

CENTRALISED
LUBRICATION
SYSTEMS

PROGRESSIVE SYSTEMS

LUBRICATION SYSTEMS



PROGRESSIVE SYSTEMS

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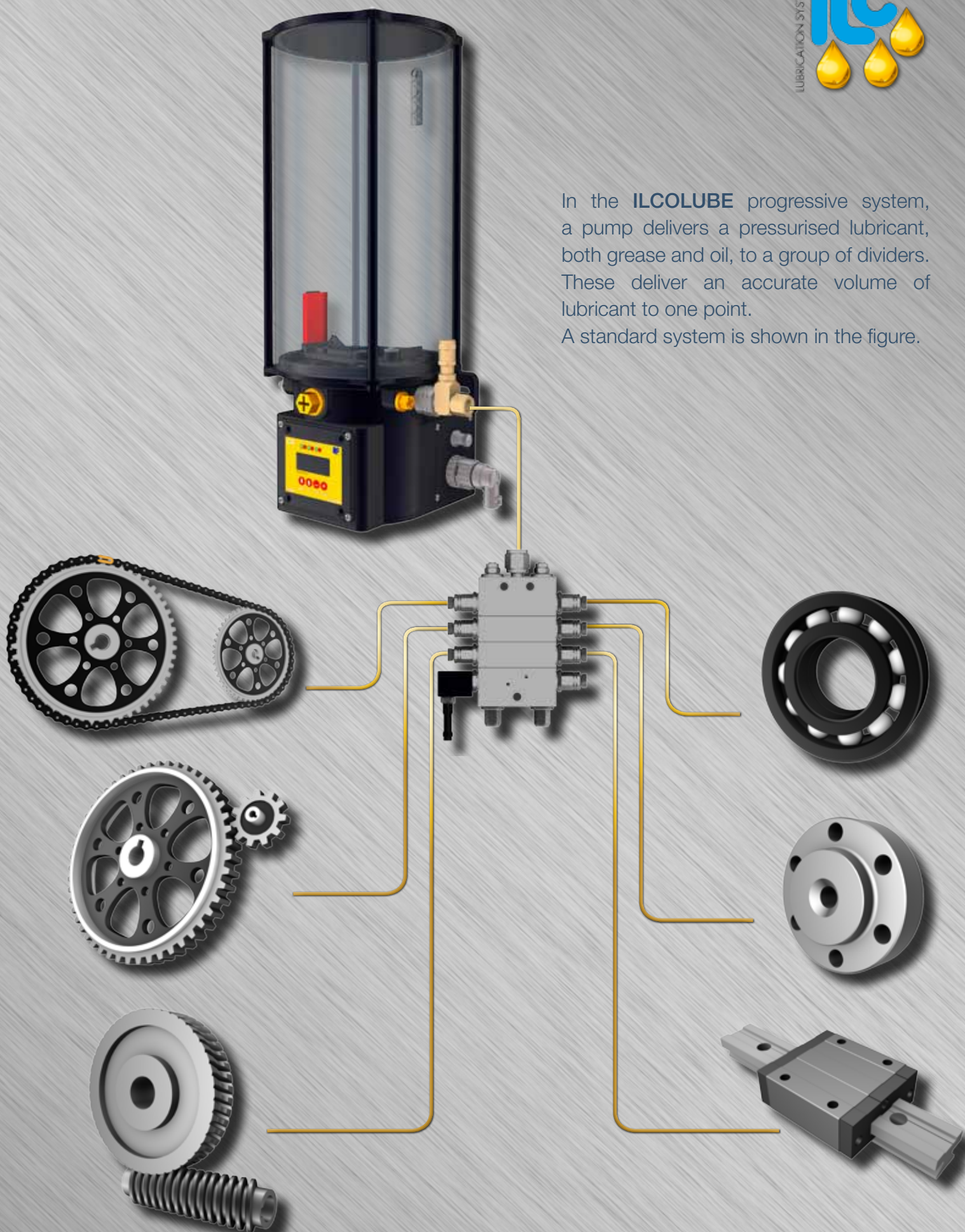
CENTRALISED LUBRICATION

AN ECONOMICAL WAY OF PROVIDING MACHINERY WITH TOP PERFORMANCE.

USING A CENTRALISED UNIT TO LUBRICATE ALL POINTS HAS THE FOLLOWING ADVANTAGES:

- 💧 Reduces preventive maintenance time.
- 💧 Prevents machine downtime, increasing production time.
- 💧 Enhances personnel safety by keeping them far from moving parts.
- 💧 Lengthens the life time of bearings and moving parts in especially heavy-duty environments by increasing lubrication frequency.
- 💧 There is no additional system requiring maintenance. Once installed, it does not require periodical maintenance.
- 💧 Maximises production time, minimising failures caused by lack of lubrication.
- 💧 Maintenance personnel appreciate how easy it is to fill out the preventive maintenance sheets.
- 💧 Installation of the centralised lubrication system is easy and economical.
- 💧 No risk of not being able to lubricate hard to reach spots.

In the **ILCOLUBE** progressive system, a pump delivers a pressurised lubricant, both grease and oil, to a group of dividers. These deliver an accurate volume of lubricant to one point.
A standard system is shown in the figure.



PMO OIL HAND PUMPS

The **PMO** hand pumps are intended for the provision of grease lubrication systems where progressive dividers are used. The pump body is made of light alloy and houses the steel pumping piston operated by a vertical lever. There is a lubricant tank at the top with relative cap and inlet filter.

An adjustable safety valve protects the pump and the components from overpressure. The lubricant leaking from the valve indicates a system block.

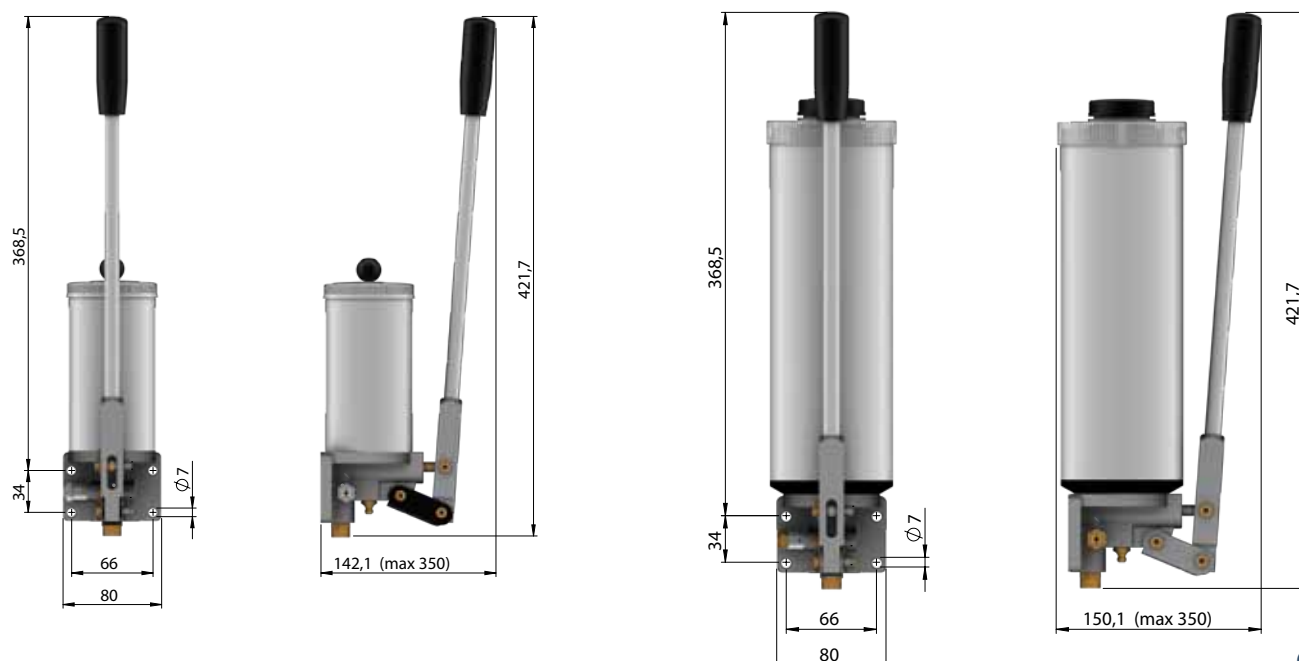
Technical Features

DISCHARGE	1 CC / STROKE
OPERATING PRESSURE	150 bar (2130 PSI)
TANKS	0.3 L O 1.4 L METAL
LUBRICANTS	MINERAL OILS 50 - 1000 cSt
TEMPERATURE	FROM -10 °C TO + 60 °C
DELIVERY FITTING	M12x1 PIPE D 6 - 8
ASSEMBLY	VERTICAL

Ordering Codes

PART NUMBER	CODE	TANK	CAPACITY
00.133.0	PMO-03	METAL	0.3 L
00.134.0	PMO-10	METAL	1.4 L

Overall Dimensions



The **PMG** hand pumps are intended for the provision of grease lubrication systems where progressive dividers are used. The pump body is made of light alloy and houses the steel pumping piston operated by a vertical lever. There is a lubricant tank at the top with relative presser disk and, on model **PMG-10**, the compression spring.

An adjustable safety valve protects the pump and the components from overpressure. The lubricant leaking from the valve indicates a system block.

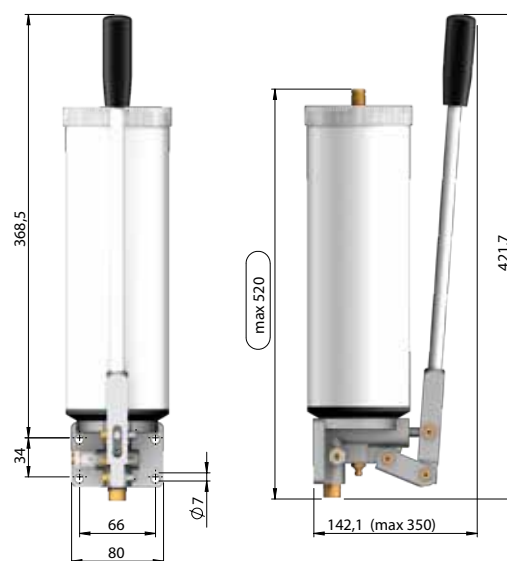
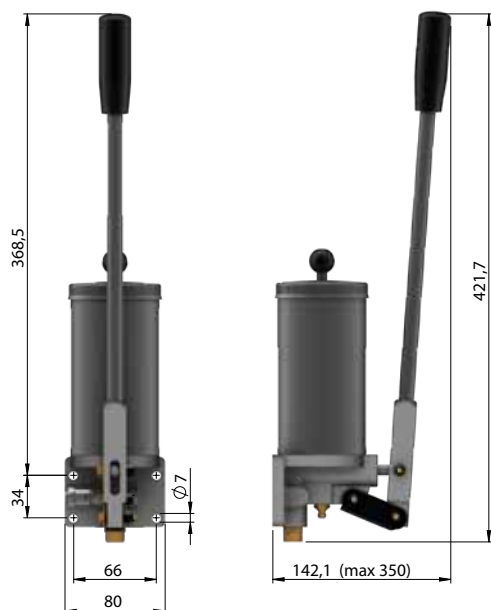
Technical Features

DISCHARGE	1 CC / STROKE
OPERATING PRESSURE	150 bar (2130 PSI)
TANKS	0.3 L O 1.4 L METAL
LUBRICANTS	PMG-3 GREASE NLGI 0 PMG-10 GREASE NLGI 2
TEMPERATURE	FROM -10 °C TO + 60 °C
DELIVERY FITTING	M12x1 PIPE D 6 - 8
ASSEMBLY	VERTICAL

Ordering Codes

PART NUMBER	CODE	TANK	CAPACITY
00.135.0	PMG-3	METAL	0.3 KG
00.132.0	PMG-10	METAL	1.4 KG

Overall Dimensions



HAND PUMP FOR 400 G CARTRIDGES

HAND PUMP

00.137.2

(for cartridge / not included)

Features: 400 g., body Ø 57 mm, black

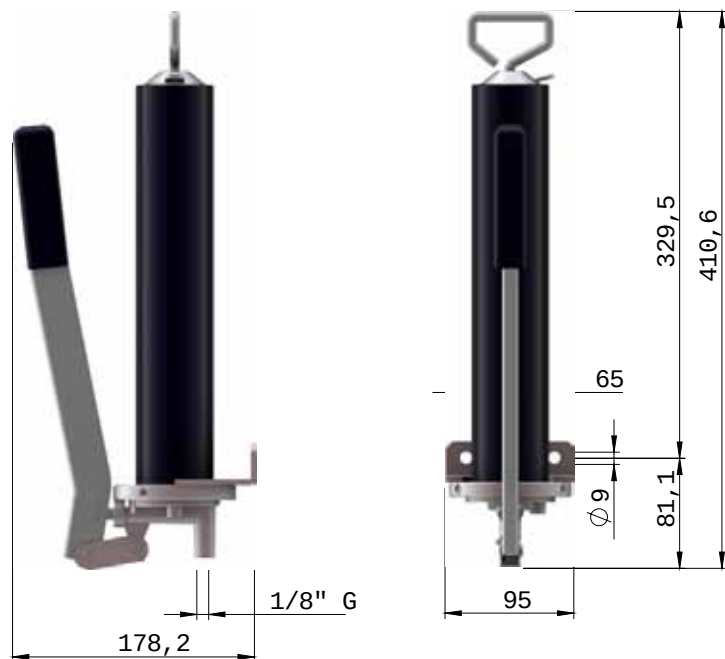
Pump: grease cartridge loading

Lever: in galvanised steel with plastic knob

Body: in steel and epoxy powder painting

PERFORMANCE

BACK PRESSURE	Discharge per stroke
100 bar	1,0 – 1,5 cc
200 bar	0 cc



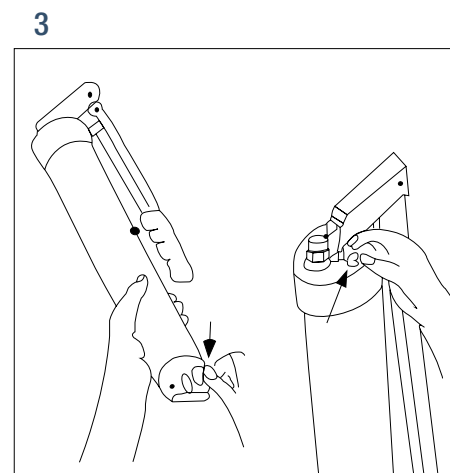
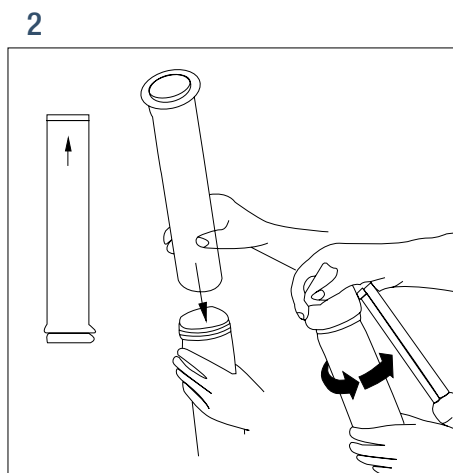
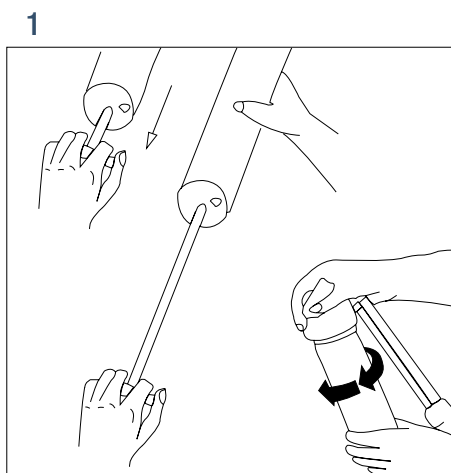
USE AND MAINTENANCE

Using with cartridge: follow the instructions

1. Unscrew the compressor head and pull the rod outwards
2. Remove the cartridge cap and cut the other end along the border
3. Insert the cartridge in the compressor, screw that head back on and insert the rod by pressing the stop lever
4. Purge by unscrewing the breather plug and press the lever

It is not advised to use with loose grease.

Maintenance: purge the compressor periodically. No particular maintenance operations are required.



12 VOLT GREASE GUN (for loose grease or cartridge)

Suitable for greasing with any type non-corrosive grease, in cartridge or loose. The grip houses a 12 Volt battery which makes it possible to dispense grease without using compressed air. It has excellent performance: the gun overcomes a back pressure of 200 bar

and beyond, being able to grease the greater part of clogged grease nipples.

Grease comes out continuously: when the operator presses the supply button, the inner gears push grease constantly towards the high pressure connection. Releasing the supply button stops the gun.

TECHNICAL FEATURES

Head and power supply in plastic and steel

Body steel cylinder with anti-corrosion treatment and epoxy powder painting

Rechargeable battery 12 Volts compliant with Directive ROHS

Recharging time 1 hour (12 hours first charge)

Power supply motor 12 V DC

Battery charger power supply 220 V (50 Hz)

Maximum back pressure 300 bar

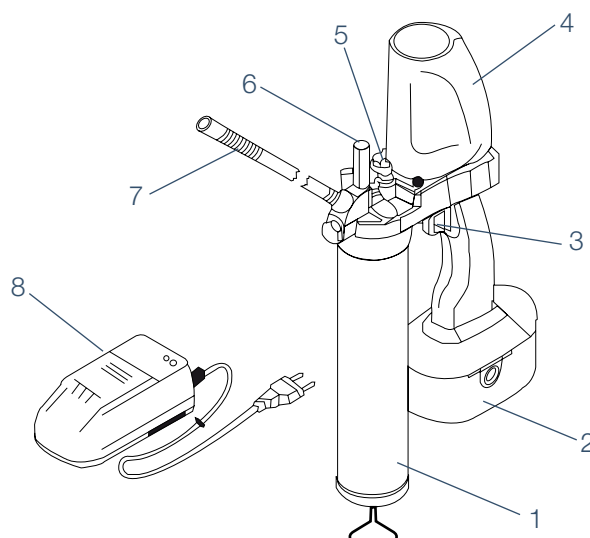
Supply 80 cc/min, with grease NLGI 2 (160cSt)



PART NUMBER	VERSIONS AVAILABLE
G00189	for loose grease
G00189A	cartridge 600gr. (Ø 56)
G00189B	cartridge 400gr. (Ø 56)
G00189C	cartridge 600gr. (Ø 53)
G00189D	cartridge 400gr. (Ø 53)

DESCRIPTION

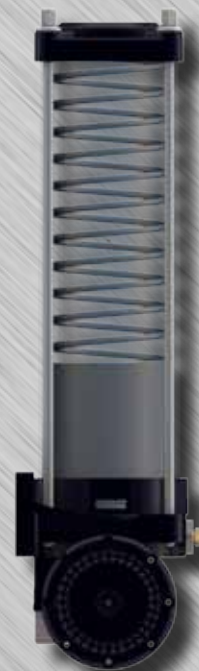
1. Cylinder
2. 12 Volt battery
3. Switch
4. Motor
5. Venting valve
6. Safety valve
7. Outlet pipe with 4 jaw head
8. Battery charger



STANDARD PACK



PNEUMATIC PUMPS PA

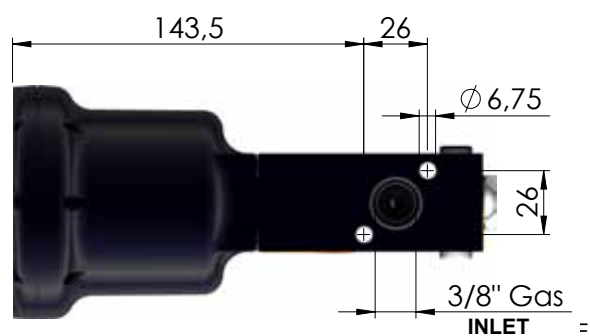
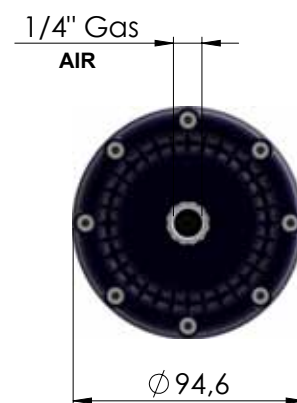
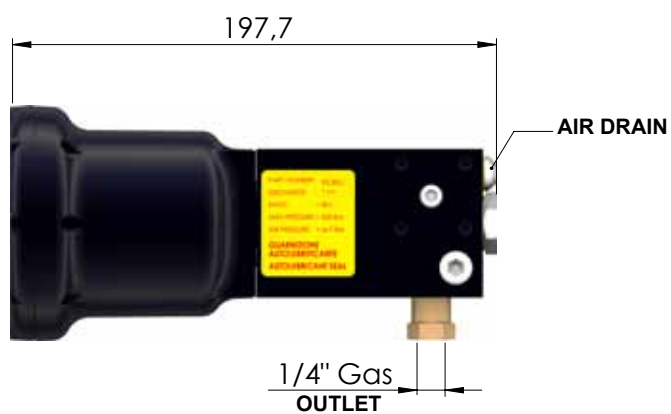


PAIL NUMBER +90 330.2
DISCHARGE +2.0 L
KWC +30.1
MAX PRESS +150 Bar
AIR PRESSURE +4.7 Bar
GUARNIZIONE
AUTOLUBRIFICANTE
AUTOLUBRICANT SEAL



Ordering Codes

PART NUMBER	CODE	DISCHARGE
90.300.1	PA-1	1CC / CYCLE
90.300.2	PA-1.5	1.5CC / CYCLE
90.300.3	PA-2	2CC / CYCLE

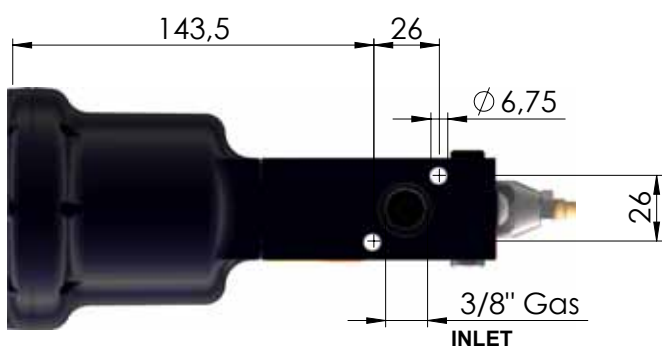
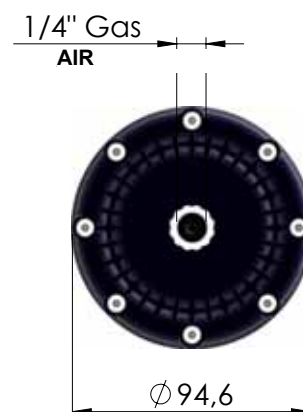
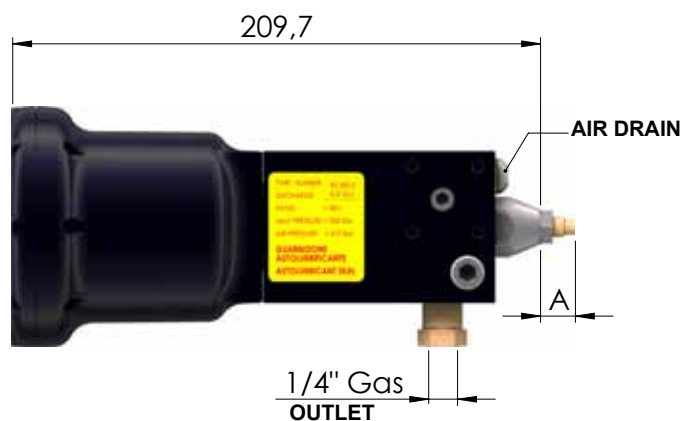


PNEUMATIC PUMPS PA



Ordering Codes

PART NUMBER	CODE	DISCHARGE
90.300.0	PA-03/2	0.3-2CC / CYCLE



A	DISCHARGE / CYCLE
	0.3 CC
16	1 CC
24	1.5 CC
29.5	2 CC

The **PAO** pneumatic pumps are intended for the provision of oil lubrication systems where progressive dividers are installed. The pump is fitted at the bottom of the tank and controlled by a single acting piston fed by compressed air. A spring returns it to the initial position. They are also equipped with minimum level indicator and cap with inlet filter.



Technical Features

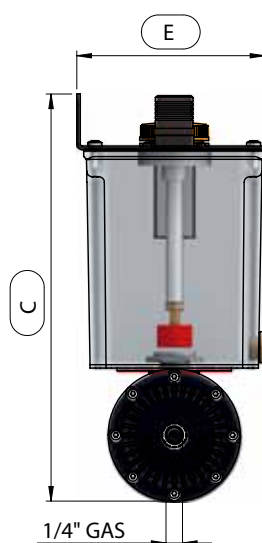
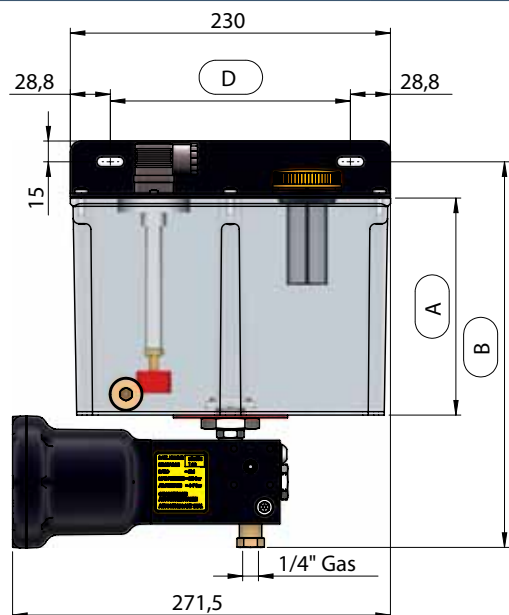
DISCHARGE CC / CYCLE	1 - 1.5 - 2 FIXED 0.3 - 2 ADJUSTABLE
OPERATING PRESSURE	150 bar (2130 PSI)
RATIO	50:1
INLET AIR PRESSURE	FROM 4 (57 PSI) TO 7 bar (114 PSI)
CYCLES / MINUTE	10 MAX WITH OIL
DELIVERY FITTING	1/4" GAS
OPERATING TEMPERATURE	FROM - 10°C TO + 80°C
LUBRICANTS	OILS 50 – 1000 cSt 40°C
ASSEMBLY	VERTICAL
ELECTRICAL LEVEL	1.5 A - 250 V AC - 200 V DC - 50W

Ordering Codes

PART NUMBER	CODE	TANK	CAPACITY	DISCHARGE
90.315.1	PAO-3 NY	TRANSPARENT	4 L	1 CC CYCLE
90.317.1	PAO-6 NY	TRANSPARENT	6 L	
90.315.2	PAO-3 NY	TRANSPARENT	4 L	1.5 CC CYCLE
90.317.2	PAO-6 NY	TRANSPARENT	6 L	
90.315.3	PAO-3 NY	TRANSPARENT	4 L	2 CC CYCLE
90.317.3	PAO-6 NY	TRANSPARENT	6 L	
90.315.4	PAO-3 NY	TRANSPARENT	4 L	0.3-2 CC CYCLE
90.317.4	PAO-6 NY	TRANSPARENT	6 L	

Overall dimensions

TANK	A	B	C	D	E	F
3 L PLASTIC	155	181	290.5	172	135	////
6 L PLASTIC	250	276	385.5	172	135	////



PNEUMATIC OIL PUMPS PAO

The **PAO** pneumatic pumps are intended for the provision of oil lubrication systems where progressive dividers are installed. The pump is fitted at the bottom of the tank and controlled by a single acting piston fed by compressed air. A spring returns it to the initial position. They are also equipped with minimum level indicator and cap with inlet filter.



Technical Features

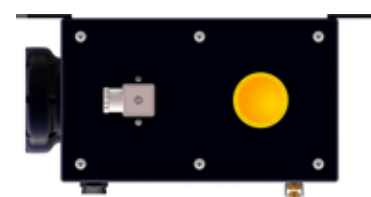
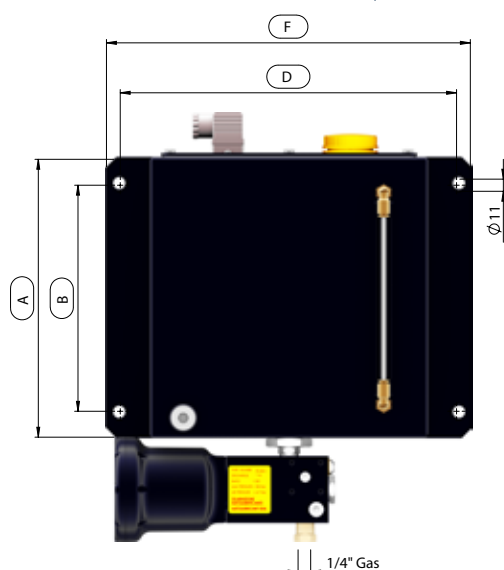
DISCHARGE CC / CYCLE	1 - 1.5 - 2 FIXED 0.3 - 2 ADJUSTABLE
OPERATING PRESSURE	150 bar (2130 PSI)
RATIO	50:1
INLET AIR PRESSURE	FROM 4 (57 PSI) TO 7 bar (114 PSI)
CYCLES / MINUTE	10 MAX WITH OIL
DELIVERY FITTING	1/4" GAS
OPERATING TEMPERATURE	FROM - 10°C TO + 80°C
LUBRICANTS	OILS 50 – 1000 cSt 40°C
ASSEMBLY	VERTICAL
ELECTRICAL LEVEL	1.5 A - 250 V AC - 200 V DC - 50W

Ordering Codes

PART NUMBER	CODE	TANK	CAPACITY	DISCHARGE
90.314.1	PAO-3 LA	METAL	5 L	1 CC CYCLE
90.316.1	PAO-6 LA	METAL	8 L	
90.317.5	PAO-12 LA	METAL	12 L	
90.314.2	PAO-3 LA	METAL	5 L	1.5 CC CYCLE
90.316.2	PAO-6 LA	METAL	8 L	
90.317.6	PAO-12 LA	METAL	12 L	
90.314.3	PAO-3 LA	METAL	5 L	2 CC CYCLE
90.316.3	PAO-6 LA	METAL	8 L	
90.317.7	PAO-12 LA	METAL	12 L	
90.314.4	PAO-3 LA	METAL	5 L	0.3-2 CC CYCLE
90.316.4	PAO-6 LA	METAL	8 L	
90.317.8	PAO-12 LA	METAL	12	

Overall dimensions

TANK	A	B	C	D	E	F
5 L METAL	156	181	292.5	172	152	274.5
8 L METAL	252	205	387	305	164	330
12 L METAL	252	205	389	330	197	355



The **PAG** pneumatic pumps are intended for the provision of grease lubrication systems where progressive dividers are installed. The pump is fitted at the bottom of the tank and controlled by a single acting piston fed by compressed air. A spring returns it to the initial position. A compression spring with presser disk is inserted inside the tank. They are also equipped with an electric minimum level indicator and filler filter. Their high level performance allows them to be applied in very large systems with a high number of points.

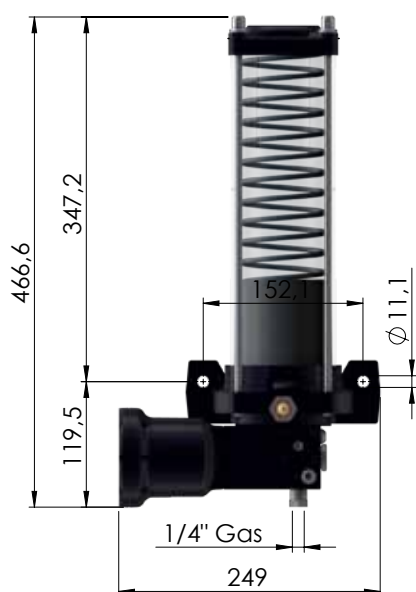
Technical Features

DISCHARGE CC / CYCLE	1 - 1.5 - 2 FIXED 0.3 - 2 ADJUSTABLE
OPERATING PRESSURE	350 bar (4950 PSI)
RATIO	50 : 1
INLET AIR PRESSURE	FROM 4 (57 PSI) TO 7 bar (114 PSI)
CYCLES / MINUTE	4 MAX WITH GREASE
DELIVERY FITTING	1/4" GAS
OPERATING TEMPERATURE	FROM - 10°C TO + 80°C
LUBRICANTS	GREASE MAX NLGI 3
ASSEMBLY	VERTICAL - HORIZONTAL
ELECTRICAL LEVEL	1 A -150 V AC/DC - 20 W



Ordering Codes

PART NUMBER	CODE	TANK	CAPACITY	DISCHARGE
90.304.1	PAG-50PL	TRANSPARENT	2.5 KG	1CC
90.304.2	PAG-50PL	TRANSPARENT	2.5 KG	1.5CC
90.304.3	PAG-50PL	TRANSPARENT	2.5 KG	2CC
90.304.4	PAG-50PL	TRANSPARENT	2.5 KG	0.3CC - 2CC



PNEUMATIC GREASE PUMPS PAG

The **PAG** pneumatic pumps are intended for the provision of grease lubrication systems where progressive dividers are installed. The pump is fitted at the bottom of the tank and controlled by a single acting piston fed by compressed air. A spring returns it to the initial position. A compression spring with presser disk is inserted inside the tank. They are also equipped with an electric minimum level indicator and filler filter. Their high level performance allows them to be applied in very large systems with a high number of points.

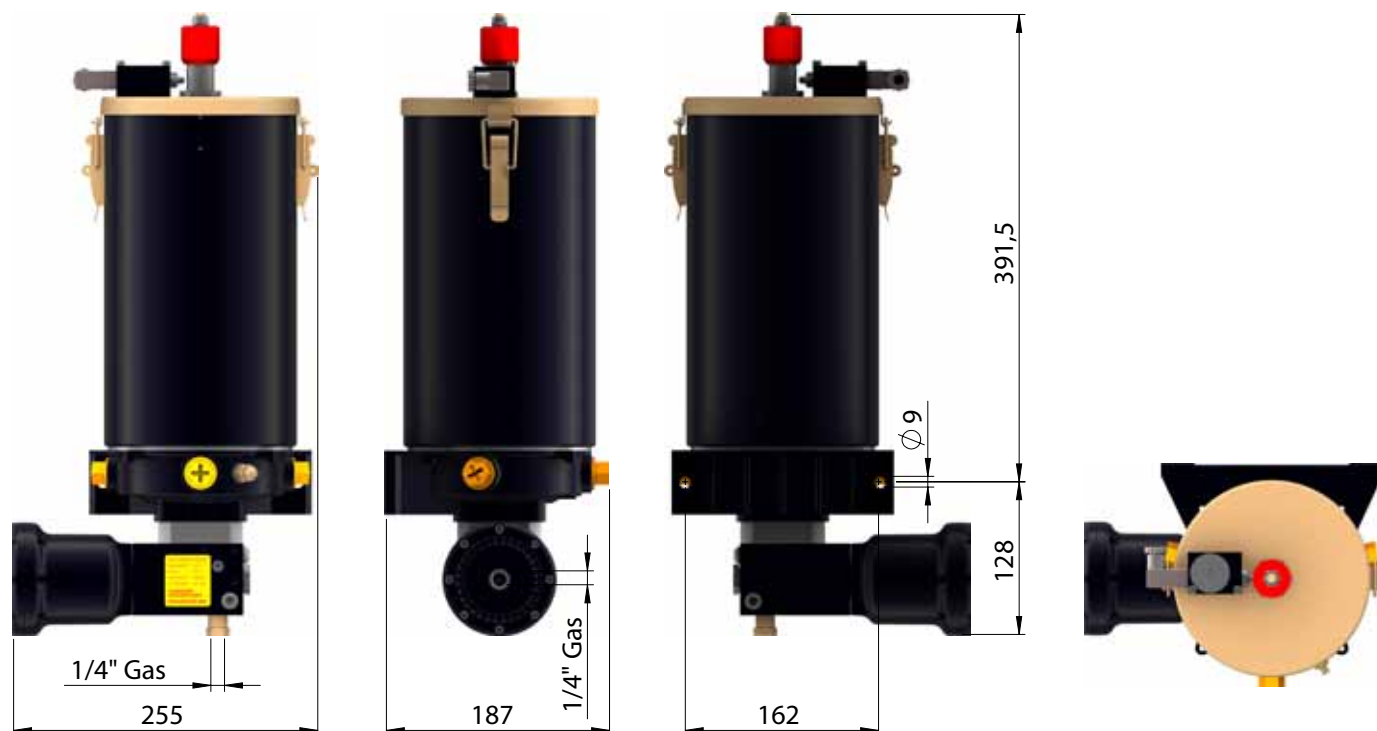
Technical Features

DISCHARGE CC / CYCLE	1 - 1.5 - 2 FIXED 0.3 - 2 ADJUSTABLE
OPERATING PRESSURE	350 bar (4950 PSI)
RATIO	50 : 1
INLET AIR PRESSURE	FROM 4 (57 PSI) TO 7 bar (114 PSI)
CYCLES / MINUTE	4 MAX WITH GREASE
DELIVERY FITTING	1/4" GAS
OPERATING TEMPERATURE	FROM - 10°C TO + 80°C
LUBRICANTS	GREASE MAX NLGI 3
ASSEMBLY	VERTICAL - HORIZONTAL
ELECTRICAL LEVEL	1 A -150 V AC/DC - 20 W



Ordering Codes

PART NUMBER	CODE	CAPACITY	DISCHARGE
90.311.3	PAG-60	5 KG	1CC
90.311.4	PAG-60	5 KG	1.5CC
90.311.5	PAG-60	5 KG	2CC
90.311.2	PAG-60	5 KG	0.3CC - 2CC



The **PAG** pneumatic pumps are intended for the provision of grease lubrication systems where progressive dividers are installed. The pump is fitted at the bottom of the tank and controlled by a single acting piston fed by compressed air. A spring returns it to the initial position. A compression spring with presser disk is inserted inside the tank. They are also equipped with an electric minimum level indicator and filler filter. Their high level performance allows them to be applied in very large systems with a high number of points.

Technical Features

DISCHARGE CC / CYCLE	1 - 1.5 - 2 FIXED 0.3 - 2 ADJUSTABLE
OPERATING PRESSURE	350 bar (4950 PSI)
RATIO	50 : 1
INLET AIR PRESSURE	FROM 4 (57 PSI) TO 7 bar (114 PSI)
CYCLES / MINUTE	4 MAX WITH GREASE
DELIVERY FITTING	1/4" GAS
OPERATING TEMPERATURE	FROM - 10°C TO + 80°C
LUBRICANTS	GREASE MAX NLGI 3
ASSEMBLY	VERTICAL - HORIZONTAL
ELECTRICAL LEVEL	1 A -150 V AC/DC - 20 W



Ordering Codes

PART NUMBER	CODE	CAPACITY	DISCHARGE
90.311.6	PAG-100	10 KG	1CC
90.311.7	PAG-100	10 KG	1.5CC
90.311.8	PAG-100	10 KG	2CC
90.311.9	PAG-100	10 KG	0.3CC - 2CC



ELECTRIC OIL PUMPS MPO



The **MPO** electric pumps are intended for the provision of oil lubrication systems where progressive dividers are installed. The pump motor unit is applied to a sheet-metal angle plate acting as a cover of the tank. A valve unit which provides priming and bypass functions is applied to the gear pump. They are also equipped with electric minimum level indicator, pressure switch, filler cap with filter and intake filter. On demand, special voltage and single phase 115 V AC - 230 V AC motors can be installed. Their high pressure and flow rate performance allow them to be used in medium and large size systems.

Technical Features

DISCHARGE/1'	150 CC - 250 CC - 500 CC
OPERATING PRESSURE	50 - 120 bar ADJUSTABLE
TANKS	4 - 5 - 6 - 8 - 12 - 50 L
LUBRICANTS	MINERAL OILS 50 - 1000 cSt
DELIVERY FITTING	M12x1 PIPE D.6 - 8
MOTOR	THREE-PHASE MULTI-VOLTAGE
POWER SUPPLY VOLTAGE	220-240 /380-420 V 50 Hz
POWER SUPPLY VOLTAGE	254-280/440-480 v 60 Hz
ABSORPTION	1.05-1.22/0.63-0.71 A
POWER SUPPLY VOLTAGE	230 V AC 50 Hz
ABSORPTION	1.49 A
POWER SUPPLY VOLTAGE	115 V AC 60 Hz
ABSORPTION	2.76 A
POWER	KW 0.18
OPERATING TEMPERATURE	FROM -20 °C TO + 80 °C
PROTECTION RATING	IP-55
SERVICE	CONTINUOUS S1
INSULATION	CLASS F
MINIMUM ELECTRIC LEVEL	1.5A - 250 V AC - 200 V DC - 50 W

Ordering Codes

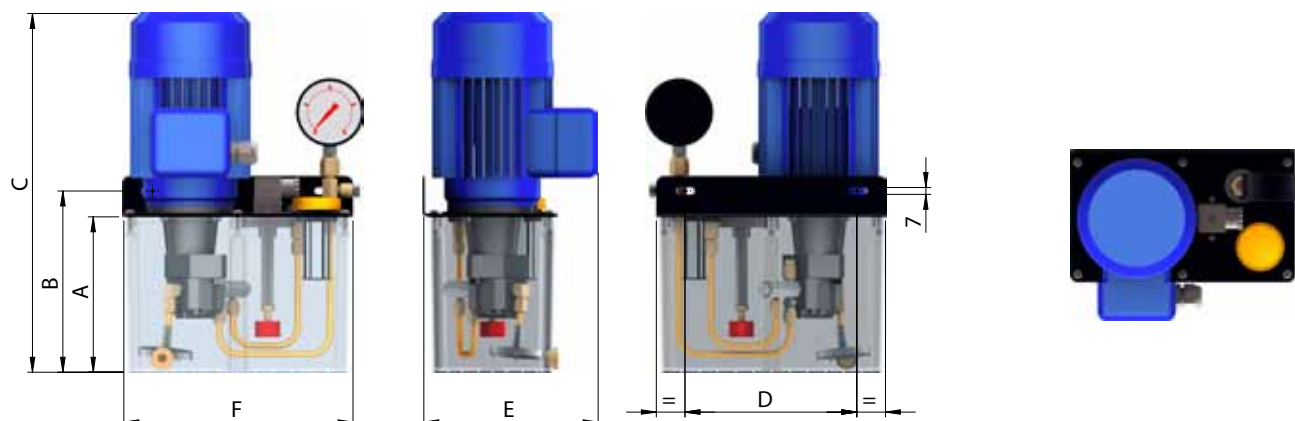
PART NUMBER	CODE	TANK	CAPACITY	DISCHARGE
00.860.0	MPO-3NY150	TRANSPARENT	4 L	150CC/1'
00.860.3	MPO-6NY150	TRANSPARENT	6 L	
00.860.1	MPO-3NY250	TRANSPARENT	4 L	250CC/1'
00.860.4	MPO-6NY250	TRANSPARENT	6 L	
00.860.2	MPO-3NY500	TRANSPARENT	4 L	500CC/1'
00.860.5	MPO-6NY500	TRANSPARENT	6 L	



The appearance of the products can be subject to change without prior notice

Overall dimensions

TANK	A	B	C	D	E	F
4 L	155	181	348	167	170	230
6 L	250	276	443	167	170	230



ELECTRIC OIL PUMPS MPO

The **MPO** electric pumps are intended for the provision of oil lubrication systems where progressive dividers are installed. The pump motor unit is applied to a sheet-metal angle plate acting as a cover of the tank. A valve unit which provides priming and bypass functions is applied to the gear pump. They are also equipped with electric minimum level indicator, pressure switch, filler cap with filter and intake filter. On demand, special voltage and single phase 115 V AC - 230 V AC motors can be installed. Their high pressure and flow rate performance allow them to be used in medium and large size systems.

Technical Features

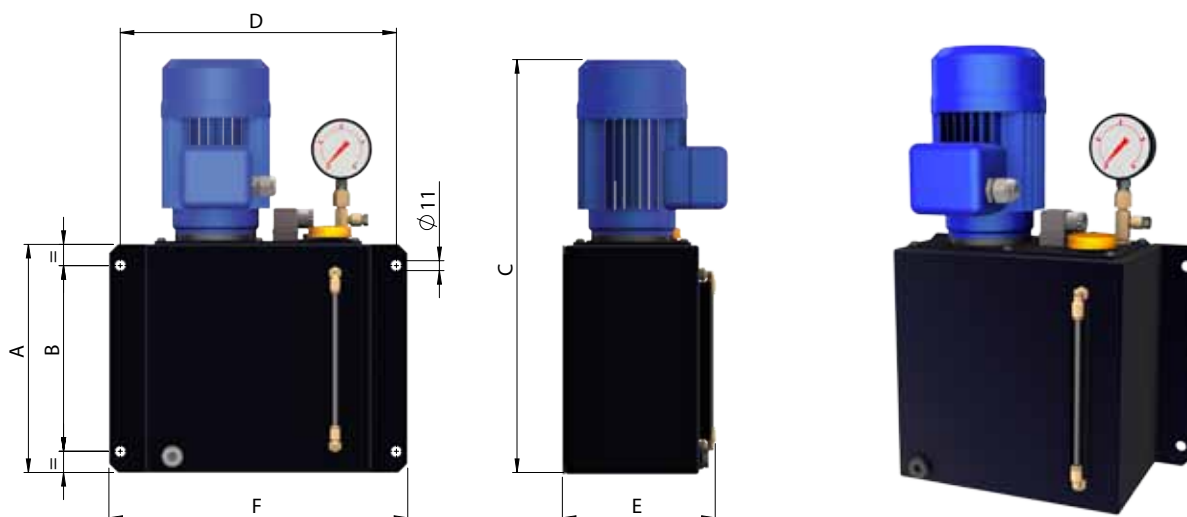
DISCHARGE/1'	150 CC - 250 CC - 500 CC
OPERATING PRESSURE	50 - 120 bar ADJUSTABLE
TANKS	4 - 5 - 6 - 8 - 12 - 50 L
LUBRICANTS	MINERAL OILS 50 - 1000 cSt
DELIVERY FITTING	M12x1 PIPE D.6 - 8
MOTOR	THREE-PHASE MULTI-VOLTAGE
POWER SUPPLY VOLTAGE	220-240 /380-420 V 50 Hz
POWER SUPPLY VOLTAGE	254-280/440-480 v 60 Hz
ABSORPTION	1.05-1.22/0.63-0.71 A
POWER SUPPLY VOLTAGE	230 V AC 50 Hz
ABSORPTION	1.49 A
POWER SUPPLY VOLTAGE	115 V AC 60 Hz
ABSORPTION	2.76 A
POWER	KW 0.18
OPERATING TEMPERATURE	FROM -20 °C TO +80 °C
PROTECTION RATING	IP-55
SERVICE	CONTINUOUS S1
INSULATION	CLASS F
MINIMUM ELECTRIC LEVEL	1.5A - 250 V AC-200 V DC - 50 W

Ordering Codes

PART NUMBER	CODE	TANK	CAPACITY	DISCHARGE
00.861.0	MPO-3LA150	METAL	5 L	150CC/1'
00.862.0	MPO-6LA150	METAL	8 L	
00.863.0	MPO-12LA150	METAL	12 L	
00.864.0	MPO-50LA150	METAL	50 L	
00.861.1	MPO-3LA250	METAL	5 L	250CC/1'
00.862.1	MPO-6LA250	METAL	8 L	
00.863.1	MPO-12LA250	METAL	12 L	
00.864.1	MPO-50LA250	METAL	50 L	
00.861.2	MPO-3LA500	METAL	5 L	500CC/1'
00.862.2	MPO-6LA500	METAL	8 L	
00.863.2	MPO-12LA500	METAL	12 L	
00.864.2	MPO-50LA500	METAL	50 L	

Overall dimensions

TANK	A	B	C	D	E	F	TANK	A	B	C	D	E	F
5 L	156	182	348	167	170	236	12 L	250	205	443	330	210	355
8 L	250	205	443	330	210	365	50 L	400	300	592	530	275	560



The **PPFG** pneumatic drum pumps are intended for the provision of grease lubrication systems where progressive dividers are used. Their high level flow rate and pressure performance allows them to supply very large systems with a high number of points or to supply dividers with just one point (with grease nipple at inlet). They are suitable for installation on commercial tanks with a 25-60 or 200 kg capacity. It is recommended to install a line filter at the outlet capable of protecting the system from impurities in the lubricant.

Technical Features

COMPRESSION RATIO	50:1
COMPRESSED AIR SUPPLY	min 2 bar max 8 bar
MAX PRESSURE	400 bar
DRUMS	25 - 60 - 200 KG
DISCHARGE	1.360 kg/min
DELIVERY CONNECTION	M 1/4" BSP
AIR CONNECTION	F 1/4" BSP
ROD LENGTH mm	450 - 750 - 950
ROD DIAMETER	28 mm

Ordering Codes

PART NUMBER	CODE	DRUM CAPACITY
00.350.0	PPFG-50-25	25
00.350.1	PPFG-50-50	60
00.350.2	PPFG-50-200	200

For the pneumatic oil drum pump,
add the fixing nut 31.510.0



PNEUMATIC GREASE DRUM PUMPS PPFG ACCESSORIES ON DEMAND

COVER

PART NUMBER	CODE
31.500.0	CF25
31.500.1	CF50
31.500.2	CF200



PRESSER DISK

PART NUMBER	CODE
31.600.0	DP25
31.600.1	DP50
31.600.2	DP200



TROLLEY

PART NUMBER	CODE
31.400.0	CP25
31.400.1	CP50
31.400.2	CP200



GUN WITH FLEX

PART NUMBER	CODE
30.350.1	PF2000



PUMP COMPLETE WITH TROLLEY, COVER, GUN WITH FLEX AND PRESSER DISK

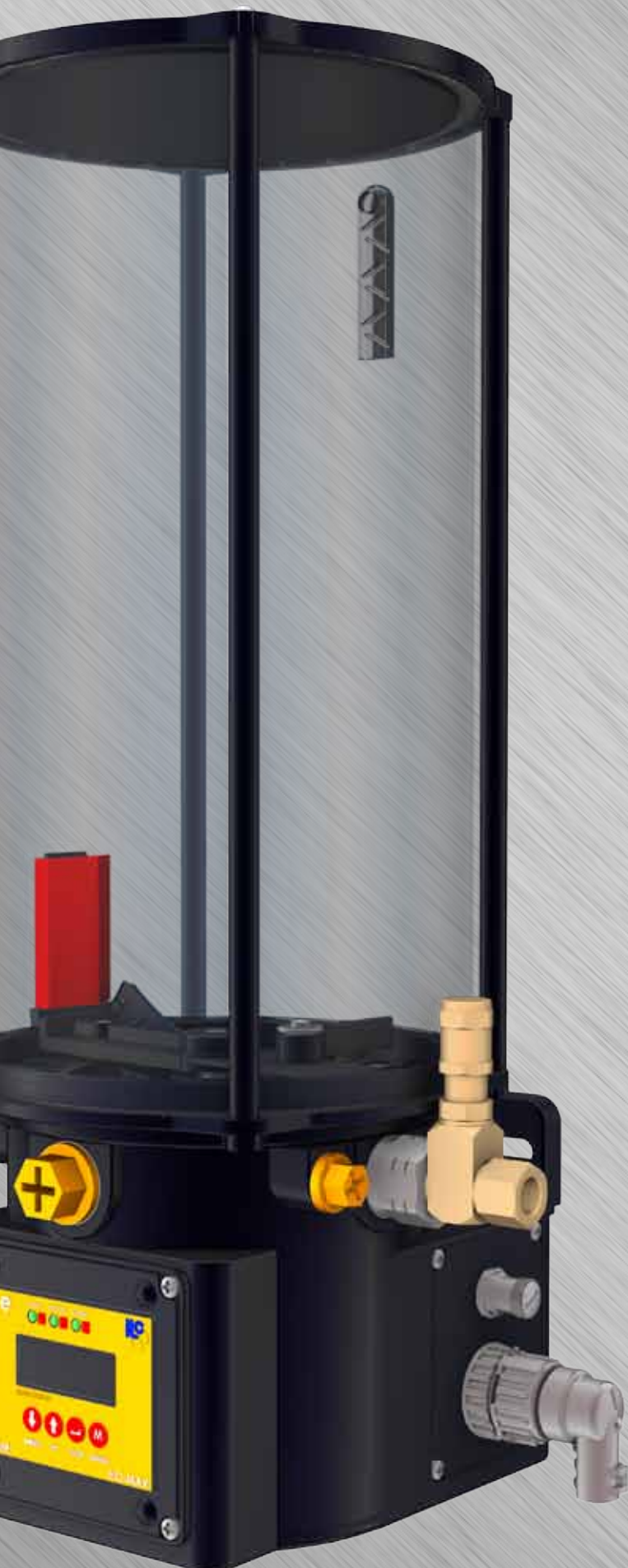
RATIO	PART NUMBER	CODE
50:1	00.370.0	GPPFG-50-25
50:1	00.370.1	GPPFG-50-50
50:1	00.369.9	GPPFG-50-200



ELECTRIC GREASE AND OIL PUMPS ILC-MAX



ELECTRIC GREASE AND OIL PUMPS - ILC-MAX



HOW TO ORDER

40.2.24AC.FST.G	
TANK 2 = 2 Kg transparent 4 = 4 Kg transparent 8 = 8 Kg transparent 5 = 5 Kg metal	
VOLTAGE Coil 12 V DC Coil 24 V DC Coil 24 V AC Coil 115 V AC Coil 230 V AC	
PUMPING F = fixed discharge R = adjustable discharge	
TIMER CT = with timer ST = without timer	
LUBRICANT G = grease O = oil	

The appearance of the products can be subject to change without prior notice

All the pumps are supplied complete with **electric lubricant level control**. The 2, 4 and 8 kg grease pumps (not the oil pumps) are supplied complete with **electric motor rotation control**.

The **models with timer** include the TYCO 7-pole connector and M12x1 4-contact connector; **models without timer** include only the TYCO 7-pole connector

PUMP INSTALLATION

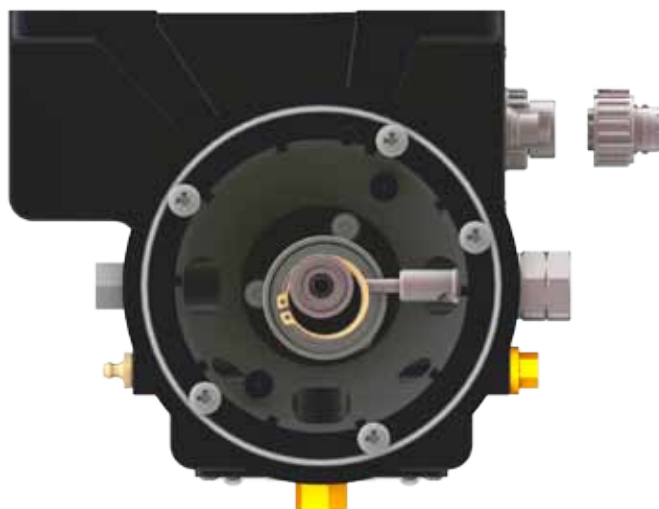
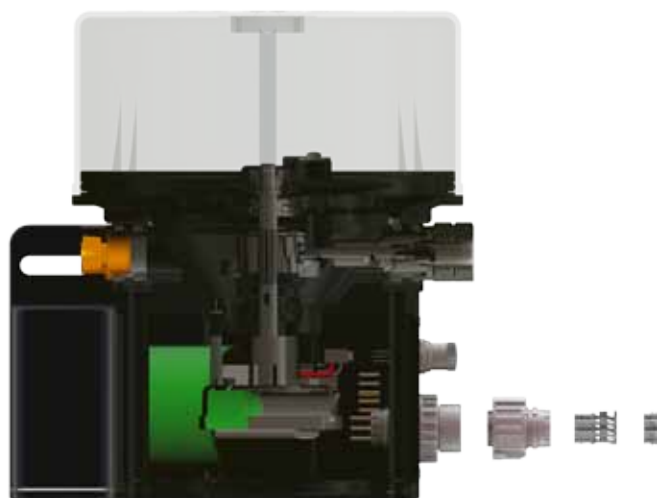
The pumps must be mounted vertically by means of the fixing bracket integrated in the pump body.

ELECTRIC GREASE (ILC-MAX-G) OIL (ILC-MAX-O) PUMPS

APPLICATIONS

They are ideal for automatic grease lubrication of all types of industrial machines, as well as trucks, engines, buses, construction and earth moving vehicles.

Together with the DPA, DPM and DPX progressive dividers, they can lubricate over 300 points with a single pump.

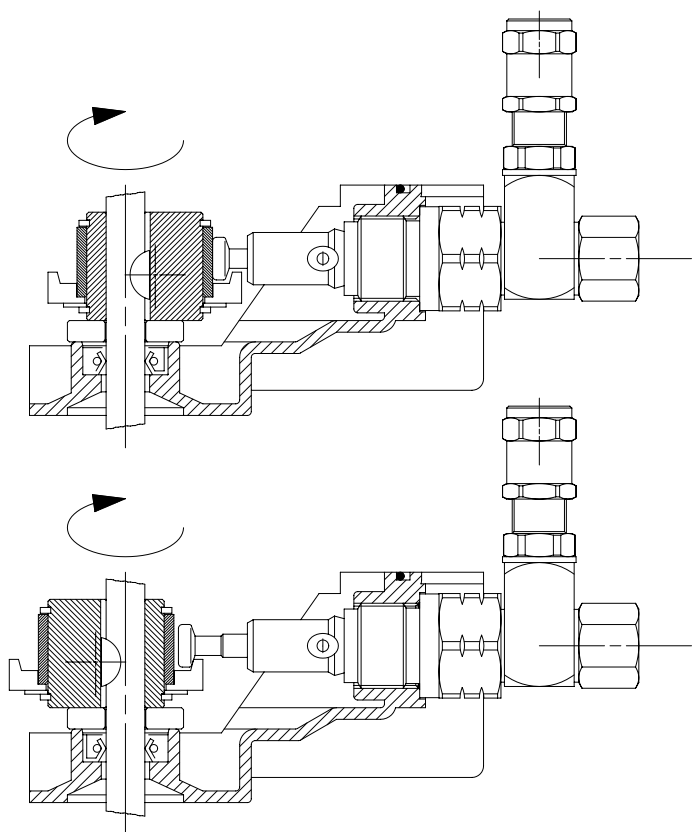


OPERATION

The pumps have been designed for intermittent or continuous operation and provide pre-programmed lubrication cycles according to the applications. A gearmotor controls an internal cam that operates up to 3 pumping elements mounted externally.

Each pumping element is equipped with a pressure relief valve capable of protecting the pump and the elements from overpressure.

It is possible to convey the flows of a second and third pumping element into a single outlet for a greater flow rate.

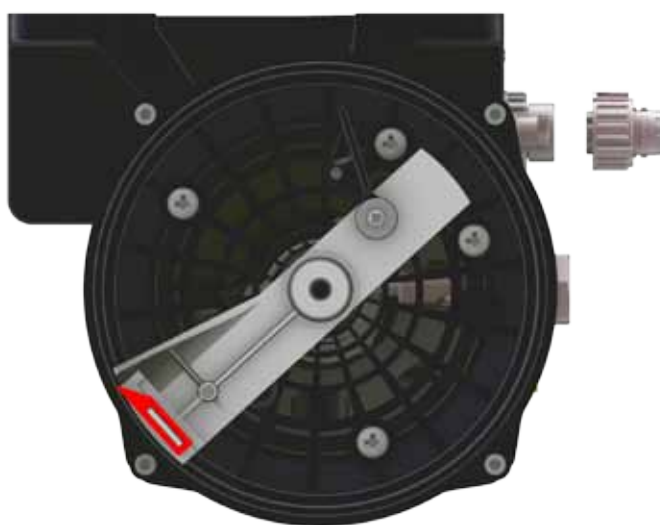
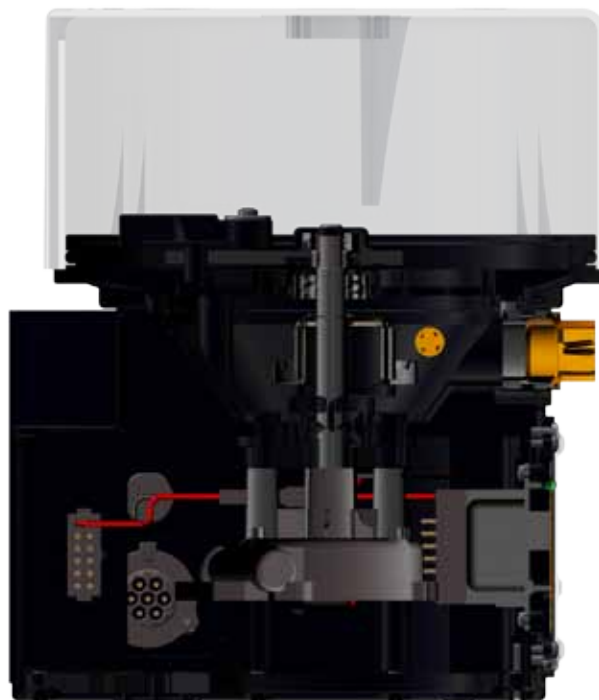
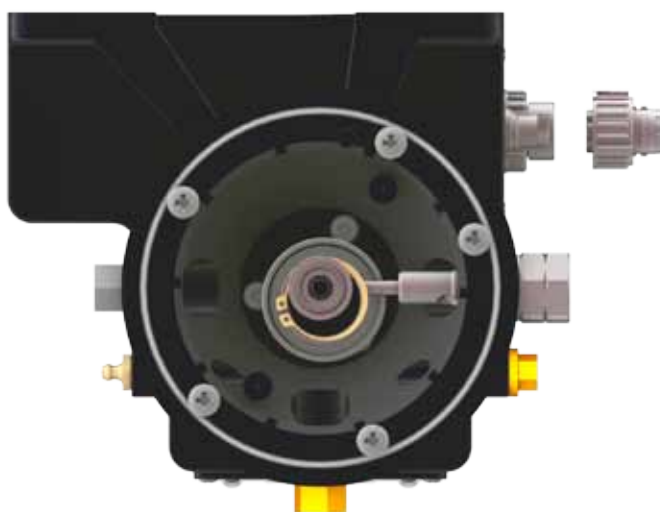


ELECTRIC GREASE (ILC-MAX-G) OIL (ILC-MAX-O) PUMPS



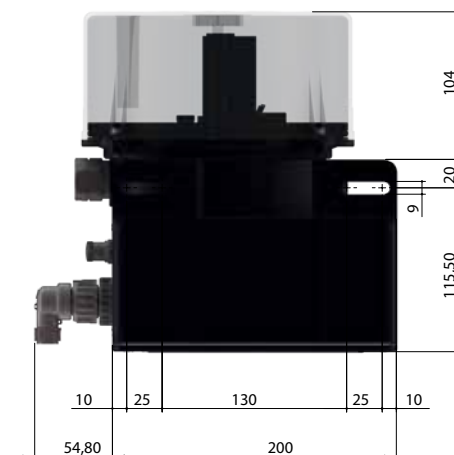
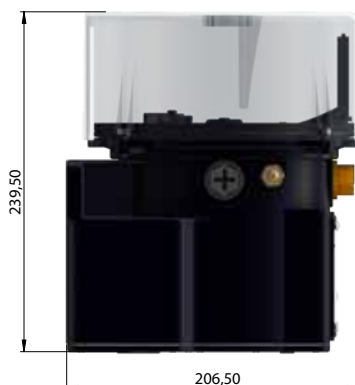
The gear motor is protected by a cover (NYLON PA6 +30% FIBREGLASS) with protection rating IP-56. They are sealed by appropriately housed “o”-rings.

The pumps can operate automatically using an optional timer integrated in the cover, which can be set with variable working and rest times.

