 AL	31	20	1.1/4"	32
KML S DN 38 AL	38	24	1.1/2"	38
KML S DN 51 AL	51	32	2"	51
KML S DN 63 AL	63	40	2.1/2"	63
KML S DN 76 AL	76	48	3"	76
KML S DN 102 AL	100	64	4"	102

**Product versions:**

**KML S VA** - Kamlock coupling male part, stainless steel nozzle, Stainless steel

**KML M HR AL****Kamlock coupling female part, aluminium HR**

**Connection 1:** BSP external thread, cylindrical  
**Connection 2:** Coupling female connection  
**Sealing form 2:** BUNA N rubber sealing ring  
**Material:** Aluminium, Stainless steel 304 lever

2

Identification	G1
KML M HR 3/4 AL	G 3/4" -14
KML M HR 1 AL	G 1" -11
KML M HR 1.1/4 AL	G 1.1/4" -11
KML M HR 1.1/2 AL	G 1.1/2" -11
KML M HR 2 AL	G 2" -11
KML M HR 2.1/2 AL	G 2.1/2" -11
KML M HR 3 AL	G 3" -11
KML M HR 4 AL	G 4" -11

**Product versions:**

**KML M HR VA** - Kamlock coupling female part, stainless steel HR, Stainless steel



**KML S HR AL****Kamlock coupling male part, aluminium HR**

**Connection 1:** BSP external thread, cylindrical  
**Connection 2:** Coupling male connection  
**Material:** Aluminium



Identification	G1
KML S HR 3/4 AL	G 3/4" -14
KML S HR 1 AL	G 1" -11
KML S HR 1.1/4 AL	G 1.1/4" -11
KML S HR 1.1/2 AL	G 1.1/2" -11
KML S HR 2 AL	G 2" -11
KML S HR 2.1/2 AL	G 2.1/2" -11
KML S HR 3 AL	G 3" -11
KML S HR 4 AL	G 4" -11

**Product versions:**

**KML S HR VA** - Kamlock coupling male part, stainless steel HR, Stainless steel

**KML M IR AL****Kamlock coupling female part, aluminium IR**

**Connection 1:** BSP cylindrical internal threads  
**Connection 2:** Coupling female connection  
**Sealing form 2:** BUNA N rubber sealing ring  
**Material:** Aluminium, Stainless steel 304 lever

2

Identification	G1
KML M IR 3/4 AL	G 3/4" -14
KML M IR 1 AL	G 1" -11
KML M IR 1.1/4 AL	G 1.1/4" -11
KML M IR 1.1/2 AL	G 1.1/2" -11
KML M IR 2 AL	G 2" -11
KML M IR 2.1/2 AL	G 2.1/2" -11
KML M IR 3 AL	G 3" -11
KML M IR 4 AL	G 4" -11

**Product versions:**

**KML M IR VA** - Kamlock coupling female part, stainless steel IR, Stainless steel

**KML S IR AL****Kamlock coupling male part, aluminium IR**

**Connection 1:** BSP cylindrical internal threads  
**Connection 2:** Coupling male connection  
**Material:** Aluminium



Identification	G1
KML S IR 3/4 AL	G 3/4" -14
KML S IR 1 AL	G 1" -11
KML S IR 1.1/4 AL	G 1.1/4" -11
KML S IR 1.1/2 AL	G 1.1/2" -11
KML S IR 2 AL	G 2" -11
KML S IR 2.1/2 AL	G 2.1/2" -11
KML S IR 3 AL	G 3" -11
KML S IR 4 AL	G 4" -11

**Product versions:**

**KML S IR VA** - Kamlock coupling male part, stainless steel IR, Stainless steel

## KML M SST MK

Locking pin with chain for kamlock female part



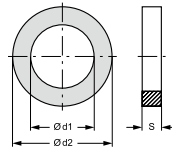
2

Identification

KML M SST MK 1.1/2-2

for coupling size

1.1/2" - 2"

**KML M DISA EP****Seal for kamlock female part, EPDM****Material:** EPDM

Identification	for coupling size	$\varnothing d1$ mm	$\varnothing d2$ mm	S mm
KML M DISA 3/4 EP	3/4"	34,93	22,22	5,54
KML M DISA 1 EP	1"	39,69	29,99	6,35
KML M DISA 1.1/4 EP	1.1/4"	49,21	34,53	6,35
KML M DISA 1.1/2 EP	1.1/2"	55,56	41,27	6,35
KML M DISA 2 EP	2"	66,67	50,80	6,35
KML M DISA 2.1/2 EP	2.1/2"	79,37	60,32	6,35
KML M DISA 3 EP	3"	94,45	76,20	6,35
KML M DISA 4 EP	4"	123,82	101,60	6,35

**Product versions:****KML M DISA NBR** - Seal for kamlock female part, NBR, NBR**KML M DISA SIL** - Seal for kamlock female part, silicone, Silicone**KML M DISA V** - Seal for kamlock female part, FKM (FPM), FKM SH 90 (Viton)

**KML M ZUB AL****Kamlock end cap, aluminium male part**

**Connection 1:** Coupling male connection  
**Material:** Aluminium

2

Identification	for coupling size
KML M ZUB 3/4 AL	3/4"
KML M ZUB 1 AL	1"
KML M ZUB 1.1/4 AL	1.1/4"
KML M ZUB 1.1/2 AL	1.1/2"
KML M ZUB 2 AL	2"
KML M ZUB 2.1/2 AL	2.1/2"
KML M ZUB 3 AL	3"
KML M ZUB 4 AL	4"

**Product versions:**

**KML M ZUB VA** - Kamlock end cap, stainless steel male part, Stainless steel

**KML S ZUB AL****Kamlock end cap, aluminium female part**

**Connection 1:** Coupling female connection  
**Sealing form 1:** BUNA N rubber sealing ring  
**Material:** Aluminium, Stainless steel 304 lever



2

Identification	for coupling size
KML S ZUB 3/4 AL	3/4"
KML S ZUB 1 AL	1"
KML S ZUB 1.1/4 AL	1.1/4"
KML S ZUB 1.1/2 AL	1.1/2"
KML S ZUB 2 AL	2"
KML S ZUB 2.1/2 AL	2.1/2"
KML S ZUB 3 AL	3"
KML S ZUB 4 AL	4"

**Product versions:**

**KML S ZUB VA** - Kamlock end cap, stainless steel female part, Stainless steel

**SSKK****Sandblasting coupling**

**Application:** for sandblasting systems and cabs (fixed / mobile)  
**Connection 1:** Hose connection  
**Connection 2:** Claw coupling  
**Material:** Malleable cast iron  
**Surface:** electro galvanised

2

Identification	DN	b mm	h mm	Cog space mm	Max. working pressure bar
SSKK NW 19	19	63	100	42	12
SSKK NW 25	25	87	93	58	12
SSKK NW 32	32	87	92	58	12
SSKK NW 32 N	32	87	135	58	12
SSKK NW 38	38	87	129	58	12
SSKK NW 40	40	87	150	58	12



**SSKK IR****Sandblasting coupling IR**

**Application:** for sandblasting systems and cabs (fixed / mobile)  
**Connection 1:** BSP cylindrical internal threads  
**Connection 2:** Claw coupling  
**Material:** Malleable cast iron  
**Surface:** electro galvanised



Identification	G1	b mm	h mm	Cog space mm	Max. working pressure bar
SSKK NW 32 IR	G 1.1/4" -11	87	55	58	12
SSKK NW 32 IR-N	G 1.1/4" -11	87	62	58	12
SSKK NW 38 IR	G 1.1/2" -11	87	55	58	12
SSKK NW 38 IR-N	G 1.1/2" -11	87	62	58	12
SSKK NW 50 IR	G 2" -11	87	84	58	12

2

**SSKK IM****Sandblasting coupling IGM coarse thread**

**Application:** for sandblasting systems and cabs (fixed / mobile)  
**Connection 1:** metric cylindrical inner thread  
**Connection 2:** Claw coupling  
**Material:** Malleable cast iron  
**Surface:** electro galvanised

2

Identification	DN	G1	b mm	h mm	Cog space mm	Max. working pressure bar
SSKK NW 50 IM	50	Coarse thread 50 mm	87	55	58	12
SSKK NW 50 IM 50-N	50	Coarse thread 50 mm	87	62	58	12

**SSKK DISA****Sandblasting sealing ring**

**Application:** for sandblasting couplings  
**Material:** Perbunan 60° Shore A, black



Identification	a mm	h mm	i1 mm
SSKK DISA	48,5	10,5	31
SSKK DISA-N	44,0	27,0	31

2

**PRT M DN****Perrot coupling female part, with hose connection**

**Connection 1:** Coupling female connection  
**Sealing form 1:** O-ring sealed  
**Connection 2:** Hose connection  
**Material:** Steel  
**Surface:** hot galvanised

2

Identification	Working pressure bar	Coupling dimension mm	for hose ID mm
PRT M 50 DN 50	12	50	50
PRT M 70 DN 63	12	70	63
PRT M 70 DN 70	12	70	70
PRT M 70 DN 75	12	70	75
PRT M 89 DN 75	12	89	75
PRT M 89 DN 80	12	89	80
PRT M 89 DN 89	12	89	89
PRT M 108 DN 75	12	108	75
PRT M 108 DN 90	12	108	90
PRT M 108 DN 102	12	108	102
PRT M 108 DN 110	12	108	110
PRT M 108 DN 127	12	108	127
PRT M 108 DN 152	12	108	152
PRT M 133 DN 50	12	133	50
PRT M 133 DN 76	12	133	76
PRT M 133 DN 102	12	133	102
PRT M 133 DN 110	12	133	110
PRT M 133 DN 127	12	133	127
PRT M 133 DN 133	12	133	133
PRT M 133 DN 152	12	133	152
PRT M 159 DN 50	12	159	50
PRT M 159 DN 76	12	159	76
PRT M 159 DN 102	12	159	102
PRT M 159 DN 127	12	159	127
PRT M 159 DN 133	12	159	133
PRT M 159 DN 152	12	159	152
PRT M 159 DN 159	12	159	159
PRT M 216 DN 200	12	216	200

**PRT M****Perrot coupling female part, assembled**

**Connection 1:** Coupling female connection  
**Sealing form 1:** O-ring sealed  
**Included in scope of supply:** fitted with O-ring  
**Material:** Steel  
**Surface:** black



Identification	Working pressure bar	Coupling dimension mm
PRT M 50	12	50
PRT M 70	12	70
PRT M 89	12	89
PRT M 108	12	108
PRT M 133	12	133
PRT M 159	12	159
PRT M 216	12	216

2

**PRT M IR****Perrot coupling female part, internal thread**

**Connection 1:** Coupling female connection  
**Sealing form 1:** O-ring seal  
**Connection 2:** BSP cylindrical internal threads  
**Material:** Steel  
**Surface:** hot galvanised

2

Identification	Working pressure bar	Coupling dimension mm	G1
PRT M 50 IR 2	12	50	G 2" -11

**PRT M HR****Perrot coupling female part, external thread**

**Connection 1:** Coupling female connection  
**Sealing form 1:** O-ring seal  
**Connection 2:** BSP cylindrical external threads  
**Material:** Steel  
**Surface:** hot galvanised



2

Identification	Working pressure bar	Coupling dimension mm	G1
PRT M 50 HR 1.1/2	12	50	G 1.1/2" -11
PRT M 50 HR 2	12	50	G 2"
PRT M 50 HR 2.1/2	12	50	G 2.1/2" -11
PRT M 70 HR 2	12	70	G 2"
PRT M 70 HR 2.1/2	12	70	G 2.1/2" -11
PRT M 70 HR 3	12	70	G 3" -11
PRT M 89 HR 2.1/2	12	89	G 2.1/2" -11
PRT M 89 HR 3	12	89	G 3" -11
PRT M 108 HR 2.1/2	12	108	G 2.1/2" -11
PRT M 108 HR 3	12	108	G 3" -11
PRT M 108 HR 4	12	108	G 4" -11
PRT M 133 HR 2.1/2	12	133	G 2.1/2" -11
PRT M 133 HR 4	12	133	G 4" -11
PRT M 133 HR 5	12	133	G 5" -11
PRT M 159 HR 2.1/2	12	159	G 2.1/2" -11
PRT M 159 HR 4	12	159	G 4" -11
PRT M 159 HR 6	12	159	G 6" -11

**PRT S DN****Perrot coupling male part, with hose connection**

**Connection 1:** Coupling male connection  
**Material:** Steel  
**Surface:** black

2

Identification	Working pressure bar	Coupling dimension mm	for hose ID mm
PRT S 50 DN 50	12	50	50
PRT S 70 DN 63	12	70	63
PRT S 70 DN 70	12	70	70
PRT S 70 DN 75	12	70	75
PRT S 89 DN 75	12	89	75
PRT S 89 DN 80	12	89	80
PRT S 89 DN 89	12	89	89
PRT S 108 DN 75	12	108	75
PRT S 108 DN 90	12	108	90
PRT S 108 DN 102	12	108	102
PRT S 108 DN 152	12	108	152
PRT S 108 DN 110	12	108	110
PRT S 108 DN 127	12	108	127
PRT S 133 DN 50	12	133	50
PRT S 133 DN 76	12	133	76
PRT S 133 DN 102	12	133	102
PRT S 133 DN 110	12	133	110
PRT S 133 DN 127	12	133	127
PRT S 133 DN 133	12	133	133
PRT S 133 DN 152	12	133	152
PRT S 159 DN 50	12	159	50
PRT S 159 DN 76	12	159	76
PRT S 159 DN 102	12	159	102
PRT S 159 DN 127	12	159	127
PRT S 159 DN 133	12	159	133
PRT S 159 DN 152	12	159	152
PRT S 159 DN 159	12	159	159
PRT S 216 DN 200	12	216	200



**PRT S****Perrot coupling male part**

**Connection 1:** Coupling male connection  
**Material:** Steel  
**Surface:** black



Identification	Working pressure bar	Coupling dimension mm
PRT S 50	12	50
PRT S 70	12	70
PRT S 89	12	89
PRT S 108	12	108
PRT S 133	12	133
PRT S 159	12	159
PRT S 216	12	216

2

**PRT S IR****Perrot coupling male part, internal thread**

**Connection 1:** Coupling male connection  
**Connection 2:** BSP cylindrical internal threads  
**Material:** Steel  
**Surface:** hot galvanized

2

Identification	Working pressure bar	Coupling dimension mm	G1
PRT S 50 IR 2	12	50	G 2" -11

**PRT S HR****Perrot coupling male part, external thread**

**Connection 1:** Coupling male connection  
**Connection 2:** BSP cylindrical external threads  
**Material:** Steel  
**Surface:** hot galvanised



2

Identification	Working pressure bar	Coupling dimension mm	G1
PRT S 50 HR 1.1/2	25	50	G 1.1/2" -11
PRT S 50 HR 2	25	50	G 2" -11
PRT S 50 HR 2.1/2	25	50	G 2.1/2" -11
PRT S 70 HR 2	25	70	G 2" -11
PRT S 70 HR 2.1/2	25	70	G 2.1/2" -11
PRT S 70 HR 3	25	70	G 3" -11
PRT S 89 HR 2.1/2	25	89	G 2.1/2" -11
PRT S 89 HR 3	25	89	G 3" -11
PRT S 108 HR 2.1/2	25	108	G 2.1/2" -11
PRT S 108 HR 3	25	108	G 3" -11
PRT S 108 HR 4	25	108	G 4" -11
PRT S 133 HR 2.1/2	25	133	G 2.1/2" -11
PRT S 133 HR 4	25	133	G 4" -11
PRT S 133 HR 5	25	133	G 5" -11
PRT S 159 HR 2.1/2	25	159	G 2.1/2" -11
PRT S 159 HR 4	25	159	G 4" -11
PRT S 159 HR 6	25	159	G 6" -11

**PRT RED M VB****Perrot coupling reduction, female part**

**Connection 1:** Coupling female connection  
**Sealing form 1:** O-ring seal  
**Connection 2:** Coupling female connection  
**Material:** Steel  
**Surface:** hot galvanized

2

Identification	Working pressure bar	Coupling dimension mm
PRT RED M VB 108-50	12	50/108
PRT RED M VB 108-133	12	108/133
PRT RED M VB 108-159	12	108/159

**PRT RED S M****Perrot coupling reduction for male to female part**

**Connection 1:** Coupling male connection  
**Connection 2:** Coupling female connection  
**Material:** Steel  
**Surface:** hot galvanised



Identification	Working pressure bar	Coupling dimension mm
PRT RED S70-M50	12	70/50
PRT RED S89-M70	12	89/70
PRT RED S108-M50	12	108/50
PRT RED S108-M70	12	108/70
PRT RED S108-M89	12	108/89
PRT RED S133-M89	12	133/89
PRT RED S133-M108	12	133/108
PRT RED S159-M133	12	159/133

**PRT RED M S****Perrot coupling female-male part reduction**

**Connection 1:** Coupling female connection  
**Sealing form 1:** O-ring seal  
**Connection 2:** Coupling male connection  
**Surface:** hot galvanised

2

Identification	Working pressure bar	Coupling dimension mm
PRT RED M70-S50	12	70/50
PRT RED M89-S70	12	89/70
PRT RED M108-S70	12	108/70
PRT RED M108-S89	12	108/89
PRT RED M133-S89	12	133/89
PRT RED M133-S108	12	133/108
PRT RED M159-S108	12	159/108
PRT RED M159-S133	12	159/133
PRT RED M216-S159	12	216/159

**PRT M VB****Perrot coupling connector, female part**

**Connection 1 + 2:** Coupling female connection  
**Sealing form 1 + 2:** O-ring seal  
**Material:** Steel  
**Surface:** hot galvanised



Identification	Working pressure bar	Coupling dimension mm
PRT M VB 50	12	50
PRT M VB 70	12	70
PRT M VB 89	12	89
PRT M VB 108	12	108
PRT M VB 133	12	133
PRT M VB 159	12	159

2

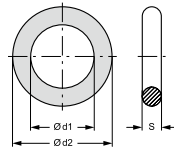
**PRT S ZUB****Perrot coupling female part, end plug**

**Connection 1:** Coupling female connection  
**Sealing form 1:** O-ring seal  
**Material:** Steel  
**Surface:** hot galvanised

2

Identification	Coupling dimension mm
PRT S ZUB 50	50
PRT S ZUB 70	70
PRT S ZUB 89	89
PRT S ZUB 108	108
PRT S ZUB 133	133
PRT S ZUB 159	159
PRT S ZUB 216	216



**PRT ORING****O-Ring for Perrot coupling**

2

Identification	Coupling dimension mm	Ø d1 mm	Ø d2 mm
PRT ORING 50	50	64	86
PRT ORING 70	70	87	110
PRT ORING 89	89	112	140
PRT ORING 108	108	124	160
PRT ORING 133	133	146	190
PRT ORING 159	159	180	224
PRT ORING 216	216		

**PRT M ZUB****Perrot coupling male part, end plug**

**Connection 1:** Coupling male connection  
**Material:** Steel  
**Surface:** hot galvanised

2

Identification	Working pressure bar	Coupling dimension mm
PRT M ZUB 50	12	50
PRT M ZUB 70	12	70
PRT M ZUB 89	12	89
PRT M ZUB 108	12	108
PRT M ZUB 133	12	133
PRT M ZUB 159	12	159
PRT M ZUB 216	12	216

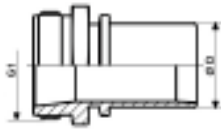
**POLY SM H****Screwed socket**

**Application:** for POLY H  
**Connection 1:** Hose connection  
**Connection 2:** Pipe connection  
**Properties:** electrically conductive, Surface resistance  $RO \leq 104 \text{ Ohm}$ , abrasion resistant, impact resistant, easy to assemble, screwed  
**Colour:** black  
**Material:** Polyurethane



Identification	DN*	L mm	for external pipe Ø mm
POLY SM DN 38 H	38	80	38
POLY SM DN 40 H	40	85	40
POLY SM DN 50 H	50	89	50
POLY SM DN 60 H	60	90	60
POLY SM DN 70 H	70	94	70

2

**TW-TG MG****Tanker fitting, brass**

**Application:** Tankers  
**Connection 1:** Hose connection  
**Connection 2:** BSP cylindrical external threads  
**Design:** with safety collar  
**Standard:** DIN EN 14 420-5  
**Material:** Brass

2

Identification	DN*	Ø D mm	G1	Max. working pressure bar
TW-TG 12 13 MG	13	13,4	G 1/2" -14	16
TW-TG 34 19 MG	19	19,4	G 3/4" -14	16
TW-TG 10 19 MG	19	19,4	G 1" -11	16
TW-TG 10 25 MG	25	25,4	G 1" -11	16
TW-TG 114 32 MG	31	32,4	G 1.1/4" -11	16
TW-TG 112 35 MG	35	35,0	G 1.1/2" -11	16
TW-TG 112 38 MG	38	38,4	G 1.1/2" -11	16
TW-TG 20 38 MG	38	38,4	G 2" -11	16
TW-TG 20 50 MG	50	50,4	G 2" -11	16
TW-TG 212 63 MG	63	63,4	G 2.1/2" -11	16
TW-TG 30 75 MG	75	75,4	G 3" -11	16
TW-TG 30 80 MG	80	80,4	G 3" -11	16
TW-TG 40 100 MG	100	100,4	G 4" -11	16

DN = Nominal diameter, nominal width

**Product versions:**

**TW-TG VA** - Tanker fitting, stainless steel, Stainless steel

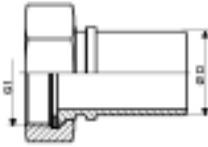
**TW-T MG****Tanker fitting, brass**

**Application:** Tankers  
**Connection 1:** Hose connection  
**Connection 2:** BSP cylindrical external threads with safety collar  
**Design:** with safety collar  
**Standard:** DIN EN 14 420-5  
**Material:** Brass



Identification	DN*	Ø D mm	G1	Max. working pressure bar
TW-T 12 13 MG	13	13,4	G 1/2" -14	16
TW-T 34 19 MG	19	19,4	G 3/4" -14	16
TW-T 10 25 MG	25	25,4	G 1" -11	16
TW-T 114 32 MG	31	32,4	G 1.1/4" -11	16
TW-T 112 38 MG	38	38,4	G 1.1/2" -11	16
TW-T 20 50 MG	50	50,4	G 2" -11	16
TW-T 212 63 MG	63	63,4	G 2.1/2" -11	16
TW-T 30 75 MG	75	75,4	G 3" -11	16
TW-T 40 100 MG	100	100,4	G 4" -11	16

DN = Nominal diameter, nominal width

**TW-TUEG MG****Tanker fitting, brass**

**Application:** Tankers  
**Connection 1:** Hose connection  
**Connection 2:** BSP nut thread  
**Sealing form 2:** Flat seal  
**Design:** with safety collar  
**Standard:** DIN EN 14 420-5  
**Included in scope of supply:** with PUR flat seal  
**Material:** Brass

2

Identification	DN*	Ø D mm	G1	Max. working pressure bar
TW-TUEG 12 13 MG	13	13,4	G 1/2" -14	16
TW-TUEG 34 19 MG	19	19,4	G 3/4" -14	16
TW-TUEG 10 25 MG	25	25,4	G 1" -11	16
TW-TUEG 114 32 MG	32	32,4	G 1.1/4" -11	16
TW-TUEG 112 35 MG	35	35,0	G 1 1/2"	16
TW-TUEG 112 38 MG	38	38,4	G 1 1/2"	16
TW-TUEG 20 38 MG	38	38,4	G 2" -11	16
TW-TUEG 20 50 MG	50	50,4	G 2" -11	16
TW-TUEG 212 63 MG	63	63,4	G 2.1/2" -11	16
TW-TUEG 30 75 MG	75	75,4	G 3" -11	16
TW-TUEG 40 100 MG	100	100,4	G 4" -11	16

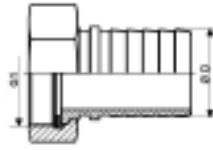
DN = Nominal diameter, nominal width

**Product versions:**

**TW-TUEG VA** - Tanker fitting, stainless steel, Stainless steel

**TW-TUE MG****Tanker fitting, brass**

**Application:** Tankers  
**Connection 1:** Hose connection  
**Connection 2:** BSP nut thread  
**Sealing form 2:** Flat seal  
**Design:** with safety collar  
**Standard:** DIN EN 14 420-5  
**Included in scope of supply:** with PUR flat seal  
**Material:** Brass



Identification	DN*	Ø D mm	G1	Max. working pressure bar
TW-TUE 12 13 MG	13	13,4	G 1/2" -14	16
TW-TUE 34 19 MG	19	19,4	G 3/4" -14	16
TW-TUE 10 25 MG	25	25,4	G 1" -11	16
TW-TUE 114 32 MG	32	32,4	G 1.1/4" -11	16
TW-TUE 112 38 MG	35	38,4	G 1 1/2"	16
TW-TUE 20 50 MG	50	50,4	G 2" -11	16
TW-TUE 212 63 MG	63	60,4	G 2.1/2" -11	16
TW-TUE 30 75 MG	75	75,4	G 3" -11	16
TW-TUE 40 100 MG	100	100,4	G 4" -11	16

DN = Nominal diameter, nominal width

**TW-MK IG MS****Tanker fitting, brass**

**Connection 1:** Coupling female connection  
**Included in scope of supply:** Sealing ring assembly with sealing ring and threaded sealing ring, Clamping ring with lever  
**Material:** Brass

2

Identification	DN*	G1
TW-MK 050 IG MS	50	G 2"
TW-MK 080 IG MS	80	G 3" -11
TW-MK 100 IG MS	100	G 4" -11

DN = Nominal diameter, nominal width

**Product versions:**

TW-MK IG VA - Tanker fitting, stainless steel, Stainless steel



**TW-VK IG MS****Tanker fitting, brass**

**Connection 1:** BSP cylindrical internal threads  
**Material:** Brass



Identification	DN*	G1
TW-VK 050 IG MS	50	G 2" -11
TW-VK 080 IG MS	80	G 3" -11
TW-VK 100 IG MS	100	G 4" -11

DN = Nominal diameter, nominal width

**Product versions:**

**TW-VK IG VA** - Tanker fitting, stainless steel, Stainless steel

**TW-VB AL****Tanker fitting, aluminium**

**Application:** Tankers  
**Connection 1:** Coupling male connection  
**Design:** Cap fire hose coupling  
**Material:** Aluminium

2

Identification	DN*
TW-VB 050 AL	50
TW-VB 080 AL	80
TW-VB 100 AL	100

DN = Nominal diameter, nominal width

**Product versions:**

**TW-VB MS** - Tanker fitting, brass, Brass

**TW-VB VA** - Tanker fitting, stainless steel, Stainless steel

**TW-MB AL****Blind cap for tanker connection, aluminium**

**Connection 1:** Coupling female connection  
**Sealing form 1:** Edge sealing ring  
**Design:** Blank coupling cap  
**Material:** Brass, Gasket: NBR



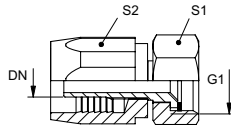
Identification	DN*
TW-MB 050 AL	50
TW-MB 080 AL	80
TW-MB 100 AL	100

DN = Nominal diameter, nominal width

**Product versions:**

**TW-MB MS** - Blind cap for tanker connection, brass, Brass

**TW-MB VA** - Blind cap for tanker connection, stainless steel, Stainless steel

**TWA AR****Screw fitting for hose ZSSOW**

**Connection 1:** BSP nut thread  
**Sealing form 1:** flat sealing  
**Short code:** DKR flat  
**Standard:** DIN EN 14424 and VG 95951  
**Included in scope of supply:** Screw nipple + screw mount  
**Material:** Hot pressed brass  
**Surface:** bright chromium plated

2

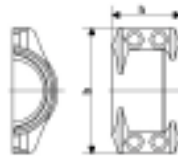
**Note:** PU seal

Identification	DN*	Size	Inches	G1	S1	S2
TWA 20 AR 25	19	12	3/4"	G 1" -11	36	36

DN = Nominal diameter, nominal width

**KS AL****Clamp ring fitting, aluminium**

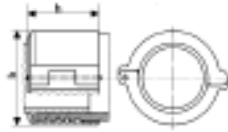
- Application:** Integrating clamp ring fittings with hose
- Design:** Clamping shells
- Included in scope of supply:** Clamping halves, loose, incl. screws and nuts
- Material:** Aluminium, forged



Identification	for hose	Clamping range (mm)	Max. working pressure bar	DN*	b mm	h mm	Screws
KS 22-24 AL	13 x 5	22 - 24	16		51	50	
KS 30-33 AL	19 x 6	30 - 33	16	20	63	50	(4 x) M 6 x 20
KS 36-39 AL	25 x 6	36 - 39	16	25	69	50	(4 x) M 6 x 20
KS 40-43 AL	25 x 8	40 - 43	16		73	50	
KS 43-46 AL	32 x 6	43 - 46	16	32	76	50	(4 x) M 6 x 20
KS 47-51 AL	38 x 5	47 - 51	16		79	50	
KS 50-53 AL	38 x 6.5	50 - 53	16	40	83	50	(4 x) M 6 x 20
KS 53-56 AL	38 x 8	53 - 56	16		85	50	
KS 60-64 AL	50 x 5.5	60 - 64	16			56	
KS 63-67 AL	50 x 8	63 - 67	16	50	102	56	(4 x) M 8 x 25
KS 74-77 AL	63 x 6	74 - 77	16		120	74	
KS 78-82 AL	63 x 8	78 - 82	16	65	120	74	(4 x) M 8 x 25
KS 89-93 AL	75 x 8	89 - 93	16	76	132	76	(4 x) M 8 x 25
KS 94-97 AL	75 x 10	94 - 97	16	80	140	76	(4 x) M 8 x 25
KS 111-115 AL	100 x 6.5	111 - 115	16			120	
KS 114-119 AL	100 x 8	114 - 119	16		166	120	
KS 118-122 AL	100 x 10	118 - 122	16		170	120	

DN = Nominal diameter, nominal width

2

**KS FIX AL****Clamping shell for pinning, aluminium**

**Application:** Integrating clamp ring fittings with hose

**Design:** Clamping shells

**Supplementary design information:** for pinning

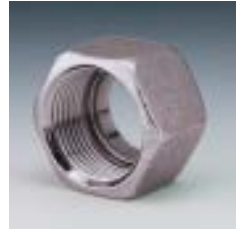
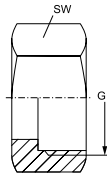
**Material:** Aluminium

2

Identification	for hose	Clamping range (mm)	Max. working pressure bar	b mm	h mm
KS 36-39 FIX AL	25 x 6	36 - 39	16	58	46
KS 43-46 FIX AL	32 x 6	43 - 46	16	66	48
KS 50-53 FIX AL	38 x 6,5	50 - 53	16	73	52
KS 63-67 FIX AL	50 x 8	63 - 67	16	89	56
KS 89-94 FIX AL	75 x 8	89 - 94	16	118	76

**SUEM R****Union nut for SI nipple**

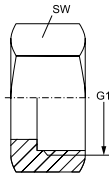
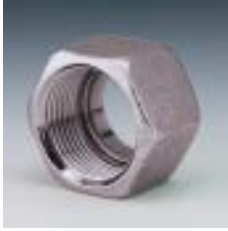
**Connection 1:** BSP nut thread  
**Material:** Steel  
**Surface:** electro galvanized



2

Identification	DN*	G1	SW mm
SUEM 03 R 04	3	G 1/8" -28	14
SUEM 04 R 06	5	G 1/4" -19	17
SUEM 06 R	6	G 1/4" -19	17
SUEM 08 R 10	8	G 3/8" -19	19
SUEM 10 R 13	10	G 1/2" -14	24

DN = Nominal diameter, nominal width

**SUEM L****Union nut for SI nipple****Connection 1:****Material:****Surface:****Series:**

metric nut thread  
Steel  
electro galvanised  
light

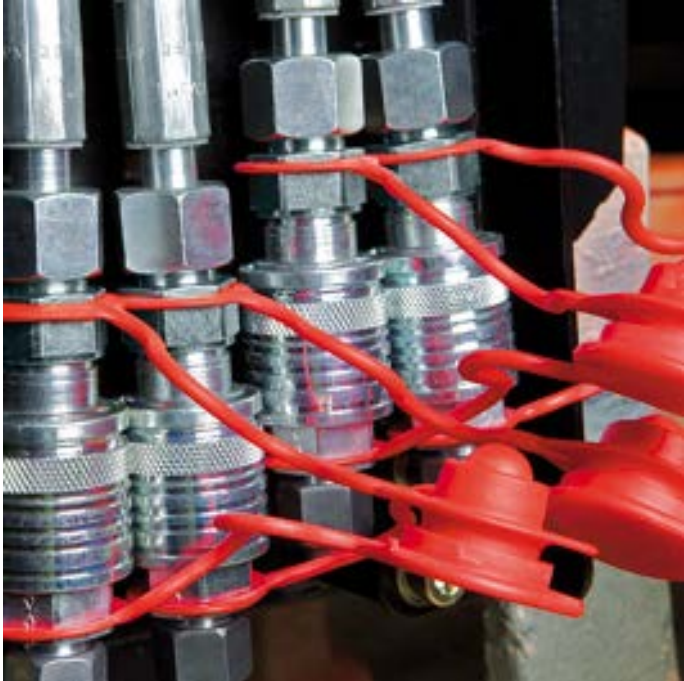
2

Identification	DN*	G1	SW mm
SUEM 02 L	3	M 10 x 1	12
SUEM 04 L	5	M 12 x 1.5	14
SUEM 06 L	6	M 14 x 1.5	17
SUEM 08 L	8	M 16 x 1.5	19
SUEM 10 L	10	M 18 x 1.5	22
SUEM 13 L	12	M 22 x 1.5	27
SUEM 16 L	16	M 26 x 1.5	32

DN = Nominal diameter, nominal width







## Couplings

**Temperature control couplings**

Sleeves (with valve)	234
Sleeves (without valve)	248
Sleeves with unlocking protection (with valve)	263
Sleeves with unlocking protection (without valve)	274
Locking sleeves	279
Connectors (with valve)	280
Connectors (without valve)	282
Connectors	289

**TKM MV IR**

## Temperature control coupling sleeve with valve



**Connection 1:** BSP cylindrical internal threads  
**Sealing form 1:** for screw-in pins with shapes A, B and if necessary E  
**Material:** Brass

Identification	DN*	Connecting thread	Connector dimension		Working pressure	SF coup.*	Mineral oil temp. min. Mineral oil temp. max.		SW
			mm	mm			°C	°C	
TKM 09 MV 06 IR	6	G 1/4" -19	9	15	3	-15	150	17	
TKM 13 MV 06 IR	6	G 1/4" -19	13	15	3	-15	150	17	
TKM 13 MV 10 IR	10	G 3/8" -19	13	15	3	-15	150	22	

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

## TKM MV HB

## Temperature control coupling sleeve with valve

**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Material:** Brass



Identification	DN*	Connecting thread	Connector dimension		Working pressure	SF coup.*	Mineral oil temp.		SW
			mm	bar			min. °C	max. °C	
TKM 09 MV 06 HB	6	G 1/4" -19	9	15	3	-15	150	17	
TKM 09 MV 10 HB	10	G 3/8" -19	9	15	3	-15	150	19	
TKM 13 MV 06 HB	6	G 1/4" -19	13	15	3	-15	150	22	
TKM 13 MV 10 HB	10	G 3/8" -19	13	15	3	-15	150	22	
TKM 19 MV 13 HB	12	G 1/2" -14	19	15	3	-15	150	30	
TKM 19 MV 20 HB	19	G 3/4" -14	19	15	3	-15	150	30	

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

3

**TKM MV HB 45**

## Temperature control coupling sleeve with valve, angle 45°



**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Material:** Brass

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKM 09 MV 06 HB 45	6	G 1/4" -19	9	15	3	-15	150	17
TKM 13 MV 10 HB 45	10	G 3/8" -19	13	15	3	-15	150	22

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

**TKM MV HB 90****Temperature control coupling sleeve with valve, angle 90°**

**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Material:** Brass



Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKM 09 MV 06 HB 90	6	G 1/4" -19	9	15	3	-15	150	17
TKM 13 MV 10 HB 90	10	G 3/8" -19	13	15	3	-15	150	22

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

3

**TKM MV HB KAF**

## Temperature control coupling sleeve with valve, short



**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Material:** Brass

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKM 09 MV 06 HB KAF	6	G 1/4" -19	9	15	3	-15	150	17
TKM 13 MV 10 HB KAF	10	G 3/8" -19	13	15	3	-15	150	22

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats



**TKM MV H****Temperature control coupling sleeve with valve**

**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 60° inner cone  
**Material:** Brass



Identification	DN*	Connecting thread	Connector dimension		Working pressure	SF coup.*	Mineral oil temp.		SW
			mm	bar			min. °C	max. °C	
TKM 09 MV 02 H	2	M 10 x 1	9	15	3	-15	150	17	
TKM 09 MV 06 H	6	M 14 x 1.5	9	15	3	-15	150	17	
TKM 13 MV 08 H	8	M 16 x 1.5	13	15	3	-15	150	22	

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

3

**TKM MV H 45**

## Temperature control coupling sleeve with valve, angle 45°



**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 60° inner cone  
**Material:** Brass

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKM 09 MV 02 H 45	2	M 10 x 1	9	15	3	-15	150	17
TKM 09 MV 06 H 45	6	M 14 x 1.5	9	15	3	-15	150	17
TKM 13 MV 08 H 45	8	M 16 x 1.5	13	15	3	-15	150	22

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

**TKM MV H 90****Temperature control coupling sleeve with valve, angle 90°**

**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 60° inner cone  
**Material:** Brass



Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKM 09 MV 02 H 90	2	M 10 x 1	9	15	3	-15	150	17
TKM 09 MV 06 H 90	6	M 14 x 1.5	9	15	3	-15	150	17
TKM 13 MV 08 H 90	8	M 16 x 1.5	13	15	3	-15	150	22

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

3

**TKM MV MM**

## Temperature control coupling sleeve with valve



**Connection 1:** Hose connection  
**Material:** Brass

Identification	DN*	Hose connection mm	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
TKM 09 MV 06 MM	6	6	9	15	3	-15	150
TKM 09 MV 09 MM	10	9	9	15	3	-15	150
TKM 13 MV 09 MM	10	9	13	15	3	-15	150
TKM 13 MV 13 MM	12	13	13	15	3	-15	150
TKM 19 MV 19 MM	19	19	19	15	3	-15	150

