

Valves and connections for SF₆



DILO. Sustainably tight.





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General



DILO offers the widest valves and couplings product range in the world. Whether for medium voltage switchgear, high voltage switchgear or gas-insulated lines (GIL) our products always meet your requirements.

The DILO sealing principle prevents the loss of SF_6 gas and moisture from penetrating the SF_6 gas system. DILO couplings will eliminate the loss of SF_6 gas by incorrect gas handling. Thanks to their reliability, quality and durability DILO couplings are the world's most widely used connecting system for SF_6 switchgear.

General

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The DILO seal principle

DILO is a seal principle without intermediate seal in the form of groove and tongue with little depth of immersion. This principle guarantees permanent tightness at high static and dynamic alternating stresses which might result from vacuum and pressure in connection with high temperatures and vibrations inside the tubing systems.

Sealing in accordance with the DILO principle is effected by direct contact of the sealing profiles of the groove and tongue parts. The different radii of curvature of groove and tongue are in a certain relation to each other.

Thus, two ring-shaped sealing areas are produced which create high stability.

The additional braking surface prevents plastic deformations at the ring-shaped sealing areas.

DILO fittings are easy to assemble and require no maintenance. They can loosened and reconnected as often as desired. Thus, the re-use of the DILO seal is guaranteed. Due to the little depth of immersion of DILO groove and tongue the tubes can be immediately pulled out laterally after loosing the clamping nut.

The DILO seal principle



DILO couplings allow a connection to be made by simply screwing the two coupling parts together. Before the metal to metal seal closes the pressure and vacuum tight coupling is sealed



inside by means of an O-ring. When loosening the coupling parts again the same O-ring prevents gas loss whilst the self seal valves close.

Advantages of application

- Self-closing coupling system
- Pressure and vacuum-tight even when coupling and uncoupling
- Permanent tightness even when frequently connected and disconnected
- Applicable up to PN 64 bar

- Suitable for temperatures from -40 °C to +80 °C
- Direct connection to DILO service carts without adapter
- Available in different materials even for outdoor switchgear

Explanation of DILO-pressure stages

Series	ML1	Valves	Accessories	Hoses
Pressure stage up to		PN64		PN40 / 64

DILO-Type explanation

Explanation of abbreviations used in our catalogue

ML Soldering-stub unions with metric connecting dimensions

Illustration of different structural shapes of DILO-soldering unions

A Soldering union



B Screw-in stub-soldering union



M Gauge connecting union



Material standards

Material No. DIN	Material designation	DILO material code letter
1 /571	V6C*N:MaT:17.10.0	

1.4571	X6CrNiMoTi17-12-2	С
CW614N	CuZn39Pb3	Р
EN AW-6082	EN AW-ALSi1MgMn	Т
1.4305	X10CrNiS189	E
CW713R	CuZn37Mn3Al2PbSi	н



Surface treatment and cleaning

Before dispatch or storage, the finished valves and fittings must be treated as follows:

- austenitic material is cleaned
- brass material is cleaned
- aluminium material is anodised, the thread is lubricated with Molykote

Version

Version of the screw-in stub with O-ring sealing (can also be supplied in special design with edge acc. to DIN 3852-1 form B and DIN EN ISO 1179-4 form B).

Design of the screw-in holes for the isometric thread as well as for Whitworth-pipe threads according to DIN 3852-1 form X and DIN EN ISO 1179-1.

Technical data of threads

Type of thread	Standards	Code designation	Illustration
Metric thread	DIN 13 thread angle 60°	M	
Whitworth thread	DIN/ISO 228 thread angle 55°	G	

Soldering process

DILO-soldering unions can be soldered by the well-known "autogenous" soldering techniques.

Packing

Parts are all hermetically sealed in PVC to ensure they are kept free of dust and dirt. The unions are protected against damage by plastic caps.

O-ring and rubber seal

For all coupling parts an EPDM rubber seal is used as sealing material.

Quality assurance

Quality assurance takes the first place within the DILO-organization. Our approved and authorized experts permanently check the material carefully. The entire raw material is ordered according to DILO approval-/ order regulations. Thus it is guaranteed that all necessary tests have been carried out which is confirmed in test certificates according to EN 10204 (3.1).

By marking of the raw materials and finished products, the identity of materials is guaranteed. Our fittings are TÜV-approved. Furthermore a certificate according to ISO 9001:2008 is available.

Approvals and certifications provided by DILO:

DILO products have been approved by international classification organisations such as:

- Certification according to ISO 9001:2008
- HP0 approval as pressure equipment manufacturer
- Production control in accordance with 2014/68/EU regulations





Symbols for valves and fittings

Soldering stub soldering-union





Blanking disk





Screw-in stub-soldering union





Transition piece





Gauge connection union





Ball valve





Coupled coupling





Coupling halfs





Hose





Mounting instructions

General

- Specify the pipe lenghts exactly and cut off rectangularly.
- Burr the pipe extremity and clean it metallically bright.
- Apply the soldering flux where soldering is to be carried out.
- •When soldering, use the auxiliary means recommended by DILO and observe the instructions of the soldering materials supplier.
- Do not touch the soldered parts until the solder has solidified and cooled down (Do not quench the soldering area with water).
- Remove the soldering material by rinsing with water and by pickling is.
- Dry union before mounting.
- •When mounting only use the connecting components not being damaged by impacts or by overflowed soldering material.
- It must be strictly observed that the tubing system is tension-free supported and that the tubing sections align to each other. Possible divergences can be straightened with the DILO straightening tool.
- Before final mounting, check that all DILO-groove and tongue parts are clear of impurities.
- In order to reduce the friction, the tube unions should be greased with suitable grease at the threads and contact surfaces of the clamping nut, especially when made of austenitic materials. Thus the torque is better converted into axial force and galling of the threads is avoided. When selecting the grease, observe the operating temperatures, the media, the corrosive degree and the materials.
- A fast and strong tightening of the clamping nut guarantees perfect tightness.

The standard version of the screw-in stub of the DILO screw-in unions is equipped with O-ring sealing.

When mounting DILO screw-in unions we recommend using softmetal-sealings (e. g. copper plates opposite the housing or block) for sealing of screw-in stub DIN 3852-1 form B and DIN EN ISO 1179-4.

When all these instructions are observed the mounting will be simple and time-saving. Pipes which are too short or not precisely aligned will require extra work.



Mounting instructions

Mounting illustration:



1. Rectangularly saw off the pipes



2. Deburring of the pipe extremities inside and outside



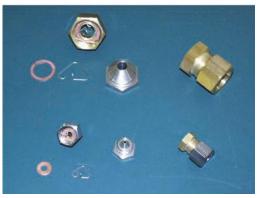
3. Clean to a bright metallic finish



4. Apply the soldering flux on the pipe



5. Apply the soldering flux at the part to be soldered



6. Use of auxiliary materials

Mounting instructions



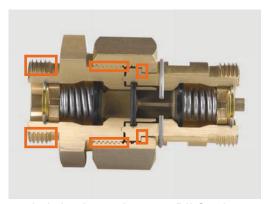
7. Observe the instructions of the soldering materials supplier



8. Before assembling clean the DILO tongue and groove part



9. Lubricate with appropriate lubricants



10. Lubricating points at a DILO tube union



11. Tighten fast and strongly the clamping nut by counteracting force according to torque table



 A screw in plug is sealed into a housing or block with an O ring or copper seal ring.

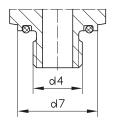


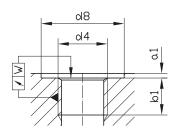
Mounting example

Screw-in stub with O-ring sealing

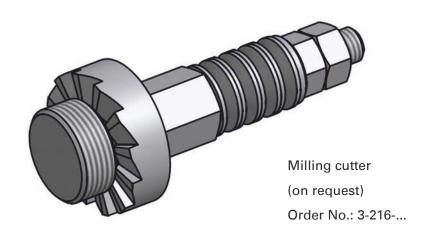
Torque see torque diagram Screw-in thread

Screw-in hole see table Make screw-in hole according to DIN 3852-1 form X and DIN EN ISO 1179-1 Use milling cutter for tight seat





DN	d4	d7	d8	a1	b1	W
8	M16 x 1,5 G 3/8 A	26	27	1,5	14	0,1
12	G 1/2 A	36	37	2,5	16	0,1
20	M33 x 2 G 1 A	49	50	2,5	20	0,2
40	G 1 1/2 A	65	66	2,5	24	0,2



Torque table

DILO profile connection		
Size of jaw	Material	Torque Nm
24	AL	40
24	Stainless steel / Brass	40
32	AL	62
32	Stainless steel / Brass	77
41	AL	88
41	Stainless steel / Brass	120
50	AL	110
50	Stainless steel / Brass	140
65	Stainless steel / Brass	150

Screw-in thread		
Screw-in thread	Material	Torque Nm
G1/4	AL	15
G3/8	AL	40
G3/8	Stainless steel / Brass	40
G1/2	AL	68
G1A	AL	120
G1A	Stainless steel / Brass	130
G1½	AL	120
G1½	Brass	140
M16x1,5	AL / Stainless steel / Brass	40
M33x2	AL	120
M33x2	Stainless steel / Brass	130

Coupling 3-408-R Torque 15 Nm

Coupling 3-888-R	Torque 15 Nm

Coupling DN40	Torque 80 Nm
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Covering caps	
Size of jaw	Torque Nm
24	20
32	40
50	40



DILO couplings DN6



The coupling allows to establish a connection by simply fitting both coupling parts into each other. Before load relieving of the coupling seats the pressure- and vacuum tight coupling is sealed inside with an O-ring during the coupling process. The coupling is forced to be open in coupled position. If both coupling sides are separated again the sealing seats shut off automatically.

All couplings are temperature-resistant from -40 °C to +80 °C.

The suitable connecting parts for DILO couplings must be ordered separately.

■ DILO couplings DN6

3 -40	08-R105	Coupling groove part / BG PN10 DN6	16
3-40	08-R006	Flange coupling PN10 DN6	17
3-40	08-R009	Gauge connecting piece DN6	18
3-40	08-R007	Covering cap DN6	18
3-40	08-R101	Coupling tongue part PN10 DN6	19
6 -11	61-R013	Coupling tongue part PN10 DN6 with connecting coupling for measuring device	20
3-40	08-R021/R022	Soldering stub connection DN16	21
3-40	08-R020	Gauge connecting coupling DN6	21
3-4 1	19-R004	Transition piece to DN8 connections	22
3-41	19-R003	Adapter piece	23

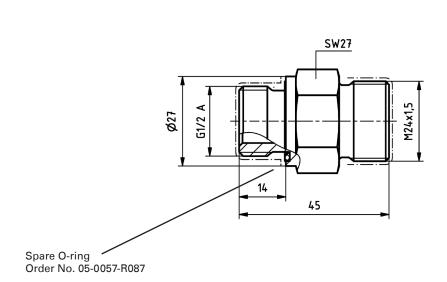
BG PN10 DN6

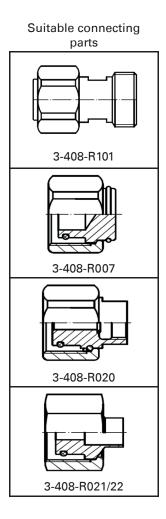
Coupling groove part

Order No.: 3-408-R105 T

Material: AL







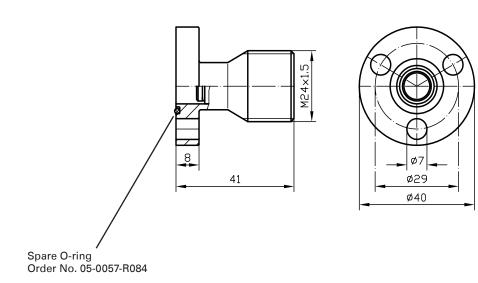
Flange coupling

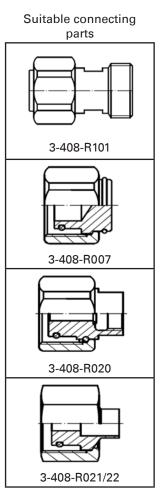
Order No.: 3-408-R006 T

Material: AL









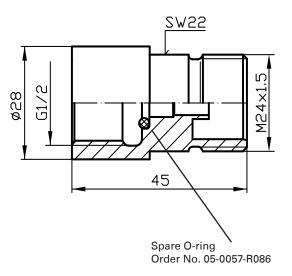
Other flanges are available on request.

Gauge connecting piece

Order No.: 3-408-R009 T

Material: AL





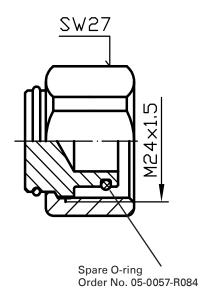
PN10 DN6

Covering cap

Order No.: 3-408-R007 T

Material: AL





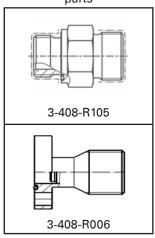
Coupling tongue part

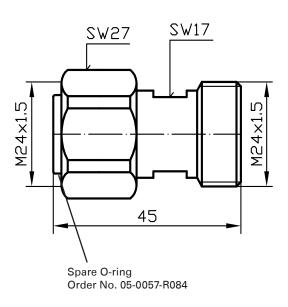
Order No.: 3-408-R101 T

Material: AL

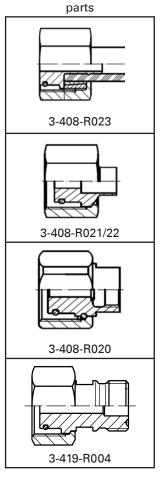






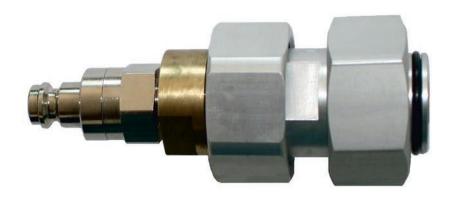


Suitable connecting

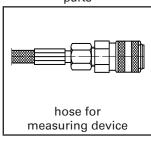


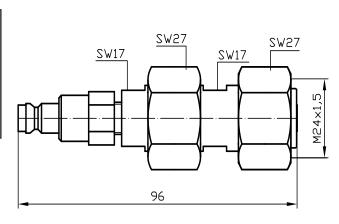
Coupling tongue part with connecting coupling for measuring device

Order No.: 6-1161-R013 Material: AL / Brass

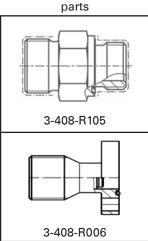


Suitable connecting parts





Suitable connecting

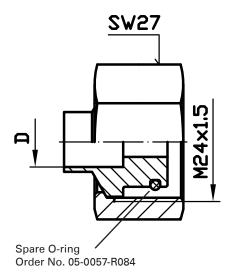


Soldering stub connection

Order No.: 3-408-R021 C D = 10 mm 3-408-R022 C D = 6 mm

Material: Stainless steel





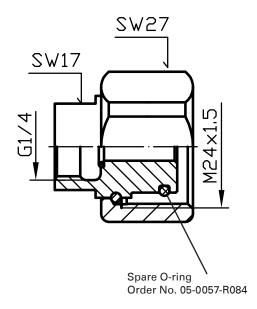
PN10 DN6

Gauge connecting coupling

Order No.: 3-408-R020 T

Material: AL





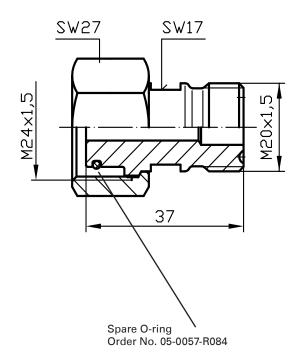


Transition piece to DN8 connections

Order No.: 3-419-R004

Material: Stainless steel / Brass





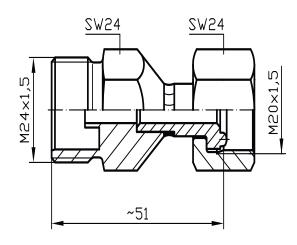
Adapter piece

Order No.: 3-419-R003

Material: Stainless steel / Brass









DILO couplings DN7



The plug connection allows to establish a connection by simply fitting both coupling parts into each other. Before load relieving of the coupling seats the pressure- and vacuum tight coupling is sealed inside with an Oring during the coupling process. The coupling is forced to be open in coupled position. If both coupling sides are separated again the sealing seats shut off automatically.

