bielomatik

Excellence in
Central Lubrication

Product Catalogue
Central Lubrication Systems

POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

bielomatik

Single piston pumps
Units
Dosing pumps
Metering valves
Dosing elements
Distributor strips
Pre-fabrication

Single line lubrication system

Page 8 - 37

Grease pumps
Progressive distributor
Pre-fabrication

Progressive lubrication system

Page 40 - 63

Gear pump
units
Flow regulators

Circulation lubrication system

Page 66 - 81

Dosing unit
Compressor nozzles
Mixing block
Pre-fabrication

Oil/air lubrication system

Page 84 - 89

Central strips
Grease nipple
Identification rings

Block lubrication system

Page 92 - 95

Solenoid valves
Pressure gauge
Pressure switch
Controls
Lines
Fittings
Tools

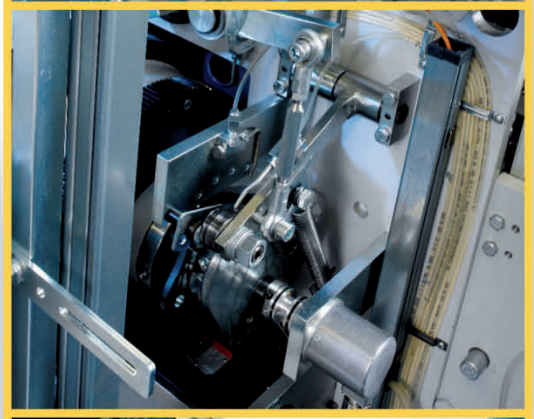
Accessories

Page 98 - 123

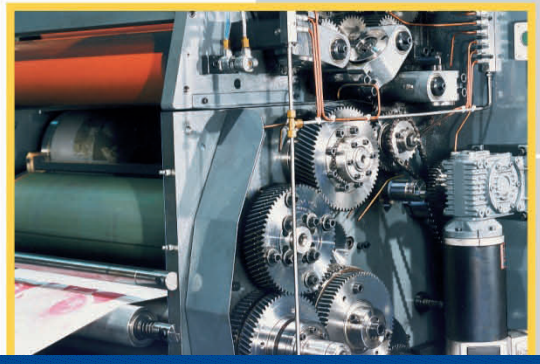
POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

bielomatik

Metered lubrication



Single line lubrication system within a bielomatik paper processing system



Single lubrication system of a paper processing line

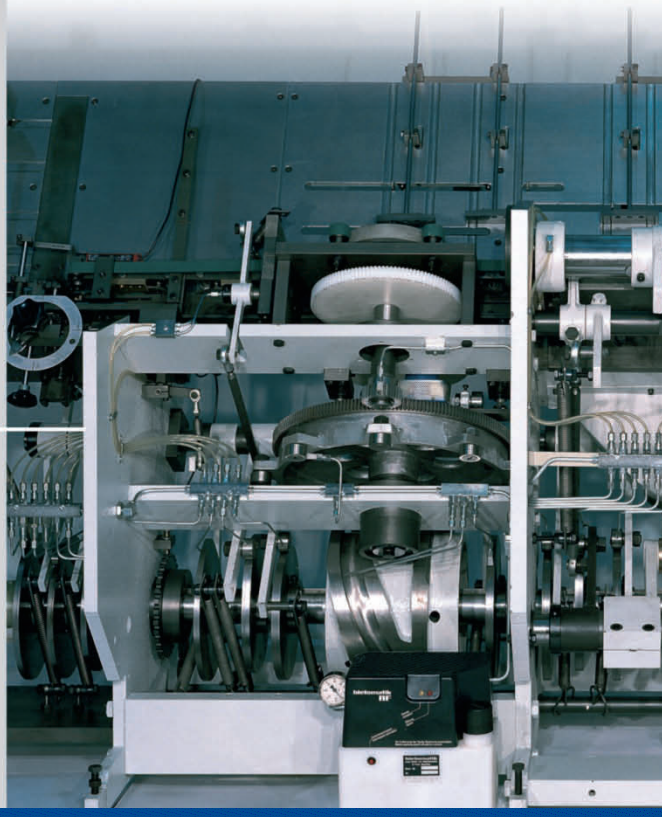
Single line lubrication system for oil within a printing machine

Our centralized lubrication technology sees to the exact dosing of lubricants. We offer application-specific solutions for plant and machinery in all industries.

As diverse as this scope of application is, our huge range of system components is

Centralized lubrication technology

- **Dosing system for oil and fluid grease**
- **Progressive system for oil, fluid grease and grease**
- **Circulation system for lubrication and cooling**
- **Oil / Air lubrication system**
- **Block lubrication system**
- **Equipment**



POMAC
LUB SERVICES BVBA

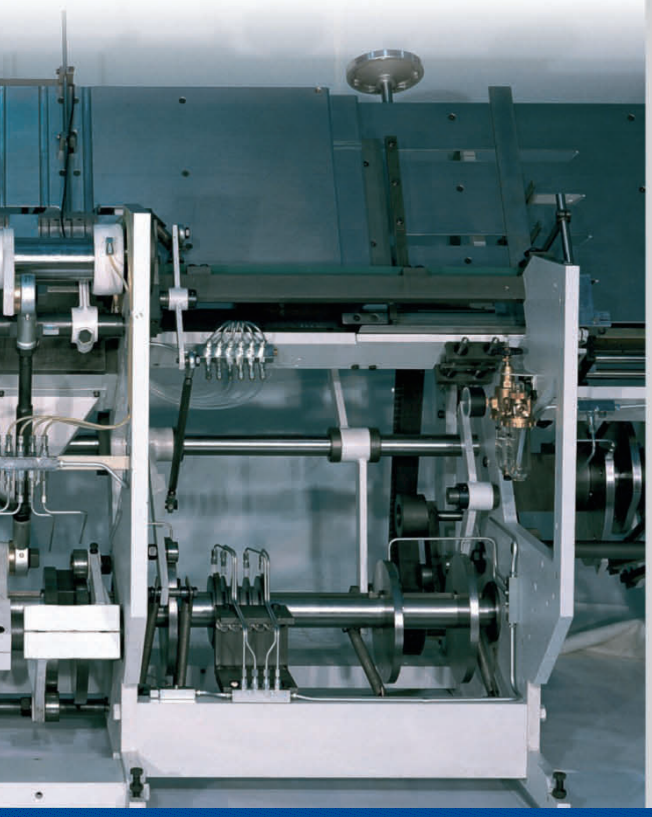
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

with oil and grease

just as extensive. Patented technologies and specialized technical solutions with the greatest precision offer you measurable success. Whether you want us to supply in series or solve a specific problem, your requirements are our central focus.

One drop of oil may be too little, or too much!

- **Too much for small, sensitive bearings.**
- **Too much, when oil should be used economically.**
- **Too much, when it contaminates the product, questioning the quality guidelines of the production output.**



Your advantage: our lubrication experience with our own machines

bielomatik
Excellence in
Paper Processing

Cutting to size:
High speed cross-cutter

Stationary manufacturing:
High speed exercise book line

bielomatik
Excellence in
Plastic Welding

Welding plastics:
Hot plate welding unit for automotive plastic fuel tanks

Minimal quantity lubrication systems for metal cutting

bielomatik
Excellence in
Minimal Quantity Lubrication

An economical alternative to traditional wet or dry machining in metal machining. bielomatik MQL systems help reducing production costs and decreasing health issues, as well as enhancing the environment.

POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

bielomatik

Single line lubrication system

Single line lubrication system

For numerous lubrication points with smallest dosing quantities for delivering oil and fluid grease.

The Advantages

- Connecting numerous lubrication points
- Smallest dosing quantities
- Compact construction
- For oil or fluid grease
- Dynamic or static principle
- Cost-effective
- Easy assembly

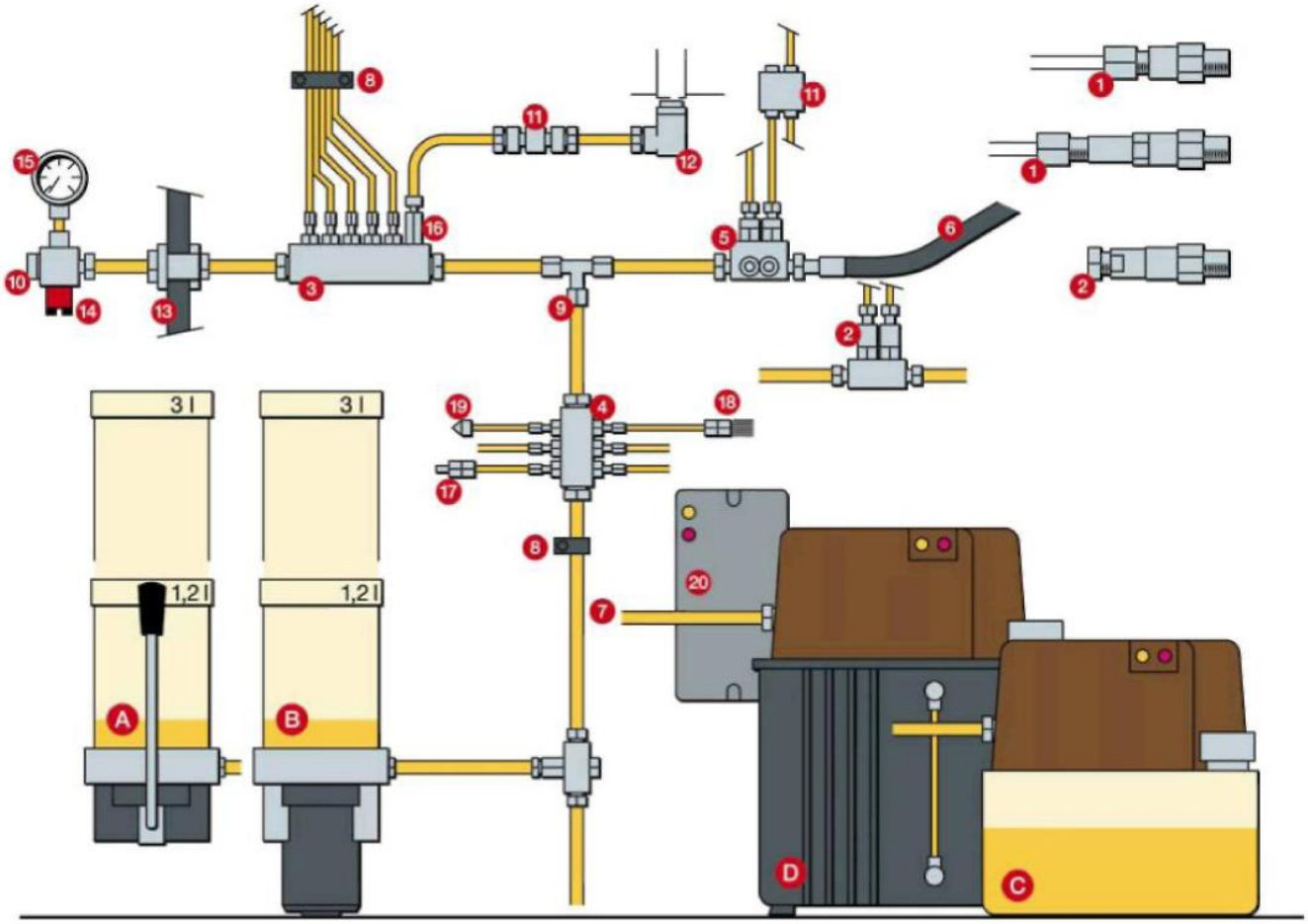
The system components

- Manual, pneumatic and electrical pumps
- Distributor strips
- Dosing valves
- Screwed fittings
- Control and check devices

The function

The dosing values are impinged on the main line with the pump – dynamically operating metering valves with a pressure surge, static operating dosing elements with slow pressure build-up. These thus transfer the respective quantity of the lubricant to the friction point.

During the following relief phase, the lubricant is restacked in the dosing valves for the next lubrication process.



1 Dosing element dynamic
2 Dosing element, static
3 Distributor strip, single
4 Distributor strip, on both sides
5 Distributor strip, angled
6 High-pressure hoses
7 Pipelines
8 Pipe clamps
9 Connecting and branching pieces
10 Vent parts
11 Pipe couplings - plug-in or bolted connections
12 Circulation pipe connections
13 Straight fittings
14 Check device - pressure switch
15 Check device - pressure gauge
16 Spacer for pipe connection
17 Pipe fitting as straight, elbow or swivel fitting
18 Brush for smearing oil
19 Nozzle
20 Control device
A Manual pump
B Pneumatic pump
C Compact unit standard (3 l)
D Compact unit with large container (6 or 13 l)

General description - Single line lubrication system

1. Application:

The single line lubrication system is the most widely spread total loss lubrication system in the general engineering field. Small quantities of oil or fluid grease are fed intermittently in the desired cycle time of the lubrication point. Example 5 to 1000 mm³ dosing volume, to 25 bar pressure at lubrication point, for a pump pressure of 25 to 80 bar.

Special features:

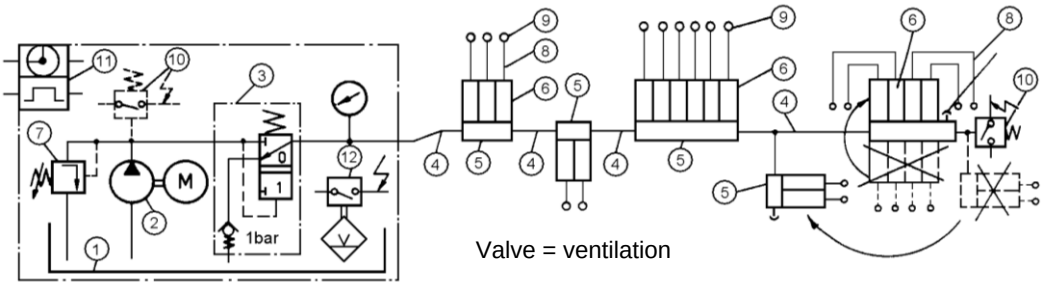
- Supply to numerous lubrication points
- Flexible construction
- Exact dosing
- Easy expansion
- Point-target type of spraying possible, e.g. chain bolt lubrication

2. Mode of operation of the bielomatik system (Fig 1):

The pump (2) sucks the lubricant from the container (1). The lubricant reaches the main line (4), distributor strips (5) and the dosing valves (6) through the relief valve (3) (position 1). For every pressure build-up controlled by the pressure control valve (7), the dosing valves (6) deliver the lubricant to the lubrication point (9) via the lubrication line (8). The respective dosing valve determines the dosing volume.
In an automatically operated system, the pressure build-up is controlled by a max. pressure switch (10) and the electronics (11). The pump is switched-off after the pressure build-up and again switched-on after the end of the cycle time. Pressure build-up from the unit up to the farthest metering valve requires a specific time depending upon the length of the line and flowability of the lubricant. The afterflow period of the pump is hence prolonged for systems, for which the pressure switch is not fitted at the end of the line. The afterflow period should end approx. 2 sec after pressure build-up at the farthest end of the main line. (factory setting of the boards tn = 2 sec). Units with controls without an afterflow period have an operating time of min. 5 sec.
A level control (12) monitors the constant level of the lubricant in the container. By stopping the pump, the entire system is relieved using the relief valve (3) (position 0) at ca. 1 bar. This is important for the function of the dosing valve and can be controlled via a min. pressure switch.

3. bielomatik Pumps and Lubrication Units:

Pressure relief valve (7) as well as a relief valve (3) are integrated in the bielomatik pumps. These are delivered complete with container or as ready to connect compact units including the electronics (11). Manual and pneumatically actuated single piston pumps deliver with a piston stroke of e.g. 10 cm³. This piston stroke must be selected such that the prescribed pressure build-up (e.g. 25/32 bar) is attained. (6. layout must be observed).
Electrical bielomatik pumpsare basically designed as gear pumps. The measuring valves require a rate of flow approx. 1 l/min. Dosing elements can be operated from 0.1 l/min. For which mostly the three-phase or single phase alternating current motors in short-time operation are adequate. Alternately, even a pump with 100% duty cycle can be used.



Picture 1: Schematic assembly of a single line lubrication system

4. bielomatik Dosing and Metering Elements (Picture 2):

Up to 24 bielomatik dosing elements can be connected to a distributor strip. For pressure build-up, every dosing element dispenses the prescribed dosing volume (piston surface x stroke). At the end of the stroke, the piston seals from the main line to the lubrication line. Due to pressure relief, the dosing piston is brought to the starting position by the spring and is pre-filled for the next lubrication procedure. For the metering valve, the piston must be moved in the direction of the spring quickly, i.e. pressure must build-up fast. There may be overdosage due to slow movement of the piston between the end positions. This is due to a leakage in the piston annular gap.
For dosing elements, the fitted seals prevent excess lubrication at slow pressure build-up.

5. The bielomatik electronics:

The bielomatik electronics is used for time or clock-dependent control of the pump motor as well as the control valve in the pneumatic pump and for monitoring the single line system. Pressure build-up must take place within a specified monitoring time. The electronic assembly can be integrated in the lubrication unit as well as installed in an electrical switch cabinet.

6. Design:

The number of lubrication points and their lubrication requirement (volume per time x) must be determined in advance. Basically, smaller dosing volume (e.g. 10 - 160 mm³) must be preferred and the cycle time must be shortened. The duty cycle of the motor and the relief time (at 1 bar) must be observed in the main line. (relief for fluid grease under circumstances few minutes).

Dimensioning of the system should be done such that the required usable dosing volumes, under consideration of the dead volume, pipeline resistance and leakage of the system is not exceeded and pressure build-up is ensured. For single piston pumps, ⅓of the displacement per stroke should be available as effective reserve after the pressure build-up.

Displacement> usable dosing volumes + dead volumes + influence of the pipeline resistance

a) The usable dosing volume is the total of the rate of delivery of all dosing elements of a system.
b) The dead volume is the volume, which is taken up by the entire system as result of pressure build-up:Compression of the trapped air and the lubricant, expansion of the main line (polyamide pipe 6x1.2:0.3 to 0.5 cm³/m), volume absorption of the pressure switch (e.g. 0.2 cm³) and the pressure gauge (to 1 cm³).
The main line and the dosing valve are laid such that self-venting is possible. That means, the main lines must be laid escalating.On the main line end and higher points of the system, dosing valves must be arranged with outlets on the top (s. picture 1) (9). There must no air inclusions.
c) The pipeline resistance of the system must be kept as little as possible so that pressure can build-up quickly at the end of the line. The more viscid the lubricant, the bigger should the line cross section be designed. If the pump delivers a flow rate much more than the system can take, the surplus outflows through the pressure control valve. This must be avoided in single piston pumps,

Picture 2: Metering valve (left); dosing element (right)

which can be attained by restricting the pneumatic maximum pressure at 6 bar.
If the pipeline resistance in open main line ends is more than the adjustment values of max. pressure switch, the same must be set at the end of the main line.

Line dimensioning:

Main line:
e.g. Polyamide pipe 6 x 1.2 mm
e.g. Steel pipe 6 x 0.7 and 8 x 0.7 mm
Lubrication lines:
e.g. Polyamide pipe 4 x 0.75 mm
e.g. Steel pipe 4 x 0.7 mm

Generally, the lines should be kept as short as possible particularly for viscid lubricants. Moreover, individual lubrication lines must not be longer than 3 m.
Pretests on an design true to the original are required for large systems or highly viscous lubricants. Pressure build-up and relief time must be determined here.

7. Lubricant:

Generally, mineral oils with an operating viscosity of 50 - 750 mm²/s can be dispensed in bielomatik lubrication systems. However, attention should be paid that these NBR seals are not affected. The function of synthetic lubricants or mineral oils can be checked with aggressive additives, on request. When using fluid greases release list TA 308 09 001, which can be obtained on request, must be checked. Fluid greases, which are not listed in consultation with bielomatik.

Attention:

- do not possibly mix different lubricants! Ideally, the system must be cleaned.
- No way must greases be mixed with non-compatible types of soaps

8. Assembly and Commissioning:

In principle, cleanliness customary to the hydraulic system must be observed. Pipelines and drilled channels must be deburred and clean them of any foreign bodies, as non-compliance may lead to malfunctions.

Retaining screws or nuts linked to double taper or cutting ring do not have a fixed arrester when tightening.

Rule:

After laying out, tighten to one and half turns. Insert sleeves must be used in polyamide pipes. The main lines must be well ventilated when commissioning. Lubrication lines should be prefilled and connected to the lubrication point.

Designation	Single piston pump	Single piston pump	Single piston pump
Type	AB-H	AB-P	AM
Kind of drive system	manual	pneumatic	pneumatic
Filling quantity	1.2 / 3.0 litres	1.2 / 1.5 / 3.0 litres	1.5 / 3.0 litres
Pump pressure	45 bar	60 bar	60 bar
Displacement	10.5 cm³/stroke	10.5 cm³/stroke	25.0 cm³/stroke
More information on	Page 16	Page 17	Page 19

Overview pumps - single line lubrication system

Lubrication unit	Lubrication unit	Compact unit	Dosing pumps
CME	MPT	AF1-OE	AG
Electrical	Electrical	Electrical	Electrical
3.0 litre	3 / 4 / 8 / 12 litres	3 / 6 / 12 litres	0.5 litre
30 bar	50 bar	45 bar	7 bar
0.2 l/min	0.2 or 0.5 l/min	1.0 l/min	25.0 mm³ / outlet
Page 21	Page 23	Page 25	Page 26

Single piston pump AB-H

The single piston pump AB-H is a robust hand lever pump. They are suitable for daily or rare lubrications. The hand lever can be mounted in three different positions, by which a flexible assembly is possible.

Detailed information under TA 308 11 501.

General

Type	Single piston pump
Lubrication line connection	Pipe connection Ø 6 mm
Ambient temperature	0 to 80 °C
Filling	manual or filling device

Hydraulic system

Operating pressure	45 bar
Displacement	10.5 cm³/stroke
Operating medium	Mineral oil, fluid grease
Range of viscosity	50 to 750 mm²/s,NLGI 000-0*

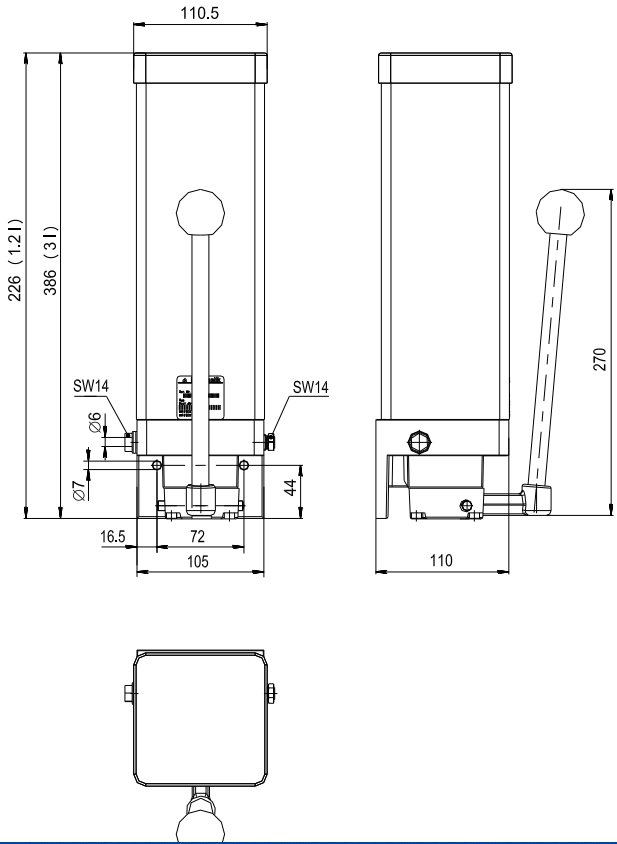
*as per fluid grease release list

Drive

Type of drive	manual
Actuating force	200 N

Order summary

Container Size [l]	Order number
1,2	**300 11 522**
3,0	**300 11 523**



Single Piston Pump AB-P

The single piston pump AB-P is a robust pneumatic pump. It is suitable for automatic lubrications, which must be done several times daily to maximum once per minute.

Detailed information under TA 308 11 502.

General

Type	Single piston pump
Lubrication line connection	Pipe connection Ø 6 mm
Ambient temperature	0 to 80 °C
Filling	manual or filling device
Protection class as per EN60529	IP67

Hydraulic system

Operating pressure	60 bar
Displacement	10.5 cm³/stroke
Operating medium	Mineral oil, fluid grease
Range of viscosity	50 to 750 mm²/s,NLGI 000-0*

*as per fluid grease release list

Drive

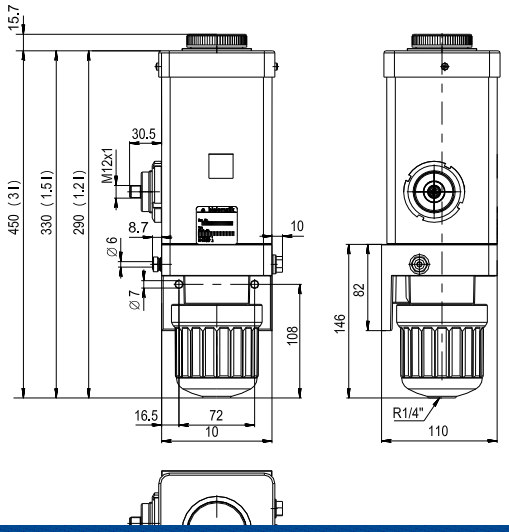
Type of drive	pneumatic
Supply pressure	4 to 6 bar
Supply fitting	R ¼ ’’

Sensor system

Level control	
Switching voltage	24 V AC/DC
Switching current	≤100 mA (≥5 mA)
Connection	M12 x 1

Order summary

Container Size [l]	Filling connection	Level control	Screw cap	Order number
1,2	no	no	no	**300 11 540**
1,2	no	Oil	no	**300 11 556**
1,2	no	Oil	yes	**300 11 565**
1,5	yes	Fluid grease	no	**300 11 575**
3,0	no	no	no	**300 11 541**
3,0	no	Oil	no	**300 11 557**
3,0	no	Fluid grease	yes	**300 11 567**



Single piston pump AB-P (capacitive level control)

The single piston pump AB-P is a robust pneumatic pump. It is suitable for automatic lubrications, which must be done several times daily to maximum once per minute.
The capacitive level control offers a reliable use of fluid greases, which are difficult to detect.

Detailed information under TA 308 11 602.

General

Type	Single piston pump
Lubrication line connection	Pipe connection Ø 6 mm
Ambient temperature	0 to 80 °C
Filling	manual or filling device
Protection class as per EN60529	IP67

Hydraulic system

Operating pressure	60 bar
Displacement	10.5 cm³/stroke
Operating medium	Mineral oil, fluid grease
Range of viscosity	50 to 750 mm²/s, NLGI 000-0*

*as per fluid grease release list

Drive

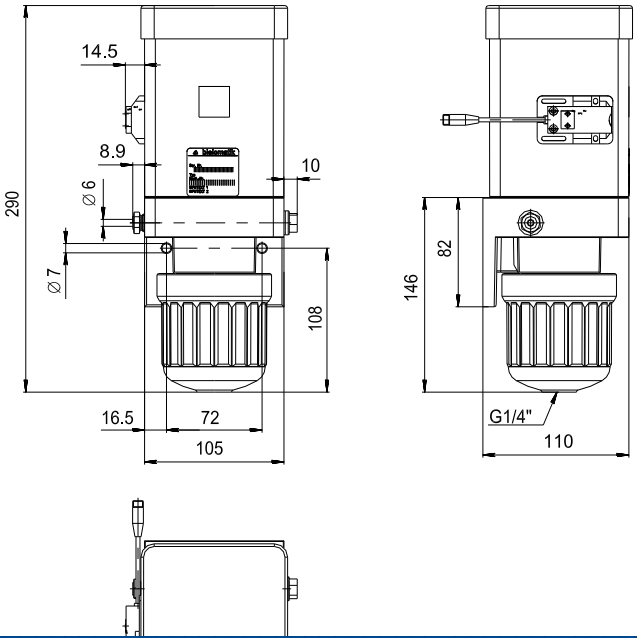
Type of drive	pneumatic
Supply pressure	4 to 6 bar
Supply fitting	G ¼ ”

Sensor system

Level control	
Nominal voltage	24 V DC
Power consumption	≤ 17 mA
Switching current	≤ 100 mA
Connection	M8 x 1

Order summary

Container Size [l]	Order number
1,2	**300 11 615**



Single piston pump AM

The single piston pump AM is a robust pneumatic pump. It is suitable for automatic lubrications, which must be done several times daily to maximum once per minute.