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**TKM MV MM 45****Temperature control coupling sleeve with valve, angle 45°**

**Connection 1:** Hose connection  
**Material:** Brass



Identification	DN*	Hose connection	Connector dimension	Working pressure	SF coup.*	Mineral oil temp. min.	Mineral oil temp. max.
		mm	mm				
TKM 09 MV 06 MM 45	6	6	9	15	3	-15	150
TKM 09 MV 09 MM 45	10	9	9	15	3	-15	150
TKM 13 MV 09 MM 45	10	9	13	15	3	-15	150
TKM 13 MV 13 MM 45	12	13	13	15	3	-15	150
TKM 19 MV 19 MM 45	19	19	19	15	3	-15	150

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

3

**TKM MV MM 90**

## Temperature control coupling sleeve with valve, angle 90°



**Connection 1:** Hose connection  
**Material:** Brass

Identification	DN*	Hose connection	Connector dimension	Working pressure	SF coup.*	Mineral oil temp.	
		mm	mm			bar	min. °C
TKM 09 MV 06 MM 90	6	6	9	15	3	-15	150
TKM 09 MV 09 MM 90	10	9	9	15	3	-15	150
TKM 13 MV 09 MM 90	10	9	13	15	3	-15	150
TKM 13 MV 13 MM 90	12	13	13	15	3	-15	150
TKM 19 MV 19 MM 90	19	19	19	15	3	-15	150

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

**TKM MV MM ND****Temperature control coupling sleeve with valve**

**Connection 1:** Hose connection  
**O-ring:** Viton, PTFE coated  
**Material:** Brass



Identification	DN*	Hose connection	Connector dimension	Working pressure	SF coup.*	Mineral oil temp. min.	Mineral oil temp. max.
		mm	mm				
TKM 09 MV 06 MM ND	6	6	9	15	3	-15	150
TKM 09 MV 10 MM ND	10	10	9	15	3	-15	150
TKM 13 MV 10 MM ND	10	10	13	15	3	-15	150
TKM 13 MV 13 MM ND	12	13	13	15	3	-15	150
TKM 19 MV 16 MM ND	16	16	19	15	3	-15	150
TKM 19 MV 19 MM ND	19	19	19	15	3	-15	150

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

3

**TKM MV MM 45 ND**

## Temperature control coupling sleeve with valve, angle 45°



**Connection 1:** Hose connection  
**O-ring:** Viton, PTFE coated  
**Material:** Brass

Identification	DN*	Hose connection		Connector dimension		Working pressure bar	SF coup.*	Mineral oil temp.	
		mm	mm	mm	mm			min. °C	max. °C
TKM 09 MV 06 MM 45 ND	6	6	9	15	3	-15	150		
TKM 09 MV 10 MM 45 ND	10	10	9	15	3	-15	150		
TKM 13 MV 10 MM 45 ND	10	10	13	15	3	-15	150		
TKM 13 MV 13 MM 45 ND	12	13	13	15	3	-15	150		

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled



## TKM MV MM 90 ND

## Temperature control coupling sleeve with valve, angle 90°

**Connection 1:** Hose connection  
**O-ring:** Viton, PTFE coated  
**Material:** Brass



Identification	DN*	Hose connection		Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp.	
		mm	mm				min. °C	max. °C
TKM 09 MV 06 MM 90 ND	6	6	9	15	3	-15	150	
TKM 09 MV 10 MM 90 ND	10	10	9	15	3	-15	150	
TKM 13 MV 10 MM 90 ND	10	10	13	15	3	-15	150	
TKM 13 MV 13 MM 90 ND	12	13	13	15	3	-15	150	

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

3

**TKM OV IR****Temperature control coupling sleeve without valve**

**Connection 1:** BSP cylindrical internal threads  
**Sealing form 1:** for screw-in pins with shapes A, B and if necessary E  
**Material:** Brass

Identification	DN*	Connecting thread	Connector dimension		Working pressure	SF coup.*	Mineral oil temp.		SW
			mm	bar			min. °C	max. °C	
TKM 09 OV 06 IR	6	G 1/4" -19	9	15	3	-15	150	17	
TKM 13 OV 06 IR	6	G 1/4" -19	13	15	3	-15	150	17	
TKM 13 OV 10 IR	10	G 3/8" -19	13	15	3	-15	150	22	

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

## TKM OV HB

## Temperature control coupling sleeve without valve

**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Material:** Brass



Identification	DN*	Connecting thread	Connector dimension		Working pressure SF coup.*	Mineral oil temp. min. Mineral oil temp. max.		SW
			mm	bar		°C	°C	
TKM 09 OV 06 HB	6	G 1/4" -19	9	15	3	-15	150	17
TKM 09 OV 10 HB	10	G 3/8" -19	9	15	3	-15	150	19
TKM 13 OV 06 HB	6	G 1/4" -19	13	15	3	-15	150	22
TKM 13 OV 10 HB	10	G 3/8" -19	13	15	3	-15	150	22
TKM 19 OV 13 HB	12	G 1/2" -14	19	15	3	-15	150	30
TKM 19 OV 20 HB	19	G 3/4" -14	19	15	3	-15	150	30

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

3

**TKM OV HB 45**

## Temperature control coupling sleeve without valve, angle 45°



**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Material:** Brass

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKM 09 OV 06 HB 45	6	G 1/4" -19	9	15	3	-15	150	17
TKM 13 OV 10 HB 45	10	G 3/8" -19	13	15	3	-15	150	22

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

**TKM OV HB 90****Temperature control coupling sleeve without valve, angle 90°**

**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Material:** Brass



Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKM 09 OV 06 HB 90	6	G 1/4" -19	9	15	3	-15	150	17
TKM 09 OV 10 HB 90	10	G 3/8" -19	9	15	3	-15	150	19
TKM 13 OV 10 HB 90	10	G 3/8" -19	13	15	3	-15	150	22

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

3

**TKM OV H****Temperature control coupling sleeve without valve**

**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 60° inner cone  
**Material:** Brass

Identification	DN*	Connecting thread	Connector dimension		Working pressure	SF coup.*	Mineral oil temp. min. Mineral oil temp. max.		SW
			mm	mm			bar	°C	
TKM 09 OV 02 H	2	M 10 x 1	9	9	15	3	-15	150	17
TKM 09 OV 06 H	6	M 14 x 1.5	9	9	15	3	-15	150	17
TKM 13 OV 08 H	8	M 16 x 1.5	13	13	15	3	-15	150	22

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

**TKM OV H 45****Temperature control coupling sleeve without valve, angle 45°**

**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 60° inner cone  
**Material:** Brass



Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKM 09 OV 02 H 45	2	M 10 x 1	9	15	3	-15	150	17
TKM 09 OV 06 H 45	6	M 14 x 1.5	9	15	3	-15	150	17
TKM 13 OV 08 H 45	8	M 16 x 1.5	13	15	3	-15	150	22

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

3

**TKM OV H 90**

## Temperature control coupling sleeve without valve, angle 90°



**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 60° inner cone  
**Material:** Brass

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKM 09 OV 02 H 90	2	M 10 x 1	9	15	3	-15	150	17
TKM 09 OV 06 H 90	6	M 14 x 1.5	9	15	3	-15	150	17
TKM 13 OV 08 H 90	8	M 16 x 1.5	13	15	3	-15	150	22

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats



**TKM OV MM****Temperature control coupling sleeve without valve**

**Connection 1:** Hose connection  
**Material:** Brass



Identification	DN*	Hose connection mm	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
TKM 09 OV 06 MM	6	6	9	15	3	-15	150
TKM 09 OV 09 MM	10	9	9	15	3	-15	150
TKM 13 OV 09 MM	10	9	13	15	3	-15	150
TKM 13 OV 13 MM	12	13	13	15	3	-15	150
TKM 19 OV 19 MM	19	19	19	15	3	-15	150

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

3

**TKM OV MM 45**

## Temperature control coupling sleeve without valve, angle 45°



**Connection 1:** Hose connection  
**Material:** Brass

Identification	DN*	Hose connection		Connector dimension		Working pressure bar	SF coup.*	Mineral oil temp.	
		mm	mm	mm	mm			min. °C	max. °C
TKM 09 OV 06 MM 45	6	6	9	9	15	3	-15	150	
TKM 09 OV 09 MM 45	10	9	9	9	15	3	-15	150	
TKM 13 OV 09 MM 45	10	9	13	13	15	3	-15	150	
TKM 13 OV 13 MM 45	12	13	13	13	15	3	-15	150	
TKM 19 OV 19 MM 45	19	19	19	19	15	3	-15	150	

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**TKM OV MM 90****Temperature control coupling sleeve without valve, angle 90°**

**Connection 1:** Hose connection  
**Material:** Brass



Identification	DN*	Hose connection		Connector dimension		Working pressure bar	SF coup.*	Mineral oil temp.	
		mm	mm	mm	mm			min. °C	max. °C
TKM 09 OV 06 MM 90	6	6	9	9	15	3	-15	150	
TKM 09 OV 09 MM 90	10	9	9	9	15	3	-15	150	
TKM 13 OV 09 MM 90	10	9	13	13	15	3	-15	150	
TKM 13 OV 13 MM 90	12	9	13	13	15	3	-15	150	
TKM 19 OV 19 MM 90	19	19	19	19	15	3	-15	150	

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

3

**TKM OV MM KAF**

## Temperature control coupling sleeve without valve, short



**Connection 1:** Hose connection  
**Material:** Brass

Identification	DN*	Hose connection	Connector dimension	Working pressure	SF coup.*	Mineral oil temp.	
		mm	mm			bar	min. °C
TKM 19 OV 19 MM KAF	19	19	19	15	3	-15	150
DN = Nominal diameter, nominal width		SF gek. = Safety factor coupled					

**TKM OV MM ND****Temperature control coupling sleeve without valve**

**Connection 1:** Hose connection  
**O-ring:** Viton, PTFE coated  
**Material:** Brass



Identification	DN*	Hose connection	Connector dimension	Working pressure	SF coup.*	Mineral oil temp. min.	Mineral oil temp. max.
		mm	mm				
TKM 09 OV 06 MM ND	6	6	9	15	3	-15	150
TKM 09 OV 10 MM ND	10	10	9	15	3	-15	150
TKM 13 OV 10 MM ND	10	10	13	15	3	-15	150
TKM 13 OV 13 MM ND	12	13	13	15	3	-15	150
TKM 19 OV 16 MM ND	16	16	19	15	3	-15	150
TKM 19 OV 19 MM ND	19	19	19	15	3	-15	150

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**TKM OV MM 45 ND**

## Temperature control coupling sleeve without valve, angle 45°



**Connection 1:** Hose connection  
**O-ring:** Viton, PTFE coated  
**Material:** Brass

Identification	DN*	Hose connection	Connector dimension	Working pressure	SF coup.*	Mineral oil temp.	
		mm	mm			bar	min. °C
TKM 09 OV 06 MM 45 ND	6	6	9	15	3	-15	150
TKM 09 OV 10 MM 45 ND	10	10	9	15	3	-15	150
TKM 13 OV 10 MM 45 ND	10	10	13	15	3	-15	150
TKM 13 OV 13 MM 45 ND	12	13	13	15	3	-15	150

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**TKM OV MM KAF ND****Temperature control coupling sleeve without valve, short**

**Connection 1:** Hose connection  
**O-ring:** Viton, PFTE coated  
**Material:** Brass



Identification	DN*	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
TKM 19 OV 16 MM KAF ND	16	19	15	3	-15	150
TKM 19 OV 19 MM KAF ND	19	19	15	3	-15	150

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

3

**TKM OV MM 90 ND****Temperature control coupling sleeve without valve, angle 90°**

**Connection 1:** Hose connection  
**O-ring:** Viton, PTFE coated  
**Material:** Brass

Identification	DN*	Hose connection	Connector dimension	Working pressure	SF coup.*	Mineral oil temp.	
		mm	mm			bar	min. °C
TKM 09 OV 06 MM 90 ND	6	6	9	15	3	-15	150
TKM 09 OV 10 MM 90 ND	10	10	9	15	3	-15	150
TKM 13 OV 10 MM 90 ND	10	10	13	15	3	-15	150
TKM 13 OV 13 MM 90 ND	12	13	13	15	3	-15	150

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled



## TKM S MV IR

### Temp. coupling female with valve, with unlocking protection

**Connection 1:** BSP cylindrical internal threads  
**Sealing form 1:** for screw-in pins with shapes A, B and if necessary E  
**Material:** Brass



Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKM 13 S MV 06 IR	6	G 1/4" -19	13	15	3	-15	150	17
DN = Nominal diameter, nominal width		SF gek. = Safety factor coupled		SW = Width across flats				

3

## TKM S MV HB

### Temp. coupling female with valve, with unlocking protection



**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Material:** Brass

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKM 13 S MV 10 HB	10	G 3/8" -19	13	15	3	-15	150	22
TKM 19 S MV 13 HB	12	G 1/2" -14	19	15	3	-15	150	30
TKM 19 S MV 20 HB	19	G 3/4" -14	19	15	3	-15	150	30

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

## TKM S MV HB 90

### Temp. coupling female with valve with unlock prot., angle 90°

**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Material:** Brass



Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKM 13 S MV 10 HB 90	10	G 3/8" -19	13	15	3	-15	150	22

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

3

## TKM S MV H

### Temp. coupling female with valve, with unlocking protection



**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 60° inner cone  
**Material:** Brass

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKM 09 S MV 06 H	6	M 14 x 1.5	9	15	3	-15	150	17
TKM 13 S MV 08 H	8	M 16 x 1.5	13	15	3	-15	150	22

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

3

## TKM S MV H 45

### Temp. coupling female with valve with unlock prot., angle 45°

**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 60° inner cone  
**Material:** Brass



Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKM 13 S MV 08 H 45	8	M 16 x 1.5	13	15	3	-15	150	22

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

3

## TKM S MV H 90

### Temp. coupling female with valve with unlock prot., angle 90°



**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 60° inner cone  
**Material:** Brass

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKM 13 S MV 08 H 90	8	M 16 x 1.5	13	15	3	-15	150	22
DN = Nominal diameter, nominal width		SF gek. = Safety factor coupled		SW = Width across flats				

3

## TKM S MV MM

### Temp. coupling female with valve, with unlocking protection

**Connection 1:** Hose connection  
**Material:** Brass



Identification	DN*	Hose connection	Connector dimension	Working pressure	SF coup.*	Mineral oil temp.	
		mm	mm			min. °C	max. °C
TKM 09 S MV 09 MM	10	9	9	15	3	-15	150
TKM 13 S MV 09 MM	10	9	13	15	3	-15	150
TKM 19 S MV 19 MM	19	19	19	15	3	-15	150

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

3

## TKM S MV MM 45

### Temp. coupling female with valve with unlock prot., angle 45°



**Connection 1:** Hose connection  
**Material:** Brass

Identification	DN*	Hose connection	Connector dimension	Working pressure bar	SF coup.*	Mineral oil temp.	
		mm	mm			min. °C	max. °C
TKM 09 S MV 09 MM 45	10	9	9	15	3	-15	150

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

3



## TKM S MV MM 90

### Temp. coupling female with valve with unlock prot., angle 90°

**Connection 1:** Hose connection  
**Material:** Brass



Identification	DN*	Hose connection	Connector dimension	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
		mm	mm				
TKM 09 S MV 09 MM 90	10	9	9	15	3	-15	150
TKM 19 S MV 19 MM 90	19	19	19	15	3	-15	150

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

3

## TKM S MV MM ND

### Temp. coupling female with valve, with unlocking protection



**Connection 1:** Hose connection  
**O-ring:** Viton, PTFE coated  
**Material:** Brass

Identification	DN*	Hose connection mm	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
TKM 09 S MV 10 MM ND	10	10	9	15	3	-15	150

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

3

## TKM S MV MM 45 ND

### Temp. coupling female with valve with unlock prot., angle 45°

**Connection 1:** Hose connection  
**O-ring:** Viton, PTFE coated  
**Material:** Brass



Identification	DN*	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
TKM 09 S MV 10 MM 45 ND	10	9	15	3	-15	150

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

## TKM S OV HB

### Temp. coupling female w/o valve, with unlock protection



**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Material:** Brass

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKM 13 S OV 10 HB	10	G 3/8" -19	13	15	3	-15	150	22

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

## TKM S OV MM

### Temp. coupling female w/o valve, with unlock protection

**Connection 1:** Hose connection  
**Material:** Brass



Identification	DN*	Hose connection	Connector dimension	Working pressure	SF coup.*	Mineral oil temp. min.	Mineral oil temp. max.
		mm	mm				
TKM 09 S OV 09 MM	10	9	9	15	3	-15	150
TKM 13 S OV 13 MM	12	13	13	15	3	-15	150

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

3

## TKM S OV MM 45

Temp. ctrl. coupling female w/o valve, with unlock prot., angle 45°



**Connection 1:** Hose connection  
**Material:** Brass

Identification	DN*	Hose connection		Connector dimension		Working pressure bar	SF coup.*	Mineral oil temp.	
		mm	mm	mm	mm			min. °C	max. °C
TKM 09 S OV 09 MM 45	10	9	9	9	9	15	3	-15	150
TKM 13 S OV 09 MM 45	10	9	9	13	13	15	3	-15	150
TKM 13 S OV 13 MM 45	12	13	13	13	13	15	3	-15	150

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

3

## TKM S OV MM 90

### Temp. ctrl. coupling female w/o valve, with unlock prot., angle 90°

**Connection 1:** Hose connection  
**Material:** Brass



Identification	DN*	Hose connection	Connector dimension	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
		mm	mm				
TKM 09 S OV 09 MM 90	10	9	9	15	3	-15	150
TKM 13 S OV 09 MM 90	10	9	13	15	3	-15	150

DN = Nominal diameter, nominal width SF gek. = Safety factor coupled

3

## TKM S OV MM ND

### Temp. coupling female w/o valve, with unlock protection



**Connection 1:** Hose connection  
**O-ring:** Viton, PFTE coated  
**Material:** Brass

Identification	DN*	Hose connection	Connector dimension	Working pressure	SF coup.*	Mineral oil temp.	
		mm	mm			bar	min. °C
TKM 09 S OV 10 MM ND	10	10	9	15	3	-15	150
TKM 13 S OV 10 MM ND	10	10	13	15	3	-15	150
TKM 13 S OV 13 MM ND	12	13	13	15	3	-15	150

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

3



**TKM ZUBS****Cap for temperature control coupling**

**Connection 1:** Plug in sleeve  
**suitable for:** Plug-in coupling sleeve TKM  
**Material:** Brass



Identification	Connector dimension mm	Mineral oil temp. min. °C	Mineral oil temp. max. °C
TKM 09 ZUBS	9	-15	150
TKM 13 ZUBS	13	-15	150

3

**TKS MV HB****Temperature control coupling connector with valve**

**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** thread seal  
**Material:** Brass

Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKS 09 MV 06 HB	6	G 1/4" -19	9	15	3	-15	150	15
TKS 13 MV 10 HB	10	G 3/8" -19	13	15	3	-15	150	17
TKS 19 MV 20 HB	19	G 3/4" -14	19	15	3	-15	150	27

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

**TKS MV H****Temperature control coupling connector with valve**

**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** thread seal  
**Material:** Brass



Identification	DN*	Connecting thread	Connector dimension		Working pressure	SF coup.*	Mineral oil temp.		SW
			mm	mm			bar	°C	
TKS 13 MV 08 H	8	M 16 x 1.5	13	15	3		-15	150	17

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

3

**TKS OV HB****Temperature control coupling connector without valve**

**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Material:** Brass

Identification	DN*	Connecting thread	Connector dimension		Working pressure	SF coup.*	Mineral oil temp.		SW
			mm	bar			min. °C	max. °C	
TKS 09 OV 02 HB	2	G 1/8" -28	9	15	3	-15	150	11	
TKS 09 OV 06 HB	6	G 1/4" -19	9	15	3	-15	150	15	
TKS 09 OV 10 HB	10	G 3/8" -19	9	15	3	-15	150	17	
TKS 13 OV 06 HB	6	G 1/4" -19	13	15	3	-15	150	15	
TKS 13 OV 10 HB	10	G 3/8" -19	13	15	3	-15	150	17	
TKS 13 OV 13 HB	12	G 1/2" -14	13	15	3	-15	150	22	
TKS 19 OV 13 HB	12	G 1/2" -14	19	15	3	-15	150	22	
TKS 19 OV 20 HB	19	G 3/4" -14	19	15	3	-15	150	27	

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

**TKS OV HBK 90****Temperature control coupling plug without valve, angle 90°**

**Construction:** Angle 90°  
**Connection 1:** BSPT conical external threads  
**Sealing form 1:** thread seal  
**Material:** Brass



Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKS 09 OV 02 HBK 90	2	R 1/8" K	9	15	3	-15	150	15
TKS 09 OV 06 HBK 90	6	R 1/4" K	9	15	3	-15	150	15
TKS 09 OV 10 HBK 90	10	R 3/8" K	9	15	3	-15	150	17
TKS 13 OV 06 HBK 90	6	R 1/4" K	13	15	3	-15	150	17

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

3

**TKS OV H****Temperature control coupling connector without valve**

**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** 60° inner cone  
**Material:** Brass

Identification	DN*	Connecting thread	Connector dimension		Working pressure	SF coup.*	Mineral oil temp.		SW
			mm	bar			min. °C	max. °C	
TKS 09 OV 02 H	2	M 10 x 1	9	15	3	-15	150	11	
TKS 09 OV 06 H	6	M 14 x 1.5	9	15	3	-15	150	15	
TKS 13 OV 02 H	2	M 10 x 1	13	15	3	-15	150	15	
TKS 13 OV 06 H	6	M 14 x 1.5	13	15	3	-15	150	15	
TKS 13 OV 08 H	8	M 16 x 1.5	13	15	3	-15	150	17	

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

**TKS OV HK 90****Temperature control coupling plug without valve, angle 90°**

**Connection 1:** metric conical outer thread  
**Sealing form 1:** thread seal  
**Material:** Brass



Identification	DN*	Connecting thread	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKS 09 OV 02 HK 90	2	M 10 x 1	9	15	3	-15	150	15
TKS 09 OV 06 HK 90	6	M 14 x 1.5	9	15	3	-15	150	15
TKS 13 OV 06 HK 90	6	M 14 x 1.5	13	15	3	-15	150	17
DN = Nominal diameter, nominal width			SF gek. = Safety factor coupled		SW = Width across flats			

3

**TKS OV ROR**

## Temperature control coupling connector without valve



**Connection 1:** Pipe socket to be cut into sections  
**Material:** Brass

Identification	External pipe Ø mm	Connector dimension mm	Length h mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C	SW mm
TKS 09 OV ROR 08 L 68	8	9	68	15	3	-15	150	9
TKS 09 OV ROR 08 L 100	8	9	100	15	3	-15	150	9
TKS 09 OV ROR 10 L 120	10	9	120	15	3	-15	150	11
TKS 09 OV ROR 10 L 240	10	9	240	15	3	-15	150	11
TKS 09 OV ROR 10 L 360	10	9	360	15	3	-15	150	11
TKS 13 OV ROR 14 L 150	14	13	150	15	3	-15	150	15
TKS 13 OV ROR 14 L 300	14	13	300	15	3	-15	150	15

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats



**TKS OV MM****Temperature control coupling connector without valve**

**Connection 1:** Hose connection  
**Material:** Brass



Identification	DN*	Hose connection mm	Connector dimension mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
TKS 09 OV 06 MM	6	6	9	15	3	-15	150
TKS 09 OV 09 MM	10	9	9	15	3	-15	150
TKS 13 OV 09 MM	10	9	13	15	3	-15	150
TKS 13 OV 13 MM	12	13	13	15	3	-15	150
TKS 19 OV 13 MM	12	13	19	15	3	-15	150
TKS 19 OV 19 MM	19	19	19	15	3	-15	150

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

3

**TKS OV MM ND**

## Temperature control coupling connector without valve



**Connection 1:** Hose connection  
**Material:** Brass

Identification	DN*	Hose connection	Connector dimension	Working pressure	SF coup.*	Mineral oil temp.	
		mm	mm			bar	min. °C
TKS 09 OV 06 MM ND	6	6	9	15	3	-15	150
TKS 09 OV 10 MM ND	10	10	9	15	3	-15	150
TKS 13 OV 10 MM ND	10	10	13	15	3	-15	150
TKS 13 OV 13 MM ND	12	13	13	15	3	-15	150
TKS 19 OV 16 MM ND	16	16	19	15	3	-15	150
TKS 19 OV 19 MM ND	19	19	19	15	3	-15	150

DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled

**TKS VB****Temperature control coupling, connector**

**Connection 1 + 2:** Connectors  
**Material:** Brass



Identification	Connector dimension 1 mm	Connector dimension 2 mm	Working pressure bar	SF coup.*	Mineral oil temp. min. °C	Mineral oil temp. max. °C
TKS 09 VB	9	9	15	3	-15	150
TKS 13 VB	13	13	15	3	-15	150
TKS 13 RVB 09	13	9	15	3	-15	150

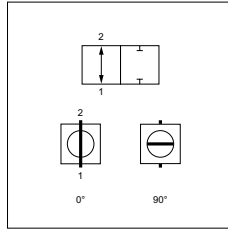
DN = Nominal diameter, nominal width    SF gek. = Safety factor coupled    SW = Width across flats

3



## Ball valves

<b>Ball valves (low pressure)</b>		<b>Gate valves</b>	
2-way	292	Pipe fittings DIN 2353, light series	301
3-way (L hole)	297		
3-way (T hole)	298		
Spare parts	299		

**BKR ND****2-way ball valve in low pressure design**

**Connection 1 + 2:** BSP cylindrical internal threads

**Contact travel:** 0°; 90°

**Temp. range:** Air: - 20 °C to + 150 °C

Water: 0 °C to +150 °C

**Material:** Brass housing, Aluminium handle, Brass ball, hard chrome-plated, PTFE ball seal

**Surface:** nickel plated

**Note:** The pressure figures are applicable for temperatures from 0 °C to +25 °C; at higher temperatures, pressure reductions must be taken into account.

Identification	DN*	Connecting thread	Working pressure bar
BKR 06 ND	6	G 1/4" -19	50
BKR 10 ND	10	G 3/8" -19	50
BKR 13 ND	12	G 1/2" -14	50
BKR 20 ND	19	G 3/4" -14	40
BKR 25 ND	25	G 1" -11	40
BKR 32 ND	31	G 1.1/4" -11	30
BKR 40 ND	38	G 1.1/2" -11	30
BKR 50 ND	51	G 2" -11	25
BKR 65 ND	65	G 2.1/2" -11	18
BKR 75 ND	76	G 3" -11	16
BKR 100 ND	100	G 4" -11	14

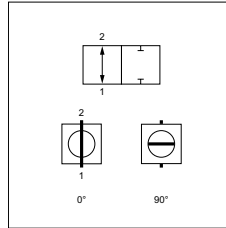
DN = Nominal diameter, nominal width    SF = Safety factor    SW = Width across flats

**Spare parts:**

**ND GRIFF** - Handle for ND ball valve

**BKR ND ROV****2-way ball valve in low pressure design**

**Connection 1 + 2:** BSP cylindrical internal threads  
**Sealing form 1 + 2:** for screw-in pins with shapes A, B and if necessary E  
**Contact travel:** 0°; 90°  
**Temp. range:** Water: 0 °C to +130 °C  
 Air: - 20 °C to +130 °C  
**Material:** Brass housing, Aluminium handle, Brass ball, hard chrome-plated, PTFE ball seal  
**Surface:** nickel plated  
**Description:** With longer screw-in thread for pipe fittings to DIN 2353



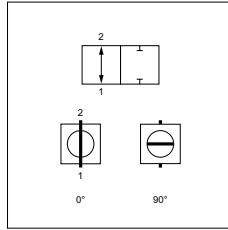
**Note:** The pressure figures are applicable for temperatures from 0 °C to +25 °C; at higher temperatures, pressure reductions must be taken into account.

Identification	DN*	Connecting thread	Working pressure bar
BKR 06 ND ROV	6	G 1/4" -19	64
BKR 10 ND ROV	10	G 3/8" -19	64
BKR 13 ND ROV	12	G 1/2" -14	50
BKR 20 ND ROV	19	G 3/4" -14	40
BKR 25 ND ROV	25	G 1" -11	40
BKR 32 ND ROV	31	G 1.1/4" -11	30
BKR 40 ND ROV	38	G 1.1/2" -11	30
BKR 50 ND ROV	51	G 2" -11	25

DN = Nominal diameter, nominal width    SF = Safety factor    SW = Width across flats

**Spare parts:**

**ND GRIFF** - Handle for ND ball valve

**BKR ND DVGW****2-way ball valve in low pressure design**

- Connection 1 + 2:** BSP cylindrical internal threads  
**Contact travel:** 0°; 90°  
**Add. feature:** DVGW approval for gas  
**Temp. range:** Water: 0 °C to +120 °C  
 Gas: -20 °C to + 60 °C  
 Misc.: - 20 °C to + 150 °C
- Media:** Town gas, liquid gas, methane gas, Cold and hot water, oils, Compressed air and general hydrocarbons
- Material:** Elastomer O-ring double seal, Brass housing, Steel handle with yellow plastic protection, Brass ball, hard chrome-plated
- Surface:** nickel plated

**Note:** The pressure figures are applicable for temperatures from 0 °C to +25 °C; at higher temperatures, pressure reductions must be taken into account.

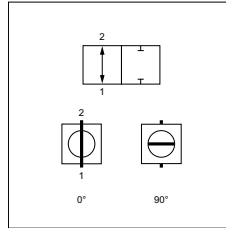
Identification	DN*	Connecting thread	BD* for gas bar	Working pressure bar
BKR 06 ND DVGW	6	G 1/4" -19	5	64
BKR 10 ND DVGW	10	G 3/8" -19	5	64
BKR 13 ND DVGW	12	G 1/2" -14	5	63
BKR 20 ND DVGW	19	G 3/4" -14	5	40
BKR 25 ND DVGW	25	G 1" -11	5	40
BKR 32 ND DVGW	31	G 1.1/4" -11	5	30
BKR 40 ND DVGW	38	G 1.1/2" -11	5	30
BKR 50 ND DVGW	51	G 2" -11	5	25

DN = Nominal diameter, nominal width SF = Safety factor SW = Width across flats



**BKR ND K****2-way ball valve in low pressure design**

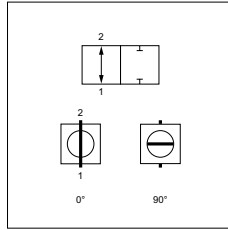
<b>Construction:</b>	Compact type with T- handle
<b>Connection 1 + 2:</b>	BSP cylindrical internal threads
<b>Contact travel:</b>	0°; 90°
<b>Temp. range:</b>	Air: - 20 °C to + 150 °C Water: 0 °C to +150 °C
<b>Material:</b>	Brass housing, Aluminium handle, Brass ball, hard chrome-plated, PTFE ball seal
<b>Surface:</b>	nickel plated



**Note:** The pressure figures are applicable for temperatures from 0 °C to +25 °C; at higher temperatures, pressure reductions must be taken into account.

Identification	DN*	Connecting thread	Working pressure bar
BKR 06 ND K	6	G 1/4" -19	50
BKR 10 ND K	10	G 3/8" -19	50
BKR 13 ND K	12	G 1/2" -14	50
BKR 20 ND K	19	G 3/4" -14	40
BKR 25 ND K	25	G 1" -11	40

DN = Nominal diameter, nominal width    SF = Safety factor    SW = Width across flats

**BKR HR ND****2-way ball valve in low pressure design**

<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Connection 2:</b>	BSP cylindrical external threads
<b>Contact travel:</b>	0°; 90°
<b>Temp. range:</b>	Air: - 20 °C to + 150 °C Water: 0 °C to +150 °C
<b>Material:</b>	Brass housing, Aluminium handle, Brass ball, hard chrome-plated, PTFE ball seal
<b>Surface:</b>	nickel plated

**Note:** The pressure figures are applicable for temperatures from 0 °C to +25 °C; at higher temperatures, pressure reductions must be taken into account.

Identification	DN*	Connecting thread	Working pressure bar
BKR 06 HR ND	6	G 1/4" -19	50
BKR 10 HR ND	10	G 3/8" -19	50
BKR 13 HR ND	12	G 1/2" -14	50
BKR 20 HR ND	19	G 3/4" -14	40
BKR 25 HR ND	25	G 1" -11	40
BKR 32 HR ND	31	G 1.1/4" -11	30
BKR 40 HR ND	38	G 1.1/2" -11	30
BKR 50 HR ND	51	G 2" -11	25

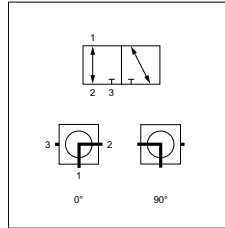
DN = Nominal diameter, nominal width    SF = Safety factor    SW = Width across flats

**Spare parts:**

**ND GRIFF** - Handle for ND ball valve

**3 BKR ND L****3-way ball valve in low pressure design**

**Connection 1 - 3:** BSP cylindrical internal threads  
**Sealing form 1 - 3:** Shape A  
**Bore:** L shaped  
**Contact travel:** 0°; 90°  
**Temp. range:** Water: 0 °C to +150 °C  
 Air: - 20 °C to + 150 °C  
**Material:** Brass housing, Aluminium handle,  
 Brass ball, hard chrome-plated, PTFE  
 ball seal  
**Surface:** nickel plated



Identification	DN*	Connecting thread	Working pressure bar
3 BKR 06 ND L	6	G 1/4" -19	25
3 BKR 10 ND L	10	G 3/8" -19	25
3 BKR 13 ND L	12	G 1/2" -14	25
3 BKR 20 ND L	19	G 3/4" -14	25
3 BKR 25 ND L	25	G 1" -11	25
3 BKR 32 ND L	31	G 1.1/4" -11	25
3 BKR 40 ND L	38	G 1.1/2" -11	25
3 BKR 50 ND L	50	G 2" -11	25

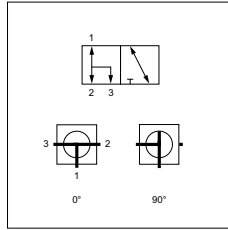
DN = Nominal diameter, nominal width    SF = Safety factor    SW = Width across flats

**Spare parts:**

**ND GRIFF** - Handle for ND ball valve

## 3 BKR ND T

### 3-way ball valve in low pressure design



**Connection 1 - 3:** BSP cylindrical internal threads  
**Sealing form 1 - 3:** Shape A  
**Bore:** T shaped  
**Contact travel:** 0°; 90°  
**Temp. range:** Water: 0 °C to +150 °C  
 Air: - 20 °C to + 150 °C  
**Material:** Brass housing, Aluminium handle, Brass ball, hard chrome-plated, PTFE ball seal  
**Surface:** nickel plated

Identification	DN*	Connecting thread	Working pressure bar
3 BKR 06 ND T	6	G 1/4" -19	25
3 BKR 10 ND T	10	G 3/8" -19	25
3 BKR 13 ND T	12	G 1/2" -14	25
3 BKR 20 ND T	19	G 3/4" -14	25
3 BKR 25 ND T	25	G 1" -11	25
3 BKR 32 ND T	31	G 1.1/4" -11	25
3 BKR 40 ND T	38	G 1.1/2" -11	25
3 BKR 50 ND T	51	G 2" -11	25

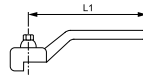
DN = Nominal diameter, nominal width    SF = Safety factor    SW = Width across flats

#### Spare parts:

**ND GRIFF** - Handle for ND ball valve

**ND GRIFF****Handle for ND ball valve**

**suitable for:** Low pressure ball valve  
**Material:** Steel



Identification	for ball valve	L1 mm
ND GRIFF DN 06 13	DN 06 - 12	80,0
ND GRIFF DN 20 25	DN 19/DN 25	113,0
ND GRIFF DN 32 40	DN 31/DN 38	137,5
ND GRIFF DN 50	DN 51	157,0
ND GRIFF DN 65	DN 65	197,0
ND GRIFF DN 100	DN 76 - DN 100	250,0

DN = Nominal diameter, nominal width

**Spare part for following products:**

- BKR ND** - 2-way ball valve in low pressure design
- 3 BKR ND T** - 3-way ball valve in low pressure design
- 3 BKR ND L** - 3-way ball valve in low pressure design
- BKR HR ND** - 2-way ball valve in low pressure design
- BKR ND ROV** - 2-way ball valve in low pressure design

## ND GRIFF K BA

### Handle for ND ball valve



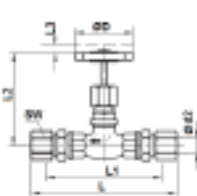
**Material:** Aluminium

Identification	for ball valve
ND GRIFF K 06 13 BA	DN 06 - 12
ND GRIFF K 20 25 BA	DN 19 - DN 25
DN = Nominal diameter, nominal width	

## ND DGV MG

## Gate valve

**Connection 1 + 2:** metric cylindrical outer thread  
**Sealing form 1 + 2:** 24° inner cone  
**Included in scope of supply:** with union nut and cutting ring  
**Temp. range:** mineral oils and fuel oil grades EL and L, 6 bar and up to 80 °C, Water: 0 °C to +80 °C  
**Material:** Brass



Identification	DN*	Series	Ø d2 mm	Working pressure bar	L mm	L1 mm	L2 mm	L3 mm	Ø D mm	SF*	SW mm
ND DGV NW 04 HL MG	5	L	6	10	117	88	63	7	50	1,5	14
ND DGV NW 06 HL MG	6	L	8	10	117	88	63	7	50	1,5	17
ND DGV NW 08 HL MG	8	L	10	10	119	90	63	7	50	1,5	19
ND DGV NW 10 HL MG	10	L	12	10	119	90	63	7	50	1,5	22
ND DGV NW 13 HL MG	12	L	15	10	123	93	65	8	50	1,5	27
ND DGV NW 16 HL MG	16	L	18	10	126	94	67	8	50	1,5	32
ND DGV NW 20 HL MG	20	L	22	10	140	108	67	8	60	1,5	36
ND DGV NW 25 HL MG	25	L	28	10	158	125	95	10	60	1,5	41
ND DGV NW 32 HL MG	32	L	35	10	188	145	102	10	70	1,5	50

DN = Nominal diameter, nominal width    d2 = for external pipe diameter    SW = Width across flats



## Mounting technology



**Hose clips**

Ear clamps	304
CLIC clamps	308
Worm drive hose clamps	310
Hinge bolt clamps	322
Clamping jaws	324
Hose clamps	329
Retaining clamps	332
Tools	339

**1 OK****1-ear clamp**

**Application:** Hose mountings in low pressure range  
**Material:** Steel  
**Surface:** galvanised

Identification	Clamping range (mm)	Band width mm
1 OK 09-11	9 - 11	6,5
1 OK 10-12	10 - 12	6,5
1 OK 11-13	11 - 13	6,5
1 OK 12-14	12 - 14	7,0
1 OK 14-16	14 - 16	7,0

**Product versions:**

**1 OK VA** - 1-ear clamp, Stainless steel

**1 OKE VA****1-ear clamp with insert ring**

**Application:** Hose mountings in low pressure range  
**Design:** with insert ring  
**Material:** Stainless steel 1.4301



Identification	Clamping range (mm)	Band width mm
1 OKE 18.0-20.3 VA	18,0 - 20,3	9,2
1 OKE 18.8-21.1 VA	18,8 - 21,1	9,2
1 OKE 19.2-21.8 VA	19,2 - 21,8	9,2
1 OKE 20.2-22.8 VA	20,2 - 22,8	9,2
1 OKE 21.0-23.8 VA	21,0 - 23,8	9,2
1 OKE 22.0-24.8 VA	22,0 - 24,8	9,2
1 OKE 23.0-25.6 VA	23,0 - 25,6	9,2
1 OKE 23.3-26.3 VA	23,3 - 26,3	9,2
1 OKE 26.5-30.0 VA	26,5 - 30,0	9,2

**2 OK****2-ear clamp**

**Application:** Hose mountings in low pressure range  
**Material:** Steel  
**Surface:** electro galvanised

Identification	Clamping range (mm)	Band width mm
2 OK 5-7	5 - 7	6,0
2 OK 7-9	7 - 9	6,0
2 OK 9-11	9 - 11	6,5
2 OK 11-13	11 - 13	6,5
2 OK 13-15	13 - 15	7,0
2 OK 14-17	14 - 17	7,0
2 OK 15-18	15 - 18	7,5
2 OK 17-20	17 - 20	7,5
2 OK 18-21	18 - 21	8,0
2 OK 20-23	20 - 23	8,0
2 OK 22-25	22 - 25	8,5
2 OK 23-27	23 - 27	8,5
2 OK 25-28	25 - 28	9,0
2 OK 28-31	28 - 31	9,0
2 OK 31-34	31 - 34	9,5
2 OK 34-37	34 - 37	9,5
2 OK 37-40	37 - 40	10,0
2 OK 40-43	40 - 43	10,0
2 OK 43-46	43 - 46	10,0

**Product versions:**

**2 OK VC** - 2-ear clamp, Steel, bright chromium galvanised

**2 OK VA** - 2-ear clamp, Stainless steel

**OKD VC****Double hose clamp**

**Application:** for parallel routing of hoses and cables  
**Material:** Steel  
**Surface:** bright chromium galvanised



Identification	Clamping range (mm)	Band width mm
OKD 4-5 VC	4 - 5	6,0
OKD 6-7 VC	6 - 7	6,0
OKD 8-9 VC	8 - 9	7,0
OKD 10-11 VC	10 - 11	8,0
OKD 12-13 VC	12 - 13	8,5
OKD 14-15 VC	14 - 15	9,0
OKD 16-17 VC	16 - 17	10,0
OKD 18-19 VC	18 - 19	10,0
OKD 20-21 VC	20 - 21	10,0
OKD 22-23 VC	22 - 23	10,0

## CLIC

### Hose clamp



**Design:**

Screwless hose clamps

**Material:**

Rustproof chrome nickel steel

**Description:**

The CLIC hose clamp is a reliable connecting element for hose socket systems.

