

LUBRICATION PUMP **PCP**

APPLICATION

Cartridge pneumatic lubrication pumps are used for lubricating friction and rolling bearings and are designed for 400 g cartridges with the connecting thread G1" (LUBE SHUTTLE) or EURO Cartridge, filled with a plastic lubricant with the lubricant consistency to NLGI 2.

DESCRIPTION

The cartridge pneumatic lubrication pump is available in two versions, which vary in the way how the air is supplied into the pneumatic cylinder.

1. In the case of PCP-1 lubrication pump, the air is brought into the pneumatic cylinder via an electropneumatic valve. In normal state, the electropneumatic valve is closed. To open the inlet into the pneumatic cylinder, the 24 V DC voltage must be brought to the solenoid terminals. The number of piston strokes is controlled by a suitable time relay with an independently adjustable time for opening and closing the outputs. The time relay is not part of the lubrication pump.
2. In the case of PCP-2 lubrication pump, the air is brought into the pneumatic cylinder via a frequency air regulator. The number of inlet air opening is set up on the air regulator. Whereas the PCP-1 lubrication pump needs both the pressure air and the electric power to operate, the PCP-2 lubrication pump needs the pressure air only.

INSTALLATION, SERVICE AND MAINTENANCE

The lubrication pump is mounted on a vertical flat surface using two M6x30 screws. It is necessary to insert a sludge trap with an air oiling device into the supply pipe to lubricate the air piston with the rubber sleeve. In the event that accidental condensation water is accumulated in the space of the pneumatic cylinder before the piston, you can drain it after unscrewing the screw.

Installation of the first full cartridge

Fit the 29x2 O-ring into the recess of the cartridge. The cartridge is screwed into the thread of the lubrication pump body and tightened so that the O-ring can seal properly. Unscrew the bleeder screw from the body. By pressing on the cartridge diaphragm, the lubricant is pushed out into the inlet chamber of the body. About 20 mm of the lubricant is forced out from the air hole; this means that the inlet chamber is free of air and is completely full of grease. Close the air hole using the bleeder screw.

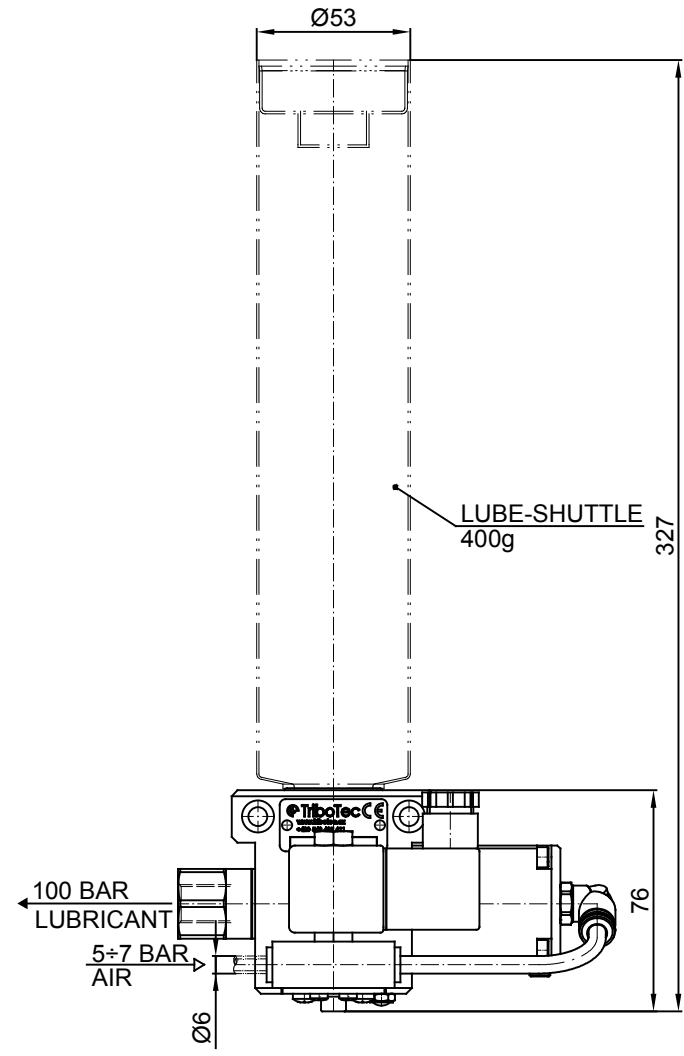
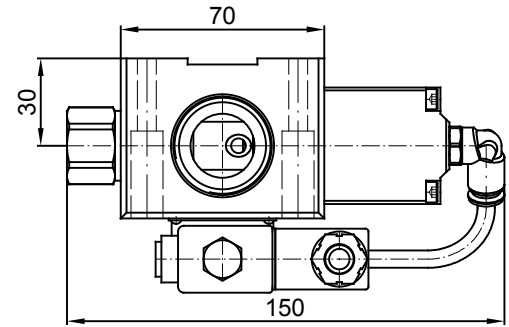
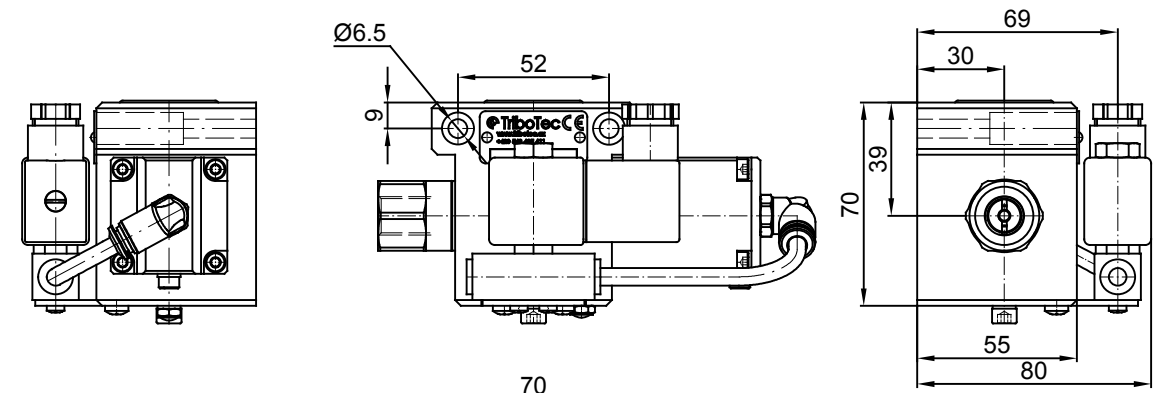
Pushing the grease into the pump inlet chamber is feasible by finger.