Detailed information under TA 308 11 504.

General

Type	Single piston pump
Lubrication line connection	Pipe connection Ø 6 mm
Ambient temperature	0 to 80 °C
Filling	manual
Protection class as per EN60529	IP 64

Hydraulic system

Operating pressure	60 bar
Displacement	25 cm³/stroke
Operating medium	Mineral oil, fluid grease
Range of viscosity	50 to 750 mm²/s, NLGI 000-0*

*as per fluid grease release list

Drive

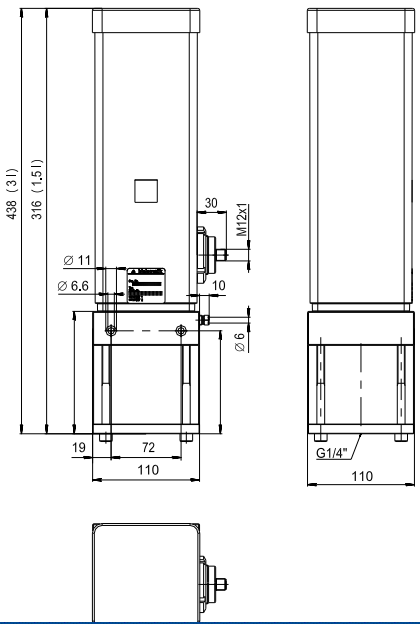
Type of drive	pneumatic
Supply pressure	4 to 6 bar
Supply fitting	G ¼ ''

Sensor system

Level control	
Switching voltage	≤ 24 V AC/DC
Switching current	≤ 100 mA (≥ 5 mA)
Connection	M12 x 1

Order summary

Container Size [l]	Level control	Order number
1,5	Fluid grease/oil	**300 11 586**
3,0	Fluid grease/oil	**300 11 587**
3,0	Oil	**300 11 626**



Single piston pump AM (capacitive level control)

The single piston pump AM is a robust pneumatic pump. It is suitable for automatic lubrications, which must be done several times daily to maximum once per minute. The capacitive level control offers a reliable use of fluid greases, which are difficult to detect.

Detailed information under TA 308 11 603.

General

Type	Single piston pump
Lubrication line connection	M10 x 1
Ambient temperature	0 to 80 °C
Filling	manual
Protection class as per EN60529	IP67

Hydraulic system

Operating pressure	60 bar
Displacement	25 cm³/stroke
Operating medium	Mineral oil, fluid grease
Range of viscosity	50 to 750 mm²/s, NLGI 000-0*

*as per fluid grease release list

Drive

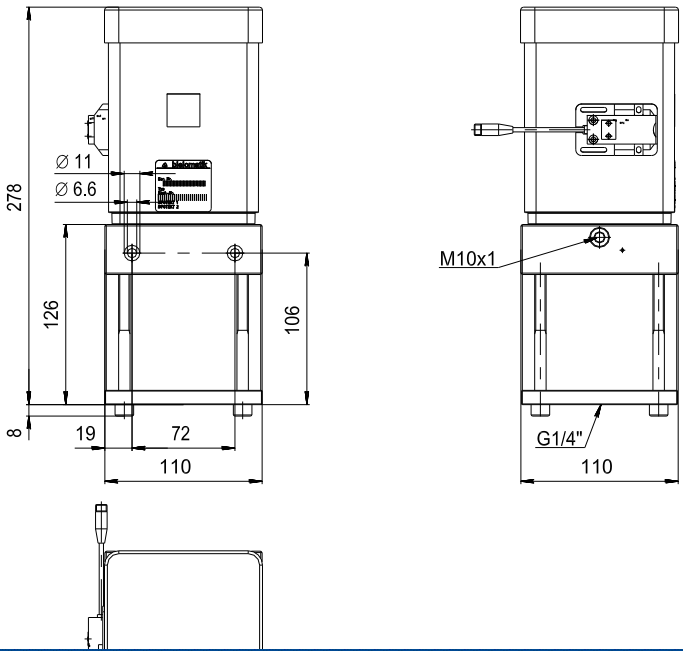
Type of drive	pneumatic
Supply pressure	4 to 6 bar
Supply fitting	G ¼ ”

Sensor system

Level control	
Nominal voltage	24 V DC
Power consumption	≤ 17 mA
Switching current	≤ 100 mA
Connection	M8 x 1

Order summary

Container Size [l]	Order number
1,2	**300 11 634**



Lubrication unit CME 3

The CME lubrication unit is a gear pump unit, which is available with and without integrated control. It is suitable for automated lubrication, which must be done several times daily to maximum once per minute.

Detailed information under TA 308 16 904.

General

Type	Lubrication unit
Lubrication line connection	Pipe connection Ø 6 mm
Ambient temperature	0 to 40 °C
Filling	manual
Protection class as per EN60529	IP33

Hydraulic system

Operating pressure	30 bar
Displacement	0.2 l/min
Operating medium	Mineral oil
Range of viscosity	50 to 750 mm²/s

Drive

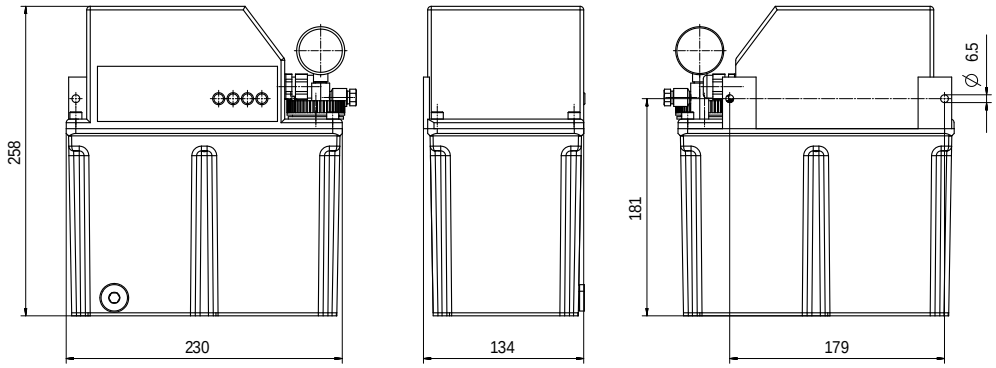
Type of drive	Electrical
Supply voltage	230 V
Supply current	0.75 A
Frequency	50 Hz
Power consumption	110 W

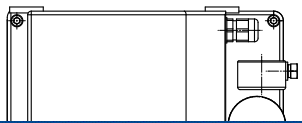
Sensor system

	Level control	Pressure monitoring
Switching voltage	≤ 24 V AC/DC	≤ 24 V AC/DC
Switching current	≤100 mA	≤2.0 A
Connection	Terminal strip	Terminal strip

Order summary

Container Size [l]	Pressure gauge	Electric control	Order number
3,0	no	yes	**300 16 932**
3,0	no	no	**300 16 934**
3,0	yes	no	**300 16 936**
3,0	yes	yes	**300 16 939**





Lubrication unit CME 3 (24 V)

The CME lubrication unit is a gear pump unit, which is available with and without integrated control. It is suitable for automated lubrication, which must be done several times daily to maximum once per minute.

Detailed information under TA 308 16 911.

General

Type	Lubrication unit
Lubrication line connection	Pipe connection Ø 6 mm
Ambient temperature	0 to 40 °C
Filling	manual
Protection class as per EN60529	IP 30

Hydraulic system

Operating pressure	30 bar
Displacement	0.2 l/min
Operating medium	Mineral oil
Range of viscosity	50 to 750 mm²/s

*as per fluid grease release list

Drive

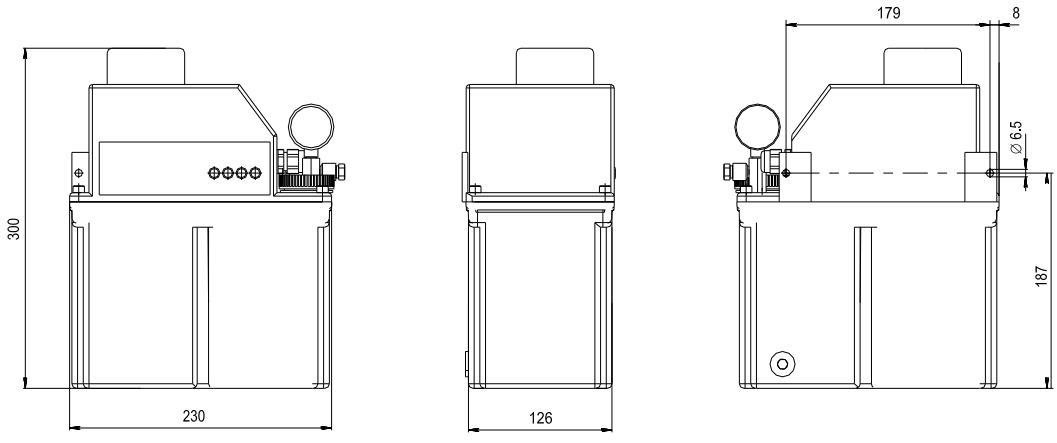
Type of drive	Electrical
Supply voltage	24 V DC
Supply current	4.5 A
Power consumption	110 W

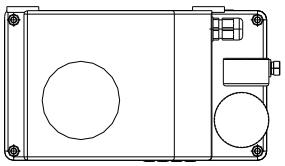
Sensor system

	Level control	Pressure monitoring
Switching voltage	≤ 24 V AC/DC	≤ 24 V AC/DC
Switching current	≤ 100 mA	≤ 2.0 A
Connection	Terminal strip	Terminal strip

Order summary

Container Size [l]	Pressure gauge	Electric control	Order number
3,0	yes	no	**300 16 943**
3,0	yes	yes	**300 16 945**





Lubrication unit MPT 3

The MPT lubrication unit is a powerful gear pump unit for quick pressure build-up. It is suitable for automated and extensive lubrication, which must be done several times daily to maximum once per minute.

Detailed information under TA 308 16 906.

General

Type	Lubrication unit
Lubrication line connection	Pipe connection Ø 6 mm
Ambient temperature	0 to 40 °C
Filling	manual
Protection class as per EN60529	IP53

Hydraulic system

Operating pressure	50 bar
Displacement	0.5 l/min
Operating medium	Mineral oil, fluid grease
Range of viscosity	50 to 750 mm²/s, NLGI 000-0*

*as per fluid grease release list

Drive

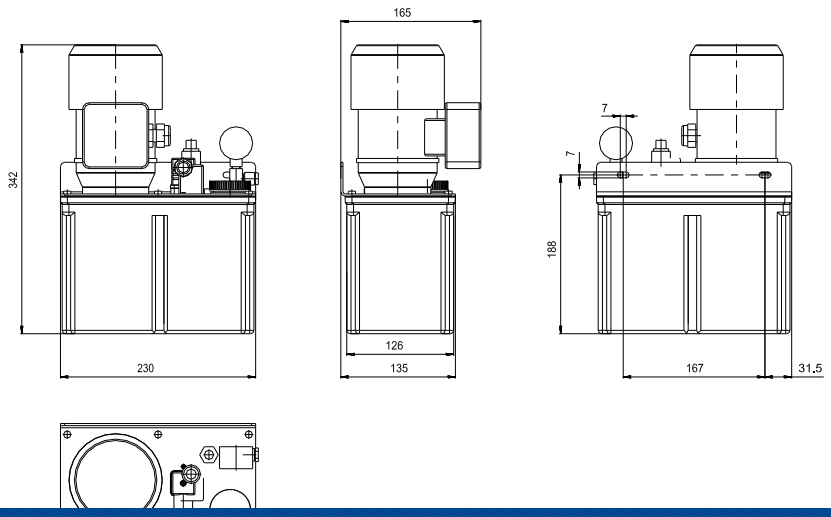
Type of drive	Electrical
Supply voltage	420 V
Supply current	0.35 A
Frequency	50 Hz
Power consumption	90 W

Sensor system

	Level control	Pressure monitoring
Switching voltage	≤ 24 V AC/DC	≤ 24 V AC/DC
Switching current	≤ 100 mA	≤ 2.0 A
Connection	Terminal strip	Terminal strip

Order summary

Container Size [l]	Level control	Pressure gauge	Pressure monitoring	Order number
3,0	Oil: closed	no	yes	**300 16 960**
3,0	Fluid grease: open	no	yes	**300 16 961**
3,0	Oil: open	no	no	**300 16 970**
3,0	Oil: open	yes	no	**300 16 978**
3,0	Fluid grease: open	yes	no	**300 16 988**



Lubrication unit MPT 4 / 8 / 12

The MPT lubrication unit is a powerful gear pump unit. It is suitable for automated and extensive lubrication, which must be done several times daily to maximum once per minute.

Detailed information under TA 308 16 905 / TA 308 16 909 / TA 308 16 903.

General

Type	Lubrication unit
Lubrication line connection	Pipe connection Ø 6 / 8 mm, M12 x 1
Ambient temperature	0 to 40 °C
Filling	manual
Protection class as per EN60529	IP54

Hydraulic system

Operating pressure	50 bar
Displacement	0.2 - 0.5 l/min
Operating medium	Mineral oil, fluid grease
Range of viscosity	50 to 750 mm²/s, NLGI 000-0*

*as per fluid grease release list

Drive

Type of drive	Electrical
Supply voltage	420 V
Supply current	0.35A
Frequency	50 Hz
Power consumption	90 W

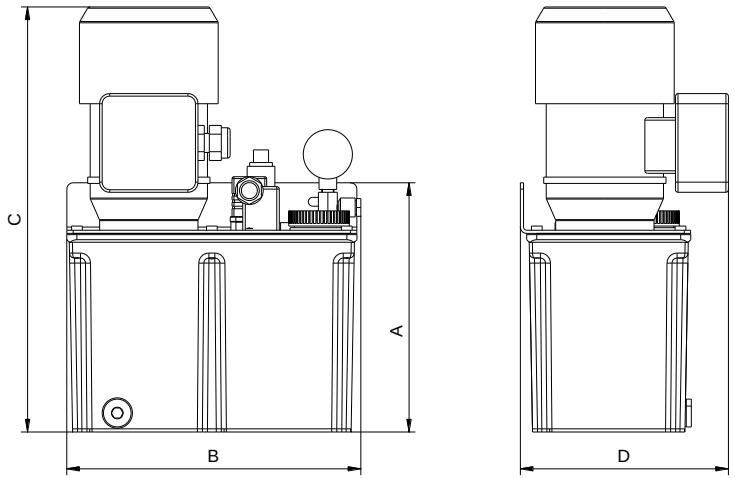
Sensor system

Level control	
Switching voltage	≤ 24 V AC/DC
Switching current	≤ 100 mA (≥ 5 mA)
Connection	M12 x 1

Order summary

Type	Container Size [l]	Connection	Displacement [l/min]	Order number
MPT 4	4,0	Pipe connection ø 8 mm	0,5	**300 16 920**
MPT 8	8,0	M 12 x 1	0,5	**300 16 921**
MPT 8	8,0	Pipe connection ø 6 mm	0,2	**300 16 980**
MPT 12	12,0	Pipe connection ø 6 mm	0,5	**300 16 990**

Unit	Dimensions [mm]			
	A	B	C	D
MPT 4	175	236	345	152
MPT 8	250	330	430	163
MPT 12	230	355	420	213



Compact unit AF1 – OE (3 / 6 / 12 litres)

The AF1 - OE compact unit is a powerful and highly dynamic gear pump unit. It is suitable for automated and extensive lubrication, which must be done several times hourly to once per second.

Detailed information under TA 308 16 303 / TA 308 16 402 / TA 308 16 513.

General

Type	Compact unit
Lubrication line connection	Pipe connection Ø 6 / 8 mm
Ambient temperature	0 to 40 °C
Filling	manual
Protection class as per EN60529	IP53

Hydraulic system

Operating pressure	45 bar
Displacement	1 l/min
Operating medium	Mineral oil, fluid grease
Range of viscosity	50 to 750 mm²/s, NLGI 000-0*

*as per fluid grease release list

Drive

Type of drive	Electrical
Supply voltage	230 V
Supply current	1.5 A
Frequency	50 Hz
Power consumption	285 W

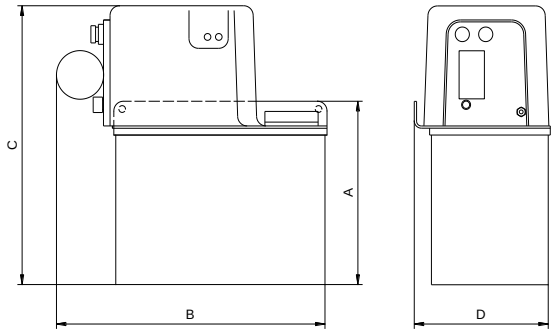
Sensor system

	Level control	Pressure monitoring
Switching voltage	≤ 24 V AC/DC	≤ 24 V AC/DC
Switching current	≤ 100 mA	≤ 2.0 A
Connection	Terminal strip	Terminal strip

Order summary

Container Size [l]	Pipe connection ø [mm]	Pressure gauge	Pressure switch	Electric control	Order number
3,0	6	no	yes	yes	**300 16 350**
3,0	6	yes	yes	yes	**300 16 352**
3,0	6	yes	no	no	**300 16 354**
3,0	6	no	yes	no	**300 16 362**
6,0	8	yes	yes	yes	**300 16 427**
6,0	6	no	yes	no	**300 16 428**
12,0	8	yes	yes	no	**300 16 513**
12,0	8	yes	yes	yes	**300 16 514**

Unit	Dimensions [mm]			
	A	B	C	D
AF1-OE 3	228	290	290	166
AF1-OE 6	232	590	379	146
AF1-OE 12	310	345	350	250



Dosing pump AG

Dosing pump AG is a compact lubrication system with a 24 V magnet pump. It is suitable for supplying one to four lubrication points directly with lubricant, which must be done several times daily to maximum once per minute. They have stroke monitoring, through which a lubrication process can be monitored.You may also get different container sizes on request.

Detailed information under TA 308 13 091.

General

Type	Dosing pumps
Lubrication line connection	Pipe connection Ø 6 mm
Ambient temperature	0 to 60 °C
Filling	manual
Protection class as per EN60529	IP 65

Hydraulic system

Max. counter pressure	7 bar
Displacement	25 mm³/stroke
Operating medium	Mineral oil
Range of viscosity	10 to 750 mm²/s

Drive

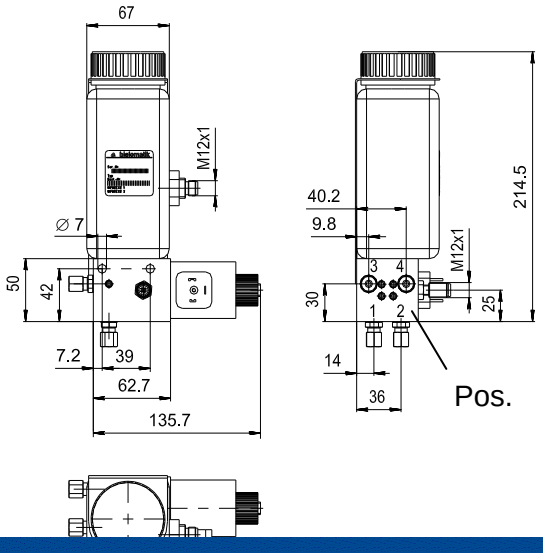
Type of drive	Electrical
Supply voltage	24 V DC
Supply current	1.2 A
Power consumption	30 W
Connection	Angled plug connector DIN43650A

Sensor system

Level control		**Stroke monitoring**	
Switching voltage	≤ 24 V	Nominal voltage	≤ 24 V
Switching current	≤ 0.5 A	Switching current	≤ 300 mA
-	-	Power consumption	≤ 15 mA
Connection	M12 x 1	Connection	M12 x 1

Order summary

Container Size [l]	Number of outlets	Order number
0,5	1 (pos.4)	**300 13 091**
0,5	2 (pos. 3 and 4)	**300 13 092**
0,5	3 (pos. 2, 3 and 4)	**300 13 093**
0,5	4 (pos. 1, 2, 3 and 4)	**300 13 094**



Summary dosing valves - single line lubrication system

Designation	Metering valve	Dosing element
Version	dynamic	Static
Dosing volume	5 to 1,000 mm³	10 to 600 mm³
Sealing material	NBR	NBR
Pipe connection	Bolted or plug connection Ø 4 mm	Bolted connection Ø 4 mm
More information on	Page 30	Page 32

General description - metering valve

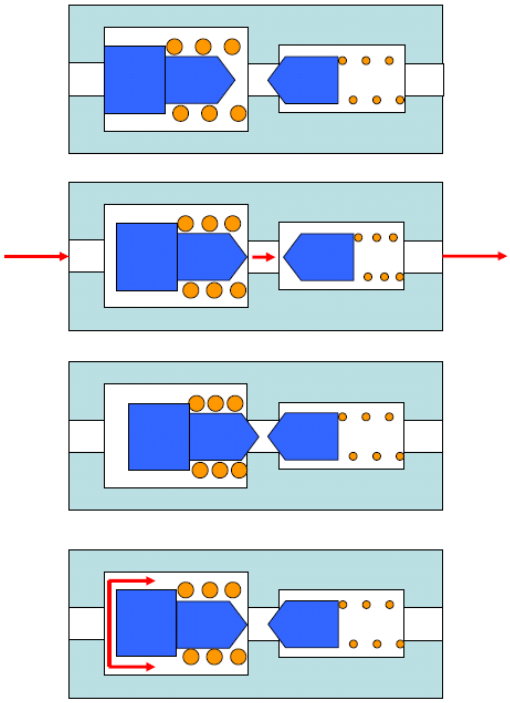
Metering valves are simple and inexpensive dynamic dosing valves. Lubrication quantity between 5 mm³ and 1000 mm³ per stroke can be dispensed with these metering valves.

Structure and mode of action

A pressure pulse is required for actuation. As a result of this pulse, the dosing piston is moved with great speed towards the return valve (position 2). With this stroke movement, a specific lubricant volume (dosing volume) is dispensed through the return valve. After completion of the stroke, the dosing valve closes the connecting bore. The dosing process is closed (position 3), the return valve closes. After completing the lubrication cycle and subsequent relieving of the main line, the dosing valve is pressed with a spring in its starting position (position 1). The lubricant is thus restacked via the play between the dosing valve and the body of the dosing element (position 4).

The metering valve must be operated only with the pumps**AB-H**, **AB-P**, **AM** and **AF1-OE**.

Detailed information under TA 308 20 001.



Position 1:
Initial position
The main line is relieved, dosing valve in the initial position return valve closed.

Position 2:
Dosing through pulse initiated,
Dosing valve in the pressure stroke position, return valve opened.

Position 3:
Dosing completed,
Dosing valve in the closed position, return valve closed.

Position 4:
Relief of main line initiated,
Dosing valve in the restacking position, return valve closed.

Order number - metering valve

Order overview

Version	Dosing volume	Order number
Plug-in connection	10 mm^3	**300 20 000**
Plug-in connection	20 mm^3	**300 20 001**
Plug-in connection	30 mm^3	**300 20 002**
Plug-in connection	50 mm^3	**300 20 003**
Plug-in connection	100 mm^3	**300 20 004**
Plug-in connection	200mm^3	**300 20 005**
Bolted connection	10 mm^3	**300 20 400**
Bolted connection	20 mm^3	**300 20 401**
Bolted connection	30 mm^3	**300 20 402**
Bolted connection	50 mm^3	**300 20 403**
Bolted connection	100 mm^3	**300 20 404**
Bolted connection	200 mm^3	**300 20 405**

The dosing volumes

5 mm^3	**300 20 030**
250 mm^3	**300 20 017**
500 mm^3	**300 20 018**
1000 mm^3	**300 20 019**

can be delivered only with bolted connection. Versions with plug-in connection can be requested separately.

General description - dosing element

Dosing elements are reliable and efficient static dosing valves. Lubrication quantity between 10 mm³ and 600 mm³ per stroke can be metered out with these dosing elements.

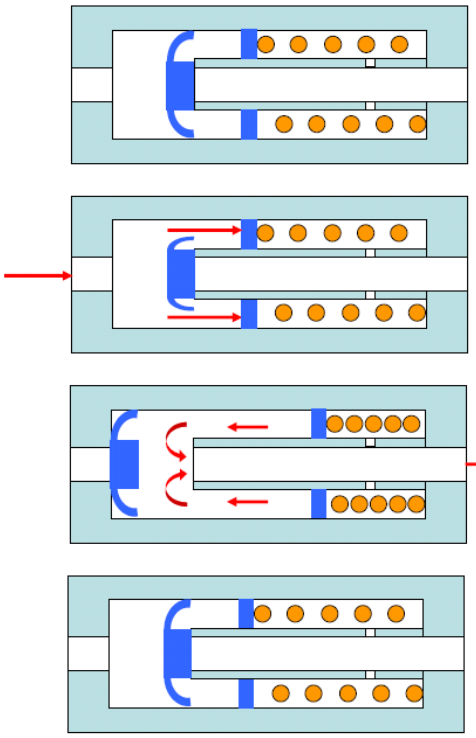
Structure and mode of action

Metering procedure:
If pressure is built-up at the entrance of the body, then the lubricant flows to the lower surface of the seal via return valve. The seal with the piston moves against the force of the spring up to the end stop on the dosing nozzle. Metering is done, whereby, the displaced lubricant flows through a transverse and longitudinal bore to the centre of the outlet.

Relieving procedure:
If pressure at the entrance falls below the relief pressure, the return valve lifts as a result of the tensioned spring and releases its longitudinal bore. The lubricant flows through the longitudinal and transverse bore at the centre from the lower to the upper side of the piston, which moves up to its lower end stop. The valve is then in the initial position and is ready for the next metering.

The dosing element can be used with all pumps of the single line system.

Detailed information under TA 308 20 801.



Position 1:
Initial position.
Main line is ventilated. Return valve in the initial position.

Position 2:
Dosing through pulse initiated.
Return valve in the restacking position.
Fill lubricant.

Position 3:
Dosing.
Return valve encircles the main line.
Spring force of the seal doses the lubricant.

Position 4:
Back to the initial position

Order number - dosing element

Order overview

Version	Dosing volume	Order number
Plug-in connection	10 mm^3	**300 20 800**
Plug-in connection	20 mm^3	**300 20 801**
Plug-in connection	30 mm^3	**300 20 802**
Plug-in connection	50 mm^3	**300 20 803**
Plug-in connection	100 mm^3	**300 20 804**
Plug-in connection	160mm^3	**300 20 805**
Plug-in connection	200 mm^3	**300 20 896**
Plug-in connection	400 mm^3	**300 20 897**
Plug-in connection	600 mm^3	**300 20 898**

Distributor strips

Distributor strips for usage with metering valves and dosing elements for the single line lubrication system.