Identification	Clamping range (mm)	Band width mm
CLIC 11.5-12.5	11,5 - 12,5	7
CLIC 12-13	12,0 - 13,0	7
CLIC 13-14	12,5 - 14,0	8
CLIC 14-15	13,5 - 15,0	8
CLIC 15-16	14,5 - 16,0	8
CLIC 16-17	15,5 - 17,0	8
CLIC 17-18	16,5 - 18,0	8
CLIC 18-19	17,5 - 19,0	8
CLIC 19-20	18,5 - 20,0	8
CLIC 20-21	19,5 - 21,0	8
CLIC 20.5-21.5	20,5 - 22,0	8
CLIC 21.5-23	21,5 - 23,0	8
CLIC 22.5-24	22,5 - 24,0	8
CLIC 23.5-25	23,5 - 25,0	8
CLIC 25.5-27	25,5 - 27,0	8
CLIC 26.5-28	26,5 - 28,0	8

**Accessories:**

CLIC ZANGE - Pliers for CLIC clamp

**CLIC SET**

## Clamp sets

**Design:** Screwless hose clamps  
**Supplementary design information:** in a practical plastic box  
**Included in scope of supply:** 500 parts  
**Material:** Rustproof chrome nickel steel



Identification	Dimension (mm)
CLIC SET	340 x 230 x 50

**Additional info:** The CLIC hose clamp is a reliable connecting element for hose socket systems.

Consisting of:

Quantity, identification, clamping range (min – max), band width

30 x 7,5/7 = 8,0 - 9,0 - 7 white	30 x 12/8 = 12,5 - 14,0 - 8 black
25 x 8/7 = 8,5 - 9,5 - 7 yellow	30 x 13/8 = 13,5 - 15,0 - 8 yellow
25 x 8,5/7 = 9,0 - 10,0 - 7 green	30 x 14/8 = 14,5 - 16,0 - 8 purple
25 x 9/7 = 9,5 - 10,5 - 7 purple	30 x 15/8 = 15,5 - 17,0 - 8 white
25 x 9,5/7 = 10,0 - 11,0 - 7 black	30 x 16/8 = 16,5 - 18,0 - 8 green
25 x 10/7 = 10,5 - 11,5 - 7 white	30 x 17/8 = 17,5 - 19,0 - 8 black
25 x 10,5/7 = 11,0 - 12,0 - 7 yellow	30 x 18/8 = 18,5 - 20,0 - 8 yellow
25 x 11/7 = 11,5 - 12,5 - 7 green	30 x 19/8 = 19,5 - 21,0 - 8 purple
25 x 11,5/7 = 12,0 - 13,0 - 7 violett	30 x 21/8 = 21,5 - 23,0 - 8 green

**Accessories:**

**CLIC ZANGE** - Pliers for CLIC clamp

**ASK****Hose clamp**

**Design:** Worm drive hose clamps  
**Supplementary design information:** Hexagon screw with slot  
**Standard:** DIN 3017  
**Material:** Steel  
**Surface:** galvanised

Identification	Clamping range (mm)	Band width mm
ASK 08-12	8 - 12	9
ASK 10-16	10 - 16	9
ASK 12-20	12 - 20	9
ASK 16-25	16 - 25	12
ASK 20-32	20 - 32	12
ASK 25-40	25 - 40	12
ASK 35-50	35 - 50	12
ASK 40-60	40 - 60	12
ASK 50-70	50 - 70	12
ASK 60-80	60 - 80	12
ASK 70-90	70 - 90	12
ASK 80-100	80 - 100	12
ASK 90-110	90 - 110	12
ASK 100-120	100 - 120	12
ASK 110-130	110 - 130	12
ASK 120-140	120 - 140	12
ASK 130-150	130 - 150	12
ASK 140-160	140 - 160	12
ASK 150-170	150 - 170	12
ASK 160-180	160 - 180	12
ASK 170-190	170 - 190	12
ASK 180-200	180 - 200	12
ASK 190-210	190 - 210	12
ASK 200-220	200 - 220	12
ASK 210-230	210 - 230	12
ASK 220-240	220 - 240	12
ASK 230-250	230 - 250	12
ASK 240-260	240 - 260	12
ASK 250-270	250 - 270	12
ASK 260-280	260 - 280	12
ASK 270-290	270 - 290	12
ASK 280-300	280 - 300	12
ASK 290-310	290 - 310	12

**Accessories:**

**SCHRAUBENDR** - Screwdriver, flexible

5



**ASK A****Hose clamp**

**Design:** Worm drive hose clamps  
**Supplementary design information:**  
**Standard:** Hexagon screw with slot  
 DIN 3017  
**Material:** Steel  
**Surface:** galvanised



Identification	Clamping range (mm)	Band width mm
ASK 08-12 A	8 - 12	9
ASK 08-14 A	8 - 14	9
ASK 10-16 A	10 - 16	9
ASK 11-17 A	11 - 17	9
ASK 12-20 A	12 - 20	9
ASK 13-20 A	13 - 20	9
ASK 15-24 A	15 - 24	12
ASK 16-25 A	16 - 25	12
ASK 19-28 A	19 - 28	12
ASK 20-32 A	20 - 32	12
ASK 22-32 A	22 - 32	12
ASK 25-40 A	25 - 40	12
ASK 32-44 A	32 - 44	12
ASK 32-50 A	32 - 50	12
ASK 38-50 A	38 - 50	12
ASK 40-60 A	40 - 60	12
ASK 44-56 A	44 - 56	12
ASK 50-70 A	50 - 70	12
ASK 58-75 A	58 - 75	12
ASK 60-80 A	60 - 80	12
ASK 68-85 A	68 - 85	12
ASK 70-90 A	70 - 90	12
ASK 77-95 A	77 - 95	12
ASK 80-100 A	80 - 100	12
ASK 87-112 A	87 - 112	12
ASK 90-110 A	90 - 110	12
ASK 100-120 A	100 - 120	12
ASK 104-138 A	104 - 138	12
ASK 110-130 A	110 - 130	12
ASK 120-140 A	120 - 140	12
ASK 130-150 A	130 - 150	12
ASK 130-165 A	130 - 65	12
ASK 140-160 A	140 - 160	12
ASK 150-170 A	150 - 170	12
ASK 150-180 A	150 - 180	12
ASK 160-180 A	160 - 180	12
ASK 170-190 A	170 - 190	12
ASK 175-205 A	175 - 205	12
ASK 180-200 A	180 - 200	12
ASK 190-210 A	190 - 210	12
ASK 200-220 A	200 - 220	12
ASK 200-231 A	200 - 231	12

**ASK A****Hose clamp****(Continued)**

Identification	Clamping range (mm)	Band width mm
ASK 210-230 A	210 - 230	12
ASK 220-240 A	220 - 240	12
ASK 226-256 A	226 - 256	12
ASK 230-250 A	230 - 250	12
ASK 240-260 A	240 - 260	12
ASK 250-270 A	250 - 270	12
ASK 251-282 A	251 - 282	12
ASK 260-280 A	260 - 280	12
ASK 270-290 A	270 - 290	12
ASK 277-307 A	277 - 307	12
ASK 280-300 A	280 - 300	12
ASK 290-310 A	290 - 310	12

**Accessories:****SCHRAUBENDR** - Screwdriver, flexible

**ASK SET 1A**

## Clamp sets A

<b>Construction:</b>	Wall bracket
<b>Design:</b>	Worm drive hose clamps
<b>Supplementary design information:</b>	Hexagon screw with slot
<b>Included in scope of supply:</b>	244 parts
<b>Material:</b>	Steel
<b>Surface:</b>	galvanised

**Identification**

ASK SET 1A

**Additional info:** Consisting of:

10 x ASK 06-08 M	10 x ASK 11-13 M	12 x ASK 08-12	12 x ASK 25-40
10 x ASK 07-09 M	10 x ASK 12-14 M	12 x ASK 10-16	12 x ASK 32-50
10 x ASK 08-10 M	10 x ASK 13-14 M	24 x ASK 12-20	12 x ASK 40-60
10 x ASK 09-11 M	10 x ASK 14-16 M	24 x ASK 16-25	10 x ASK 50-70
10 x ASK 10-12 M	10 x ASK 15-17 M	24 x ASK 20-32	
1 x screwdriver 30			

**ESK****Hose clamp**

**Design:** Worm drive hose clamps  
**Supplementary design information:** Hexagon screw with slot  
**Material:** Stainless steel 1.4301

Identification	Clamping range (mm)	Band width mm
ESK 11-17	11 - 17	9
ESK 15-24	15 - 24	9
ESK 19-28	19 - 28	12
ESK 22-32	22 - 32	12
ESK 26-38	26 - 38	12
ESK 32-44	32 - 44	12
ESK 38-50	38 - 50	12
ESK 44-56	44 - 56	12
ESK 50-65	50 - 65	12
ESK 58-75	58 - 75	12
ESK 68-85	68 - 85	12
ESK 77-95	77 - 95	12
ESK 87-112	87 - 112	12
ESK 104-138	104 - 138	12
ESK 136-165	136 - 165	12
ESK 150-180	150 - 180	12
ESK 175-205	175 - 205	12
ESK 200-231	200 - 231	12
ESK 226-256	226 - 256	12
ESK 251-282	251 - 282	12
ESK 277-307	277 - 307	12

**Product versions:**

**ESK W2** - Hose clamp, Stainless steel 1.4016

**ESK W5** - Hose clamp, Stainless steel 1.4436

**Accessories:**

**SCHRAUBENDR** - Screwdriver, flexible

**ESK M****Hose clamp, mini series**

**Design:** Tensioning screw clamp  
**Supplementary design information:** Hexagon screw with slot  
**Material:** Stainless steel 1.4301



Identification	Clamping range (mm)	Band width mm
ESK 06-08 M	6,5 - 8,0	9
ESK 07-09 M	7,0 - 9,0	9
ESK 08-10 M	9,0 - 10,0	9
ESK 09-11 M	9,5 - 11,0	9
ESK 10-12 M	10,5 - 12,0	9
ESK 11-13 M	11,5 - 13,0	9
ESK 12-14 M	12,5 - 14,0	9
ESK 13-15 M	13,5 - 15,0	9
ESK 14-16 M	14,0 - 16,0	9
ESK 15-17 M	15,0 - 17,0	9

**Accessories:**

**SCHRAUBENDR** - Screwdriver, flexible

**ESK W2****Hose clamp**

**Design:** Worm drive hose clamps  
**Supplementary design information:** Hexagon screw with slot  
**Material:** Stainless steel 1.4016

**Note:** Steel screw is galvanised and yellow chromised.

Identification	Clamping range (mm)	Band width mm
ESK 08-12 W2	8 - 12	9
ESK 10-16 W2	10 - 16	9
ESK 12-20 W2	12 - 20	9
ESK 16-25 W2	16 - 25	9
ESK 20-32 W2	20 - 32	9
ESK 25-40 W2	25 - 40	9
ESK 32-50 W2	32 - 50	9
ESK 40-60 W2	40 - 60	9
ESK 50-70 W2	50 - 70	9
ESK 60-80 W2	60 - 80	9
ESK 70-90 W2	70 - 90	9
ESK 80-100 W2	80 - 100	9
ESK 90-110 W2	90 - 110	9
ESK 100-120 W2	100 - 120	9
ESK 110-130 W2	110 - 130	9
ESK 120-140 W2	120 - 140	9
ESK 130-150 W2	130 - 150	9
ESK 12 16-25 W2	16 - 25	12
ESK 12 20-32 W2	20 - 32	12
ESK 12 25-40 W2	25 - 40	12
ESK 12 32-50 W2	32 - 50	12
ESK 12 40-60 W2	40 - 60	12
ESK 12 50-70 W2	50 - 70	12
ESK 12 60-80 W2	60 - 80	12
ESK 12 70-90 W2	70 - 90	12
ESK 12 80-100 W2	80 - 100	12
ESK 12 90-110 W2	90 - 110	12
ESK 12 100-120 W2	100 - 120	12
ESK 12 110-130 W2	110 - 130	12

**Product versions:**

ESK - Hose clamp, Stainless steel 1.4301

**Accessories:**

SCHRAUBENDR - Screwdriver, flexible

**ESK W5****Hose clamp**

**Design:** Worm drive hose clamps  
**Supplementary design information:**  
**Material:** Hexagon screw with slot  
 Stainless steel 1.4436



Identification	Clamping range (mm)	Band width mm
ESK 08-14 W5	8 - 14	9
ESK 11-17 W5	11 - 17	9
ESK 13-20 W5	13 - 20	9
ESK 15-24 W5	15 - 24	9
ESK 19-28 W5	19 - 28	12
ESK 22-32 W5	22 - 32	12
ESK 26-38 W5	26 - 38	12
ESK 32-44 W5	32 - 44	12
ESK 38-50 W5	38 - 50	12
ESK 44-56 W5	44 - 56	12
ESK 50-65 W5	50 - 65	12
ESK 58-75 W5	58 - 75	12
ESK 68-85 W5	68 - 85	12
ESK 77-95 W5	77 - 95	12
ESK 87-112 W5	87 - 112	12
ESK 104-138 W5	104 - 138	12
ESK 130-165 W5	130 - 165	12
ESK 150-180 W5	150 - 180	12
ESK 175-205 W5	175 - 205	12
ESK 200-231 W5	200 - 231	12
ESK 226-256 W5	226 - 256	12
ESK 251-282 W5	251 - 282	12
ESK 277-307 W5	277 - 307	12

**Product versions:**

ESK -

**Accessories:**

SCHRAUBENDR - Screwdriver, flexible

## SPS

### Spiral clamp



**Application:**

suitable for POLY H and POLY XL

**Material:**

Clamp band, clamping wire, screws: steel

**Description:**

Special hose clamp for attaching heavy spiral hoses with a clockwise rising gradient.

Identification	DN*
SPS DN 50	50
SPS DN 60	60
SPS DN 65	65
SPS DN 70	70
SPS DN 75	75
SPS DN 80	80
SPS DN 100	100
SPS DN 110	110
SPS DN 120	120
SPS DN 125	125
SPS DN 130	130
SPS DN 140	140
SPS DN 150	150
SPS DN 160	160
SPS DN 175	175
SPS DN 180	180
SPS DN 200	200
SPS DN 225	225
SPS DN 250	250
SPS DN 275	275
SPS DN 300	300

**Accessory for following products:**

**POLY H** - Polyurethane suction / delivery hose

**POLY XL** - Polyurethane suction / delivery hose



**SCHELLEN SET A****DIN clamp set**

**Design:** Worm drive hose clamps  
**Supplementary design information:** Hexagon screw with slot  
**Included in scope of supply:** 135 parts  
**Material:** Steel  
**Surface:** galvanised



**Note:** Consisting of:  
 10 x ASK 06-08 M    10 x ASK 14-16 M    10 x ASK 15-24  
 20 x ASK 08-10 M    10 x ASK 15-17 M    5 x ASK 19-28  
 20 x ASK 10-12 M    10 x ASK 11-17    5 x ASK 22-32  
 10 x ASK 12-14 M    20 x ASK 13-20    5 x ASK 26-28  
 1 x screwdriver 30

Identification	Dimension (mm)
SCHELLEN SET A	340 x 240 x 50

## SCHELLEN SET B

### DIN clamp set



<b>Design:</b>	Worm drive hose clamps
<b>Supplementary design information:</b>	Hexagon screw with slot
<b>Included in scope of supply:</b>	265 parts
<b>Material:</b>	Steel
<b>Surface:</b>	galvanised

**Note:** Consisting of:

50 x ASK 08-12	25 x ASK 16-25	15 x ASK 32-50
50 x ASK 10-16	25 x ASK 20-32	10 x ASK 40-60
50 x ASK 12-20	20 x ASK 25-40	20 x ASK 50-70
1 x screwdriver 30		

Identification	Dimension (mm)
SCHELLEN SET B	400 x 270 x 85

**SCHELLEN SET M**

## Mini clamp set series

**Design:** Tensioning screw clamp  
**Supplementary design information:** Hexagon screw with slot  
**Included in scope of supply:** 120 parts  
**Material:** Steel  
**Surface:** galvanised

**Note:** Consisting of:

15 x ASK 06-08 M    10 x ASK 09-11 M    5 x ASK 12-14 M  
 15 x ASK 07-09 M    30 x ASK 10-12 M    5 x ASK 13-15 M  
 30 x ASK 08-10 M    10 x ASK 11-13 M  
 1 x screwdriver 30

Identification	Dimension (mm)
SCHELLEN SET M	280 x 170 x 45

**GBS****Hinge bolt clamp PA-RI**

**Application:** for suction and return hoses  
**Design:** Hinge bolt clamp  
**Material:** Steel  
**Surface:** electro galvanised

Identification	for external hose Ø mm	Clamping range (mm)	Band width mm	Screws	Design
GBS 36-20	36	32 - 38	20	1 x M 6	1 piece
GBS 42-20	42	38 - 44	20	1 x M 6	1 piece
GBS 44-20	44	40 - 46	20	1 x M 6	1 piece
GBS 48-20	48	44 - 50	20	1 x M 6	1 piece
GBS 50-20	50	46 - 52	20	1 x M 6	1 piece
GBS 56-25	56	52 - 58	25	1 x M 8	1 piece
GBS 61-25	61	57 - 63	25	1 x M 8	1 piece
GBS 63-25	63	59 - 65	25	1 x M 8	1 piece
GBS 70-25	70	66 - 72	25	1 x M 8	1 piece
GBS 76-25	76	72 - 78	25	1 x M 8	1 piece
GBS 78-25	78	74 - 80	25	1 x M 8	1 piece
GBS 83-25	83	79 - 85	25	1 x M 8	1 piece
GBS 89-25	89	85 - 91	25	1 x M 8	1 piece
GBS 91-25	91	87 - 93	25	1 x M 8	1 piece
GBS 94-25	94	90 - 96	25	1 x M 8	1 piece
GBS 105-25		101 - 107	25	1 x M 8	1 piece
GBS 116-25	116	112 - 118	25	1 x M 8	1 piece
GBS 118-25	118	114 - 120	25	1 x M 8	1 piece
GBS 145-25	145	137 - 149	25	2 x M 8	2 piece
GBS 170-25	170	162 - 174	25	2 x M 8	2 piece
GBS 225-25	225	217 - 229	25	2 x M 8	2 piece

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## MRS

## Hinge bolt clamp

**Application:** for suction and return hoses  
**Design:** Hinge bolt clamp  
**Standard:** similar to DIN 3017  
**Material:** Steel  
**Surface:** electro galvanised



Identification	Clamping range (mm)	Band width mm
MRS 17-19	17 - 19	18
MRS 20-22	20 - 22	18
MRS 21-23	21 - 23	18
MRS 23-25	23 - 25	18
MRS 25-27	25 - 27	18
MRS 26-28	26 - 28	18
MRS 29-31	29 - 31	18
MRS 32-35	32 - 35	20
MRS 36-39	36 - 39	20
MRS 40-43	40 - 43	20
MRS 44-47	44 - 47	22
MRS 48-51	48 - 51	20
MRS 52-55	52 - 55	22
MRS 56-59	56 - 59	20
MRS 60-63	60 - 63	20
MRS 64-67	64 - 67	22
MRS 68-73	68 - 73	24
MRS 74-79	74 - 79	24
MRS 80-85	80 - 85	24
MRS 86-91	86 - 91	24
MRS 92-97	92 - 97	24
MRS 98-103	98 - 103	24
MRS 104-112	104 - 112	24
MRS 113-121	113 - 121	24
MRS 122-130	122 - 130	25
MRS 131-139	131 - 139	25
MRS 140-148	140 - 148	25
MRS 149-161	149 - 161	25
MRS 162-174	162 - 174	25
MRS 175-187	175 - 187	25
MRS 188-200	188 - 200	25
MRS 201-213	201 - 213	25
MRS 214-226	214 - 226	25
MRS 227-239	227 - 239	25
MRS 240-252	240 - 252	25
MRS 253-265	253 - 265	30
MRS 266-278	266 - 278	30
MRS 279-291	279 - 291	30
MRS 292-304	292 - 304	30

**Product versions:**

MRSS - Hinge bolt clamp, Stainless steel 1.4301

**SBS 12 / 15 / 20 / 25****Clamping jaw****Application:**

for rubber and plastic hoses

**Design:**

Hose clamp

**Supplementary design information:**

1-piece with clamping jaw tightening to DIN 3017

**Material:**

Steel

**Surface:**

electro galvanised

Identification	Minimum Ø mm	Band width mm
SBS 12-18	18	12
SBS 12-21	21	12
SBS 12-22	22	12
SBS 12-24	28	12
SBS 12-26	26	12
SBS 12-28	28	12
SBS 12-30	30	12
SBS 12-32	32	12
SBS 12-34	34	12
SBS 12-36	36	12
SBS 12-38	38	12
SBS 12-40	40	12
SBS 15-21	21	15
SBS 15-22	22	15
SBS 15-24	24	15
SBS 15-25	25	15
SBS 15-26	26	15
SBS 15-28	28	15
SBS 15-30	30	15
SBS 15-32	32	15
SBS 15-34	34	15
SBS 15-36	36	15
SBS 15-38	38	15
SBS 15-40	40	15
SBS 15-42	42	15
SBS 15-44	44	15
SBS 15-46	46	15
SBS 15-48	48	15
SBS 15-50	50	15
SBS 15-52	52	15
SBS 15-54	54	15
SBS 15-56	56	15
SBS 15-58	58	15
SBS 15-60	60	15
SBS 15-62	62	15
SBS 15-64	64	15
SBS 15-66	66	15
SBS 15-68	68	15
SBS 15-70	70	15
SBS 15-72	72	15
SBS 15-74	74	15
SBS 15-76	76	15

## SBS 12 / 15 / 20 / 25

(Continued)

Clamping jaw

Identification	Minimum Ø mm	Band width mm
SBS 15-78	78	15
SBS 15-80	80	15
SBS 15-82	82	15
SBS 15-84	84	15
SBS 15-86	86	15
SBS 15-88	88	15
SBS 15-90	90	15
SBS 20-25	25	20
SBS 20-28	28	20
SBS 20-30	30	20
SBS 20-32	32	20
SBS 20-34	34	20
SBS 20-36	36	20
SBS 20-38	38	20
SBS 20-40	40	20
SBS 20-42	42	20
SBS 20-44	44	20
SBS 20-46	46	20
SBS 20-48	48	20
SBS 20-50	50	20
SBS 20-52	52	20
SBS 20-54	54	20
SBS 20-56	56	20
SBS 20-58	58	20
SBS 20-60	60	20
SBS 20-62	62	20
SBS 20-64	64	20
SBS 20-66	66	20
SBS 20-68	68	20
SBS 20-70	70	20
SBS 20-72	72	20
SBS 20-74	74	20
SBS 20-76	76	20
SBS 20-78	78	20
SBS 20-80	80	20
SBS 20-82	82	20
SBS 20-84	84	20
SBS 20-86	86	20
SBS 20-88	88	20
SBS 20-90	90	20
SBS 20-92	92	20
SBS 20-94	94	20
SBS 20-96	96	20
SBS 20-98	98	20
SBS 20-100	100	20
SBS 25-32	32	25
SBS 25-34	34	25
SBS 25-36	36	25
SBS 25-38	38	25
SBS 25-40	40	25
SBS 25-42	42	25
SBS 25-44	44	25
SBS 25-46	46	25
SBS 25-48	48	25
SBS 25-50	50	25
SBS 25-52	52	25
SBS 25-54	54	25
SBS 25-56	56	25
SBS 25-58	58	25
SBS 25-60	60	25
SBS 25-62	62	25

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**SBS 12 / 15 / 20 / 25****Clamping jaw****(Continued)**

<b>Identification</b>	<b>Minimum Ø</b> <b>mm</b>	<b>Band width</b> <b>mm</b>
SBS 25-64	64	25
SBS 25-66	66	25
SBS 25-68	68	25
SBS 25-70	70	25
SBS 25-72	72	25
SBS 25-74	74	25
SBS 25-76	76	25
SBS 25-78	78	25
SBS 25-80	80	25
SBS 25-82	82	25
SBS 25-84	84	25
SBS 25-86	86	25
SBS 25-88	88	25
SBS 25-90	90	25
SBS 25-92	92	25
SBS 25-94	94	25
SBS 25-96	96	25
SBS 25-98	98	25
SBS 25-100	100	25



**SBS 220 / 225****Clamping jaw**

**Application:** for rubber and plastic hoses  
**Design:** Hose clamp  
**Supplementary design information:** 2-piece with clamping jaw tightening to DIN 3017  
**Material:** Steel  
**Surface:** electro galvanised



Identification	Minimum Ø mm	Band width mm
SBS 220-42	42	20
SBS 220-44	44	20
SBS 220-46	46	20
SBS 220-48	48	20
SBS 220-50	50	20
SBS 220-52	52	20
SBS 220-54	54	20
SBS 220-56	56	20
SBS 220-58	58	20
SBS 220-60	60	20
SBS 220-62	62	20
SBS 220-64	64	20
SBS 220-66	66	20
SBS 220-68	68	20
SBS 220-70	70	20
SBS 220-72	72	20
SBS 220-74	74	20
SBS 220-76	76	20
SBS 220-78	78	20
SBS 220-80	80	20
SBS 220-82	82	20
SBS 220-84	84	20
SBS 220-86	86	20
SBS 220-88	88	20
SBS 220-90	90	20
SBS 220-92	92	20
SBS 220-94	94	20
SBS 220-96	96	20
SBS 220-98	98	20
SBS 220-100	100	20
SBS 225-42	42	25
SBS 225-44	44	25
SBS 225-46	46	25
SBS 225-48	48	25
SBS 225-50	50	25
SBS 225-52	52	25
SBS 225-54	54	25
SBS 225-56	56	25
SBS 225-58	58	25
SBS 225-60	60	25
SBS 225-62	62	25
SBS 225-64	64	25

**SBS 220 / 225****Clamping jaw****(Continued)**

Identification	Minimum Ø mm	Band width mm
SBS 225-66	66	25
SBS 225-68	68	25
SBS 225-70	70	25
SBS 225-72	72	25
SBS 225-74	74	25
SBS 225-76	76	25
SBS 225-78	78	25
SBS 225-80	80	25
SBS 225-82	82	25
SBS 225-84	84	25
SBS 225-86	86	25
SBS 225-88	88	25
SBS 225-90	90	25
SBS 225-92	92	25
SBS 225-94	94	25
SBS 225-96	96	25
SBS 225-98	98	25
SBS 225-100	100	25

**KSKL (LZ)****Hose clamp**

**Design:** 2 piece hose clamps  
**Supplementary design information:** with loose tongues  
**Material:** Malleable cast iron  
**Surface:** electro galvanised



Identification	Clamping range (mm)	Width mm	Working pressure bar
KSKL 22-29	22 - 29	61,5	PN 16
KSKL 28-34	28 - 34	71,0	PN 16
KSKL 32-40	32 - 40	81,0	PN 16
KSKL 39-49	39 - 49	92,5	PN 16
KSKL 48-60	48 - 60	105,0	PN 16
KSKL 60-76	60 - 76	115,0	PN 16
KSKL 77-94	77 - 94	150,5	PN 16
KSKL 94-115	94 - 115	163,0	PN 16
KSKL 115-145	115 - 145	198,0	PN 16

## KSKL (FZ)

### Hose clamp



**Design:** 2 piece hose clamps  
**Supplementary design information:** with overall cast tongues  
**Material:** Malleable cast iron  
**Surface:** electro galvanised

Identification	Clamping range (mm)	Working pressure bar
KSKL 17-22	17 - 22	PN 16
KSKL 27-32	27 - 32	PN 16

**KSKL SK****Hose clamp with safety claw**

**Design:** 2 piece hose clamps  
**Supplementary design information:** with loose tongues and safety claws  
**Material:** Malleable cast iron  
**Surface:** electro galvanised



Identification	Clamping range (mm)	Width mm	Working pressure bar
KSKL 22-29 SK	22 - 29	63	PN 25
KSKL 28-32 SK	28 - 32	70	PN 25
KSKL 35-42 SK	35 - 42	84	PN 25
KSKL 42-45 SK	42 - 45	92	PN 25
KSKL 45-53 SK	45 - 53	106	PN 25
KSKL 55-60 SK	55 - 60	117	PN 25
KSKL 60-73 SK	60 - 73	117	PN 25
KSKL 86-102 SK	86 - 102	154	PN 25

**NRS (9 mm)****Retaining clamp**

<b>Application:</b>	for mounting pipes, hoses and cables
<b>Design:</b>	Retaining clamp
<b>Supplementary design information:</b>	with rubber profile
<b>Standard:</b>	DIN 3016
<b>Material:</b>	Steel
<b>Surface:</b>	galvanised

**Note:** The rubber profile dampens vibrations and impacts and prevents scratching.

Identification	Minimum Ø mm	Band width mm	Hole Ø mm
NRS 06-09	6	9	4,5
NRS 08-09	8	9	4,5
NRS 10-09	10	9	4,5
NRS 12-09	12	9	4,5
NRS 14-09	14	9	4,5
NRS 15-09	15	9	4,5
NRS 16-09	16	9	4,5
NRS 18-09	18	9	4,5
NRS 20-09	20	9	4,5

**Product versions:**

- NRS (12 mm) - Retaining clamp, Steel
- NRS W4 (12 mm) - Retaining clamp, Chrome nickel steel (1.4301)
- NRS (15 mm) - Retaining clamp, Steel
- NRS W4 (15 mm) - Retaining clamp, Chrome nickel steel (1.4301)
- NRS (20 mm) - Retaining clamp, Steel
- NRS W4 (20 mm) - Retaining clamp, Chrome nickel steel (1.4301)
- NRS (25 mm) - Retaining clamp, Steel

**NRS (12 mm)****Retaining clamp**

**Application:** for mounting pipes, hoses and cables  
**Design:** Pipe clamp  
**Supplementary design information:** with rubber profile  
**Standard:** DIN 3016  
**Material:** Steel  
**Surface:** galvanised



**Note:** The rubber profile dampens vibrations and impacts and prevents scratching.

Identification	Minimum Ø mm	Band width mm	Hole Ø mm
NRS 05-12	5	12	5,3
NRS 06-12	6	12	5,3
NRS 07-12	7	12	5,3
NRS 08-12	8	12	5,3
NRS 09-12	9	12	5,3
NRS 10-12	10	12	5,3
NRS 11-12	11	12	5,3
NRS 12-12	12	12	5,3
NRS 13-12	13	12	5,3
NRS 14-12	14	12	5,3
NRS 15-12	15	12	5,3
NRS 16-12	16	12	5,3
NRS 17-12	17	12	5,3
NRS 18-12	18	12	5,3
NRS 19-12	19	12	5,3
NRS 20-12	20	12	5,3
NRS 21-12	21	12	5,3
NRS 22-12	22	12	5,3
NRS 23-12	23	12	5,3
NRS 24-12	24	12	5,3
NRS 25-12	25	12	5,3
NRS 50-12	50	12	5,3

**Product versions:**

**NRS W4 (12 mm)** - Retaining clamp, Chrome nickel steel (1.4301)

**NRS (9 mm)** - Retaining clamp, Steel

**NRS (15 mm)** - Retaining clamp, Steel

**NRS W4 (15 mm)** - Retaining clamp, Chrome nickel steel (1.4301)

**NRS (20 mm)** - Retaining clamp, Steel

**NRS W4 (20 mm)** - Retaining clamp, Chrome nickel steel (1.4301)

**NRS (25 mm)** - Retaining clamp, Steel

**NRS (15 mm)****Retaining clamp**

**Application:** for mounting pipes, hoses and cables  
**Design:** Pipe clamp  
**Supplementary design information:** with rubber profile  
**Standard:** DIN 3016  
**Material:** Steel  
**Surface:** galvanised

**Note:** The rubber profile dampens vibrations and impacts and prevents scratching.

Identification	Minimum Ø mm	Band width mm	Hole Ø mm
NRS 05-15	5	15	6,4
NRS 06-15	6	15	6,4
NRS 07-15	7	15	6,4
NRS 08-15	8	15	6,4
NRS 09-15	9	15	6,4
NRS 10-15	10	15	6,4
NRS 11-15	11	15	6,4
NRS 12-15	12	15	6,4
NRS 13-15	13	15	6,4
NRS 14-15	14	15	6,4
NRS 15-15	15	15	6,4
NRS 16-15	16	15	6,4
NRS 17-15	17	15	6,4
NRS 18-15	18	15	6,4
NRS 19-15	19	15	6,4
NRS 20-15	20	15	6,4
NRS 21-15	21	15	6,4
NRS 22-15	22	15	6,4
NRS 23-15	23	15	6,4
NRS 24-15	24	15	6,4
NRS 25-15	25	15	6,4
NRS 26-15	26	15	6,4
NRS 27-15	27	15	6,4
NRS 28-15	28	15	6,4
NRS 29-15	29	15	6,4
NRS 30-15	30	15	6,4
NRS 31-15	31	15	6,4
NRS 32-15	32	15	6,4
NRS 33-15	33	15	6,4
NRS 34-15	34	15	6,4
NRS 35-15	35	15	6,4
NRS 36-15	36	15	6,4
NRS 37-15	37	15	6,4
NRS 38-15	38	15	6,4
NRS 39-15	39	15	6,4
NRS 40-15	40	15	6,4
NRS 48-15	48	15	6,4



**NRS (15 mm)**

(Continued)

**Retaining clamp**

Identification	Minimum Ø mm	Band width mm	Hole Ø mm
NRS 75-15	75	15	6,4

**Product versions:**

NRS W4 (15 mm) - Retaining clamp, Chrome nickel steel (1.4301)

NRS (9 mm) - Retaining clamp, Steel

NRS (12 mm) - Retaining clamp, Steel

NRS W4 (12 mm) - Retaining clamp, Chrome nickel steel (1.4301)

NRS (20 mm) - Retaining clamp, Steel

NRS W4 (20 mm) - Retaining clamp, Chrome nickel steel (1.4301)

NRS (25 mm) - Retaining clamp, Steel

**NRS (20 mm)****Retaining clamp**

<b>Application:</b>	for mounting pipes, hoses and cables
<b>Design:</b>	Pipe clamp
<b>Supplementary design information:</b>	with rubber profile
<b>Standard:</b>	DIN 3016
<b>Material:</b>	Steel
<b>Surface:</b>	galvanised

**Note:** The rubber profile dampens vibrations and impacts and prevents scratching.

Identification	Minimum Ø mm	Band width mm	Hole Ø mm
NRS 10-20	10	20	8,4
NRS 11-20	11	20	8,4
NRS 12-20	12	20	8,4
NRS 13-20	13	20	8,4
NRS 14-20	14	20	8,4
NRS 15-20	15	20	8,4
NRS 16-20	16	20	8,4
NRS 17-20	17	20	8,4
NRS 18-20	18	20	8,4
NRS 19-20	19	20	8,4
NRS 20-20	20	20	8,4
NRS 21-20	21	20	8,4
NRS 22-20	22	20	8,4
NRS 23-20	23	20	8,4
NRS 24-20	24	20	8,4
NRS 25-20	25	20	8,4
NRS 26-20	26	20	8,4
NRS 27-20	27	20	8,4
NRS 28-20	28	20	8,4
NRS 29-20	29	20	8,4
NRS 30-20	30	20	8,4
NRS 31-20	31	20	8,4
NRS 32-20	32	20	8,4
NRS 33-20	33	20	8,4
NRS 34-20	34	20	8,4
NRS 35-20	35	20	8,4
NRS 36-20	36	20	8,4
NRS 37-20	37	20	8,4
NRS 38-20	38	20	8,4
NRS 39-20	39	20	8,4
NRS 40-20	40	20	8,4
NRS 41-20	41	20	8,4
NRS 42-20	42	20	8,4
NRS 43-20	43	20	8,4
NRS 44-20	44	20	8,4
NRS 45-20	45	20	8,4
NRS 46-20	46	20	8,4
NRS 47-20	47	20	8,4
NRS 48-20	48	20	8,4
NRS 49-20	49	20	8,4
NRS 50-20	50	20	8,4
NRS 51-20	51	20	8,4

**NRS (20 mm)**

(Continued)

**Retaining clamp**

Identification	Minimum Ø mm	Band width mm	Hole Ø mm
NRS 54-20	54	20	8,4
NRS 57-20	57	20	8,4
NRS 60-20	60	20	8,4
NRS 65-20	64	20	8,4
NRS 80-20	80	20	8,4
NRS 90-20	90	20	8,4
NRS 118-20	118	20	8,4

**Product versions:****NRS W4 (20 mm)** - Retaining clamp, Chrome nickel steel (1.4301)**NRS (9 mm)** - Retaining clamp, Steel**NRS (12 mm)** - Retaining clamp, Steel**NRS W4 (12 mm)** - Retaining clamp, Chrome nickel steel (1.4301)**NRS (15 mm)** - Retaining clamp, Steel**NRS W4 (15 mm)** - Retaining clamp, Chrome nickel steel (1.4301)**NRS (25 mm)** - Retaining clamp, Steel

**NRS (25 mm)****Retaining clamp**

<b>Application:</b>	for mounting pipes, hoses and cables
<b>Design:</b>	Pipe clamp
<b>Supplementary design information:</b>	with rubber profile
<b>Standard:</b>	DIN 3016
<b>Material:</b>	Steel
<b>Surface:</b>	galvanised

**Note:** The rubber profile dampens vibrations and impacts and prevents scratching.

Identification	Minimum Ø mm	Band width mm	Hole Ø mm
NRS 15-25	15	25	10,5
NRS 22-25	22	25	10,5
NRS 30-25	30	25	10,5
NRS 38-25	38	25	10,5
NRS 42-25	42	25	10,5
NRS 45-25	45	25	10,5
NRS 46-25	46	25	10,5
NRS 50-25	50	25	10,5
NRS 55-25	55	25	10,5
NRS 60-25	60	25	10,5
NRS 65-25	65	25	10,5
NRS 67-25	67	25	10,5
NRS 68-25	68	25	10,5
NRS 70-25	70	25	10,5
NRS 72-25	72	25	10,5
NRS 74-25	74	25	10,5
NRS 125-25	125	25	10,5

**Product versions:**

- NRS (9 mm) - Retaining clamp, Steel
- NRS (12 mm) - Retaining clamp, Steel
- NRS W4 (12 mm) - Retaining clamp, Chrome nickel steel (1.4301)
- NRS (15 mm) - Retaining clamp, Steel
- NRS W4 (15 mm) - Retaining clamp, Chrome nickel steel (1.4301)
- NRS (20 mm) - Retaining clamp, Steel
- NRS W4 (20 mm) - Retaining clamp, Chrome nickel steel (1.4301)

**SCHRAUBENDR****Screwdriver, flexible**

**Design:** Screwdrivers for clamps  
**Supplementary design information:** Flexible  
**Material:** Chrome vanadium



Identification	for width across flat mm
SCHRAUBENDR 30	7

**Accessory for following products:**

ASK - Hose clamp  
 ESK W2 - Hose clamp  
 ESK M - Hose clamp, mini series  
 ESK - Hose clamp  
 ESK W5 - Hose clamp  
 ASK A - Hose clamp

## CLIC ZANGE

### Pliers for CLIC clamp



**Description:**

Steel assembly pliers for Clic clamp sets, suitable for closing and opening for all sizes.