Replacement of an empty cartridge

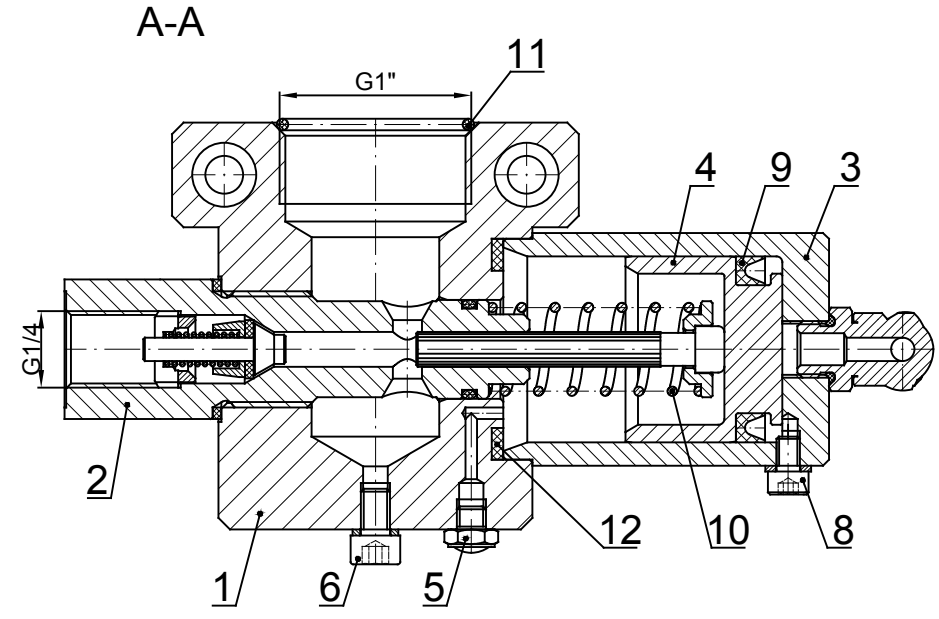
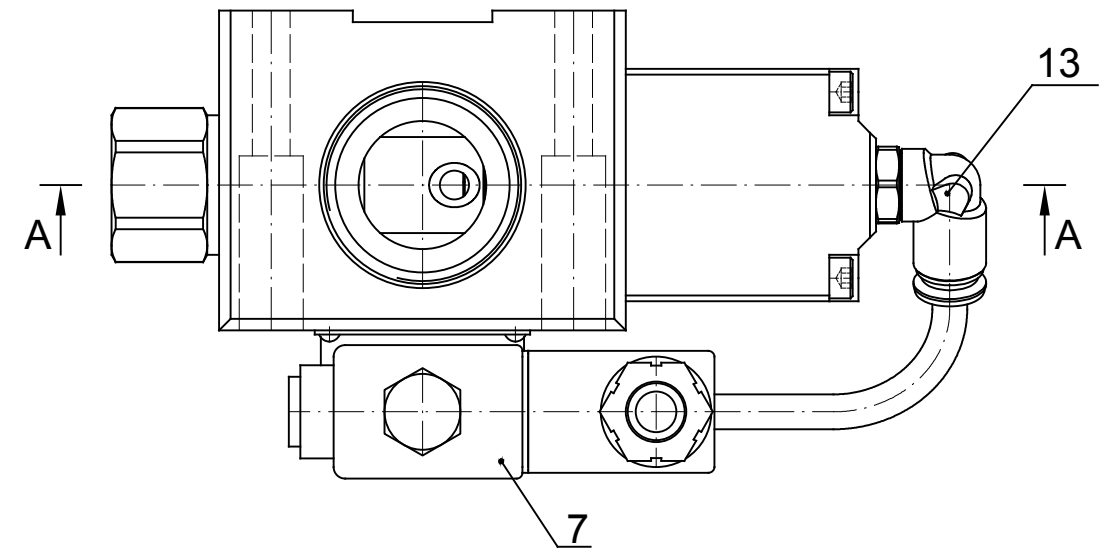
When replacing the empty cartridge with a full one, after unscrewing the plug from the full cartridge, fit it onto the threads of the lubrication pump and push slightly on the diaphragm until it is apparent that the lubricant starts penetrating round the thread. Then screw the cartridge into the body. By this procedure, all the air inside the inlet chamber of the operating cylinder is removed. It is no longer necessary to carry out bleeding of the working space through the bleeder screw.