General

Version	Steel, surface galvanised
Application	for installing dosing elements, metering valves, compressor nozzles and as branching-off conductor
Operating pressure	100 bar
Fixing	Tapping screw

Order summary (duplicate)

Number of outlets	Fig.	Packaging unit [no.]	Dimensions [mm]			Order number
			a	L1	L2	
2x1	1	30	-	45	20	**300 48 001**
2x2	2	20	-	57	32	**300 48 002**
2x3	3	20	18	75	50	**300 48 003**
2x4	3	20	36	93	68	**300 48 004**
2x5	3	20	54	111	86	**300 48 005**
2x6	3	10	72	129	104	**300 48 006**
2x7	3	10	90	147	122	**300 48 007**
2x8	3	10	108	165	140	**300 48 008**
2x9	3	10	126	183	158	**300 48 009**
2x10	3	10	144	201	176	**300 48 010**
2x11	3	10	162	219	194	**300 48 011**
2x12	3	10	180	237	212	**300 48 012**

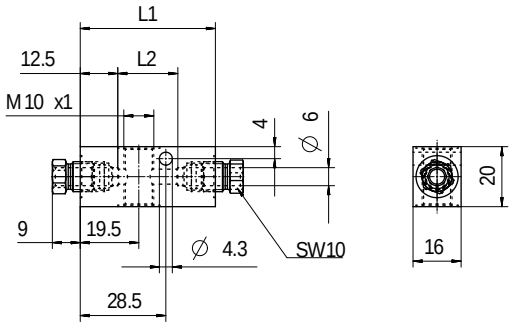


Fig. 1

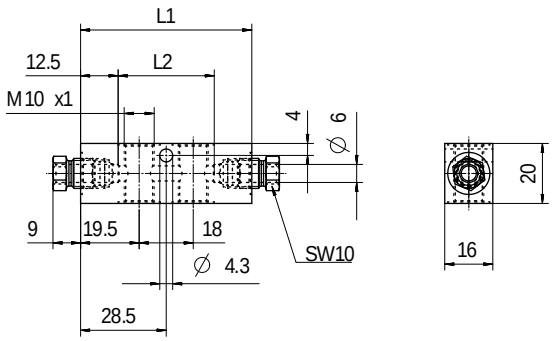


Fig. 2

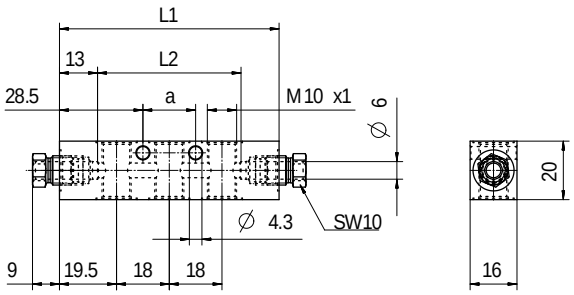


Fig. 3

Order summary (simple)

Number of outlets	Fig.	Packaging unit	Dimensions [mm]			Order number
			a	L1	L2	
1	4	30	-	45	20	**300 48 201**
2	5	20	-	57	32	**300 48 202**
3	6	20	18	75	50	**300 48 203**
4	6	20	36	93	68	**300 48 204**
5	6	20	54	111	86	**300 48 205**
6	6	10	72	129	104	**300 48 206**
7	6	10	90	147	122	**300 48 207**
8	6	10	108	165	140	**300 48 208**
9	6	10	126	183	158	**300 48 209**
10	6	10	144	201	176	**300 48 210**
11	6	10	162	219	194	**300 48 211**
12	6	10	180	237	212	**300 48 212**

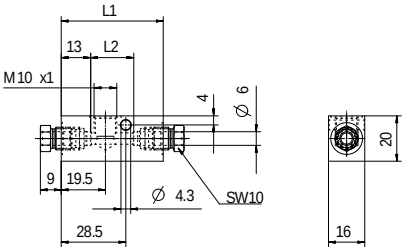


Fig. 4

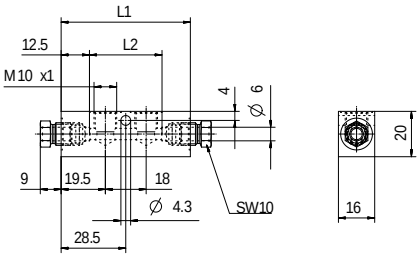


Fig. 5

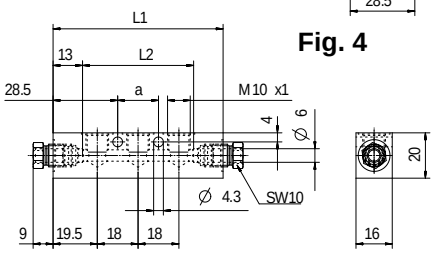


Fig. 6

Order summary (angled)

Number of outlets	Fig.	Packaging unit	Dimensions [mm]			Order number
			a	L1	L2	
2x1	7	15	-	40	15	**300 48 401**
2x2	8	10	-	58	33	**300 48 402**
2x3	9	10	18	76	51	**300 48 403**
2x4	9	10	36	94	69	**300 48 404**
2x5	9	10	54	112	87	**300 48 405**
2x6	9	5	72	130	105	**300 48 406**

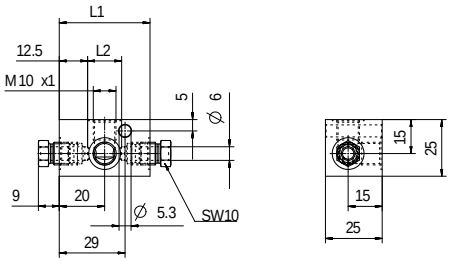


Fig. 7

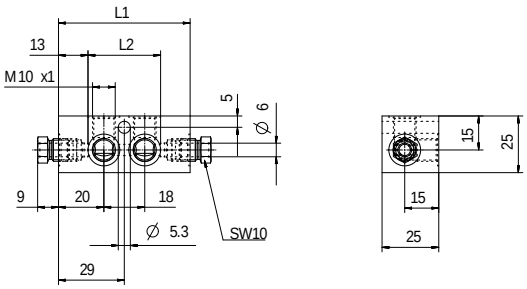


Fig. 8

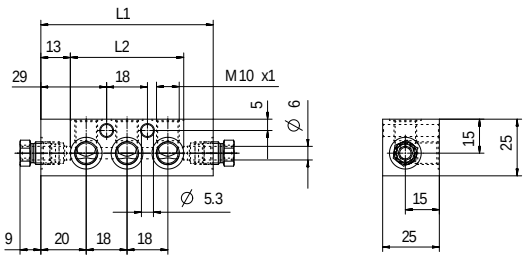


Fig. 9

Accessories

Designation	Thread	Order number
Tapping screw	M4 x 25	**300 47 703**
	M4 x 35	**300 47 705**

Prefabrication - single line lubrication system

As a special service bielomatik offers system-wide prefabrication of the components. This service covers all imaginable assembly operations, which are possible before the delivery of the system.

- Filling the pump with the lubrication desired by the customer
- Filling the pipes and lines with the lubrication desired by the customer
- Lubrication system for complete installation in connection with a customer interface
- Customer-specific configuration of pumps (air or lubrication side with specific screw joints)
- Customer-specific modifications to standard elements
- Customer-specific packaging of fabricated systems
- Combinations of several systems

The advantage is that a complete system can be pre-fabricated ex-factory as per the customer's requirements thus significantly reducing the assembly time. Even placing the order is very simple as individual parts from all systems must not be ordered separately. You can get the delivery of a completely pre-fabricated lubrication system under one order number.

The following examples show only a small extract from the various options of pre-fabrication from bielomatik Leuze GmbH & Co. KG.

Example 1:

This assembly group is pre-fabricated based on a 10-port distributor port, 10 different dosing elements and outgoing lines and thus delivered in compliance with the customer requirements.

Example 2:

Comprising a double-sided distributor strip with 2x6 outlets with 11 different dosing elements and a straight pipe fitting 6 mm as supply or transfer line, this assembly is specially delivered pre-fabricated as per the customer's requirements.

Example 3:

Consisting of a double-sided distributor strip with 2x5 outlets, 8 metering valves with four nozzles each, two brushes for smearing oil and two pre-fabricated pipelines, example 3 shows the flexibility of the customer-specific pre-fabrication.
An additional pressure switch is assembled for monitoring the lubrication. The supply line comprises a swivelling fitting with 6 mm diameter.

For queries related to customer-specific pre-fabrication call us on +49 (0) 7025 / 12-519.

bielomatik

Progressive lubrication

POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Progressive lubrication system

For oil, fluid grease and grease. Dispensing with optimum function monitoring.

The Advantages

- Compact, flexible kit
- Monitored function
- Channels flow through completely
- 8 different dosing volumes
- Integrated return valve
- System also sequentially controlled

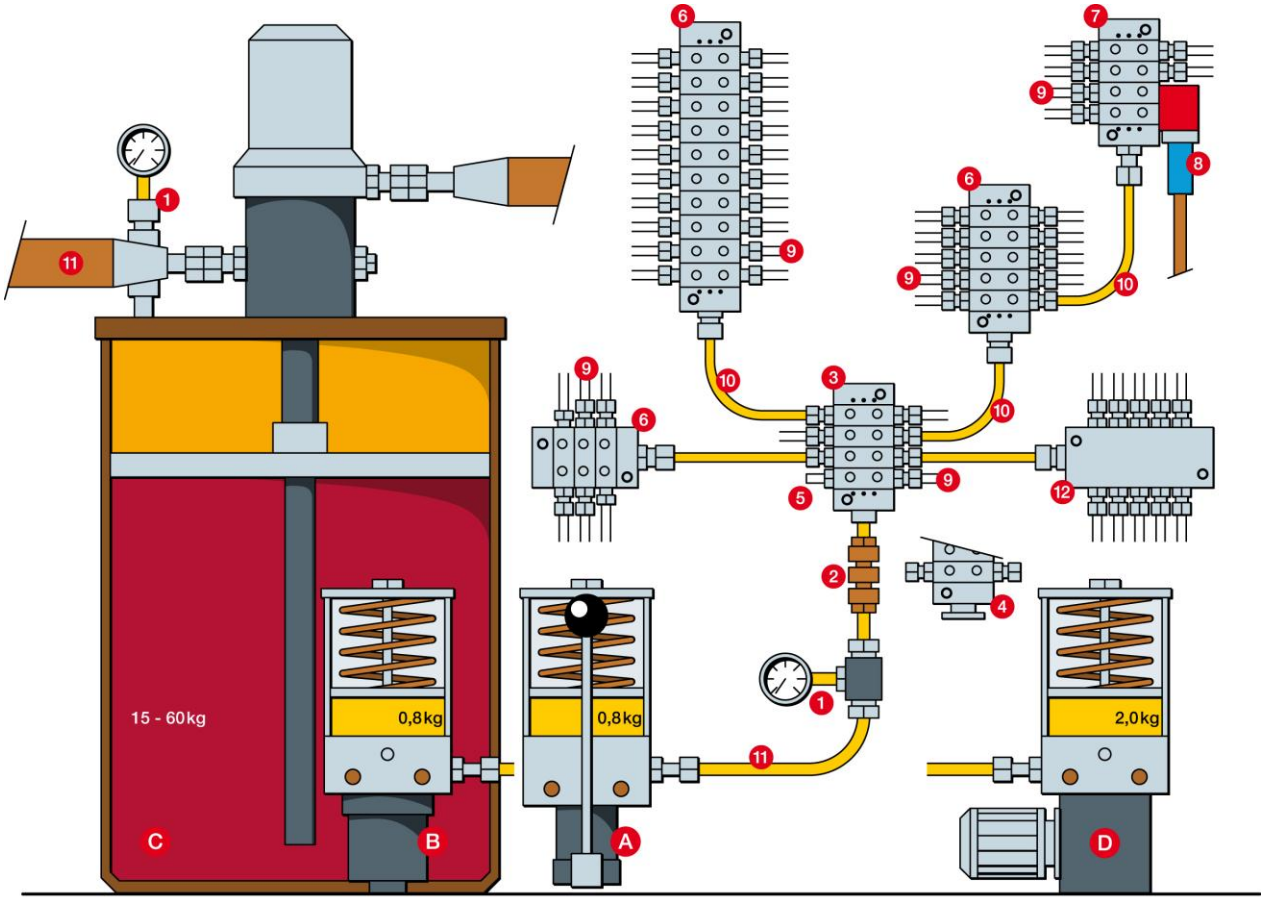
The system components

- Manual, pneumatic and electrical pumps
- Main lines
- Progressive distributor
- Line to the lubrication point
- Screwed fittings
- Control and monitoring devices

The function

The lubricant is pumped through the main lines to the progressive distributor with the pump. The lubricant is delivered consequently "progressively" to the friction point.

The circulation of a progressive distributor is monitored optically or electrically.



1 Pressure check/ ventilation
2 Coupling/ plug-in and screw coupling
3 Progressive distributor (1 generation), detachable, up to 50 connections
4 Connection for sliding clutch for mobile supply
5 Control pin for the function of the distributor
6 Progressive distributor (2 generation)
7 Progressive distributor (3 generation)
8 Function control
9 Line to the lubrication point
10 Pipes and hoses
11 Main line
12 Progressive block distributor (2 generation)
A Hand pump for grease
B Pneumatic pump for grease
C Barrel pump for thread of 15 – 60 kg
D Electrical grease pump

General description - progressive lubrication system

1. Construction and design:

The bielomatik progressive lubrication system comprises a feed pump and progressive distributors, whereby, the distributor is equipped with a circulation control (U of Fig. 1). In addition there are the necessary pipelines, threaded pipe fittings and fastening components. Pressure indicator (D of Fig. 1) in the inlet of the respective progressive distributor, are additionally helpful for function control.

The layout of a system depends upon the number of lubrication points and the respective grease requirement. If several lubrication points are available than those that can be supplied by a progressive distributor, a main distributor must be used, from which downstream distributors can be supplied. Max. 3 generations are possible in a row (Fig. 1).
The lubrication pump should be assembled on an easily accessible position of the machine, so that uncomplicated refilling of the container is possible. The progressive distributor should be assembled as close to the lubrication points as possible. The line system must be designed such that it can take maximum pump pressure. Preferably steel pipes are laid. If mobile lubrication points are to be lubricated, high pressure hoses of appropriate dimension must be used. The length of the high pressure hoses should be kept as short as possible, as these expand under pressure and can intake appropriate lubricant quantity. Timely secure feeding of the lubricant is thus no longer guaranteed. Moreover, like for air inclusions, a quick pressure suppression, which may affect the lubricant adversely, is prevented. Only lubrication lines, i.e. lines directly leading from the distributor to the lubrication point, can be laid in polyamide pipe, if it is ensured that the permissible operating pressure of the pipe shall not be exceeded. The required pipe fittings and fastening components are yielded by the cross-sections of the pipes and the available connection thread. Fittings with tapered thread must not be used in the progressive distributors at all.

It is recommended to select the cross-sections of the pipeline according to the length of the pipes so that only little operating pressure (less than 80 bar) is required. Slow action pumps are beneficial. Higher pressure changes the lubricants adversely. Hence, possibly low operating pressure must be selected in the pneumatic pumps. The pumping pressure can also be reduced through a throttle in the air line.

2. Mode of action:

The lubricant is pumped into the main line by actuating the pump and fed to the connected progressive distributor. The lubricant is distributed over the number of outlets of the distributor and then delivered to the lubrication points or fed to another downstream progressive distributor, divided there and dispensed to the connected lubrication points. Dosing is done as per the selection of the dosing elements with different flow rates. A circulation control detects every circulation of the system. If a progressive distributor cannot deliver its lubricant or if a piston is blocked e.g. due to contamination, the system reports fault i.e. the circulation control has not reported within the monitoring time.

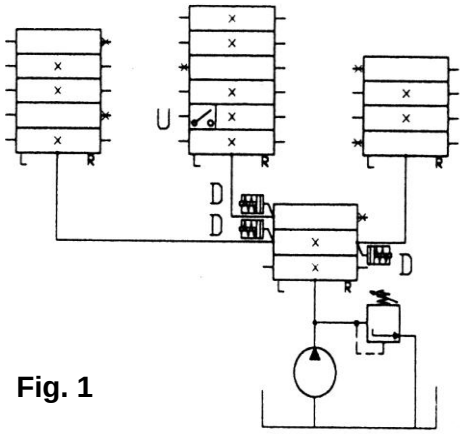


Fig. 1

3. Start-up:

Before start-up, the pump must be filled with clean grease without any air bubbles. It is important that the pump is filled using a filling or barrel pump. The barrel pumps must be equipped with follow-up piston. Clean and air-bubble-free filling can thus be ensured. A cartridge pump with pre-filled cartridges may also be used for small consumption quantities. Then the pump and subsequently the progressive distributor must be ventilated. Pumping follows till bubble-free lubricant appears first on the pump and then on all the outlets of the main distributor and subsequently on the downstream progressive distributors.

Particularly for large systems, which are operated with grease, it is essential to start the system step-wise from the lubrication point to the pump i.e. lubrication points, lines and progressive distributor must be pre-filled individually. The pressure requirement of individual segments of the system can thus be checked directly. Pay attention that the lubricant is refilled on time, for preventing air bubbles in the system. Else the complete system must be re-ventilated.

4. Assembly:

The fastening surface of the progressive distributor must be plane, so that the housing is not braced while screwing. If required, washers may be required for alignment.

Outlet bore of the progressive distributor must be closed. Cleanliness must be observed. Pumps, progressive distributor and particularly the pipelines and fittings must be cleaned thoroughly prior to the assembly.

5. Lubricant:

Generally, grease can be dispensed based on mineral oil that shows a walk penetration more than 265 (1/10 mm), NLGI-Klasse 000 - 2 in the bielomatik progressive lubrication system.

Greases must not be mixed. In exceptional case, if tolerated, saponification may be mixed.

Attention:

- do not possibly mix different lubricants! Ideally, the system must be cleaned.
- No way must greases be mixed with non-compatible types of soaps.

6. Maintenance:

Impermeability of the system and the container fill level must be checked at regular intervals. A fault

occurs if the circulation control has not responded within the monitoring time.
Reasons:
a) Container or barrel empty.
b) Pump not ventilated or defective.
c) System blocks at high pump pressure.

Reasons:

- Lubrication line closed
- Lubrication point or its channel closed
- Outlet on the progressive distributor closed unauthorised
- Piston in the progressive distributor fits tightly (bracing, contamination)
- Channel within the progressive distributor closed due to contamination.
- All pistons of a progressive distributor are at centre position.

In case the system is blocked, fault may occur at any location in the system. There is overpressure at the blocked location, which is signalled to the relevant pressure indicator by a protruding pin. Source of fault can thus be localised on a secondary distributor.

Designation	Single piston pump	Single piston pump
Type	AI-H	AI-P
Drive method	manual	pneumatic
Filling quantity	0.8 kg	0.8 kg
Pump pressure	145 bar	145 bar
Displacement	3 cm³/stroke	3 cm³/stroke
More information on	Page 46	Page 47

Summary of grease pumps progressive lubrication system

Electrical grease pump	Mounting press	Grease filling machine
PEG 2 / PEG 5	-	-
Electrical	manual	manual
2 / 5 kg	0.5 kg	15, 25, 50 kg
250 bar	400 bar	8 bar
2.4 / 4.5 cm^3 per min.	1.4 cm^3/stroke	30.0 cm^3/stroke
Page 48	Page 50	Page 51

Single piston pump AI-H

The single piston pump AI-H is a robust hand lever pump. They are suitable for different lubrication, which must be done daily or rarely.

Detailed information under TA 308 11 306.

General

Type	Single piston pump
Lubrication line connection	Pipe connection Ø 8 mm
Ambient temperature	0 to 40 °C
Filling	Filling device

Hydraulic system

Operating pressure	145 bar
Displacement	3 cm³/stroke
Operating medium	Fluid grease, grease
Range of viscosity	NLGI 000-2*

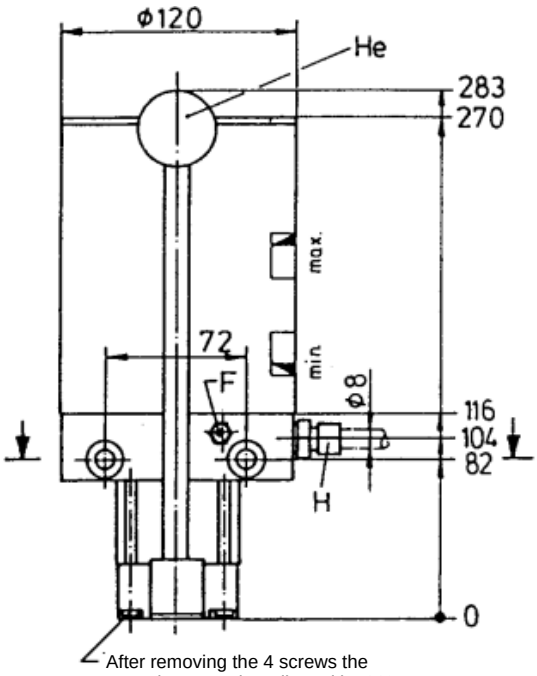
*as per fluid grease release list

Drive

Type of drive	manual
Actuating force	200 N

Order summary

Fill quantity [kg]	Order number
0,8	**300 11 301**



After removing the 4 screws the pump lever can be adjusted by 90°.

Single piston pump AI-P

The single piston pump AB-P is a robust pneumatic pump. It is suitable for automated and different lubrication, which must be done several times daily to once per minute.

Detailed information under TA 308 11 305.

General

Type	Single piston pump
Lubrication line connection	Pipe connection Ø 8 mm
Ambient temperature	0 to 40 °C
Filling	Filling device
Protection class as per EN60529	IP 54

Hydraulic system

Operating pressure	145 bar
Displacement	3 cm³/stroke
Operating medium	Fluid grease, grease
Range of viscosity	NLGI 000 – 2*

*as per fluid grease release list

Drive

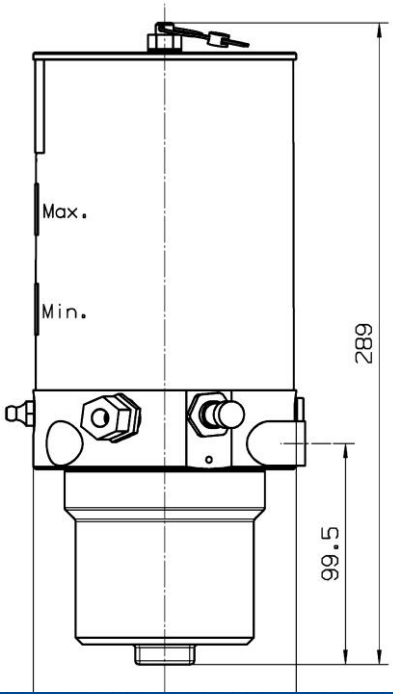
Type of drive	pneumatic
Supply pressure	6 bar
Supply fitting	G ¼“

Sensor system

Level control	
Nominal voltage	24 V DC
Power consumption	≤ 20 mA
Switching current	≤ 200 mA
Connection	M12 x 1

Order summary

Fill quantity [kg]	**Order number**
0,8	**300 11 406**



POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Electrical grease pump PEG 2

The electrical grease pump PEG 2 is robust and efficient stirring pump. It is suitable for automated lubrication. It is connected directly or to the progressive distributors and can be retrofitted with up to three pump elements.

Detailed information under TA 308 11 725.

General

Type	Stirring pump
Lubrication line connection	G ¼ ’’
Ambient temperature	0 to 60 °C
Filling	Filling device
Protection class as per EN60529	IP 54

Hydraulic system

Operating pressure	145 bar
Displacement	2.4 cm³/min
Operating medium	Fluid grease, grease
Range of viscosity	NLGI 000-2*

*as per fluid grease release list

Drive

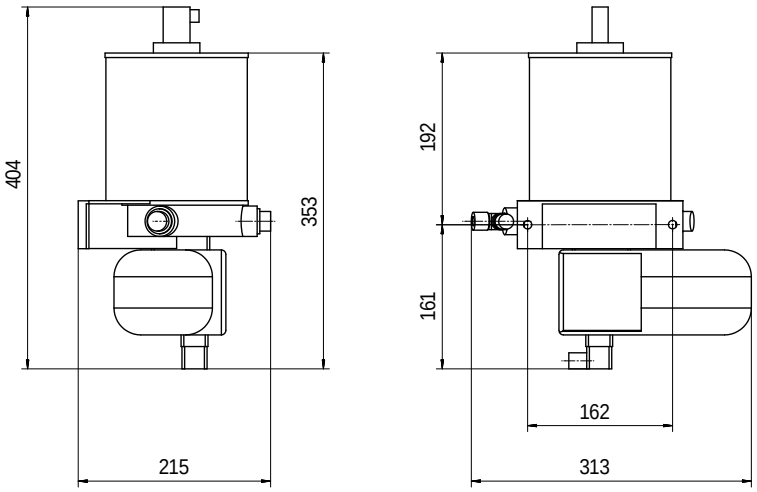
Type of drive	Electrical
Supply voltage	24 V DC
Supply current	1.5 A
Power consumption	30 W
Connection	Angled plug connector DIN 43650A

Sensor system

Level control	
Nominal voltage	24 V
Switching current	≤ 0.2 A
Connection	Angled plug connector DIN 43650A

Order summary

Fill quantity [kg]	Order number
2,0	**300 11 726**



Electrical grease pump PEG 5

The electrical grease pump PEG5 is robust and efficient stirring pump. It is suitable for automated lubrication. It is connected directly or to the progressive distributors and can be retrofitted with up to three pump elements.

Detailed information under TA 308 11 750.

General

Type	Stirring pump
Lubrication line connection	G ¼ ”
Ambient temperature	0 to 80 °C
Filling	Filling device
Protection class as per EN60529	IP 54

Hydraulic system

Operating pressure	250 bar
Displacement	4.5 cm³/min
Operating medium	Fluid grease, grease
Range of viscosity	NLGI 000-2*

*as per fluid grease release list

Drive

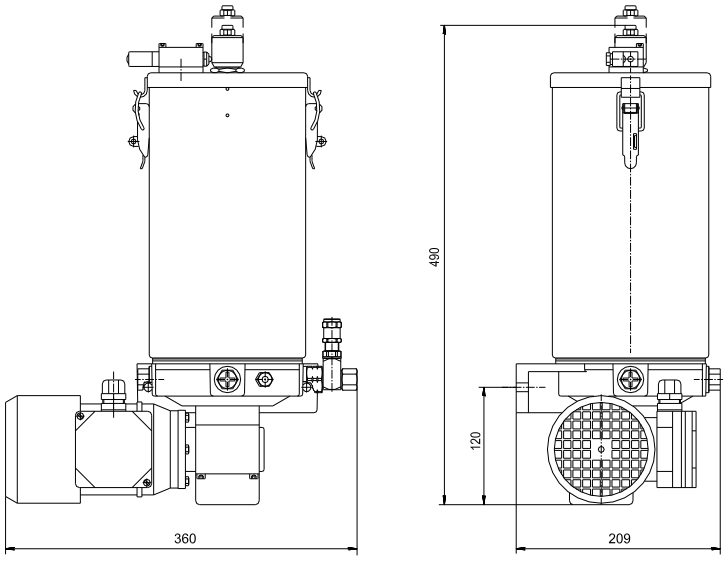
Type of drive	Electrical
Supply voltage	3 x 400 V / 3 x 460 V
Supply current	≤ 0.46 A
Frequency	50 / 60 Hz
Power consumption	90 W
Connection	Terminal board

Sensor system

Level control	
Switching voltage	≤ 24 V DC
Switching current	≤ 2 A DC
Connection	Angled plug connector DIN 43650A

Order summary

Fill quantity [kg]	Order number
5,0	**300 11 750**



Mounting press

The mounting press is a robust and cost-effective cartridge grease gun. It is suitable for simple lubrication tasks.

Detailed information under TA 308 15 102.

General

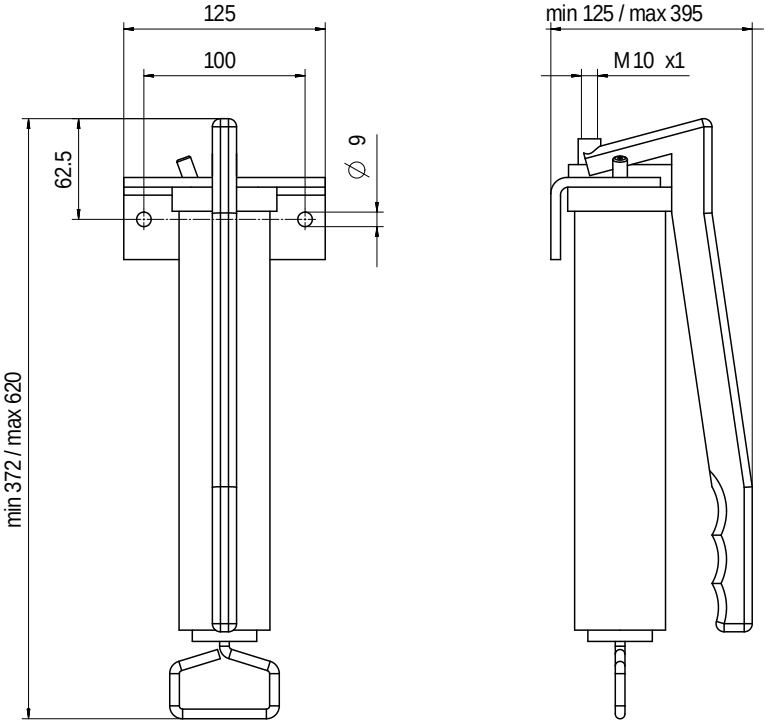
Filling	a.) via fill nipple
	b.) with cartridge 500ccm
	c.) external (suction)

Hydraulic system

Max. pumping pressure	400 bar
Displacement	1.4 cm³/stroke

Order summary

Mounting press	Order number
for grease nipple DIN 1282	**300 15 111**
for ball joint grease nipple DIN 71412	**300 15 112**
for grease nipple DIN 1282 incl. retaining clip	**300 15 113**



POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Grease filling machine

Grease filling device for filling grease pumps with filling nipple from commercially available threads. The filling device ensures a quick, closed and air free filling of the grease pumps. Disadvantages of manual filling, like contamination of the lubricant at open threads and pumps on-site and contaminated auxiliary means, are eliminated by an economical refilling.

