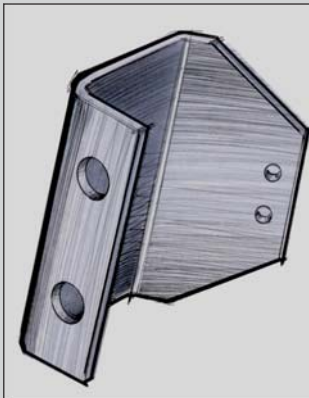
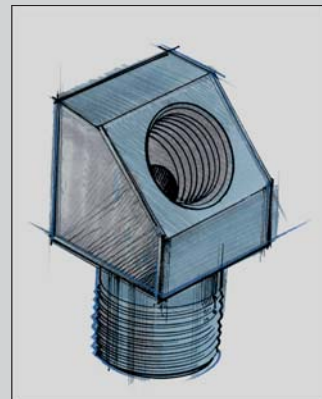
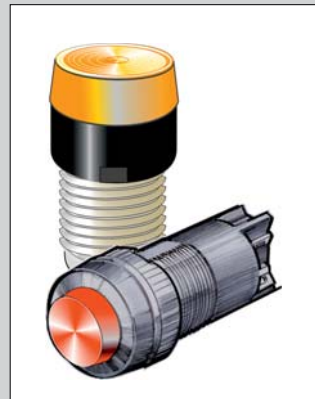
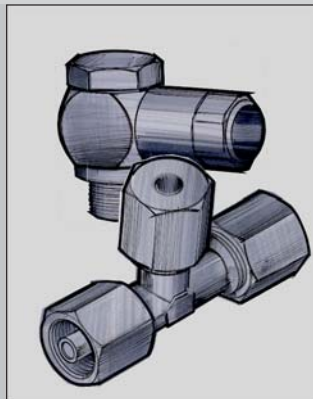
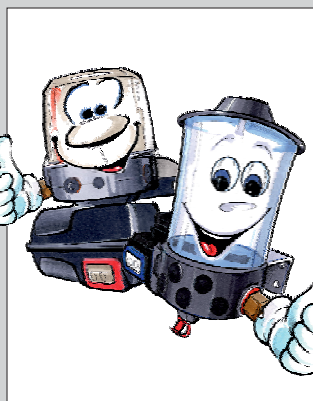
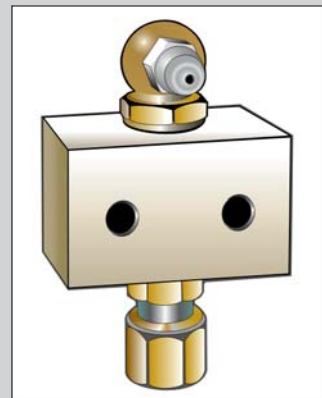


PARTS CATALOGUE



Technology
you can
rely on



Progressive central lubrication systems



Overview



BEKA

8.0 Parts catalogue for progressive central lubrication system

Table of Contents

Page

Electric pump and control units	8.1
Pump elements and accessories	8.2
Pump accessories	8.3
Manual pumps and filling presses	8.4
Progressive distributor MX-F	8.5
Progressive distributor SX-1	8.6
Progressive distributor SXE-2	8.7
Hoses, tubes and accessories	8.8
Fittings	8.9
Electric accessories	8.10
Accessory parts	8.11
Tools	8.12

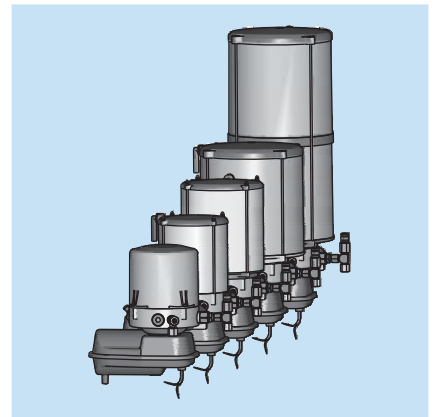


8.1 Electric pumps and control units

Table of Contents	Page
Electric pump EP-1 without control unit	8.1.2
Electric pump EP-1 with integrated control unit BEKA-troniX1 with bayonet connector	8.1.3
Integrated control unit BEKA-troniX1 for installation into the electric pump EP-1 and OC-1	8.1.4
Integrated control unit S-EP 4 for installation into the electric pump EP-1 and OC-1	8.1.5
Electric pump EP-1 with integrated control unit EP-tronic with bayonet connector	8.1.6
Integrated control unit EP-tronic for installation into the electric pump EP-1 and OC-1	8.1.7
Electric pump EP-1 with integrated control unit EP-tronic T1 with bayonet connector	8.1.8
Integrated control unit EP-tronic T1 for installation into the electric pump EP-1 and OC-1	8.1.9
Electric pump EP-1 with integrated control unit EP-T2 with bayonet connector	8.1.10
Integrated control unit EP-T2 for installation into the electric pump EP-1 and OC-1	8.1.10
Central lubrication pump PICO without control unit	8.1.11
Central lubrication pump PICO with integrated control unit PICO S-EP 4	8.1.11
Central lubrication pump PICO with integrated control unit PICO-tronic T1	8.1.11
Central lubrication pump PICO with integrated control unit PICO-T2	8.1.11
Integrated control unit PICO-tronic for installation into the central lubrication pump PICO	8.1.12
Integrated control unit PICO S-EP 4 for installation into the central lubrication pump PICO	8.1.13
Integrated control unit PICO-tronic T1 for installation into the central lubrication pump PICO	8.1.13
Integrated control unit PICO-T2 for installation into the central lubrication pump PICO	8.1.13
External control unit S-EP 6	8.1.14



Electric Pump EP-1



Order Key:

Construction type

2152 . XX . XX . XX . 000

Motor voltage

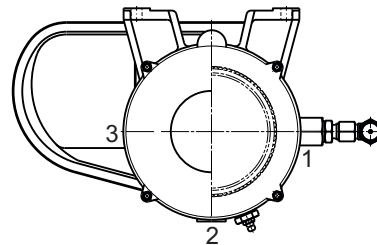
	without plug		with bayonet connector	
Voltage	12 V	24 V	12 V	24 V
Code	01	02	03	04

Pump elements	Outlet No		
	1	2	3
without	0	0	0
PE-60	1	1	1
PE-120	2	2	2
PE-120 V	3	3	3
PE-170	4	4	4

Fig.	Code	Fig.	Code	Fig.	Code	Fig.	Code	Fig.	Code
000	A0	100	F0	200	01	300	41	400	V0
001	A1	101	F1	201	K1	301	Q1	401	V1
002	A3	102	F2	202	K2	302	Q2	402	V2
003	A4	103	F3	203	K3	303	Q3	403	V3
004	A5	104	F4	204	K4	304	Q4	404	V4
010	B0	110	N0	210	L0	310	R0	410	W0
011	B1	111	G1	211	L1	311	R1	411	W1
012	B2	112	G2	212	L2	312	R2	412	W2
013	B3	113	G3	213	L3	313	R3	413	W3
014	B4	114	G4	214	L4	314	R4	414	W4
020	C0	120	H0	220	02	320	S0	420	X0
021	C1	121	H1	221	M1	321	S1	421	X1
022	C2	122	H2	222	03	322	S2	422	X2
023	C3	123	H3	223	M3	323	S3	423	X3
024	C4	124	H4	224	M4	324	S4	424	X4
030	D0	130	H5	230	52	330	42	430	Y0
031	D1	131	H6	231	N1	331	T1	431	Y1
032	D2	132	H7	232	N2	332	T2	432	Y2
033	D3	133	H8	233	53	333	43	433	Y3
034	D4	134	H9	234	N4	334	T4	434	Y4
040	E0	140	J0	240	P0	340	U0	440	Z0
041	E1	141	J1	241	P1	341	U1	441	Z1
042	E2	142	J2	242	P2	342	U2	442	Z2
043	E3	143	J3	243	P3	343	U3	443	Z3
044	E4	144	J4	244	P4	344	U4	444	Z4

Special variants 000

Ordering example pump elements:



1 PE-120 installed in outlet position 1:

Fig. = 200 -> Code = 01

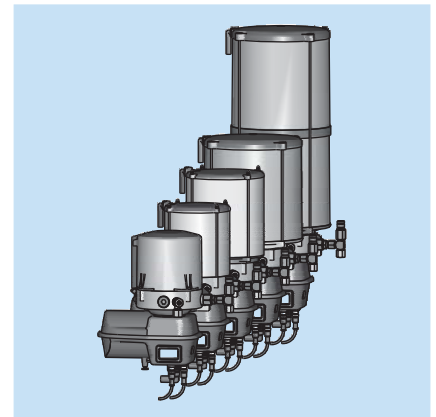
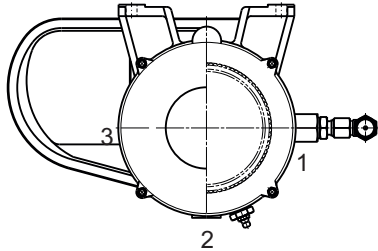
Reservoir size (kg)	1,9	2,5	4	8	16
Transparent reservoir					
without grease level control	27	25	30	35	37
with LM min. plug connection M12x1 in reservoir cover		51	52	53	
Reservoir size (kg)	2	4	8		
Steel reservoir					
without grease level control	31	26	36		

Special variants: 028 = Pump elements with microswitch
 257 = Pump elements with malfunction indicator and grease repatriation



EP-1 with integrated Control Unit BEKA-troniX1

Positions of outlets:



Order Key with integrated Control Unit BEKA-troniX1:

Construction type

2175 . 3 . 1 . E . 0 . 1 . 2 . 1 . 000

Motor voltage

with bayonet connector

12V

24V

3

4

Outlet	Pump element	without	PE-60	PE-120	PE-120 V	PE-170
Pos. 1	without micro switch	0	7	1	2	G
	with micro switch	0	A	D	N	H
Pos. 2	without micro switch	0	8	3	4	J
	with micro switch	0	B	E	P	K
Pos. 3	without micro switch	0	9	5	6	L
	with micro switch	0	C	F	A	M
Special variants		ZZZ				

Only one micro switch can be connected to the BEKA-troniX1 controller!

Size of reservoir (kg)	Transparent reservoirs					Steel reservoirs		
	1,9	4	2,5	8	16	2	4	8
without grease level monitoring	1	2	4	8	9	6	7	5
with LM min. plug connection M12x1 in reservoir cover		B	A	C				

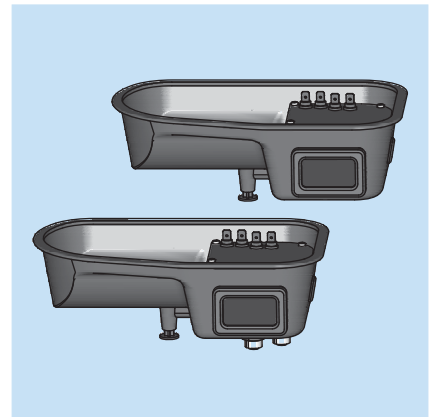
Additional equipment connected at controller	
without additional equipment	0
Grease level monitoring	1
System excess pressure monitoring	2
Grease level controller and system excess pressure monitoring	3
without connection to the controller (only connectors, not connected, not activated)	4

Parameter	Cycle duration		
Lubrication time	0.5 to 8 h	2 to 32 min.	2 to 32 h
I 1 to 16 min.	1	A	J
II 2 to 32 min.	2	B	K
III 2 to 32 sec.	3	C	L
Pump revolutions			
I 1 to 16	7	G	O
II 10 to 160	8	H	Q
III 170 to 320	9	I	R

Special models 000



Integrated Control Unit BEKA-troniX1 for EP-1 and OC-1



Order Key for integrated Control Unit BEKA-troniX1:

Construction type 2175 . 90 . 10 . 0 . A . 000

Connector version
with bayonet connector 10

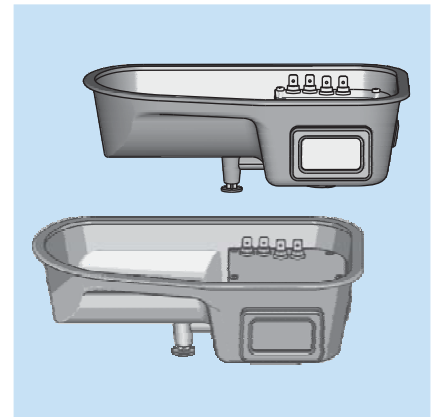
additional equipment	
without additional equipment	0
with grease level monitoring	1
with system excess pressure monitoring	2
with grease level monitoring and system excess pressure monitoring	3
with contact plugs (not activated)	4

Parameter		Cycle duration		
Lubrication time	0.5 to 8 h	2 to 32 min.	2 to 32 h	
I	1 to 16 min.	1	A	J
II	2 to 32 min.	2	B	K
III	2 to 32 sec.	3	C	L
Pump revolutions				
I	1 to 16	7	G	P
II	10 to 160	8	H	Q
III	170 to 320	9	I	R

Special models 000



Integrated Control Unit S-EP 4



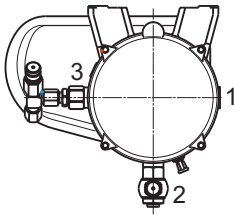
Order Key for Integrated Control Unit S-EP 4 with Bayonet Connector
for EP-1 and OC-1 (Lower Motor Housing)

Construction type			2147 . 90 . 10 . 2 . 1 . 00		
Connector version					
for Hirschmann connector	00				
for bayonet connector	10				
Lubrication time					
Time range I	1 min. to 16 min.	1			
Time range II	2 min. to 32 min.	2			
Button for interim lubrication	Yes	No			
Code	1	0			
Special type	00				



Electric Pump EP-1 with Integrated Control Unit EP-tronic

Ordering Example Pump Elements:

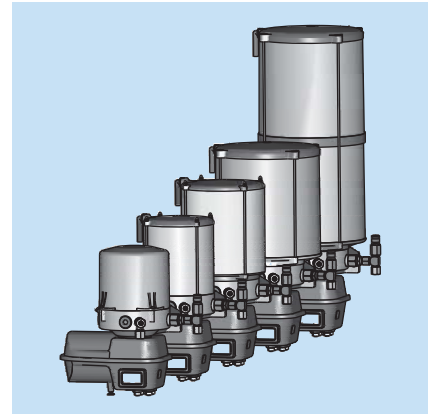


Order example:

Outlet position: 1 2 3

Fig.: 0 2 1

Code: 9



Order Key EP-1 with Integrated Control Unit EP-tronic

with Bayonet connector

Construction type

2157.3.1.2.0.A.0.0000

Motor voltage

with bayonet connector

12V

24V

3

4

Fig.

1 1 2 3 4 0

2 1 2 3 4 0

3 1 2 3 4 0

Outlet position
PE-120
PE-120 V
PE-60
PE-170
without

001	G	Special variants				Z
010	H	002	K	003	N	004 R
011	J	020	L	030	P	040 S
100	1	022	M	033	Q	044 T
110	2	200	4	300	V	400 D
111	3	220	5	330	B	440 E
120	7	222	6	333	C	444 F
102	W	021	9	122	8	123 U
Fig.	Code	Fig.	Code	Fig.	Code	Fig. Code

Other combinations of pump elements on demand!

Transparent reservoirs

Steel reservoirs

Size of reservoir (kg)

1,9 4 2,5 8 16 2 4 8

without grease level monitoring

1 2 4 8 K A B C

with LM min. plug connection M12x1 in reservoir cover

N M P

Additional equipment

Without

0

Attached to controller

System pressure P_{max.}

1

Grease level monitoring

2

System excess pressure monitoring and grease level controller

3

Parameter	Cycle duration			
Lubricating time	0.5 to 8 h	2 to 32 min.	2 to 32 h	
I 1 to 16 min.	1	A	J	
II 2 to 32 min.	2	B	K	
III 2 to 32 sec.	3	C	L	
Strokes				
I 1 to 16 Strokes	4	D	M	
II 17 to 32 Strokes	5	E	N	
III 33 to 48 Strokes	6	F	O	
Pump revolutions				
I 1 to 16	7	G	P	
II 10 to 160	8	H	Q	
III 170 to 320	9	I	R	

With collective error notification (stat. error) (Standard)

1

With starter enabling device

2

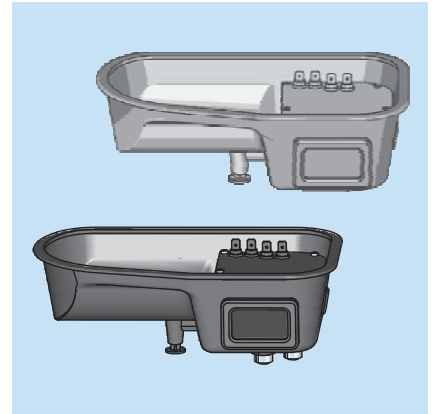
Special models 0000

All additional functions of time periods can be activated or set later with the system analysis software on PC.

8.1.6



Integrated Control Unit EP-tronic for EP-1 and OC-1



Order Key for Integrated Controller EP-tronic

Order-No.: _____ **2157 . 90 . 00 . X . X . X . 00**

Connector version	
for Hirschmann connector	00
for bayonet connector	10

Additional Equipment at Hirschmann connector type	
Without	0
Connected to Control Unit	
System Pressure P max.	1
Grease Level Control	2
Observance of System Pressure and Grease Level Control	3

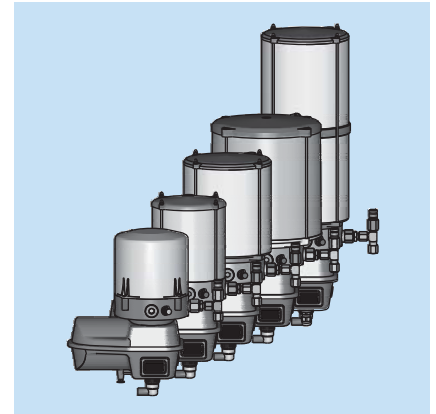
Additional equipment at bayonet connector type	
Without	0
Attached to controller	
System pressure P _{max.}	1
Grease level monitoring	2
System excess pressure monitoring and grease level controller	3

Parameter		Cycle Time		
Lubrication Time		0.5 up to 8 h	2 up to 32 min.	2 up to 32 h
I	1 up to 16 min.	1	A	J
II	2 up to 32 min.	2	B	K
III	2 up to 32 sec.	3	C	L
Strokes				
I	1 up to 16 Strokes	4	D	M
II	17 up to 32 Strokes	5	E	N
III	33 up to 48 Strokes	6	F	O
Rotations of Pump				
I	1 up to 16	7	G	P
II	10 up to 160	8	H	Q
III	170 up to 320	9	I	R

With Collective Disturbance Report (Constant Error)	1
With Ignition Release	2

Special Model 00


Electric Pump EP-1 with integrated Control Unit EP-tronic T1



Order Key for Electric Pump EP-1 with integrated Control Unit EP-tronic T1 with Bayonet connector

Construction type		2183 . X . X . X . X . X . XXXX									
Motor voltage											
with bayonet connector											
12 V	24 V										
3	4										

	Fig.				
1	1	2	3	4	0
2	1	2	3	4	0
3	1	2	3	4	0

Outlet position	PE-120	PE-120 V	PE-60	PE-170	without

Fig.	Code	Fig.	Code	Fig.	Code	Fig.	Code
001	G	002	K	003	N	004	R
010	H	020	L	030	P	040	S
011	J	022	M	033	Q	044	T
100	1	200	4	300	V	400	D
110	2	220	5	330	B	440	E
111	3	222	6	333	C	444	F
120	7	021	9	122	8	123	U
Special variants							Z

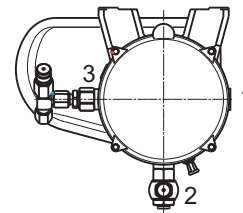
Other combinations of pump elements on demand!

Size of reservoir	1.9 kg	2.5 kg	4 kg	8 kg
Code	1	4	2	8

Integrated electronic controller EP-tronic T1				
Lubrication time range	Cycle time range			
	0.5 h to 8 h	2 min. to 32 min.	2 h to 32 h	
I 1 min. to 16 min.	1	A	J	
II 2 min. to 32 min.	2	B	K	
III 2 sec. to 32 sec.	3	C	L	

Button for interim lubrication	without	with
Code	0	1

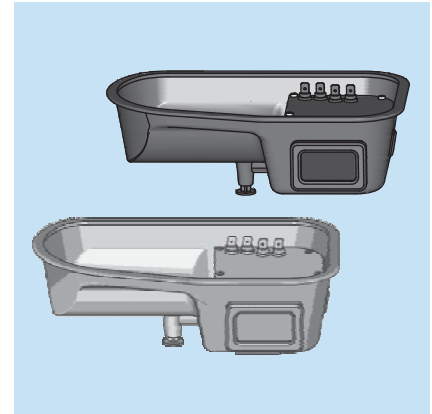
Special types	without
Code	0000



Order example:
 Outlet position: 1 2 3
 Fig.: 0 2 1
 Code: 9



Integrated Control Unit EP-tronic T1 for EP-1 and OC-1



Order Key for Integrated Control Unit EP-tronic T1

Construction type 2183 . 90 . 10 . X . X . XXXX

Connector version	
for Hirschmann connector	00
with bayonet connector	10

Integrated electronic controller EP-tronic T1				
Lubrication time range		Cycle time range		
		0.5 h to 8 h	2 min. to 32 min.	2 h to 32 h
I	1 min. to 16 min.	1	A	J
II	2 min. to 32 min.	2	B	K
III	2 sec. to 32 sec.	3	C	L

Button for interim lubrication	without	with
Code	0	1

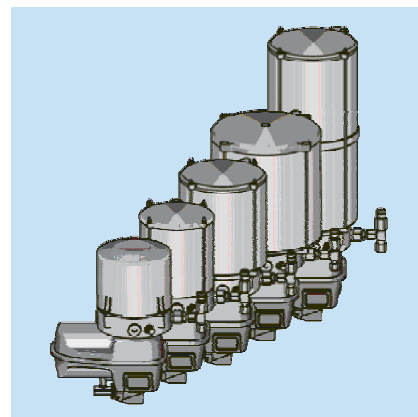
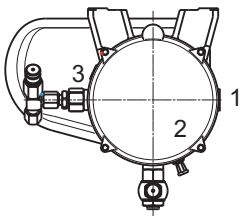
Special types	without
Code	0000

Date of issue Okt. 2004



EP-1 with integrated control unit EP-T2 and Integrated Control Unit EP-T2

Positions of outlets:



Order Key for EP-1 with integrated control unit EP-T2

Construction type		2184 . X . X . X . X . X . X . XXX				
Motor voltage						
with bayonet connector						
12 V	24 V					
3	4					
Code						
1	1	2	3	4	0	Z
2	1	2	3	4	0	Z
3	1	2	3	4	0	Z
Outlet-no.	PE-120	PE-120 V	PE-60	PE-170	without	Special variants
Size of reservoir		1,9 kg	2,5 kg	4 kg	8 kg	
Code		1	4	2	8	
Integrated electronic control unit EP-T2						
Lubricating time range		Code				
1 sec. to 60 sec.		1				
Special types	without					
Code	000					

Updated: 11.2012

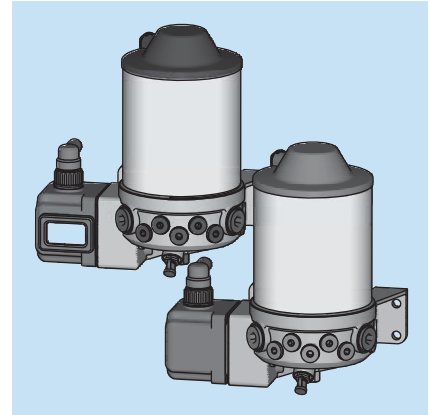
Order Key for integrated control unit EP-T2

Construction type		2184 . 90 . 10 . X . XXXXX			
Connector version					
with bayonet connector		10			
Integrated electronic controller EP-T2					
Lubricating time range		Code			
1 sec. to 60 sec.		1			
Special types	without				
Code	00000				

Updated: January 2006



Central Lubrication Pump Pico



Order Key for Electric Pump PICO

without Controller,

with integrated Control Unit PICO S-EP 4, PICO-tronic T1 or PICO-T2

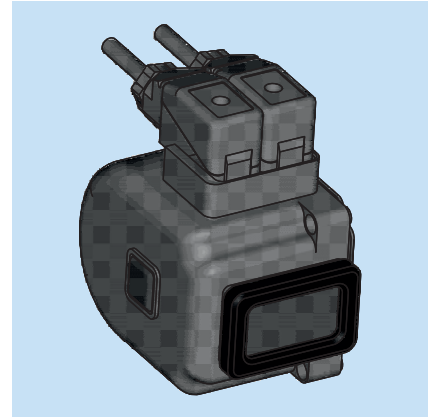
with Bayonet Connector

Order-No.					2185 . X . X . X . X . X . XXXX	
with Bayonet Connector						
Motor voltage	12 V	24 V				
Number	3	4				
Pump elements	Outlet-No.				Note: Pump elements PE-5 up to PE-50 must be ordered separately!	
	4	10	4+10	without		
PE-120F	1	2	3	0		
PE-120FV	4	5	6			
PE-120F + PE-120FV	X		7			
PE-120F + PE-120FV		X	8			
PE-120F + PE-120FV	X					
Container size	1.2 kg					
Number	1					
Sort of control unit	without	PICO S-EP 4	Trailers and semi-trailers PICO-tronic T1	Trailers and semi-trailers PICO-T2		
Number	1	2	3	5		
without	0					
PICO S-EP 4						
Lubrication time range	Cycle time range					
	0.5 h up to 8 h					
I 1 min. up to 16 min.	Z					
II 2 min. up to 32 min.	T					
PICO-tronic T1 for trailers and semi-trailers						
Lubrication time range	Cycle time range					
	0.5 h up to 8 h	2 min. up to 32 min.	2 h up to 32 h			
I 1 min. up to 16 min.	1	A	J			
II 2 min. up to 32 min.	2	B	K			
III 2 sec. up to 32 sec.	3	C	L			
PICO-T2 for trailers and semi-trailers						
Lubrication time range						
1 sec. up to 1 min.	1					
Special variants	without					
Number	0000					

Stand Feb. 2007



Integrated control for central Lubrication Pump PICO



Order-No. for integrated Control unit PICO-tronic

Order-No.: _____ 2185 . 900. .4 . X . XXXX

Model of Control Unit	PICO-tronic
Order-No.	4

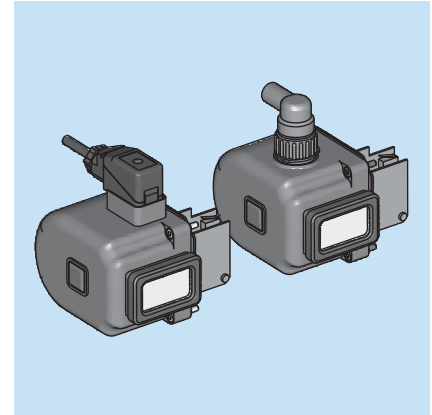
at PICO-tronic				
Lubrication Time		Cycle Time		
		0.5 h up to 8 h	2 min. up to 32 min.	2 h up to 32 h
I	1 min. up to 16 min.	1	A	L
II	2 min. up to 32 min.	2	B	K
III	2 sec. up to 32 sec.	3	C	L
Strokes				
I	1 up to 16 Strokes	4	D	M
II	17 up to 32 Strokes	5	E	N
III	33 up to 48 Strokes	6	F	O
Rotations of pump				
I	1 up to 16 Rotations	7	G	P
II	10 up to 160 Rotations	8	H	Q
III	170 up to 320 Rotations	9	I	R

Special Model	without
Order-No.	0000

Updated March 2001



Integrated control for central Lubrication Pump PICO



Order-No. for integrated Control unit PICO S-EP 4

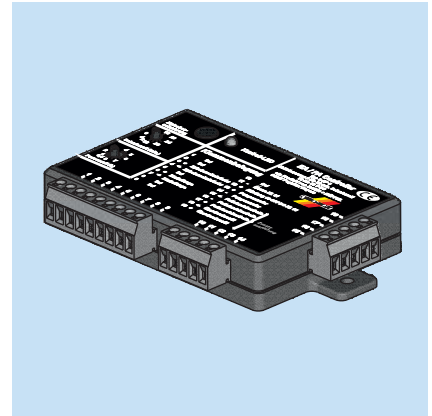
Type	Lubrication Time	Cycle Time	Order-No.
for bayonet connector 7 pol.	2 min. up to 32 min.	0.5 h up to 8 h	21859002T
	1 min. up to 16 min.		21859002Z
for bayonet connector 4 pol.	2 min. up to 32 min.	0.5 h up to 8 h	2185.9002.T.0002
	1 min. up to 16 min.		2185.9002.Z.0002
for Hirschmann connector	2 min. up to 32 min.	0.5 h up to 8 h	2185.9002.T
	1 min. up to 16 min.		2185.9002.Z

Order Key for integrated Control Unit PICO-tronic T1 and PICO-T2

Order-No.:		2185 . 90 . 0 . 3 . X . 0000		
Connector version				
for Hirschmann connector	00			
for bayonet connector	10			
Model of Control Unit	PICO-tronic T1	PICO-T2		
Order-No.	3	5		
at Trailers and Semitrailers PICO-tronic T1				
Range of Lubrication Time		Range of Cycle Time		
		0.5 h up to 8 h	2 min. up to 32 min.	2 h up to 32 h
I	1 min. up to 16 min.	1	A	J
II	2 min. up to 32 min.	2	B	K
III	2 sec. up to 32 sec.	3	C	L
at Trailers and Semitrailers PICO-T2				
Lubricating time range		Code		
1 sec. to 60 sec.		1		
Special Model	0000			



External Control Unit S-EP 6



Order Key for external Control Unit S-EP 6

Order-No.: _____ 2166 . 9000 . X . X . 00

Mode of Operation	
Control by Time	Range of Lubrication Time
	1 min. up to 16 min. 1
	2 min. up to 32 min. 2
Control by Strokes	3
Control by revolutions	4

Connector for Special Functions	
Yes	1
No	0

Special Models 00



8.2 Pump elements and accessories

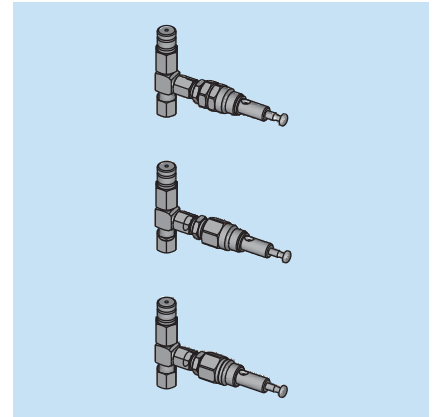
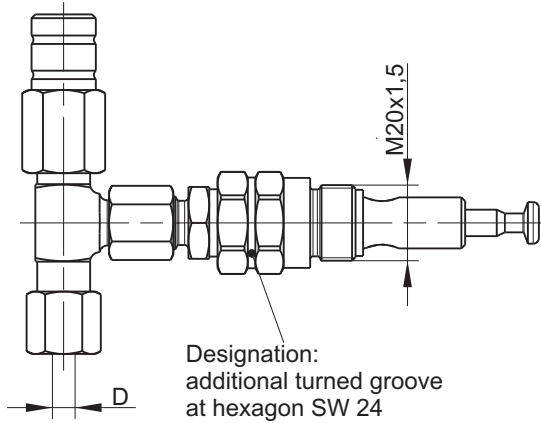
Table of Contents	Page
Pump elements	
Pump elements PE-60 to PE-170 with pressure relief valve	8.2.2
Pump element PE-120 V with pressure relief valve	8.2.3
Pump element PE-120 F with pressure relief valve	8.2.4
Pump element PE-120 FV with pressure relief valve	8.2.5
Pump elements PE-5 to PE-50	8.2.6
Pump elements with lubrication nipple	8.2.7
Pump elements PE-60 to PE-170 without pressure relief valve	8.2.8
Pump elements PE-60F to PE-170F without pressure relief valve	8.2.9
Pump elements PE-120 V and PE-120 FV without pressure relief valve	8.2.10
Pressure relief valves	
Pressure relief valve for PE-60 to PE-170 and PE-120 F	8.2.11
Pressure relief valve for PE-120 V and PE-120 FV	8.2.11
Pressure relief valve with lubrication nipple	8.2.12
Pressure relief valve with micro switch with cable one-sided	8.2.13
Pressure relief valve with micro switch with cable and angled plug M12x1	8.2.13
Accessories	
Malfunction indicator on pressure relief valve	8.2.14
Reduction	8.2.15
Screwed non-return valve	8.2.15



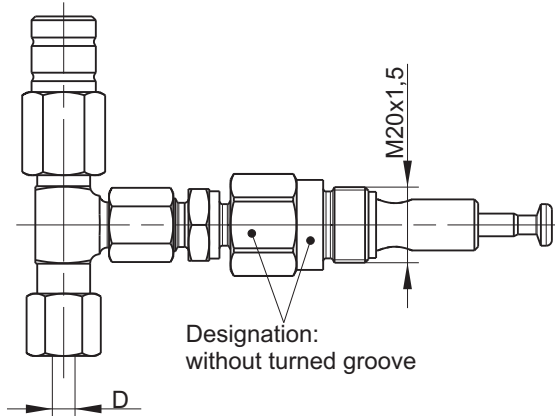
Pump elements

not adjustable delivery quantity, with pressure relief valve
for electric Pump EP-1

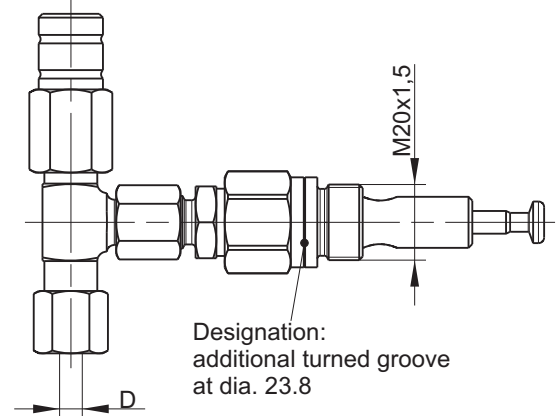
Pic. 1:
PE-170



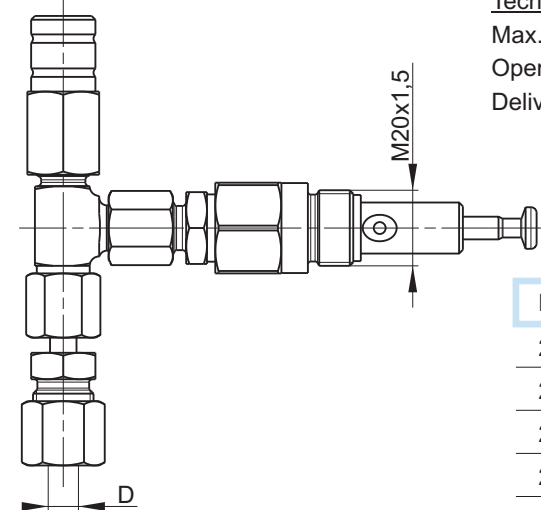
Pic. 2:
PE-120



Pic. 3:
PE-60



Pic. 4:
Pipe connection dia. 8:



Technical data:

Max. operating pressure:

adjusted to 280 bar

Operating temperature:

-35°C to +70°C

Delivery media:

Greases up to NLGI-cl. 2
(excluding solid lubricants)
Mineral oils from 40 mm²/s (cSt)

Part-No.	D	Delivery quantity	Pic.	Material
2152 990 69 0000	6	170 mm ³ /stroke	1	Steel
2152 990 69 0001	8	170 mm ³ /stroke	4	Steel
2152 990 61 0000	6	120 mm ³ /stroke	2	Steel
2152 990 61 0001	8	120 mm ³ /stroke	4	Steel
2152 990 67 0000	6	60 mm ³ /stroke	3	Steel

All parts made of steel are zinc coated and yellow chromated.

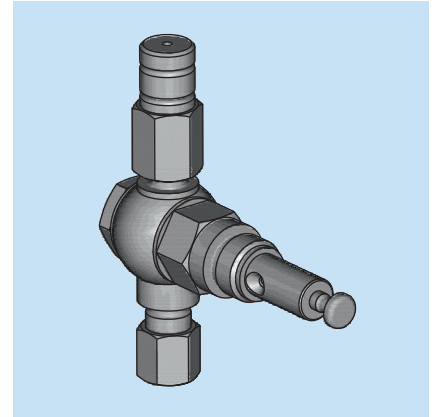
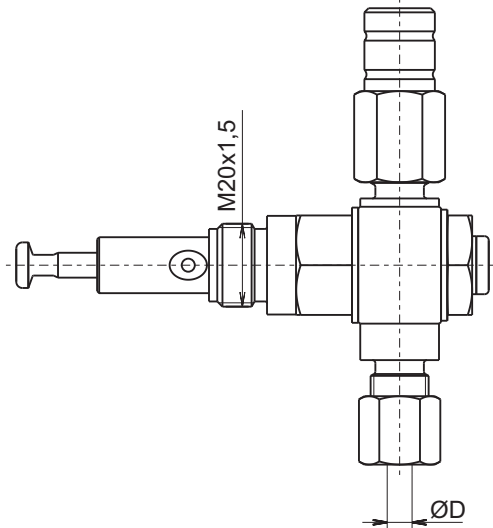
8.2.2



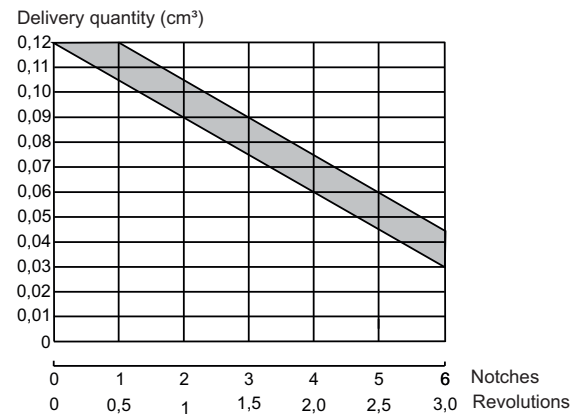
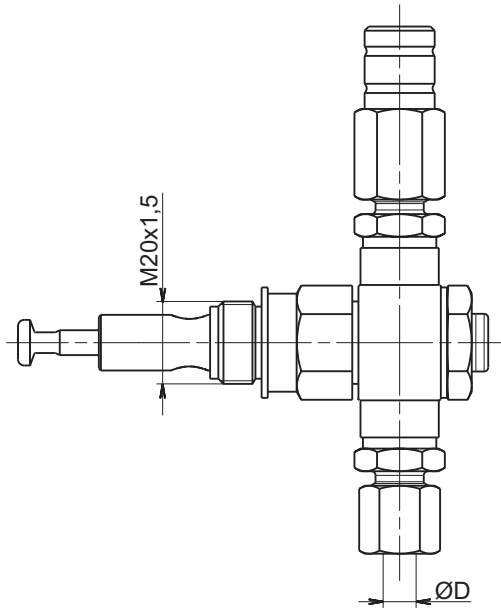
Pump element PE-120V

adjustable delivery quantity, with pressure relief valve
for electric Pump EP-1

Pic. 1:



Pic. 2:



Technical data:

Delivery quantity: 40 mm³/stroke to 120mm³/stroke
 Max. operating pressure: adjusted to 280 bar
 Operating temperature: -35°C to +70°C
 Delivery media: Greases up to NLGI-cl. 2
 (excluding solid lubricants)
 Mineral oils from 40 mm²/s (cSt)

Part-No.	D	Pic.	Material
2152 990 63 0000	6	1	Steel
2152 990 63 0001	8	2	Steel

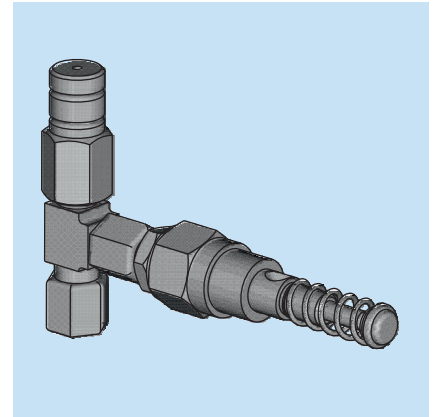
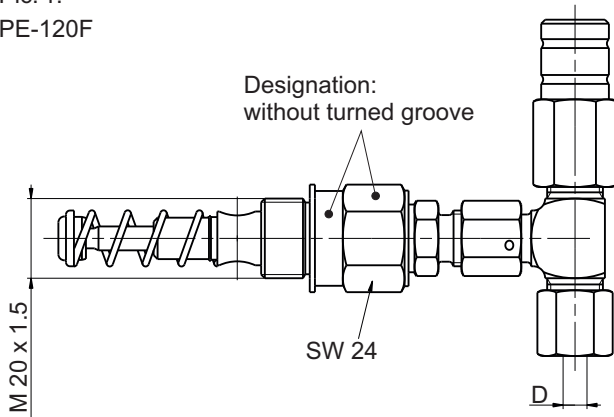
All parts made of steel are zinc coated and yellow chromated.



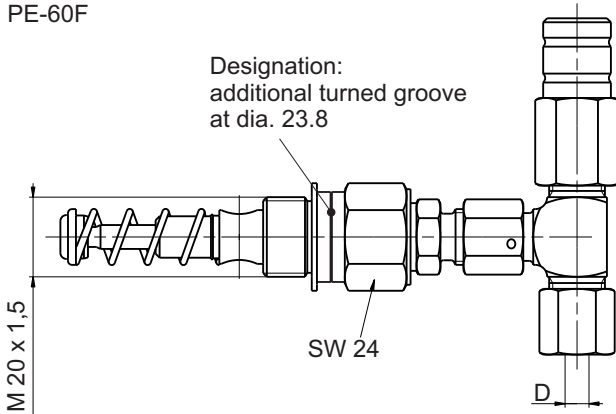
Pump Element

not adjustable delivery quantity, with pressure relief valve
for Central Lubrication Pump Pico

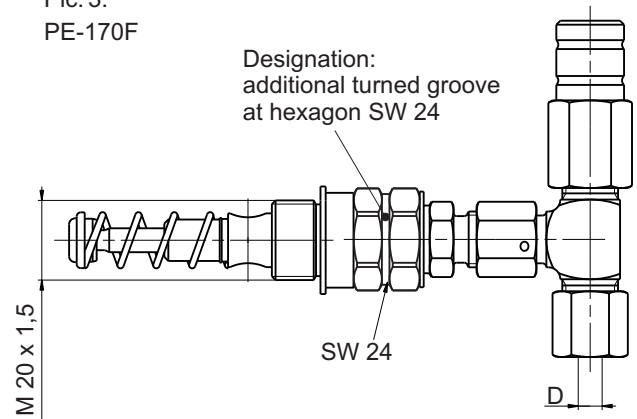
Pic. 1:
PE-120F



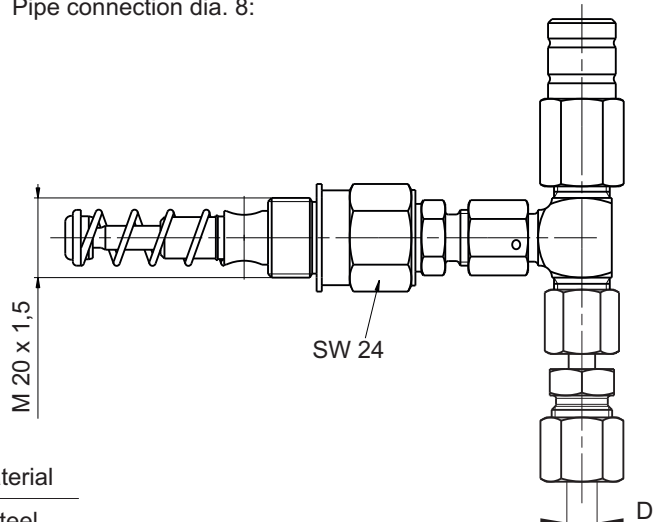
Pic. 2:
PE-60F



Pic. 3:
PE-170F



Pic. 4:
Pipe connection dia. 8:



Technical data:

Max. operating pressure: adjusted to 280 bar
Operating temperature: -35°C to +70°C
Delivery media: Greases up to NLGI-cl. 2
(excluding solid lubricants)
Mineral oils from 40 mm²/s (cSt)

Part-No.	D	Delivery quantity	Pic.	Material
2152 990 67 1003	6	60 mm ³ /stroke	2	Steel
2185 990 61 0000	6	120 mm ³ /stroke	1	Steel
2185 970 61 0000	6	120 mm ³ /stroke	1	stainless
2185 990 61 0001	8	120 mm ³ /stroke	4	Steel
2185 990 69 0000	6	170 mm ³ /stroke	3	Steel

All parts made of steel are zinc coated and yellow chromated.