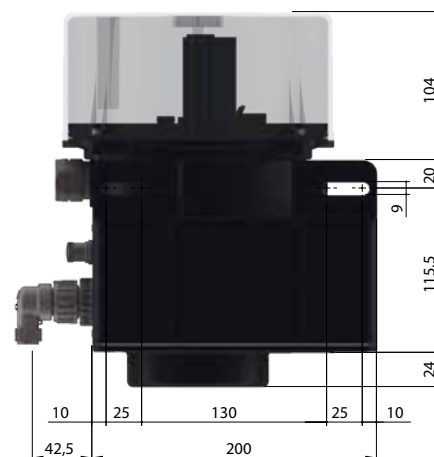


The appearance of the products can be subject to change without prior notice

ELECTRIC GREASE PUMP ILC-MAX-G 2 (12/24 V DC – 24 V AC)



ELECTRIC GREASE PUMP ILC-MAX-G 2 (115/230 V AC)



Technical Features

NUMBER OF OUTLETS	FROM 1 TO 3
DISCHARGE PER REV WITH FIXED PUMPING	0.16 CC
DISCHARGE PER REV WITH ADJUSTABLE PUMPING	0.01 – 0.16 CC
RPM	23 rpm (12 V DC) / 22 rpm (24 V DC) / 29 rpm (230 V AC) / 31 rpm (115 V AC)
DISCHARGE PER MINUTE WITH FIXED PUMPING	3,68 cm ³ (12 V DC) / 3,52 cm ³ (24 V DC) / 4,64 cm ³ (230 V AC) / 4,96 cm ³ (115 V AC)
DISCHARGE PER MINUTE WITH ADJUSTABLE PUMPING	0,23 - 3,68 cm ³ (12 V DC) / 0,22 - 3,52 cm ³ (24 V DC) / 0,29 - 4,64 cm ³ (230 V AC) / 0,31 - 4,96 cm ³ (115 V AC)
SUITABLE LUBRICANTS	GREASE UP TO A CONSISTENCY NLGI NO. 2
MAXIMUM OPERATING PRESSURE	275 bar (3993 PSI)
TANK CAPACITY	2 KG -TRANSPARENT
TEMPERATURE	FROM - 20 °C TO + 80 °C
DELIVERY FITTING	1 / 4" G
MINIMUM ELECTRIC LEVEL	1 A 140 V AC – 200 V DC 10 W NO When the tank is empty, a pulse from open to closed is created at each rotation
ROTATION CONTROL	1 A 140 V AC – 200 V DC 10 W NO –The contact closes at each rotation

ELECTRIC GREASE PUMP ILC-MAX-G 4 (12/24 V DC – 24 V AC)



ELECTRIC GREASE PUMP ILC-MAX-G 4 (115/230 V AC)

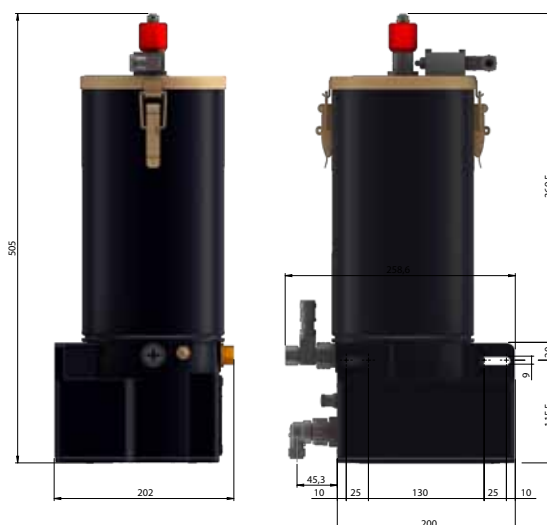


The appearance of the products can be subject to change without prior notice

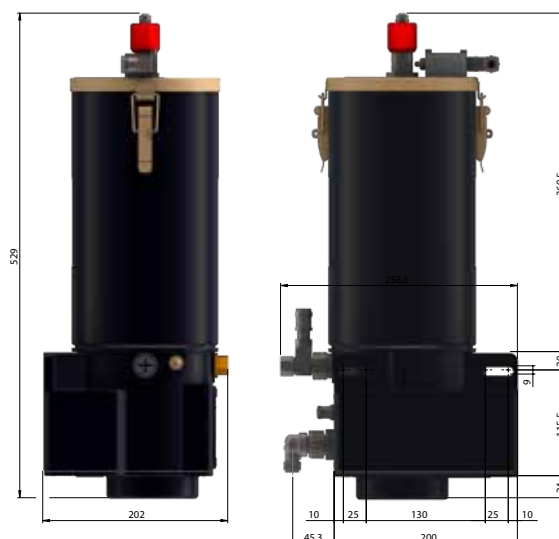
Technical Features

NUMBER OF OUTLETS	FROM 1 TO 3
DISCHARGE PER REV WITH FIXED PUMPING	0.16 CC
DISCHARGE PER REV WITH ADJUSTABLE PUMPING	0.01 – 0.16 CC
RPM	23 rpm (12 V DC) / 22 rpm (24 V DC) / 29 rpm (230 V AC) / 31 rpm (115 V AC)
DISCHARGE PER MINUTE WITH FIXED PUMPING	3,68 cm ³ (12 V DC) / 3,52 cm ³ (24 V DC) / 4,64 cm ³ (230 V AC) / 4,96 cm ³ (115 V AC)
DISCHARGE PER MINUTE WITH ADJUSTABLE PUMPING	0,23 - 3,68 cm ³ (12 V DC) / 0,22 - 3,52 cm ³ (24 V DC) / 0,29 - 4,64 cm ³ (230 V AC) / 0,31 - 4,96 cm ³ (115 V AC)
SUITABLE LUBRICANTS	GREASE UP TO A CONSISTENCY NLGI NO. 2
MAXIMUM OPERATING PRESSURE	275 bar (3993 PSI)
TANK CAPACITY	4 KG -TRANSPARENT
TEMPERATURE	FROM - 20 °C TO + 80 °C
DELIVERY FITTING	1 / 4" G
MINIMUM ELECTRIC LEVEL	1 A 140 V AC – 200 V DC 10 W NO When the tank is empty, a pulse from open to closed is created at each rotation
ROTATION CONTROL	1 A 140 V AC – 200 V DC 10 W NO –The contact closes at each rotation

ELECTRIC GREASE PUMP ILC-MAX-G 5 (12/24 V DC – 24 V AC)



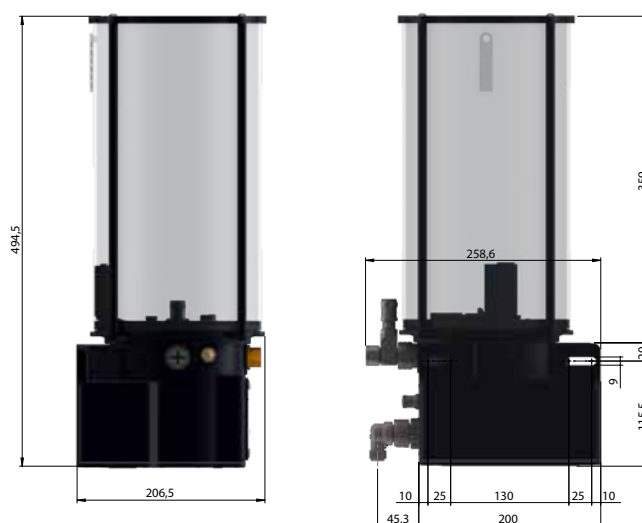
ELECTRIC GREASE PUMP ILC-MAX-G 5 (115/230 V AC)



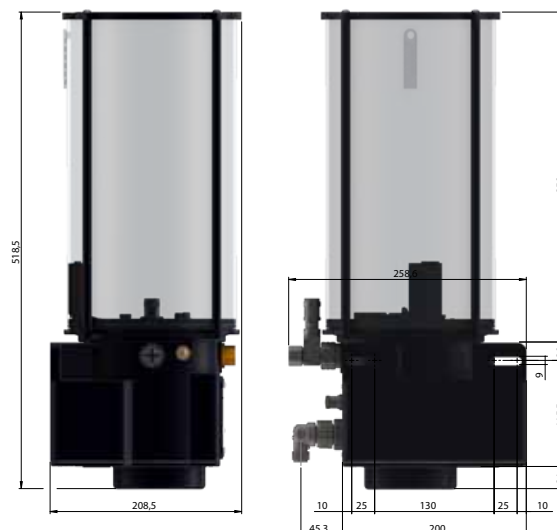
Technical Features

NUMBER OF OUTLETS	FROM 1 TO 3
DISCHARGE PER REV WITH FIXED PUMPING	0.16 CC
DISCHARGE PER REV WITH ADJUSTABLE PUMPING	0.01 – 0.16 CC
RPM	23 rpm (12 V DC) / 22 rpm (24 V DC) / 29 rpm (230 V AC) / 31 rpm (115 V AC)
DISCHARGE PER MINUTE WITH FIXED PUMPING	3,68 cm ³ (12 V DC) / 3,52 cm ³ (24 V DC) / 4,64 cm ³ (230 V AC) / 4,96 cm ³ (115 V AC)
DISCHARGE PER MINUTE WITH ADJUSTABLE PUMPING	0,23 - 3,68 cm ³ (12 V DC) / 0,22 - 3,52 cm ³ (24 V DC) / 0,29 - 4,64 cm ³ (230 V AC) / 0,31 - 4,96 cm ³ (115 V AC)
SUITABLE LUBRICANTS	GREASE UP TO A CONSISTENCY NLGI NO. 2
MAXIMUM OPERATING PRESSURE	275 bar (3993 PSI)
TANK CAPACITY	5 KG - METAL
TEMPERATURE	FROM - 20 °C TO + 80 °C
DELIVERY FITTING	1 / 4" G
MINIMUM ELECTRIC LEVEL	5A – 250 V AC / 0.4 A - 125 V DC – NC o NO contact

ELECTRIC GREASE PUMP ILC-MAX-G 8 (12/24 V DC – 24 V AC)



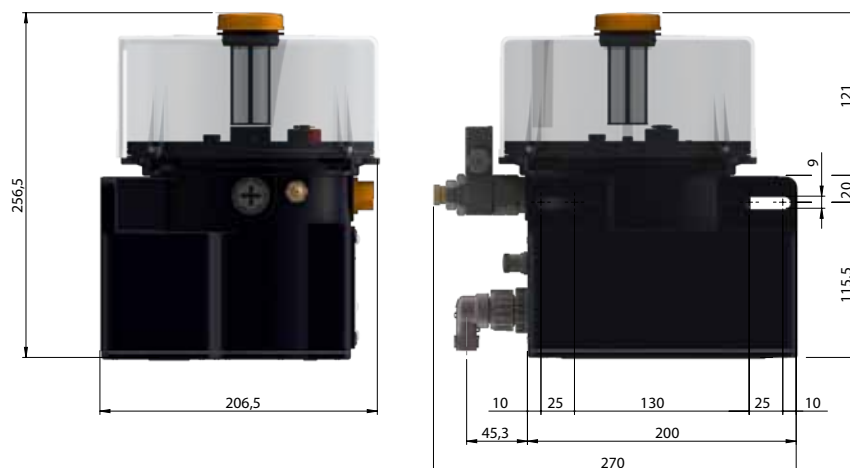
ELECTRIC GREASE PUMP ILC-MAX-G 8 (115/230 V AC)



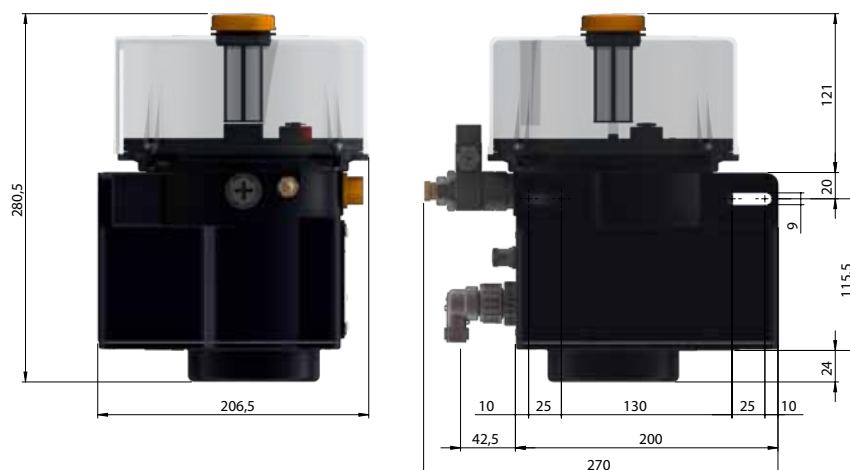
Technical Features

NUMBER OF OUTLETS	FROM 1 TO 3
DISCHARGE PER REV WITH FIXED PUMPING	0.16 CC
DISCHARGE PER REV WITH ADJUSTABLE PUMPING	0.01 – 0.16 CC
RPM	23 rpm (12 V DC) / 22 rpm (24 V DC) / 29 rpm (230 V AC) / 31 rpm (115 V AC)
DISCHARGE PER MINUTE WITH FIXED PUMPING	3,68 cm ³ (12 V DC) / 3,52 cm ³ (24 V DC) / 4,64 cm ³ (230 V AC) / 4,96 cm ³ (115 V AC)
DISCHARGE PER MINUTE WITH ADJUSTABLE PUMPING	0,23 - 3,68 cm ³ (12 V DC) / 0,22 - 3,52 cm ³ (24 V DC) / 0,29 - 4,64 cm ³ (230 V AC) / 0,31 - 4,96 cm ³ (115 V AC)
SUITABLE LUBRICANTS	GREASE UP TO A CONSISTENCY NLGI NO. 2
MAXIMUM OPERATING PRESSURE	275 bar (3993 PSI)
TANK CAPACITY	8 KG -TRANSPARENT
TEMPERATURE	FROM - 20 °C TO + 80 °C
DELIVERY FITTING	1 / 4" G
MINIMUM ELECTRIC LEVEL	1 A 140 V AC – 200 V DC 10 W NO When the tank is empty, a pulse from open to closed is created at each rotation
ROTATION CONTROL	1 A 140 V AC – 200 V DC 10 W NO –The contact closes at each rotation

ELECTRIC OIL PUMP ILC-MAX-O 2 (12/24 V DC – 24 V AC)



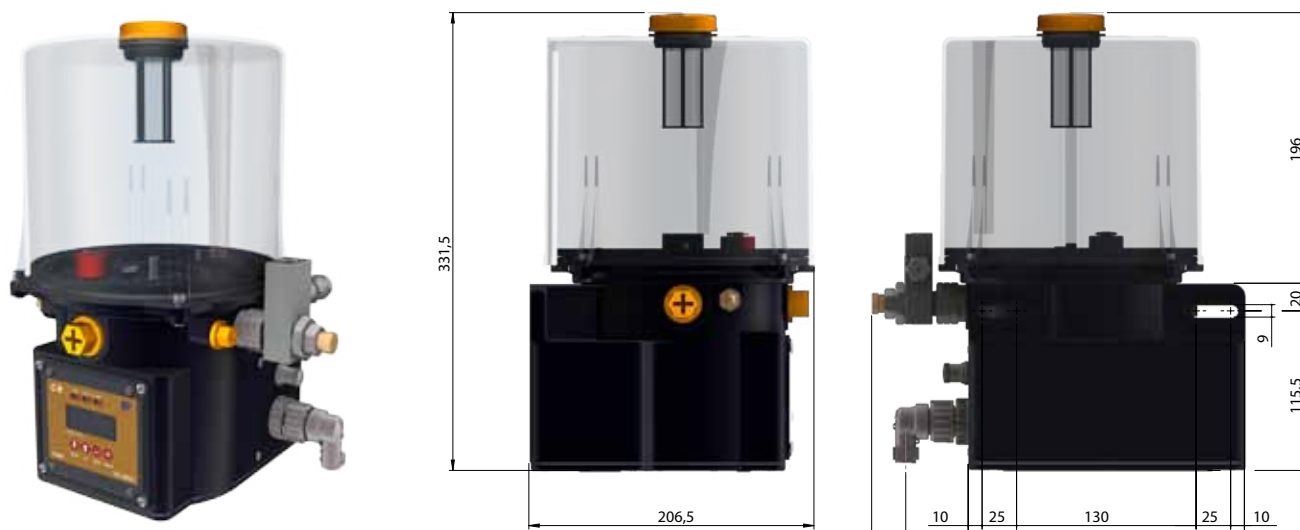
ELECTRIC OIL PUMP ILC-MAX-O 2 (115/230 V AC)



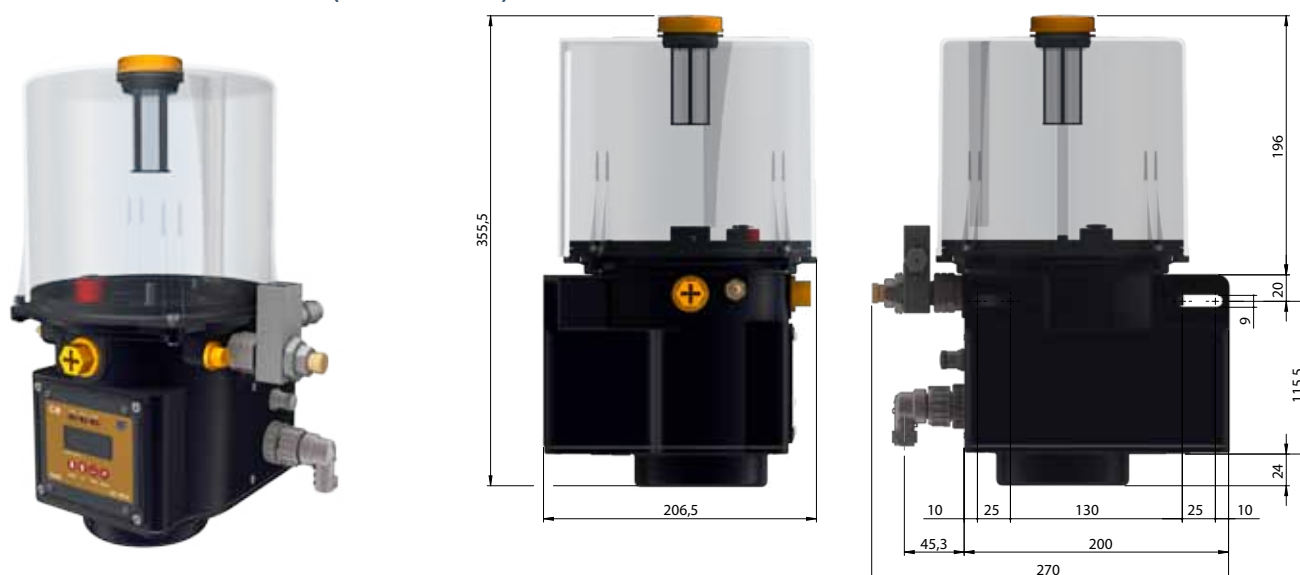
Technical Features

NUMBER OF OUTLETS	FROM 1 TO 3
DISCHARGE PER REV WITH FIXED PUMPING	0.16 CC
DISCHARGE PER REV WITH ADJUSTABLE PUMPING	0.01 – 0.16 CC
RPM	23 rpm (12 V DC) / 22 rpm (24 V DC) / 29 rpm (230 V AC) / 31 rpm (115 V AC)
DISCHARGE PER MINUTE WITH FIXED PUMPING	3,68 cm ³ (12 V DC) / 3,52 cm ³ (24 V DC) / 4,64 cm ³ (230 V AC) / 4,96 cm ³ (115 V AC)
DISCHARGE PER MINUTE WITH ADJUSTABLE PUMPING	0,23 - 3,68 cm ³ (12 V DC) / 0,22 - 3,52 cm ³ (24 V DC) / 0,29 - 4,64 cm ³ (230 V AC) / 0,31 - 4,96 cm ³ (115 V AC)
SUITABLE LUBRICANTS	MINERAL OILS 50-1500 cSt
MAXIMUM OPERATING PRESSURE	275 bar (3993 PSI)
TANK CAPACITY	2 L - TRANSPARENT
TEMPERATURE	FROM - 20 °C TO + 80 °C
DELIVERY FITTING	1 / 4" G
MINIMUM ELECTRIC LEVEL	1 A 140 V AC – 200 V DC 10 W NO - The contact opens when the tank is empty

ELECTRIC OIL PUMP ILC-MAX-0 4 (12/24 V DC – 24 V AC)



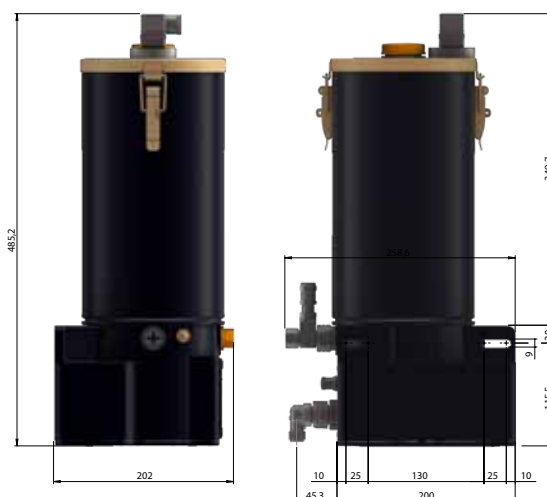
ELECTRIC OIL PUMP ILC-MAX-0 4 (115/230 V AC)



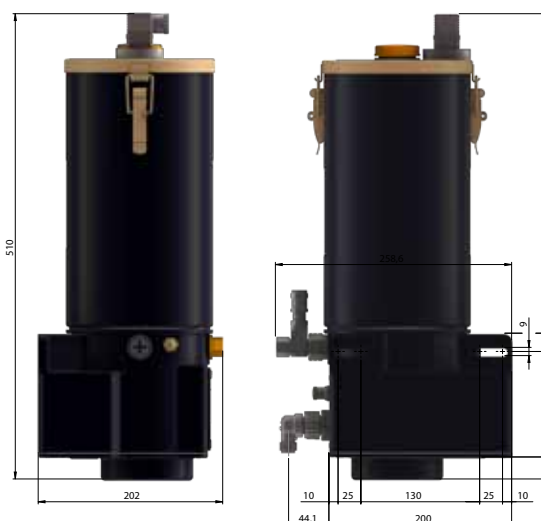
Technical Features

NUMBER OF OUTLETS	FROM 1 TO 3
DISCHARGE PER REV WITH FIXED PUMPING	0.16 CC
DISCHARGE PER REV WITH ADJUSTABLE PUMPING	0.01 – 0.16 CC
RPM	23 rpm (12 V DC) / 22 rpm (24 V DC) / 29 rpm (230 V AC) / 31 rpm (115 V AC)
DISCHARGE PER MINUTE WITH FIXED PUMPING	3,68 cm ³ (12 V DC) / 3,52 cm ³ (24 V DC) / 4,64 cm ³ (230 V AC) / 4,96 cm ³ (115 V AC)
DISCHARGE PER MINUTE WITH ADJUSTABLE PUMPING	0,23 - 3,68 cm ³ (12 V DC) / 0,22 - 3,52 cm ³ (24 V DC) / 0,29 - 4,64 cm ³ (230 V AC) / 0,31 - 4,96 cm ³ (115 V AC)
SUITABLE LUBRICANTS	MINERAL OILS 50-1500 cSt
MAXIMUM OPERATING PRESSURE	275 bar (3993 PSI)
TANK CAPACITY	4 L - TRANSPARENT
TEMPERATURE	FROM - 20 °C TO + 80 °C
DELIVERY FITTING	1 / 4" G
MINIMUM ELECTRIC LEVEL	1 A 140 V AC – 200 V DC 10 W NO - The contact opens when the tank is empty

ELECTRIC OIL PUMP ILC-MAX-0 5 (12/24 V DC – 24 V AC)



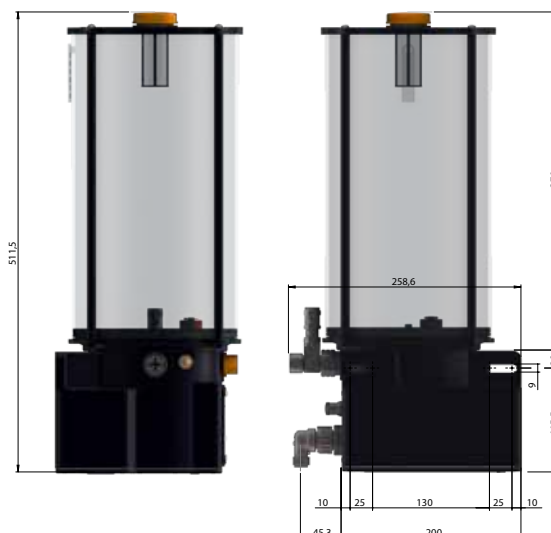
ELECTRIC OIL PUMP ILC-MAX-0 5 (115/230 V AC)



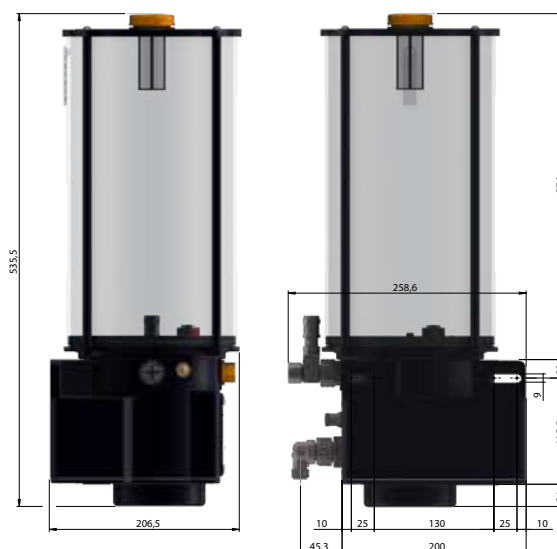
Technical Features

NUMBER OF OUTLETS	FROM 1 TO 3
DISCHARGE PER REV WITH FIXED PUMPING	0.16 CC
DISCHARGE PER REV WITH ADJUSTABLE PUMPING	0.01 – 0.16 CC
RPM	23 rpm (12 V DC) / 22 rpm (24 V DC) / 29 rpm (230 V AC) / 31 rpm (115 V AC)
DISCHARGE PER MINUTE WITH FIXED PUMPING	3,68 cm ³ (12 V DC) / 3,52 cm ³ (24 V DC) / 4,64 cm ³ (230 V AC) / 4,96 cm ³ (115 V AC)
DISCHARGE PER MINUTE WITH ADJUSTABLE PUMPING	0,23 - 3,68 cm ³ (12 V DC) / 0,22 - 3,52 cm ³ (24 V DC) / 0,29 - 4,64 cm ³ (230 V AC) / 0,31 - 4,96 cm ³ (115 V AC)
SUITABLE LUBRICANTS	MINERAL OILS 50-1500 cSt
MAXIMUM OPERATING PRESSURE	275 bar (3993 PSI)
TANK CAPACITY	5 L - METAL
TEMPERATURE	FROM - 20 °C TO + 80 °C
DELIVERY FITTING	1 / 4" G
MINIMUM ELECTRIC LEVEL	1.5 A 250 V AC – 200 V DC 50 W – NC o NO contact

ELECTRIC OIL PUMP ILC-MAX-0 8 (12/24 V DC – 24 V AC)



ELECTRIC OIL PUMP ILC-MAX-0 8 (115/230 V AC)



Technical Features

NUMBER OF OUTLETS	FROM 1 TO 3
DISCHARGE PER REV WITH FIXED PUMPING	0.16 CC
DISCHARGE PER REV WITH ADJUSTABLE PUMPING	0.01 – 0.16 CC
RPM	23 rpm (12 V DC) / 22 rpm (24 V DC) / 29 rpm (230 V AC) / 31 rpm (115 V AC)
DISCHARGE PER MINUTE WITH FIXED PUMPING	3,68 cm ³ (12 V DC) / 3,52 cm ³ (24 V DC) / 4,64 cm ³ (230 V AC) / 4,96 cm ³ (115 V AC)
DISCHARGE PER MINUTE WITH ADJUSTABLE PUMPING	0,23 - 3,68 cm ³ (12 V DC) / 0,22 - 3,52 cm ³ (24 V DC) / 0,29 - 4,64 cm ³ (230 V AC) / 0,31 - 4,96 cm ³ (115 V AC)
SUITABLE LUBRICANTS	MINERAL OILS 50-1500 cSt
MAXIMUM OPERATING PRESSURE	275 bar (3993 PSI)
TANK CAPACITY	8 L - TRANSPARENT
TEMPERATURE	FROM - 20 °C TO + 80 °C
DELIVERY FITTING	1 / 4" G
MINIMUM ELECTRIC LEVEL	1 A 140 V AC – 200 V DC 10 W NO - The contact opens when the tank is empty





ACCESSORIES

ELECTRIC GREASE AND OIL PUMPS

ILC-MAX



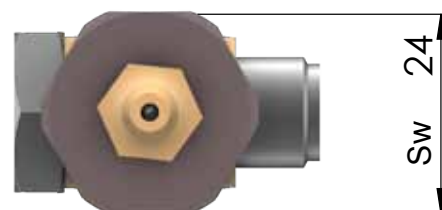
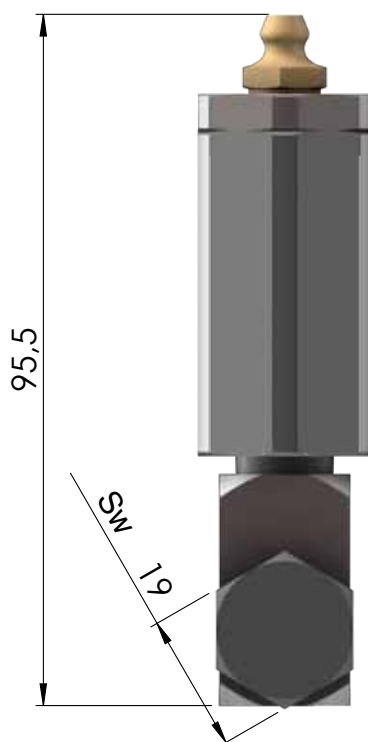
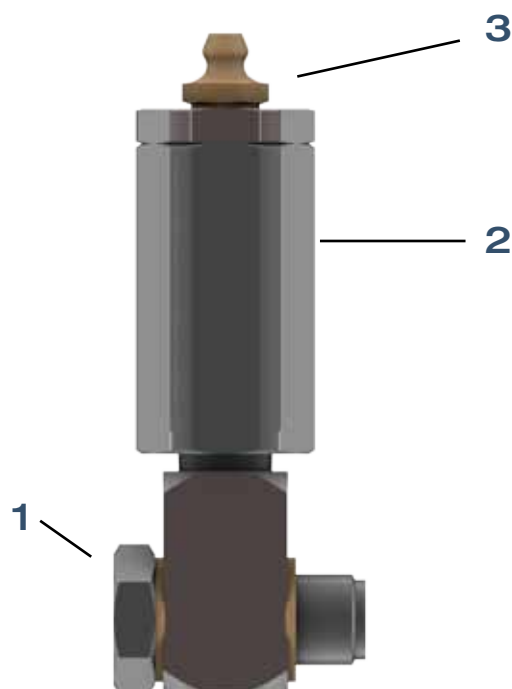
ACCESSORIES

INLET FILTER A70.093526

To prevent impurities from entering while the tank is being filled, we recommend applying an inlet filter directly on the pump body by unscrewing the needle grease nipple.

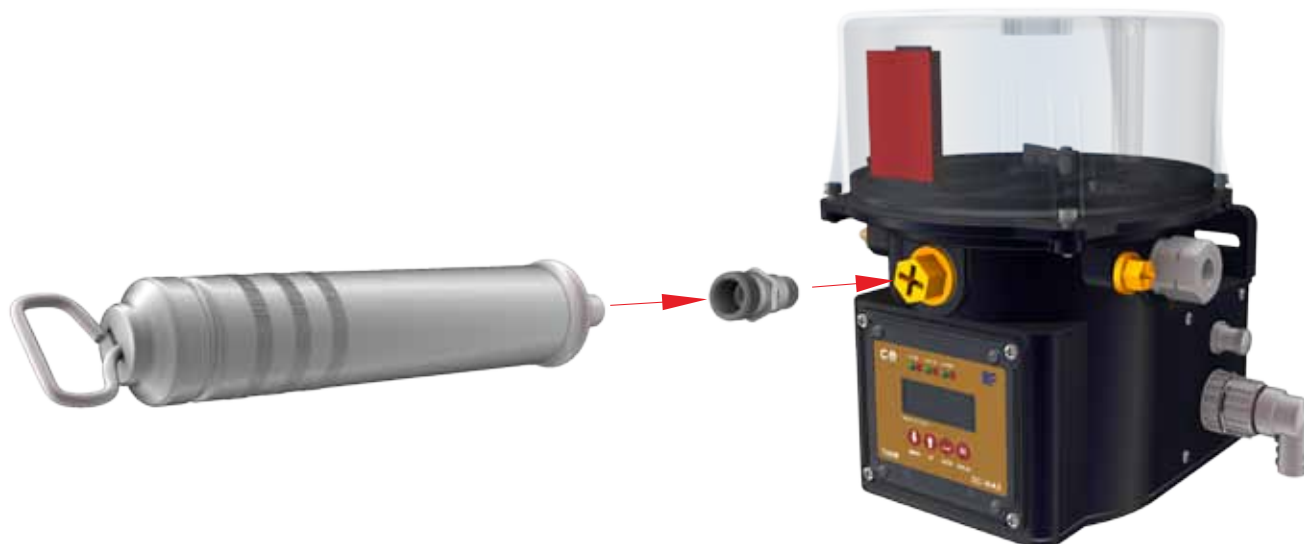
Ordering Codes

	DESCRIPTION	PART NUMBER
1	1/4" Gas joint	A70.093596
2	Inlet filter	07.270.0
3	1/8" Gas grease nipple	A70.078422

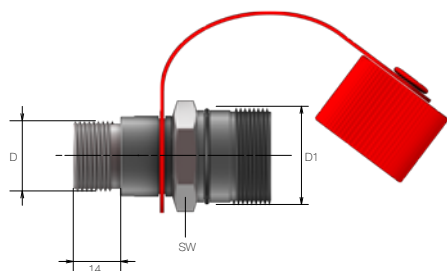


HAND PUMP AND ADAPTOR FOR FILLING ILC-MAX PUMPS

Unscrew the yellow cap. Install the filling connection. Insert the cartridge in the hand pump
Fill the tank. Remove the filling connection. Refit the yellow cap.



FILLING CONNECTION



PART NUMBER	D	SW
ZZZ100-208	M22X1.5	32

FILLING PUMP

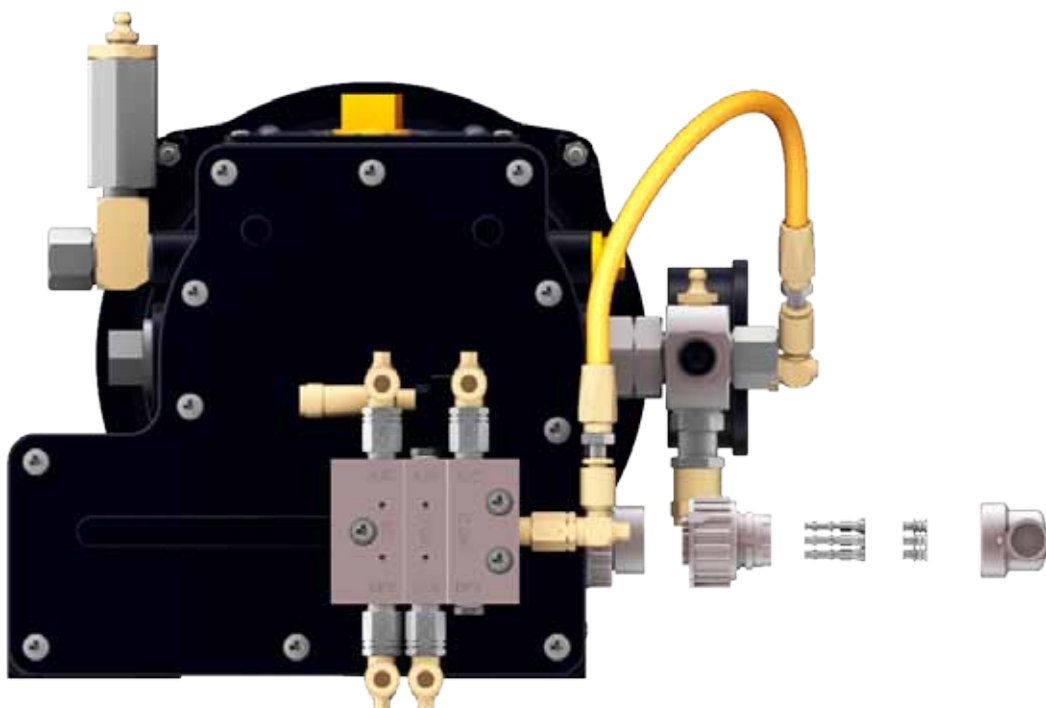


PART NUMBER
ZZZ100-201

ACCESSORIES

DPX MOUNTED ON PUMP

ILC-MAX is set up to be assembled with a 3 to 9 element DPX mounted directly below the base of the pump.



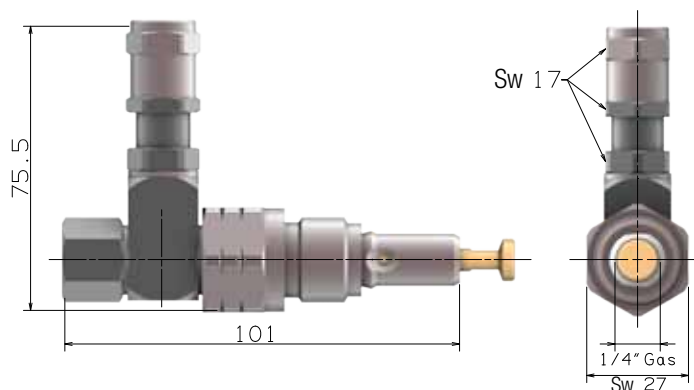
40.KRT.001 Connection kit ILC-MAX / DPX



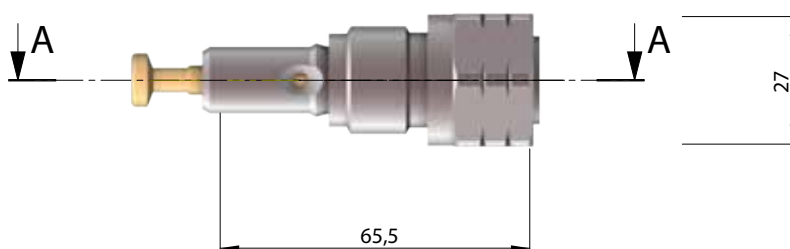
FIXED DISCHARGE PUMPING COMPLETE WITH SAFETY VALVE 90.900.0



Overall dimensions

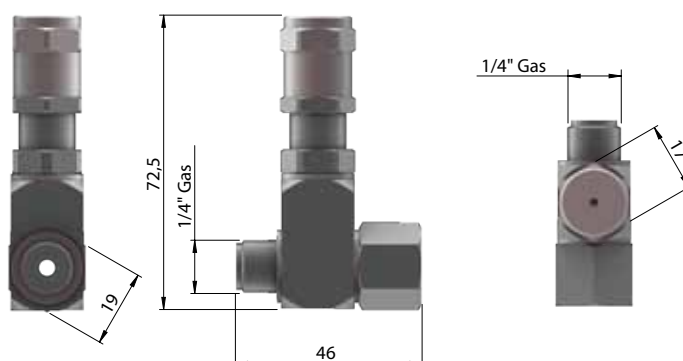


FIXED DISCHARGE PUMPING WITHOUT SAFETY VALVE A70.093245



To add an
EXTERNAL SAFETY valve, you may order:

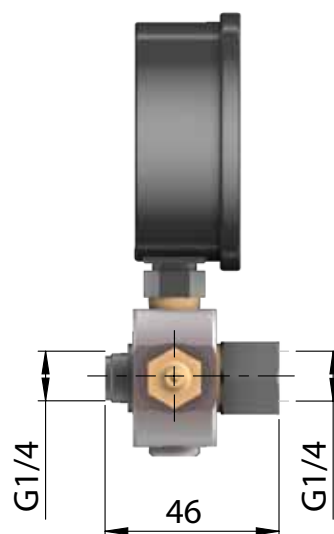
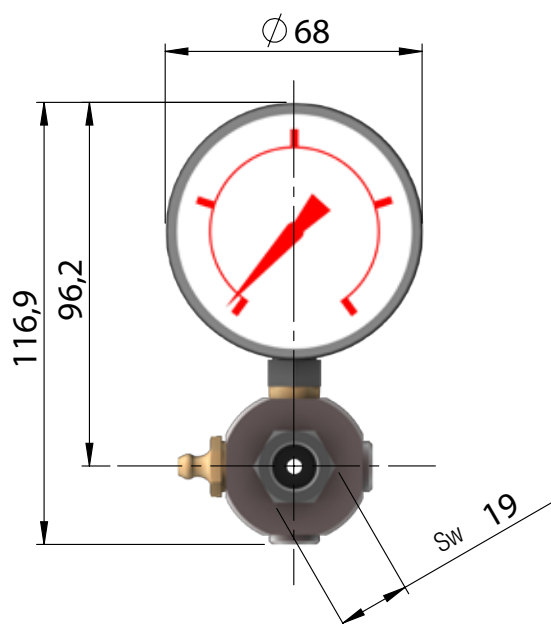
A70.093133



ACCESSORIES FOR FIXED PUMPING

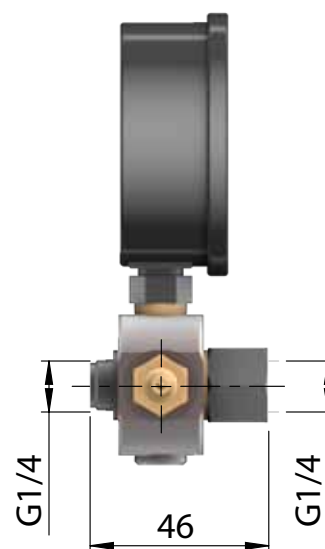
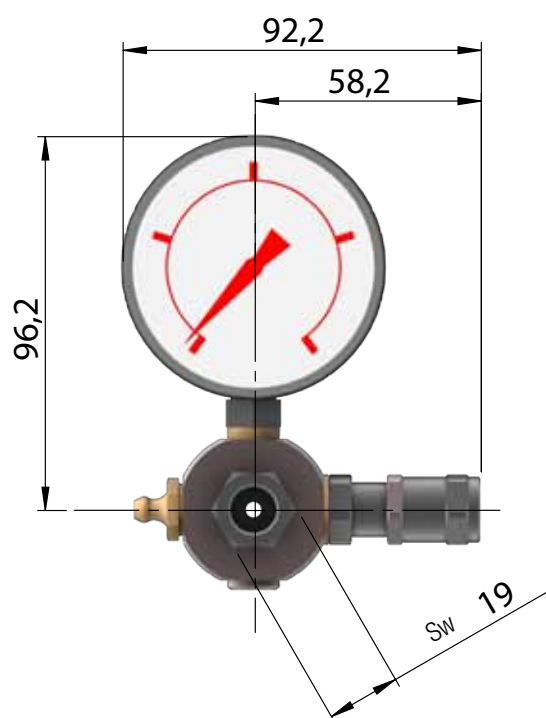
BLOCK WITH PRESSURE GAUGE AND GREASE NIPPLE 40.BMI.01

The block is mounted on the delivery line to control system operating pressure by means of a pressure gauge and to fill the system through a grease nipple with a hand or pneumatic pump.



BLOCK WITH PRESSURE GAUGE, SAFETY VALVE AND GREASE NIPPLE 40.BMI.02

The block is mounted on the delivery line to control system operating pressure by means of a pressure gauge and to fill the system through a grease nipple with a hand or pneumatic pump. The safety valve protects the system from overpressure.

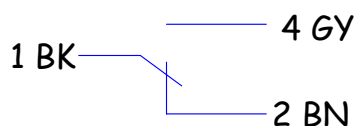


ACCESSORIES FOR FIXED PUMPING

BLOCK WITH PRESSURE GAUGE, ELECTROMECHANICAL SENSOR AND GREASE NIPPLE 40.BMI.03

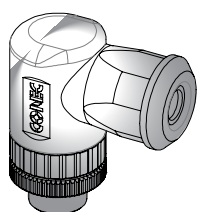
The block is mounted on the delivery line to control system operating pressure by means of a pressure gauge and to fill the system through a grease nipple with a hand or pneumatic pump.

The safety valve protects the system from overpressure and the electromagnetic sensor is triggered in case of high pressure on the main line.



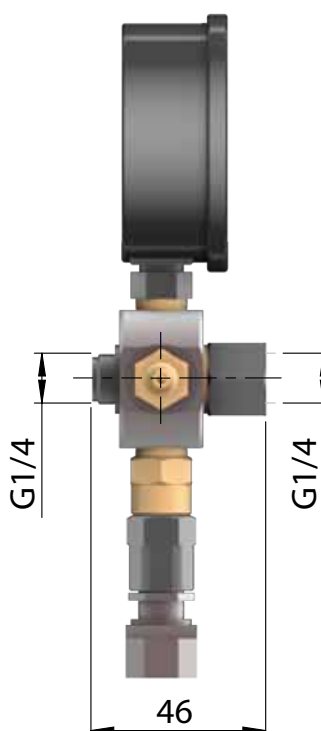
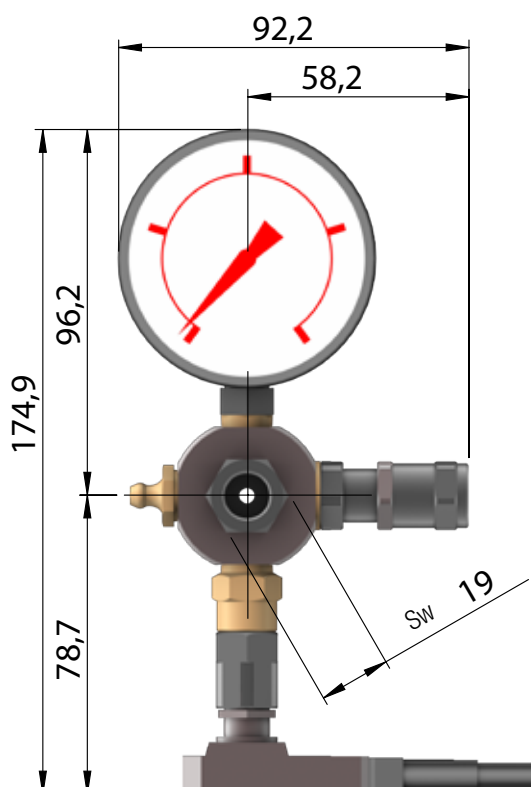
1 A 230 V AC – 250 V DC 40 W

Cable for electric connection (see page 52)



Recommended connection

- 1 - Brown
- 2 -
- 3 -
- 4 - Black



BLOCK WITH PRESSURE GAUGE, PROXIMITY SENSOR AND GREASE NIPPLE 40.BMI.04

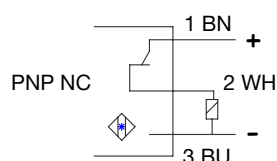
The block is mounted on the delivery line to control system operating pressure by means of a pressure gauge and to fill the system through a grease nipple with a hand or pneumatic pump.

The safety valve protects the system from overpressure and the proximity sensor is triggered in case of high pressure on the main line.

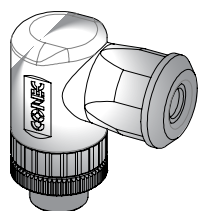
Features

VOLTAGE	Coil -30 V DC
OUTPUT CURRENT	MAX 200 Ma
CURRENT	< 12 Ma
TEMPERATURE	- 25°C + 70°C
PROTECTION	IP 67
SENSOR BODY	STAINLESS STEEL

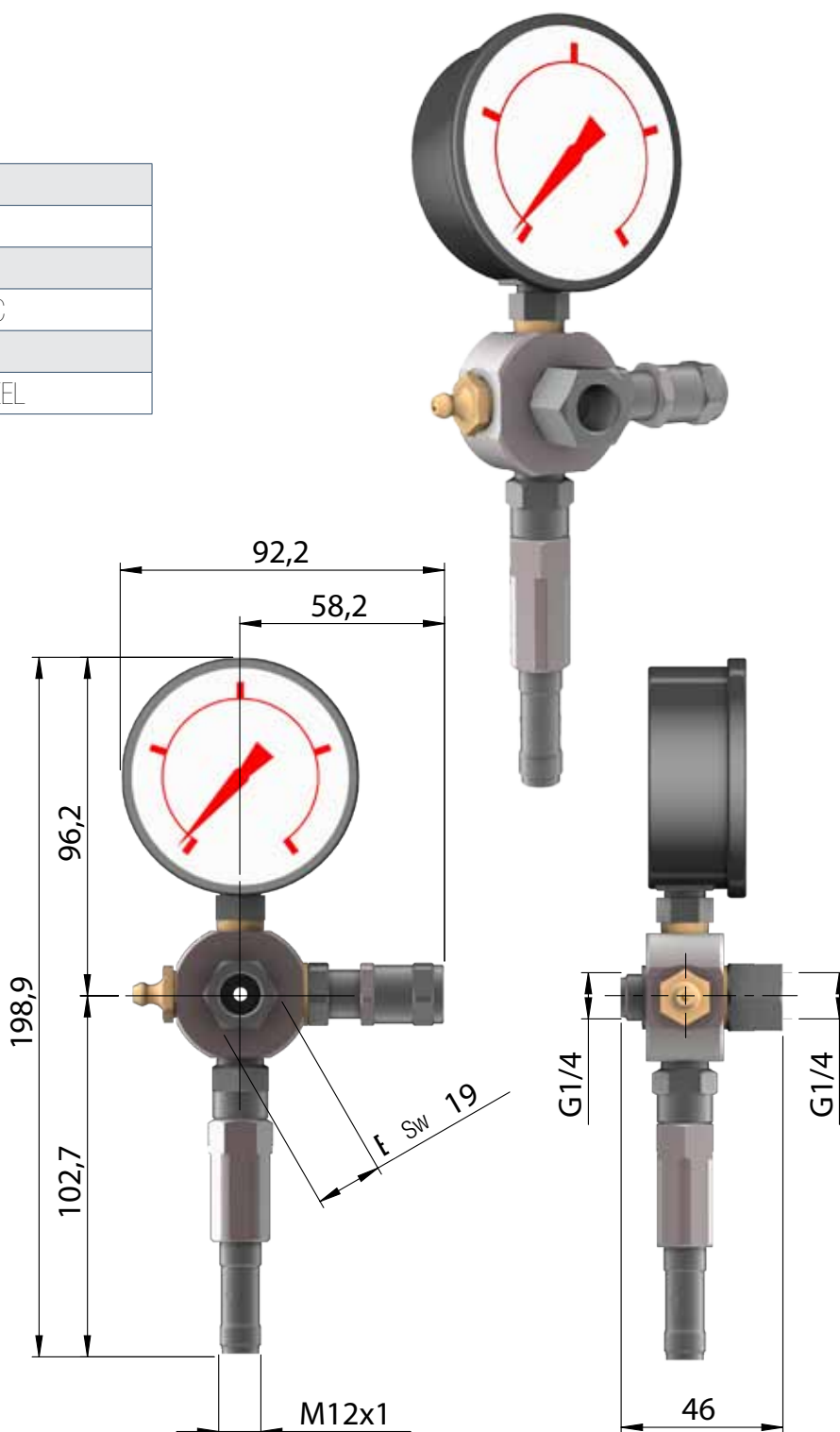
Wiring Diagram



Cable for electric connection (see page 52)



Recommended connection
1 - Brown
2 -
3 -
4 - Black



ACCESSORIES

ADJUSTABLE DISCHARGE PUMPING COMPLETE WITH SAFETY VALVE 90.900.3



Pumping is equipped with two supplementary 1/4" G outlets used to mount the following accessories:

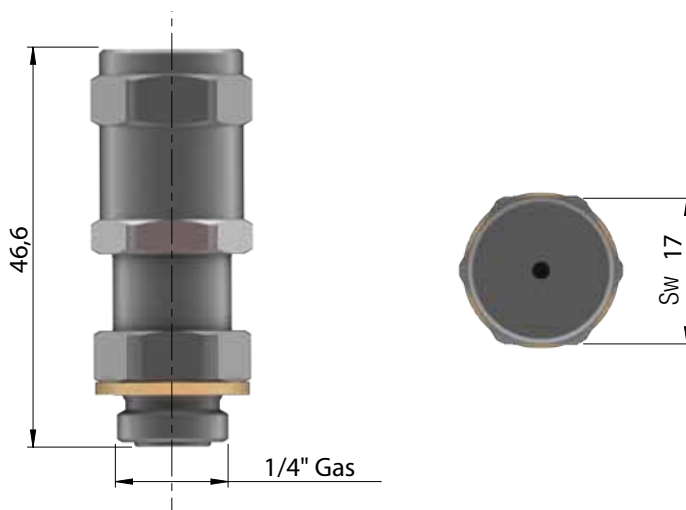
Safety valve / A68.075011
Pressure gauge 0-400 / 46.600.0
Proximity sensor 250 bar / 09.712.7
Electromechanical sensor 250 bar / 09.713.7
Grease nipple/ 39.000.3

ADJUSTABLE DISCHARGE PUMPING WITHOUT SAFETY VALVE 90.900.4

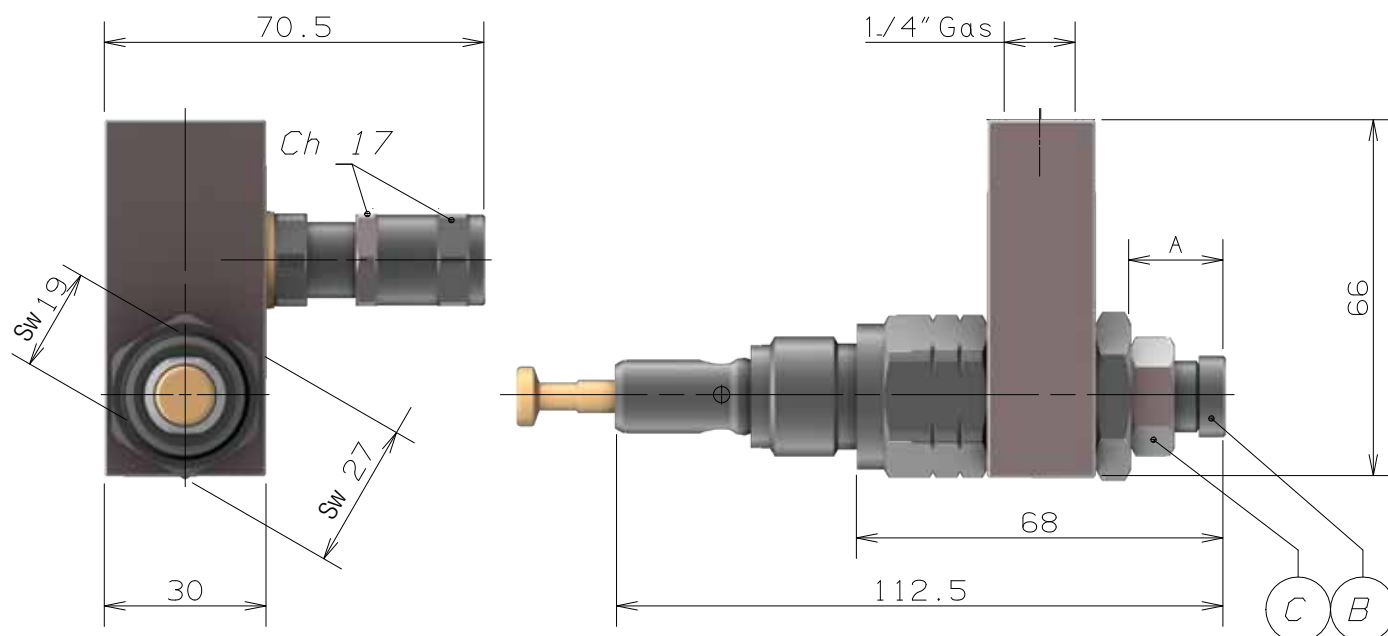


To add an external safety valve, you may order:

A68.075011



PUMPING ADJUSTMENT



To change the nominal flow rate of the pump, the lock nut (Pos. c) must be loosened and the adjusting screw (Pos. b) turned clockwise to reduce the amount of lubricant or anticlockwise to increase it. When the desired value has been set, it is extremely important to secure the lock nut again (Pos. c).

IMPORTANT:
“A” MUST NOT BE
GREATER THAN 23.6 mm

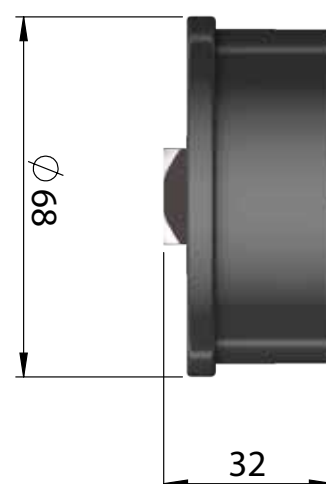
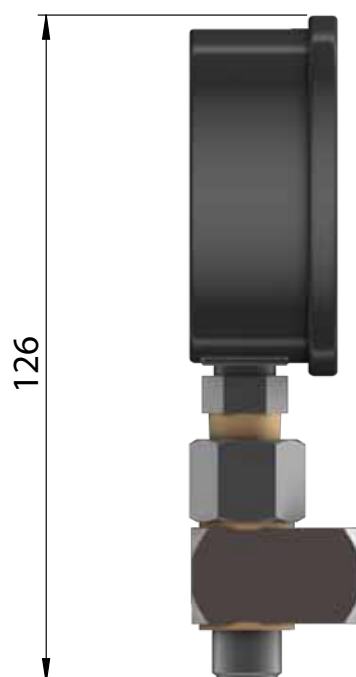
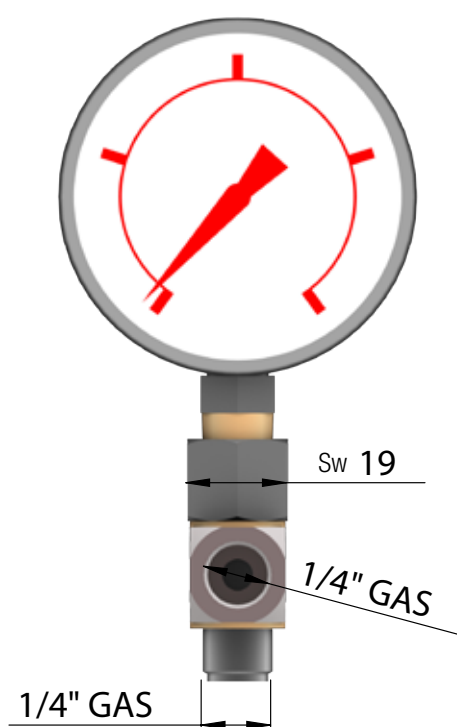
Discharge adjustment table

A	DISCHARGE/CYCLE	PERCENTAGE
23.6	0.16 CC	100 %
22.5	0.12 CC	75 %
21	0.08 CC	50 %
19.5	0.04 CC	25 %
18.5	0.01 CC	6 %
17.5	0.00 CC	0 %

ACCESSORIES FOR ADJUSTABLE PUMPING

TWO-WAY JOINT WITH PRESSURE GAUGE A70.093523

The block is mounted on the delivery line to control system operating pressure by means of the pressure gauge.



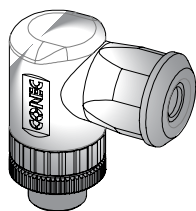
THREE-WAY JOINT WITH PRESSURE GAUGE AND ELECTROMECHANICAL SENSOR A70.093525

The block is mounted on the delivery line to control system operating pressure by means of the pressure gauge and is also equipped with an electromechanical sensor to check for high pressure on the main line.

1 BK — 4 GY
2 BN

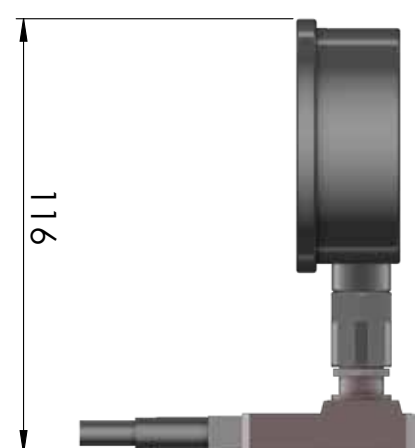
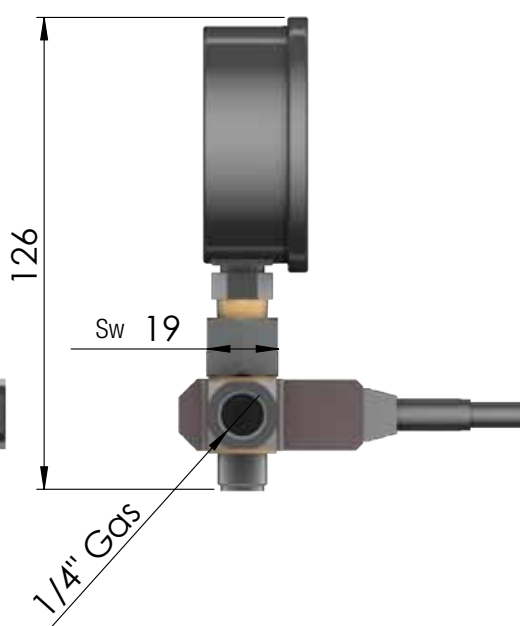
1 A 230 V AC – 250 V DC 40 W

Cable for electric
connection (see page 52)



Recommended connection

- 1 - Brown
- 2 -
- 3 -
- 4 - Black



ACCESSORIES FOR ADJUSTABLE PUMPING

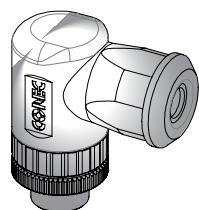
THREE-WAY JOINT WITH PRESSURE GAUGE AND PROXIMITY SENSOR A70.093524

The block is mounted on the delivery line to control system operating pressure by means of the pressure gauge and is also equipped with a proximity sensor to check for high pressure on the main line.

Features

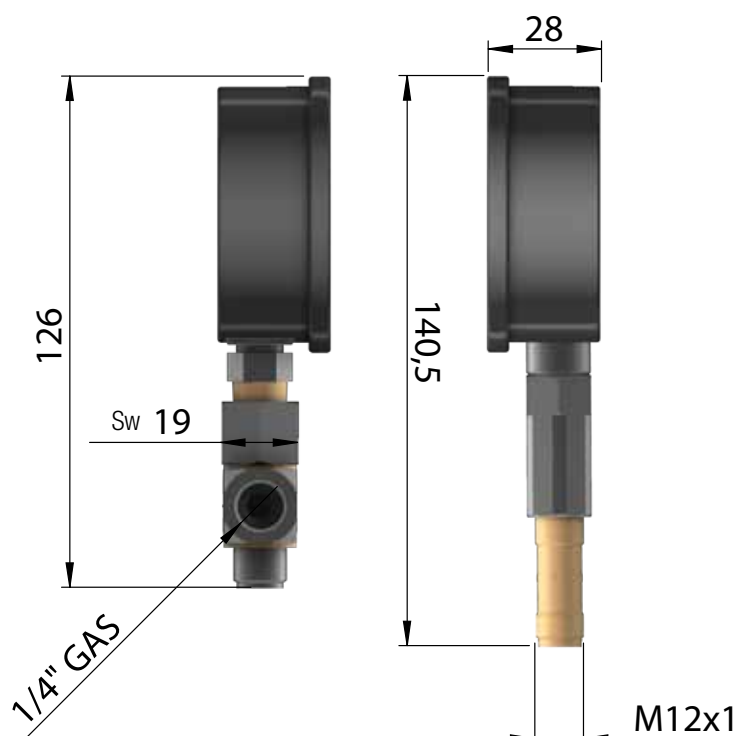
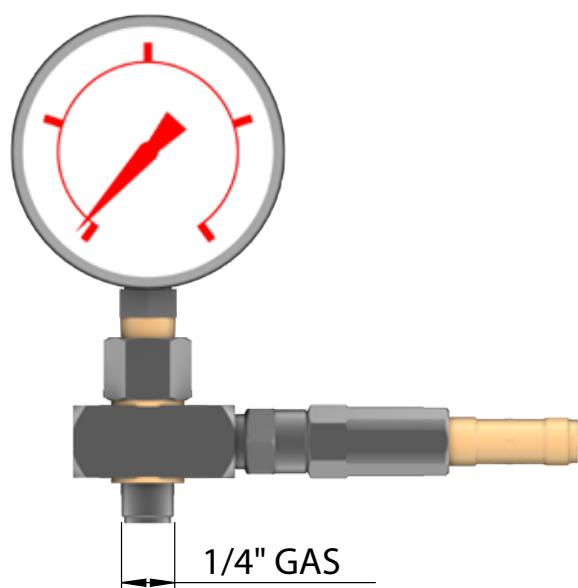
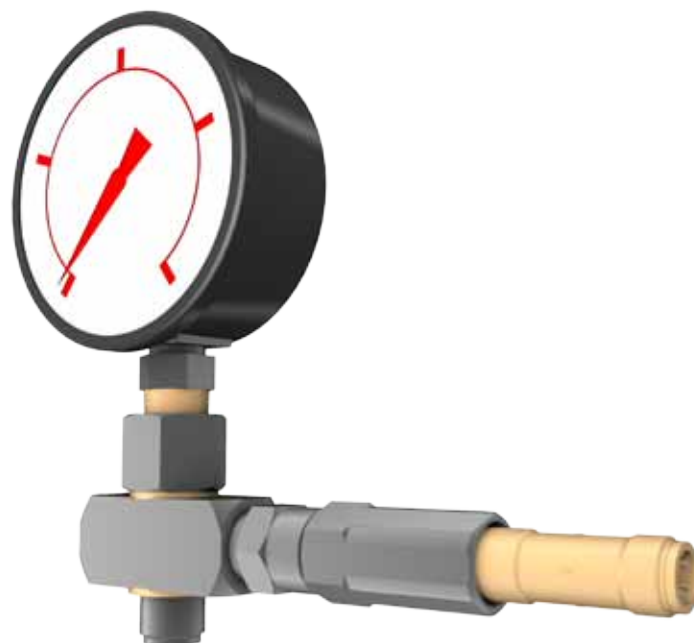
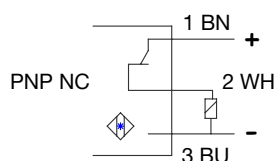
VOLTAGE	Coil -30 V DC
OUTPUT CURRENT	MAX 200 Ma
CURRENT	< 12 Ma
TEMPERATURE	-25°C +70°C
PROTECTION	IP 67
SENSOR BODY	STAINLESS STEEL

Cable for electric connection (see page 52)

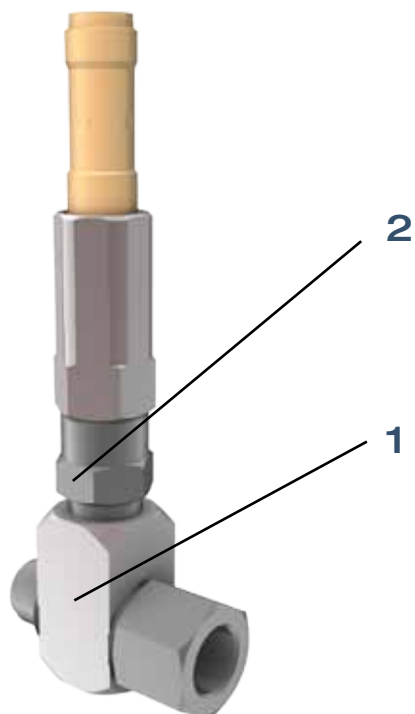


Recommended connection
1 - Brown
2 -
3 -
4 - Black

Wiring Diagram



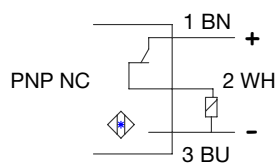
2-WAY 1/4" GAS JOINT + PROXIMITY OVERPRESSURE SENSOR 250 bar A70093543



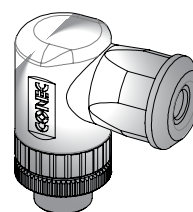
1
A70093186
2-way 1/4" Gas joint without bypass valve

2
09-712-7
Proximity overpressure sensor (250 bar)

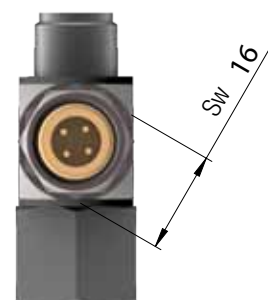
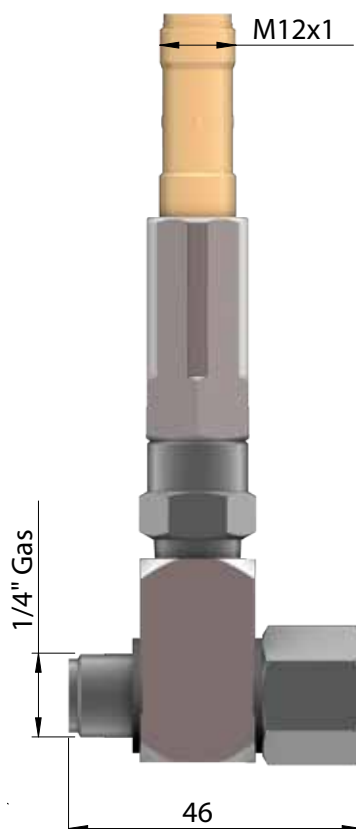
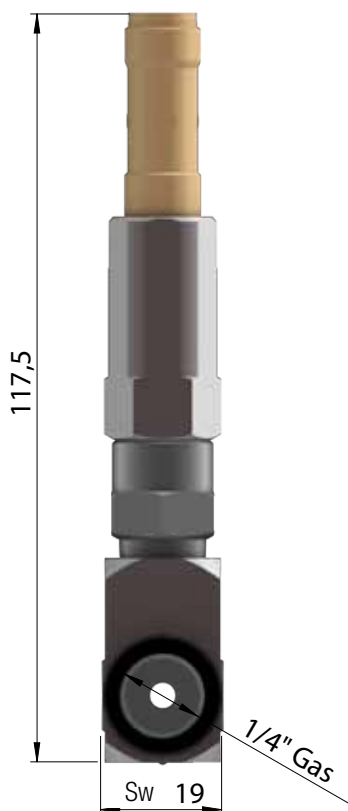
Wiring Diagram



Cable for electric connection (see page 52)

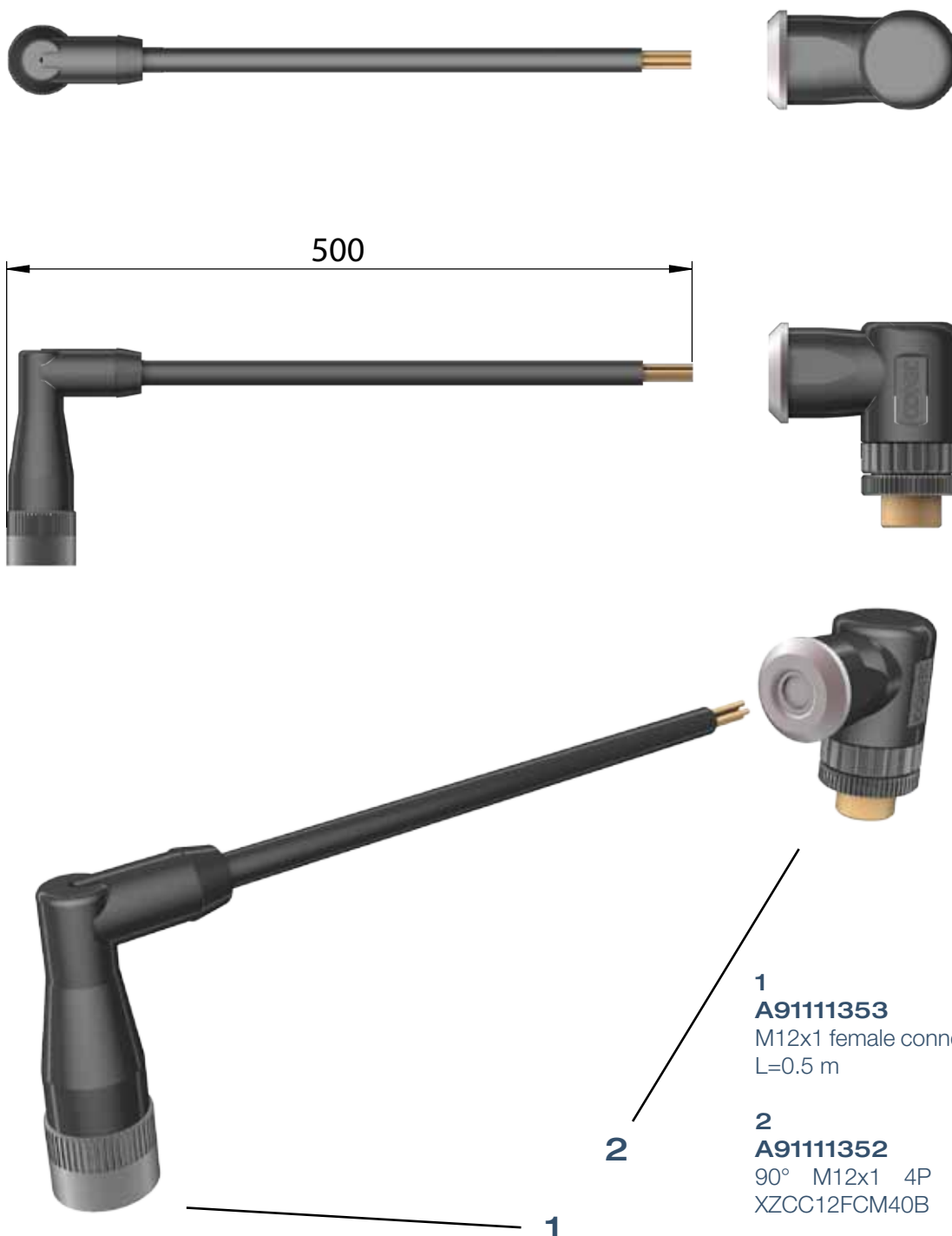


Recommended connection
1 - Brown
2 -
3 -
4 - Black



ACCESSORIES

4P CONNECTION FOR OVERPRESSURE M12x1 90° FEMALE- 90° MALE L=0.5 m 40-CPC-4-03

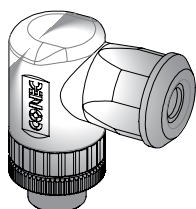


1
A91111353
M12x1 female connector 90° 4P PVC
L=0.5 m

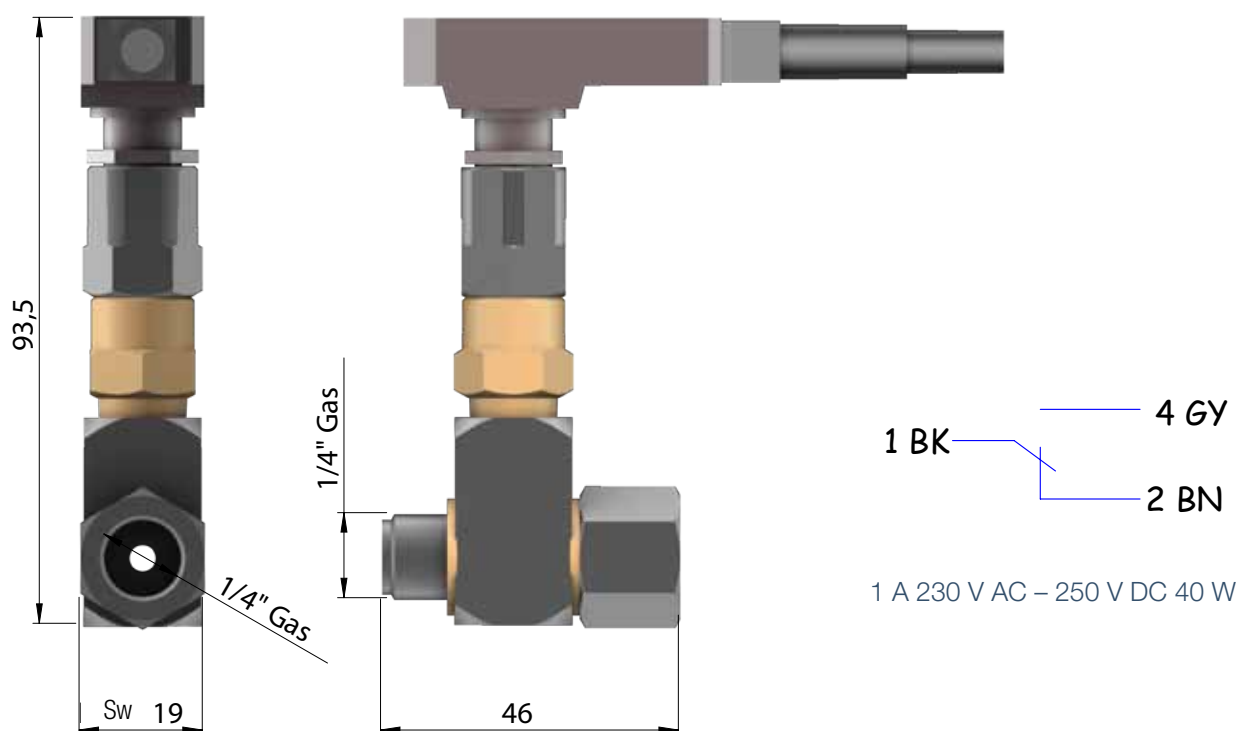
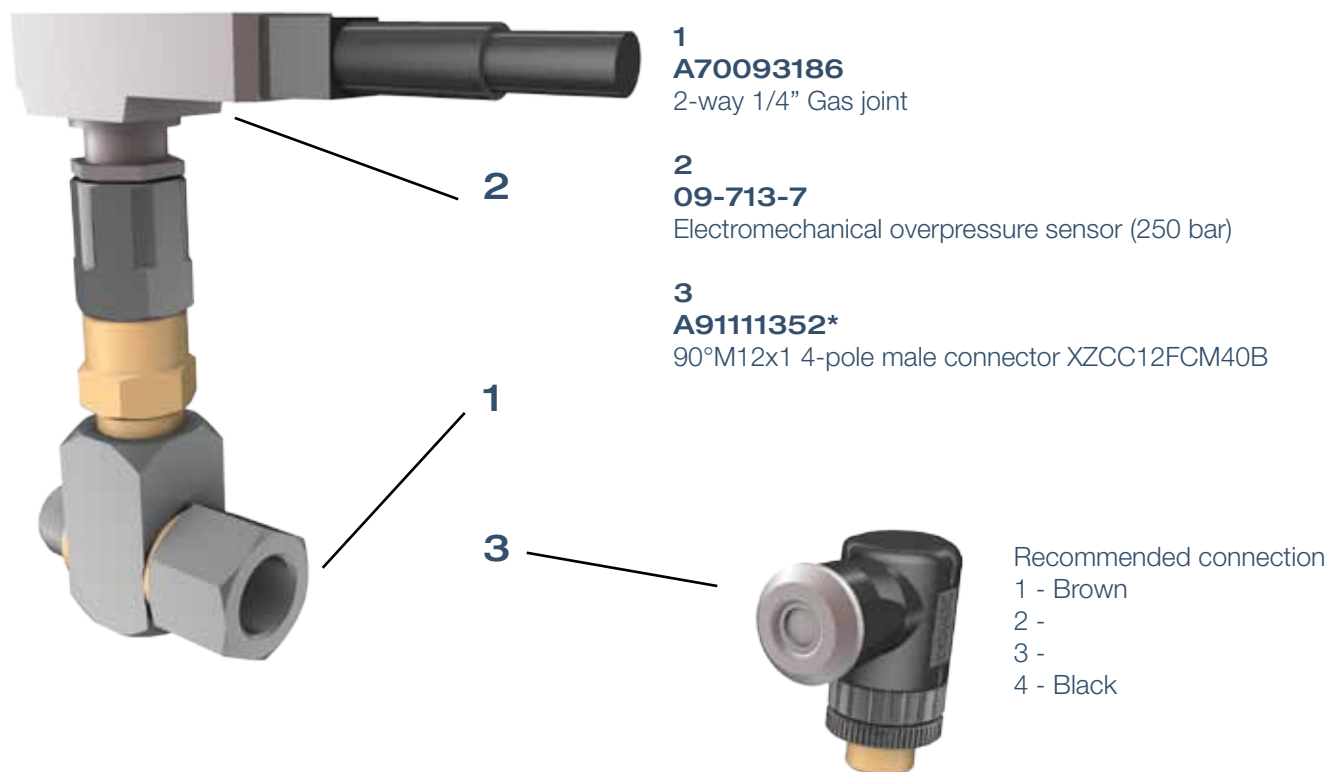
2
A91111352
90° M12x1 4P male connector
XZCC12FCM40B

Connections

- 1**- Brown
- 2**-White
- 3**-Blue
- 4**-Black



2-WAY 1/4" GAS JOINT + ELECTROMECHANICAL OVERPRESSURE SENSOR 250 bar A70093544



BUTTONS

LUMINOUS BUTTON



VOLTS	COLOUR	MATERIAL	PART NUMBER
12	green	plastic	40.PBG.12
24	green	plastic	40.PBG.24

RESET BUTTON WITHOUT LIGHT

40.PSB.00



RESET BUTTON WITH LIGHT

VOLTS	COLOUR	MATERIAL	PART NUMBER
12	green	Plastic	40.PSG.12
24	green	Plastic	40.PSG.24
12	red	Plastic	40.PSR.12
24	red	Plastic	40.PSR.24



LUMINOUS BUTTON

40.COS.00



LIGHT



VOLTS	COLOUR	MATERIAL	PART NUMBER
12	green	Plastic	40.SLG.12
24	green	Plastic	40.SLG.24
12	red	Plastic	40.SLR.12
24	red	Plastic	40.SLR.24

LIGHTS

VOLTS	MATERIAL	PART NUMBER
12	plastic	40.COL.12
24	plastic	40.COL.24



ELECTRIC CONNECTIONS

The ILC-MAX pump is supplied complete with 7-pole electric connector.