Detailed information under TA 308 15 302.

General

- Clean handling
- efficient when dealing with grease
- safe and quick filling from the grease container
- Automatic throttling valve (hence no grease spill)

Order overview
Manually operated filling device as portable version (without transport carriage)

Grease container [kg]	Container interior-Ø [mm]	Container interior-height max. [mm]	Order number
15	250 - 267	362	**300 58 032**
25	311 - 330	400	**300 58 034**

Filling machine with pneumatic pump and transport carriage

Grease container [kg]	Container interior-Ø [mm]	Container interior-height max. [mm]	Order number
15	250 - 267	362	**300 15 332**
25	311 - 330	400	**300 15 334**
50	365 - 385	590	**300 15 335**

Filling machine complete

Grease filling machine complete with lid, follow-up piston, dolly, 3.5 m hose and mouthpiece for	
conical grease nipple	Flat grease nipple
DIN 71412	DIN 3404 A

Designation
Version
Number of outlets
Dosing volume per outlet
Monitoring
More information on

Progressive distributors

Progressive distributor VD	Progressive distributor VF	Progressive distributor VE
Block distributor	Block distributor	Disc distributor
2 or 4	3 to 18	3 to 50
230 mm³	100 / 200 mm³	80 to 420 mm³
Without	Optical / electrical	Optical / electrical
Page 54	Page 56	Page 58

Progressive distributor VD

Progressive distributor in block design available with 2 or 4 lubrication outlets.
The progressive distributor VD is suitable for lubrication with fluid grease or grease.

Detailed information under TA 308 20 203.

General

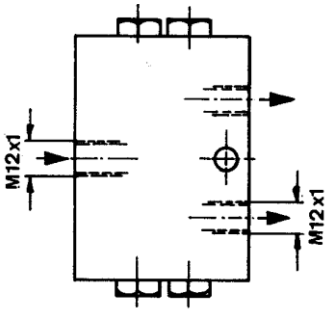
Type	Block distributor
Lubrication line connection	M12 x 1
Ambient temperature	0 to 100 °C

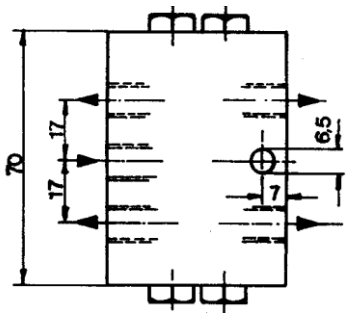
Hydraulic system

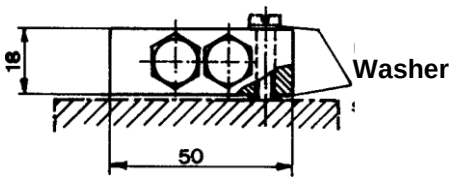
Operating pressure	100 bar
max. displacement	0.1 l/min
Operating medium	Fluid grease, grease
Range of viscosity	NLGI 000-2
Dosing volume	230mm^3 / outlet

Order summary

Number of outlets	Order number
2	**300 20 265**
4	**300 20 266**

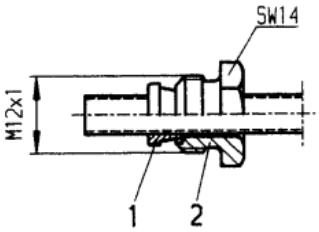


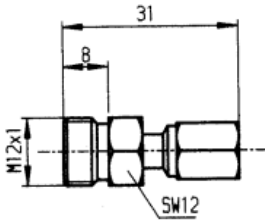




Order overview for accessories

Accessories	Connection	Order number
Sealing cone	Ø 4 mm Ø 6 mm	**302 25 002** **302 25 001**
Male fitting	Ø 4 mm M12 x 1 Ø 6 mm M12 x 1	**302 56 608** **302 56 609**
Straight pipe fitting	Ø 8 mm M12 x 1 Ø 10 mm M12 x 1	**300 44 150** **300 44 233**
Retaining screw	M6 x 30	**620 06 052**
Washer	A 6.4	**620 44 003**





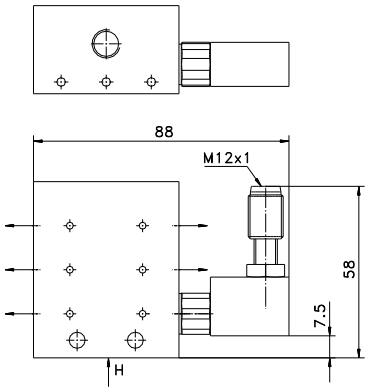
Progressive distributor VF

Progressive distributor in block design available with up to 18 lubrication outlets.
The progressive distributor VF is suitable for distribution of central lubrication with fluid grease or grease.

Detailed information under TA 308 21 502.

General

Type	Block distributor
Lubrication line connection	M10x1
Ambient temperature	0 to 100 °C
Protection class as per EN60529	IP 67



Hydraulic system

Operating pressure	20 to 250 bar
Operating medium	Fluid grease, grease
Range of viscosity	NLGI 000- 2

Sensor system

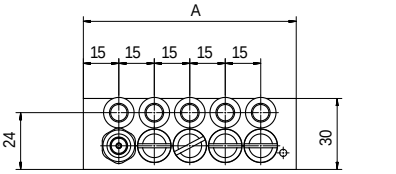
Circulation control	
Switching voltage	24 V DC
Switching current	≤ 300 mA
Power consumption	≤ 15 mA
Connection	M12 x 1

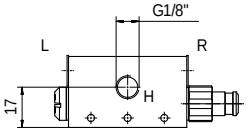
Design:

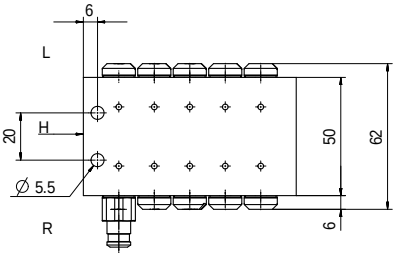
Block design i.e. 1 piston for each outlet in a housing. The inflow through the main line H is on the front side of the housing. Outlets L and R are on the left and right of the housing, which are offset against the effective piston (see directions of arrow Fig. 1). Opposite outlets can be connected. Due to which the opposite outlets demand double the quantity. The dosing volume for every outlet is specified in figures on the type plate. For details see order samples. Electrical circulation controls are available.

Mode of operation:

Every piston in the progressive distributor is displaced once consecutively per circulation in the two end positions. The lubricant thus displaced flows towards the respective outlet. Before the end position of the currently mobile piston, the piston initiates the inflow and the outflow of the lubricant to the next piston via its control edge. Progressive distributor can pause in every position and restart. If an outlet is blocked, the progressive distributor stands still. This is a pre-requisite for simple monitoring of individual progressive distributor or those connected in series. There must be a circulation control in the system for monitoring, which, for the purpose of controlling, must respond in a predetermined monitoring time.







Kolben	A [mm]
3	60
4	75
5	90
6	105
7	120
8	135
9	150

Order number - configurator

Order number:	300 21	X X	X	VF	X X	X	-	. . .

Version:

without monitoring	**57**
optical monitoring	**58**
electrical monitoring*	**49**

Number of outlets:

6 outlets	**3**
8 outlets	**4**
10 outlets	**5**
12 outlets	**6**
14 outlets	**7**
16 outlets	**8**
18 outlets	**9**

Dosing volume:

100 mm³/outlet	**10**
200 mm³/outlet	**20**

Page:

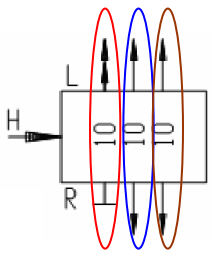
Left	**L**
Right	**R**

*incl. inductive proximity switch
with cable M12 x 1, length 3m

The dosing volume of the outlets must be enumerated starting from input H. This must be specified through the figure 10 for 100 mm³ or 20 for 200 mm³. If the dosing volume is combined by removing the ball and the plug screw on an opposite side, the same must be mentioned. The side to be kept open should be specified through addition R or L as per the code. (R = Right; L = Left)

Order sample:

Progressive distributor 300 21 573
VF 10L-10-10
10 for 100 mm³



Order overview

Version		Order number
Without Monitoring	6 Outlets	**300 21 57 3**
Without Monitoring	8 Outlets	**300 21 57 4**
Without Monitoring	10 Outlets	**300 21 57 5**
Without Monitoring	12 Outlets	**300 21 57 6**
Without Monitoring	14 Outlets	**300 21 57 7**
Without Monitoring	16 Outlets	**300 21 57 8**
Without Monitoring	18 Outlets	**300 21 57 9**
Optical Monitoring	6 Outlets	**300 21 58 3**
Optical Monitoring	8 Outlets	**300 21 58 4**
Optical Monitoring	10 Outlets	**300 21 58 5**
Optical Monitoring	12 Outlets	**300 21 58 6**
Optical Monitoring	14 Outlets	**300 21 58 7**
Optical Monitoring	16 Outlets	**300 21 58 8**
Optical Monitoring	18 Outlets	**300 21 58 9**
Electrical Monitoring	6 Outlets	**300 21 49 3**
Electrical Monitoring	8 Outlets	**300 21 49 4**
Electrical Monitoring	10 Outlets	**300 21 49 5**
Electrical Monitoring	12 Outlets	**300 21 49 6**
Electrical Monitoring	14 Outlets	**300 21 49 7**
Electrical Monitoring	16 Outlets	**300 21 49 8**

Progressive distributor VE

Progressive distributor in disks, which is available with up to 25 lubrication outlets, each having a different dosing volume. The progressive distributor VE is suitable for distribution of challenging lubrication tasks with fluid grease or grease.

Detailed information under TA 308 21 601.

General

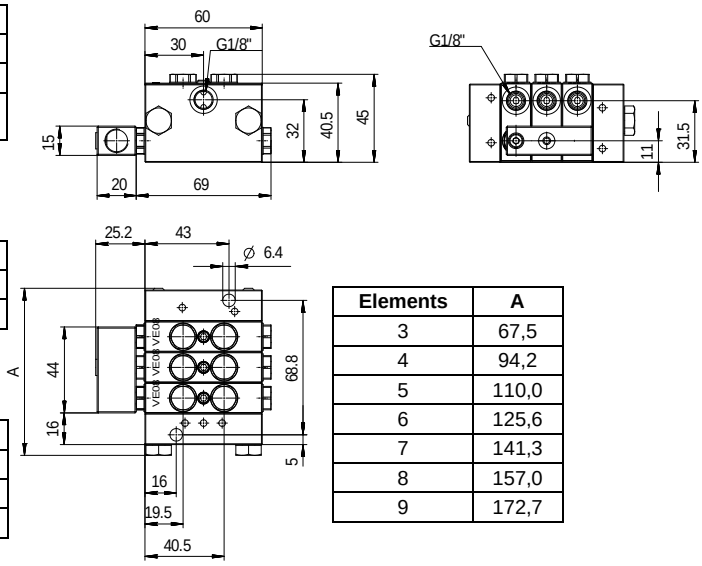
Type	Disc distributor
Lubrication line connection	M10 x 1
Ambient temperature	0 to 110 °C
Protection class as per EN60529	IP 67

Hydraulic system

Operating pressure	20 to 250 bar
Operating medium	Fluid grease, grease
Range of viscosity	NLGI 000-2

Sensor system

Circulation control	
Switching voltage	24 V DC
Switching current	≤ 300 mA
Connection	M12 x 1



Elements	A
3	67,5
4	94,2
5	110,0
6	125,6
7	141,3
8	157,0
9	172,7

Design:

Disk-type construction, with starter and end plate and optionally with 3 to 10 elements with 7 different dosing volumes. The disks are held together with 2 through screws. Inflow through main line connection H in the starter plate. Through a dosing piston assembled in the lower part of the element, every element delivers 2 element-based dosed volumes, which can optionally be delivered laterally (L, R) or to the upper outlets (1, 2). The upper outlets are closed in the delivered condition. Opposite outlets can be connected. Due to which the opposite outlets yield double the quantity. Adjacent outlets, outlets on the top or lateral outlets can be connected in pairs with bridges. All dosing quantities can be realised with the addition of individual dosing quantities. A return valve is integrated in the progressive distributor per outlet. Backflow of grease is thus avoided. Electrical and optical circulation controls as well as pressure indicators are included in the kit.

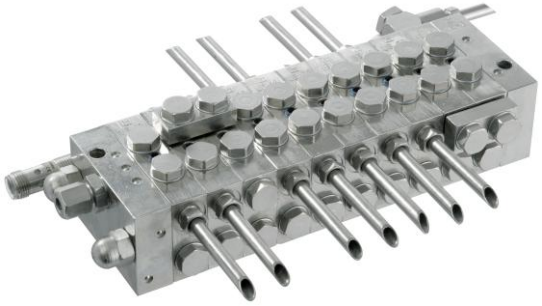
Mode of operation:

During pressurisation, pistons in the elements are again moved back consequently before and afterwards. The lubricant thus displaced flows towards the respective outlet. Shortly before the end position of the currently mobile piston, the piston initiates the inflow and the outflow of the lubricant to the next piston via its control edge. Progressive distributor can pause in every position and restart. If an outlet is blocked, the progressive distributor stands still. This is a pre-requisite for simple monitoring of individual progressive distributor or those connected in series. There must be a circulation control in the system for monitoring that detects the monitoring time.

Features:

All channels flow through completely with lubricant.

- No settling of the bled grease solids in the channels, which lead to blocking.
- Mandatory self-venting



Order number - configurator

Order number:	300 216	X	X	VE	X X	X	-	. . .

Version:

without monitoring	**0**
optical monitoring	**1**
electrical monitoring*	**2**

Number of elements**:

3 elements	**3**
4 elements	**4**
5 elements	**5**
6 elements	**6**
7 elements	**7**
8 elements	**8**
9 elements	**9**

Dosing volume:

80 mm³/outlet	**08**
120 mm³/outlet	**12**
180 mm³/outlet	**18**
240 mm³/outlet	**24**
300 mm³/outlet	**30**
360 mm³/outlet	**36**
420 mm³/outlet	**42**

Page:

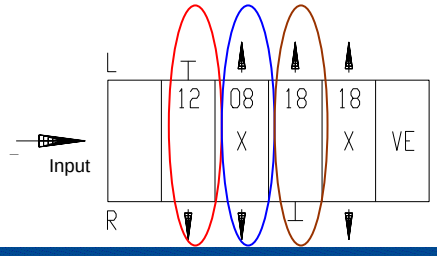
Left	**L**
Right	**R**

* In progressive distributor with electrical circulation control the inductive proximity switch 676 62 047 must be ordered.
** Up to 25 elements are available on request.

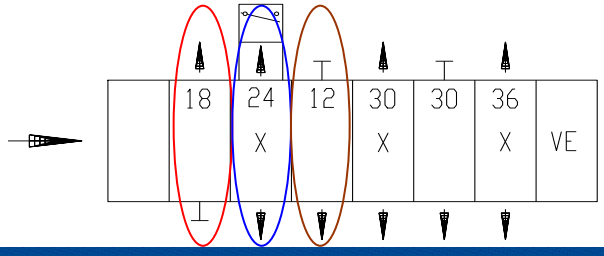
The dosing volume of the outlets must be enumerated starting from input H. The progressive distributor may contain only one size. These must be specified with the code 08 for 80 mm³ or 42 for 420 mm³.
If the dosing volume is combined by removing the ball and the plug screw on an opposite side, the same must be mentioned. The side to be kept open should be specified through addition R or L as per the code. (R = Right; L = Left)

Sample orders:

1. Progressive distributor with 4 elementsand 6 outlets.
   Progressive distributor
   300 21 604 VE 12R-08-18L-18



2. Progressive distributor with 6 elements and 9 outlets and electrical circulation control.
   Progressive control with electrical circulation control
   300 21 626 VE 18L-24-12R-30-30R-36



Order overview

Version		Order number
Without Monitoring	3 Elements	**300216 0 3**
Without Monitoring	4 Elements	**300216 0 4**
Without Monitoring	5 Elements	**300216 0 5**
Without Monitoring	6 Elements	**300216 0 6**
Without Monitoring	7 Elements	**300216 0 7**
Without Monitoring	8 Elements	**300216 0 8**
Without Monitoring	9 Elements	**300216 0 9**
Optical Monitoring	3 Elements	**300216 1 3**
Optical Monitoring	4 Elements	**300216 1 4**
Optical Monitoring	5 Elements	**300216 1 5**
Optical Monitoring	6 Elements	**300216 1 6**
Optical Monitoring	7 Elements	**300216 1 7**
Optical Monitoring	8 Elements	**300216 1 8**
Optical Monitoring	9 Elements	**300216 1 9**
Electrical Monitoring	3 Elements	**300216 2 3**
Electrical Monitoring	4 Elements	**300216 2 4**
Electrical Monitoring	5 Elements	**300216 2 5**
Electrical Monitoring	6 Elements	**300216 2 6**
Electrical Monitoring	7 Elements	**300216 2 7**
Electrical Monitoring	8 Elements	**300216 2 8**
Electrical Monitoring	9 Elements	**300216 2 9**

Accessories: For main line connection H, outlets L, R, 1, 2 (see Fig.)

Designation	Dimensions [mm]					Drawing	Possible assembly	Order number
	d	1	S2	L	L1			
Straight pipe fitting	4	1	12	21	-	E4	L, R, 1, 2, H	**300 44 152**
Straight pipe fitting	6	11	12	21	-	E6	L, R, 1, 2, H	**300 44 147**
Straight pipe fitting	8	14	14	22	-	E8	L, R, 1, 2, H *	**300 43 905**
Straight pipe fitting	10	17	19	29	-	E10	H	**638 12 802**
Straight pipe fitting	12	19	22	49	-	E12	H	**300 44 141**
Straight pipe fitting with return valve	6	17	14	41	-	R6	H	**300 22 143**
Straight pipe fitting with return valve	8	17	17	39	-	R8	H	**300 22 144**
Straight pipe fitting with return valve	10	17	17	41	-	R10	H	**300 22 145**
Swivelling fitting	4	14	8	20	26	S4	L, R, 1, 2, H	**300 45 523**
Swivelling fitting	6	14	10	20	29	S6	L, R, 1, 2, H	**300 45 527**
Swivelling fitting	8	14	14	21	23	S8	H *	**300 45 401**
Bridge	-	12	-	14	-	B	L, R, 1, 2	**300 45 809**
Bridge with outlet	-	12	-	14	25	A	L, R, 1, 2	**300 45 804**
Pressure indicator 100 bar	-	12	-	27	-	DZ 100	L, R, 1, 2, 3, 4	**300 27 101**
Pressure indicator 50 bar	-	12	-	27	-	DZ 100	L, R, 1, 2, 3, 4	**300 27 100**
Male fitting	6	0	-	5	-	D6	L, R	**302 56 616**
Double taper ring	for Ø 6 mm pipe						L, R, 1, 2, H	**302 15 201**

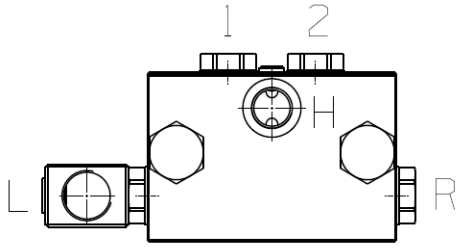
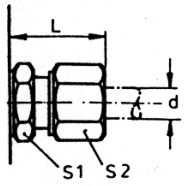
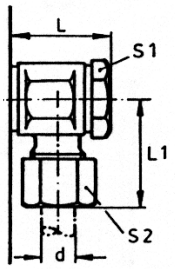


Fig.: Overview connections

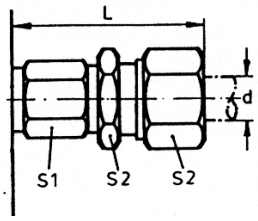
E4
E6
E8
E10



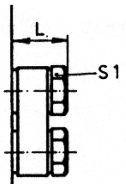
S8



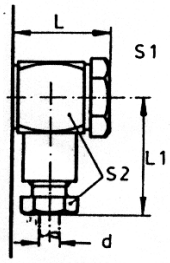
E12



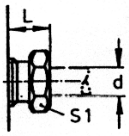
B



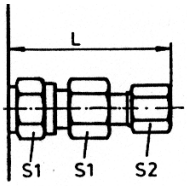
S4
S6



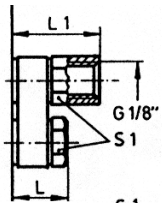
D6



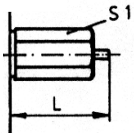
R6
R8
R10



A



DZ 100



Prefabrication - progressive lubrication system

As a special service bielomatik offers system-wide prefabrication of the components. This service covers all imaginable assembly operations, which are possible before the delivery of the system.

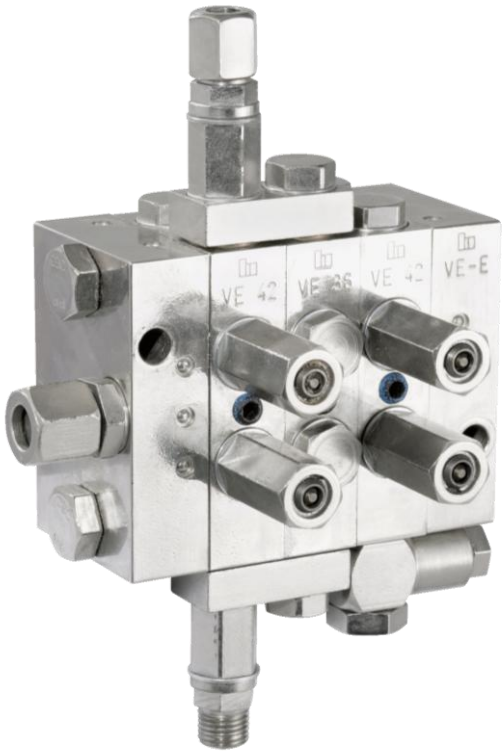
- Filling the pump with the lubrication desired by the customer
- Filling the pipes and lines with the lubrication desired by the customer
- Lubrication system for complete installation in connection with a customer interface
- Customer-specific configuration of pumps (air or lubrication side with specific screw joints)
- Customer-specific modifications to standard elements
- Customer-specific packaging of fabricated systems
- Combinations of several systems

The advantage is that a complete system can be pre-fabricated ex-factory as per the customer's requirements thus significantly reducing the assembly time. Even placing the order is very simple as individual parts from all systems must not be ordered separately. You can get the delivery of a completely pre-fabricated lubrication system under one order number.

The following examples show only a small extract from the various options of pre-fabrication from bielomatik Leuze GmbH & Co. KG.

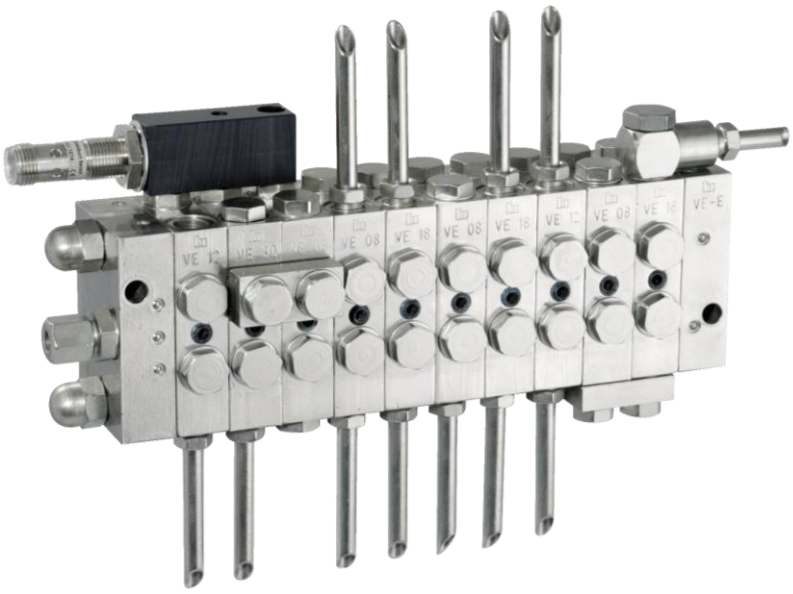
Example 1:

The figure shows a 3 times magnified progressive distributor VE with the assembly **VE 42-36-42.**
The distributor is provided with customer-specific various screw joints and equipped with additional pressure indicators.



Example 2:

The figure shows a 8 times magnified progressive distributor VE with the assembly **VE 12-30-08-08-18-12-08-18.** The distributor is provided with customer-specific various screw joints and has an additional electronic circulation control.



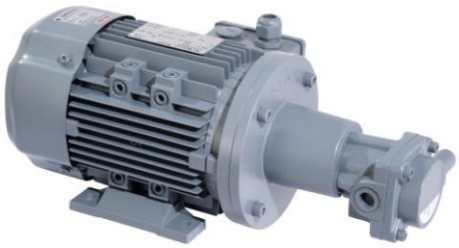
Example 3:

The figure shows a customer-specific lubrication cabinet with electronic control for automated lubrication of up to 8 lubrication circuits. The lubrication cabinet comprises a pump for 50 kg thread, level and function monitoring and an outlet stop.

For queries related to customer-specific pre-fabrication call us on +49 (0) 7025 / 12-519.

bielomatik

Circulation lubrication system

POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Circulation lubrication system

For lubricating and cooling supports and gearboxes.

Theadvantages

- Economical through closed circuit
- Environment friendly
- Function monitoring

The system components

- Customer-specific circulation units with gear and screw spindle pumps
- Main line
- Flow regulators with electronic monitoring
- Lines to the lubrication points
- Fittings
- Control and check devices

Circulation lubrication system for the supply to lubrication points

The bielomatik circulation lubrication system is preferably used, if an additional cooling and cleaning of the lubrication point is requested. In this lubrication system, after the supply to the lubrication point, oil is led back to the lubrication unit and reused. Due to this impurities are removed and very high temperatures are avoided.

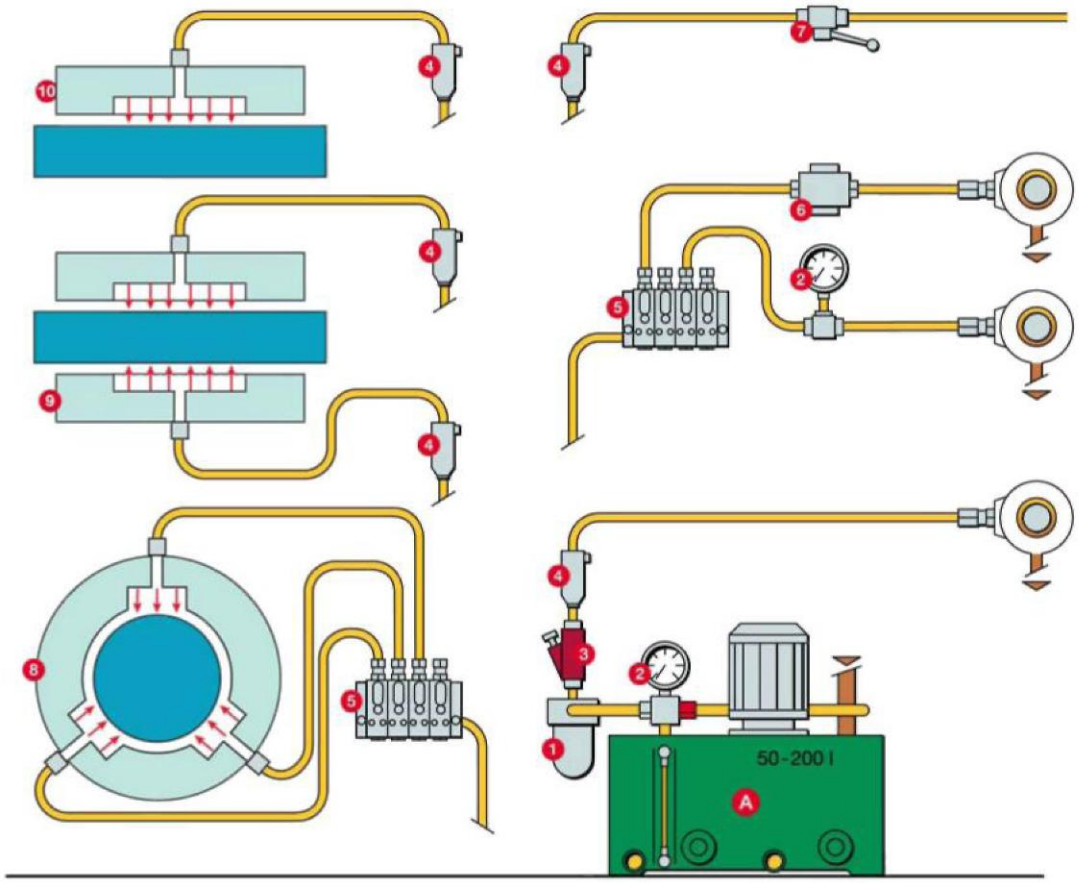
The closed oil circuit supports such an environment friendly and economical lubrication system.