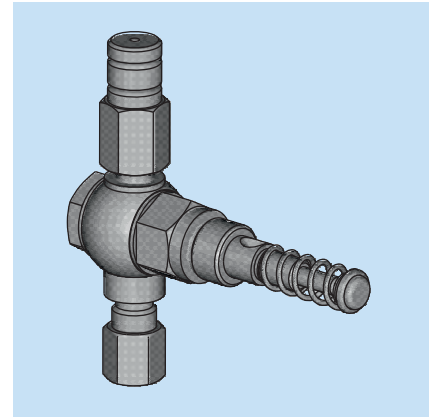
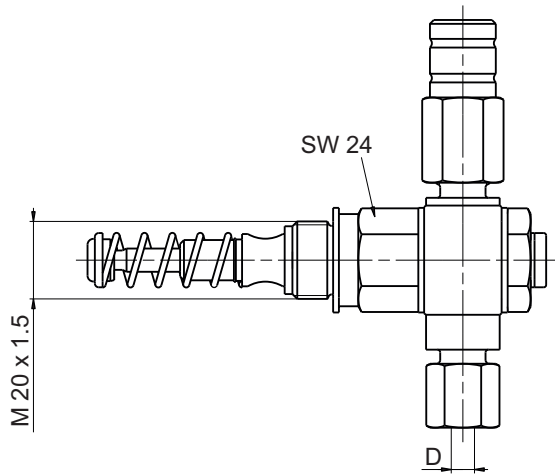


Pump Element PE-120FV

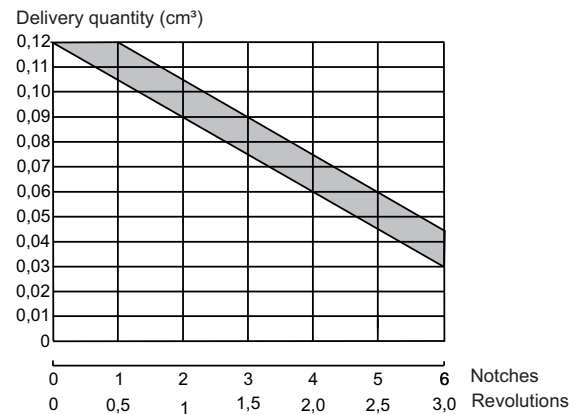
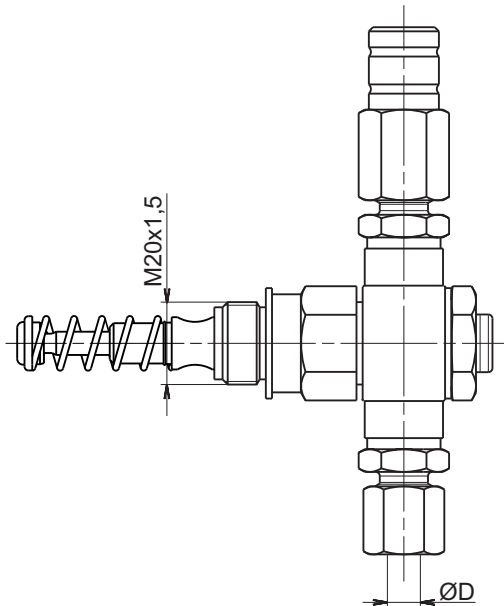
with pressure relief valve

for Central Lubrication Pump Pico

Pic. 1:



Pic. 2:



Technical data:

Delivery quantity: 40 mm³/stroke to 120mm³/stroke
 Max. operating pressure: adjusted to 280 bar
 Operating temperature: -35°C to +70°C
 Delivery media: Greases up to NLGI-cl. 2
 (excluding solid lubricants)
 Mineral oils from 40 mm²/s (cSt)

Part-No.	D	Pic.	Material
2185 990 63 0000	6	1	Steel
2185 990 63 0002	8	2	Steel

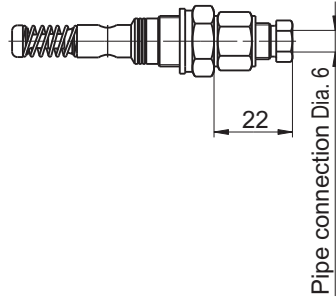
All parts made of steel are zinc coated and yellow chromated.



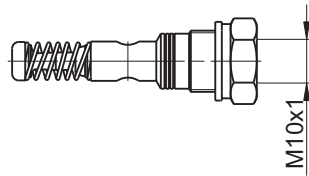
Pump Element PE-5 up to PE-50

for Central Lubrication Pump Pico

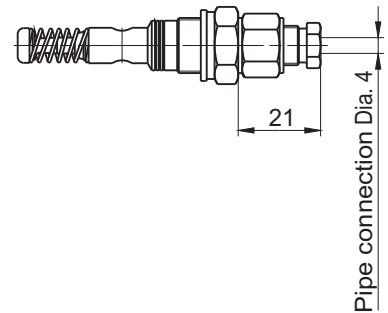
with Cap Screw and Double Cone Olive for Pipes Dia. 6:
(Standard)



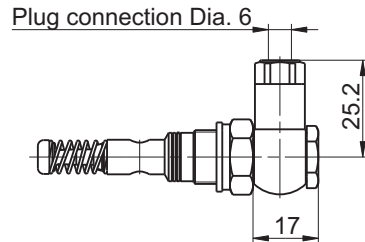
with Threaded Joint M10x1



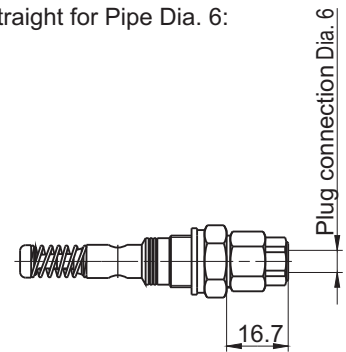
with Cap Screw and Double Cone Olive for Pipe Dia. 4:



with Plug-in Connection 90° for Pipe Dia. 6:



with Plug-in Connection straight for Pipe Dia. 6:



Order Key:

Order-No. 2154 . 9000 . 01

Name	Delivery Quantity/Stroke	
PE-5	5 mm ³	9001
PE-10	10 mm ³	9002
PE-15	15 mm ³	9003
PE-25	25 mm ³	9000
PE-50	50 mm ³	9010

Connection Name	
Threaded Joint M10x1	00
Pipe Connection Dia. 6 with ÜS6 and DKR6	01
Plug-in Connection straight for Pipe Dia. 6	02
Plug-in Connection 90° for Pipe Dia. 6	03
Pipe Connection Dia. 4 with ÜS4 and DKR4	04

All parts made of steel are zinc coated and yellow chromated.



Pump element with lubricating nipple

Dimensional drawing:

Fig. 1:

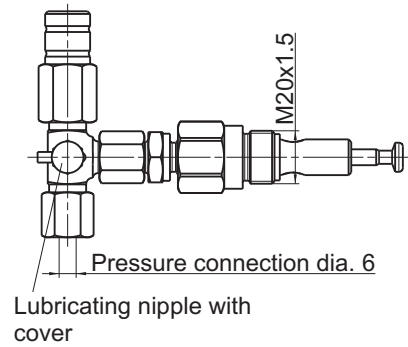


Fig. 2:

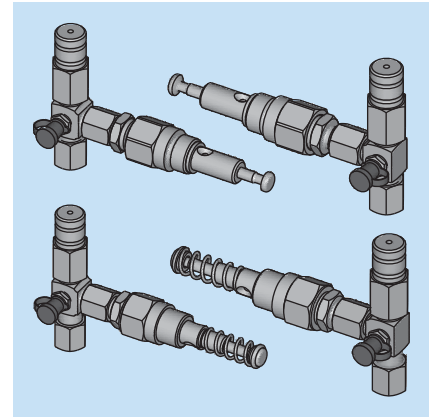
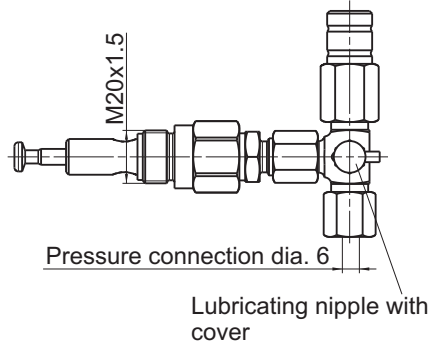


Fig. 3:

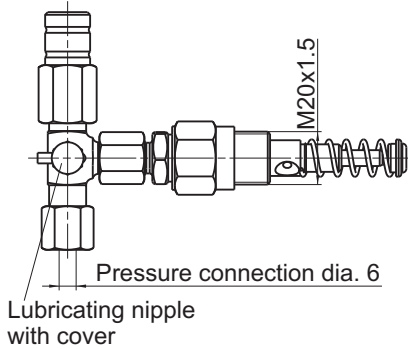
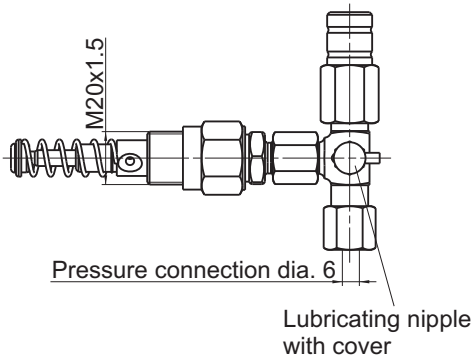


Fig. 4:



Technical data:

Max. operating pressure: adjusted to 280 bar
 Operating temperature: -35°C to +70°C
 Delivery media: Greases up to NLGI-cl. 2
 (excluding solid lubricants)
 Mineral oils from 40 mm²/s (cSt)

Article-nr.	Designation	Output rate	for installation into pump	Fig.	Material
2152 990 69 4000	PE-170	170 mm ³ /stroke	EP-1 / HP-1	1	Steel
2152 990 69 5000	PE-170	170 mm ³ /stroke	EP-1 / HP-1	2	Steel
2152 990 61 4000	PE-120	120 mm ³ /stroke	EP-1 / HP-1	1	Steel
2152 990 61 5000	PE-120	120 mm ³ /stroke	EP-1 / HP-1	2	Steel
2152 990 67 4000	PE-60	60 mm ³ /stroke	EP-1 / HP-1	1	Steel
2152 990 67 5000	PE-60	60 mm ³ /stroke	EP-1 / HP-1	2	Steel
2185 990 61 4000	PE-120F	120 mm ³ /stroke	PICO	3	Steel
2185 990 61 5000	PE-120F	120 mm ³ /stroke	PICO	4	Steel

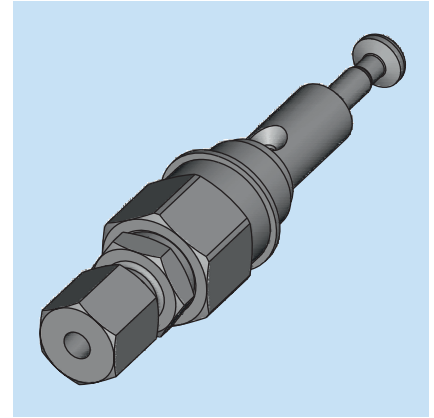
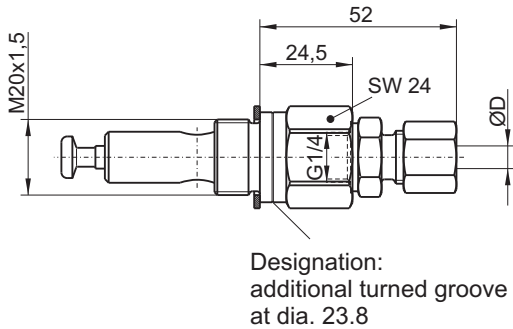
All parts made of steel are galvanized, yellow chromated.
 Lubricating nipple cap: plastic red



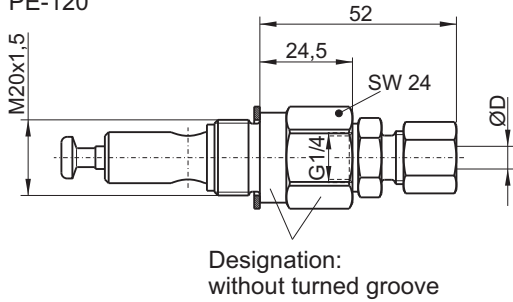
Pump elements

not adjustable delivery quantity, without pressure relief valve
for electric Pump EP-1

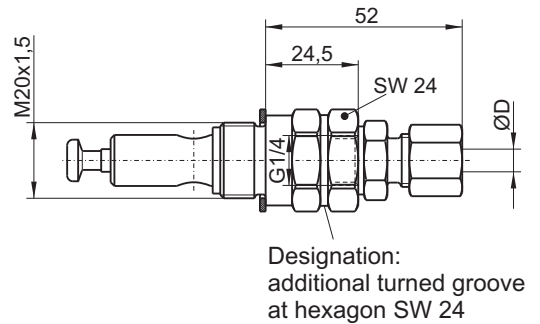
Pic. 1:
PE-60



Pic. 2:
PE-120



Pic. 3:
PE-170



Technical data:

Operating temperature: -35°C to +70°C

Delivery media: Greases up to NLGI-cl. 2
(excluding solid lubricants)
Mineral oils from 40 mm²/s (cSt)

Part-No.	D	Delivery quantity	Pic.	Material
2152 990 67 0100	6	60 mm ³ /Hub	1	Steel
2152 990 61 0100	6	120 mm ³ /Hub	2	Steel
2152 990 69 0100	6	170 mm ³ /Hub	3	Steel

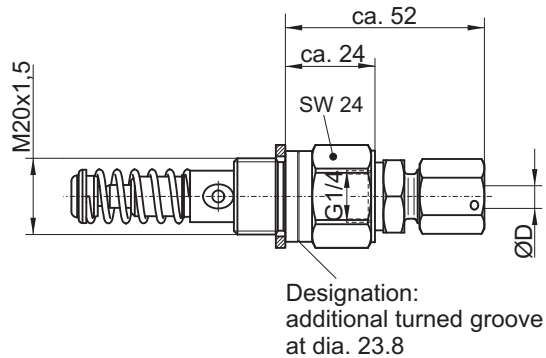
All parts made of steel are zinc coated and yellow chromated.



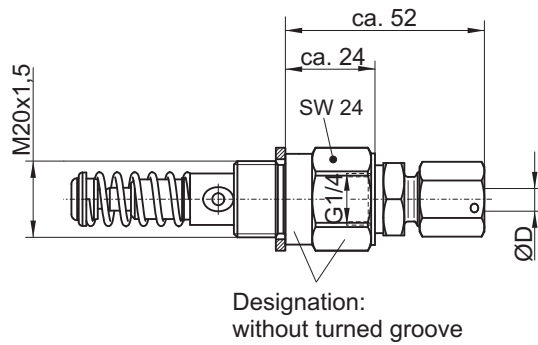
Pump Element

not adjustable delivery quantity, with pressure relief valve
for Central Lubrication Pump Pico

Pic. 1:
PE-60



Pic. 2:
PE-120



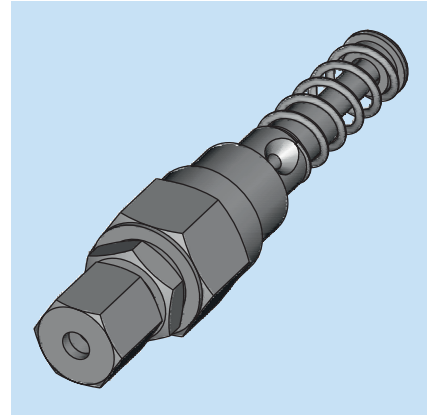
Technical data:

Operating temperature: -35°C to +70°C

Delivery media: Greases up to NLGI-cl. 2
(excluding solid lubricants)
Mineral oils from 40 mm²/s (cSt)

Part-No.	D	Delivery quantity	Pic.	Material
2152 990 67 1000	6	60 mm ³ /Hub	1	Steel
2185 990 61 0100	6	120 mm ³ /Hub	2	Steel

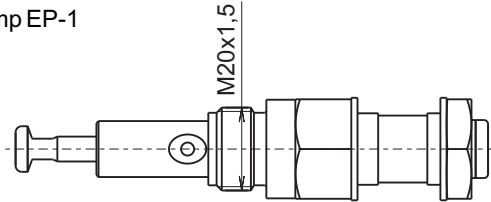
All parts made of steel are zinc coated and yellow chromated.



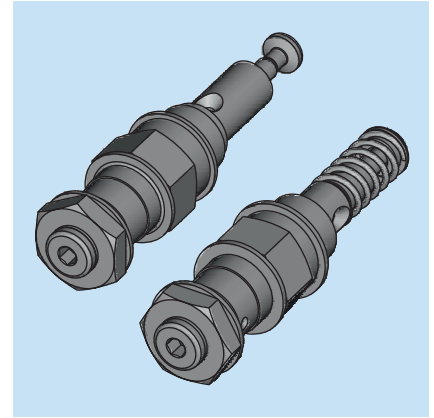
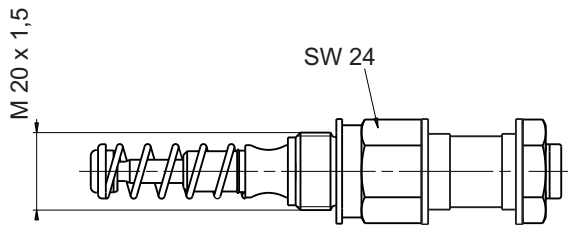
Pump elements

adjustable delivery quantity, without pressure relief valve

Pic. 1:
PE-120 V
for electric Pump EP-1

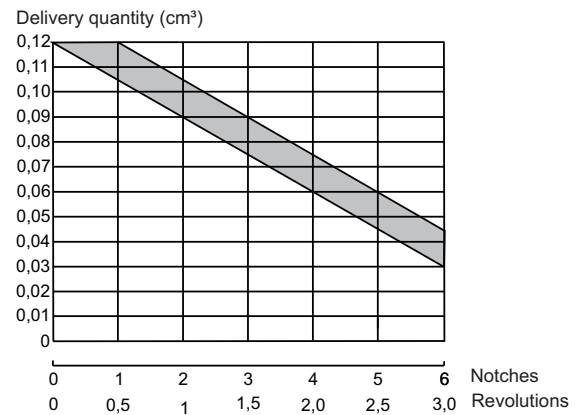


Pic. 2:
PE-120 FV
for Central Lubrication Pump Pico



Technical data:

Delivery quantity: 40 mm³/stroke to 120mm³/stroke
Operating temperature: -35°C to +70°C
Delivery media: Greases up to NLGI-cl. 2
(excluding solid lubricants)
Mineral oils from 40 mm²/s (cSt)



Part-No.	Pic.	Material
2152 990 63 0014	1	Steel
2185 990 63 0112	2	Steel

All parts made of steel are zinc coated and yellow chromated.



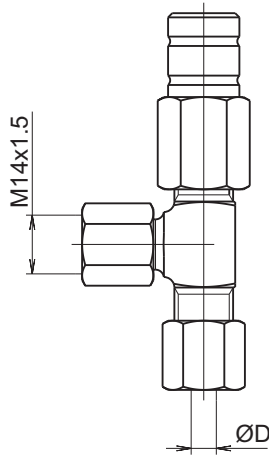


Pressure Relief Valve

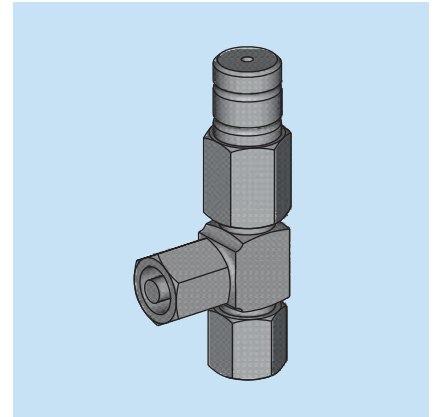
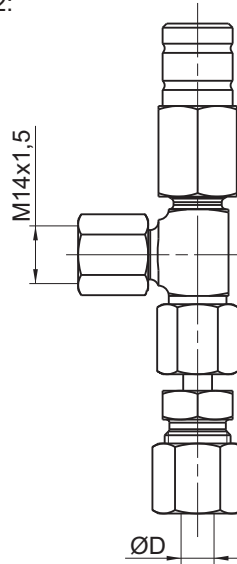
for pump elements PE60, PE-120, PE170, PE-60F, PE120F and PE-170F

Max. operating pressure adjusted to: 280 bar

Pic.. 1:



Pic. 2:



Part-No.	D	Pic.	Material
2152 0062	6	1	Steel
2152 0060	8	2	Steel

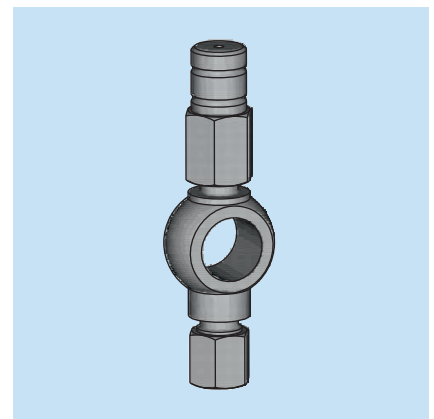
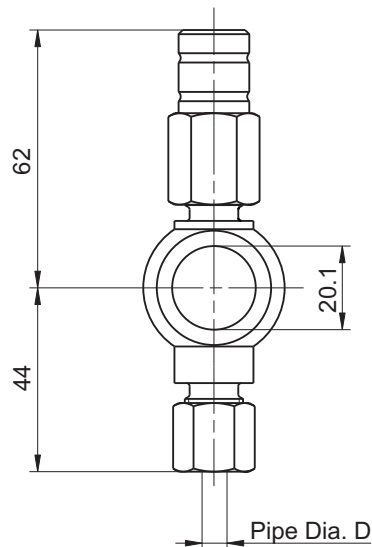
All parts made of steel are zinc coated and yellow chromated.

Pressure Relief Valve

for pump elements PE-120V and PE-120FV

Max. operating pressure adjusted to: 280 bar

Pic. 1:



Part-No.	D	Pic.	Material
2152 0063	6	1	Steel

All parts made of steel are zinc coated and yellow chromated.



Pressure relief valve with lubricating nipple

for pump elements PE60, PE-120, PE170, PE-60F, PE-120F and PE-170F
preadjusted to 280 bar opening pressure

Dimensional drawing

Fig. 1:

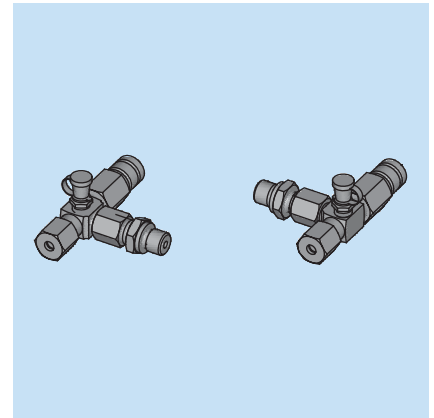
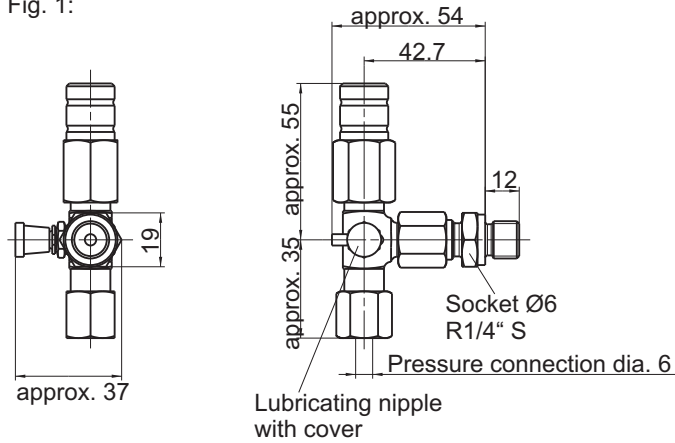
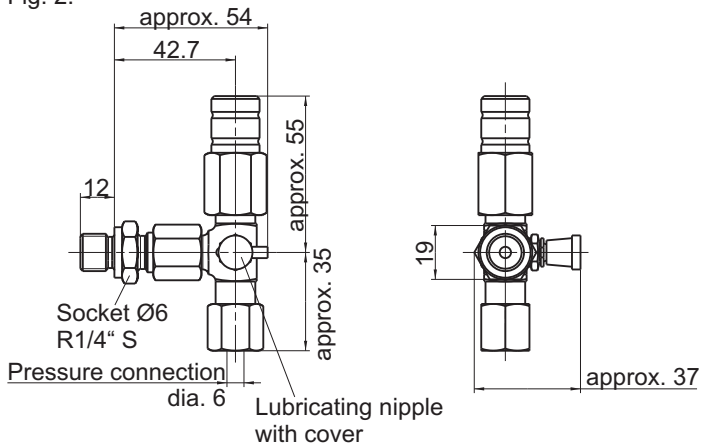


Fig. 2:



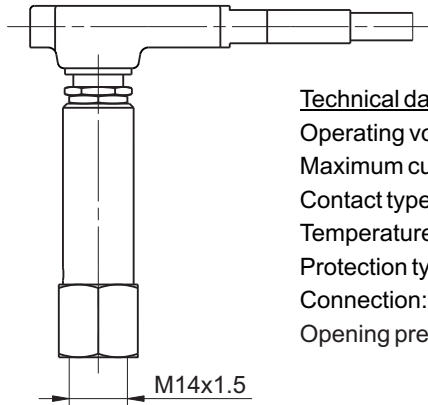
Article-nr.	Fig.	Socket dia. 6	Material
21520067	1	with	Steel
21520068	1	without	Steel
21520075	2	with	Steel
21520076	2	without	Steel

All parts made of steel are galvanized, yellow chromated.
Lubricating nipple cap: plastic red

Pressure relief valve with micro switch

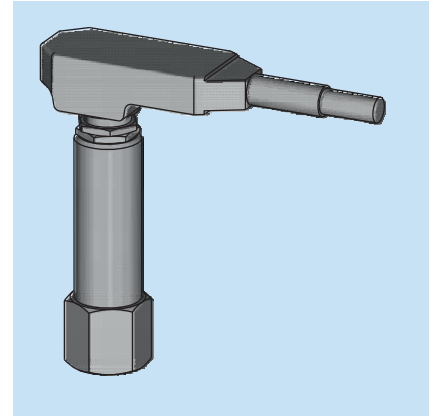
for PE-60 to PE-170; PE-120F; PE-120 V und PE-120 FV
with cable one-sided

Dimensions:



Technical data:

Operating voltage:	10 to 60 V DC
Maximum current load:	I = 1.7 A
Contact type:	1 changeover switch
Temperature range:	-25°C to +85°C
Protection type:	IP 67
Connection:	Cable, length 0.5 m, heat-sealed
Opening pressure:	preadjusted to 280 bar



Article-no.	Material
2152 9906 10028	steel

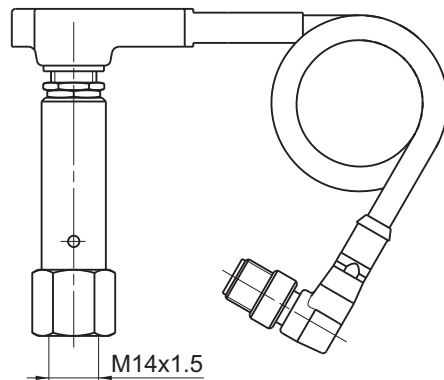
All parts made of steel are galvanized, yellow chromated.

Pressure relief valve with micro switch

for PE-60 to PE-170; PE-120F; PE-120 V and PE-120 FV

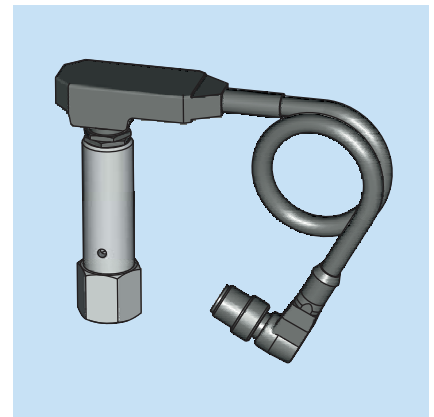
with cable and angled plug M12x1 for the connection at the BEKA-troniX1 or EP-tronic control unit with bayonet plug

Dimensions:



Article-no.	Material
2152 99 119	steel

All parts made of steel are galvanized, yellow chromated.



Technical data:

Operating voltage:	10 to 60 V DC
Maximum current load:	I = 1.7 A
Contact type:	1 changeover switch
Temperature range:	-25°C to +85°C
Protection type:	IP 67
Connection:	Cable, length 0.5 m, heat-sealed
Opening pressure:	preadjusted to 280 bar
Connection:	4-pole M12x1, plugable

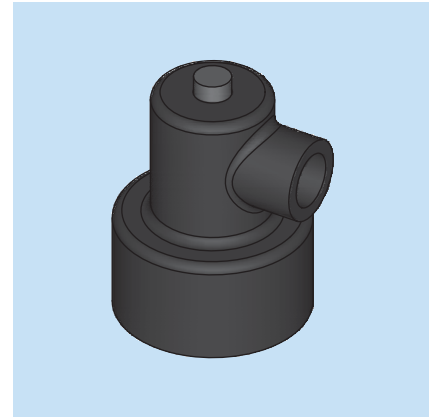
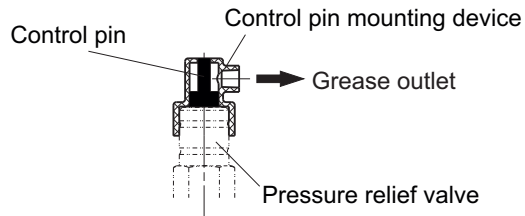


Malfunction indicator on pressure relief valve

for PE-60 to PE-170, PE-120 V, PE-60F, PE-120F and PE-120FV

consisting of: Control pin and control pin mounting device

Dimensional drawing:

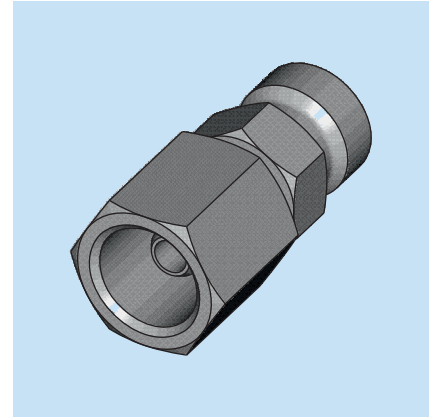
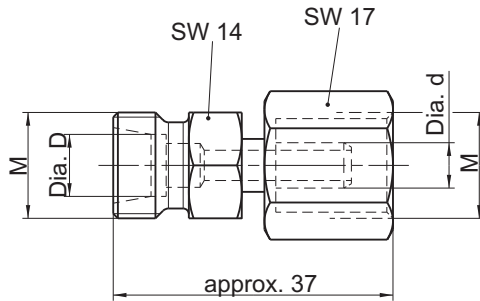


Part-No.	Material
2152 99061 0030	Plastic



Reduction

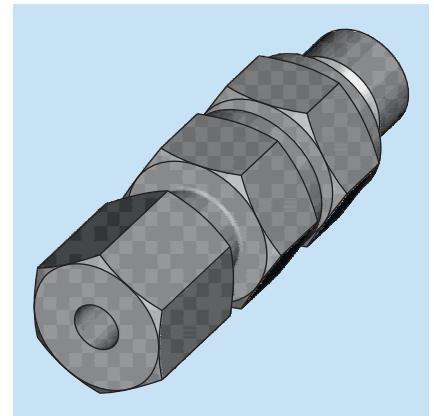
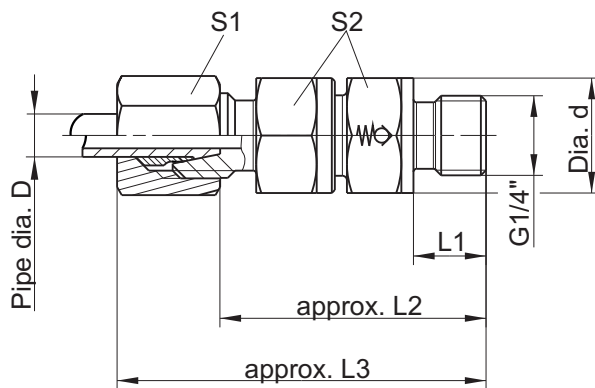
for pump elements PE-60 to PE-170 and PE-60F to PE-170F



Part-No.	Pipe connection dia. D	Dia. d	M	Material
04062352	8L	6S	M14x1.5	Steel zinc coated, yellow chromate

Screwed cone valve

for pump elements PE-60 to PE-170 and PE-60F to PE-170F



Part-No.	Pipe dia. D	Construction sort	Opening pressure	Dia. d	L1	L2	L3	S1	S2	Material
0438000135	6	S	2 bar	19	12	44	61	17	19	Steel
0438000004	8	L	3 bar	19	12	42.5	57	17	19	Steel

All parts made of steel are galvanized, yellow chromated.



8.3 Pump accessories

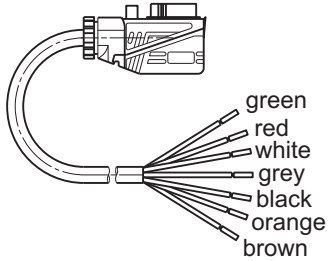
Table of Contents	Page
Power cords	
Power cord with Hirschmann connector	8.3.2
Power cord with bayonet plug	8.3.3
Power cord with connector 4-pole	8.3.4
Adapter cable with plug 4-pole	8.3.5
Connectors	
Hirschmann connector 7-pole for standard connection	8.3.6
Hirschmann connector 7-pole for connecting additional equipment	8.3.6
Bayonet connector 7-pole	8.3.7
Bayonet connector 4-pole	8.3.7
Filling connections	
Filling connection straight for filling the electric pump EP-1	8.3.8
Filling connection 45° for filling the electric pump EP-1	8.3.8
Filling connection 90° with counter nut for filling the electric pump EP-1	8.3.9
Filling connection straight for filling the central lubrication pump PICO	8.3.10
Filling connection 90° for filling the central lubrication pump PICO	8.3.10
Dust protection cover	8.3.11
Mounting plates and mounting brackets	
Mounting plates and mounting brackets for electric pump EP-1	8.3.12 - 8.3.16
Mounting plates and mounting brackets for central lubrication pump PICO	8.3.17 - 8.3.18



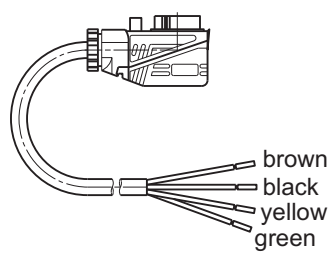
Power cord with connector 7-pole

for control units with Hirschmann connector

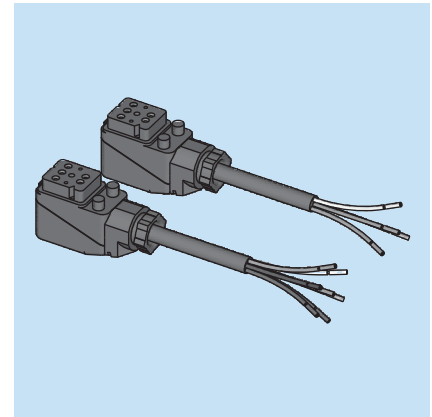
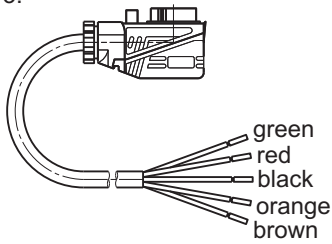
Pic. 1:



Pic. 2:



Pic. 3:



Part-No.	Use	Plug	Power cord	Length	Pic.
FAZ02977-01	EP-tronic PICO-tronic EP-tronic T1 PICO-tronic T1	GO 070 WF	7-wire	10 m	1
FAZ02977-00	PICO S-EP 4	GO 070 WF	5-wire	10 m	3
FAZ02499-02	S-EP 4	GO 070 WF	4-wire	10 m	2

Power cord with connector

for control units with bayonet plug

Fig. 1:

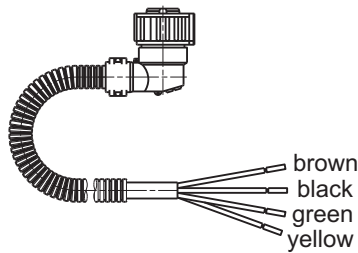


Fig. 2:

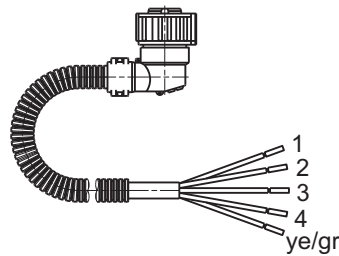


Fig. 3:

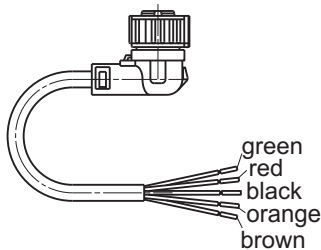


Fig. 4:

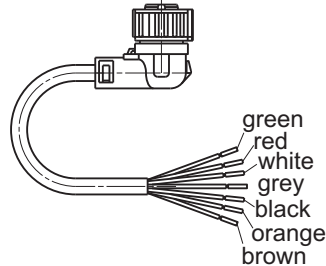


Fig. 5:

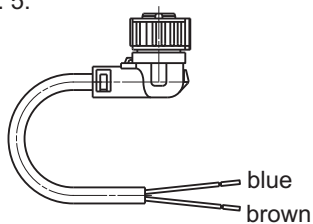
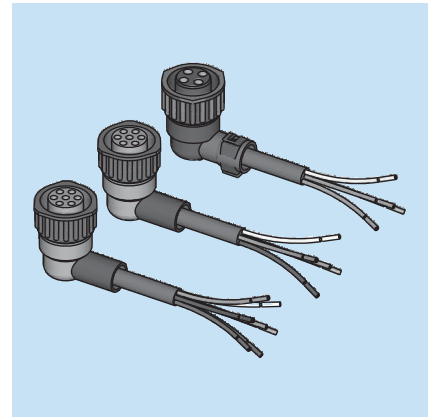
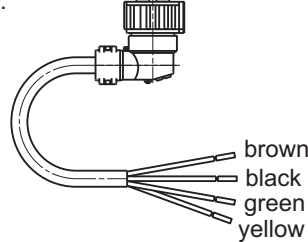


Fig. 6:



Article-no.	Use	Plug-type	Corrugated hose	Power cord	Length	Wires	Fig.
FAZ02499-15	S-EP 4 PICO S-EP 4	4-poles	yes	4-wires	10 m	colored	1
FAZ02499-17	S-EP 4 PICO S-EP 4	4-poles	yes	5-wires	15 m	black	2
FAZ02499-30	without control and revolution signal	4-poles	no	4-wires	5 m	colored	6
FAZ02499-39	without control and revolution signal	4-poles	no	4-wires	10 m	colored	6
FAZ02499-19	BEKA-troniX1 PICO S-EP 4	7-poles	no	5-wires	10 m	colored	3
FAZ02499-21	EP-tronic EP-tronic T1 PICO-tronic T1	7-poles	no	7-wires	10 m	colored	4
FAZ02499-24	EP-T2 PICO-T2	7-poles	no	2-wires	10 m	colored	5



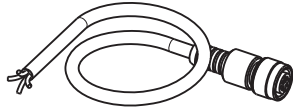
Power cord with connector 4-pole

for connecting external signal transmitters

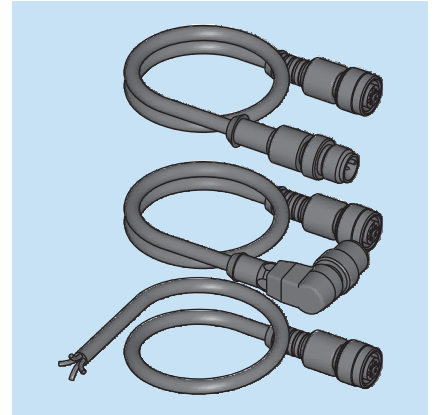
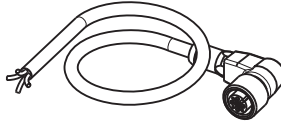
Connection cable no. 1:

for connecting a proximity switch M12x1 or a grease level monitoring with connection M 12x1 at an external control unit or at a control unit with Hirschmann plug.

Pic. 1:



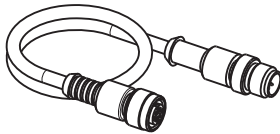
Pic. 2:



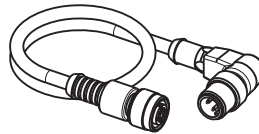
Connection cable No. 2:

for connecting a proximity switch M 12x1 or a grease level monitoring with connection M 12x1 at a control unit BEKA-troniX1 or EP-tronic.

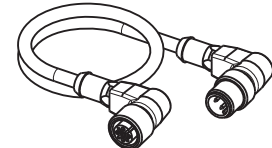
Pic. 3:



Pic. 4:



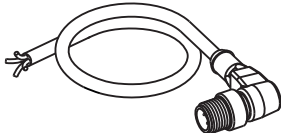
Pic. 5:



Connection cable no. 3:

for connection M 12x1 of the start release relay at the control unit EP-tronic model bayonet plug.

Pic. 6:



Part-No.	Bush	Plug	Power cord length	Pic.
1000912458	M12x1 straight	without	2 m	1
1000911237	M12x1 straight	without	5 m	1
1000912457	M12x1 straight	without	10 m	1
1000912997	M12x1 angular	without	5 m	2
1000912464	M12x1 straight	M12x1 straight	2 m	3
1000912465	M12x1 straight	M12x1 straight	5 m	3
1000912467	M12x1 straight	M12x1 angular	2 m	4
1000912468	M12x1 straight	M12x1 angular	5 m	4
1000913291	M12x1 straight	M12x1 angular	0,6 m	4
1000912998	M12x1 angular	M12x1 angular	0,6 m	5
1000913278	without	M12x1 angular	5 m	6



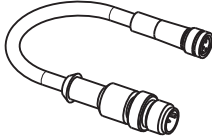
Adapter cable with plug 4-pole

for connecting proximity switch and control unit

Adapter cable no. 1:

for connecting proximity switch with threaded connection M8x1, with a control unit with threaded connection M12x1.

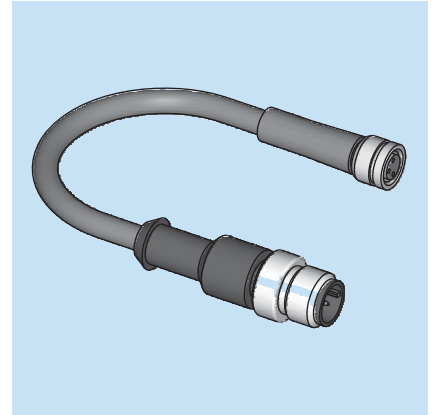
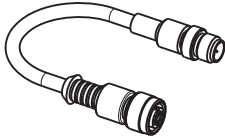
Pic. 1:



Adapter cable no. 2:

for connecting proximity switch with threaded connection M12x1 with an already installed cable with threaded connection M8x1.

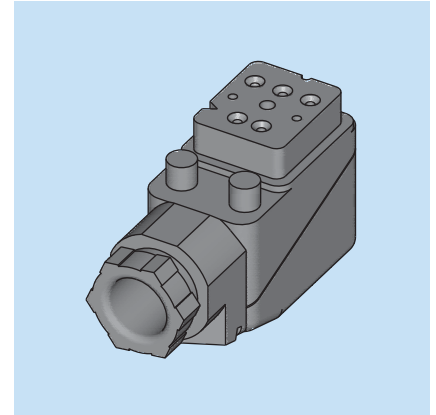
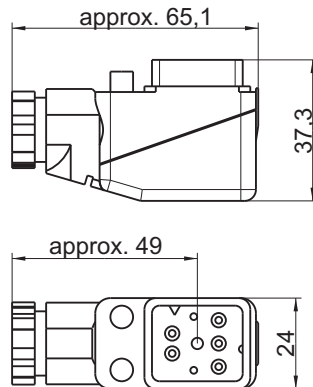
Pic. 2:



Part-No.	Bush	Plug	Power cord length	Pic.
1000912495	M8x1	M12x1	0,3 m	1
1000912496	M12x1	M8x1	0,3 m	2

Hirschmann connector 7-pole

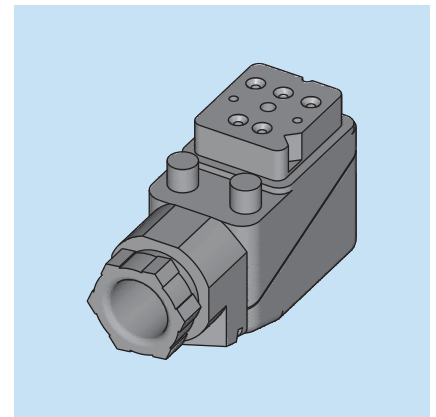
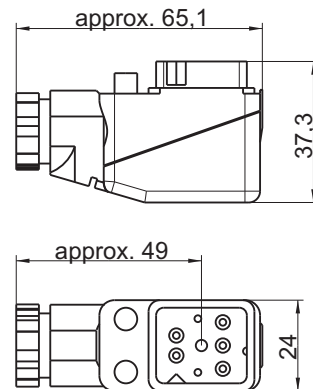
for standard connection of control units



Part-No.	Use	Contact box	for power cord
100091211	S-EP 4 PICO S-EP 4 EP-tronic PICO-tronic EP-tronic T1 PICO-tronic T1	GO 070 WF	7-wire 5-wire 4-wire

Hirschmann connector 7-pole

for connecting additional equipment at the control unit

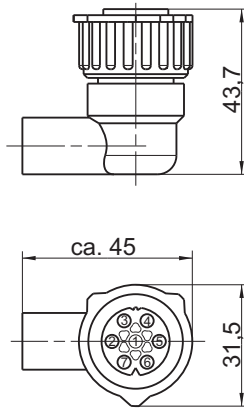


Part-No.	Use	Contact box
100091212	S-EP 4 Cycle control Grease level monitoring Pressure relief valve with micro contact	GO 610 WF
	EP-tronic PICO-tronic Cycle control Grease level monitoring Pressure relief valve with micro contact Release relay Collective malfunction message	



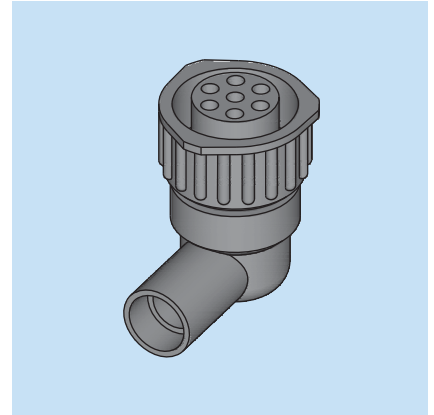
Bayonet connector 7-pole complete

for connecting control units



Consisting of:

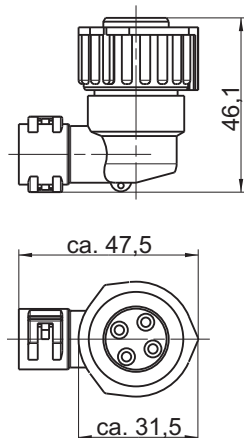
- 1 piece bush housing 7-pole
- 1 piece cap for corrugated pipe
- 7 pieces bush contact
- 7 pieces individual sealing
- 5 pieces welsh plug
- 1 piece strain relief for cable 7-wire
- 1 piece strain relief for cable 5-wire
- 1 piece strain relief for cable 2-wire



Part-No.	Use	for power cord
1000912932	EP-tronic PICO-tronic EP-tronic T1 PICO-tronic T1 EP-T2 PICO-T2	7-wire 5-wire 2-wire

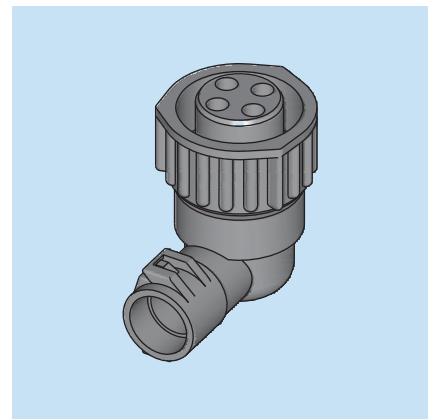
Bayonet connector 4-pole complete

for connecting control units



Consisting of:

- 1 piece bush housing 4-pole
- 1 piece cap for corrugated pipe
- 4 pieces bush contact
- 4 pieces individual sealing



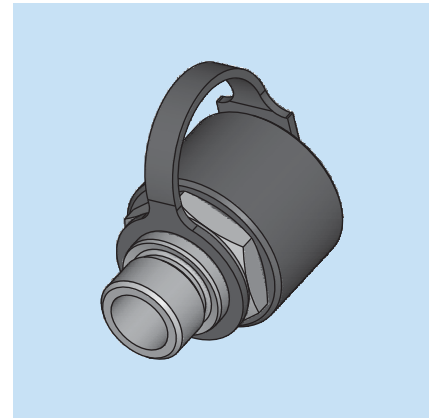
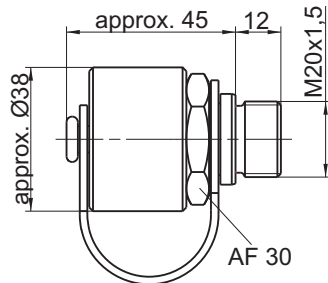
Part-No.	Use	for power cord
1000912664	S-EP 4 PICO S-EP 4	4-wire 5-wire



Filling connection straight without non return valve

according to AZ-02519-00

for filling of electric pump EP-1



Article-no.	Material
21520150	steel

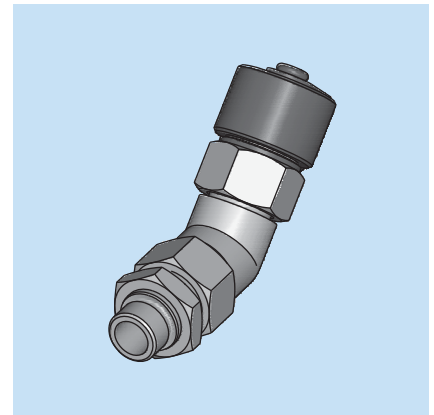
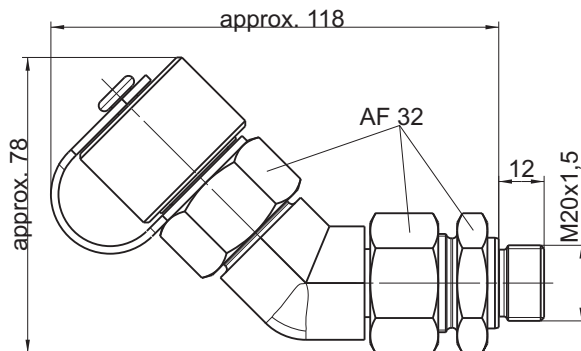
All parts made of steel are galvanized, yellow chromated.