A91.111327

N.B. the supply includes 3 types of rubbers for different diameters and for unused contacts.



n. 7 Code **A91.111315**
1.2 to 2.1 mm² cables

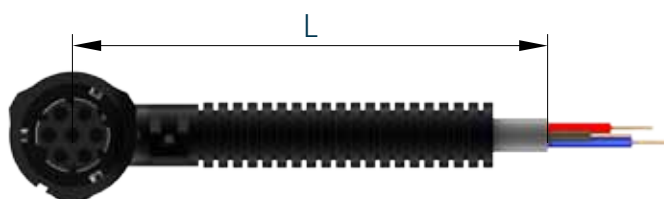
n. 7 Code **A91.111314**
2.2 to 3 mm² cables

n. 7 Code **A91.111310**
to plug the hole of an unused contact



We can supply the connector complete with 3-wire cable (1 mm²)

PART NUMBER	L
40.CBL.3.05	5 m
40.CBL.3.10	10 m
40.CBL.3.15	15 m



Or else, we can supply the connector complete with 7-wire cable (1 mm²)

PART NUMBER	L
40.CBL.7.05	5 M
40.CBL.7.10	10 M
40.CBL.7.15	15 M



INTERNAL CIRCUIT BOARD**40.CCT.AC.00** – 24 V AC**40.CCT.DC.00** – 12/24 V DC**TECHNICAL FEATURES**

Voltage: 9 – 30 V DC

 Absorption: 12 V DC 40 mA
 24 V DC 30 mA

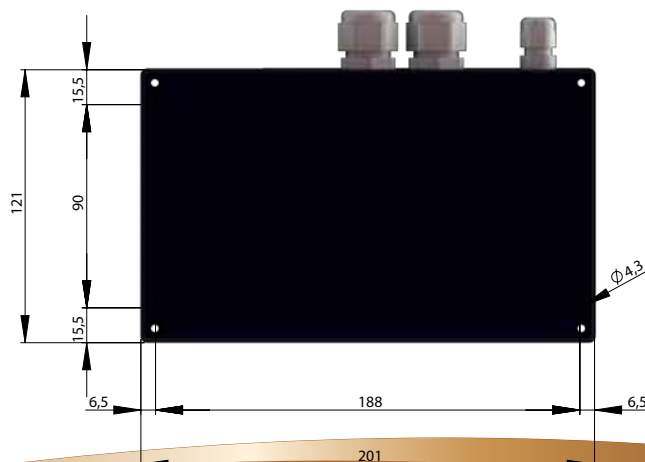
Temperature: from -20 to 80 °C

EXTERNAL CIRCUIT BOARD**40.BCT.BT.AC** – 24 V AC**40.BCT.BT.DC** – 12/24 V DC**TECHNICAL FEATURES**

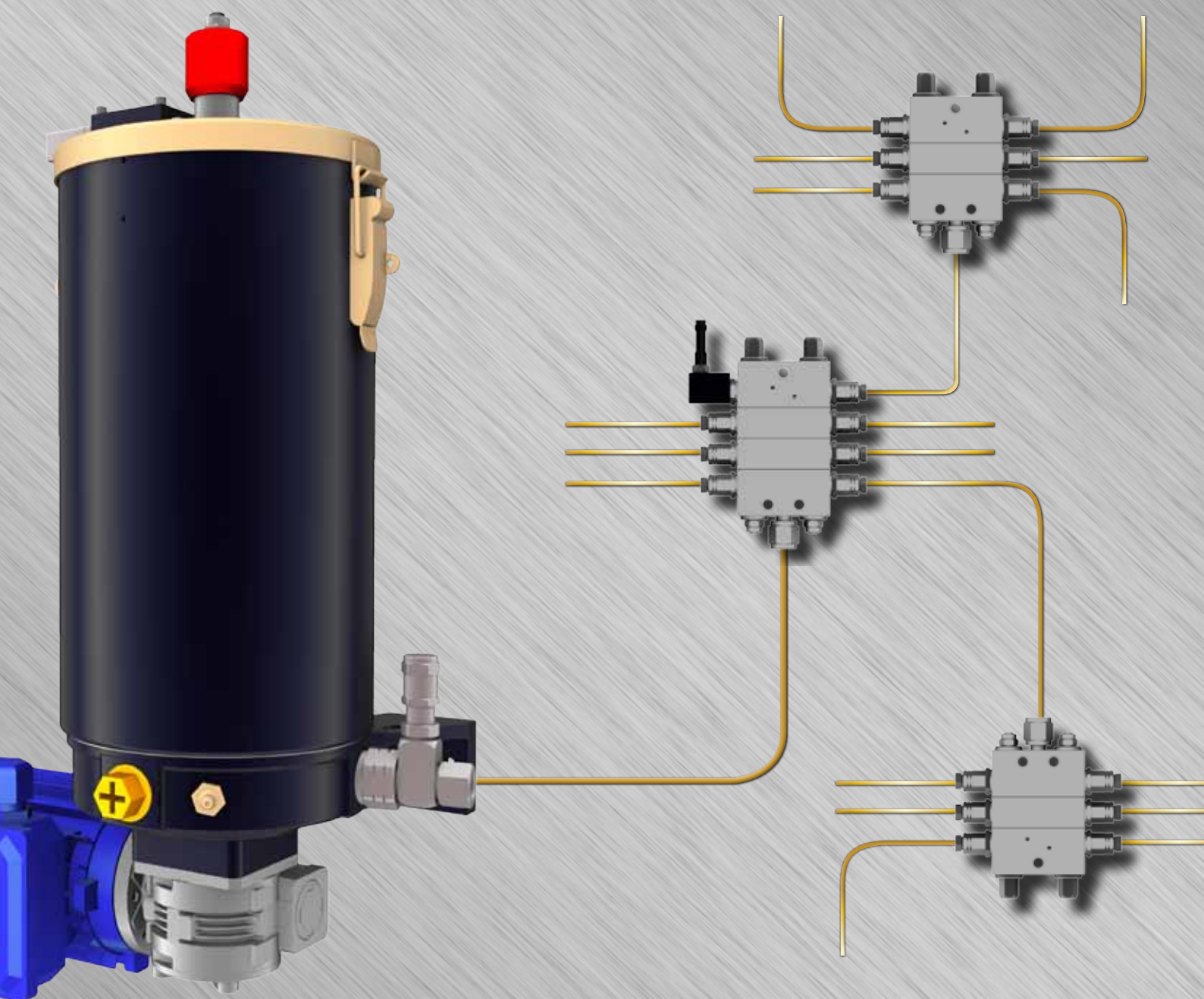
Voltage: 9 – 30 V DC

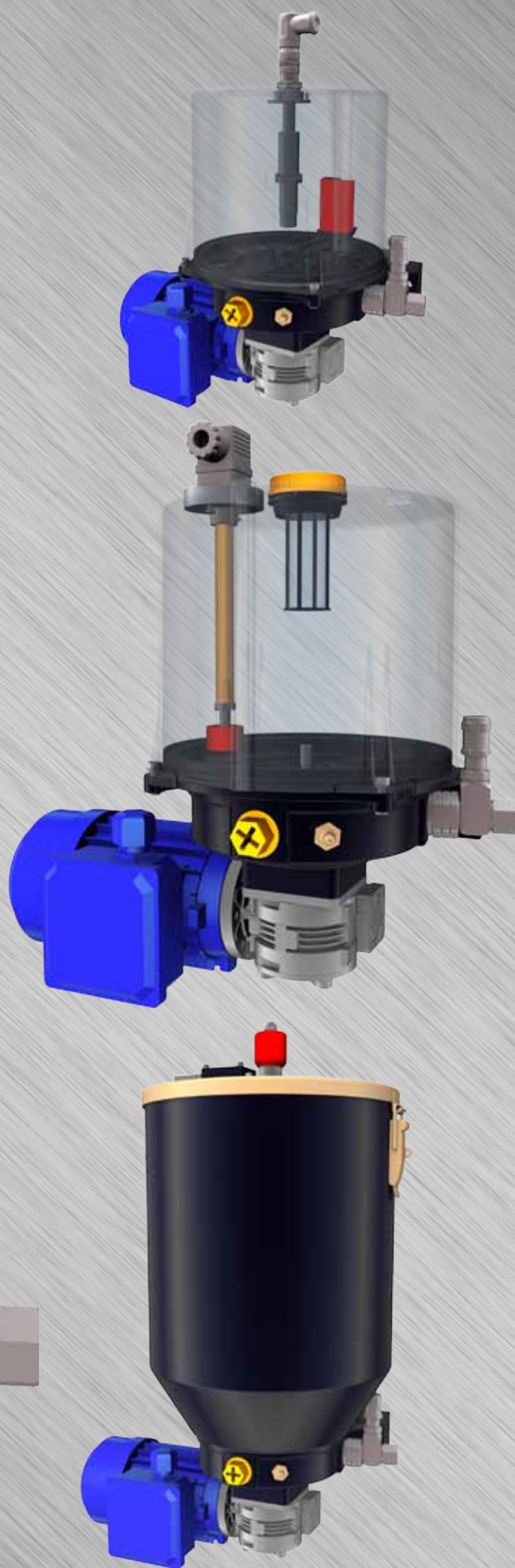
 Absorption: 12 V DC 40 mA
 24 V DC 30 mA

Temperature: from -20 to 80 °C



ELECTRIC GREASE AND OIL PUMPS PEG-N / PEO-N



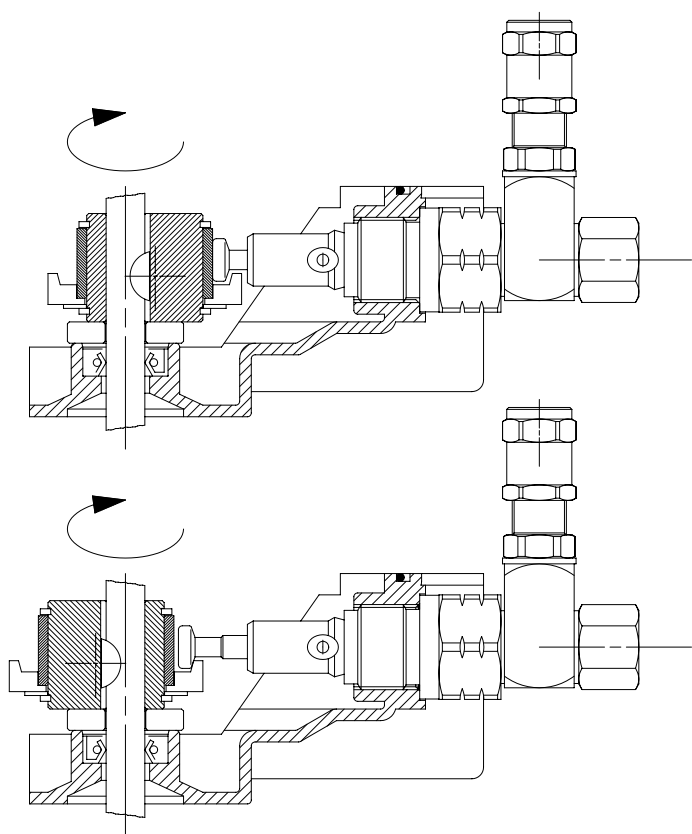


ELECTRIC GREASE (PEG-N) OR OIL (PEO-N) PUMPS

APPLICATIONS

They are ideal for automatic grease lubrication of all types of industrial machines, as well as trucks, engines, buses, construction and earth moving vehicles.

Together with the DPA or DPM progressive dividers, they can lubricate over 300 points with a single pump.

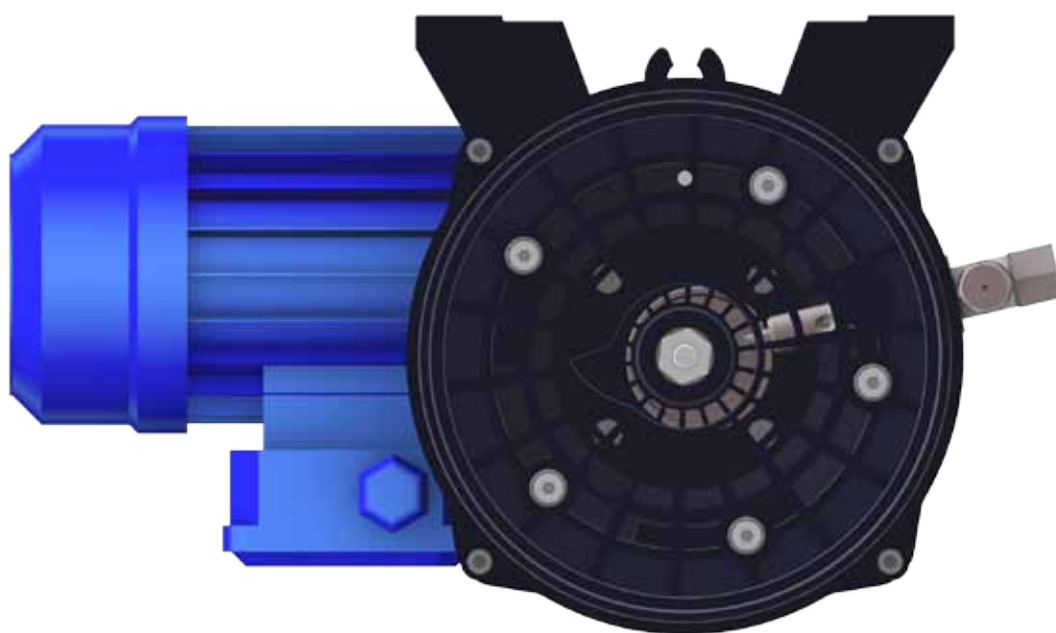


OPERATION

The pumps have been designed for intermittent or continuous operation and provide pre-programmed lubrication cycles according to the applications. A gearmotor controls an internal cam that operates up to 3 pumping elements mounted externally.

Each pumping element is equipped with an adjustable pressure relief valve capable of protecting the pump and the elements from overpressure.

It is possible to convey the flows of a second and third pumping element into a single outlet for a greater flow rate.



ELECTRIC GREASE PUMPS PEG-520, PEG-540, PEG-580



Pump Installation

The pumps must be mounted vertically by means of the fixing bracket integrated in the pump body.



Technical Features

NUMBER OF OUTLETS	FROM 1 TO 3
DISCHARGE PER CYCLE WITH FIXED PUMPING	0.16 CC
DISCHARGE PER CYCLE WITH ADJUSTABLE PUMPING	0.01 – 0.16 CC
SUITABLE LUBRICANTS	GREASE UP TO A CONSISTENCY NLGI NO. 2
MAXIMUM RECOMMENDED OPERATING PRESSURE	500 bar (7260 PSI)
TANK CAPACITY	2 KG, 4 KG or 8 KG
TEMPERATURE	FROM - 30 °C TO + 80 °C
DELIVERY FITTING	1 / 4" G

Electric Levels with Capacity Sensor

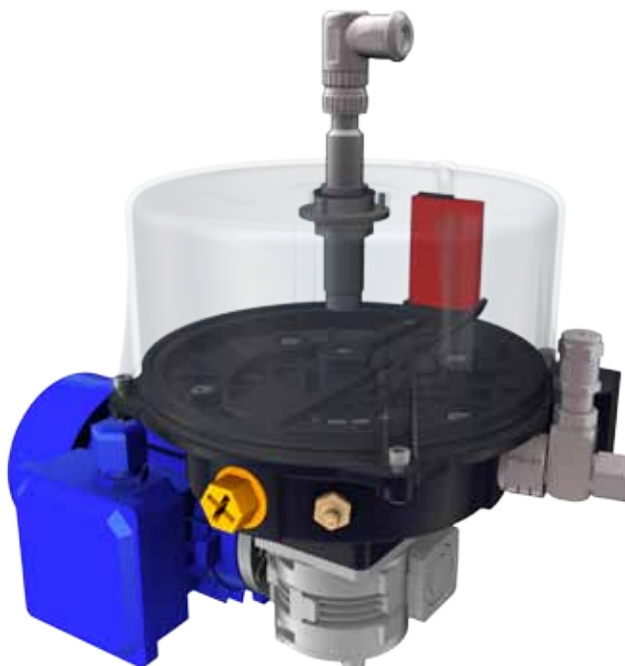
POWER SUPPLY VOLTAGE	FROM 10 TO 40 V DC (RIPPLE INCLUDED)
RIPPLE	=<10%
LOAD CURRENT	=< 200 mA
ABSORPTION	=< 12 mA
VOLTAGE DROP	=< 2.8 V DC AT MAX LOAD
ELECTRIC PROTECTION	POLE INVERSION AND SHORT-CIRCUIT
ACTIVATION FREQUENCY	25 Hz
CONTACT	"NO"
TEMPERATURE	FROM -25°C TO 70°C
PROTECTION RATING	IP 67 (NEMA 1,3,4,6,13)
APPROVALS	UL / CSA
CE MARKING	YES

ELECTRIC GREASE PUMPS PEG-520, PEG-540, PEG-580

Electric Motor Features

POWER SUPPLY VOLTAGE	220-240/380-420
FREQUENCY	50 Hz
ABSORPTION	0.64-0.74/0.37-0.46 A
POWER SUPPLY VOLTAGE	254-280/440-480
FREQUENCY	60 Hz
ABSORPTION	0.64-0.74/0.37-0.46 A
POWER SUPPLY VOLTAGE	115 V AC
FREQUENCY	50 Hz o 60 Hz
ABSORPTION	2.2 A
POWER SUPPLY VOLTAGE	230 V AC
FREQUENCY	50 Hz o 60 Hz
ABSORPTION	0.9 A
POWER	90 W
PROTECTION RATING	IP - 55
SERVICE	CONTINUOUS S1
INSULATION	CLASS F
CONSTRUCTION SHAPE	B14
SIZE	MEC - 56

ELECTRIC GREASE PUMP MODEL PEG-520 TRANSPARENT TANK 2 KG



Ordering Codes without Electric Level

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.2.380VF300G	PEG-520/30	1-30	46	55	***	
41.2.380VF500G	PEG-520/50	1-50	28	33	***	
41.2.380VF800G	PEG-520/80	1-80	17	20	***	
41.2.380VR300G	PEG-520/30 R	1-30	46	55		***
41.2.380VR800G	PEG-520/80 R	1-80	17	33		***

Ordering Codes with Electric Level

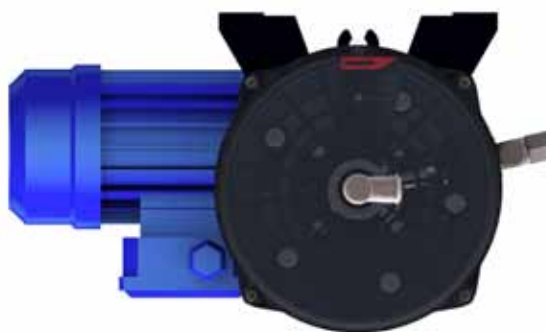
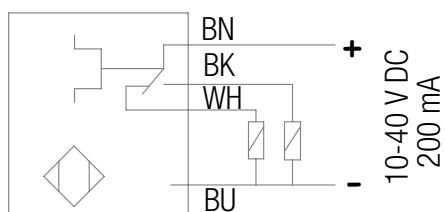
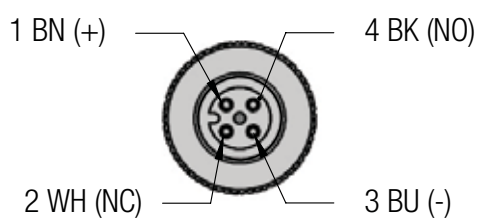
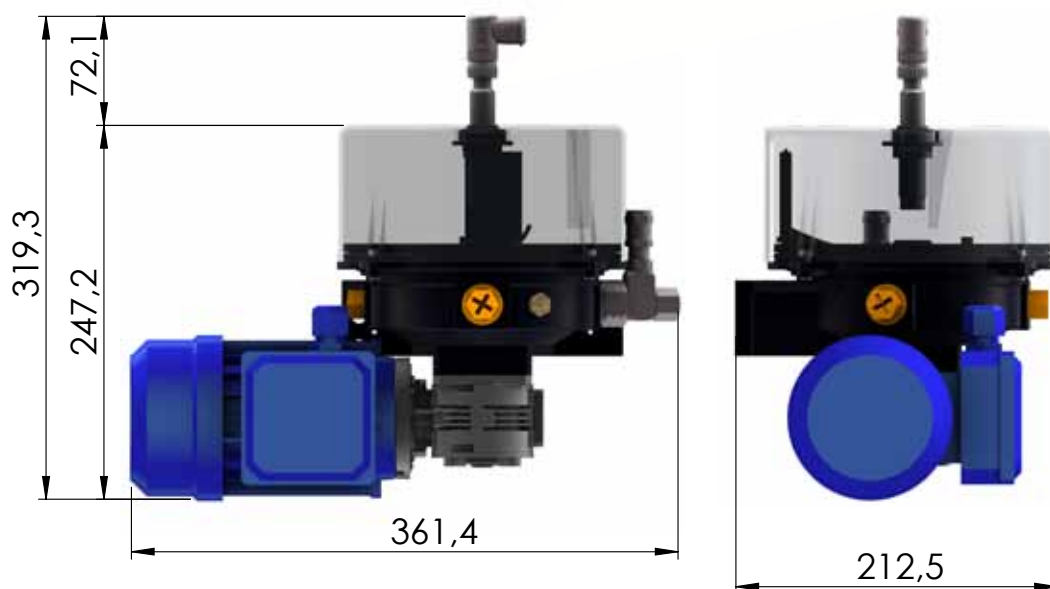
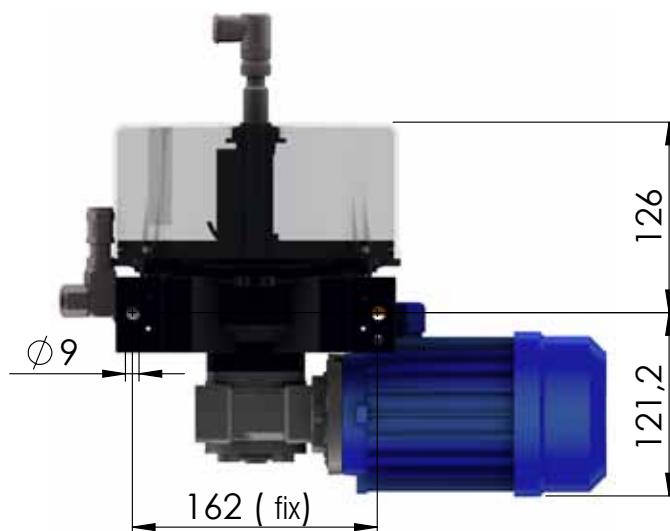
The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.2.380VF30CG	PEG-520 C/30 LV	1-30	46	55	***	
41.2.380VF50CG	PEG-520 C/50 LV	1-50	28	33	***	
41.2.380VF80CG	PEG-520 C/80 LV	1-80	17	20	***	
41.2.380VR30CG	PEG-520 C/30 R LV	1-30	46	55		***
41.2.380VR80CG	PEG-520 C/80 R LV	1-80	17	20		***

On demand, it is possible to supply single phase motors 115 V AC, 230 V AC 50/60 Hz or motors with special voltages. The required voltage must be added to the ordering code.

Example: part number **41.2.380VR80CG**
but with electric motor 115 V AC = **41.2.115VR80CG**

Overall Dimensions



ELECTRIC GREASE PUMP MODEL PEG-540 TRANSPARENT TANK 4 KG



Ordering Codes without Electric Level

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.4.380VF300G	PEG-540/30	1-30	46	55	***	
41.4.380VF500G	PEG-540/50	1-50	28	33	***	
41.4.380VF800G	PEG-540/80	1-80	17	20	***	
41.4.380VR300G	PEG-540/30 R	1-30	46	55		***
41.4.380VR800G	PEG-540/80 R	1-80	17	33		***

Ordering Codes with Electric Level

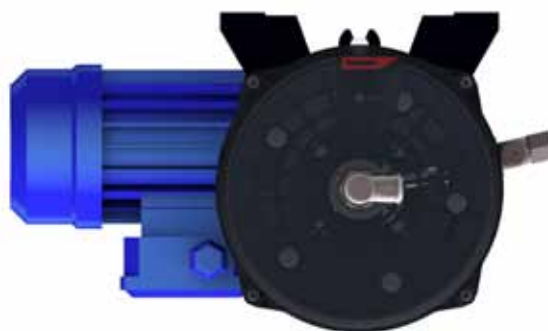
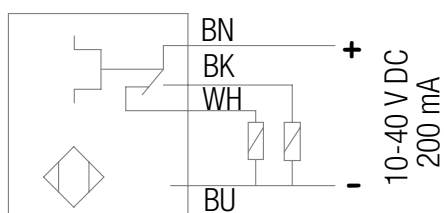
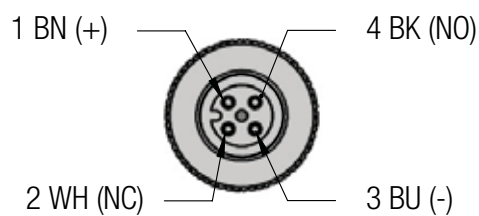
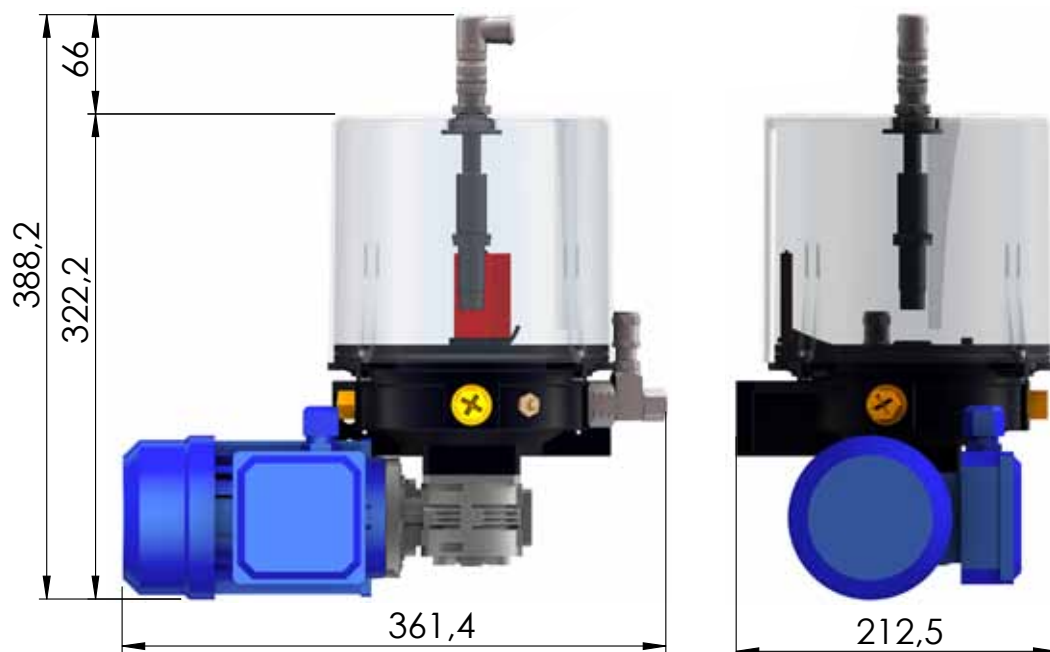
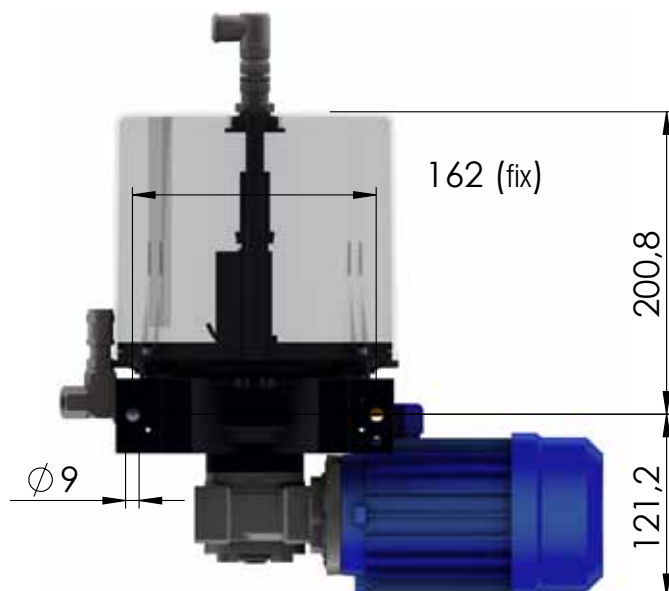
The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.4.380VF30CG	PEG-540 C/30 LV	1-30	46	55	***	
41.4.380VF50CG	PEG-540 C/50 LV	1-50	28	33	***	
41.4.380VF80CG	PEG-540 C/80 LV	1-80	17	20	***	
41.4.380VR30CG	PEG-540 C/30 R LV	1-30	46	55		***
41.4.380VR80CG	PEG-540 C/80 R LV	1-80	17	20		***

On demand, it is possible to supply single phase motors 115 V AC, 230 V AC 50/60 Hz or motors with special voltages. The required voltage must be added to the ordering code.

Example: part number **41.4.380VR80CG**
but with electric motor 115 V AC = **41.4.115VR80CG**

Overall Dimensions



ELECTRIC GREASE PUMP MODEL PEG-580 TRANSPARENT TANK 8 KG



Ordering Codes without Electric Level

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.8.380VF300G	PEG-580/30	1-30	46	55	***	
41.8.380VF500G	PEG-580/50	1-50	28	33	***	
41.8.380VF800G	PEG-580/80	1-80	17	20	***	
41.8.380VR300G	PEG-580/30 R	1-30	46	55		***
41.8.380VR800G	PEG-580/80 R	1-80	17	33		***

Ordering Codes with Electric Level

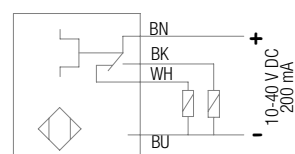
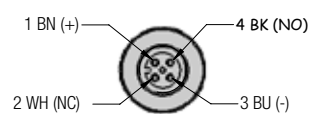
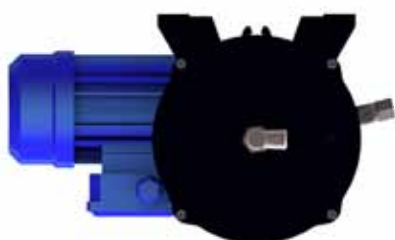
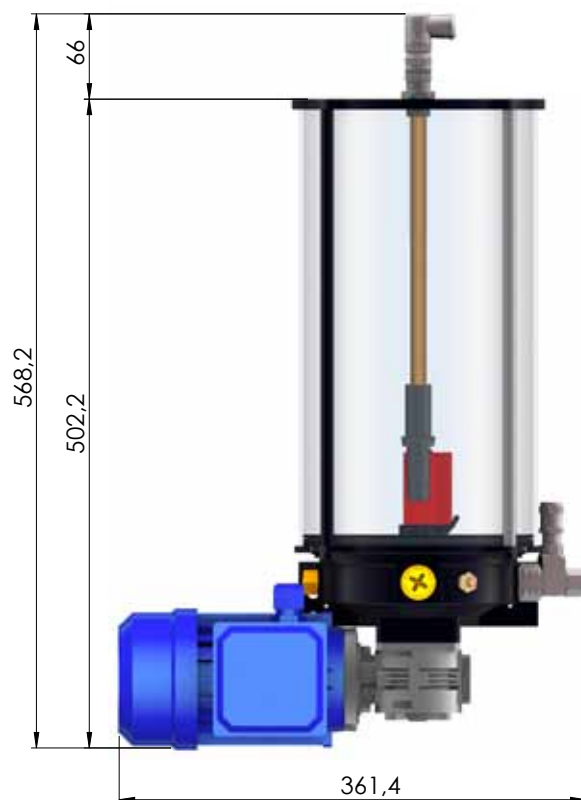
The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.8.380VF30CG	PEG-580 C/30 LV	1-30	46	55	***	
41.8.380VF50CG	PEG-580 C/50 LV	1-50	28	33	***	
41.8.380VF80CG	PEG-580 C/80 LV	1-80	17	20	***	
41.8.380VR30CG	PEG-580 C/30 R LV	1-30	46	55		***
41.8.380VR80CG	PEG-580 C/80 R LV	1-80	17	20		***

On demand, it is possible to supply single phase motors 115 V AC, 230 V AC 50/60 Hz or motors with special voltages. The required voltage must be added to the ordering code.

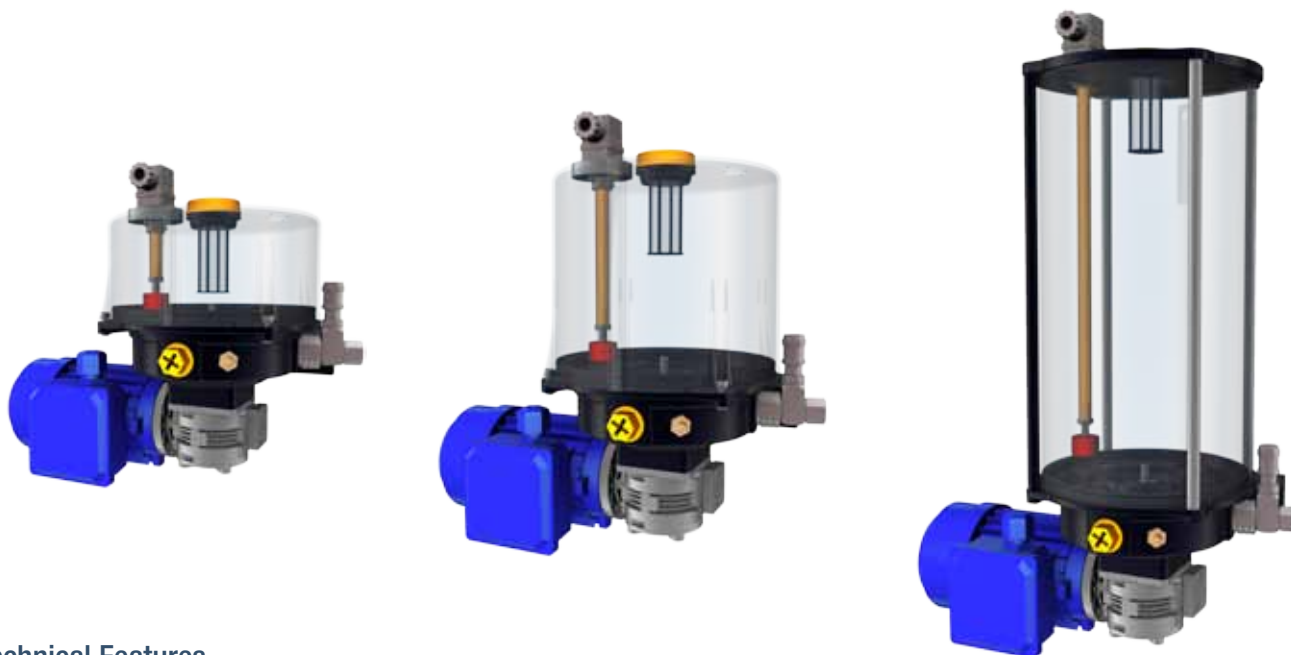
Example: part number **41.8.380VR80CG**
but with electric motor 115 V AC = **41.8.115VR80CG**

Overall Dimensions



Pump Installation

The pumps must be mounted vertically by means of the fixing bracket integrated in the pump body.



Technical Features

NUMBER OF OUTLETS	FROM 1 TO 3
DISCHARGE PER CYCLE WITH FIXED PUMPING	0.16 CC
DISCHARGE PER CYCLE WITH ADJUSTABLE PUMPING	0.01 – 0.16 CC
SUITABLE LUBRICANTS	MINERAL OILS 50-1500 cSt
MAXIMUM RECOMMENDED OPERATING PRESSURE	500 bar (7260 PSI)
TANK CAPACITY	2 L, 4 L, 8 KG
TEMPERATURE	FROM - 30 °C TO + 80 °C
DELIVERY FITTING	1 / 4" G

ELECTRIC OIL PUMPS PEO-520, PEO-540, PEO-580

Electric Motor Features

POWER SUPPLY VOLTAGE	220-240/380-420
FREQUENCY	50 Hz
ABSORPTION	0.64-0.74/0.37-0.46 A
POWER SUPPLY VOLTAGE	254-280/440-480
FREQUENCY	60 Hz
ABSORPTION	0.64-0.74/0.37-0.46 A
POWER SUPPLY VOLTAGE	115 V AC
FREQUENCY	50 Hz o 60 Hz
ABSORPTION	2.2 A
POWER SUPPLY VOLTAGE	230 V AC
FREQUENCY	50 Hz o 60 Hz
ABSORPTION	0.9 A
POWER	90 W
PROTECTION RATING	IP - 55
SERVICE	CONTINUOUS S1
INSULATION	CLASS F
CONSTRUCTION SHAPE	B14
SIZE	MEC - 56

ELECTRIC OIL PUMP MODEL PEO-520 TRANSPARENT TANK 2 L



Ordering Codes without Electric Level

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.2.380VF3000	PEO-520/30	1-30	46	55	***	
41.2.380VF5000	PEO-520/50	1-50	28	33	***	
41.2.380VF8000	PEO-520/80	1-80	17	20	***	
41.2.380VR3000	PEO-520/30 R	1-30	46	55		***
41.2.380VR8000	PEO-520/80 R	1-80	17	33		***

Ordering Codes with Electric Level

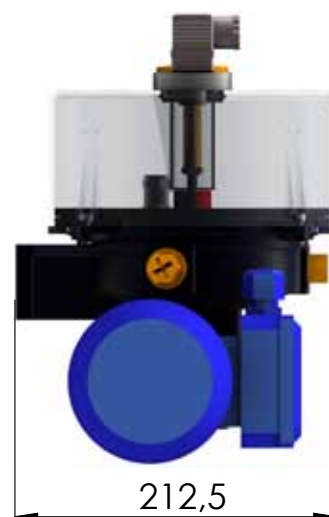
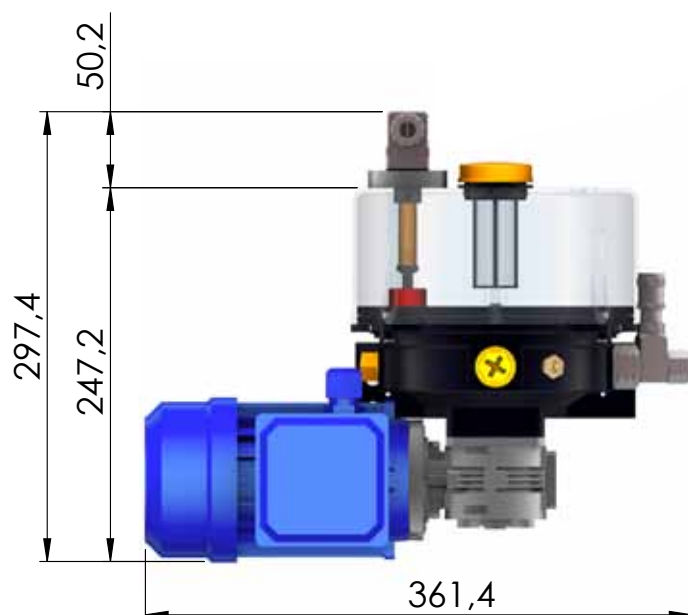
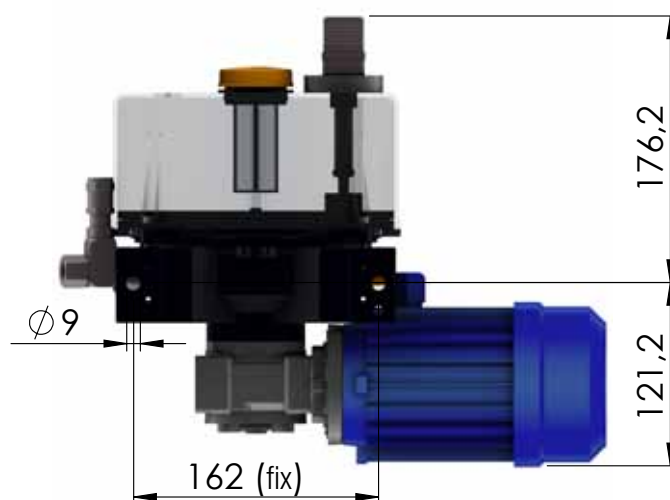
The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.2.380VF30LO	PEO-520 C/30 LV	1-30	46	55	***	
41.2.380VF50LO	PEO-520 C/50 LV	1-50	28	33	***	
41.2.380VF80LO	PEO-520 C/80 LV	1-80	17	20	***	
41.2.380VR30LO	PEO-520 C/30 R LV	1-30	46	55		***
41.2.380VR80LO	PEO-520 C/80 R LV	1-80	17	20		***

On demand, it is possible to supply single phase motors 115 V AC, 230 V AC 50/60 Hz or motors with special voltages. The required voltage must be added to the ordering code.

Example: part number **41.2.380VF30LO**
but with electric motor 115 V AC = **41.2.115VF30LO**

Overall Dimensions



ELECTRIC OIL PUMP MODEL PEO-540 TRANSPARENT TANK 4 L



Ordering Codes without Electric Level

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.4.380VF3000	PEO-540/30	1-30	46	55	***	
41.4.380VF5000	PEO-540/50	1-50	28	33	***	
41.4.380VF8000	PEO-540/80	1-80	17	20	***	
41.4.380VR3000	PEO-540/30 R	1-30	46	55		***
41.4.380VR8000	PEO-540/80 R	1-80	17	33		***

Ordering Codes without Electric Level

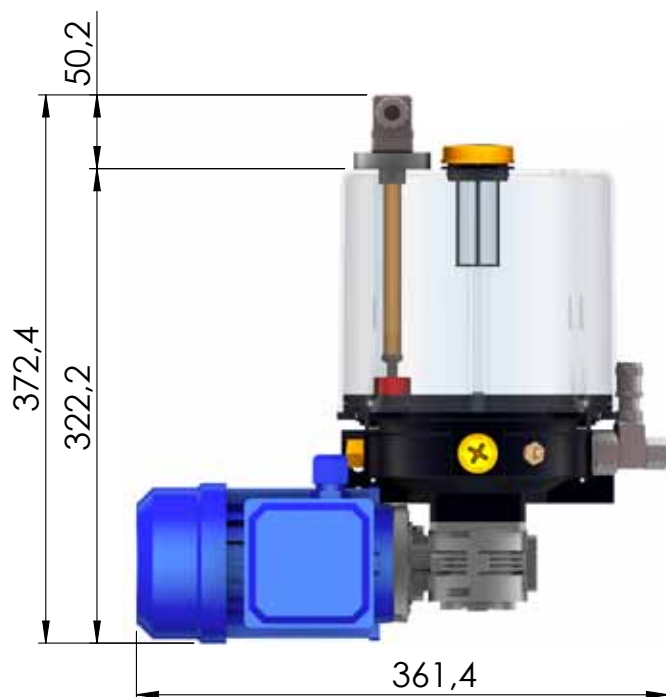
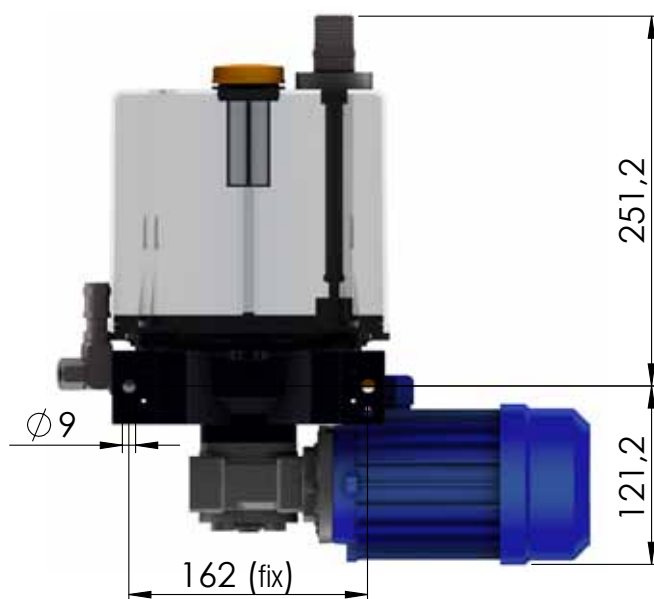
The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.4.380VF30LO	PEO-540 C/30 LV	1-30	46	55	***	
41.4.380VF50LO	PEO-540 C/50 LV	1-50	28	33	***	
41.4.380VF80LO	PEO-540 C/80 LV	1-80	17	20	***	
41.4.380VR30LO	PEO-540 C/30 R LV	1-30	46	55		***
41.4.380VR80LO	PEO-540 C/80 R LV	1-80	17	20		***

On demand, it is possible to supply single phase motors 115 V AC, 230 V AC 50/60 Hz or motors with special voltages. The required voltage must be added to the ordering code.

Example: part number **41.4.380VF30LO**
but with electric motor 115 V AC = **41.4.115VF30LO**

Overall Dimensions



ELECTRIC OIL PUMP MODEL PEO-580 TRANSPARENT TANK 8 L



Ordering Codes without Electric Level

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.8.380VF3000	PEO-580/30	1-30	46	55	***	
41.8.380VF5000	PEO-580/50	1-50	28	33	***	
41.8.380VF8000	PEO-580/80	1-80	17	20	***	
41.8.380VR3000	PEO-580/30 R	1-30	46	55		***
41.8.380VR8000	PEO-580/80 R	1-80	17	33		***

Ordering Codes with Electric Level

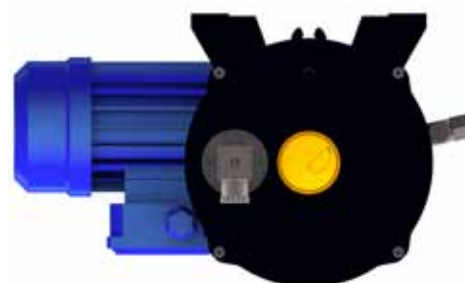
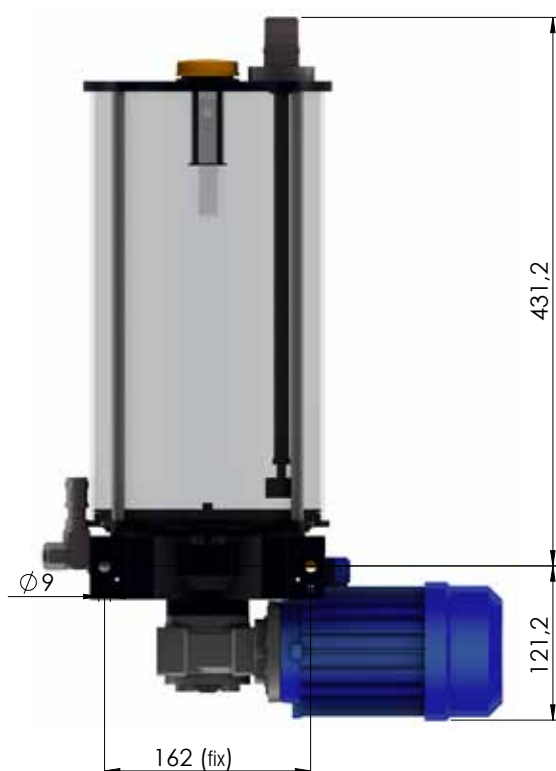
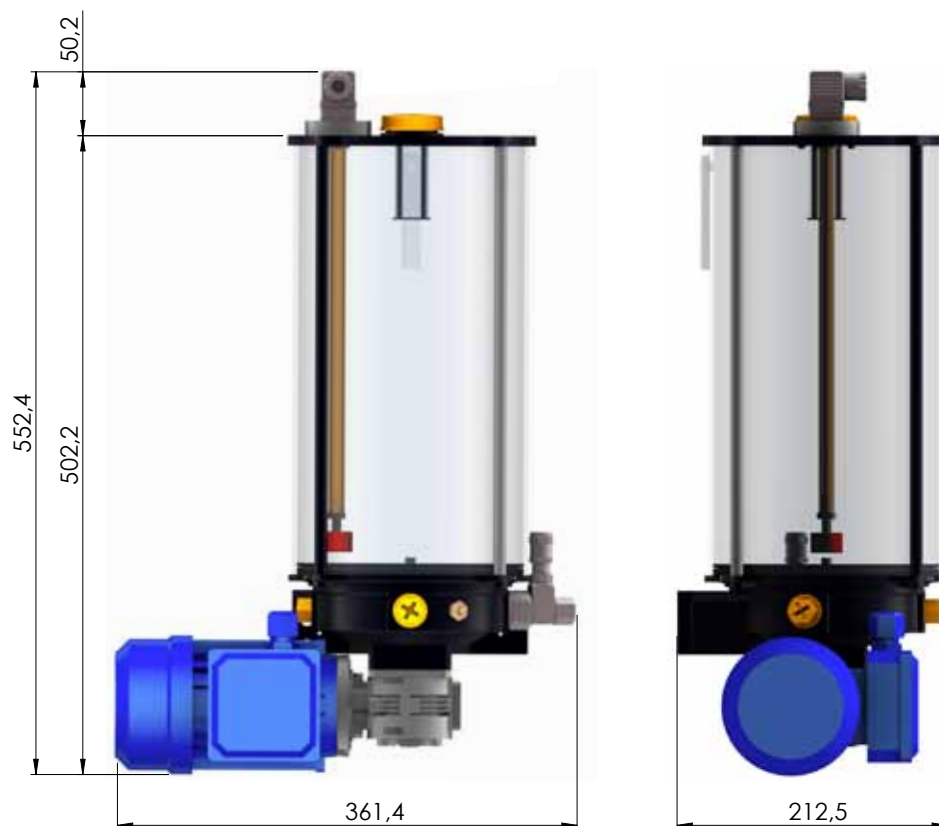
The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.8.380VF30LO	PEO-580 C/30 LV	1-30	46	55	***	
41.8.380VF50LO	PEO-580 C/50 LV	1-50	28	33	***	
41.8.380VF80LO	PEO-580 C/80 LV	1-80	17	20	***	
41.8.380VR30LO	PEO-580 C/30 R LV	1-30	46	55		***
41.8.380VR80LO	PEO-580 C/80 R LV	1-80	17	20		***

On demand, it is possible to supply single phase motors 115 V AC, 230 V AC 50/60 Hz or motors with special voltages. The required voltage must be added to the ordering code.

Example: part number **41.8.380VF30LO**
but with electric motor 115 V AC = **41.8.115VF30LO**

Overall Dimensions



ELECTRIC GREASE PUMPS PEG-5N, PEG-10N



Pump Installation

The pumps must be mounted vertically by means of the fixing bracket integrated in the pump body.

Technical Features

NUMBER OF OUTLETS	FROM 1 TO 3
DISCHARGE PER CYCLE WITH FIXED PUMPING	0.16 CC
DISCHARGE PER CYCLE WITH ADJUSTABLE PUMPING	0.01 – 0.16 CC
SUITABLE LUBRICANTS	GREASE UP TO A CONSISTENCY NLGI NO. 2
MAXIMUM RECOMMENDED OPERATING PRESSURE	500 bar (7260 PSI)
TANK CAPACITY	5 KG or 10 KG
TEMPERATURE	FROM - 30 °C TO + 80 °C
DELIVERY FITTING	1 / 4" G
ELECTRIC LEVELS PEG-5N E PEG-10N	5A – 250 V AC 0.4 A - 125 V DC IP65 RESISTIVE LOAD

Electric Motor Features

POWER SUPPLY VOLTAGE	220-240/380-420
FREQUENCY	50 Hz
ABSORPTION	0.64–0.74/0.37-0.46 A
POWER SUPPLY VOLTAGE	254-280/440-480
FREQUENCY	60 Hz
ABSORPTION	0.64–0.74/0.37-0.46 A
POWER SUPPLY VOLTAGE	115 V AC
FREQUENCY	50 Hz o 60 Hz
ABSORPTION	2.2 A
POWER SUPPLY VOLTAGE	230 V
FREQUENCY	50 Hz o 60 Hz
ABSORPTION	0.9 A
POWER	90 W
PROTECTION RATING	IP - 55
SERVICE	CONTINUOUS S1
INSULATION	CLASS F
CONSTRUCTION SHAPE	B14
SIZE	MEC - 56

ELECTRIC GREASE PUMPS PEG-5N

ELECTRIC GREASE PUMP MODEL PEG-5N METAL TANK 5 KG

Ordering Codes

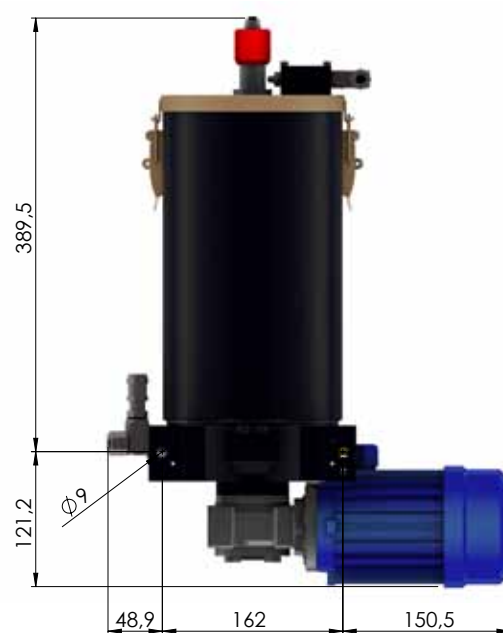
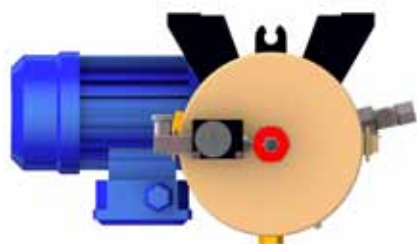
The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
90.880.0	PEG-5N/30	1-30	46	55	***	
90.880.2	PEG-5N/50	1-50	28	33	***	
90.880.5	PEG-5N/80	1-80	17	20	***	
90.898.0	PEG-5N/30 R	1-30	46	55		***
90.898.1	PEG-5N/80 R	1-80	17	20		***

On demand, it is possible to supply single phase motors 115 V AC, 230 V AC 50/60 Hz or motors with special voltages. The required voltage must be added to the ordering code.

Example: part number **90.880.5**
but with electric motor 230 V AC = **90.880.5.230**

Overall Dimensions



ELECTRIC GREASE PUMP MODEL PEG-5N METAL TANK 5 KG MIN AND MAX GREASE LEVEL CONTROL

Ordering Codes

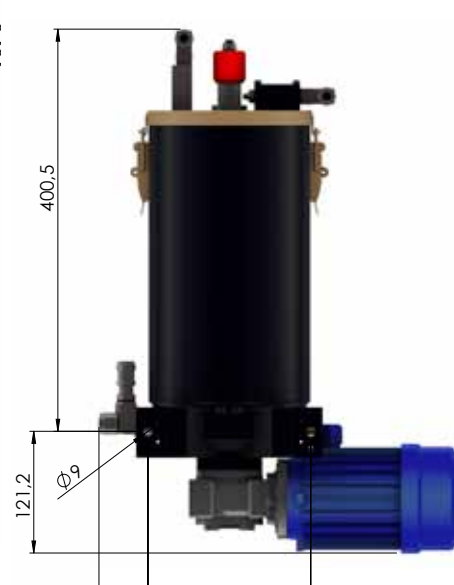
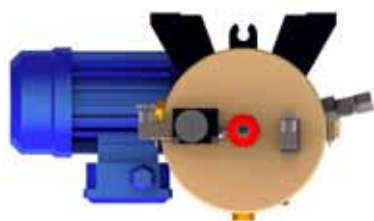
The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
90.880.0.HL	PEG-5N/30 HL	1-30	46	55	***	
90.880.2.HL	PEG-5N/50 HL	1-50	28	33	***	
90.880.5.HL	PEG-5N/80 HL	1-80	17	20	***	
90.898.0.HL	PEG-5N/30 R HL	1-30	46	55		***
90.898.1.HL	PEG-5N/80 R HL	1-80	17	20		**

On demand, it is possible to supply single phase motors 115 V AC, 230 V AC 50/60 Hz or motors with special voltages. The required voltage must be added to the ordering code.

Example: part number **90.880.5.HL**
but with electric motor 230 V AC = **90.880.5.HL230**

Overall Dimensions



ELECTRIC GREASE PUMPS PEG-10N

ELECTRIC GREASE PUMP MODEL PEG-10N METAL TANK 10 KG

Ordering Codes

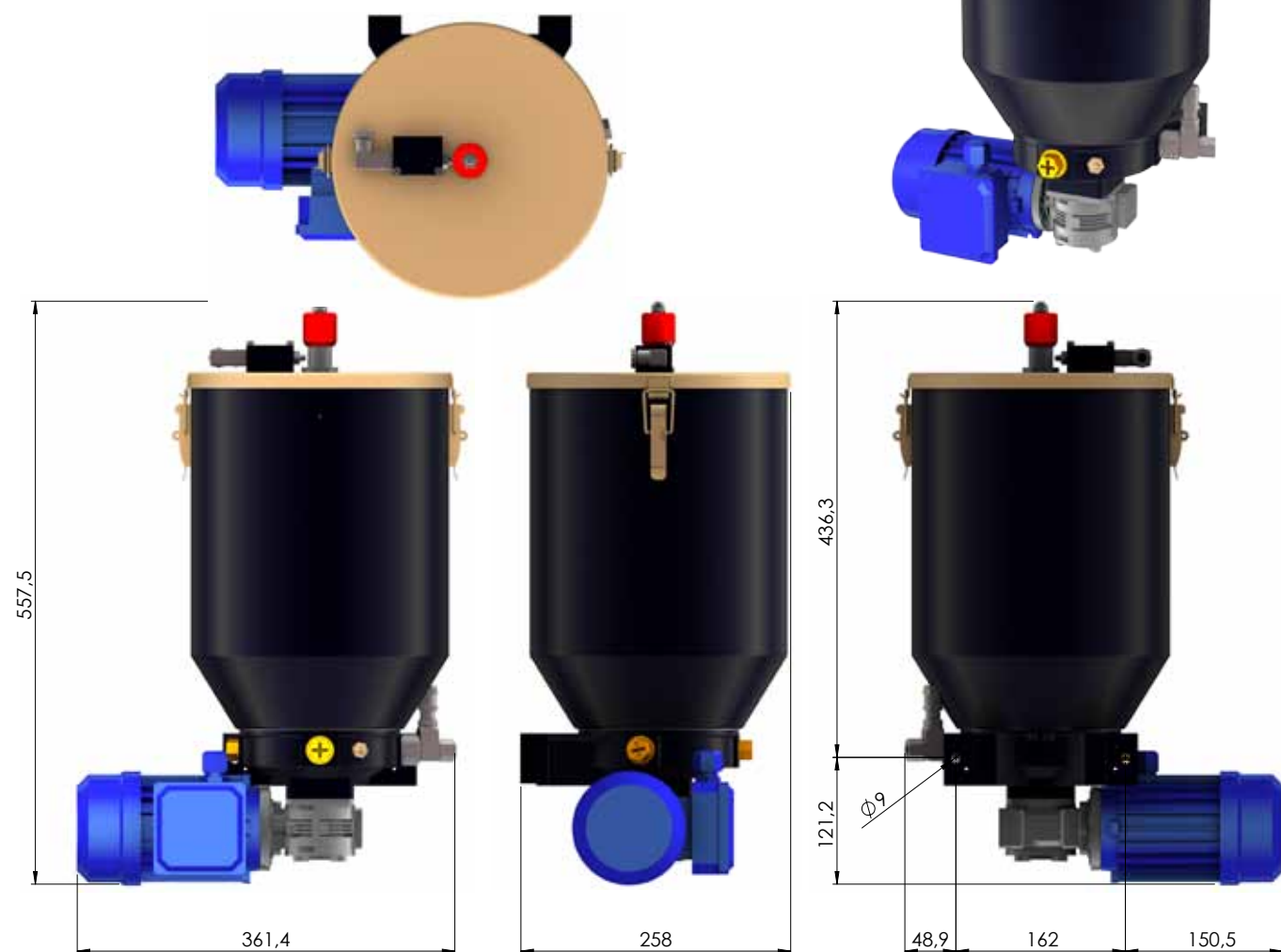
The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
90.922.0	PEG-10N/30	1-30	46	55	***	
90.922.1	PEG-10N/50	1-50	28	33	***	
90.922.2	PEG-10N/80	1-80	17	20	***	
90.923.0	PEG-10N/30 R	1-30	46	55		***
90.923.1	PEG-10N/80 R	1-80	17	20		***

On demand, it is possible to supply single phase motors 115 V AC, 230 V AC 50/60 Hz or motors with special voltages. The required voltage must be added to the ordering code.

Example: part number **90.923.1**
but with electric motor 230 V AC = **90.923.1.230**

Overall Dimensions



ELECTRIC GREASE PUMP MODEL PEG-10N METAL TANK 10 KG MIN AND MAX GREASE LEVEL CONTROL

Ordering Codes

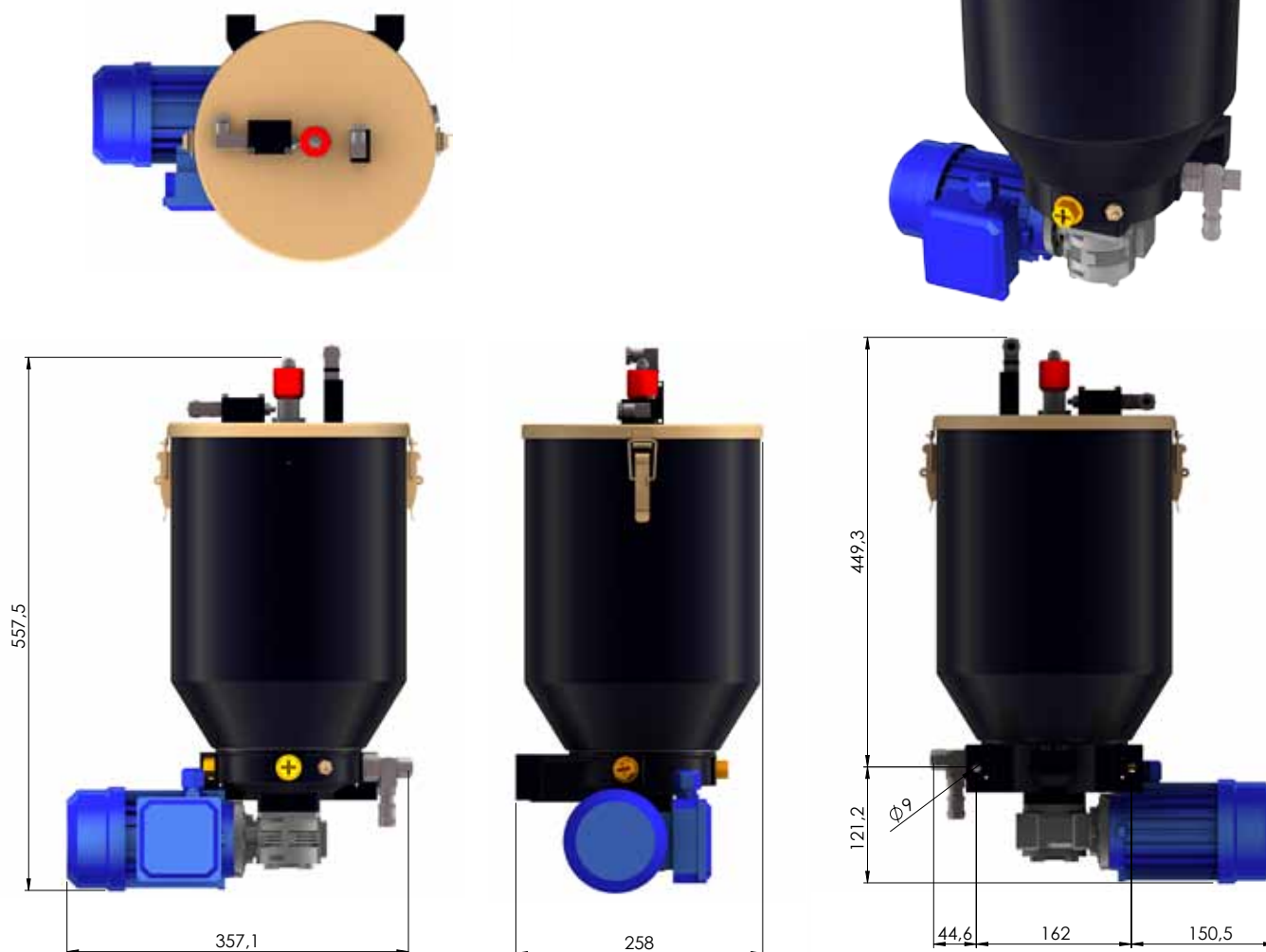
The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
90.922.0.HL	PEG-10N/30 HL	1-30	46	55	***	
90.922.1.HL	PEG-10N/50 HL	1-50	28	33	***	
90.922.2.HL	PEG-10N/80 HL	1-80	17	20	***	
90.923.0.HL	PEG-10N/30 R HL	1-30	46	55		***
90.923.1.HL	PEG-10N/80 R HL	1-80	17	20		***

On demand, it is possible to supply single phase motors 115 V AC, 230 V AC 50/60 Hz or motors with special voltages. The required voltage must be added to the ordering code.

Example: part number **90.923.1.HL**
but with electric motor 230 V AC = **90.923.1.HL230**

Overall Dimensions



ELECTRIC OIL PUMPS PEO-5N AND PEO-10N

Pump Installation

The pumps must be mounted vertically by means of the fixing bracket integrated in the pump body.