A screw spindle or gear pump dispenses the oil from the tank via pressure filter to the distributors. The desired oil quantity can be fed to the lubrication points via flow regulators or throttles.

Pressure switch, flow regulators with electrical monitoring, temperature sensors and circulation controls are used for monitoring.

Oil supply from hyrdrostatic elements

Circulating oil lubrication



A Oil container/ pump combination 50 to 200 l
1 Filter/double filter with electrical monitoring
2 Pressure gauge
3 Pressure control adjustable
4 Flow regulator with electronic monitoring
5 Flow regulator with electronic monitoring. Flangeable
6 Throttle
7 Shut-off valve
8 Axis support
9 Encompassing linear guide
10 Linear guide

Circulation lubrication system in the hydrostatic

Hydrostatic sliding guides are often used in machines with high precision and lifting capacity requirements. Advantage of hydrostatic sliding guides is that the contact surfaces are separated by a permanent oil film. The oil supply creates the required pressure in the oil gap. Sliding surfaces are thus separated. The load is carried by the hydrostatic oil film. This prevents wearing and startup friction. This produces an improved damping and a stick-slip can be eliminated.

Several support cavities are required for mounting for being able to accept excentric loads. As the oil pressures in the respective support cavities vary according to the load, independent oil supply must be provided. bielomatik offers flow regulators for regulating this oil supply. Function of these flow regulators is to keep the volume flow constant, independent of temperature and load pressure.

The bielomatik flow regulator regulates the volume flow so that the same remains constant. Constant volume flow produces pocket pressure dependent upon the height (h), so that change in height (Δh) decreases with bigger loads. This means that change in height (Δh) is less at larger load, as compared to a pressure control. This yields an excellent stiffness ratio and good damping characteristics of the guide.

By using bielomatik flow regulator and an unregulated pump, it is possible to supply a guide with several support cavities. They are flow regulators for pipeline installation and available flangable as valve terminal. The work area of the flow regulators is between 0.16 l/min and 31 l/min with a size grouping according to preferred number of rows.

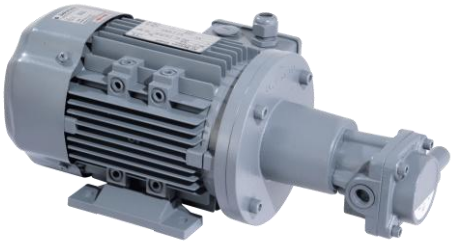
Version

Displacement

Pump pressure

More information on

Summary gear pump unit circulation lubrication system



Gear pump unit 1	Gear pump unit 2	Gear pump unit 3
Base mount	Sub-base mount	Base mount
< 3 litre	< 3 litre	> 3 litre
35 bar	35 bar	35 bar
Page 70	Page 71	Page 72

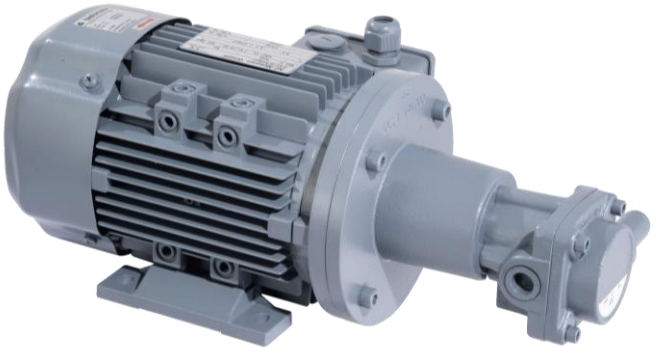
Gear pump unit 1

Gear pumps up to 3 litres displacement and a maximum pumping pressure of 35 bar. This pump is designed for base mount.

Detailed information under TA 308 14 302.

General

Type	Base mount
Ambient temperature	0 to 80 °C
Protection class as per EN60529	IP 44



Hydraulic system

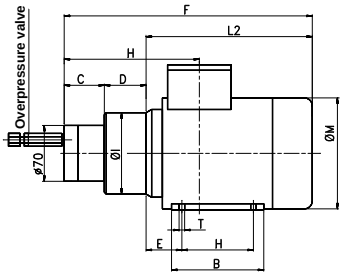
Operating pressure	35 bar
Displacement	< 3 l/min
Operating medium	Mineral oil
Range of viscosity	20 to 750 mm²/s

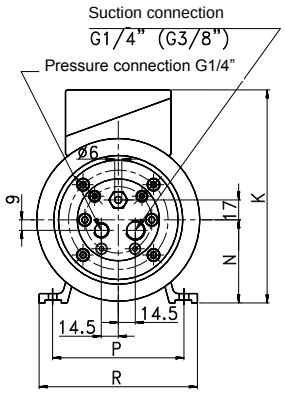
Drive

Type of drive	Electrical
Supply voltage	3x 400 V AC
Frequency	50 Hz
Connection	Terminal board

Gear pump unit to 3 l/min displacement

Flow rate [l/min]	Engine output [KW]	Dimensions [mm]									Order number
						C	D	F	L2	M	
		B	E	N	P	R	T	H	I	K	
0,06	0,21	100	40	63	100	37 128	42,5 8	236 80	156 90	109 161	**300 14 154**
0,18	0,21	100	40	63	100	37 128	42,5 8	236 80	156 90	109 161	**300 14 155**
0,25	0,21	100	40	63	100	37 128	42,5 8	236 80	156 90	109 161	**300 14 139**
0,375	0,21	100	40	63	100	38,5 128	42,5 8	237 80	156 90	109 161	**300 14 156**
0,5	0,21	100	40	63	100	40 128	42,5 8	239 80	156 90	109 161	**300 14 153**
0,75	0,30	116	45	71	112	45 138	52,5 8	274 90	176 102	124 175	**300 14 158**
1	0,30	116	45	71	112	45 138	52,5 8	274 90	176 102	124 175	**300 14 159**
1,2	0,44	116	45	71	112	47 138	52,5 8	276 90	176 102	124 175	**300 14 323**
1,5	0,44	116	45	71	112	47 138	52,5 8	276 90	176 102	124 175	**300 14 327**
2	0,44	116	45	71	112	47 135	52,5 7	276 90	176 102	124 182	**300 14 330**
3	0,66	116	45	71	112	50,5 135	52,5 7	312 90	209 102	139 182	**300 14 427**





Gear pump unit 2

Gear pumps up to 3 litres displacement and also a maximum pumping pressure of 35 bar. This pump is designed for sub-base mount

Detailed information under TA 308 14 302.

General

Type	Sub-base mount
Ambient temperature	0 to 80 °C
Protection class as per EN60529	IP 44

Hydraulic system

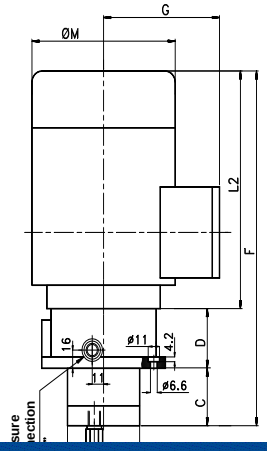
Operating pressure	35 bar
Displacement	< 3 l/min
Operating medium	Mineral oil
Range of viscosity	20 to 750 mm²/s

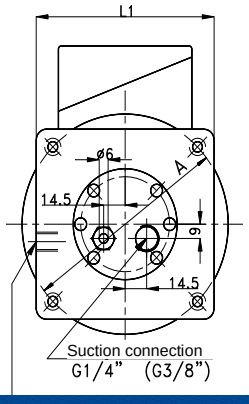
Drive

Type of drive	Electrical
Supply voltage	3x 400VAC
Frequency	50 Hz
Connection	Terminal board

Gear pump unit to 3 l/min displacement

Flow rate [l/min]	Engine output [KW]	Dimensions [mm]								Order number
		A	C	D	F	Thread	L1	L2	M	
0,06	0,21	110	37	42,5	236	107	100	156	109	**300 14 150**
0,18	0,21	110	37	42,5	236	107	100	156	109	**300 14 151**
0,25	0,21	110	37	42,5	236	107	100	156	109	**300 14 124**
0,375	0,21	110	38,5	42,5	237	107	100	156	109	**300 14 152**
0,5	0,21	110	40	42,5	239	107	100	156	109	**300 14 157**
0,75	0,30	138	45	52,5	274	113	120	176	124	**300 14 160**
1,0	0,30	138	45	52,5	274	113	120	176	124	**300 14 147**
1,2	0,44	138	47	52,5	276	113	120	176	124	**300 14 325**
1,5	0,44	138	47	52,5	276	113	120	176	124	**300 14 326**
2,0	0,44	110	47	52,5	276	113	100	176	124	**300 14 332**
3,0	0,66	138	50,5	52,5	312	113	120	209	139	**300 14 535**





Gear pump unit 3

Gear pumps for displacement of 3 litres and also a maximum pumping pressure of 35 bar. This pump is designed for base mount.
Detailed information under TA 308 14 302.

General

Type	Base mount
Ambient temperature	0 to 80 °C
Protection class as per EN60529	IP 44

Hydraulic system

Operating pressure	35 bar
Displacement	> 3 l/min
Operating medium	Mineral oil
Range of viscosity	20 to 750 mm²/s

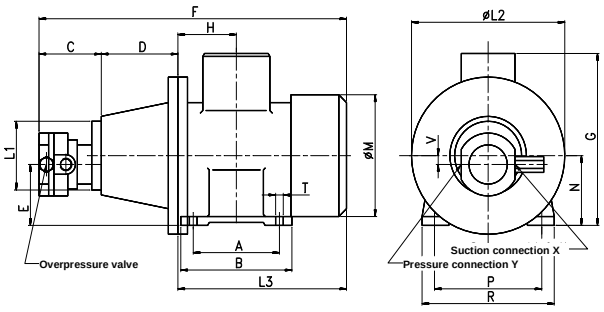
Drive

Type of drive	Electrical
Supply voltage	3x 400 V AC
Frequency	50 Hz
Connection	Terminal board

Gear pump unit greater than 3 l/min displacement

Flow rate [l/min]	Engine output [KW]	Dimensions [mm]										Order number
		A	B	C	D	E	F	Thread	H	L1	L2	
		L3	M	N	P	R	T	V	X	Y		
3	0,44	90	116	65	80	62	321	175	61	70	160	**300 14 514**
		176	124	71	112	138	8	9	¼''	¼ "		
6	0,66	100	125	85	100	67	394	192	67	100	200	**300 14 762**
		209	139	80	125	168	10	13	3/8"	3/8"		
9	0,90	100	125	85	100	67	394	192	67	100	200	**300 14 763**
		209	139	80	125	168	10	13	3/8"	3/8"		**300 14 768***
13	1,32	100	130	100	100	75	426	210	70	120	200	**300 14 764**
		226	157	90	140	178	10	15	1/2"	1/2"		
17	1,80	125	155	100	100	75	448	210	70	120	200	**300 14 765**
		248	157	90	140	178	10	15	1/2"	1/2"		
22	1,80	125	155	120	124	71	492	210	70	140	200	**300 14 766**
		248	157	90	140	178	10	19	3/4"	3/4"		
27	2,64	140	175	120	135	81	527	227	75	140	250	**300 14 767**
		272	177	100	160	192	12	19	3/4"	3/4"		

*without overpressure valve



Designation	SAS size 1	SAS size 2
Version	Pipe fitting	Pipe fitting
Volume	0.16 to 6.3 l/min fixed setting	7.1 to 31.5 l/min fixed setting
Pipe connection	G ¼ ”	G ¾ ”
More information on	Page 76	Page 77

Summary flow regulators oil circulation lubrication system

SCS
Connection panel
0,16 to 3,6 l/min fixed setting
G ½ ” On; G ⅜ ” Off
Page 78

SFE
Connection panel
0,1 to 5,8 l/min adjustable setting
G ½ ”On; G ⅜ ”Off
Page 80

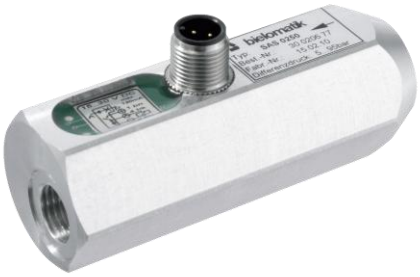
SKE
Screw-in hole
0,1 to 5,8 l/min adjustable setting
See drawing
Page 81

Flow regulator SAS (size 1)

The flow regulator SAS is a pressure independent and monitored volume flow regulator. It is available from 0.16 l/min to 6.3 l/min and designed for pipe fitting.

Mode of operation:
A measuring orifice fixed in the flow regulator determines the volume flow. A control piston ensures constant pressure difference at the measuring orifice, regardless of the pressure difference of inflow P and outflow A. The volume flow is mostly pressure and temperature independent. The function is ensured if the pressure difference from P to A is min. 5 bar and the available volume flow is more than 10% than the relevant actual volume flow at the operating viscosity of the oil. The integrated signal generator reports if the volume flow is lower than max. 20% of the actual volume flow. If the green LED on the valve glows, volume flow is ok. The red LED reports no or a very low volume flow. A protective diode for the cut-off discharge of inductive loads is integrated.

Detailed information under TA 308 20 602.



General

Type	Pipe fitting
Lubrication line connection	G ¼ ''
Ambient temperature	0 to 80 °C
Protection class as per EN60529	IP 67

Hydraulic system

Operating pressure	100 bar
Displacement	0.16 to 6.3 l/min
Operating medium	Mineral and synthetic oils
Range of viscosity	10 to 750 mm²/s

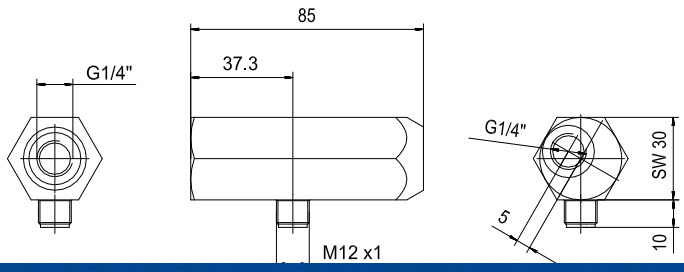
Sensor system

Function monitoring	
Nominal voltage	24 V DC
Switching current	≤130 mA
Connection	M12 x 1; 4-pole

Order summary

Discharge rate [l/min]	Single device type	Order number
0,16	SAS 0160	**300 20 675***
0,25	SAS 0250	**300 20 677***
0,40	SAS 0400	**300 20 679***
0,50	SAS 0500	**300 20 680***
0,63	SAS 0630	**300 20 681***
1,00	SAS 1000	**300 20 683**
1,25	SAS 1250	**300 20 684**
1,60	SAS 1600	**300 20 685**
2,00	SAS 2000	**300 20 686**
2,50	SAS 2500	**300 20 687**
3,15	SAS 3150	**300 20 688**
4,00	SAS 4000	**300 20 689**
5,00	SAS 5000	**300 20 690**
6,30	SAS 6300	**300 20 691**

* with stainless steel filter



POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Flow regulator SAS (size 2)

The flow regulator SAS is a pressure independent and monitored volume flow regulator. It is available from 7.1 l/min to 31.5 l/min and designed for pipe fitting.

Mode of operation:
A measuring orifice fixed in the flow regulator determines the volume flow. A control piston ensures constant pressure difference at the measuring orifice, regardless of the pressure difference of inflow P and outflow A. The volume flow is mostly pressure and temperature independent. The function is ensured if the pressure difference from P to A is min. 5.2 bar and the available volume flow is more than 10% than the relevant actual volume flow at the operating viscosity of the oil. The integrated signal generator reports if the volume flow is lower than max. 20 % of the actual volume flow. If the green LED on the valve glows, volume flow is ok. The red LED reports no or a very low volume flow. A protective diode for the cut-off discharge of inductive loads is integrated

Detailed information under TA 308 20 602.

General

Type	Pipe fitting
Lubrication line connection	G ¾ ’’
Ambient temperature	0 to 80 °C
Protection class as per EN60529	IP 67

Hydraulic system

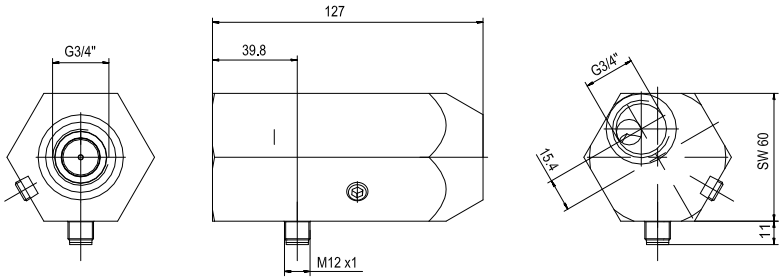
Operating pressure	100 bar
Displacement	7.1 to 31.5 l/min
Operating medium	Mineral and synthetic oils
Range of viscosity	10 to 750 mm²/s

Sensor system

Function monitoring	
Nominal voltage	24 V DC
Switching current	≤130 mA
Connection	M12 x 1; 4-pole

Order summary

Discharge rate [l/min]	Single device type	Order number
7,10	SAS 07100	**300 20 651**
8,00	SAS 08000	**300 20 652**
10,00	SAS 10000	**300 20 654**
12,50	SAS 12500	**300 20 656**
14,00	SAS 14000	**300 20 657**
16,00	SAS 16000	**300 20 658**
18,00	SAS 18000	**300 20 659**
20,00	SAS 20000	**300 20 660**
25,00	SAS 25000	**300 20 662**
31,50	SAS 31500	**300 20 664**



Flow regulator SCS (flanshable)

The flow regulator SCS is a pressure independent and monitored volume flow regulator. It is available from 0.16 l/min to 6.3 l/min. The flow regulator is available on a flange plate, which makes space-saving installation easy.

Mode of operation:
A measuring orifice fixed in the flow regulator determines the volume flow. A control piston ensures constant pressure difference at the measuring orifice, regardless of the pressure difference of inflow P and outflow A. The volume flow is mostly pressure and temperature independent. The function is ensured if the pressure difference from P to A is min. 5 bar and the available volume flow is more than 10% than the relevant actual volume flow at the operating viscosity of the oil. The integrated signal generator reports if the volume flow is lower than max. 20% of the actual volume flow. If the green LED on the valve glows, volume flow is ok. The red LED reports no or a very low volume flow. A protective diode for the cut-off discharge of inductive loads is integrated

Detailed information under TA 308 20 901.

General

Type	Flange construction
Lubrication line connection	On G½", Off G⅜"
Ambient temperature	0 to 80 °C
Protection class as per EN60529	IP 67

Hydraulic system

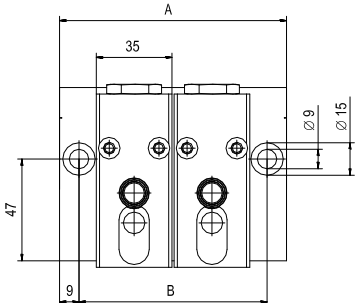
Operating pressure	100 bar
Displacement	0.16 to 6.3 l/min
Operating medium	Mineral and synthetic oils
Range of viscosity	10 to 750 mm²/s

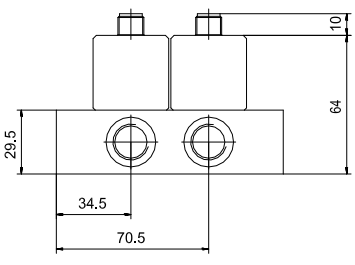
Sensor system

Function monitoring	
Nominal voltage	24 V DC
Switching current	≤130 mA
Connection	M12 x 1; 4-pole

Dimensions flow regulator terminal

Number of flow regulators	A [mm]	B [mm]
1 times	69	51
2 times	105	87
3 times	141	123
4 times	177	159
5 times	213	195
6 times	249	231
7 times	285	267
8 times	321	303





Order number - configurator

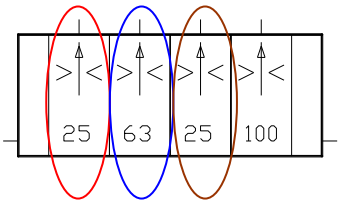
Order number:	300 20 99	X	SCS	X X	-	. . .

Number of flow regulators:	
1 Valve	**1**
2 Valves	**2**
3 Valves	**3**
4 Valves	**4**
5 Valves	**5**
6 Valves	**6**
7 Valves	**7**
8 Valves	**8**

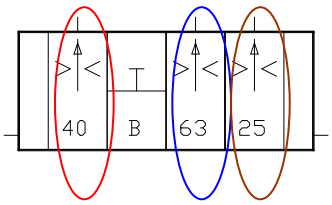
Discharge rate:	
0.16 l/min	**16**
0.25 l/min	**25**
0.40 l/min	**40**
0.50 l/min	**50**
0.63 l/min	**63**
0.80 l/min	**80**
1.00 l/min	**100**
1.25 l/min	**125**
1.60 l/min	**160**
2.00 l/min	**200**
2.50 l/min	**250**
3.15 l/min	**315**
4.00 l/min	**400**
5.00 l/min	**500**
6.30 l/min	**630**

Sample orders:

1. Flow regulator with 4 valves.
Flow regulator valve terminal 300 20 994
SCS 25-63-25-100



2. Mit 3 Ventilen und einer Blindplatte.
Stromregelventilinsel 300 20 994 SCS40-B-63-25



Order overview

Version	Order number
1 Valve	**300 20 99 1**
2 Valves	**300 20 99 2**
3 Valves	**300 20 99 3**
4 Valves	**300 20 99 4**
5 Valves	**300 20 99 5**
6 Valves	**300 20 99 6**
7 Valves	**300 20 99 7**
8 Valves	**300 20 99 8**

Flow regulator SFE (adjustable)

The adjustable flow regulator with a flange structure ensures a load-independent and even flow rate for supplying hydraulic consumers. An adjusting piston, which regulates the oil flow rate, is used for the adjustment.

Mode of operation:
A measuring orifice fixed in the flow regulator determines the volume flow. A control piston ensures constant pressure difference at the measuring orifice, regardless of the pressure difference of inflow P and outflow A. The volume flow is pressure and temperature independent. The function is ensured if the pressure difference from P to A is min. 5 bar and the available volume flow is more than 10% than the relevant actual volume flow at the operating viscosity of the oil.

Detailed information in datasheet.

General

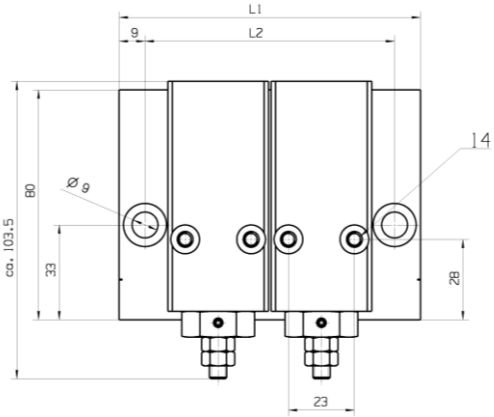
Type	Flange construction
Lubrication line connection	On G ½“ ; Off G ⅜''
Ambient temperature	20 to 80 °C
Protection class as per EN60529	IP 67

Hydraulic system

Operating pressure	max. 100 bar
Displacement	See order summary
Operating medium	Mineral and synthetic oils
Range of viscosity	10 to 750 mm²/s

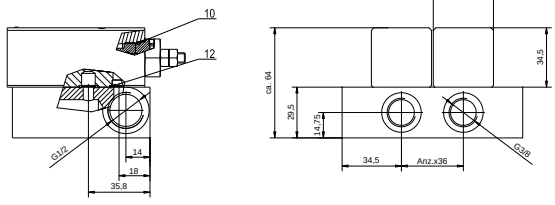
Order summary

Number of flow regulators	Dimensions L1 (mm)	Dimensions L2 (mm)	Order number
1 times	69	51	**300 21 331**
2 times	105	87	**300 21 332**
3 times	141	123	**300 21 333**
4 times	177	159	**300 21 334**
5 times	213	195	**300 21 335**
6 times	249	231	**300 21 336**
7 times	285	267	**300 21 337**
8 times	321	303	**300 21 338**

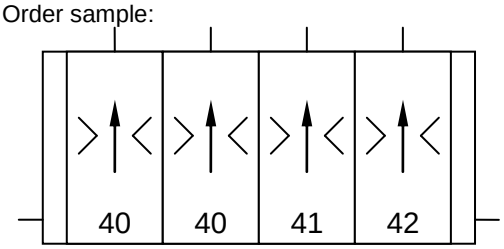


Overview figures for the individual valves

Component	Flow rate	Default setting ex works	Reference number
Flow regulator	0.1-0.5 l/min	0.3 l/min	39
Flow regulator	0.4-1.0 l/min	0.7 l/min	40
Flow regulator	0.9-2.5 l/min	1.7 l/min	41
Flow regulator	2.4-5.8 l/min	4.5 l/min	42
Blanking plate			B



Order sample:



Flow regulator terminal SFE 40 – 40 – 41 - 42

Flow regulator SKE (adjustable)

The adjustable flow regulator ensures a load-independent and even flow rate for supplying hydraulic consumers. An adjusting piston, which regulates the oil flow rate, is used for the adjustment. The flow regulator has a cartridge-type structure and can therefore be used in screw-in holes according to illustration.

Mode of operation:
A measuring orifice fixed in the flow regulator determines the volume flow. A control piston ensures constant pressure difference at the measuring orifice, regardless of the pressure difference of inflow P and outflow A. The volume flow is pressure and temperature independent. The function is ensured if the pressure difference from P to A is min. 5 bar and the available volume flow is more than 10% than the relevant actual volume flow at the operating viscosity of the oil.

Detailed information in datasheet.

General

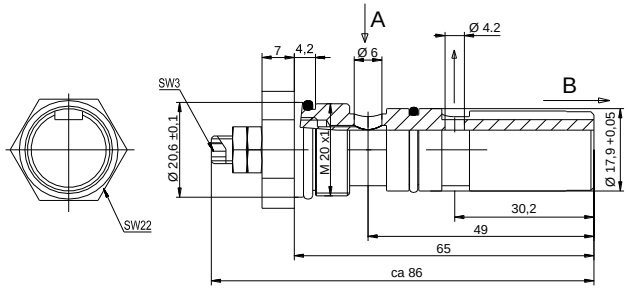
Type	Flange construction
Lubrication line connection	Screw-in hole
Ambient temperature	20 to 80 °C
Protection class as per EN60529	IP 67

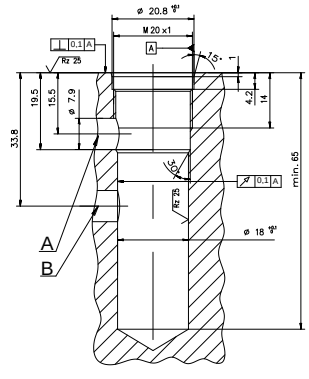
Hydraulic system

Operating pressure	max. 100 bar
Displacement	See order summary
Operating medium	Mineral and synthetic oils
Range of viscosity	10 to 750 mm²/s

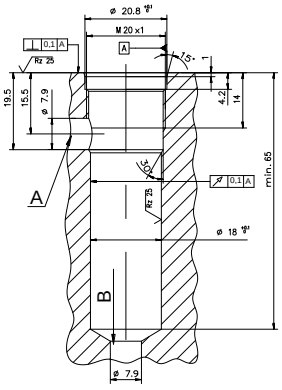
Order summary

Flow rate	Default setting ex works	Order number
0.1-0.5 l/min	0.3 l/min	**300 21 349**
0.4-1.0 l/min	0.7 l/min	**300 21 350**
0.9-2.5 l/min	1.7 l/min	**300 21 351**
2.4-5.8 l/min	4.5 l/min	**300 21 352**





Fitting 1



Fitting 2

POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Oil/air lubrication system

Oil/air lubrication system

Lubrication of open support, friction surfaces, spindles or chains with smallest dosing quantities.