TECHNICAL PARAMETERS

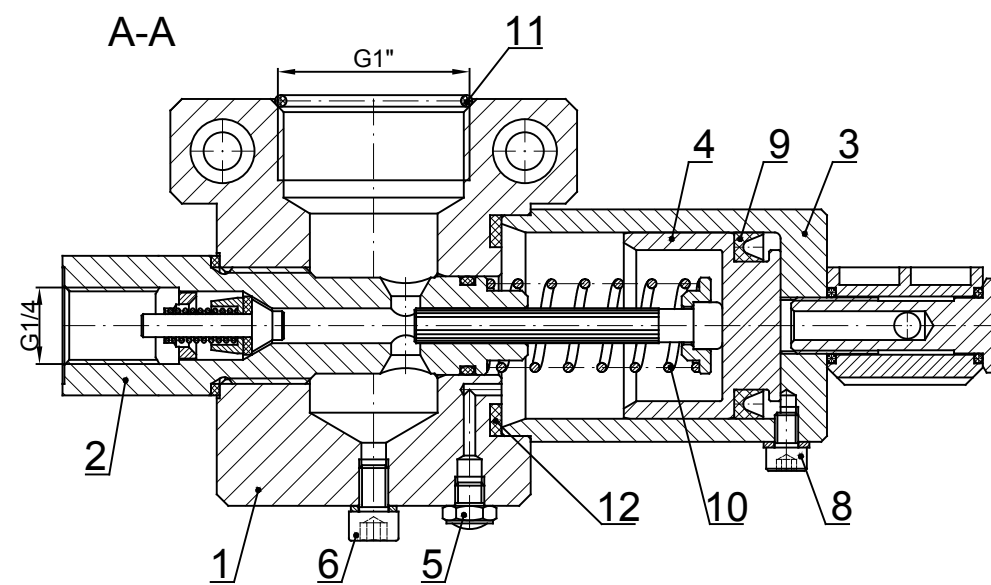
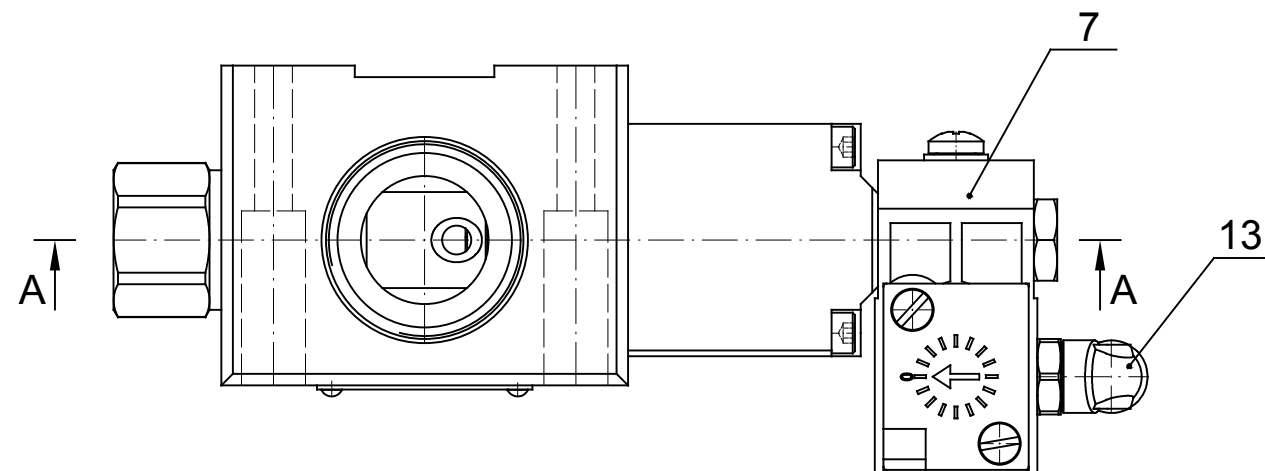
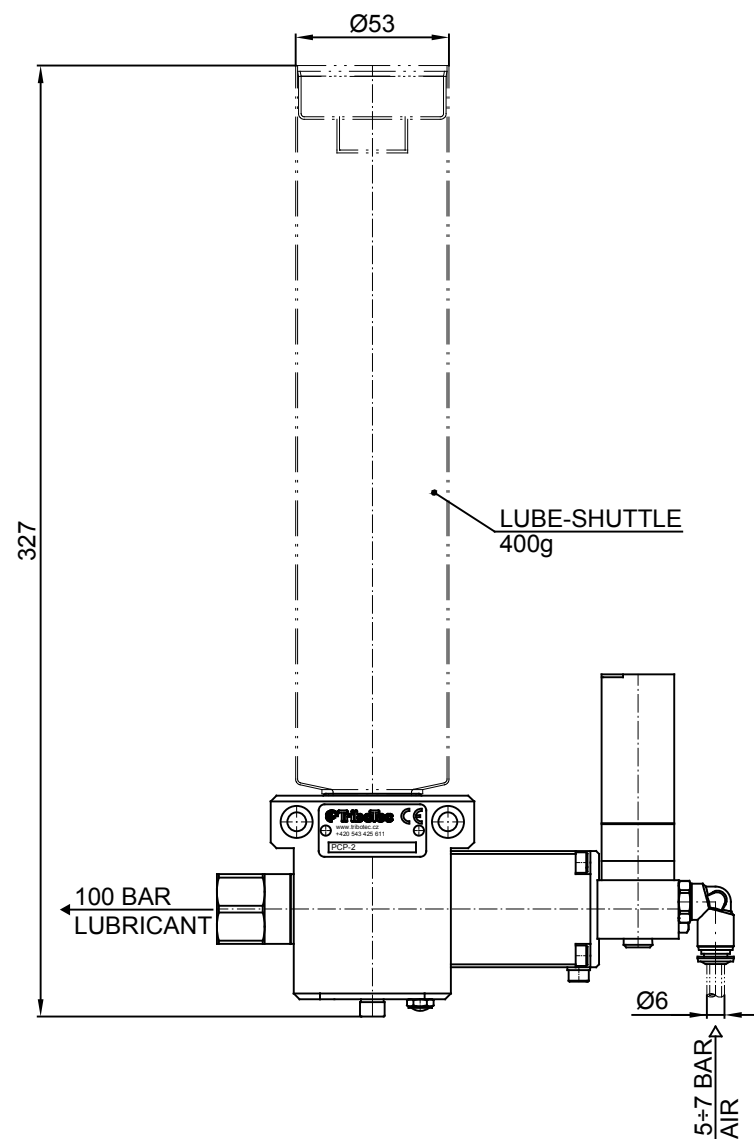
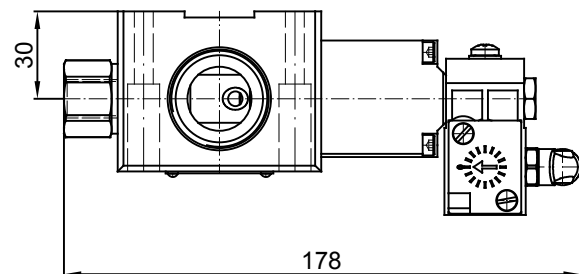
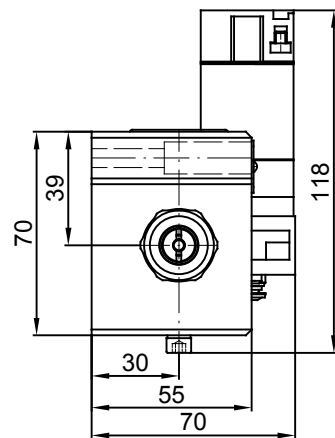
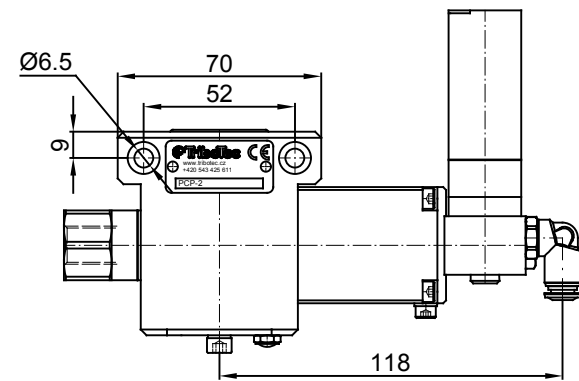
Maximum output pressure at the air pressure 7 bar	120 bar
Working output pressure at the air pressure 6 bar	100 bar
Nominal delivery quantity (oil-tested)	0,46 cm ³ /stroke
Working air pressure	5÷7 bar
Operating voltage of the solenoid valve	24 VDC
Number of outlets	1
Thread connection to the working cylinder	G1/4
Connection to the air inlet	PA tube 6/1,5
Recommended number of piston strokes	15÷20 stroke min. ⁻¹
Grease	max. NLGI 2
LUBE SHUTTLE cartridge	PCP-1, PCP-2
EURO cartridge	PCP-1M, PCP-2M
Temperature of the working environment	-15 up to +40 °C
Weight PCP-1	1,23 kg
Weight PCP-2	1,19 kg