Dust protection cover: plastic red

Filling connection 45° without non return valve

according to FAZ02519-07

for filling of electric pump EP-1



Article-no.	Material
21520146	steel

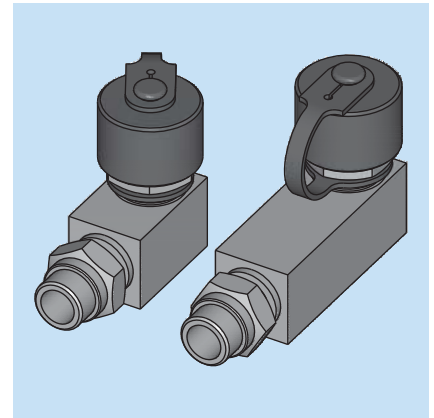
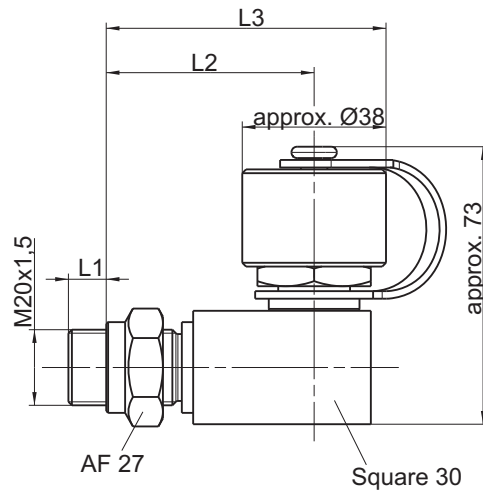
All parts made of steel are galvanized, yellow chromated.

Dust protection cover: plastic red



Filling connection 90°

without non return valve, with counter nut
for filling of electric pump EP-1



Article-no.	L1	approx. L2	approx. L3	Material
21520149	10-14	50-56	74	steel
21520147	10-14	85-91	109	steel

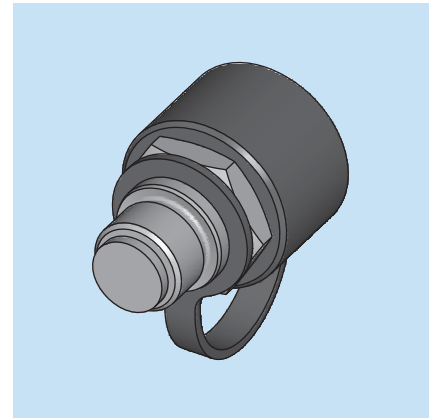
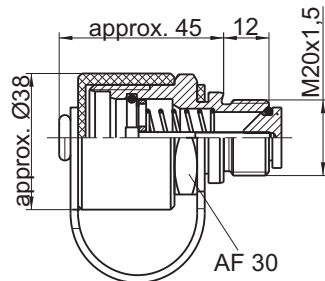
All parts made of steel are galvanized, yellow chromated.

Dust protection cover: plastic red

Filling connection straight with non return valve

according to FAZ03177-00

for filling of central lubrication pump PICO



Article-no.	Material
21520152	steel

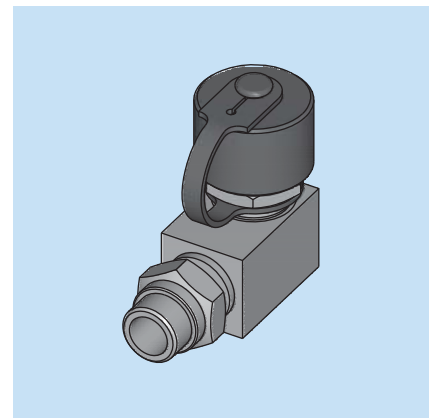
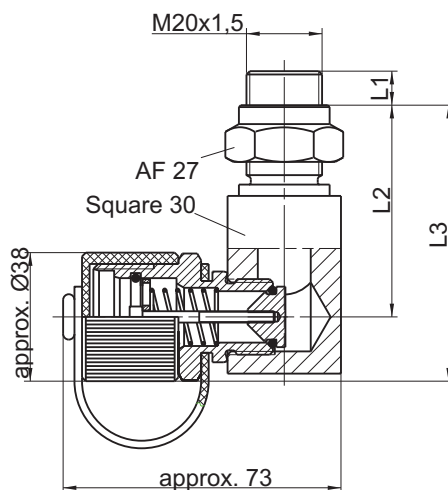
All parts made of steel are galvanized, yellow chromated.

Dust protection cover: plastic red

Filling connection 90° with non return valve, with counter nut

according to FAZ03177-01

for filling of central lubrication pump PICO



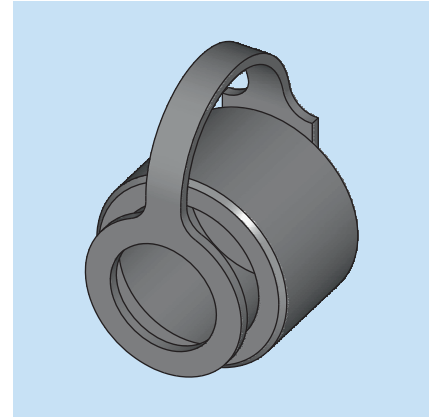
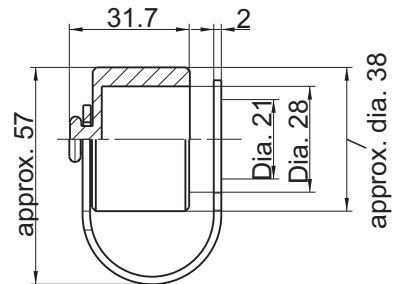
Article-no.	L1	approx. L2	approx. L3	Material
21520174	10-14	50-56	74	steel

All parts made of steel are galvanized, yellow chromated.

Dust protection cover: plastic red



Dust protection cover

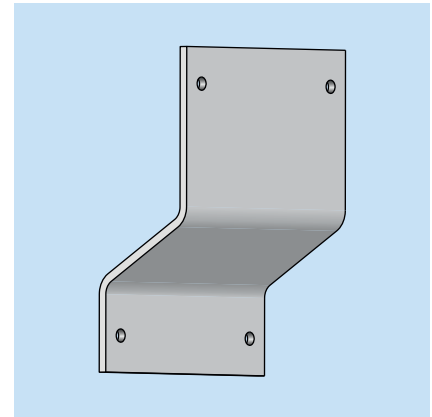
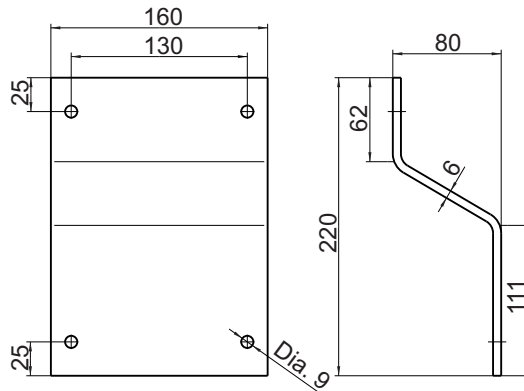


Part-No.	Material
0435 0055	Plastic red



Mounting Bracket

for Electric Pump EP-1



Part-No.

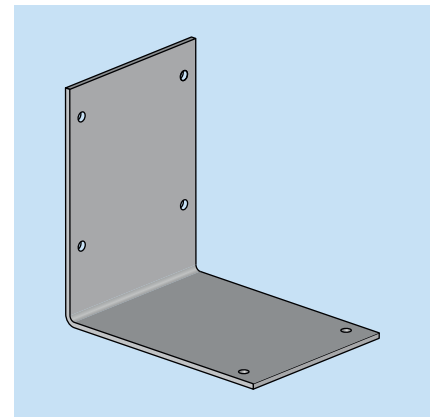
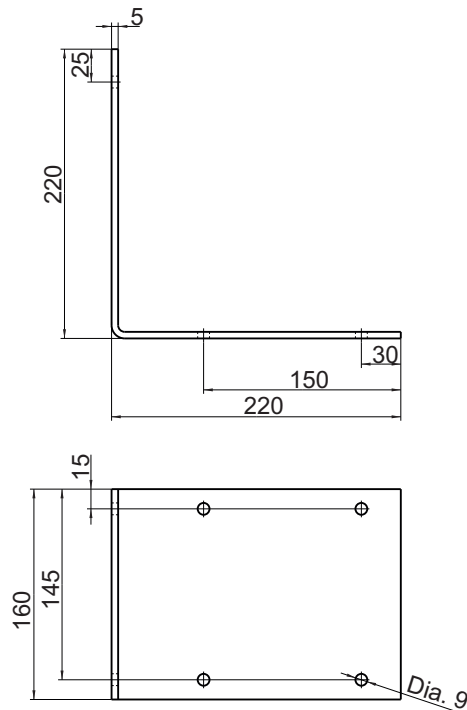
Material

0800500100

Steel zinc coated,
yellow chromate

Mounting Plate

for Electric Pump EP-1



Part-No.

Material

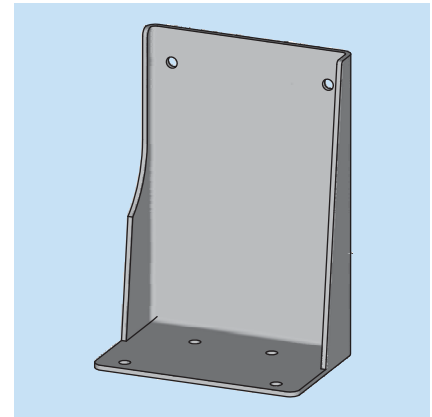
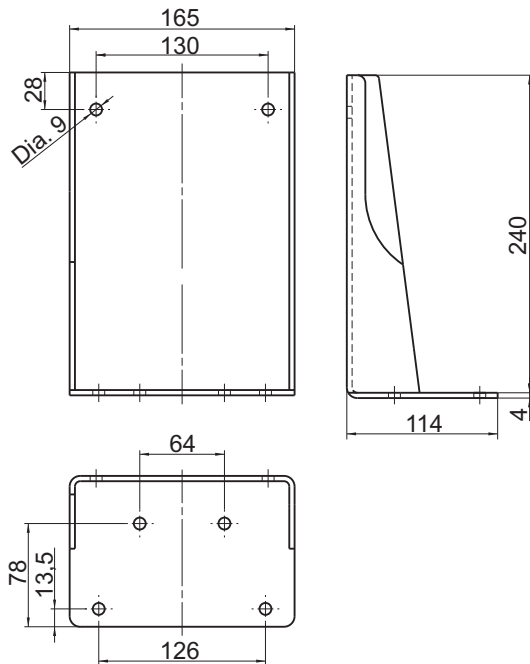
0800500101

Steel zinc coated,
yellow chromate



Bracket

for Electric pump EP-1



Part-No.

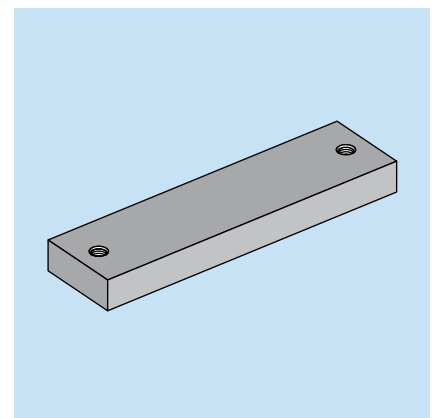
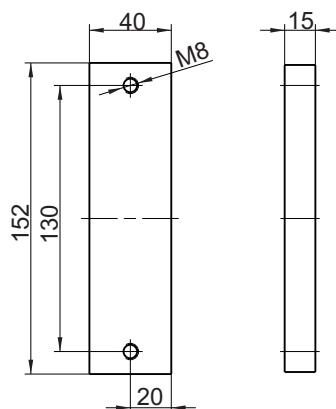
Material

0800800445

Steel zinc coated
yellow chromate

Mounting Plate

for Electric pump EP-1



Part-No.

Material

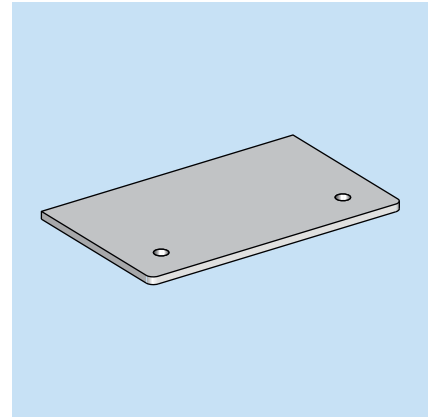
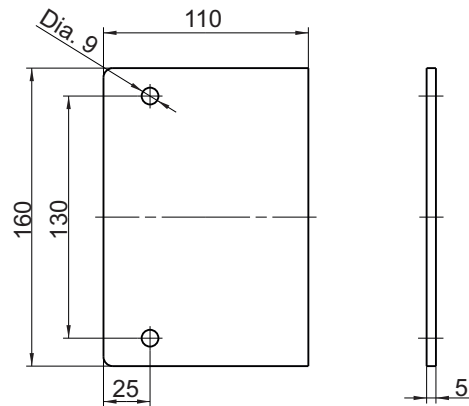
FWZ03605-00

Steel uncoated



Pump Mounting Plate

for Electric Pump EP-1



Part-No.

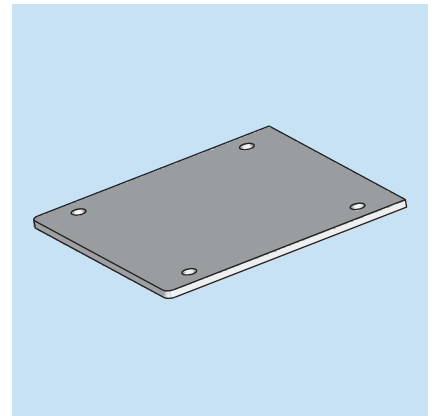
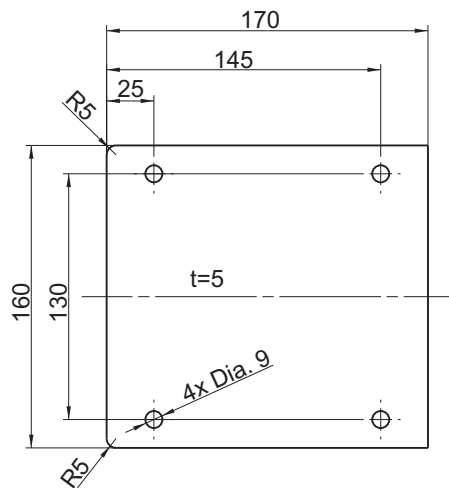
0800800263

Material

Steel uncoated

Pump Mounting Plate

for Electric Pump EP-1



Part-No.

0800801354

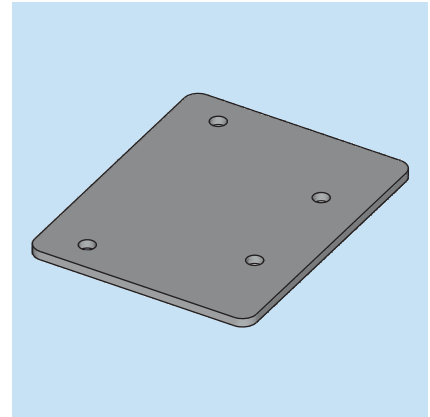
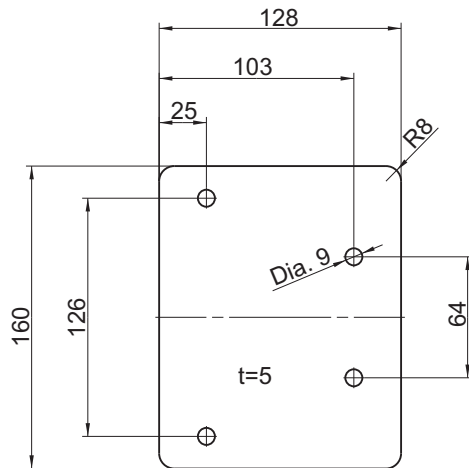
Material

Steel zinc coated,
yellow chromated



Pump Mounting Plate

for Electric Pump EP-1



Part-No.

Material

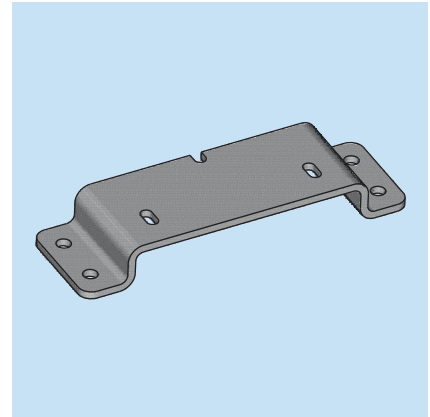
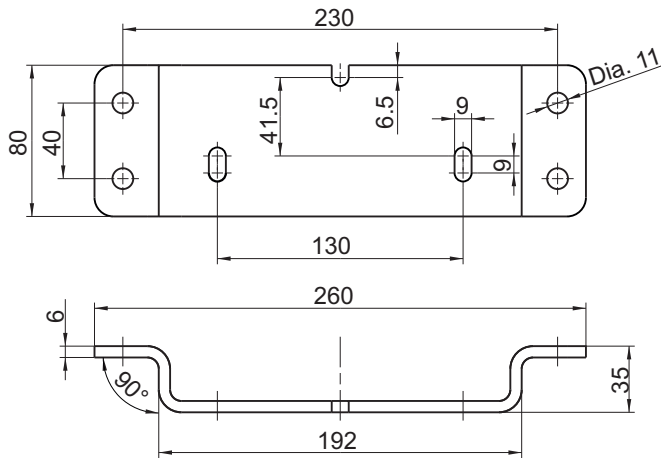
0800802064

Steel zinc coated,
yellow chromated



Mounting Bracket

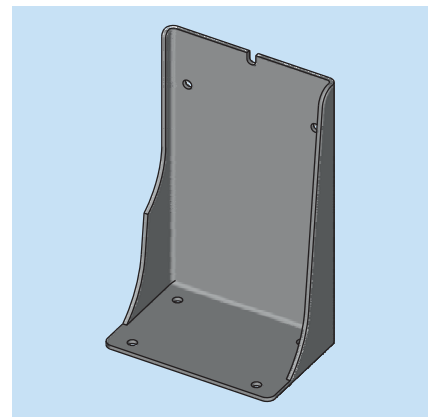
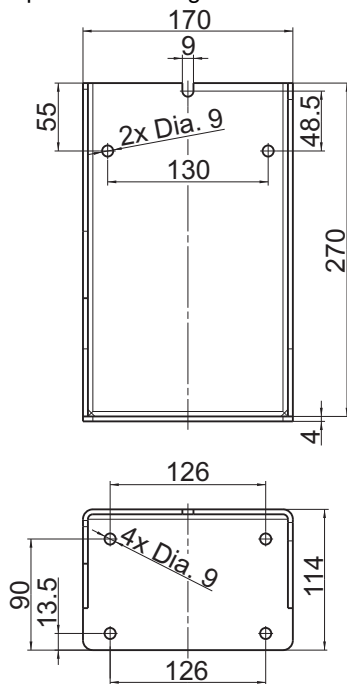
for EP-1 with 8 kg Grease-reservoir 1 part



Part-No.	Material
0800800822	Steel zinc coated, yellow chromated

Bracket

for Electric pump EP-1 with 8 kg Grease-reservoir 1 part

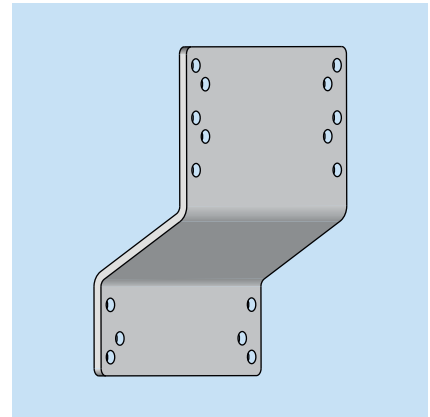
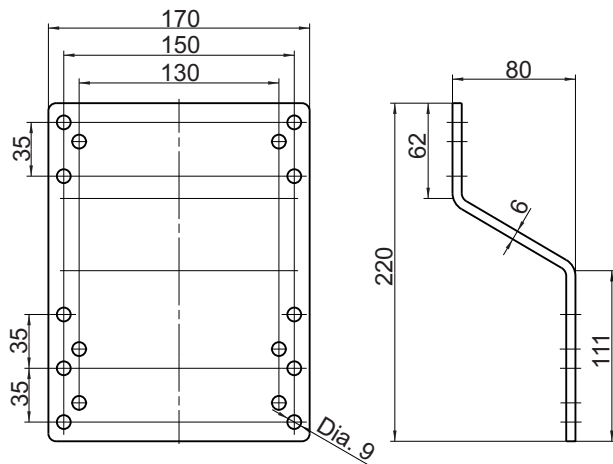


Part-No.	Material
0800802449	Steel zinc coated, yellow chromated



Pump Mounting Plate

for Centralized Lubrication Pump PICO



Part-No.

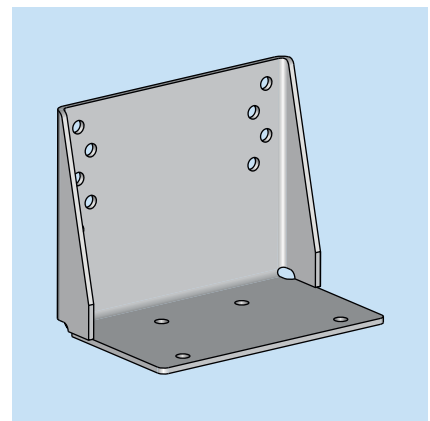
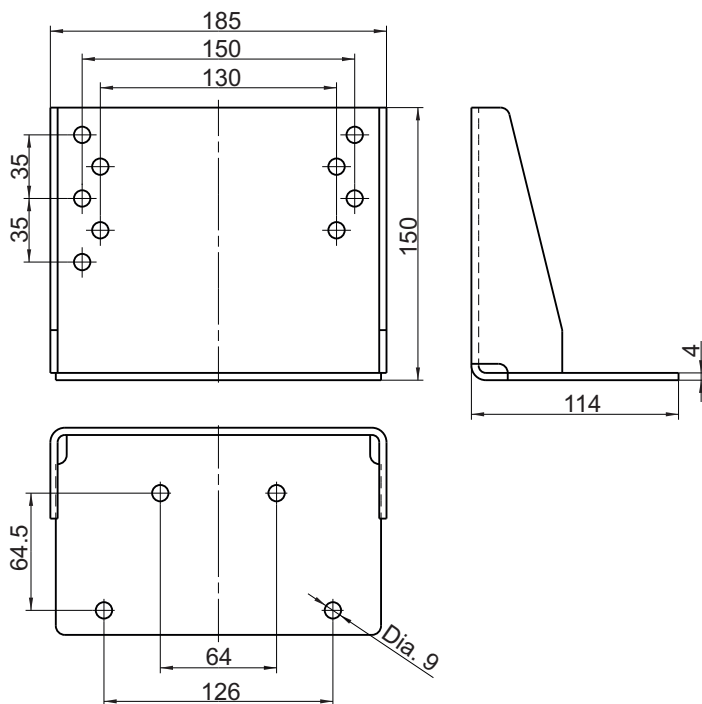
Material

0800800733

Steel zinc coated,
yellow chromate

Bracket

for Centralized Lubrication Pump Pico



Part-No.

Material

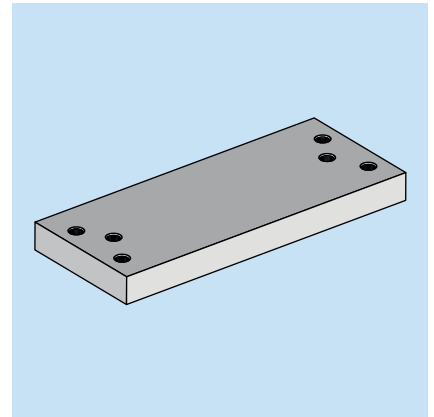
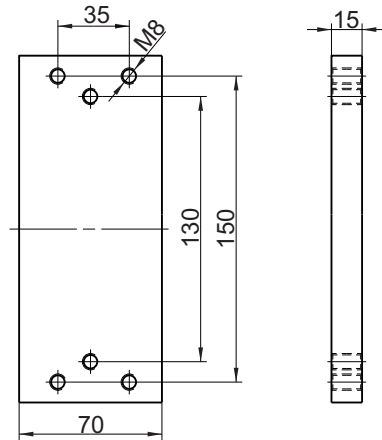
0800800734

Steel zinc coated,
yellow chromate



Weld on mounting Plate

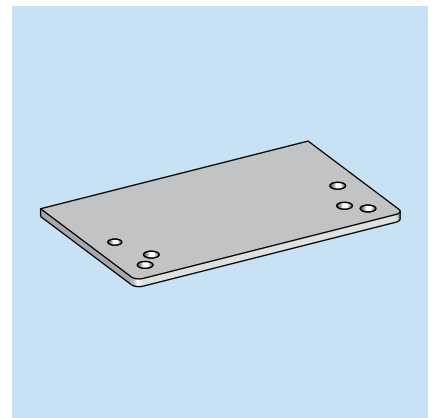
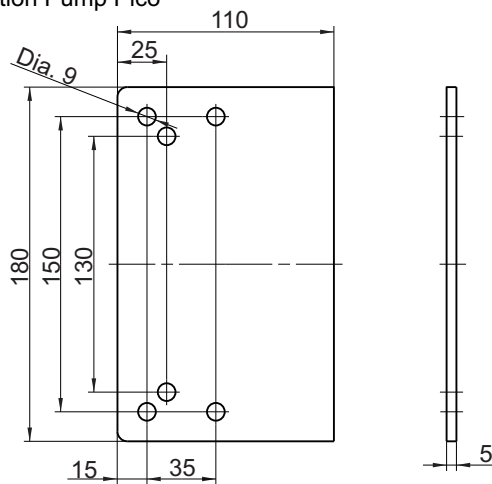
for Centralized Lubrication Pump Pico



Part-No.	Material
F2185/33-00	Steel uncoated

Mounting Plate

for Centralized Lubrication Pump Pico



Part-No.	Material
0800800732	Steel uncoated



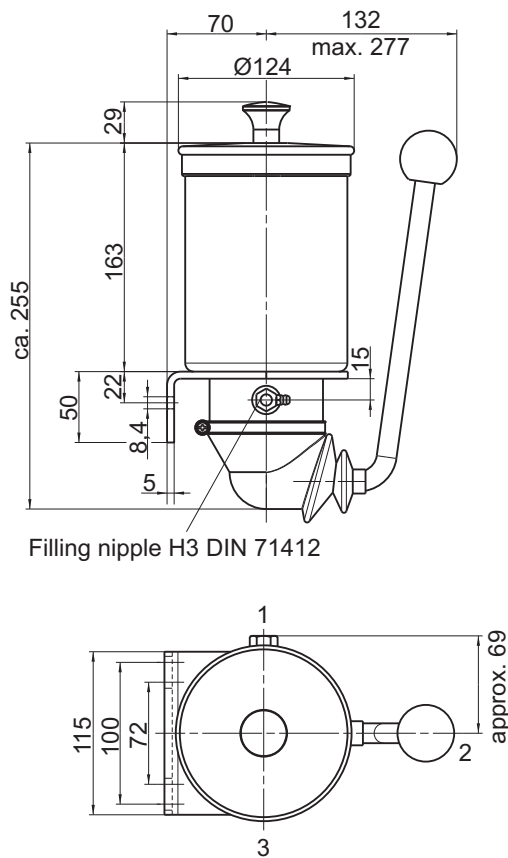
8.4 Manual pumps and filling presses

Table of Contents	Page
Grease manual pump type FHX-2	8.4.2
Hand lever grease pump	8.4.3
Hand lever grease pump FHX	8.4.4
Filling press	8.4.5
Single hand filling press	8.4.5



Grease manual pump type FHX-2

according to AZ-1838-00



Technical data:

Pressure:	max. 300 bar
Output rate:	max. 1,5 cm ³ /stroke
Reservoir capacity:	1,2 l
Pressure connection-Ø:	6 mm
Pressure outlet position:	1
Position of lever:	2
Position of filling nipple:	3
Medium:	greases up to NLGI-cl. 2
Level monitoring:	visual, by transparent reservoir

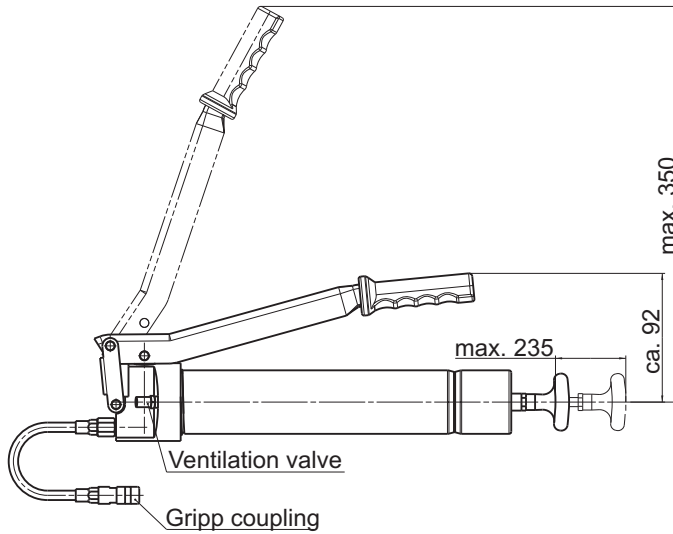
Article-no.	Filling nipple
2534.1570001	included



Hand lever grease pump at FAZ02255-06

for filling electric pump EP-1 and PICO

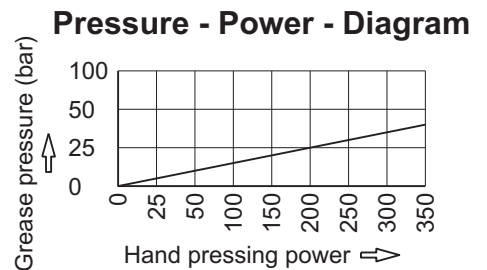
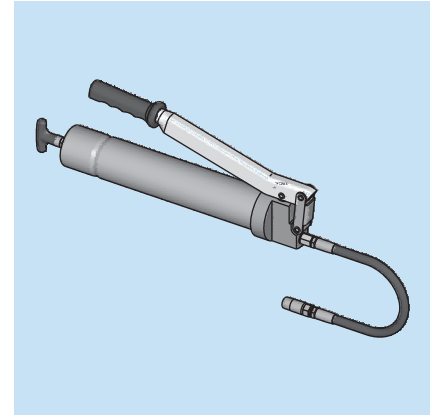
suitable for grease cartridges according to DIN 1284



Technical data:

Pressure:	max. 40 bar
Delivery rate:	max. 8 cm ³ /stroke
Cartridge volume:	400 g
Volume w/o cartridge:	500 cm ³
max. tube outside diameter:	53,5 mm
min. tube inside diameter:	51 mm
Delivery media:	Greases up to NLGI-Kl. 2

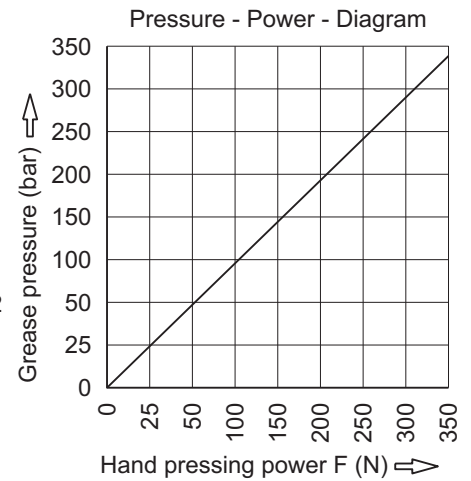
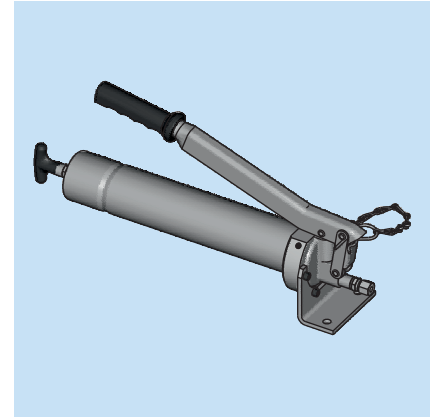
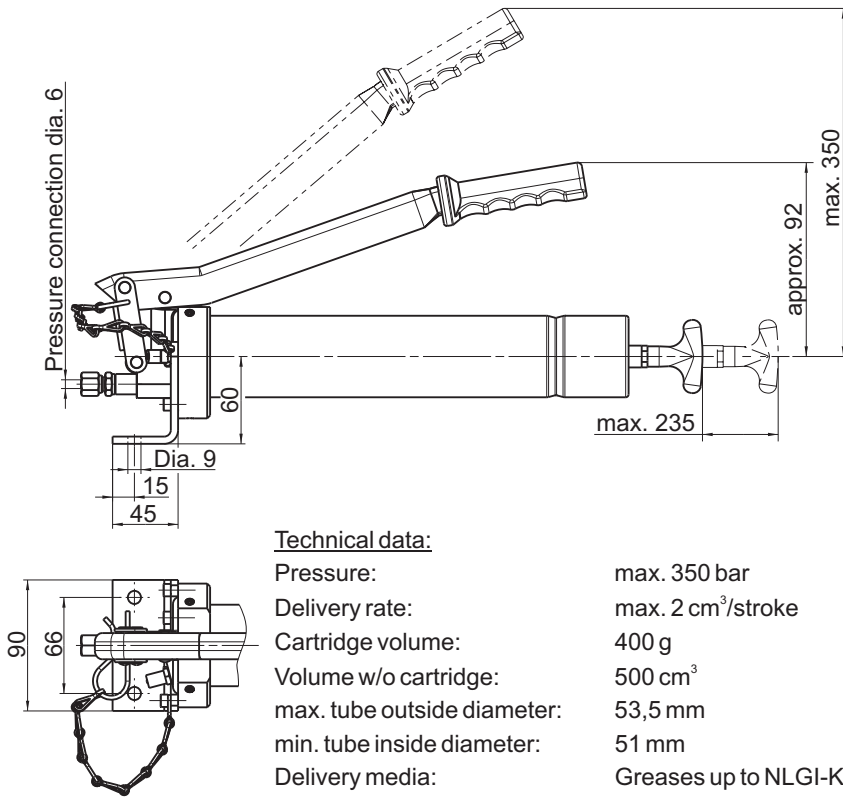
Part-No.	Grease volume
21590080008	max. 500 cm ³



Hand lever grease pump FHX at FAZ01821-00

for filling electric pump EP-1 and PICO

suitable for grease cartridges according to DIN 1284

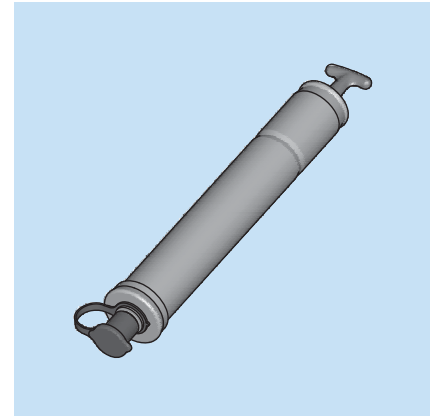
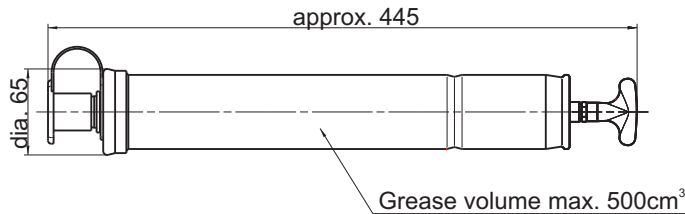


Part-No.	Grease volume
2081 03000	max. 500 cm³



Filling Press for EP-1

suitable for grease cartridges according to DIN 1284



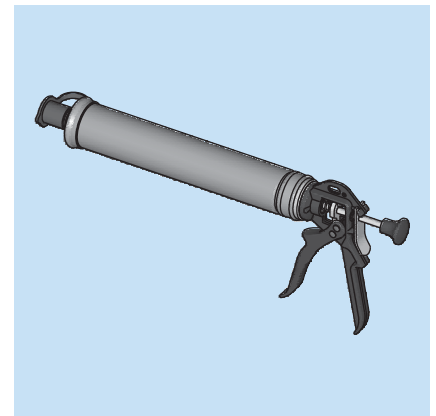
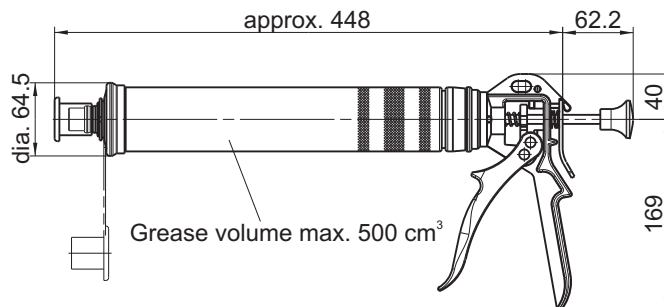
Technical data:

Cartridge volume:	400 g
Volume w/o cartridge:	500 cm ³
max. tube outside diameter:	53,5 mm
min. tube inside diameter:	51 mm
Delivery media:	Greases up to NLGI-cl. 2

Part-No.	Grease volume
208303026	max. 500 cm ³

Single hand-filling press

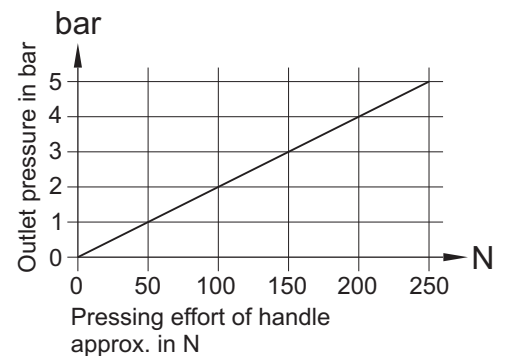
suitable for grease cartridges according to DIN 1284



Technical data:

Output rate:	ca. 9 cm ³ to 10 cm ³ per full stroke
Cartridge volume:	400 g
Volume w/o cartridge:	500 cm ³
max. tube outside diameter:	53,5 mm
min. tube inside diameter:	51 mm
Delivery media:	Greases up to NLGI-cl. 2

Part-No.	Grease volume
20830001	max. 500 cm ³



8.5 Progressive distributors MX-F

Table of Contents

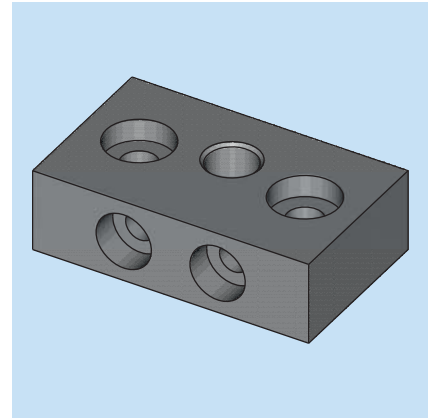
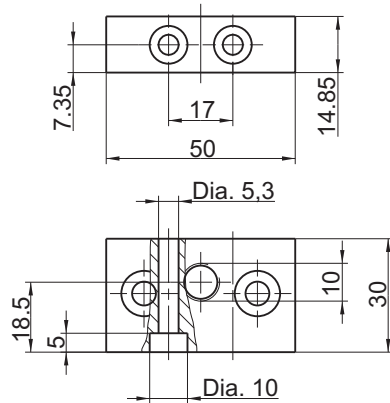
	Page
Elements	
Initial element	8.5.2
Initial element with elbow screw fitting	8.5.2
Middle elements	8.5.3
Element 00, with attached proximity switch	8.5.3
End elements	8.5.4
End elements with form grease nipple	8.5.4
Elements with attached proximity switch	8.5.5
Accessories	
Lock screw	8.5.6
Sealing screw	8.5.6
Screw fittings	
Screw fittings for outlets	8.5.7
Non-return valves	8.5.8
Components	
Pipe bridge	8.5.9
Distributor bridge, without outlet, without non-return valve	8.5.9
Distributor bridge, without outlet, with non-return valve	8.5.10
Distributor bridge with outlet	8.5.10
Power cords	
Power cord with connector 4-pole	8.5.11
Adapter cable with connector 4-pole	8.5.12
Mounting Brackets and Mounting Plates	
Mounting Brackets	8.5.13 - 8.5.16
Mounting Plates	8.5.17 - 8.5.18





Initial element

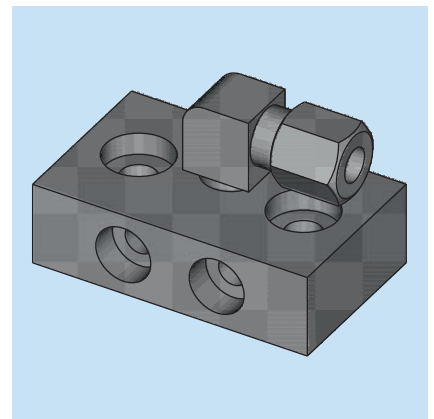
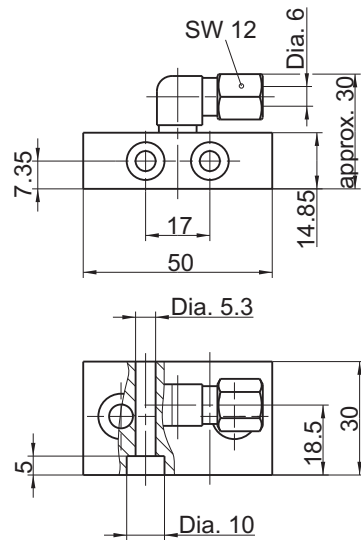
for progressive distributor MX-F



Part-No.	Material
4010 94 001	Steel zinc coated, yellow chromate

Initial element

for progressive distributor MX-F
with elbow screw fitting WE6 M10x1k

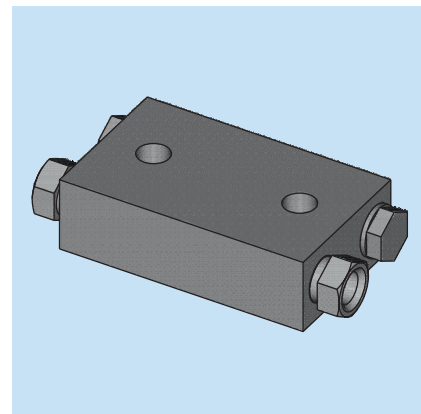
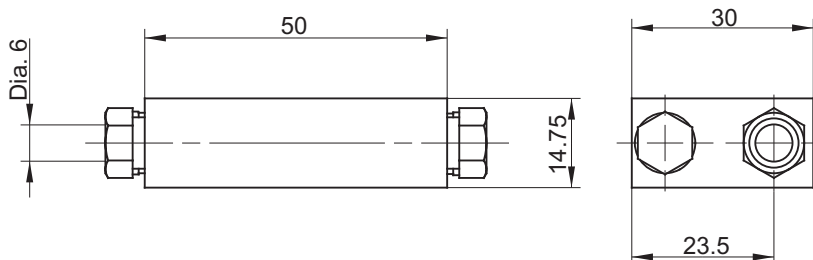


Part-No.	Material
4010 94 002	Steel zinc coated, yellow chromate



Middle element

for progressive distributor MX-F

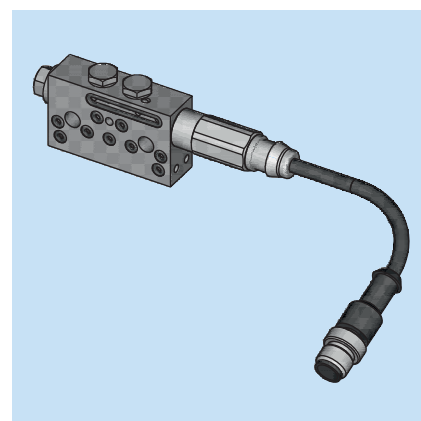
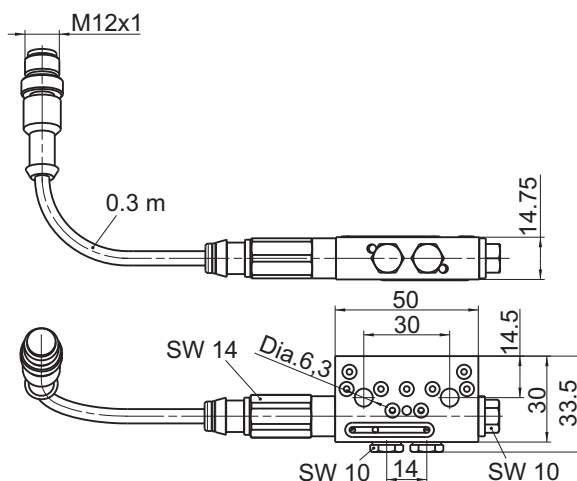


Part-No.	Designation	Delivery rate	Material
4010 95 101	MX-F 25	25 mm ³ /outlet	Steel
4010 95 102	MX-F 45	45 mm ³ /outlet	Steel
4010 95 103	MX-F 75	75 mm ³ /outlet	Steel
4010 95 104	MX-F 105	105 mm ³ /outlet	Steel

All parts made of steel are galvanized, yellow chromated.