The Advantages

- Minimum quantity lubrication for high speeds (10 000 – 45 000 U/min.)
- Surface lubrication
- Lubrication of open supports, friction points, spindles and chains

The system components

- Manual, pneumatic and electrical pumps
- Main line
- Distributor strips
- Dosing units
- Mixing heads
- Lines to the lubrication points
- Screwed fittings
- Control and check devices

The function

Pneumatic control is used simultaneously with every lubrication pulse in order to spray the measured out lubricant according to the mixing head with pressure on the lubrication point.

POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Dosing unit

Dosing units are available with a different number of outlets. Several lubrication points with defined dosing quantities are fed.

Detailed information under TA 308 21302.

General

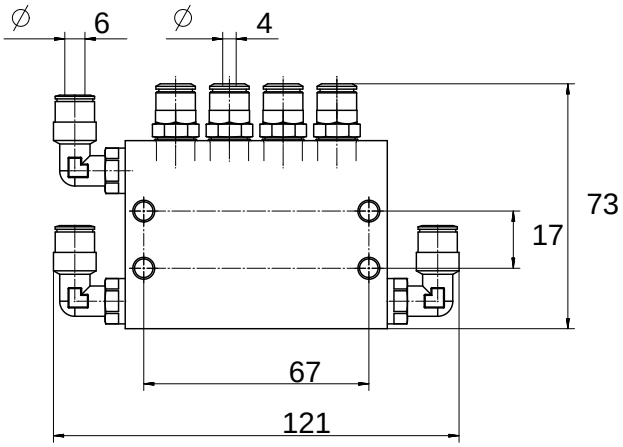
Type	Oil/air dosing unit
Installation position	Outlets on the top
Lubrication line connection	Plug connector Ø 4 mm
Ambient temperature	0 to 60 °C

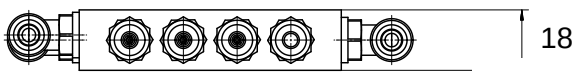
Hydraulic system

Displacement	20 mm³/stroke
Operating medium	Mineral oil
Range of viscosity	50 to 150 mm²/s

Order summary

Number of outlets	Order number
2	**300 21 302**
4	**300 21 304**
6	**300 21 306**
8	**300 21 308**





Compressor nozzle

Compressor nozzles are used for spraying oil or an oil-air mixture. The different external geometries enable attachment of hoses, pipes or fittings. Fluid velocity can be specified through the diameter of the nozzle, by which the impact speed or the range can be determined. Main applications are the chain lubrication and the support lubrication.
Moreover, nozzles for fitting in the pipelines, which function as pressure reducer, are available.

Detailed information under TA 308 20 501.

General

Type	Nozzle for pipe fitting
Installation position	Any
Operating pressure	max.2 bar
Air flow	see Diagram

Order summary

Bore Ø [mm]	Label (see diagram)	Order number				
		Fig.1	Fig.2	Fig.3	Fig.4	Fig.5
0,5	1	**300 20 540**	-	**303 23 008**	**303 23 018**	-
0,7	2	-	-	**303 23 009**	**303 23 019**	**300 20 509**
0,9	3	-	**300 20 552**	**303 23 010**	-	-
1,2	4	**300 20 543**	-	**303 23 011**	-	-

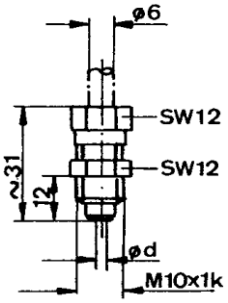


Fig. 1

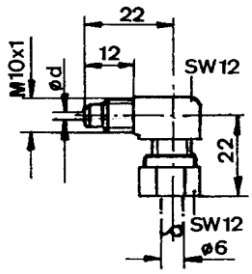


Fig. 2

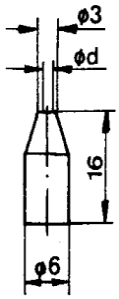


Fig. 3

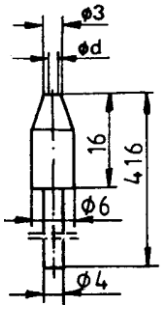


Fig. 4

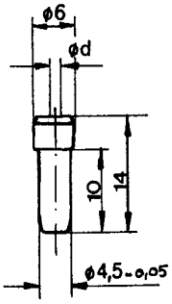


Fig. 5

POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Mixing block

Mixing blocks for mixing oil/air for spraying on accessible lubrication points and for continuous feeding on closed lubrication points.

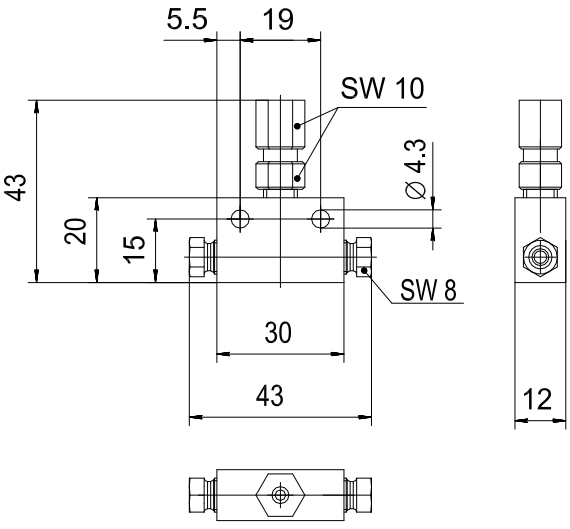
Detailed information under TA 308 46 803.

General

Type	Steel mixing block
Installation position	Any
Operating pressure	100 bar
Pipe connection	Pipe connection Ø 4 mm
Fixing	Tapping screw

Order summary

Pipe connection	Order number
Ø 4 mm	**300 48 219**



POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Pre-fabrication - Oil/air lubrication system

As a special service bielomatik offers system-wide prefabrication of the components. This service covers all imaginable assembly operations, which are possible before the delivery of the system.

- Filling the pump with the lubrication desired by the customer
- Filling the pipes and lines with the lubrication desired by the customer
- Lubrication system for complete installation in connection with a customer interface
- Customer-specific configuration of pumps (air or lubrication side with specific screw joints)
- Customer-specific modifications to standard elements
- Customer-specific packaging of fabricated systems
- Combinations of several systems

The advantage is that a complete system can be pre-fabricated ex-factory as per the customer's requirements thus significantly reducing the assembly time. Even placing the order is very easy, as not individual parts from all systems must be ordered separately. It is available under one order number the complete lubrication system is delivered pre-fabricated.

The following examples show only a small extract from the various options of pre-fabrication of bielomatik Leuze GmbH & Co. KG.

Components predominantly from the field of single line systems can be combined with the screw joint program - connected to an easy and cost-effective oil/air system. Here two distributor strips are screwed together, whereby, one functions as the air side and the other as oil side.
Both the sides are joined with a Y-piece.
There is a metering valve on the oil side through the dimensioning of which oil droplets can be defined,
which should be added to the air flow per lubrication pulse.

Oil from the air flow is fed as smear to the lubrication point. The oil quantity can thus be defined through the cycle time of the lubrication pulse.

Example 1:

Comprises a 12 times distributor strip, assembly with 12 metering valves, is used as distributor block for the oil/air lubrication. The oil and air-side supply line with Ø 6 mm is fixed with a pluggable screw joint.

Example 2:

The single piston pump AM is used for supplying to the assembly presented in example 1. Customer-specific, this pump is provided with two pluggable connections for lines with Ø 6 mm and a pressure gauge for pressure monitoring.

For queries related to customer-specific pre-fabrication call us on +49 (0) 7025 / 12-519.

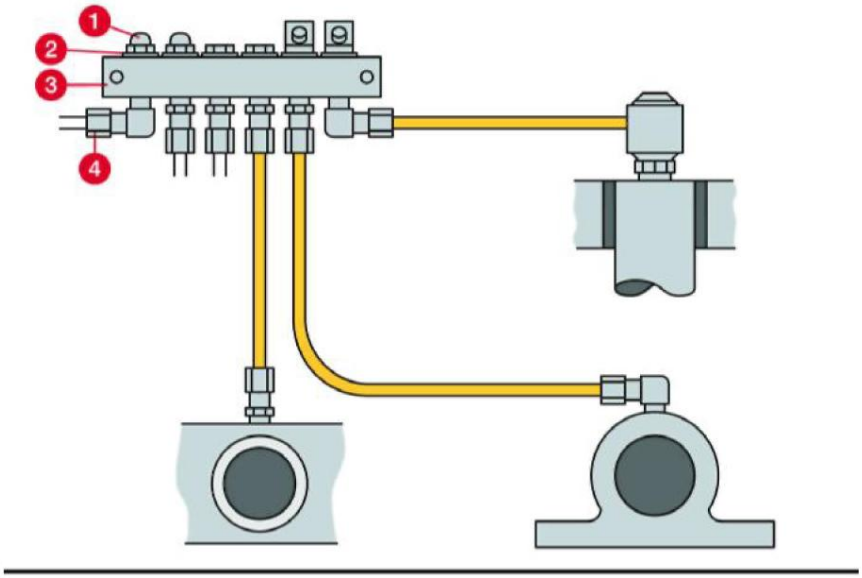
Block lubrication system

Block lubrication system

Easy and cost-effective.

The block lubrication system

is an easy and cost-effective solution for providing grease or fluid grease to inaccessible lubrication points manually from a central location.



1 Grease nipple
2 Identification ring
3 Central strip
4 Pipe fitting

POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Central strips

The central strips have 1 to 8 through threaded holes of different thread types. Lubrication lines of different lubrication points are connected to the central strips and assigned to the lubrication nipples.

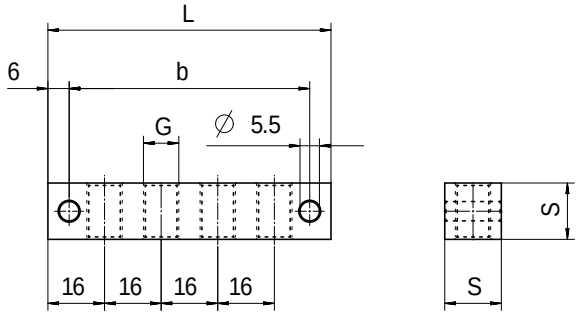
Detailed information under TA 308 43 701.

Number of Connections	Dimensions					Order number
	Thread	S	a [mm]	b [mm]	l [mm]	
1	M10 x 1	16	-	20	32	**304 48 671**
2	M10 x 1	16	20	40	52	**304 48 672**
3	M10 x 1	16	16	52	64	**304 48 673**
4	M10 x 1	16	16	68	80	**304 48 674**
5	M10 x 1	16	16	84	96	**304 48 675**
6	M10 x 1	16	16	100	112	**304 48 676**
7	M10 x 1	16	16	116	128	**304 48 677**
8	M10 x 1	16	16	132	144	**304 48 678**

1	M8 x 1	16	-	20	32	**304 48 622**
2	M8 x 1	16	20	40	52	**304 48 623**
3	M8 x 1	16	16	52	64	**304 48 624**
4	M8 x 1	16	16	68	80	**304 48 625**
5	M8 x 1	16	16	84	96	**304 48 626**
6	M8 x 1	16	16	100	112	**304 48 627**
7	M8 x 1	16	16	116	128	**304 48 628**
8	M8 x 1	16	16	132	144	**304 48 629**

1	M6	12	-	20	32	**304 48 651**
2	M6	12	16	36	48	**304 48 652**
3	M6	12	16	52	64	**304 48 653**
4	M6	12	16	68	80	**304 48 654**
5	M6	12	16	84	96	**304 48 655**
6	M6	12	16	100	112	**304 48 656**
7	M6	12	16	116	128	**304 48 657**
8	M6	12	16	132	144	**304 48 658**

1	G ⅛“	16	-	20	32	**304 48 601**
2	G ⅛“	16	20	40	52	**304 48 602**
3	G ⅛“	16	16	52	64	**304 48 603**
4	G ⅛“	16	16	68	80	**304 48 604**
5	G ⅛“	16	16	84	96	**304 48 605**
6	G ⅛“	16	16	100	112	**304 48 606**
7	G ⅛“	16	16	116	128	**304 48 607**
8	G ⅛“	16	16	132	144	**304 48 608**



Grease nipple

Different lubrication nipples for the block lubrication system.

Detailed information under TA 308 51 002.

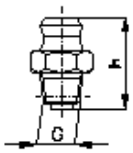


Fig. 1

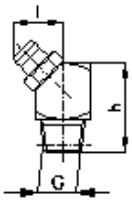


Fig. 2

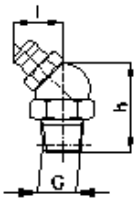


Fig. 3

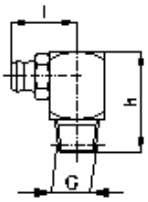


Fig. 4

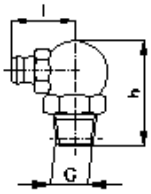


Fig. 5

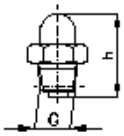


Fig. 6

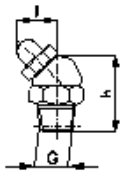


Fig. 7

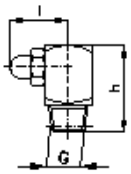


Fig. 8

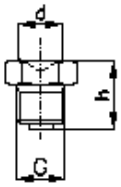


Fig. 9

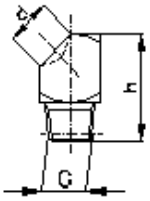


Fig. 10

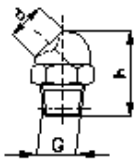


Fig. 11

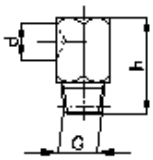


Fig. 12

Thread	Packaging unit [no.]	Dimensions					Order number					
		d	h	l	Wrench opening		Fig.	Conical grease nipple DIN71412	Fig.	Conical grease nipple DIN3402	Fig.	Funnel type lubrication nipple DIN3405
					Square	Hexa.						
M6 x 1	100	6	9,5	-	-	7	-	-	-	-	9	**300 51 201**
M8 x 1	100	8	9,5	-	-	9	-	-	-	-	9	**300 51 202**
M10 x 1	100	10	9,5	-	-	11	-	-	-	-	9	**300 51 204**
M6k	100	-	15	-	-	7	1	**300 51 001**	6	**300 51 101**	-	-
M8 x 1k	100	-	15	-	-	9	1	**300 51 002**	6	**300 51 102**	-	-
M8 x 1.25k	100	-	15	-	-	9	1	**300 51 003**	-	-	-	-
M10 x 1k	100	-	15	-	-	11	1	**300 51 004**	-	-	-	-
G⅛	100	-	15	-	-	11	1	**300 51 005**	6	**300 51 105**	-	-
M12 x 1k	100	-	18	-	-	14	1	**300 51 008**	-	-	-	-
M6 x 1	100	-	13	-	-	7	1	**300 51 009**	-	-	-	-
M6k	50	6	15	10	9	-	2	**300 51 021**	-	-	-	-
M8 x 1k	50	6	15	10	9	-	2	**300 51 022**	-	-	10	**300 51 222**
M8 x 1.25k	50	-	15	-	9	-	2	**300 51 023**	-	-	-	-
M10 x 1k	50	6	15	11	11	-	3	**300 51 024**	7	**300 51 124**	11	**300 51 224**
G⅛	50	6	20	11	-	11	3	**300 51 025**	-	-	11	**300 51 225**
M6k	50	6	18	14	9	-	4	**300 51 041**	8	**300 51 141**	-	-
M8 x 1k	50	6	18	14	9	-	4	**300 51 042**	8	**300 51 142**	-	-
M8 x 1.25k	50	-	18	14	9	-	4	**300 51 043**	-	-	-	-
M10 x 1k	50	6	18	15	11	11	4	**300 51 044**	-	-	12	**300 51 244**
G⅛	50	6	19	15	-	11	5	**300 51 045**	-	-	-	-

POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

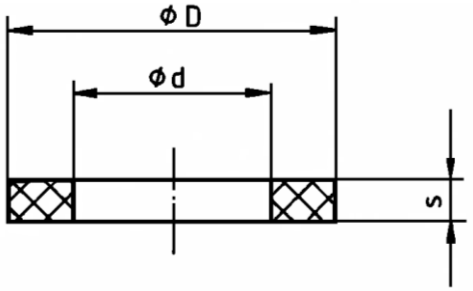
Identification rings

Rings for labelling lubrication points, for determining the lubrication frequency or the kind of lubricant.

Detailed information under TA 308 51 401.

General

Version	from PMMA Colours: red, yellow, green, white and blue
Installation	in connection with grease nipples
Packaging unit	250 pieces



Order summary

D [mm]	d [mm]	s [mm]	Thread	Order number				
				red	yellow	green	white	blue
10	6,2	1,0	M6	**300 51 410**	**300 51 411**	**300 51 412**	**300 51 413**	**300 51 414**
14	6,2	1,0	M6	**300 51 420**	**300 51 421**	**300 51 422**	**300 51 423**	**300 51 424**
15	8,2	1,0	M8	**300 51 430**	**300 51 431**	**300 51 432**	**300 51 433**	**300 51 434**
15	10,2	1,0	M10	**300 51 440**	**300 51 441**	**300 51 442**	**300 51 443**	**300 51 444**

2/2 control valve

Electrical 2/2 solenoid valve for mineral oil and fluid grease in static and dynamic single line systems with a nominal width of 5 mm.

Detailed information under TA 308 23 800.

General

Type	2/2 solenoid valve
Lubrication line connection	G ¼ ''
Ambient temperature	0 to 80 °C
Protection class as per EN60529	IP 65

Hydraulic system

Operating pressure	0 - 50 bar
Operating medium	Mineral oil, fluid grease
Range of viscosity	20 to 750 mm²/s, NLGI 000-0*

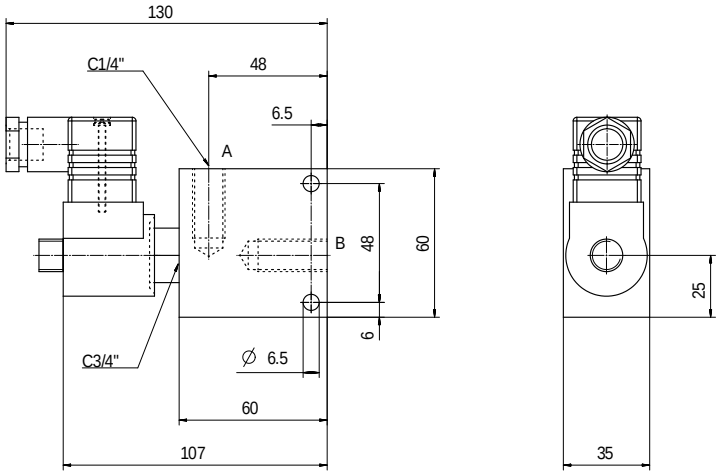
*as per fluid grease release list

Sensor system

Drive	Electrical
Supply voltage	24 V DC
Supply current	0.52 A
Power consumption	12.5 W
Drive	Right-angle connector

Order summary

Duty cycle	function	Order number
100 %	NO (normal open)	**300 23 810**
100 %	NC (normal close)	**300 23 811**
50 % (15 min.)	NO (normal open)	**300 23 816**



POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

3/2 control valve

Electrical 3/2 control-solenoid valve for oiled compressed air with a nominal width of 1.5 mm.

Detailed information under TA 308 23 401.

General

Type	3/2 solenoid valve
Lubrication line connection	G¼''; G⅛''
Ambient temperature	0 to 60 °C
Protection class as per EN60529	IP 54

Hydraulic system

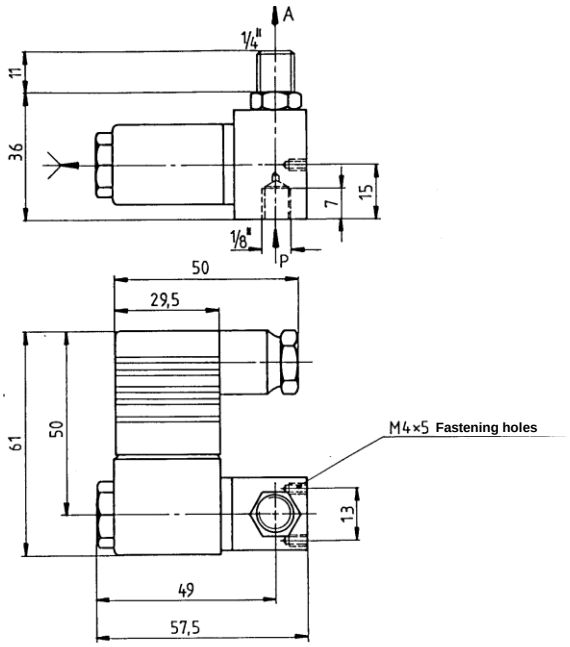
Operating pressure	6 bar

Drive

Type of drive	Electrical	Electrical
Supply voltage	230 V AC	24 V DC
Power consumption	5 W	3 W
Connection	Right-angle connector	Right-angle connector

Order summary

Voltage	Order number
24V DC	**300 23 403**
230 V AC, 50 Hz	**300 23 404**



4/2 control valve

Electrical solenoid control valve for oil with a nominal width of 6 mm.

Detailed information under TA 308 23 703.

General

Type	4/2 solenoid valve
Ambient temperature	-20 to 50 °C
Protection class as per EN60529	IP 54

Hydraulic system

Operating pressure	200 or 315 bar
Operating medium	Mineral oil, fluid grease
Range of viscosity	20 – 750 mm²/s

*as per fluid grease release list

Drive

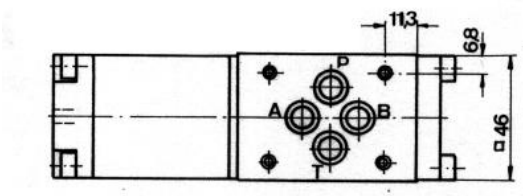
Type of drive	Electrical	
Supply voltage	220 V AC	24 V DC
Frequency	50 Hz	-
Power consumption	50 W	32 W
Operating pressure	200 bar	315 bar

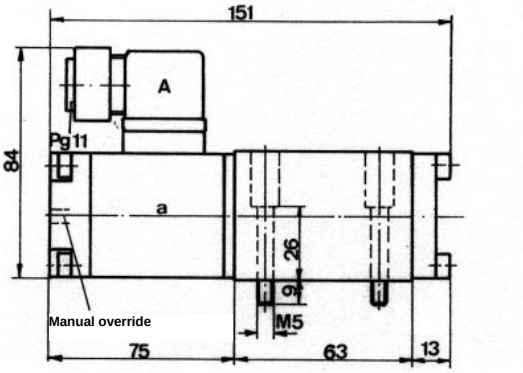
Order summary

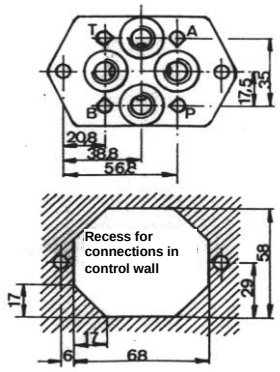
Supply voltage	Order number
220 V AC	**300 23 772**
24 V	**300 23 713**

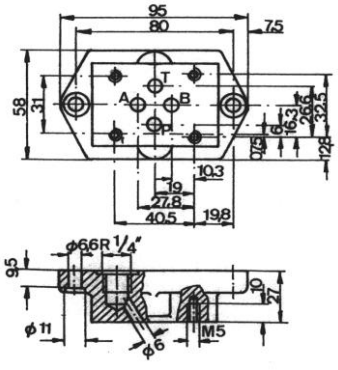
Order summary accessories

Accessories	Order number
Connection panel	**638 40 004**
Fixing bracket	**304 20 457**
Straight pipe fitting ø 10	**300 44 056**









POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

2/2 control valve

Electrical 2/2 control - solenoid valve with a nominal width of 3 mm. High quality valve for viscous fluids.

Detailed information under TA 308 23 707.

General

Type	2/2 solenoid valve
Lubrication line connection	G ⅜'"
Ambient temperature	0 to 80 °C
Protection class as per EN60529	IP 65

Hydraulic system

Operating pressure	250 bar
Operating medium	Fluid grease, grease
Range of viscosity	NLGI 000-2*

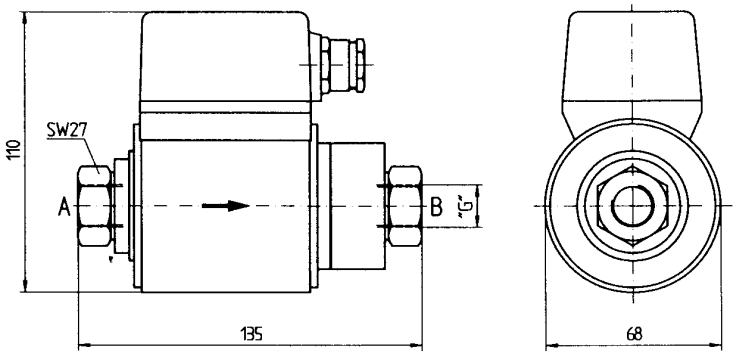
*as per fluid grease release list

Drive

Voltage	24 V DC
Supply current	1.6 A
Power consumption	40 W
Connection	Terminal strip

Order summary

Voltage	**Order number**
24 V DC	**300 23 798**

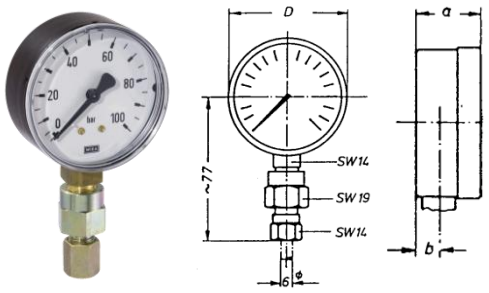


Pressure gauge

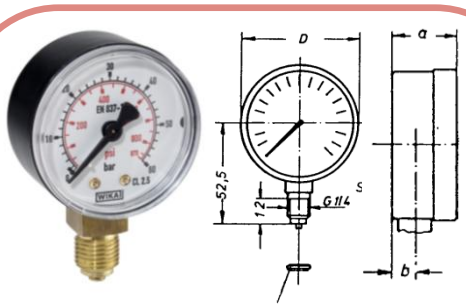
General:

Application	For pressure measurement of media, which do not corrode copper alloys
Installation	Different kinds of connections, when using polyamide pipes, strictly use insert sleeves.

Detailed information under TA 308 27,001.

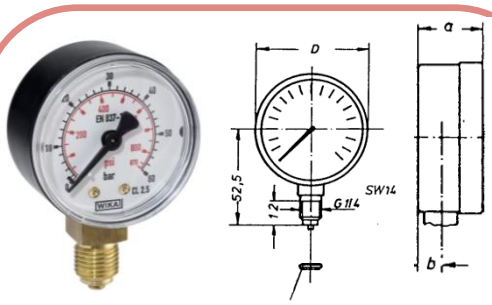


Version:	Standard
Pressure range:	0 to 100 bar
Dimension:	D = 63 mm
	a = 27 mm
	b = 9.5 mm
Order number:	**300 27 005**



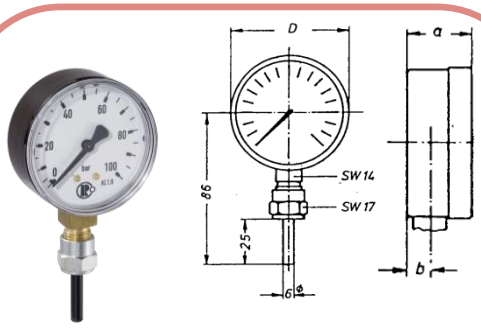
Sealing ring 30049314 to be ordered extra

Version:	Glycerine
Pressure range:	0 to 60 bar
Dimension:	D = 63 mm
	a = 36 mm
	b = 11.5 mm
Order number:	**300 27 098**

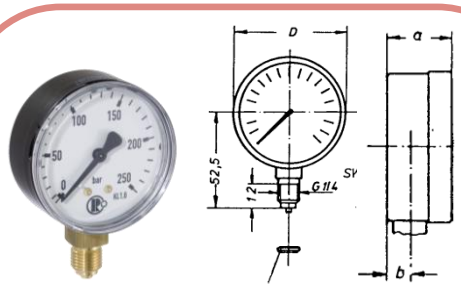


Sealing ring 30049314 to be ordered extra

Version:	Standard
Pressure range:	0 to 60 bar
Dimension:	D = 50 mm
	a = 27 mm
	b = 9.5 mm
Order number:	**642 04 032**



Version:	Standard
Pressure range:	0 to 100 bar
Dimension:	D = 63 mm
	a = 27 mm
	b = 9.5 mm
Order number:	**300 27 006**



Sealing ring 30049314 to be ordered extra

Version:	Standard
Pressure range:	0 to 250 bar
Dimension:	D = 63 mm
	a = 27 mm
	b = 9.5 mm
Order number:	**300 27 014**

Pressure switch

Pressure switch for monitoring the lubrication in line lubrication systems. Available as normally closed or normally open for different pressures.