#### Identification

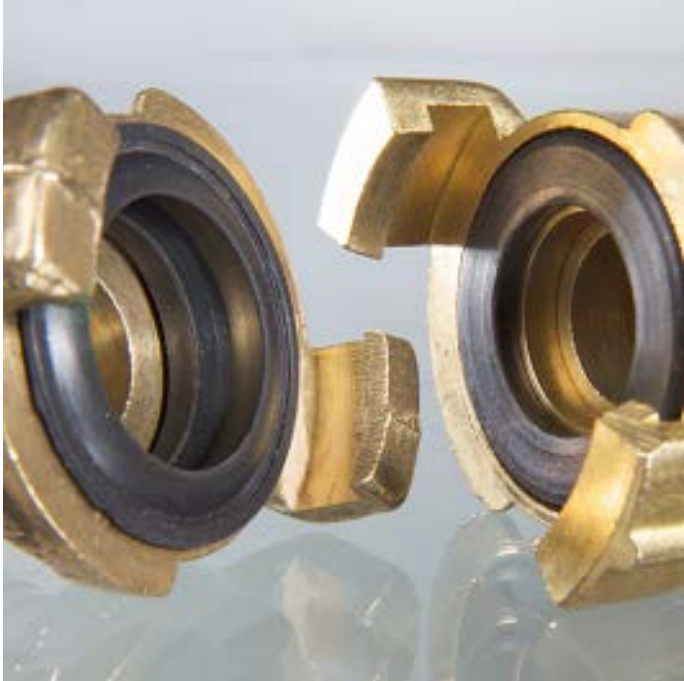
CLIC ZANGE

**Accessory for following products:**

CLIC - Hose clamp

CLIC SET - Clamp sets





## Water technology



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**WSK****GEKA claw coupling (water)**

**Connection 1:** Hose connection  
**Sealing form 1:** NBR form sealing ring  
**Connection 2:** Claw coupling  
**Temp. min.:** 0 °C  
**Temp. max.:** 95 °C  
**Media:** Water  
**Material:** Hot pressed brass MS 58

Identification	Inches	for hose ID mm	Cog space mm	Working pressure bar
WSK NW 10	3/8"	10	40	PN 50
WSK NW 13	1/2"	13	40	PN 50
WSK NW 16	5/8"	16	40	PN 50
WSK NW 19	3/4"	19	40	PN 50
WSK NW 25	1"	25	40	PN 50
WSK NW 32	1.1/4"	32	40	PN 50
WSK NW 38	1.1/2"	38	40	PN 50

**Spare parts:**

**WSK GKOR NEU** - Form sealing ring for water claw coupling

**WSK MODY****Claw coupling (water), MODY**

<b>Connection 1:</b>	Hose connection
<b>Sealing form 1:</b>	NBR form sealing ring
<b>Connection 2:</b>	Claw coupling
<b>Design:</b>	with adjusting ring
<b>Temp. min.:</b>	0 °C
<b>Temp. max.:</b>	95 °C
<b>Media:</b>	Water
<b>Material:</b>	Hot pressed brass MS 58



Identification	Inches	for hose ID mm	Cog space mm	Working pressure bar
WSK NW 13 MODY	1/2"	13	40	PN 10
WSK NW 19 MODY	3/4"	19	40	PN 10
WSK NW 25 MODY	1"	25	40	PN 10

**Spare parts:**

**WSK DISA MODY** - Form sealing ring for water claw coupling

**WSK D****GEKA claw coupling (water), rotating**

**Connection 1:** Hose connection  
**Sealing form 1:** NBR form sealing ring  
**Connection 2:** Claw coupling  
**Design:** 360° axial rotation  
**Construction:** straight  
**Temp. min.:** 0 °C  
**Temp. max.:** 95 °C  
**Media:** Water  
**Material:** Hot pressed brass MS 58

Identification	Inches	for hose ID mm	Cog space mm	Working pressure bar
WSK NW 13 D	1/2"	13	40	PN 10
WSK NW 19 D	3/4"	19	40	PN 10
WSK NW 25 D	1"	25	40	PN 10

**Spare parts:**

**WSK GKOR DREH** - Form sealing ring for water claw coupling

**WSK 90 D****GEKA claw coupling (water), rotating**

<b>Connection 1:</b>	Hose connection
<b>Sealing form 1:</b>	NBR form sealing ring
<b>Connection 2:</b>	Claw coupling
<b>Design:</b>	360° axial rotation
<b>Construction:</b>	Angle 90°
<b>Temp. min.:</b>	0 °C
<b>Temp. max.:</b>	95 °C
<b>Media:</b>	Water
<b>Material:</b>	Hot pressed brass MS 58



Identification	Inches	for hose ID mm	Cog space mm	Working pressure bar
WSK 90 NW 13 D	1/2"	13	40	PN 10
WSK 90 NW 19 D	3/4"	19	40	PN 10
WSK 90 NW 25 D	1"	25	40	PN 10

**Spare parts:**

**WSK GKOR DREH** - Form sealing ring for water claw coupling

**WSK HR****GEKA claw coupling (water)**

**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** flat sealing  
**Connection 2:** Claw coupling  
**Sealing form 2:** NBR form sealing ring  
**Temp. min.:** 0 °C  
**Temp. max.:** 95 °C  
**Media:** Water  
**Material:** Hot pressed brass MS 58

Identification	G1	Cog space mm	Working pressure bar
WSK NW 06 HR	G 1/4" -19	40	PN 50
WSK NW 10 HR	G 3/8" -19	40	PN 50
WSK NW 13 HR	G 1/2" -14	40	PN 50
WSK NW 20 HR	G 3/4" -14	40	PN 50
WSK NW 25 HR	G 1" -11	40	PN 50
WSK NW 32 HR	G 1.1/4" -11	40	PN 50
WSK NW 40 HR	G 1.1/2" -11	40	PN 50

**Spare parts:**

**WSK GKOR NEU** - Form sealing ring for water claw coupling

**WSK IR****GEKA claw coupling (water)**

**Connection 1:** BSP cylindrical internal threads  
**Sealing form 1:** flat sealing  
**Connection 2:** Claw coupling  
**Sealing form 2:** NBR form sealing ring  
**Temp. min.:** 0 °C  
**Temp. max.:** 95 °C  
**Media:** Water  
**Material:** Hot pressed brass MS 58



Identification	G1	Cog space mm	Working pressure bar
WSK NW 06 IR	G 1/4" -19	40	PN 50
WSK NW 10 IR	G 3/8" -19	40	PN 50
WSK NW 13 IR	G 1/2" -14	40	PN 50
WSK NW 20 IR	G 3/4" -14	40	PN 50
WSK NW 25 IR	G 1" -11	40	PN 50
WSK NW 32 IR	G 1.1/4" -11	40	PN 50
WSK NW 40 IR	G 1.1/2" -11	40	PN 50

**Spare parts:**

**WSK GKOR NEU** - Form sealing ring for water claw coupling

**WSK DISA MODY****Form sealing ring for water claw coupling**

**Design:**  
**Supplementary  
 design informa-  
 tion:**  
**Material:**

Replacement sealing ring for MODY claw coupling.  
 with support ring  
 NBR, black, 65 Shore / MS

Identification	External Ø mm	Internal Ø mm	h mm
WSK DISA MODY	33,5	21,5	7

**Spare part for following products:**  
 WSK MODY - Claw coupling (water), MODY



**WSK GKOR DICHT****Form sealing ring for water claw coupling**

**Design:** Replacement sealing ring for GEKA water couplings (old version)  
**Material:** NBR, black, 50 Shore



Identification	External Ø mm	Internal Ø mm	h mm
WSK GKOR	38	22	11,5

**WSK GKOR NEU****Form sealing ring for water claw coupling**

**Design:** Replacement sealing ring for GEKA plus water couplings (new version).  
**Material:** NBR, black, 65 Shore

Identification	External Ø mm	Internal Ø mm	h mm
WSK GKOR N	33,5	20,5	10,8

**Spare part for following products:**

**WSK HR** - GEKA claw coupling (water)  
**WSK** - GEKA claw coupling (water)  
**WSK IR** - GEKA claw coupling (water)  
**WSK VERSCHL** - Cap for water coupling  
**WSK DUESE LA** - Water jet with claw coupling  
**WSK DUESE SA** - Water jet with claw coupling

**WSK GKOR DREH****Form sealing ring for water claw coupling**

**Design:** Replacement sealing ring for rotating MODY claw couplings  
**Material:** NBR, green, 60 Shore



Identification	External Ø mm	Internal Ø mm	h mm
WSK GKOR D	38	22	11,5

**Spare part for following products:**

**WSK 90 D** - GEKA claw coupling (water), rotating

**WSK D** - GEKA claw coupling (water), rotating

## WKM HB

### Plug-in coupling sleeve (water)



**Connection 1:** BSP external thread, cylindrical  
**Connection 2:** Sleeve Ø 15.0 mm  
**Sealing form 1:** 60° inner cone  
**Design:** Quick release coupling sleeve  
**Material:** Coupling, unlocking sleeve, valve body and brass valve, Springs, snap ring and pins from stainless steel, Gasket: NBR

Identification	Connecting thread
WKM 10 HB	G 3/8" -19
WKM 13 HB	G 1/2" -14

**WKM IR****Plug-in coupling sleeve (water)**

<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Connection 2:</b>	Sleeve Ø 15.0 mm
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>Design:</b>	Quick release coupling sleeve
<b>Material:</b>	Coupling, unlocking sleeve, valve body and brass valve, Springs, snap ring and pins from stainless steel, Gasket: NBR
<b>Description:</b>	Materials used: Coupling, unlocking sleeve, valve body and brass valve. NBR seals Springs, snap ring and pins from stainless steel.



Identification	Connecting thread
WKM 06 IR	G 1/4" -19
WKM 10 IR	G 3/8" -19

**WKS HB****Plug-in coupling connector (water)**

**Connection 1:** BSP external thread, cylindrical  
**Connection 2:** Connector Ø 15.0 mm  
**Sealing form 1:** 60° inner cone  
**Design:** Quick release coupling plug  
**Material:** Steel  
**Surface:** galvanised

Identification	Connecting thread
WKS 10 HB	G 3/8" -19
WKS 13 HB	G 1/2" -14

**WKS IR****Plug-in coupling connector (water)**

<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Connection 2:</b>	Connector Ø 15.0 mm
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>Design:</b>	Quick release coupling plug
<b>Material:</b>	Steel
<b>Surface:</b>	galvanised



Identification	Connecting thread
WKS 06 IR	G 1/4" -19
WKS 10 IR	G 3/8" -19

**MF MG****Sliding socket**

**Connection 1 + 2:** BSP cylindrical internal threads  
**Temp. min.:** 0 °C  
**Temp. max.:** 120 °C  
**Material:** Brass OT 58, steel handle

**Note:** The pressure figures are applicable for temperatures from 0 °C to +25 °C; at higher temperatures, pressure reductions must be taken into account.

Identification	DN*	Size	Working pressure bar	G1 + G2	L mm
MF 06 MG	6	4	10	G 1/4" -19	33
MF 10 MG	10	6	10	G 3/8" -19	33
MF 13 MG	12	8	10	G 1/2" -14	36
MF 20 MG	19	12	10	G 3/4" -14	39
MF 25 MG	25	16	10	G 1" -11	43
MF 32 MG	31	20	10	G 1.1/4" -11	48
MF 40 MG	38	24	10	G 1.1/2" -11	52
MF 50 MG	51	32	10	G 2" -11	57
MF 65 MG	60	40	10	G 2.1/2" -11	65
MF 75 MG	76	48	10	G 3" -11	75
MF 100 MG	100	64	10	G 4" -11	84

DN = Nominal diameter, nominal width    G1 + G2 = Threads of connections 1+2

**Product versions:**

**MF VA** - Sliding socket, Stainless steel



**W DUESE LA****Water jet with hose nozzle**

**Connection:** Hose connection  
**Design:** Light design  
**Properties:** For full jet, sprinkler, mist and shut off  
**Material:** Hot pressed brass MS 58



Identification	Inches	for hose ID mm	Mouth piece hole mm	Working pressure bar
W DUESE NW 13 LA	1/2"	13	5	PN 10
W DUESE NW 19 LA	3/4"	19	7	PN 10
W DUESE NW 25 LA	1"	25	8	PN 10

**W DUESE SA****Water jet**

**Connection:** Hose connection  
**Design:** Heavy design  
**Properties:** For full jet, sprinkler, mist and shut off  
**Material:** Brass MS 58

Identification	Inches	for hose ID mm	Mouth piece hole mm	Working pressure bar
W DUESE NW 13 SA	1/2"	13	5	PN 10
W DUESE NW 19 SA	3/4"	19	7	PN 10
W DUESE NW 25 SA	1"	25	8	PN 10
W DUESE NW 32 SA	1.1/4"	32	8	PN 10

**WSK DUESE LA****Water jet with claw coupling**

**Connection:** Claw coupling  
**Design:** Light design  
**Properties:** For full jet, sprinkler, mist and shut off  
**Material:** Hot pressed brass MS 58



Identification	Inches	for hose ID mm	Cog space mm	Mouth piece hole mm	Working pressure bar
WSK DUESE NW 13 LA	1/2"	12	40	5	PN 10
WSK DUESE NW 19 LA	3/4"	19	40	7	PN 10

**Spare parts:**

WSK GKOR NEU - Form sealing ring for water claw coupling

**WSK DUESE SA****Water jet with claw coupling**

**Connection:** Claw coupling  
**Design:** Heavy design  
**Properties:** For full jet, sprinkler, mist and shut off  
**Material:** Hot pressed brass MS 58

Identification	Inches	for hose ID mm	Cog space mm	Mouth piece hole mm	Working pressure bar
WSK DUESE NW 13 SA	1/2"	12	40	5	PN 10
WSK DUESE NW 19 SA	3/4"	19	40	7	PN 10
WSK DUESE NW 25 SA	1"	25	40	8	PN 10

**Spare parts:**

**WSK GKOR NEU** - Form sealing ring for water claw coupling

**WSK VERSCHL****Cap for water coupling**

**Connection:** Claw coupling  
**Sealing form 1:** NBR form sealing ring  
**Material:** Hot pressed brass MS 58



Identification	Cog space mm	h mm
WSK VERSCHLUSS	40	35

**Spare parts:**

**WSK GKOR NEU** - Form sealing ring for water claw coupling

## 3 WS IR

### 3-way piece



**Connection 1 - 3:** BSP cylindrical internal threads  
**Sealing form 1 - 3:** Shape A  
**Design:** Distributors  
**Construction:** Y shaped  
**Material:** Malleable cast iron  
**Surface:** electro galvanised

Identification	G1 - G3
3 WS 20 IR	G 3/4" -14
3 WS 25 IR	G 1" -11
G1 - G3 = Threads for connections 1-3	

#### Product versions:

3 WS IR MG - 3-way piece, Brass

**3 WS IR HR MG****3-way piece**

**Connection 1:** BSP cylindrical internal threads  
**Sealing form 1:** for screw-in pins with shapes A, B and if necessary E  
**Connection 2 + 3:** BSP cylindrical external threads  
**Sealing form 2 + 3:** Flat seal  
**Design:** Distributors  
**Construction:** Y shaped  
**Material:** Brass



Identification	G1 - G3
3 WS IR 20 HR MG	G 3/4" -14
G1 - G3 = Threads for connections 1-3	

## 4 WS IR MG

### 4-way piece



**Connection 1 - 4:** BSP cylindrical internal threads  
**Sealing form 1 - 4:** for screw-in pins with shapes A, B and if necessary E  
**Material:** Brass

Identification	G1 - G4
4 WS 10 IR MG	G 3/8" -19
4 WS 13 IR MG	G 1/2" -14
G1 - G4 = Threads for connections 1-4	



## SK KG AL

## Suction coupling for fire brigade coupling

<b>Connection 1:</b>	Hose connection
<b>Connection 2:</b>	Claw coupling
<b>Design:</b>	Suction coupling for outer cover
<b>Sealing form 2:</b>	Moulded seal made of black nitrile
<b>Material:</b>	Aluminium



Identification	for hose ID mm	Cog space mm	Nominal size Storz
SK KG 31 NW 13 D AL	13	31	25-D
SK KG 31 NW 15 D AL	15	31	25-D
SK KG 31 NW 19 D AL	19	31	25-D
SK KG 31 NW 25 D AL	25	31	25-D
SK KG 44 NW 19 AL	19	44	32
SK KG 44 NW 32 AL	32	44	32
SK KG 44 NW 25 AL	25	44	32
SK KG 52 NW 25 AL	25	51	38
SK KG 52 NW 32 AL	32	51	38
SK KG 52 NW 38 AL	38	51	38
SK KG 66 NW 25 C AL	25	66	52-C
SK KG 66 NW 32 C AL	32	66	52-C
SK KG 66 NW 38 C AL	38	66	52-C
SK KG 66 NW 42 C AL	42	66	52-C
SK KG 66 NW 50 C AL	50	66	52-C
SK KG 66 NW 52 C AL	52	66	52-C
SK KG 66 NW 19 C AL	19	66	52-C
SK KG 66 NW 28 C AL	28	66	52-C
SK KG 66 NW 40 C AL	40	66	52-C
SK KG 66 NW 45 C AL	45	66	52-C
SK KG 66 NW 55 C AL	55	66	52-C
SK KG 66 NW 60 C AL	60	66	52-C
SK KG 81 NW 65 AL	65	81	65
SK KG 81 NW 38 AL	38	81	65
SK KG 81 NW 52 AL	52	81	65
SK KG 81 NW 75 AL	75	81	65
SK KG 81 NW 70 AL	70	81	65
SK KG 89 NW 52 B AL	52	89	75-B
SK KG 89 NW 65 B AL	65	89	75-B
SK KG 89 NW 70 B AL	70	89	75-B
SK KG 89 NW 75 B AL	75	89	75-B
SK KG 89 NW 80 B AL	80	89	75-B
SK KG 105 NW 75 AL	75	105	90
SK KG 105 NW 90 AL	90	105	90
SK KG 115 NW 100 AL	100	115	100
SK KG 133 NW 90 A AL	90	133	110-A
SK KG 133 NW 100 A AL	100	133	110-A
SK KG 133 NW 110 A AL	110	133	110-A
SK KG 133 NW 125 A AL	125	133	110-A
SK KG 148 NW 125 AL	125	148	125
SK KG 160 NW 150 AL	150	160	150

**SK KG AL****Suction coupling for fire brigade coupling****(Continued)**

Identification	for hose ID mm	Cog space mm	Nominal size Storz
SK KG 220 NW 205 AL	205	220	205

**Product versions:**

SK KG MG - Suction coupling for fire brigade coupling, Brass

**Spare parts:**

DSD KG N - Pressure suction seal for fire brigade couplings

**FK KG IR AL****Fixed coupling for fire brigade couplings**

**Connection 1:** BSP cylindrical internal threads  
**Sealing form 1:** flat sealing  
**Connection 2:** Claw coupling  
**Design:** Fixed coupling with inner thread  
**Sealing form 2:** Moulded seal made of black nitrile  
**Material:** Aluminium



Identification	Connecting thread	Cog space mm	Nominal size Storz
FK KG 31 IR 13 D AL	G 1/2" -14	31	25-D
FK KG 31 IR 20 D AL	G 3/4" -14	31	25-D
FK KG 31 IR 25 D AL	G 1" -11	31	25-D
FK KG 31 IR 32 D AL	G 1.1/4" -11	31	25-D
FK KG 44 IR 25 AL	G 1" -11	44	32
FK KG 44 IR 32 AL	G 1.1/4" -11	44	32
FK KG 52 IR 25 AL	G 1" -11	52	38
FK KG 52 IR 32 AL	G 1.1/4" -11	52	38
FK KG 52 IR 40 AL	G 1.1/2" -11	52	38
FK KG 52 IR 50 AL	G 2" -11	52	38
FK KG 66 IR 20 C AL	G 3/4" -14	66	52-C
FK KG 66 IR 25 C AL	G 1" -11	66	52-C
FK KG 66 IR 32 C AL	G 1.1/4" -11	66	52-C
FK KG 66 IR 40 C AL	G 1.1/2" -11	66	52-C
FK KG 66 IR 50 C AL	G 2" -11	66	52-C
FK KG 66 IR 65 C AL	G 2.1/2" -11	66	52-C
FK KG 81 IR 40 AL	G 1.1/2" -11	81	65
FK KG 81 IR 50 AL	G 2" -11	81	65
FK KG 81 IR 65 AL	G 2.1/2" -11	81	65
FK KG 81 IR 75 AL	G 3" -11	81	65
FK KG 89 IR 50 B AL	G 2" -11	89	75-B
FK KG 89 IR 65 B AL	G 2.1/2" -11	89	75-B
FK KG 89 IR 75 B AL	G 3" -11	89	75-B
FK KG 105 IR 75 AL	G 3" -11	105	90
FK KG 115 IR 100 AL	G 4" -11	115	100
FK KG 133 IR 75 A AL	G 3" -11	133	110-A
FK KG 133 IR 100 A AL	G 4" -11	133	110-A
FK KG 133 IR 110 A AL	G 4.1/2" -11	133	110-A
FK KG 133 IR 125 A AL	G 5" -11	133	110-A
FK KG 148 IR 125 AL	G 5" -11	148	125
FK KG 160 IR 150 AL	G 6" -11	160	150
FK KG 188 IR 175 AL	G 7" -11	188	165
FK KG 220 IR 200 AL	G 8" -11	220	205
FK KG 278 IR 250 AL	G 10" -11	278	250

**Product versions:**

**FK KG IR MG** - Fixed coupling for fire brigade couplings, Brass

**Spare parts:**

**FLD R N** - Flat sealing ring for fire brigade couplings

**DSD KG N** - Pressure suction seal for fire brigade couplings

**FK KG HR AL****Fixed coupling for fire brigade couplings**

**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** flat sealing  
**Connection 2:** Claw coupling  
**Design:** Fixed coupling with outer thread  
**Sealing form 2:** Moulded seal made of black nitrile  
**Material:** Aluminium

Identification	Connecting thread	Cog space mm	Nominal size Storz
FK KG 31 HR 20 D AL	G 3/4" -14	31	25-D
FK KG 31 HR 25 D AL	G 1" -11	31	25-D
FK KG 31 HR 32 D AL	G 1.1/4" -11	31	25-D
FK KG 44 HR 25 AL	G 1" -11	44	32
FK KG 44 HR 32 AL	G 1.1/4" -11	44	32
FK KG 52 HR 32 AL	G 1.1/4" -11	52	38
FK KG 52 HR 40 AL	G 1.1/2" -11	52	38
FK KG 52 HR 50 AL	G 2" -11	52	38
FK KG 66 HR 25 C AL	G 1" -11	66	52-C
FK KG 66 HR 32 C AL	G 1.1/4" -11	66	52-C
FK KG 66 HR 40 C AL	G 1.1/2" -11	66	52-C
FK KG 66 HR 50 C AL	G 2" -11	66	52-C
FK KG 66 HR 65 C AL	G 2.1/2" -11	66	52-C
FK KG 81 HR 40 AL	G 1.1/2" -11	81	65
FK KG 81 HR 50 AL	G 2" -11	81	65
FK KG 81 HR 65 AL	G 2.1/2" -11	81	65
FK KG 81 HR 75 AL	G 3" -11	81	65
FK KG 89 HR 50 B AL	G 2" -11	89	75-B
FK KG 89 HR 65 B AL	G 2.1/2" -11	89	75-B
FK KG 89 HR 75 B AL	G 3" -11	89	75-B
FK KG 105 HR 75 AL	G 3" -11	105	90
FK KG 115 HR 100 AL	G 4" -11	115	100
FK KG 133 HR 100 A AL	G 4" -11	133	110-A
FK KG 160 HR 150 AL	G 6" -11	160	150

**Product versions:**

**FK KG HR MG** - Fixed coupling for fire brigade couplings, Brass

**Spare parts:**

**DSD KG N** - Pressure suction seal for fire brigade couplings

**BL KG AL****Cap fire hose coupling for fire brigade coupling**

**Connection:** Claw coupling  
**Sealing form 1:** Moulded seal made of black nitrile  
**Design:** Cap fire hose coupling with chain  
**Material:** Aluminium



Identification	Cog space mm	Nominal size Storz
BL KG 31 D AL	31	25-D
BL KG 44 AL	44	32
BL KG 52 AL	51	38
BL KG 66 C AL	66	52-C
BL KG 81 AL	81	65
BL KG 89 B AL	89	75-B
BL KG 105 AL	105	90
BL KG 115 AL	115	100
BL KG 133 A AL	133	110-A
BL KG 148 AL	148	125
BL KG 160 AL	160	150
BL KG 220 AL	220	205

**Product versions:**

BL KG MG - Cap fire hose coupling, brass, Brass

**Spare parts:**

DD KG N - Pressure seal for fire brigade coupling

**VB KG AL****Adapter for fire brigade coupling**

**Connection 1 + 2:** Claw coupling  
**Sealing form 1 + 2:** Moulded seal made of black nitrile  
**Design:** Reducing adapter  
**Material:** Aluminium

Identification	Cog space mm	Nominal size Storz
VB KG 66-31 CD AL	66/31	52-C / 25-D
VB KG 66-44 AL	66/44	52-C / 32
VB KG 66-52 AL	66/51	52-C / 38
VB KG 81-52 AL	81/51	65 / 38
VB KG 81-66 AL	81/66	65 / 52-C
VB KG 89-66 BC AL	89/66	75-B / 52-C
VB KG 89-81 AL	89/81	75-B / 65
VB KG 105-89 AL	105/89	90 / 75-B
VB KG 115-89 AL	115/89	100 / 75-B
VB KG 115-105 AL	115/105	100 / 90
VB KG 133-66 AC AL	133/66	110-A / 52-C
VB KG 133-89 AB AL	133/89	110-A / 75-B
VB KG 133-105 AL	133/105	110-A / 90
VB KG 133-115 AL	133/115	110-A / 100
VB KG 148-115 AL	148/115	125 / 100
VB KG 148-133 AL	148/133	125 / 110-A
VB KG 160-133 AL	160/133	150 / 110-A
VB KG 160-148 AL	160/148	150 / 148

**Product versions:**

**VB KG MG** - Adapter for fire brigade coupling, Brass

**Spare parts:**

**DSD KG N** - Pressure suction seal for fire brigade couplings

**MST AL****Jet pipes for fire brigade coupling**

<b>Connection:</b>	Hose connection
<b>Design:</b>	Multi-purpose jet pipe
<b>Material:</b>	Aluminium / Polyamide
<b>Description:</b>	Pipe section, nozzle and mouth piece made of cold resistant, impact resistant polyamide.



Identification	for hose ID mm
MST NW 19 AL	19
MST NW 25 AL	25

G1 = Thread of connection 1

**MST KG AL****Jet pipes for fire brigade coupling**

<b>Connection:</b>	Claw coupling
<b>Sealing form:</b>	Moulded seal made of black nitrile
<b>Design:</b>	Multi-purpose jet pipe
<b>Material:</b>	Aluminium / Polyamide
<b>Description:</b>	Pipe section, nozzle and mouth piece made of cold resistant, impact resistant polyamide.

Identification	Cog space mm	Nominal size Ø	Nominal size Storz
MST KG 31 D AL	31	DM	25-D
MST KG 66 C AL	66	CM	52-C
MST KG 89 B AL	89	BM	75-B

**Spare parts:**

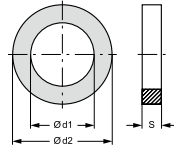
**DD KG N** - Pressure seal for fire brigade coupling



## FLD R N

## Flat sealing ring for fire brigade couplings

**Design:** Flat seal for fixed coupling with inner thread  
**Material:** Nitrile rubber, black



Identification	for thread	Ø d1 mm	Ø d2 mm	S mm
FLD R 1/2 N	G 1/2"	17	22	2
FLD R 3/4 N	G 3/4"	18	27	2
FLD R 1 N	G 1"	20	33	3
FLD R 1 1/2 N	G 1.1/2"	39	48	3
FLD R1 1/4 N	G 1.1/4"	33	42	3
FLD R 2 N	G 2"	47	60	3
FLD R 2 1/2 N	G 2 1/2"	66	76	3
FLD R 3 N	G 3"	76	88	3
FLD R 4 N	G 4"	102	113	3
FLD R 4 1/2 N	G 4 1/2"	105	126	3
FLD R 5 N	G 5"	122	140	4

**Product versions:**

**FLD R N W** - Flat sealing ring for fire brigade couplings, White nitrile

**FLD R T** - Flat sealing ring for fire brigade couplings, Teflon

**Spare part for following products:**

**FK KG IR AL** - Fixed coupling for fire brigade couplings

**SD KG N****Suction seal for fire brigade coupling**

**Design:** Sealing ring for suction mode  
**Material:** Nitrile rubber, black

Identification	Cog space mm	Nominal size Storz	for external hose Ø mm
SD KG 31 D N	31	25-D	25
SD KG 44 N	44	32	32
SD KG 52 N	51	38	38
SD KG 66 C N	66	52-C	52
SD KG 81 N	81	65	65
SD KG 89 B N	89	75-B	75
SD KG 105 N	105	90	90
SD KG 115 N	115	100	100
SD KG 133 A N	133	110-A	110
SD KG 148 N	148	125	125
SD KG 160 N	160	150	150
SD KG 188 N	188	165	165

**Product versions:**

**SD KG S** - Suction seal for fire brigade coupling, Transparent silicone

**SD KG V** - Suction seal for fire brigade coupling, Viton green

**DD KG N****Pressure seal for fire brigade coupling**

**Design:** Sealing ring for pressure mode  
**Material:** Nitrile rubber, black



Identification	Cog space mm	Nominal size Storz
DD KG 81 N	81	65
DD KG 115 N	115	100
DD KG 89 B N	89	75-B
DD KG 66 C N	66	52-C

**Product versions:**

**DD KG V** - Pressure seal for fire brigade coupling, Viton green

**DD KG S** - Pressure seal for fire brigade coupling, Transparent silicone

**Spare part for following products:**

**BL KG AL** - Cap fire hose coupling for fire brigade coupling

**MST KG AL** - Jet pipes for fire brigade coupling

**DSD KG N****Pressure suction seal for fire brigade couplings**

**Design:**  
**Material:**

Sealing ring for suction and pressure mode  
White nitrile

Identification	Dimension	Cog space mm	Nominal size Storz
DSD KG 31 D N	29.0 x 18.0 x 9.0	31	25-D
DSD KG 44 N	42.0 x 25.0 x 9.5	44	32
DSD KG 52 N	64.0 x 47.0 x 10.0	51	38
DSD KG 66 C N	64.0 x 47.0 x 10.0	66	52-C
DSD KG 81 N	79.0 x 60.0 x 10.0	81	65
DSD KG 89 B N	87.0 x 67.0 x 10.5	89	75-B
DSD KG 105 N	103.0 x 93.0 x 10.0	105	90
DSD KG 115 N	113.0 x 93.0 x 10.0	115	100
DSD KG 133 A N	130.0 x 102.0 x 12.0	133	110-A
DSD KG 148 N	144.0 x 117.0 x 12.5	148	125

**Product versions:**

**DSD KG S** - Pressure suction seal, fire brigade coupling, Transparent silicone

**DSD KG V** - Pressure suction seal, fire brigade coupling, Viton green

**Spare part for following products:**

**SK KG AL** - Suction coupling for fire brigade coupling

**VB KG AL** - Adapter for fire brigade coupling

**FK KG IR AL** - Fixed coupling for fire brigade couplings

**FK KG HR AL** - Fixed coupling for fire brigade couplings

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**KPS****Spanner for fire brigade couplings****Material:** Steel**Description:** For fitting fire brigade couplings.