Technical Features

NUMBER OF OUTLETS	FROM 1 TO 3
DISCHARGE PER CYCLE WITH FIXED PUMPING	0.16 CC
DISCHARGE PER CYCLE WITH ADJUSTABLE PUMPING	0.01 – 0.16 CC
SUITABLE LUBRICANTS	MINERAL OILS 50-1500 cSt
MAXIMUM RECOMMENDED OPERATING PRESSURE	500 bar (7260 PSI)
TANK CAPACITY	5 L or 10 L
TEMPERATURE	FROM - 30 °C TO + 80 °C
DELIVERY FITTING	1 / 4" G
MINIMUM ELECTRIC LEVEL	1.5 A 250 V AC – 200 V DC 50 W RESISTIVE LOAD

Electric Motor Features

POWER SUPPLY VOLTAGE	220-240/380-420
FREQUENCY	50 Hz
ABSORPTION	0.64–0.74/0.37-0.46 A
POWER SUPPLY VOLTAGE	254-280/440-480
FREQUENCY	60 Hz
ABSORPTION	0.64–0.74/0.37-0.46 A
POWER SUPPLY VOLTAGE	115 V AC
FREQUENCY	50 Hz o 60 Hz
ABSORPTION	2.2 A
POWER SUPPLY VOLTAGE	230 V AC
FREQUENCY	50 Hz o 60 Hz
ABSORPTION	0.9 A
POWER	90 W
PROTECTION RATING	IP - 55
SERVICE	CONTINUOUS S1
INSULATION	CLASS F
CONSTRUCTION SHAPE	B14
SIZE	MEC - 56

ELECTRIC OIL PUMP MODEL PEO-5N METAL TANK 5 L

Ordering Codes

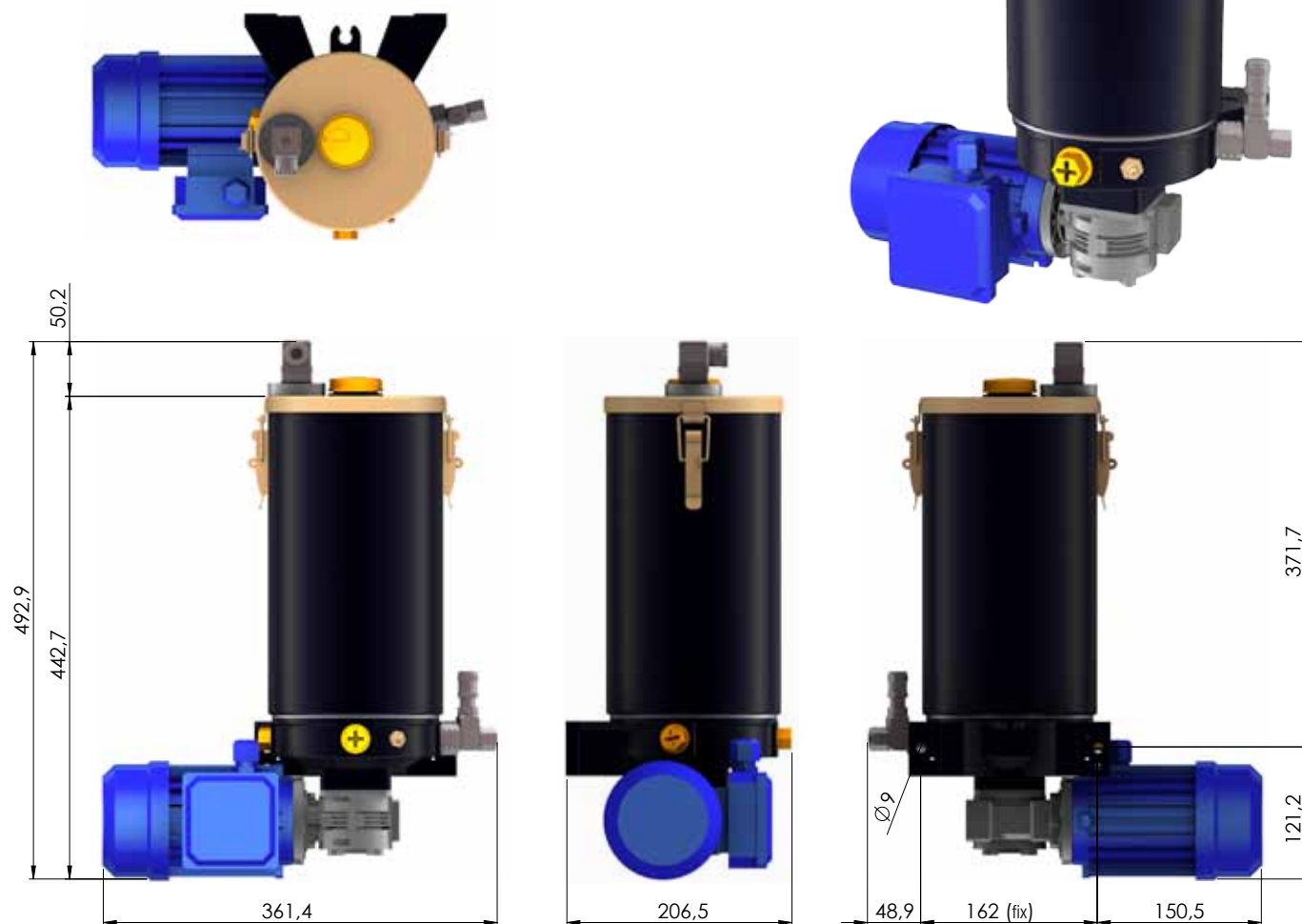
The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	ELECTRIC LEVEL	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
90.892.0	PEO-5N/30 LV	1-30	46	55	***	***	
90.892.2	PEO-5N/50 LV	1-50	28	33	***	***	
90.892.5	PEO-5N/80 LV	1-80	17	20	***	***	
90.905.0	PEO-5N/30 R LV	1-30	46	55	***		***
90.905.1	PEO-5N/80 R LV	1-80	17	20	***		***

On demand, it is possible to supply single phase motors 115 V AC, 230 V AC 50/60 Hz or motors with special voltages. The required voltage must be added to the ordering code.

Example: part number **90.905.1**
but with electric motor 115 V AC = **90.905.1.115**

Overall Dimensions



ELECTRIC OIL PUMPS MODEL PEO-10N

ELECTRIC OIL PUMP MODEL PEO-10N METAL TANK 10 L

Ordering Codes

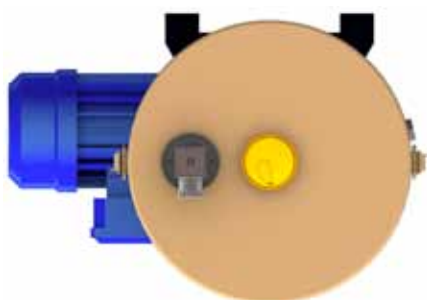
The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	ELECTRIC LEVEL	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
90.924.0	PEO-10N/30 LV	1-30	46	55	***	***	
90.924.1	PEO-10N/50 LV	1-50	28	33	***	***	
90.924.2	PEO-10N/80 LV	1-80	17	20	***	***	
90.924.3	PEO-10N/30 R LV	1-30	46	55	***		***
90.924.4	PEO-10N/80 R LV	1-80	17	20	***		***

On demand, it is possible to supply single phase motors 115 V AC, 230 V AC 50/60 Hz or motors with special voltages. The required voltage must be added to the ordering code.

Example: part number **90.924.1**
but with electric motor 115 V AC = **90.924.1.115**

Overall Dimensions



ELECTRIC GREASE PUMPS PEG-25N, PEG-210N

Pump Installation

The pumps must be mounted vertically by means of the fixing bracket integrated in the pump body.

Technical Features

NUMBER OF OUTLETS	FROM 1 TO 3
DISCHARGE PER CYCLE WITH FIXED PUMPING	0.16 CC
DISCHARGE PER CYCLE WITH ADJUSTABLE PUMPING	0.01 – 0.16 CC
SUITABLE LUBRICANTS	GREASE UP TO A CONSISTENCY NLGI NO. 2
MAXIMUM RECOMMENDED OPERATING PRESSURE	300 bar (4200 PSI)
ELECTRIC MOTOR	24 V DC – 85 W – 4.2 A 1500 rpm SERVICE S1 CLASS F IP54
ELECTRIC MOTOR	12 V DC – 85 W – 8.4 A 1500 rpm SERVICE S1 CLASS F IP54
TANK CAPACITY	5 KG or 10 KG
TEMPERATURE	FROM - 30 °C TO + 80 °C
DELIVERY FITTING	1 / 4" G
MINIMUM ELECTRIC LEVEL	5A – 250 V AC 0.4 A - 125 V DC IP65 RESISTIVE LOAD



PEG-25N



PEG-210N

ELECTRIC GREASE PUMPS PEG-25N

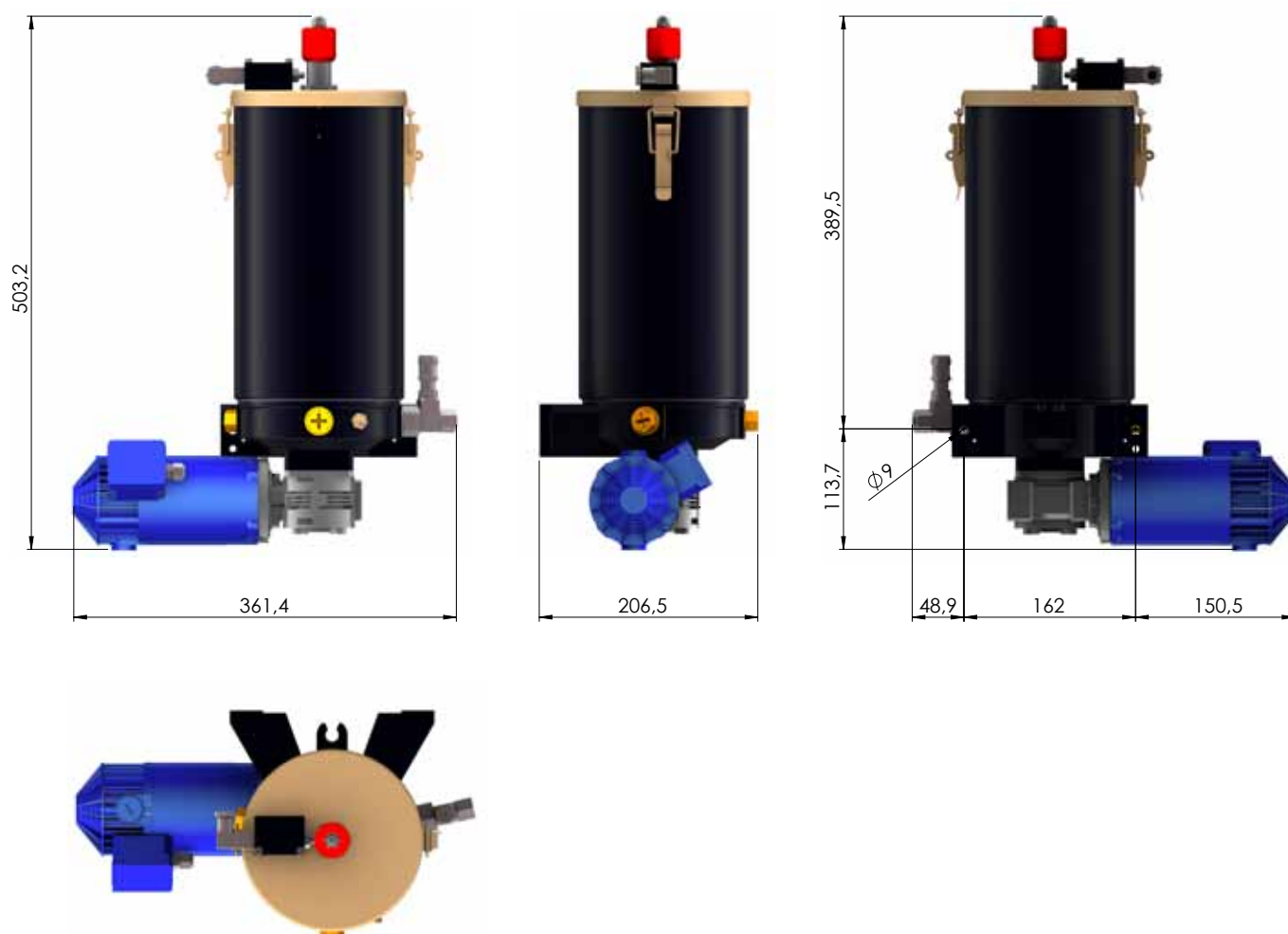
ELECTRIC GREASE PUMP MODEL PEG-25N METAL TANK 5 KG

Ordering Codes

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1'	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
90.881.0	PEG-25N/30 24 V DC	1-30	46	***	
90.881.2	PEG-25N/50 24 V DC	1-50	28	***	
90.881.5	PEG-25N/80 24 V DC	1-80	17	***	
90.899.0	PEG-25N/30 R 24 V DC	1-30	46		***
90.899.1	PEG-25N/80 R 24 V DC	1-80	17		***
90.887.0	PEG-25N/30 12 V DC	1-30	46	***	
90.887.1	PEG-25N/50 12 V DC	1-50	28	***	
90.887.2	PEG-25N/80 12 V DC	1-80	17	***	
90.887.3	PEG-25N/30 R 12 V DC	1-30	46		***
90.887.4	PEG-25N/80 R 12 V DC	1-80	17		***

Overall Dimensions



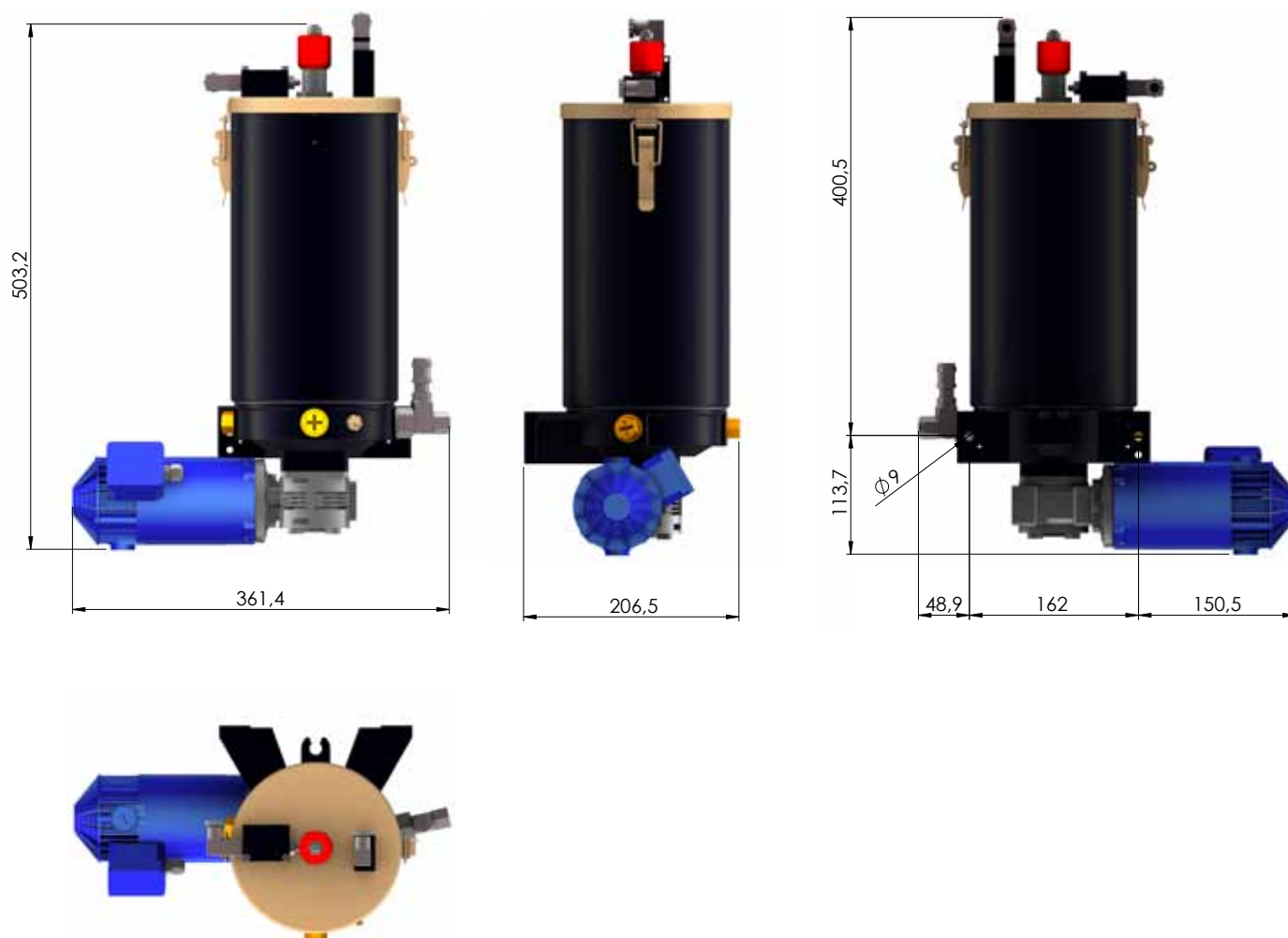
ELECTRIC GREASE PUMP MODEL PEG-25N METAL TANK 5 KG MIN AND MAX GREASE LEVEL CONTROL

Ordering Codes

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1'	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
90.881.0.HL	PEG-25N/30 24 V DC HL	1-30	46	***	
90.881.2.HL	PEG-25N/50 24 V DC HL	1-50	28	***	
90.881.5.HL	PEG-25N/80 24 V DC HL	1-80	17	***	
90.899.0.HL	PEG-25N/30 R 24 V DC HL	1-30	46		***
90.899.1.HL	PEG-25N/80 R 24 V DC HL	1-80	17		***
90.887.0.HL	PEG-25N/30 12 V DC HL	1-30	46	***	
90.887.1.HL	PEG-25N/50 12 V DC HL	1-50	28	***	
90.887.2.HL	PEG-25N/80 12 V DC HL	1-80	17	***	
90.887.3.HL	PEG-25N/30 R 12 V DC HL	1-30	46		***
90.887.4.HL	PEG-25N/80 R 12 V DC HL	1-80	17		***

Overall Dimensions



ELECTRIC GREASE PUMPS PEG-210N

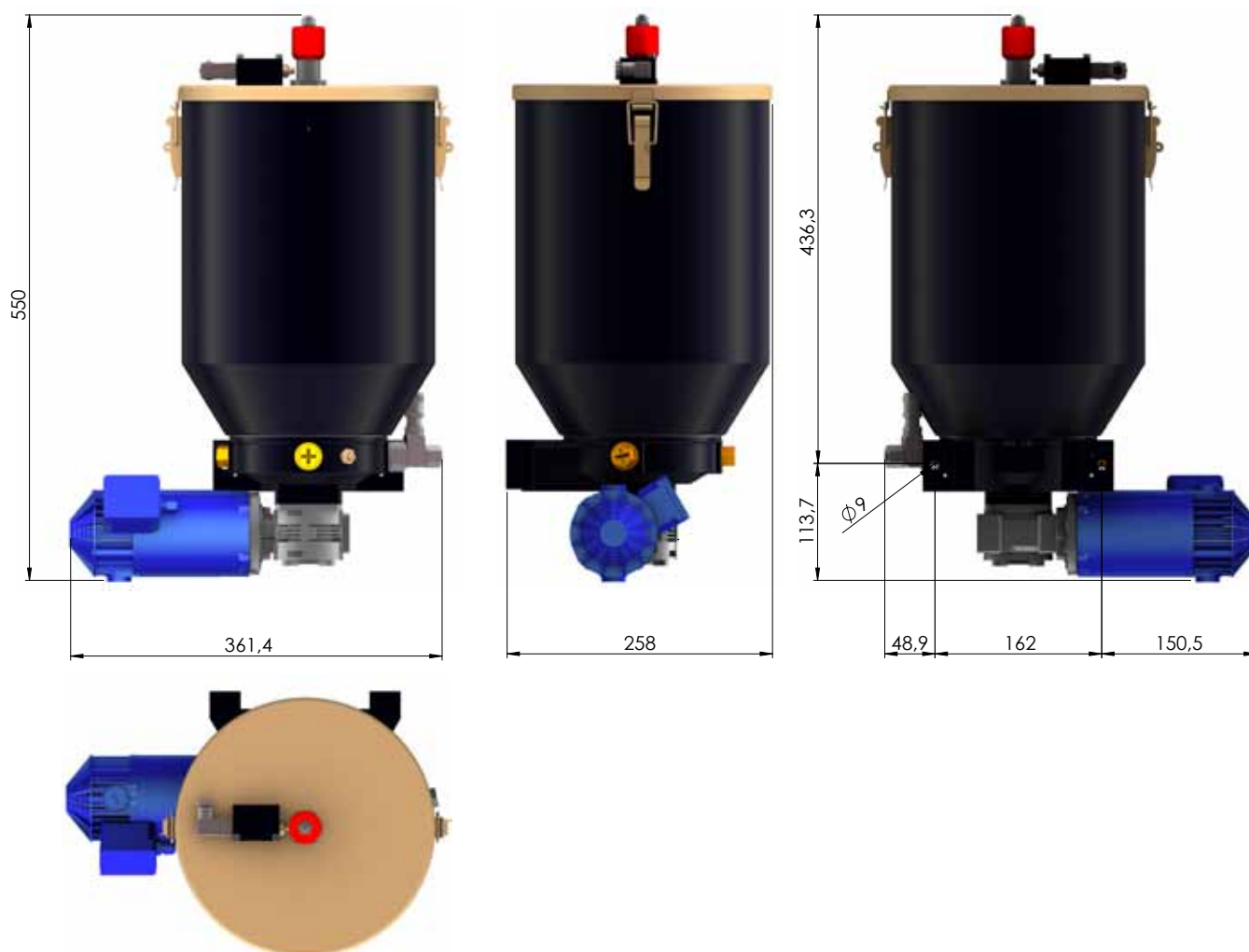
ELECTRIC GREASE PUMP MODEL PEG-210N METAL TANK 10 KG

Ordering Codes

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1'	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
90.881.6	PEG-210N/30 24 V DC	1-30	46	***	
90.881.7	PEG-210N/50 24 V DC	1-50	28	***	
90.881.8	PEG-210N/80 24 V DC	1-80	17	***	
90.899.2	PEG-210N/30 R 24 V DC	1-30	46		***
90.899.3	PEG-210N/80 R 24 V DC	1-80	17		***
90.888.0	PEG-210N/30 12 V DC	1-30	46	***	
90.888.1	PEG-210N/50 12 V DC	1-50	28	***	
90.888.2	PEG-210N/80 12 V DC	1-80	17	***	
90.888.3	PEG-210N/30 R 12 V DC	1-30	46		***
90.888.4	PEG-210N/80 R 12 V DC	1-80	17		***

Overall Dimensions



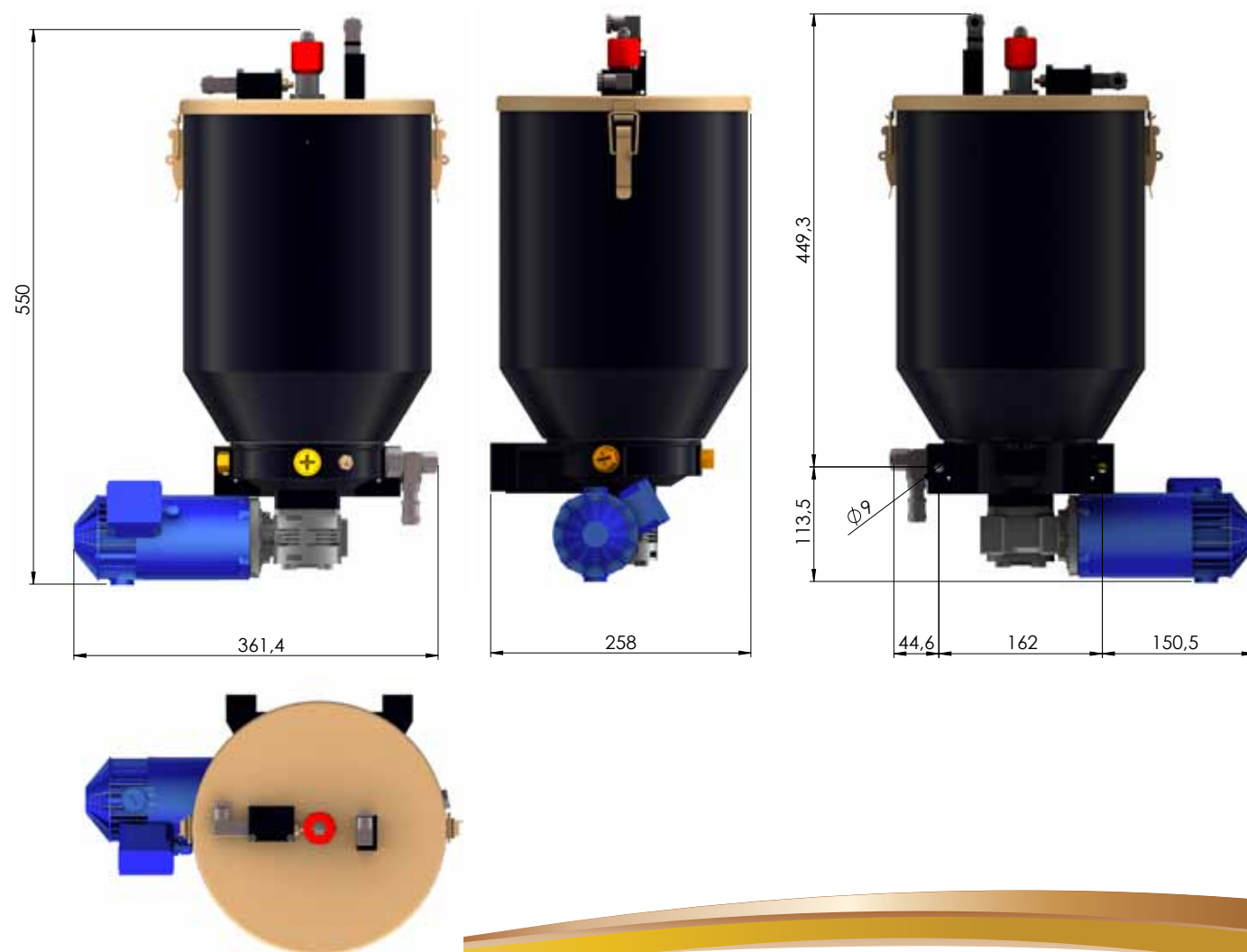
ELECTRIC GREASE PUMP MODEL PEG-5N METAL TANK 10 KG MIN AND MAX GREASE LEVEL CONTROL

Ordering Codes

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1'	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
90.881.0.HL	PEG-25N/30 24 V DC HL	1-30	46	***	
90.881.2.HL	PEG-25N/50 24 V DC HL	1-50	28	***	
90.881.5.HL	PEG-25N/80 24 V DC HL	1-80	17	***	
90.899.0.HL	PEG-25N/30 R 24 V DC HL	1-30	46		***
90.899.1.HL	PEG-25N/80 R 24 V DC HL	1-80	17		***
90.887.0.HL	PEG-25N/30 12 V DC HL	1-30	46	***	
90.887.1.HL	PEG-25N/50 12 V DC HL	1-50	28	***	
90.887.2.HL	PEG-25N/80 12 V DC HL	1-80	17	***	
90.887.3.HL	PEG-25N/30 R 12 V DC HL	1-30	46		***
90.887.4.HL	PEG-25N/80 R 12 V DC HL	1-80	17		***

Overall Dimensions



ELECTRIC OIL PUMPS PEO-25N AND PEO-210N

Pump Installation

The pumps must be mounted vertically by means of the fixing bracket integrated in the pump body.

Technical Features

NUMBER OF OUTLETS	FROM 1 TO 3
DISCHARGE PER CYCLE WITH FIXED PUMPING	0.16 CC
DISCHARGE PER CYCLE WITH ADJUSTABLE PUMPING	0.01 – 0.16 CC
SUITABLE LUBRICANTS	MINERAL OILS 50-1500 cSt
MAXIMUM RECOMMENDED OPERATING PRESSURE	300 bar (4200 PSI)
ELECTRIC MOTOR	24 V DC – 85 W – 4.2 A 1500 rpm SERVICE S1 CLASS F IP54
ELECTRIC MOTOR	12 V DC – 85 W – 8.4 A 1500 rpm SERVICE S1 CLASS F IP54
TANK CAPACITY	5 L or 10 L
TEMPERATURE	FROM - 30 °C TO + 80 °C
DELIVERY FITTING	1 / 4" G
MINIMUM ELECTRIC LEVEL	1.5 A 250 V AC – 200 V DC 50 W RESISTIVE LOAD



PEO-25N



PEO-210N

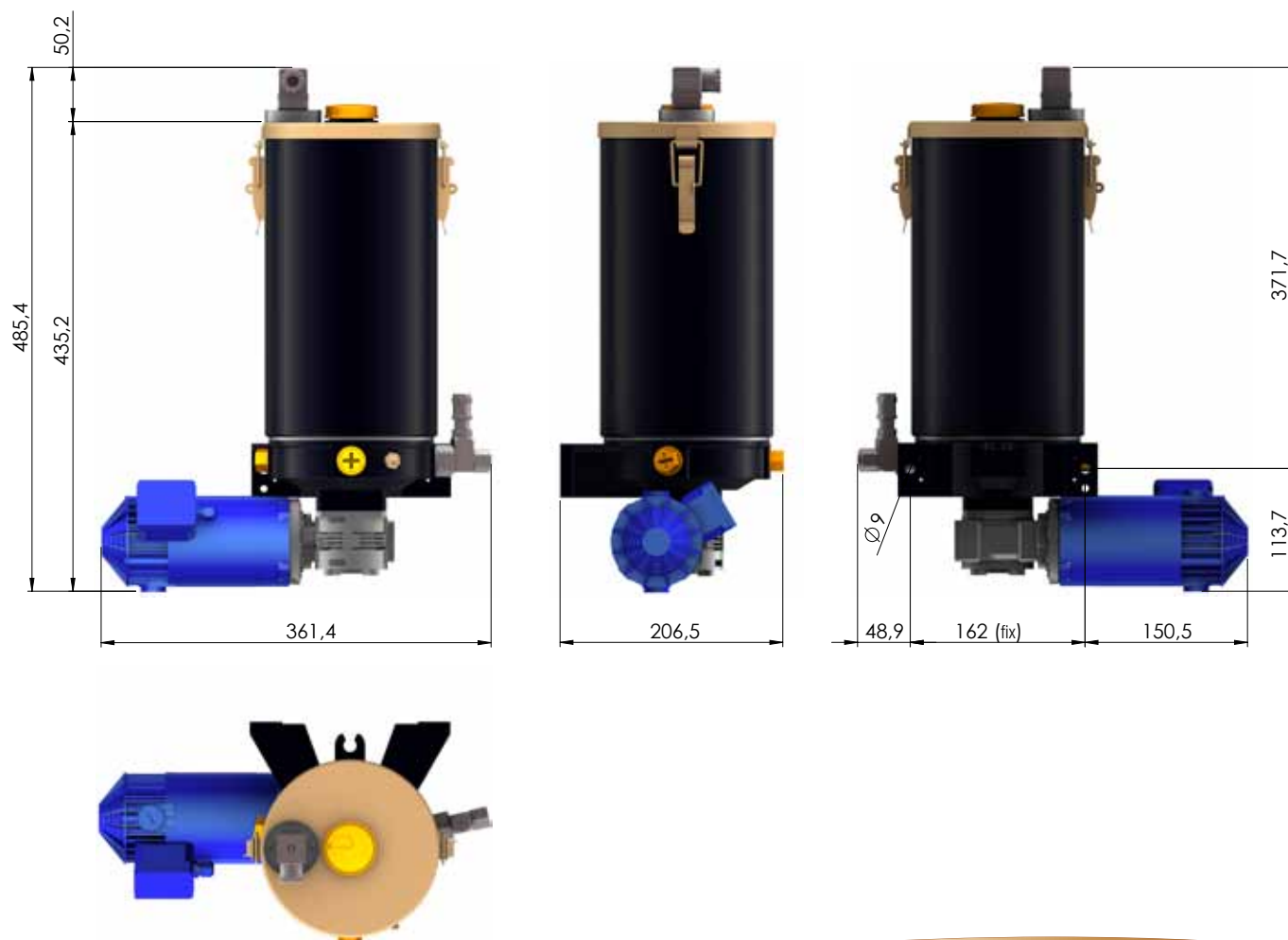
ELECTRIC OIL PUMP MODEL PEO-25N METAL TANK 5 L

Ordering Codes

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1'	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
90.893.0	PEO-25N/30 24 V DC	1-30	46	***	
90.893.2	PEO-25N/50 24 V DC	1-50	28	***	
90.893.5	PEO-25N/80 24 V DC	1-80	17	***	
90.906.0	PEO-25N/30 R 24 V DC	1-30	46		***
90.906.1	PEO-25N/80 R 24 V DC	1-80	17		***
90.913.4	PEO-25N/30 12 V DC	1-30	46	***	
90.913.5	PEO-25N/50 12 V DC	1-50	28	***	
90.913.6	PEO-25N/80 12 V DC	1-80	17	***	
90.913.7	PEO-25N/30 R 12 V DC	1-30	46		***
90.913.8	PEO-25N/80 R 12 V DC	1-80	17		***

Overall Dimensions



ELECTRIC OIL PUMPS PEO-25N AND PEO-210N

ELECTRIC GREASE PUMP MODEL PEO-210N METAL TANK 10 KG

Ordering Codes

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	CYCLES /1'	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
90.881.6	PEO-210N/30 24 V DC	1-30	46	***	
90.881.7	PEO-210N/50 24 V DC	1-50	28	***	
90.881.8	PEO-210N/80 24 V DC	1-80	17	***	
90.899.2	PEO-210N/30 R 24 V DC	1-30	46		***
90.899.3	PEO-210N/80 R 24 V DC	1-80	17		***
90.888.0	PEO-210N/30 12 V DC	1-30	46	***	
90.888.1	PEO-210N/50 12 V DC	1-50	28	***	
90.888.2	PEO-210N/80 12 V DC	1-80	17	***	
90.888.3	PEO-210N/30 R 12 V DC	1-30	46		***
90.888.4	PEO-210N/80 R 12 V DC	1-80	17		***

Overall Dimensions



ELECTRIC GREASE PUMPS PEG-520/SM, PEG-540/SM, PEG-580/SM

Pump Installation

The pumps must be mounted vertically by means of the fixing bracket integrated in the pump body.

Technical Features

NUMBER OF OUTLETS	FROM 1 TO 3
DISCHARGE PER CYCLE WITH FIXED PUMPING	0.16 CC
DISCHARGE PER CYCLE WITH ADJUSTABLE PUMPING	0.01 – 0.16 CC
SUITABLE LUBRICANTS	GREASE UP TO A CONSISTENCY NLGI NO. 2
MAXIMUM RECOMMENDED OPERATING PRESSURE	500 bar (7260 PSI)
TANK CAPACITY	2 KG, 4 KG or 8 KG
TEMPERATURE	FROM - 30 °C TO + 80 °C
DELIVERY FITTING	1 / 4" G

PEG-520/SM



PEG-540/SM



PEG-580/SM



ELECTRIC GREASE PUMPS PEG 520/SM

ELECTRIC GREASE PUMP MODEL PEG-520/SM TRANSPARENT TANK 2 KG



Ordering Codes without Electric Level

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

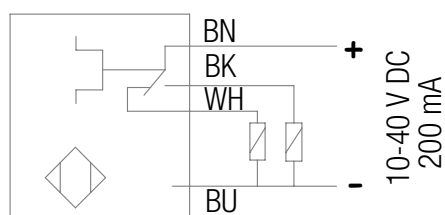
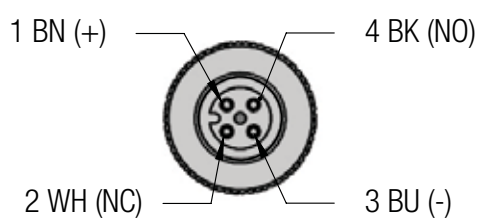
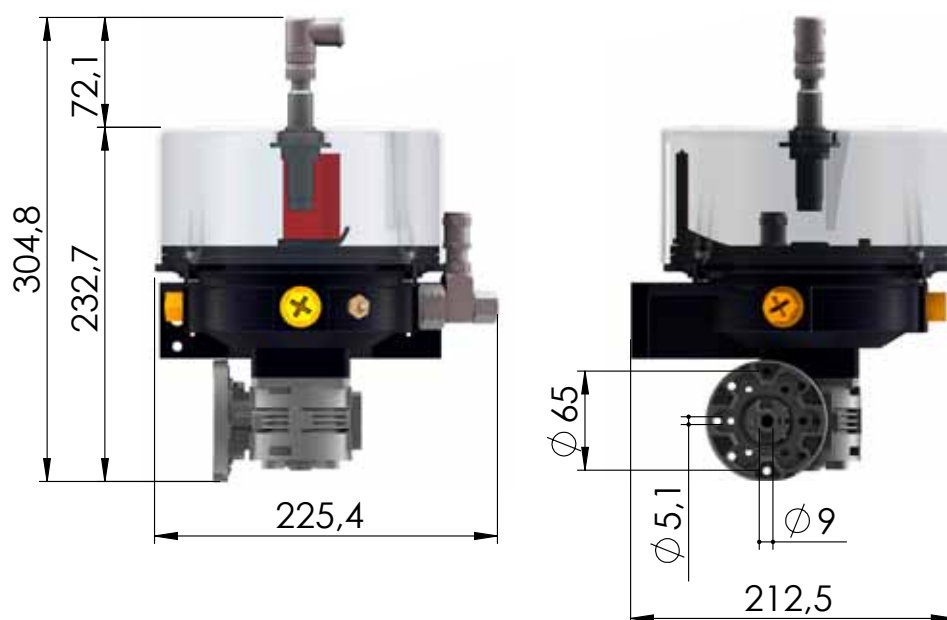
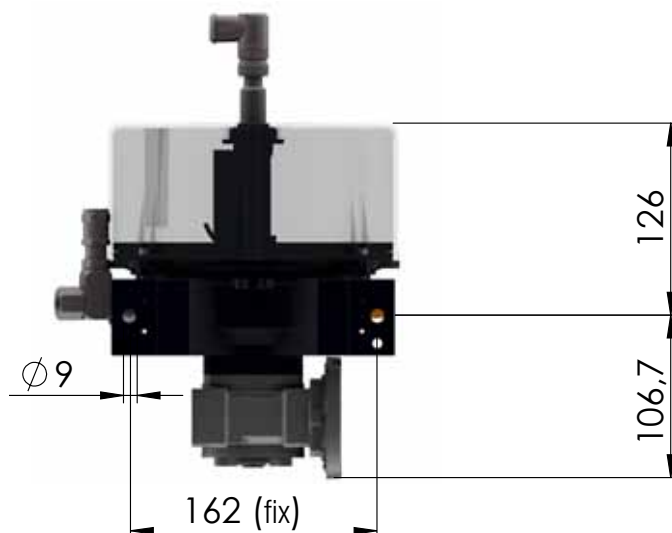
PART NUMBER	CODE	RED.RAT.	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.2.SM.F300G	PEG-520/30	1-30	***	
41.2.SM.F500G	PEG-520/50	1-50	***	
41.2.SM.F800G	PEG-520/80	1-80	***	
41.2.SM.R300G	PEG-520/30 R	1-30		***
41.2.SM.R800G	PEG-520/80 R	1-80		***

Ordering Codes with Electric Level

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.2.SM.F30CG	PEG-520 C/30 LV	1-30	***	
41.2.SM.F50CG	PEG-520 C/50 LV	1-50	***	
41.2.SM.F80CG	PEG-520 C/80 LV	1-80	***	
41.2.SM.R30CG	PEG-520 C/30 R LV	1-30		***
41.2.SM.R80CG	PEG-520 C/80 R LV	1-80		***

Overall Dimensions



ELECTRIC GREASE PUMPS PEG 540/SM

ELECTRIC GREASE PUMP MODEL PEG-540/SM TRANSPARENT TANK 4 KG



Ordering Codes without Electric Level

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

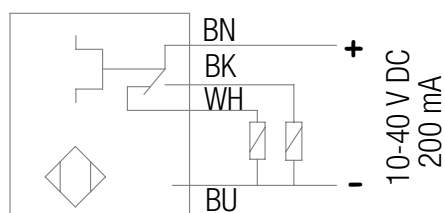
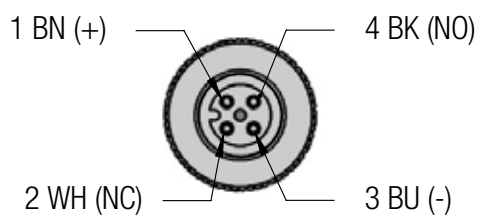
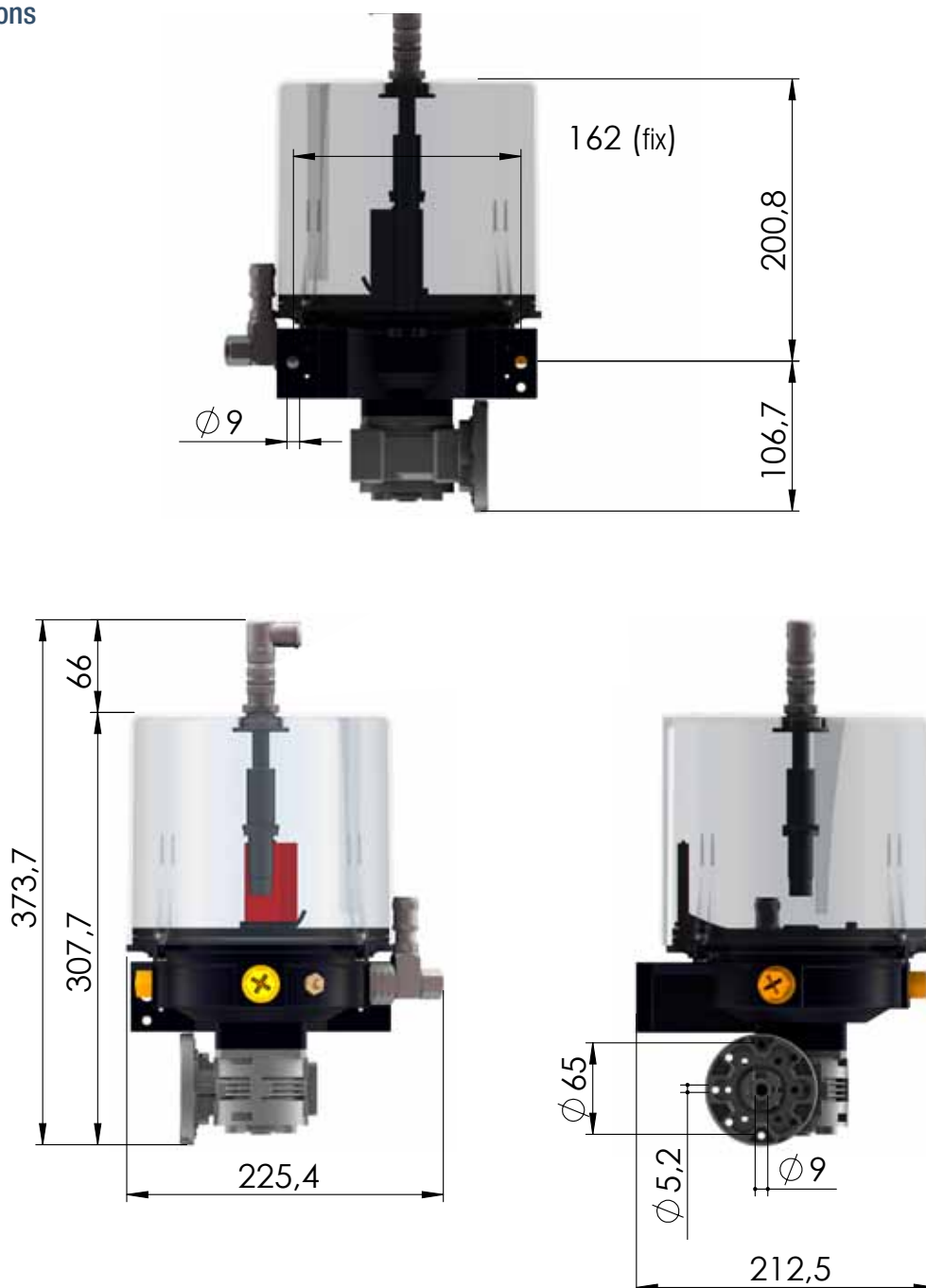
PART NUMBER	CODE	RED.RAT.	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.4.SM.F300G	PEG-540/30	1-30	***	
41.4.SM.F500G	PEG-540/50	1-50	***	
41.4.SM.F800G	PEG-540/80	1-80	***	
41.4.SM.R300G	PEG-540/30 R	1-30		***
41.4.SM.R800G	PEG-540/80 R	1-80		***

Ordering Codes without Electric Level

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.4.SM.F30CG	PEG-540 C/30 LV	1-30	***	
41.4.SM.F50CG	PEG-540 C/50 LV	1-50	***	
41.4.SM.F80CG	PEG-540 C/80 LV	1-80	***	
41.4.SM.R30CG	PEG-540 C/30 R LV	1-30		***
41.4.SM.R80CG	PEG-540 C/80 R LV	1-80		***

Overall Dimensions



ELECTRIC GREASE PUMPS PEG 580/SM

ELECTRIC GREASE PUMP MODEL PEG-580 TRANSPARENT TANK 8 KG



Ordering Codes without Electric Level

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

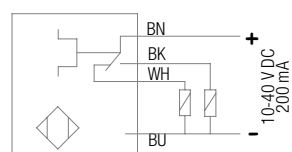
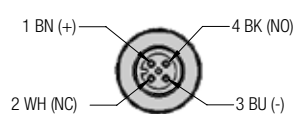
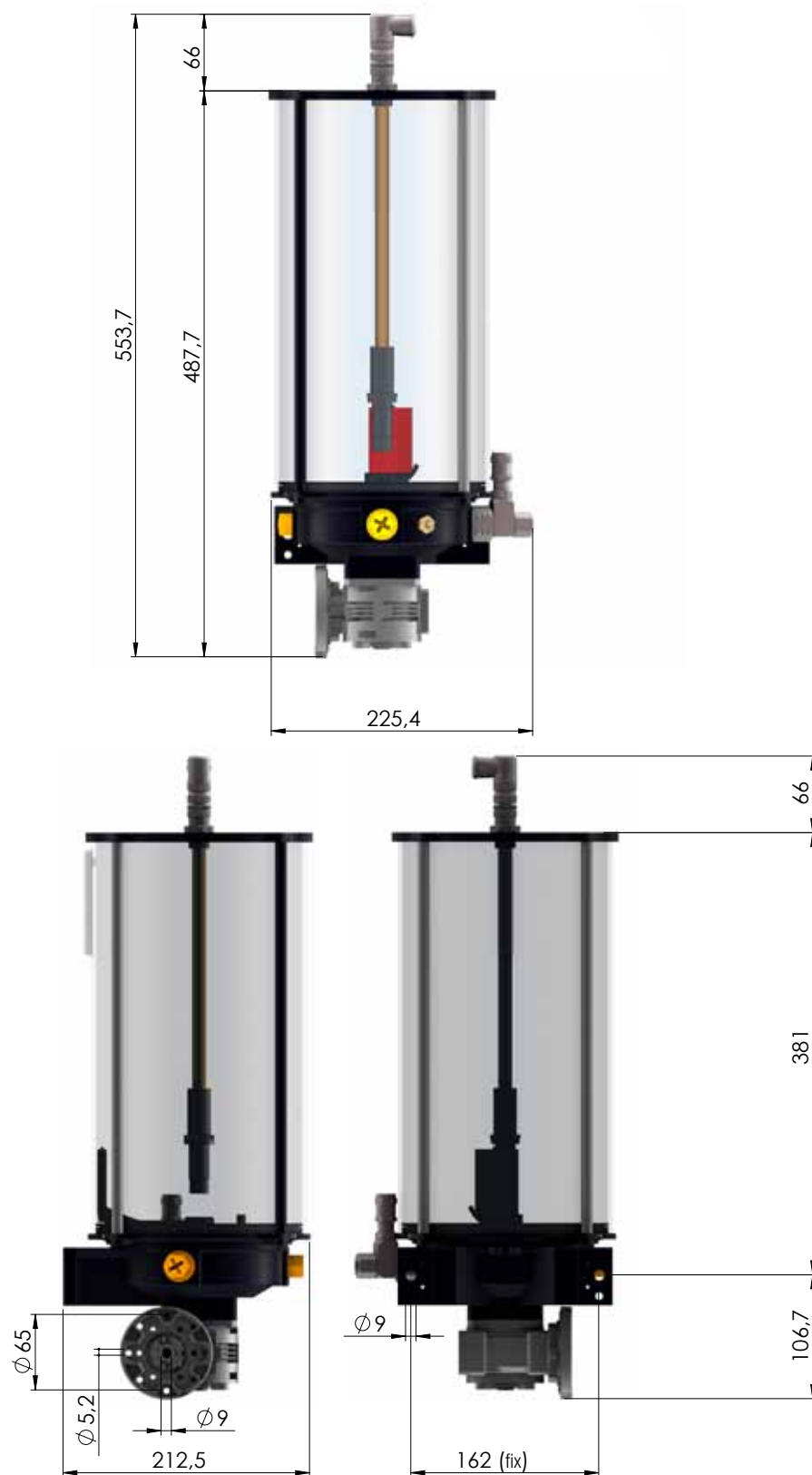
PART NUMBER	CODE	RED.RAT.	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.8.SM.F300G	PEG-580/30	1-30	***	
41.8.SM.F500G	PEG-580/50	1-50	***	
41.8.SM.F800G	PEG-580/80	1-80	***	
41.8.SM.R300G	PEG-580/30 R	1-30		***
41.8.SM.R800G	PEG-580/80 R	1-80		***

Ordering Codes with Electric Level

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.8.SM.F30CG	PEG-580 C/30 LV	1-30	***	
41.8.SM.F50CG	PEG-580 C/50 LV	1-50	***	
41.8.SM.F80CG	PEG-580 C/80 LV	1-80	***	
41.8.SM.R30CG	PEG-580 C/30 R LV	1-30		***
41.8.SM.R80CG	PEG-580 C/80 R LV	1-80		***

Overall Dimensions



ELECTRIC GREASE PUMPS PEG-5N/SM, PEG-10N/SM

Pump Installation

The pumps must be mounted vertically by means of the fixing bracket integrated in the pump body.

Technical Features

NUMBER OF OUTLETS	FROM 1 TO 3
DISCHARGE PER CYCLE WITH FIXED PUMPING	0.16 CC
DISCHARGE PER CYCLE WITH ADJUSTABLE PUMPING	0.01 – 0.16 CC
SUITABLE LUBRICANTS	GREASE UP TO A CONSISTENCY NLGI NO. 2
MAXIMUM RECOMMENDED OPERATING PRESSURE	500 bar (7260 PSI)
TANK CAPACITY	5 KG or 10 KG
TEMPERATURE	FROM - 30 °C TO + 80 °C
DELIVERY FITTING	1 / 4" G
ELECTRIC LEVELS PEG-5N E PEG-10N	5A – 250 V AC 0.4 A - 125 V DC IP65 RESISTIVE LOAD

PEG-5N/SM



PEG-10N/SM



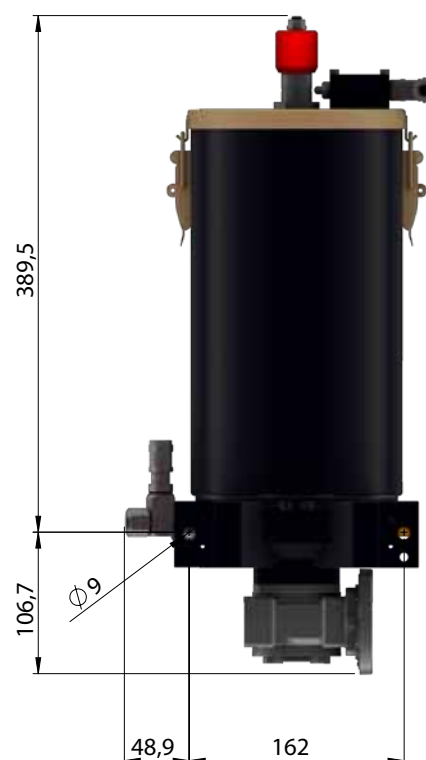
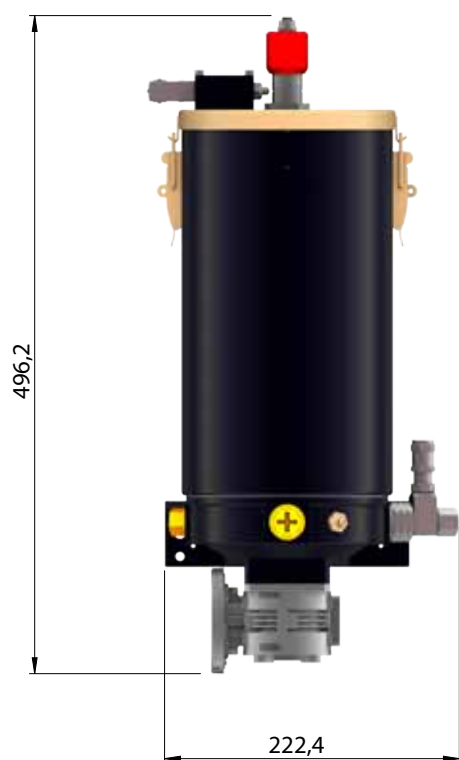
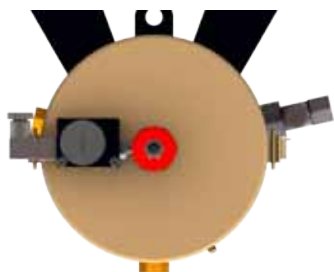
ELECTRIC GREASE PUMP MODEL PEG-5N/SM METAL TANK 5 KG

Ordering Codes

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	ELECTRIC LEVEL	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
90.884.0	PEG-5N/SM/30	1-30	***	***	
90.884.2	PEG-5N/SM/50	1-50	***	***	
90.884.5	PEG-5N/SM/80	1-80	***	***	
90.901.0	PEG-5N/SM/30 R	1-30	***		***
90.901.1	PEG-5N/SM/80 R	1-80	***		***

Overall Dimensions



ELECTRIC GREASE PUMPS PEG-5N/SM - HL

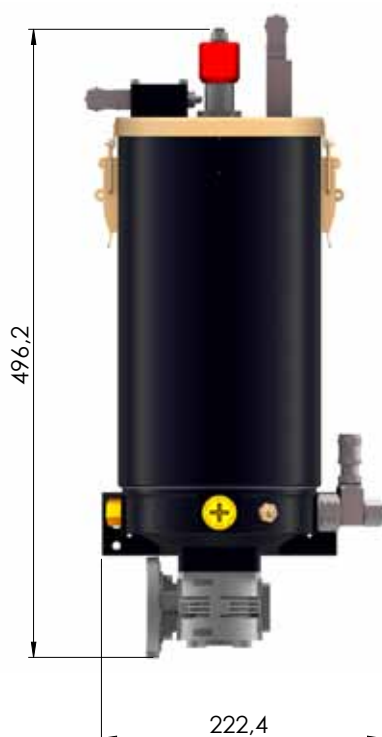
ELECTRIC GREASE PUMP MODEL PEG-5N/SM METAL TANK 5 KG MIN AND MAX GREASE LEVEL CONTROL

Ordering Codes

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	ELECTRIC LEVEL	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
90.884.0.HL	PEG-5N/SM/30 HL	1-30	***	***	
90.884.2.HL	PEG-5N/SM/50 HL	1-50	***	***	
90.884.5.HL	PEG-5N/SM/80 HL	1-80	***	***	
90.901.0.HL	PEG-5N/SM/30 R HL	1-30	***		***
90.901.1.HL	PEG-5N/SM/80 R HL	1-80	***		***

Overall Dimensions



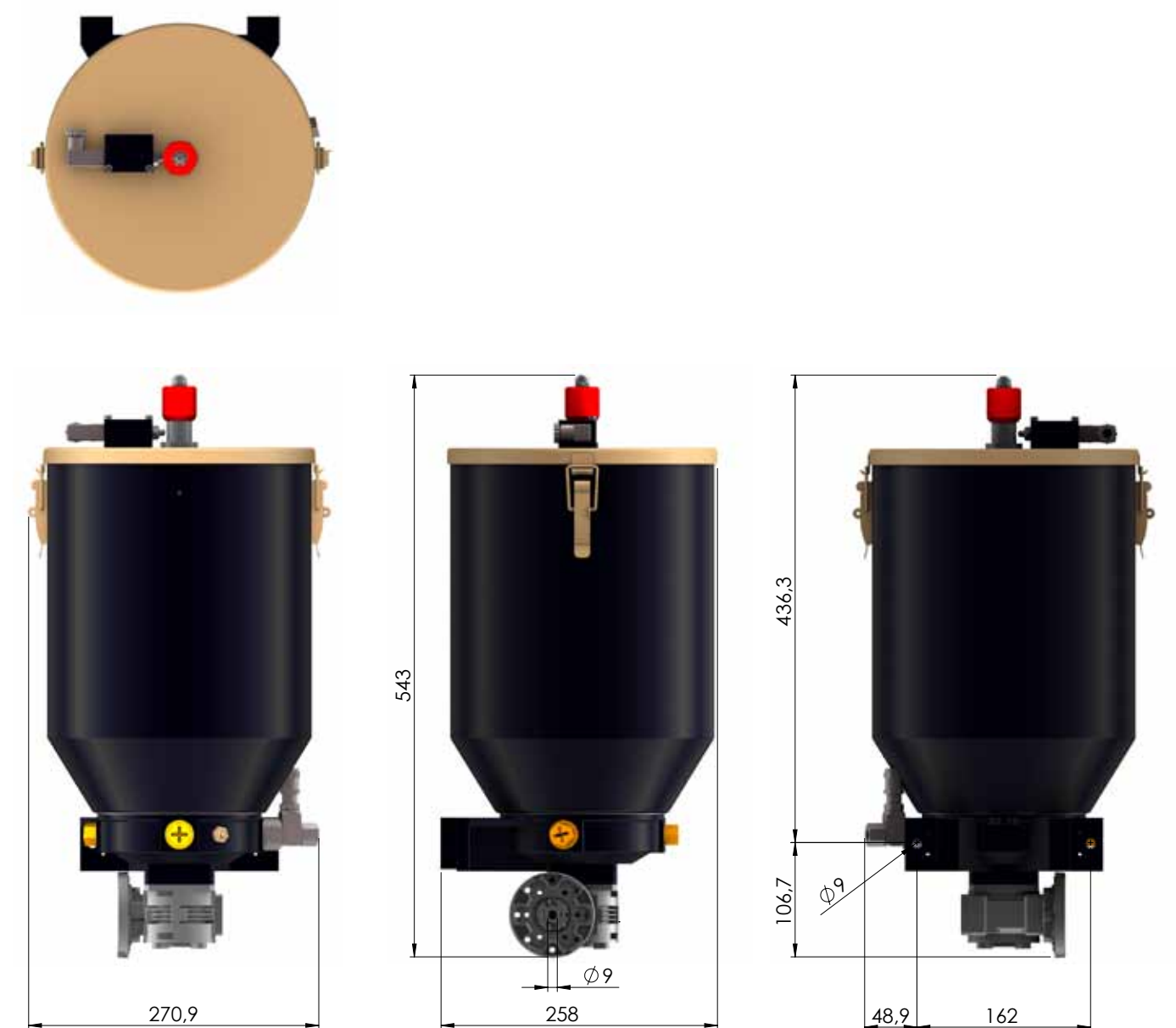
ELECTRIC GREASE PUMP MODEL PEG-10N/SM METAL TANK 10 KG

Ordering Codes

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	ELECTRIC LEVEL	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
90.923.5	PEG-10N/SM/30	1-30	***	***	
90.923.6	PEG-10N/SM/50	1-50	***	***	
90.923.7	PEG-10N/SM/80	1-80	***	***	
90.923.8	PEG-10N/SM/30 R	1-30	***		***
90.923.9	PEG-10N/SM/80 R	1-80	***		***

Overall Dimensions



ELECTRIC GREASE PUMPS PEG-10N/SM - HL

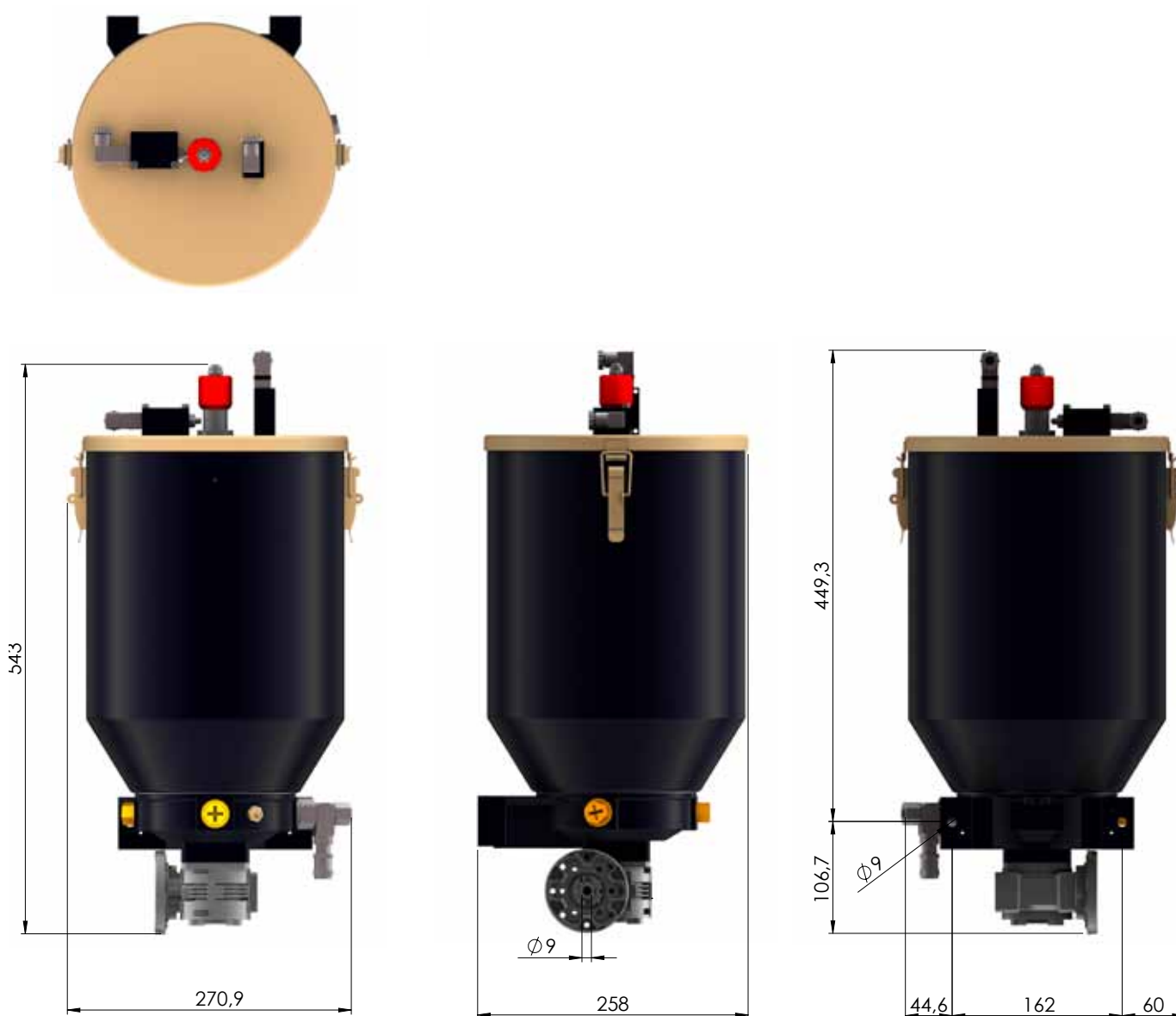
ELECTRIC GREASE PUMP MODEL PEG-10N/SM METAL TANK 10 KG MIN AND MAX GREASE LEVEL CONTROL

Ordering Codes

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	ELECTRIC LEVEL	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
90.923.5.HL	PEG-10N/SM/30 HL	1-30	***	***	
90.923.6.HL	PEG-10N/SM/50 HL	1-50	***	***	
90.923.7.HL	PEG-10N/SM/80 HL	1-80	***	***	
90.923.8.HL	PEG-10N/SM/30 R HL	1-30	***		***
90.923.9.HL	PEG-10N/SM/80 R HL	1-80	***		***

Overall Dimensions



ELECTRIC OIL PUMPS MODEL PEO-520/SM, PEO-540/SM, PEO-580/SM, PEO-5N-SM AND PEO-10N-SM

Pump Installation

The pumps must be mounted vertically by means of the fixing bracket integrated in the pump body.