Detailed information on data sheet 308 62 403.

General

Type	Pressure switch
Lubrication line connection	M10 x 1
Ambient temperature	0 to 80°C
Protection class as per EN60529	IP 65

Hydraulic system

Operating pressure	60 bar
Operating medium	Mineral oil, fluid grease, air
Range of viscosity	20 – 750 mm²/s, NLGI 000-2

Sensor system

Switching voltage	≤ 42 V DC
Switching current	≤ 1.5 A

Order summary

Normally closed contact			Normally open contact			Adjusted switching pressure [bar]
Fig.1 Screw terminal	Fig.2 Flat plug	Fig.3 M12 x 1	Fig.1 Screw terminal	Fig.2 Tab connector	Fig.3 M12 x 1	
300 62 403	300 62 423	301 62 317	300 62 503	300 62 523	301 62 321	0,5
300 62 410	-	301 62 315	300 62 510	300 62 512	301 62 313	0,8
300 62 405	300 62 424	301 62 316	300 62 505	300 62 524	301 62 312	1
300 62 407	-	301 62 324	300 62 507	-	-	1,5
300 62 408	300 62 426	301 62 325	300 62 508	300 62 526	301 62 320	2
300 62 409	300 62 427	301 62 326	300 62 509	300 62 527	301 62 318	3
300 62 411	300 62 428	301 62 329	300 62 511	300 62 528	301 62 319	5
300 62 450	300 62 437	-	300 62 550	-	301 62 323	8
300 62 413	300 62 429	-	300 62 513	-	-	10
300 62 415	300 62 430	-	300 62 515	300 62 530	301 62 331	12
-	-	301 62 338	300 62 517	300 62 531	301 62 332	15
300 62 418	300 62 432	301 62 335	300 62 518	300 62 532	301 62 337	20
300 62 419	300 62 433	301 62 342	300 62 519	300 62 533	301 62 340	25
300 62 400	300 62 402	301 62 341	300 62 500	300 62 502	301 62 343	32
300 62 421	-	-	300 62 521	300 62 535	-	50

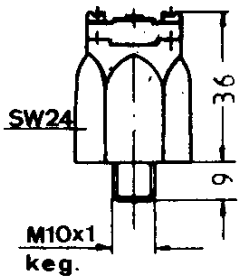


Fig. 1

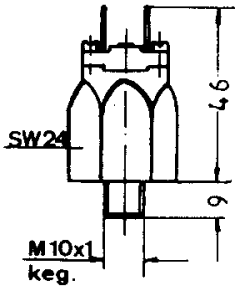


Fig. 2

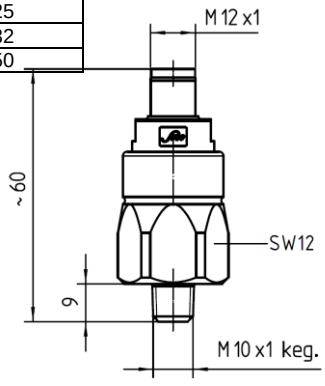
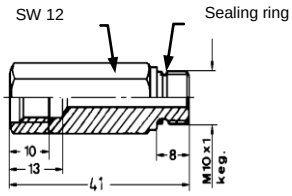
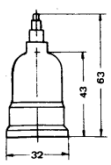


Fig. 3





POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Control for single line lubrication system

For control and monitoring single line lubrication systems with metering valves and dosing elements.

Detailed information under TA 308 64,401.

General

Nominal voltage	230 V AC; 24 V DC
Output pump drive	230 V – 3A AC; 24 V - 3 A DC
Error messages	≤ 60 V - 0.8 A DC (floating) ≤ 250 V - 2 A AC
Cycle time (time dependent)	1 sec to 99days (factory setting t_z=3 h)
Monitoring time	1 to 99 sec (factory setting $t_{ü}$=15 sec)
Run-on time	0 to 15 sec (factory setting t_n=2 sec)
Cycle time (clock dependent)	1 - 9.9x10^4 cycles

Order summary

Fig.	Voltage	Protection class	Relays for pump drive	Order number
1	230 V AC	IP 00	no	**300 64 400**
2	230 V AC	IP 65	no	**300 64 402**
2	24 V	IP 65	yes	**300 64 442**

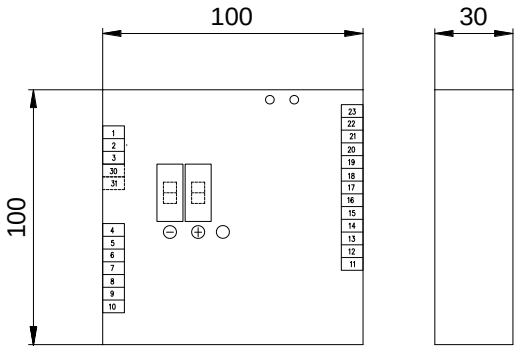


Abb. 1 Platine

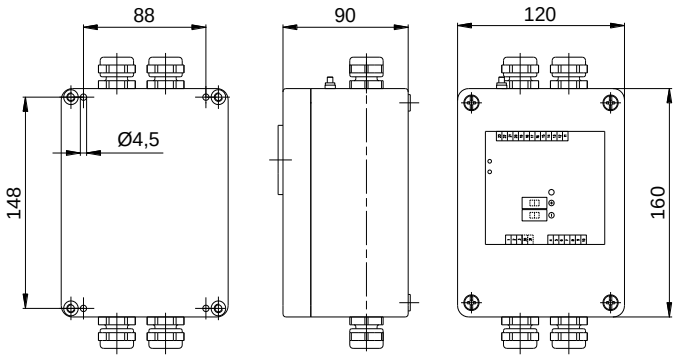


Abb. 2 Kunststoffgehäuse

POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Control for progressive lubrication system

For controlling and monitoring progressive lubrication systems with progressive distributor

Detailed information under TA 308 64,402.

General

Nominal voltage	230 V AC; 24 V DC
Output pump drive	230 V – 3A AC; 24 V - 3 A DC
Error messages	≤ 60 V - 0.8 A DC (floating) ≤ 250 V - 2 A AC
Cycle time (time dependent)	1 sec to 99days (factory setting t_z=3 h)
Monitoring time	1 to 9 min (factory setting $t_ü$=15 sec)
Cycle time (clock dependent)	1 - 9.9x10^4 cycles

Order summary

Fig.	Voltage	Protection class	Static output for electric grease pump	Dynamic output for single piston pump	**Order number**
1	24 V	IP65	Yes	no	**300 64 447**
1	230 V AC	IP65	no	yes	**300 64 407**
2	24 V	IP54	no	yes	**300 64 449**

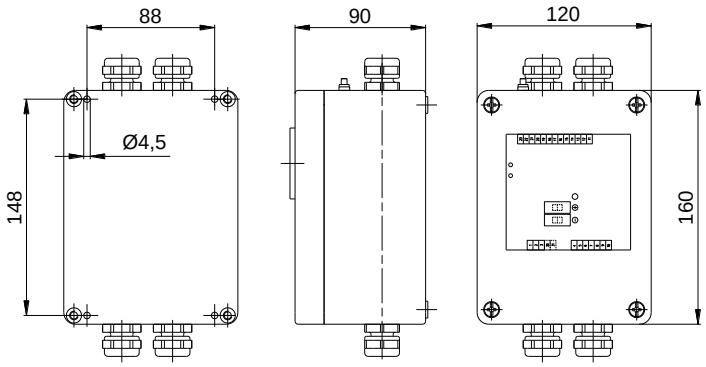


Fig. 1 Plastic housing

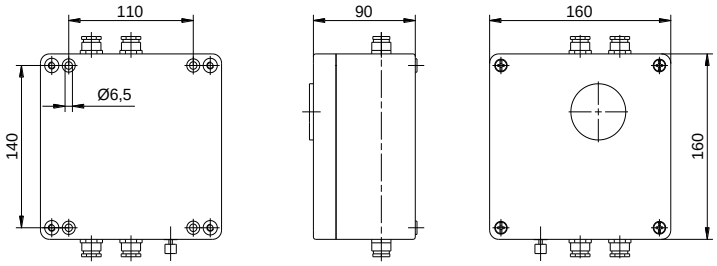


Fig. 2 Alu housing

POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Shut-off valve

For shutting off pipelines for lubricants, water, air and gas.

Detailed information under TA 308 22,503.

General

Version	Housing: Steel Handle: Fig.1 Plastic, Fig.2 Aluminium.
Ambient temperature	0 to 80 °C
Installation	Pipe connection. When using polyamide pipes strictlyuse insert sleeves.
Direction of passage	Any
Control travel	90°

Order summary

Fig.	Pipe Ø [mm]	Operating pressure [bar]	Dimensions [mm]								Order number
			R	L1	L2	B	H	h	m	S	
1	6	500	108	86	53	26	55	13	M12 x 1.5	14	**300 22 567**
2	10	250	100	94	59	30	54	14,5	M16 x 1.5	19	**300 22 512**

Fig. 1

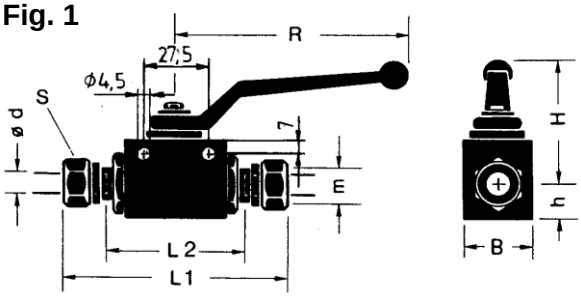
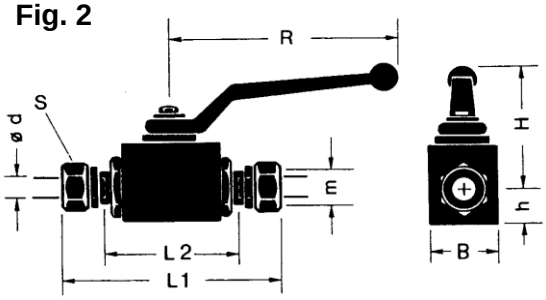


Fig. 2



POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Polyamide pipe

PA pipes for flexible laying of lubrication lines. Preferred for single line lubrication system.

Technological characteristics:
Ageing resistant. Water consumption for permanent storage in water max. 0.5 to 1%. The smooth external and internal surfaces enable high rate of flow, abrasion-proof. Hardly inflammable

Chemical characteristics:
Resistant and insensitive to oils, grease, lubricant, all forces, chlorine-free detergents and solvents. For decision on specific cases on resistance of polyamide pipe against chemicals, we request you for specific details about used chemicals, temperatures, pressures etc.

Detailed information under TA 308 40,301.

General

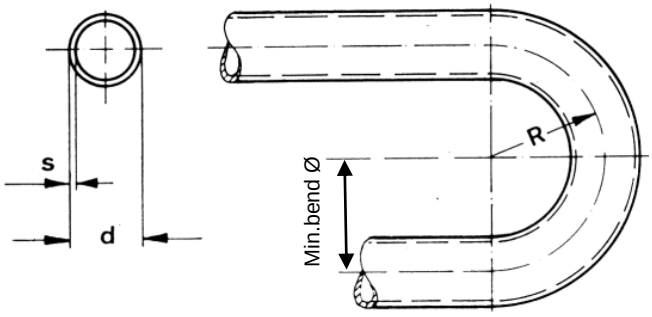
Application	Normal or flexible version
Ambient temperature	-40 to +80 °C
Material	PA transparent

Order summary standard version

External Ø [mm]	Wall thickness [mm]	Standard version		
		Operating pressure [bar]	Min. bend Ø [mm]	Order number
4	0,75	52	15 x Ø	**300 40 302**
4	1	76	15 x Ø	**300 40 303**
6	1	45	15 x Ø	**300 40 305**
6	1,2	50	15 x Ø	**300 40 350**
8	1	32	15 x Ø	**300 40 307**

Order summary flexible version

External Ø [mm]	Wall thickness [mm]	Flexible version		
		Operating pressure [bar]	Min. bend Ø [mm]	Order number
4	0,75	31	10 x Ø	**300 40 322**
4	1	44	10 x Ø	**300 40 323**
6	1	27	10 x Ø	**300 40 325**



POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

High pressure hose line

Detailed information under TA 308 40,703.

General

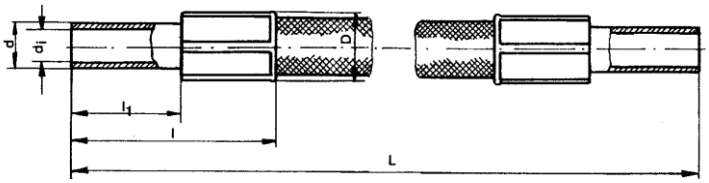
Application	Flexible pipe connection
Version	Polyamide 11 with synthetic fibre outer layer
Ambient temperature	-60 to 100 °C
Resistant	Mineral oil, synthetic oil, fluid grease
Increase in volume	0.1 cm³/m (at 50 bar operating pressure)
Information	When using in connection with safety components special guidelines must be observed

Dimensions

Pipe- external- ø d [mm]	Clear width di [mm]	Clamping sleeves ø D [mm]	l1 [mm]	L [mm]	min. bending radius [mm]	max. pressure at 20 °C [bar]
6	3	approx. 10	25	32	40	200
8	4,8	approx. 13	22	44	63	190

Order summary

Hose length L [mm]	Order number	
	d= ø 6 mm	d= ø 8 mm
200	**300 40 801**	**300 40 846**
300	**300 40 802**	**-**
400	**300 40 803**	**300 40 848**
500	**300 40 804**	**-**
600	**300 40 805**	**300 40 850**
700	**300 40 806**	**300 40 851**
800	**300 40 807**	**300 40 852**
900	**300 40 808**	**300 40 853**
1000	**300 40 809**	**300 40 854**
1250	**300 40 810**	**300 40 855**
1500	**300 40 811**	**300 40 856**
2000	**300 40 812**	**300 40 857**
2500	**300 40 813**	**-**



POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Steel pipe

Steel pipes for motionless installation of lubrications. These are preferably used in progressive system, as they can withstand high pressure.

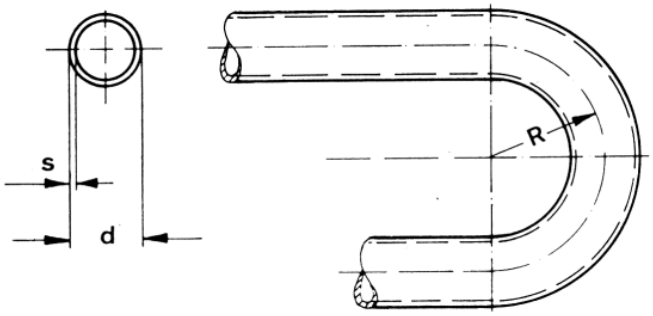
Detailed information under TA 308 40,003.

General

Versions:	Version 1: Steel tape wound, internal and external coppered. Version 2: Steel tape wound, internal and external galvanised. Version 3: Seamless precision steel pipe DIN2391 St 35.4 grade C.
Installation	Connection via pipe fittings

Order summary

External Ø ±0.05 mm [mm]	Wall thickness [mm]	Smallest bending radius as per DIN 5508 [mm]	Version			Order number
			1	2	3	
4	0,7	7	X	-	-	**300 40 001**
4	1,0	7	-	-	X	**300 40 004**
6	0,7	12	X	-	-	**300 40 002**
6	0,7	12	-	X	-	**300 40 032**
8	0,7	20	X	-	-	**300 40 005**
8	0,7	20	-	X	-	**300 40 035**
10	0,7	25	X	-	-	**300 40 007**
10	0,7	25	-	X	-	**300 40 037**



POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Straight fitting

Straight fittings of different sizes and types for executing pipelines through machines or container walls.

Detailed information under TA 308 42,502.

General

Version	Steel, galvanised surface, with double taper ring and male fitting
Operating pressure	40 bar
Installation	Installation instructions see TA 308 09 101. When using polyamide pipes strictly use insert sleeves.

Order summary

Pipe Ø [mm]	Fig.	Dimensions [mm]									Packaging unit [no.]	Order number
		L	L1	a	Thread	b	n	S1	S2	S3		
4	1	-	52	17	M8 x 1	M8 x 1	-	14	-	10	10	**300 42 400**
4	2	22	30	12	M12	M10 x 1	M8 x 1	14	-	8	100	**300 42 501**
6	3	33	50	20	M16 x 1.5	-	-	24	24	10	25	**300 42 502**

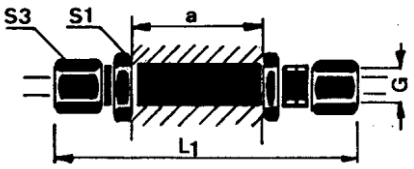


Fig.1

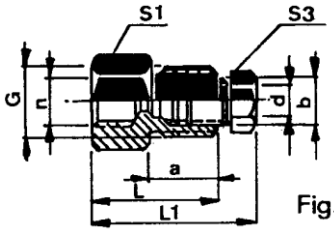


Fig. 2

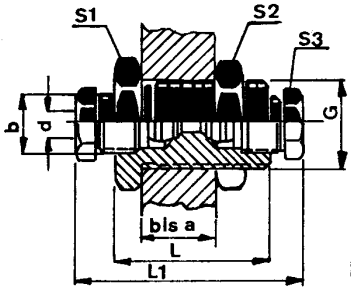


Fig.3

POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Pipe connections

Pipe connections for connecting pipelines made of metal and polyamide.

Detailed information under TA 308 41,002.

General

Version	Steel
Surface	galvanised
Installation	Installation instructions see TA 308 09 101. When using polyamide pipes strictly use insert sleeves.

Straight fittings (Fig. 1)

Pressure [bar]	Pipe Ø [mm]	Dimensions [mm]					Packaging unit [no.]	Order number
		m	L_1	L_2	S_1	S_2		
40	4	M8 x 1	32	8	10	10	100	**300 41 000**
	6	M10 x 1	34	6	12	12	100	**300 41 001**
	8	M12 x 1	35	5	14	14	100	**300 41 002**
100	6	M12 x 1.5	40	13	14	14	50	**300 41 003**
	8	M14 x 1.5	43	10	17	17	50	**300 41 004**
	10	M16 x 1.5	43	9	17	19	25	**300 41 005**
	12	M18 x 1.5	45	8	19	22	25	**300 41 006**

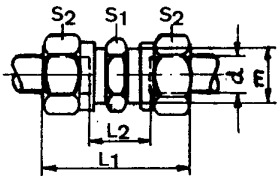


Fig. 1

Elbow fittings (Fig. 2)

Pressure [bar]	Pipe Ø [mm]	Dimensions [mm]					Packaging unit [no.]	Order number
		m	L_1	L_2	S_1	S_2		
40	4	M8 x 1	21	9	10	10	50	**300 41 300**
	6	M10 x 1	21	9	12	12	50	**300 41 301**
	8	M12 x 1	24	13	12	14	50	**300 41 308**
100	6	M12 x 1.5	25,5	14	11	14	50	**300 41 307**
	8	M14 x 1.5	26,5	16	12	17	25	**300 41 309**
	10	M16 x 1.5	29,5	16,5	14	19	25	**300 41 310**
	12	M18 x 1.5	34	19	17	22	25	**300 41 311**

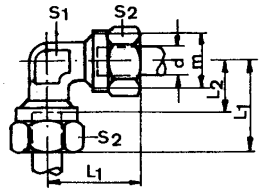


Fig. 2

T-fittings (Fig. 3)

Pressure [bar]	Pipe Ø [mm]	Dimensions [mm]					Packaging unit [no.]	Order number
		m	L_1	L_2	S_1	S_2		
40	4	M8 x 1	21	11	7	10	50	**300 41 607**
	6	M10 x 1	23	11	9	12	50	**300 41 608**
	8	M12 x 1	24	13	12	14	25	**300 41 610**
100	6	M12 x 1.5	25,5	14	11	14	25	**300 41 609**
	8	M14 x 1.5	28,5	16	12	17	25	**300 41 611**
	10	M16 x 1.5	29,5	16,5	14	19	25	**300 41 612**
	12	M18 x 1.5	34	19	17	22	25	**300 41 613**
160	18	M26 x 1.5	80	40	24	32	25	**300 41 615**

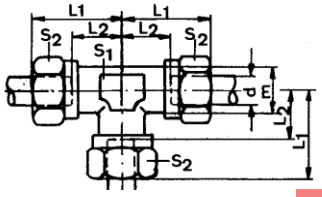


Fig. 3

Cross fittings (Fig. 4)

Pressure [bar]	Pipe Ø [mm]	Dimensions [mm]					Packaging unit [no.]	Order number
		m	L_1	L_2	S_1	S_2		
40	4	M8 x 1	42	11	7	10	25	**300 42 000**
	6	M10 x 1	46	11	9	12	25	**300 42 001**
	8	M12 x 1	50	14	11	14	10	**300 42 007**
100	6	M12 x 1.5	51	14	11	14	25	**300 42 002**
	8	M14 x 1.5	57	16	12	17	10	**300 42 008**

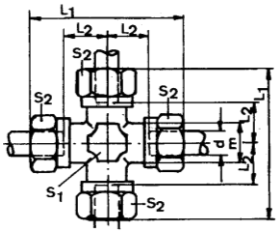


Fig. 4

POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Pipe joint

Pipe joint for quickly detachable connections of the pipelines.

Mode of action:
By introducing valved nipples in the locking coupling, a plug-like connection is established. When uncoupling, valves of both the connection times close simultaneously.
Engaging and disengaging also possible under pressure.

Detailed information under TA 308 42,903.

General

Version	Material brass, seal Perbunan
Ambient temperature	-20 to 80 °C
Type	Sealing on both sides
Installation position	Any
Flow direction	Any
Throughpassage	NW 4

Order summary

Designation	Fig.	Order number
Locking coupling	1	**300 42 926**
Locking coupling	2	**300 42 927**
Locking coupling	3	**300 42 960**
Valved nipples	4	**300 42 928**
Valved nipples	5	**300 42 929**
Valved nipples	6	**300 42 961**

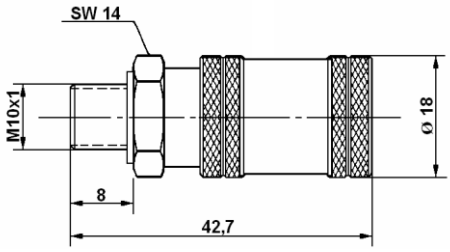


Fig. 1

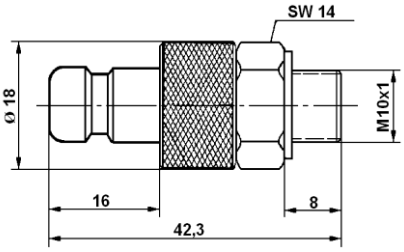


Fig. 4

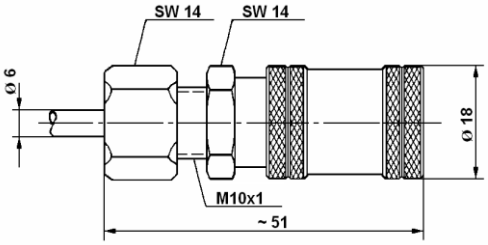


Fig. 2

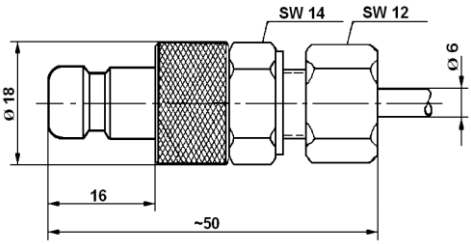


Fig. 5

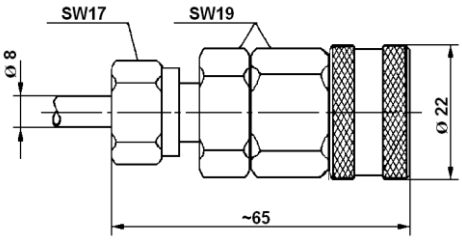


Fig. 3

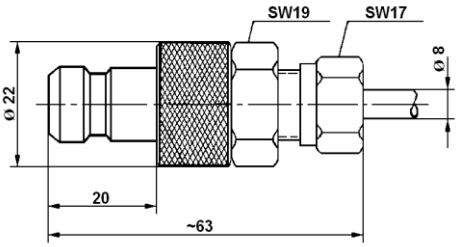


Fig. 6

POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Circulation pipe connection

Detailed information under TA 308 46,903.

General

Application	Rotating shafts
Version	Fig. 1: Aluminium and steel Fig. 2 and 3: galvanised
Ambient temperature	-20 to 80 °C
Installation position	Any
Rotational direction	Any

Hydraulic system

Operating medium	Mineral oil
Range of viscosity	50 to 750 mm²/s

Order summary

Pipe ø [mm]	Fig.	Pressure [bar]	Speed [U/min]	Dimensions [mm]							Order number
				Thread	f	i	L	S_1	S_2	S_3	
-	1	5	1500	M10 x 1k	21,5	8	42	12	-	-	**300 46 932**
-	1	5	1500	M8 x 1k	21,5	8	42	12	-	-	**300 46 934**
-	1	5	1500	G ⅛“	21,5	8	42	12	-	-	**300 46 935**
6	2	25	1500	G¼“	-	12	57	22	17	17	**300 46 907**
6	3	100	400	G¼“	39,5	12	-	22	17	17	**300 46 908**
8	3	160	200	G¼“	39,5	12	-	22	19	17	**300 46 911**

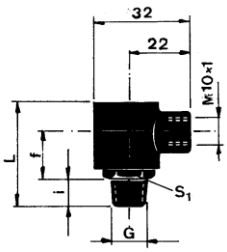


Fig.1

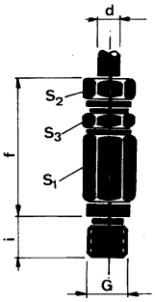


Fig.2

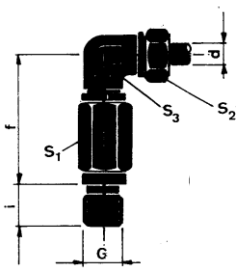


Fig.3

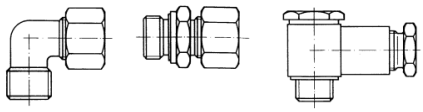
Pipe fittings

Pipe fittings for connecting pipelines made of metal and polyamide.

Detailed information under TA 308 44,003.

General

Version	Steel, surface treatment galvanized, if not noted otherwise, with cutting rings DIN3861 or double conical rings DIN3862
Installation	Installation instructions see TA 30809101. When using polyamide pipes strictly use insert sleeves.