Identification	Nominal size Storz
KPS ABC ST	A; B; C
KPS ABC TG	A; B; C
KPS BC ST	B; C
KPS BC TG	B; C



## Compressed air technology

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**LP MM****Air jet gun**

**Connection:** Hose connection  
**Temp. min.:** -20 °C  
**Temp. max.:** 100 °C  
**Material:** Aluminium

Identification	Inches	for hose ID mm	Working pressure bar
LP 06 MM	1/4"	6	PN 12
LP 09 MM	3/8"	9	PN 12



**LH MM****Air jet gun**

**Connection:** Hose connection  
**Temp. min.:** -20 °C  
**Temp. max.:** 100 °C  
**Material:** Brass



Identification	Inches	for hose ID mm	Working pressure bar
LH 06 MM	1/4"	6	PN 12
LH 09 MM	3/8"	9	PN 12

## LP-LKS

### Compressed air gun with plug in connection



**Connection:** Plug-in connection  
**Temp. min.:** -20 °C  
**Temp. max.:** 100 °C  
**Material:** Aluminium

**Identification**

LP - LKS

**Working pressure bar**

PN 12

**LSK HR G****Claw coupling (air)**

<b>Design:</b>	Claw outer thread coupling
<b>Supplementary design information:</b>	with safety double cam
<b>Connection 1:</b>	BSP external thread, cylindrical
<b>Connection 2:</b>	Claw coupling
<b>Sealing form 2:</b>	Rubber sealing ring
<b>Standard:</b>	DIN 3489
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Material:</b>	Cast iron
<b>Surface:</b>	electro galvanised



**Note:** A coupling with brass seal should be used as the counter coupling.

Identification	Connecting thread	Cog space mm	Working pressure bar
LSK NW 06 HR G	G 1/4" -19	42	PN 10
LSK NW 10 HR G	G 3/8" -19	42	PN 10
LSK NW 13 HR G	G 1/2" -14	42	PN 10
LSK NW 20 HR G	G 3/4" -14	42	PN 10
LSK NW 25 HR G	G 1" -11	42	PN 10

**Product versions:**

LSK HR G AC - Claw coupling (air), Steel

**Spare parts:**

LSK GOOR - Rubber ring for claw coupling

**Accessories:**

LSK GDOR - Rubber ring for claw coupling

**LSK HR M****Claw coupling (air)**

<b>Design:</b>	Claw outer thread coupling
<b>Supplementary design information:</b>	with safety double cam
<b>Connection 1:</b>	BSP external thread, cylindrical
<b>Connection 2:</b>	Claw coupling
<b>Sealing form 2:</b>	Brass seal with rubber insert
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Material:</b>	Cast iron
<b>Surface:</b>	electro galvanised

**Note:** A coupling with rubber seal must be used as the counter coupling.

Identification	Connecting thread	Cog space mm	Working pressure bar
LSK NW 13 HR M	G 1/2" -14	42	PN 10
LSK NW 20 HR M	G 3/4" -14	42	PN 10
LSK NW 25 HR M	G 1" -11	42	PN 10

**Spare parts:**

**LSK MOOH** - Brass sleeve for claw coupling

**LSK HOOS** - Retaining screw for claw coupling

**LSK SOOR** - Hose ring for claw coupling

**LSK IR G****Claw coupling (air)**

<b>Design:</b>	Claw inner thread coupling
<b>Supplementary design information:</b>	with safety double cam
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Connection 2:</b>	Claw coupling
<b>Sealing form 2:</b>	Rubber sealing ring
<b>Standard:</b>	DIN 3489
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Material:</b>	Cast iron
<b>Surface:</b>	electro galvanised



Identification	Connecting thread	Cog space mm	Working pressure bar
LSK NW 06 IR G	G 1/4" -19	42	PN 10
LSK NW 10 IR G	G 3/8" -19	42	PN 10
LSK NW 13 IR G	G 1/2" -14	42	PN 10
LSK NW 20 IR G	G 3/4" -14	42	PN 10
LSK NW 25 IR G	G 1" -11	42	PN 10
LSK NW 32 IR G	G 1.1/4" -11	42	PN 10

**Product versions:**

**LSK IR G AC** - Claw coupling (air), Steel

**Spare parts:**

**LSK GOOR** - Rubber ring for claw coupling

**Accessories:**

**LSK GDOR** - Rubber ring for claw coupling

**LSK IR M****Claw coupling (air)**

<b>Design:</b>	Claw inner thread coupling
<b>Supplementary design information:</b>	with safety double cam
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Connection 2:</b>	Claw coupling
<b>Sealing form 2:</b>	Brass seal with rubber insert
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Material:</b>	Cast iron
<b>Surface:</b>	electro galvanised

**Note:** A coupling with rubber seal must be used as the counter coupling.

Identification	Connecting thread	Cog space mm	Working pressure bar
LSK NW 13 IR M	G 1/2" -14	42	PN 10
LSK NW 20 IR M	G 3/4" -14	42	PN 10
LSK NW 25 IR M	G 1" -11	42	PN 10

**Spare parts:**

**LSK HOOS** - Retaining screw for claw coupling

**LSK MOOH** - Brass sleeve for claw coupling

**LSK SOOR** - Hose ring for claw coupling

**LSK G****Claw coupling (air)**

<b>Design:</b>	Claw hose coupling
<b>Supplementary design information:</b>	with safety double cam
<b>Connection 1:</b>	Hose connection
<b>Connection 2:</b>	Claw coupling
<b>Sealing form 2:</b>	Rubber sealing ring
<b>Standard:</b>	DIN 3489
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Material:</b>	Cast iron
<b>Surface:</b>	electro galvanised



Identification	for hose ID mm	Inches	Cog space mm	Working pressure bar
LSK NW 06 G	6	1/4"	42	PN 10
LSK NW 10 G	10	3/8"	42	PN 10
LSK NW 13 G	13	1/2"	42	PN 10
LSK NW 15 G	15	5/8"	42	PN 10
LSK NW 19 G	19	3/4"	42	PN 10
LSK NW 25 G	25	1"	42	PN 10
LSK NW 32 G	32	1.1/4"	42	PN 10

**Product versions:**

LSK G AC - Claw coupling (air), Steel

**Spare parts:**

LSK GOOR - Rubber ring for claw coupling

**Accessories:**

LSK GDOR - Rubber ring for claw coupling

**LSK M****Claw coupling (air)**

<b>Design:</b>	Claw hose coupling
<b>Supplementary design information:</b>	with safety double cam
<b>Connection 1:</b>	Hose connection
<b>Connection 2:</b>	Claw coupling
<b>Sealing form 2:</b>	Brass seal with rubber insert
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Material:</b>	Cast iron
<b>Surface:</b>	galvanised, white chromised

**Note:** A coupling with rubber seal must be used as the counter coupling.

Identification	for hose ID mm	Inches	Cog space mm	Working pressure bar
LSK NW 13 M	13	1/2"	42	PN 10
LSK NW 15 M	15	5/8"	42	PN 10
LSK NW 19 M	19	3/4"	42	PN 10
LSK NW 25 M	25	1/2"	42	PN 10

**Spare parts:**

**LSK HOOS** - Retaining screw for claw coupling

**LSK MOOH** - Brass sleeve for claw coupling

**LSK SOOR** - Hose ring for claw coupling



**LSK SB G****Claw coupling (air), safety collar**

<b>Design:</b>	Claw hose coupling
<b>Supplementary design information:</b>	with safety double nipple and safety collar
<b>Connection 1:</b>	Hose connection
<b>Connection 2:</b>	Claw coupling
<b>Sealing form 2:</b>	Rubber sealing ring
<b>Standard:</b>	DIN 3489
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Material:</b>	Cast iron
<b>Surface:</b>	electro galvanised



Identification	for hose ID mm	Inches	Cog space mm	Working pressure bar
LSK NW 13 SB G	13	1/2"	42	PN 10
LSK NW 15 SB G	15	5/8"	42	PN 10
LSK NW 19 SB G	19	3/4"	42	PN 10
LSK NW 25 SB G	25	1"	42	PN 10

**Spare parts:**

**LSK GOOR** - Rubber ring for claw coupling

**Accessories:**

**LSK GDOR** - Rubber ring for claw coupling

**LSK HR G D****Claw coupling (air), rotating**

<b>Design:</b>	Rotating claw outer thread coupling
<b>Supplementary design information:</b>	with safety double cam
<b>Connection 1:</b>	BSP external thread, cylindrical
<b>Connection 2:</b>	Claw coupling
<b>Sealing form 2:</b>	Rubber sealing ring
<b>Standard:</b>	DIN 3489
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Material:</b>	Malleable cast iron coupling head / Steel nozzle
<b>Surface:</b>	electro galvanised

Identification	Connecting thread	Cog space mm	Working pressure bar
LSK NW 13 HR G D	G 1/2" -14	42	PN 16
LSK NW 20 HR G D	G 3/4" -14	42	PN 16
LSK NW 25 HR G D	G 1" -11	42	PN 16

**Spare parts:**

**LSK GOOR** - Rubber ring for claw coupling

**Accessories:**

**LSK GDOR** - Rubber ring for claw coupling

**LSK IR D****Claw coupling (air), rotating**

<b>Design:</b>	Rotating claw inner thread coupling
<b>Supplementary design information:</b>	with safety double cam
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Connection 2:</b>	Claw coupling
<b>Sealing form 2:</b>	Rubber sealing ring
<b>Standard:</b>	DIN 3489
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Material:</b>	Malleable cast iron coupling head / Steel nozzle
<b>Surface:</b>	electro galvanised



Identification	Connecting thread	Cog space mm	Working pressure bar
LSK NW 13 IR D	G 1/2" -14	42	PN 16
LSK NW 20 IR D	G 3/4" -14	42	PN 16
LSK NW 25 IR D	G 1" -11	42	PN 16

**Spare parts:**

LSK GOOR - Rubber ring for claw coupling

**Accessories:**

LSK GDOR - Rubber ring for claw coupling

**LSK G D****Claw coupling (air), rotating**

<b>Design:</b>	Rotating claw hose coupling
<b>Supplementary design information:</b>	with safety double cam
<b>Connection 1:</b>	Hose connection
<b>Connection 2:</b>	Claw coupling
<b>Sealing form 2:</b>	Rubber sealing ring
<b>Standard:</b>	DIN 3489
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Material:</b>	Malleable cast iron coupling head / Steel nozzle
<b>Surface:</b>	electro galvanised

Identification	for hose ID mm	Inches	Cog space mm	Working pressure bar
LSK NW 13 G D	13	1/2"	42	PN 16
LSK NW 19 G D	19	3/4"	42	PN 16
LSK NW 25 G D	25	1"	42	PN 16

**Spare parts:**

**LSK GOOR** - Rubber ring for claw coupling

**Accessories:**

**LSK GDOR** - Rubber ring for claw coupling

**LSK SB G D****Claw coupling (air), safety collar**

<b>Design:</b>	Rotating claw hose coupling
<b>Supplementary design information:</b>	with safety double nipple and safety collar
<b>Connection 1:</b>	Hose connection
<b>Connection 2:</b>	Claw coupling
<b>Sealing form 2:</b>	Rubber sealing ring
<b>Standard:</b>	DIN 3489
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Material:</b>	Malleable cast iron coupling head / Steel nozzle
<b>Surface:</b>	electro galvanised



Identification	for hose ID mm	Inches	Cog space mm	Working pressure bar
LSK NW 13 SB G D	13	1/2"	42	PN 16
LSK NW 19 SB G D	19	3/4"	42	PN 16
LSK NW 25 SB G D	25	1"	42	PN 16

**Spare parts:**

**LSK GOOR** - Rubber ring for claw coupling

**Accessories:**

**LSK GDOR** - Rubber ring for claw coupling

**LSK HR MODY****Claw coupling (air), MODY**

<b>Design:</b>	MODY outer thread coupling
<b>Connection 1:</b>	BSP external thread, cylindrical
<b>Connection 2:</b>	Claw coupling
<b>Sealing form 2:</b>	Rubber sealing ring
<b>Standard:</b>	DIN 3238
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Material:</b>	Malleable cast iron coupling head / Steel nozzle
<b>Surface:</b>	electro galvanised
<b>Description:</b>	with reinforced thread protection ring and new sealing ring on both sides.

Identification	Connecting thread	Cog space mm	Working pressure bar
LSK NW 10 HR MODY	G 3/8" -19	42	PN 16
LSK NW 13 HR MODY	G 1/2" -14	42	PN 16
LSK NW 20 HR MODY	G 3/4" -14	42	PN 16
LSK NW 25 HR MODY	G 1" -11	42	PN 16

**Spare parts:**

**LSK SGOR N** - Rubber ring for MODY coupling

**Accessories:**

**LSK SDOR N** - Rubber ring for MODY coupling

**LSK IR MODY****Claw coupling (air), MODY**

<b>Design:</b>	MODY inner thread coupling
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Connection 2:</b>	Claw coupling
<b>Sealing form 2:</b>	Rubber sealing ring
<b>Standard:</b>	DIN 3238
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Material:</b>	Malleable cast iron coupling head / Steel nozzle
<b>Surface:</b>	electro galvanised
<b>Description:</b>	with reinforced thread protection ring and new sealing ring on both sides.



Identification	Connecting thread	Cog space mm	Working pressure bar
LSK NW 10 IR MODY	G 3/8" -19	42	PN 16
LSK NW 13 IR MODY	G 1/2" -14	42	PN 16
LSK NW 20 IR MODY	G 3/4" -14	42	PN 16
LSK NW 25 IR MODY	G 1" -11	42	PN 16

**Spare parts:**

**LSK SGOR N** - Rubber ring for MODY coupling

**Accessories:**

**LSK SDOR N** - Rubber ring for MODY coupling

## LSK MODY

### Claw coupling (air), MODY



<b>Design:</b>	MODY hose coupling
<b>Supplementary design information:</b>	with safety double cam
<b>Connection 1:</b>	Hose connection
<b>Connection 2:</b>	Claw coupling
<b>Sealing form 2:</b>	Rubber sealing ring
<b>Standard:</b>	DIN 3238
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Material:</b>	Malleable cast iron coupling head / Steel nozzle
<b>Surface:</b>	electro galvanised
<b>Description:</b>	with reinforced thread protection ring and new sealing ring on both sides.

Identification	for hose ID mm	Inches	Cog space mm	Working pressure bar
LSK NW 10 MODY	10	3/8"	42	PN 16
LSK NW 13 MODY	13	1/2"	42	PN 16
LSK NW 15 MODY	15	5/8"	42	PN 16
LSK NW 19 MODY	19	3/4"	42	PN 16
LSK NW 25 MODY	25	1"	42	PN 16
LSK NW 32 MODY	32	1.1/4"	42	PN 16

#### Spare parts:

LSK SGOR N - Rubber ring for MODY coupling

#### Accessories:

LSK SDOR N - Rubber ring for MODY coupling



**LSK SB MODY****Claw coupling (air), MODY, with safety collar**

<b>Design:</b>	MODY hose coupling
<b>Supplementary design information:</b>	with safety double nipple and safety collar
<b>Connection 1:</b>	Hose connection
<b>Connection 2:</b>	Claw coupling
<b>Sealing form 2:</b>	Rubber sealing ring
<b>Standard:</b>	DIN 3228
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Material:</b>	Malleable cast iron coupling head / Steel nozzle
<b>Surface:</b>	electro galvanised
<b>Description:</b>	with safety collar, reinforced thread protection ring and new sealing ring guided on both sides.



Identification	for hose ID mm	Inches	Cog space mm	Working pressure bar
LSK NW 10 SB MODY	10	3/8"	42	PN 16
LSK NW 13 SB MODY	13	1/2"	42	PN 16
LSK NW 15 SB MODY	15	5/8"	42	PN 16
LSK NW 19 SB MODY	19	3/4"	42	PN 16
LSK NW 25 SB MODY	25	1"	42	PN 16

**Spare parts:**

LSK SGOR N - Rubber ring for MODY coupling

**Accessories:**

LSK SDOR N - Rubber ring for MODY coupling

**LSK G AC MODY****Claw coupling (air), MODY**

<b>Design:</b>	MODY hose coupling
<b>Connection 1:</b>	Hose connection
<b>Connection 2:</b>	Claw coupling
<b>Sealing form 2:</b>	Rubber sealing ring
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	with reinforced thread protection ring and new sealing ring on both sides.

Identification	for hose ID mm	Inches	Cog space mm	Working pressure bar
LSK NW 13 G AC MODY	12,5	1/2"	42	PN 16
LSK NW 20 G AC MODY	20,0	3/4"	42	PN 16
LSK NW 25 G AC MODY	25,0	1"	42	PN 16

**Spare parts:**

LSK SGOR N - Rubber ring for MODY coupling

**Accessories:**

LSK SDOR N - Rubber ring for MODY coupling

**LSK VERSCHLUSS**

## Cap for claw coupling

**Design:** Cap coupling  
**Connection:** Claw coupling  
**Sealing form 1:** Rubber sealing ring  
**Standard:** DIN 3489  
**Material:** Cast iron  
**Surface:** electro galvanised



Identification	Cog space mm	Working pressure bar	Included in scope of supply
LSK VERSCHLUSS MK	42	PN 10	with chain
LSK VERSCHLUSS OK	42	PN 10	without chain

**Spare parts:**

LSK GOOR - Rubber ring for claw coupling

**LKM HB****Plug-in coupling sleeve (air)**

**Design:** Quick release coupling sleeve  
**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Connection 2:** Sleeve Ø 7.2 mm  
**Material:** Coupling, unlocking sleeve, valve body and brass valve, Springs, snap ring and pins from stainless steel, Gasket: NBR

Identification	Connecting thread	Working pressure bar	SW mm
LKM 02 HB	G 1/8" -28	PN 35	22
LKM 06 HB	G 1/4" -19	PN 35	22
LKM 10 HB	G 3/8" -19	PN 35	22
LKM 13 HB	G 1/2" -14	PN 35	22

SW = Width across flats

**LKM IR****Plug-in coupling sleeve (air)**

**Design:** Quick release coupling sleeve  
**Connection 1:** BSP cylindrical internal threads  
**Connection 2:** Sleeve  $\varnothing$  7.2 mm  
**Material:** Coupling, unlocking sleeve, valve body and brass valve, Springs, snap ring and pins from stainless steel, Gasket: NBR



Identification	Connecting thread	Working pressure bar	SW mm
LKM 02 IR	G 1/8" -28	PN 35	22
LKM 06 IR	G 1/4" -19	PN 35	22
LKM 10 IR	G 3/8" -19	PN 35	22
LKM 13 IR	G 1/2" -14	PN 35	24

SW = Width across flats

**LKM MM****Plug-in coupling sleeve (air)**

**Design:** Quick release coupling sleeve  
**Construction:** straight  
**Connection 1:** Hose connection  
**Connection 2:** Sleeve Ø 7.2 mm  
**Material:** Coupling, unlocking sleeve, valve body and brass valve, Springs, snap ring and pins from stainless steel, Gasket: NBR

Identification	for hose ID mm	Working pressure bar
LKM 06 MM	6	PN 35
LKM 08 MM	8	PN 35
LKM 09 MM	9	PN 35
LKM 10 MM	10	PN 35
LKM 13 MM	13	PN 35

**LKM MM 45****Plug-in coupling sleeve (air)**

**Design:** Quick release coupling sleeve  
**Construction:** Angle 45°  
**Connection 1:** Hose connection  
**Connection 2:** Sleeve Ø 7.2 mm  
**Material:** Coupling, unlocking sleeve, valve body and brass valve, Springs, snap ring and pins from stainless steel, Gasket: NBR



Identification	for hose ID mm	Working pressure bar
LKM 06 MM 45	6	PN 35
LKM 09 MM 45	9	PN 35
LKM 13 MM 45	13	PN 35

**LKM MM 90****Plug-in coupling sleeve (air)**

**Design:** Quick release coupling sleeve  
**Construction:** Angle 90°  
**Connection 1:** Hose connection  
**Connection 2:** Sleeve Ø 7.2 mm  
**Material:** Coupling, unlocking sleeve, valve body and brass valve, Springs, snap ring and pins from stainless steel, Gasket: NBR

Identification	for hose ID mm	Working pressure bar
LKM 06 MM 90	6	PN 35
LKM 09 MM 90	9	PN 35
LKM 13 MM 90	13	PN 35



**LKM HR ST****Plug-in coupling sleeve (air) with locking mechanism**

<b>Design:</b>	Quick release coupling sleeve
<b>Supplementary design information:</b>	with safety lock
<b>Connection 1:</b>	BSP external thread, cylindrical
<b>Connection 2:</b>	Sleeve Ø 7.2 mm
<b>Material:</b>	Steel / composite material
<b>Description:</b>	Coupling housing made of composite material is extremely resistant to abrasion, impacts, crushing and vibrations.



**Note:** Coupling safety lock prevents a hazardous whiplash effect.

Identification	Connecting thread	Working pressure bar
LKM 06 HR ST	G 1/4" -19	PN 12
LKM 10 HR ST	G 3/8" -19	PN 12
LKM 13 HR ST	G 1/2" -14	PN 12

**LKM HRK C****Plug-in coupling sleeve (air)**

<b>Design:</b>	Quick release coupling sleeve
<b>Supplementary design information:</b>	with safety lock
<b>Connection 1:</b>	BSPT conical external threads
<b>Connection 2:</b>	Sleeve Ø 7.6 mm
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

**Note:** Coupling safety lock prevents a hazardous whiplash effect.

Identification	Connecting thread	Working pressure bar
LKM 13 HRK C	R 1/2" K	PN 16

**LKM IR ST****Plug-in coupling sleeve (air) with locking mechanism**

<b>Design:</b>	Quick release coupling plug, DN 7, 2
<b>Supplementary design information:</b>	with safety lock
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Connection 2:</b>	Sleeve Ø 7.2 mm
<b>Material:</b>	Steel / composite material
<b>Description:</b>	Coupling housing made of composite material is extremely resistant to abrasion, impacts, crushing and vibrations.



**Note:** Coupling safety lock prevents a hazardous whiplash effect.

Identification	Connecting thread	Working pressure bar
LKM 06 IR ST	G 1/4" -19	PN 12
LKM 10 IR ST	G 3/8" -19	PN 12
LKM 13 IR ST	G 1/2" -14	PN 12

**LKM MM ST****Plug-in coupling sleeve (air) with locking mechanism**

**Design:** Quick release coupling sleeve

**Supplementary design information:** with safety lock

**Connection 1:** Hose connection

**Connection 2:** Sleeve Ø 7.2 mm

**Material:** Steel / composite material

**Description:** Coupling housing made of composite material is extremely resistant to abrasion, impacts, crushing and vibrations.

**Note:** Coupling safety lock prevents a hazardous whiplash effect.

Identification	for hose ID mm	Working pressure bar
LKM 06 MM ST	6	PN 12
LKM 08 MM ST	8	PN 12
LKM 09 MM ST	9	PN 12
LKM 10 MM ST	10	PN 12
LKM 13 MM ST	13	PN 12

**LKS HB****Plug-in coupling connector (air)**

**Design:** Quick release coupling plug  
**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** 60° inner cone  
**Connection 2:** Connector Ø 7.2 mm  
**Material:** Brass



Identification	Connecting thread	Working pressure bar	SW mm
LKS 02 HB	G 1/8" -28	PN 35	13
LKS 06 HB	G 1/4" -19	PN 35	17
LKS 10 HB	G 3/8" -19	PN 35	19
LKS 13 HB	G 1/2" -14	PN 35	24

SW = Width across flats

**LKS HR ST****Plug-in coupling connector (air)**

**Design:** Quick release coupling plug, DN 7, 2  
**Supplementary design information:** for LKM...ST  
**Connection 1:** BSP external thread, cylindrical  
**Connection 2:** Connector Ø 7.2 mm  
**Material:** Steel  
**Surface:** electro galvanised

Identification	Connecting thread	Working pressure bar
LKS 06 HR ST	G 1/4" -19	PN 35
LKS 10 HR ST	G 3/8" -19	PN 35
LKS 13 HR ST	G 1/2" -14	PN 35

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**LKS HRK C****Plug-in coupling connector (air)**

**Design:** Quick release coupling plug  
**Connection 1:** BSPT conical external threads  
**Connection 2:** Connector Ø 7.6 mm  
**Material:** Steel  
**Surface:** electro galvanised



Identification	Connecting thread	Working pressure bar
LKS 04 HRK C	R 1/8" K	PN 16
LKS 06 HRK C	R 1/4" K	PN 16
LKS 10 HRK C	R 3/8" K	PN 16
LKS 13 HRK C	R 1/2" K	PN 16

**LKS IR****Plug-in coupling connector (air)**

**Design:** Quick release coupling plug  
**Connection 1:** BSP cylindrical internal threads  
**Connection 2:** Connector Ø 7.2 mm  
**Material:** Brass

Identification	Connecting thread	Working pressure bar	SW mm
LKS 02 IR	G 1/8" -28	PN 35	13
LKS 06 IR	G 1/4" -19	PN 35	17
LKS 10 IR	G 3/8" -19	PN 35	19
LKS 13 IR	G 1/2" -14	PN 35	24

SW = Width across flats



**LKS IR C****Plug-in coupling connector (air)**

**Design:** Quick release coupling plug  
**Connection 1:** BSP cylindrical internal threads  
**Connection 2:** Connector Ø 7.6 mm  
**Material:** Steel  
**Surface:** electro galvanised



Identification	Connecting thread	Working pressure bar
LKS 04 IR C	G 1/8" -28	PN 16
LKS 06 IR C	G 1/4" -19	PN 16
LKS 10 IR C	G 3/8" -19	PN 16
LKS 13 IR C	G 1/2" -14	PN 16

**LKS IR ST****Plug-in coupling connector (air)**

**Design:** Quick release coupling plug  
**Supplementary design information:** for LKM...ST  
**Connection 1:** BSP cylindrical internal threads  
**Connection 2:** Connector Ø 7.2 mm  
**Material:** Steel  
**Surface:** electro galvanised

Identification	Connecting thread	Working pressure bar
LKS 06 IR ST	G 1/4" -19	PN 16
LKS 10 IR ST	G 3/8" -19	PN 16
LKS 13 IR ST	G 1/2" -14	PN 16

**LKS MM****Plug-in coupling connector (air)**

**Design:** Quick release coupling plug  
**Connection 1:** Hose connection  
**Connection 2:** Connector Ø 7.2 mm  
**Material:** Brass



Identification	for hose ID mm	Working pressure bar
LKS 06 MM	6	PN 35
LKS 08 MM	8	PN 35
LKS 09 MM	9	PN 35
LKS 10 MM	10	PN 35
LKS 13 MM	13	PN 16

**LKS MM C****Plug-in coupling connector (air)**

**Design:** Quick release coupling plug  
**Connection 1:** Hose connection  
**Connection 2:** Connector Ø 7.6 mm  
**Material:** Steel  
**Surface:** electro galvanised

Identification	for hose ID mm	Working pressure bar
LKS 04 MM C	5	PN 16
LKS 06 MM C	6	PN 16
LKS 08 MM C	8	PN 16
LKS 10 MM C	10	PN 16
LKS 13 MM C	13	PN 16

**LKS MM ST****Plug-in coupling connector (air)**

**Design:** Quick release coupling plug  
**Supplementary design information:** for LKM...ST  
**Connection 1:** Hose connection  
**Connection 2:** Connector Ø 7.2 mm  
**Material:** Steel  
**Surface:** electro galvanised



Identification	for hose ID mm	Working pressure bar
LKS 06 MM ST	6	PN 35
LKS 08 MM ST	8	PN 35
LKS 09 MM ST	9	PN 35
LKS 10 MM ST	10	PN 35
LKS 13 MM ST	13	PN 35

**LSK GDOR****Rubber ring for claw coupling**

**Design:** Rubber ring for claw couplings  
**Supplementary design information:** steam resistant  
**Temp. min.:** -40 °C  
**Temp. max.:** 200 °C  
**Material:** Silicone

Identification	External Ø mm	Internal Ø mm	h mm
LSK GDOR	33	20	10

**Accessory for following products:**

LSK G D - Claw coupling (air), rotating  
 LSK IR D - Claw coupling (air), rotating  
 LSK G - Claw coupling (air)  
 LSK HR G - Claw coupling (air)  
 LSK HR G D - Claw coupling (air), rotating  
 LSK IR G - Claw coupling (air)  
 LSK SB G - Claw coupling (air), safety collar  
 LSK SB G D - Claw coupling (air), safety collar

**LSK GOOR****Rubber ring for claw coupling**

**Design:** Rubber ring for claw couplings  
**Supplementary design information:** oil resistant synthetic rubber  
**Temp. min.:** -40 °C  
**Temp. max.:** 95 °C  
**Material:** Perbunan



Identification	External Ø mm	Internal Ø mm	h mm
LSK GOOR	34	20	10,5

**Spare part for following products:**

LSK SB G - Claw coupling (air), safety collar  
 LSK IR G - Claw coupling (air)  
 LSK HR G - Claw coupling (air)  
 LSK G - Claw coupling (air)  
 LSK SB G D - Claw coupling (air), safety collar  
 LSK HR G D - Claw coupling (air), rotating  
 LSK G D - Claw coupling (air), rotating  
 LSK IR D - Claw coupling (air), rotating  
 LSK VERSCHLUSS - Cap for claw coupling

**LSK SDOR****Rubber ring for MODY coupling**

**Design:** Rubber ring for MODY couplings  
**Supplementary design information:** steam resistant  
**Temp. min.:** -40 °C  
**Temp. max.:** 200 °C  
**Material:** Silicone

**Note:** SDOR only suitable for the old seal base.

Identification	External Ø mm	Internal Ø mm	h mm
LSK SDOR	33	21	7

**Accessory for following products:**

LSK MODY - Claw coupling (air), MODY  
 LSK G AC MODY - Claw coupling (air), MODY  
 LSK HR MODY - Claw coupling (air), MODY  
 LSK SB MODY - Claw coupling (air), MODY, with safety collar  
 LSK IR MODY - Claw coupling (air), MODY



**LSK SDOR N****Rubber ring for MODY coupling**

**Design:** Rubber ring for MODY couplings  
**Supplementary design information:** steam resistant  
**Temp. min.:** -40 °C  
**Temp. max.:** 200 °C  
**Material:** Ohasil



**Note:** SDORN suitable for new seal seats led on both sides.

Identification	External Ø mm	Internal Ø mm	h mm
LSK SDOR N	30	21	4

**Spare part for following products:**

LSK G AC MODY - Claw coupling (air), MODY  
 LSK HR MODY - Claw coupling (air), MODY  
 LSK IR MODY - Claw coupling (air), MODY  
 LSK MODY - Claw coupling (air), MODY  
 LSK SB MODY - Claw coupling (air), MODY, with safety collar

**LSK SGOR****Rubber ring for MODY coupling**

**Design:** Rubber ring for MODY couplings  
**Supplementary design information:** oil resistant synthetic rubber  
**Temp. min.:** -40 °C  
**Temp. max.:** 95 °C  
**Material:** Perbunan

**Note:** SGOR only suitable for the old seal base.

Identification	External Ø mm	Internal Ø mm	h mm
LSK SGOR	33	21	7

**Accessory for following products:**

LSK MODY - Claw coupling (air), MODY  
 LSK G AC MODY - Claw coupling (air), MODY  
 LSK HR MODY - Claw coupling (air), MODY  
 LSK SB MODY - Claw coupling (air), MODY, with safety collar  
 LSK IR MODY - Claw coupling (air), MODY

**LSK SGOR N****Rubber ring for MODY coupling**

**Design:** Rubber ring for MODY couplings  
**Supplementary design information:** oil resistant synthetic rubber  
**Temp. min.:** -40 °C  
**Temp. max.:** 90 °C  
**Material:** Perbunan



**Note:** SGORN suitable for new seal bases guided on both sides.

Identification	External Ø mm	Internal Ø mm	h mm
LSK SGOR N	30	21	4

**Spare part for following products:**

LSK SB MODY - Claw coupling (air), MODY, with safety collar

LSK IR MODY - Claw coupling (air), MODY

LSK MODY - Claw coupling (air), MODY

LSK G AC MODY - Claw coupling (air), MODY

LSK HR MODY - Claw coupling (air), MODY

## LSK HOOS

### Retaining screw for claw coupling



**Design:** Retaining screw for claw coupling with brass seal.  
**Material:** Steel  
**Surface:** electro galvanised

Identification	G1
LSK HOOS	M 5 x 14

**Spare part for following products:**

LSK HR M - Claw coupling (air)

LSK M - Claw coupling (air)

LSK IR M - Claw coupling (air)

**LSK MOOH****Brass sleeve for claw coupling**

**Design:** Brass sleeve for claw coupling with brass seal.  
**Temp. min.:** -40 °C  
**Temp. max.:** 95 °C  
**Material:** Brass



Identification	External Ø mm	Internal Ø mm	h mm
LSK MOOH	32	17	21

**Spare part for following products:**

LSK M - Claw coupling (air)  
 LSK HR M - Claw coupling (air)  
 LSK IR M - Claw coupling (air)

**LSK SOOR****Hose ring for claw coupling**

**Design:** Hose ring for claw coupling with brass seal  
**Temp. min.:** -40 °C  
**Temp. max.:** 95 °C  
**Material:** Perbunan

Identification	External Ø mm	Internal Ø mm	h mm
LSK SOOR	28	23	12

**Spare part for following products:**

LSK IR M - Claw coupling (air)

LSK M - Claw coupling (air)

LSK HR M - Claw coupling (air)

**TUE M****Threaded nozzle**

**Connection 1:** BSP nut thread  
**Sealing form 1:** 60° outer cone  
**Connection 2:** Hose connection  
**Material:** Brass



Identification	Connecting thread	for hose ID mm	SW mm	Working pressure bar
TUE 18 6 M	G 1/8" -28	6	12	PN 16
TUE 14 6 M	G 1/4" -19	6	17	PN 16
TUE 14 9 M	G 1/4" -19	9	17	PN 16
TUE 38 6 M	G 3/8" -19	6	19	PN 16
TUE 38 9 M	G 3/8" -19	9	19	PN 16
TUE 12 9 M	G 1/2" -14	9	24	PN 16
TUE 12 13 M	G 1/2" -14	13	24	PN 16

SW = Width across flats

**TUE M SB****Threaded nozzle**

<b>Application:</b>	Systems engineering, Industry and construction
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Connection 2:</b>	Hose connection
<b>Media:</b>	Compressed air
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	rotating nozzle contour enables perfect hose seating maximum hole size for greatest possible flow rate

**Note:** To be integrated with DIN 20039 B hose clamps.

Identification	Connecting thread	for hose ID mm	Ø ID mm	Length mm	Thread length mm	Nozzle length mm	Ø Safety collar mm	SW mm	Working pressure bar
TUE 34 19 M SB	G 3/4" -14	19	15,00	71	19	40	32	32	PN 25
TUE 1 19 M SB	G 1" -11	19	15,00	73	20	40	32	41	PN 25
TUE 1 25 M SB	G 1" -11	25	20,00	75	20	41	36	41	PN 25
TUE 114 25 M SB	G 1.1/4" -11	25	20,00	80	23	41	36	50	PN 25
TUE 114 32 M SB	G 1.1/4" -11	32	25,00	86	23	48	45	50	PN 25

SW = Width across flats    Ø ID = Through hole



**T M MG****Threaded nozzle**

**Connection 1:** BSP external thread, cylindrical  
**Connection 2:** Hose connection  
**Material:** Brass



Identification	Connecting thread	for hose ID mm	SW mm	Working pressure bar
T 184 M	G 1/8" -28	4	14	PN 16
T 186 M	G 1/8" -28	6	14	PN 16
T 189 M	G 1/8" -28	9	14	PN 16
T 144 M	G 1/4" -19	4	17	PN 16
T 146 M	G 1/4" -19	6	17	PN 16
T 149 M	G 1/4" -19	9	17	PN 16
T 1413 M	G 1/4" -19	13	17	PN 16
T 386 M	G 3/8" -19	6	19	PN 16
T 389 M	G 3/8" -19	9	19	PN 16
T 3813 M	G 3/8" -19	13	19	PN 16
T 126 M	G 1/2" -14	6	24	PN 16
T 129 M	G 1/2" -14	9	24	PN 16
T 1213 M	G 1/2" -14	13	24	PN 16
T 1219 M	G 1/2" -14	19	24	PN 16
T 349 M	G 3/4" -14	9	27	PN 16
T 3413 M	G 3/4" -14	13	32	PN 16
T 3419 M	G 3/4" -14	19	32	PN 16
T 1019 M	G 1" -11	19	26	PN 16
T 1025 M	G 1" -11	25	38	PN 16

SW = Width across flats

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## T M SB

## Threaded nozzle



<b>Application:</b>	Systems engineering, Industry and construction
<b>Connection 1:</b>	BSP external thread, cylindrical
<b>Connection 2:</b>	Hose connection
<b>Media:</b>	Compressed air
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	rotating nozzle contour enables perfect hose seating maximum hole size for greatest possible flow rate

**Note:** To be integrated with DIN 20039 B hose clamps.

Identification	Connecting thread	for hose ID mm	Ø ID mm	Length mm	Thread length mm	Nozzle length mm	Ø Safety collar mm	SW mm	Working pressure bar
T 12 13 M SB	G 1/2" -14	13	10,00	73	15	40	22	22	PN 25
T 34 19 M SB	G 3/4" -14	19	15,00	72	15	40	32	32	PN 25
T 1 19 M SB	G 1" -11	19	15,00	74	17	40	32	36	PN 25
T 1 25 M SB	G 1" -11	25	20,00	80	17	41	36	36	PN 25
T 114 25 M SB	G 1.1/4" -11	25	20,00	90	18	48	39	46	PN 25
T 114 32 M SB	G 1.1/4" -11	32	25,00	92	20	48	45	46	PN 25
T 112 38 M SB	G 1.1/2" -11	38	33,00	100	22	51	53	55	PN 25
T 2 50 M SB	G 2" -11	50	42,00	125	25	72	64	65	PN 25
T 2 53 M SB	G 2" -11	53	44,00	125	25	72	74	75	PN 25
T 3 75 M SB	G 3" -11	75	68,00	185	30	120	95	90	PN 25

SW = Width across flats    Ø ID = Through hole

## TRD

## Threaded nozzle

<b>Application:</b>	in construction, mining and tunnel building
<b>Connection 1:</b>	round external thread
<b>Connection 2:</b>	Hose connection
<b>Media:</b>	Compressed air, water
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised
<b>Description:</b>	fits conical nozzle threaded connections rotating nozzle contour enables perfect hose seating



**Note:** To be integrated with DIN 20,039 A hose clamps.

Identification	for hose ID mm	G1	Ø ID mm	Length mm	Nozzle length mm	SW mm	Cone	Working pressure bar
TRD 32-13 MM	13	Rd 32 x 1/8"	10,00	75	41	32	1:3	PN 25
TRD 32-16 MM	16	Rd 32 x 1/8"	12,00	75	41	32	1:3	PN 25
TRD 32-19 MM	19	Rd 32 x 1/8"	15,00	75	41	32	1:3	PN 25
TRD 32-25 MM	25	Rd 32 x 1/8"	20,00	75	41	32	1:3	PN 25

SW = Width across flats    Ø ID = Through hole

## KT UEM

### Conical nozzle with union nut



<b>Application:</b>	in construction, mining and tunnel building
<b>Connection 1:</b>	BSP nut thread
<b>Sealing form 1:</b>	Outer cone
<b>Connection 2:</b>	Hose connection
<b>Standard:</b>	DIN 8537 / 20 033
<b>Included in scope of supply:</b>	Union nut and conical nozzle
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Media:</b>	Compressed air, water
<b>Material:</b>	Steel, Malleable cast iron
<b>Surface:</b>	electro galvanised

**Note:** To be integrated with DIN 20039 B hose clamps. Conical nozzles 1:3 cone generally with additional O-ring seal.

Identification	for hose ID mm	G1	Ø ID mm	Length mm	b mm	Cone	Ø Safety collar mm	Working pressure bar
KT UEM 3/4-10 MM	10	G 3/4" -14	8,00	70	58	1:4	21	PN 25
KT UEM 3/4-13 MM	13	G 3/4" -14	10,00	79	58	1:4	21	PN 25
KT UEM 3/4-15 MM	15	G 3/4" -14	12,00	79	58	1:4	26	PN 25
KT UEM 3/4-19 MM	19	G 3/4" -14	13,00	80	58	1:4	33	PN 25
KT UEM 1-10 MM	10	G 1" -11	7,50	83	65	1:3	21	PN 25
KT UEM 1-13 MM	13	G 1" -11	10,00	85	65	1:3	22	PN 25
KT UEM 1-15 MM	15	G 1" -11	12,00	85	65	1:3	26	PN 25
KT UEM 1-19 MM	19	G 1" -11	15,00	85	65	1:3	33	PN 25
KT UEM 1-25 MM	25	G 1" -11	16,00	90	65	1:3	38	PN 25

G1 = Thread of connection 1    Ø ID = Through hole

#### Spare parts:

UEM KT - Union nut for conical nozzles

## KT UEM RD

## Conical nozzle with union nut

<b>Application:</b>	in construction, mining and tunnel building
<b>Connection 1:</b>	Rund nut thread
<b>Connection 2:</b>	Hose connection
<b>Standard:</b>	DIN 8537 / 20 033
<b>Included in scope of supply:</b>	Union nut and conical nozzle
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Media:</b>	Compressed air, water
<b>Material:</b>	Steel, Malleable cast iron
<b>Surface:</b>	electro galvanised



**Note:** To be integrated with DIN 20039 B hose clamps. Conical nozzles 1:3 cone generally with additional O-ring seal.

Identification	for hose ID mm	G1	Ø ID mm	Length mm	b mm	Cone	Ø Safety collar mm	Working pressure bar
KT UEM RD32-10 MM	10	Rd 32 x 1/8"	7,50	90	65	1:3	21	PN 25
KT UEM RD32-13 MM	13	Rd 32 x 1/8"	10,00	83	65	1:3	22	PN 25
KT UEM RD32-15 MM	15	Rd 32 x 1/8"	12,00	85	65	1:3	26	PN 25
KT UEM RD32-19 MM	19	Rd 32 x 1/8"	15,00	85	65	1:3	33	PN 25
KT UEM RD32-25 MM	25	Rd 32 x 1/8"	16,00	90	65	1:3	38	PN 25
KT UEM RD38-25 MM	25	Rd 38 x 1/8"	19,00	98	76	1:3	38	PN 25
KT UEM RD46-32 MM	32	Rd 46 x 1/6"	25,00	124	86	1:3	50	PN 25
KT UEM RD55-35 MM	35	Rd 55 x 1/6"	30,00	131	95	1:3	55	PN 25
KT UEM RD55-38 MM	38	Rd 55 x 1/6"	31,00	131	95	1:3	55	PN 25
KT UEM RD62-42 MM	42	Rd 62 x 1/6"	35,00	139	105	1:3	63	PN 25
KT UEM RD75-50 MM	50	Rd 75 x 1/6"	45,00	149	137	1:3	77	PN 25
KT UEM RD75-53 MM	53	Rd 75 x 1/6"	45,00	149	137	1:3	77	PN 25
KT UEM RD105-75 MM	75	Rd 105 x 1/4"	67,00	206	158	1:3	110	PN 25

G1 = Thread of connection 1    Ø ID = Through hole

**Spare parts:**

UEM KT RD - Union nut for conical nozzles

**KT MM****Conical nozzle**

<b>Application:</b>	in construction, mining and tunnel building
<b>Connection 1:</b>	Sealing cone
<b>Sealing form 1:</b>	Outer cone
<b>Connection 2:</b>	Hose connection
<b>Standard:</b>	DIN 8537 / 20 033
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Media:</b>	Compressed air, water
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised

**Note:** The conical nozzles are without a safety collar KT19MM-PH for hydraulic pressing with press sleeve. Conical nozzles 1:3 cone generally with additional O-ring seal.