All couplings are temperature-resistant from -40 °C to +80 °C.

The suitable connecting parts for DILO couplings must be ordered separately.

■ DILO couplings DN7

3-308-R003	Plug connection groove part PN30 DN7	26
■ 3-308-R016	Covering cap for plug connection groove part PN30 DN7	27
3-308-R002	Plug connection tongue part PN30 DN7	28
■ 6-11161-R015	Plug connection tongue part PN30 DN7 with connecting coupling for measuring device	29
3-308-R006	Covering cap for plug connection tongue part PN30 DN7	30

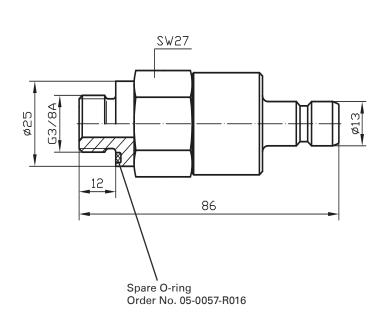
C 3102-03 25

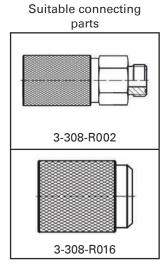
Plug connection groove part

Order No.: 3-308-R003 T

Material: AL







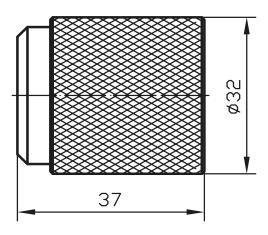
Covering cap for plug connection groove part

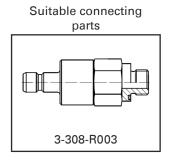


Order No.: 3-308-R016 T

Material: AL







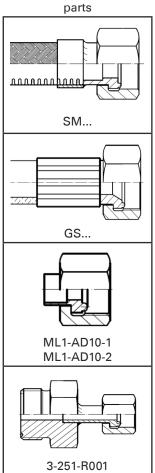
Plug connection tongue part

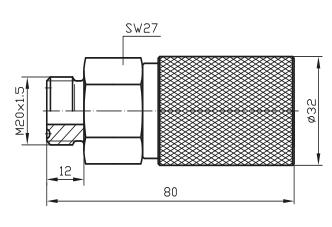
Order No.: 3-308-R002 T

Material: AL



Suitable connecting





Suitable connecting parts

3-308-R003

3-308-R006

Plug connection tongue part with connecting coupling for measuring device

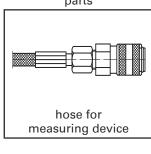
DILO

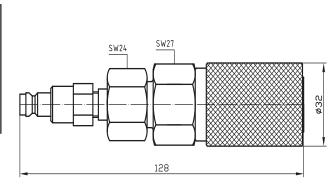
Order No.: 6-1161-R015

Material: AL

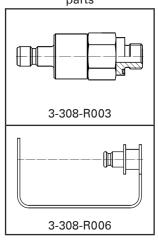


Suitable connecting parts





Suitable connecting parts

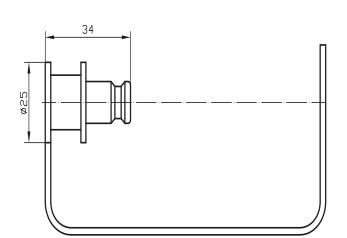


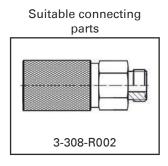
Covering cap for plug connection tongue part

Order No.: 3-308-R006

Material: PVC









DILO couplings DN8



The coupling allows to establish a connection by simply fitting both coupling parts into each other. Before load relieving of the coupling seats the pressure- and vacuum tight coupling is sealed inside with an O-ring during the coupling process. The coupling is forced to be open in coupled position. If both coupling sides are separated again the sealing seats shut off automatically.

All couplings are temperature-resistant from -40 °C to +80 °C. In special version these couplings are also available for a temperature range of -60 °C to +80 °C.

The suitable connecting parts for DILO couplings must be ordered separately.

■ DILO couplings DN8

■VK/A-02/8	Coupling groove part / A PN64 DN8	32
■VK/B(G)-03/8	Coupling groove part PN64 DN8 with O-ring	33
SK-272-R001	Flange coupling PN64 DN8	34
SK-272-R003	Flange coupling PN64 DN8	35
■ 3-778-R001	Flange coupling PN64 DN8 with 2-hole flange	36
■VK/KN-04/8	Covering cap für coupling groove part PN64 DN8	37
■VK/F-02/8	Coupling tongue part PN64 DN8	38
■ 6-1161-R011	Coupling tongue part PN64 DN8 with connecting coupling for measuring device	39
SK-372-R020/	Gauge connecting coupling PN64 DN8	40

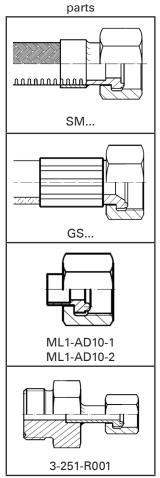
A PN64 DN8

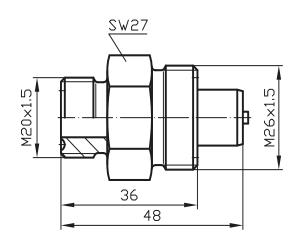
Coupling groove part

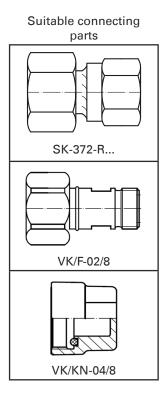


Order No.	Material
VK/A-02/8 T	AL
VK/A-02/8 E	Stainless steel
VK/A-02/8 P	Brass

Suitable connecting







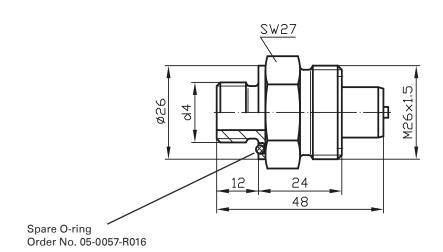
PN64 DN8

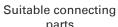
Coupling groove part with O-ring

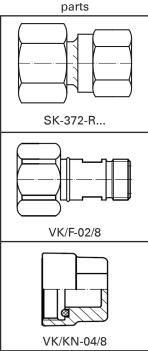




d4	Order No.	Material
M16 x 1,5	VK/B-03/8 T	AL
M16 x 1,5	VK/B-03/8 E	Stainless steel
M16 x 1,5	VK/B-03/8 H	Brass
G 3/8 A	VK/BG-03/8 T	AL
G 3/8 A	VK/BG-03/8 E	Stainless steel
G 3/8 A	VK/BG-03/8 H	Brass







In special version the screw-in thread can also be supplied with sealing edge according to DIN 3852-1 and DIN EN ISO 1179.

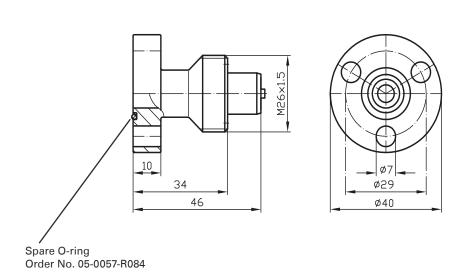
PN64 DN8

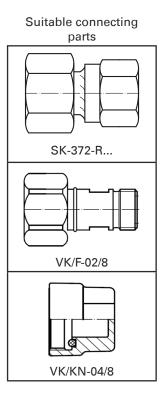
Flange coupling

Order No.: SK-272-R001 T

Material: AL







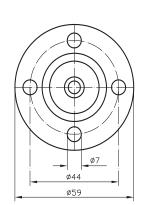
Other flanges are available on request.

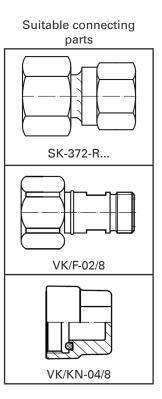
PN64 DN8 Flange coupling

Order No.: SK-272-R003 T

Material: AL







Other flanges are available on request.

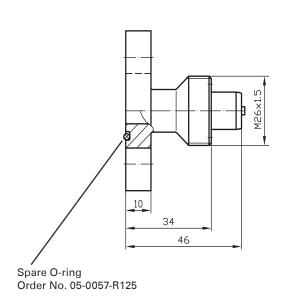
PN64 DN8

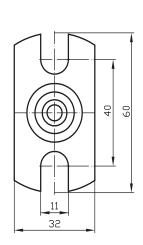
Flange coupling with 2-hole flange

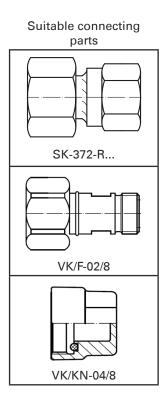
Order No.: 3-778-R001 T

Material: AL









Other flanges are available on request.

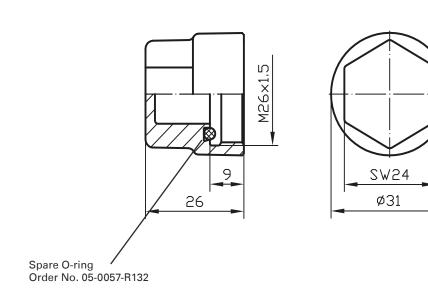
PN64 DN8

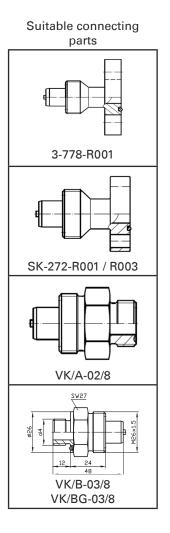
Covering cap for coupling groove part





Order No.	Material
VK/KN-04/8 T	AL
VK/KN-04/8 E	Stainless steel



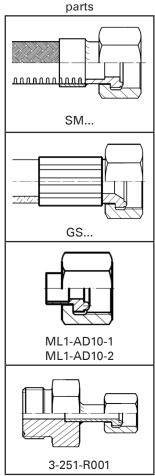


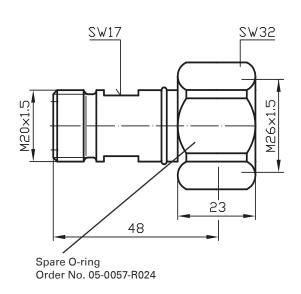
Coupling tongue part



Order No.	Material
VK/F-02/8 T	AL
VK/F-02/8 E	Stainless steel
VK/F-02/8 P	Brass

Suitable connecting





Suitable connecting parts

3-778-R001

SK-272-R001 / R003

VK/A-02/8

VK/B-03/8
VK/BG-03/8

C 3103-03

Coupling tongue part with connecting coupling for measuring device

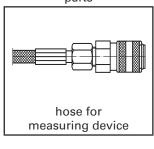
Order No.: 6-1161-R011

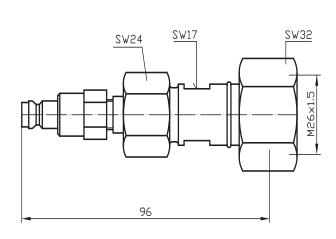
Material: Brass



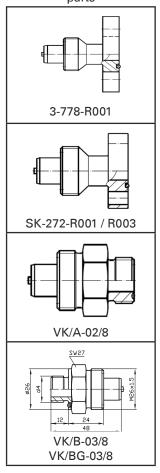


Suitable connecting parts





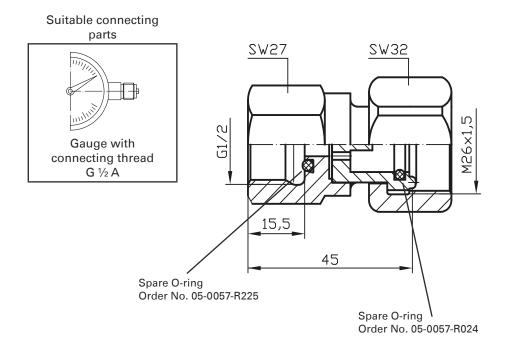
Suitable connecting parts



Gauge connecting coupling

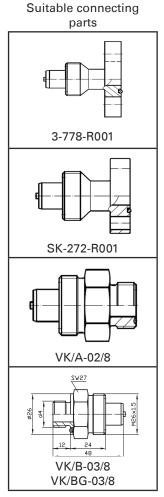


Order No.	Material
SK-372-R020 P	Brass
SK-372-R021 C	Stainless steel



Description

The gauge connecting coupling serves as connecting piece to a coupling groove part DN8. When coupling, a pin in the gauge connecting coupling opens the flow of the opposite coupling groove part (forced opening). This allows to read the present operating pressure on the screwed-in gauge. When disconnecting, the concial nipple of the groove part is closed by spring load (pressure and vacuum tight). If the gauge connecting coupling is not connected the gauge shows "zero pressure". The connecting coupling allows to install the gauge in any required position (rotatable 360°).



40 C 3103-03



DILO couplings DN12



The coupling allows to establish a connection by simply fitting both coupling parts into each other. Before load relieving of the coupling seats the pressure- and vacuum tight coupling is sealed inside with an O-ring during the coupling process. The coupling is forced to be open in coupled position. If both coupling sides are separated again the sealing seats shut off automatically.

All couplings are temperature-resistant from -40 °C to +80 °C. In special version these couplings are also available for a temperature range of -60 °C to +80 °C.

The suitable connecting parts for DILO couplings must be ordered separately.