Element 00

with attached proximity switch
for progressive distributor MX-F



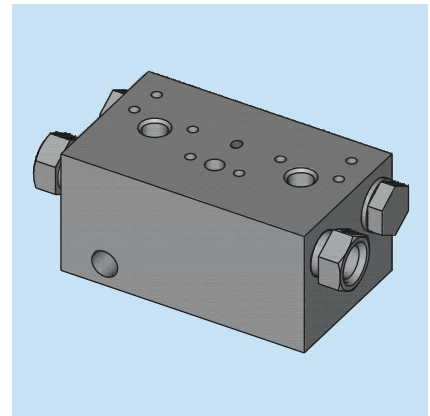
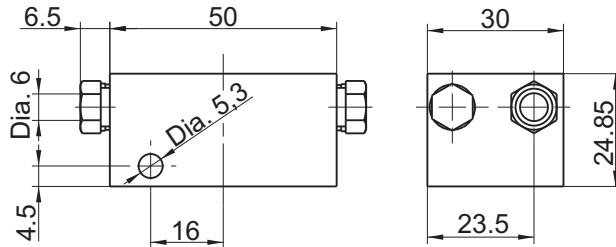
Part-No.	Designation	Installation side of proximity switch	Model
4010 95 000	MX-F 00	left	Steel, galvanized
4010 95 001	MX-F 00	right	Steel, galvanized
4096 95 000	MX-F 00	left	rust-resistant
4096 95 001	MX-F 00	right	rust-resistant

Technical data of the proximity switch:

Connection: 4 pol. / M12x1 plug-in
 Connecting method: PNP contact
 Power rating: 10 mA
 Current consumption: < 15 mA
 Voltage: 10 to 60 V DC
 Temperature range: -25° C to +70° C
 perm. operating pressure: max. 350 bar for grease
 Protection type: IP 67

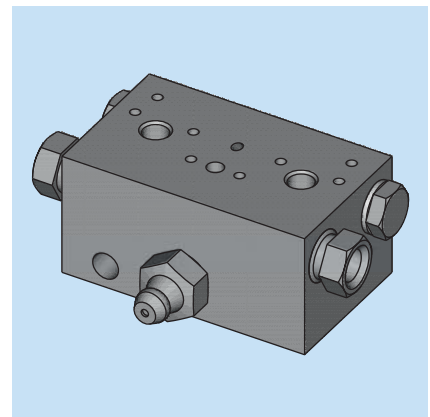
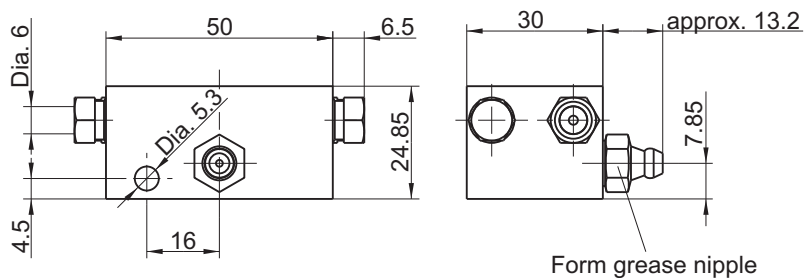


for progressive distributor MX-F



All parts made of steel are galvanized, yellow chromated.

with form grease nipple,
for progressive distributor MX-F



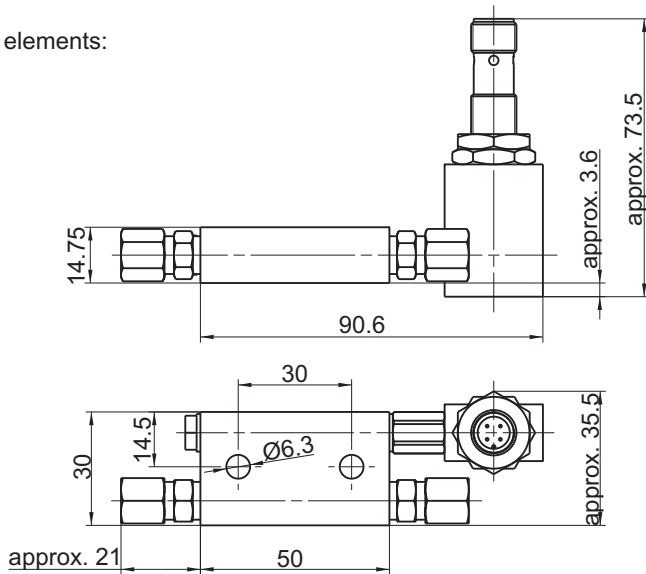
All parts made of steel are galvanized, yellow chromated.

Elements

with attached proximity switch
for progressive distributor MX-F

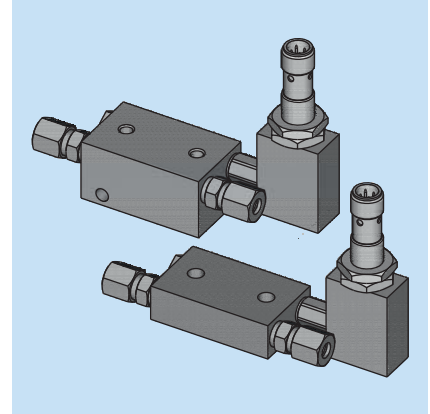
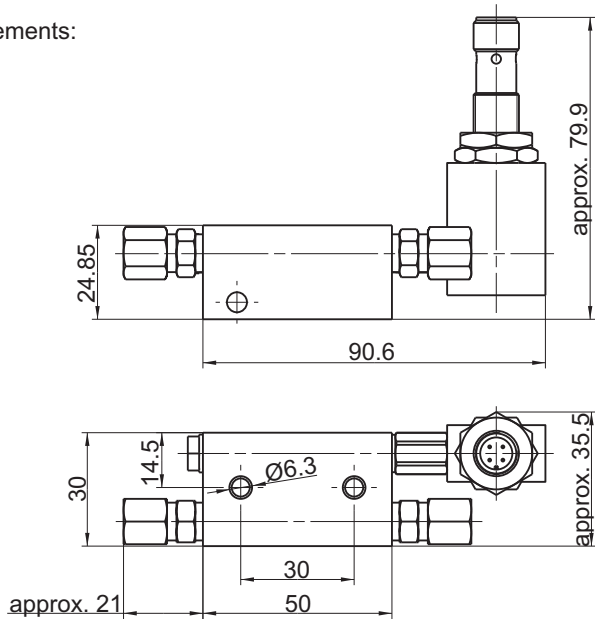
Pic. 1:

Middle elements:



Pic. 2:

End elements:



Technical data of the proximity switch:

Connection:	4 pol. / M12x1 plug-in
Connecting method:	PNP contact
Power rating:	200 mA
Voltage:	10 to 60 V DC
Temperature range:	-40°C to +85°C
Function display:	LED yellow
Housing material:	stainless steel
Protection type:	IP 67

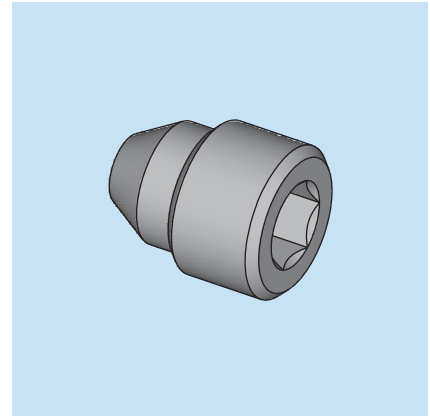
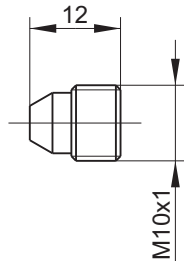
Part-No.	Designation	Delivery rate	Pic.	Model
4010 95 123 022	MX-F 75	75 mm ³ /outlet	1	Steel galvanized
4010 95 124 022	MX-F 105	105 mm ³ /outlet	1	Steel galvanized
4096 95 123 001	MX-F 75	75 mm ³ /outlet	1	rust-resistant
4096 95 124 001	MX-F 105	105 mm ³ /outlet	1	rust-resistant
4010 96 123 022	MX-F 75	75 mm ³ /outlet	2	Steel galvanized
4010 96 124 022	MX-F 105	105 mm ³ /outlet	2	Steel galvanized
4096 96 123 001	MX-F 75	75 mm ³ /outlet	2	rust-resistant
4096 96 124 001	MX-F 105	105 mm ³ /outlet	2	rust-resistant





Lock screw

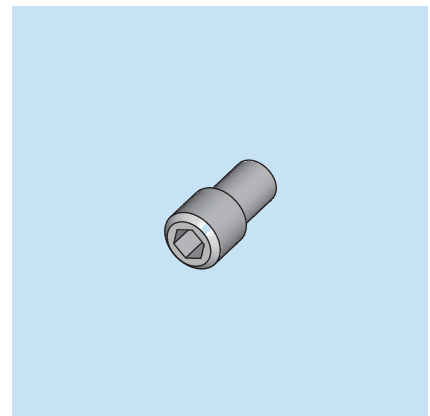
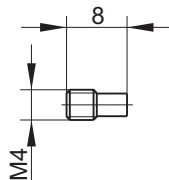
for progressive distributor MX-F



Article-nr.	Material
401096005000	Steel zinc coated, yellow chromate

Sealing screw

for progressive distributor MX-F



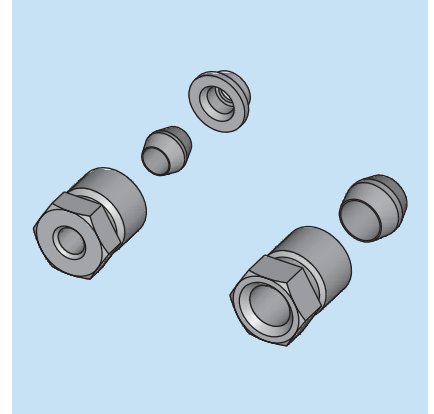
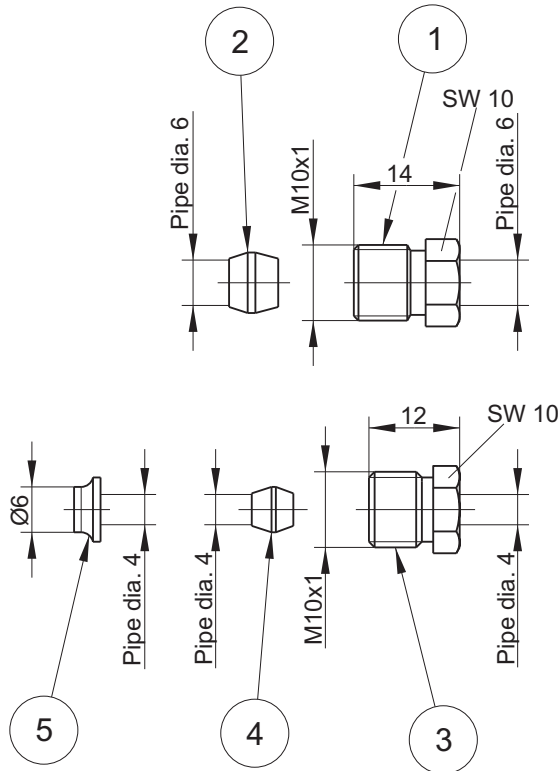
Article-nr.	Material
0802000455	Steel zinc coated, yellow chromate



Screw fittings for outlets

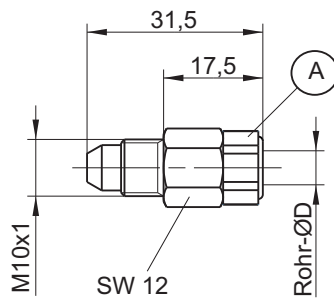
for progressive distributor MX-F

Union screw with olives



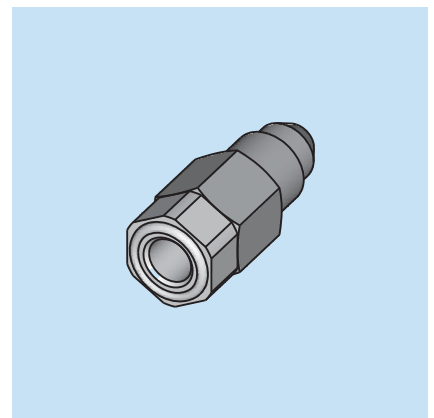
Article-nr.	Name	for Pipe dia.	Part-No.	Material
0802 000 190	Union screw	6	1	Steel zinc coated, yellow chromate
09 03862 0023	Olive	6	2	Brass
0802 000 311	Union screw	4	3	Steel zinc coated, yellow chromate
09 03862 0013	Olive	4	4	Brass
0802 000 310	Reducer ring dia. 6 - dia. 4	4	5	Steel

Plug connections



A
Plug-type connection
for pipe dia. 6
SW 12
Article-nr.: 0406 0850

A
Plug-type connection
for pipe dia. 4
SW 12
Article-nr.: 0406 0851



Article-nr.	Pipe dia. D
FAZ03605-01	4
FAZ03605-00	6

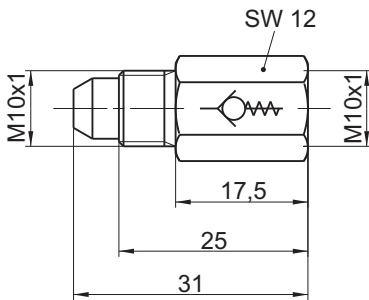
Material: Steel zinc coated, yellow chromate / Steel



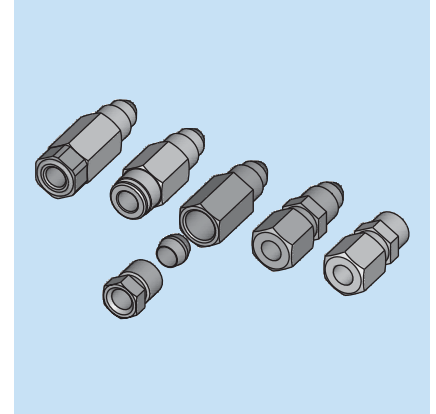
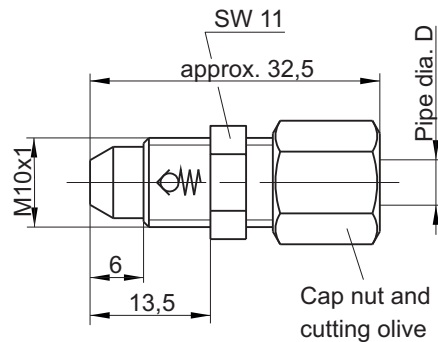
Non-return valves

for progressive distributor MX-F

Pic. 1:



Pic. 2:

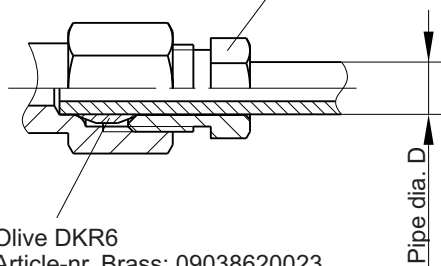


The lubricant line is fastened by means of an olive and an union screw at the non-return valve fig. 1.

Cap screw ÜS6 M10x1

Article-nr. Steel zinc coated, yellow chromate: 0802000190

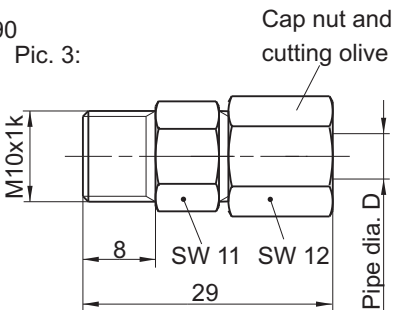
Article-nr. High-grade Steel: F0060/19-08



Olive DKR6

Article-nr. Brass: 09038620023

Article-nr. High-grade Steel: 09038620026



Pic. 3:

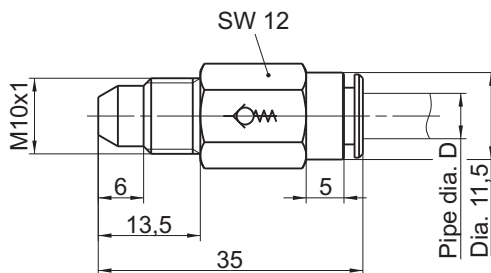
Pic. 5:

with plug-type connection, Type HP
soluble without tool

Material: Steel, zinc coated - Brass, nickel-plated;

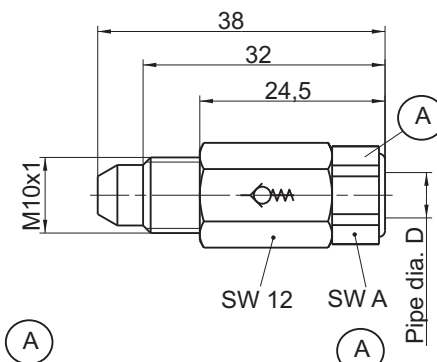
Pressure range: max. 150 bar

Temperature range: -20°C to +70°C



Pic. 4:

with plug-type connection, Type BEKA



Plug-type connection
for pipe dia.4

SW 12

Article-nr.: 0406 0851

Plug-type connection
for pipe dia.4

SW 12

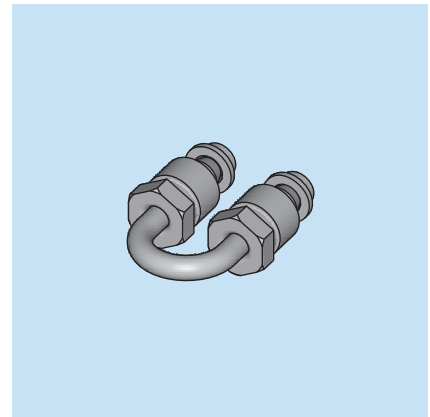
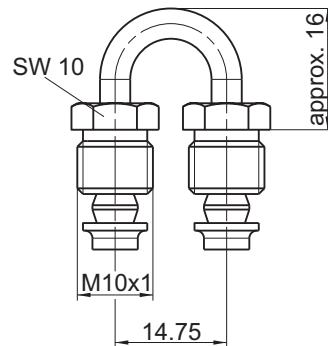
Article-nr.: 0406 0851

Article-nr.	Pipe dia. D	Pic.	Material
4010960040000	6	1	Steel
4010960040009	6	1	High-grade Steel
0438000179	6	2	Steel
0438000314	6	3	High-grade Steel
4010960040008	4	4	Steel
4010960040007	6	4	Steel
4010960040012	6	5	Steel - Brass

All parts made of steel are galvanized, yellow chromated.

Pipe bridge

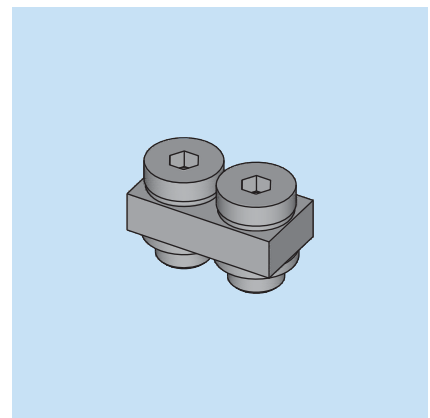
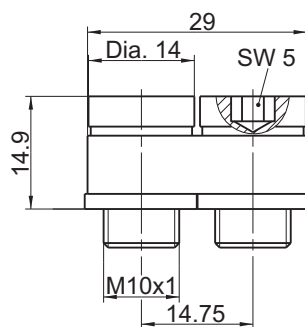
for progressive distributor MX-F



Part-No.	Material
4010960010011	Steel zinc coated, yellow chromate
4010960010014	High-grade steel

Distributor bridge

for progressive distributor MX-F
without outlet, without non-return valve



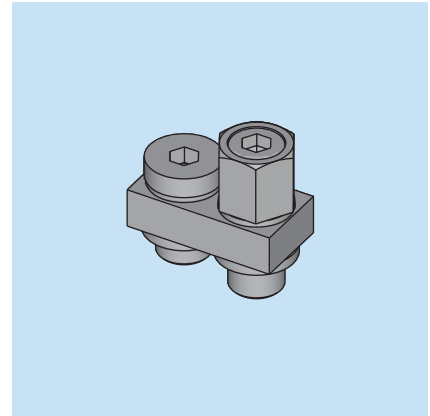
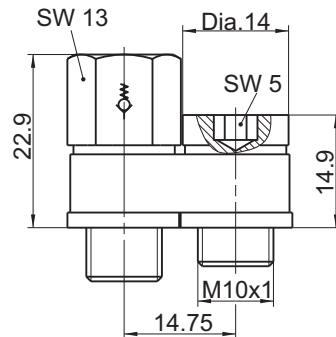
Part-No.	Material
4010960010013	Steel zinc coated, yellow chromate
4096960010013	stainless





Distributor bridge

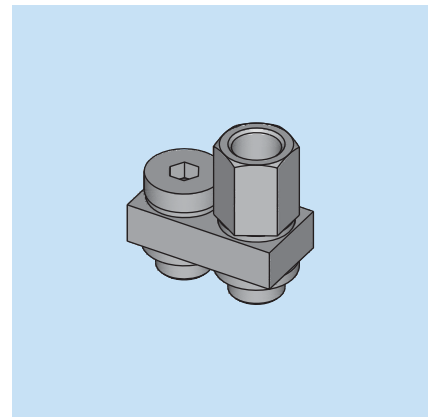
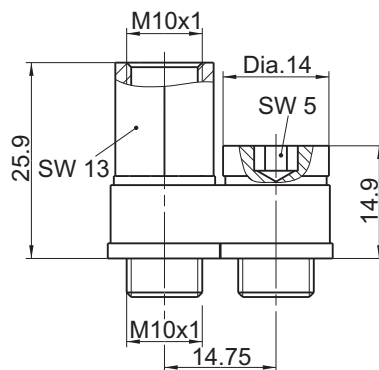
for progressive distributor MX-F
without outlet.with non-return valve



Part-No.	Material
4010960010016	Steel zinc coated, yellow chromate
4096960010016	stainless

Distributor bridge

for progressive distributor MX-F
with outlet



Part-No.	Material
4010960010012	Steel zinc coated, yellow chromate
4096960010020	stainless



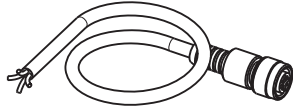
Power cord with connector 4-pole

for connecting external signal transmitters

Connection cable no. 1:

for the connection of an installed proximity switch of the progressive distributor at the external control unit or at a control unit with Hirschmann plug.

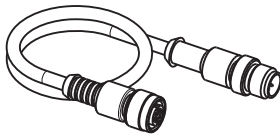
Pic. 1:



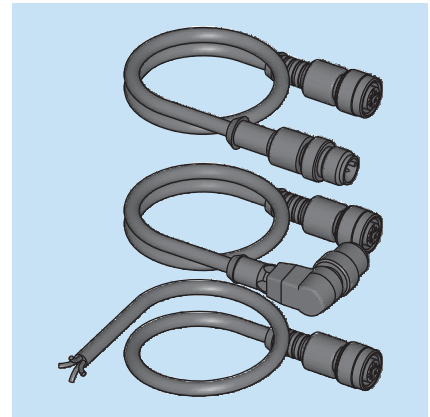
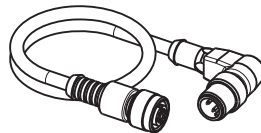
Connection cable No. 2:

for the connection of an installed proximity switch of the progressive distributor at the external control unit BEKA-troniX1 or EP-tronic

Pic. 2:



Pic. 3:



Part-No.	Bush	Plug	Power cord length	Pic.
1000912458	M12x1 straight	without	2 m	1
1000911237	M12x1 straight	without	5 m	1
1000912457	M12x1 straight	without	10 m	1
1000912464	M12x1 straight	M12x1 straight	2 m	2
1000912465	M12x1 straight	M12x1 straight	5 m	2
1000912467	M12x1 straight	M12x1 angular	2 m	3
1000912468	M12x1 straight	M12x1 angular	5 m	3



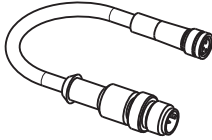
Adapter cable with plug 4-pole

for connecting proximity switch and control unit

Adapter cable no. 1:

for connecting proximity switch with threaded connection M8x1, with a control unit with threaded connection M12x1.

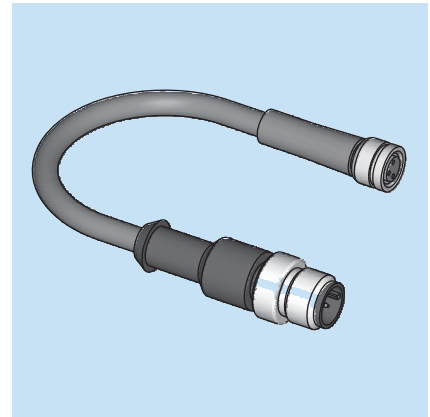
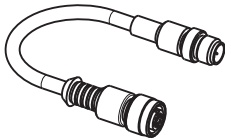
Pic. 1:



Adapter cable no. 2:

for connecting proximity switch with threaded connection M12x1 with an already installed cable with threaded connection M8x1.

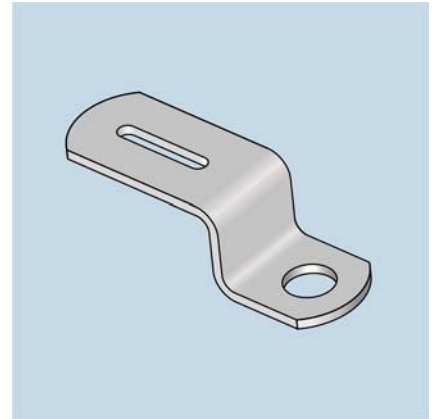
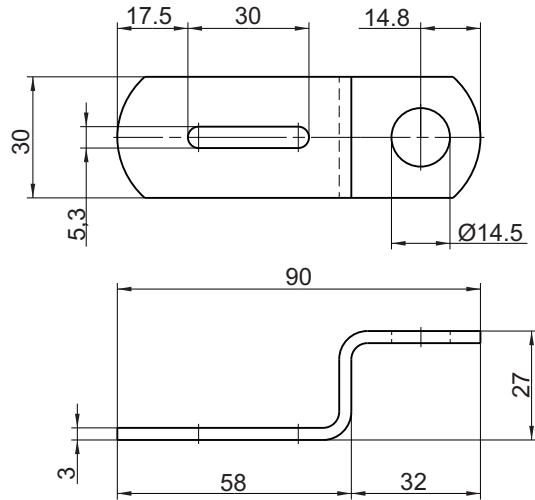
Pic. 2:



Part-No.	Bush	Plug	Power cord length	Pic.
1000912495	M8x1	M12x1	0,3 m	1
1000912496	M12x1	M8x1	0,3 m	2

Mounting Bracket

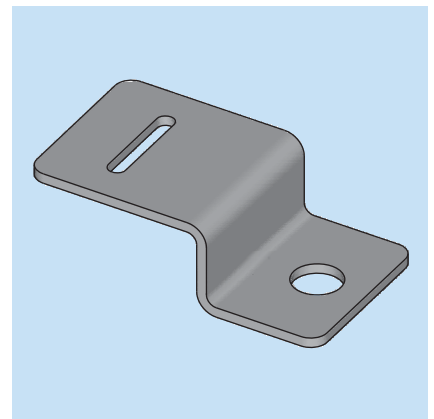
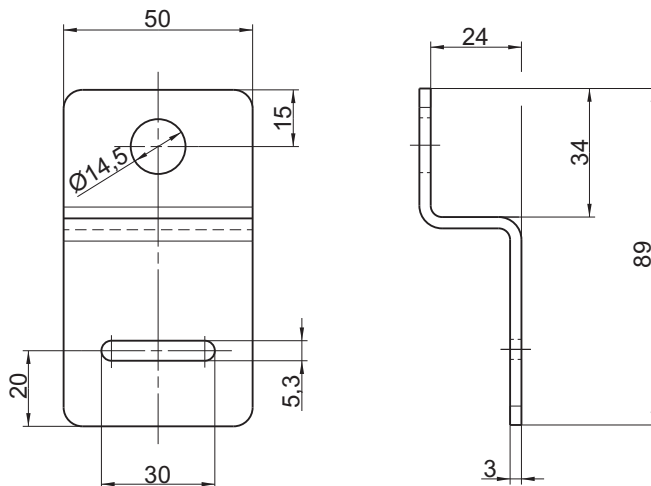
for MX-F Distributor



Part-No.	Material
0800800010	Steel zinc coated, yellow chromate

Mounting Bracket

for MX-F Distributor

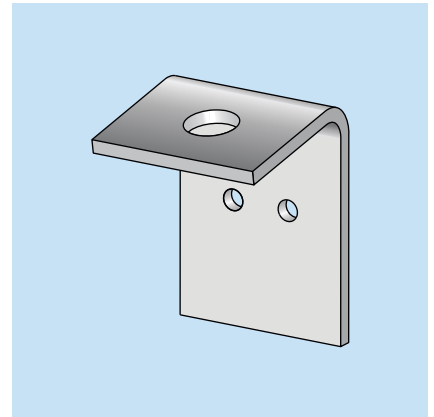
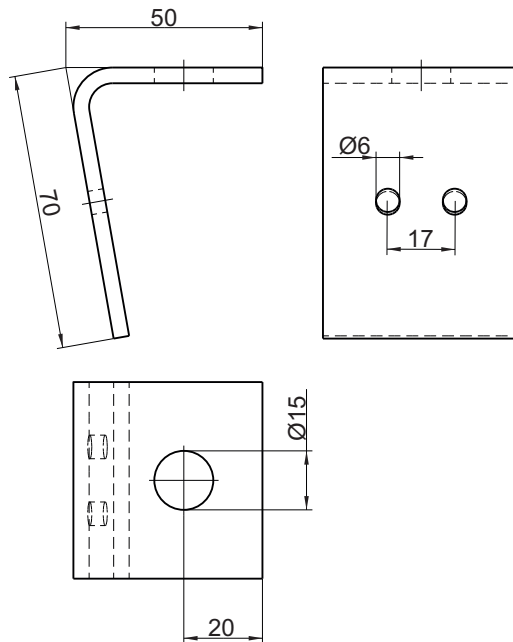


Part-No.	Material
0800801398	Steel zinc coated, yellow chromate



Mounting Bracket

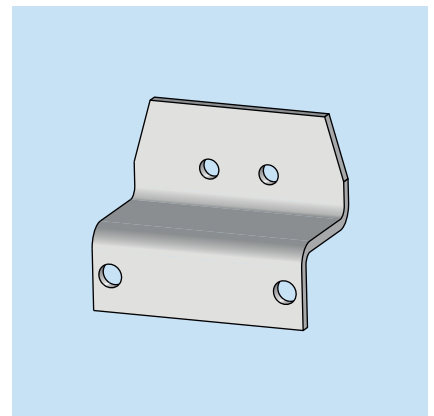
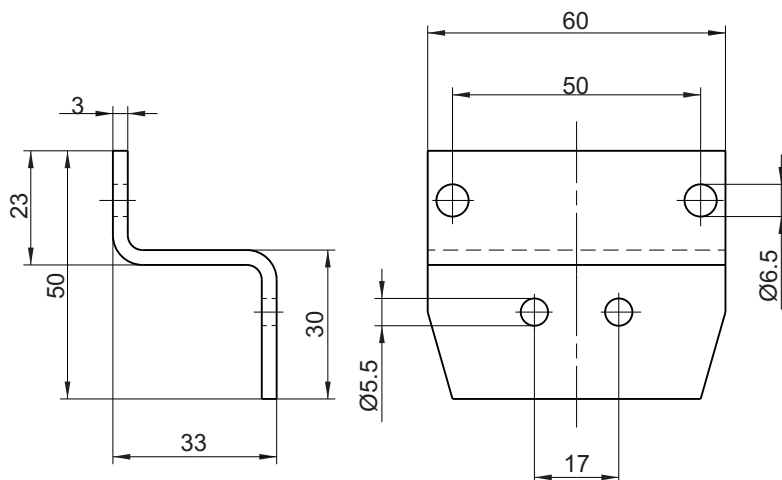
for MX-F Distributor



Part-No.	Material
0800800241	Steel zinc coated, yellow chromate

Mounting Bracket

for MX-F Distributor

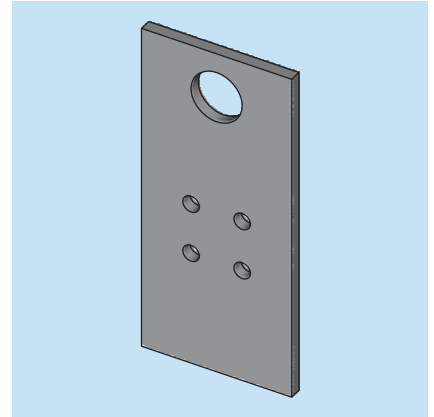
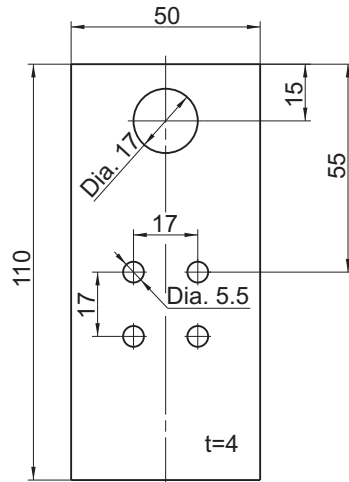


Part-No.	Material
0800800220	Steel zinc coated, yellow chromate



Mounting plate

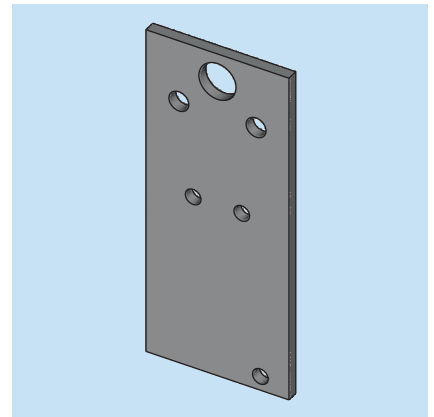
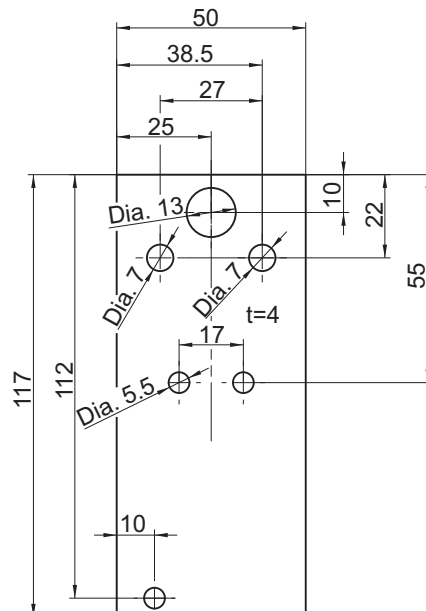
for MX-F distributor



Part-No.	Material
0800801319	Steel zinc coated, yellow chromate

Mounting plate

for MX-F distributor

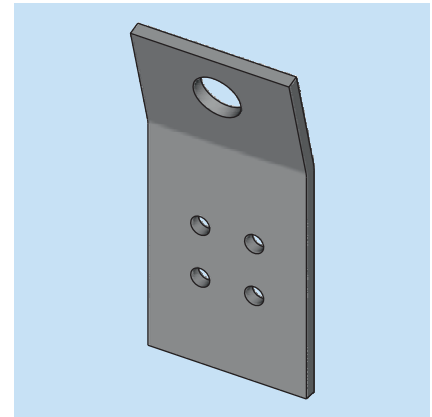
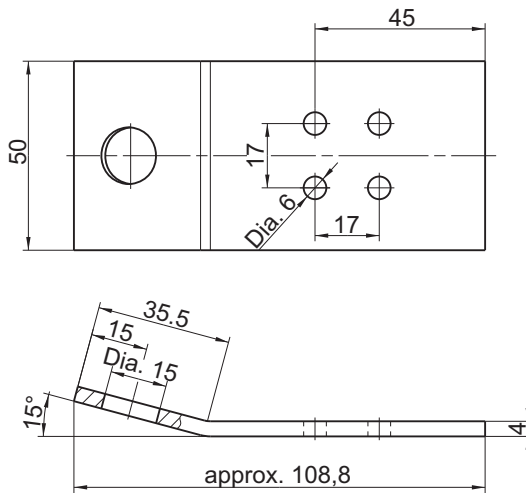


Part-No.	Material
0800800776	Steel zinc coated, yellow chromate



Mounting bracket

for MX-F distributor



Part-No.

Material

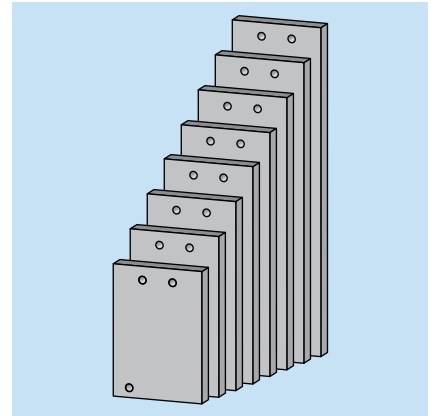
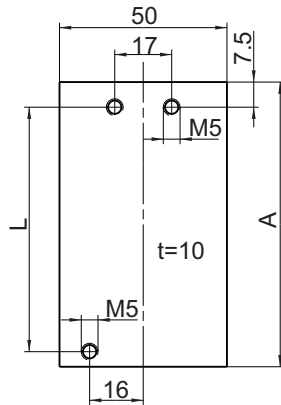
0800801627

Steel zinc coated,
yellow chromate



Mounting Plates (welding)

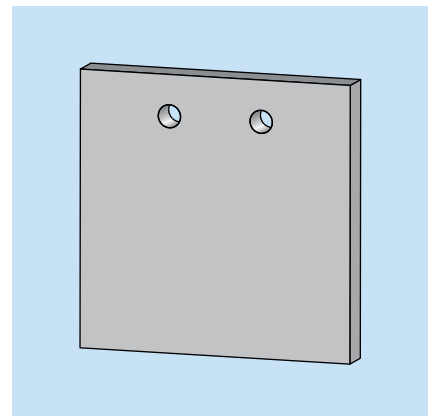
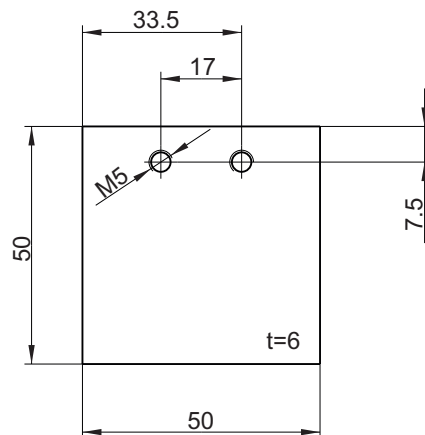
for MX-F Distributor



Part-No.	for Distributor MX-F X/X	A	L	Material
FWZ02259-00 001	3/X	70	57.2	Steel
FWZ02259-00 002	4/X	85	72.0	Steel
FWZ02259-00 003	5/X	100	86.7	Steel
FWZ02259-00 004	6/X	115	101.5	Steel
FWZ02259-00 005	7/X	129	116.2	Steel
FWZ02259-00 006	8/X	144	131	Steel
FWZ02259-00 007	9/X	159	145.7	Steel
FWZ02259-00 008	10/X	174	160.5	Steel

Short Mounting Plate (welding)

for MX-F Distributors

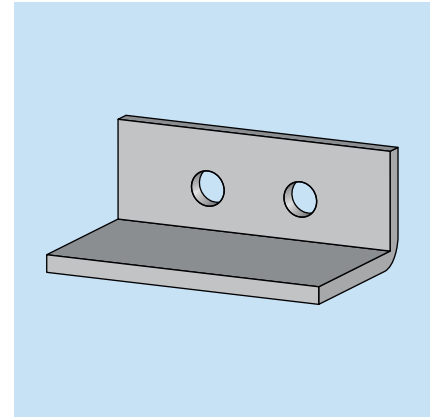
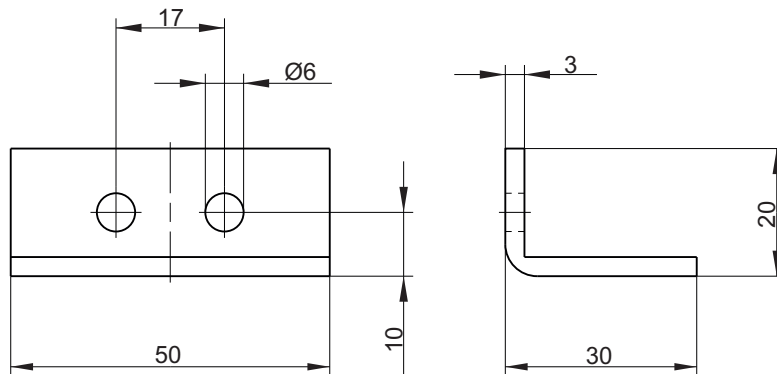


Part-No.	Material
0800800636	Steel zinc coated, yellow chromate



Angle Mounting Plate (welding)

for MX-F Distributor



Part-No.	Material
0800800571	Steel zinc coated, yellow chromate

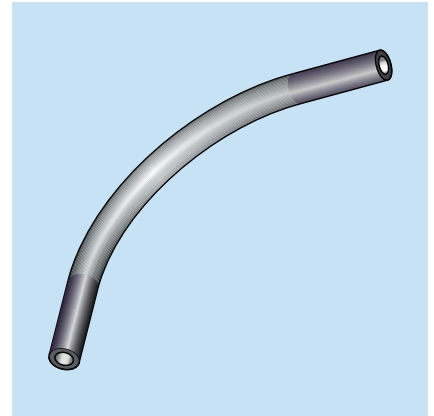
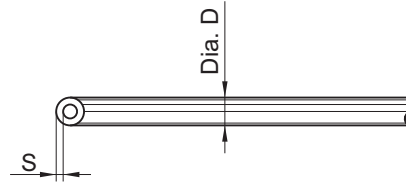
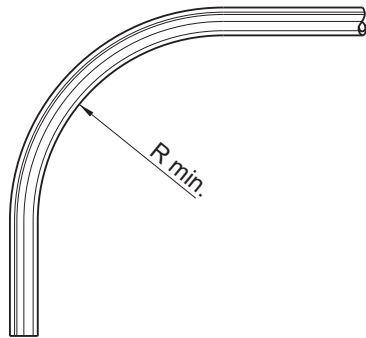


8.8 Hoses, tubes and accessories

Table of Contents	Page
Tubes, hoses and pipes	
Polyamide tube	8.8.2
High pressure hose	8.8.2
Steel pipes	8.8.3
Polyamide tube for malfunction indicator on pressure relief valve	8.8.3
Steel pipes dia. 10x3, straight	8.8.4
Steel pipes dia. 10x3, bent one-side	8.8.4
Steel pipes dia. 10x3, bent both-side	8.8.5
Sleeves and pipe sockets	
Sleeves	8.8.6
Straight pipe socket, for the assembly of a high pressure hose Ø8,6x4	8.8.7
Pipe socket bend by 45° for assembly of a high pressure hose Ø8,6x4	8.8.8
Pipe socket bend by 90° for assembly of a high pressure hose Ø8,6x4	8.8.9
Insert for Ferrule, straight for assembly of a High Pressure Hose Dia. 11.2 x 6.5	8.8.10
Pipe socket bend by 45° for assembly of a High Pressure Hose Dia. 11.2 x 6.5	8.8.10
Pipe socket bent by 90° for assembly of a High Pressure Hose Dia. 11.2 x 6.5	8.8.11
Ferrules and Nipples	
Ferrule DN4	8.8.12
Nipple DN 4	8.8.12

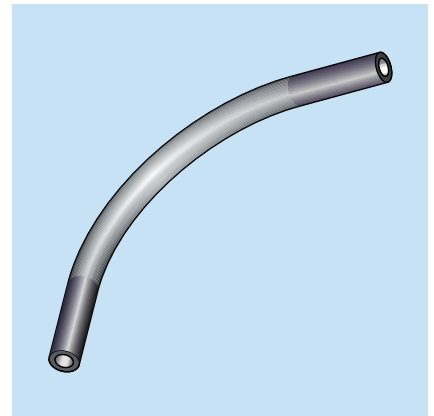
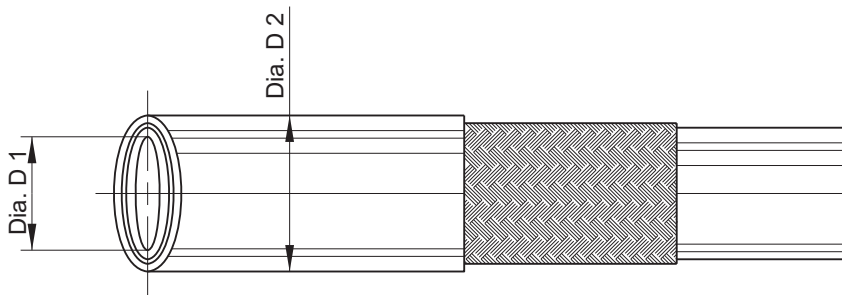