Identification	for hose ID mm	Length mm	b mm	Cone	Working pressure bar
KT 10 MM	10	78	28	1:3	PN 25
KT 10 MM-2	10	70	24	1:4	PN 25
KT 13 MM	13	80	28	1:3	PN 25
KT 13 MM-2	13	79	24	1:4	PN 25
KT 15 MM	15	80	28	1:3	PN 25
KT 15 MM-2	15	79	24	1:4	PN 25
KT 19 MM	19	80	28	1:3	PN 25
KT 19 MM-2	19	80	24	1:4	PN 25
KT 19 MM-PH	19	80	28	1:3	PN 25
KT 25 MM	25	90	33	1:3	PN 25
KT 25 MM-2	25	85	30	1:3	PN 25
KT 25 MM-3	25	85	29	1:3	PN 25
KT 32 MM	32	120	40	1:3	PN 25
KT 35 MM	35	125	35	1:3	PN 25
KT 38 MM	38	125	48	1:3	PN 25
KT 42 MM	42	130	57	1:3	PN 25
KT 50 MM	50	140	68	1:3	PN 25
KT 53 MM	53	140	68	1:3	PN 25
KT 75 MM	75	189	98	1:3	PN 25

**Accessories:**

**UEM KT** - Union nut for conical nozzles

**UEM KT RD** - Union nut for conical nozzles

**UEM KT****Union nut for conical nozzles**

<b>Application:</b>	in construction, mining and tunnel building
<b>Connection 1:</b>	BSP nut thread
<b>Standard:</b>	DIN 8537 / 20 033
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Media:</b>	Compressed air, water
<b>Material:</b>	Malleable cast iron
<b>Surface:</b>	electro galvanised



Identification	G1	Length mm	b mm	Hole Ø mm	Working pressure bar
UEM 3/4 KT	G 3/4" -14	23	58	21,5	PN 25
UEM 1 KT	G 1" -11	28	65	23,0	PN 25
UEM 1 L KT	G 1" -11	28	65	27,5	PN 25

G1 = Thread of connection 1

**Spare part for following products:**

KT UEM - Conical nozzle with union nut

**Accessory for following products:**

KT MM - Conical nozzle

**UEM KT RD****Union nut for conical nozzles**

<b>Application:</b>	in construction, mining and tunnel building
<b>Connection 1:</b>	Rund nut thread
<b>Standard:</b>	DIN 8537 / 20 033
<b>Temp. min.:</b>	-40 °C
<b>Temp. max.:</b>	95 °C
<b>Media:</b>	Compressed air, water
<b>Material:</b>	Malleable cast iron
<b>Surface:</b>	electro galvanised

Identification	G1	Length mm	b mm	Hole Ø mm	Working pressure bar
UEM RD 32	Rd 32 x 1/8"	28	65	23,0	PN 25
UEM RD 32-2	Rd 32 x 1/8"	28	65	27,5	PN 25
UEM RD 38	Rd 38 x 1/8"	33	76	29,0	PN 25
UEM RD 46	Rd 46 x 1/6"	36	86	35,0	PN 25
UEM RD 55	Rd 55 x 1/6"	38	95	42,0	PN 25
UEM RD 62	Rd 62 x 1/6"	44	105	49,0	PN 25
UEM RD 75	Rd 75 x 1/6"	50	137	61,0	PN 25
UEM RD 105	Rd 105 x 1/4"	60	158		PN 25

G1 = Thread of connection 1

**Spare part for following products:**

**KT UEM RD** - Conical nozzle with union nut

**Accessory for following products:**

**KT MM** - Conical nozzle



**XV RD****Cone double nipple**

**Application:** in construction, mining and tunnel building  
**Connection 1:** round external thread  
**Connection 2:** round external thread  
**Standard:** DIN 8537 / 20 036  
**Media:** Compressed air, water  
**Material:** Steel  
**Description:** fits conical nozzle threaded connections



Identification	G1 + G2	Length mm	Cone	SW mm	Working pressure bar
XV 32 RD	Rd 32 x 1/8"	55	1:3 / 1:3	32	PN 25
XV 38 RD	Rd 38 x 1/8"	62	1:3 / 1:3	41	PN 25
XV 46 RD	Rd 46 x 1/6"	70	1:3 / 1:3	46	PN 25
XV 55 RD	Rd 55 x 1/6"	78	1:3 / 1:3	55	PN 25
XV 62 RD	Rd 62 x 1/6"	88	1:3 / 1:3	65	PN 25
XV 75 RD	Rd 75 x 1/6"	100	1:3 / 1:3	75	PN 25

G1 + G2 = Threads of connections 1+2 SW = Width across flats

**XV RD HB KV****Self-sealing nipple with conical valve**

**Application:** in construction, mining and tunnel building  
**Connection 1:** round external thread  
**Connection 2:** BSP cylindrical external threads  
**Media:** Compressed air, water  
**Material:** Steel, Brass conical valve  
**Description:** fits conical nozzle threaded connections

**Note:** Brass conical valve

Identification	G1	G2	Length mm	Cone	SW mm	Working pressure bar
XVRD 32 HB 20 KV	G 3/4" -14	Rd 32 x 1/8"	49	1:3	32	PN 25
G1 = Thread of connection 1   G2 = Thread of connection 2   SW = Width across flats						

## XV RD HB OS

## Sieve nipple

<b>Application:</b>	in construction, mining and tunnel building
<b>Connection 1:</b>	round external thread
<b>Connection 2:</b>	BSP cylindrical external threads
<b>Standard:</b>	DIN 20037
<b>Media:</b>	Compressed air, water
<b>Material:</b>	Steel
<b>Description:</b>	fits conical nozzle threaded connections



Identification	Design	G1	G2	Length mm	Cone	SW mm	Working pressure bar
XVRD 32 HB 20 OS	without sieve	Rd 32 x 1/8"	G 3/4" -14	48	1:3	32	PN 25
XVRD 38 HB 25 OS	without sieve	Rd 38 x 1/8"	G 1" -11	54	1:3	41	PN 25
XVRD 46 HB 25 OS	without sieve	Rd 46 x 1/6"	G 1" -11	58	1:3	46	PN 25
XVRD 46 HB 32 OS	without sieve	Rd 46 x 1/6"	G 1.1/4" -11	58	1:3	46	PN 25
XVRD 46 HB 40 OS	without sieve	Rd 46 x 1/6"	G 1.1/2" -11	63	1:3	50	PN 25
XVRD 55 HB 32 OS	without sieve	Rd 55 x 1/6"	G 1.1/4" -11	63	1:3	55	PN 25
XVRD 55 HB 40 OS	without sieve	Rd 55 x 1/6"	G 1.1/2" -11	68	1:3	55	PN 25
XVRD 55 HB 50 OS	without sieve	Rd 55 x 1/6"	G 2" -11	68	1:3	75	PN 25
XVRD 62 HB 40 OS	without sieve	Rd 62 x 1/6"	G 1.1/2" -11	75	1:3	65	PN 25
XVRD 62 HB 50 OS	without sieve	Rd 62 x 1/6"	G 2" -11	75	1:3	75	PN 25
XVRD 75 HB 40 OS	without sieve	Rd 75 x 1/6"	G 1.1/2" -11	80	1:3	75	PN 25
XVRD 75 HB 50 OS	without sieve	Rd 75 x 1/6"	G 2" -11	85	1:3	75	PN 25

G1, G2 = Threads for connections 1 and 2    SW = Width across flats

**XV G****Cone double nipple**

**Application:** in construction, mining and tunnel building  
**Connection 1:** BSP external thread, cylindrical  
**Connection 2:** BSP cylindrical external threads  
**Media:** Compressed air, water  
**Material:** Steel  
**Description:** fits conical nozzle threaded connections

Identification	G1	G2	Length mm	Cone	SW mm	Working pressure bar
XV 1-3/4	G 1" -11	G 3/4" -14	51	1:3 / 1:4	36	PN 25

G1, G2 = Threads for connections 1 and 2 SW = Width across flats

## SVB ND

## Hose connectors

<b>Connection 1:</b>	Hose connection
<b>Connection 2:</b>	Hose connection
<b>Standard:</b>	DIN 20038
<b>Media:</b>	Compressed air
<b>Material:</b>	Steel
<b>Description:</b>	maximum hole size for greatest possible flow rate rotating nozzle contour enables perfect hose seating



**Note:** To be integrated with DIN 20,039 A hose clamps.

Identification	for hose ID mm	Ø ID mm	b mm	Length mm	Working pressure bar
SVB 10 ND	10	8,00	11,0	75	PN 25
SVB 13 ND	13	9,00	13,5	80	PN 25
SVB 15 ND	15	12,00	17,0	105	PN 25
SVB 19 ND	19	16,00	21,0	105	PN 25
SVB 25 ND	25	22,00	26,5	160	PN 25
SVB 32 ND	32	27,00	33,5	175	PN 25
SVB 38 ND	38	33,00	40,0	215	PN 25
SVB 50 ND	50	45,00	51,0	225	PN 25
SVB 53 ND	53	46,00	54,0	225	PN 25

Ø ID = Through hole

**SVB ND SB****Hose connectors**

- Connection 1:** Hose connection  
**Connection 2:** Hose connection  
**Standard:** DIN 20038  
**Media:** Compressed air  
**Material:** Steel  
**Description:** maximum hole size for greatest possible flow rate  
 rotating nozzle contour enables perfect hose seating

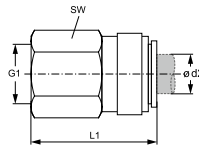
**Note:** To be integrated with DIN 20039 B hose clamps.

Identification	for hose ID mm	Ø ID mm	b mm	Length mm	Ø Safety collar mm	Working pressure bar
SVB 13 ND SB	13	9,00	13,5	80	25	PN 25
SVB 15 ND SB	15	12,00	17,0	105	30	PN 25
SVB 19 ND SB	19	16,00	21,0	105	34	PN 25
SVB 25 ND SB	25	22,00	26,5	160	42	PN 25
SVB 32 ND SB	32	27,00	33,5	175	50	PN 25
SVB 38 ND SB	38	33,00	40,0	215	56	PN 25
SVB 50 ND SB	50	45,00	51,0	225	78	PN 25
SVB 53 ND SB	53	46,00	54,0	225	78	PN 25
SVB 75 ND SB	75	68,00	76,0	250	110	PN 25

Ø ID = Through hole

**JG 45 (UN/UNF)****Screw-on connector**

<b>Application:</b>	Pneumatic, vacuum and food applications
<b>Connection 1:</b>	UN/UNF inner thread
<b>Sealing form 1:</b>	for screw-in pins with shapes A, B and if necessary E
<b>Connection 2:</b>	Plug in sleeve
<b>Design:</b>	Screw-on connector
<b>Colour:</b>	black
<b>Media:</b>	Air, fluid media, inert gases, e.g. N <sub>2</sub> /CO <sub>2</sub>
<b>Material:</b>	Acetal copolymer body; nitrile O-ring

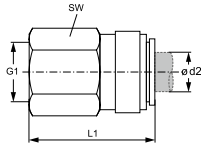


Identification	Ø d2 mm	G1	L1 mm	SW mm
JG 45 08 F4S	8	7/16"-20 UNF	34,0	16
JG 45 08 C5S	8	1/2"-20 UNF	36,5	20

**Accessories:**

**JG 18 S** - Locking ring for connectors

**JG 19 E** - Cap for connectors

**JG 45 (BSP)****Screw-on connector**

- Application:** Pneumatic, vacuum and food applications
- Connection 1:** BSP cylindrical internal threads for screw-in pins with shapes A, B and if necessary E
- Sealing form 1:** Plug in sleeve
- Connection 2:** Plug in sleeve
- Design:** Screw-on connector
- Colour:** black
- Media:** Air, fluid media, inert gases, e.g., N<sub>2</sub>/CO<sub>2</sub>
- Material:** Acetal copolymer body; nitrile O-ring

Identification	Ø d2 mm	G1	L1 mm	SW mm
JG 45 04 11 E	4	G 1/8" -28	28,0	14
JG 45 06 12 E	6	G 1/4" -19	32,0	17
JG 45 08 12 E	8	G 1/4" -19	32,5	17

**Accessories:**

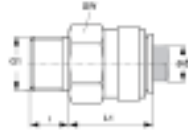
JG 19 E - Cap for connectors

JG 18 S - Locking ring for connectors



**JG 01 (zyl.)****Screw-in connectors**

<b>Application:</b>	Pneumatic, vacuum and food applications
<b>Connection 1:</b>	BSP external thread, cylindrical
<b>Sealing form 1:</b>	encapsulated O-ring on screw-in socket
<b>Connection 2:</b>	Plug in sleeve
<b>Design:</b>	Screw-in connectors
<b>Construction:</b>	straight
<b>Colour:</b>	black
<b>Media:</b>	Air, fluid media, inert gases, e.g., N <sub>2</sub> /CO <sub>2</sub>
<b>Material:</b>	Acetal copolymer body; nitrile O-ring

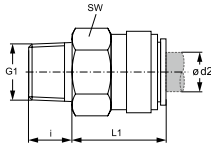


Identification	Ø d2 mm	G1	i mm	L1 mm	SW mm
JG 01 04 11 E	4	G 1/8" -28	5,5	17	14
JG 01 04 12 E	4	G 1/4" -19	8,0	16	17
JG 01 05 11 E	5	G 1/8" -28	5,5	17	14
JG 01 05 12 E	5	G 1/4" -19	8,0	16	17
JG 01 06 11 E	6	G 1/8" -28	5,5	20	15
JG 01 06 12 E	6	G 1/4" -19	8,0	16	17
JG 01 08 11 E	8	G 1/8" -28	5,5	20	17
JG 01 08 12 E	8	G 1/4" -19	8,0	16	17
JG 01 08 13 E	8	G 3/8" -19	9,5	16	22
JG 01 10 12 E	10	G 1/4" -19	8,0	23	20
JG 01 10 13 E	10	G 3/8" -19	9,5	19	22
JG 01 10 14 E	10	G 1/2" -14	12,5	18	27
JG 01 12 13 E	12	G 3/8" -19	9,5	21	24
JG 01 12 14 E	12	G 1/2" -14	12,5	22	27
JG 01 15 14 E	15	G 1/2" -14	12,5	26	27
JG 01 18 14 E	18	G 1/2" -14	12,5	46	30
JG 01 22 16 E	22	G 3/4" -14	15,0	46	32

**Accessories:**

JG 19 E - Cap for connectors

JG 18 S - Locking ring for connectors

**JG 01 (keg.)****Screw-in connectors**

- Application:** Pneumatic, vacuum and food applications
- Connection 1:** BSPT conical external threads
- Sealing form 1:** thread seal
- Connection 2:** Plug in sleeve
- Design:** Screw-in connectors
- Construction:** straight
- Colour:** black
- Media:** Air, fluid media, inert gases, e.g., N<sub>2</sub>/CO<sub>2</sub>
- Material:** Acetal copolymer body; nitrile O-ring

Identification	Ø d2 mm	G1	i mm	L1 mm	SW mm
JG 01 04 01 E	4	R 1/8" K	10	15	15
JG 01 04 02 E	4	R 1/4" K	11	14	17
JG 01 05 01 E	5	R 1/8" K	10	15	15
JG 01 05 02 E	5	R 1/4" K	11	14	17
JG 01 06 01 E	6	R 1/8" K	10	18	17
JG 01 06 02 E	6	R 1/4" K	11	14	17
JG 01 08 01 E	8	R 1/8" K	10	19	17
JG 01 08 02 E	8	R 1/4" K	11	14	17
JG 01 08 03 E	8	R 3/8" K	13	14	20
JG 01 10 02 E	10	R 1/4" K	11	21	20
JG 01 10 03 E	10	R 3/8" K	13	17	20
JG 01 10 04 E	10	R 1/2" K	16	15	22
JG 01 12 03 E	12	R 3/8" K	13	27	24
JG 01 12 04 E	12	R 1/2" K	16	22	24

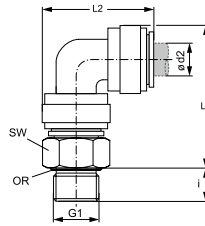
**Accessories:**

JG 19 E - Cap for connectors

JG 18 S - Locking ring for connectors

**JG 09 (zyl.)****Screw-in connector, angle 90°**

<b>Application:</b>	Pneumatic, vacuum and food applications
<b>Connection 1:</b>	BSP external thread, cylindrical encapsulated O-ring on screw-in socket
<b>Connection 2:</b>	Plug in sleeve
<b>Design:</b>	Screw-in connectors
<b>Construction:</b>	Angle 90°
<b>Colour:</b>	black
<b>Media:</b>	Air, fluid media, inert gases, e.g., N <sub>2</sub> /CO <sub>2</sub>
<b>Material:</b>	Acetal copolymer body; nitrile O-ring



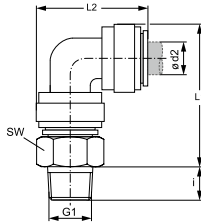
Identification	Ø d2 mm	G1	i mm	L1 mm	L2 mm	SW mm
JG 09 04 11 E	4	G 1/8" -28	5,5	30,0	24,0	14
JG 09 04 12 E	4	G 1/4" -19	8,0	31,0	24,0	17
JG 09 05 11 E	5	G 1/8" -28	5,5	30,0	24,0	14
JG 09 05 12 E	5	G 1/4" -19	8,0	31,0	24,0	17
JG 09 06 11 E	6	G 1/8" -28	5,5	34,0	27,0	15
JG 09 06 12 E	6	G 1/4" -19	8,0	35,0	27,0	17
JG 09 08 11 E	8	G 1/8" -28	5,5	36,0	30,0	17
JG 09 08 12 E	8	G 1/4" -19	8,0	37,0	30,0	17
JG 09 08 13 E	8	G 3/8" -19	9,5	37,0	30,0	22
JG 09 10 12 E	10	G 1/4" -19	8,0	42,0	35,0	20
JG 09 10 13 E	10	G 3/8" -19	9,5	42,0	35,0	22
JG 09 10 14 E	10	G 1/2" -14	12,5	42,0	35,0	27
JG 09 12 13 E	12	G 3/8" -19	9,5	50,0	44,0	26
JG 09 12 14 E	12	G 1/2" -14	12,5	50,0	44,0	30
JG 09 15 13 E	15	G 3/8" -19	11,3	65,5	50,6	22
JG 09 15 14 E	15	G 1/2" -14	14,5	65,5	50,6	27
JG 09 18 14 E	18	G 1/2" -14	14,5	77,0	59,7	27
JG 09 22 14 E	22	G 1/2" -14	14,5	82,0	66,0	27
JG 09 22 16 E	22	G 3/4" -14	17,0	83,6	66,0	37

missing dimensions available on request

**Accessories:**

**JG 18 S** - Locking ring for connectors

**JG 19 E** - Cap for connectors

**JG 09 (keg.)****Screw-in connector, angle 90°**

- Application:** Pneumatic, vacuum and food applications
- Connection 1:** BSPT conical external threads
- Sealing form 1:** thread seal
- Connection 2:** Plug in sleeve
- Design:** Screw-in connectors
- Construction:** Angle 90°
- Colour:** black
- Media:** Air, fluid media, inert gases, e.g., N<sub>2</sub>/CO<sub>2</sub>
- Material:** Acetal copolymer body; nitrile O-ring

Identification	Ø d2 mm	G1	i mm	L1 mm	L2 mm	SW mm
JG 09 04 01 E	4	R 1/8" K	10	29	24	15
JG 09 04 02 E	4	R 1/4" K	11	29	24	17
JG 09 05 01 E	5	R 1/8" K	10	29	24	15
JG 09 05 02 E	5	R 1/4" K	11	29	24	17
JG 09 06 01 E	6	R 1/8" K	10	32	27	17
JG 09 06 02 E	6	R 1/4" K	11	32	27	17
JG 09 08 01 E	8	R 1/8" K	10	35	30	17
JG 09 08 02 E	8	R 1/4" K	11	35	30	17
JG 09 08 03 E	8	R 3/8" K	13	35	30	20
JG 09 10 02 E	10	R 1/4" K	11	40	35	20
JG 09 10 03 E	10	R 3/8" K	13	40	35	20
JG 09 10 04 E	10	R 1/2" K	16	40	35	22
JG 09 12 03 E	12	R 3/8" K	13	49	44	24
JG 09 12 04 E	12	R 1/2" K	16	49	44	24

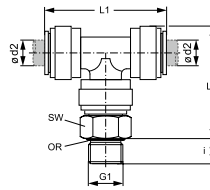
**Accessories:**

JG 18 S - Locking ring for connectors

JG 19 E - Cap for connectors

**JG 10 (zyl.)****Screw-in connector, T shaped**

<b>Application:</b>	Pneumatic, vacuum and food applications
<b>Connection 1:</b>	BSP external thread, cylindrical
<b>Sealing form 1:</b>	encapsulated O-ring on screw-in socket
<b>Connection 2 + 3:</b>	Plug in sleeve
<b>Design:</b>	Screw-in connectors
<b>Construction:</b>	T shaped
<b>Colour:</b>	black
<b>Media:</b>	Air, fluid media, inert gases, e.g., N <sub>2</sub> /CO <sub>2</sub>
<b>Material:</b>	Acetal copolymer body; nitrile O-ring



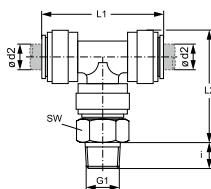
Identification	Ø d2 mm	G1	i mm	L1 mm	L2 mm	SW mm
JG 10 04 11 E	4	G 1/8" -28	5,5	35	30	14
JG 10 04 12 E	4	G 1/4" -19	8,0	35	31	17
JG 10 05 11 E	5	G 1/8" -28	5,5	35	30	14
JG 10 05 12 E	5	G 1/4" -19	8,0	35	31	17
JG 10 06 11 E	6	G 1/8" -28	5,5	40	33	15
JG 10 06 12 E	6	G 1/4" -19	8,0	40	34	17
JG 10 08 11 E	8	G 1/8" -28	5,5	42	36	17
JG 10 08 12 E	8	G 1/4" -19	8,0	42	37	17
JG 10 08 13 E	8	G 3/8" -19	9,5	42	37	22
JG 10 10 12 E	10	G 1/4" -19	8,0	50	42	20
JG 10 10 13 E	10	G 3/8" -19	9,5	50	42	22
JG 10 10 14 E	10	G 1/2" -14	12,5	40	42	27
JG 10 12 13 E	12	G 3/8" -19	9,5	65	50	24
JG 10 12 14 E	12	G 1/2" -14	12,5	65	50	27

**Accessories:**

**JG 19 E** - Cap for connectors

**JG 08** - Sealing plugs

**JG 18 S** - Locking ring for connectors

**JG 10 (keg.)****Screw-in connector, T shaped**

- Application:** Pneumatic, vacuum and food applications
- Connection 1:** BSPT conical external threads
- Sealing form 1:** thread seal
- Connection 2 + 3:** Plug in sleeve
- Design:** Screw-in connectors
- Construction:** T shaped
- Colour:** black
- Media:** Air, fluid media, inert gases, e.g., N<sub>2</sub>/CO<sub>2</sub>
- Material:** Acetal copolymer body; nitrile O-ring

Identification	Ø d2 mm	G1	i mm	L1 mm	L2 mm	SW mm
JG 10 04 01 E	4	R 1/8" K	10	35	29	15
JG 10 04 02 E	4	R 1/4" K	11	35	29	17
JG 10 05 01 E	5	R 1/8" K	10	35	29	15
JG 10 05 02 E	5	R 1/4" K	11	35	29	17
JG 10 06 01 E	6	R 1/8" K	10	40	32	17
JG 10 06 02 E	6	R 1/4" K	11	40	32	17
JG 10 08 01 E	8	R 1/8" K	10	42	35	17
JG 10 08 02 E	8	R 1/4" K	11	42	35	17
JG 10 08 03 E	8	R 3/8" K	13	42	35	20
JG 10 10 02 E	10	R 1/4" K	11	50	40	20
JG 10 10 03 E	10	R 3/8" K	13	50	40	20
JG 10 10 04 E	10	R 1/2" K	16	50	40	22
JG 10 12 03 E	12	R 3/8" K	13	65	49	24
JG 10 12 04 E	12	R 1/2" K	16	65	49	24

**Accessories:**

JG 19 E - Cap for connectors

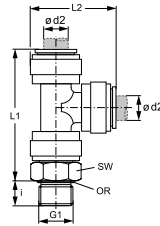
JG 08 - Sealing plugs

JG 18 S - Locking ring for connectors

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**JG 11 (zyl.)****Screw-in connector, L shaped**

<b>Application:</b>	Pneumatic, vacuum and food applications
<b>Connection 1:</b>	BSP external thread, cylindrical
<b>Sealing form 1:</b>	encapsulated O-ring on screw-in socket
<b>Connection 2 + 3:</b>	Plug in sleeve
<b>Design:</b>	Screw-in connectors
<b>Construction:</b>	L shaped
<b>Colour:</b>	black
<b>Media:</b>	Air, fluid media, inert gases, e.g., N <sub>2</sub> /CO <sub>2</sub>
<b>Material:</b>	Acetal copolymer body; nitrile O-ring



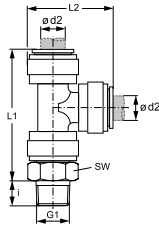
Identification	Ø d2 mm	G1	i mm	L1 mm	L2 mm	SW mm
JG 11 04 11 E	4	G 1/8" -28	5,5	42	24	14
JG 11 04 12 E	4	G 1/4" -19	8,0	42	24	17
JG 11 05 11 E	5	G 1/8" -28	5,5	42	24	14
JG 11 05 12 E	5	G 1/4" -19	8,0	42	24	17
JG 11 06 11 E	6	G 1/8" -28	5,5	46	27	27
JG 11 06 12 E	6	G 1/4" -19	8,0	46	27	17
JG 11 08 11 E	8	G 1/8" -28	5,5	49	30	17
JG 11 08 12 E	8	G 1/4" -19	8,0	49	30	17
JG 11 08 13 E	8	G 3/8" -19	9,5	49	30	22
JG 11 10 12 E	10	G 1/4" -19	8,0	57	35	20
JG 11 10 13 E	10	G 3/8" -19	9,5	57	35	22
JG 11 10 14 E	10	G 1/2" -14	12,5	57	35	27
JG 11 12 13 E	12	G 3/8" -19	9,5	71	44	24
JG 11 12 14 E	12	G 1/2" -14	12,5	71	44	27

**Accessories:**

JG 19 E - Cap for connectors

JG 18 S - Locking ring for connectors

JG 08 - Sealing plugs

**JG 11 (keg.)****Screw-in connector, L shaped**

- Application:** Pneumatic, vacuum and food applications
- Connection 1:** BSPT conical external threads
- Sealing form 1:** thread seal
- Connection 2 + 3:** Plug in sleeve
- Design:** Screw-in connectors
- Construction:** L shaped
- Colour:** black
- Media:** Air, fluid media, inert gases, e.g., N<sub>2</sub>/CO<sub>2</sub>
- Material:** Acetal copolymer body; nitrile O-ring

Identification	Ø d2 mm	G1	i mm	L1 mm	L2 mm	SW mm
JG 11 04 01 E	4	R 1/8" K	10	40	24	15
JG 11 04 02 E	4	R 1/4" K	11	40	24	17
JG 11 05 01 E	5	R 1/8" K	10	40	24	15
JG 11 05 02 E	5	R 1/4" K	11	40	24	17
JG 11 06 01 E	6	R 1/8" K	10	44	27	17
JG 11 06 02 E	6	R 1/4" K	11	44	27	17
JG 11 08 01 E	8	R 1/8" K	10	50	30	17
JG 11 08 02 E	8	R 1/4" K	11	50	30	17
JG 11 08 03 E	8	R 3/8" K	13	50	30	20
JG 11 10 02 E	10	R 1/4" K	11	55	35	20
JG 11 10 03 E	10	R 3/8" K	13	55	35	20
JG 11 10 04 E	10	R 1/2" K	16	55	35	22
JG 11 12 03 E	12	R 3/8" K	13	70	44	24
JG 11 12 04 E	12	R 1/2" K	16	70	44	24

**Accessories:**

JG 08 - Sealing plugs

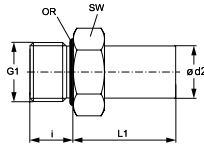
JG 19 E - Cap for connectors

JG 18 S - Locking ring for connectors



**JG 05 (zyl.)****Screw-in sockets**

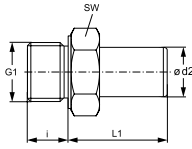
<b>Application:</b>	Pneumatic, vacuum and food applications
<b>Connection 1:</b>	BSP external thread, cylindrical
<b>Sealing form 1:</b>	encapsulated O-ring on screw-in socket
<b>Connection 2:</b>	Pipe sockets
<b>Design:</b>	Screw-in sockets
<b>Construction:</b>	straight
<b>Colour:</b>	black
<b>Media:</b>	Air, fluid media, inert gases, e.g., N <sub>2</sub> /CO <sub>2</sub>
<b>Material:</b>	Acetal copolymer body; nitrile O-ring



Identification	Ø d2 mm	G1	i mm	L1 mm	SW mm
JG 05 04 11 E	4	G 1/8" -28	5,5	20	14
JG 05 04 12 E	4	G 1/4" -19	8,0	21	17
JG 05 05 11 E	5	G 1/8" -28	5,5	20	14
JG 05 05 12 E	5	G 1/4" -19	8,0	21	17
JG 05 06 11 E	6	G 1/8" -28	5,5	22	15
JG 05 06 12 E	6	G 1/4" -19	8,0	22	17
JG 05 08 11 E	8	G 1/8" -28	5,5	23	17
JG 05 08 12 E	8	G 1/4" -19	8,0	23	17
JG 05 08 13 E	8	G 3/8" -19	9,5	23	22
JG 05 10 12 E	10	G 1/4" -19	8,0	26	20
JG 05 10 13 E	10	G 3/8" -19	9,5	26	22
JG 05 10 14 E	10	G 1/2" -14	12,5	26	27
JG 05 12 13 E	12	G 3/8" -19	9,5	31	24
JG 05 12 14 E	12	G 1/2" -14	12,5	31	27
JG 05 15 13 E	15	G 3/8" -19	11,5	43	22
JG 05 15 14 E	15	G 1/2" -14	14,5	43	27
JG 05 18 14 E	18	G 1/2" -14	14,5	50	27
JG 05 22 14 E	22	G 1/2" -14	14,5	60	27
JG 05 22 16 E	22	G 3/4" -14	17,0	52	37

**Product versions:**

JG 05 N - Screw-in sockets, Brass

**JG 05 N****Screw-in sockets**

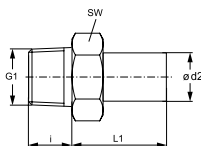
<b>Application:</b>	Pneumatic, vacuum and food applications
<b>Connection 1:</b>	BSP external thread, cylindrical without thread seal
<b>Connection 2:</b>	Pipe sockets
<b>Design:</b>	Screw-in sockets
<b>Construction:</b>	straight
<b>Media:</b>	Air, fluid media, inert gases, e.g., N <sub>2</sub> /CO <sub>2</sub>
<b>Material:</b>	Brass

Identification	Ø d2 mm	G1	i mm	L1 mm	SW mm
JG 05 28 18 N	28	G 1" -11	14	65	36

## JG 05 (keg.)

## Screw-in sockets

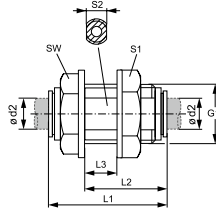
<b>Application:</b>	Pneumatic, vacuum and food applications
<b>Connection 1:</b>	BSPT conical external threads
<b>Sealing form 1:</b>	thread seal
<b>Connection 2:</b>	Pipe sockets
<b>Design:</b>	Screw-in sockets
<b>Construction:</b>	straight
<b>Colour:</b>	black
<b>Media:</b>	Air, fluid media, inert gases, e.g., N <sub>2</sub> /CO <sub>2</sub>
<b>Material:</b>	Acetal copolymer body; nitrile O-ring



Identification	Ø d2 mm	G1	i mm	L1 mm	SW mm
JG 05 04 01 E	4	R 1/8" K	10	19	15
JG 05 04 02 E	4	R 1/4" K	11	19	17
JG 05 05 01 E	5	R 1/8" K	10	19	15
JG 05 05 02 E	5	R 1/4" K	11	19	17
JG 05 06 01 E	6	R 1/8" K	10	20	17
JG 05 06 02 E	6	R 1/4" K	11	20	17
JG 05 08 01 E	8	R 1/8" K	10	21	17
JG 05 08 02 E	8	R 1/4" K	11	21	17
JG 05 08 03 E	8	R 3/8" K	13	21	20
JG 05 10 02 E	10	R 1/4" K	11	24	20
JG 05 10 03 E	10	R 3/8" K	13	24	20
JG 05 10 04 E	10	R 1/2" K	16	24	22
JG 05 12 03 E	12	R 3/8" K	13	29	24
JG 05 12 04 E	12	R 1/2" K	16	29	24

## JG 12

### Bulkhead connectors



<b>Application:</b>	Pneumatic, vacuum and food applications
<b>Connection 1 + 2:</b>	Plug in sleeve
<b>Design:</b>	Bulkhead connector
<b>Construction:</b>	straight
<b>Colour:</b>	black
<b>Media:</b>	Air, fluid media, inert gases, e.g., N <sub>2</sub> /CO <sub>2</sub>
<b>Material:</b>	Acetal copolymer body; nitrile O-ring

Identification	Ø d2 mm	G1	L1 mm	L2 mm	L3 mm	S1	S2	SW mm
JG 12 04 E	4	G 3/8" -19	35	25	13,5	20	15	19
JG 12 05 E	5	G 3/8" -19	35	25	13,5	20	15	19
JG 12 06 E	6	G 3/8" -19	34	25	13,5	20	15	19
JG 12 08 E	8	G 1/2" -14	40	29	16,0	25	20	22
JG 12 10 E	10	G 1/2" -14	41	29	16,0	25	20	22
JG 12 12 E	12	G 3/4" -14	52	38	22,5	32	24	28