■ DILO couplings DN12

3-888-R005	Coupling groove part / BG PN10 DN12	42
3-888-R007	Covering cap	43
3-888-R001	Coupling tongue part PN10 DN12	44
6-1161-R014	Coupling tongue part PN10 DN12 with connecting coupling for measuring device	45
3-888-R031	Gauge connecting coupling PN10 DN12	46
3-888-R009	Gauge connecting coupling PN10 DN12	47

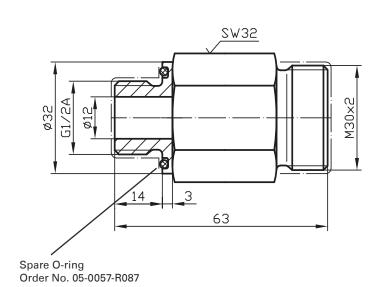
BG PN10 DN12

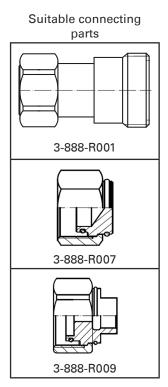
Coupling groove part

Order No.: 3-888-R005 T

Material: AL







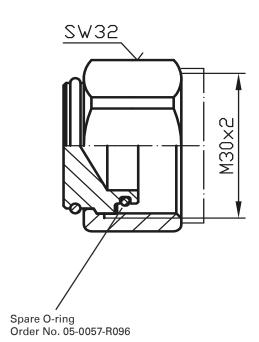
Covering cap

Order No.: 3-888-R007 T

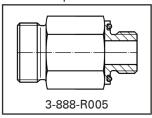
Material: AL







Suitable connecting parts

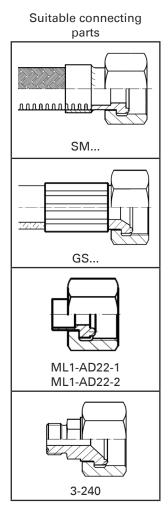


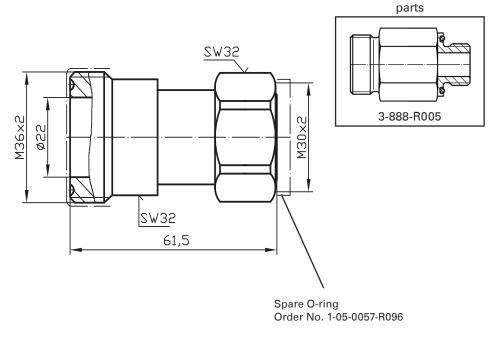
Coupling tongue part

Order No.: 3-888-R001 T

Material: AL







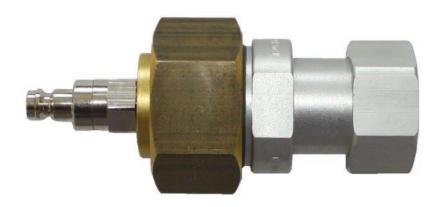
Suitable connecting

Coupling tongue part with connecting coupling for measuring device

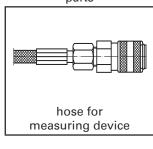
Order No.: 6-1161-R014

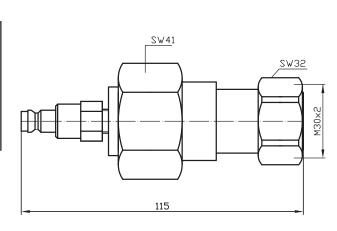
Material: AL



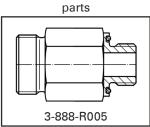


Suitable connecting parts





Suitable connecting

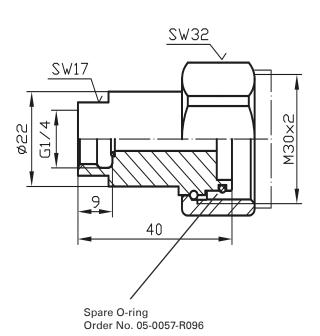


Gauge connecting coupling

Order No.: 3-888-R031 T

Material: AL





Suitable connecting parts

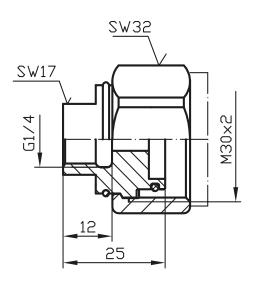
3-888-R005

Gauge connecting coupling

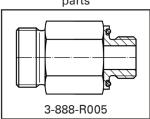
Order No.: 3-888-R009 T

Material: AL





Suitable connecting parts



C 3104-06 4



DILO couplings DN12



The plug connection allows to establish a connection by simply fitting both coupling parts into each other. Before load relieving of the coupling seats the pressure- and vacuum tight coupling is sealed inside with an Oring during the coupling process. The coupling is forced to be open in coupled position. If both coupling sides are separated again the sealing seats shut off automatically.

All couplings are temperature-resistant from -40 °C to +80 °C.

The suitable connecting parts for DILO couplings must be ordered separately.

■ DILO couplings DN12

3-1095-R005	Plug connection groove part PN8 DN12	50
■ 3-1095-R016	Covering cap für plug connection groove part PN8 DN12	51
3-1095-R001	Plug connection tongue part PN8 DN12	52
■ 3-1095-R002	Plug connection tongue part PN8 DN12 with connecting coupling for measuring device	53
■ 3-1095-R017	Density gauge connection PN8 DN12	54

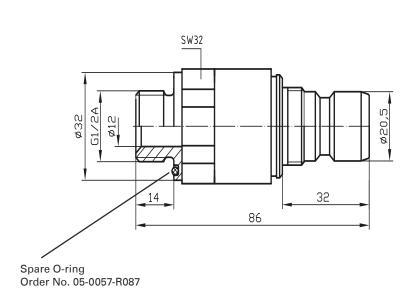
C 3104-06 49

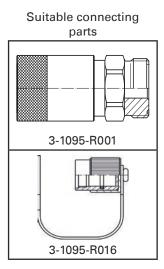
Plug connection groove part

Order No.: 3-1095-R005 T

Material: AL







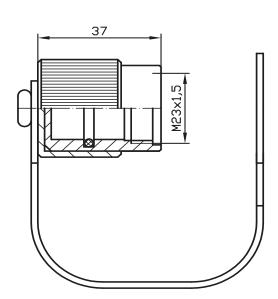
Covering cap for plug connection groove part



Order No.: 3-1095-R016 T

Material: AL





Suitable connecting parts

3-1095-R005

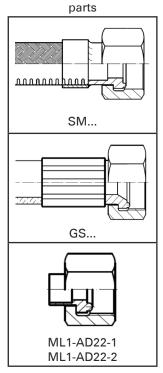
Plug connection tongue part

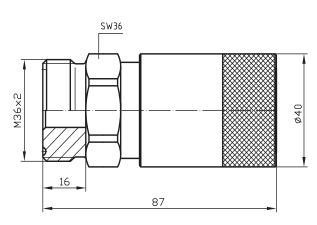
Order No.: 3-1095-R001 T

Material: AL

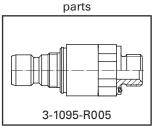


Suitable connecting





Suitable connecting

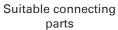


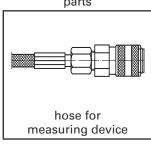
Plug connection tongue part with connecting coupling for measuring device

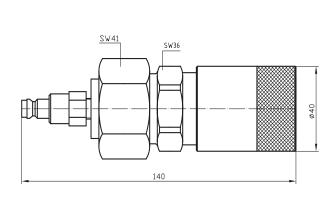
Order No.: 3-1095-R002 T

Material: AL

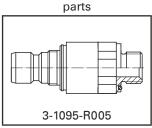








Suitable connecting



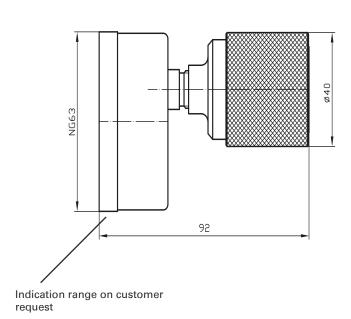
C 3104-06 5

Density gauge connection

Order No.: 3-1095-R017 T

Material: AL





Suitable connecting parts

3-1095-R005



DILO couplings DN20



The coupling allows to establish a connection by simply fitting both coupling parts into each other. Before load relieving of the coupling seats the pressure- and vacuum tight coupling is sealed inside with an O-ring during the coupling process. The coupling is forced to be open in coupled position. If both coupling sides are separated again the sealing seats shut off automatically.

All couplings are temperature-resistant from -40 °C to +80 °C. In special version these couplings are also available for a temperature range of -60 °C to +80 °C.

The suitable connecting parts for DILO couplings must be ordered separately.

■ DILO couplings DN20

■VK/A-02/20	Coupling groove part / A PN64 DN20	56
■VK/B(G)-03/20	Coupling groove part PN64 DN20 with O-ring	57
■VK/FL-01/20	Flange coupling PN64 DN20	58
3-777-R001	Flange coupling PN64 DN20 with 2-hole flange	59
■ 3-685-R001	Flange coupling PN64 DN20	60
■VK/KN-04/20	Covering cap for coupling groove part PN64 DN20	61
■VK/F-02/20	Coupling tongue part PN64 DN20	62
■ 3-1121-R003	DN20 Quick coupling	63
■ 6-1161-R012	Coupling tongue part PN64 DN20 with connecting coupling for measuring device	64
■ 6-1206-R001	Coupling tongue part	65
■ 6-1092-R006	Coupling tongue part	66
■ 6-1281-R001	Coupling tongue part with air filter	67
SK-282-R020	Gauge connecting coupling PN64 DN20	68

C 3105-08 5

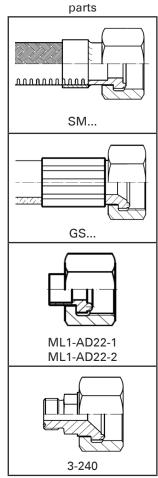
A PN64 DN20

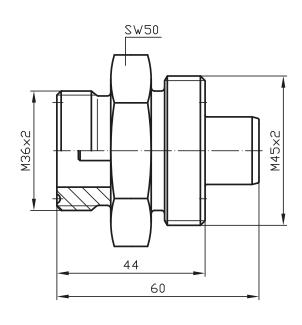
Coupling groove part

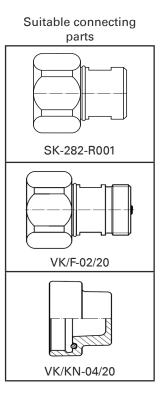


Order No.	Material
VK/A-02/20 T	AL
VK/A-02/20 P	Brass
VK/A-02/20 E	Stainless steel

Suitable connecting





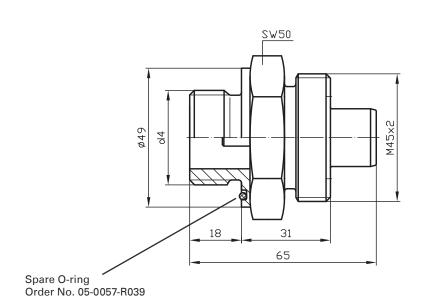


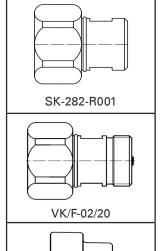
Coupling groove part with O-ring





d4	Order No.	Material
M33 x 2	VK/B-03/20 T	AL
M33 x 2	VK/B-03/20 P	Brass
M33 x 2	VK/B-03/20 E	Stainless steel
G 1 A	VK/BG-03/20 T	AL
G 1 A	VK/BG-03/20 P	Brass
G 1 A	VK/BG-03/20 E	Stainless steel





VK/KN-04/20

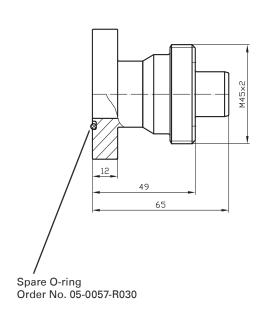
Suitable connecting parts

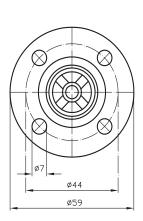
In special version the screw-in thread can also be supplied with sealing edge according to DIN 3852-1 and DIN EN ISO 1179.

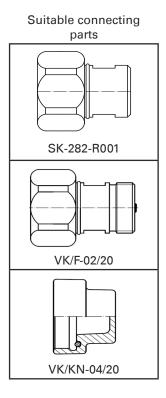
Flange coupling



Order No.	Material
VK/FL-01/20 T	AL
VK/FL-01/20 E	Stainless steel







Other flanges are available on request.

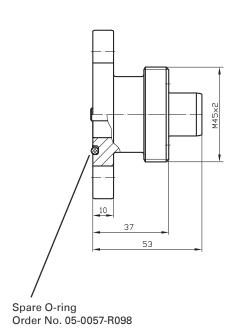
Flange coupling with 2-hole flange

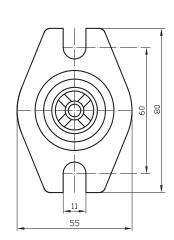
-DILO-

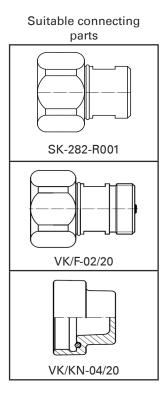
Order No.: 3-777-R001 T

Material: AL









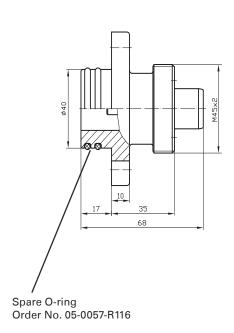
Other flanges are available on request.

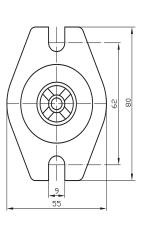
Flange coupling

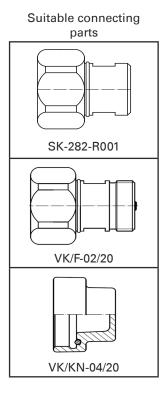
Order No.: 3-685-R001 T

Material: AL









Other flanges are available on request.

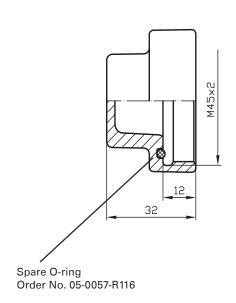
Covering cap for coupling groove part

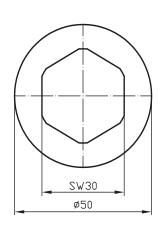


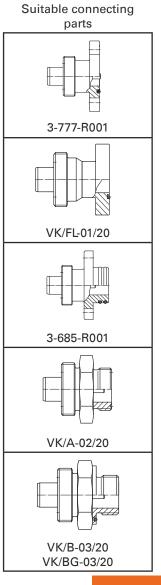




Order No.	Material
VK/KN-04/20 T	AL
VK/KN-04/20 E	Stainless steel
VK/KN-04/20 PA	Plastic material





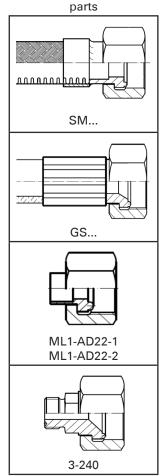


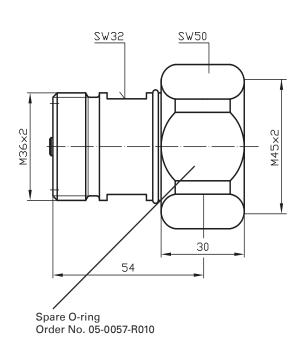
Coupling tongue part



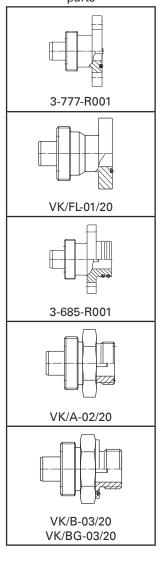
Order No.	Material
VK/F-02/20 T	AL
VK/F-02/20 E	Stainless steel
VK/F-02/20 P	Brass

Suitable connecting





Suitable connecting parts

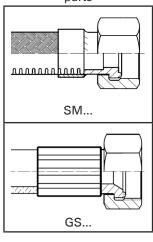


3-1121-R003

DN20 Quick coupling



Suitable connecting parts

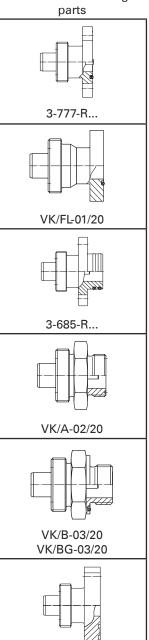




closed coupling



Suitable connecting



open coupling



Mount for safe fixation on the wall and as dust protection Article-No. 3-1121-R093

For easy coupling and uncoupling of hoses

The quick coupling is very useful in all fields of application where hoses have to be frequently loosened and reconnected e. g. during final tests of completely mounted GIS fields. Thanks to the clamp lock the DN20 hoses can easily be connected without any loss of SF_6 gas. Thus the handling times in GIS production are shortened and productivity is increased considerably.

Please see our product video!



SK-507-R..

Important note:

The quick coupling is only compatible with DILO coupling groove parts of version 2 (additional "V2" stamp on the flange or wrench size).