Polyamide tube



Part-No.	Dia. D	S	min. bending radius R	Type	Viscous oil filled	Material
1001 20 075	4	0.85	40	hard	with	Polyamide
1001 20 040	4	0.85	40	soft	with	Polyamide
1001 20 039	4	0.85	40	hard	without	Polyamide
1001 20 041	4	0.85	40	soft	without	Polyamide
1001 20 100	6	1.5	40	hard	with	Polyamide
1001 20 101	6	1.5	40	hard	without	Polyamide

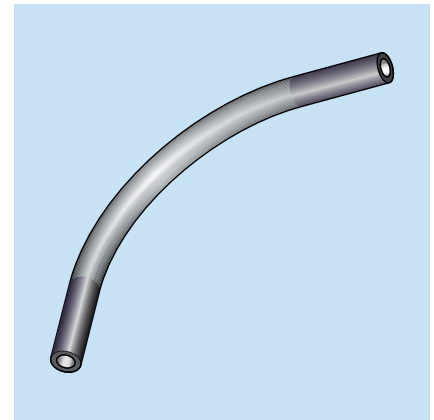
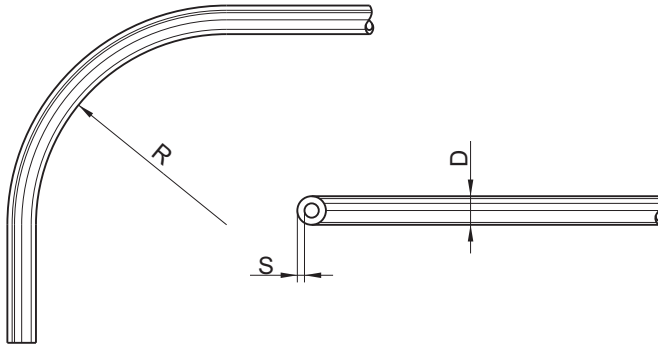
High Pressure Hose



Part-No.	Dia. D 1	Dia. D 2	Type	Grease filled	Material
1001 20 200	4	8.6	straight	with	Plastic / Synthetic Net
1001 20 205	4	8.6	spiral	with	Plastic / Synthetic Net
1001 20 201	4	8.6	straight	without	Plastic / Synthetic Net
1001 20 206	4	8.6	spiral	without	Plastic / Synthetic Net
1001 20 265	6.5	11.2	straight	with	Plastic / Synthetic Net
1001 20 266	6.5	11.2	straight	without	Plastic / Synthetic Net

Steel Pipe

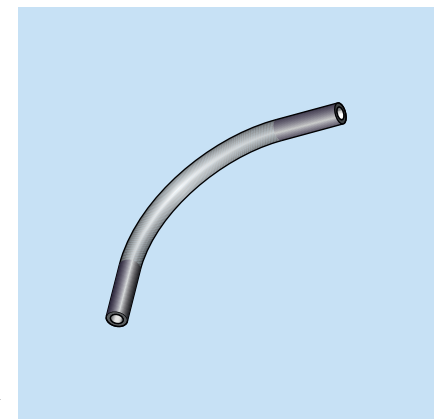
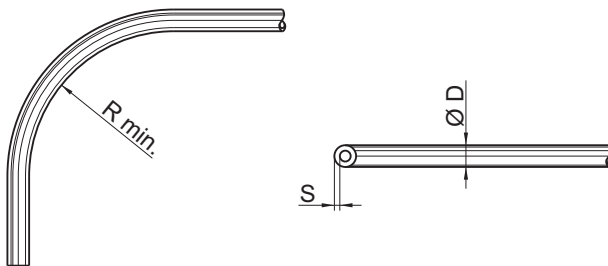
DIN 2391



Part-No.	D	S	min. bending radius R	Material
0612 020 002	4	0.7	5	Steel zinc coated
0612 020 001	6	1	11	Steel zinc coated
0612 020 017	8	1	15	Steel zinc coated
0678 022 223	10	3	30	Steel zinc coated

Polyamide tube

for grease return into reservoir at malfunction indicator on pressure relief valve



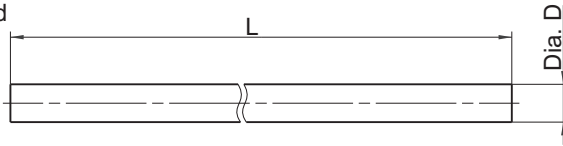
Part-No.	ØD	S	min. bending radius R	Type	Grease filled	Length	Material
1001 20 068	6	1	30	soft	without	0,1 m	Polyamide



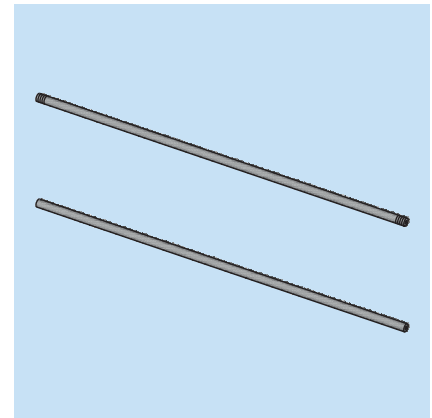
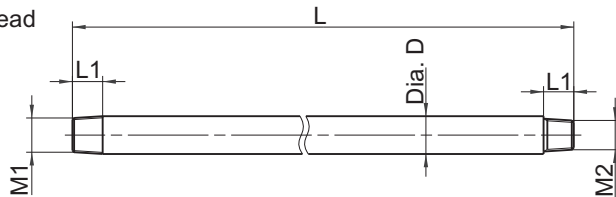
Steel pipe dia. 10x3

straight, at FAZ04664-00

Pic. 1:
without thread



Pic. 2:
with thread

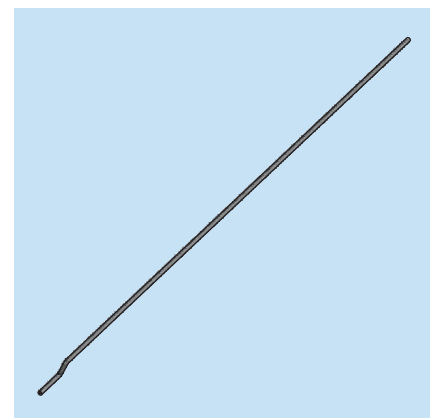
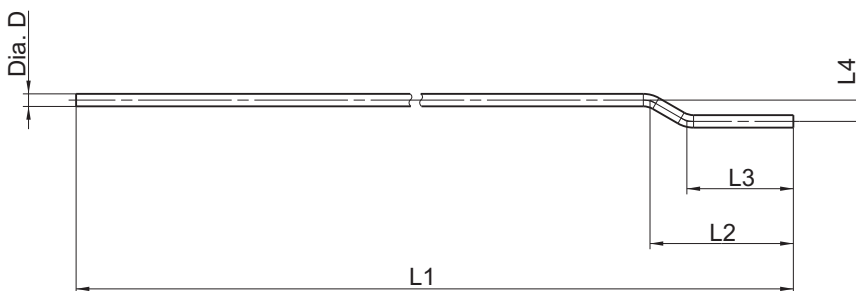


Part-No.	Pipe dia. D	L	M1	M2	L1	Pic.	Material
1001030164	10x3	500	--	--	--	1	Steel
1001030165	10x3	1000	--	--	--	1	Steel
1001030166	10x3	1600	--	--	--	1	Steel
FWZ04514-00	10x3	800	M10x1k	M8x1k	8	2	Steel
FWZ04514-01	10x3	480	M10x1k	M10x1k	8	2	Steel
FWZ04514-02	10x3	600	M10x1k	M10x1k	8	2	Steel
0800160003	10x3	600	M10x1k	M10x1k	8	2	1.4301

All Parts made of steel are zinc coated and yellow chromated.

Steel pipe dia. 10x3

bent one-side at FAZ03954-12



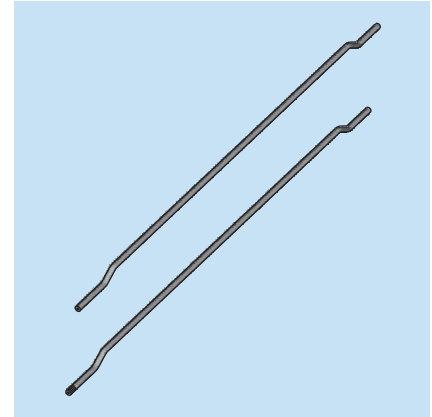
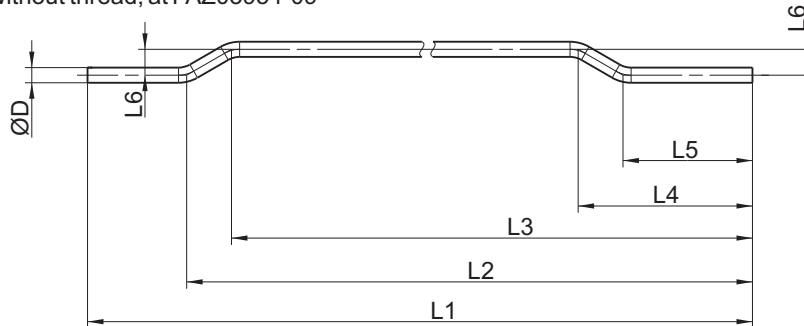
Part-No.	Pipe dia. D	L1	L2	L3	L4	Material
0800600056	10x3	1600	114.9	85.4	17.1	Steel zinc coated, yellow chromated



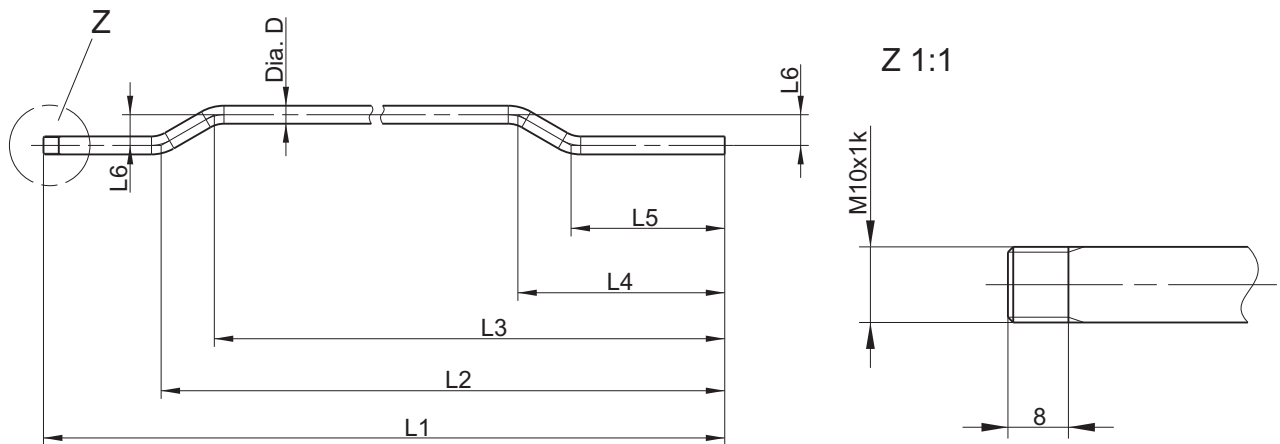
Steel pipe dia. 10x3

bent both-side

Pic. 1:
without thread, at FAZ03954-09



Pic. 2:
with thread, at FAZ03954-10 and FAZ03954-11

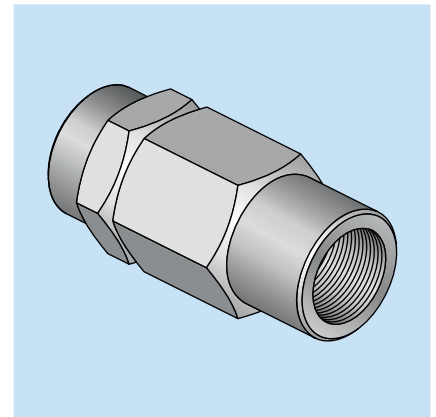
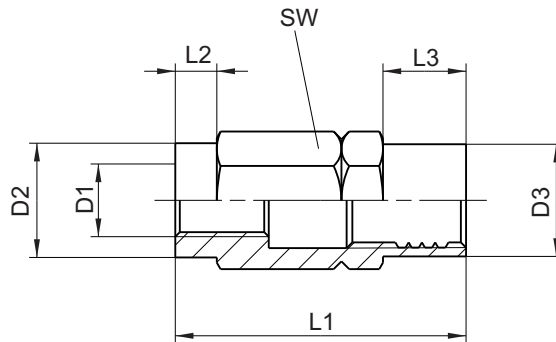


Part-No.	Pipe dia. D	L1	L2	L3	L4	L5	L6	Pic.	Material
0800600066	10x3	970	905	875	115	85	17	1	Steel
0800600054	10x3	800	734.6	705.1	114.9	85.4	17.1	2	Steel
0800600055	10x3	970	904.6	875.1	114.9	85.4	17.1	2	Steel

All Parts made of steel are zinc coated and yellow chromated.



Threaded ferrule



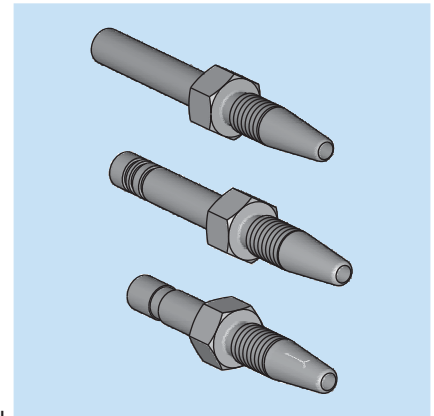
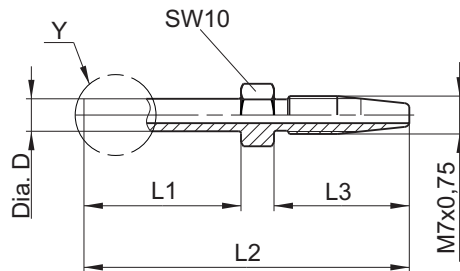
Part-No.	D1	D2	D3	L1	L2	L3	SW	for HP-Hose	Material
1001 21 200	M7x0.75	11	10.8	28	4	8	12	8.6x4	Steel
1001 21 197	M7x0.75	10	11	28	2	8	12	8.6x4	1.4305
1001 21 305	M9x1	14	16	35.8	4	9	17	11.2x6,5	Steel
1001 21 347	M9x1	14	16	35.8	4	9	17	11.2x6,5	1.4305

All parts made of steel are zinc coated and yellow chromated.

Straight pipe socket,

for the assembly of a high pressure hose Ø8,6x4

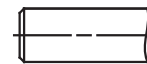
Dimensions:



Part-no.	Dia. D	L1	L2	L3	Detail	M	Material
1001 21 218	5	30	64	28	Y	M7x0.75	Steel
1001 21 189	6	18	49.1	25	Y	M7x0.75	Steel
1001 21 380	6	18	49.1	25	Y	M7x0.75	1.4305
1001 21 186	6	20	51.1	X	Y	M7x0.75	Steel
1001 21 190	6	24	55.1	25	Y	M7x0.75	Steel
1001 21 201	6	30	61.1	25	Y	M7x0.75	Steel
1001 21 196	6	30	61.1	25	Y	M7x0.75	1.4305
1001 21 198	6	30	61.1	25	Y	M7x0.75	1.4571
1001 21 171	8	22	53	25	Y	M7x0.75	Steel
1001 21 173	8	30	61	25	Y	M7x0.75	Steel
1001 21 219	10	30	64	28	Y	M7x0.75	Steel
1001 21 220	10	30	64	28	Y	M7x0.75	1.4305
1001 21 282	6	24	55.1	25	Y1	M7x0.75	Steel
1001 21 252	6	30	61.1	25	Y1	M7x0.75	Steel
1001 21 253	6	30	61.1	25	Y1	M7x0.75	1.4305
1001 21 382	6	18	49.1	25	Y2	M7x0.75	Steel
1001 21 191	6	30	61.1	25	Y2	M7x0.75	Steel
1001 21 210	6	21	52.1	25	Y3	M7x0.75	Steel

Version for cutting ring-/olive

Y



Version for plug-type connection HP detachable without tools

Y1



Version for BEKA-plug-type connection detachable with tools

Y2



Version for plug-type connection Camozzi detachable without tool

Y3



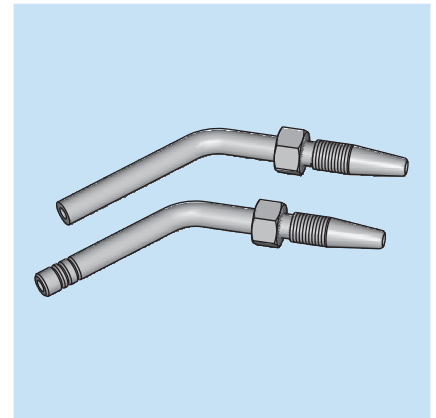
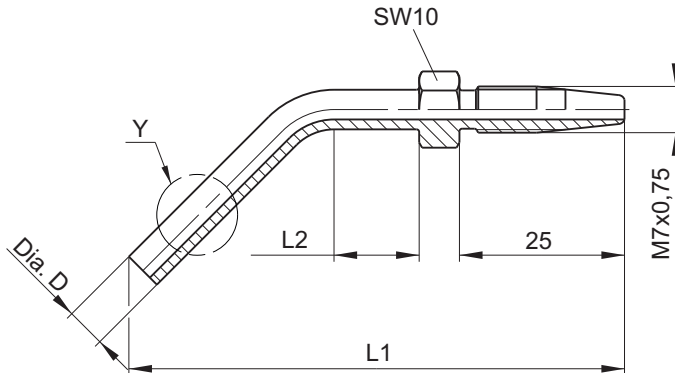
All Parts made of steel are zinc coated and yellow chromated.



Pipe socket bend by 45°

for assembly of a high pressure hose Ø8,6x4

Dimensions:

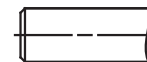


Part-no.	Dia. D	L1	L2	Detail	M	Material
1001 21 227	6	68.3	18.5	Y	M7x0.75	Steel
1001 21 206	6	79.1	28.4	Y	M7x0.75	Steel
1001 21 187	6	79.1	28.4	Y	M7x0.75	1.4305
1001 21 215	6	93.2	43.3	Y	M7x0.75	Steel
1001 21 175	8	68.5	13	Y	M7x0.75	Steel
1001 21 177	8	76.5	13	Y	M7x0.75	Steel
1001 21 254	6	79.1	28.4	Y1	M7x0.75	Steel
1001 21 383	6	79.1	28.4	Y2	M7x0.75	Steel

All Parts made of steel are zinc coated and yellow chromated.

Version for cutting ring-/olive

Y



Version for plug-type connection HP detachable without tools

Y1



Version for BEKA-plug-type connection detachable with tools

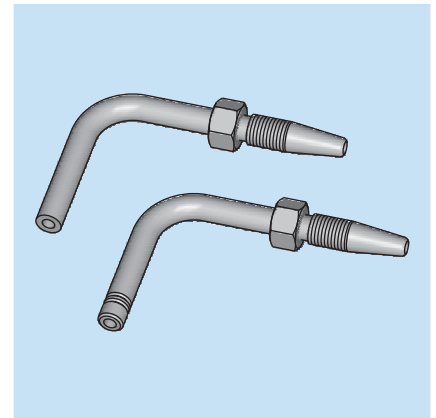
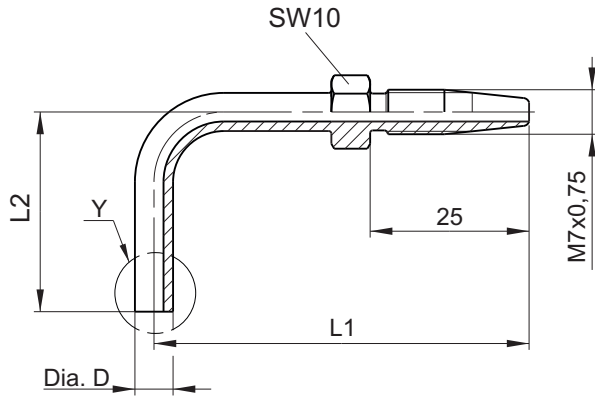
Y2



Pipe socket bend by 90°

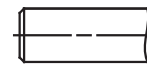
for assembly of a high pressure hose Ø8,6x4

Dimensions:



Version for cutting ring-/olive

Y



Version for plug-type connection HP detachable without tools

Y1



Version for BEKA-plug-type connection detachable with tools

Y2



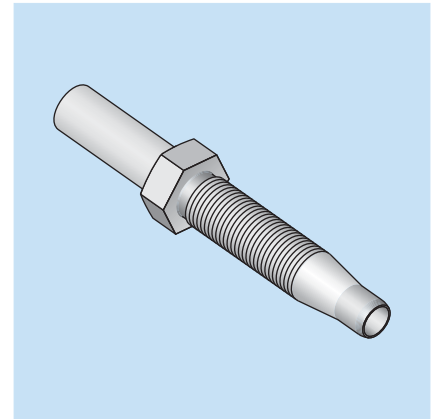
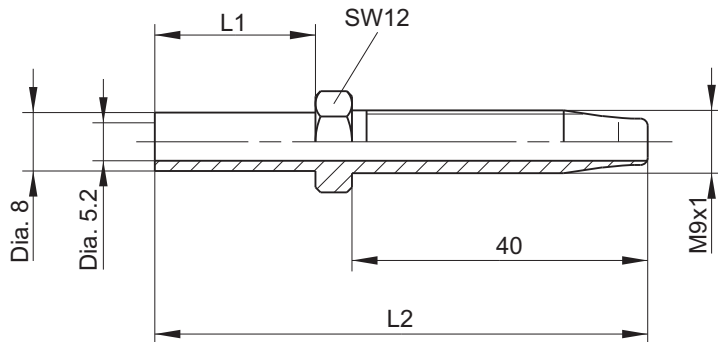
Part-no.	Dia. D	L1	L2	Detail	M	Material
1001 21 208	6	45.1	20.7	Y	M7x0.75	Steel
1001 21 378	6	45.1	20.7	Y	M7x0.75	1.4305
1001 21 209	6	45.1	32.7	Y	M7x0.75	Steel
1001 21 379	6	45.1	32.7	Y	M7x0.75	1.4305
1001 21 202	6	59	38	Y	M7x0.75	Steel
1001 21 376	6	59	38	Y	M7x0.75	1.4305
1001 21 203	6	59	50	Y	M7x0.75	Steel
1001 21 377	6	59	50	Y	M7x0.75	1.4305
1001 21 179	8	55	30	Y	M7x0.75	Steel
1001 21 181	8	55	50	Y	M7x0.75	Steel
1001 21 228	6	45.1	32.7	Y1	M7x0.75	Steel
1001 21 257	6	59	38	Y1	M7x0.75	Steel
1001 21 283	6	59	50	Y1	M7x0.75	Steel
1001 21 385	6	45.1	32.7	Y2	M7x0.75	Steel
1001 21 386	6	59	38	Y2	M7x0.75	Steel
1001 21 387	6	59	50	Y2	M7x0.75	Steel

All parts made of steel are galvanized, yellow chromated.



Insert for Ferrule, straight

for fittings with union screws and cutting rings, for the assembly of high pressure hose Ø11,2x6,5

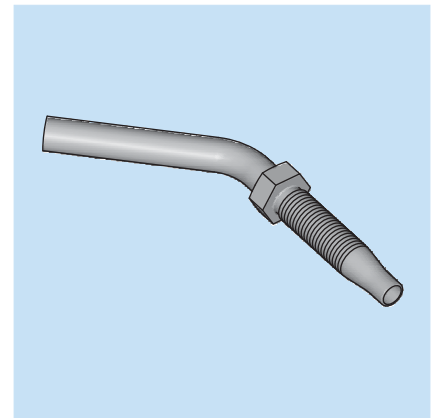
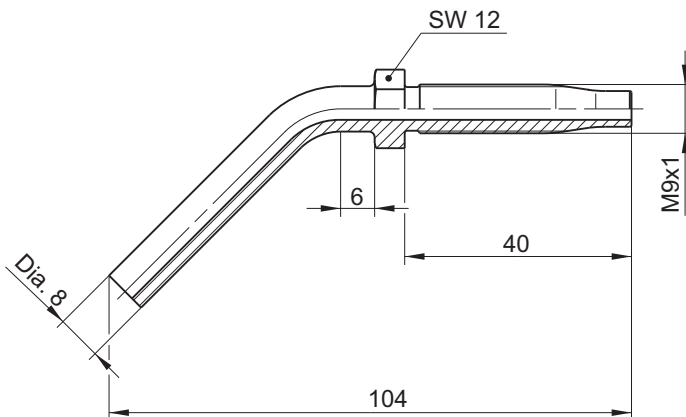


Part-No.	L1	L2	Material
1001 21 301	22	67.3	Steel
1001 21 348	22	67.3	1.4305
1001 21 161	42	87.3	Steel

All Parts made of steel are zinc coated and yellow chromated.

Pipe socket bend by 45°

for fittings with union screws and cutting rings, for the assembly of high pressure hose Ø11,2x6,5

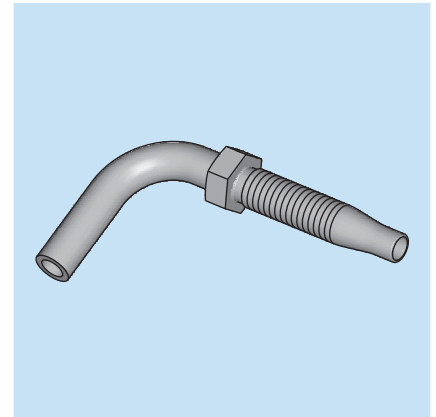
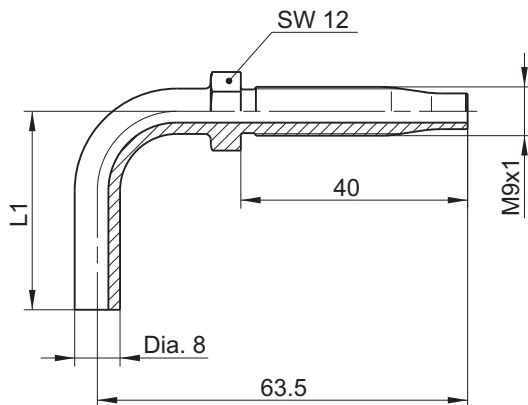


Part-No.	Material
1001 21 163	Steel
1001 21 164	1.4305

All Parts made of steel are zinc coated and yellow chromated.

Insert for Ferrule, 90° bent

for Couplings with Cap Screw and Cutting Olive to Mounting a High Pressure Hose Dia. 11.2 x 6.5

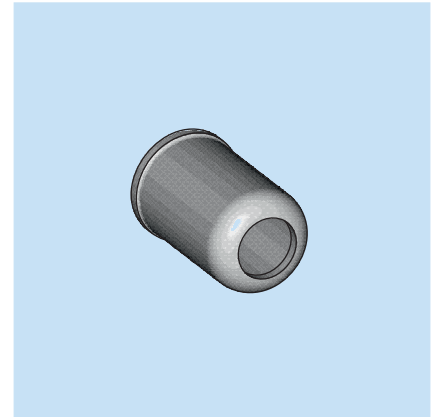
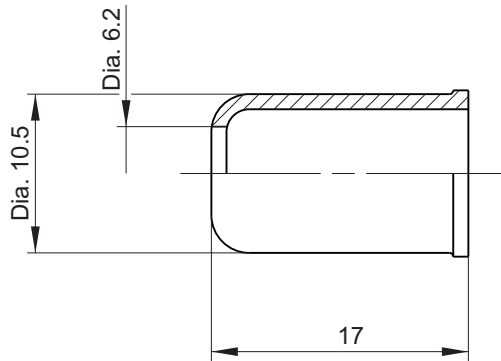


Part-No.	L1	Material
1001 21 165	35	Steel
1001 21 166	35	1.4305
1001 21 167	55	Steel
1001 21 168	55	1.4305
1001 21 169	75	Steel
1001 21 170	75	1.4305

All Parts made of steel are zinc coated and yellow chromated.

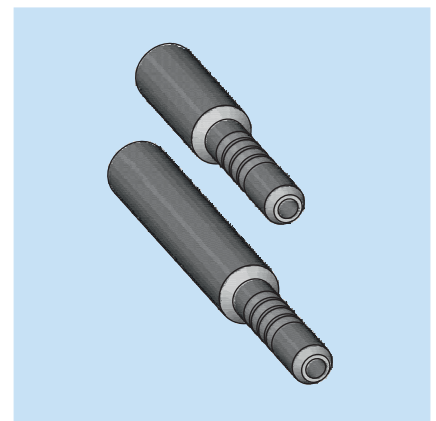
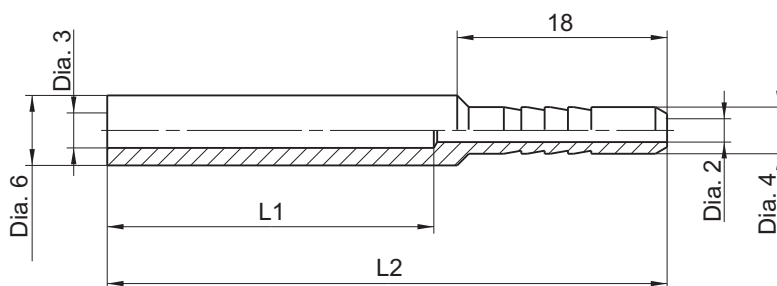


Ferrule DN4



Part-No.	Material
100121204	Steel zinc coated, yellow chromated

Insert for Ferrule DN 4



Part-No.	L1	L2	Material
FWZ02392-00	28	48	Steel
FWZ02392-01	13	33	Steel

All Parts made of steel are zinc coated and yellow chromated.

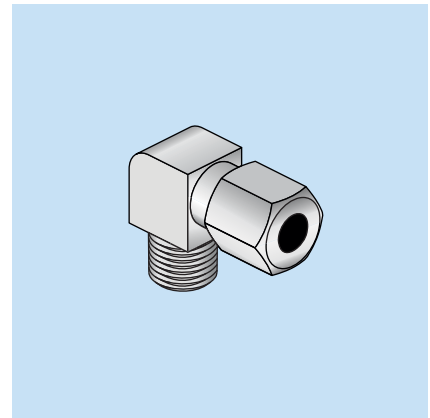
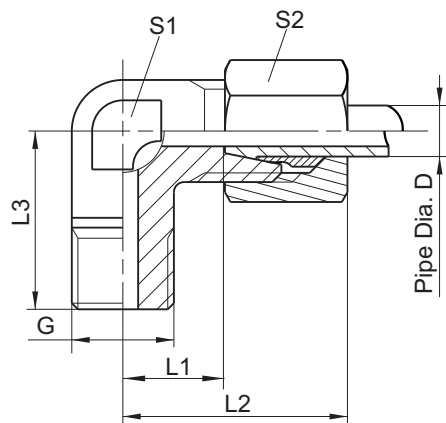


8.9 Fittings

Table of Contents	Page
Fittings with bolted connection	
Elbow screw fitting	8.9.2
Male stud coupling with conical thread	8.9.3
Male stud coupling with straight thread	8.9.4
Straight fitting (pipe connection)	8.9.5
Elbow swivelling screw fitting	8.9.6
Straight rotary connection	8.9.7
Hinges	8.9.7
Bulkhead fitting	8.9.8
Adjustable L fitting	8.9.9
Reduction	8.9.9
T fittings	8.9.10
Adjustable T fitting	8.9.10
Union Nuts	8.9.11
Cutting ring	8.9.12
Union Screw	8.9.13
Olives	8.9.13
Fittings with plug-type connections	
Straight plug-type connection type BEKA	8.9.14
Elbow plug connection type BEKA	8.9.15
Hinge with plug-type connection type BEKA	8.9.16
Elbow swivelling screw fitting with plug-type connection type BEKA	8.9.17
Straight plug-type connection detachable type HP	8.9.18
Elbow plug connection detachable type HP	8.9.19
Joint swivelling plug-type connection detachable type HP	8.9.20
Straight plug-type connection (pipe connection) type Camozzi	8.9.21
Fittings without pipe connections	
Extensions and reductions	8.9.22 - 8.9.24
Elbow Connector	8.9.25 - 8.9.26
Straight connection piece	8.9.27
Straight Bulkhead fitting with inside threading	8.9.27



Elbow screw fitting



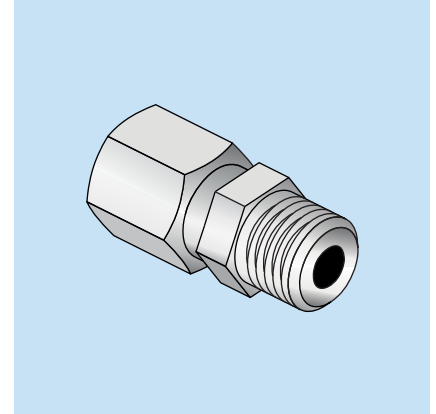
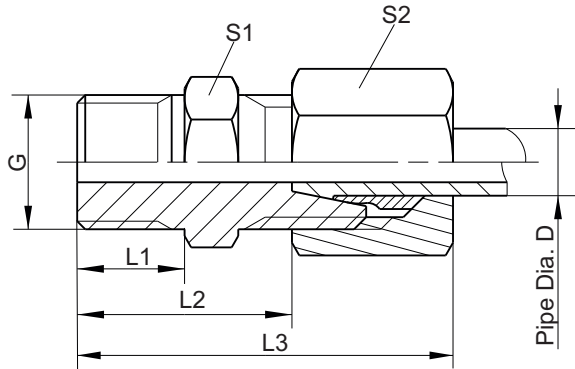
Part-No.	G	Construction Sort	Pipe Dia. D	L1	approx. L2	L3	S1	S2	Material
0401 2210 406	M6k	LL	4	11	21	17	9	10	Steel
0401 2210 506	M8x1k	LL	4	11	21	17	9	10	Steel
0401 2210 513	M8x1k	LL	4	11	21	17	9	10	1.4751
0401 2210 306	M10x1k	LL	4	11	21	17	11	10	Steel
0401 2210 606	R1/8" k	LL	4	11	21	18	11	10	Steel
0401 2210 613	R1/8" k	LL	4	11	21	18	11	10	1.4751
0401 2200 406	M6k	LL	6	9.5	21	17	11	12	Steel
0401 2200 413	M6k	LL	6	9.5	21	17	11	12	1.4305
0401 2200 506	M8x1k	LL	6	9.5	21	17	11	12	Steel
0401 2200 513	M8x1k	LL	6	9.5	21	17	11	12	1.4305
0401 2200 306	M10x1k	LL	6	9.5	21	17	11	12	Steel
0401 2200 313LL	M10x1k	LL	6	9.5	21	17	11	12	1.4305
0401 2201 006	M10x1k	L	6	12	27	20	12	14	Steel
0401 2200 606	R1/8" k	LL	6	10	22	17	11	12	Steel
0401 2200 613LL	R1/8" k	LL	6	10	22	17	11	12	1.4305
0401 2200 806	R1/4" k	S	6	16	31	27	14	17	Steel
0401 2200 813	R1/4" k	S	6	16	31	27	14	17	1.4305
0401 2220 606	R1/8" k	LL	8	11.5	23	20	12	14	Steel
0401 2220 306	M10x1k	LL	8	11.5	23	20	12	14	Steel
0401 2220 313	M10x1k	LL	8	11.5	23	20	12	14	1.4305
0401 2220 613	R1/8" k	LL	8	11.5	23	20	12	14	1.4305
0401 2220 806	R1/4" k	L	8	14	29	27	14	17	Steel
0401 2220 813	R1/4" k	L	8	14	29	27	14	17	1.4305

All Parts made of steel are zinc coated and yellow chromated.



Male stud coupling

with conical thread



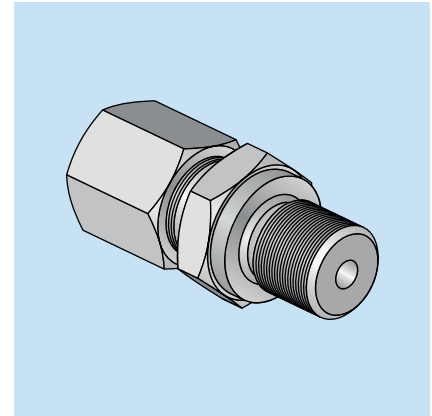
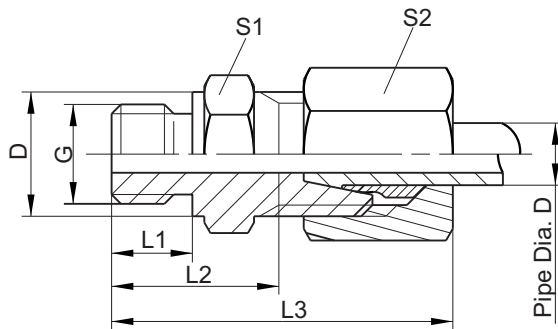
Part-No.	G	Construction Sort	Pipe Dia. D	L1	L2	approx. L3	S1	S2	Material
0401 2010 406	M6k	LL	4	8	16	26	10	10	Steel
0401 2010 506	M8x1k	LL	4	8	16	26	10	10	Steel
0401 2010 513	M8x1k	LL	4	8	16	26	10	10	1.4571
0401 2010 306	M10x1k	LL	4	8	14.5	26	11	12	Steel
0401 2010 606	R1/8"k	LL	4	8	16	26	11	10	Steel
0401 2000 406	M6k	LL	6	8	14.5	26	11	12	Steel
0401 2000 413	M6k	LL	6	8	14.5	26	11	12	1.4571
0401 2003 906	M7x1k	LL	6	8	14.5	26	12	12	Steel
0401 2000 506	M8x1k	LL	6	8	14.5	26	11	12	Steel
0401 2000 513	M8x1k	LL	6	8	14.5	26	11	12	1.4571
0401 2000 306	M10x1k	LL	6	8	14.5	26	11	12	Steel
0401 2000 313	M10x1k	LL	6	8	14.5	26	11	12	1.4305
0401 2000 606	R1/8"k	LL	6	8	14.5	26	11	12	Steel
0401 2000 613	R1/8"k	LL	6	8	14.5	26	11	12	1.4305
0401 2000 806	R1/4"k	S	6	11.5	23.5	40	17	17	Steel
0401 2020 306	M10x1k	LL	8	8	16.5	28	12	14	Steel
0401 2020 313	M10x1k	LL	8	8	16.5	28	12	14	1.4305
0401 2020 806	R1/4"k	L	8	12	20	35	17	17	Steel

All Parts made of steel are zinc coated and yellow chromated.



Male stud coupling

with straight thread



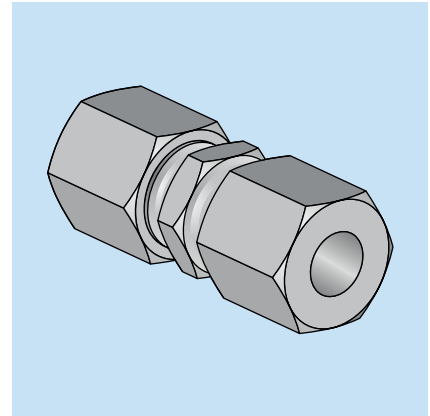
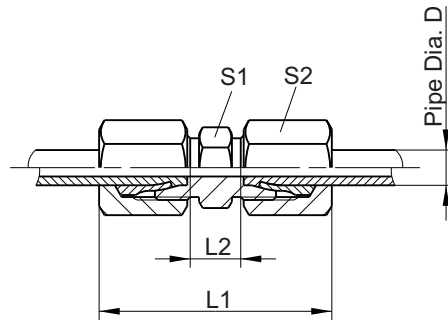
Part-No.	G	Construction Sort	Pipe Dia. D	L1	L2	approx. L3	S1	S2	D	Material
0401 2010 913	G1/8"	LL	4	8	16	28	14	12	14	1.4571
0401 2000 206	M10x1	L	6	8	16.5	31	14	14	14	Steel
0401 2000 213	M10x1	L	6	8	16.5	31	14	14	14	1.4571
0401 2000 906	G1/8"	LL	6	8	16	28	14	12	14	Steel
0401 2000 913LL	G1/8"	LL	6	8	16	28	14	12	14	1.4571
0401 2001 006L	G1/4"	L	6	12	22	37	19	14	18	Steel
0401 2001 006	G1/4"	S	6	12	25	40	19	17	18	Steel
0401 2001 013	G1/4"	S	6	12	25	40	19	17	18	1.4571
0401 2001 406	G3/8"	L	6	12	23.5	38	22	14	22	Steel
0401 2020 213	M10x1	L	8	12	22	37	17	17	17	1.4571
0401 2020 906	G1/8"	LL	8	8	18	29	14	14	14	Steel
0401 2020 913	G1/8"	LL	8	8	18	29	14	14	14	1.4571
0401 2021 006	G1/4"	L	8	12	22	37	19	17	18	Steel
0401 2021 013	G1/4"	L	8	12	22	37	19	17	18	1.4571
0401 2021 006S	G1/4"	S	8	12	27	42	19	19	18	Steel
0401 2021 406	G3/8"	L	8	12	23.5	38	22	17	22	Steel
0401 2021 413	G3/8"	L	8	12	23.5	38	22	17	22	1.4571

All Parts made of steel are zinc coated and yellow chromated.



Straight fitting

(pipe connection)

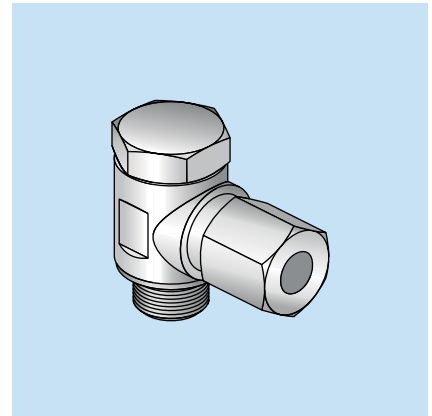
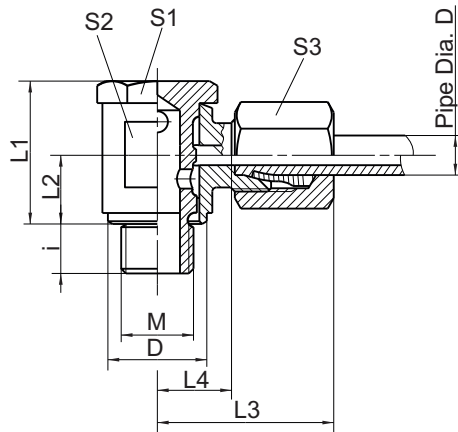


Part-No.	Pipe Dia. D	Construction Sort	approx.				Material
			L1	L2	S1	S2	
0401 3600 106	4	LL	31	12	9	10	Steel
0401 3600 306	6	LL	32	9	11	12	Steel
0401 3600 313	6	LL	39	9	11	12	1.4571
0401 3601 006	6	L	39	10	12	14	Steel
0401 3602 006	6	S	45	16	14	17	Steel
0401 3600 406	8	LL	35	12	12	14	Steel
0401 3601 106	8	L	40	11	14	17	Steel
0401 3602 106	8	S	47	18	17	19	Steel

All Parts made of steel are zinc coated and yellow chromated.



Elbow swivelling screw fitting

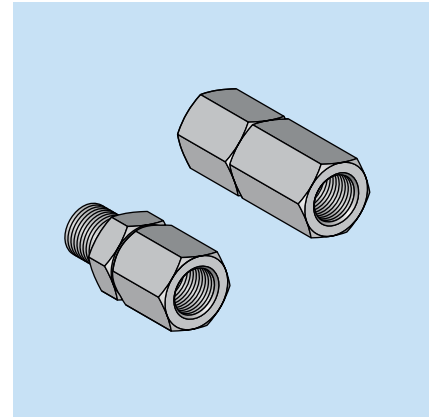
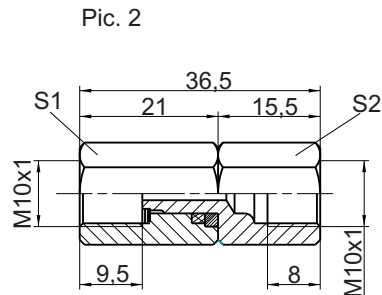
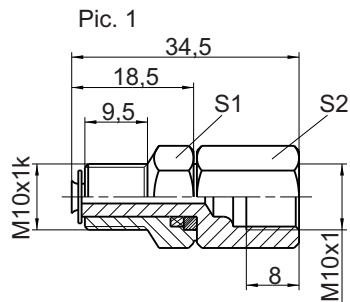


Part-No.	M	Pipe Dia. D	Construction sort	L1	L2	approx. L3	L4	i	S1	S2	S3	D	Material
0401 3210 206	M10x1	4	LL	20	9.5	22	10	6	14	14	12	13	Steel
0401 3210 706	M8x1	4	LL	18	8	21	11.5	6	14	14	10	13	Steel
0401 3200 706LL	M8x1	6	LL	20	9.5	22	10	6	14	14	12	13	Steel
0401 3200 206LL	M10x1	6	LL	20	9.5	22	10	6	14	14	12	13	Steel
0401 3200 206	M10x1	6	L	22	10	26	11.5	6	14	17	14	14.5	Steel
0401 3200 906	G1/8"	6	L	22	10	26	11.5	6	14	17	14	14.5	Steel
0401 3201 006	G1/4"	6	S	26	12.5	29	14.5	9	19	19	17	18	Steel
0401 3220 206LL	M10x1	8	LL	21.5	10	23	11	6	14	14	14	13	Steel
0401 3220 906	G1/8"	8	LL	21.5	10	23	11	6	14	14	14	13	Steel
0401 3221 006	G1/4"	8	L	26	12.5	28	13	9	19	19	17	18	Steel

All Parts made of steel are zinc coated and yellow chromated.