Pos	Name
1	Lubrication pump body
2	Complete working cylinder
3	Pneumatic cylinder
4	Pneumatic cylinder piston
5	Noise silencer
6	Bleeder screw M5x8
7	Electromagnetic valve 3/2 24VDC
8	Sludge screw M4x6
9	Sleeve
10	Spring
11	O-ring 29x2
12	Absorbing ring
13	Angle connection

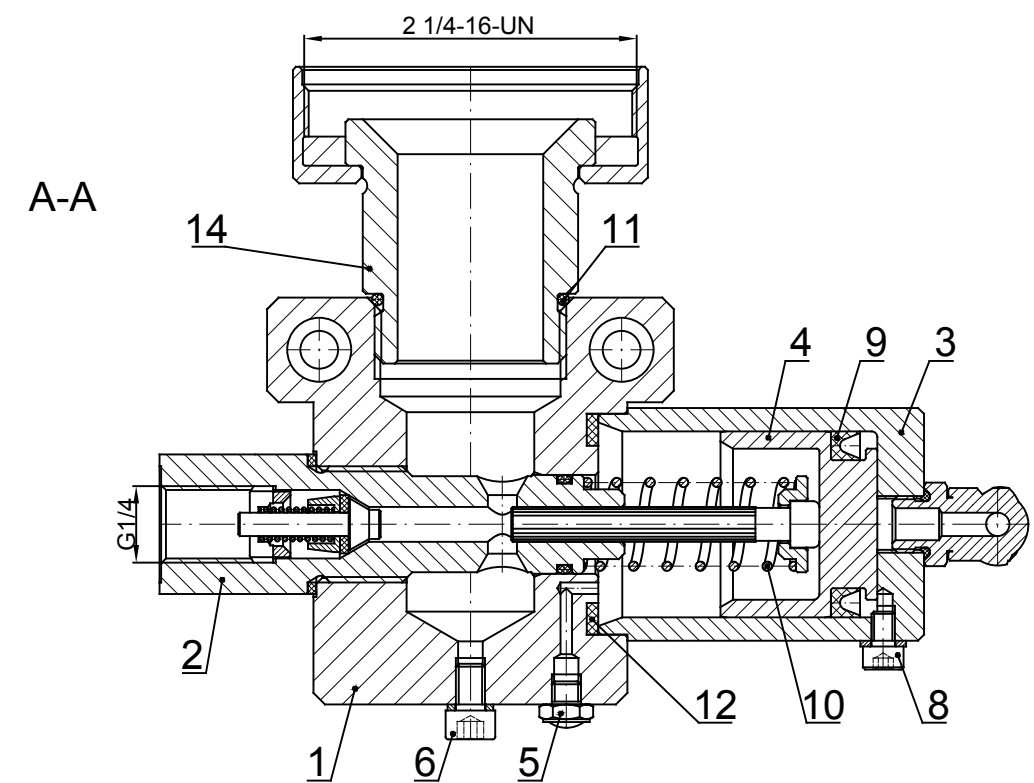
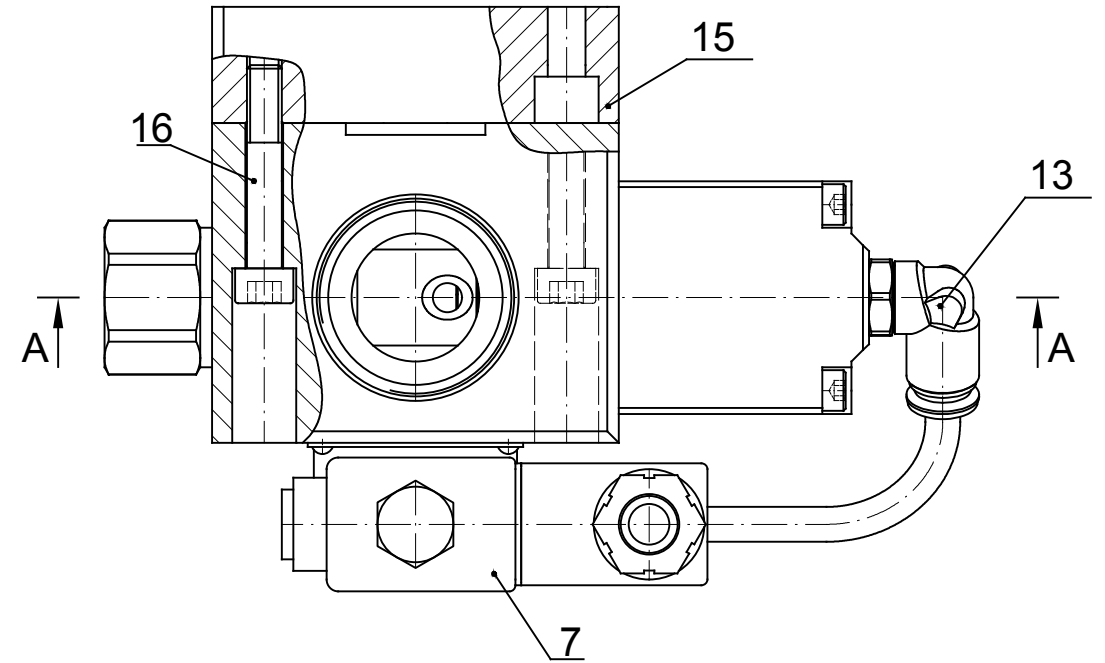
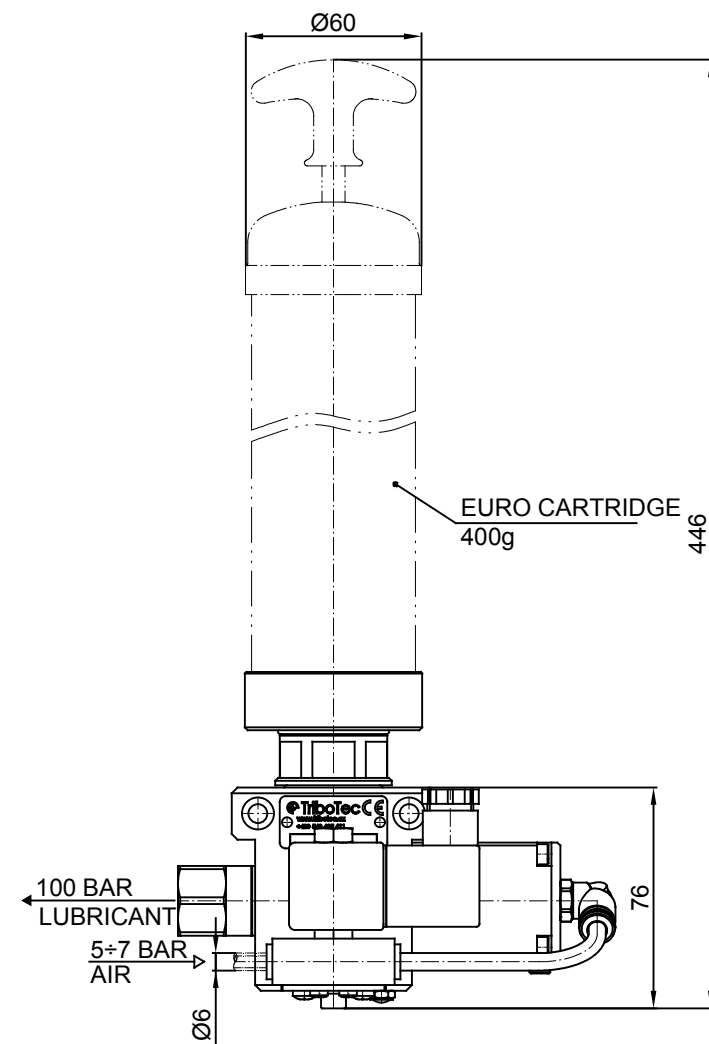
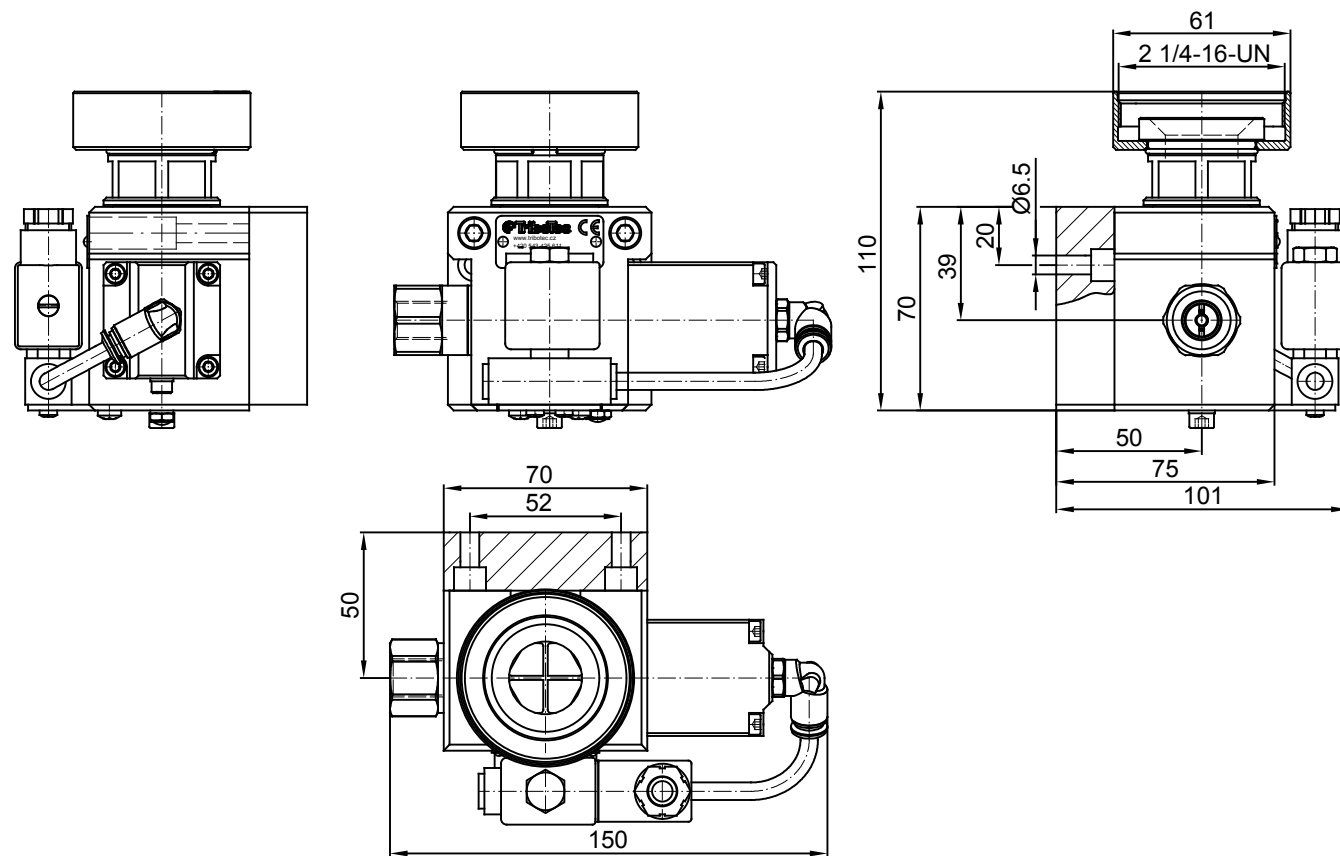