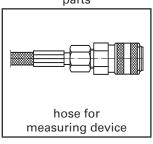
Coupling tongue part with connecting coupling for measuring device

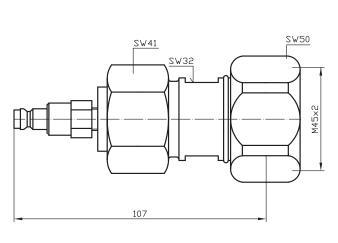
Order No.: 6-1161-R012

Material: Brass

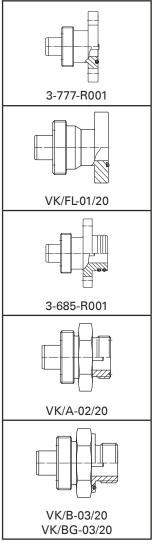


Suitable connecting parts





Suitable connecting parts



PN64 DN20 / DN8

Coupling tongue part

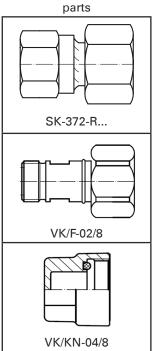
Order No.: 6-1206-R001

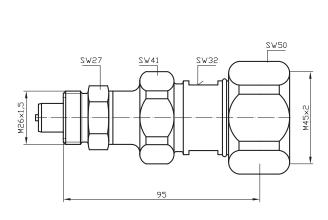
Material: Brass



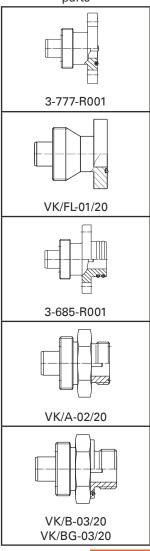


Suitable connecting





Suitable connecting parts



PN64 DN20 / DN8

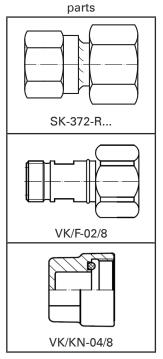
Transition piece with connecting coupling for measuring device

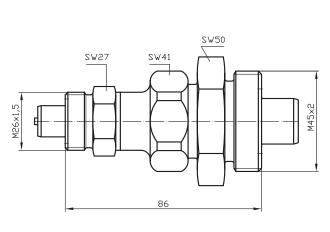
Order No.: 6-1092-R006

Material: Brass

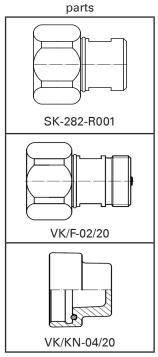


Suitable connecting





Suitable connecting



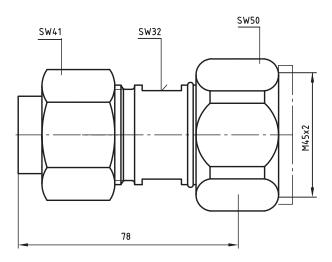
Coupling tongue part with air filter

DILO

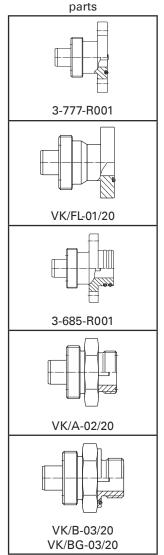
Order No.: 6-1281-R001

Material: Brass





Suitable connecting



Description

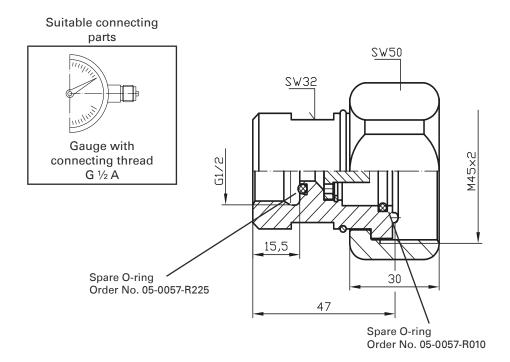
This coupling tongue part allows gas compartments which are under vacuum to be flooded with air after the SF_6 gas recovery and it is not necessary to use any service cart.

The integrated 100- μm filter sieve prevents dirt particles from ambient air penetrating the gas compartment during the flooding process.

Gauge connecting coupling

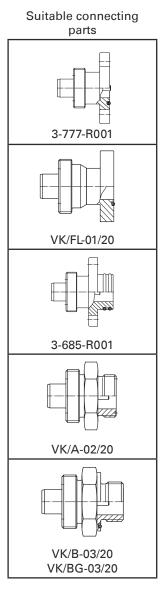


Order No.	Material
SK-282-R020 T	AL
SK-282-R020 P	Brass



Description

The gauge connecting coupling serves as connecting piece to a coupling groove part DN20. When coupling, a pin in the gauge connecting coupling opens the flow of the opposite coupling groove part (forced opening). This allows to read the present operating pressure on the screwed-in gauge. When disconnecting, the concial nipple of the groove part is closed by spring load (pressure and vacuum tight). If the gauge connecting coupling is not connected the gauge shows "zero pressure". The connecting coupling allows to install the gauge in any required position (rotatable 360°).





DILO couplings DN40



The coupling allows to establish a connection by simply fitting both coupling parts into each other. Before load relieving of the coupling seats the pressure- and vacuum tight coupling is sealed inside with an O-ring during the coupling process. The coupling is forced to be open in coupled position. If both coupling sides are separated again the sealing seats shut off automatically.

All couplings are temperature-resistant from -40 °C to +80 °C.

The suitable connecting parts for DILO couplings must be ordered separately.

■ DILO couplings DN40

■VK/A-02/40	Coupling groove part / A PN16 DN40	70
■VK/FL-01/40	Flange coupling PN16 DN40	71
■VK/KN-01/40	Covering cap PN16 DN40	72
■VK/F-01/40	Coupling tongue part PN16 DN40	73
6-1092-R001	Coupling tongue part PN16 DN40	74

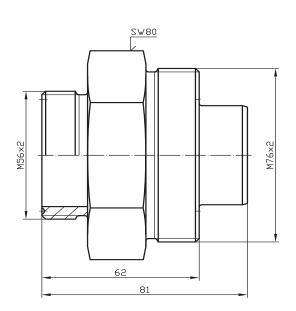
C 3106-07 69

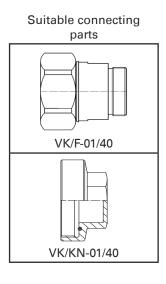
A PN16 DN40

Coupling groove part

Order No.: VK/A-02/40 E Material: Stainless steel





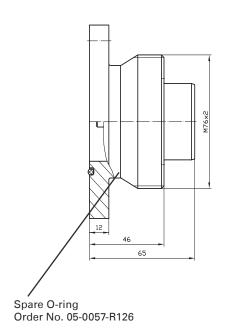


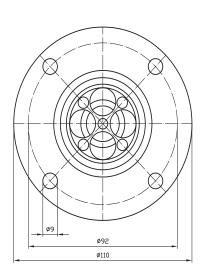
PN16 DN40

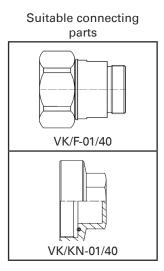
Flange coupling

Order No.: VK/FL-01/40 E Material: Stainless steel









Other flanges are available on request.

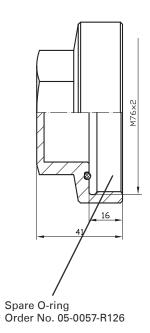
PN16 DN40

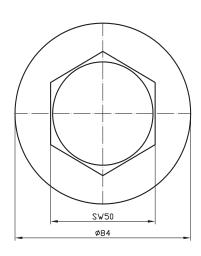
Covering cap

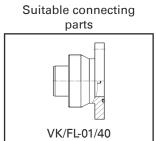
Order No.: VK/KN-01/40 T

Material: AL









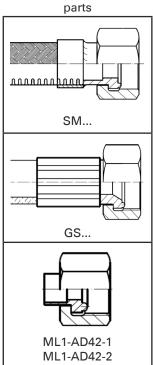
PN16 DN40

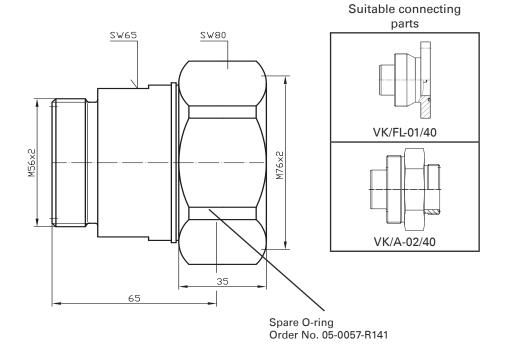
Coupling tongue part

Order No.: VK/F-01/40 E Material: Stainless steel



Suitable connecting





PN16 DN40 / DN20

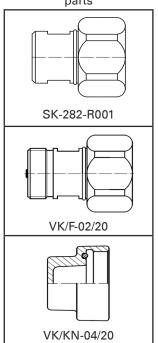
Transition piece

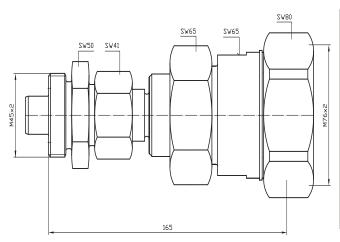
Order No: 6-1092-R001

Material: Brass/ Stainless steel

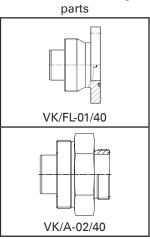


Suitable connecting parts





Suitable connecting



74 C 3106-07



DILO soldering unions







DILO soldering unions are particularly used in factory fabrication area piping. DILO offers a very wide variety of unions. Soldering unions are available either with soldering connections on both ends where the highest vibration resistance is required or with a soldering connection on one end and a screw in thread on the other.

DILO soldering unions withstand pressures up to 64 bar.

Different materials are available for all applications.

The suitable connecting parts for DILO couplings must be ordered separately.

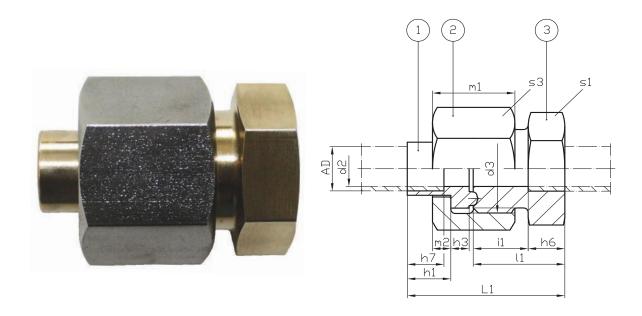
■ DILO soldering unions of the ML1 series for pressures up to PN64

■ ML1A-AD	Soldering stub-soldering union PN64	/6
ML1BO-AD	Screw-in stub-soldering union PN64 with O-ring	77
ML1M-AD10	Gauge union PN64 DN8	78
■ 3-328-R020	Gauge union PN64 DN8	79
■ ML18	Blanking disk PN64	80
■VST03	Plug PN64	81
■ 05-1545-R	Tee piece	82
■ 05-1545-R	Angle piece	83
■ 05-1545-R	Plug-in angle piece	84

C 3107-06 75

PN64

Soldering stub-soldering union



Tube outside diameter Ø AD	d2	d3	L1	l1	h1	h3	h6	h7	m1	m2	i1	s1	s3	Order No.
10	8	M20x1,5	35	20	9,5	4	8	8	18	4	12	22	24	ML1A-AD10 P
10	8	M20x1,5	35	20	9,5	4	8	8	18	4	12	22	24	ML1A-AD10 C
15	12	M26x1,5	52	22	13,5	5	10	10	20	5	12	27	32	ML1A-AD15 P
22	19	M36x2	54	31	15,5	6	12	12	26	7	16	41	41	ML1A-AD22 P
22	19	M36x2	54	31	15,5	6	12	12	26	7	16	41	41	ML1A-AD22 C
42	35	M56x2	65	37	19,5	7	20	20	29	7	18	60	65	ML1A-AD42 P
42	35	M56x2	65	37	19,5	7	20	20	29	7	18	60	65	ML1A-AD42 C

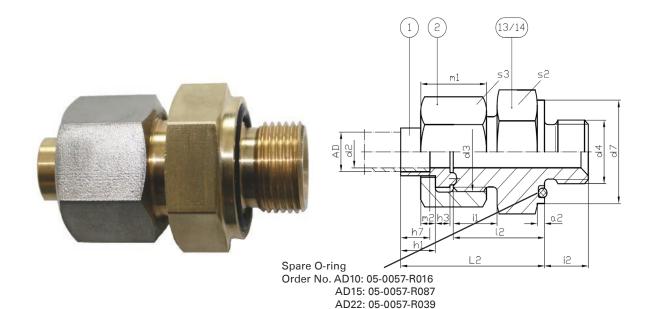
Piece	Designation	Order No.	Material		
1	Soldering shoulder-tongue part	ML1-AD1	P = Brass / C = Stainless steel		
2	Clamping nut	ML1-AD2	P = Brass / C = Stainless steel		
3	Soldering stub-groove part	ML1-AD3	P = Brass / C = Stainless steel		

Note: For the nominal width (outside diameter 10) the clamping nut is made of stainless steel.

PN64







Tube outside diameter Ø AD	d2	d3	d4	d7	L2	12	h1	h3	h7	m1	m2	i1	i2	a2	s2	s3	Order No.
10	8	M20x1,5	M16x1,5	26	40	25	9,5	4	8	18	4	12	12	2	27	24	ML1BO-AD10 P
10	8	M20x1,5	M16x1,5	26	40	25	9,5	4	8	18	4	12	12	2	27	24	ML1BO-AD10T
10	8	M20x1,5	G 3/8 A	26	40	25	9,5	4	8	18	4	12	12	2	27	24	ML1BO-AD10G P
10	8	M20x1,5	G 3/8 A	26	40	25	9,5	4	8	18	4	12	12	2	27	24	ML1BO-AD10GT
15	12	M26x1,5	G 1/2 A	32	47	27	13,5	5	10	20	5	12	14	3	32	32	ML1BO-AD15G P
22	19	M36x2	M33x2	49	59	36	15,5	6	12	26	7	16	18	3	50	41	ML1BO-AD22 P
22	19	M36x2	M33x2	49	59	36	15,5	6	12	26	7	16	18	3	50	41	ML1BO-AD22T
22	19	M36x2	G1A	49	59	36	15,5	6	12	26	7	16	18	3	50	41	ML1BO-AD22G P
22	19	M36x2	G1A	49	59	36	15,5	6	12	26	7	16	18	3	50	41	ML1BO-AD22GT
42	35	M56x2	G 1½ A	65	69	41	19,5	7	20	29	7	18	22	3	65	65	ML1BO-AD42G P

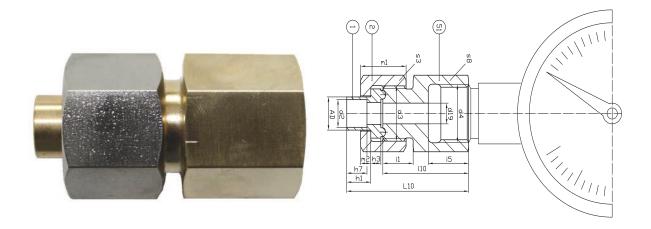
AD42: 05-0057-R126

Piece	Designation	Order No.	Material		
1	Soldering shoulder-tongue part	ML1-AD1	P = Brass / C = Stainless steel		
2	Clamping nut	ML1-AD2	P = Brass / C = Stainless steel		
13	Screw-in stub (M16x1,5 / M33x2)	ML1-AD13	P = Brass /T = AL		
14	Screw-in stub (G 3/8 A / G ½ A / G 1 A / G 1½ A)	ML1-AD14	P = Brass /T = AL		

Note: For the nominal width (outside diameter 10) the clamping nut is made of stainless steel. Regarding material AL only part 13 or 14 is made of AL, part 1 and 2 are made of stainless steel.