Technical Features

NUMBER OF OUTLETS	FROM 1 TO 3
DISCHARGE PER CYCLE WITH FIXED PUMPING	0.16 CC
DISCHARGE PER CYCLE WITH ADJUSTABLE PUMPING	0.01 – 0.16 CC
SUITABLE LUBRICANTS	MINERAL OILS 50-1500 cSt
MAXIMUM RECOMMENDED OPERATING PRESSURE	500 bar (7260 PSI)
TANK CAPACITY	2 L, 4 L, 5 L, 8 L or 10 L
TEMPERATURE	FROM - 30 °C TO + 80 °C
DELIVERY FITTING	1 / 4" G
MINIMUM ELECTRIC LEVEL	1.5 A 250 V AC – 200 V DC 50 W RESISTIVE LOAD

PEO-520/SM



PEO-540/SM



PEO-580/SM



ELECTRIC OIL PUMPS MODEL PEO-520/SM,
PEO-540/SM, PEO-580/SM, PEO-5N-SM AND PEO-10N-SM

PEO-5N/SM



PEO-10N/SM

ELECTRIC OIL PUMP MODEL PEO-520/SM TRANSPARENT TANK 2 L



Ordering Codes without Electric Level

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

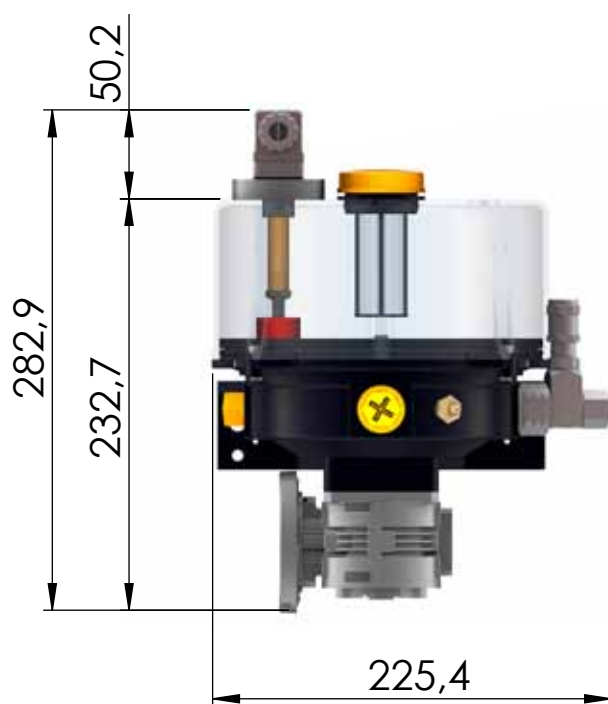
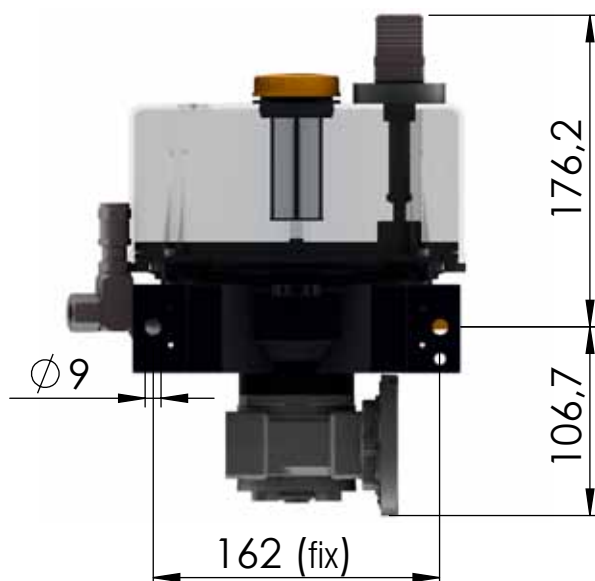
PART NUMBER	CODE	RED.RAT.	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.2.SM.F3000	PEO-520/30	1-30	***	
41.2.SM.F5000	PEO-520/50	1-50	***	
41.2.SM.F8000	PEO-520/80	1-80	***	
41.2.SM.R3000	PEO-520/30 R	1-30		***
41.2.SM.R8000	PEO-520/80 R	1-80		***

Ordering Codes with Electric Level

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.2.SM.F30LO	PEO-520 C/30 LV	1-30	***	
41.2.SM.F50LO	PEO-520 C/50 LV	1-50	***	
41.2.SM.F80LO	PEO-520 C/80 LV	1-80	***	
41.2.SM.R30LO	PEO-520 C/30 R LV	1-30		***
41.2.SM.R80LO	PEO-520 C/80 R LV	1-80		***

Overall Dimensions



ELECTRIC OIL PUMP MODEL PEO-540/SM TRANSPARENT TANK 4 L



Ordering Codes without Electric Level

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

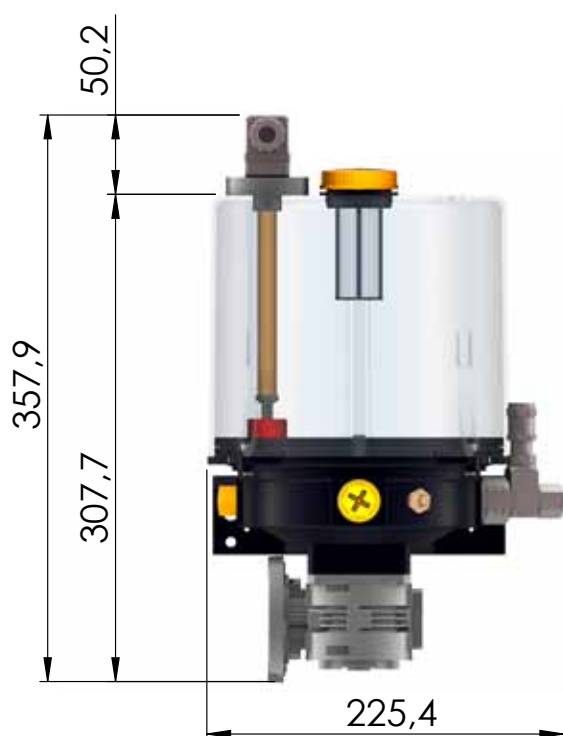
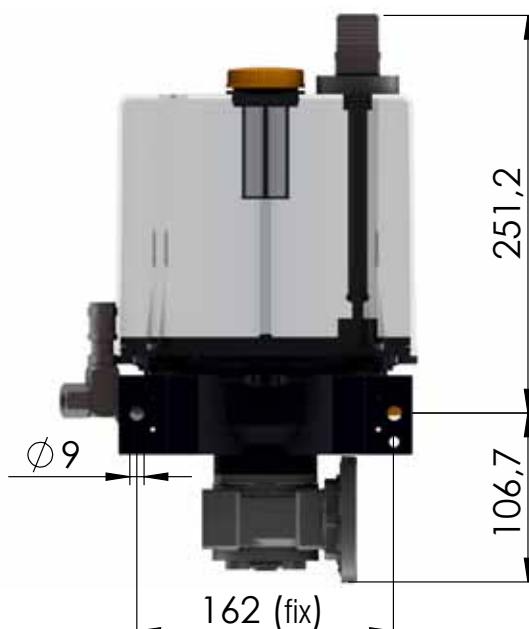
PART NUMBER	CODE	RED.RAT.	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.4.SM.F3000	PEO-540/30	1-30	***	
41.4.SM.F5000	PEO-540/50	1-50	***	
41.4.SM.F8000	PEO-540/80	1-80	***	
41.4.SM.R3000	PEO-540/30 R	1-30		***
41.4.SM.R8000	PEO-540/80 R	1-80		***

Ordering Codes with Electric Level

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.4.SM.F30LO	PEO-540 C/30 LV	1-30	***	
41.4.SM.F50LO	PEO-540 C/50 LV	1-50	***	
41.4.SM.F80LO	PEO-540 C/80 LV	1-80	***	
41.4.SM.R30LO	PEO-540 C/30 R LV	1-30		***
41.4.SM.R80LO	PEO-540 C/80 R LV	1-80		***

Overall Dimensions



ELECTRIC OIL PUMP MODEL PEO-580/SM TRANSPARENT TANK 8 L



Ordering Codes without Electric Level

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.8.SM.F3000	PEO-580/30	1-30	***	
41.8.SM.F5000	PEO-580/50	1-50	***	
41.8.SM.F8000	PEO-580/80	1-80	***	
41.8.SM.R3000	PEO-580/30 R	1-30		***
41.8.SM.R8000	PEO-580/80 R	1-80		***

Ordering Codes with Electric Level

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
41.8.SM.F30LO	PEO-580 C/30 LV	1-30	***	
41.8.SM.F50LO	PEO-580 C/50 LV	1-50	***	
41.8.SM.F80LO	PEO-580 C/80 LV	1-80	***	
41.8.SM.R30LO	PEO-580 C/30 R LV	1-30		***
41.8.SM.R80LO	PEO-580 C/80 R LV	1-80		***

Overall Dimensions



ELECTRIC OIL PUMPS PEO-5N/SM

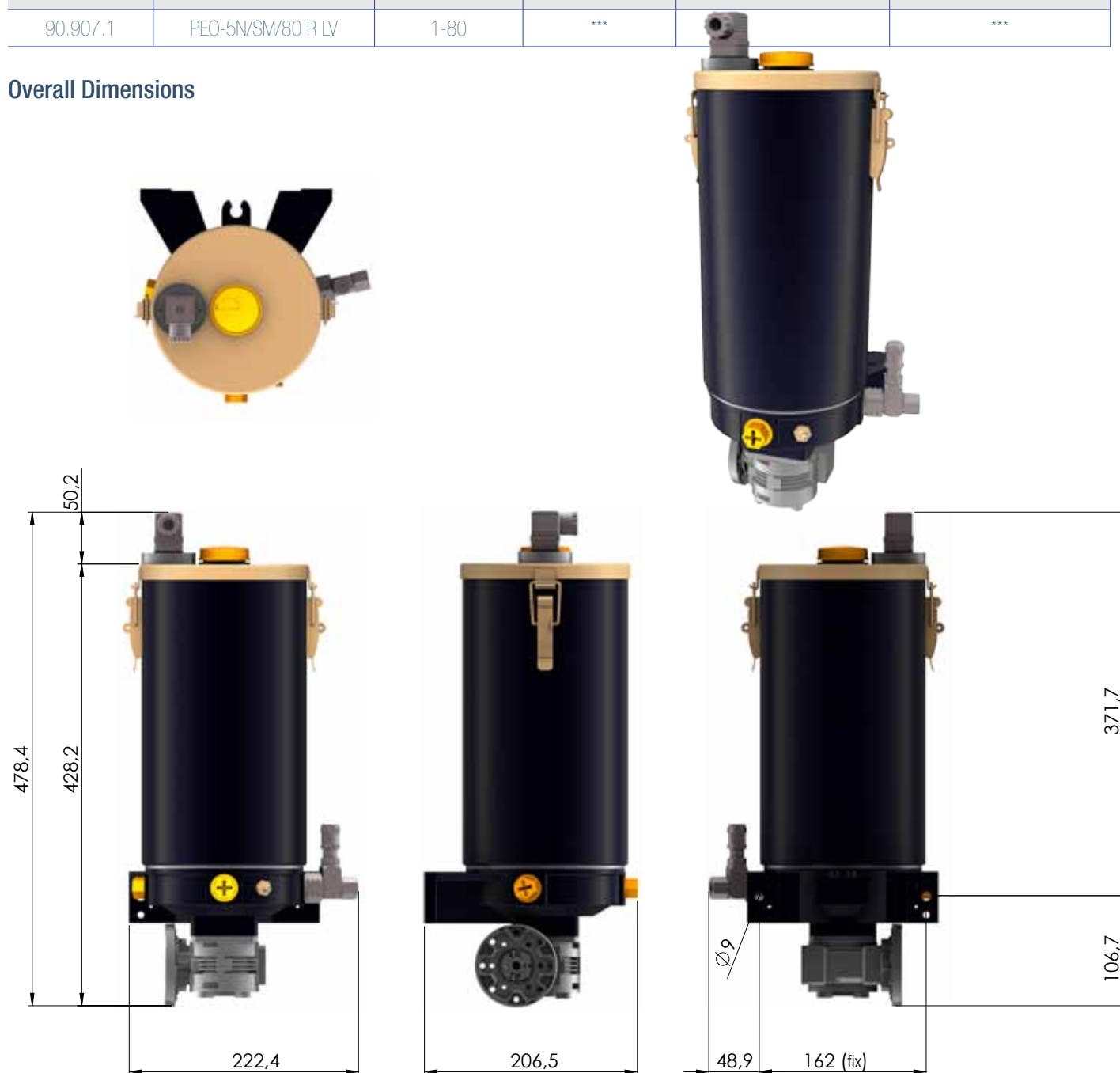
ELECTRIC OIL PUMP MODEL PEO-5N/SM METAL TANK 5 L

Ordering Codes

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PART NUMBER	CODE	RED.RAT.	ELECTRIC LEVEL	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
90.894.0	PEO-5N/SM/30 LV	1-30	***	***	
90.894.2	PEO-5N/SM/50 LV	1-50	***	***	
90.894.5	PEO-5N/SM/80 LV	1-80	***	***	
90.907.0	PEO-5N/SM/30 R LV	1-30	***		***
90.907.1	PEO-5N/SM/80 R LV	1-80	***		***

Overall Dimensions



The appearance of the products can be subject to change without prior notice

ELECTRIC OIL PUMPS PEO-10N/SM

ELECTRIC OIL PUMP MODEL PEO-10N/SM METAL TANK 10 L

Ordering Codes

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

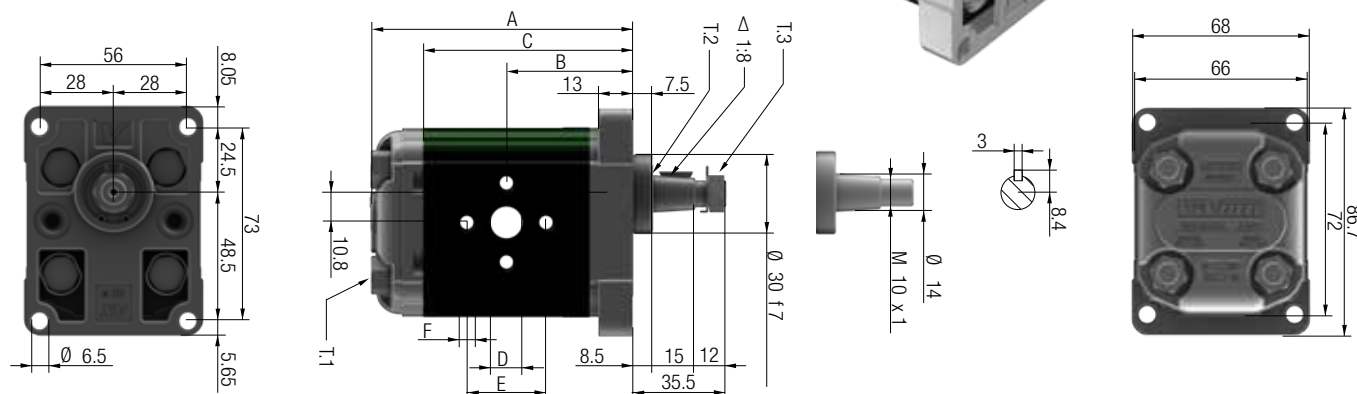
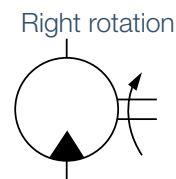
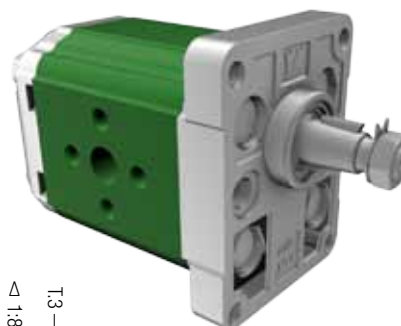
PART NUMBER	CODE	RED.RAT.	ELECTRIC LEVEL	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE
90.924.5	PEO-10N/SM/30 LV	1-30	***	***	
90.924.6	PEO-10N/SM/50 LV	1-50	***	***	
90.924.7	PEO-10N/SM/80 LV	1-80	***	***	
90.924.8	PEO-10N/SM/30 R LV	1-30	***		***
90.924.9	PEO-10N/SM/80 R LV	1-80	***		***

Overall Dimensions



ELECTRIC GREASE PUMPS HYDRAULIC MOTOR

Ordering Codes A97.061020



The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

HYDRAULIC MOTOR FEATURES		
MAX INLET PRESSURE		250 bar
MIN INLET PRESSURE		10 bar
MAX CONTINUOUS BACK PRESSURE		6 bar
MAX PEAK INLET PRESSURE		300 bar
SPEED		FROM 700 TO 5000 rpm
DISCHARGE PER REV		6,5 CC
MINIMUM DISCHARGE		4,5 L/min
MAXIMUM DISCHARGE		32,5 L/min
DISPLACEMENT		6,50 cc/rev
TORQUE	1000 rpm 100 bar	8.79 Nm
POWER		0,92 KW

WEIGHT		Kg	1.300
A	mm		98.5
B	mm		48.0
C	mm		86.5
D	IN		Ø12
E			30
F			M6x1
D	OUT		Ø12
E			30
F			M6x1

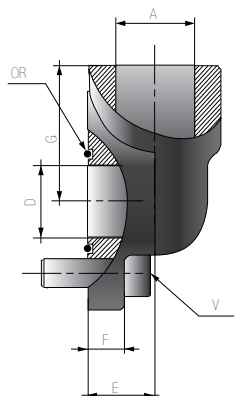
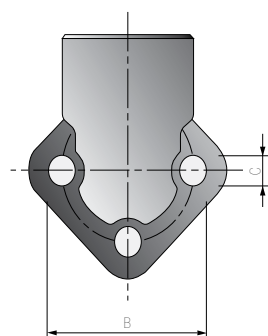
The appearance of the products can be subject to change without prior notice.

90° STEEL FITTINGS

Ordering Codes A92.106424

Order 2 fittings for each pump

Type	A	B	C	D	E	F	G	O Ring	V
RG 30/13,5 – ½" BSP	3/8"	30	6.5	13.5	18	9.5	27	Ø15.88x2.62	M6x20



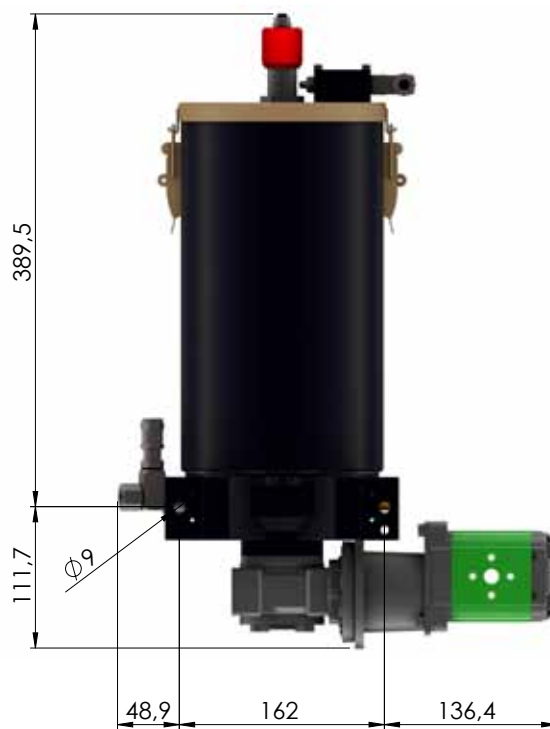
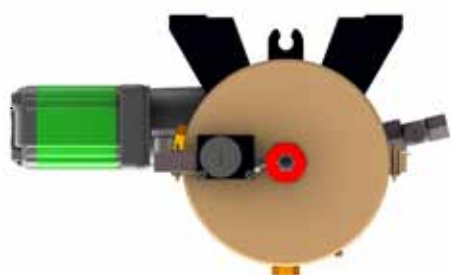
ELECTRIC GREASE PUMPS PEG-5N-MI

ELECTRIC GREASE PUMP WITH HYDRAULIC MOTOR MODEL PEG-5N-MI METAL TANK 5 KG REDUCER 1:50

Ordering Codes 90.884.8

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PUMP FEATURES	
FLOW RATE PER CYCLE	0,16 CC
NUMBER OF OUTLETS	FROM 1 TO 3
MAX OPERATING PRESSURE	500 bar (7260 PSI)
TANK CAPACITY	5 KG
DELIVERY FITTING	1/4" GAS
ELECTRICAL LEVEL	5 A – 250 V AC 0,4 A – 125 V DC IP 65 RESISTIVE LOAD
LUBRICANTS	GREASE MAX NLGI 2



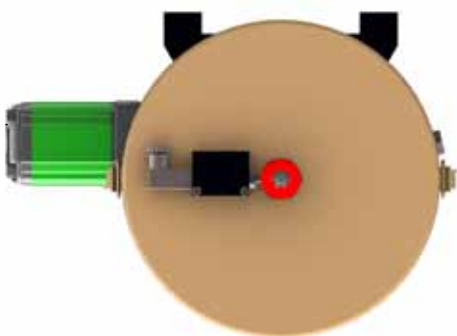
ELECTRIC GREASE PUMPS PEG-10N-MI

ELECTRIC GREASE PUMP WITH HYDRAULIC MOTOR MODEL PEG-10N-MI METAL TANK 10 KG REDUCER 1:50

Ordering Codes 90.922.8

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

PUMP FEATURES	
DISCHARGE PER CYCLE	0,16 CC
NUMBER OF OUTLETS	FROM 1 TO 3
MAX OPERATING PRESSURE	500 bar (7260 PSI)
TANK CAPACITY	10 KG
DELIVERY FITTING	1/4" GAS
ELECTRICAL LEVEL	5 A – 250 V AC 0,4 A – 125 V DC IP 65 RESISTIVE LOAD
LUBRICANTS	GREASE MAX NLGI 2



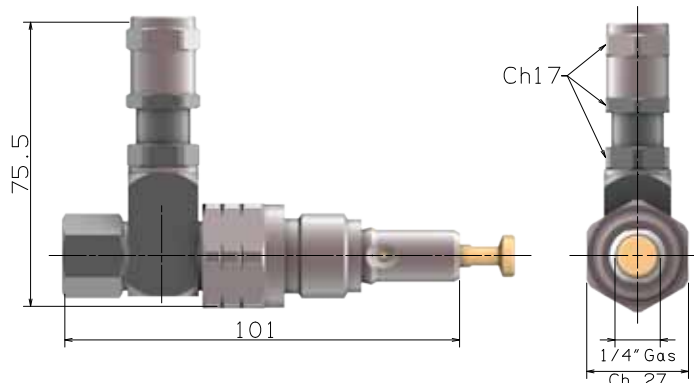
The appearance of the products can be subject to change without notice.

ACCESSORIES

FIXED DISCHARGE PUMPING PART NUMBER 90.900.0

All the electric pumps of the Peg series can be equipped, even subsequently, with a 2nd and 3rd pump capable of feeding other main lines or of conveying the supplied lubricant in the same pipe.

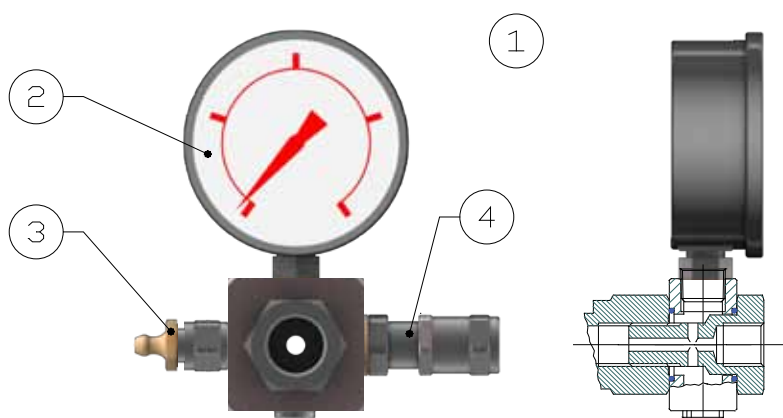
To make final use more practical, the delivery connection has been implemented by means of an adjustable 360° joint with an adjustable safety valve inserted to protect the various elements from overpressure.



FEED BLOCK FOR FIXED DISCHARGE PUMP GENERAL FEATURES

The block is mounted on the delivery line to check system operating pressure and the fill the system with a pneumatic pump. The safety valve protects against overpressure.

POS	DESCRIPTION	PART NUMBER
1	COMPLETE UNIT	46.750.0
2	1/8" GREASE NIPPLE	A70.078422
3	PRESSURE GAUGE 0-400 bar	46.600.0
4	MAX PRESSURE VALVE	A68.075011

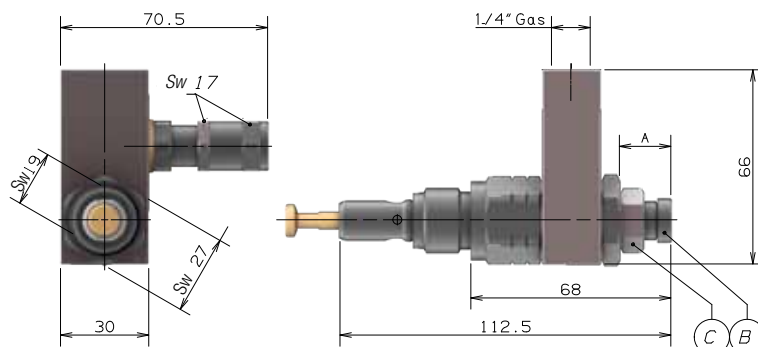


ADJUSTABLE DISCHARGE PUMPING

PART NUMBER 90.900.3

All the electric pumps of the Peg series can be equipped, even subsequently, with a 2nd and 3rd pump capable of feeding other main lines or of conveying the supplied lubricant in the same pipe.

To make final use more practical, the delivery connection has been implemented by means of an adjustable 360° joint with an adjustable safety valve inserted to protect the various elements from overpressure.



ADJUSTMENT

To change the nominal flow rate of the pump, the lock nut (Pos. c) must be loosened and the adjusting screw (Pos. b) turned clockwise to reduce the amount of lubricant or anticlockwise to increase it. When the desired value has been set, it is extremely important to secure the lock nut again (Pos. c).

IMPORTANT: "A" MUST NOT BE GREATER THAN 23.6 mm

Flow rate discharge table

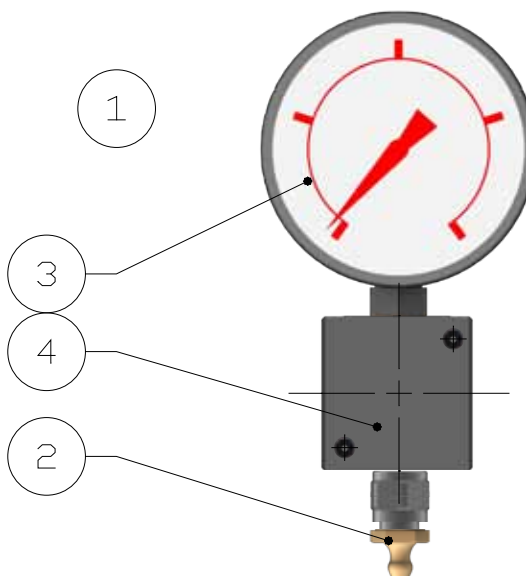
A	DISCHARGE/CYCLE	PERCENTAGE
23.6	0.16 CC	100 %
22.5	0.12 CC	75 %
21	0.08 CC	50 %
19.5	0.04 CC	25 %
18.5	0.01 CC	6 %
17.5	0.00 CC	0 %

FEED BLOCK FOR FIXED AND ADJUSTABLE DISCHARGE PUMP

GENERAL FEATURES

The block is mounted on the delivery line to check system operating pressure and the fill the system with a pneumatic pump.

POS	DESCRIPTION	PART NUMBER
1	COMPLETE UNIT	46.750.1
2	1/4" GREASE NIPPLE	A93.115018
3	PRESSURE GAUGE 0-400 bar	46.600.0
4	4-WAY BLOCK	01.160.3

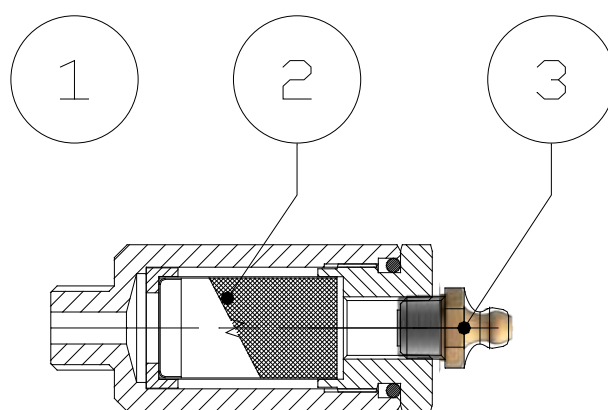


ACCESSORIES

GREASE INLET FILTERS

To prevent impurities from entering while the tank is being filled, we recommend applying inlet filters directly on the pump body by unscrewing the needle grease nipple.

POS	DESCRIPTION	PART NUMBER
1	COMPLETE FILTER UNIT	07.270.0
2	FILTER CARTRIDGE	A93.086020
3	1/8" GREASE NIPPLE	A70.078422



ELECTRIC GREASE PUMPS PEG-250N



ELECTRIC GREASE PUMPS PEG-250N

Pump Installation

The pumps must be mounted vertically by means of the fixing bracket integrated in the pump body.

Technical Features

NUMBER OF OUTLETS	FROM 1 TO 15
DISCHARGE PER CYCLE WITH FIXED PUMPING	0.16 CC
DISCHARGE PER CYCLE WITH ADJUSTABLE PUMPING	0.01 – 0.16 CC
SUITABLE LUBRICANTS	GREASE UP TO A CONSISTENCY NLGI NO. 2
MAXIMUM RECOMMENDED OPERATING PRESSURE	350 bar (5082 PSI)
TANK CAPACITY	25 KG
TEMPERATURE	FROM - 30 °C TO + 80 °C
DELIVERY FITTING	1 / 4" G

Electric Motor Features

POWER SUPPLY VOLTAGE	220-240/380-420
ABSORPTION	1,05-1.22/0.63-0.71 A
FREQUENCY	50 Hz
POWER SUPPLY VOLTAGE	254-280/440-480
ABSORPTION	1,05-1.22/0.63-0.71 A
FREQUENCY	60 Hz
POWER SUPPLY VOLTAGE	230 V AC
ABSORPTION	1.49 A
FREQUENCY	50 Hz o 60 Hz
POWER SUPPLY VOLTAGE	115 V AC
ABSORPTION	2.76
FREQUENCY	50 Hz o 60 Hz
POWER	0.18 Kw
PROTECTION RATING	IP - 55
SERVICE	CONTINUOUS S1
INSULATION	CLASS F
CONSTRUCTION SHAPE	B14
SIZE	MEC - 63

ELECTRIC GREASE PUMPS PEG-250N

ELECTRIC GREASE PUMP MODEL PEG-250N METAL TANK 25 KG

Electric Levels with Capacity Sensor

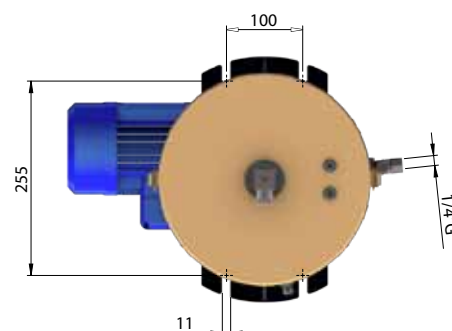
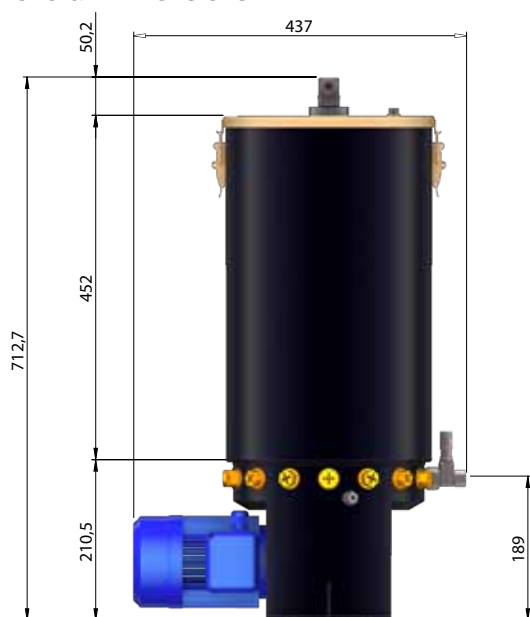
POWER SUPPLY VOLTAGE	FROM 10 TO 40 V DC (RIPPLE INCLUDED)
RIPPLE	=<10%
LOAD CURRENT	=< 200 mA
ABSORPTION	=< 12 mA
VOLTAGE DROP	=< 2.8 V DC AT MAX LOAD
ELECTRIC PROTECTION	POLE INVERSION AND SHORT-CIRCUIT
ACTIVATION FREQUENCY	25 Hz
CONTACT	"NO"
TEMPERATURE	FROM -25°C TO 70°C
PROTECTION RATING	IP 67 (NEMA 1,3,4,6,13)
APPROVALS	UL / CSA
CE MARKING	YES

Ordering Codes

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

With Electric Level C/L							Without Electric Level S/L	
PART NUMBER	CODE	RED.RAT.	CYCLES /1' 50 Hz	CYCLES /1' 60 Hz	NON-ADJUST. DISCHARGE	ADJUSTABLE DISCHARGE	PART NUMBER	CODE
90.930.0	PEG-250N/30	1-30	46	55	***		90.930.0.SL	PEG-250N/30
90.930.1	PEG-250N/50	1-50	28	33	***		90.930.1.SL	PEG-250N/50
90.930.2	PEG-250N/80	1-80	17	20	***		90.930.2.SL	PEG-250N/80
90.930.3	PEG-250N/30 R	1-30	46	55		***	90.930.3.SL	PEG-250N/30 R
90.930.4	PEG-250N/80 R	1-80	17	20		***	90.930.4.SL	PEG-250N/80 R

Overall Dimensions



On demand, it is possible to supply single phase motors 115 V AC, 230 V AC 50/60 Hz or motors were special voltages. The required voltage must be added to the ordering code.

Example: part number **90.930.0** but with electric motor 230 V AC = **90.930.0.230**

ELECTRIC GREASE PUMPS PEG-250N

ELECTRIC GREASE PUMP MODEL PEG-250N 24VDC TANK 25 KG

Ordering Codes

90.930.0.24

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

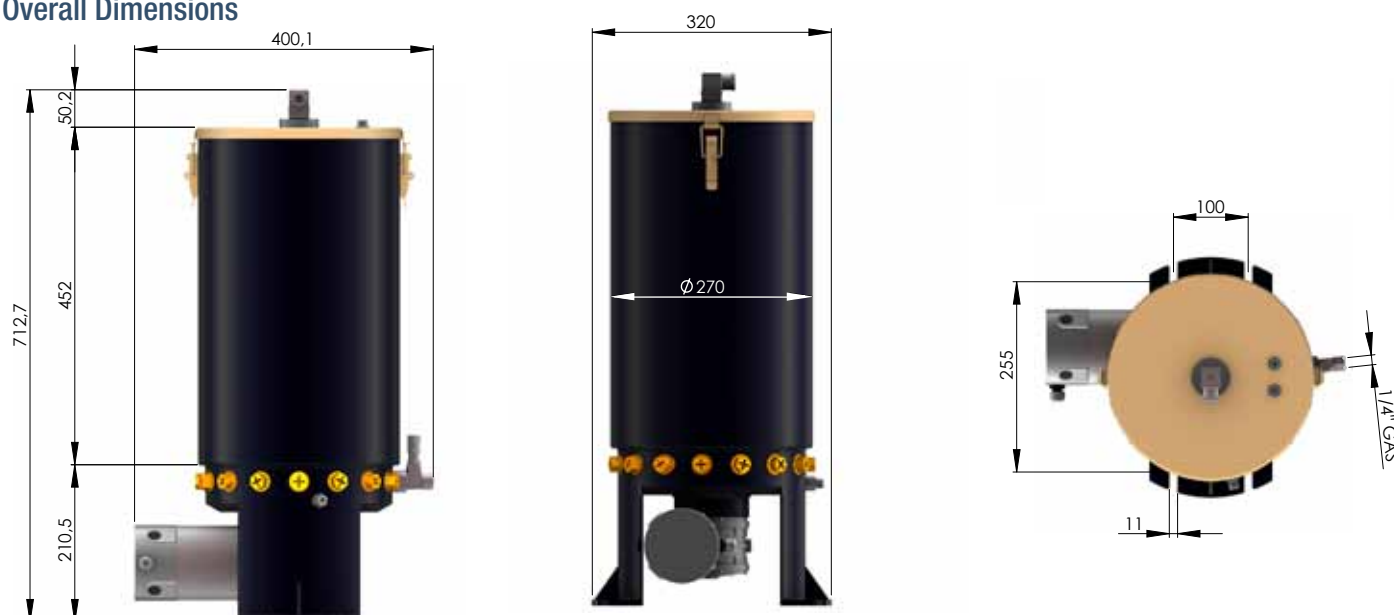
Electric Motor Features

POWER SUPPLY VOLTAGE	24 V DC
ABSORPTION	8.5 A
POWER	0,16 KW
PROTECTION RATING	IP 54
SERVICE	CONTINUOUS S1
TEMPERATURE	105°C MAX
INSULATION	CLASS F
CONSTRUCTION SHAPE	B14
SIZE	MEC 63

Pump Features

DISCHARGE	0.16 CC/CYCLE
NUMBER OF OUTLETS	FROM 1 TO 15
MAX OPERATING PRESSURE	500 bar (7260 PSI)
TANK CAPACITY	25 KG
DELIVERY FITTING	1/4" GAS
ELECTRICAL LEVEL	10-40 V DC / 0,2 A
LUBRICANTS	GREASE MAX NLGI 2
ASSEMBLY	VERTICAL
OPERATING TEMPERATURE	FROM -30°C TO +80°C

Overall Dimensions

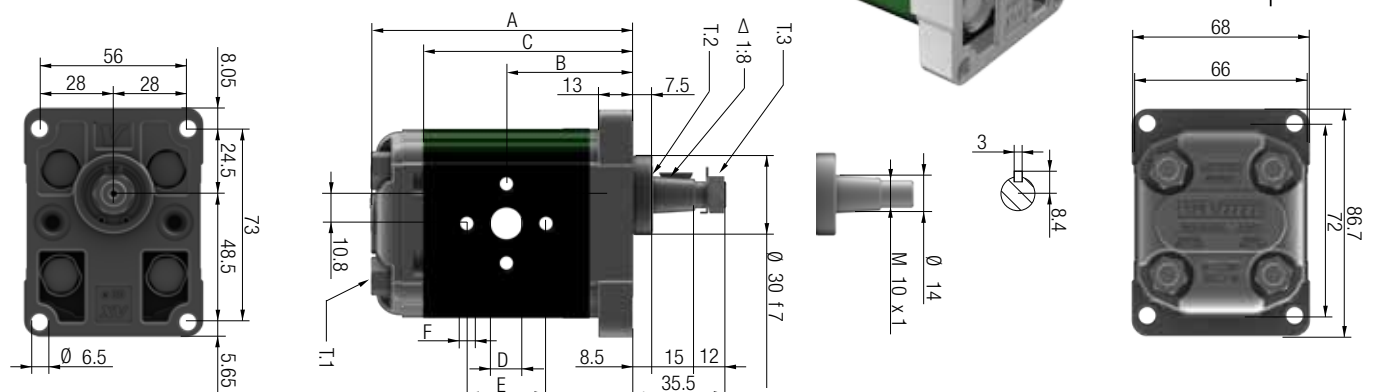


HYDRAULIC GREASE PUMP MOTOR



ELECTRIC GREASE PUMPS HYDRAULIC MOTOR

Ordering Codes A97.061020



The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

HYDRAULIC MOTOR FEATURES		
MAX INLET PRESSURE		250 bar
MIN INLET PRESSURE		10 bar
MAX CONTINUOUS BACK PRESSURE		6 bar
MAX PEAK INLET PRESSURE		300 bar
SPEED		FROM 700 TO5000 rpm
DISCHARGE PER REV		6,5 CC
MINIMUM DISCHARGE		4,5 L/min
MAXIMUM DISCHARGE		32,5 L/min
DISPLACEMENT		6,50 cc/rev
TORQUE	1000 rpm 100 bar	8.79 Nm
POWER		0,92 KW

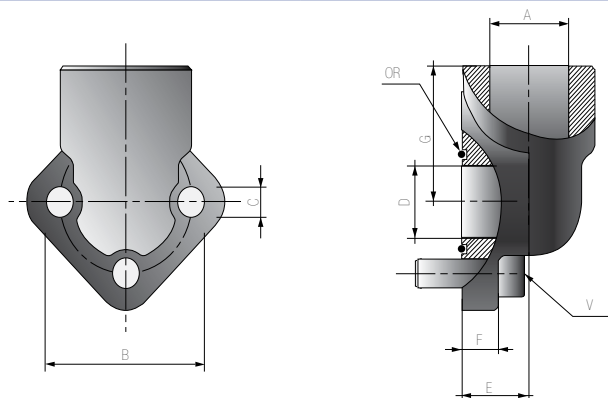
WEIGHT		Kg	1.300
A	mm	98.5	
B	mm	48.0	
C	mm	86.5	
D	IN	Ø12	
E		30	
F		M6x1	
D	OUT	Ø12	
E		30	
F		M6x1	

90° STEEL FITTINGS

Ordering Codes A92.106424

Order 2 fittings for each pump

Type	A	B	C	D	E	F	G	O Ring	V
RG 30/13,5 – ½" BSP	3/8"	30	6.5	13.5	18	9.5	27	Ø15.88x2.62	M6x20



ELECTRIC GREASE PUMPS PEG-250N-MI

ELECTRIC GREASE PUMP WITH HYDRAULIC MOTOR MODEL PEG-250N-MI METAL TANK 25 KG REDUCER 1:50

Ordering Codes

90.931.1 (fixed pumping element) PEG-250N-MI

90.931.2 (adjustable pumping element) PEG-250N-MI-ADJ

The standard version is applied with a single outlet. Further pumping elements must be ordered separately.

Pump Features

DISCHARGE	0,16 CC
NUMBER OF OUTLETS	FROM 1 TO 15
MAX OPERATING PRESSURE	500 bar (7260 PSI)
TANK CAPACITY	25 KG
DELIVERY FITTING	1/4" GAS
ELECTRICAL LEVEL	5 A – 250 V AC
	0.4 A – 125 V DC
	IP 65 RESISTIVE LOAD
LUBRICANTS	GREASE MAX NLGI 2

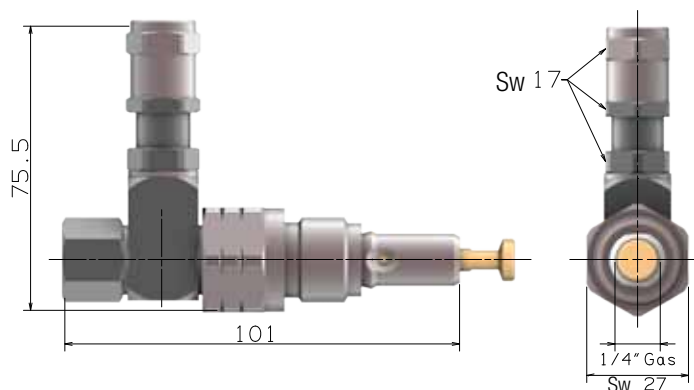
Overall Dimensions



FIXED DISCHARGE PUMPING PART NUMBER 90.900.0

All the electric pumps of the Peg series can be equipped, even subsequently, with a 2nd and 3rd pump capable of feeding other main lines or of conveying the supplied lubricant in the same pipe.

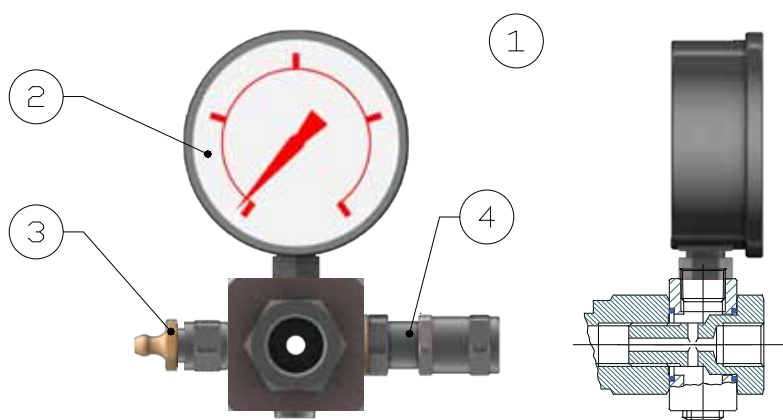
To make final use more practical, the delivery connection has been implemented by means of an adjustable 360° joint with an adjustable safety valve inserted to protect the various elements from overpressure.



FEED BLOCK FOR FIXED DISCHARGE PUMP GENERAL FEATURES

The block is mounted on the delivery line to check system operating pressure and the fill the system with a pneumatic pump. The safety valve protects against overpressure.

POS	DESCRIPTION	PART NUMBER
1	COMPLETE UNIT	46.750.0
2	1/8" GREASE NIPPLE	A70.078422
3	PRESSURE GAUGE 0-400 bar	46.600.0
4	MAX PRESSURE VALVE	A68.075011

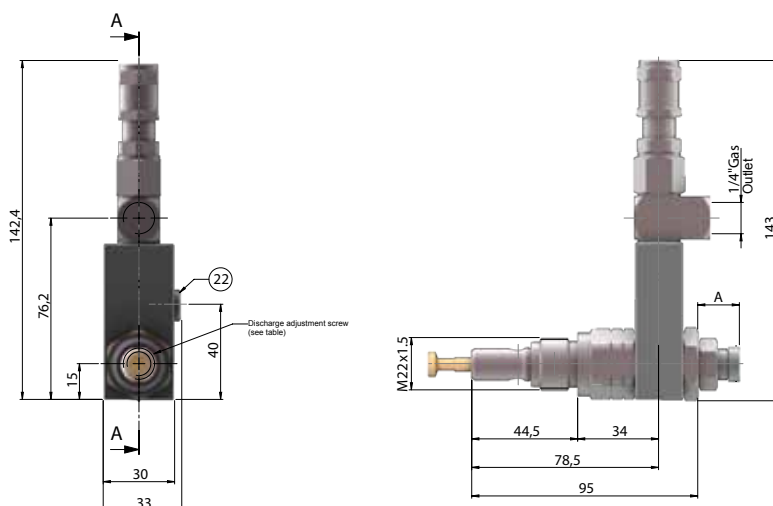


ACCESSORIES

ADJUSTABLE DISCHARGE PUMPING PART NUMBER 90.900.7

All the electric pumps of the Peg series can be equipped, even subsequently, with a 2nd and 3rd pump capable of feeding other main lines or of conveying the supplied lubricant in the same pipe.

To make final use more practical, the delivery connection has been implemented by means of an adjustable 360° joint with an adjustable safety valve inserted to protect the various elements from overpressure.



ADJUSTMENT

To change the nominal flow rate of the pump, the lock nut (Pos. c) must be loosened and the adjusting screw (Pos. b) turned clockwise to reduce the amount of lubricant or anticlockwise to increase it. When the desired value has been set, it is extremely important to secure the lock nut again (Pos. c).

IMPORTANT: “A” MUST NOT BE GREATER THAN 23.6 mm

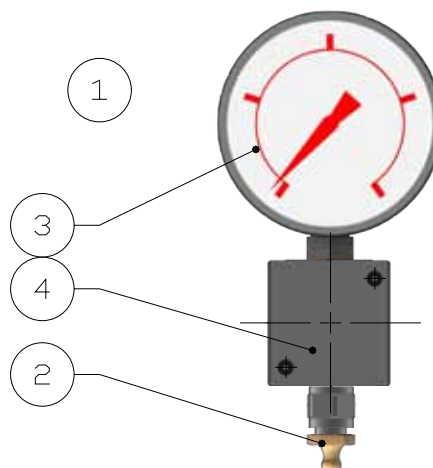
Discharge adjustment table

A	DISCHARGE/CYCLE	PERCENTAGE
23.6	0.16 CC	100 %
22.5	0.12 CC	75 %
21	0.08 CC	50 %
19.5	0.04 CC	25 %
18.5	0.01 CC	6 %
17.5	0.00 CC	0 %

FEED BLOCK FOR FIXED AND ADJUSTABLE DISCHARGE PUMP GENERAL FEATURES

The block is mounted on the delivery line to check system operating pressure and the fill the system with a pneumatic pump.

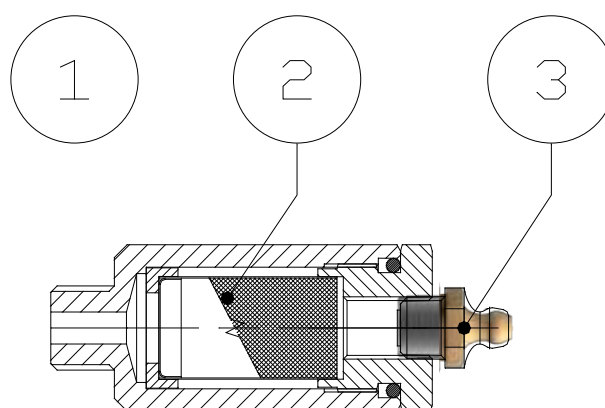
POS	DESCRIPTION	PART NUMBER
1	COMPLETE UNIT	46.750.1
2	1/4" GREASE NIPPLE	A93.115018
3	PRESSURE GAUGE 0-400 bar	46.600.0
4	4-WAY BLOCK	01.160.3



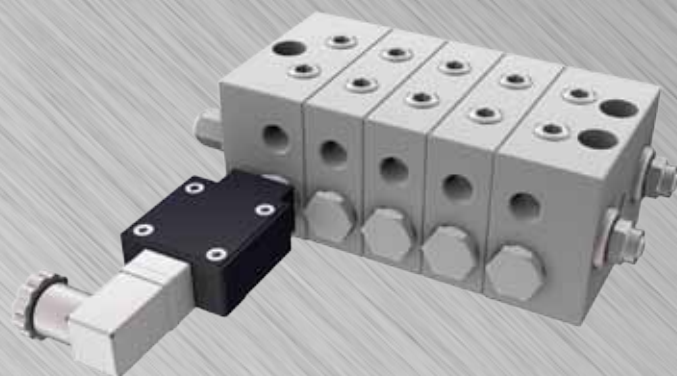
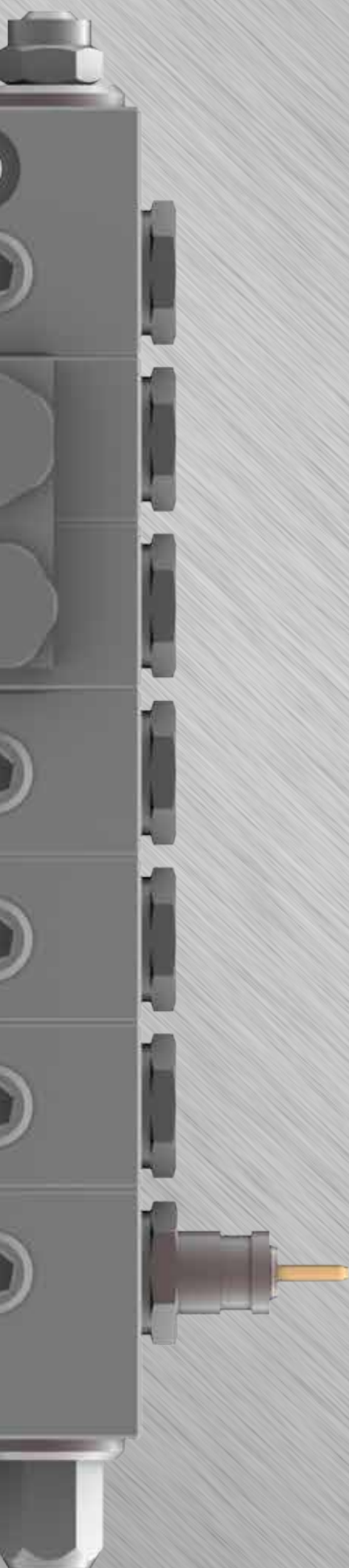
GREASE INLET FILTERS

To prevent impurities from entering while the tank is being filled, we recommend applying inlet filters directly on the pump body by unscrewing the needle grease nipple.

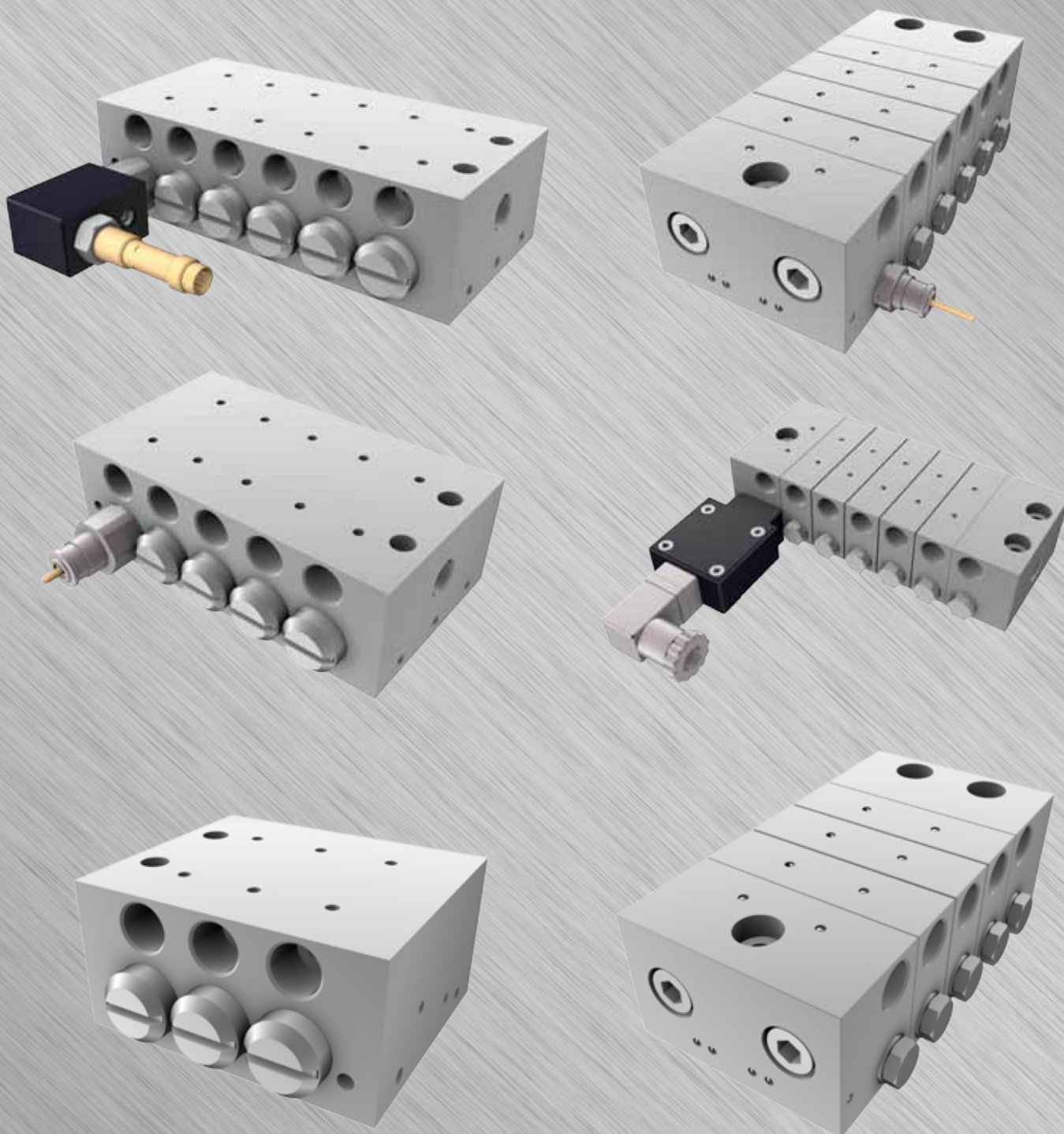
POS	DESCRIPTION	PART NUMBER
1	COMPLETE FILTER UNIT	07.270.0
2	FILTER CARTRIDGE	A93.086020
3	1/8" GREASE NIPPLE	A70.078422



PROGRESSIVE DIVIDERS
DPA



PROGRESSIVE DIVIDERS DPM - DPX



PROGRESSIVE DIVIDERS

DESCRIPTION

Ilc lube is a lubrication system which identifies the distribution and metering of lubricant with a progressive movement of pistons, driving one another in an inter-dependent succession obtained by means of a single feed flow. This system is highly qualified for dosing oil and grease for one or several support units. Each piston is in series with those preceding or with those following and the failure of one of them stops the sequence and therefore blocks the system. This block even occurs in case of an external obstruction or when an outlet not thought to be used is closed. It is sufficient to apply just one element equipped with visual or electrical control for an effective and complete control of the entire distribution. In oil-loss systems, operating stop and go, the flow rate of the pump is determined by the sum of the flow rates of the metering elements. In circulation systems, the suppliable amount, in the time unit, is less severe, however placing attention at not exceeding thus generating unexpected overpressure for the pumps and components and damage for the controls. The pump flow rate is fractionable, placing metering blocks in cascade. One block called master can feed one, or joining several outlets, another block and from this yet another. Theoretically it is possible to continue but, due to compressibility and aeration of lubricants, it is recommended not to exceed two cascades after the master as going further could cause irregularities especially when using low penetration index grease and minimum flow rates.

The Ilc lube system has three types of dividers: the monobloc model DPM and the sector model DPA and DPX.

MAIN ADVANTAGES FROM USE OF THE ILCOLUBE PROGRESSIVE SYSTEM

ABSOLUTE GUARANTEE OF DELIVERING THE PRE-ESTABLISHED AMOUNT OF LUBRICANT

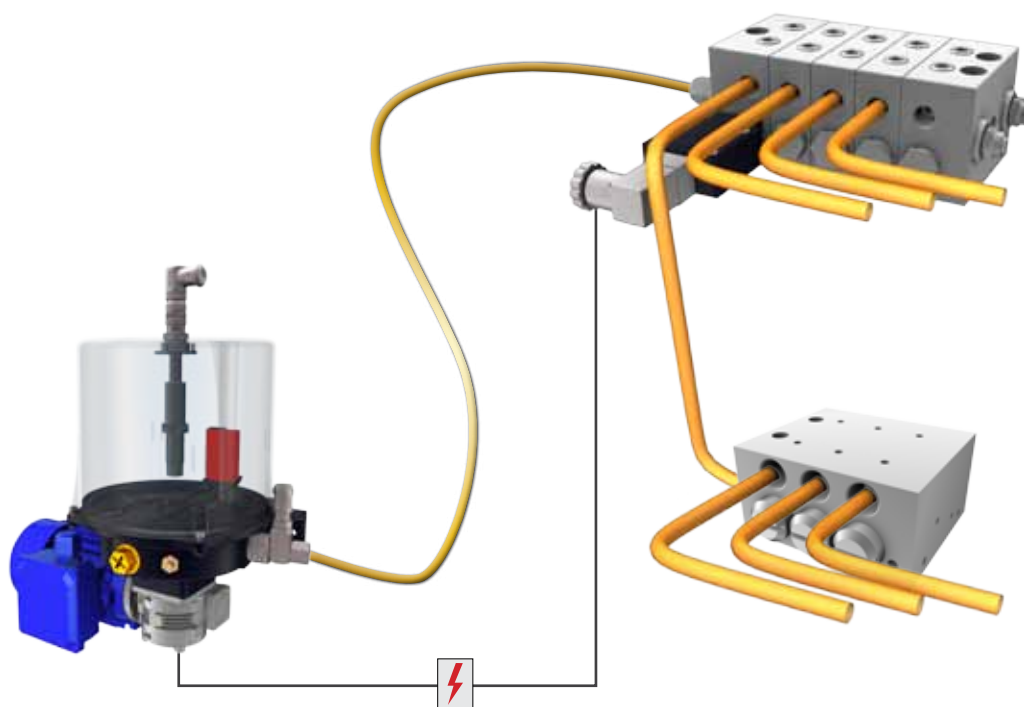
SUITED FOR USE IN SYSTEMS REQUIRING OPERATING CONTROL

ABSOLUTE CERTAINTY OF LONG LIFE BY MEANS OF A CAREFUL CHOICE OF MATERIALS AND FULL CONTROL OF PROCESSING

POSSIBILITY OF CHECKING OPERATION BY USING VISUAL AND ELECTRIC CONTROL DEVICES

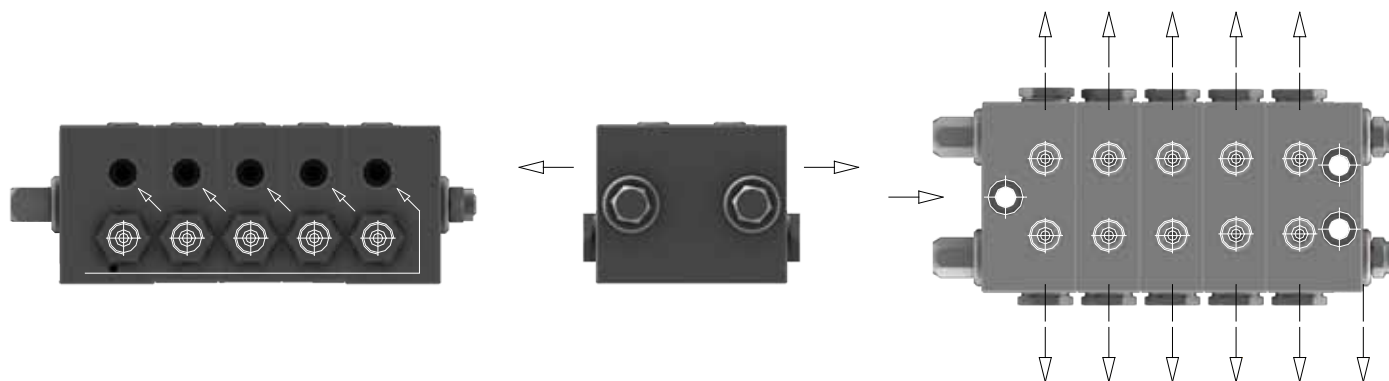
DESIGNER HAS A LARGE SELECTION OF AVAILABLE DIVIDERS AND FLOW RATES

CENTRALISED LUBRICATION SYSTEM WITH PROGRESSIVE DIVIDERS DIAGRAM



LUBRICANT DISPENSING SEQUENCE

The initial piston dispenses lubricant to the outlets corresponding to the final piston. The final piston dispenses lubricant to the outlets corresponding to the central piston or, if more than one, to the outlets corresponding to the closest intermediate piston. The intermediate piston dispenses lubricant to the outlets corresponding to the initial piston. The metering pistons in the DPA progressive dividers do not dispense the pre-established lubricant to the corresponding outlet but based on a set circuit sequence.

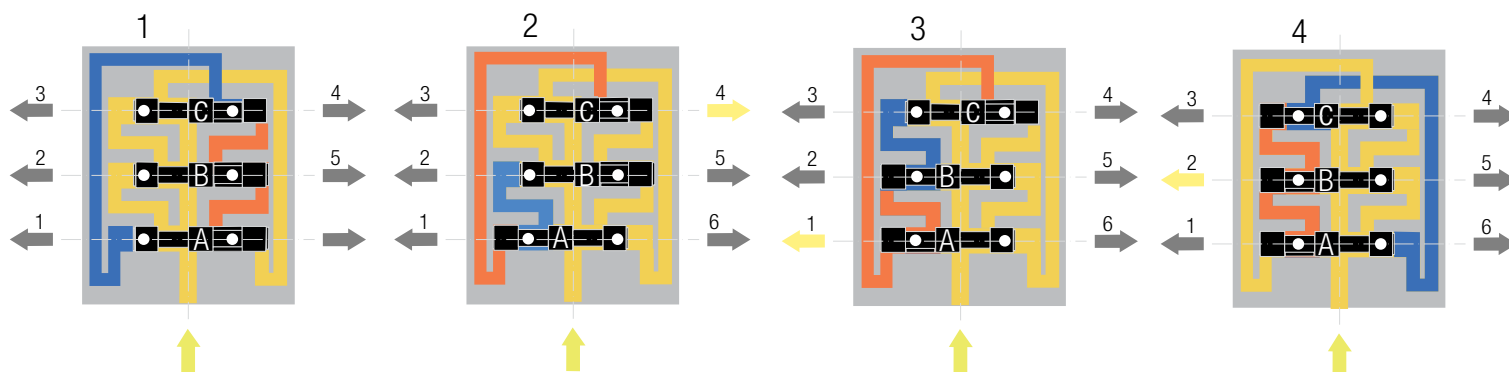


OPERATING PRINCIPLE

Yellow - pressurised lubricant

Pink - non-pressurised lubricant

1. Lubricant pressure through internal passages moves piston "A" to the left while it keeps pistons "B" and "C" in place.
2. An exact amount of lubricant exits point 4. Piston "A" is at the end of stroke. Through the opening left by piston "A" the lubricant pressure moves piston "B".
3. The lubricant exits point 1. Piston "B" is at the end of stroke. Through the opening left by piston "B" the lubricant pressure moves piston "C".
4. The lubricant exits point 2. Piston "C" is at the end of stroke. Through the opening left by piston "C" the lubricant pressure moves piston "A" to its original position. The lubricant exits point 3. Etc...

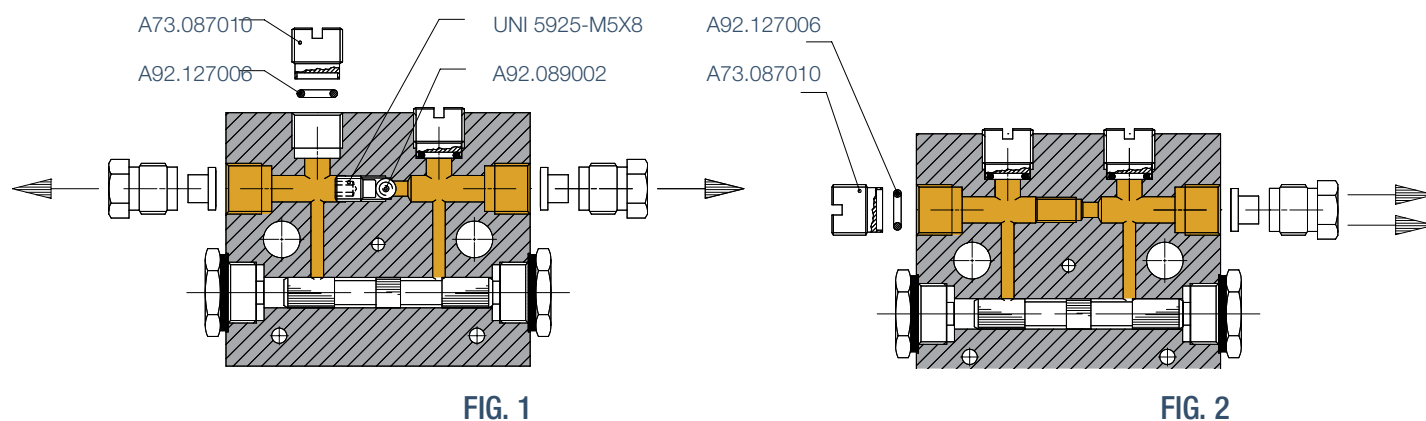


DPA PROGRESSIVE DIVIDERS

JOINING 2 OUTLETS

To lubricate larger surfaces, it could be necessary to join two or more outlets of the progressive divider. Each divider piston is set up to feed 1 or 2 outlets. When the separator grain is inserted (**Fig.1**) lubricant is dispensed in both side outlets. When the grain is not inserted (**Fig.2**) lubricant is only dispensed in one outlet with a double flow rate. When it is necessary to close an outlet thought to be used, remove not only the grain (UNI5925-M5x8) but also the ball (A92.089002), making sure to insert the closing plug (A73.087010 + A92.127006) in the outlet no longer used. The same procedure is valid when, on the contrary, the amount of outlets must be reduced. You must remove the closing plug and insert the separator grain with the relative ball. Dividers are normally supplied with the separator grain inserted and two side outlets open.

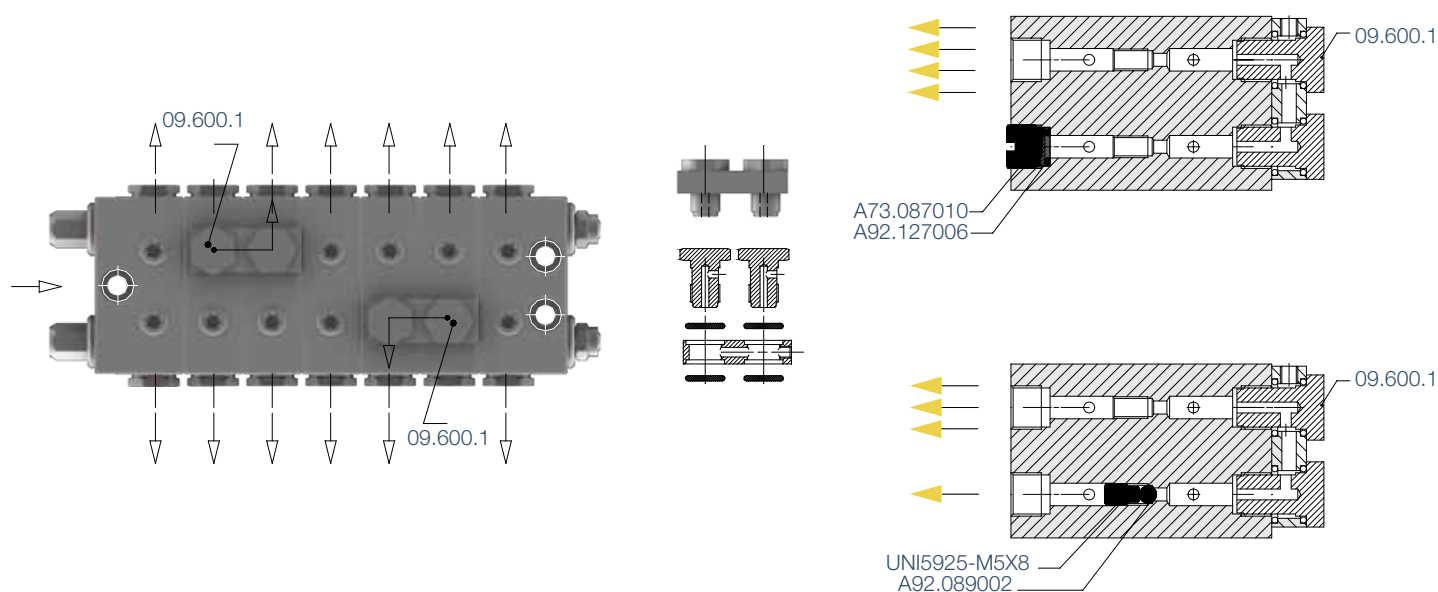
IMPORTANT: IT IS NOT POSSIBLE TO CLOSE BOTH OUTLETS RELATIVE TO A SINGLE PISTON. ALL OF THE OPERATIONS INDICATED ABOVE MUST BE PERFORMED IN A PERFECTLY CLEAN ENVIRONMENT.



JOINING SEVERAL OUTLETS

PART NUMBER 09.600.1

If the overall outlet of the two assembled outlets is not sufficient, for example in case of a large bearing or primary divider, several outlets of the divider can be joined by a bridge junction.



DPA PROGRESSIVE DIVIDERS



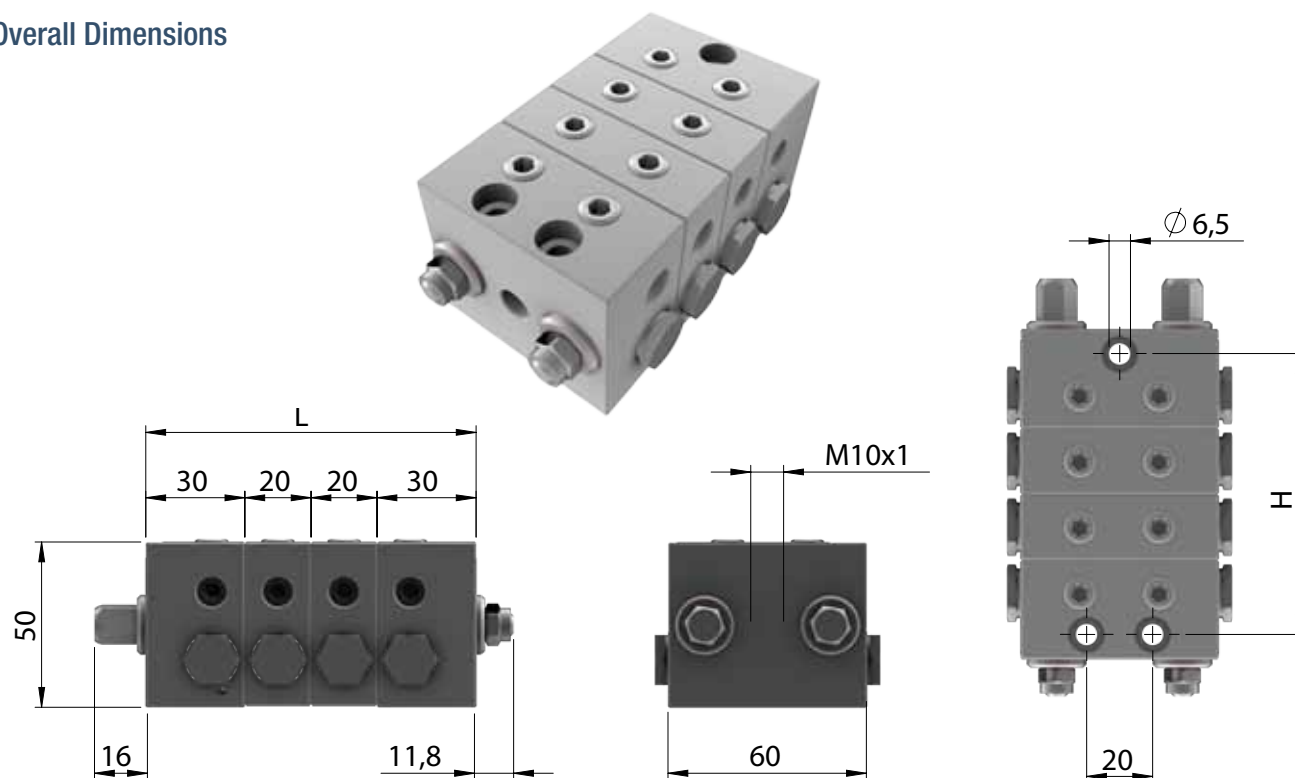
Features

DISCHARGE/STROKE FOR SINGLE OUTLET	0.05 CC - 0.10 CC - 0.15 CC - 0.20 CC - 0.30 CC - 0.40 CC - 0.50 CC
NUMBER OF METERING ELEMENTS	FROM 3 TO 12
OPERATING PRESSURE	FROM 15 bar TO 300 bar
OPERATING TEMPERATURE	FROM -20° C TO +100° C
DIVIDER MATERIAL	GALVANISED STEEL
N°. CYCLES PER MINUTE	MAXIMUM 300
INLET	M10X1
DELIVERIES	M10X1
FIXING SCREWS	M6X50
LUBRICANTS	MIN. OILS 15 cSt - MAX. GREASE NLGI 2
CONTROL DEVICES	VISUAL AND ELECTRIC INDICATING CYCLE AND OVERPRESSURE
MAIN LINES	PIPES Ø 10-8-6
SECONDARY LINES	PIPES Ø 8-6-4

Ordering Codes

PART NUMBER	NUMBER OF PISTONS	H	L
02.800.3	3	65	80
02.800.4	4	85	100
02.800.5	5	105	120
02.800.6	6	125	140
02.800.7	7	145	160

Overall Dimensions



DPA PROGRESSIVE DIVIDERS

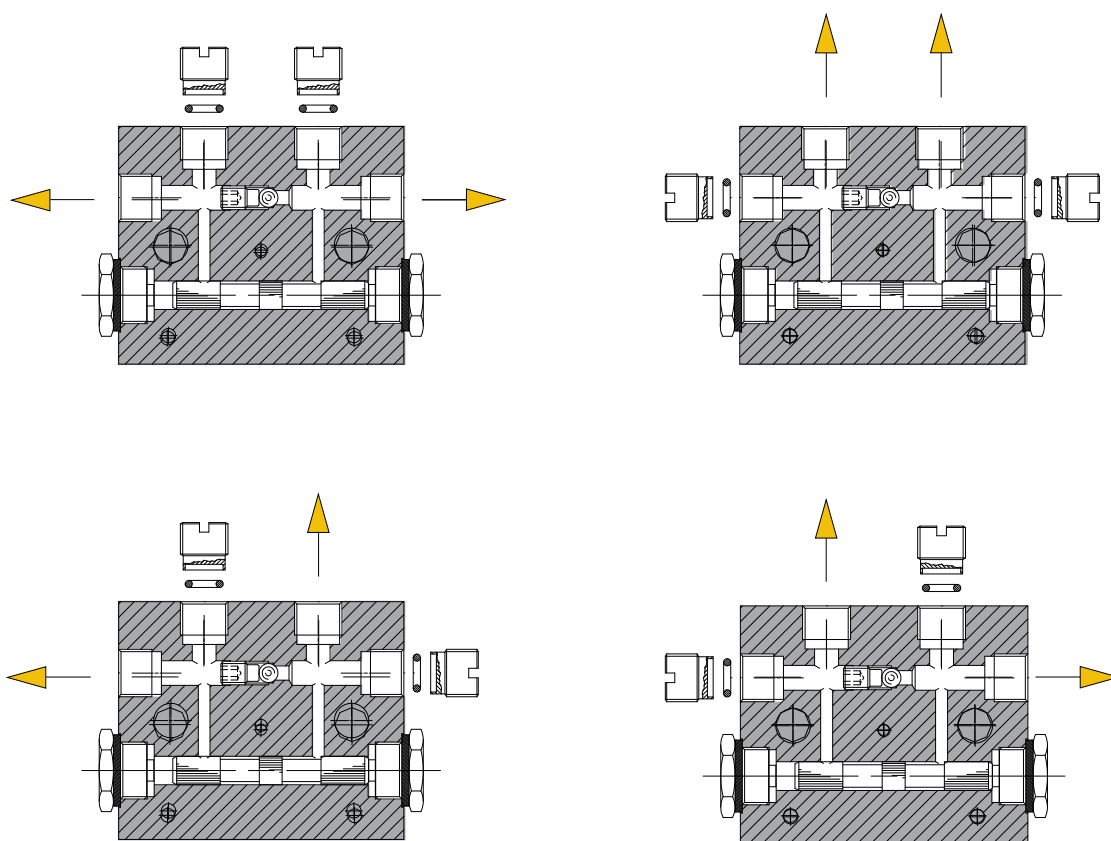
Single Elements

The elements of the DPA series progressive dividers are set up to feed 1 or 2 outlets. When the separation grain is inserted (see Fig. 1) the single supply is dispensed in both intended outlets. When the grain is not inserted (see Fig. 2) the double supply is dispensed to any of the 4 outlets available. When it is necessary to close an outlet thought to be used, remove not only the grain but also the ball, making sure to insert the closing plug in the outlet no longer used. Normally the elements supplied with the separator grain inserted and two side outlets open. If required, only one outlet can be supplied, marked with a "D" positioned in the middle of the two vertical delivery lines.