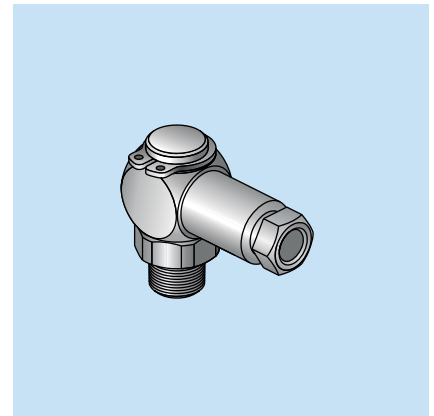
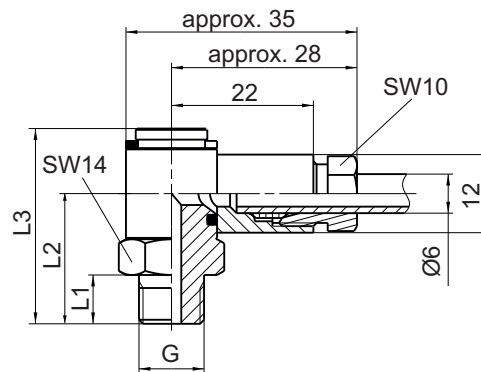


Straight rotary coupling



Part-No.	Pic.	S1	S2	Material
0402 020	1	14	14	Brass
0402 042	2	14	14	Brass

Hinges

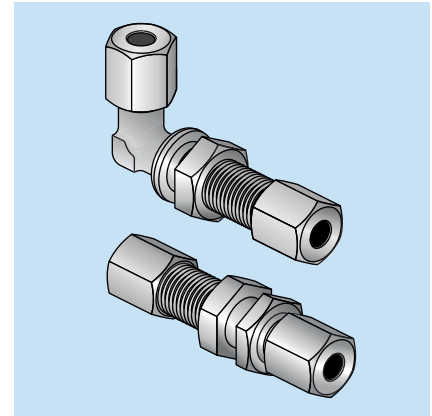
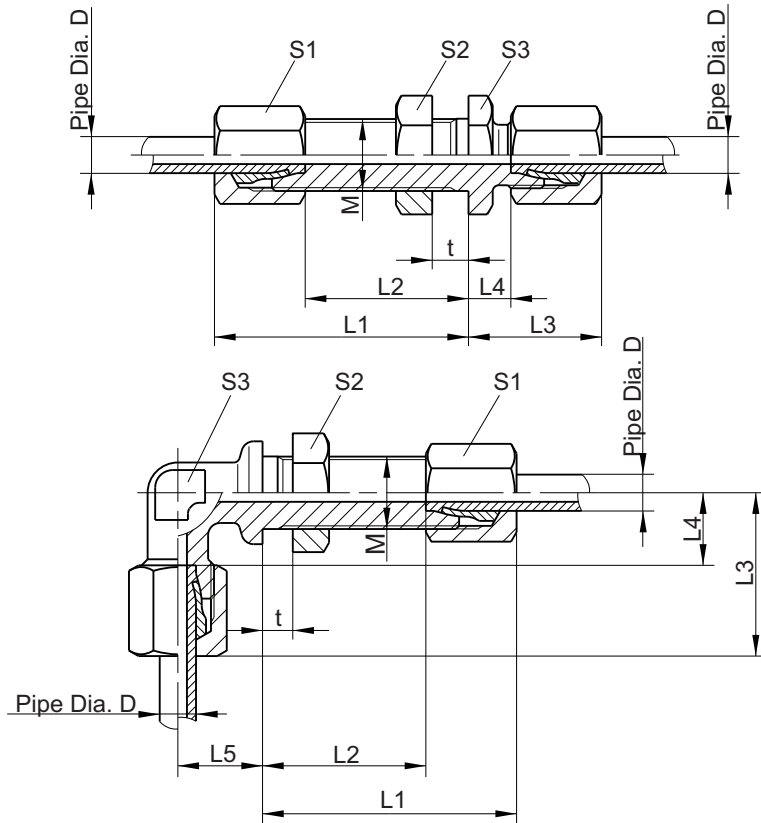


Part-No.	G	L1	L2	L3	Material
0402 011	M6k	7,5	20	30	Brass
0402 012	M8x1k	7,5	20	30	Brass
0402 013	M10x1k	7,5	20	30	Brass
0402 023	R1/8"k	7,5	20	30	Brass
0402 043	R1/4"k	9	21,5	31,5	Brass
0402 041	1/8-27 NPT	7,5	20	30	Brass





Bulkhead fitting



Straight bulkhead fitting

Part-No.	Pipe Dia. D	Construction sort	M	t max.	approx. L1	approx. L2	approx. L3	L4	S1	S2	S3	Material
0401 4701 006	6	L	M12x1.5	16	42	27	22	7	14	17	17	Steel
0401 4701 013	6	L	M12x1.5	16	42	27	22	7	14	17	17	1.4571
0401 4701 106	8	L	M14x1.5	16	42	27	23	8	17	19	19	Steel
0401 4701 113	8	L	M14x1.5	16	42	27	23	8	17	19	19	1.4571

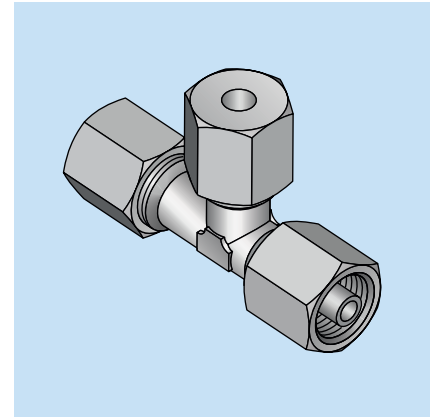
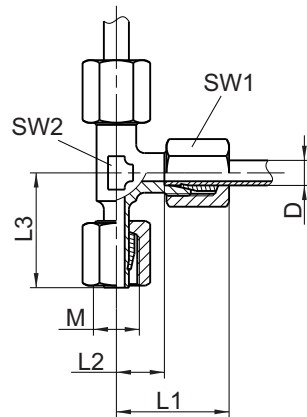
Angular bulkhead fitting

Part-No.	Pipe Dia. D	Construction sort	M	t max.	approx. L1	approx. L2	approx. L3 max.	L4	L5	S1	S2	S3	Material
0401 4721 006	6	L	M12x1.5	16	42	27	27	12	14	14	17	12	Steel
0401 4721 013	6	L	M12x1.5	16	42	27	27	12	14	14	17	12	1.4571
0401 4722 006	6	S	M14x1.5	16	44	29	31	16	17	17	19	12	Steel
0401 4721 106	8	L	M14x1.5	16	42	27	29	14	17	17	19	12	Steel

All Parts made of steel are zinc coated and yellow chromated.



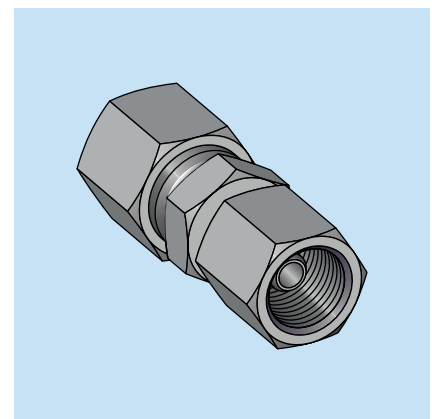
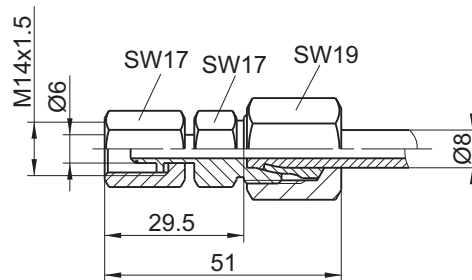
Adjustable L fitting



Part-No.	Construction Sort	D	M	approx.			SW1	SW2	Material
04015821006	L	6	M12x1.5	27	12	26	14	12	Steel
04015822006	S	6	M14x1.5	31	16	27	17	12	Steel
04015821106	L	8	M14x1.5	29	14	27.5	17	12	Steel
04015822106	S	8	M16x1.5	32	17	27.5	19	14	Steel

All Parts made of steel are zinc coated and yellow chromated.

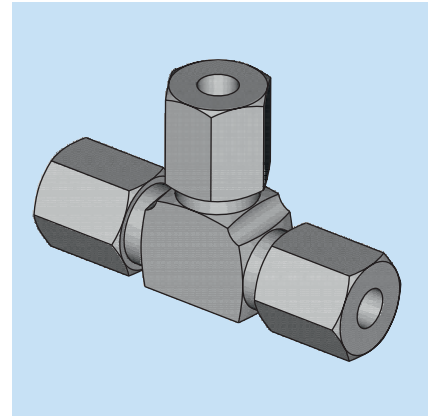
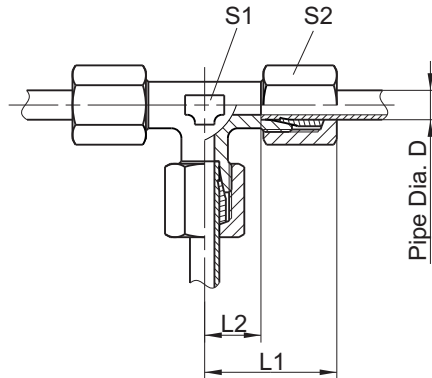
Reduction



Part-No.	Construction sort	Material
04060957	S	Steel, zinc coated, yellow chromate



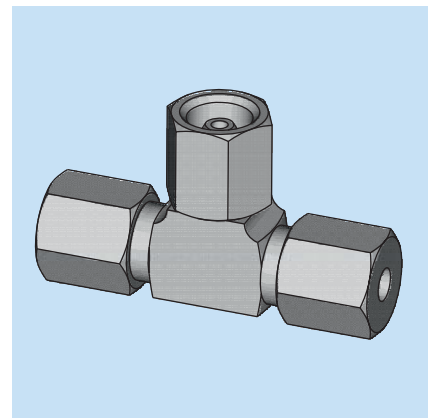
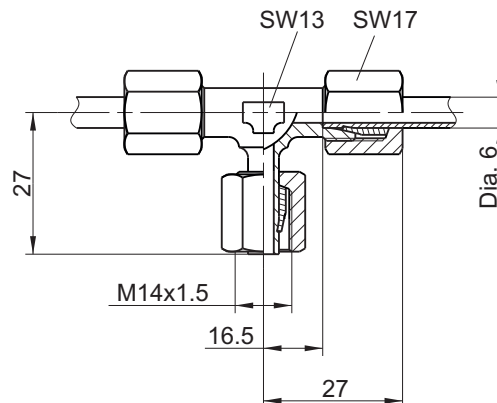
T fittings



Part-No.	Pipe Dia. D	Construction sort	approx.				Material
			L1	L2	S1	S2	
0401 3640 306	6	LL	21	9.5	11	12	Steel
0401 3641 006	6	L	27	12	12	14	Steel
0401 3642 006	6	S	31	16	14	17	Steel
0401 3640 406	8	LL	23	11.5	12	14	Steel
0401 3641 106	8	L	29	14	14	17	Steel

All Parts made of steel are zinc coated and yellow chromated.

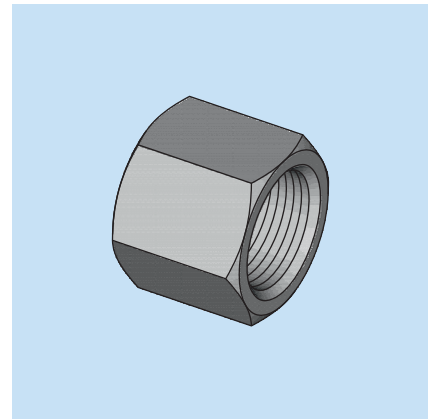
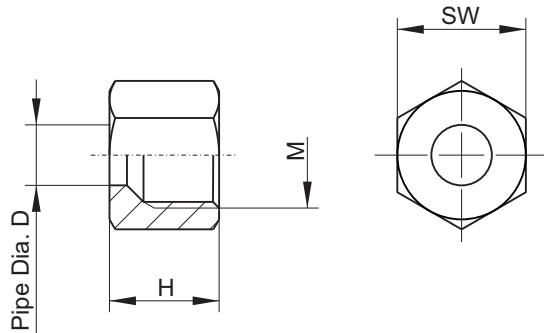
Adjustable T fitting



Part-No.	Construction Sort	Material
04015722006	S	Steel, zinc coated, yellow chromate



Union Nuts

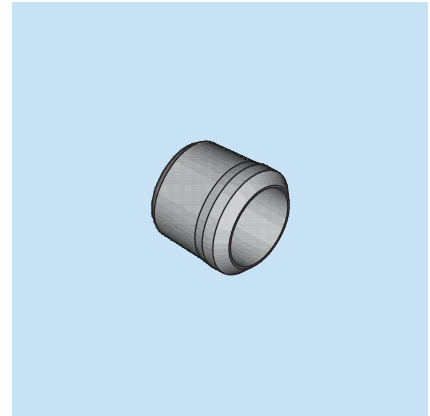
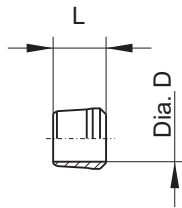


Part-No.	Construction sort	Pipe Dia. D	M	H	SW	Material
0403 15001 06	LL	4	M8x1	11	10	Steel
0403 15003 06	LL	6	M10x1	11.5	12	Steel
0403 15010 06	L	6	M12x1.5	14.5	14	Steel
0403 15010 13	L	6	M12x1.5	14.5	14	1.4571
0403 15020 06	S	6	M14x1.5	16.5	17	Steel
0403 15004 06	LL	8	M12x1	12	14	Steel
0403 15011 06	L	8	M14x1.5	14.5	17	Steel
0403 15011 13	L	8	M14x1.5	14.5	17	1.4571
0403 15021 06	S	8	M16x1.5	16.5	19	Steel

All Parts made of Steel are Zinc coated and yellow chromated.



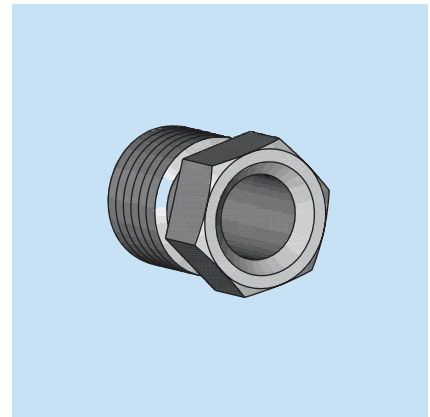
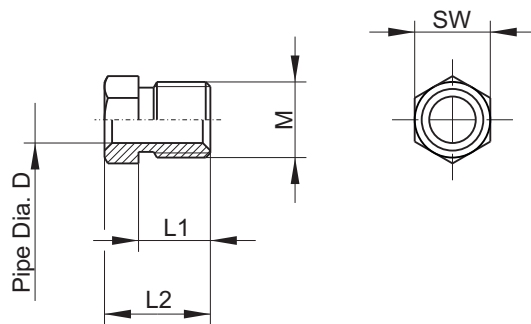
Cutting ring



Part-No.	for Pipe Dia. D	Construction Sort	L	Material
0403 15201 05	4	LL	6	Steel Zinc coated
0403 15203 05	6	LL	7	Steel Zinc coated
09 03861 06 03211	6	L / S	9.5	Steel Zinc coated
0403 15210 13	6	L / S	9.5	1.4571
0403 15204 05	8	LL	7	Steel Zinc coated
09 03861 08 03211	8	L / S	9.5	Steel Zinc coated
0403 15211 13	8	L / S	9.5	1.4571



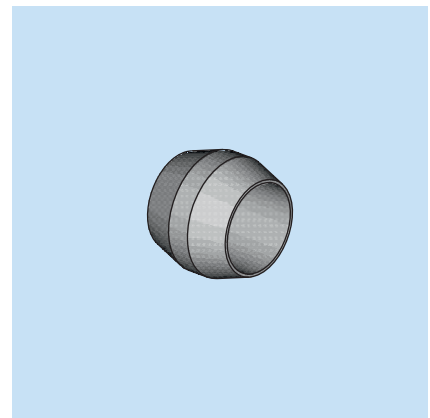
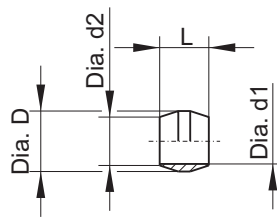
Union Screw



Part-No.	Pipe Dia. D	M	L1	L2	SW	Material
0802 000 311	4	M10x1	8.5	12	10	Steel
0802 000 312	4	M10x1	8.5	12	10	High-grade Steel
0802 000 190	6	M10x1	9.5	14	10	Steel
F0060/19-08	6	M10x1	9.5	14	10	High-grade Steel

All Parts made of Steel are Zinc coated and yellow chromated.

Olives

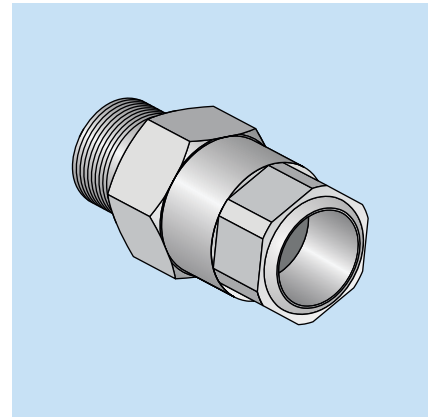
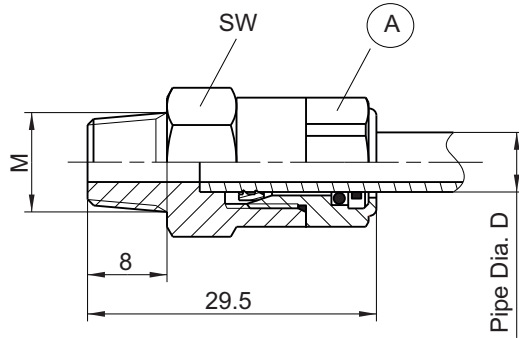


Part-No.	for Pipe Dia.	Dia. D	L	Dia. d1	Dia. d2	Material
09 03862 0011	4	6	5.5	4	4,3	Steel
09 03862 0013	4	6	5.5	4	4.3	Brass
09 03862 0015	4	6	5.5	4	4.3	High-grade Steel
09 03862 0021	6	8	6.5	6	6.4	Steel
09 03862 0023	6	8	6.5	6	6.4	Brass
09 03862 0026	6	8	6.5	6	6.4	High-grade Steel
09 03862 0031	8	10	6.5	8	8.5	Steel
09 03862 0033	8	10	6.5	8	8.5	Brass



Straight plug-type connection

Type BEKA



(A)

Plug-in connection
for Pipe Dia. 4
SW 12
Order-No.: 0406 0851

(A)

Plug-in connection
for Pipe Dia. 6
SW 12
Order-No.: 0406 0850

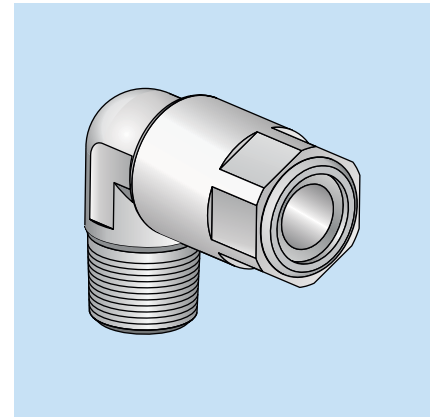
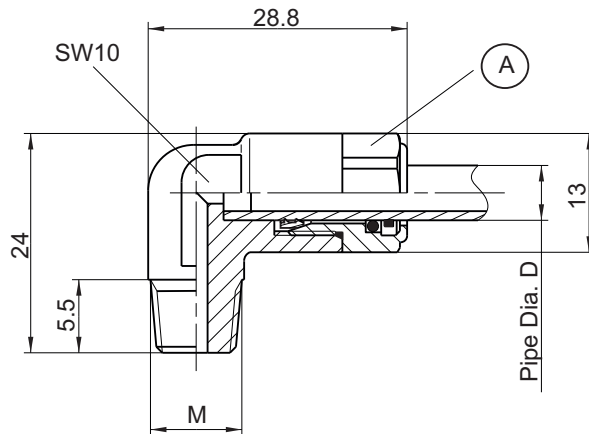
Part-No.	M	Pipe Dia. D	SW	Material
0406 0874	M6k	4	11	Steel
0406 0873	M8x1k	4	11	Steel
0406 0872	M10x1k	4	11	Steel
0406 0875	R1/8"k	4	11	Steel
0406 0878	M6k	6	13	Steel
0406 0877	M8x1k	6	13	Steel
0406 0876	M10x1k	6	13	Steel
0406 0879	R1/8"k	6	13	Steel

All Parts made of steel are zinc coated and yellow chromated.



Elbow plug connection

Type BEKA



(A)

Plug-in connection
for Pipe Dia. 4
SW 12
Order-No.: 0406 0851

(A)

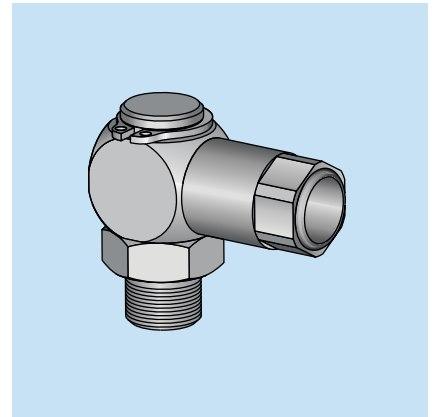
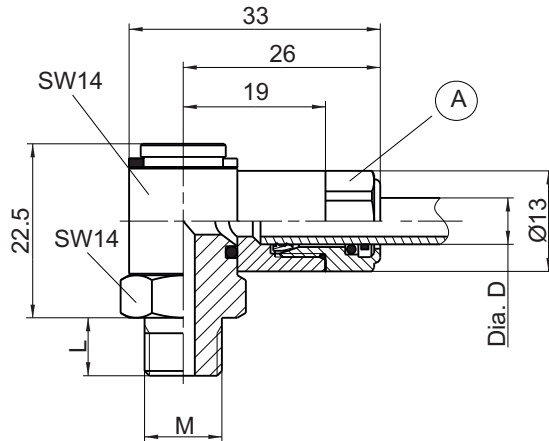
Plug-in connection
for Pipe Dia. 6
SW 12
Order-No.: 0406 0850

Part-No.	M	Pipe Dia. D	Material
0406 0866	M6k	4	Brass
0406 0865	M8x1k	4	Brass
0406 0864	M10x1k	4	Brass
0406 0867	R1/8"k	4	Brass
0406 0870	M6k	6	Brass
0406 0869	M8x1k	6	Brass
0406 0868	M10x1k	6	Brass
0406 0871	R1/8"k	6	Brass



Hinge

with plug-type connection
Type BEKA



(A)

Plug-in connection
for Pipe Dia. 4
SW 12
Order-No.: 0406 0851

(A)

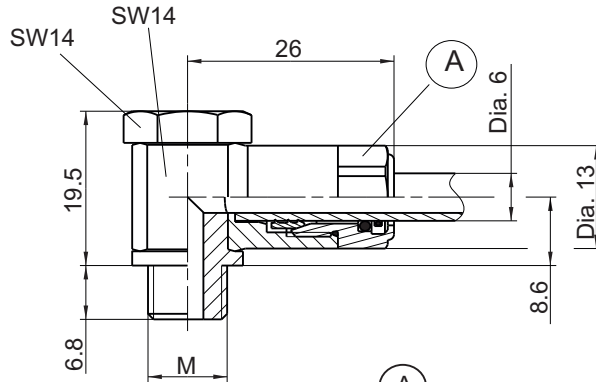
Plug-in connection
for Pipe Dia. 6
SW 12
Order-No.: 0406 0850

Part-No.	M	L	Dia. D	Material
0402 050	M6k	7.5	4	Brass
0402 051	M8x1k	7.5	4	Brass
0402 052	M10x1k	7.5	4	Brass
0402 054	R1/8"k	7.5	4	Brass
0402 053	R1/4"k	9	4	Brass
0402 036	M6k	7.5	6	Brass
0402 037	M8x1k	7.5	6	Brass
0402 038	M10x1k	7.5	6	Brass
0402 040	R1/8"k	7.5	6	Brass
0402 039	R1/4"k	9	6	Brass
0402 045	1/8-27 NPT	7.5	6	Brass



Elbow swivelling screw fitting

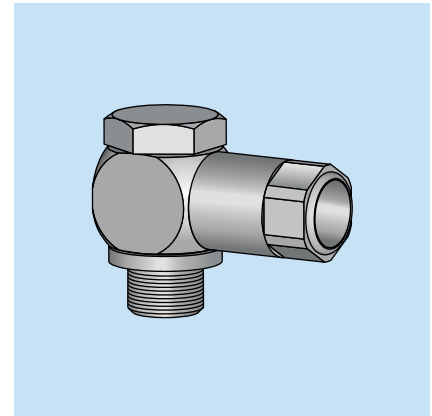
with plug-type connection
Type BEKA



A

Plug-in Connection
for Pipe Dia. 6
SW 12

Order-No.: 0406 0850



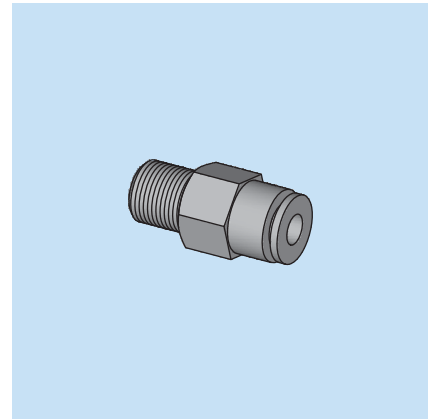
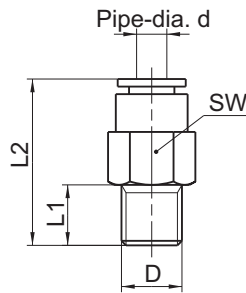
Part-No.	M	Material
0401950029-00	G1/8"	Steel, zinc coated,
0401950029-01	M10x1	yellow chromate



Straight plug-type connection detachable

Type HP

soluble without tool



Part-No.	Pipe-dia. d	D	L1	L2	SW
04062321	4	M8x1k	8	22	10
04062323	4	M10x1k	8	21	11
04062325	4	M6k	8	25	10
04062347	4	R1/8"k	7.5	21	10
04062322	6	M8x1k	8	28	12
04062324	6	M10x1k	8	24	12
04062326	6	M6k	8	28	12
04062348	6	R1/8"k	7.5	24	12
04062349	6	R1/4"k	11	26	14

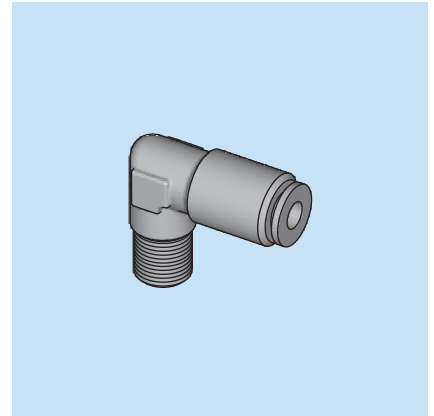
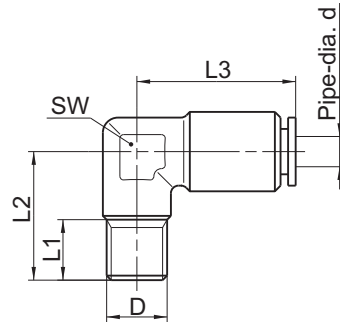
Material: Brass, nickel-plated; Pressure range: max. 150 bar; Temperature range: -20°C to +70°C



Elbow plug connection detachable

Type HP

soluble without tool



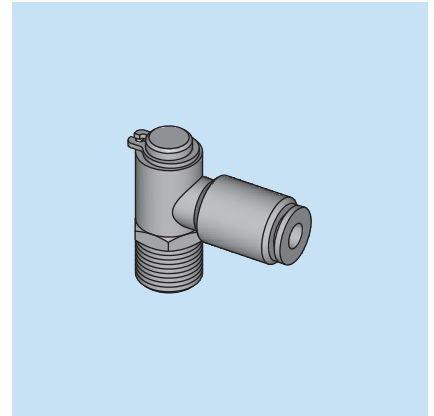
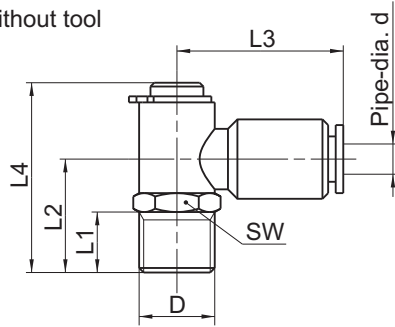
Part-No.	Pipe-dia. d	D	L1	L2	L3	SW
04062327	4	R1/8"k	7.5	17	21	10
04062329	4	M6k	6	17	21	10
04062331	4	M8x1k	8	17	21	10
04062333	4	M10x1k	8	17	21	10
04062328	6	R1/8"k	7.5	20	22	14
04062330	6	M6k	6	20	22	14
04062332	6	M8x1k	8	20	22	14
04062362	6	M8x1.25k	8	20	22	14
04062334	6	M10x1k	8	20	22	14

Material: Brass, nickel-plated; Pressure range: max. 150 bar;
Temperature range: -20°C to +70°C

Joint swivelling plug-type connection detachable

Type HP

soluble without tool



Part-No.	Pipe-dia. d	D	L1	L2	L3	L4	SW
04062335	4	R1/8"k	7.5	14.5	22	24.5	11
04062338	4	M6k	8	15	22	24	11
04062340	4	M8x1k	8	15	22	24	11
04062342	4	M10x1k	8	15	22	25	11
04062336	6	R1/8"k	7.5	14.5	24	24.5	11
04062339	6	M6k	8	15	24	24	11
04062341	6	M8x1k	8	15	24	24	11
04062363	6	M8x1.25k	8	15	24	24	11
04062343	6	M10x1k	8	15	24	25	11
04062337	6	R1/4"k	11	20.5	24	28	14

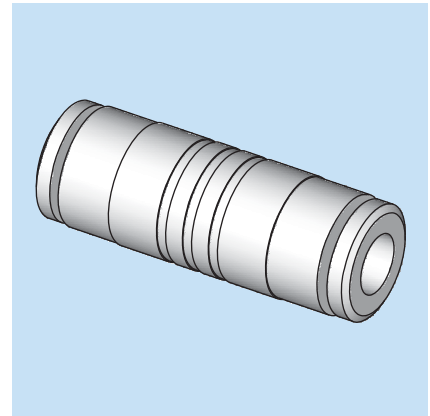
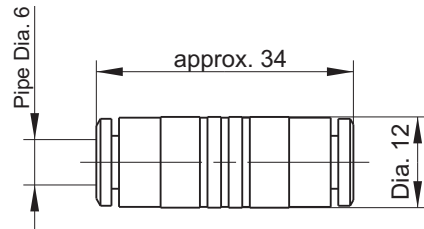
Material: Brass, nickel-plated; Pressure range: max. 150 bar; Temperature range: -20°C to +70°C



Straight plug-type connection

(pipe connection)

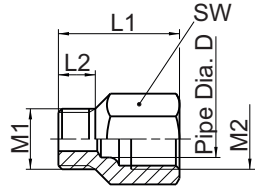
Type CAMOZZI



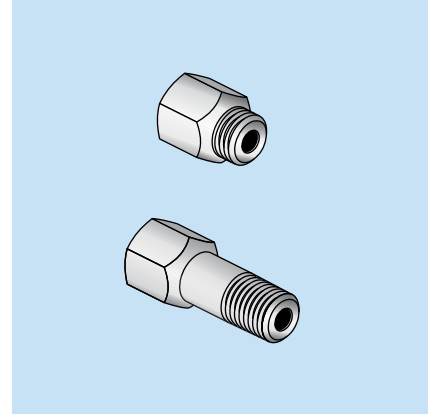
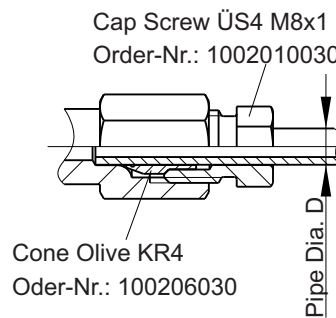
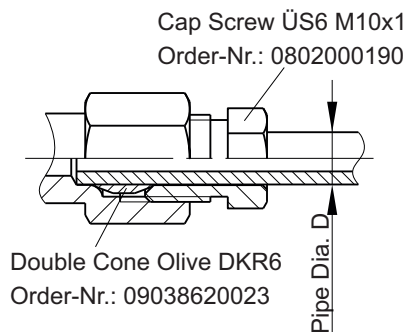
Part-No.	Material
04060759	Steel zinc coated



Extensions and reductions



It is also possible to connect the lubrication pipes with a extension piece direct.

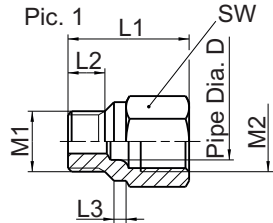


Part-No.	M1	M2	L1	L2	L3	SW	Pipe Dia. D	Material
1002 1000 301k	M6k	M8x1	20	6	--	11	4	Steel
0401 1600 506	M6k	M10x1	24	6	--	13	6	Steel
0401 1600 406	M8k	M10x1	21	6	--	13	6	Steel
1002 1000 304k	M8x1k	M8x1	17	7.4	--	11	4	Steel
0401 1600 106	M8x1k	M10x1	21	6	--	13	6	Steel
0401 1600 906	M10k	M10x1	21	6	--	13	6	Steel
1002 1000 306k	M10x1k	M8x1	16	7.4	--	11	4	Steel
0401 1610 306	M10x1k	M10x1	17.5	6	--	13	6	Steel
0401 1600 206	M10x1k	M10x1	21	6	--	13	6	Steel
0401 1600 213	M10x1k	M10x1	21	6	--	13	6	1.4305
0401 1610 006	M10x1k	M10x1	26	6	--	13	6	Steel
0401 1610 106	M12x1k	M10x1	21	8.5	--	13	6	Steel

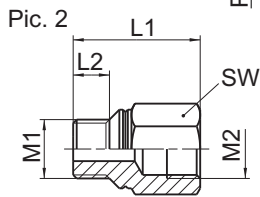
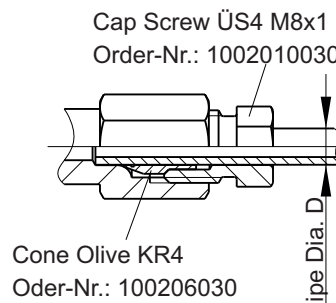
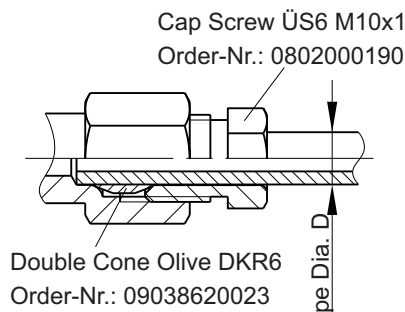
All Parts made of steel are zinc coated and yellow chromated.



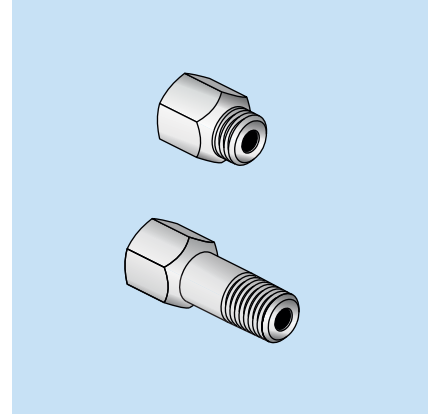
Extensions and reductions



It is also possible to connect the lubrication pipes with a extension piece direct.



On this part it is not possible to connect a lubrication pipe directly.

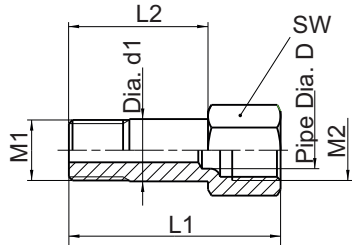


Part-No.	M1	M2	L1	L2	L3	SW	Pipe Dia. D	Material	Pic.
0401 1600 306	R1/8"K	M10x1	21	6	2	13	6	Steel	1
0401 1600 313	R1/8"K	M10x1	21	6	2	13	6	1.4305	1
0401 1604 106	R1/8"K	R1/8"	21	6	2	13	--	Steel	2
0401 1601 406	UNF 1/4"-28	M10x1	24	6	2	13	6	Steel	1
0401 1601 306	UNEF 1/4"-32	M10x1	24	6	4	13	6	Steel	1

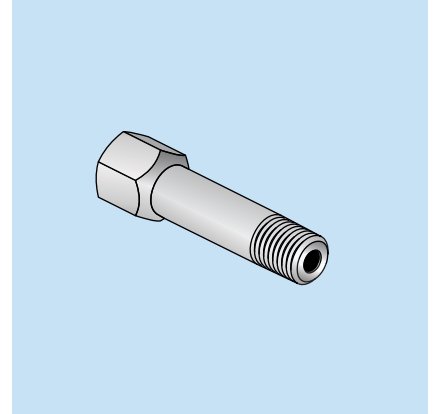
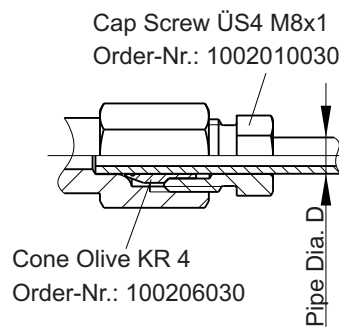
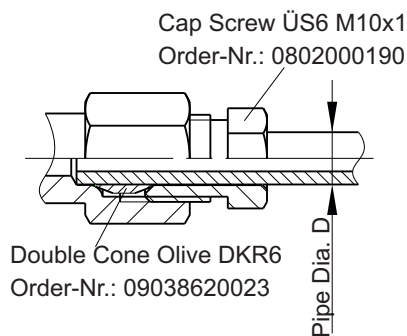
All Parts made of steel are zinc coated and yellow chromated.



Extensions and reductions



It is also possible to connect the lubrication pipes to extension piece direct.



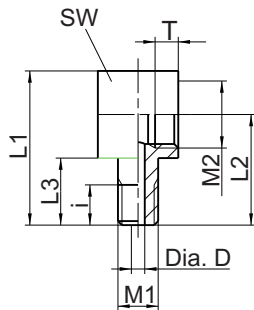
Part-No.	M1	M2	L1	L2	SW	Pipe Dia. D	Dia. d1	Material
0401 1605 806	M6k	M8x1	35	23	10	4	6.3	Steel
0401 1600 806	M8x1k	M8x1	35	23	10	4	8.3	Steel
0401 1603 106	M8x1k	M8x1	50	37.5	10	4	8.3	Steel
0401 1600 706	M10x1k	M10x1	35	23	13	6	10.3	Steel
0401 1610 813	M10x1k	M10x1	35	23	13	6	10.3	1.4305
0401 1600 606	M10x1k	M10x1	50	38	13	6	10.3	Steel
0401 1601 613	M10x1k	M10x1	50	38	13	6	10.3	1.4305
0401 1610 406	M10x1k kurz	M10x1	100	88	13	6	10.3	Steel
0401 1611 506	R1/8"k	M10x1	50	38	13	6	9.9	Steel
0401 1601 206	R1/4"k	M10x1	26	14	14	6	13.2	Steel
0401 1601 213	R1/4"k	M10x1	26	14	14	6	13.2	1.4305
0401 1601 006	R1/4"k	M10x1	35	23	14	6	13.2	Steel
0401 1601 013	R1/4"k	M10x1	35	23	14	6	13.2	1.4305
0401 1601 106	R1/4"k	M10x1	55	43	14	6	13.2	Steel
0401 1601 113	R1/4"k	M10x1	55	43	14	6	13.2	1.4305

All Parts made of steel are zinc coated and yellow chromated.

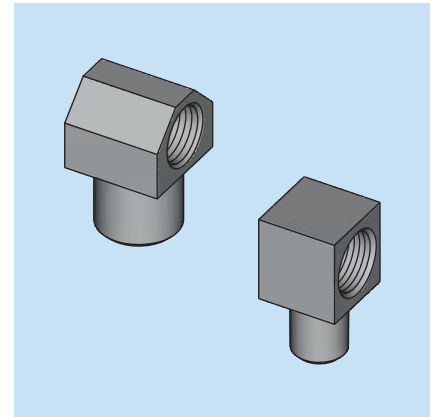
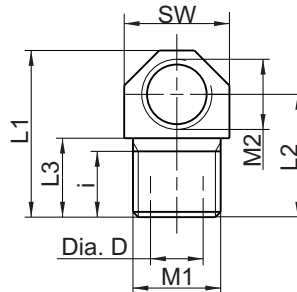


Elbow Connector 90°

Pic. 1:



Pic. 2:

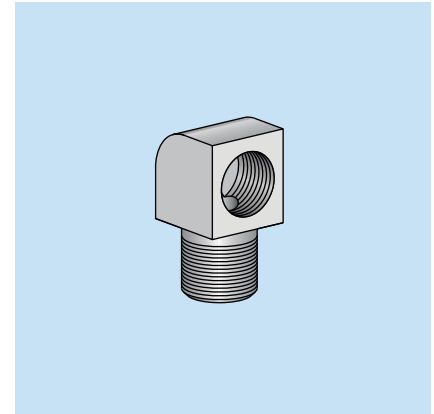
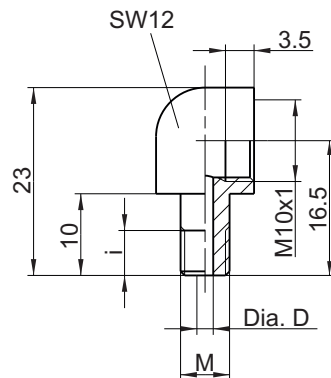


Part-No.	M1	i	M2	T	Dia. D	L1	L2	L3	SW	Material	Pic.
1002 10 010	M6k	6	M10x1	3.5	2	23	16.5	10	12	Steel	1
1002 10 020	M8x1k	7	M10x1	3.5	4	23	16.5	10	12	Steel	1
1002 10 025	M8x1.25k	7	M10x1	3.5	4	23	16.5	10	12	Steel	1
1002 10 120	M10x1k	7.5	M8x1	4.5	6	19	14	9	12	Steel	2
1002 10 030	M10x1k	7	M10x1	3.5	5	23	16.5	10	12	Steel	1
1002 10 041	M10x1k	7	M10x1	3.5	5	25	18.5	10	12	1.4305	1
1002 10 042	M10x1k	7	M10x1	3.5	5	65	58.5	10	12	1.4305	1
1002 10 043	M10x1k	7	M10x1	3.5	5	75	68.5	10	12	1.4305	1
1002 10 105	R1/8" k	10	M10x1	3.5	5	26	19	12	12	Steel	1
1002 10 035	R1/4" k	10	M10x1	3.5	7	26	19	12	14	Steel	1
1002 10 032	1/4"-28UNF	6	M10x1	3.5	2	23	16.5	10	12	Steel	1

All Parts made of steel are zinc coated and yellow chromated.



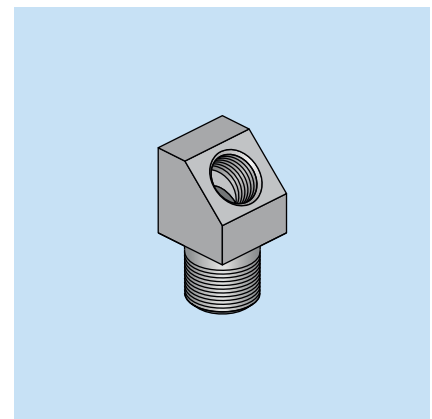
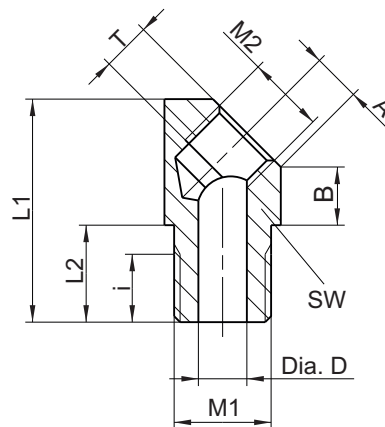
Elbow Connector 90°



Part-No.	M	i	Dia. D	Material
1002 10 073	M6k	6	2	Steel
1002 10 072	M8x1k	7	4	Steel
1002 10 071	M8x1.25k	7	4	Steel
1002 10 070	M10x1k	7	5	Steel

All Parts made of steel are zinc coated and yellow chromated.

Elbow Connector 45°

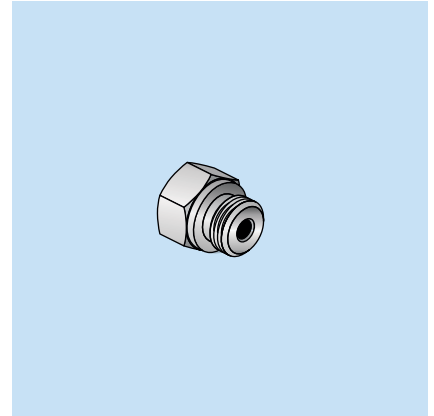
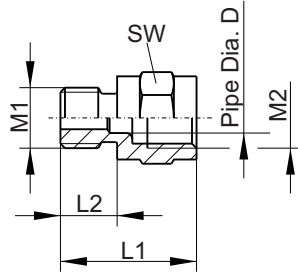


Part-No.	M1	i	Dia. D	M2	T	L1	L2	A	B	SW	Material
1002 10 095	M6k	6	2	M8x1	5	23	10	4.95	6	12	Steel
1002 10 085	M8x1k	7	4	M8x1	5	23	10	4.95	6	12	Steel
1002 10 090	M8x1.25k	7	4	M8x1	5	23	10	4.95	6	12	Steel
1002 10 080	M10x1k	7	5	M8x1	5	23	10	4.95	6	12	Steel
0401950007-00	R1/4" k	14.5	7	R1/4" k	7	32.5	14.5	7.1	8	18	Steel
1002 10 098	1/4"-28UNF	6	2	M8x1	5	23	10	4.95	6	12	Steel

All Parts made of steel are zinc coated and yellow chromated.