In special version the screw-in thread can also be supplied with sealing edge according to DIN 3852-1 and DIN EN ISO 1179.

Gauge union



Tube outside diameter Ø AD	d2	d3	d4	d19	L10	l10	h1	h3	h7	m1	m2	i1	i5	s3	s8	Order No.
10	8	M20x1,5	G 1/2	7,5	49	34	9,5	4	8	18	4	12	16	24	24	ML1M-AD10/51
10	8	M20x1,5	G 1/4	5,5	44	29	9,5	4	8	18	4	12	13	24	22	ML1M-AD10/59

Piece	Designation	Order No.	Material
1	Soldering shoulder-tongue part	ML1-AD10-1 P	Brass
2	Clamping nut	ML1-AD10-2 C	Stainless steel
3	Gauge connecting piece	M1-10-51 P	Brass
3	Gauge connecting piece	M1-10-59 P	Brass

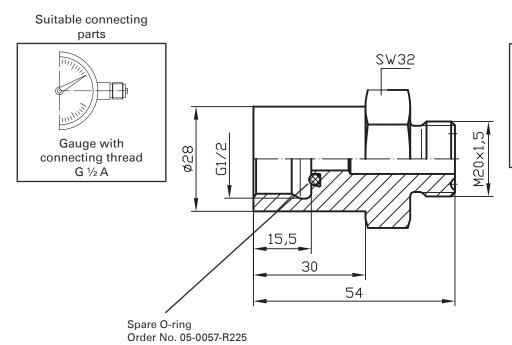
Gauge union

Order No.: 3-328-R020 P

Material: Brass







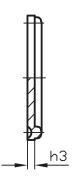
Suitable connecting parts

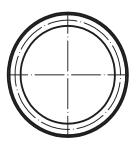
ML1-AD10-1
ML1-AD10-2

PN64

Blanking disk



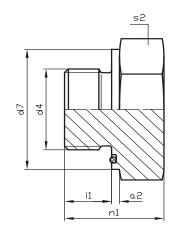




Tube outside diameter Ø AD	h3	Order No.	Material
10	1,5	ML1-10-8 P	Brass
22	2	ML1-22-8 P	Brass
42	3	ML1-42-8 P	Brass

PN64 Plug



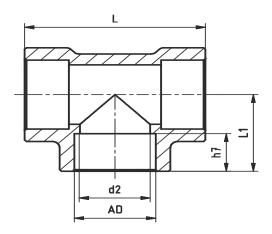


			Met	ric fi	ne th	read ISO		V	Vhitworth pipe threa	ad	Spare O-ring
d4	d7	n1	i1	a2	s2	Order No. Material		d4	Order No.	Material	Order No.
	23	23	12	2	24			G 1/4 A	VST03 / G 1/4 AT	AL	05-0057-R088
M16x1,5	26	24	12	2	27	VST03 / M16x1,5	AL	G 3/8 A	VST03 / G 3/8 AT	AL	05-0057-R016
	36	32	15	3	36			G 1/2 A	VST03 / G 1/2 AT	AL	05-0057-R033
M33x2	49	38	18	3	50	VST03 / M33x2T	AL	G 1 A	VST03 / G 1 AT	AL	05-0057-R039
	65	45	22	3	65			G 1½ A	VST03 / G 1½ AT	AL	05-0057-R126



Tee piece

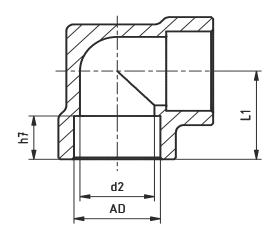




Tube outside diameter Ø AD	PN	d2	L	L1	h7	Order No.	Material
10	64	8	29	14,5	8	05-1545-R001	Brass
15	64	12	38	19	10	05-1545-R004	Brass
22	64	19	49	24,5	12	05-1545-R002	Brass
42	25	39	90	45	20	05-1545-R003	Brass

Angle piece

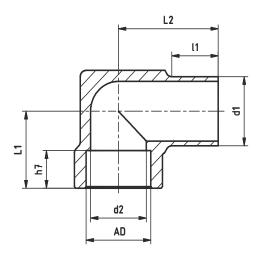




Tube outside diameter Ø AD	PN	d2	L1	h7	Order No.	Material
10	64	8	14,5	8	05-1545-R005	Brass
15	64	12	19	10	05-1545-R008	Brass
22	64	19	24,5	12	05-1545-R006	Brass
42	25	39	45	20	05-1545-R007	Brass

Plug-in angle piece





Tube outside diameter Ø AD	PN	d2	L1	h7	L2	d1	l1	Order No.	Material
10	64	8	14,5	8	21,5	10	10	05-1545-R010	Brass
15	64	12	19	10	26	15	13	05-1545-R011	Brass
22	64	19	24,5	12	34	22	16	05-1545-R012	Brass
42	25	39	45	20	56,4	42	24	05-1545-R013	Brass



DILO ball valves



The ball valve has a compact design and is maintenance-free. The notch on the spindle head and the position of the handle show the flow rate (closed or opened). The flow rate is controlled by a ball which is stored in a sealing. Each ball valve is tested for tightness in our works.

All ball valves are temperature-resistant from -40 °C to +80 °C.

The suitable connecting parts must be ordered separately.

■ DILO ball valves for pressures up to PN64

3-365-R001	Ball valve PN64 DN8	84
3-365-R008	Ball valve with handwheel PN64 DN8	85
3-383-R001	Ball valve PN64 DN20	86
3-679-R001	Ball valve PN25 DN40	87

C 3108-02 83

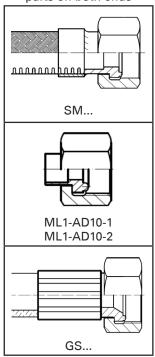
Ball valve

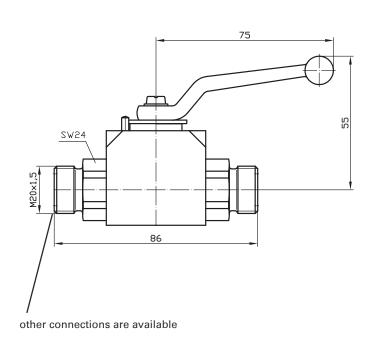
Order No.: 3-365-R001 P

Material: Brass



Suitable connecting parts on both ends





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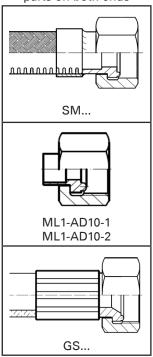
Ball valve with handwheel

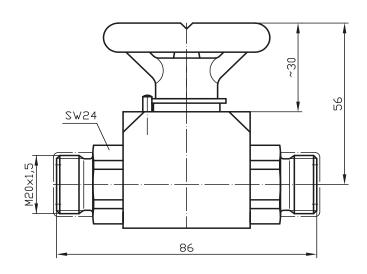
Order No.: 3-365-R008 P

Material: Brass



Suitable connecting parts on both ends





C 3108-02

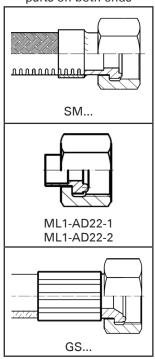
Ball valve

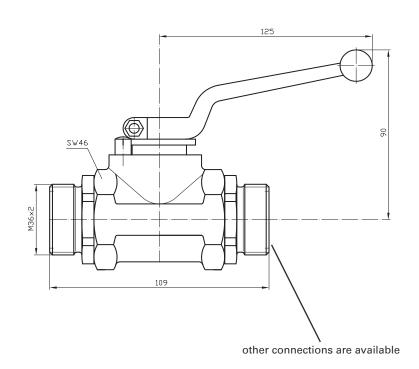
Order No.: 3-383-R001 P

Material: Brass



Suitable connecting parts on both ends





36 C 3108-02

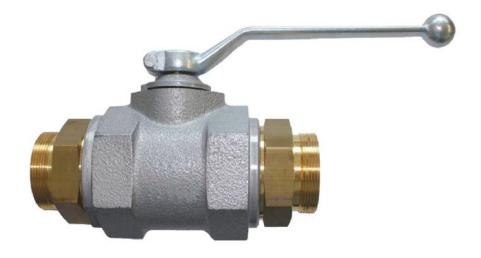
PN25 DN40

Ball valve

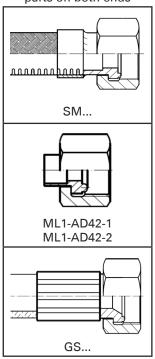
-DILO-

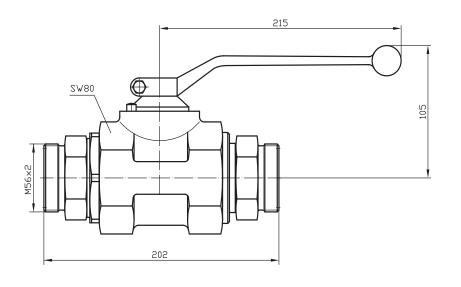
Order No.: 3-679-R001 P

Material: Brass



Suitable connecting parts on both ends







DILO hoses



We also offer wire braided stainless steel hoses as well as rubber hoses. Both hose types can be used up to max. 64 bar. They are pressure and vacuum tight and are available with different coupling connections. No matter whether you need a hose for connection to SF_6 maintenance devices, gas insulated fabrication plants or other devices, we can offer the appropriate hose connection.

The suitable connecting parts must be ordered separately.

■ DILO hoses for pressures up to PN64

SIVIUI	vvire braided nose DIN8 / DIN20 / DIN40	90				
SM03	Wire braided hose with elbow connection DN8 / DN20 / DN40	91				
■ SM07	Wire braided hose with elbow connections DN8 / DN20	92				
SM10	Wire braided hose with protective hose DN8 / DN20 / DN40	93				
■ GS01	Rubber hose DN8 / DN20 / DN40	94				
■ GS03	Rubber hose with elbow connection DN8 / DN20	95				
Ordering examples						

DN8 / DN20 / DN40

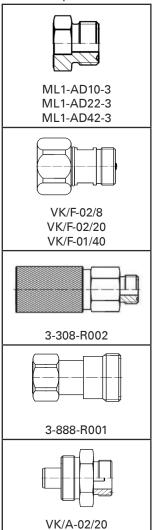
Wire braided hose



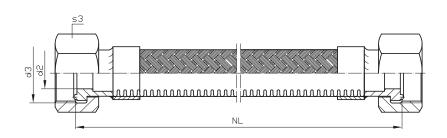
nominal pressure level DIN EN ISO 10380 SF 4	AD	DN	d2	d3	s3	minimum bending radius / onetime bending	nominal ben- ding radius / frequent move- ments	Order No.* NL in mm
64	10	8	8	M20x1,5	24	38	130	SM018L
40	22	20	19	M36x2	41	70	170	SM0120L
64	22	20	19	M36x2	41	70	285	SM1520L
25	42	40	35	M56x2	65	130	300	SM0140L

*Ordering example see page 96

Suitable connecting parts



VK/A-01/40



Structure of the rust- and acid resistant wire braided hose:

Full metal wall made of 1.4404 with outside wire sheating made of stainless steel, both ends completely equipped with DILO-connections made of brass.

(For nominal diameter AD10 the clamping nut is made of stainless steel).

Supply length: max. 25 m

DN8 / DN20 / DN40



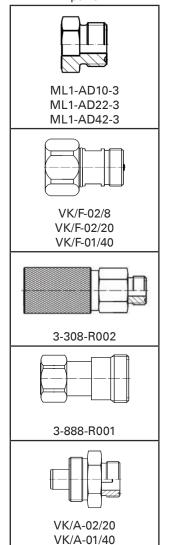


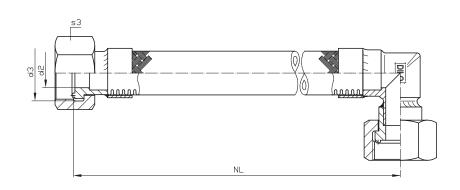


nominal pressure level DIN EN ISO 10380 SF 4	AD	DN	d2	d3	s3	minimum bending radius / onetime bending	nominal bending radius / frequent movements	Order No.* NL in mm
64	10	8	8	M20x1,5	24	38	130	SM038L
40	22	20	19	M36x2	41	70	170	SM0320L
25	42	40	35	M56x2	65	130	300	SM0340L

*Ordering examples see page 96

Suitable connecting parts





Structure of the rust- and acid resistant wire braided hose:

Full metal wall made of 1.4404 with outside wire sheating made of stainless steel, both ends completely equipped with DILO-connections made of brass.

(For nominal diameter AD10 the clamping nut is made of stainless steel).

Supply length: max. 25 m

DN8 / DN20

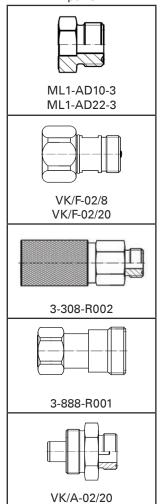
Wire braided hose with elbow connections

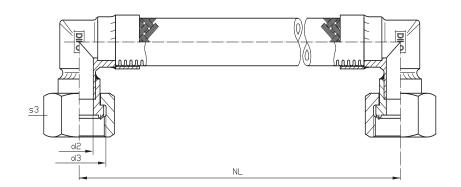


nominal pressure level DIN EN ISO 10380 SF 4	AD	DN	d2	d3	s3	minimum bending radius / onetime bending	nominal bending radius / frequent movements	Order No.* NL in mm
64	10	8	8	M20x1,5	24	38	130	SM078L
40	22	20	19	M36x2	41	70	170	SM0720L

*Ordering example see page 96

Suitable connecting parts





Structure of the rust- and acid resistant wire braided hose:

Full metal wall made of 1.4404 with outside wire sheating made of stainless steel, both ends completely equipped with DILO-connections made of brass.

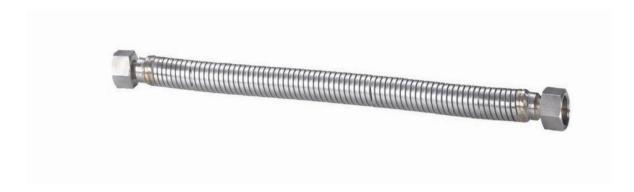
(For nominal diameter AD10 the clamping nut is made of stainless steel).

Supply length: max. 25 m

DN8 / DN20 / DN40



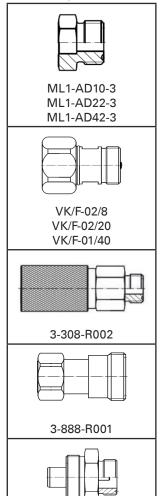




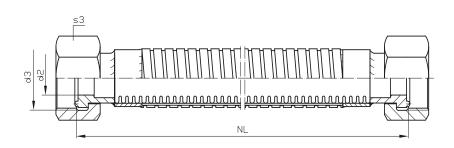
nominal pressure level DIN EN ISO 10380 SF 4	AD	DN	d2	d3	s3	minimum bending radius / onetime bending	nominal bending radius / frequent movements	Order No.* NL in mm
64	10	8	8	M20x1,5	24	38	130	SM108L
40	22	20	19	M36x2	41	70	170	SM1020L
25	42	40	35	M56x2	65	130	300	SM1040L

Suitable connecting parts

*Ordering example see page 96



VK/A-02/20 VK/A-02/40



Structure of the rust- and acid resistant wire braided hose:

Full metal wall made of 1.4404 with outside wire sheating made of stainless steel, both ends completely equipped with DILO-connections made of brass.