#### Accessories:

JG 18 S - Locking ring for connectors

JG 19 E - Cap for connectors

**JG 04 / JG 20****Connector**

**Application:** Pneumatic, vacuum and food applications

**Connection 1 + 2:** Plug in sleeve

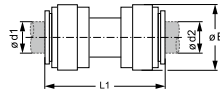
**Design:** Connector

**Construction:** straight

**Colour:** black

**Media:** Air, fluid media, inert gases, e.g., N<sub>2</sub>/CO<sub>2</sub>

**Material:** Acetal copolymer body; nitrile O-ring

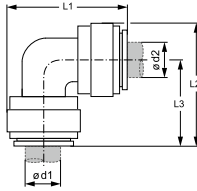


Identification	Ø d1 mm	Ø d2 mm	Ø B mm	L1 mm
JG 04 04 E	4	4	14	32
JG 04 05 E	5	5	14	32
JG 20 06 04 E	6	4	15	35
JG 04 06 E	6	6	15	35
JG 20 08 04 E	8	4	18	42
JG 20 08 06 E	8	6	18	42
JG 04 08 E	8	8	18	42
JG 20 10 04 E	10	4	20	42
JG 20 10 06 E	10	6	20	42
JG 20 10 08 E	10	8	20	42
JG 04 10 E	10	10	20	42
JG 20 12 08 E	12	8	23	53
JG 20 12 10 E	12	10	24	54
JG 04 12 E	12	12	23	51
JG 04 15 E	15	15	28	62
JG 04 18 E	18	18	32	65
JG 04 22 E	22	22	36	71
JG 04 28 E	28	28	50	91

**Accessories:**

**JG 18 S** - Locking ring for connectors

**JG 19 E** - Cap for connectors

**JG 03 / JG 21****Connector, angle 90°**

<b>Application:</b>	Pneumatic, vacuum and food applications
<b>Connection 1 + 2:</b>	Plug in sleeve
<b>Design:</b>	Connector
<b>Construction:</b>	Angle 90°
<b>Colour:</b>	black
<b>Media:</b>	Air, fluid media, inert gases, e.g., N <sub>2</sub> /CO <sub>2</sub>
<b>Material:</b>	Acetal copolymer body; nitrile O-ring

Identification	Ø d1 mm	Ø d2 mm	L1 mm	L2 mm	L3 mm
JG 03 04 E	4	4	24	24	18
JG 03 05 E	5	5	24	24	18
JG 21 06 04 E	6	4	27	27	20
JG 03 06 E	6	6	27	27	20
JG 21 08 04 E	8	4	30	29	21
JG 21 08 06 E	8	6	30	29	21
JG 03 08 E	8	8	30	30	21
JG 21 10 04 E	10	4	35	34	25
JG 21 10 06 E	10	6	35	34	25
JG 21 10 08 E	10	8	35	35	25
JG 03 10 E	10	10	35	35	25
JG 21 12 08 E	12	8	43	41	33
JG 21 12 10 E	12	10	45	43	33
JG 03 12 E	12	12	44	44	32
JG 03 15 E	15	15	50	50	37
JG 03 18 E	18	18	60	60	44
JG 03 22 E	22	22	67	67	49
JG 03 28 E	28	28	85	85	44

**Accessories:**

JG 18 S - Locking ring for connectors

JG 19 E - Cap for connectors

**JG 02 / JG 30****Connector, T shaped**

**Application:** Pneumatic, vacuum and food applications

**Connection 1 - 3:** Plug in sleeve

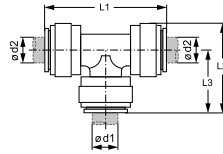
**Design:** Connector

**Construction:** T shaped

**Colour:** black

**Media:** Air, fluid media, inert gases, e.g.,  
N<sub>2</sub>/CO<sub>2</sub>

**Material:** Acetal copolymer body; nitrile O-ring



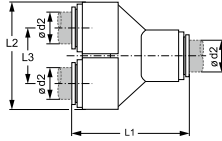
Identification	Ø d1 mm	Ø d2 mm	L1 mm	L2 mm	L3 mm
JG 02 04 E	4	4	35	24	18
JG 02 05 E	5	5	35	24	18
JG 02 06 E	6	6	40	27	20
JG 02 08 E	8	8	42	30	21
JG 02 10 E	10	10	50	35	25
JG 02 12 E	12	12	65	44	32
JG 02 15 E	15	15	73	50	37
JG 30 18 AE	18	15	87	56	40
JG 02 18 E	18	18	89	61	44
JG 30 22 AE	15	22	90	60	42
JG 02 22 E	22	22	98	67	49
JG 02 28 E	28	28	121	85	60

**Accessories:**

**JG 19 E** - Cap for connectors

**JG 18 S** - Locking ring for connectors

**JG 08** - Sealing plugs

**JG 23****Connector, Y shaped**

**Application:** Pneumatic, vacuum and food applications

**Connection 1 - 3:** Plug in sleeve

**Design:** Connector

**Construction:** Y shaped

**Colour:** black

**Media:** Air, fluid media, inert gases, e.g., N<sub>2</sub>/CO<sub>2</sub>

**Material:** Acetal copolymer body; nitrile O-ring

Identification	Ø d2 mm	L1 mm	L2 mm	L3 mm
JG 23 04 E	4	37,0	28,5	15,0
JG 23 06 E	6	35,5	26,8	12,9
JG 23 08 E	8	50,0	41,0	21,6
JG 23 12 E	12	55,5	44,2	21,9

**Accessories:**

JG 19 E - Cap for connectors

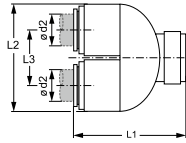
JG 18 S - Locking ring for connectors

JG 08 - Sealing plugs



**JG UB****Return bend with connector**

<b>Application:</b>	Pneumatic, vacuum and food applications
<b>Connection 1 + 2:</b>	Plug in sleeve
<b>Design:</b>	Return bends
<b>Construction:</b>	U shaped
<b>Colour:</b>	black
<b>Media:</b>	Air, fluid media, inert gases, e.g., N <sub>2</sub> /CO <sub>2</sub>
<b>Material:</b>	Acetal copolymer body; nitrile O-ring
<b>Description:</b>	For pipe reversal with plastic pipes.

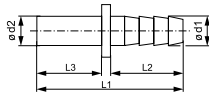


Identification	Ø d2 mm	L1 mm	L2 mm	L3 mm
JG UB 15 E	15	54,5	48	26

**Accessories:**

JG 18 S - Locking ring for connectors

JG 19 E - Cap for connectors

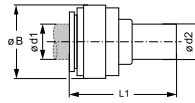
**JG 25****Tube to hose connector**

<b>Application:</b>	Pneumatic, vacuum and food applications
<b>Connection 1:</b>	Hose connection
<b>Connection 2:</b>	Pipe sockets
<b>Design:</b>	Tube to hose connector
<b>Construction:</b>	straight
<b>Colour:</b>	black
<b>Media:</b>	Air, fluid media, inert gases, e.g., N <sub>2</sub> /CO <sub>2</sub>
<b>Material:</b>	Acetal copolymer body; nitrile O-ring

Identification	Ø d1 mm	Ø d2 mm	L1 mm	L2 mm	L3 mm
JG 25 06 04 E	6,1	6	42,0	20,8	18,0
JG 25 08 06 E	6,9	8	43,1	20,8	19,0
JG 25 10 08 E	10,0	10	50,0	24,8	22,2

**JG 06 / JG 13****Reducing connecting socket**

<b>Application:</b>	Pneumatic, vacuum and food applications
<b>Connection 1:</b>	Plug in sleeve
<b>Connection 2:</b>	Pipe sockets
<b>Design:</b>	Reducing connecting socket
<b>Construction:</b>	straight
<b>Colour:</b>	black
<b>Media:</b>	Air, fluid media, inert gases, e.g., N <sub>2</sub> /CO <sub>2</sub>
<b>Material:</b>	Acetal copolymer body; nitrile O-ring

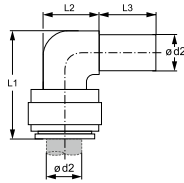


Identification	Ø d1 mm	Ø d2 mm	Ø B mm	L1 mm
JG 06 05 04 E	4	5	13	35
JG 06 06 04 E	4	6	13	36
JG 06 08 04 E	4	8	13	37
JG 13 04 05 E	5	4	13	34
JG 06 06 05 E	5	6	13	36
JG 06 08 05 E	5	8	13	37
JG 06 08 06 E	6	8	15	37
JG 06 10 06 E	6	10	15	40
JG 06 10 08 E	8	10	18	40
JG 06 12 08 E	8	12	18	46
JG 06 12 10 E	10	12	20	50
JG 06 15 10 E	10	15	20	56
JG 06 15 12 E	12	15	23	61
JG 06 18 15 E	15	18	27	72
JG 06 22 15 E	15	22	32	72
JG 06 22 18 E	18	22	32	72
JG 06 28 22 E	22	28	36	82

**Accessories:**

JG 18 S - Locking ring for connectors

JG 19 E - Cap for connectors

**JG 22****Connector, angle 90°**

- Application:** Pneumatic, vacuum and food applications
- Connection 1:** Plug in sleeve
- Connection 2:** Pipe sockets
- Design:** Plug in connector
- Construction:** Angle 90°
- Colour:** black
- Media:** Air, fluid media, inert gases, e.g., N<sub>2</sub>/CO<sub>2</sub>
- Material:** Acetal copolymer body; nitrile O-ring

Identification	Ø d2 mm	L1 mm	L2 mm	L3 mm
JG 22 04 04 E	4	22	9	17
JG 22 05 05 E	5	22	9	17
JG 22 06 06 E	6	25	11	18
JG 22 08 08 E	8	27	13	19
JG 22 10 10 E	10	33	15	24
JG 22 12 12 E	12	39	18	28
JG 22 15 15 E	15	51	19	34
JG 22 18 18 E	18	53	25	32
JG 22 22 22 E	22	59	25	36

**Accessories:**

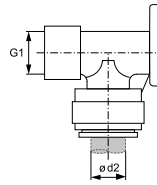
JG 19 E - Cap for connectors

JG 18 S - Locking ring for connectors

**JG 15 WB / JG 22 WB**

Angle 90° to wall mounting

<b>Application:</b>	Pneumatic, vacuum and food applications
<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>Connection 2:</b>	Plug in sleeve
<b>Design:</b>	Angle connector with wall connecting plate
<b>Construction:</b>	Angle 90°
<b>Media:</b>	Air, fluid media, inert gases, e.g., N <sub>2</sub> /CO <sub>2</sub>
<b>Material:</b>	Brass



Identification	Ø d2 mm	G1
JG 15 WB	15	G 1/2" -14
JG 22 WB	22	G 3/4" -14

**Accessories:**

JG 18 S - Locking ring for connectors

JG 19 E - Cap for connectors

**JG LWSK****Air distributor socket for connectors**

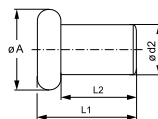
- Application:** Pneumatic, vacuum and food applications
- Included in scope of supply:** 3 self sealing plastic screws
- Colour:** black
- Media:** Air, fluid media, inert gases, e.g., N<sub>2</sub>/CO<sub>2</sub>
- Material:** Acetal copolymer body; nitrile O-ring
- Description:** Air distributor with 4 mounting holes and 5 internal thread connections (1/2") for screwing on adapters.

Identification	for external pipe Ø mm	G1
JG LWSK 1/2	12/15/18/22	G 1/2" -14
G1 - G5 = Threads for connections 1-5		

## JG 08

## Sealing plugs

**Design:** Sealing plugs for connectors  
**Media:** Air, fluid media, inert gases, e.g.,  
 N<sub>2</sub>/CO<sub>2</sub>  
**Material:** Acetal copolymer



Identification	Ø d2 mm	Ø A mm	L1 mm	L2 mm	Colour
JG 08 04 R	4	12,7	28,7	25,4	red
JG 08 05 R	5	12,7	29,2	25,9	red
JG 08 06 R	6	15,2	30,0	26,2	red
JG 08 08 R	8	17,8	31,0	26,9	red
JG 08 10 R	10	19,6	35,8	31,2	red
JG 08 12 R	12	21,6	38,6	33,9	red
JG 08 15 E	15	24,9	45,0	40,0	black
JG 08 18 E	18	28,2	45,0	40,0	black
JG 08 22 E	22	32,0	45,0	40,3	black

**Accessory for following products:**

JG 11 (keg.) - Screw-in connector, L shaped

JG 02 / JG 30 - Connector, T shaped

JG 10 (zyl.) - Screw-in connector, T shaped

JG 10 (keg.) - Screw-in connector, T shaped

JG 23 - Connector, Y shaped

JG 11 (zyl.) - Screw-in connector, L shaped

**JG 18 S****Locking ring for connectors**

**Colour:** black  
**Material:** Acetal copolymer  
**Description:** The locking mechanism prevents the retaining element from being released inadvertently.

Identification	for external pipe Ø mm
JG 18 15 S	15
JG 18 18 S	18

**Accessory for following products:**

JG 01 (zyl.) - Screw-in connectors  
 JG 12 - Bulkhead connectors  
 JG 11 (keg.) - Screw-in connector, L shaped  
 JG 01 (keg.) - Screw-in connectors  
 JG 15 WB / JG 22 WB - Angle 90° to wall mounting  
 JG 02 / JG 30 - Connector, T shaped  
 JG 22 - Connector, angle 90°  
 JG 11 (zyl.) - Screw-in connector, L shaped  
 JG 03 / JG 21 - Connector, angle 90°  
 JG 10 (keg.) - Screw-in connector, T shaped  
 JG 23 - Connector, Y shaped  
 JG 04 / JG 20 - Connector  
 JG 45 (UN/UNF) - Screw-on connector  
 JG 45 (BSP) - Screw-on connector  
 JG 10 (zyl.) - Screw-in connector, T shaped  
 JG 06 / JG 13 - Reducing connecting socket  
 JG UB - Return bend with connector  
 JG 09 (keg.) - Screw-in connector, angle 90°  
 JG 09 (zyl.) - Screw-in connector, angle 90°

7



**JG 19 E****Cap for connectors**

<b>Colour:</b>	black
<b>Material:</b>	Acetal copolymer
<b>Description:</b>	The locking mechanism prevents the retaining element from being released inadvertently.



Identification	for external pipe Ø mm
JG 19 04 E	4
JG 19 05 E	5
JG 19 06 E	6
JG 19 08 E	8
JG 19 10 E	10
JG 19 12 E	12
JG 19 15 E	15
JG 19 18 E	18
JG 19 22 E	22

**Accessory for following products:**

- JG 12 - Bulkhead connectors
- JG 09 (zyl.) - Screw-in connector, angle 90°
- JG 09 (keg.) - Screw-in connector, angle 90°
- JG 01 (zyl.) - Screw-in connectors
- JG 06 / JG 13 - Reducing connecting socket
- JG 10 (zyl.) - Screw-in connector, T shaped
- JG UB - Return bend with connector
- JG 04 / JG 20 - Connector
- JG 45 (BSP) - Screw-on connector
- JG 10 (keg.) - Screw-in connector, T shaped
- JG 45 (UN/UNF) - Screw-on connector
- JG 23 - Connector, Y shaped
- JG 03 / JG 21 - Connector, angle 90°
- JG 22 - Connector, angle 90°
- JG 11 (zyl.) - Screw-in connector, L shaped
- JG 02 / JG 30 - Connector, T shaped
- JG 11 (keg.) - Screw-in connector, L shaped
- JG 15 WB / JG 22 WB - Angle 90° to wall mounting
- JG 01 (keg.) - Screw-in connectors

**JG 26 S****Angle terminal strip for connectors**

**Construction:** Angle 90°  
**Colour:** black  
**Material:** Acetal copolymer  
**Description:** Angle guide for plastic pipes with 2 mounting holes

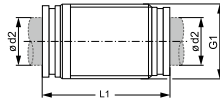
Identification	for external pipe Ø mm
JG 26 08 S	8
JG 26 10 S	10

**JG RK****Pipe clamp for plastic pipe**

**Colour:** white  
**Material:** Plastic  
**Description:** For installation of plastic pipes. Mounted using two-step drilling.



Identification	for external pipe Ø mm
JG RK 06	6
JG RK 08	8
JG RK 10	10
JG RK 12	12
JG RK 15	15
JG RK 18	18
JG RK 22	22
JG RK 28	28

**TR G VB****Connector for Tecalan pipe****Design:****Construction:****Material:****Surface:**

Connector

straight

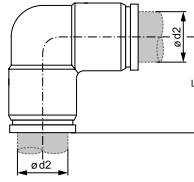
Brass

nickel plated

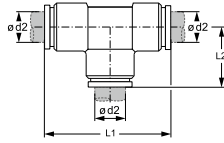
Identification	Ø d2 mm	G1	L1 mm
TR 04 G VB	4	M 11 x 1	28,6
TR 05 G VB	5	M 14 x 1	33,5
TR 06 G VB	6	M 13 x 1	31,2
TR 08 G VB	8	M 15 x 1	33,9
TR 10 G VB	10	M 17 x 1	37,8
TR 12 G VB	12	M 20 x 1	39,7
TR 14 G VB	14	M 24 x 1	45,5

**TR W VB****Connector for Tecalan pipe**

**Design:** Connector  
**Construction:** Angle 90°  
**Material:** Brass  
**Surface:** nickel plated



Identification	Ø d2 mm	L3 mm
TR 04 W VB	4	18,2
TR 05 W VB	5	19,2
TR 06 W VB	6	19,7
TR 08 W VB	8	23,2
TR 10 W VB	10	27,5
TR 12 W VB	12	25,5
TR 14 W VB	14	29,1

**TR TVB****Connector for Tecalan pipe****Design:****Construction:****Material:****Surface:**

Connector

T shaped

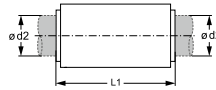
Brass

nickel plated

Identification	Ø d2 mm	L1 mm	L2 mm
TR 04 T VB	4	36,4	18,2
TR 05 T VB	5	38,4	19,2
TR 06 T VB	6	39,4	19,7
TR 08 T VB	8	46,4	23,2
TR 10 T VB	10	55,0	27,5
TR 12 T VB	12	51,0	25,5
TR 14 T VB	14	58,2	29,1

**TR G V B T****Connector for Tecalan pipe**

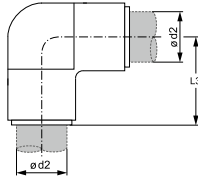
**Special features:** TÜV tested  
**Design:** Connector  
**Construction:** straight  
**Material:** Steel  
**Surface:** electro galvanised



Identification	$\varnothing d2$ mm	for pipe	L1 mm
TR 06 G V B T	6	6 x 1	35,6
TR 08 G V B T	8	8 x 1	37,6
TR 09 G V B T	9	9 x 1,5	47,0
TR 10 G V B T	10	10 x 1	44,1
TR 11 G V B T	11	11 x 1,5	48,0
TR 12 G V B T	12	12 x 1,5	51,1
TR 15 G V B T	15	15 x 1,5	61,5

**TR W VB T**

## Connector for Tecalan pipe



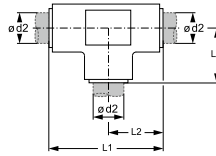
**Special features:** TÜV tested  
**Design:** Connector  
**Construction:** Angle 90°  
**Material:** Steel  
**Surface:** electro galvanised

Identification	$\varnothing d2$ mm	L3 mm
TR 06 W VB T	6	21,0
TR 08 W VB T	8	22,8
TR 10 W VB T	10	27,1
TR 12 W VB T	12	32,1
TR 15 W VB T	15	38,5



**TR T VB T****Connector for Tecalan pipe**

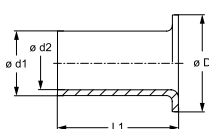
**Special features:** TÜV tested  
**Design:** Connector  
**Construction:** T shaped  
**Material:** Steel  
**Surface:** electro galvanised



Identification	$\varnothing d2$ mm	L1 mm	L2 mm
TR 06 T VB T	6	42,0	21,0
TR 08 T VB T	8	45,8	22,8
TR 10 T VB T	10	54,2	27,1
TR 12 T VB T	12	64,2	32,1
TR 15 T VB T	15	77,0	38,5

## TR EH

### Push-in sleeve



**Design:**  
**Supplementary  
 design informa-  
 tion:**  
**Material:**

Support bushes

for PA 11/12 plastic pipes  
 Brass

Identification	D mm	Ø d1 mm	Ø d2 mm	L1 mm
TR 04-1 EH	3,5	2,0	1,3	8
TR 06-1 EH	5,0	4,0	3,2	10
TR 06-1.5 EH	5,0	3,0	2,2	10
TR 08-1 EH	8,0	6,0	5,0	15
TR 08-1.5 EH	8,0	5,0	4,0	15
TR 10-1 EH	10,0	8,0	6,7	15
TR 10-1.25 EH	10,0	7,5	6,5	10
TR 10-1.5 EH	10,0	7,0		
TR 12-1 EH	12,0	10,0	8,7	15
TR 12-1.5 EH	12,0	9,0	7,7	15
TR 12-2 EH	12,0	8,0	6,7	15
TR 15-1.5 EH	14,0	12,0	10,7	15
TR 15-2 EH	14,0	11,0	7,0	15
TR 18-1.5 EH	17,8	15,0		
TR 18-2 EH	17,8	14,0	12,7	18
TR 20-2 EH	17,8	16,0	14,7	18
TR 22-2 EH	21,8	18,0	16,7	20
TR 25-2.5 EH	21,8	20,0	18,7	20

**DH IR HB****Double plug valve**

<b>Application:</b>	for compressed air supply in construction, compressors, hose lines and hammers.
<b>Connection 1:</b>	BSP cylindrical internal threads
<b>Connection 2 + 3:</b>	BSP cylindrical external threads
<b>Standard:</b>	DIN 3487
<b>Included in scope of supply:</b>	with lever stop and bleeding, with brass plug and malleable cast iron lever
<b>Temp. min.:</b>	-15 °C
<b>Temp. max.:</b>	80 °C
<b>Media:</b>	Compressed air
<b>Material:</b>	Malleable cast iron
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Self-sealing; under pressure, the conical plug is pressed against the housing and seals valve off. This prevents sealing wear.



Identification	DN*	G1	G2 + G3	h mm	l mm	SW mm	Working pressure bar
DH NW 20 IR 20 HB	17	G 3/4" -14	G 3/4" -14	100	110	41	PN 10
DH NW 25 IR 20 HB	17	G 1" -11	G 3/4" -14	100	110	41	PN 10

DN = Nominal diameter, nominal width    G1 - G3 = Threads for connections 1-3    SW = Width across flats

**DH IR HB D****Double plug valve**

- Application:** for compressed air supply in construction, compressors, hose lines and hammers.
- Connection 1:** BSP cylindrical internal threads
- Connection 2 + 3:** Claw coupling
- Standard:** DIN 3487
- Included in scope of supply:** with lever stop and bleeding, with brass plug and malleable cast iron lever
- Temp. min.:** -15 °C
- Temp. max.:** 80 °C
- Media:** Compressed air
- Material:** Malleable cast iron
- Surface:** electro galvanised
- Description:** Self-sealing; under pressure, the conical plug is pressed against the housing and seals valve off. This prevents sealing wear.

Identification	DN*	G1	h mm	SW mm	Working pressure bar
DH NW 20 IR 20 HB D	17	G 3/4" -14	100	41	PN 10

DN = Nominal diameter, nominal width    G1 = Thread of connection 1    SW = Width across flats

**BKR BH HB****Plug valve for hammer drill**

<b>Application:</b>	for compressed air supply in construction, compressors, hose lines and hammers.
<b>Connection 1 + 2:</b>	BSP cylindrical external threads
<b>Standard:</b>	DIN 20030
<b>Included in scope of supply:</b>	with brass plug and malleable cast iron lever
<b>Temp. min.:</b>	-15 °C
<b>Temp. max.:</b>	80 °C
<b>Media:</b>	Compressed air
<b>Material:</b>	Malleable cast iron
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Self-sealing; under pressure, the conical plug is pressed against the housing and seals valve off. This prevents sealing wear.



**Note:** Input thread with counter nut SW 32/41 Hammer drill valves DIN 20030 without lever without lever stop, without bleeding.

Identification	DN*	G1 + G2	h mm	l mm	SW mm	Working pressure bar
BKR BH NW 20 HB	12	G 3/4" -14	85	110	32	PN 10
BKR BH NW 25 HB	16	G 1" -11	95	120	36	PN 10
DN = Nominal diameter, nominal width		G1 + G2 = Threads of connections 1+2		SW = Width across flats		

**BKR BH HB RD****Plug valve for hammer drill**

<b>Application:</b>	for compressed air supply in construction, compressors, hose lines and hammers.
<b>Connection 1:</b>	BSP external thread, cylindrical
<b>Connection 2:</b>	round external thread
<b>Standard:</b>	DIN 20030
<b>Included in scope of supply:</b>	with brass plug and malleable cast iron lever
<b>Temp. min.:</b>	-15 °C
<b>Temp. max.:</b>	80 °C
<b>Media:</b>	Compressed air
<b>Material:</b>	Malleable cast iron
<b>Surface:</b>	electro galvanised
<b>Description:</b>	Self-sealing; under pressure, the conical plug is pressed against the housing and seals valve off. This prevents sealing wear.

**Note:** Input thread with counter nut SW 32/41 Hammer drill valves DIN 20030 without lever without lever stop, without bleeding.

Identification	DN*	G1	G2	h mm	l mm	SW mm	Working pressure bar
BKR BH NW 20 HB 32 RD	12	G 3/4" -14	Rd 32 x 1/8"	95	140	32	PN 10
BKR BH NW 25 HB 32 RD	16	G 1" -11	Rd 32 x 1/8"	95	120	36	PN 10

DN = Nominal diameter, nominal width    G1 + G2 = Threads of connections 1+2    SW = Width across flats





## Fluid service



<b>Sampling</b>		<b>Hydraulic fluids</b>	
Fluid sampling sets	488	Industry	509
Individual parts	490	Automotive	514
<b>Analysis</b>		<b>Oil binding agents</b>	
Oil analysis	494	Oil binding agents	516
Accessories	498		
<b>Filtration</b>			
Partial flow filter systems	500		
Accessories	503		

**HK FES DMM****Fluid sampling set, dynamic****Application:**

General hydraulic systems

**Connection 1:**

Measuring connection M 16 x 2

**Description:**

The fluid sampling set is used for safely collecting fluid samples at measuring connections in hydraulic systems (even while the system is running). The equipment consists of several individual parts and is delivered fully assembled.

**Note:** Work on hydraulic systems must only be carried out by technically qualified personnel and compliance with the safety regulations in force.  
The operating manual for this equipment must be followed to prevent injury to personnel and damage to the environment!

Identification	Weight kg	Max. working pressure bar
HK FES-DMM	0,75	315

**Additional elements:**

HK PROBEF GL - Glass sample bottle

HK PROBEF LDPE - Plastic sample bottle

OELANALYSE SET 2 - Oil analysis set for mineral oil

OELANALYSE SET 3 - Oil analysis set for bio oil

OELANALYSE SET 4 - Oil analysis set for gear oil

**HK FES SUP****Fluid sampling set, static**

**Application:** General hydraulic systems

**Included in scope of supply:**

1 x vacuum pump, 3 x 250 ml sample bottles, glass, 2 x 500 ml sample bottles, glass, 2 x 500 ml sample bottles, plastic, 1 x adapter for sample bottles, 2 x PVC hoses, 1 x pipe section

**Description:**

The fluid sampling set is used for safely collecting fluids from containers and systems  
The fluid is sucked through the 1000 mm long hose and directly into the glass sample bottle by the vacuum pump.



Identification	Weight kg
HK FES-SUP	1,45

**Spare parts:**

HK PROBEF LDPE - Plastic sample bottle

HK PROBEF GL - Glass sample bottle

HK PROBEF ADA AL - Adapter for sample bottle

HK VAK PUMPE - Vacuum hand pump

PSK - PVC hose, transparent

**HK PROBEF LDPE**

## Plastic sample bottle



**Included in scope  
of supply:**

Sample bottle with cap

**Description:**

Plastic sample bottle for fluid sampling set.

Identification	Weight kg	Content mL	Material	Colour
HK PROBEF-LDPE500 MD	0,07	500	Plastic	white, transparent

**HK PROBEF GL****Glass sample bottle****Included in scope  
of supply:**

Sample bottle with cap

**Description:**

Glass sample bottle for fluid sampling set.



Identification	Weight kg	Content mL	Material
HK PROBEF-GL250 MD	0,25	250	Glass
HK PROBEF-GL500 MD	0,37	500	Glass

**Accessories:**

HK PROBEF ADA AL - Adapter for sample bottle

**HK PROBEF ADA AL****Adapter for sample bottle**

**Description:** Cover with 2 hose connections for extracting the fluid.

**Note:** Only suitable for glass sample bottles.

Identification	Weight kg	Material
HK PROBEF-ADA-AL	0,33	Aluminium

**Spare part for following products:**

HK FES SUP - Fluid sampling set, static

**Accessory for following products:**

HK PROBEF GL - Glass sample bottle

HK VAK PUMPE - Vacuum hand pump

**HK VAK PUMPE****Vacuum hand pump**

**Connection:** Hose fitting = 6 mm diameter  
**Description:** Vacuum hand pump for fluid collection.  
 Fits HK FES SUP and HK VAK FILTRA-GL.



Identification	Weight kg
HK VAK-PUMPE	0,37

**Spare part for following products:**

HK FES SUP - Fluid sampling set, static

**Accessory for following products:**

HK VAK FILTRA GL - Glass vacuum filtration device

**HK VAK FILTRA GL****Glass vacuum filtration device**

**Connection:** Hose fitting = 6 mm diameter

**Description:** Glass vacuum filtration device for visual evaluation of liquids.

**Note:** Highly viscous media should be diluted with HK VAK NHEPTAN-TECH.

Identification	Weight kg
HK VAK-FILTRA-GL	1,7

**Additional info:** The oil sample is drawn through the filter and into the filter bottle with the aid of a vacuum pump. The residue in the filter provides a preliminary indication of the degree of contamination of the oil. The filtrate bottle can hold up to 1000 ml, the glass top can hold up to 250 ml, the filtration area is 12.5 cm<sup>2</sup> with a filter diameter of 50 mm.

**Accessories:**

**HK VAK MEM** - Filter for vacuum filtration

**HK VAK HEPTAN** - N-heptane

**Additional elements:**

**HK VAK PUMPE** - Vacuum hand pump

**PSK** - PVC hose, transparent



**OELANALYSE SET 2****Oil analysis set for mineral oil****Included in scope****of supply:**

1 x sample container, 1x Sample data sheet, 1x shipping case

**Additional feature:**

Analysis costs are included in the price. All oil samples will be evaluated within 24 hours of receipt at the laboratory.

**Description:**

With the oil analysis set, the condition of an oil can be analysed precisely in the lab.

The condition of the system can also be deduced from the result of the oil analysis.



Identification	Colour	for medium	Weight kg
OEL ANALYSE SET 2	black cover	Mineral oil-based hydraulic oil	0,2

**Additional info:** The oil analysis set 2 includes the following analyses:

- Wearing metals (iron, chrome, tin, aluminium, nickel, copper, lead, molybdenum),
- PQ index (magnetisable iron parts),
- Additives (calcium, magnesium, zinc, phosphorus, barium, boron),
- Contaminants (silicon, potassium, sodium, water as %),
- Oil condition (viscosity at +40° and +100°C),
- Viscosity index,
- Oxidation,
- Appearance of the oil,
- Particle count according to ISO 4406, SAE 4059.

## OELANALYSE SET 3

### Oil analysis set for bio oil



**Included in scope of supply:**

1 x sample container, 1x Sample data sheet, 1x shipping case  
Analysis costs are included in the price. All oil samples will be evaluated within 24 hours of receipt at the laboratory.

**Additional feature:**

With the oil analysis set, the condition of an oil can be analysed precisely in the lab.

**Description:**

The condition of the system can also be deduced from the result of the oil analysis.

Identification	Colour	for medium	Weight kg
OEL ANALYSE SET 3	yellow cover	Biologically degradable hydraulic fluids	0,2

**Additional info:** The oil analysis set 3 includes the following analyses:

- Wearing metals (iron, chrome, tin, aluminium, nickel, copper, lead, molybdenum),
- PQ index (magnetisable iron parts),
- Additives (calcium, magnesium, zinc, phosphorus, barium, boron),
- Contaminants (silicon, potassium, sodium, water as %),
- KF water,
- Oil condition (viscosity at +40° and +100°C),
- Viscosity index,
- Oxidation,
- Neutralisation value,
- Appearance of the oil,
- Colour number,
- Density,
- Particle count according to ISO 4406, SAE 4059.

**OELANALYSE SET 4****Oil analysis set for gear oil****Included in scope****of supply:**

1 x sample container, 1x Sample data sheet, 1x shipping case

**Additional feature:**

Analysis costs are included in the price. All oil samples will be evaluated within 24 hours of receipt at the laboratory.

**Description:**

With the oil analysis set, the condition of an oil can be analysed precisely in the lab.

The condition of the system can also be deduced from the result of the oil analysis.



Identification	Colour	for medium	Weight kg
OEL ANALYSE SET 4	red cover	Gearbox oil	0,2

**Additional info:** The oil analysis set 4 includes the following analyses:

- Wearing metals (iron, chrome, tin, aluminium, nickel, copper, lead, molybdenum),
- PQ index (magnetisable iron parts),
- Additives (calcium, magnesium, zinc, phosphorus, barium, boron),
- Contaminants (silicon, potassium, sodium, water as %),
- KF water,
- Oil condition (viscosity at +40° and +100°C),
- Viscosity index,
- Oxidation,
- Neutralisation value,
- Appearance of the oil,
- O.P.A. with particle count

**HK VAK HEPTAN****N-heptane**

**Description:** Technical solution for diluting and cleaning.

**Note:** Liquid is highly volatile, harmful to health and hazardous for the environment. Store containers in a well ventilated area. Do not approach with ignition sources. Observe the information in the material safety data sheet.

Identification	Packaging unit	Weight kg
HK VAK-NHEPTAN-TECH	10 litres	8,0

**Spare part for following products:**

**HK VAK FILTRA GL** - Glass vacuum filtration device

**HK VAK MEM****Filter for vacuum filtration****Description:**

The white cellulose nitrate filter is printed with a black mesh pattern.  
Each filter is packaged separately and under sterile conditions.



Identification	Diameter mm	Filter mesh size $\mu\text{m}$	Packaging unit	Weight kg
HK VAK-MEM-FILTER	50	0,8	100 screws	0,14

**Spare part for following products:**

HK VAK FILTRA GL - Glass vacuum filtration device

## NSFA Typ C

### Bypass flow filter system Type C



**Media:**

**Description:**

Mineral oil, Synthetic oils, turbine oils, vegetable oils  
 Partial flow filter systems increase the reliability and operational readiness of many hydraulic and lubricating oil systems. Oil filtering prolongs the service life not only of the machine, but also of the entire system.

When a partial flow system is used, the filter can work permanently without being affected by changes in pressure or volume flow in the main system.

The equipment is particularly notable for its compact construction and low noise level.

Identification	Voltage	Power kW	Volumetric flow max. L/min	System size*	Weight kg
NSFA TYP C 20/380 V 1.5	380 V	1,5	20,0	up to 600 litres	35
NSFA TYP C 60/380 V 1.5	380 V	1,5	60,0	up to 1200 litres	35
NSFA TYP C 80/380 V 1.5	380 V	1,5	80,0	up to 2500 litres	35
NSFA TYP C 80/380 V 3.0	380 V	3,0	80,0	up to 2500 litres	45

System size contains values for reference purposes only

**Additional info:** Double filter system, 2 filter elements are needed. The filter systems can be rented by the day, the week, or by the month.

Our service technicians will then install and commission the equipment for a fee.

Duration of filtration depends essentially on the degree of contamination of the medium.

**Accessories:**

HK FEC - Filter element for NSFA Type C

**NSFA Typ D****Bypass flow filter system Type D****Media:**

Mineral oil, Synthetic oils, turbine oils, vegetable oils

**Description:**

Partial flow filter systems increase the reliability and operational readiness of many hydraulic and lubricating oil systems. Oil filtering prolongs the service life not only of the machine, but also of the entire system.

When a partial flow system is used, the filter can work permanently without being affected by changes in pressure or volume flow in the main system.

The equipment is particularly notable for its compact construction and low noise level.



Identification	Voltage	Power kW	Volumetric flow max. L/min	System size*	Weight kg
NSFA TYP D 20/12 V 035	12 V	0,35	20,0	up to 600 litres	15
NSFA TYP D 20/24 V 037	24 V	0,37	20,0	up to 600 litres	15
NSFA TYP D 20/230 V 055	230 V	0,55	20,0	up to 600 litres	18
NSFA TYP D 40/230 V 1.5	230 V	1,50	40,0	up to 1200 litres	18
NSFA TYP D 60/230 V 1.5	230 V	1,50	60,0	up to 1200 litres	19
NSFA TYP D 40/380 V 1.5	380 V	1,50	40,0	up to 1200 litres	23
NSFA TYP D 60/380 V 1.5	380 V	1,50	60,0	up to 1200 litres	23

\*System size contains values for reference purposes only

**Additional info:** The filter systems can be rented by the day, the week, or by the month.

Our service technicians will then install and commission the equipment for a fee.

Duration of filtration depends essentially on the degree of contamination of the medium.

**Accessories:**

HK FED - Filter element for NSFA Type D

## NSFA Typ E

### Bypass flow filter system Type E



**Media:**

Mineral oil, Synthetic oils, turbine oils, vegetable oils

**Description:**

Partial flow filter systems increase the reliability and operational readiness of many hydraulic and lubricating oil systems. Oil filtering prolongs the service life not only of the machine, but also of the entire system.

When a partial flow system is used, the filter can work permanently without being affected by changes in pressure or volume flow in the main system.

The equipment is particularly notable for its compact construction and low noise level.

Identification	Voltage	Power kW	Volumetric flow max. L/min	System size*	Weight kg
NSFA TYP E 150/380 V 55	380 V	5,5	150,0	above 2500 litres	175
System size contains values for reference purposes only					

**Additional info:** The filter systems can be rented by the day, the week, or by the month.

Our service technicians will then install and commission the equipment for a fee.

Duration of filtration depends essentially on the degree of contamination of the medium.