Straight connection piece

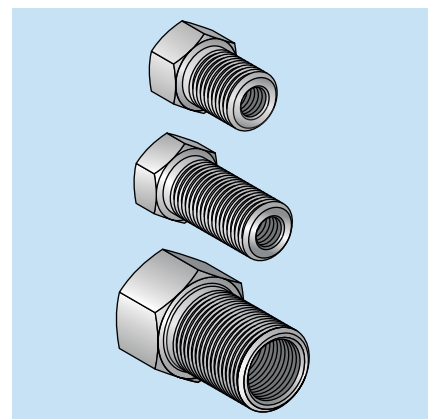
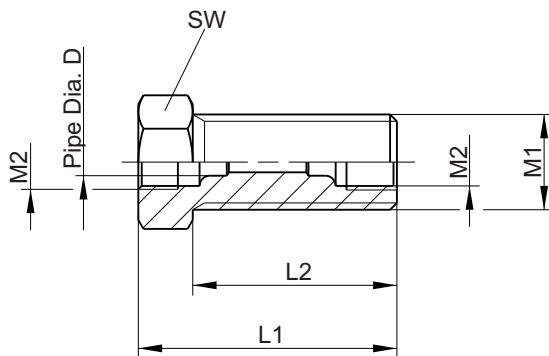


Part-No.	M1	M2	L1	L2	SW	Pipe Dia. D	Material
1002 1000 301	M6	M8x1	20	6.5	11	4	Steel
1002 1000 304	M8x1	M8x1	18	7.5	11	4	Steel
1002 1000 404	M8x1	M10x1	23	7.5	14	6	Steel
1002 1000 306	M10x1	M8x1	18	7.5	14	4	Steel
1002 1000 406	M10x1	M10x1	20.5	7.5	14	6	Steel
1002 1000 410	G1/4"	M10x1	21.5	10	17	6	Steel

All Parts made of steel are zinc coated and yellow chromated.

Straight Bulkhead fitting

with Inside Threading



Part-No.	M1	M2	L1	L2	SW	Pipe Dia. D	Material
1002 5000 311	M14x1.5	M8x1	27	19	17	4	Steel
1002 5000 311L	M14x1.5	M8x1	38	30	17	4	Steel
1002 5000 411	M14x1.5	M10x1	30	20	17	6	Steel
1002 5000 715	M20x1.5	M16x1.5	42	27	24	10	Steel

All Parts made of steel are zinc coated and yellow chromated.



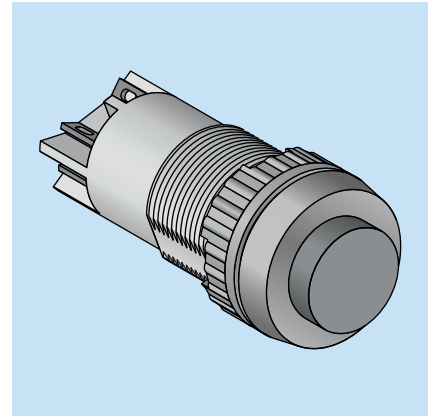
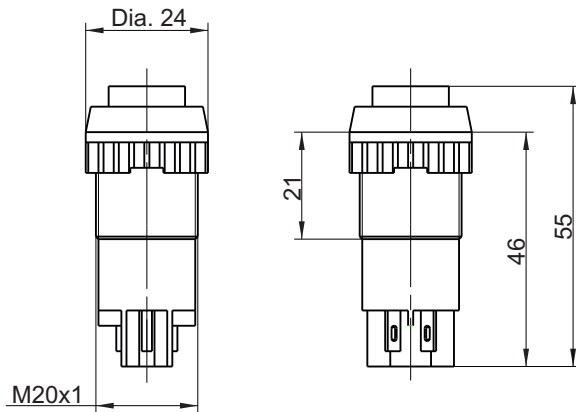
8.10 Electric accessories

Table of Contents	Page
Push button light	8.10.2
Intermediate lube button without signal lamp	8.10.2
Intermediate lube button with signal lamp	8.10.3
Selective lube button depending on working conditions	8.10.3
Signal lamps	8.10.4
Small relays	8.10.5
Incandescent lamp	8.10.6
Power supply NGR-1	8.10.7

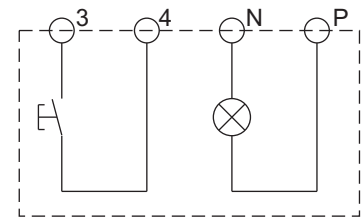


Push Button Light

(including Sticker)

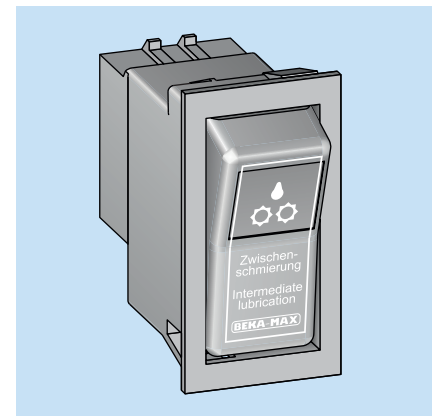
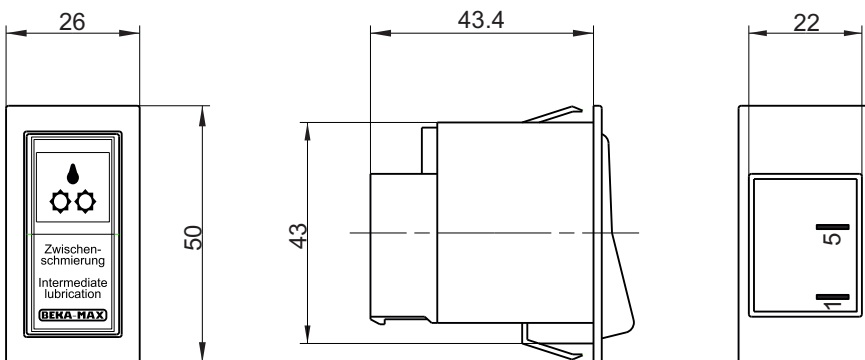


Part-No.	Voltage	Color	Material
100 091 051	12V	green	Plastics
100 091 050	24V	green	Plastics

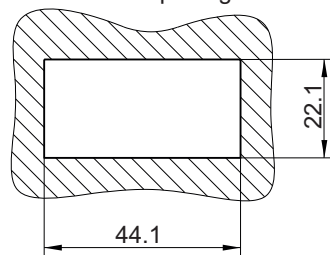


Intermediate Lube Button

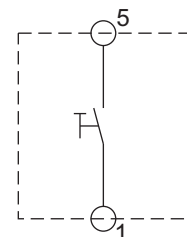
(without Signal Lamp, inclusive Sticker)



Installation Opening:

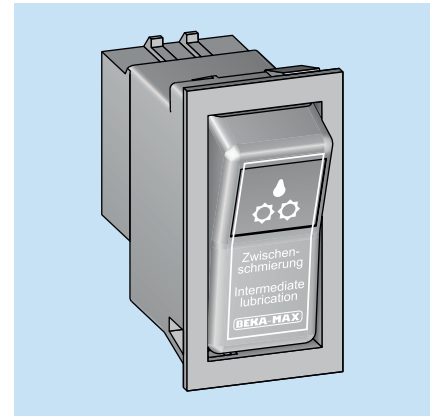
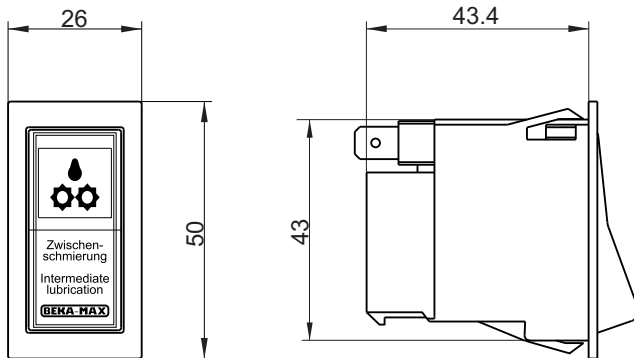


Part-No.	Material
1000950017	Plastic



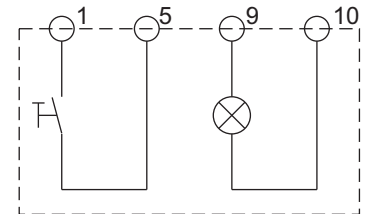
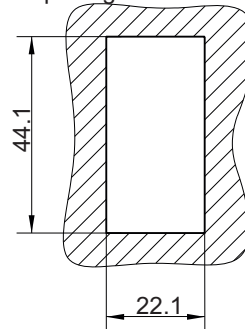
Intermediate Lube Button

(with Signal Lamp)



Installations

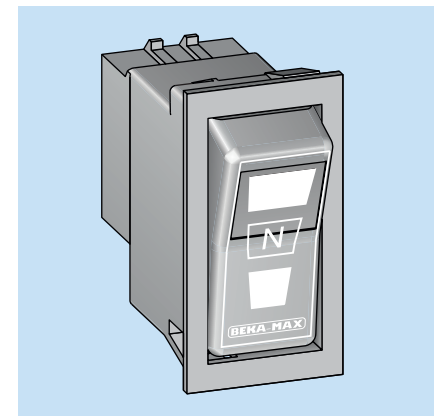
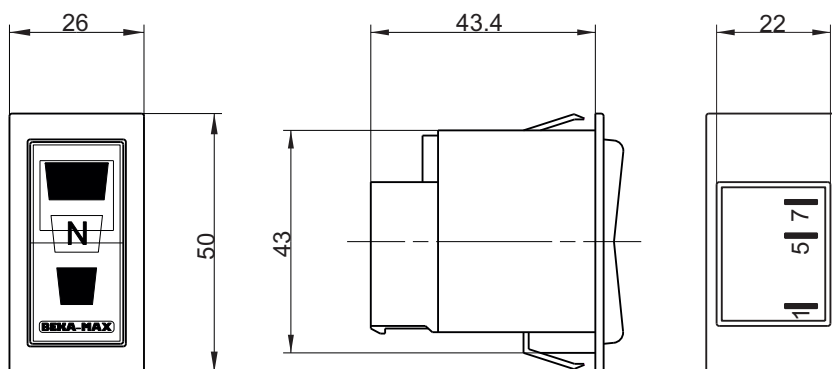
Opening:



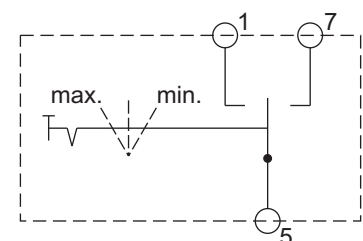
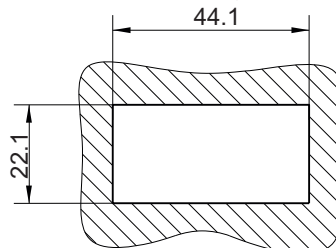
Part-No.	Voltage	Color	Material
1000 950 023	12V	green	Plastic
1000 950 024	24V	green	Plastic
1000 950 019	12V	red	Plastic
1000 950 020	24V	red	Plastic

Selective Lube Button

depending on Working Conditions



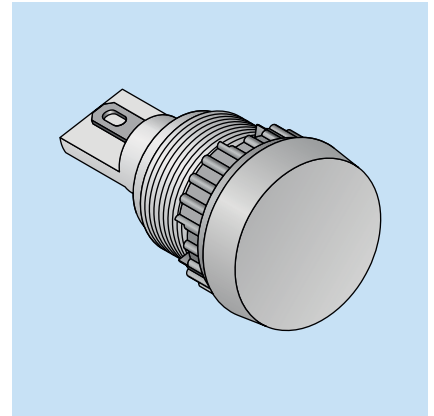
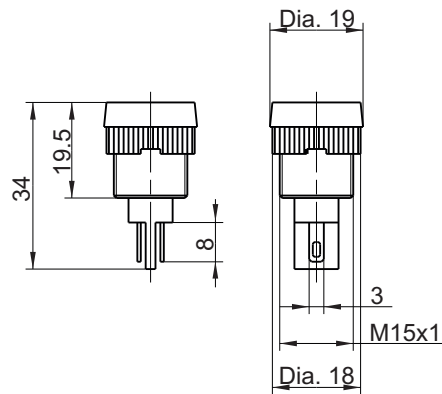
Installations Opening:



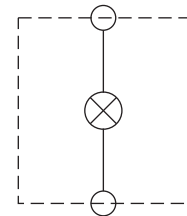
Part-No.	Material
1000950018	Plastic



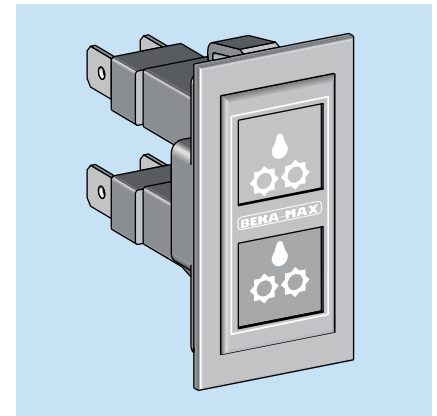
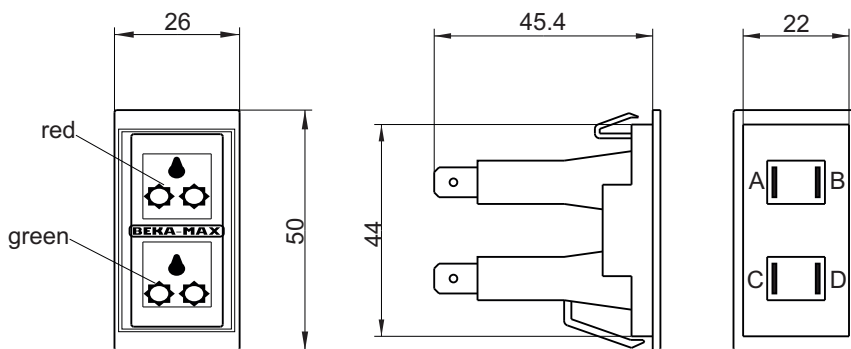
Signal Lamp



Part-No.	Voltage	Color	Material
100 091 300	12V	green	Plastic
100 091 310	24V	green	Plastic
100 091 305	12V	red	Plastic
100 091 320	24V	red	Plastic

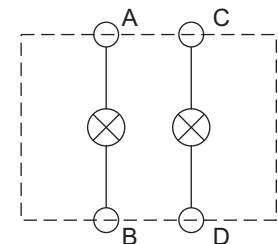
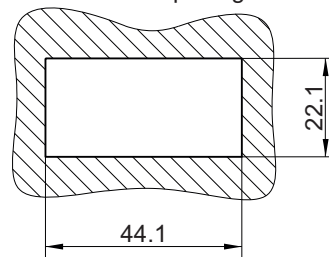


Signal Lamp



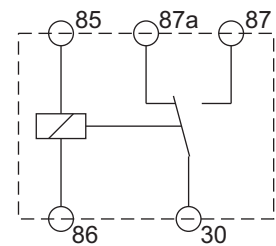
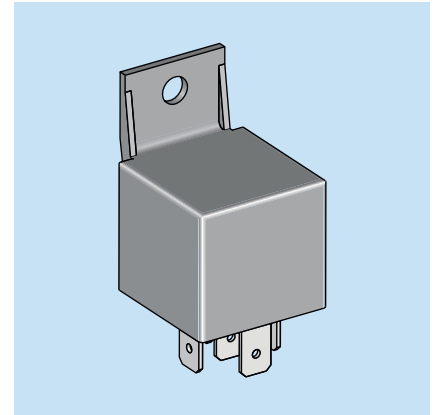
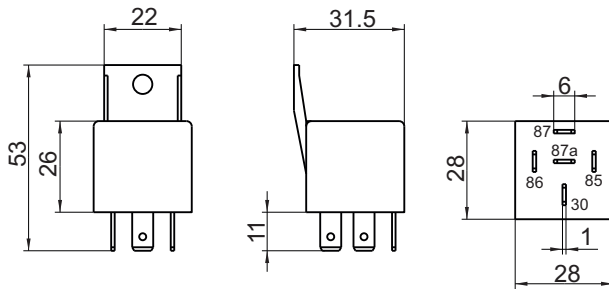
Part-No.	Voltage	Material
1000 950 021	12V	Plastic
1000 950 022	24V	Plastic

Installations Opening:



Small Relay

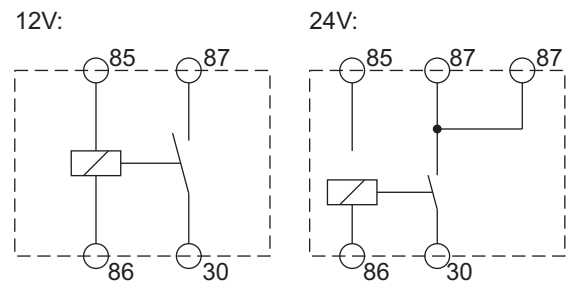
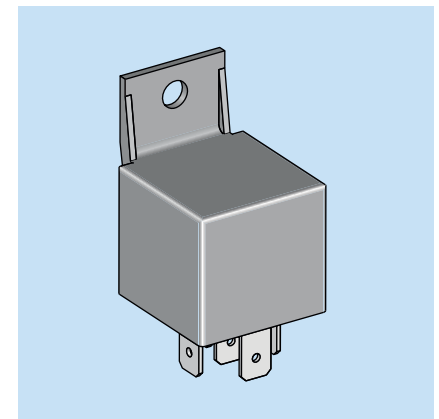
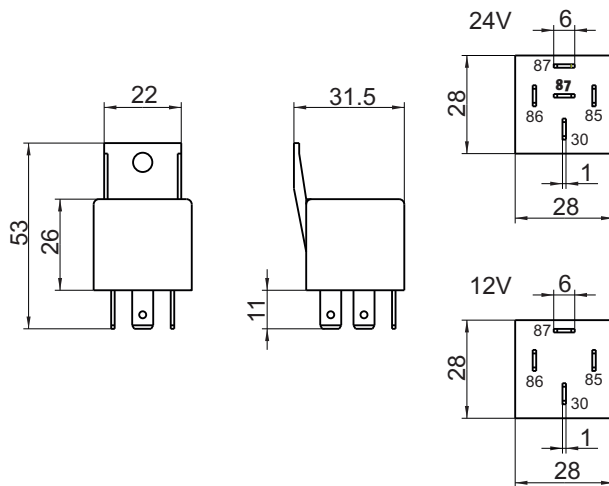
1 changeover switch



Part-No.	Voltage	Amperage
05 000 400 013	12V	20A
05 000 400 014	24V	20A

Small Relay

1 Closer

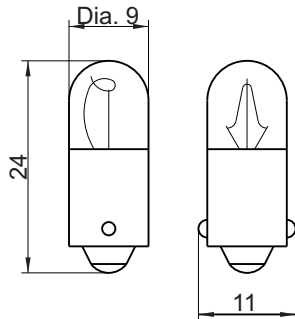


Part-No.	Voltage	Amperage
100 091 397	12V	30A
100 091 430	24V	20A

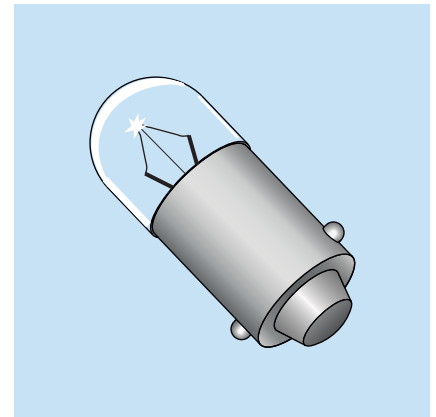
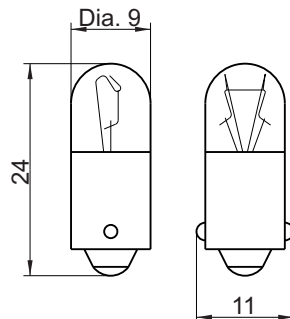


Incandescent Lamps

Incandescent Lamp 12 V

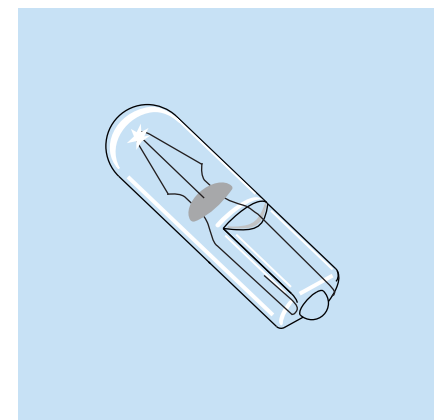
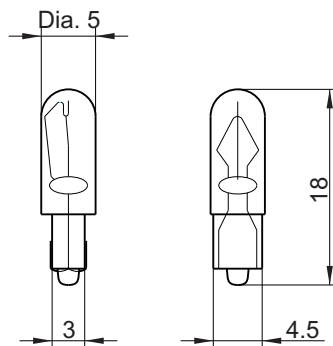


Incandescent Lamp 24 V



Part-No.	Voltage	Fitting for	
		Known as	Part-No.
100 091 551	12V	Light Push Button	100091051
100 091 550	24V	Light Push Button	100091050

Incandescent Lamps

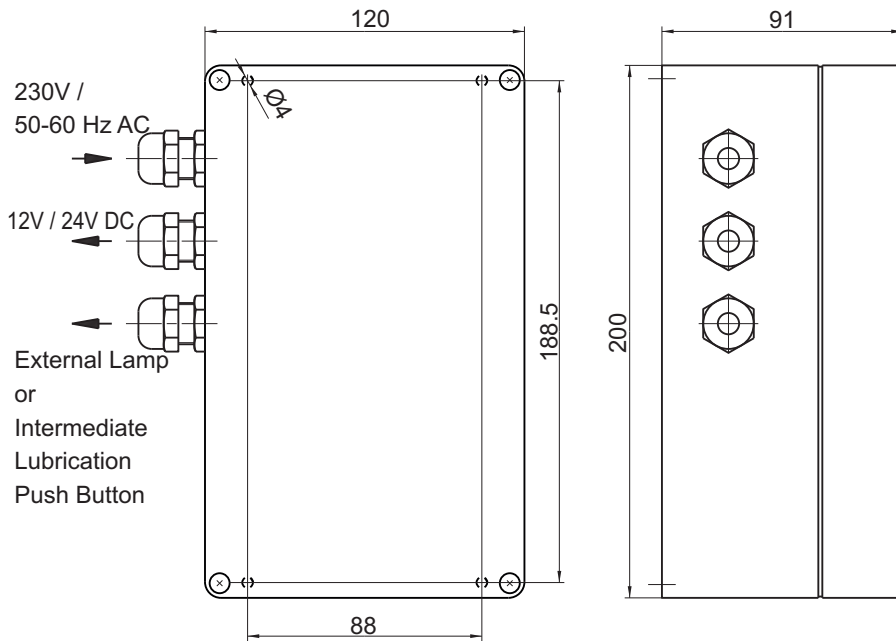


Part-Nr.	Voltage	Fitting for	
		Known as:	Part-No.
100 091 561	12V	Intermediate Button	1000950023
	12V	Intermediate Button	1000950019
	12V	Signal Light	100091300
	12V	Signal Light	100091305
	12V	Signal Light	1000950021
100 091 560	24V	Intermediate Button	1000950020
	24V	Intermediate Button	1000950024
	24V	Signal Light	100091310
	24V	Signal Light	100091320
	24V	Signal Light	1000950022

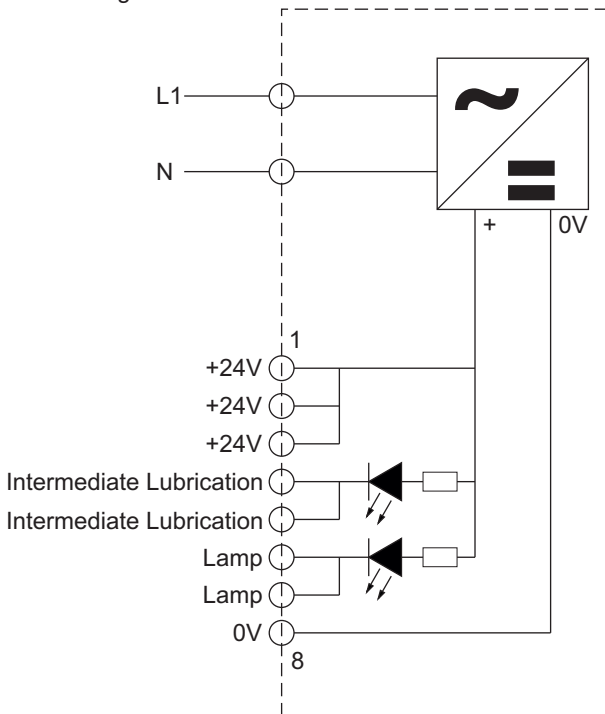
8.10.6



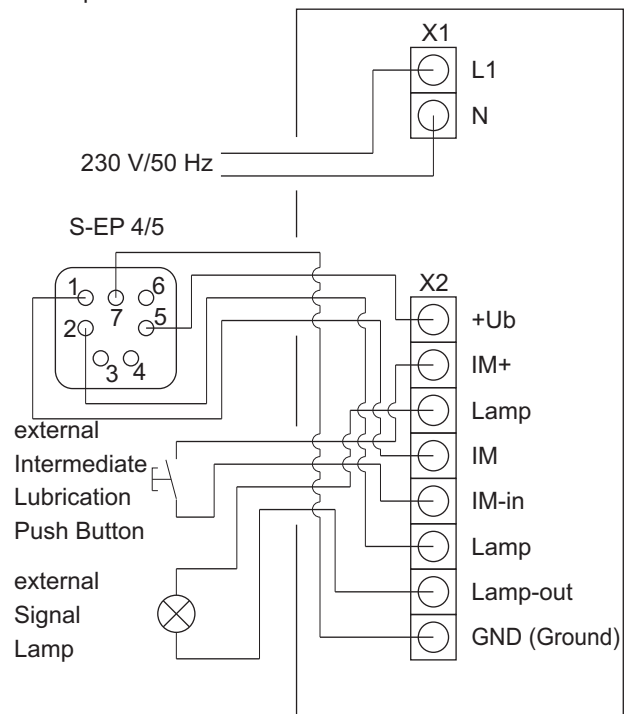
Power Supply NGR-1



Circuit Diagram:



Example for connection:



Part-No.	Voltage	Amperage	Possibility for Connect a Signal Lamp or a Intermediate Lubrication Push Button
4170 2100	12V	4 A	with
4170 2000	12V	4 A	without
4170 1100	24V	2.2 A	with
4170 1000	24V	2.2 A	without



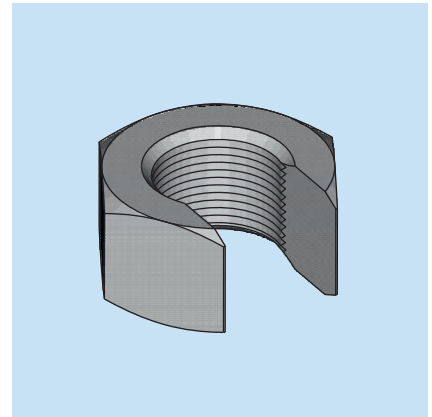
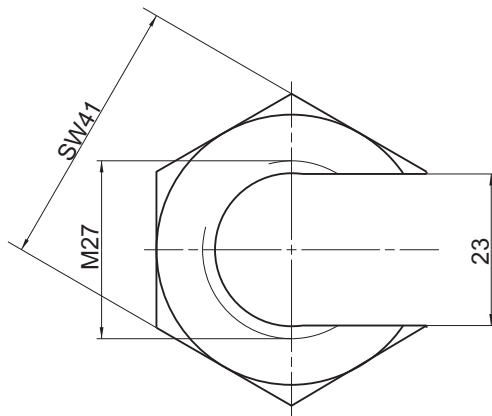
8.11 Accessory parts

Table of Contents	Page
Protection parts for lubrication points	
Weld-on nut	8.11.2
Protection ring	8.11.2
Protector for lubrication points	8.11.3
Weld-on piece for lubrication points	8.11.3
Protection parts for lubrication lines	
Protector for lines	8.11.4
Coiled tubing	8.11.4
Bent protection spiral	8.11.5
Fastening material	
Rubber lined pipe clips	8.11.6
Pipe clips duplex-fastening	8.11.7
Pipe clips one-side-fastening	8.11.8
Hose tie	8.11.8
Nipple connections	
Nipple reconstruction kit	8.11.9
Nipple block one-outlet	8.11.9
Nipple block two-outlets	8.11.10
Nipple block three up to eight-outlets	8.11.10
Nipple block one up to eight-outlets	8.11.11
Straight-way nipple block one-outlet	8.11.12
Straight-way nipple block three-outlet	8.11.12
Straight-way nipple block acc to AZ-1760-04	8.11.13
Straight-way nipple block acc to FAZ02225-00	8.11.13
Straight Bulkhead coupling with Hydraulic Grease Nipple	8.11.14
Angular Bulkhead coupling with Hydraulic Grease Nipple	8.11.14
Elbow fitting with lubrication nipple behind	8.11.15
Elbow fitting with lubrication nipple and dust cap	8.11.15
Elbow fitting with lubrication nipple top	8.11.16



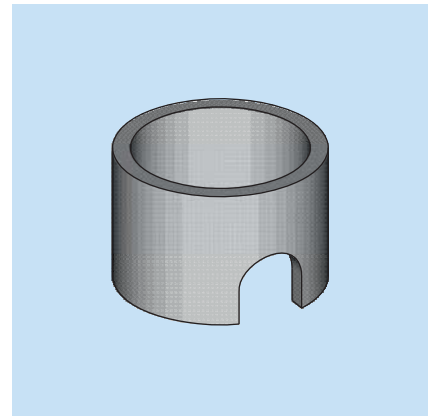
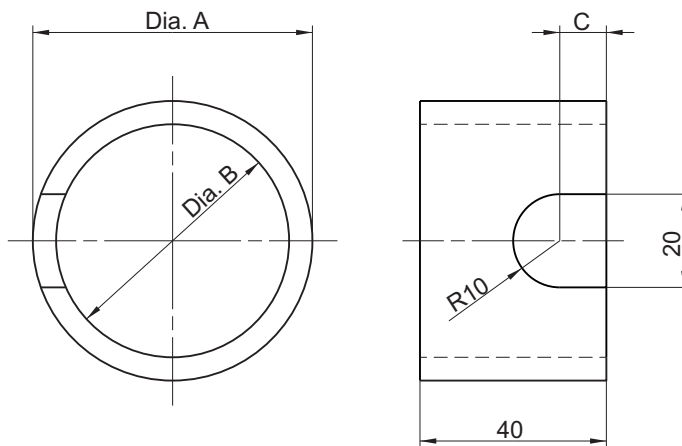


Weld-on Nut



Part-No.	Material
FWZ02617-00	Steel

Protection Ring

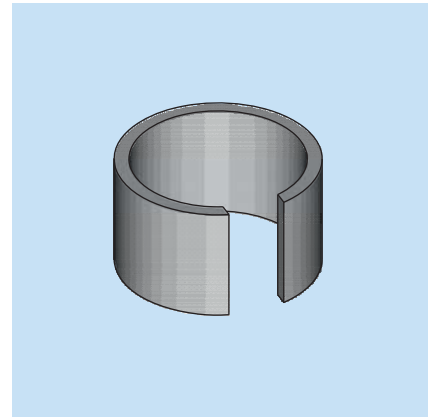
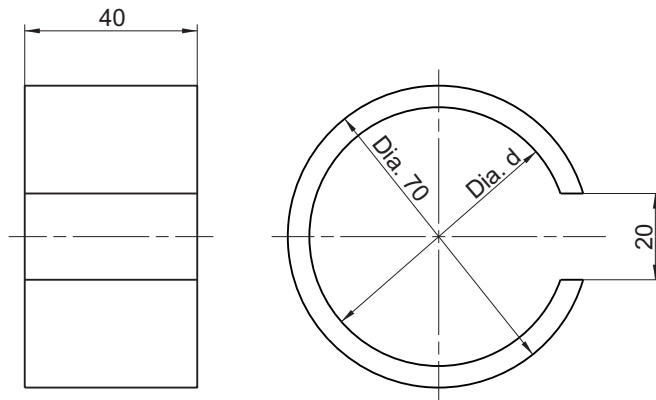


Part-No.	Dia. A	Dia. B	C	Material
FWZ02902-01	60	50	10	Steel
FWZ02902-02	90	78	13	Steel
0802000595	70	60	10	Steel



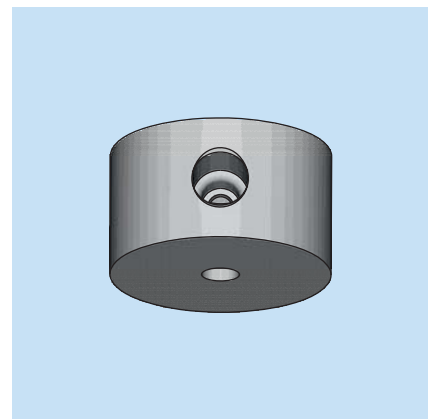
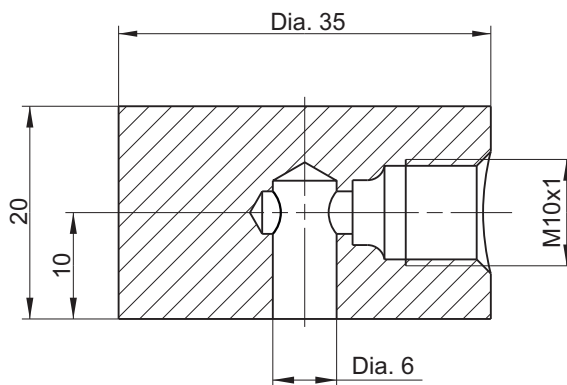


Protector for Lubrication Points



Part-No.	Dia. d	Material
FWZ02902-00	60	Steel undercoated
FWZ02902-06	50	Steel bare

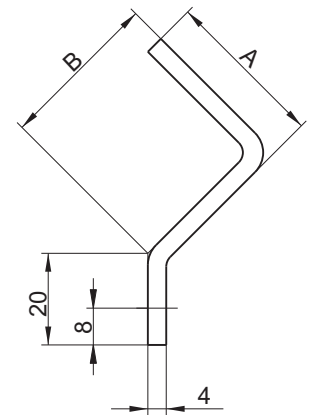
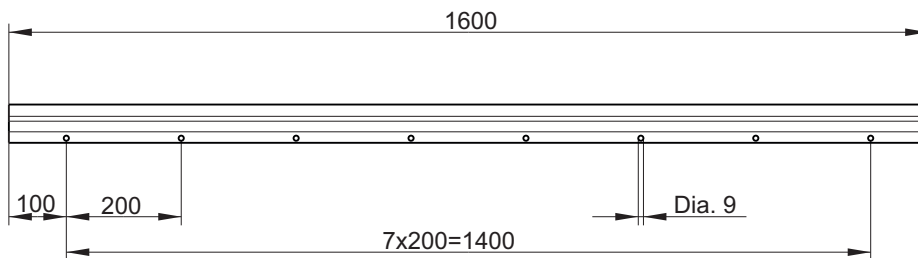
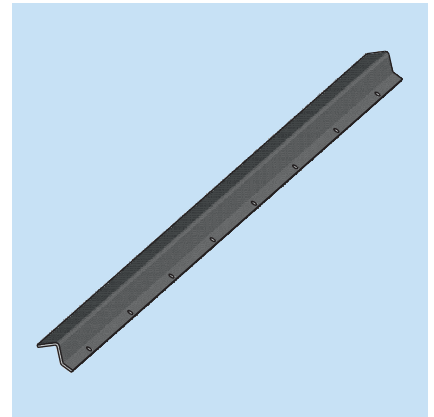
Weld-on Piece for connecting the Lubrication Point



Part-No.	Material
FWZ03326-00	Steel



Protector for lines

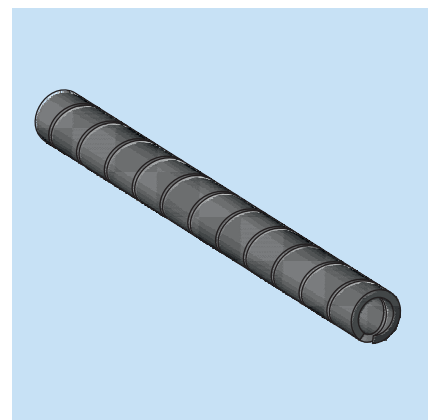
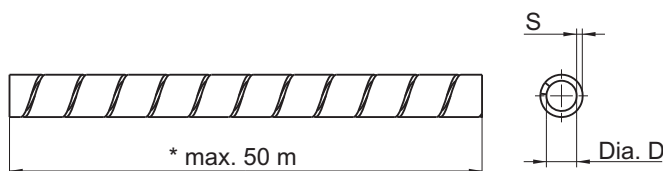


Part-No.	A	B	Material
0800800628	35	35	Steel

All Parts made of Steel are Zinc coated and yellow chromated.

Spiral Protection

* =Indicate Length at order!



Part-No.	ØD	S	Material
100121005	8	1.5	Polyethylene
100120463	4	1	Color black

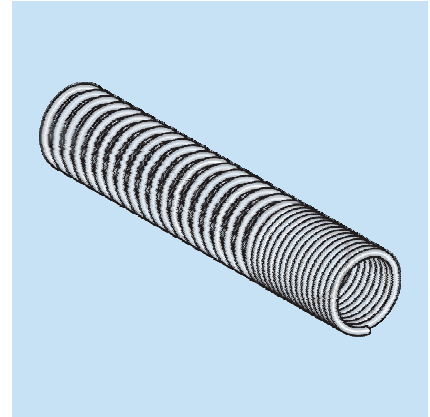
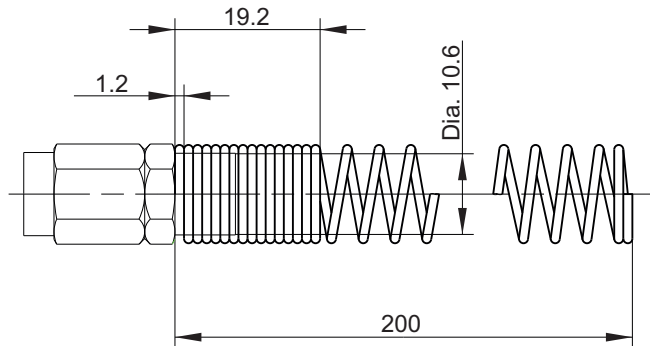
Technical data:

Melting point: -112° C

Temperature range of use: -50° C to +85° C

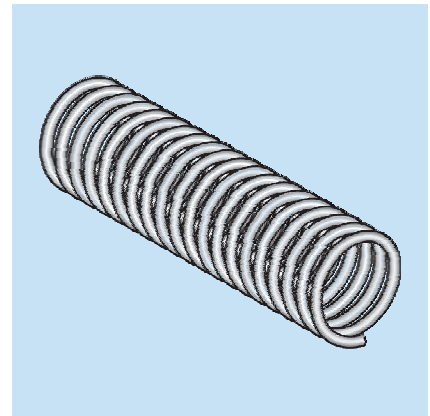
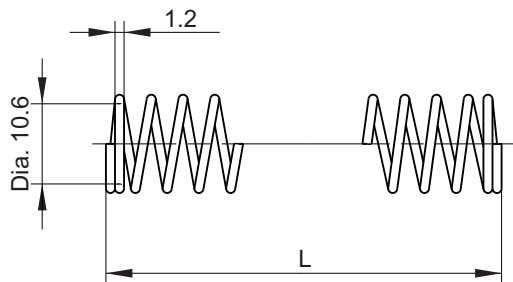


Bent Protection Spiral



Part-No.	Material
100121002	Steel zinc coated yellow chromate

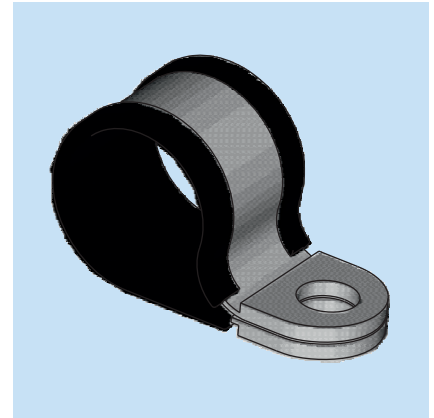
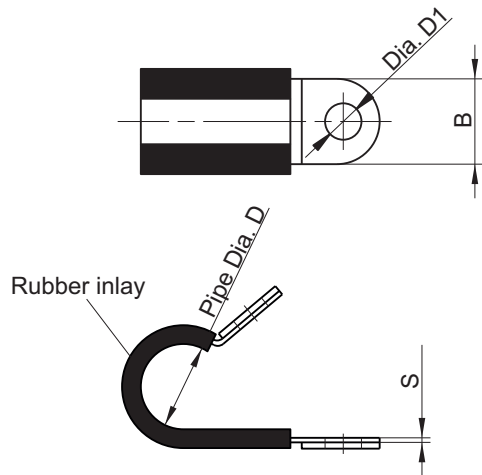
Bent Protection Spiral



Part-No.	L (mm)	Material
1001 21 004	5000	1.4310
1001 21 040	2000	1.4310
1001 21 041	1300	1.4310
1001 21 042	750	1.4310



Rubber lined Pipe Clips



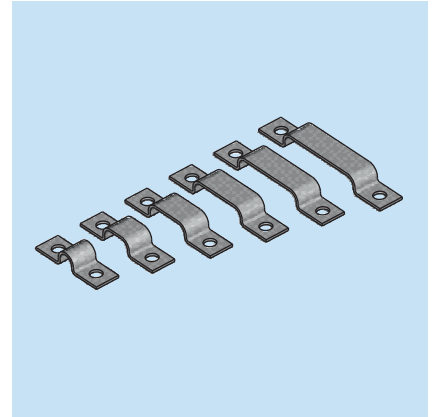
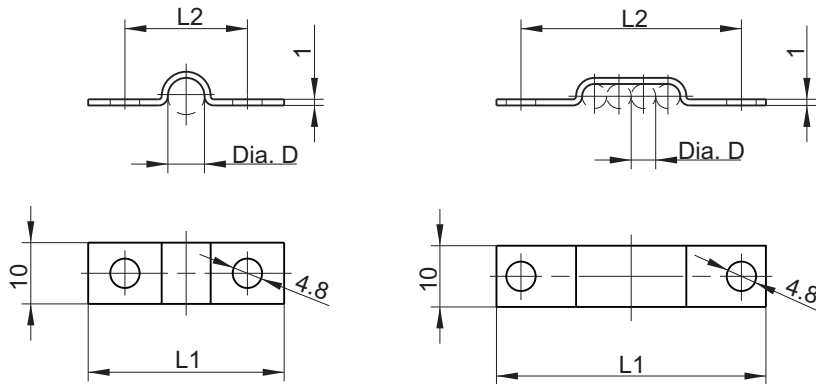
Part-No.	B	Pipe Dia. D	S	Dia. D1	Material
1001 500 10	12	6	0.5	5.3	Steel
1001 500 20	12	9	0.5	5.3	Steel
1001 500 30	12	12	0.5	5.3	Steel
1001 500 40	12	15	0.5	5.3	Steel
1001 500 60	12	17	0.5	5.3	Steel
1001 500 65	12	18	0.5	5.3	Steel
1001 500 50	12	20	0.5	5.3	Steel
1003 050 019	15	6	0.6	6.4	Steel
1003 050 006	15	9	0.6	6.4	Steel
1003 050 022	15	10	0.6	6.4	Steel
1003 050 012	15	12	0.6	6.4	Steel
1003 050 023	15	15	0.8	6.4	Steel
1003 050 003	15	17	0.8	6.4	Steel
1003 050 013	15	18	0.8	6.4	Steel
1003 050 032	15	19	0.8	6.4	Steel
1003 050 004	15	20	0.8	6.4	Steel
1003 050 014	15	22	0.8	6.4	Steel
1003 050 016	15	25	0.8	6.4	Steel

All Parts made of Steel are Zinc coated.



Pipe Clips

Duplex-fastening, at DIN 72573



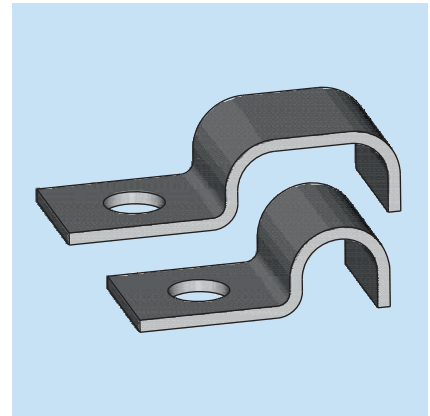
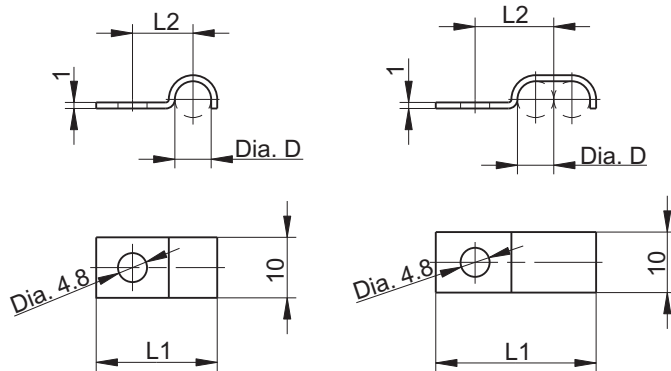
Part-No.	Dia. D	Number of pipes	L1	L2	Material
097 257 300 411	4	1	29	17	Steel
097 257 300 412	4	2	33	21	Steel
097 257 300 413	4	3	39	27	Steel
097 257 300 414	4	4	44	32	Steel
097 257 300 415	4	5	48	36	Steel
097 257 300 416	4	6	52	40	Steel
097 257 300 111	6	1	32	20	Steel
097 257 300 112	6	2	38	26	Steel
097 257 300 113	6	3	45	33	Steel
097 257 300 114	6	4	51	39	Steel
097 257 300 115	6	5	57	45	Steel
097 257 300 116	6	6	64	52	Steel
097 257 300 211	8	1	34	22	Steel
097 257 300 212	8	2	42	30	Steel
097 257 300 213	8	3	51	39	Steel
097 257 300 214	8	4	59	47	Steel
097 257 300 215	8	5	68	56	Steel
097 257 300 216	8	6	76	64	Steel
097 257 300 511	10	1	34	22	Steel
097 257 300 512	10	2	44	32	Steel
097 257 300 513	10	3	55	43	Steel
097 257 300 514	10	4	67	55	Steel
097 257 300 515	10	5	77	65	Steel
097 257 300 516	10	6	90	78	Steel

All Parts made of Steel are Zinc coated.