(For nominal diameter AD10 the clamping nut is made of stainless steel).

Protective hose, resistant to twisting, flexible, high tensile with high mechanical strength in accordance with DIN EN ISO 15465. Supply length: max. 25 m

DN8 / DN20 / DN40

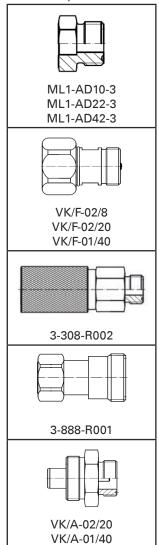
Rubber hose

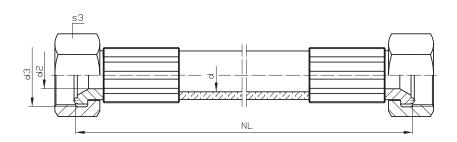


Pressure stage bar	Fitting AD	Hose DN	Hose d	Fitting d2	Fitting d3	Fitting s3	Bending radius	Order No.* NL in mm
64	10	8	7,9	5,5	M20x1,5	24	50	GS0108L
50	22	20	19	15,5	M36x2	41	240	GS0120L
64	42	40	38	33	M56x2	65	500	GS0140L

Suitable connecting parts

*Ordering example see page 96





Range of application and temperature:

From -40 °C up to +100 °C according to the medium used (see DIN EN 853/854)

Materials and composition:

The hoses consist of an internal layer made of synthetic rubber which is oil- and waterproof and of external rubber layer whick is oil- and weatherproof.

Fitting material: Brass

(For nominal diameter AD10 the clamping nut is made of stainless steel)

The hose fitting is made in pressnipple form.

DN8 / DN20

Rubber hose with elbow connection

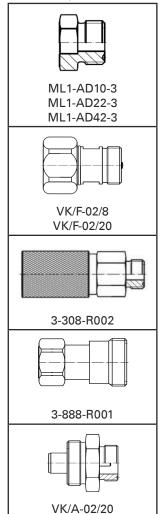


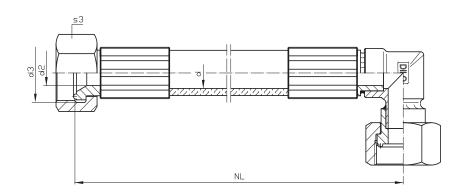


Pressure stage bar	Fitting AD	Hose DN	Hose d	Fitting d2	Fitting d3	Fitting s3	Bending radius	Order No.*	NL in mm
64	10	8	7,9	5,5	M20x1,5	24	50	GS0308L _	
50	22	20	19	15,5	M36x2	41	240	GS0320L _	

*Ordering example see page 96

Suitable connecting parts





Range of application and temperature:

From -40 °C up to +100 °C according to the medium used (see DIN EN 853/854)

Materials and composition:

The hoses consist of an internal layer made of synthetic rubber which is oil- and waterproof and of external rubber layer whick is oil- and weatherproof.

Fitting material: Brass

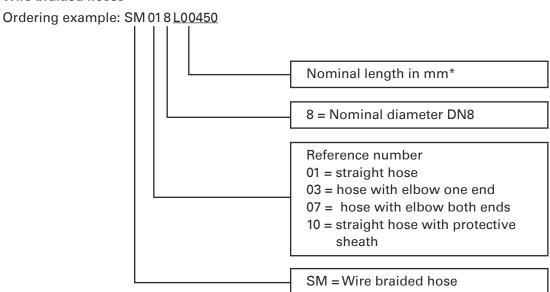
(For nominal diameter AD10 the clamping nut is made of stainless steel)

The hose fitting is made in pressnipple form.

Ordering examples

Wire braided hoses and rubber hoses

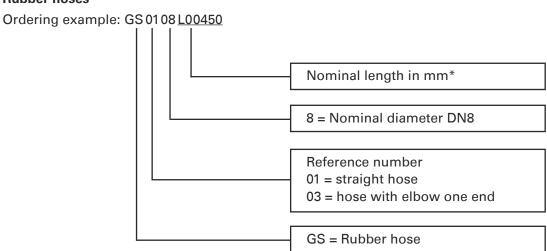
Wire braided hoses



*Wire braided hoses are available in the following length increments:

Length	Length increment
< 1 m	50 mm
1 m to < 5 m	100 mm
5 m to < 10 m	500 mm
10 m to < 20 m	1 m

Rubber hoses



*Rubber hoses are available in the following length increments:

Length	Length increment
< 1 m	50 mm
1 m to < 5 m	100 mm
5 m to < 10 m	500 mm
10 m to < 20 m	1 m



DILO transition pieces and adapters



Our product range comprises a large variety of transition pieces and adapters to establish connections between components with different nominal lengths. Thus DILO connecting couplings and hoses allow the comfortable adaption to other coupling systems on switchgear.

The suitable connecting parts must be ordered separately.

■ DILO transition pieces and adapters for pressures up to PN64

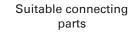
■ 6-1033-R001/ 6-1058-R/ SK-279-R / 6-1027-R	Adapter DILO couplings DN20 ASEA / Magrini / Siemens/ Westinghouse	98 - 101
3-920-R002/R001	Adapter - Hansen connection	102 - 103
3 -353-R005/R006	Adapter DILO DN8 - Michelin valve	104 - 105
■ 6-1059-R/6-1203-R	Adapter with flange coupling on both ends	106
■ K022R02	Tee piece with DILO couplings	107
■ 3-351-R001 P	Screw-in stub	108
SK-386 T/3-240-R/ 3-251-R001/3-314-R001	Transition pieces	109 - 112
■ 3-227-R001/3-311-R001/ 3-984-R001	Intermediate pieces	113
■ 3-816-R001/R002/ R003/R005	Transition pieces	114 - 117
■ K018R02/R06/ 3-717-R/K018R07/ K018R	Angle pieces	118 - 122
■ K020R	Tee pieces	123 - 124
3-718-R006/R036	Distributor	125 - 126
3-1026-R002	Tubings	127

Adapter DN20 DILO coupling - ASEA connection

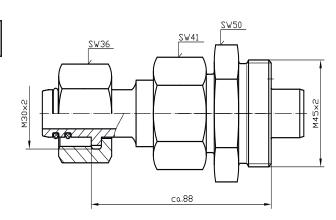
Order No.: 6-1033-R001

Material: Brass

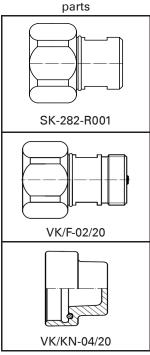




ASEA connection



Suitable connecting



Adapter DN8 DILO coupling - ASEA connection

Order No.: 6-1033-R003

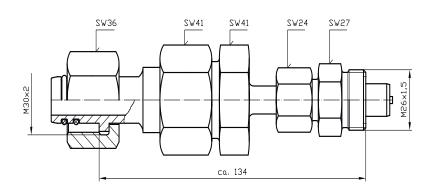
Material: Brass



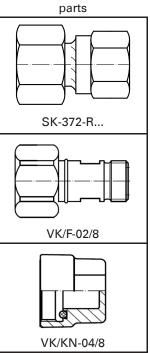


Suitable connecting parts

ASEA connection



Suitable connecting



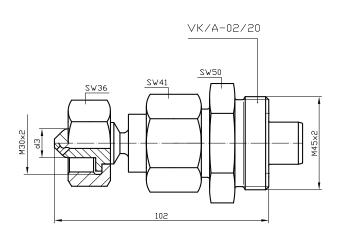
Adapter DN20 DILO coupling - Magrini connection



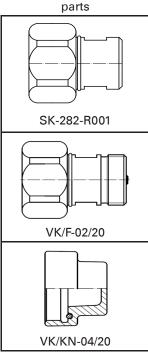
d3	Order No.	Material
Ø 14	6-1058-R001	Brass
Ø 16	6-1058-R002	Brass

Suitable connecting parts

Magrini connection



Suitable connecting



Adapter DN20 DILO coupling - Siemens connection

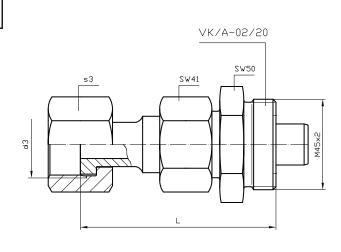




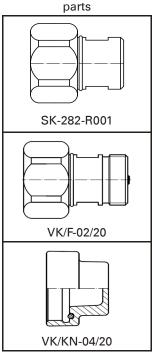
d3	L	S3	Order No.	Material
G 3/4	97	32	SK-279-R001 P	Brass
G 1	98	41	SK-279-R002 P	Brass
G 1 1/4	93	50	SK-279-R003 P	Brass

Suitable connecting parts

Siemens connection



Suitable connecting



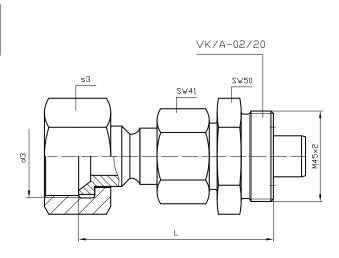
Adapter DN20 DILO coupling - Westinghouse connection



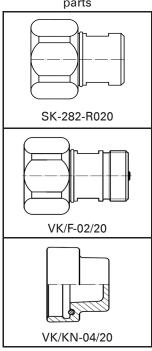
d3	L	S3	Order No.	Material
1 5/8 - 12UN	97	50	6-1027-R001	Brass
1 5/16 - 12UN	95	41	6-1027-R002	Brass
1 1/16 - 12UN	90	32	6-1027-R003	Brass

Suitable connecting parts

Westinghouse connection



Suitable connecting parts

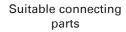


Adapter DN20 DILO coupling - Hansen connection

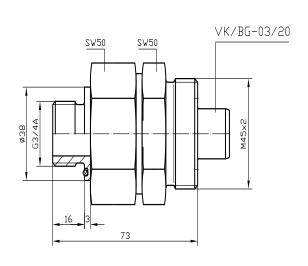
Order No.: 3-920-R002 P

Material: Brass

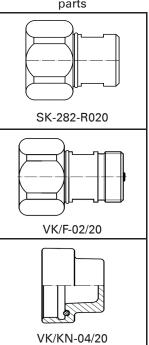




Hansen connection G 3/4 A



Suitable connecting parts



Adapter DN8 DILO coupling - Hansen connection

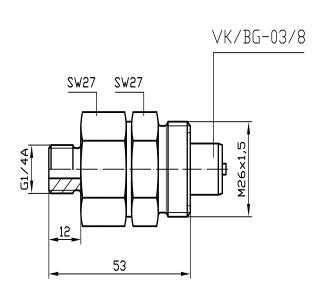
Order No.: 3-920-R001 P

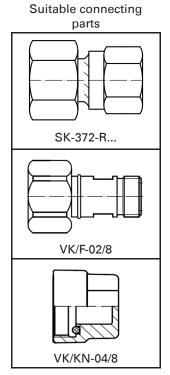
Material: Brass



Suitable connecting parts

Hansen connection G 1/4 A





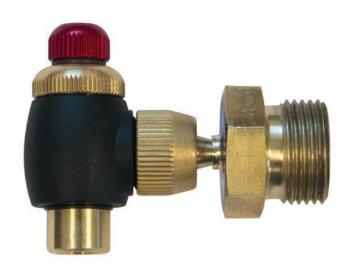
PN2 DN8

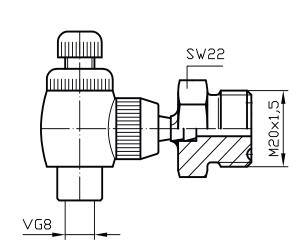
DILO DN8 adapter – Michelin valve

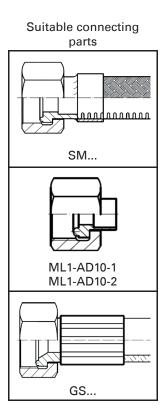
-DILO-

Order No.: 3-353-R005 P

Material: Brass





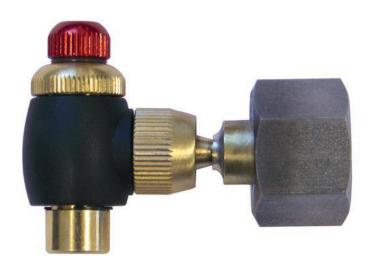


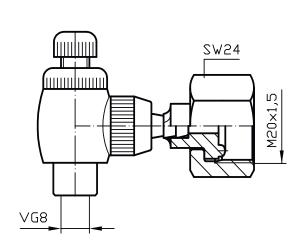
PN2 DN8

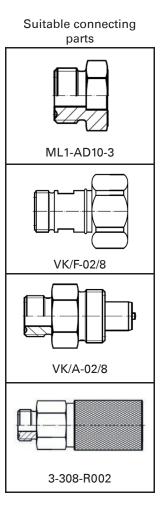
DILO DN8 adapter – Michelin valve

Order No.: 3-353-R006 P

Material: Brass







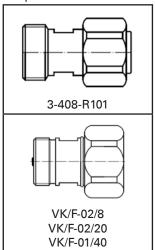


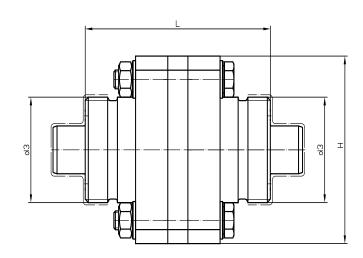
Adapter with flange coupling on both ends



DN	for coupling tongue part	d3	L	н	PN	Order No.	Material
6	3-408-R101	M24x1,5	92	Ø 40	10	6-1059-R004	AL
8	VK/F-02/8	M26x1,5	74	Ø 40	64	6-1059-R012	AL
20	VK/F-02/20	M45x2	92	Ø 80	64	6-1059-R011	AL
40	VK/F-01/40	M76x2	102	Ø 110	16	6-1203-R001	Stainless steel

Suitable connecting parts on both ends





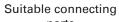
PN64 DN8 / DN20

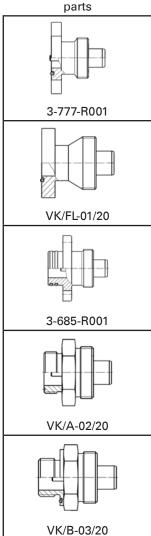
Tee piece with DILO couplings

Order No.: K022R02

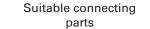
Material: AL

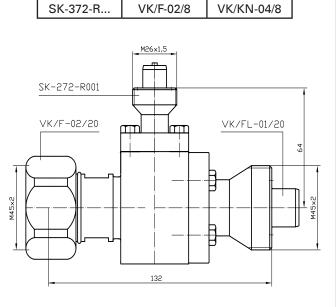




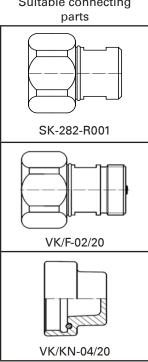


VK/BG-03/20





Suitable connecting



Other versions are available.