Ordering codes of single elements with two outlets

PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
0.05 CC	02.810.1	02.811.1	02.812.1
0.10 CC	02.810.2	02.811.2	02.812.2
0.15 CC	02.810.3	02.811.3	02.812.3
0.20 CC	02.810.4	02.811.4	02.812.4
0.30 CC	02.810.5	02.811.5	02.812.5
0.40 CC	02.810.6	02.811.6	02.812.6
0.50 CC	02.810.7	02.811.7	02.812.7

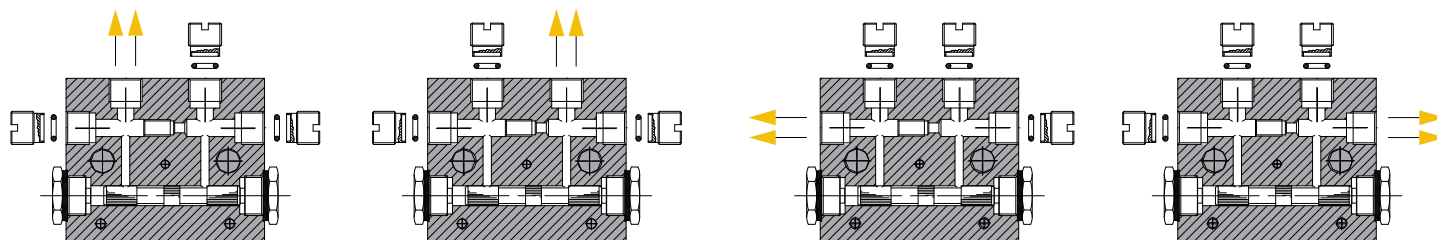
Examples of use of 2 outlets in elements with single flow rate



Ordering codes of single elements with one outlet

PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
0.10 cc	02.813.1	02.814.1	02.815.1
0.20 cc	02.813.2	02.814.2	02.815.2
0.30 cc	02.813.3	02.814.3	02.815.3
0.40 cc	02.813.4	02.814.4	02.815.4
0.60 cc	02.813.5	02.814.5	02.815.5
0.80 cc	02.813.6	02.814.6	02.815.6
1.00 cc	02.813.7	02.814.7	02.815.7

Examples of use of 2 outlets in elements with double flow rate



TIE ROD



A73.105002



A73.105002

TIE ROD



Example:

How to order tie rods to assemble
a DPA-4
(4 SECTIONS)

n. 2 Code 08.301.2
n. 4 Code A73.105002
n. 2 Code UNI7473-M07

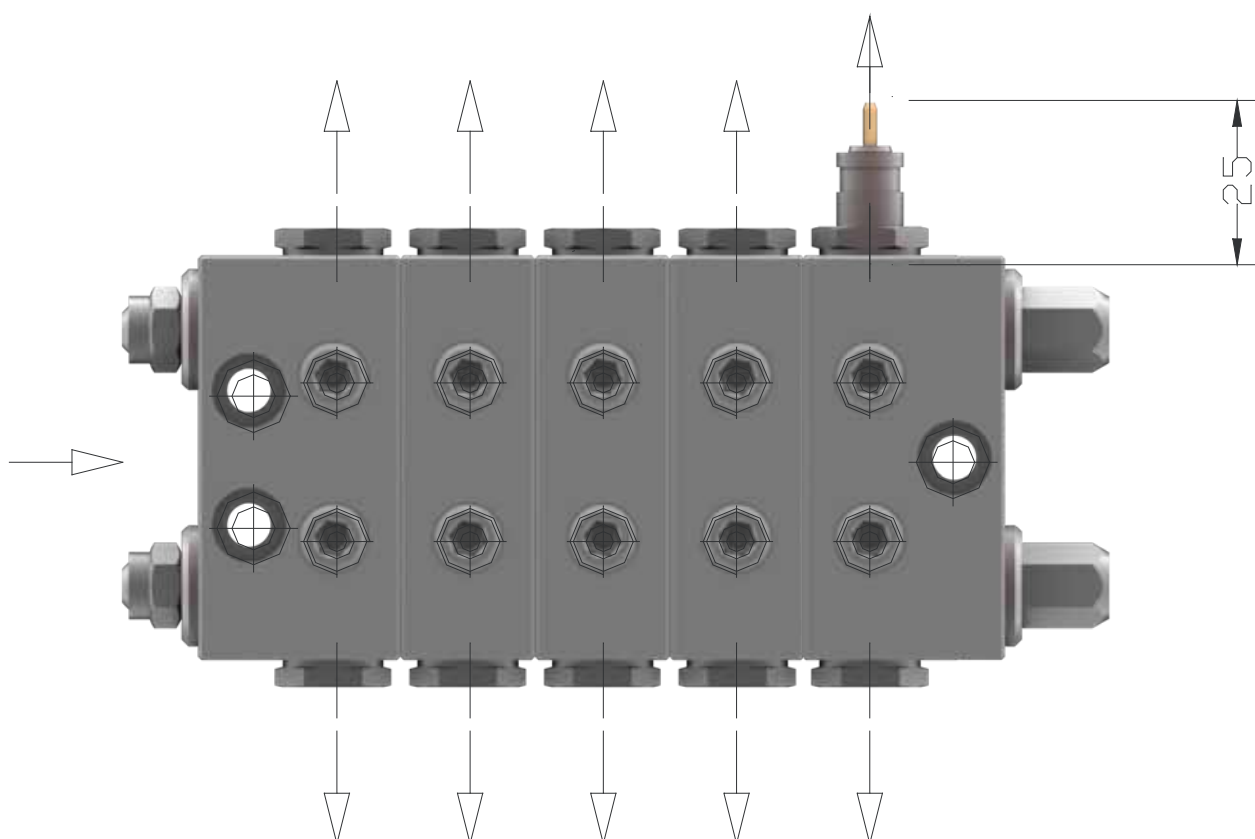
N° ELEMENTS	A (mm)	PART NUMBER
3	94	08.301.1
4	114	08.301.2
5	134	08.301.3
6	154	08.301.4
7	174	08.301.5
8	194	08.301.6
9	214	08.301.7
10	234	08.301.8
11	256	08.301.9
12	276	08.302.0

DPA PROGRESSIVE DIVIDERS WITH VISUAL INDICATOR

The visual control indicators allow you to view movement of the pistons and consequent correct operation of the entire system. They are normally on the main divider (master) but as they cannot indicate any breakage in secondary pipes, we recommend installing them in one or, if possible, all secondary dividers. The indicator is moved by the metering piston on which the indicator is applied. The construction shape of the part allows it to be used in stop and go operating systems where several cycles can be performed if necessary, but they cannot be used in continuous operation systems. Should it be necessary later on to change from visual to electric control, just apply the case of the control microswitch to the body of the visual indicator because the activation mechanism is identical for both. When placing the order, you must also always specify whether the visual control must be placed on the right or left of the entrance, adding the letters dx if on the right or sx if on the left to the divider code.

Ordering codes of dividers complete with visual indicator

PART NUMBER	NUMBER OF PISTONS	PART NUMBER	NUMBER OF PISTONS
02.870.3	3	02.870.8	8
02.870.4	4	02.870.9	9
02.870.5	5	02.871.0	10
02.870.6	6	02.871.1	11
02.870.7	7	02.871.2	12



DPA PROGRESSIVE DIVIDERS WITH VISUAL INDICATOR

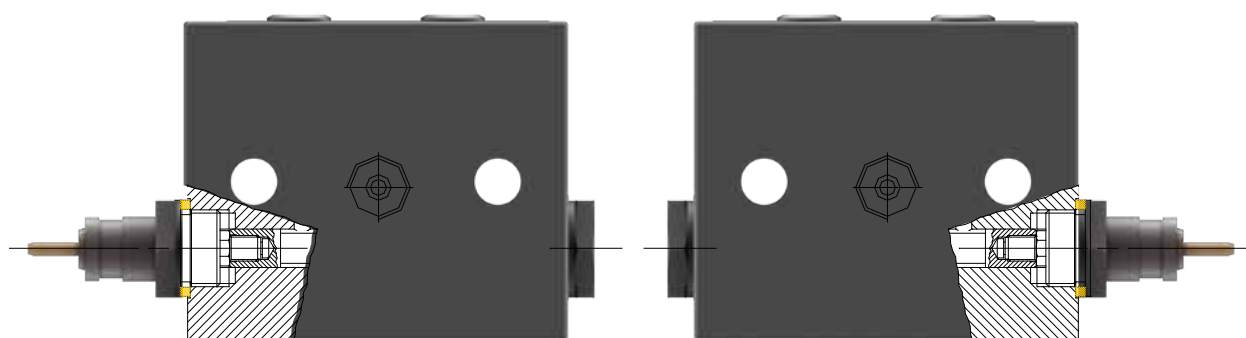
Codes to order elements complete with 2 outlet visual indicator

PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
0.10 CC	02.819.8	02.820.8	02.821.8
0.15 CC	02.819.9	02.820.9	02.821.9
0.20 CC	02.820.0	02.821.0	02.822.0
0.30 CC	02.820.1	02.821.1	02.822.1
0.40 CC	02.820.2	02.821.2	02.822.2
0.50 CC	02.820.3	02.821.3	02.822.3

Codes to order elements complete with 1 outlet indicator

PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
0.10 CC	02.819.8	02.820.8	02.821.8
0.15 CC	02.819.9	02.820.9	02.821.9
0.20 CC	02.820.0	02.821.0	02.822.0
0.30 CC	02.820.1	02.821.1	02.822.1
0.40 CC	02.820.2	02.821.2	02.822.2
0.50 CC	02.820.3	02.821.3	02.822.3

The appearance of the products can be subject to change without prior notice



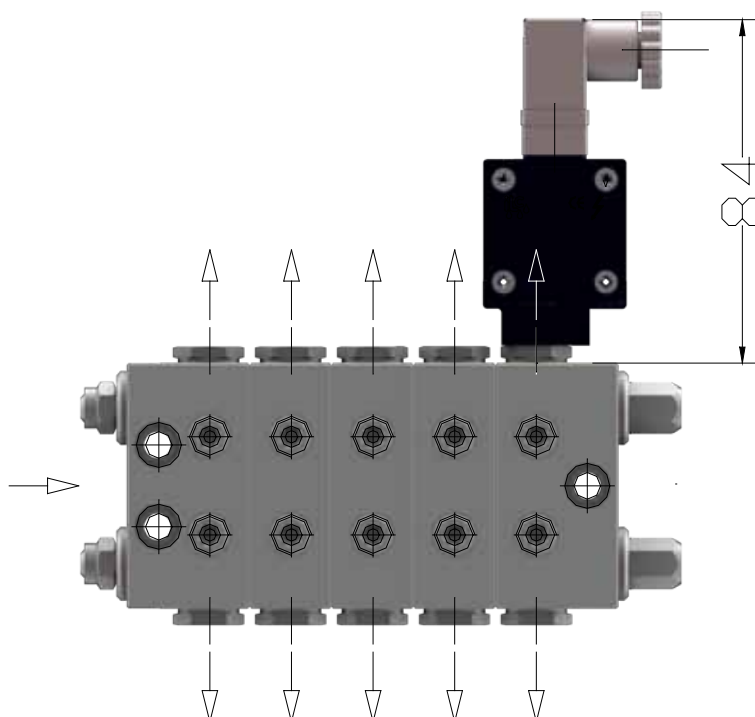
DPA PROGRESSIVE DIVIDERS WITH CYCLE END MICROSWITCH

The cycle end microswitch sends an electrical signal to verify correct movement of the pistons and consequent operation of the entire system. It is normally positioned in the main divider (master), but since it can only control overpressure generated by blocks or breakage in the main pipeline keeping lubricant from reaching the divider, it is recommended to position it in one of the secondary dividers making it possible to control another secondary pipeline. A control microswitch can be inserted in all the secondary dividers to be absolutely certain that the system is operating. Energising and deenergising of the microswitch is generated by the indicator, joined to the metering piston, changing the contact status at each movement. As the start position of the microswitch cannot be established beforehand ("NO" or "NC") we recommend setting the control function in the time unit: pumping time 20" control time 30" after which the dispatch of the electric signal must be checked. Do not use the electric signal to stop the pump as this could happen before lubricant is sent to all points.

Important: by complete cycle we mean start with the contact of the microswitch at "NO" or "NC", changing to "NC" or "NO" and returning to the initial position. If the machine is not equipped with an electronic control device, we can supply circuit boards with microprocessor capable of timing and controlling the system. The construction shape of the part allows it to be used in stop and go operating systems where several cycles can be performed if necessary, but they cannot be used in continuous operation systems (oil circulation).

Ordering codes of dividers complete with cycle end microswitch

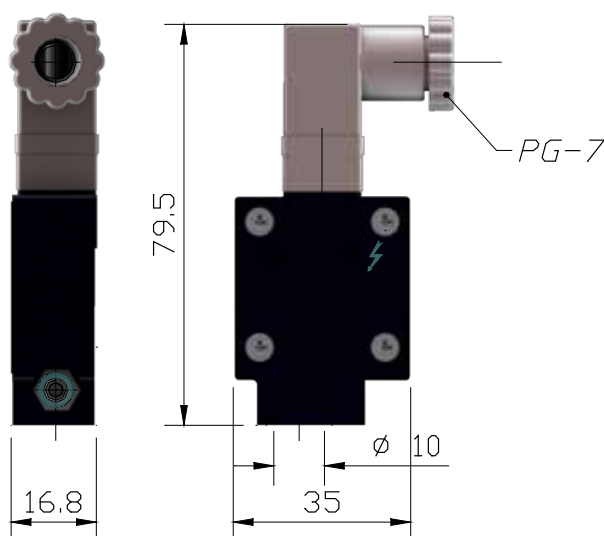
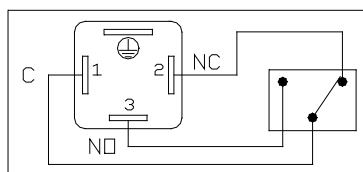
PART NUMBER	CODE	NUMBER OF PISTONS	PART NUMBER	CODE	NUMBER OF PISTONS
02.850.3	DPA-3 CM	3	02.850.8	DPA-8 CM	8
02.850.4	DPA-4 CM	4	02.850.9	DPA-9 CM	9
02.850.5	DPA-5 CM	5	02.851.0	DPA-10 CM	10
02.850.6	DPA-6 CM	6	02.851.1	DPA-11 CM	11
02.850.7	DPA-7 CM	7	02.851.2	DPA-12 CM	12



DPA PROGRESSIVE DIVIDERS WITH CYCLE END MICROSWITCH



PART NUMBER 49.050.0



ELECTRICAL FEATURES

MICROSWITCH	5A – 250 V AC – 0.4 A – 125 V DC
CONNECTIONS	3P CONNECTOR
PROTECTION	IP-65
TEMPERATURE	FROM -25°C TO +85 °C

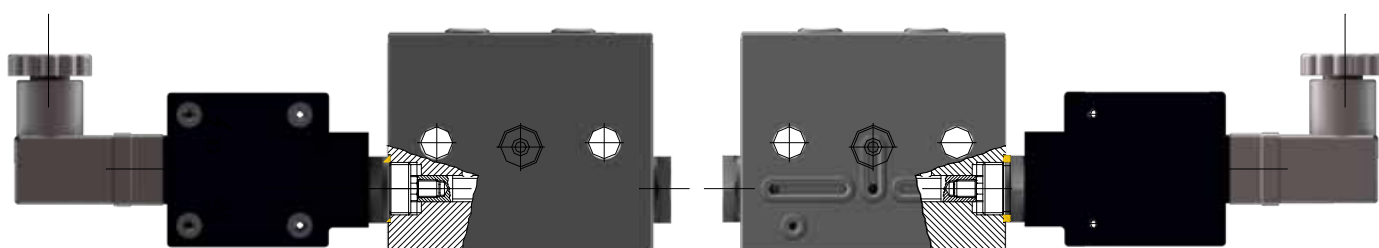
Codes to order elements complete with 2 outlet microswitch

CODE	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
0.10 CC	02.825.8	02.826.8	02.827.8
0.15 CC	02.825.9	02.826.9	02.827.9
0.20 CC	02.826.0	02.827.0	02.828.0
0.30 CC	02.826.1	02.827.1	02.828.1
0.40 CC	02.826.2	02.827.2	02.828.2
0.50 CC	02.826.3	02.827.3	02.828.3

Codes to order elements complete with 1 outlet microswitch

CODE	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
0.20 CC	02.828.8	02.829.8	02.830.8
0.30 CC	02.828.9	02.829.9	02.830.9
0.40 CC	02.829.0	02.830.0	02.831.0
0.60 CC	02.829.1	02.830.1	02.831.1
0.80 CC	02.829.2	02.830.2	02.831.2
1.00 CC	02.829.3	02.830.3	02.831.3

When placing the order, you must also always specify whether the microswitch must be placed on the right or left of the entrance, adding the letters **dx** if on the right and **sx** if on the left, to the divider code.



DPA PROGRESSIVE DIVIDERS WITH MAGNETIC CONTROL

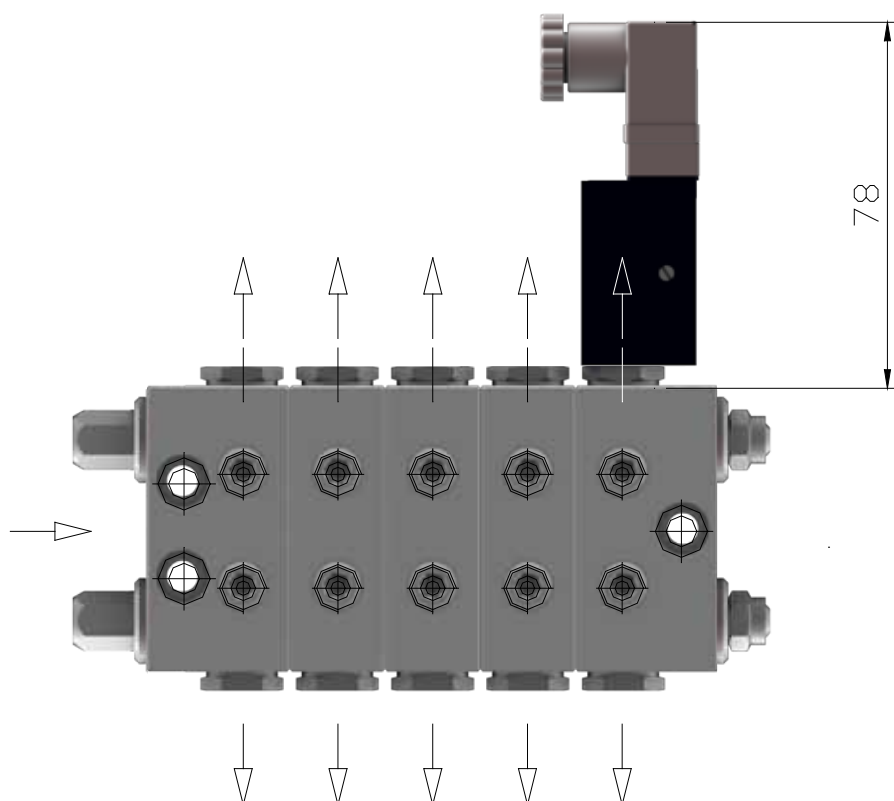
This indicator consists of a REED switch enclosed in an aluminium block. When energised by a permanent magnet, joined to the piston, it signals the cycle finished when the piston moves to its own operating seat.

They are normally used in circulation systems for checking continuous cycles and can count up to 500 movements per minute.

The REED contact is hermetically sealed in epoxy resin.

Ordering codes of dividers complete with magnetic control

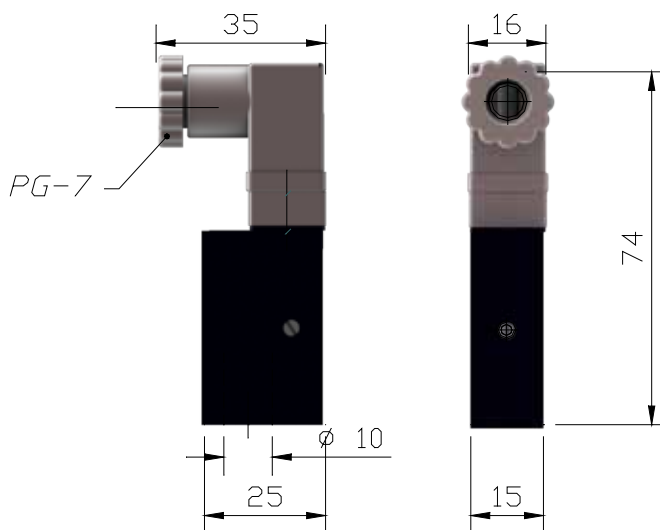
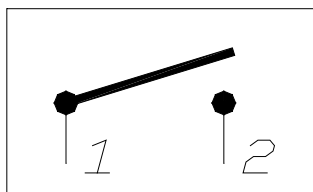
PART NUMBER	CODE	NUMBER OF PISTONS	PART NUMBER	CODE	NUMBER OF PISTONS
02.860.3	DPA-3 CM	3	02.860.8	DPA-8 CMG	8
02.860.4	DPA-4 CM	4	02.860.9	DPA-9 CMG	9
02.860.5	DPA-5 CM	5	02.861.0	DPA-10 CMG	10
02.860.6	DPA-6 CM	6	02.861.1	DPA-11 CMG	11
02.860.7	DPA-7 CM	7	02.861.2	DPA-12 CMG	12



DPA PROGRESSIVE DIVIDERS WITH MAGNETIC CONTROL



PART NUMBER 49.051.0



ELECTRICAL FEATURES

MICROSWITCH	2A – 230 V AC/DC – 40 W
CONNECTIONS	3P CONNECTOR
PROTECTION	IP-65
TEMPERATURE	FROM -25 °C TO +80 °C

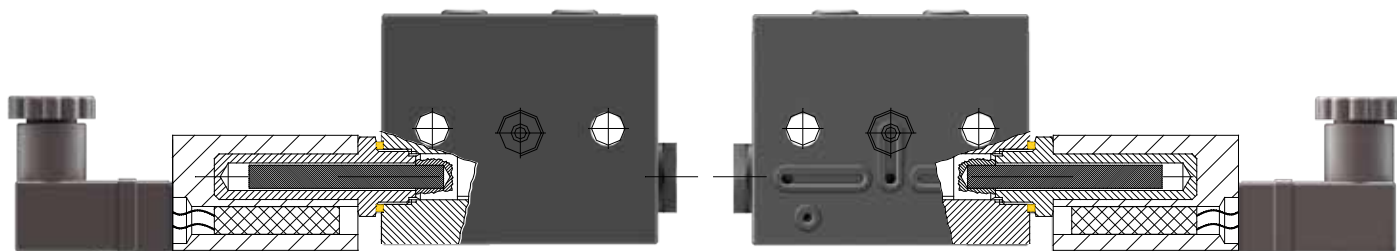
Codes to order elements complete with 2 outlet magnetic controller

PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
0.30 CC	02.832.1	02.833.1	02.834.1
0.40 CC	02.832.2	02.833.2	02.834.2
0.50 CC	02.832.3	02.833.3	02.834.3

Codes to order elements complete with 1 outlet magnetic controller

PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
0.60 CC	02.835.1	02.836.1	02.837.1
0.80 CC	02.835.2	02.836.2	02.837.2
1.00 CC	02.835.3	02.836.3	02.837.3

When placing the order, you must also always specify whether the MAGNETIC CONTROLLER must be placed on the right or left of the entrance, adding the letters **dx** if on the right and **sx** if on the left, to the divider code.

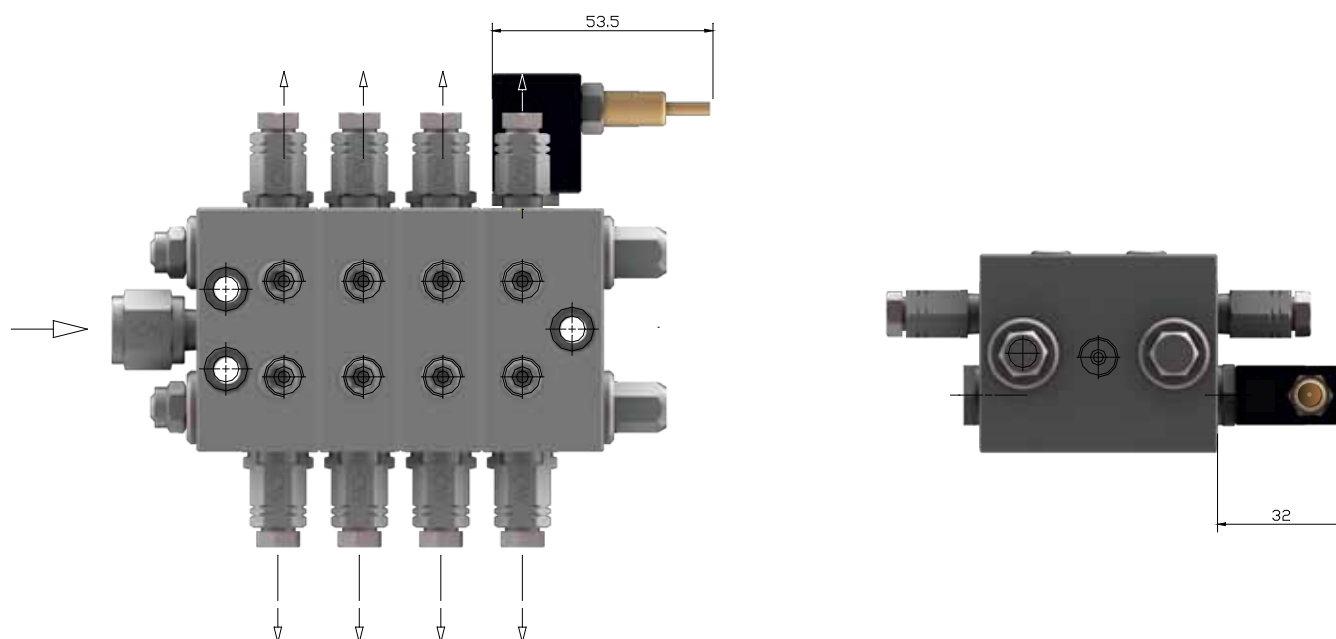


DPA PROGRESSIVE DIVIDERS WITH PROXIMITY SENSOR

This indicator consists of a proximity sensor enclosed in an aluminium block. The contact opens and closes when the piston moves into its operating seat. They are normally used in circulation systems for checking the continuous cycle. Connected to an electronic circuit, they can count up to 500 movements per minute.

Ordering codes for dividers complete with proximity sensor

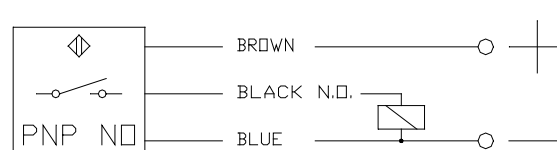
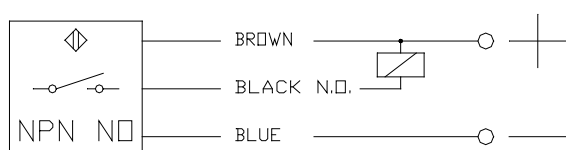
PART NUMBER	CODE	NUMBER OF PISTONS	PART NUMBER	CODE	NUMBER OF PISTONS
02.861.3	DPA-3 CMPS	3	02.861.8	DPA- 8 CMPS	8
02.861.4	DPA-4 CMPS	4	02.861.9	DPA- 9 CMPS	9
02.861.5	DPA-5 CMPS	5	02.862.0	DPA-10 CMPS	10
02.861.6	DPA-6 CMPS	6	02.862.1	DPA-11 CMPS	11
02.861.7	DPA-7 CMPS	7	02.862.2	DPA-12 CMPS	12



ELECTRICAL FEATURES

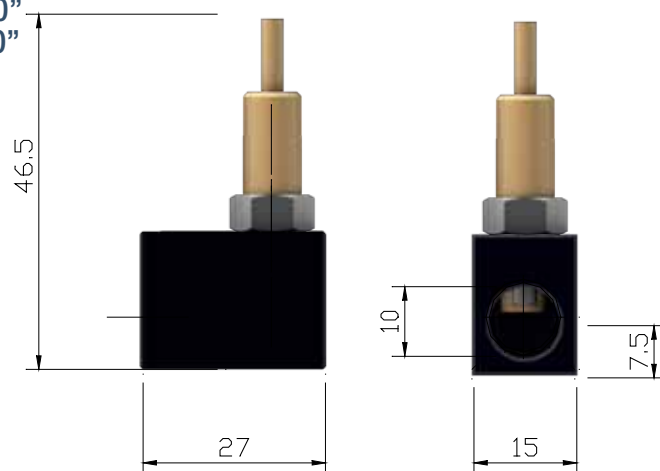
VOLTAGE	Coil -30 V DC
OUTPUT CURRENT	MAX 200 Ma
CURRENT	< 12 Ma
TEMPERATURE	- 25 °C / + 70 °C
PROTECTION	IP 67
SENSOR BODY	STAINLESS STEEL
SENSOR CABLES	3x0.14 mm² PVC

Wiring diagram



DPA PROGRESSIVE DIVIDERS WITH PROXIMITY SENSOR

PART NUMBER 49.052.1 NPN "NO"
PART NUMBER 49.052.0 PNP "NO"



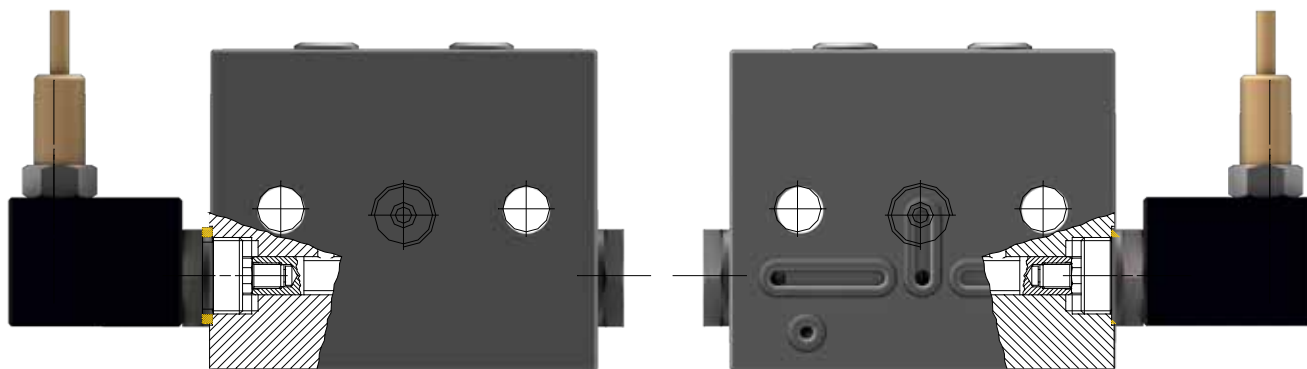
Codes to order elements complete with 2 outlet proximity sensor

PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
0.10	02.837.8	02.838.8	02.839.8
0.15	02.837.9	02.838.9	02.839.9
0.20	02.838.0	02.839.0	02.840.0
0.30	02.838.1	02.839.1	02.840.1
0.40	02.838.2	02.839.2	02.840.2
0.50	02.838.3	02.839.3	02.840.3

Codes to order elements complete with 1 outlet proximity sensor

PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
0.20	02.840.8	02.841.8	02.842.8
0.30	02.840.9	02.841.9	02.842.9
0.40	02.841.0	02.842.0	02.843.0
0.60	02.841.1	02.842.1	02.843.1
0.80	02.841.2	02.842.2	02.843.2
1.00	02.841.3	02.842.3	02.843.3

When placing the order, you must also always specify whether the PROXIMITY SENSOR must be placed on the right or left of the entrance, adding the letters **dx** if on the right and **sx** if on the left, to the divider code.

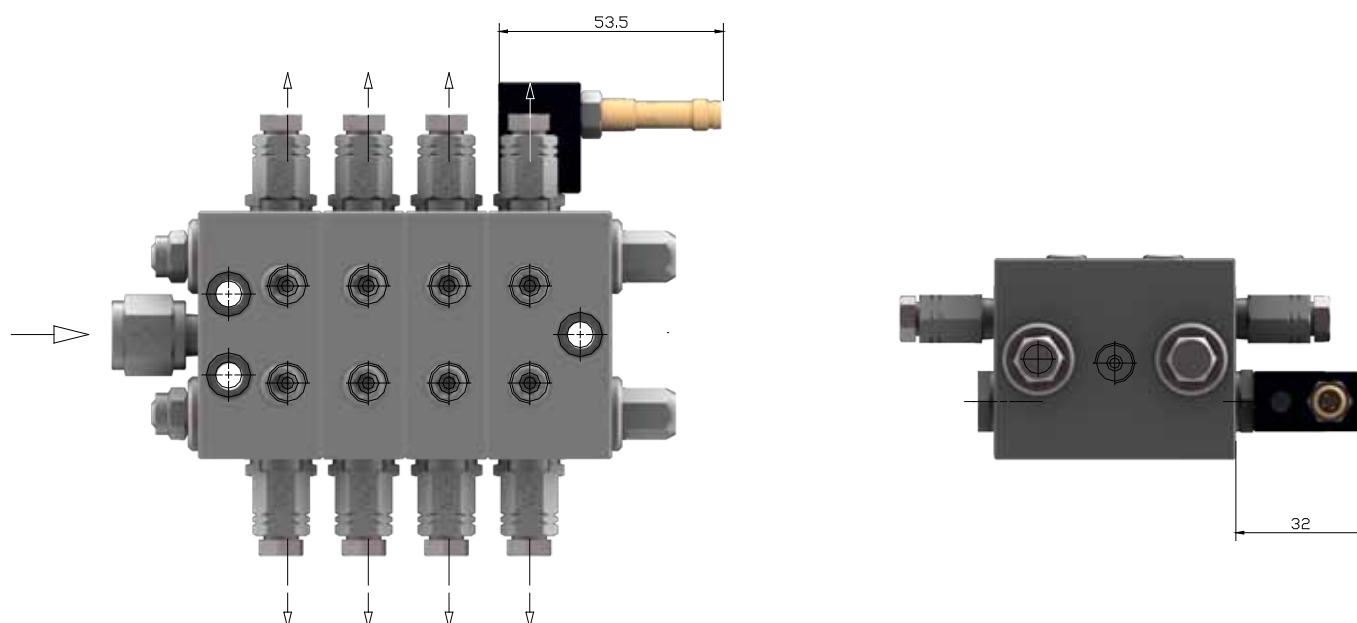


DPA PROGRESSIVE DIVIDERS WITH PROXIMITY SENSOR M8x1

This indicator consists of a proximity sensor enclosed in an aluminium block. The contact opens and closes when the piston moves into its operating seat. They are normally used in circulation systems for checking the continuous cycle. Connected to an electronic circuit, they can count up to 500 movements per minute.

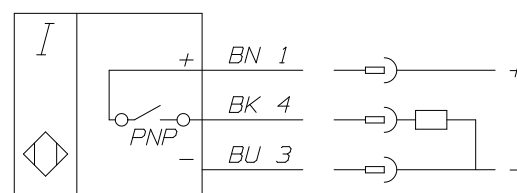
Ordering codes for dividers complete with proximity sensor

PART NUMBER	CODE	NUMBER OF PISTONS	PART NUMBER	CODE	NUMBER OF PISTONS
02.861.3.M8	DPA-3 CMPS	3	02.861.8.M8	DPA- 8 CMPS	8
02.861.4.M8	DPA-4 CMPS	4	02.861.9.M8	DPA- 9 CMPS	9
02.861.5.M8	DPA-5 CMPS	5	02.862.0.M8	DPA-10 CMPS	10
02.861.6.M8	DPA-6 CMPS	6	02.862.1.M8	DPA-11 CMPS	11
02.861.7.M8	DPA-7 CMPS	7	02.862.2.M8	DPA-12 CMPS	12



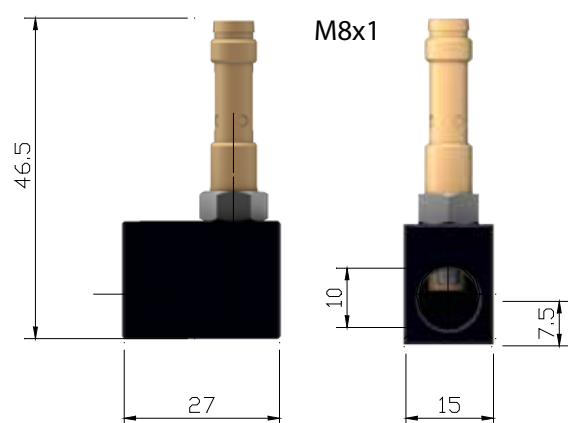
ELECTRICAL FEATURES	
VOLTAGE	Coil -30 V DC
OUTPUT CURRENT	MAX 200 Ma
CURRENT	< 12 Ma
TEMPERATURE	- 25 °C / + 70 °C
PROTECTION	IP 67
SENSOR BODY	STAINLESS STEEL

Wiring diagram



DPA PROGRESSIVE DIVIDERS WITH PROXIMITY SENSOR M8x1

PART NUMBER 49.052.7 PNP "NO"



ELECTRIC CABLE TO ORDER SEPARATELY



A91.111227
A91.111348
A91.111393

L= 5 m
L= 10 m
L= 15 m

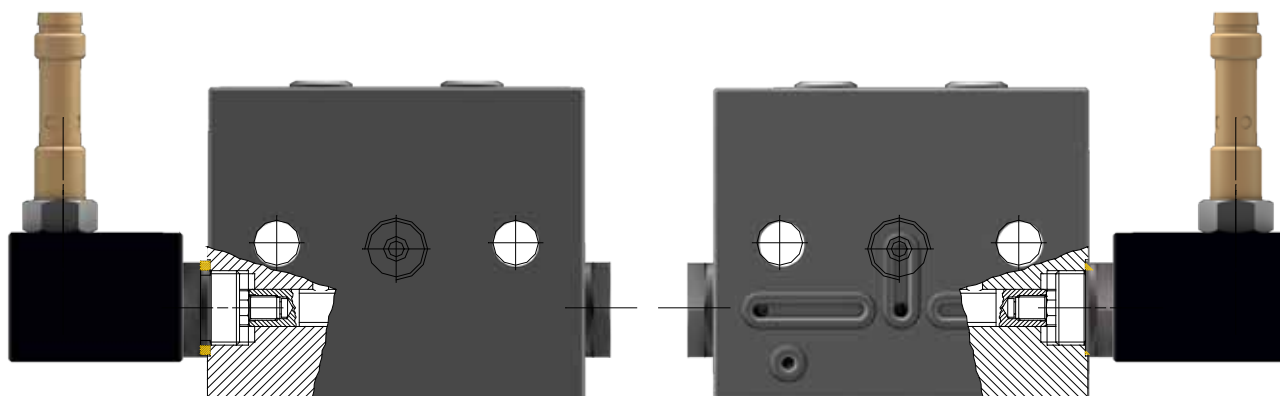
Codes to order elements complete with 2 outlet proximity sensor

PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
0.10	02.837.8.M8	02.838.8.M8	02.839.8.M8
0.15	02.837.9.M8	02.838.9.M8	02.839.9.M8
0.20	02.838.0.M8	02.839.0.M8	02.840.0.M8
0.30	02.838.1.M8	02.839.1.M8	02.840.1.M8
0.40	02.838.2.M8	02.839.2.M8	02.840.2.M8
0.50	02.838.3.M8	02.839.3.M8	02.840.3.M8

Codes to order elements complete with 1 outlet proximity sensor

PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
0.20	02.840.8.M8	02.841.8.M8	02.842.8.M8
0.30	02.840.9.M8	02.841.9.M8	02.842.9.M8
0.40	02.841.0.M8	02.842.0.M8	02.843.0.M8
0.60	02.841.1.M8	02.842.1.M8	02.843.1.M8
0.80	02.841.2.M8	02.842.2.M8	02.843.2.M8
1.00	02.841.3.M8	02.842.3.M8	02.843.3.M8

When placing the order, you must also always specify whether the PROXIMITY SENSOR must be placed on the right or left of the entrance, adding the letters **dx** if on the right and **sx** if on the left, to the divider code.

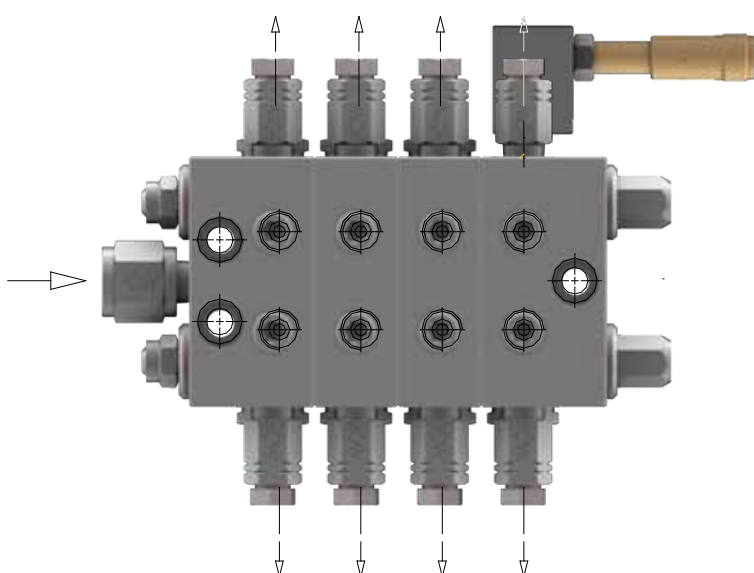


DPA PROGRESSIVE DIVIDERS WITH PROXIMITY SENSOR M12x1

This indicator consists of a proximity sensor enclosed in an aluminium block. The contact opens and closes when the piston moves into its operating seat. They are normally used in circulation systems for checking the continuous cycle. Connected to an electronic circuit, they can count up to 500 movements per minute.

Ordering codes for dividers complete with proximity sensor

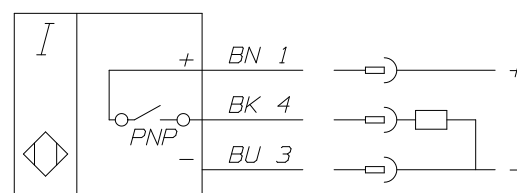
PART NUMBER	CODE	NUMBER OF PISTONS	PART NUMBER	CODE	NUMBER OF PISTONS
02.861.3.M12	DPA-3 CMPS	3	02.861.8.M12	DPA- 8 CMPS	8
02.861.4.M12	DPA-4 CMPS	4	02.861.9.M12	DPA- 9 CMPS	9
02.861.5.M12	DPA-5 CMPS	5	02.862.0.M12	DPA-10 CMPS	10
02.861.6.M12	DPA-6 CMPS	6	02.862.1.M12	DPA-11 CMPS	11
02.861.7.M12	DPA-7 CMPS	7	02.862.2.M12	DPA-12 CMPS	12



ELECTRICAL FEATURES

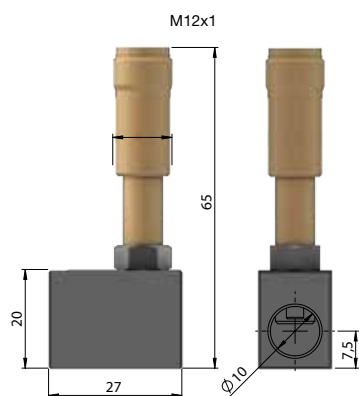
VOLTAGE	Coil -30 V DC
OUTPUT CURRENT	MAX 200 Ma
CURRENT	< 12 Ma
TEMPERATURE	- 25 °C / + 70 °C
PROTECTION	IP 67
SENSOR BODY	STAINLESS STEEL

Wiring diagram



DPA PROGRESSIVE DIVIDERS WITH PROXIMITY SENSOR M12x1

PART NUMBER 49.052.9 PNP "NO"



ELECTRIC CABLE TO ORDER SEPARATELY



A91.111349

L= 5 m

A91.111296

L= 10 m

A91.111350

L= 15 m

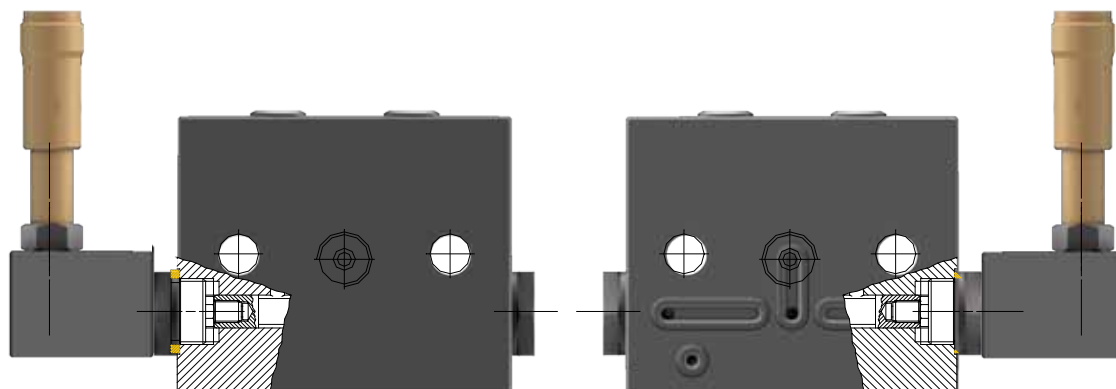
Codes to order elements complete with 2 outlet proximity sensor

PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
0.10	02.837.8.M12	02.838.8.M12	02.839.8.M12
0.15	02.837.9.M12	02.838.9.M12	02.839.9.M12
0.20	02.838.0.M12	02.839.0.M12	02.840.0.M12
0.30	02.838.1.M12	02.839.1.M12	02.840.1.M12
0.40	02.838.2.M12	02.839.2.M12	02.840.2.M12
0.50	02.838.3.M12	02.839.3.M12	02.840.3.M12

Codes to order elements complete with 1 outlet proximity sensor

PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
0.20	02.840.8.M12	02.841.8.M12	02.842.8.M12
0.30	02.840.9.M12	02.841.9.M12	02.842.9.M12
0.40	02.841.0.M12	02.842.0.M12	02.843.0.M12
0.60	02.841.1.M12	02.842.1.M12	02.843.1.M12
0.80	02.841.2.M12	02.842.2.M12	02.843.2.M12
1.00	02.841.3.M12	02.842.3.M12	02.843.3.M12

When placing the order, you must also always specify whether the PROXIMITY SENSOR must be placed on the right or left of the entrance, adding the letters **dx** if on the right and **sx** if on the left, to the divider code.

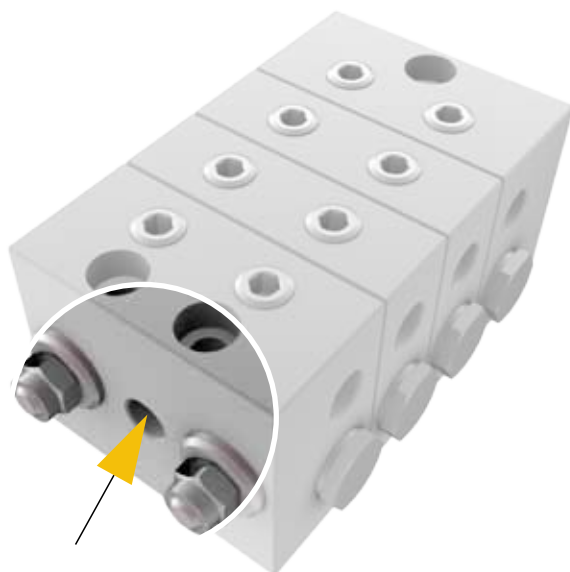


DPA PROGRESSIVE DIVIDERS

Fittings for high pressure pipe

The inlet thread to the DPA divider is M10x1 and appropriate fittings make it possible to connect rigid or flexible pipes with an outside diameter of 6. The side outlets have a M10x1 thread with flat seat and appropriate fittings make it possible to connect pipes with an outside diameter of 4 or 6.

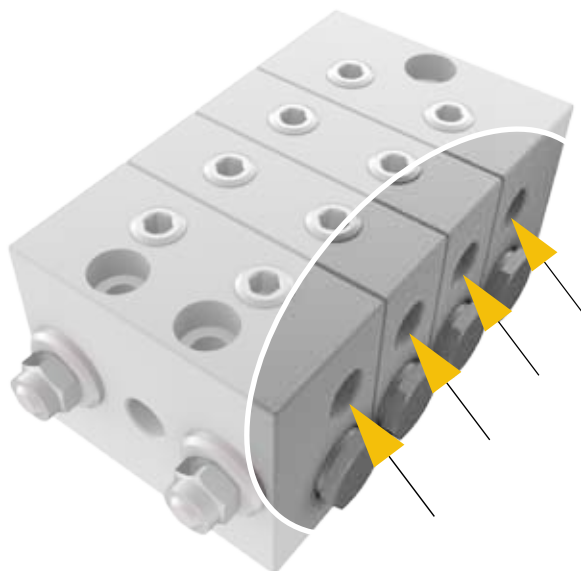
DPA INLET



	Ø	QUICK FITTINGS	STANDARD FITTINGS
	6	03.256.3	ZZZ106-003
90°	6	03.256.7	ZZZ106-103
	4	03.255.3	
90°	4	03.255.8	



DPA OUTLETS

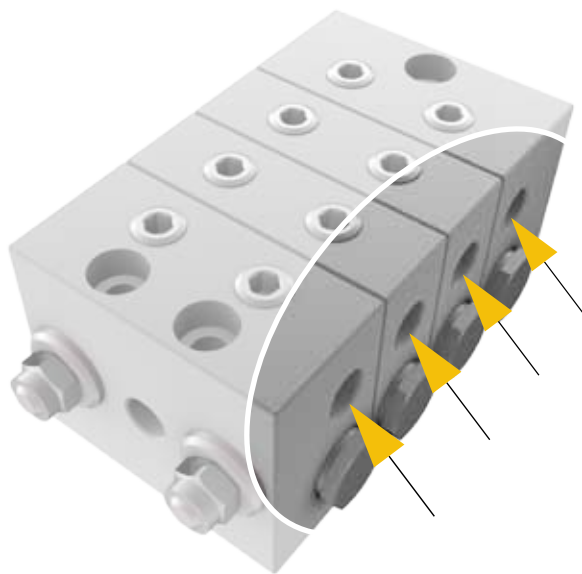


	Ø	QUICK FITTINGS	STANDARD FITTINGS
	6	03.256.3	ZZZ106-003
90°	6	03.256.7	ZZZ106-103
	4	03.255.3	
90°	4	03.255.8	



Fittings for polyamide pipe PA6 – PA12 and rilsan pipe PA11

DPA OUTLETS



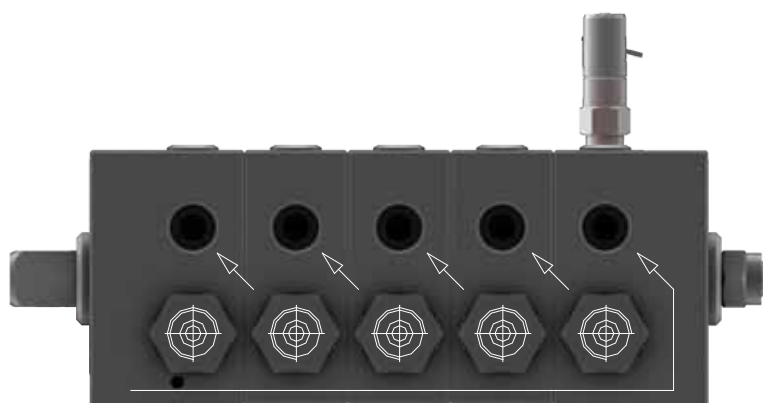
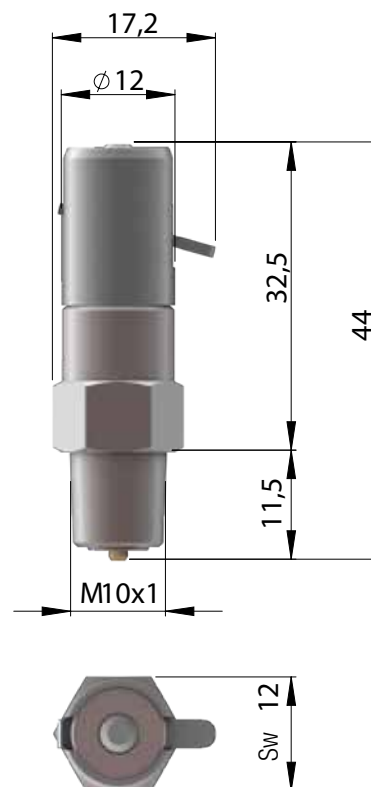
	Ø	FITTINGS
	6	06.052.0 + 04.052.0
	4	06.051.0 + 04.051.0



Visual overpressure indicators for DPA indicators with memory

These indicators are normally used to check for overpressure on main and secondary lines. If a pressure beyond that intended occurs, the indicator comes out from its seat and remains out until you manually intervene on the release lever. We recommend intervening on the release lever after having discovered what happened and where.

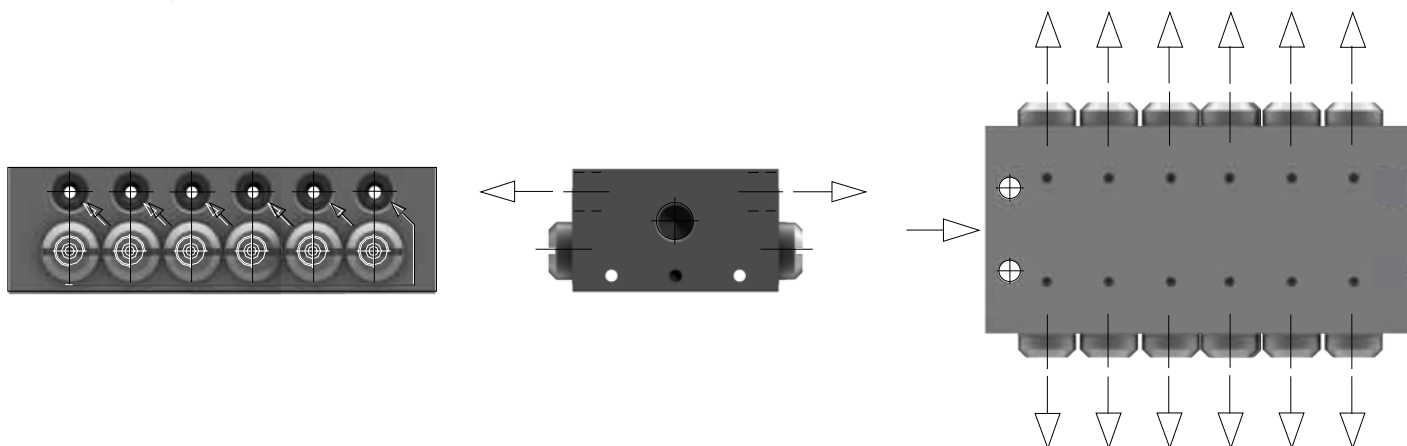
PART NUMBER	MAX PRESSURE
09.710.1	30
09.710.2	50
09.710.3	75
09.710.4	100
09.710.5	150
09.710.6	200
09.710.7	250



DPM PROGRESSIVE DIVIDERS

Lubricant dispensing sequence

The initial piston dispenses lubricant to the outlets corresponding to the final piston. The final piston dispenses lubricant to the outlets corresponding to the central piston or, if more than one, to the outlets corresponding to the closest intermediate piston. The intermediate piston dispenses lubricant to the outlets corresponding to the initial piston. The metering pistons in the DPA progressive dividers do not dispense the pre-established lubricant to the corresponding outlet but based on a set circuit sequence.

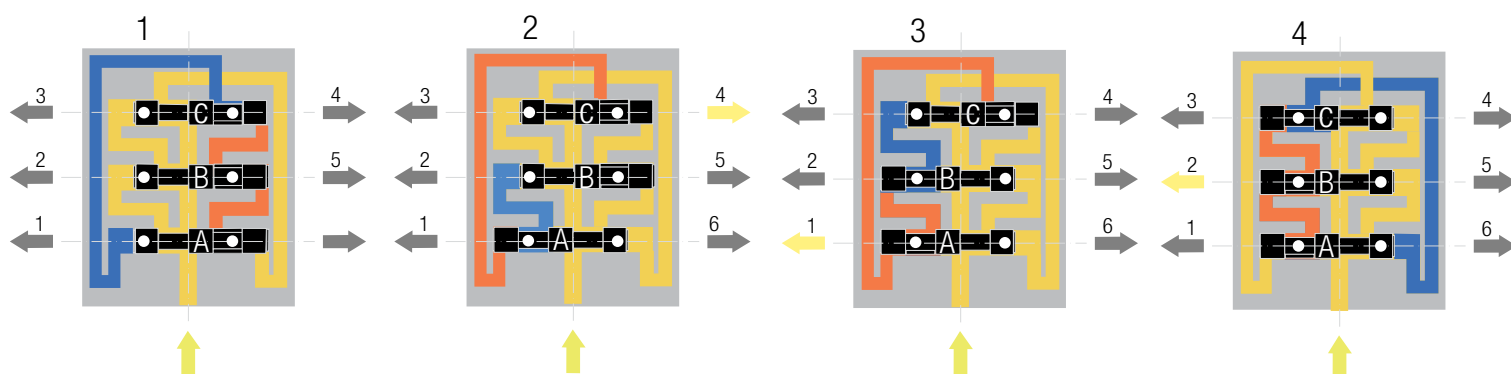


OPERATING PRINCIPLE

Yellow - pressurised lubricant

Pink - non-pressurised lubricant

1. Lubricant pressure through internal passages moves piston "A" to the left while it keeps pistons "B" and "C" in place.
2. An exact amount of lubricant exits point 4. Piston "A" is at the end of stroke. Through the opening left by piston "A" the lubricant pressure moves piston "B".
3. The lubricant exits point 1. Piston "B" is at the end of stroke. Through the opening left by piston "B" the lubricant pressure moves piston "C".
4. The lubricant exits point 2. Piston "C" is at the end of stroke. Through the opening left by piston "C" the lubricant pressure moves piston "A" to its original position. The lubricant exits point 3. Etc...



JOINING 2 OUTLETS

To lubricate larger surfaces, it could be necessary to join two or more outlets of the progressive divider. Each divider piston is set up to feed 1 or 2 outlets. When the separator grain is inserted (**Fig.1**) lubricant is dispensed in both side outlets. When the grain is not inserted (**Fig.2**) lubricant is only dispensed in one outlet with a double flow rate. When it is necessary to close an outlet thought to be used, remove not only the grain (UNI5925-M5x8) but also the ball (A92.089002), making sure to insert the closing plug (A73.087010 + A92.127006) in the outlet no longer used. The same procedure is valid when, on the contrary, the amount of outlets must be reduced. You must remove the closing plug and insert the separator grain with the relative ball. Dividers are normally supplied with the separator grain inserted and two side outlets open.

IMPORTANT: IT IS NOT POSSIBLE TO CLOSE BOTH OUTLETS RELATIVE TO A SINGLE PISTON. ALL OF THE OPERATIONS INDICATED ABOVE MUST BE PERFORMED IN A PERFECTLY CLEAN ENVIRONMENT.

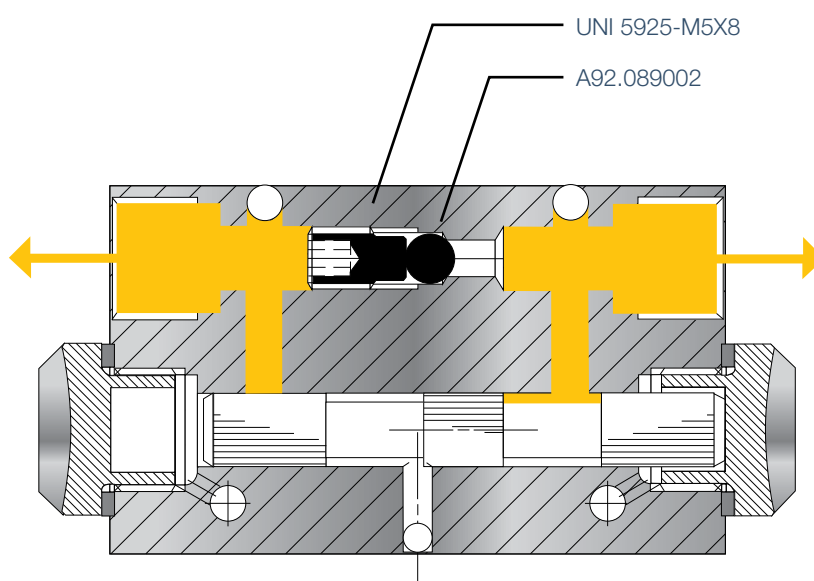


FIG. 1

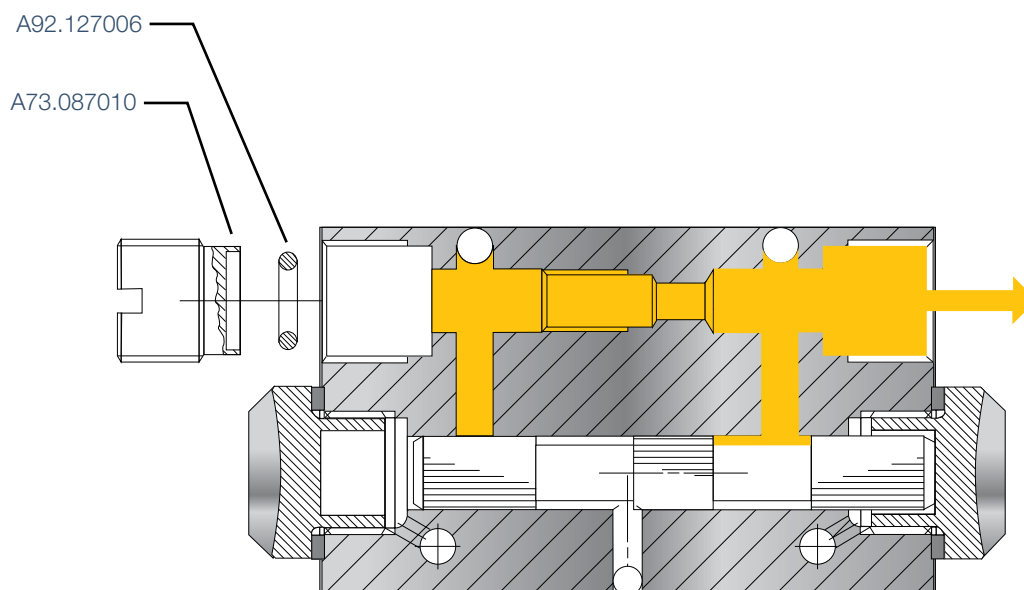


FIG. 2

DPM PROGRESSIVE DIVIDERS

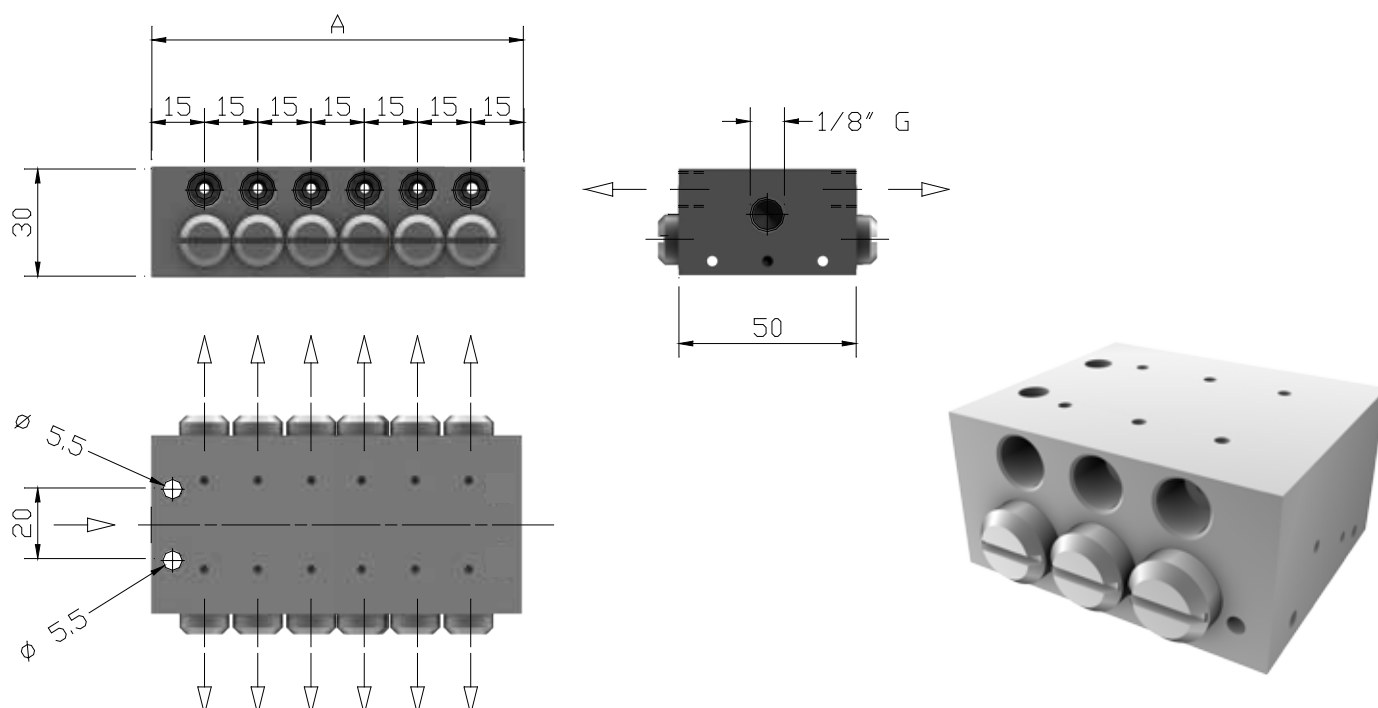
Features

DISCHARGE/STROKE FOR SINGLE OUTLET	0.10 CC - 0.15 CC - 0.20 CC
NUMBER OF METERING ELEMENTS	FROM 3 TO 10
OPERATING PRESSURE	FROM 15 bar TO 250 bar
OPERATING TEMPERATURE	FROM -20° C TO +100° C
DIVIDER MATERIAL	GALVANISED STEEL
N°. CYCLES PER MINUTE	MAXIMUM 250
INLET	1/8"
DELIVERIES	M10X1
FIXING SCREWS	M5X40
LUBRICANTS	MIN. OILS 15 cSt - MAX. GREASE NLGI 2
CONTROL DEVICES	VISUAL AND ELECTRIC INDICATING CYCLE AND OVERPRESSURE
MAIN LINES	PIPES Ø 10-8-6
SECONDARY LINES	PIPES Ø 6-4

Ordering Codes

PART NUMBER	NUMBER OF PISTONS	A	PART NUMBER	NUMBER OF PISTONS	A
02.880.3	3	60	02.880.7	7	120
02.880.4	4	75	02.880.8	8	135
02.880.5	5	90	02.880.9	9	150
02.880.6	6	105	02.881.0	10	165

Overall Dimensions

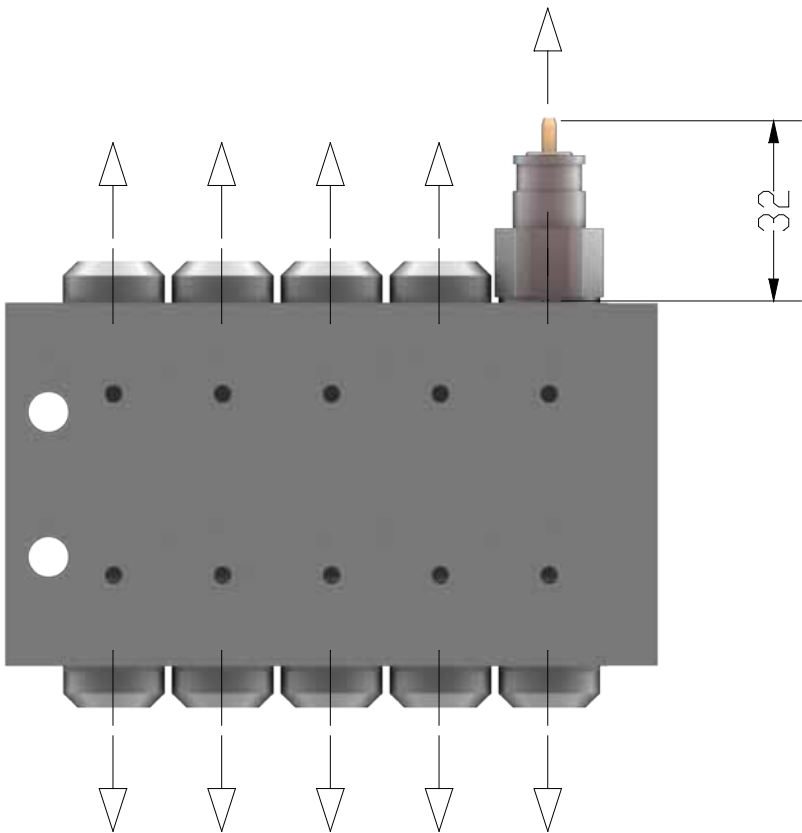


DPM PROGRESSIVE DIVIDERS WITH VISUAL INDICATOR

The visual control indicators allow you to view movement of the pistons and consequent correct operation of the entire system. They are normally on the main divider (**master**) but as they cannot indicate any breakage in secondary pipes, we recommend installing them in one or, if possible, all secondary dividers. The indicator is moved by the metering piston on which the indicator is applied. The construction shape of the part allows it to be used in stop and go operating systems where several cycles can be performed if necessary, but they cannot be used in continuous operation systems. Should it be necessary later on to change from visual to electric control, just apply the case of the control microswitch to the body of the visual indicator because the activation mechanism is identical for both. When placing the order, you must also always specify whether the visual control must be placed on the right or left of the entrance, adding the letters **dx** if on the right and **sx** if on the left, to the divider code.