Name	LUBRICATION PUMP	 Košuličova 4 Brno www.tribotec.cz +420 543 425 611
Type	PCP-1	
Code	9 45 1758	




Pos	Name
1	Lubrication pump body
2	Complete working cylinder
3	Pneumatic cylinder
4	Pneumatic cylinder piston
5	Noise silencer
6	Bleeder screw M5x8
7	Frequency generator
8	Sludge screw M4x6
9	Sleeve
10	Spring
11	O-ring 29x2
12	Absorbing ring
13	Angle connection

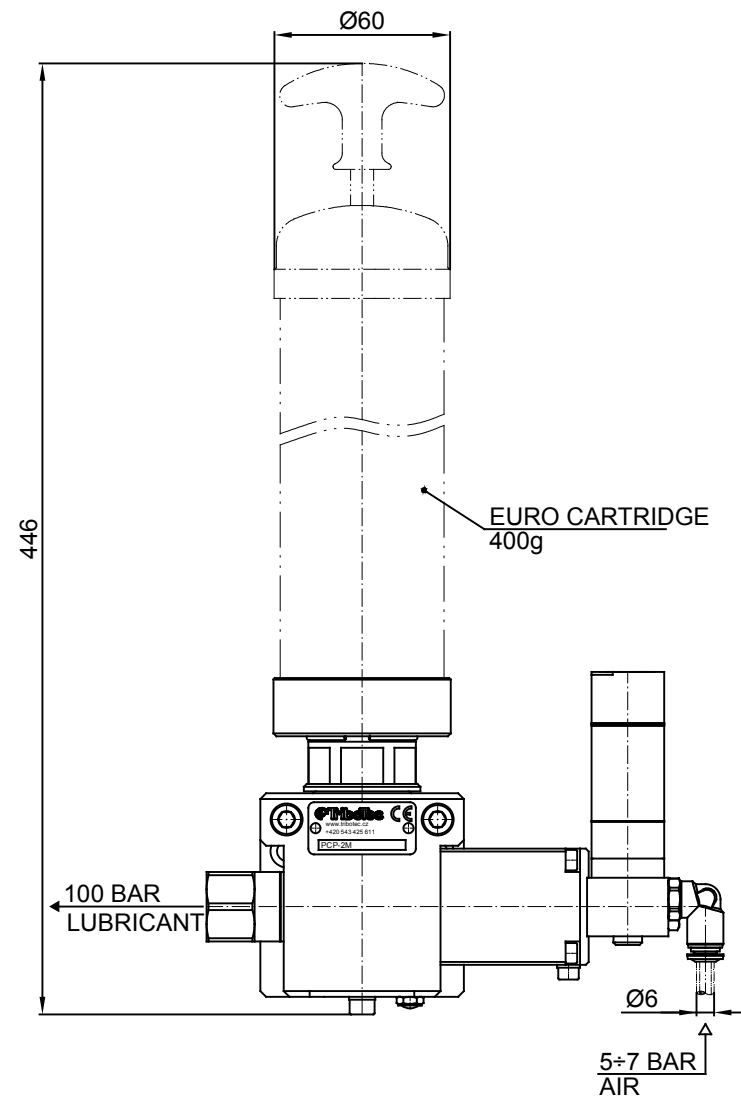
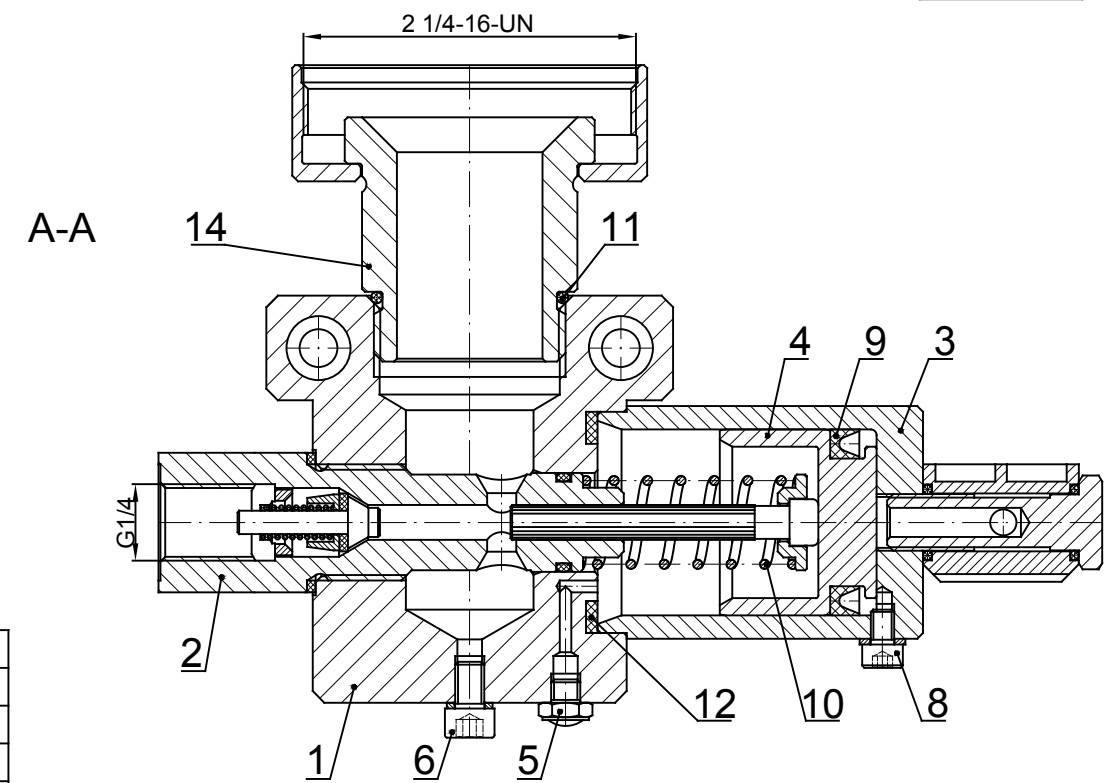
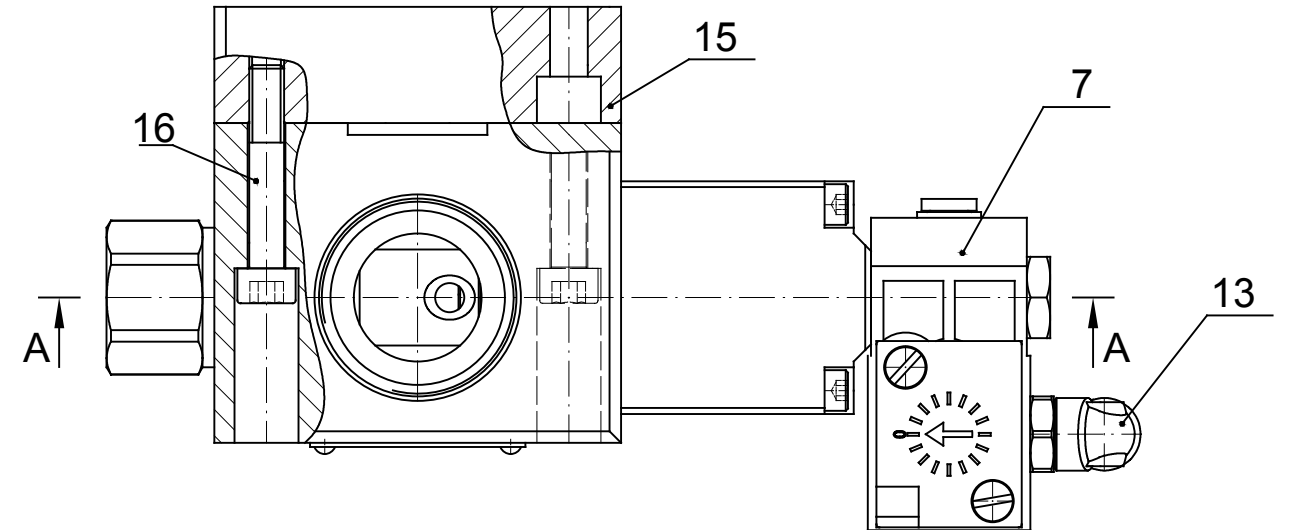
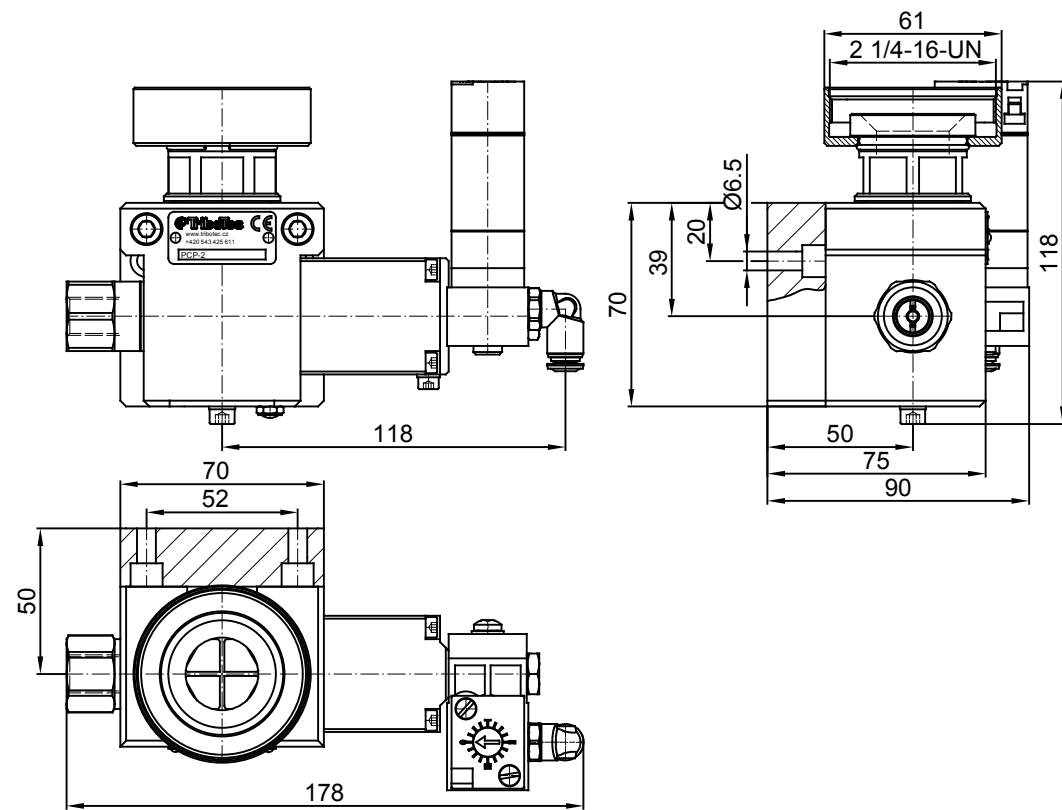
Name	LUBRICATION PUMP	Tribotec s.r.o. Košuličova 4 Brno www.tribotec.cz +420 543 425 611
Type	PCP-2	
Code	9 45 1789	



Pos	Name
1	Lubrication pump body
2	Complete working cylinder
3	Pneumatic cylinder
4	Pneumatic cylinder piston
5	Noise silencer
6	Bleeder screw M5x8
7	Electromagnetic valve 3/2 24VDC
8	Sludge screw M4x6
9	Sleeve
10	Spring
11	O-ring 29x2
12	Absorbing ring
13	Angle connection
14	Flange
15	Plate
16	Screw M6x35

Name	LUBRICATION PUMP	
Type	PCP-1M	
Code	9 45 2136	

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 Košuličova 4 Brno
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Pos	Name
1	Lubrication pump body
2	Complete working cylinder
3	Pneumatic cylinder
4	Pneumatic cylinder piston
5	Noise silencer
6	Bleeder screw M5x8
7	Frequency generator
8	Sludge screw M4x6
9	Sleeve
10	Spring
11	O-ring 29x2
12	Absorbing ring
13	Angle connection
14	Flange
15	Plate
16	Screw M6x35

Name	LUBRICATION PUMP	 Košuličova 4 Brno www.tribotec.cz +420 543 425 611
Type	PCP-2M	
Code	9 45 2138	