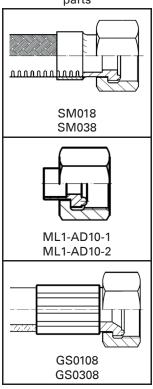
Screw-in stub

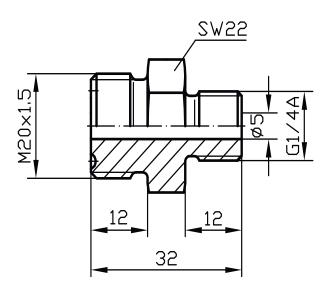
Order No.: 3-351-R001 P

Material: Brass



Suitable connecting parts





Suitable connecting parts

G 1/4 internal thread

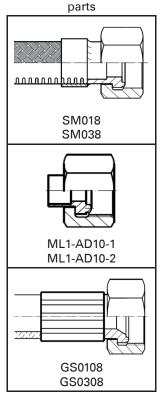
Transition piece DN8

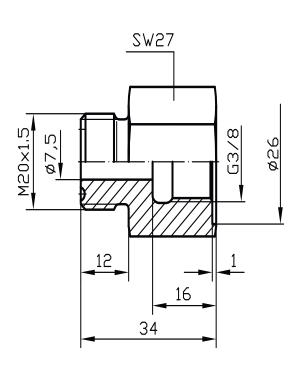
Order No.: SK-386 T

Material: AL



Suitable connecting





Suitable connecting parts

G 3/8 external thread

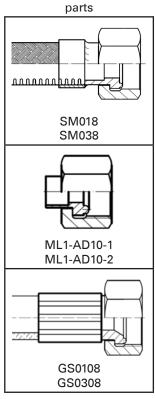
Transition piece

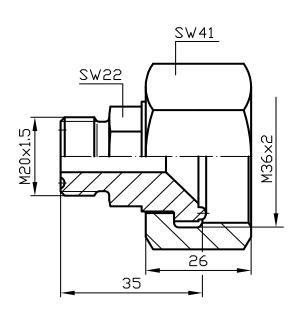




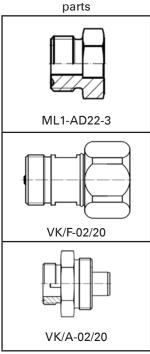
Order No.	Material
3-240-R001 P	Brass
3-240-R002 C	Stainless steel

Suitable connecting





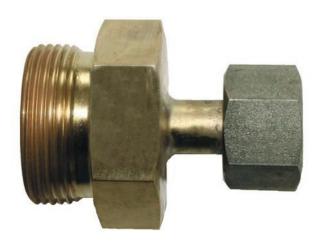
Suitable connecting



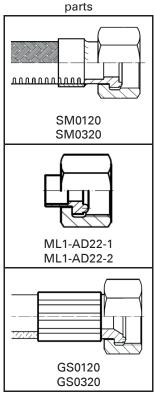
Transition piece

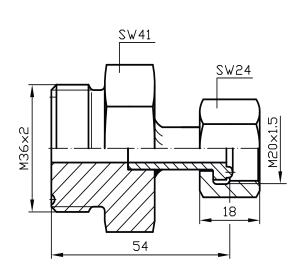
Order No.: 3-251-R001 P

Material: Brass

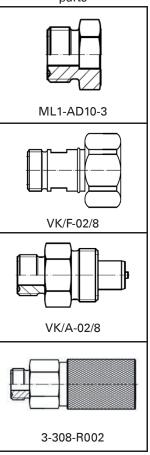


Suitable connecting





Suitable connecting parts

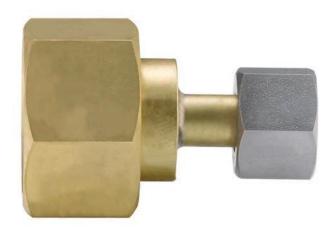


Transition piece

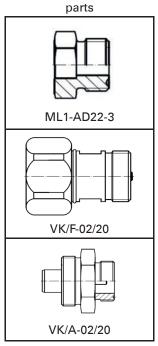
Order No.: 3-314-R001 P

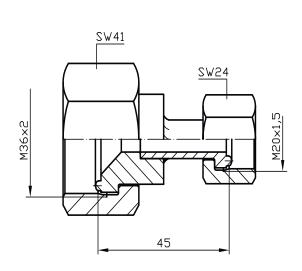
Material: Brass



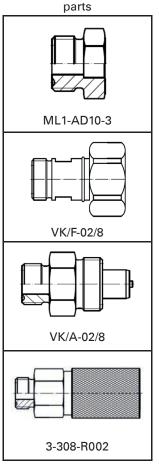


Suitable connecting





Suitable connecting



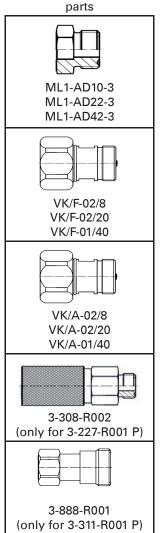
PN64 DN8 / DN20 / DN40

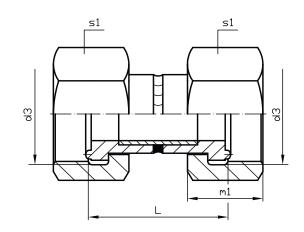
Intermediate piece



AD	d3	L	m1	s1	Order No.	Material
10	M20x1,5	32	18	24	3-227-R001 P	Brass
22	M36x2	48	26	41	3-311-R001 P	Brass
42	M56x2	58	29	65	3-984-R001 P	Brass

Suitable connecting





Transition piece

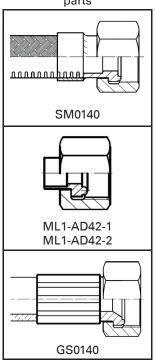
Order No.: 3-816-R001 P

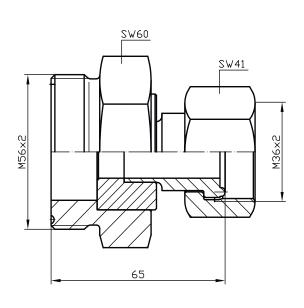
Material: Brass



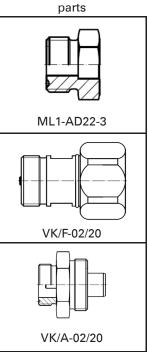


Suitable connecting parts





Suitable connecting



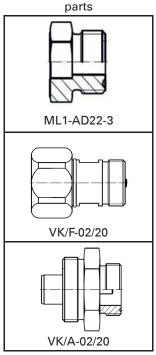
Transition piece

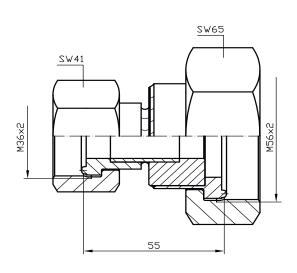
Order No.: 3-816-R002

Material: Brass

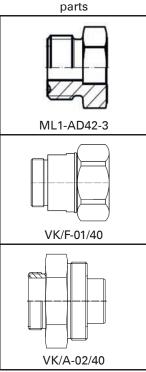


Suitable connecting





Suitable connecting



Transition piece

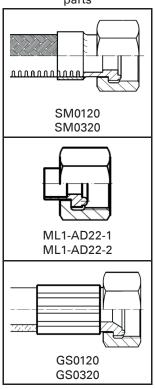
Order No.: 3-816-R003

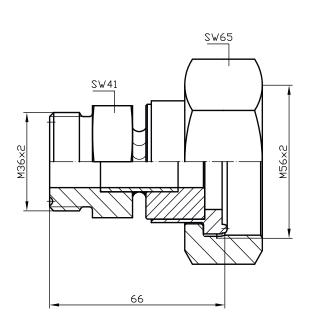
Material: Brass



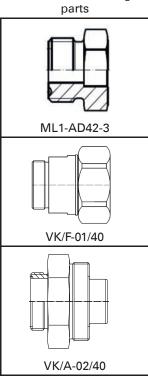


Suitable connecting parts





Suitable connecting



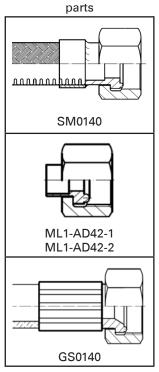
Transition piece

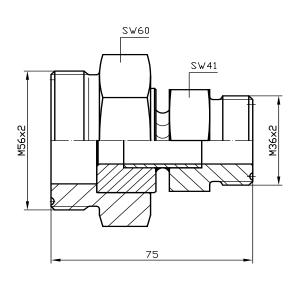
Order No.: 3-816-R005 P

Material: Brass

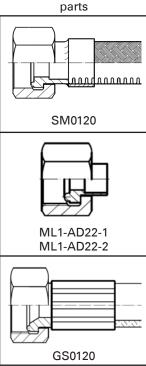


Suitable connecting





Suitable connecting



PN64 DN8 /DN20 / DN40

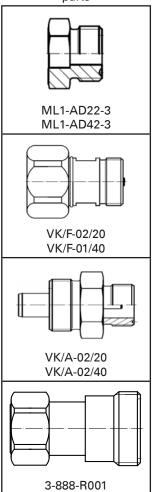
Angle piece

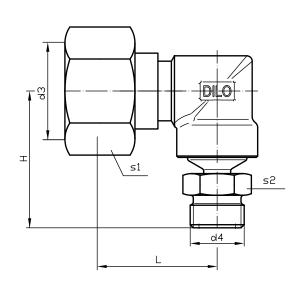




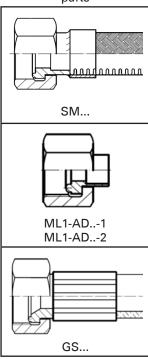
AD	d3	d4	L	Н	s1	s2	Bestellnummer	Werkstoff
10/22	M36x2	M20x1,5	45	51	41	22	K018R02	Brass
22/42	M56x2	M36x2	64	81	65	41	K018R06	Brass

Suitable connecting parts





Suitable connecting parts



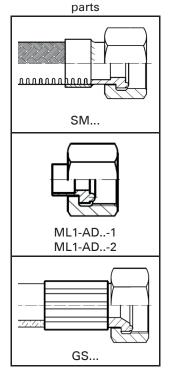
PN64 DN8 /DN20 / DN40

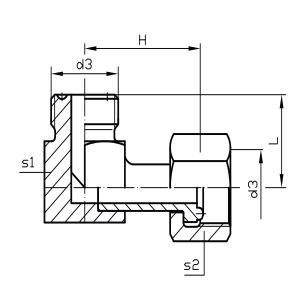
Angle piece



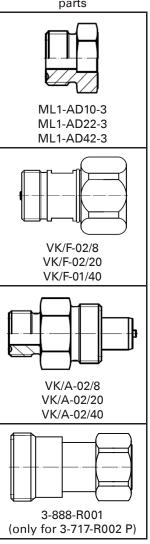
AD	d3	L	Н	s1	s2	Order No.	Material
10	M20x1,5	32	31	22	24	3-717-R001 P	Brass
22	M36x2	48	46	36	41	3-717-R002 P	Brass
42	M56x2	58	65	60	65	K018R07	Brass

Suitable connecting





Suitable connecting parts



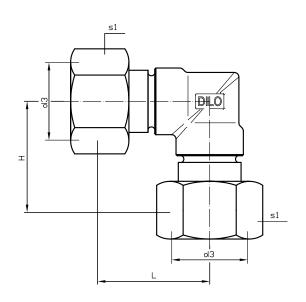
PN64 DN8 /DN20 / DN40

Angle piece

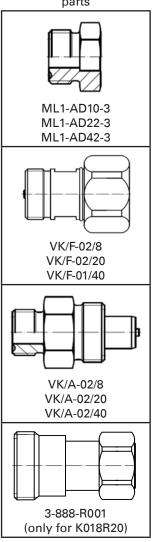




AD	d3	L	Н	s1	Order No.	Material
10	M20x1,5	32	32	24	K018R10	Brass
22	M36x2	50	50	41	K018R20	Brass
42	M56x2	65	80	65	K018R32	Brass



Suitable connecting parts

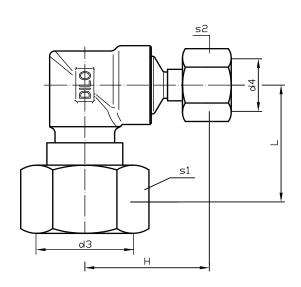


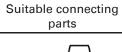
PN64 DN8 / DN20 / DN40

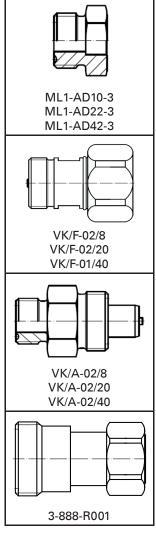
Angle piece



AD	d3	d4	L	Н	s1	s2	Order No.	Material
10/22	M36x2	M20x1,5	45	46	41	24	K018R27	Brass
22/42	M56x2	M36x2	64	72	65	41	K018R31	Brass







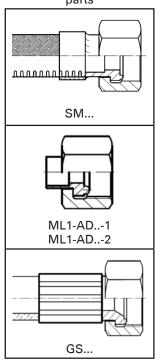
Angle piece

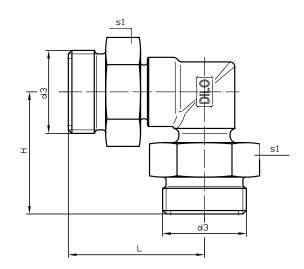




AD	d3	L	Н	s1	Order No.	Material
10	M20x1,5	38	34	22	K018R41	Brass
22	M36x2	59	53	41	K018R40	Brass
42	M56x2	85	73	60	K018R29	Brass

Suitable connecting parts

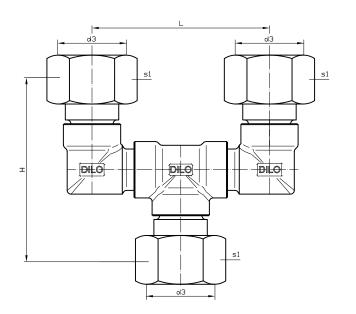


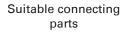


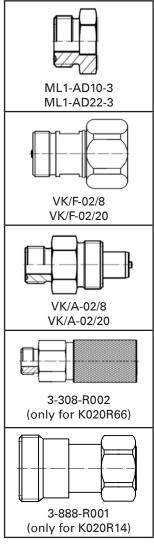
Tee piece



AD	d3	L	н	s1	Order No.	Material
10	M20x1,5	56	64	24	K020R66	Brass
22	M36x2	93	98	41	K020R14	Brass







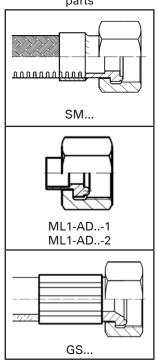
Tee piece

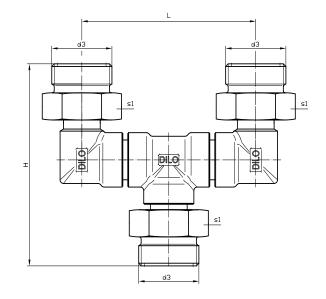




AD	d3	L	Н	s1	Order No.	Material
10	M20x1,5	56	75	22	K020R26	Brass
22	M36x2	104	112	41	K020R59	Brass

Suitable connecting parts



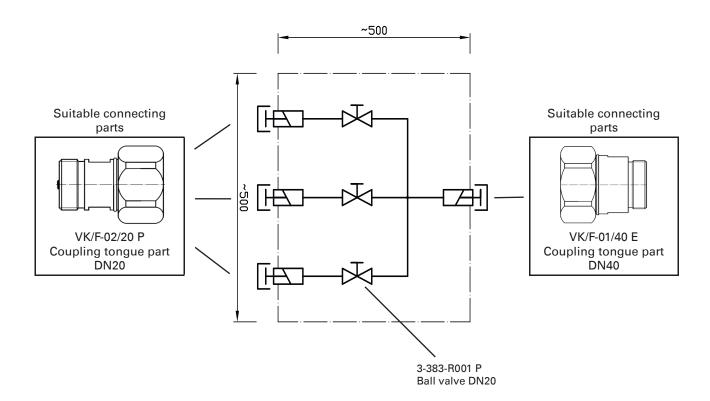


3 x DN20 / 1 x DN40

Distributor

Order No.: 3-718-R006





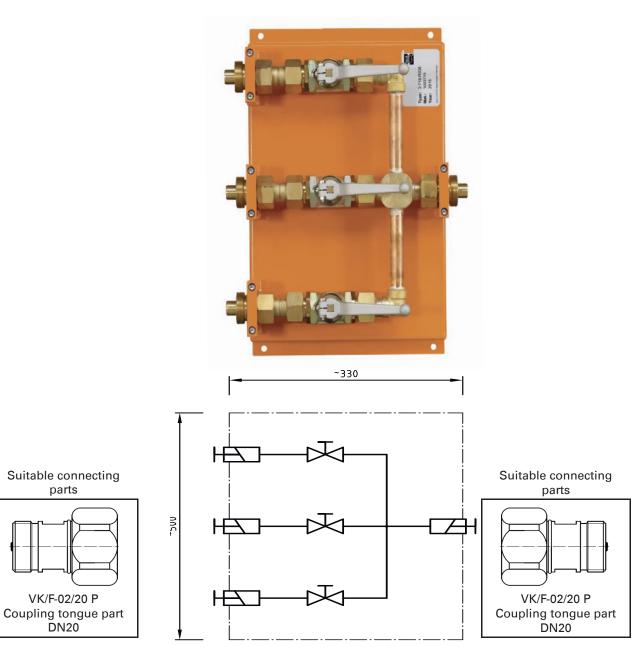
Other versions are available.