Ordering codes of dividers complete with visual indicator

PART NUMBER	NUMBER OF PISTONS	PART NUMBER	NUMBER OF PISTONS
02.881.3	3	02.881.7	7
02.881.4	4	02.881.8	8
02.881.5	5	02.881.9	9
02.881.6	6	02.882.0	10



The appearance of the products can be subject to change without prior notice

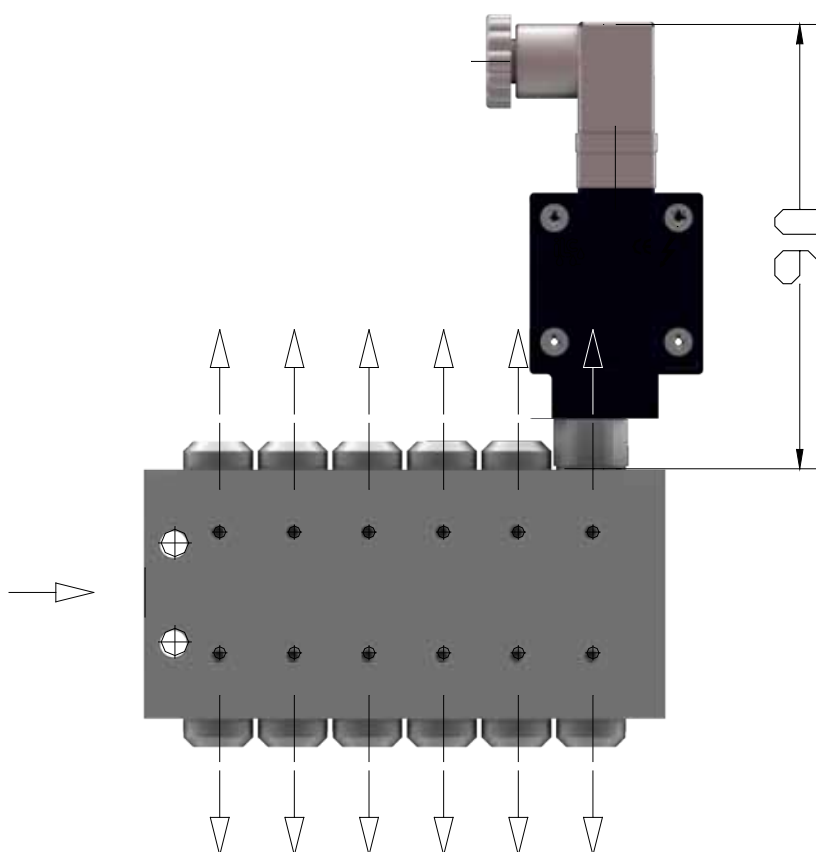
DPM PROGRESSIVE DIVIDERS WITH CYCLE END MICROSWITCH

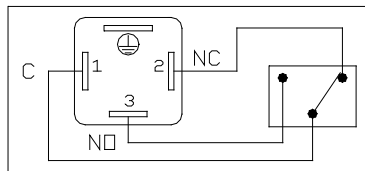
The cycle end microswitch sends an electrical signal to verify correct movement of the pistons and consequent operation of the entire system. It is normally positioned in the main divider (**master**), but since it can only control overpressure generated by blocks or breakage in the main pipeline keeping lubricant from reaching the divider, it is recommended to position it in one of the secondary dividers making it possible to control another secondary pipeline. A control microswitch can be inserted in all the secondary dividers to be absolutely certain that the system is operating. Energising and deenergising of the microswitch is generated by the indicator, joined to the metering piston, changing the contact status at each movement. As the start position of the microswitch cannot be established beforehand (**"NO"** or **"NC"**) we recommend setting the control function in the time unit: pumping time 20" control time 30" after which the dispatch of the electric signal must be checked. Do not use the electric signal to stop the pump as this could happen before lubricant is sent to all points.

Important: by complete cycle we mean start with the contact of the microswitch at **"NO"** or **"NC"**, changing to **"NC"** or **"NO"** and returning to the initial position. If the machine is not equipped with an electronic control device, we can supply circuit boards with microprocessor capable of timing and controlling the system. The construction shape of the part allows it to be used in stop and go operating systems where several cycles can be performed if necessary, but they cannot be used in continuous operation systems (oil circulation).

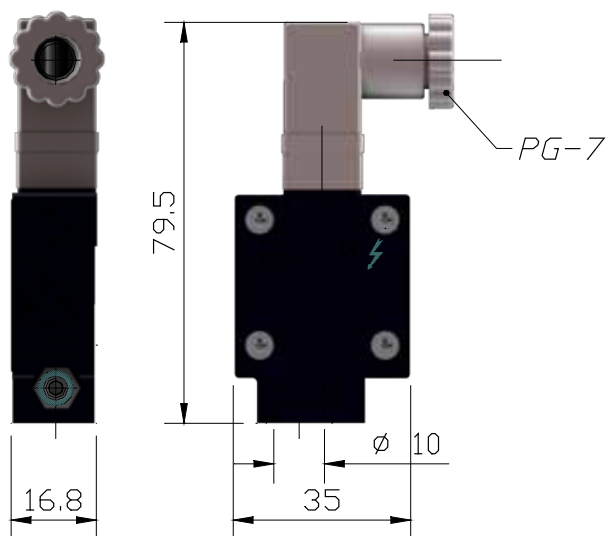
Ordering codes for dividers complete with microswitch

PART NUMBER	CODE	NUMBER OF PISTONS	PART NUMBER	CODE	NUMBER OF PISTONS
02.882.3	DPM-3 CM	3	02.882.7	DPM- 7 CM	7
02.882.4	DPM-4 CM	4	02.882.8	DPM- 8 CM	8
02.882.5	DPM-5 CM	5	02.882.9	DPM- 9 CM	9
02.882.6	DPM-6 CM	6	02.883.0	DPM-10 CM	10



**CYCLE END MICROSWITCH
PART NUMBER 49.050.0**

ELECTRICAL FEATURES

MICROSWITCH	5A – 250 V AC – 0.4 A – 125 V DC
CONNECTIONS	3P CONNECTOR
PROTECTION	IP-65
TEMPERATURE	FROM -25 °C TO +85 °C

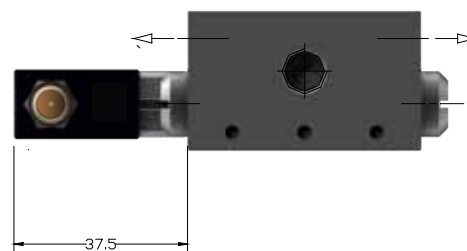
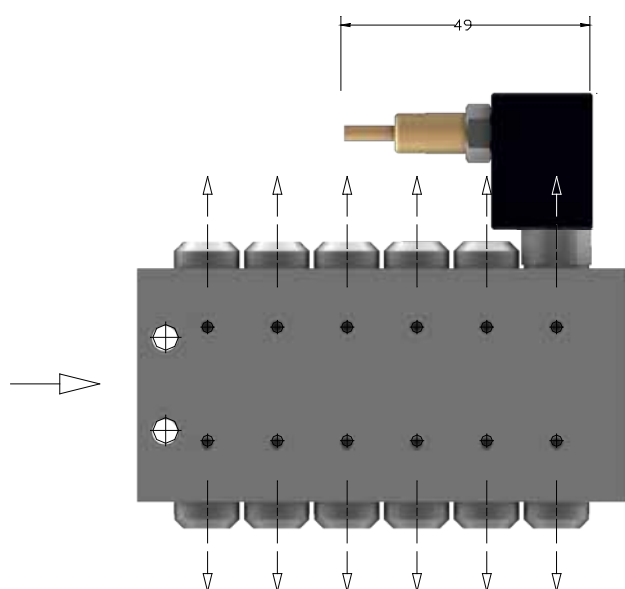


DPM PROGRESSIVE DIVIDERS WITH PROXIMITY SENSOR

This indicator consists of a proximity sensor enclosed in an aluminium block. The contact opens and closes when the piston moves into its operating seat. They are normally used in circulation systems for checking the continuous cycle. Connected to an electronic circuit, they can count up to 500 movements per minute.

Ordering codes for dividers complete with proximity sensor

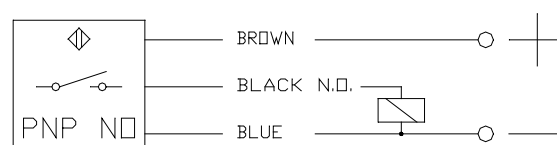
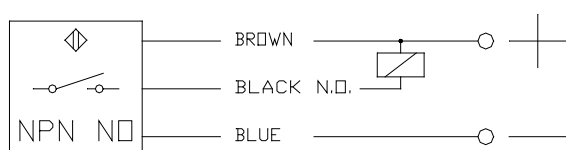
PART NUMBER	CODE	NUMBER OF PISTONS	PART NUMBER	CODE	NUMBER OF PISTONS
02.884.3	DPM-3 CMPS	3	02.884.7	DPM- 7 CMPS	7
02.884.4	DPM-4 CMPS	4	02.884.8	DPM- 8 CMPS	8
02.884.5	DPM-5 CMPS	5	02.884.9	DPM- 9 CMPS	9
02.884.6	DPM-6 CMPS	6	02.885.0	DPM-10 CMPS	10
02.861.7	DPA-7 CMPS	7	02.862.2	DPA-12 CMPS	12



ELECTRICAL FEATURES

VOLTAGE	Coil -30 V DC
OUTPUT CURRENT	MAX 200 Ma
CURRENT	< 12 Ma
TEMPERATURE	- 25 °C / + 70 °C
PROTECTION	IP 67
SENSOR BODY	STAINLESS STEEL
SENSOR CABLES	3x0.14 mm² PVC

Wiring diagram

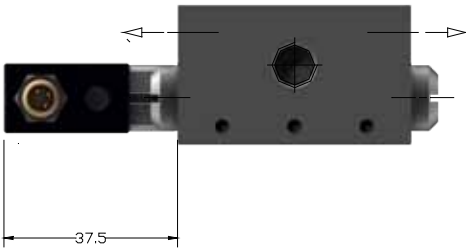
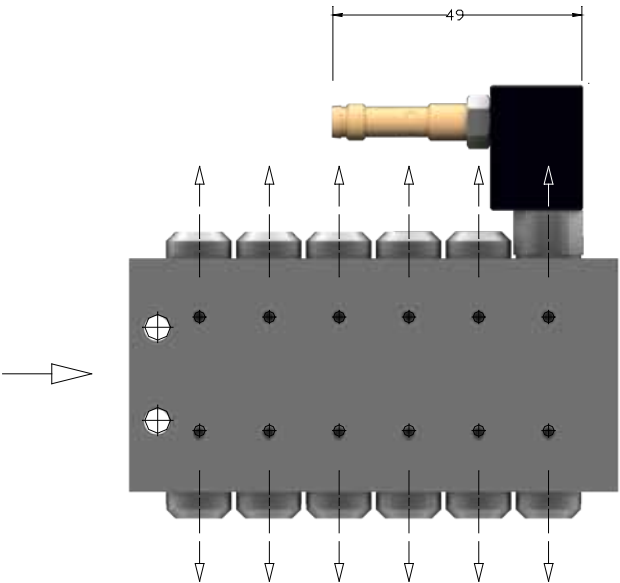


DPM PROGRESSIVE DIVIDERS WITH PROXIMITY SENSOR M8x1

This indicator consists of a proximity sensor enclosed in an aluminium block. The contact opens and closes when the piston moves into its operating seat. They are normally used in circulation systems for checking the continuous cycle. Connected to an electronic circuit, they can count up to 500 movements per minute.

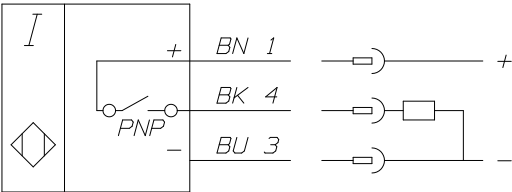
Ordering codes for dividers complete with proximity sensor

PART NUMBER	CODE	NUMBER OF PISTONS	PART NUMBER	CODE	NUMBER OF PISTONS
02.884.3.M8	DPM-3 CMPS	3	02.884.7.M8	DPM- 7 CMPS	7
02.884.4.M8	DPM-4 CMPS	4	02.884.8.M8	DPM- 8 CMPS	8
02.884.5.M8	DPM-5 CMPS	5	02.884.9.M8	DPM- 9 CMPS	9
02.884.6.M8	DPM-6 CMPS	6	02.885.0.M8	DPM-10 CMPS	10
02.861.7.M8	DPA-7 CMPS	7	02.862.2.M8	DPA-12 CMPS	12



ELECTRICAL FEATURES	
VOLTAGE	Coil -30 V DC
OUTPUT CURRENT	MAX 200 Ma
CURRENT	< 12 Ma
TEMPERATURE	- 25 °C / + 70 °C
PROTECTION	IP 67
SENSOR BODY	STAINLESS STEEL

Wiring diagram



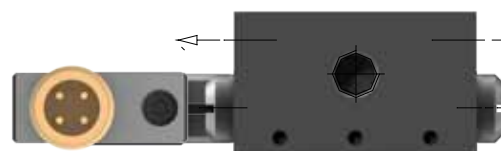
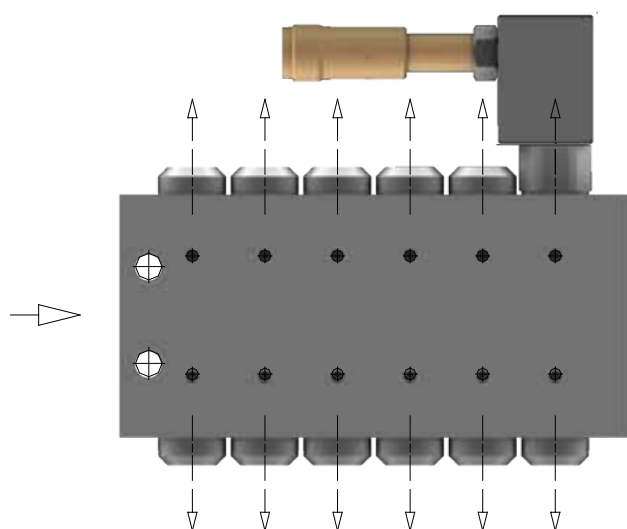
The appearance of the products can be subject to change without prior notice

DPM PROGRESSIVE DIVIDERS WITH PROXIMITY SENSOR M12x1

This indicator consists of a proximity sensor enclosed in an aluminium block. The contact opens and closes when the piston moves into its operating seat. They are normally used in circulation systems for checking the continuous cycle. Connected to an electronic circuit, they can count up to 500 movements per minute.

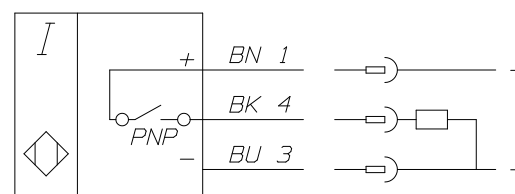
Ordering codes for dividers complete with proximity sensor

PART NUMBER	CODE	NUMBER OF PISTONS	PART NUMBER	CODE	NUMBER OF PISTONS
02.884.3.M12	DPM-3 CMPS	3	02.884.7.M12	DPM- 7 CMPS	7
02.884.4.M12	DPM-4 CMPS	4	02.884.8.M12	DPM- 8 CMPS	8
02.884.5.M12	DPM-5 CMPS	5	02.884.9.M12	DPM- 9 CMPS	9
02.884.6.M12	DPM-6 CMPS	6	02.885.0.M12	DPM-10 CMPS	10
02.861.7.M12	DPA-7 CMPS	7	02.862.2.M12	DPA-12 CMPS	12



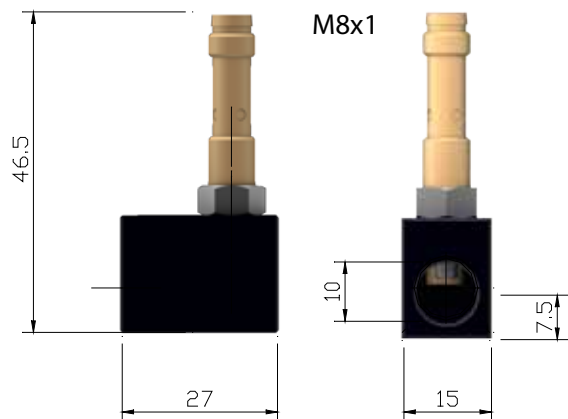
ELECTRICAL FEATURES	
VOLTAGE	Coil -30 V DC
OUTPUT CURRENT	MAX 200 Ma
CURRENT	< 12 Ma
TEMPERATURE	- 25 °C / + 70 °C
PROTECTION	IP 67
SENSOR BODY	STAINLESS STEEL

Wiring diagram



CYCLE END PROXIMITY SENSORS

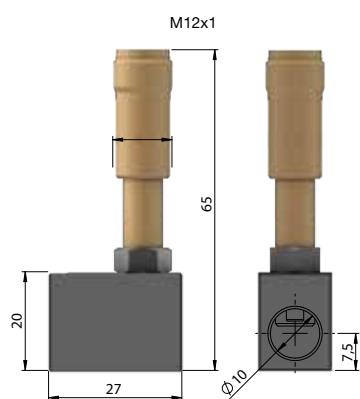
M8x1 PART NUMBER 49.052.4 PNP "NO"



A91.111227
A91.111348
A91.111393

L= 5 m
L= 10 m
L= 15 m

M12x1 PART NUMBER 49.052.8 PNP "NO"



A91.111349
A91.111296
A91.111350

L= 5 m
L= 10 m
L= 15 m

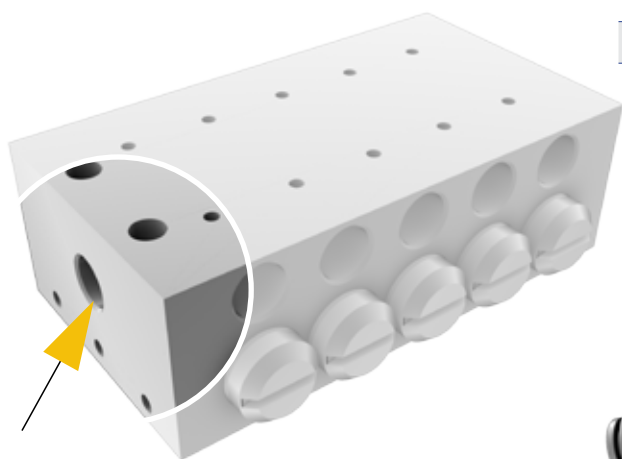
DPM PROGRESSIVE DIVIDERS

Fittings for high pressure pipe

The inlet thread to the DPM divider is 1/8" and appropriate fittings make it possible to connect rigid or flexible pipes with an outside diameter of 6. The side outlets have a M10x1 thread with flat seat and appropriate fittings make it possible to connect pipes with an outside diameter of 4 or 6.

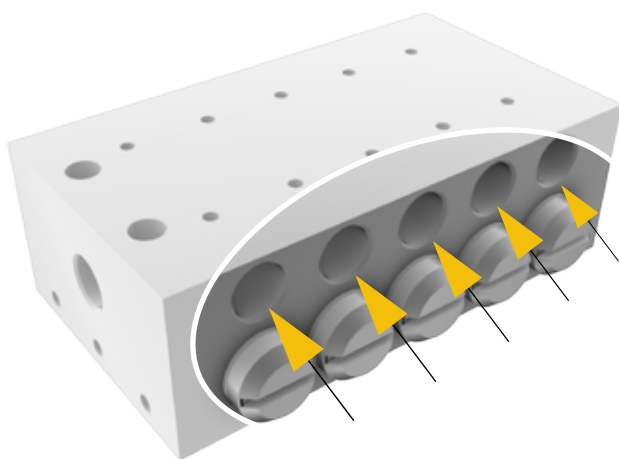
DPM INLET

	Ø	QUICK FITTINGS	STANDARD FITTINGS
	6	03.256.0	ZZZ106-004
90°	6	03.256.6	ZZZ106-104



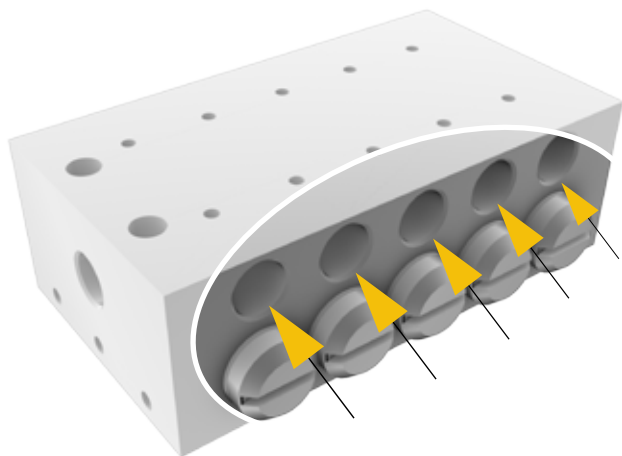
DPM OUTLETS

	Ø	QUICK FITTINGS	STANDARD FITTINGS
	6	03.256.3	ZZZ106-003
90°	6	03.256.7	ZZZ106-103
	4	03.255.3	
90°	4	03.255.8	



Fittings for polyamide pipe PA6 – PA12 and rilsan pipe PA11

DPM OUTLETS



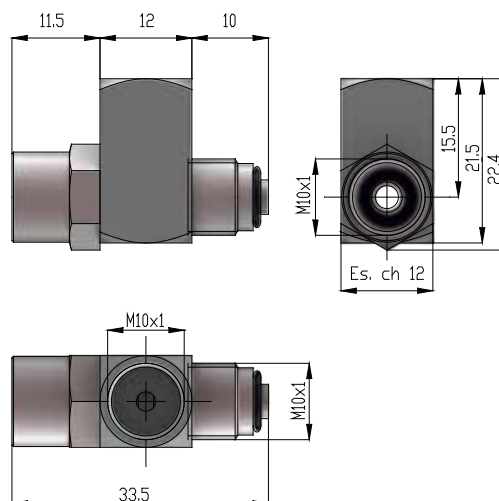
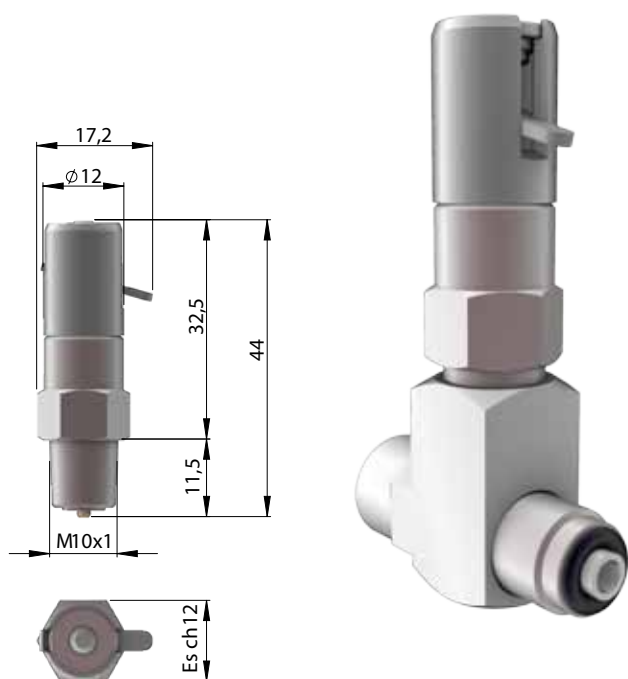
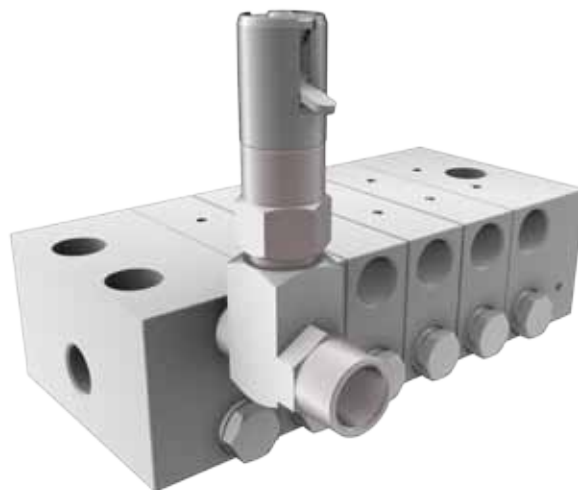
	Ø	FITTINGS
	6	06.052.0 + 04.052.0
	4	06.051.0 + 04.051.0

DPM PROGRESSIVE DIVIDERS

VISUAL OVERPRESSURE INDICATORS FOR DPM INDICATORS WITH MEMORY AND TEE FITTING (09.600.5)

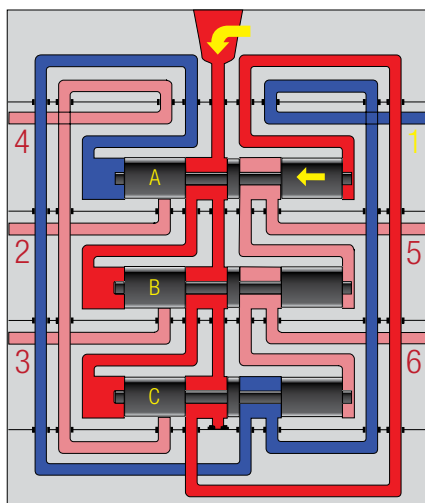
These indicators are normally used to check for overpressure on main and secondary lines. If a pressure beyond that intended occurs, the indicator comes out from its seat and remains out until you manually intervene on the release lever. We recommend intervening on the release lever after having discovered what happened and where.

PART NUMBER	MAX PRESSURE
09.710.2	50
09.710.3	75
09.710.4	100
09.710.5	150
09.710.6	200
09.710.7	250

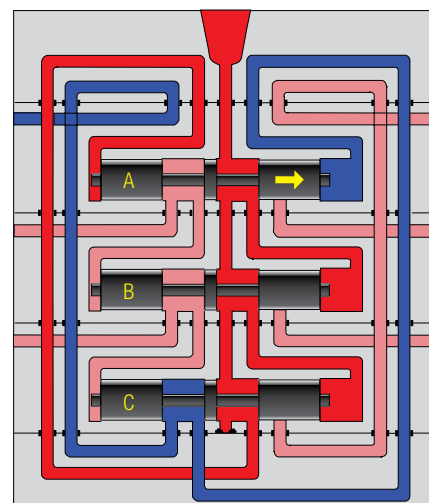


OPERATING PRINCIPLE

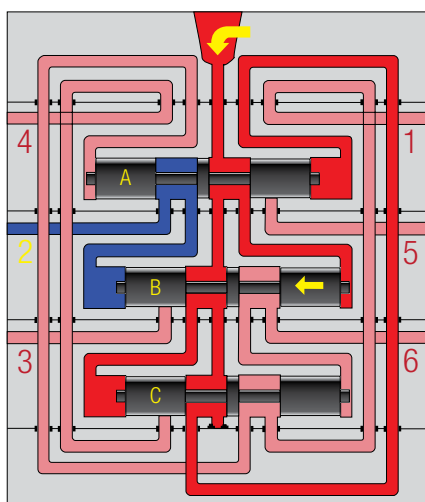
The pressurised lubricant flow (red) moves piston A to the left enabling dispensing (blue) from outlet 1



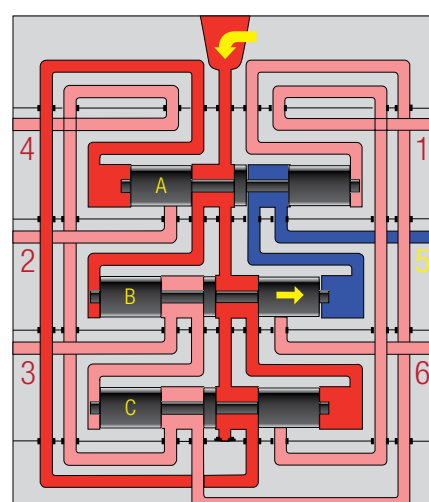
The pistons now move in the opposite direction, starting from piston A



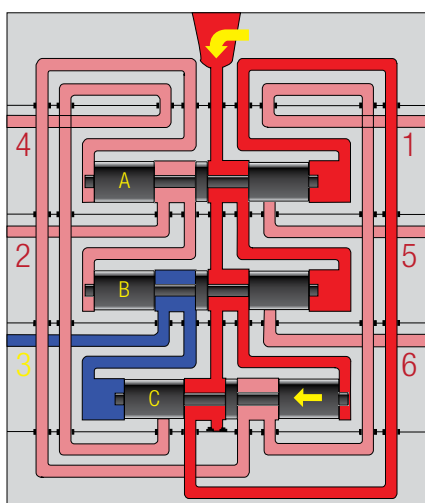
When piston A has completed its stroke, the pressurised lubricant flow acts on piston B. The lubricant volume (blue) is dispensed from outlet 2



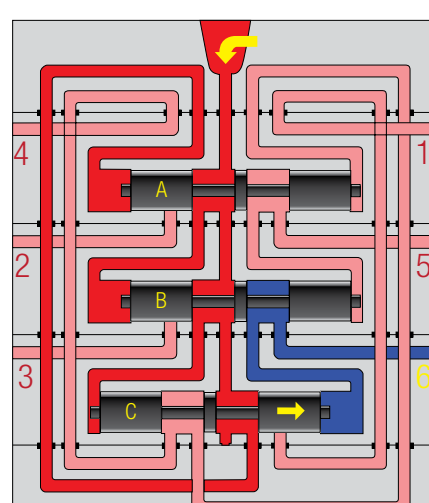
A complete cycle is when all pistons have completed movement from right to left and from left to right.



The piston C starts its stroke and lubricant is dispensed from outlet 3



The progressive divider is ready for new cycle



The appearance of the products can be subject to change without prior notice

DPX PROGRESSIVE DIVIDERS

Joining 2 outlets

Each divider piston is set up to feed 1 or 2 outlets. When the separator grain is inserted (Fig.1) lubricant is dispensed in both side outlets. When the grain is not inserted (Fig.2) lubricant is only dispensed in one outlet with a double flow rate. When it is necessary to close an outlet thought to be used, remove not only the grain (UNI5925-M4X6) but also the ball (A92.089024), making sure to insert the closing plug (A73.087010 + A92.127006) in the outlet no longer used. The same procedure is valid when, on the contrary, the amount of outlets must be reduced. You must remove the closing plug and insert the separator grain with the relative ball. Dividers are normally supplied with the separator grain inserted and two side outlets open.

IMPORTANT: IT IS NOT POSSIBLE TO CLOSE BOTH OUTLETS RELATIVE TO A SINGLE PISTON. ALL OF THE OPERATIONS INDICATED ABOVE MUST BE PERFORMED IN A PERFECTLY CLEAN ENVIRONMENT.

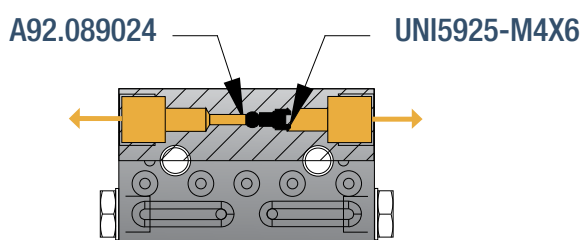


FIG. 1

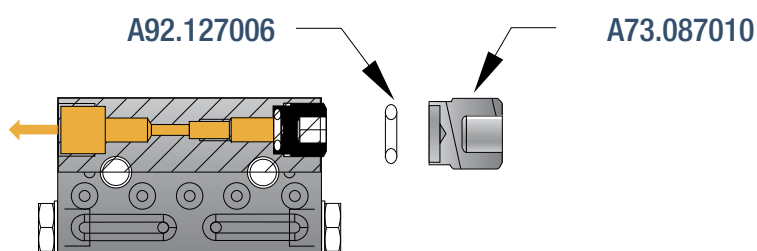
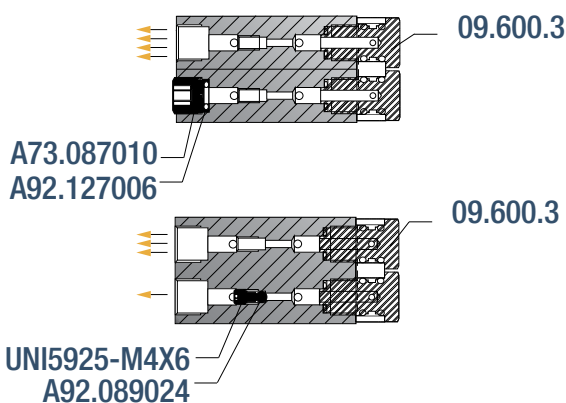
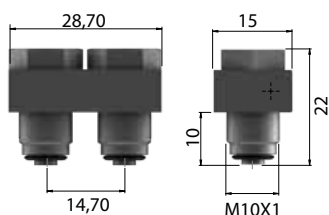
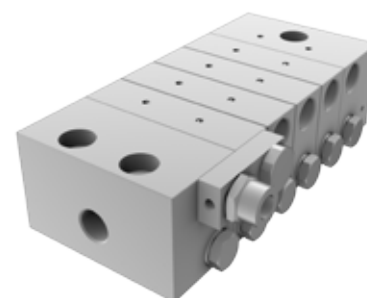
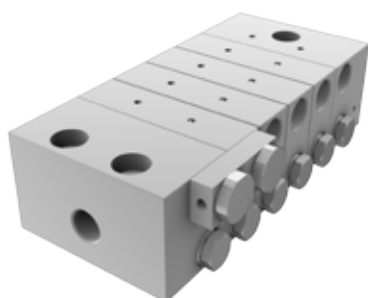
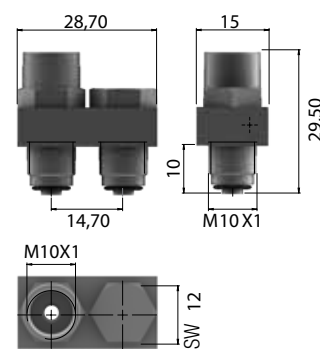
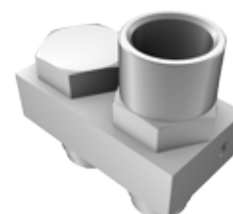


FIG. 2

09.600.3



09.600.4



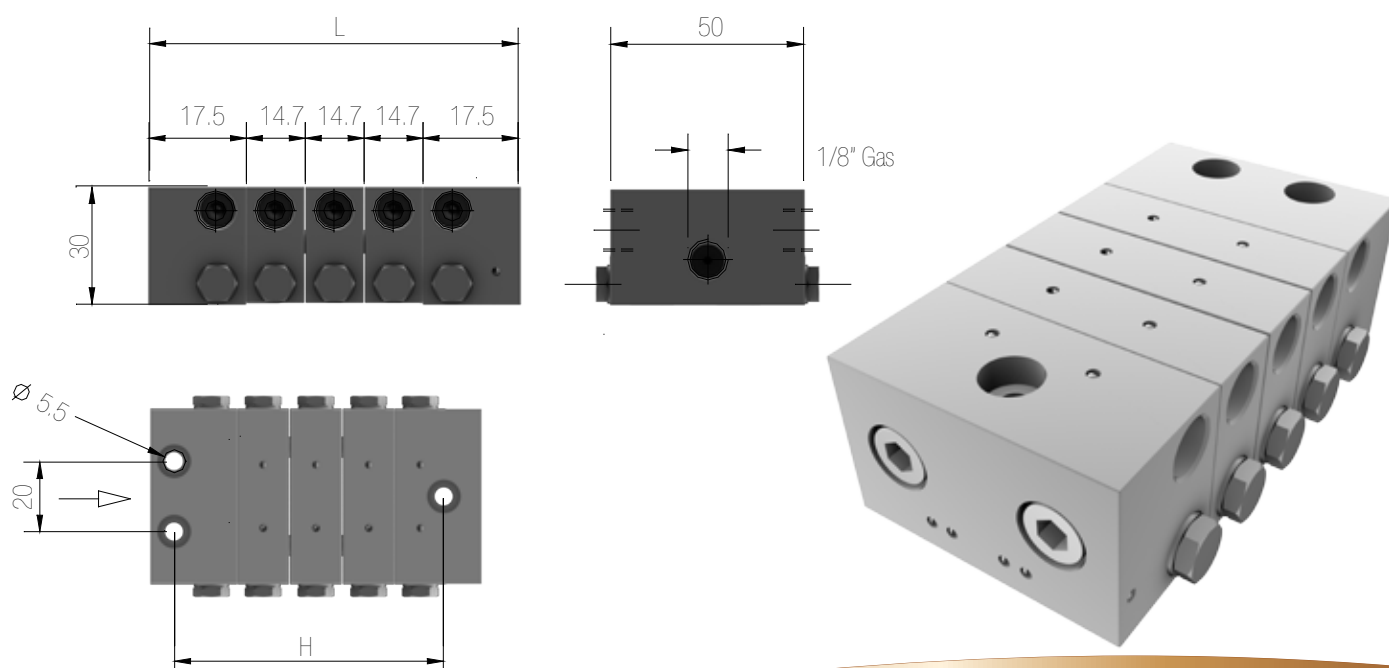
Features

DISCHARGE/STROKE FOR SINGLE OUTLET	25 mm ³ - 45 mm ³ - 75 mm ³ - 105 mm ³
NUMBER OF METERING ELEMENTS	FROM 3 TO 12
OPERATING PRESSURE	FROM 15 bar TO 300 bar
OPERATING TEMPERATURE	FROM -20° C TO +100° C
DIVIDER MATERIAL	GALVANISED STEEL
N°. CYCLES PER MINUTE	MAXIMUM 300
INLET	1/8" Gas
DELIVERIES	M10X1
FIXING SCREWS	M5X30
LUBRICANTS	MIN. OILS 15 cSt - MAX. GREASE NLGI 2
CONTROL DEVICES	VISUAL AND ELECTRIC INDICATING CYCLE AND OVERPRESSURE
MAIN LINES	PIPES Ø 8-6
SECONDARY LINES	PIPES Ø 6-4

Ordering Codes

PART NUMBER	CODE	NUMBER OF PISTONS	H	L	PART NUMBER	CODE	NUMBER OF PISTONS	H	L
02.880.3	DPX-3	3	46.7	64.4	2.1N.08	DPX-8	8	120.2	137.9
02.880.4	DPX-4	4	61.4	79.1	2.1N.09	DPX-9	9	134.9	152.6
02.880.5	DPX-5	5	76.1	93.8	2.1N.10	DPX-10	10	149.6	167.3
02.880.6	DPX-6	6	90.8	108.5	2.1N.11	DPX-11	11	164.3	182
02.880.5	DPX-7	7	105.5	123.2	2.1N.12	DPX-12	12	179	196.7

Overall Dimensions



DPX PROGRESSIVE DIVIDERS

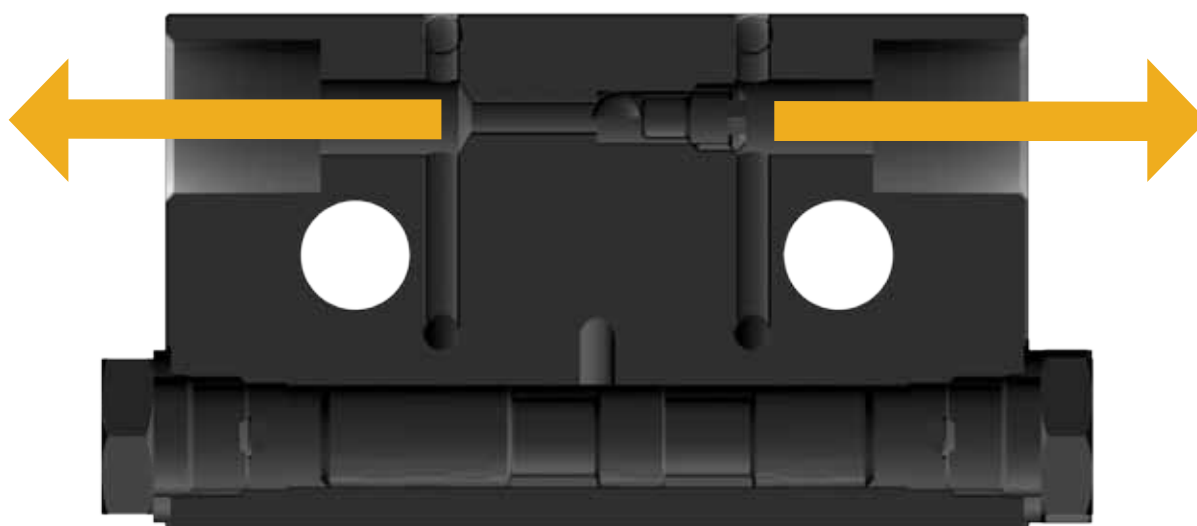
SINGLE ELEMENTS

The elements of the DPX series progressive dividers are set up to feed 1 or 2 outlets. When the separation grain is inserted (see Fig. 1) lubricant is dispensed in both side outlets with the same flow rate. When the grain is not inserted (see Fig. 2) lubricant is dispensed in just one outlet in a double flow rate. When it is necessary to close an outlet thought to be used, remove not only the grain but also the ball, making sure to insert the closing plug in the outlet no longer used. Normally the elements supplied with the separator grain inserted and two side outlets open. If required, only one outlet can be supplied, marked with a "D" positioned in the middle of the two vertical delivery lines.

Ordering codes of single elements with two outlets

DISCHARGE	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
25 mm ³	2.A.025.D.1N	2.B.025.D.1N	2.C.025.D.1N
45 mm ³	2.A.045.D.1N	2.B.045.D.1N	2.C.045.D.1N
75 mm ³	2.A.075.D.1N	2.B.075.D.1N	2.C.075.D.1N
105 mm ³	2.A.105.D.1N	2.B.105.D.1N	2.C.105.D.1N

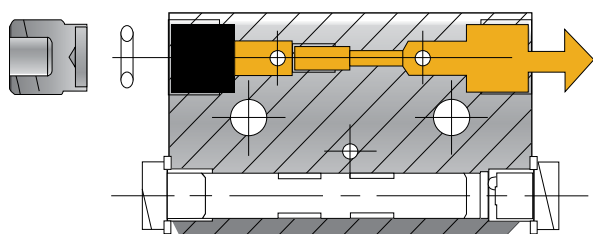
Example of using 2 outlets in an element



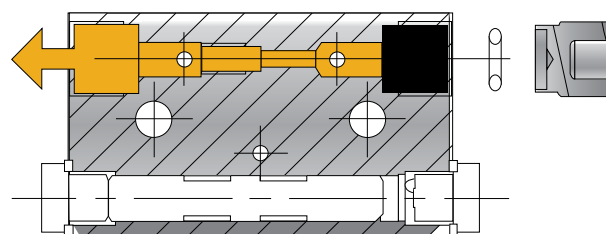
Ordering codes of single elements with one outlet

DISCHARGE	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
50 mm ³	2.A.025.S.1N	2.B.025.S.1N	2.C.025.S.1N
90 mm ³	2.A.045.S.1N	2.B.045.S.1N	2.C.045.S.1N
150 mm ³	2.A.075.S.1N	2.B.075.S.1N	2.C.075.S.1N
210 mm ³	2.A.105.S.1N	2.B.105.S.1N	2.C.105.S.1N

Example of using 1 outlet in an element



SECTION A-A



SECTION B-B

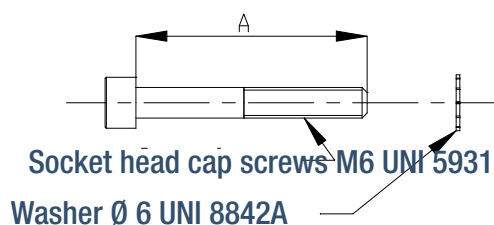


The appearance of the products can be subject to change without prior notice

Ordering Codes for tie rods

N° ELEMENTS	A (mm)	CODES
3	45	2.TR.03
4	60	2.TR.04
5	75	2.TR.05
6	90	2.TR.06
7	105	2.TR.07
8	120	2.TR.08
9	135	2.TR.09
10	150	2.TR.10
11	165	2.TR.11
12	180	2.TR.12

Tie rods



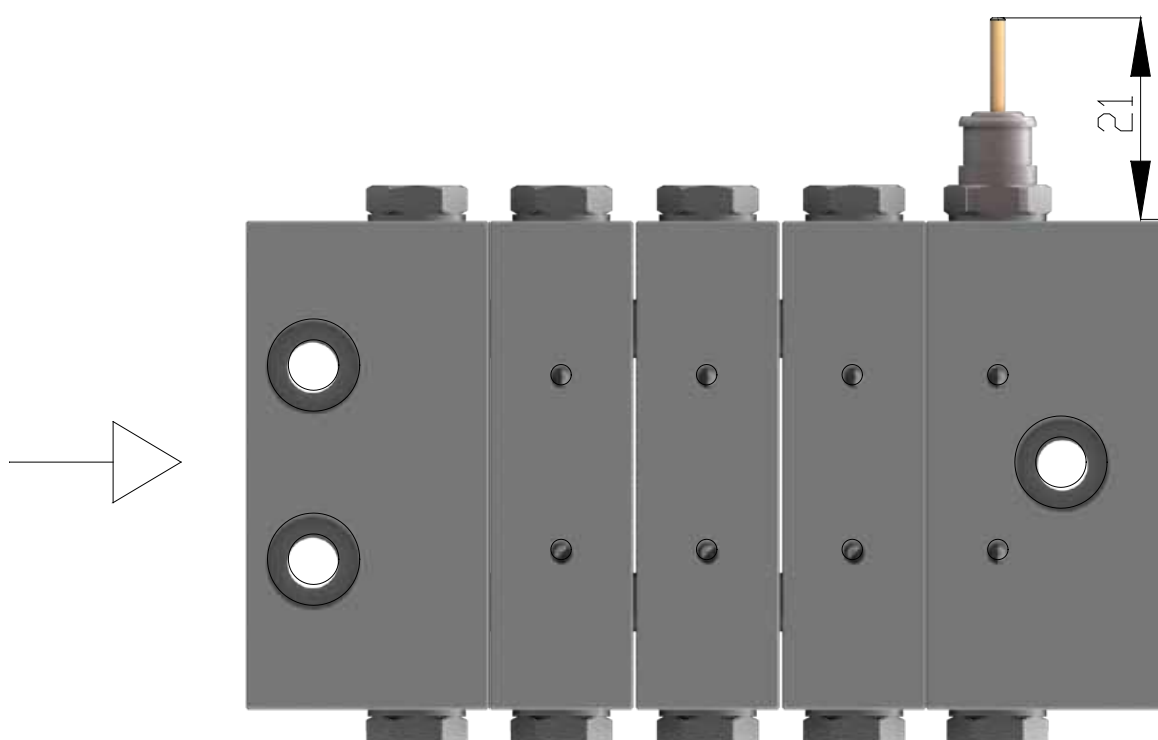
Each complete block requires 2 tie rods!

DPX PROGRESSIVE DIVIDERS WITH VISUAL INDICATOR

The visual control indicators allow you to view movement of the pistons and consequent correct operation of the entire system. They are normally on the main divider (master) but as they cannot indicate any breakage in secondary pipes, we recommend installing them in one or, if possible, all secondary dividers. The indicator is moved by the metering piston on which the indicator is applied. The construction shape of the part allows it to be used in stop and go operating systems where several cycles can be performed if necessary, but they cannot be used in continuous operation systems. Should it be necessary later on to change from visual to electric control, just apply the case of the control microswitch to the body of the visual indicator because the activation mechanism is identical for both. When placing the order, you must also always specify whether the visual control must be placed on the right or left of the entrance, adding the letters dx if on the right or sx if on the left to the divider code.

Ordering codes of dividers complete with visual indicator

PART NUMBER	CODE	NUMBER OF PISTONS	PART NUMBER	CODE	NUMBER OF PISTONS
2.2V.03	DPX-3 V	3	2.2V.08	DPX-8 V	8
2.2V.04	DPX-4 V	4	2.2V.09	DPX-9 V	9
2.2V.05	DPX-5 V	5	2.2V.10	DPX-10 V	10
2.2V.06	DPX-6 V	6	2.2V.11	DPX-11 V	11
2.2V.07	DPX-7 V	7	2.2V.12	DPX-12 V	12

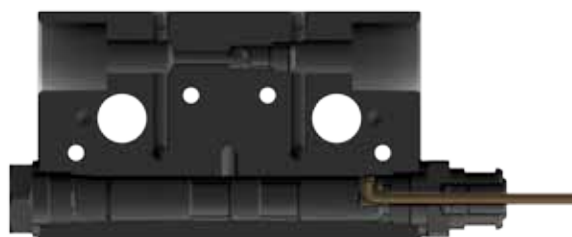


Codes to order elements complete with 2 outlet indicator

DISCHARGE	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
45 mm ³	2.A.045.D.2V	2.B.045.D.2V	2.C.045.D.2V
75 mm ³	2.A.075.D.2V	2.B.075.D.2V	2.C.075.D.2V
105 mm ³	2.A.105.D.2V	2.B.105.D.2V	2.C.105.D.2V

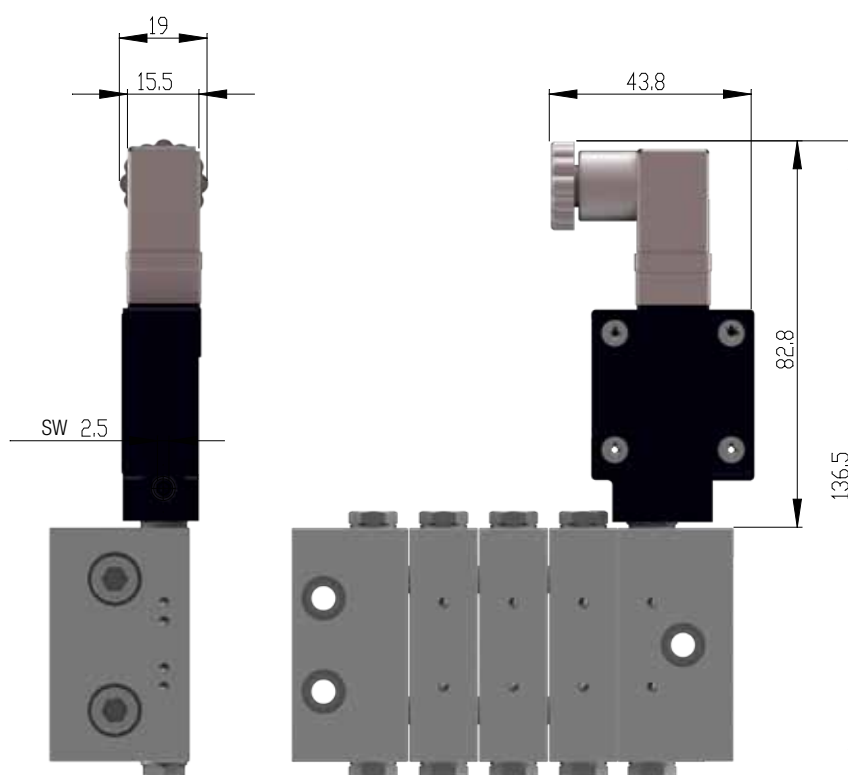
Codes to order elements complete with 1 outlet indicator

DISCHARGE	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
90 mm ³	2.A.045.S.2V	2.B.045.S.2V	2.C.045.S.2V
150 mm ³	2.A.075.S.2V	2.B.075.S.2V	2.C.075.S.2V
210 mm ³	2.A.105.S.2V	2.B.105.S.2V	2.C.105.S.2V



DPX PROGRESSIVE DIVIDERS WITH CYCLE END MICROSWITCH

This indicator consists of a **switch** enclosed in an aluminium block. The contact opens and closes when the piston moves into its operating seat. They are not normally used in circulation systems for checking the continuous cycle.

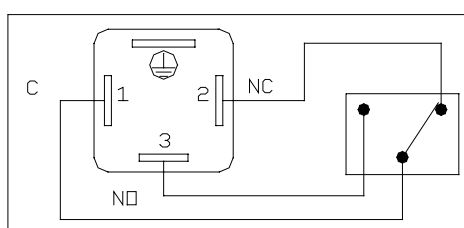


Ordering codes of dividers complete with cycle end microswitch

PART NUMBER	CODE	NUMBER OF PISTONS	PART NUMBER	CODE	NUMBER OF PISTONS
2.3l.03	DPX-3 I	3	2.3l.08	DPX- 8 I	8
2.3l.04	DPX-4 I	4	2.3l.09	DPX- 9 I	9
2.3l.05	DPX-5 I	5	2.3l.10	DPX-10 I	10
2.3l.06	DPX-6 I	6	2.3l.11	DPX-11 I	11
2.3l.07	DPX-7 I	7	2.3l.12	DPX-12 I	12

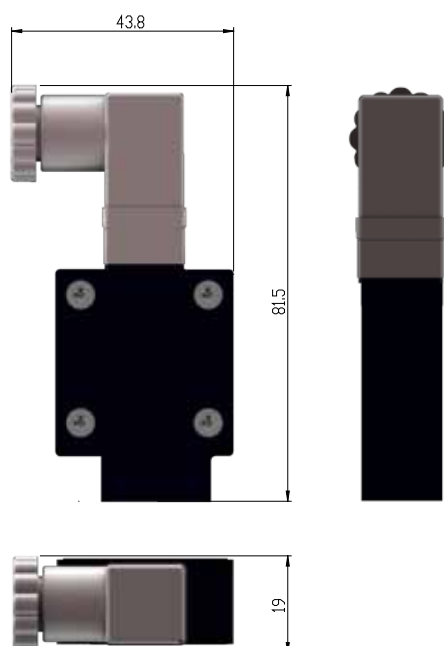
ELECTRICAL FEATURES	
MICROSWITCH	5 A – 250 V AC 0.4 A – 125 V DC
CONNECTIONS	3P CONNECTOR
PROTECTION	IP-65
TEMPERATURE	FROM -25°C TO +85 °C

Wiring diagram



DPX PROGRESSIVE DIVIDERS WITH CYCLE END MICROSWITCH

CYCLE END MICROSWITCH PART NUMBER 49.050.2



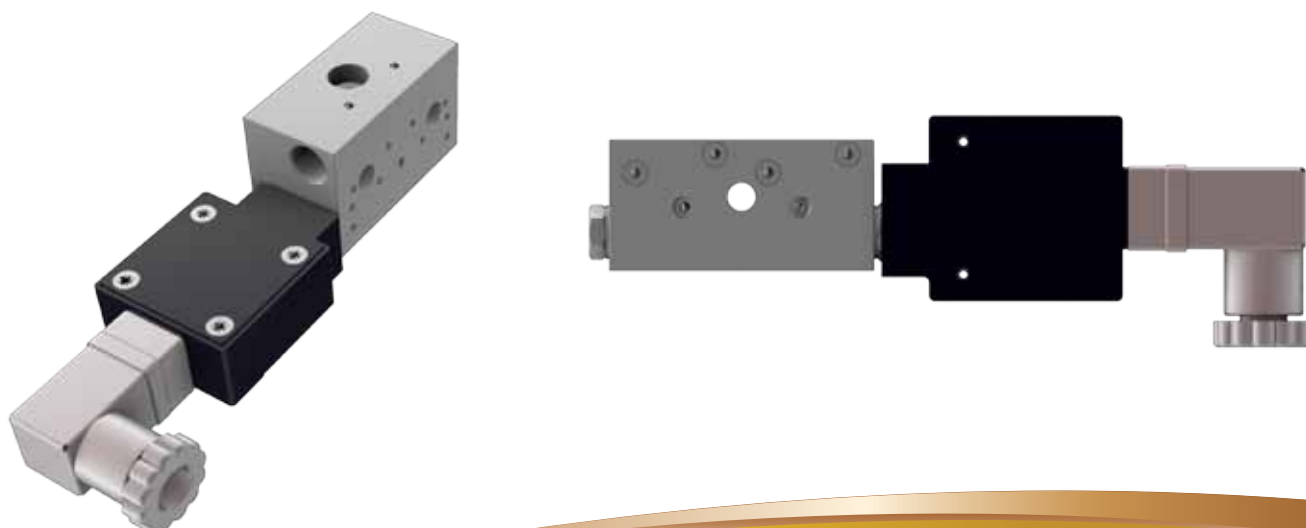
Codes to order elements complete with 2 outlet microswitch

PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
45 mm ³	2.A.045.D.4M	2.B.045.D.4M	2.C.045.D.4M
75 mm ³	2.A.075.D.4M	2.B.075.D.4M	2.C.075.D.4M
105 mm ³	2.A.105.D.4M	2.B.105.D.4M	2.C.105.D.4M

Codes to order elements complete with 1 outlet microswitch

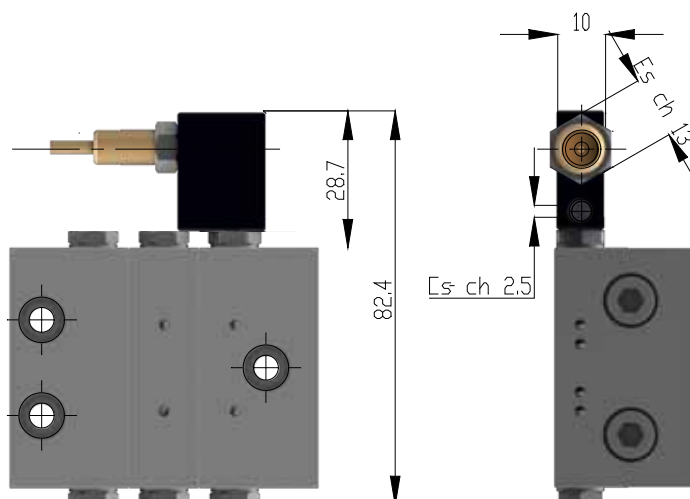
PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
90 mm ³	2.A.045.S.4M	2.B.045.S.4M	2.C.045.S.4M
150 mm ³	2.A.075.S.4M	2.B.075.S.4M	2.C.075.S.4M
210 mm ³	2.A.105.S.4M	2.B.105.S.4M	2.C.105.S.4M

When placing the order, you must also always specify whether the CYCLE END MICROSWITCH must be placed on the right or left of the entrance, adding the letters dx if on the right and sx if on the left, to the divider code.



DPX PROGRESSIVE DIVIDERS WITH PROXIMITY SENSOR

This indicator consists of a **proximity sensor** enclosed in an aluminium block. The contact opens and closes when the piston moves into its operating seat. They are normally used in circulation systems for checking the continuous cycle. Connected to an electronic circuit, they can count up to 500 movements per minute.



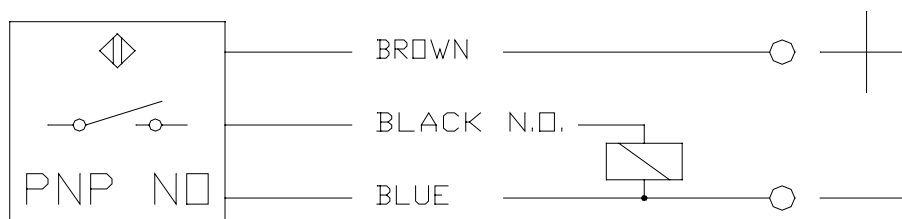
Ordering codes for dividers complete with proximity sensor

PART NUMBER	CODE	NUMBER OF PISTONS	PART NUMBER	CODE	NUMBER OF PISTONS
2.3l.03	DPX-3 I	3	2.3l.08	DPX- 8 I	8
2.3l.04	DPX-4 I	4	2.3l.09	DPX- 9 I	9
2.3l.05	DPX-5 I	5	2.3l.10	DPX-10 I	10
2.3l.06	DPX-6 I	6	2.3l.11	DPX-11 I	11
2.3l.07	DPX-7 I	7	2.3l.12	DPX-12 I	12

ELECTRICAL FEATURES

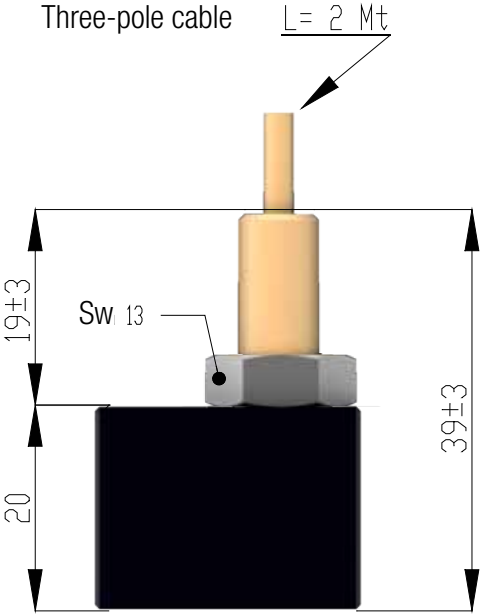
VOLTAGE	Coil -30 V DC
OUTPUT CURRENT	MAX 200 Ma
CURRENT	< 12 Ma
TEMPERATURE	- 25 °C / + 70 °C
PROTECTION	IP 67
SENSOR BODY	STAINLESS STEEL
SENSOR CABLES	3x0.14 mm ² PVC

Wiring diagram



PART NUMBER 49.052.5 PNP “NO”

Three-pole cable $L = 2\text{ Mt}$



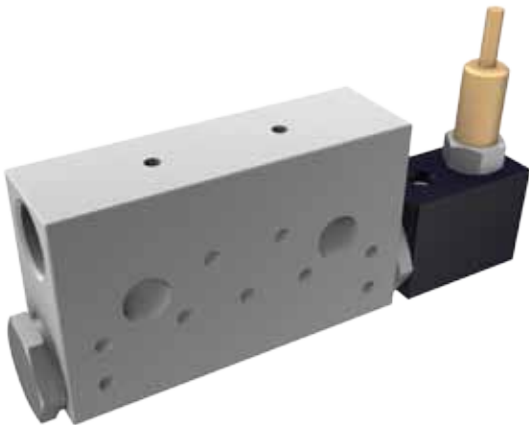
Codes to order elements complete with 2 outlet microswitch

PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
45 mm ³	2.A.045.D.3I	2.B.045.D.3I	2.C.045.D.3I
75 mm ³	2.A.075.D.3I	2.B.075.D.3I	2.C.075.D.3I
105 mm ³	2.A.105.D.3I	2.B.105.D.3I	2.C.105.D.3I

Codes to order elements complete with 1 outlet indicator

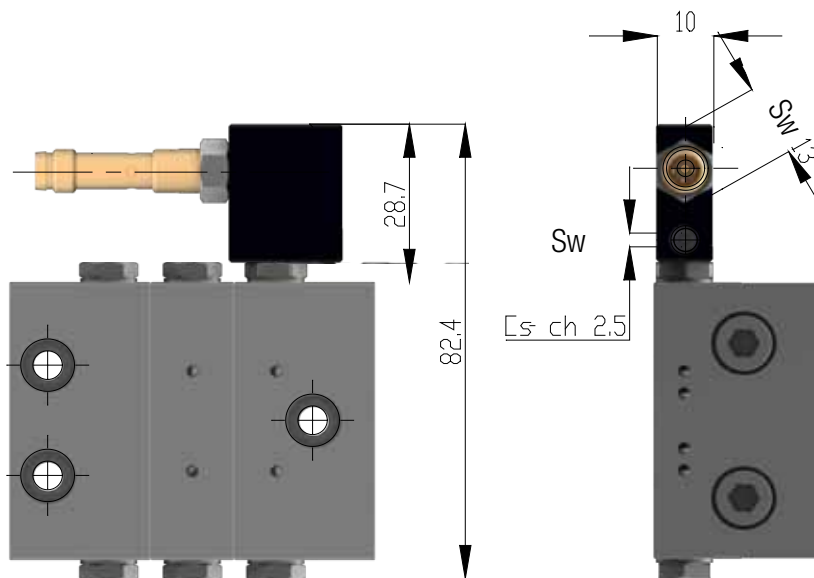
PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
90 mm ³	2.A.045.S.3I	2.B.045.S.3I	2.C.045.S.3I
150 mm ³	2.A.075.S.3I	2.B.075.S.3I	2.C.075.S.3I
210 mm ³	2.A.105.S.3I	2.B.105.S.3I	2.C.105.S.3I

When placing the order, you must also always specify whether the PROXIMITY SENSOR must be placed on the right or left of the entrance, adding the letters dx if on the right and sx if on the left, to the divider code.



DPX PROGRESSIVE DIVIDERS WITH PROXIMITY SENSOR M8x1

This indicator consists of a **proximity sensor** enclosed in an aluminium block. The contact opens and closes when the piston moves into its operating seat. They are normally used in circulation systems for checking the continuous cycle. Connected to an electronic circuit, they can count up to 500 movements per minute.

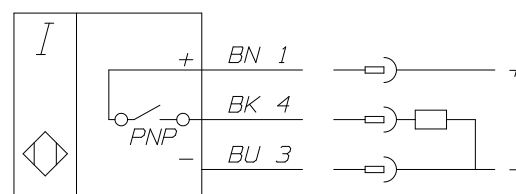


Ordering codes for dividers complete with proximity sensor

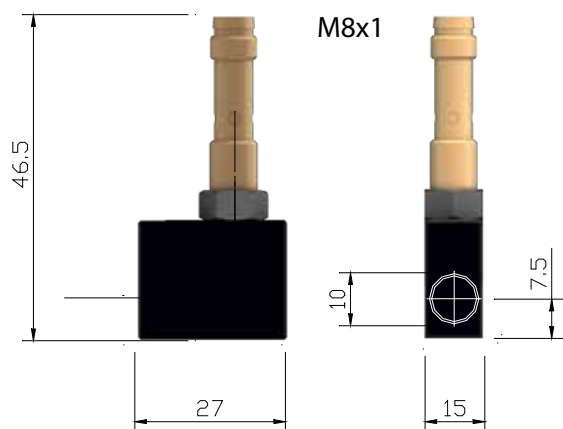
PART NUMBER	CODE	NUMBER OF PISTONS	PART NUMBER	CODE	NUMBER OF PISTONS
2.3l.03.M8	DPX-3 I	3	2.3l.08.M8	DPX- 8 I	8
2.3l.04.M8	DPX-4 I	4	2.3l.09.M8	DPX- 9 I	9
2.3l.05.M8	DPX-5 I	5	2.3l.10.M8	DPX-10 I	10
2.3l.06.M8	DPX-6 I	6	2.3l.11.M8	DPX-11 I	11
2.3l.07.M8	DPX-7 I	7	2.3l.12.M8	DPX-12 I	12

ELECTRICAL FEATURES	
VOLTAGE	Coil -30 V DC
OUTPUT CURRENT	MAX 200 Ma
CURRENT	< 12 Ma
TEMPERATURE	- 25 °C / + 70 °C
PROTECTION	IP 67
SENSOR BODY	STAINLESS STEEL

Wiring diagram



PART NUMBER 49.052.7 PNP "NO"



ELECTRIC CABLE TO ORDER SEPARATELY



A91.111227
A91.111348
A91.111393

L= 5 m
L= 10 m
L= 15 m

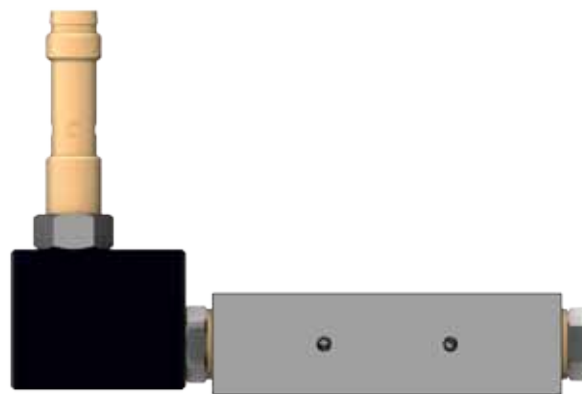
Codes to order elements complete with 2 outlet microswitch

PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
45 mm ³	2.A.045.D.3I.M8	2.B.045.D.3I.M8	2.C.045.D.3I.M8
75 mm ³	2.A.075.D.3I.M8	2.B.075.D.3I.M8	2.C.075.D.3I.M8
105 mm ³	2.A.105.D.3I.M8	2.B.105.D.3I.M8	2.C.105.D.3I.M8

Codes to order elements complete with 1 outlet indicator

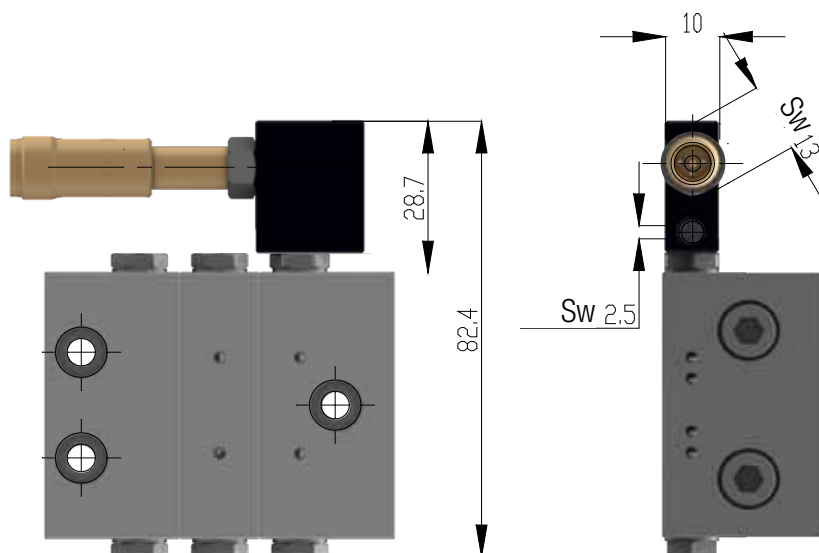
PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
90 mm ³	2.A.045.S.3I.M8	2.B.045.S.3I.M8	2.C.045.S.3I.M8
150 mm ³	2.A.075.S.3I.M8	2.B.075.S.3I.M8	2.C.075.S.3I.M8
210 mm ³	2.A.105.S.3I.M8	2.B.105.S.3I.M8	2.C.105.S.3I.M8

When placing the order, you must also always specify whether the PROXIMITY SENSOR must be placed on the right or left of the entrance, adding the letters dx if on the right and sx if on the left, to the divider code.