Pipe Clips

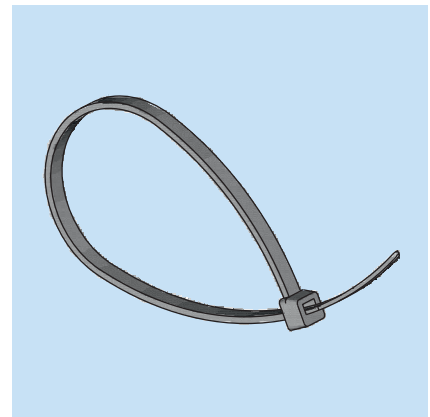
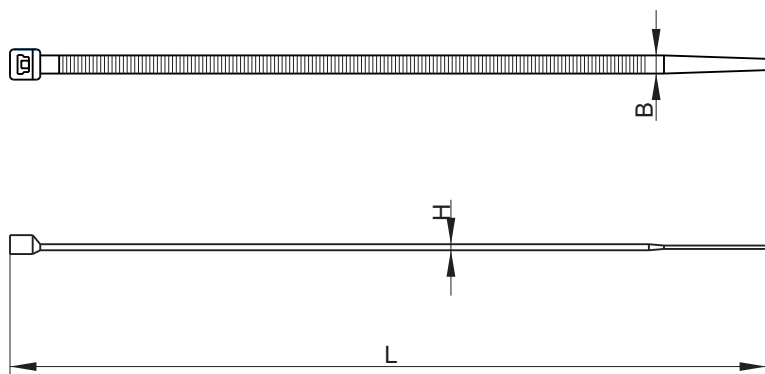
One-side-fastening, at DIN 72571



Part-No.	Dia. D	Number of pipes	L1	L2	Material
097 257 100 111	4	1	18	9	Steel
097 257 100 211	6	1	20	10	Steel
097 257 100 311	8	1	22	11	Steel
097 257 100 411	10	1	23	11	Steel
097 257 100 112	4	2	22.5	11	Steel
097 257 100 212	6	2	26.5	13	Steel
097 257 100 312	8	2	30.5	15	Steel
097 257 100 412	10	2	33.5	16	Steel

All Parts of steel are Zinc coated.

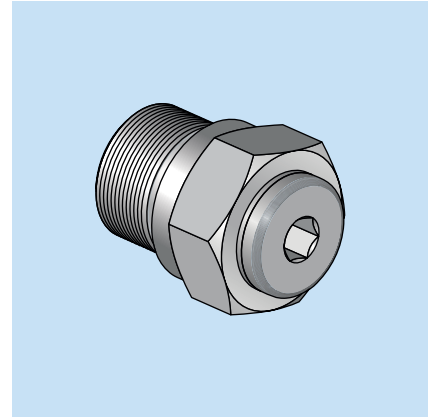
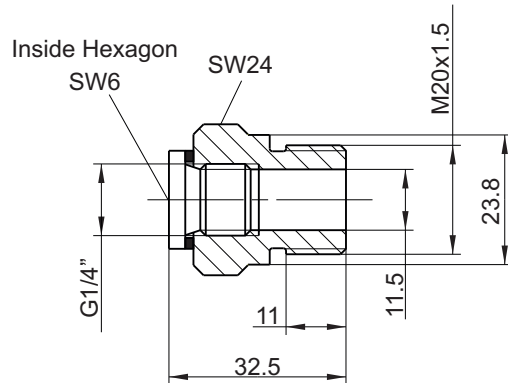
Hose Tie



Part-No.	L	B	H	Material
100 121 517	200	4.8	1.6	Plastic
100 121 012	200	3.6	1	Plastic
100 121 520	360	4.8	1.6	Plastic
100 121 518	365	7.8	1.8	Plastic
100 121 016	450	7.8	1.8	Plastic



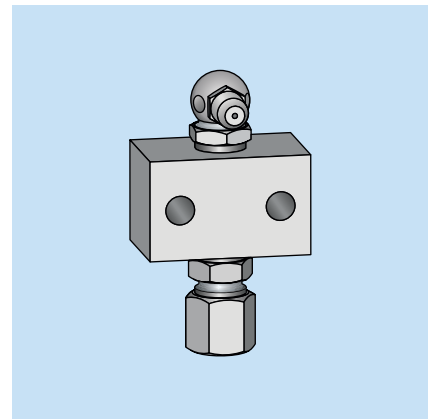
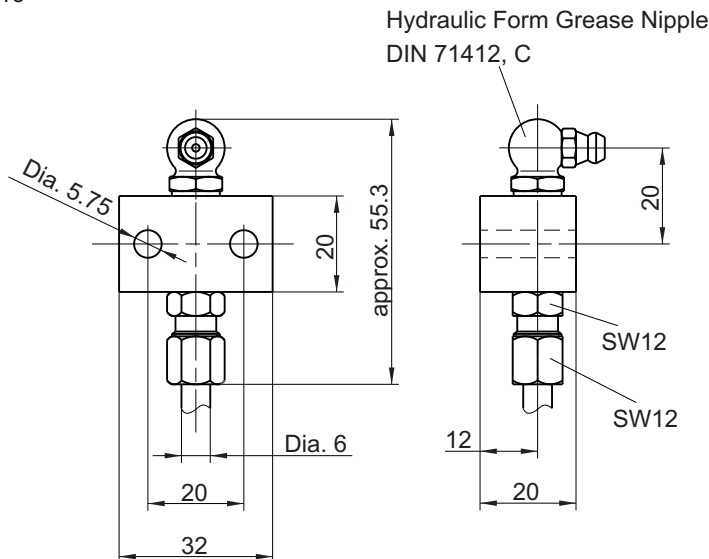
Nipple reconstruction kit



Part-No.	Material
21590010020	Steel zinc coated yellow chromate

Nipple Block One-Outlet

at AZ-1713

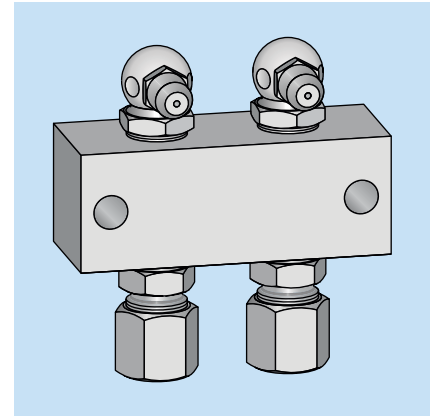
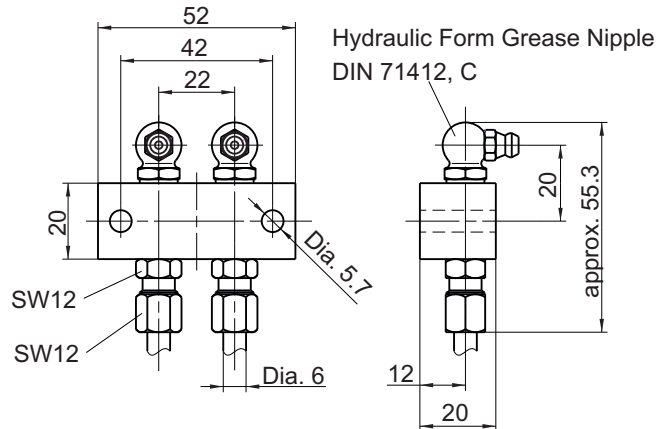


Part-No.	Material
21590020014	Steel zinc coated yellow chromate



Nipple Block Two-Outlets

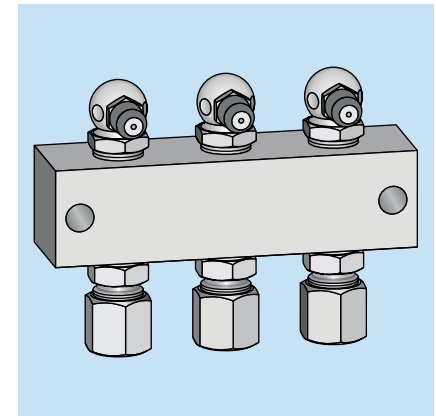
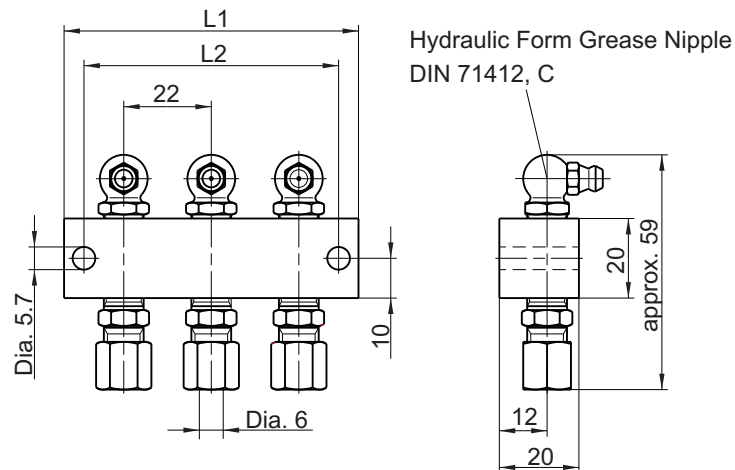
at AZ-1714



Part-No	Material
21590020024	Steel zinc coated yellow chromate

Nipple Block Three up to Eight-Outlets

Pic.: Nipple Block Three-Outlets

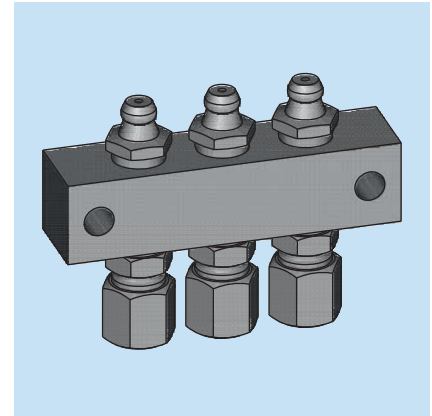
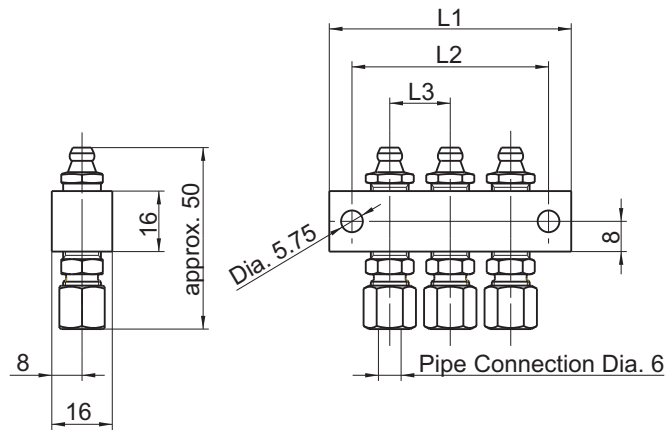


Part-No.	Number of connections	L1	L2	Material
2159 0020 025	3	74	64	Steel
2159 0020 026	4	96	86	Steel
2159 0020 027	5	118	108	Steel
2159 0020 028	6	140	130	Steel
2159 0020 029	8	184	174	Steel

All Parts made of steel are zinc coated and yellow chromated.

Nipple Block One up to eight-outlets

at FAZ1714-05

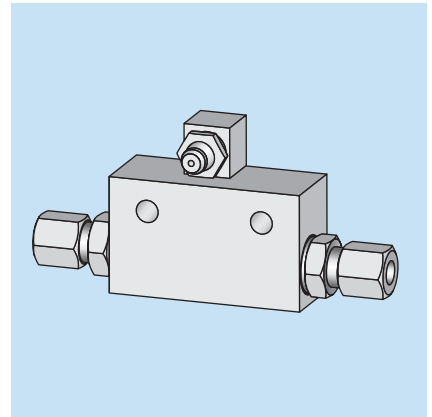
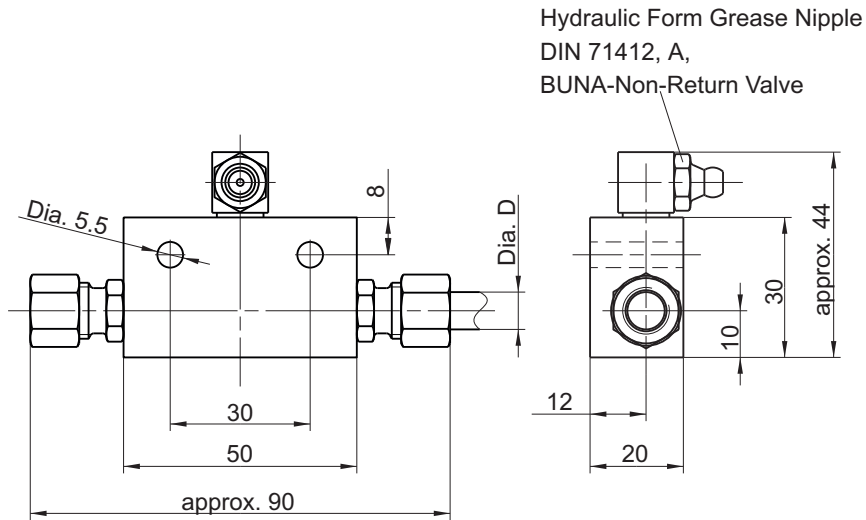


Part-No.	Number of connections	L1	L2	L3	Material
2159 0020 065	1	32	20	20	Steel
2159 0020 066	2	52	40	16	Steel
2159 0020 067	3	64	52	16	Steel
2159 0020 068	4	80	68	16	Steel
2159 0020 069	5	96	84	16	Steel
2159 0020 070	6	112	100	16	Steel
2159 0020 071	7	128	116	16	Steel
2159 0020 072	8	144	132	16	Steel

All Parts made of steel are zinc coated and yellow chromated.

Straight-Way Nipple Block One-Outlet

Connection Dia. 6 and Dia. 8

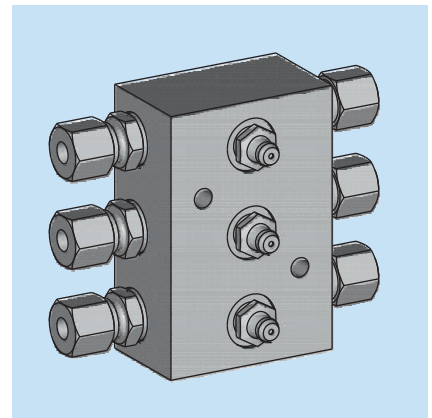
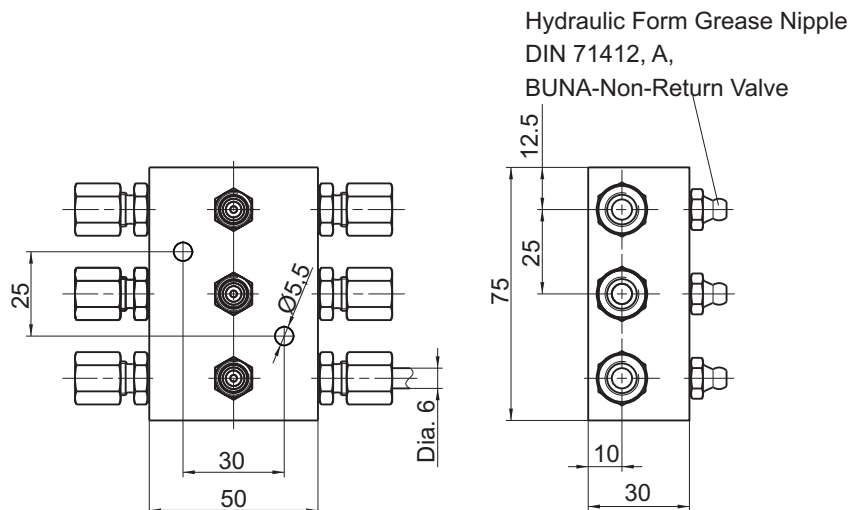


Part-No.	Dia. D	Material
2159 0030 014	6	Steel
2159 0030 017	8	Steel

All Parts made of steel are zinc coated and yellow chromated.

Straight-Way Nipple Block 3 Outlets

at AZ-1760-02

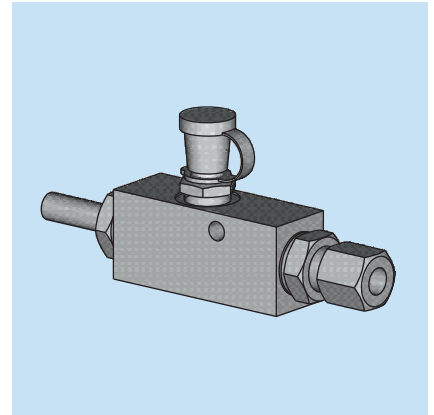
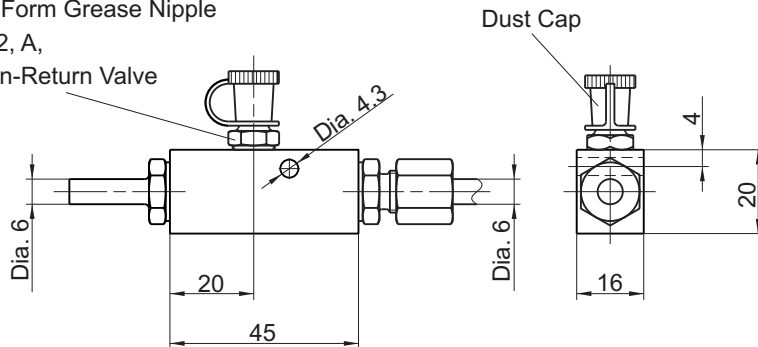


Part-No.	Material
21590030016	Steel zinc coated yellow chromate

Straight-Way Nipple Block

at AZ-1760-04

Hydraulic Form Grease Nipple
DIN 71412, A,
BUNA-Non-Return Valve

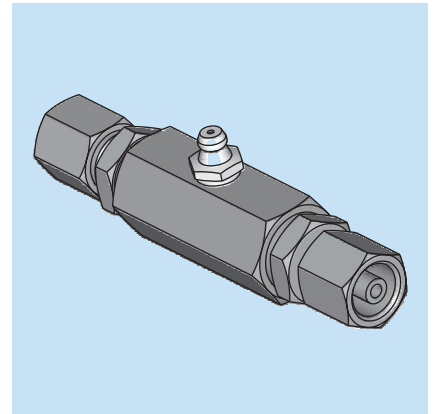
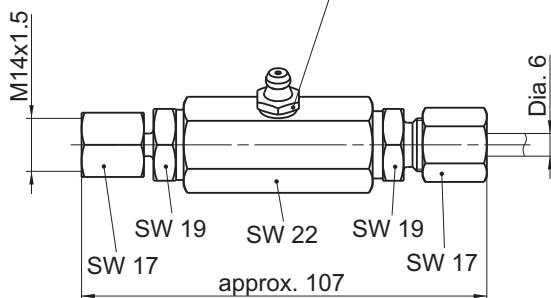


Part-No.	Material
21590030020	Steel zinc coated yellow chromate

Straight-Way Nipple Block

acc to FAZ02225-00

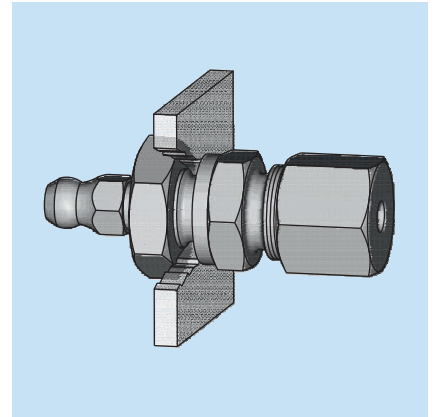
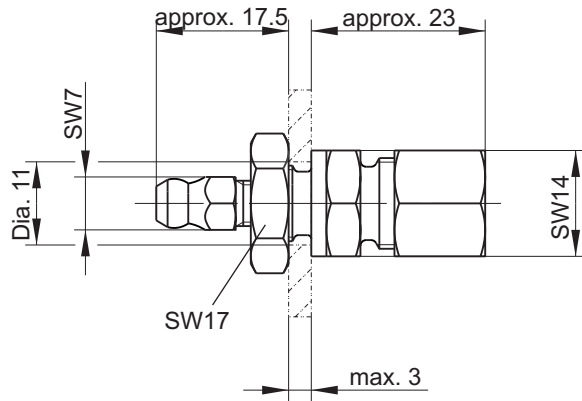
Hydraulic form grease nipple
DIN 71412, A
with integrated non-return valve



Part-no.	Material
21590030015	Steel zinc coated yellow chromate
21590030040	stainless

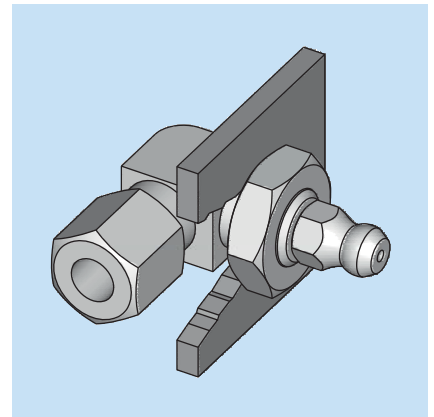
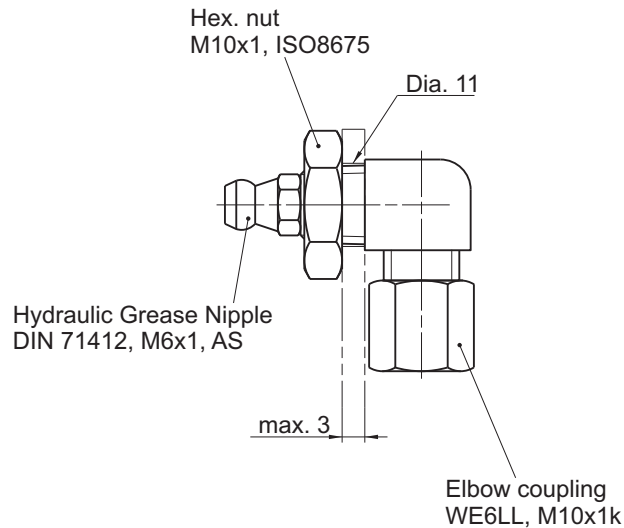


Straight Bulkhead coupling with Hydraulic Grease Nipple



Part-No.	Material
FAZ03552-00	Steel zinc coated yellow chromate

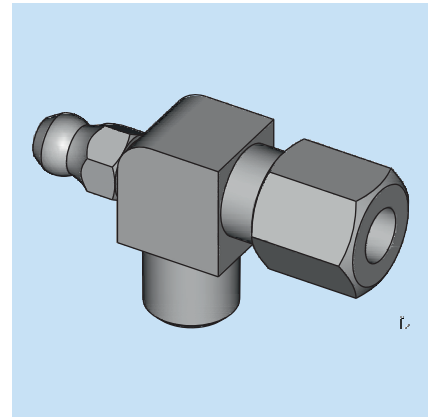
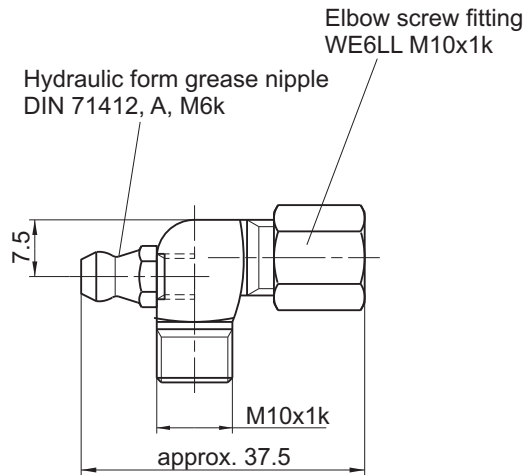
Angular Bulkhead coupling with Hydraulic Grease Nipple



Part-No.	Material
FAZ03552-02	Steel zinc coated yellow chromate

Elbow fitting with lubricating nipple

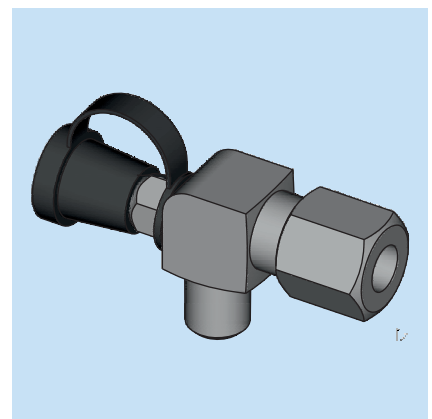
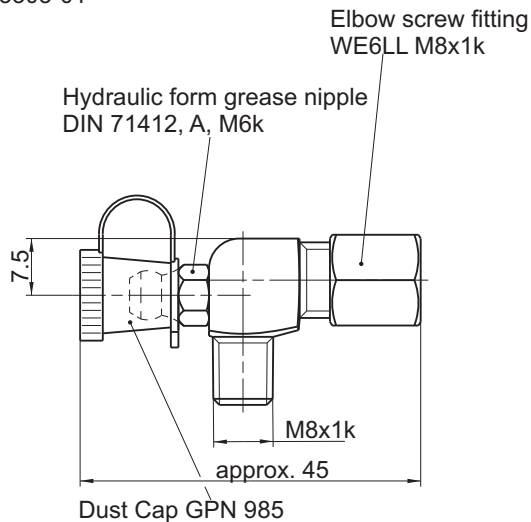
acc to FAZ03303-00



Part-no.	Material
FAZ03303-00	Steel zinc coated yellow chromate

Elbow fitting with lubricating nipple and dust cap

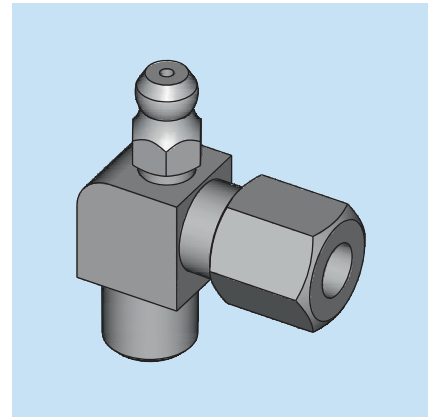
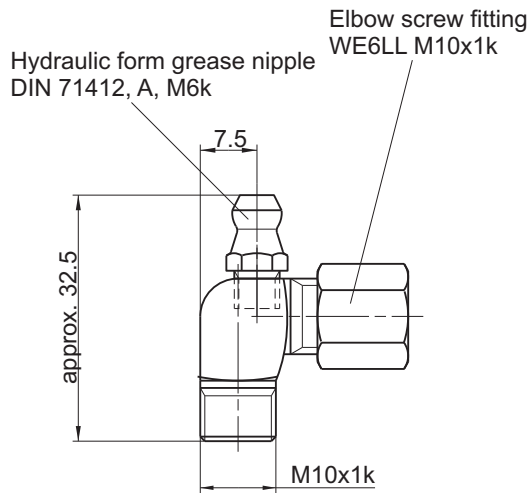
acc to FAZ03303-01



Part-no.	Material
FAZ03303-01	Steel zinc coated yellow chromate

Elbow fitting with lubricating nipple

acc to FAZ03303-02



Part-no.	Material
FAZ03303-02	Steel zinc coated yellow chromate

8.12 Tools

Table of contents

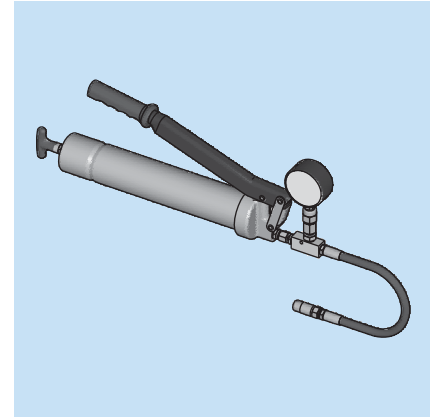
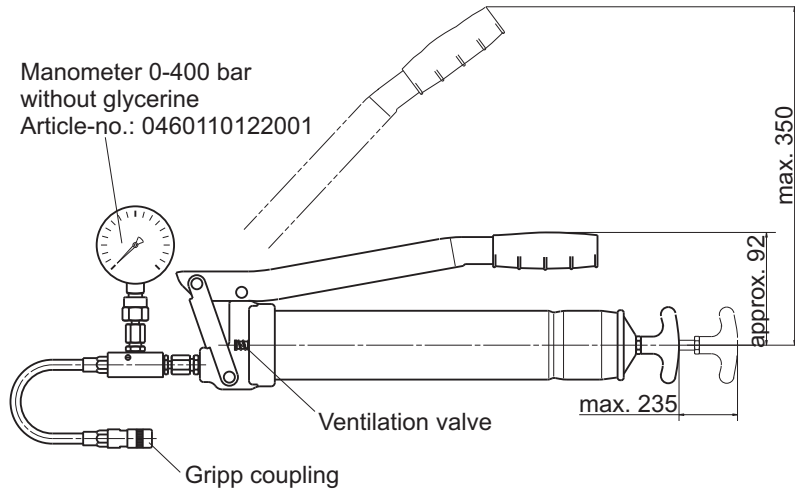
Page

Manual lever grease pump	8.12.2
KIT for checking central lubrication systems	
Manual lever grease pump	8.12.3
Plug tube with grip coupling	8.12.3
Pressure gauge with coupling	8.12.4
Extension with grease nipple	8.12.4
Tools	
Centering device	8.12.5
Screw-in device for elbow screw fitting	8.12.6
Hose scissors, large	8.12.7
Replacing blades for hose scissors, large	8.12.7
Hose scissors, small	8.12.8
Replacing blades for hose scissors, small	8.12.8



Hand lever grease pump acc to FAZ02255-00

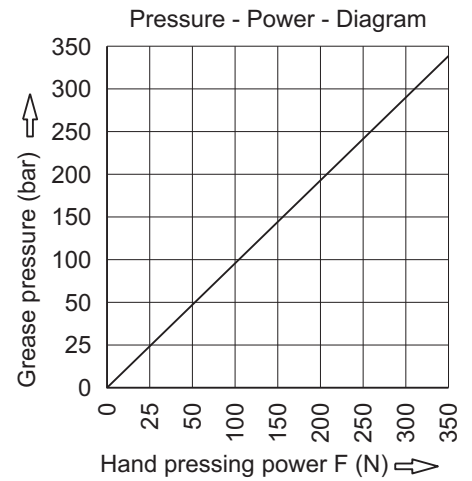
for filling electric pump EP-1 and PICO and for lubricating
suitable for grease cartridges according to DIN 1284



Technical data:

Pressure:	max. 350 bar
Delivery rate:	max. 2 cm ³ /stroke
Cartridge volume:	400 g
Volume w/o cartridge:	500 cm ³
max. tube outside diameter:	53,5 mm
min. tube inside diameter:	51 mm
Delivery media:	Greases up to NLGI-Kl. 2

Part-No.	Grease volume
21590080000	max. 500 cm ³



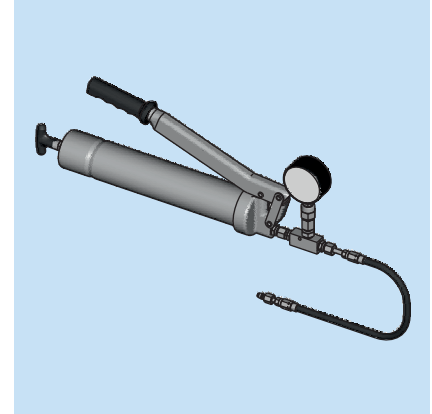
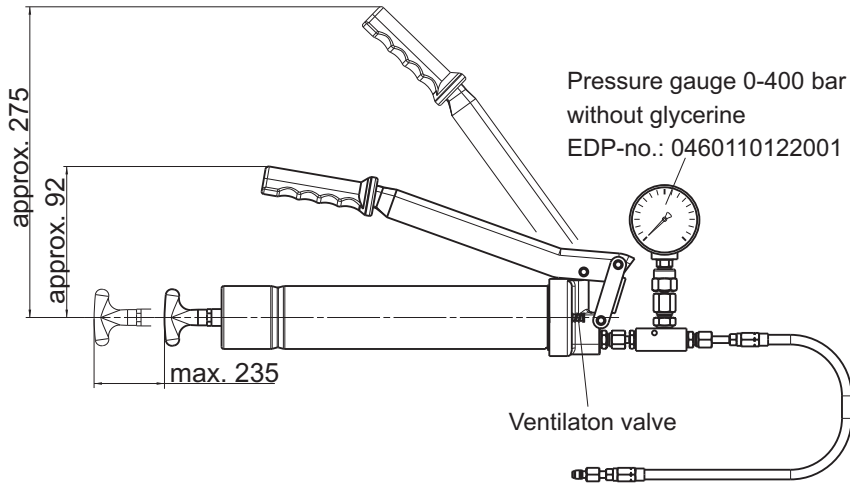
KIT

for checking central lubrication systems

Manual lever grease pump at DIN 1283

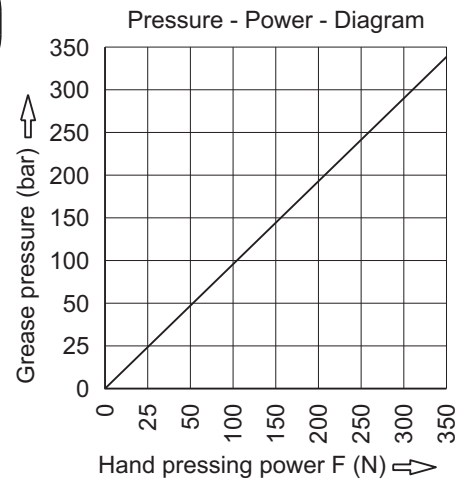
with pressure gauge and plug tube for connecting with progressive distributors

Plug Ø6 M10x1



Technical data:

Pressure:	max. 350 bar	max. tube outside dia.:	53.5 mm
Delivery rate:	max. 2 cm ³ /stroke	min. tube inside dia.:	51 mm
Cartridge volume:	400 g	Delivery media:	
Volume w/o cartridge:	500 g		Greases up to NLGI-Kl. 2

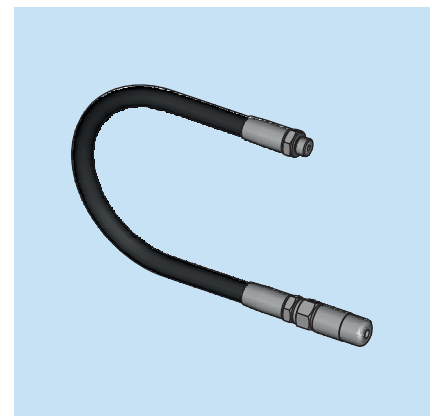
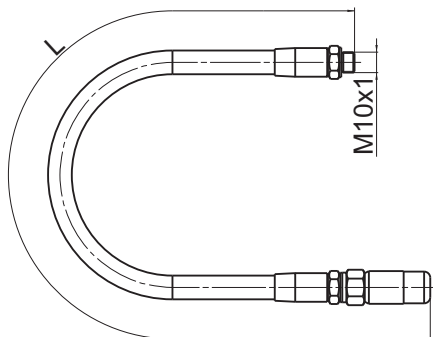


Part-No.	Grease volume
21590080003	max. 500 cm ³

Plug tube with grip coupling

for manual lever grease pump

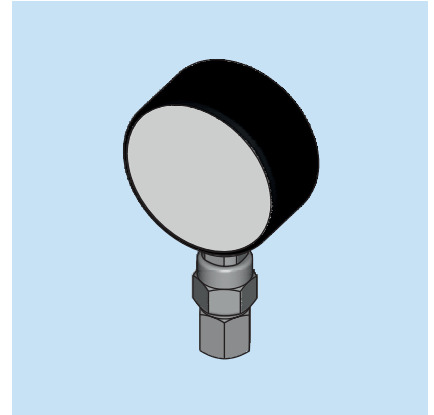
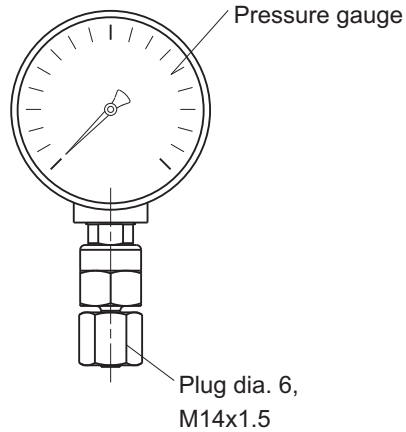
for connecting to grease nipples, DIN 71412



Part-No.	Length L
100120210	330 mm

Pressure gauge with coupling

to be assembled with the pump element
Plug dia. 6 M14x1.5



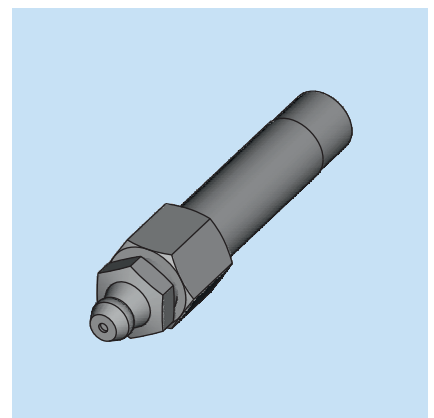
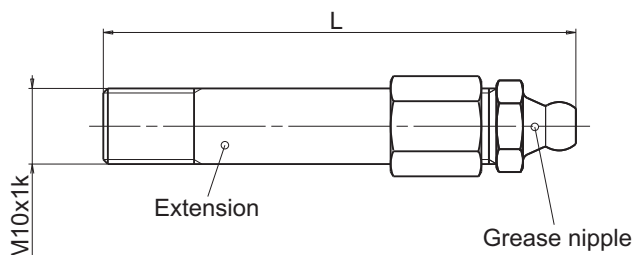
consisting of:

Pressure gauge DN 63 with glycerine filling
Pressure gauge connecting plug dia. 6, R1/4", not preassembled
Union nut dia. 6S, M14x1.5
Cutting ring SR6

Part-No.	Pressure gauge
21590130001	DN 63, with glycerine filling 0 - 400 bar

Extension

with grease nipple at DIN 71412

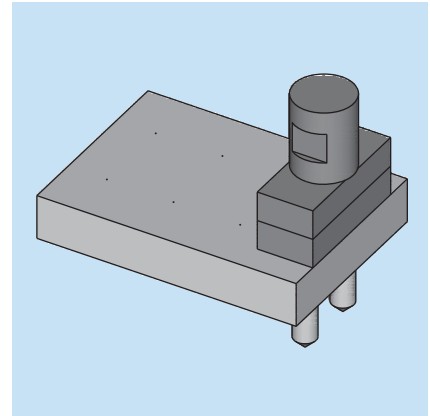
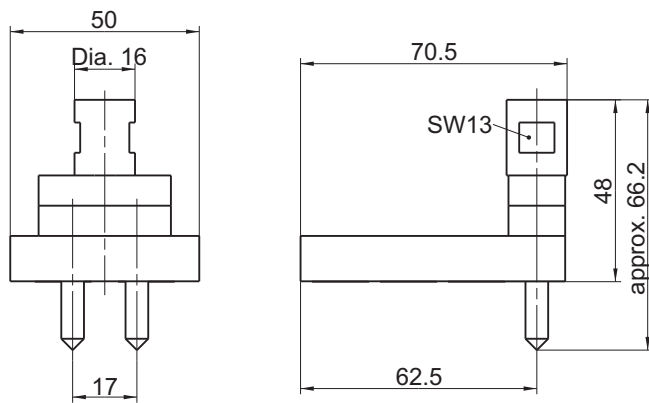


consisting of:

Extension M10x1k - M10x1, length 50 mm
Grease nipple M10x1k, DIN 71412

Part-No.	L
21590090015	approx. 62.5

Centering device



Part-No.	Material
4566 0001	Aluminum Steel

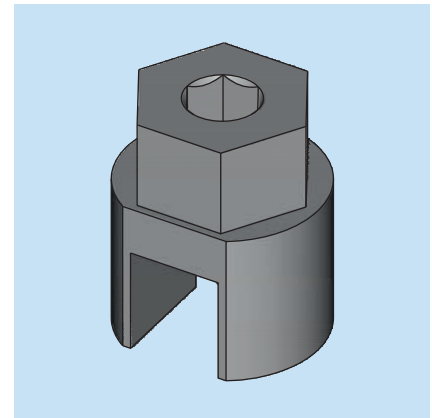
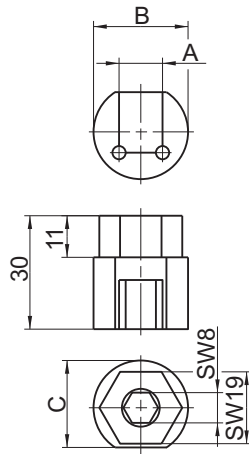
All Parts made of steel are zinc coated and blue chromated.





Screw-in device

for elbow screw fitting

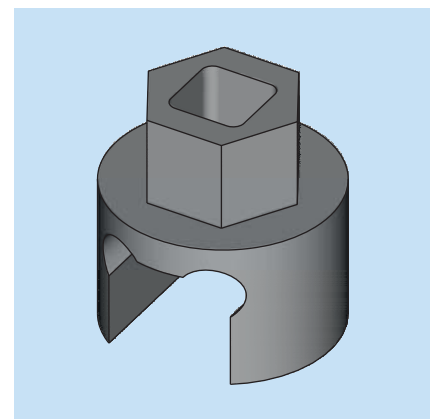
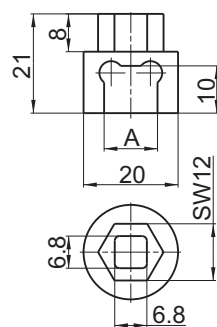


Part-no.	for coupling	A	B	C	Material
F4566/06-00 001	WE6LL-M10x1	11.5	Ø25	23	Steel inserted and hardened
F4566/06-00 002	WE6L-M10x1 WE8L-M10x1	12.5	Ø25	23	
F4566/06-00 003	WE8L-M12x1.5	14.5	Ø28	24.5	

All parts made of steel are zinc coated and blue chromated.

Screw-in device

for elbow screw fitting



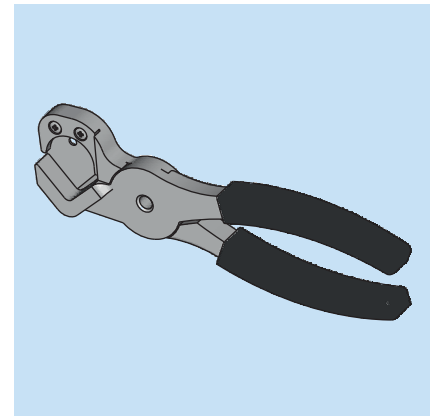
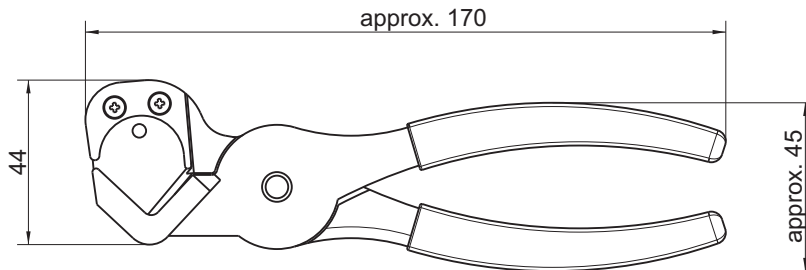
Part-no.	A	Material
FWZ05658-00	11.3	Steel
FWZ05658-01	10.3	Steel

All parts made of steel are zinc coated and blue chromated.



Hose scissors, large

incl. bag and two replacing blades

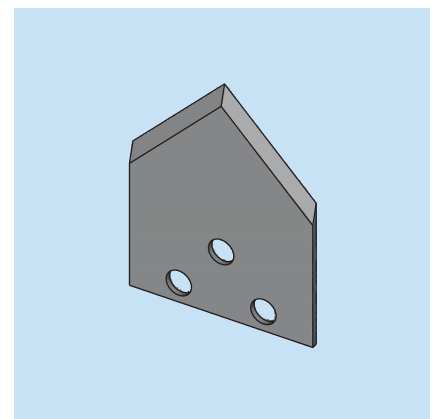
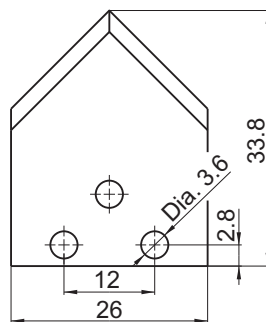


Part-No.	Cutting size	Material
0488 0008	2-20 mm	Steel zinc coated

Holder covered with plastic, blue

Replacing blades

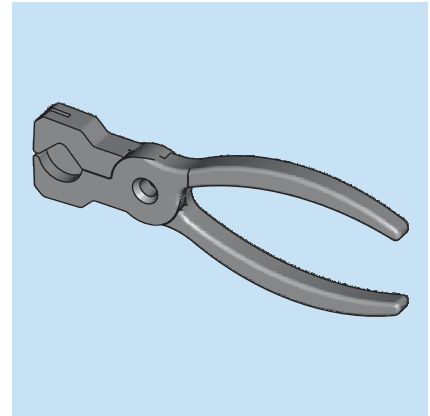
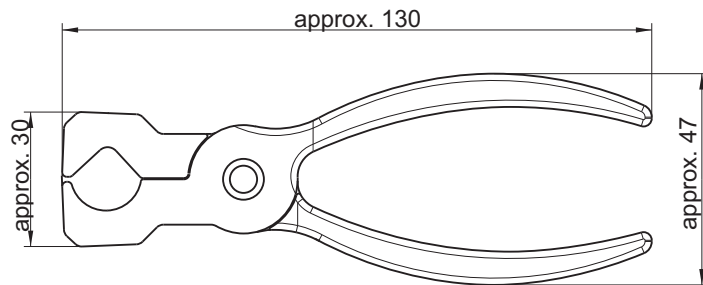
for large hose scissors



Part-No.	Material
0488 0007	Steel zinc coated



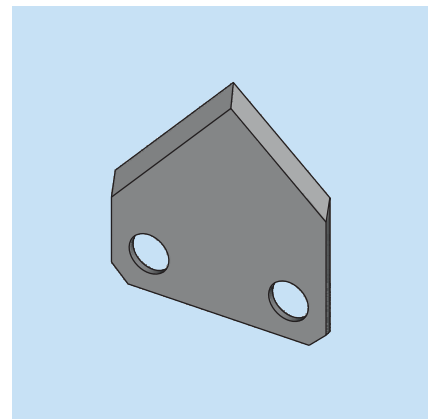
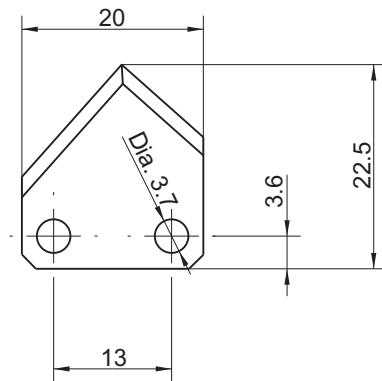
Hose scissors, small



Part-No.	Cutting size	Material
0488 0005	2-12 mm	Steel zinc coated

Replacing blades

for small hose scissors



Part-No.	Material
0488 0006	Steel zinc coated