4 x DN20

Distributor

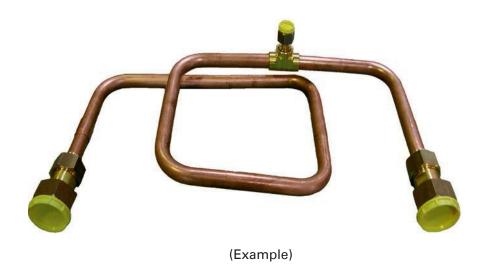
Order No.: 3-718-R036





Tubings

Order No.: 3-1026-R002



Other versions are available.



DILO SF₆ bottle connections



DILO offers a wide range of connections suitable for all commercial SF_6 bottles. Thus safe and quick connection of hoses of DILO service carts or SF_6 gas refilling devices to the SF_6 gas bottles is guaranteed. This refers to bottle connections for new gas as well as for reuse gas.

The suitable connecting parts must be ordered separately.

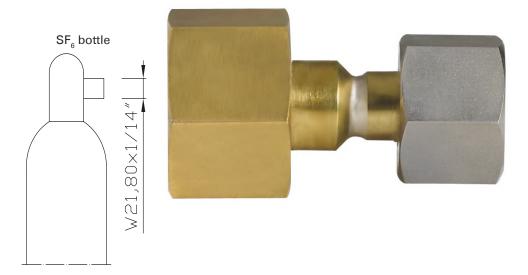
■ DILO SF₆ bottle connections

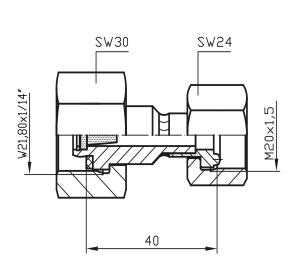
■ 3-316-R001	SF ₆ bottle connection	130
■ 3-858-R001	Angle SF ₆ bottle connection	131
■ 3-643-R001	Chinese SF ₆ bottle connection	132
■ 3-643-R002	Chinese SF ₆ bottle connection	133
3-245-R001	American SF ₆ bottle connection	134
3-334-R002	American SF ₆ bottle connection	135
3-245-R002	English SF ₆ bottle connection	136
3-245-R004	English SF ₆ bottle connection	137
3-851-R002	Connection for reuse gas bottle	138
3-851-R003	Connection for reuse gas bottle	139
■ 3-858-R002	Angle for connection of reuse gas bottle	140
■ 6-1037-R050	Storage connecting hose DN20	141
- 6-1041-R050	Storage connecting hose DN8	142

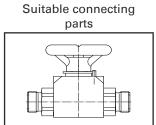
C 3834-00 129

SF_6 bottle connection W21.80x1/14" - DIN 477 No. 6

Order No.: 3-316-R001 P Material: Stainless steel / Brass







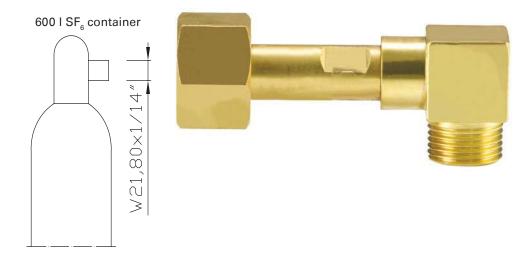
3-365-R008

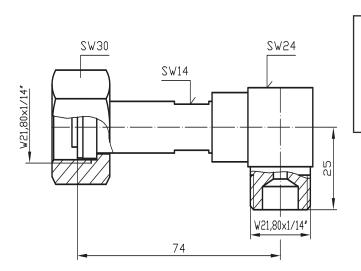
Angle SF_6 bottle connection W21.80x1/14" - DIN 477 No. 6

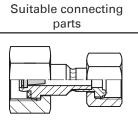
-DILO_®

Order No.: 3-858-R001 P

Material: Brass







3-316-R001

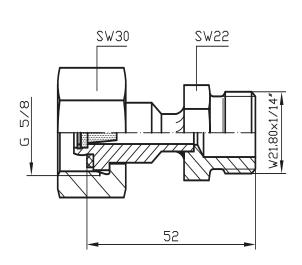
C 3834-00 131

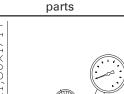
Chinese SF_6 bottle connection G 5/8 - DIN 477 No. 7

Order No.: 3-643-R001 P

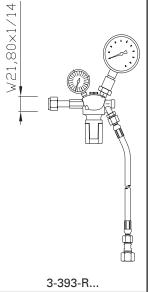
Material: Brass







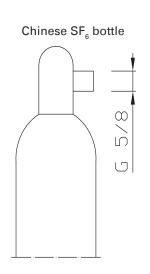
Suitable connecting



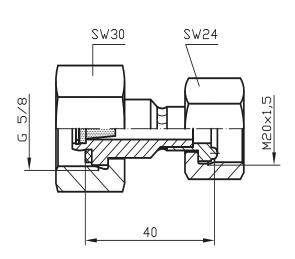
Chinese SF_6 bottle connection G 5/8 - DIN 477 No. 7

Order No.: 3-643-R002 P Material: Stainless steel / Brass

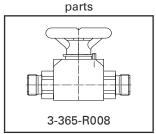








Suitable connecting



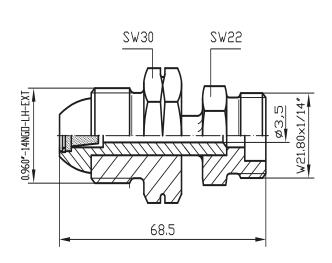
C 3834-00 13

American SF_6 bottle connection 0.960"-14NGO-LH-EXT - CGA 590

Order No.: 3-245-R001 P

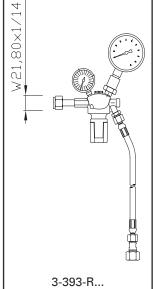
Material: Brass







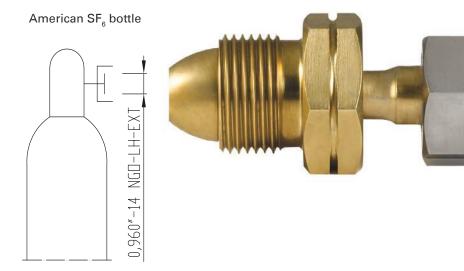
parts

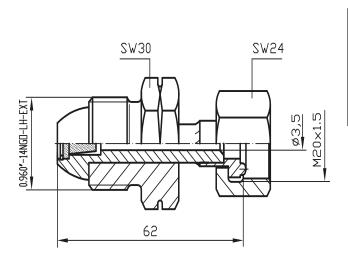


American SF₆ bottle connection 0.960"-14NGO-LH-EXT - CGA 590

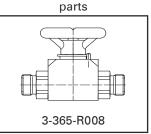
Order No.: 3-334-R002 P Material: Stainless steel / Brass







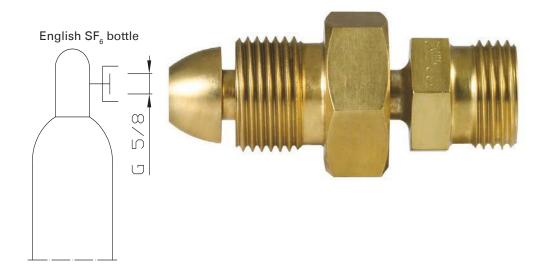
Suitable connecting

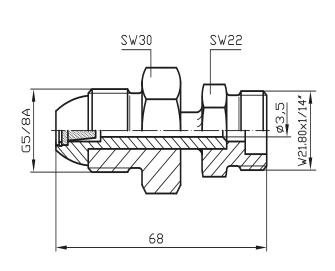


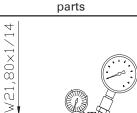
English SF₆ bottle connection G 5/8 - BS No. 3

Order No.: 3-245-R002 P

Material: Brass







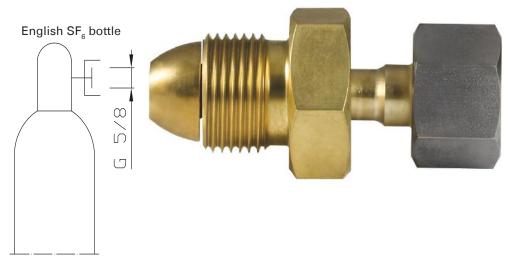
Suitable connecting

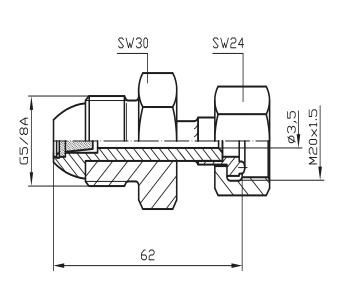
3-393-R...

English SF_6 bottle connection G 5/8 - BS No. 3

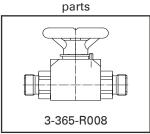
Order No.: 3-245-R004 P Material: Stainless steel / Brass







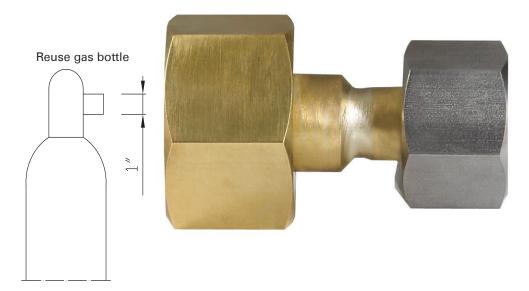
Suitable connecting

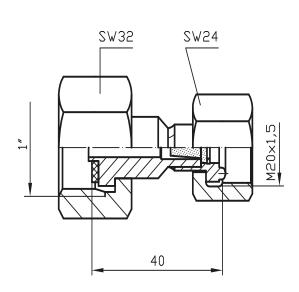


C 3834-00 13

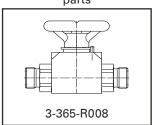
Connection for reuse gas bottle 1" - DIN 477 No. 8

Order No.: 3-851-R002 P Material: Stainless steel / Brass





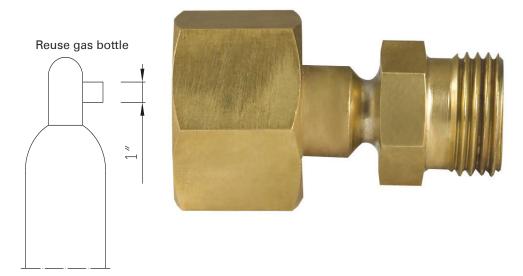
Suitable connecting parts

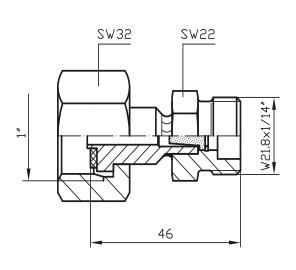


Connection for reuse gas bottle 1" - DIN 477 No. 8

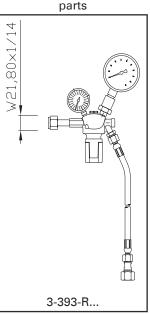
Order No.: 3-851-R003 P

Material: Brass





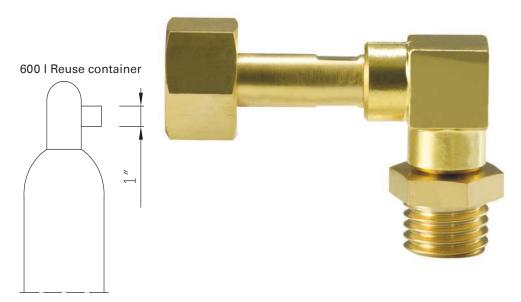


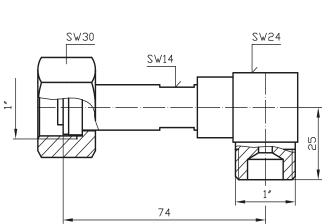


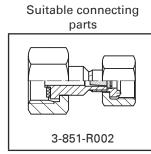
Angle for connection of reuse gas bottle 1" - DIN 477 No. 8

Order No.: 3-858-R002 P

Material: Brass







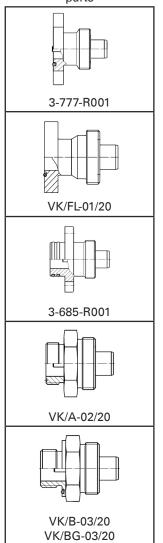
Storage connecting hose DN20

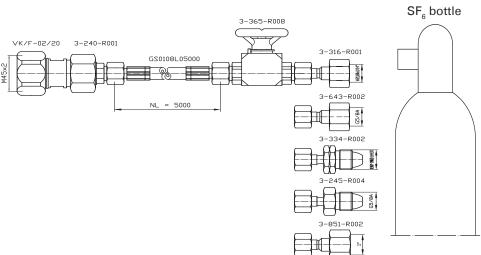


Order No.: 6-1037-R050



Suitable connecting parts



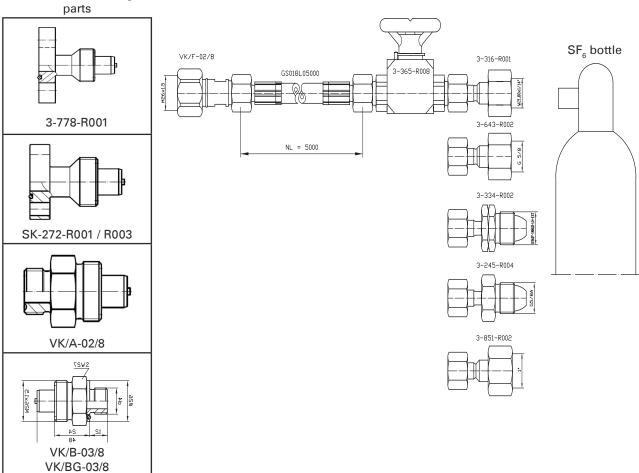


Storage connecting hose DN8

Order No.: 6-1041-R050



Suitable connecting



For your notes





SF₆ gas handling

Besides ${\rm SF_6}$ couplings and valves DILO supplies a wide range of devices for ${\rm SF_6}$ gas handling.

For further information please ask for our special leaflet.



High pressure tube unions

High pressure tube unions are DILO's second core competence. For further information please ask for our special leaflet.

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Tel: + 49 (0) 83 33 - 302-0 Fax: + 49 (0) 83 33 - 302-52 E-Mail: info@dilo-gmbh.com