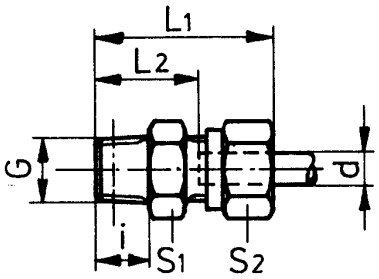


Fig.: Straight pipe fitting with tapered male thread socket

Operating pressure [bar]	Pipe Ø [mm]	Dimensions [mm]							Order number
		Thread	L_1	L_2	i	S_1	S_2	*	
40	2,5	M6 keg	20	11	6	8	8	2)	**300 44 014**
40	2,5	M8 x 1 keg	26	16	8	10	10	3)	**300 44 131**
40	2,5	M10 x 1 keg	26	16	8	12	10	3)	**300 44 124**
40	4	M6 x 0.75 keg	24	11	5	10	10	1)	**300 44 027**
100	4	¼K-26 BSF	26	13	6	10	10	1)	**300 44 102**
100	4	M6 keg	24	12	6	10	10	1)	**300 44 017**
100	4	M8 keg	26	14	8	10	10	1)	**300 44 018**
100	4	M10 x 1 keg	26	14	8	12	10	1)	**300 44 109**
100	4	M8 x 1 keg	26	14	8	10	10	1)	**300 44 000**
100	6	M8 x 1 keg	29	14	7	11	12	1)	**300 44 103**
100	6	M10 x 1 keg	27	13	8	12	12	1)	**300 44 001**
100	8	M10 x 1 keg	28	16,5	8	12	14	-	**300 44 002**
250	6	M12 x 1.5 keg	34	20	12	14	14	-	**300 44 025**
250	8	M12 x 1.5 keg	35	20	12	14	17	-	**300 44 004**
250	8	M14 x 1.5 keg	35	20	12	17	17	-	**300 44 019**
250	10	M14 x 1.5 keg	36	21	12	17	19	-	**300 44 024**
250	10	M16 x 1.5 keg	36	21	12	17	19	-	**300 44 020**
250	12	M16 x 1.5 keg	-	22	12	19	22	-	**300 44 006**
100	4	G ⅛"	26	14	8	10	10	1)	**300 44 007**
100	6	G ⅛"	27	13	8	12	12	1)	**300 44 008**
100	8	G ⅛"	28	13	8	12	14	-	**300 44 009**
100	8	G ¼"	36	19,5	12	17	17	1)	**300 44 133**
100	10	G ¼"	36	19	12	17	19	1)	**300 44 134**
160	18	G ½"	35	26,5	14	27	32	-	**300 44 034**
250	6	G ¼"	35	21	12	14	14	-	**300 44 022**
250	8	G ¼"	36	19,5	12	17	17	-	**300 44 011**
250	10	G ¼"	36	21	12	17	19	-	**300 44 012**
250	10	G ⅜"	36	22	12	19	19	-	**300 44 023**
250	12	G ⅜"	38	22	12	19	22	-	**300 44 013**

1.) Fitting with double taper ring
2.) Fitting with clamping ring
3.) Fitting with reduced tapered ring
4.) Stud threads form A, DIN 3852, sealing with sealing ring

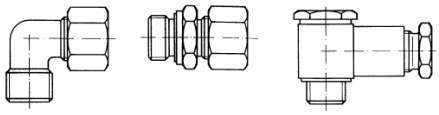
Pipe fittings

Pipe fittings for connecting pipelines made of metal and polyamide

Detailed information under TA 308 44,003.

General

Version	Steel, surface treatment galvanized, if not noted otherwise, with cutting rings DIN3861 or double conical rings DIN 3862
Installation	Installation instructions see TA 308 09 101. When using polyamide pipes strictly use insert sleeves.



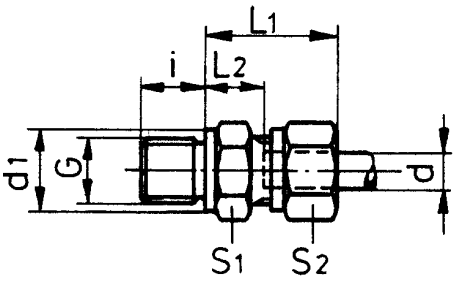


Fig.: Straight pipe fitting
with cylindrical thread. Stud threads form B, DIN 3852,
Sealing with sealing edge or sealing ring.

Operating pressure[bar]	Pipe Ø [mm]	Dimensions [mm]								Order number
		Thread	L_1	L_2	i	d_1	S_1	S_2	*	
100	4	M8 x 1	19	9,5	8	12	12	10	-	**300 44 036**
100	4	M10 x 1	18	7	8	14	14	10	1)	**300 44 142**
100	6	M10 x 1	21	7	8	14	14	12	1)	**300 44 050**
100	8	M10 x 1	21	9	8	14	14	14		**300 44 059**
100	10	M18 x 1.5	27	10,5	12	23	24	19	1)	**300 44 135**
250	6	M12 x 1.5	25	10	12	17	17	14	-	**300 44 058**
250	8	M12 x 1.5	25	10	12	17	17	17	-	**300 44 051**
250	10	M14 x 1.5	26	11	12	19	19	19	-	**300 44 052**
250	10	M18 x 1.5	28	12,5	12	23	24	19	4)	**300 44 032**
250	12	M18 x 1.5	27	12,5	12	23	24	22	-	**300 44 061**
640	10	M16 x 1.5	31	15	12	21	22	22	-	**300 44 060**
100	4	G ⅛"	21	7	8,5	14	11	12	1)4)	**300 44 152**
100	6	G ⅛"	21	7	8	14	14	12	1)	**300 44 054**
100	6	G ⅛"	23	8	8	13	11	12	1)4)	**300 44 147**
100	8	G ⅛"	21	9	8	14	14	14	-	**300 44 063**
160	18	G ½"	31	14,5	14	26	27	32	-	**300 44 073**
160	18	G ¼"	31	14,5	16	32	32	32	-	**300 44 074**
250	6	G ⅛"	23	8,5	8	14	14	14	-	**300 44 069**
250	6	G ¼"	25	10	12	18	19	14	-	**300 44 062**
250	8	G ¼"	25	10	12	18	19	17	-	**300 44 055**
250	10	G ⅛"	28	10	10	14	17	19	4)	**638 12 802**
250	10	G ¼"	26	11	12	18	19	19	-	**300 44 056**
250	10	G ⅜"	27	12,5	12	22	22	19	-	**300 44 064**
250	12	G ¼"	26	11	12	18	22	22	-	**300 44 141**
250	12	G ⅜"	27	12,5	12	22	22	22	-	**300 44 057**
250	10	G ½"	28	13	14	26	27	19	-	**300 44 105**
250	12	G ½"	28	13	14	26	27	22	-	**300 44 115**
250	15	G ½"	29	14	14	26	27	27	-	**300 44 065**

1.) Fitting with double taper ring
2.) Fitting with clamping ring
3.) Fitting with reduced tapered ring
4.) Stud threads form A, DIN 3852, sealing with sealing ring

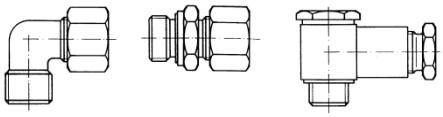
Pipe fittings

Pipe fittings for connecting pipelines made of metal and polyamide.

Detailed information under TA 308 44,003.

General

Version	Steel, surface treatment galvanized, if not noted otherwise, with cutting rings DIN3861 or double conical rings DIN3862
Installation	Installation instructions see TA 308 09 101. When using polyamide pipes strictly use insert sleeves.



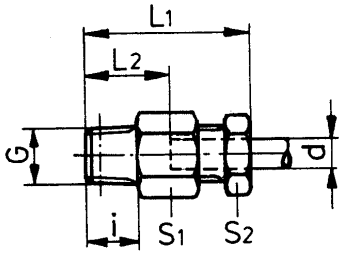


Fig.: Straight pipe fitting
with thread inserts with tapering thread

Operating pressure[bar]	Pipe Ø [mm]	Dimensions [mm]							Order number
		Thread	L_1	L_2	i	S_1	S_2	*	
100	4	M6 keg	23	7	5	10	8	1)	**300 44 200**
100	4	M8 keg	23	7	8	10	8	1)	**300 44 202**
100	4	M8 x 1 keg	23	7	8	10	8	1)	**300 44 203**
100	6	M10 x 1	33	10	8	12	10	1)	**300 44 208**
100	6	M10 x 1 keg	30	8	8	12	10	1)	**300 44 209**
100	4	G ¼"	24	8	9	14	8	1)	**300 44 207**
100	6	G ⅛"	29	9	8	12	10	1)	**300 44 215**

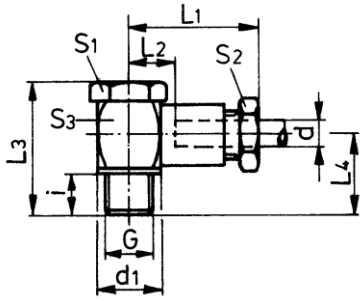


Fig.: Swivelling fitting; banjo screw
on the head with the sealing edge

Operating pressure[bar]	Pipe Ø [mm]	Dimensions [mm]											Order number
		Thread	L_1	L_2	L_3	L_4	i	d_1	S_1	S_2	S_3	*	
100	4	M6	25	6	23	13	6	12	12	8	12	1)	**300 45 615**
100	4	M8 x 1	25	6	23	13	6	12	12	8	12	1)	**300 45 520**
100	4	M8	25	6	23	13	6	12	12	8	12	1)	**300 45 521**
100	4	M10 x 1	26	7	28	16	8	14	14	8	14	1)	**300 45 522**
100	6	M10 x 1	29	7	28	16	8	14	14	10	14	1)	**300 45 526**
100	4	G ⅛"	26	7	28	16	8	14	14	8	14	1)	**300 45 523**
100	6	G ⅛"	29	7	28	16	8	14	14	10	14	1)	**300 45 527**
100	6	G ¼"	31	9	33,5	19,5	9	18	19	10	18	1)	**300 45 529**

1.) Fitting with double taper ring
2.) Fitting with clamping ring
3.) Fitting with reduced tapered ring
4.) Stud threads form A, DIN 3852, sealing with sealing ring

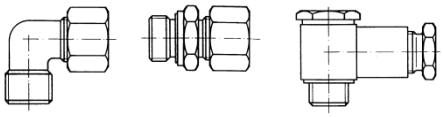
Pipe fittings

Pipe fittings for connecting pipelines made of metal and polyamide.

Detail information under TA 308 44 003.

General

Version	Steel, surface treatment galvanized, if not noted otherwise, with cutting rings DIN3861 or double conical rings DIN3862
Installation	Installation instructions see TA 308 09 101. When using polyamide pipes strictly use insert sleeves.



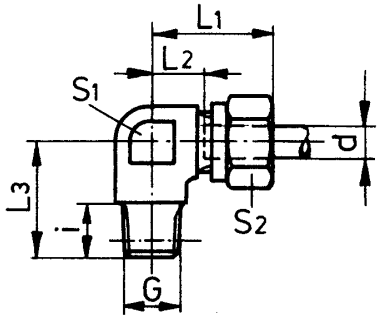


Fig.: Elbow pipe fitting with taper thread

Operating pressure [bar]	Pipe Ø [mm]	Dimensions [mm]								Order number
		Thread	L_1	L_2	L_3	i	S_1	S_2		
40	2,5	M6 keg	16	5,5	10,5	6,5	7	8	2)	**300 44 314**
40	2,5	M8 keg	21	11	15	8	10	10	3)	**300 44 415**
100	4	¼"26 BSF	22	9	15	8	10	10	1)	**300 44 401**
100	4	M6 keg	21	9	15	8	10	10	1)	**300 44 317**
100	4	M8 keg	21	9	15	8	10	10	1)	**300 44 318**
100	4	M8 x 1 keg	21	9	15	8	10	10	1)	**300 44 300**
100	4	M10 x 1 keg	22	10	16	8	12	10	1)	**300 44 403**
100	6	M8 x 1 keg	22	9	16,5	8	11	12	1)	**300 44 404**
100	6	M10 x 1 keg	22	9	18	8	12	12	1)	**300 44 301**
100	8	M10 x 1 keg	24	9,5	18,5	8	13	14	1)	**300 44 320**
100	8	M10 x 1 keg	23	11,5	20	8	12	14	-	**300 44 337**
100	10	M14 x 1.5keg	31	13	27	12	17	19	1)	**300 44 413**
250	8	M12 x 1.5keg	29	14	26	12	12	17	-	**300 44 321**
250	10	M14 x 1.5keg	30	15	27	12	17	19	-	**30044 323**
250	12	M16 x 1.5keg	32	17,5	28	12	17	22	-	**300 44 325**
640	6	M12 x 1.5keg	31	16	26	12	12	17	-	**300 44 319**
640	8	M14 x 1.5keg	32	17	27	12	14	19	-	**300 44 322**
640	10	M16 x 1.5keg	34	17,5	28	12	17	22	-	**300 44 324**
100	4	G ⅛"	21	10	16	8	11	10	1)	**300 44 307**
100	6	G ⅛"	22	9	16	8	11	12	1)	**300 44 308**
100	8	G ⅛"	23	11,5	20	8	12	14	-	**300 44 338**
160	18	G ½"	40	29,5	36	14	24	32	-	**300 44 339**
250	6	G ¼"	26	14	26	12	14	14	-	**300 44 327**
250	8	G ¼"	29	14	26	12	12	17	-	**300 44 329**
250	10	G ¼"	30	15	27	12	14	19	-	**300 44 330**
250	10	G ⅜"	30	15	27	12	17	19	-	**300 44 331**
250	12	G ¼"	32	17	28	12	19	22	-	**300 44 340**
250	12	G ⅜"	32	17	28	12	17	22	-	**300 44 332**

1.) Fitting with double taper ring
2.) Fitting with clamping ring
3.) Fitting with reduced tapered ring
4.) Stud threads form A, DIN 3852, sealing with sealing ring

Pipe clamp

Pipe clamp for fixing pipelines made of steel and polyamide and from plastic tubes.
Available for 1 to 12 lines.

Detailed information under TA 308 47 202.

General

Version	Made of steel, surface galvanised
Fixing	Tapping screw (see page)

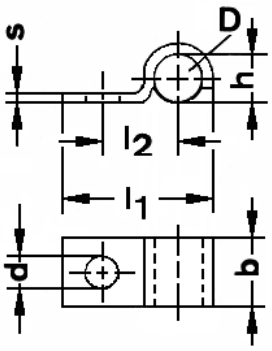


Fig. 1

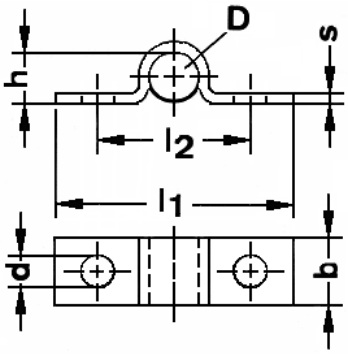


Fig. 2

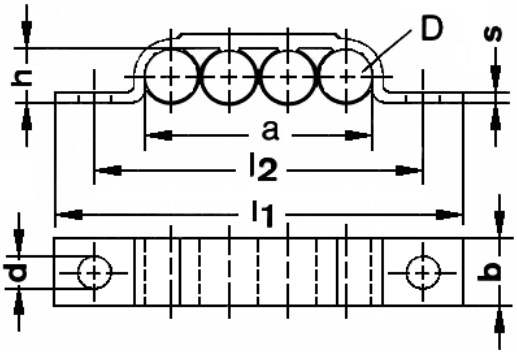


Fig. 3

POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Order summary

Pipelines		Fig.	Dimensions [mm]							Packagingunit [no.]	Order number
Ø [mm]	Number		d	b	h	l_1	l_2	s	a+1		
2,5	1	1	4,8	10	2,4	17	8	1	-	100	**300 47 200**
2,5	2	3	4,8	10	2,4	28	18	1	-	100	**300 47 201**
2,5	3	3	4,8	10	2,4	31	21	1	-	100	**300 47 202**
2,5	4	3	4,8	10	2,4	34	24	1	-	100	**300 47 203**
2,5	5	3	4,8	10	2,4	36	26	1	-	100	**300 47 204**
2,5	6	3	4,8	10	2,4	39	29	1	-	100	**300 47 205**
4	1	1	4,8	10	3,5	18	9	1	-	100	**300 47 206**
4	1	1	5,5	10	3,5	18	9	1	-	100	**300 47 261**
4	1	1	6,5	10	3,5	18	9	1	-	100	**300 47 260**
4	1	2	4,8	10	3,5	29	17	1	-	100	**300 47 218**
4	2	3	4,8	10	3,5	33	21	1	8,5	100	**300 47 207**
4	3	3	4,8	10	3,5	39	27	1	12,5	100	**300 47 208**
4	4	3	4,8	10	3,5	44	32	1	17	100	**300 47 209**
4	5	3	4,8	10	3,5	48	36	1	21	100	**300 47 210**
4	6	3	4,8	10	3,5	52	40	1	25	100	**300 47 211**
4	7	3	4,8	10	3,5	56	44	1	29,5	100	**300 47 212**
4	8	3	4,8	10	3,5	60	48	1	33,5	100	**300 47 213**
4	9	3	4,8	10	3,5	64	52	1	37,5	100	**300 47 214**
4	10	3	4,8	10	3,5	68	56	1	42	100	**300 47 215**
4	11	3	4,8	10	3,5	72	60	1	46	100	**300 47 216**
4	12	3	4,8	10	3,5	77	65	1	50	100	**300 47 217**
6	1	1	4,8	10	5,5	20	10	1	-	100	**300 47 219**
6	1	2	4,8	10	5,5	32	20	1	-	100	**300 47 231**
6	2	3	4,8	10	5,5	38	26	1	12,5	100	**300 47 220**
6	3	3	4,8	10	5,5	45	33	1	18,5	100	**300 47 221**
6	4	3	4,8	10	5,5	51	39	1	25	100	**300 47 222**
6	5	3	4,8	10	5,5	57	45	1	31	100	**300 47 223**
6	6	3	4,8	10	5,5	64	52	1	37	100	**300 47 224**
6	7	3	4,8	10	5,5	72	60	1	43,5	100	**300 47 225**
6	8	3	4,8	10	5,5	76	64	1	49,5	100	**300 47 226**
6	9	3	4,8	10	5,5	82	70	1	55,5	100	**300 47 227**
6	10	3	4,8	10	5,5	90	78	1	62	100	**300 47 228**
6	11	3	4,8	10	5,5	96	84	1	68	100	**300 47 229**
8	1	1	4,8	10	7,5	22	11	1	-	100	**300 47 232**
8	1	2	4,8	10	7,5	34	22	1	-	100	**300 47 244**
8	2	3	4,8	10	7,5	42	30	1	16,5	100	**300 47 233**
8	3	3	4,8	10	7,5	51	39	1	24,5	100	**300 47 234**
8	4	3	4,8	10	7,5	59	47	1	33	100	**300 47 235**
8	5	3	4,8	10	7,5	68	56	1	41	100	**300 47 236**
8	6	3	4,8	10	7,5	76	64	1	49	100	**300 47 237**
8	7	3	4,8	10	7,5	86	74	1	57,5	100	**300 47 238**
8	8	3	4,8	10	7, 5	94	82	1	65,5	100	**300 47 239**
8	10	3	4,8	10	7,5	111	99	1	82	100	**300 47 241**
8	11	3	4,8	10	7,5	119	107	1	90	100	**300 47 242**
8	12	3	4,8	10	7,5	127	115	1	98	100	**300 47 243**
10	1	1	4,8	10	9,5	23	11	1	-	100	**300 47 245**
10	1	2	4,8	10	9,5	34	22	1	-	100	**300 47 257**
10	2	3	4,8	10	9,5	44	32	1	20,5	100	**300 47 246**
10	3	3	4,8	10	9,5	55	43	1	30,5	100	**300 47 247**
10	4	3	4,8	10	9,5	67	55	1	41	100	**300 47 248**
10	5	3	4,8	10	9,5	77	65	1	51	100	**300 47 249**
10	8	3	4,8	10	9,5	110	98	1	81,5	100	**300 47 252**
10	10	3	4,8	10	9,5	131	119	1	102	100	**300 47 254**
10	11	3	4,8	10	9,5	141	129	1	112	100	**300 47 255**
12	1	1	5,8	12	11,3	30,5	16	1,5	-	100	**300 47 258**
12	1	2	5,8	12	11,3	46	32	1,5	-	100	**300 47 259**
15	1	1	5,8	12	14,3	34	18	1,5	-	100	**300 47 270**
15	1	2	5,8	12	14,3	50	-	1,5	-	100	**300 47 271**
18	1	1	7	12	17,3	35,5	18	1,5	-	100	**300 47 272**
18	1	2	7	12	17,3	50	36	1,5	-	100	**300 47 273**

Tapping screw

Tapping screw for fixing pipe clamps, distribution part and branch pieces.

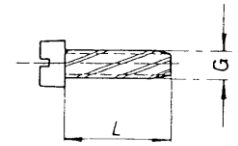
Detailed information under TA 308 47,701.

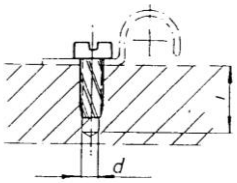
General

Version	as per DIN 7513 (galvanised)

Order summary

Dimensions [mm]				Packagingunit [no.]	Order number
Thread	L	i Minimum dimension	Bore d H11		
M4	8	8	3,6	100	**300 47 701**
M4	25	8	3,6	100	**300 47 703**
M4	35	8	3,6	100	**300 47 705**
M5	10	10	10	100	**300 47 706**
M6	12	12	12	100	**300 47 707**





Sealing ring

Detailed information under TA 308 49,302.

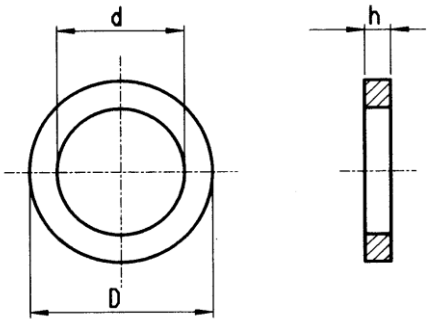
General

Version	Copper
Packaging unit	100 pieces

Order summary

Dimensions [mm]				Thread	Order number
Nominal dimension	$d^{+0.3}$	$D^{-0.2}$	$h^{+0.2}$		
6 x 10	6,2	9,9	1	-	**300 49 300**
8 x 12	8,2	11,9	1	-	**300 49 301**
10 x 14	10,2	13,9	1	G ⅛ “	**300 49 302**
10 x 14*	10,2	13,9	1	G ⅛“	**300 49 331**
12 x 16	12,2	15,9	1,5	-	**300 49 303**
14 x 18	14,2	17,9	1,5	G ¼ ’’	**300 49 304**
16 x 20	16,2	19,9	1,5	-	**300 49 305**
17 x 21	17,2	20,9	1,5	G ⅜’’’	**300 49 306**
18 x 22	18,2	21,9	1,5	G ⅜’’’	**300 49 307**
20 x 24	20,2	23,9	1,5	-	**300 49 308**
22 x 27	22,2	26,9	1,5	G ½’’	**300 49 309**
22 x 29	22,2	28,9	1,5	G ½’’	**300 49 310**

*Soft iron as per DIN 7603 form A.



POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Insert sleeve

Insert sleeves for reinforcing pipe ends made of polyamide pipes, which are assembled in double taper ring, clamping ring or cutting ring connections. The insert sleeves prevent constricting of the polyamide pipes during assembly and ensure a tight fitting of the connection.

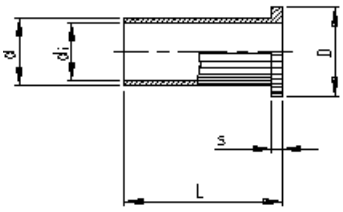
Detailed information under TA 308 49,401.

General

Version	made of brass

Order summary

Suitable for pipe	Dimensions [mm]					Packaging unit [no.]	Order number
	d	$D_{-0.2}$	L	di	S		
2.5 x 0.5	1,5	2,5	10	1,1	0,20	100	**300 49 400**
4 x 0.75	2,5	4,0	14	1,9	0,30	100	**300 49 427**
4 x 1.0	2,0	3,2	14	1,4	0,30	100	**300 49 425**
4 x 0.75	2,5	4,0	12	1,9	0,30	100	**300 49 401**
4.5 x 0.75	3,0	4,5	15	2,6	0,20	100	**300 49 412**
6 x 1.0	4,0	6,0	15	3,2	0,40	100	**300 49 403**
6 x 1.2	3,4	5,8	15	3,0	0,25	100	**300 49 409**
8 x 1.0	6,0	8,0	17	5,0	0,50	100	**300 49 426**
8 x 1.5	5,0	8,0	17	4,2	0,40	100	**300 49 422**
10 x 1.0	8,0	10,0	20	7,0	0,50	100	**300 49 423**
10 x 1.5	7,0	10,0	18	6,0	0,50	100	**300 49 417**
12 x 1.0	10,0	12,0	18	9,0	0,50	100	**300 49 408**
12 x 1.5	9,0	12,0	18	8,0	0,50	100	**300 49 413**
15 x 1.5	12,0	15,0	15	11,0	0,50	100	**300 49 424**
18 x 2.0	14,0	18,0	18	13,0	0,50	100	**300 49 416**



Screw plug

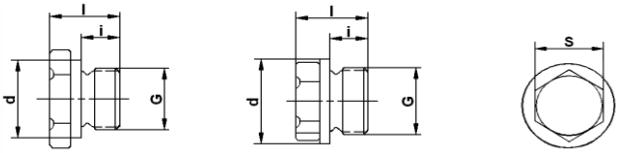
Detailed information under TA 308 49,501.

General

Version	Fig. 1 and 2 steel, galvanised. With metric thread as per 7604. With inch thread as per DIN 910.

Order summary

Fig.	Dimensions [mm]					Order number
	Thread	d	i	l	S	
1	M8 x 1	12	8	13,0	12	**300 49 500**
1	M10 x 1	14	8	12,5	14	**300 49 501**
1	M12 x 1.5	17	9	16,5	17	**300 49 502**
1	M14 x 1.5	19	9	16,5	19	**300 49 503**
1	M16 x 1.5	21	9	16,5	22	**300 49 504**
2	M18 x 1.5	23	9	17	17	**300 49 505**
2	G ⅛"	14	8	17	10	**300 49 506**
2	G ¼"	18	12	21	13	**300 49 507**
2	G ⅜"	22	12	21	17	**300 49 508**
2	G ½"	26	14	26	19	**300 49 509**
1	M10 x 1	12,5	7,5	13,5	12	**303 57 101**



Bleeder screw

Ventilation parts for ventilating the main lines in the single line lubrication systems

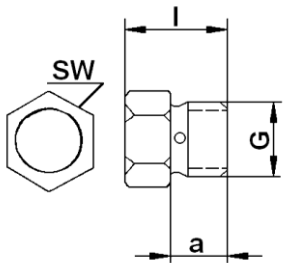
Detailed information under TA 308 49,701.

General

Version	Brass
Operating pressure	100 bar

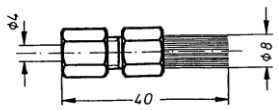
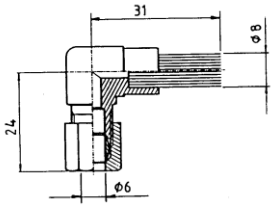
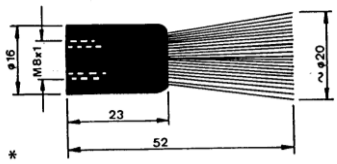
Order summary

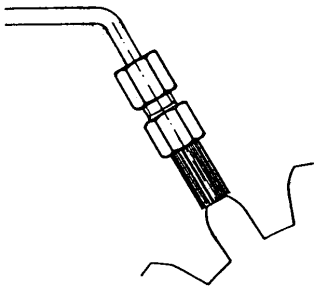
Dimensions [mm]				Order number
Thread	**l**	**a**	**A/F**	
M10 x 1	13,5	7,5	12	**303 57 100**



Brush for smearing oil

Detailed information under TA 308 50,501.

	Version	Order number
	Perlon 0.2 mm temperature-resistant up to 90 °C	**300 46 809**
		**300 45 841**
	Nylon black 0.3 mm, waved temperature-resistant up to 100 °C	**303 20 302**
	Brass wire 0.2 mm, waved temperature-resistant up to 200 °C	**303 20 305**



*Accessories: Pipe fittings see TA 3084400

POMAC
LUB SERVICES BVBA
Kortrijkstraat 187 B-8770 Ingelmunster
Tel. +32 (0)51 316 205 - Fax +32 (0)51 309 621 info@pomac.be - www.pomac.be

Special tools for lubrication system assembly

Detailed information under TA 308 54,001.

Pipe cutter and deburrer

for pipes up to 10 mm outer diameter

Order summary

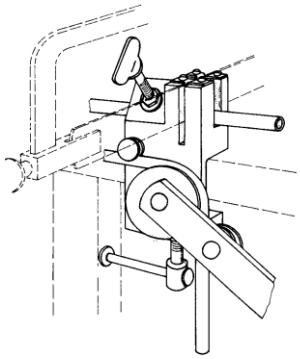
Length	Order number
120 mm	**300 54 006**

Order summary spare parts

Spare part	Order number
Cutter wheel	**300 54 034**

Pipe bending and sawing machines

for pipes from 6 to 12 mm outer diameter



Order summary

Rolls for pipe outer diameter	Rolls for bending radius	Order number
6+8 / 10 / 12 mm	20 / 25 / 26 mm	**300 54 004**

Cutting tool for plastic pipes

Pipe cutter for all plastic pipes and hoses up to 15 mm outer diameter

Order summary

Version	Order number
Plastic	**300 54 016**

Order summary spare parts

Spare part	Order number
Knife	**300 54 021**

Metering valve key

for tightening the metering valves in the distribution parts and the lubrication lines

Order summary

Version	Order number
Chrome-vanadium steel, chrome-plated	**300 54 120**