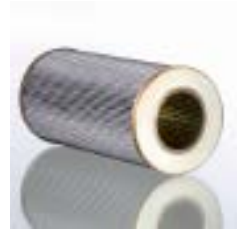
**Accessories:**

HK FEE - Filter element for NSFA Type E



**HK FEC****Filter element for NSFA Type C**

**Description:** Filter element made from inorganic filter material for partial flow filter systems NSFA Type C.  
Filter mesh size in absolute values.



Identification	Filter mesh size µm	Note	External Ø mm	Internal Ø mm	Length mm	Weight kg
HK FEC N 3	3	Solid particle contamination	99	53	211	1,1
HK FEC N 6	6	Solid particle contamination	99	53	211	1,1
HK FEC N 10	10	Solid particle contamination	99	53	211	1,1
HK FEC WS 25	25	absorbing additional water	99	53	211	1,1

**Accessory for following products:**

**NSFA Typ C** - Bypass flow filter system Type C

**HK FED****Filter element for NSFA Type D****Description:**

Filter element made from inorganic filter material for partial flow filter systems NSFA Type D.  
Filter mesh size in absolute values.

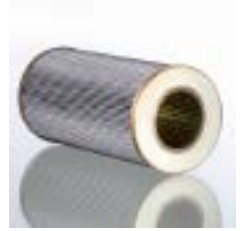
Identification	Filter mesh size µm	Note	External Ø mm	Internal Ø mm	Length mm	Weight kg
HK FED N 3	3	Solid particle contamination	80	40,3	250	0,8
HK FED N 6	6	Solid particle contamination	80	40,3	250	0,8
HK FED N 10	10	Solid particle contamination	80	40,3	250	0,8
HK FED WS 10	10	absorbing additional water	80	40,3	250	0,8

**Accessory for following products:**

NSFA Typ D - Bypass flow filter system Type D

**HK FEE****Filter element for NSFA Type E**

**Description:** Filter element made from inorganic filter material for partial flow filter systems NSFA Type E.  
Filter mesh size in absolute values.



Identification	Filter mesh size µm	Note	External Ø mm	Internal Ø mm	Length mm	Weight kg
HK FEE N 3	3	Solid particle contamination	106	72	464	0,95
HK FEE N 6	6	Solid particle contamination	106	72	464	0,95
HK FEE N 10	10	Solid particle contamination	106	72	464	0,95
HK FEE WS 25	25	absorbing additional water	106	72	464	0,95

**Accessory for following products:**

**NSFA Typ E** - Bypass flow filter system Type E

**HK FAPC F****Filter element for oil service appliance HK FAPC 016**

Identification	for filter type	Weight kg
HK FAPC V71220 113	3E-N;β(c)=200	1,2

**Spare part for following products:**  
HK FAPC - Oil service appliance

**HK FAPC 1760****Carrier for oil service appliance HK FAPC 016****Description:**

For simplified transportation of the HKFAPC016 the trolley can be attached to the stationary appliance. Easy transportation is thus possible, even over longer distances.



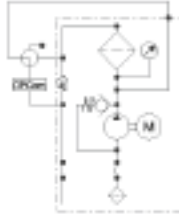
Identification	Weight kg
HK FAPC 016 1760	3

**Accessory for following products:**

HK FAPC - Oil service appliance

## HK FAPC

### Oil service appliance



**Note:** Length of suction/pressure hose 1.8 / 2.0 m Appliance HK FAPC016 1105 is equipped with a memory (storage of 500 purity classes with date and time; download in Excel compatible format).

Identification	Nominal volume current L/min	Soiling capacity g	Viscosity mm <sup>2</sup> /s max.	Electric motor	for filter type	Suction height max. m	BD max. bar	Weight kg
HK FAPC 016 1105	16	160	150	230 V/50 Hz; 0,45 kW	3E-Nß(c)=200	1,5	4	24

BD = Working pressure

#### Description:

With the filter unit, hydraulic or lubricating oil systems can simply be filled and cleaned in the bypass flow. The appliance is suitable for mineral oil and environmentally compatible hydraulic fluids. The compact design allows easy access to the oil tank. The HK FAPC 016 is equipped with hoses and ready to connect. The superfine filter elements can be replaced without any special tools required. The suction and pressure hoses are coiled up directly on the appliance. Remaining oil droplets are collected in the oil drip tray. The heart of the filtration appliance are the EXAPOR® superfine filter elements. High separation rates guarantee very high degrees of cleanliness, and hence maximum component protection. The high soiling absorption capacity of the EXAPOR® ultrafine filter elements permit cost-effective operation of the unit. A pressure gauge indicates when the filter element has to be replaced. The water-absorbing filter element EXAPOR® Aqua can be installed briefly to remove small amounts of water from hydraulic oils - available on request - The HK FAPC 016 is equipped with a purity class monitor. The purity class achieved during the filling or cleaning process is continuously monitored. When monitoring the purity level a ball cock can be used to select between "downstream of filter" (e.g. when filling systems) or "upstream of filter" (e.g. cleansing oil fillings). Selection between particle sizes 4, 6, 14 and 21 µm can be made on the display. The reference number for the selected particle size according to ISO 4406:1999 is displayed on the monitor.

#### Spare parts:

**HK FAPC F** - Filter element for oil service appliance HK FAPC 016

#### Accessories:

**HK FAPC 1760** - Carrier for oil service appliance HK FAPC 016

**OEL HLP****Mineral oil-based hydraulic oil**

- Application:** as universal oil, e.g. hydraulic presses, injection moulding machines, construction machinery etc.
- Classification:** HLP
- Standard:** DIN 51524-2
- Description:** Hydraulic oil based on mineral oil with agents against corrosion, oil ageing and wear.



**Note:** Note: Do not mix different oils.

Identification	Viscosity class	Packaging unit
OEL HLP 32	ISO VG 32	20 litres
OEL HLP 46	ISO VG 46	20 litres

**OEL HLPD****Hydraulic oil, red mineral oil-based**

- Application:** as universal oil, e.g. hydraulic presses, injection moulding machines, construction machinery etc.
- Classification:** HLPD
- Additional feature:** Especially suitable for systems with sensitive control valves.
- Description:** Detergent hydraulic oil based on mineral oil containing agents against corrosion, oil ageing and wear.

**Note:** Note: Do not mix different oils.

Identification	Viscosity class	Packaging unit
OEL R 20	ISO VG 46	20 litres

**Additional info:** The detergent properties remove deposits from the hydraulics and prevent adhesion. HLPD oils demonstrate a unique property of absorbing certain amounts of water without causing operating problems in the hydraulic system.



**OEL BIO****Vegetable oil-based hydraulic oil**

**Classification:** HETG  
**Standard:** DIN ISO 15380



**Note:** Note: Do not mix different oils.

Identification	Viscosity class	Packaging unit
OEL BIO	ISO VG 46	20 litres

## OEL PANOLIN

### Hydraulic oil, synthetic (Panolin)



**Application:** e.g. mobile hydraulics  
**Classification:** HEES  
**Standard:** DIN ISO 15380

**Note:** Note: Do not mix different oils.

Identification	Viscosity class	Packaging unit
OEL PANOLIN	ISO VG 46	25 litres

**OEL SYNT****Synthetic ester-based hydraulic oil**

**Application:** e.g. mobile hydraulics  
**Classification:** HEES  
**Standard:** DIN ISO 15380



**Note:** Note: Do not mix different oils.

Identification	Viscosity class	Packaging unit
OEL SYNT	ISO VG 46	20 litres

**OEL W****Mineral oil-based engine oil**

**Note:** Note: Do not mix different oils.

Identification	Area	Packaging unit
OEL 10 W	Monograde oil	20 litres
OEL 10 W 40	Multigrade oil	20 litres

**OEL ATF****Mineral oil-based ATF gear oil**

**Note:** Note: Do not mix different oils.

Identification	Specification	Packaging unit
OEL ATF 66	Suffix A	20 litres
OEL ATF 86	Dexron II	20 litres

## OEL MATTE

### Oil binding agent, (matt)



**Description:**

Oil binder for receiving oil-based non-woven fabrics from polypropylene homopolymer (PP)

**Identification**

OEL MATTE

**Dimension**

43 x 33 cm

**OEL BIND****Oil binding agent, (granular)**

**Description:** Material: Calcined diatomaceous earth (Moler), no chemical and synthetic additives. Oil binder, Type III R



**Note:** Insoluble in water and acids.

Identification	Weight kg
OEL BIND	15

**Additional info:** No risk to persons, animals, plants and ground water. 1 litre oil binder, coarse grain, 1 - 3 mm binds approx. 0.4 litres of oil.



## Accessories and tools



**Oil drain valves**

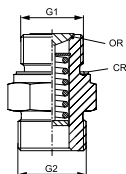
Valves	520
Couplings	523
Spare parts	525

**Lubricating nipple**

Hydraulic-type lubricating nipple	527
Funnel-type lubricating nipple	542
Flat lubricating nipple	544
Mouth pieces	549

**Tools**

Cutter for plastic pipes	550
Screwdriver, flexible	552
Spanner for fire brigade couplings	553
Pliers for CLIC clamp	554

**BOE****Oil drain screw with valve**

**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** Shape A  
**Connection 2:** metric cylindrical outer thread  
**Design:** Drain valve

**Included in scope of supply:** with copper ring and cap

**Temp. min.:** -30 °C

**Temp. max.:** 200 °C

**Description:** The BOE oil drain screw is closed at rest (O-ring seal). When the oil drain hose is unscrewed, the valve is opened, allowing the oil to drain.

**Note:** Material for seal washer in protective cap: NBR. Seal material on valve seat: FPM (Viton)

Identification	G1	G2	Material
BOE 12-1.5	M 12 x 1.5	M 22 x 1.5	Steel
BOE 14-1.5	M 14 x 1.5	M 22 x 1.5	Steel
BOE 16-1.5	M 16 x 1.5	M 22 x 1.5	Steel
BOE 18-1.5	M 18 x 1.5	M 26 x 1.5	Steel
BOE 20-1.5	M 20 x 1.5	M 26 x 1.5	Steel
BOE 20-1.75	M 20 x 1.75	M 26 x 1.5	Steel
BOE 22-1.5	M 22 x 1.5	M 26 x 1.5	Steel
BOE 22-1.75	M 22 x 1.75	M 26 x 1.5	Steel
BOE 24-1.5	M 24 x 1.5	M 26 x 1.5	Brass
BOE 24-2	M 24 x 2	M 26 x 1.5	Brass
BOE 26-1.5	M 26 x 1.5	M 26 x 1.5	Brass
BOE 30-1.5	M 30 x 1.5	M 26 x 1.5	Brass
BOE 30-2	M 30 x 2	M 26 x 1.5	Brass
BOE 32-1.5	M 32 x 1.5	M 26 x 1.5	Brass
BOE 36-1.5	M 36 x 1.5	M 26 x 1.5	Brass
BOE 36-2	M 36 x 2	M 26 x 1.5	Brass
BOE 38-1.5	M 38 x 1.5	M 26 x 1.5	Brass

**Spare parts:**

**BOE DICHTSCHEIBE** - Sealing washer for BOE drain screw

**BOE KAPPE** - Cap for drain screws

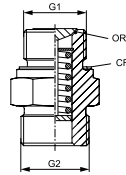
**Accessories:**

**BOE ABLASS** - Oil drain hose

**BOE ABLASS 90** - Oil drain hose

**BOE R****Oil drain screw with valve**

- Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** Shape A  
**Connection 2:** metric cylindrical outer thread  
**Design:** Drain valve  
**Included in scope of supply:** with copper ring and cap  
**Temp. min.:** -30 °C  
**Temp. max.:** 200 °C  
**Description:** The BOE oil drain screw is closed at rest (O-ring seal). When the oil drain hose is unscrewed, the valve is opened, allowing the oil to drain.



**Note:** Material for seal washer in protective cap: NBR. Seal material on valve seat: FPM (Viton)

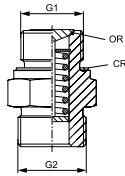
Identification	G1	G2	Material
BOE R 1/4	G 1/4" -19	M 22 x 1.5	Steel
BOE R 3/8	G 3/8" -19	M 22 x 1.5	Steel
BOE R 1/2	G 1/2" -14	M 26 x 1.5	Steel
BOE R 5/8	G 5/8" -14	M 26 x 1.5	Steel
BOE R 3/4	G 3/4" -14	M 26 x 1.5	Steel / brass
BOE R 7/8	G 7/8" -14	M 26 x 1.5	Steel / brass
BOE R 1	G 1" -11	M 26 x 1.5	Brass
BOE R 1 1/4	G 1.1/4" -11	M 26 x 1.5	Brass
BOE R 1 1/2	G 1.1/2" -11	M 26 x 1.5	Brass

**Spare parts:**

- BOE DICHTSCHEIBE** - Sealing washer for BOE drain screw  
**BOE KAPPE** - Cap for drain screws

**Accessories:**

- BOE ABLASS** - Oil drain hose  
**BOE ABLASS 90** - Oil drain hose

**BOE U****Oil drain screw with valve**

**Connection 1:** UN/UNF external threads  
**Sealing form 1:** Shape A  
**Connection 2:** metric cylindrical outer thread  
**Design:** Drain valve

**Included in scope of supply:**

with copper ring and cap  
 -30 °C

**Temp. min.:**

**Temp. max.:** 200 °C

**Description:**

The BOE oil drain screw is closed at rest (O-ring seal). When the oil drain hose is unscrewed, the valve is opened, allowing the oil to drain.

**Note:** Material for seal washer in protective cap: NBR. Seal material on valve seat: FPM (Viton)

Identification	G1	G2	Material
BOE U 1/2-20	1/2"-20 UNF	M 22 x 1.5	Steel
BOE U 5/8-18	5/8"-18 UNF	M 22 x 1.5	Steel
BOE U 3/4-16	3/4"-16 UNF	M 26 x 1.5	Steel
BOE U 7/8-14	7/8"-14 UNF	M 26 x 1.5	Steel
BOE U 1-12	1" -12 UNF	M 26 x 1.5	Brass
BOE U 1 1/8-12	1.1/8"-12 UNF	M 26 x 1.5	Brass
BOE U 1 1/2-12	1.1/2"-12 UNF	M 26 x 1.5	Brass
BOE U 1 1/16-12	1.1/16" -12 UN	M 26 x 1.5	Brass

**Spare parts:**

**BOE DICHTSCHEIBE** - Sealing washer for BOE drain screw

**BOE KAPPE** - Cap for drain screws

**Accessories:**

**BOE ABLASS** - Oil drain hose

**BOE ABLASS 90** - Oil drain hose

**BOE ABLASS**

## Oil drain hose

**Design:** Coupling with PVC hose  
**Construction:** straight



Identification	Connecting thread	Length mm
BOE ABLASS 2	M 22 x 1.5	250
BOE ABLASS 3	M 26 x 1.5	250

**Accessory for following products:**

BOE R - Oil drain screw with valve  
 BOE - Oil drain screw with valve  
 BOE U - Oil drain screw with valve

**BOE ABLASS 90**

## Oil drain hose



**Design:** Coupling with PVC hose  
**Construction:** Angle 90°

Identification	Connecting thread	Length mm
BOE ABLASS 2-90	M 22 x 1.5	250
BOE ABLASS 3-90	M 26 x 1.5	250

**Accessory for following products:**

**BOE** - Oil drain screw with valve

**BOE R** - Oil drain screw with valve

**BOE U** - Oil drain screw with valve

**BOE DICHTSCHEIBE**

## Sealing washer for BOE drain screw

**Design:** Seal washer for protective caps  
**Material:** NBR



Identification	for thread
BOE DICHTSCHEIBE 2	M 22 x 1.5
BOE DICHTSCHEIBE 3	M 26 x 1.5

**Spare part for following products:**

**BOE** - Oil drain screw with valve  
**BOE R** - Oil drain screw with valve  
**BOE U** - Oil drain screw with valve

**BOE KAPPE**

## Cap for drain screws



**Design:**  
**Material:**

Cap with seal  
Brass, NBR seal

Identification	for thread	Included in scope of supply
BOE KAPPE 2 MDK	M 22 x 1.5	with chain
BOE KAPPE 2 MDOK	M 22 x 1.5	without chain
BOE KAPPE 3 MDK	M 26 x 1.5	with chain
BOE KAPPE 3 MDOK	M 26 x 1.5	without chain

**Spare part for following products:**

**BOE** - Oil drain screw with valve

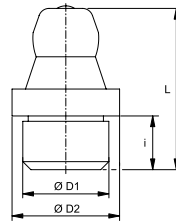
**BOE U** - Oil drain screw with valve

**BOE R** - Oil drain screw with valve



**SNK GLATT****Conical lubricating nipple, drive type shank**

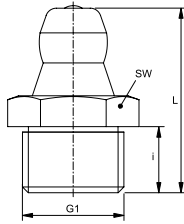
**Connection 1:** Drive type shank  
**Connection 2:** Lubricating nipple  
**Design:** Hydraulic-type lubricating nipple  
**Supplementary design information:** for driving in with smooth pin straight  
**Construction:** DIN 71412  
**Additional feature:** Lubricating nipple head diameter 6,5 mm  
**Material:** Steel  
**Surface:** electro galvanised



Identification	Ø D1 mm	Ø D2 mm	i mm	L mm
SNK GLATT 06	6	8	5,5	15
SNK GLATT 08	8	10	5,5	15

## SNK FOR M

### Conical lubricating nipple with self-forming thread

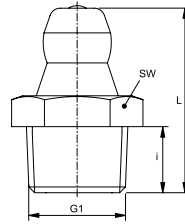


**Connection 1:** Self-forming thread  
**Sealing form 1:** thread seal  
**Connection 2:** Lubricating nipple  
**Design:** Hydraulic-type lubricating nipple  
**Supplementary design information:** with self-forming thread  
**Construction:** straight  
**Standard:** DIN 71412  
**Additional feature:** Lubricating nipple head diameter 6,5 mm  
**Material:** Steel  
**Surface:** electro galvanised

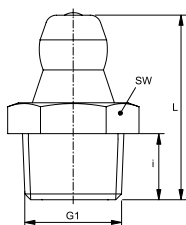
Identification	G1	i mm	L mm	SW mm
SNK FOR M6-1	M 6 x 1 K	5,5	15	7
SNK FOR M8-1	M 8 x 1 K	5,5	15	9
SNK FOR M10-1	M 10 x 1 K	5,5	15	11

**SNK R****Hydraulic-type lubricating nipple**

**Connection 1:** BSPT conical external threads  
**Sealing form 1:** thread seal  
**Connection 2:** Lubricating nipple  
**Design:** Hydraulic-type lubricating nipple  
**Construction:** straight  
**Standard:** DIN 71412  
**Additional feature:** Lubricating nipple head diameter 6,5 mm  
**Material:** Steel  
**Surface:** electro galvanised



Identification	G1	i mm	L mm	SW mm
SNK R1/8	R 1/8" K	5,5	15,0	11
SNK R1/4	R 1/4" K	6,5	17,5	14

**SNK M****Hydraulic-type lubricating nipple**

**Connection 1:** metric conical outer thread  
**Sealing form 1:** thread seal  
**Connection 2:** Lubricating nipple  
**Design:** Hydraulic-type lubricating nipple  
**Construction:** straight  
**Standard:** DIN 71412  
**Additional feature:** Lubricating nipple head diameter 6,5 mm  
**Material:** Steel  
**Surface:** electro galvanised

Identification	G1	i mm	L mm	SW mm
SNK M06-1.00	M 6 x 1 K	5,5	15,0	7
SNK M08-1.00	M 8 x 1 K	5,5	15,0	9
SNK M10-1.00	M 10 x 1 K	5,5	15,0	11
SNK M10-1.50	M 10 x 1.5 K	5,5	15,0	11
SNK M12-1.00	M 12 x 1 K	6,5	17,5	14
SNK M12-1.50	M 12 x 1.5 K	6,5	17,5	14

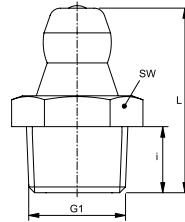
**Product versions:**

**SNK M MG** - Hydraulic-type lubricating nipple, Brass

**SNK M V2** - Hydraulic-type lubricating nipple, Stainless steel 1.4541

**SNK N****Hydraulic-type lubricating nipple**

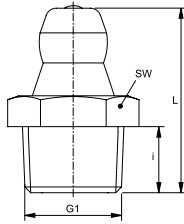
<b>Connection 1:</b>	NPT external threads
<b>Sealing form 1:</b>	thread seal
<b>Connection 2:</b>	Lubricating nipple
<b>Design:</b>	Hydraulic-type lubricating nipple
<b>Construction:</b>	straight
<b>Standard:</b>	DIN 71412
<b>Additional feature:</b>	Lubricating nipple head diameter 6,5 mm
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	G1	i mm	L mm	SW mm
SNK N1/8	1/8" -27 NPT	5,5	15	11

## SNK KK R

### Conical lubricating nipple with plastic ball

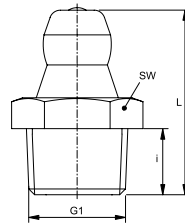


**Connection 1:** BSPT conical external threads  
**Sealing form 1:** thread seal  
**Connection 2:** Lubricating nipple  
**Design:** Hydraulic-type lubricating nipple  
**Supplementary design information:** with plastic ball  
**Construction:** straight  
**Standard:** DIN 71412  
**Additional feature:** Lubricating nipple head diameter 6,5 mm  
**Material:** Steel  
**Surface:** electro galvanised

Identification	G1	i mm	L mm	SW mm
SNK KK R1/4	R 1/4" K	6,5	17,5	14

**SNK KK M****Conical lubricating nipple with plastic ball**

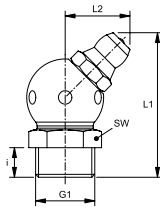
<b>Connection 1:</b>	metric conical outer thread
<b>Sealing form 1:</b>	thread seal
<b>Connection 2:</b>	Lubricating nipple
<b>Design:</b>	Hydraulic-type lubricating nipple
<b>Supplementary design information:</b>	with plastic ball
<b>Construction:</b>	straight
<b>Standard:</b>	DIN 71412
<b>Additional feature:</b>	Lubricating nipple head diameter 6,5 mm
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	G1	i mm	L mm	SW mm
SNK KK M06-1.00	M 6 x 1 K	5,5	15	7
SNK KK M08-1.00	M 8 x 1 K	5,5	15	9
SNK KK M10-1.00	M 10 x 1 K	5,5	15	11

## SNK 45 KU R

### Conical lubricating, ball, angle 45°



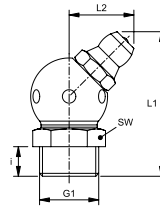
**Connection 1:** BSPT conical external threads  
**Sealing form 1:** thread seal  
**Connection 2:** Lubricating nipple  
**Design:** Hydraulic-type lubricating nipple  
**Supplementary design information:** Spherical design  
**Construction:** Angle 45°  
**Standard:** DIN 71412  
**Additional feature:** Lubricating nipple head diameter 6,5 mm  
**Material:** Steel  
**Surface:** electro galvanised

Identification	G1	i mm	L1 mm	L2 mm	SW mm
SNK 45 KU R1/8	R 1/8" K	5,5	25,0	11,5	11
SNK 45 KU R1/4	R 1/4" K	6,5	22,5	12,0	14



**SNK 45 KU M****Conical lubricating, ball, angle 45°**

<b>Connection 1:</b>	metric conical outer thread
<b>Sealing form 1:</b>	thread seal
<b>Connection 2:</b>	Lubricating nipple
<b>Design:</b>	Hydraulic-type lubricating nipple
<b>Supplementary design information:</b>	Spherical design
<b>Construction:</b>	Angle 45°
<b>Standard:</b>	DIN 71412
<b>Additional feature:</b>	Lubricating nipple head diameter 6,5 mm
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



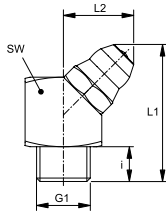
Identification	G1	i mm	L1 mm	L2 mm	SW mm
SNK 45 KU M05-0.8	M 5 x 0.8 K	5,5	23,5	10,5	9
SNK 45 KU M06-1.0	M 6 x 1 K	5,5	23,5	10,5	9
SNK 45 KU M08-1.0	M 8 x 1 K	5,5	23,5	10,5	9
SNK 45 KU M10-1.0	M 10 x 1 K	5,5	25,0	11,5	11

**Product versions:**

SNK 45 KU M V2 - Conical lubricating, ball, angle 45°, Stainless steel 1.4541

## SNK 45 KA R

### Conical lubricating nipple, hexagonal head, angle 45°

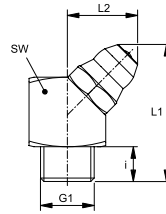


**Connection 1:** BSPT conical external threads  
**Sealing form 1:** thread seal  
**Connection 2:** Lubricating nipple  
**Design:** Hydraulic-type lubricating nipple  
**Supplementary design information:** Angular design  
**Construction:** Angle 45°  
**Standard:** DIN 71412  
**Material:** Steel  
**Surface:** electro galvanised

Identification	G1	i mm	L1 mm	L2 mm	SW mm
SNK 45 KA R1/8	R 1/8" K	5,5	20,5	11	11

**SNK 45 KA M****Conical lubricating nipple, hexagonal head, angle 45°**

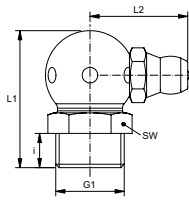
<b>Connection 1:</b>	metric conical outer thread
<b>Sealing form 1:</b>	thread seal
<b>Connection 2:</b>	Lubricating nipple
<b>Design:</b>	Hydraulic-type lubricating nipple
<b>Supplementary design information:</b>	Angular design
<b>Construction:</b>	Angle 45°
<b>Standard:</b>	DIN 71412
<b>Additional feature:</b>	Lubricating nipple head diameter 6,5 mm
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	G1	i mm	L1 mm	L2 mm	SW mm
SNK 45 KA M06-1.0	M 6 x 1 K	5,5	20,2	10,5	9
SNK 45 KA M08-1.0	M 8 x 1 K	5,5	20,2	10,5	9
SNK 45 KA M10-1.0	M 10 x 1 K	5,5	20,5	11,0	11

## SNK 90 KU R

### Conical lubricating, ball, angle 90°

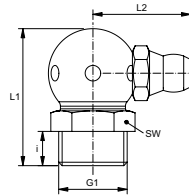


**Connection 1:** BSPT conical external threads  
**Sealing form 1:** thread seal  
**Connection 2:** Lubricating nipple  
**Design:** Hydraulic-type lubricating nipple  
**Supplementary design information:** Spherical design  
**Construction:** Angle 90°  
**Standard:** DIN 71412  
**Additional feature:** Lubricating nipple head diameter 6,5 mm  
**Material:** Steel  
**Surface:** electro galvanised

Identification	G1	i mm	L1 mm	L2 mm	SW mm
SNK 90 KU R1/8	R 1/8" K	5,5	20	14	11
SNK 90 KU R1/4	R 1/4" K	6,5	22	16	14

**SNK 90 KU M****Conical lubricating, ball, angle 90°**

<b>Connection 1:</b>	metric conical outer thread
<b>Sealing form 1:</b>	thread seal
<b>Connection 2:</b>	Lubricating nipple
<b>Design:</b>	Hydraulic-type lubricating nipple
<b>Supplementary design information:</b>	Spherical design
<b>Construction:</b>	Angle 90°
<b>Standard:</b>	DIN 71412
<b>Additional feature:</b>	Lubricating nipple head diameter 6,5 mm
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



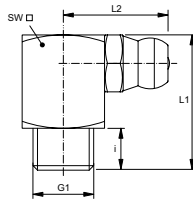
Identification	G1	i mm	L1 mm	L2 mm	SW mm
SNK 90 KU M06-1.00	M 6 x 1 K	5,5	18	13	9
SNK 90 KU M08-1.00	M 8 x 1 K	5,5	18	13	9
SNK 90 KU M10-1.00	M 10 x 1 K	5,5	20	14	11

**Product versions:**

**SNK 90 KU M V2** - Conical lubricating, ball, angle 90°, Stainless steel 1.4541

## SNK 90 KA R

### Conical lubricating nipple, hexagonal head, angle 90°

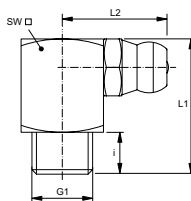


**Connection 1:** BSPT conical external threads  
**Sealing form 1:** thread seal  
**Connection 2:** Lubricating nipple  
**Design:** Hydraulic-type lubricating nipple  
**Supplementary design information:** Angular design  
**Construction:** Angle 90°  
**Standard:** DIN 71412  
**Additional feature:** Lubricating nipple head diameter 6,5 mm  
**Material:** Steel  
**Surface:** electro galvanised

Identification	G1	i mm	L1 mm	L2 mm	SW mm
SNK 90 KA R1/8	R 1/8" K	5,5	19	15	11

**SNK 90 KA M****Conical lubricating nipple, hexagonal head, angle 90°**

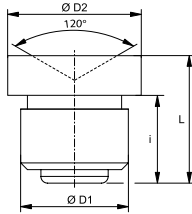
<b>Connection 1:</b>	metric conical outer thread
<b>Sealing form 1:</b>	thread seal
<b>Connection 2:</b>	Lubricating nipple
<b>Design:</b>	Hydraulic-type lubricating nipple
<b>Supplementary design information:</b>	Angular design
<b>Construction:</b>	Angle 90°
<b>Standard:</b>	DIN 71412
<b>Additional feature:</b>	Lubricating nipple head diameter 6,5 mm
<b>Material:</b>	Steel
<b>Surface:</b>	electro galvanised



Identification	G1	i mm	L1 mm	L2 mm	SW mm
SNK 90 KA M06-1.00	M 6 x 1 K	5,5	18	14	9
SNK 90 KA M08-1.00	M 8 x 1 K	5,5	18	14	9
SNK 90 KA M10-1.00	M 10 x 1 K	5,5	18	15	11

## SNT GLATT

### Funnel-type lubricating nipple, drive type shank



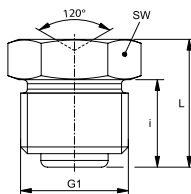
**Connection 1:** Drive type shank  
**Connection 2:** Lubricating nipple  
**Design:** Funnel-type lubricating nipple  
**Supplementary design information:** for driving in with smooth pin straight  
**Construction:** DIN 3405  
**Standard:** Steel  
**Material:** electro galvanised  
**Surface:**

Identification	$\varnothing D1$ mm	$\varnothing D2$ mm	i mm	L mm
SNT GLATT 08	8	10	6,5	9,5
SNT GLATT 10	10	12	6,5	9,5



**SNT M****Funnel-type lubricating nipple**

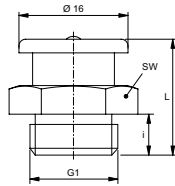
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** Shape A  
**Connection 2:** Lubricating nipple  
**Design:** Funnel-type lubricating nipple  
**Construction:** straight  
**Standard:** DIN 3405  
**Material:** Steel  
**Surface:** electro galvanised



Identification	G1	i mm	L mm	SW mm
SNT M06-1.00	M 6 x 1	5,5	8,5	7
SNT M08-1.00	M 8 x 1	6,5	9,5	9

## SNF R

### Flat lubricating nipple



**Connection 1:** BSP external thread, cylindrical without thread seal  
**Sealing form 1:** Lubricating nipple  
**Connection 2:** Flat lubricating nipple  
**Design:** Flat lubricating nipple  
**Construction:** straight  
**Standard:** DIN 3404  
**Material:** Steel  
**Surface:** electro galvanised

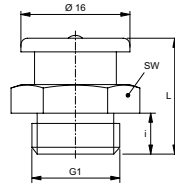
Identification	G1	i mm	L mm	SW mm
SNF R1/4	G 1/4" -19	6	17	17
SNF R3/8	G 3/8" -19	7	18	17

**Product versions:**

SNF R MG - Flat lubricating nipple, Brass

**SNF M****Flat lubricating nipple**

**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** without thread seal  
**Connection 2:** Lubricating nipple  
**Design:** Flat lubricating nipple  
**Construction:** straight  
**Standard:** DIN 3404  
**Material:** Steel  
**Surface:** electro galvanised



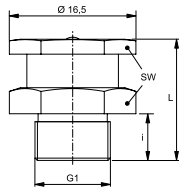
Identification	G1	i mm	L mm	SW mm
SNF M08-1.00	M 8 x 1	6	17	17
SNF M08-1.25	M 8 x 1.25	6	17	17
SNF M10-1.00	M 10 x 1	6	17	17
SNF M10-1.50	M 10 x 1.5	6	17	17

**Product versions:**

**SNF M MG** - Flat lubricating nipple, Brass

## SNF 6K R MG

### Flat lubricating nipple, hexagonal lubricating head

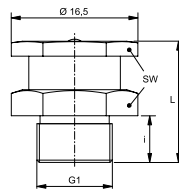


- Connection 1:** BSP external thread, cylindrical without thread seal
- Sealing form 1:** Lubricating nipple
- Connection 2:** Flat lubricating nipple
- Design:** Flat lubricating nipple
- Supplementary design information:** Hexagon lubricating head
- Construction:** straight
- Standard:** DIN 3404
- Additional feature:** Lubricating nipple head diameter 15 mm
- Material:** Brass

Identification	G1	i mm	L mm	SW mm
SNF 6K R1/8 MG	G 1/8" -28	6	16	15
SNF 6K R1/4 MG	G 1/4" -19	6	16	15

**SNF 6K M****Flat lubricating nipple, hexagonal lubricating head**

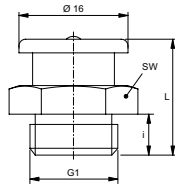
**Connection 1:** metric cylindrical outer thread  
**Sealing form 1:** without thread seal  
**Connection 2:** Lubricating nipple  
**Design:** Flat lubricating nipple  
**Supplementary design information:** Hexagon lubricating head  
**Construction:** straight  
**Standard:** DIN 3404  
**Additional feature:** Lubricating nipple head diameter 15 mm  
**Material:** Steel  
**Surface:** electro galvanised



Identification	G1	i mm	L mm	SW mm
SNF 6K M10-1.00	M 10 x 1	6	16	15

## SNF KK R

### Flat lubricating nipple



**Connection 1:** BSP external thread, cylindrical  
**Sealing form 1:** without thread seal  
**Connection 2:** Lubricating nipple  
**Design:** Flat lubricating nipple  
**Supplementary design information:** with plastic ball  
**Construction:** straight  
**Standard:** DIN 3404  
**Material:** Steel  
**Surface:** electro galvanised

Identification	G1	i mm	L mm	SW mm
SNF KK R1/4	G 1/4" -19	6	17	17

**FP MUND****Mouth piece for grease guns**

**Connection 1:** Metric or imperial inner thread  
**Sealing form 1:** metallic  
**Connection 2:** Lubricating nipple H DIN 71412



Identification	G1
FP MUNDSTUECK M10	M 10 x 1
FP MUNDSTUECK R1/8	G 1/8" -28

## TECALANSCHERE

### Cutter for plastic pipes



**suitable for:**

Plastic pipes and hoses

**Material:**

Steel

#### Identification

for external pipe  $\varnothing$  mm

TECALAN SCHERE

4 - 28

#### Spare parts:

ERSATZKLINGE TS - Spare blade for Tecalan cutter



## ERSATZKLINGE TS

Spare blade for Tecalan cutter

**Material:** Steel



### Identification

ERSATZKLINGE

**Spare part for following products:**

TECALANSCHERE - Cutter for plastic pipes

## SCHRAUBENDR

### Screwdriver, flexible



**Design:** Screwdrivers for clamps  
**Supplementary design information:** Flexible  
**Material:** Chrome vanadium

Identification	for width across flat mm
SCHRAUBENDR 30	7

**Accessory for following products:**

- ASK - Hose clamp
- ESK W2 - Hose clamp
- ESK M - Hose clamp, mini series
- ESK - Hose clamp
- ESK W5 - Hose clamp
- ASK A - Hose clamp

**KPS****Spanner for fire brigade couplings****Material:** Steel**Description:** For fitting fire brigade couplings.

Identification	Nominal size Storz
KPS ABC ST	A; B; C
KPS ABC TG	A; B; C
KPS BC ST	B; C
KPS BC TG	B; C

## CLIC ZANGE

### Pliers for CLIC clamp



**Description:**

Steel assembly pliers for Clic clamp sets, suitable for closing and opening for all sizes.

#### Identification

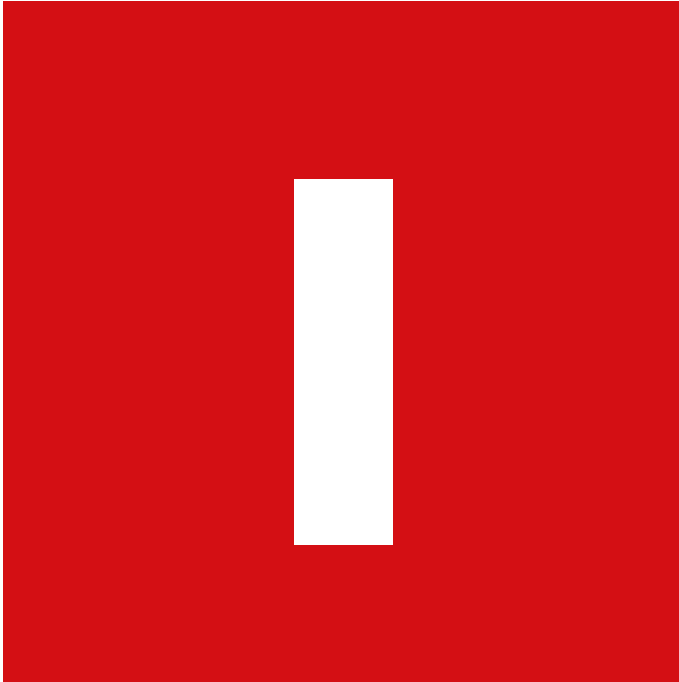
CLIC ZANGE

**Accessory for following products:**

CLIC - Hose clamp

CLIC SET - Clamp sets





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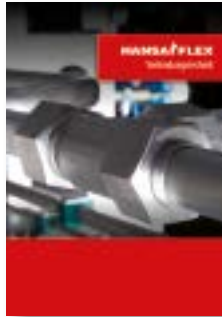
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Hose Technology**



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



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	Werkstoffdaten



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