DPX PROGRESSIVE DIVIDERS WITH PROXIMITY SENSOR M12x1

This indicator consists of a **proximity sensor** enclosed in an aluminium block. The contact opens and closes when the piston moves into its operating seat. They are normally used in circulation systems for checking the continuous cycle. Connected to an electronic circuit, they can count up to 500 movements per minute.

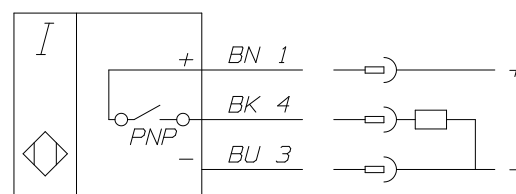


Ordering codes for dividers complete with proximity sensor

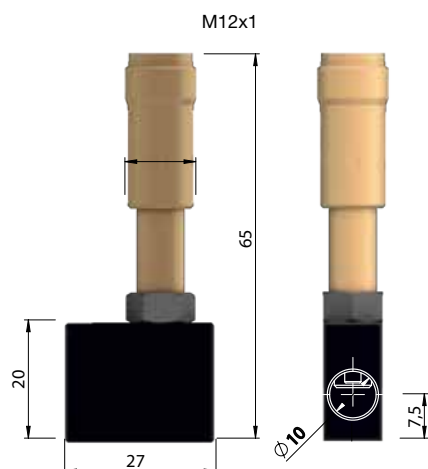
PART NUMBER	CODE	NUMBER OF PISTONS	PART NUMBER	CODE	NUMBER OF PISTONS
2.3l.03.M8	DPX-3 I	3	2.3l.08.M8	DPX- 8 I	8
2.3l.04.M8	DPX-4 I	4	2.3l.09.M8	DPX- 9 I	9
2.3l.05.M8	DPX-5 I	5	2.3l.10.M8	DPX-10 I	10
2.3l.06.M8	DPX-6 I	6	2.3l.11.M8	DPX-11 I	11
2.3l.07.M8	DPX-7 I	7	2.3l.12.M8	DPX-12 I	12

ELECTRICAL FEATURES	
VOLTAGE	Coil -30 V DC
OUTPUT CURRENT	MAX 200 Ma
CURRENT	< 12 Ma
TEMPERATURE	- 25 °C / + 70 °C
PROTECTION	IP 67
SENSOR BODY	STAINLESS STEEL

Wiring diagram



PART NUMBER 49.052.9 PNP "NO"



ELECTRIC CABLE TO ORDER SEPARATELY



A91.111349
A91.111296
A91.111350

L= 5 m
L= 10 m
L= 15 m

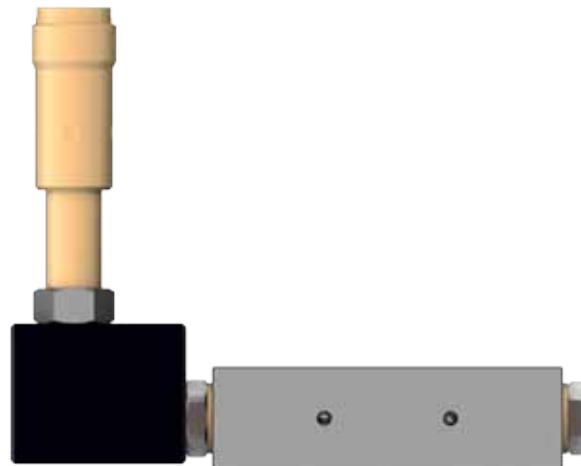
Codes to order elements complete with 2 outlet microswitch

PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
45 mm ³	2.A.045.D.3l.M8	2.B.045.D.3l.M8	2.C.045.D.3l.M8
75 mm ³	2.A.075.D.3l.M8	2.B.075.D.3l.M8	2.C.075.D.3l.M8
105 mm ³	2.A.105.D.3l.M8	2.B.105.D.3l.M8	2.C.105.D.3l.M8

Codes to order elements complete with 1 outlet indicator

PART NUMBER	INITIAL ELEMENT	INTERMEDIATE ELEMENT	FINAL ELEMENT
90 mm ³	2.A.045.S.3l.M8	2.B.045.S.3l.M8	2.C.045.S.3l.M8
150 mm ³	2.A.075.S.3l.M8	2.B.075.S.3l.M8	2.C.075.S.3l.M8
210 mm ³	2.A.105.S.3l.M8	2.B.105.S.3l.M8	2.C.105.S.3l.M8

When placing the order, you must also always specify whether the PROXIMITY SENSOR must be placed on the right or left of the entrance, adding the letters dx if on the right and sx if on the left, to the divider code.

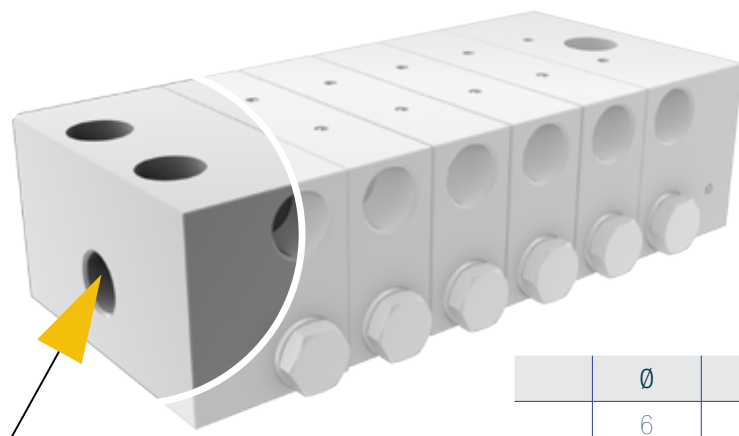


DPX PROGRESSIVE DIVIDERS

Fittings for high pressure pipe

The inlet thread to the DPM divider is 1/8" and appropriate fittings make it possible to connect rigid or flexible pipes with an outside diameter of 6. The side outlets have a M10x1 thread with flat seat and appropriate fittings make it possible to connect pipes with an outside diameter of 4 or 6.

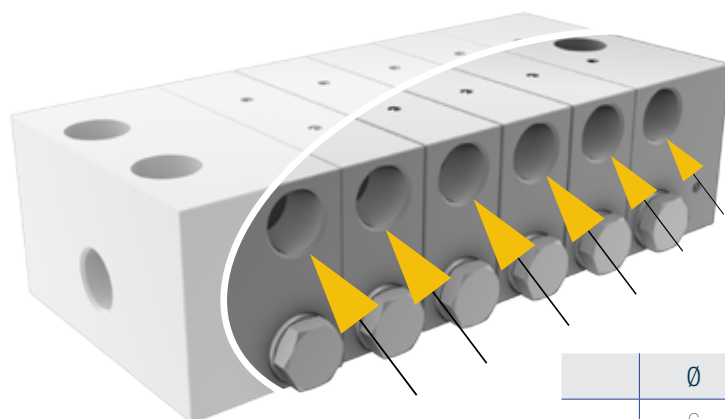
DPX INLET



	Ø	QUICK FITTINGS	STANDARD FITTINGS
	6	03.256.0	ZZZ106-004
90°	6	03.256.6	ZZZ106-104



DPX OUTLETS

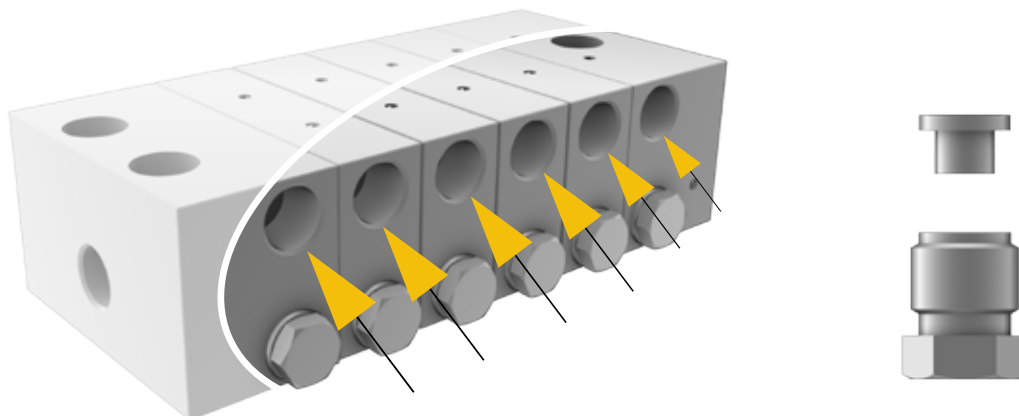


	Ø	QUICK FITTINGS	STANDARD FITTINGS
	6	03.256.3	ZZZ106-003
90°	6	03.256.7	ZZZ106-103
	4	03.255.3	
90°	4	03.255.8	



Fittings for polyamide pipe PA6 – PA12 and rilsan pipe PA11

DPX OUTLETS



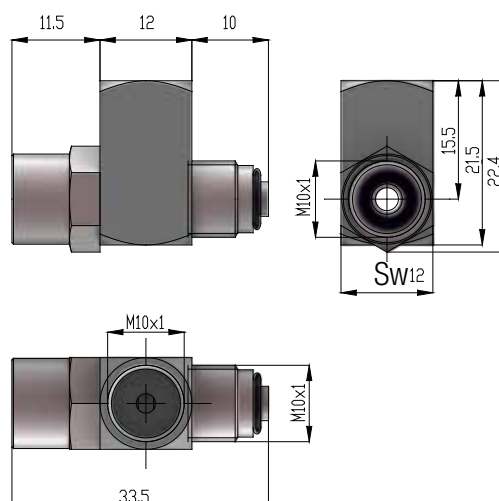
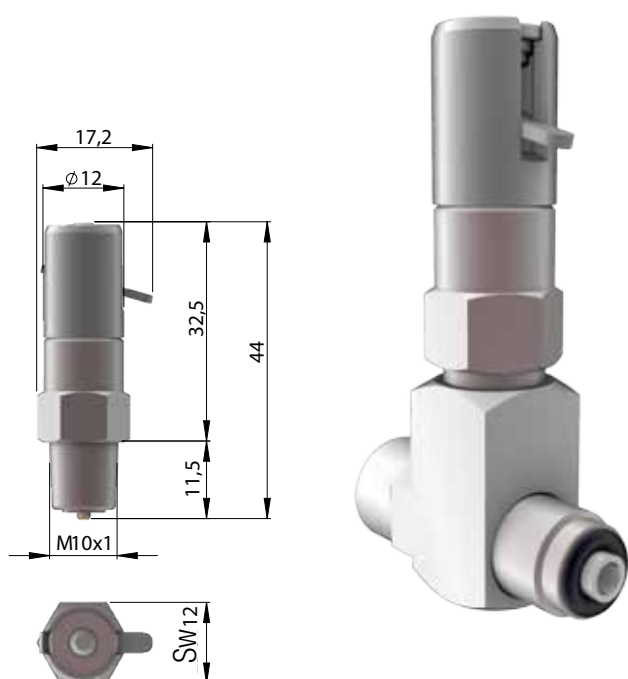
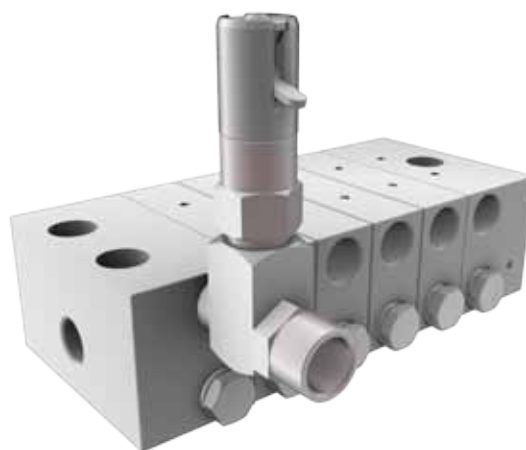
	Ø	FITTINGS
	6	06.052.0 + 04.052.0
	4	06.051.0 + 04.051.0

DPX PROGRESSIVE DIVIDERS

VISUAL OVERPRESSURE INDICATORS FOR DPX INDICATORS WITH MEMORY AND TEE FITTING (09.600.5)

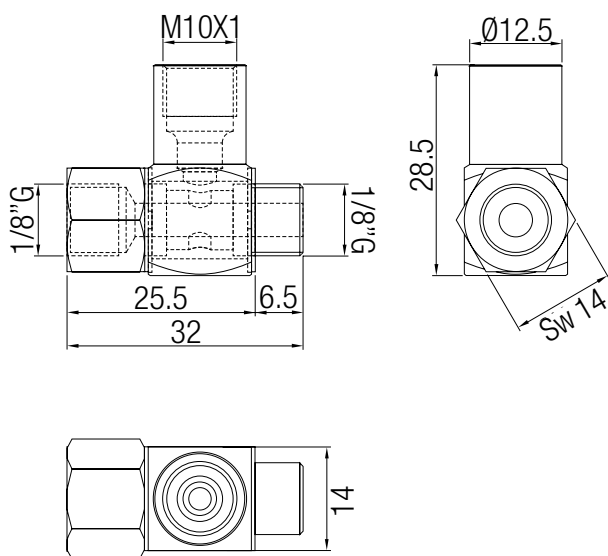
These indicators are normally used to check for overpressure on main and secondary lines. If a pressure beyond that intended occurs, the indicator comes out from its seat and remains out until you manually intervene on the release lever. We recommend intervening on the release lever after having discovered what happened and where.

PART NUMBER	MAX PRESSURE
09.710.2	50
09.710.3	75
09.710.4	100
09.710.5	150
09.710.6	200
09.710.7	250



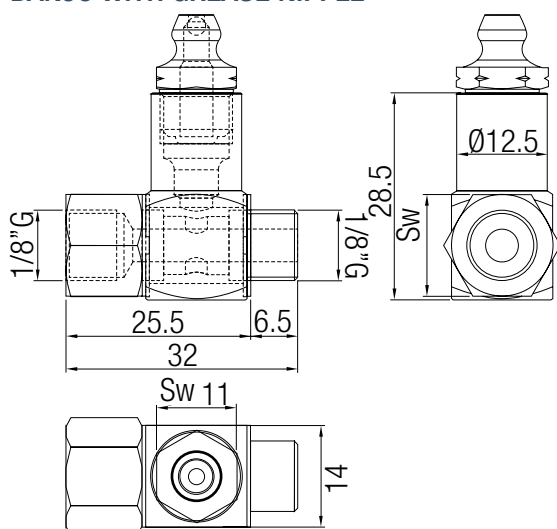
BANJO FOR DPM AND DPX PROGRESSIVE SYSTEMS

BANJO



PART NUMBER				
03.355.4	1/8"G	1/8"G	M10X1	Ø6

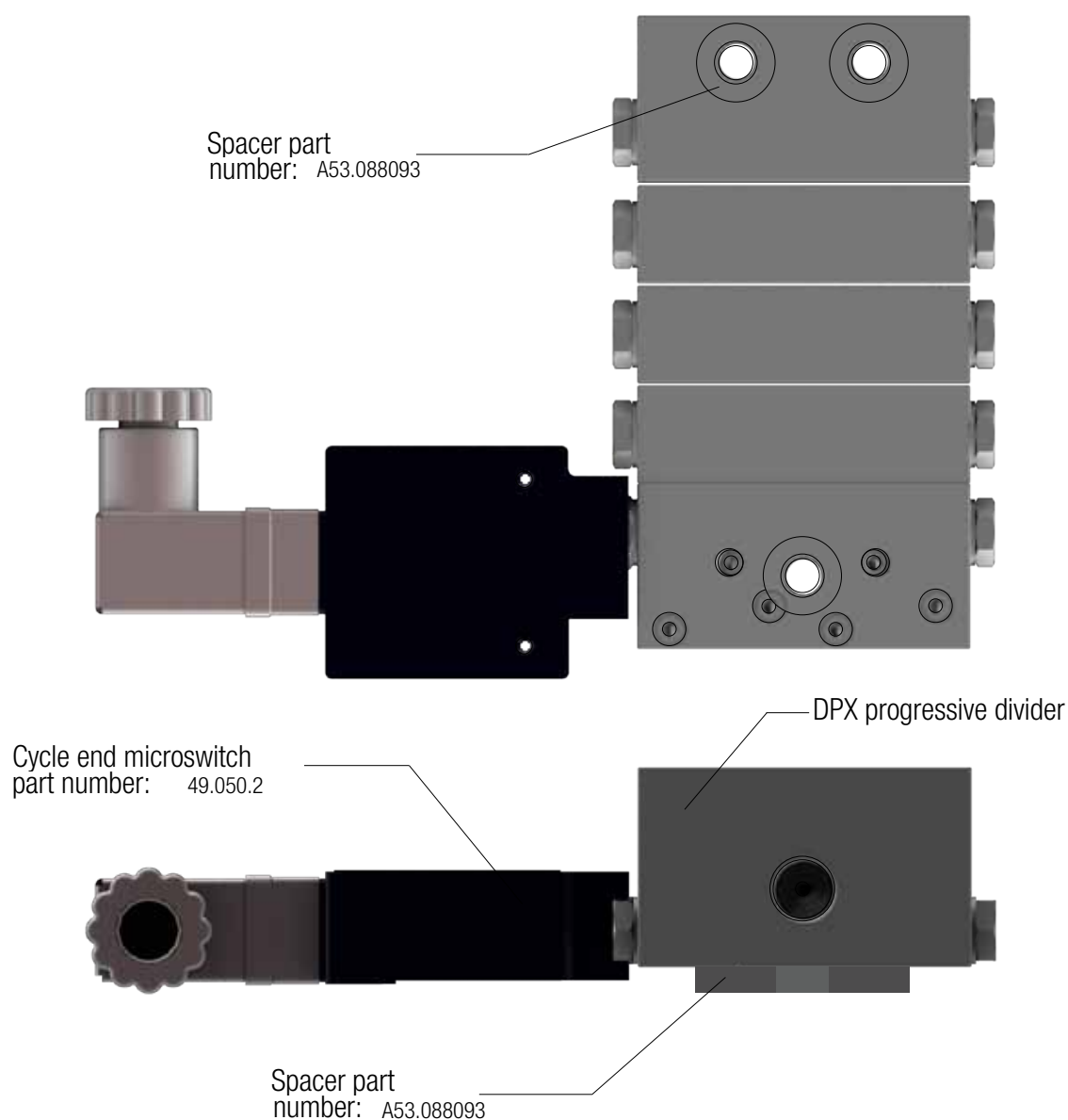
BANJO WITH GREASE NIPPLE



PART NUMBER				
03.355.5	1/8"G	1/8"G	M10X1	Ø6

DPX DIVIDER WITH MICROSWITCH

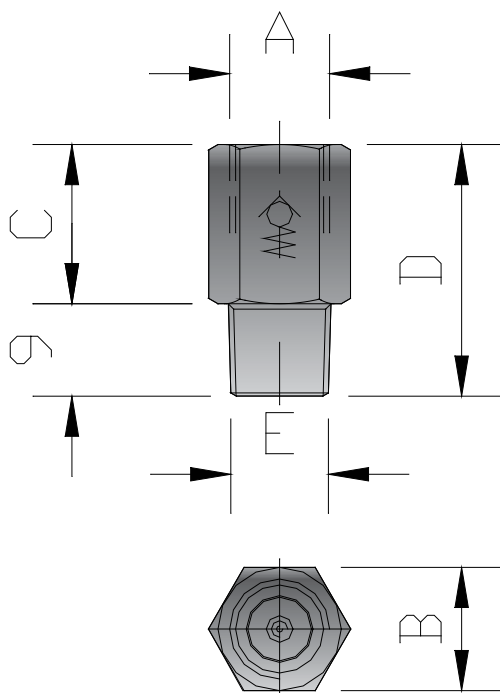
3 spacers (part number A53.088093) have been provided to place the cycle end microswitch and the progressive divider on the same level. They must be installed below the fixing holes of the DPX. If a cycle end microswitch must be installed on a DPX complete with visual indicator, 3 spacers (part number A53.088093) must be ordered as well.



CHECK VALVE FOR DPA,DPM AND DPX



This indicator consists of a **switch** enclosed in an aluminium block. The contact opens and closes when the piston moves into its operating seat. They are not normally used in circulation systems for checking the continuous cycle.



Ordering codes

PART NUMBER	DESCRIPTION	A	B	C	D	E
14.050.3	CV 1/8" INLET DPM/DPX - DOUBLE CONE 6mm	1/8" G	SW 12	15.5	24.5	1/8" GK
14.050.4	CV 1/8" INLET DPM/DPX - RING 6mm	M10x1	SW 12	15.5	24.5	1/8" GK
14.050.5	CV 1/8" INLET DPM/DPX - DOUBLE CONE 8mm	1 /4" G	SW 17	18	27	1/8" GK
14.050.6	CV M10x1 INLET DPA –RING 4/6 mm	M10x1	CH12	15.5	24.5	M10x1 K
14.050.7	CV M10x1 INLET DPA – DOUBLE CONE 8/10 mm	1 /4" G	SW 17	18	27	M10x1 K
14.050.8	CV M10x1 OUTLET DPA/DPM/DPX – RING 4/6 mm	M10x1	SW 12	15.5	24.5	M10x1 K
14.050.9	CV M10x1 OUTLET DPA – DOUBLE CONE 8 mm	1 /4" G	SW 17	18	27	M10x1 K

CHECK VALVE FOR DPA,DPM AND DPX

FITTINGS FOR HIGH PRESSURE PIPE

INLET CHECK VALVE

VALVE	QUICK	STANDARD		Ø
14.050.3	03.255.0			4
14.050.3	03.255.7		90	4
14.050.3	03.256.0	ZZZ106-004		6
14.050.3	03.256.6	ZZZ106-104	90	6
14.050.4	03.255.3			4
14.050.4	03.255.8		90	4
14.050.4	03.256.3	ZZZ106-003		6
14.050.4	03.256.7	ZZZ106-103	90	6
14.050.5	03.257.4	ZZZ106-005-L		6
14.050.5	03.257.2	ZZZ106-105-L	90	6
14.050.6	03.255.3			4
14.050.6	03.255.8		90	4
14.050.6	03.256.3	ZZZ106-003		6
14.050.6	03.256.7	ZZZ106-103	90	6
14.050.7	03.257.4	ZZZ106-005-L		6
14.050.7	03.257.2	ZZZ106-105-L	90	6



OUTLET CHECK VALVE

VALVE	QUICK	STANDARD	°	Ø
14.050.8	03.255.3			4
14.050.8	03.255.8		90	4
14.050.8	03.256.3	ZZZ106-003		6
14.050.8	03.256.7	ZZZ106-103	90	6
14.050.9	03.257.4	ZZZ106-005-L		6
14.050.9	03.257.2	ZZZ106-105-L	90	6

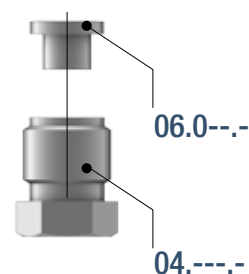


CHECK VALVE FOR DPA,DPM AND DPX

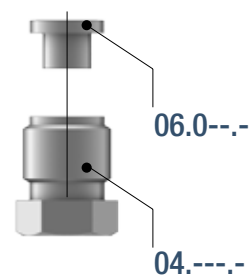


Fittings for polyamide pipe PA6 – PA12 and rilsan pipe PA11

INLET CHECK VALVE			
VALVE	LOW PRESSURE FITTINGS	°	Ø
14.050.3	04.103.0 + 06.003.0		6
14.050.4	04.052.0 + 06.052.0		6
14.050.5	04.104.0 + 06.004.4		8
14.050.6	04.052.0 + 06.052.0		6
14.050.7	04.104.0 + 06.004.0		8

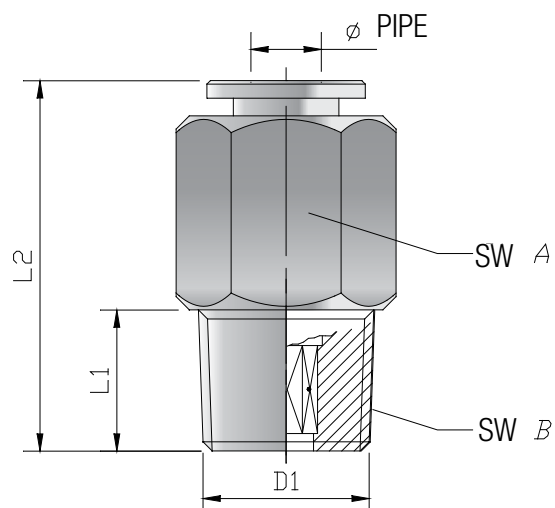


OUTLET CHECK VALVE			
VALVE	LOW PRESSURE FITTINGS	°	Ø
14.050.9	04.104.0 + 06.004.0		8
14.050.8	04.052.0 + 06.052.0		6
14.050.8	04.051.0 + 06.051.0		4



PIPES AND FITTINGS

STRAIGHT HIGH PRESSURE QUICK FITTINGS



PART NUMBER	Ø mm	D1	L1	L2	Sw A	Ch B
03.257.5	4	5/16" 24 thr 1"	8.0	22	10	3.0
03.255.0	4	1/8" GAS	8.0	21	10	3.0
03.255.4	4	M 6x0.75	6.0	23	10	2.5
03.255.1	4	M 6x1	8.0	25	10	2.5
03.255.2	4	M 8x1	8.0	22	10	3.0
03.255.3	4	M 10x1	8.0	21	11	3.0
03.257.6	6	5/16" 24 thr 1"	8.0	28	12	4.0
03.256.0	6	1/8" GAS	8.0	26	12	4.0
03.257.4	6	1/4" GAS	11.0	26	14	4.0
03.256.1	6	M 6x1	8.0	28	12	2.5
03.256.2	6	M 8x1	8.0	28	12	4.0
03.256.3	6	M 10x1	8.0	24	12	4.0
03.256.4	6	M 12x1	9.0	25	13	4.0

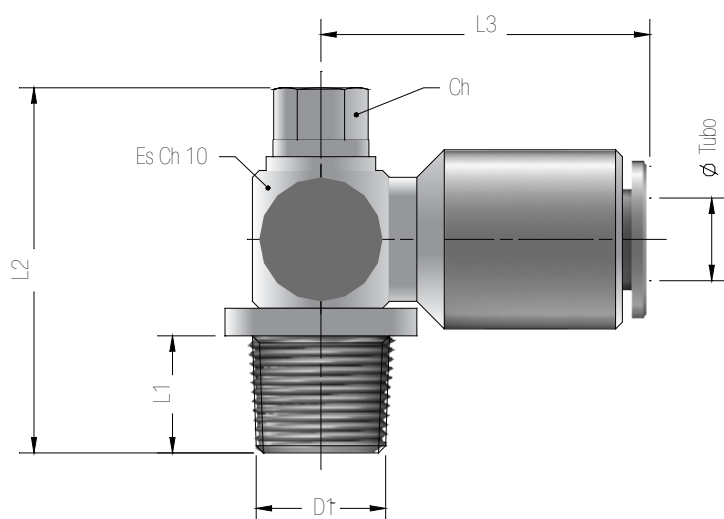
FEATURES

BODY	NICKEL-PLATED BRASS
WORKING PRESSURE	250 bar
BURST PRESSURE	BEYOND 1000 bar
TEMPERATURE	FROM - 20 °C TO + 120 °C
LUBRICANTS	OIL AND GREASE
INTERNAL SEAL	NBR "O"-RING 90SH

RECOMMENDED PIPES

30.090.0	NYLON A.P. 4x2
30.160.0	NYLON A.P. 4x2.5
30.161.0	NYLON A.P. 6x3

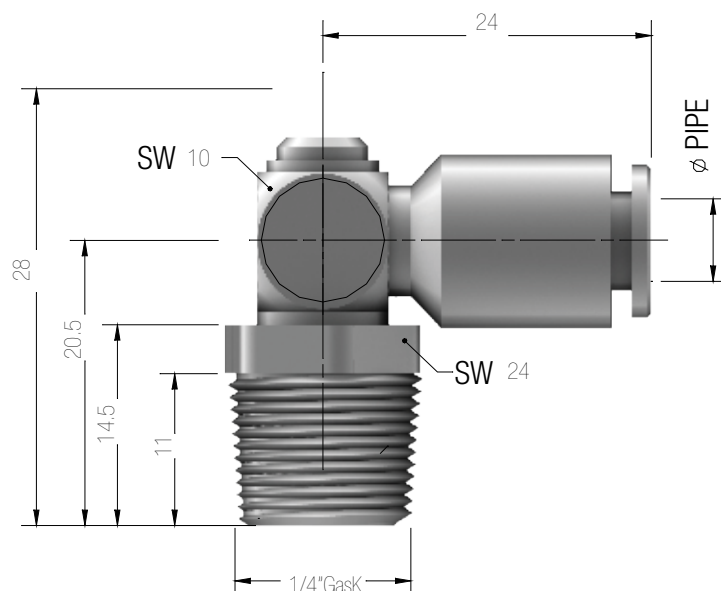
HIGH PRESSURE QUICK FITTINGS ADJUSTABLE AT 90°



FEATURES	
BODY	NICKEL-PLATED BRASS
WORKING PRESSURE	250 bar
BURST PRESSURE	900 bar
TEMPERATURE	FROM - 20 °C TO + 120 °C
LUBRICANTS	OIL AND GREASE
INTERNAL SEAL	NBR "O"-RING 90SH
RECOMMENDED PIPES	
30.090.0	NYLON A.P. 4x2
30.160.0	NYLON A.P. 4x2.5
30.161.0	NYLON A.P. 6x3
30.330.0	PIPE S-30 5/32"

PART NUMBER	Ø mm	D1	L1	L2	Sw A	Ch B
03.257.7	4	5/16" 24 thr 1"	8.0	26	22	6
03.255.7	4	1/8" GAS	7.5	25	22	6
03.257.0	4	M 6x0.75	6.0	24	22	6
03.255.5	4	M 6x1	8.0	26	22	6
03.255.6	4	M 8x1	8.0	26	22	6
03.255.8	4	M 10x1	8.0	26	22	6
03.257.8	6	5/16" 24 thr 1"	8.0	26	24	6
03.256.6	6	1/8" GAS	7.5	25	24	6
03.256.5	6	M 6x1	8.0	26	24	6
03.257.1	6	M 8x1	8.0	26	24	6
03.256.7	6	M 10x1	8.0	26	24	6
03.256.8	6	M 12x1	9.0	26	24	6

HIGH PRESSURE QUICK FITTINGS ADJUSTABLE AT 90° 1/4" TUBE 6 mm PART NUMBER 03.257.2



All straight fittings are equipped with an inner hex screw (ch b) requiring an Allen key to install the fitting at any position and in small spaces.



Cut the pipe at 90° checking that there is no internal or external burr and making sure it is not oval-shaped. When using a metal pipe, make a groove as in figure 45 (H 6) to correctly crimp the support clamp of the fitting.

STEP 1
INSERT THE TUBE



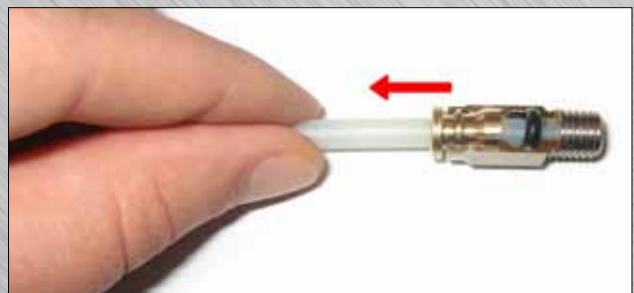
STEP 2
PUSH TO OVERCOME
THE **FIRST** RESISTANCE



STEP 3
PUSH FURTHER TO OVERCOME THE
SECOND RESISTANCE UNTIL YOU HEAR A
CLICK



STEP 4
PULL THE TUBE AND MAKE SURE
IT DOES NOT COME OUT



IF THE TUBE COMES OUT

STEP A
REMOVE THE INSERT



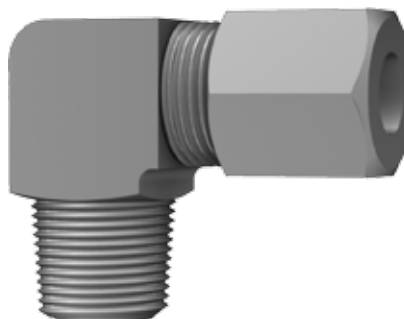
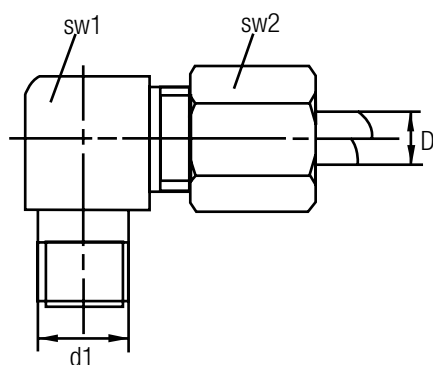
STEP B
REFIT THE INSERT



FASE C
RESTART FROM POINT 1



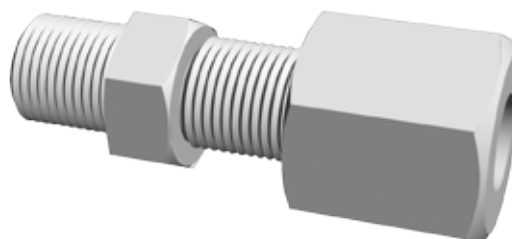
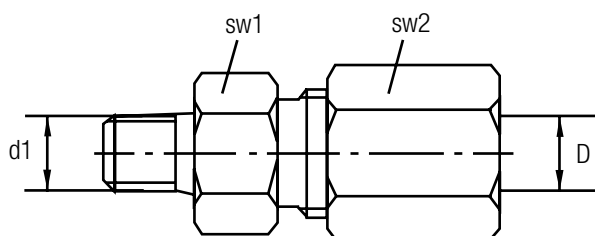
90° FITTINGS



PART NUMBER	D	D1	Sw1	Sw2
ZZZ106-101	6	M 6 K	11	12
ZZZ106-102	6	M8X1 K	11	12
ZZZ106-103	6	M10X1 K	11	12
ZZZ106-104	6	R 1/8" BSP K	11	12
ZZZ106-105-L	6	R 1/4" BSP K	12	14
03.362.0	10	R 1/4" BSP K	14	19
03.361.0	8	R 1/4" BSP K	12	17

MINIMUM QUANTITY 50 PIECES FOR EACH ELEMENT

STRAIGHT FITTINGS

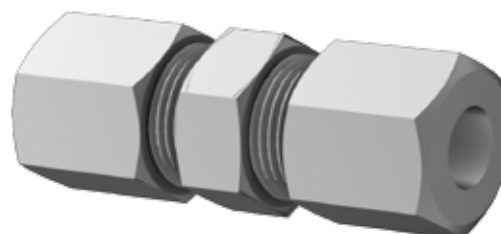
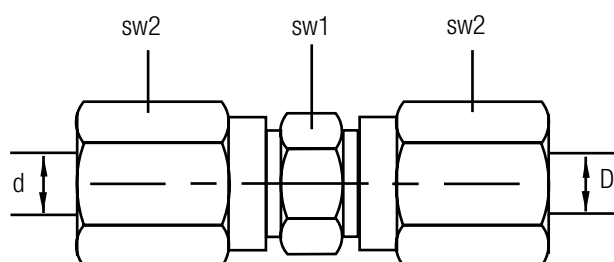


PART NUMBER	D	D1	Sw1	Sw2
ZZZ106-001	6	M 6 K	11	12
ZZZ106-002	6	M8X1 K	11	12
ZZZ106-003	6	M10X1 K	11	12
ZZZ106-004	6	R 1/8" BSP K	11	12
ZZZ106-005-L	6	R 1/4" BSP K	12	14
03.004.5	8	R 1/8" BSP K	12	14
03.365.1	8	R 1/4" BSP K	17	17
03.362.1	10	R 1/4" BSP K	17	19

MINIMUM QUANTITY 50 PIECES FOR EACH ELEMENT

FITTINGS AND ACCESSORIES

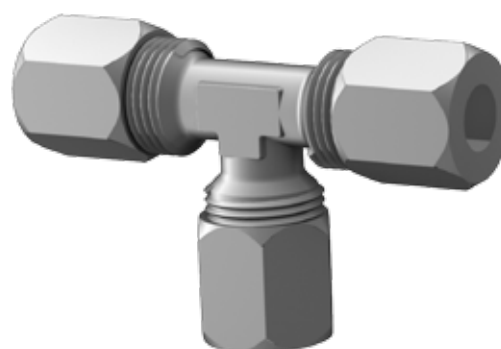
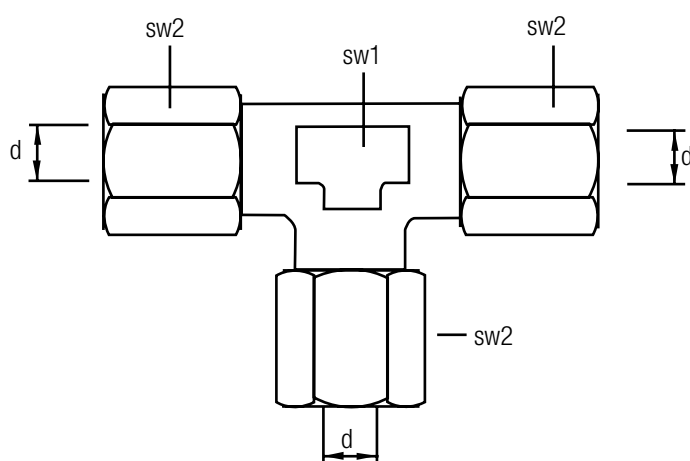
PIPE-PIPE FITTINGS



PART NUMBER	d	D	SW1	SW2	SW3
ZZZ104-000	4	4	9	10	10
ZZZ104-000-6	4	6	9	10	12
ZZZ106-000	6	6	11	12	12
ZZZ106-000-8	6	8	12	12	14
ZZZ106-000-10-L	6	10	17	14	19

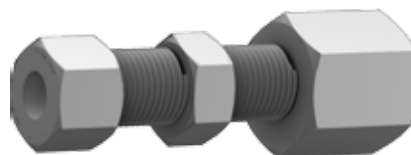
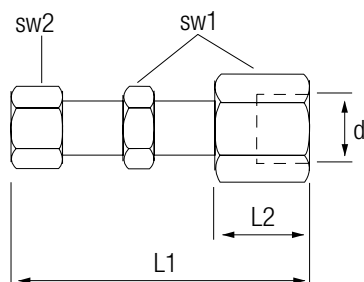
MINIMUM QUANTITY 50 PIECES FOR EACH ELEMENT

T – PIPE/PIPE

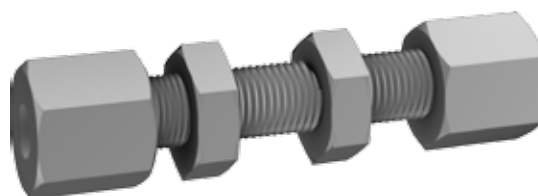
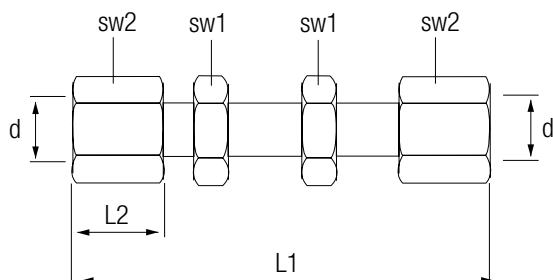


PART NUMBER	d	SW1	SW2
ZZZ106-300	6	11	12
ZZZ106-300-L	6	12	14

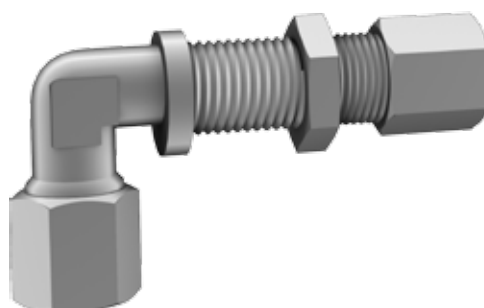
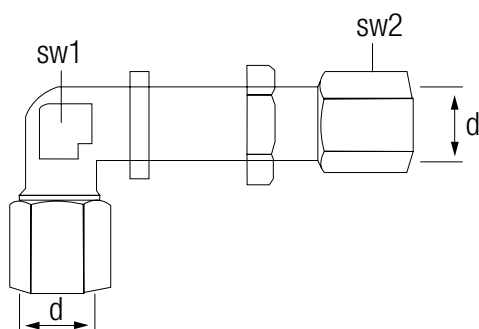
MINIMUM QUANTITY 50 PIECES FOR EACH ELEMENT

BULKHEAD FITTING M10X1 – 6L

PART NUMBER	d	L1	L2	SW1	SW2
ZZZ106-243-L	M10X1	66	20	17	14

STRAIGHT PIPE 6 mm BULKHEAD FITTING

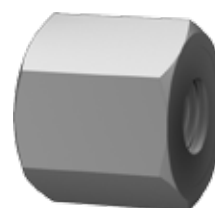
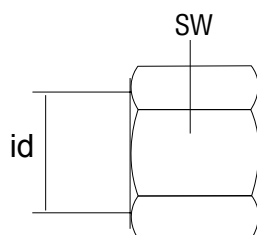
PART NUMBER	d	SW1	SW2
ZZZ106-221-L	6	17	14

90° PIPE 6 mm BULKHEAD FITTING

PART NUMBER	d	SW1	SW2
ZZZ106-231-L	6	12	14

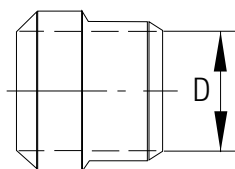
FITTINGS AND ACCESSORIES

FITTING



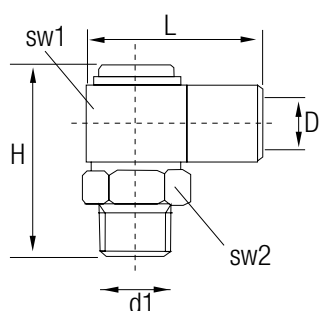
PART NUMBER	id	SW
ZZZ106-200	6	12
MINIMUM QUANTITY 50 PIECES FOR EACH ELEMENT		

CUTTING RING



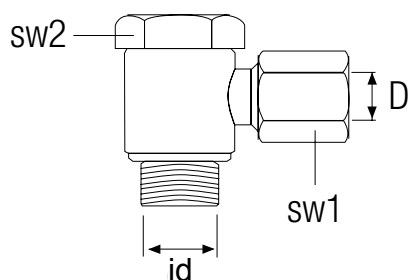
PART NUMBER	id
ZZZ106-210-ST	6
MINIMUM QUANTITY 50 PIECES FOR EACH ELEMENT	

90° SWIVEL FITTINGS



PART NUMBER	D	D1	SW1	SW2	H	L
ZZZ104-172	M8X1	M8X1	15	14	30	26.5
ZZZ104-173	M8X1	M10X1	15	14	30	26.5
ZZZ106-171	M10X1	M6X1	15	14	30	29
ZZZ106-172	M10X1	M8X1	15	14	30	29
ZZZ106-173	M10X1	M10X1	15	14	30	29
ZZZ106-174	M10X1	1/8"	15	14	30	29
MINIMUM QUANTITY 50 PIECES FOR EACH ELEMENT						

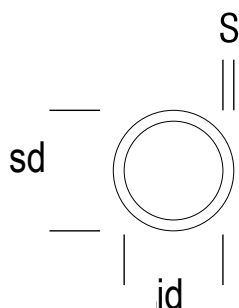
BANJO FITTINGS



PART NUMBER	D	D1	SW1	SW2
ZZZ106-123	6	M10X1	12	14
ZZZ106-124	6	1/8"	12	14

MINIMUM QUANTITY 25 PIECES FOR EACH ELEMENT

POLYAMIDE PIPES

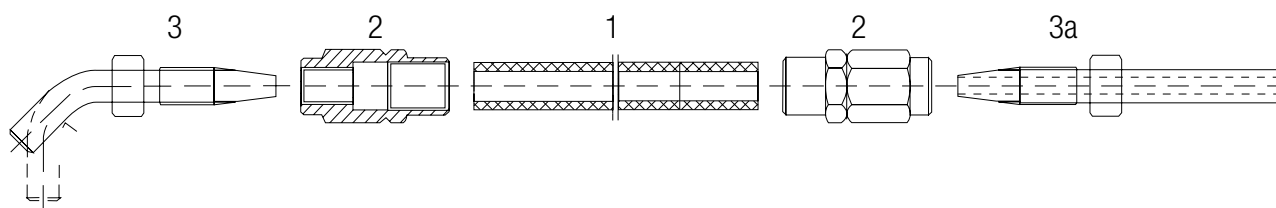


PART NUMBER		SD	S	ID
ZZZ100-004**	HOSE 6x1.5 mm	6	1.5	3.0

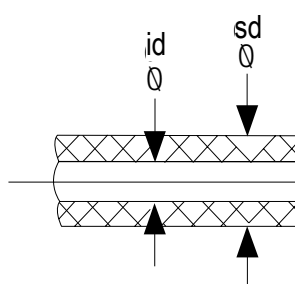
** FILLED WITH GREASE NLGI 000 – 100 M

MINIMUM QUANTITY 100 M

FITTINGS AND ACCESSORIES



1 – HIGH PRESSURE PIPE 840 bar

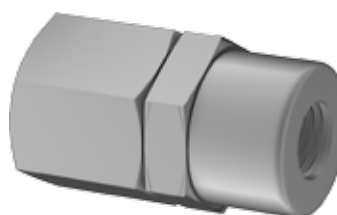
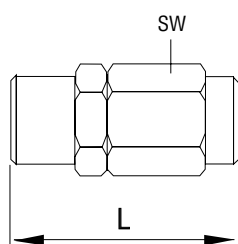


PART NUMBER		ID	SD
ZZZ100-001 **		4.0 mm	8.6 mm
ZZZ100-002	EMPTY	4.0 mm	8.6 mm

** FILLED WITH GREASE NLGI 000 – 100 M

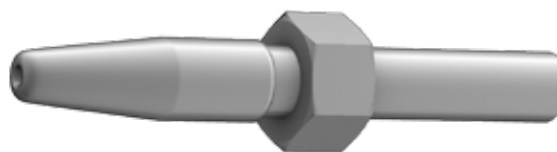
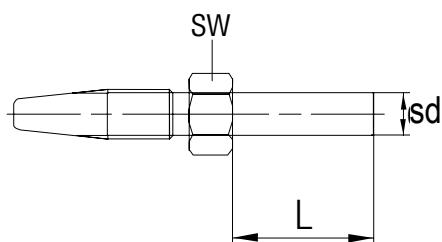
MINIMUM QUANTITY 50 PIECES FOR EACH ELEMENT

2 – RING NUT



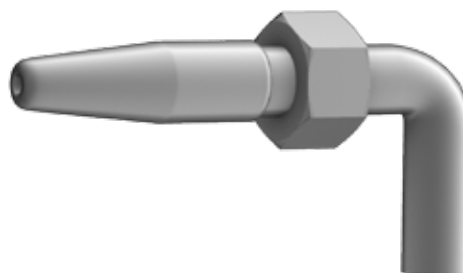
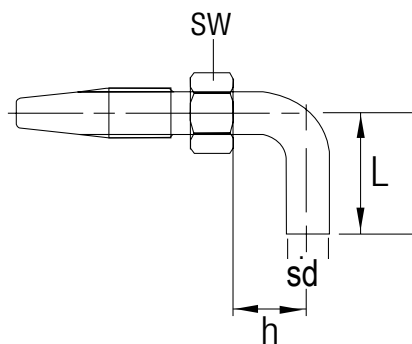
PART NUMBER		ID	SD
ZZZ100-050	4,1X8,75 mm	28	12

MINIMUM QUANTITY 50 PIECES FOR EACH ELEMENT

3A –STRAIGHT INSERT

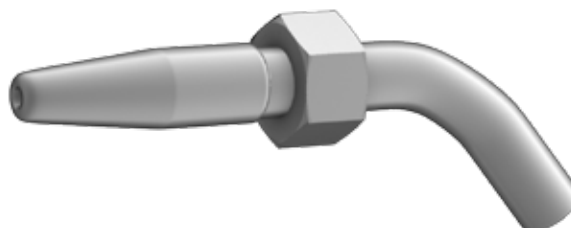
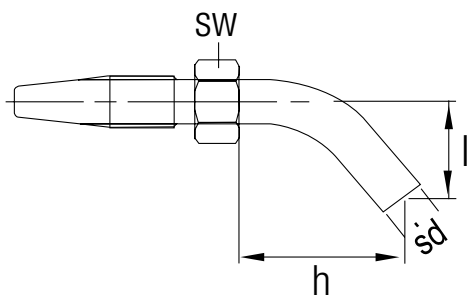
PART NUMBER		SD	L	SW
ZZZ100-054	6X20 mm	6	20	10
ZZZ100-051	6X30 mm	6	30	10

MINIMUM QUANTITY 100 PIECES FOR EACH ELEMENT

3 – 90° INSERT

PART NUMBER		SD	H	L	SW
ZZZ100-052	6X21 mm	6	13	21	10
ZZZ100-053	6X37 mm	6	28	37	10
ZZZ100-056	6X53 mm	6	28	53	10

MINIMUM QUANTITY 100 PIECES FOR EACH ELEMENT

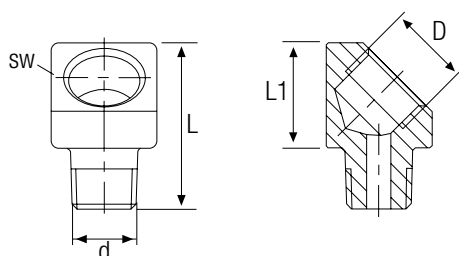
3 – 45° INSERT

PART NUMBER		SD	H	L	SW
ZZZ100-057	6X24 mm	6	24	15	10
ZZZ100-058	6X35 mm	6	35	25	10

MINIMUM QUANTITY 100 PIECES FOR EACH ELEMENT

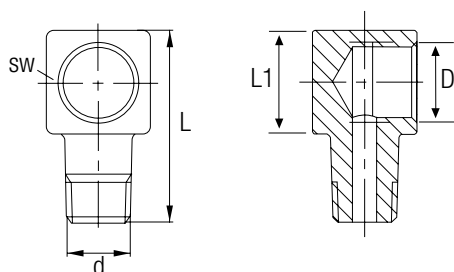
FITTINGS AND ACCESSORIES

45° ADAPTOR



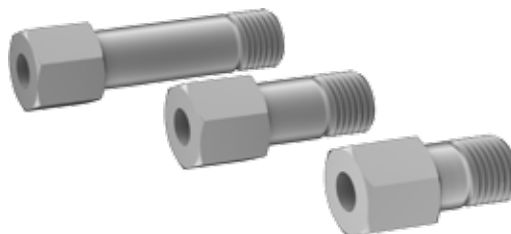
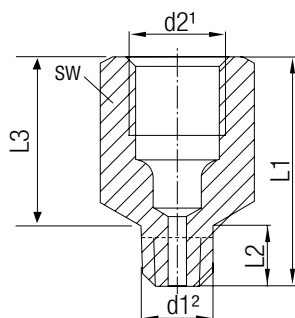
PART NUMBER	D	d	sw	L	L1
ZZZ100-822	M 8X1	M 8X1	13	23	13
ZZZ100-833	M 10X1	M 10X1	13	23	13
ZZZ100-844	R 1/8" BSP	R 1/8" BSP	13	23	13
MINIMUM QUANTITY 50 PIECES FOR EACH ELEMENT					

90° ADAPTOR



PART NUMBER	D	d	sw	L	L1
ZZZ100-721	M 8X1	M 6X1	12	23	13
ZZZ100-722	M 8X1	M 8X1	12	23	13
ZZZ100-723	M 8X1	M 10X1	12	23	13
ZZZ100-733 03.001.0	M 10X1	M 10X1	13	23	13
ZZZ100-744 03.232.0	R 1/8" BSP	R 1/8" BSP	13	23	13
ZZZ100-724	M 8X1	R 1/8" BSP	12	23	13
MINIMUM QUANTITY 50 PIECES FOR EACH ELEMENT					

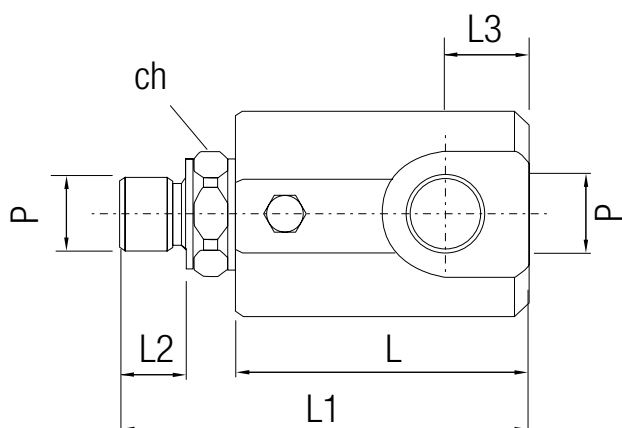
EXTENSIONS



PART NUMBER	D1	D2	L1	L2	L3	SW	HOSE
ZZZ100-137	M8X1 K	M10X1	23	12	11	13	6
ZZZ100-142	M10X1 K	M10X1	18	7	11	13	6
ZZZ100-141	M10X1 K	M10X1	23	12	11	13	6
ZZZ100-145	M10X1 K	M10X1	35	24	11	13	6
ZZZ100-143	M10X1 K	M10X1	40	29	11	13	6
ZZZ100-146	M10X1 K	M10X1	50	39	11	13	6
ZZZ100-151	R1/8" K	M10X1	18	7	11	13	6
ZZZ100-152	R1/8" K	R 1/8"	18	7	11	13	6
ZZZ100-148	R1/8" K	R 1/8"	23	12	11	13	6
ZZZ100-149	R1/8" K	R 1/8"	35	23	12	13	6
ZZZ100-153	R1/8" K	R 1/8"	50	38	12	13	6
ZZZ100-130	M8X1 K	M8X1 K	18	8	10	11	4
ZZZ100-140	M10X1 K	M8X1 K	18	8	10	11	4

MINIMUM QUANTITY 50 PIECES FOR EACH ELEMENT

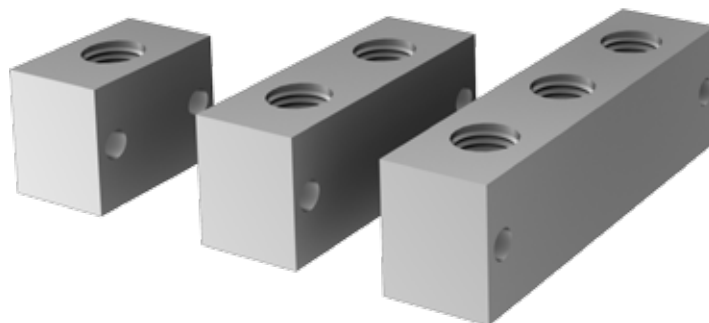
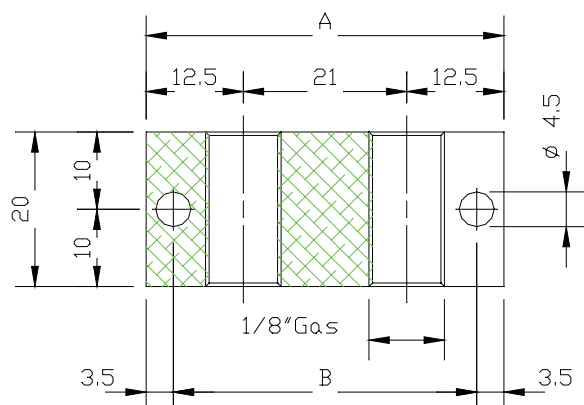
The appearance of the products can be subject to change without prior notice

90° ROTARY JOINT
PART NUMBER 03.004.9


MAX DISCHARGE	25 L/MIN
MAX PRESSURE	400 bar
MAX SPEED	500 RPM
DIMENSIONS	
A	62
B	50
C	42
D	33
E GAS	1/4
F	SW 30
CH	19
WEIGHT Kg	0.27

FITTINGS AND ACCESSORIES

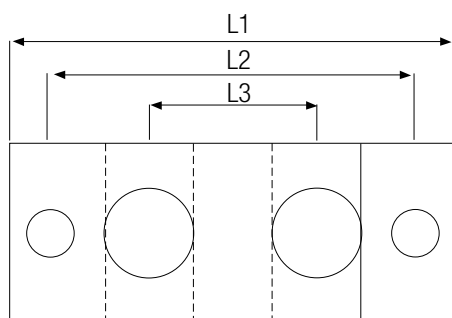
ANCHOR BLOCKS



PART NUMBER	OUTLETS	A	B
01.110.1	1	25	18
01.110.2	2	46	39
01.110.3	3	67	60
01.110.4	4	88	81
01.110.5	5	109	102
01.110.6	6	130	123
01.110.7	7	151	144
01.110.8	8	172	165

MINIMUM QUANTITY 10 PIECES FOR EACH ELEMENT

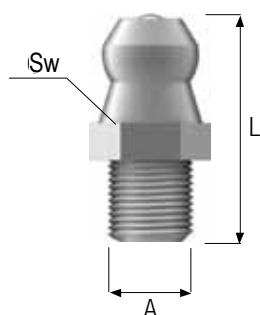
TEE ANCHOR BLOCKS M10X1



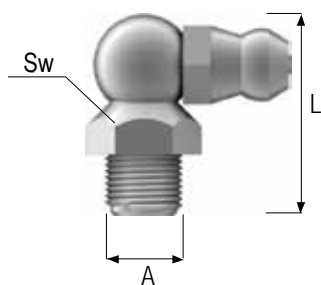
PART NUMBER		L1	L2	L3
ZZZ100-211	1	30		
ZZZ100-212	2	60	50	22
ZZZ100-213	3	80	74	22
ZZZ100-214	4	106	96	22
ZZZ100-215	5	128	118	22
ZZZ100-216	6	150	140	22
ZZZ100-218	8	194	184	22

MINIMUM QUANTITY 10 PIECES FOR EACH ELEMENT

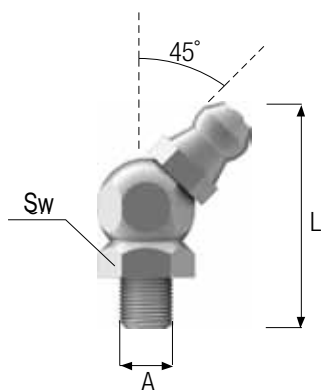
GREASE NIPPLES



PART NUMBER	L	A	SW
A92.078422	18	1/8" BSP	11



PART NUMBER	L	A	SW
39.000.2	21	1/8" BSP	11



PART NUMBER	L	A	SW
39.000.4	26.5	1/8" BSP	11

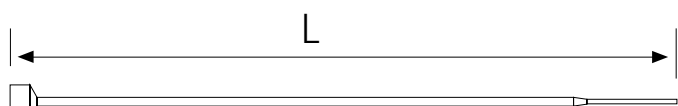
FITTINGS AND ACCESSORIES

ELECTRIC CABLE

PART NUMBER	
A91.111215	4X1 mm
A70.094128	5 M 4X1 mm
A70.094129	10 M 4X1 mm



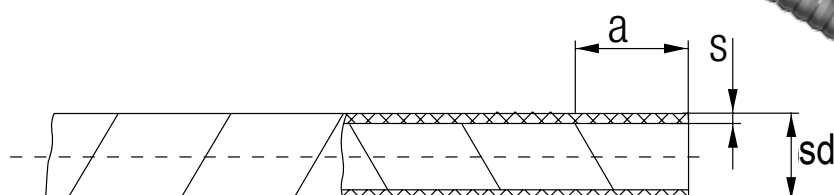
CABLE TIES



PART NUMBER	L	
A91.111273	380	x4,7
A91.111274	200	x3,5
MINIMUM QUANTITY 100 PIECES FOR EACH ELEMENT		



PROTECTION SPIRAL

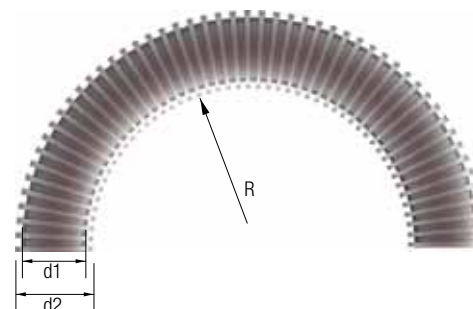


PART NUMBER		A	SD	S
ZZZ100-040		10	6	1
ZZZ100-041		10	11.5	1.5
30.326.0	12x8	15	12	2
30.326.1	16x12	15	16	2
30.326.2	20x16	15	20	2
MINIMUM QUANTITY 50 M FOR EACH ELEMENT				

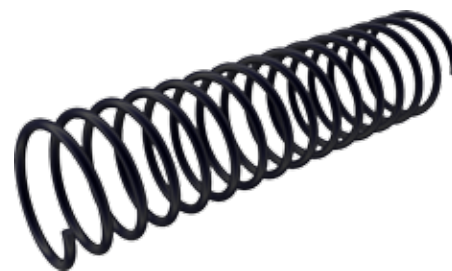
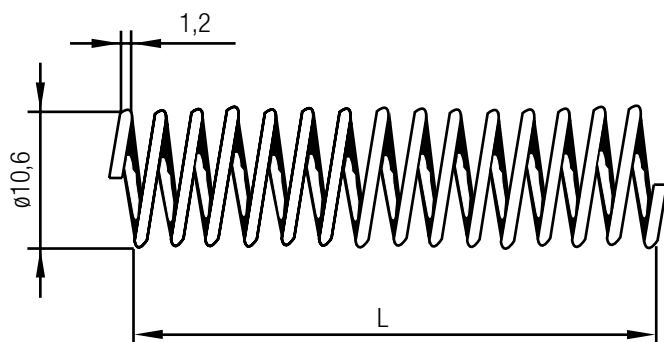
OPENABLE PROTECTIVE CONDUITS



PART NUMBER	D1	D2	R
ZZZ1212079	6.9	10	11
MINIMUM QUANTITY 50 M			

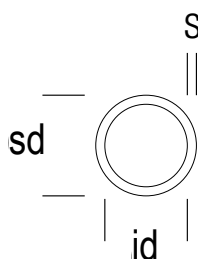


METAL PROTECTION SPIRAL



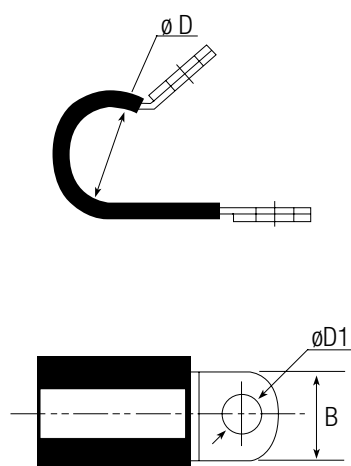
PART NUMBER	L
ZZZ00208210	6 M

STEEL PIPES



PART NUMBER	L	SD	S	ID
ZZZTC6/4/1	6 M	6	1	4
ZZZTC10/5/2.5	6 M	10	2.5	5

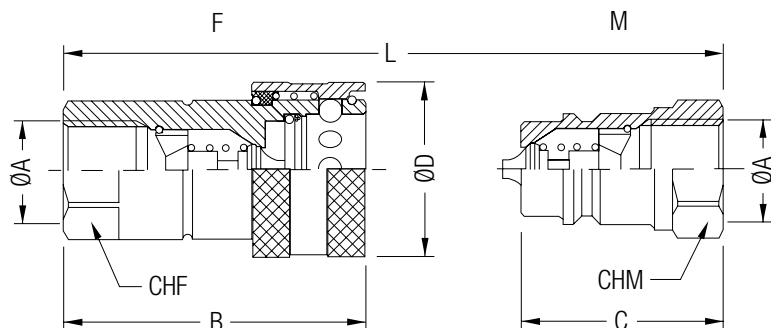
TUBE CLAMPS



PART NUMBER	Ø D	Ø D1	B
ZZZ100-506	6 mm	5.3	12
ZZZ100-509	9 mm	5.3	12
ZZZ100-512	12 mm	5.3	12
ZZZ100-515	15 mm	5.3	12
ZZZ100-518	18 mm	5.3	12
ZZZ100-522	22 mm	5.3	12
ZZZ100-525	25 mm	5.3	12
ZZZ100-606	6 mm	6.4	15
ZZZ100-609	9 mm	6.4	15
ZZZ100-610	10 mm	6.4	15
ZZZ100-612	12 mm	6.4	15
ZZZ100-615	15 mm	6.4	15
ZZZ100-618	18 mm	6.4	15
ZZZ100-620	20 mm	6.4	15
ZZZ100-622	22 mm	6.4	15
ZZZ100-625	25 mm	6.4	15

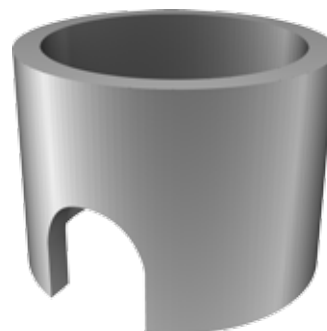
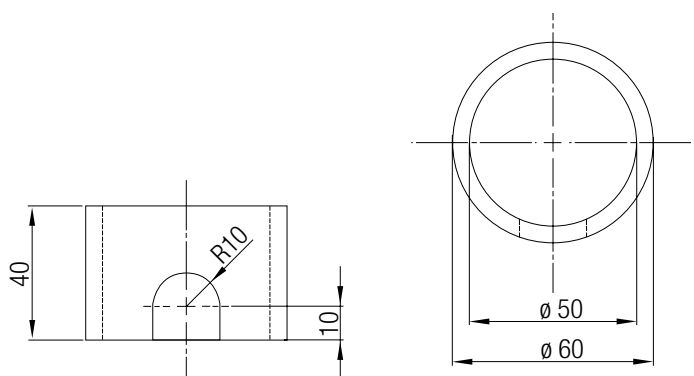
FITTINGS AND ACCESSORIES

DOUBLE SHUTTER QUICK COUPLING



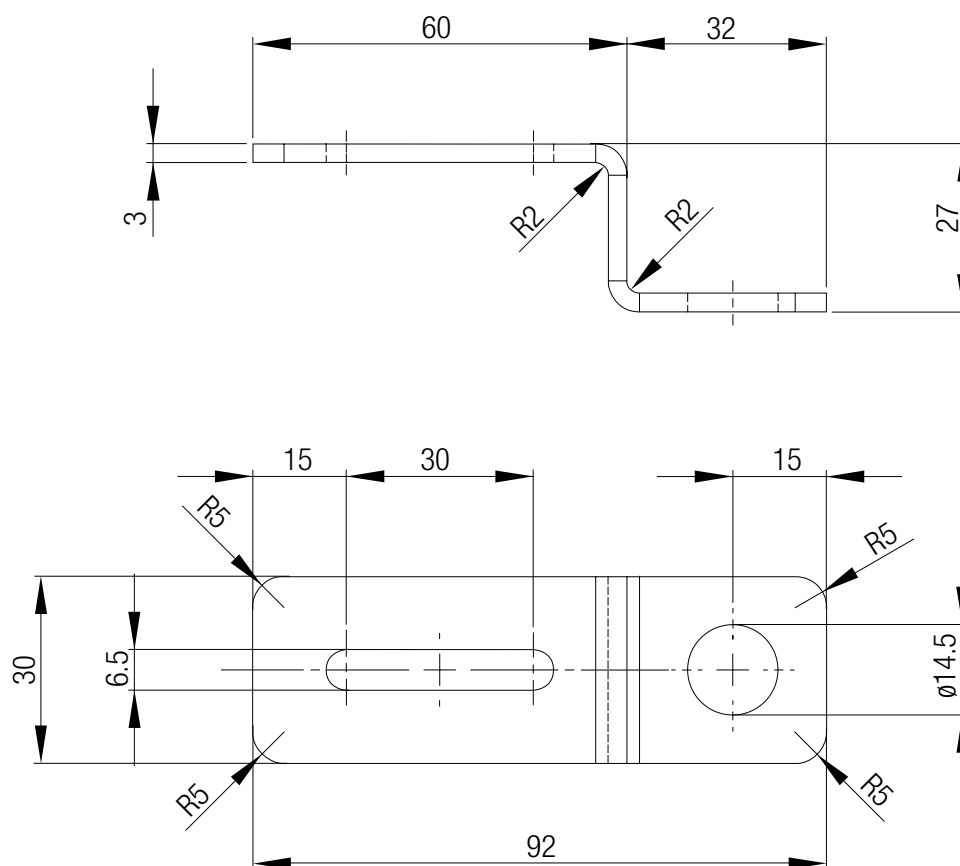
PART NUMBER	ØA	B	C	ØD	L	CHF	CHM
04.900.6	1/4" (F)	50		27	66	19	
04.900.9	1/4" (M)		33		66		19
04.900.5	1/8" (F)	50		23	63	18	
04.900.8	1/8" (M)		31.5		63		17

SOLDER PROTECTIVE RING

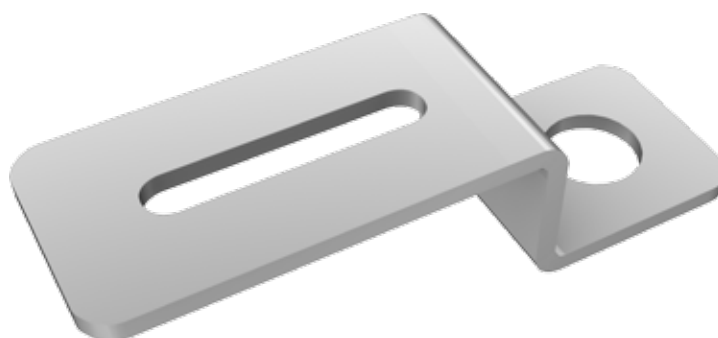


PART NUMBER			
08.111.0	50	5	4

PROGRESSIVE DIVIDERS SUPPORT "Z" BRACKET



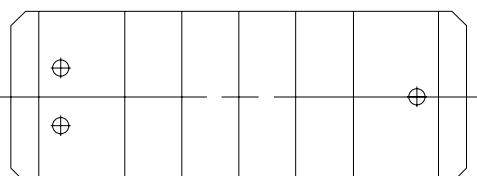
PART NUMBER	BORE
08.112.0	$\varnothing 14.5$



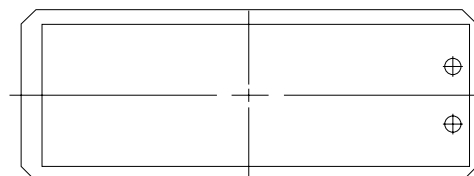
FITTINGS AND ACCESSORIES

SOLDER BRACKET FOR PROGRESSIVE DIVIDERS

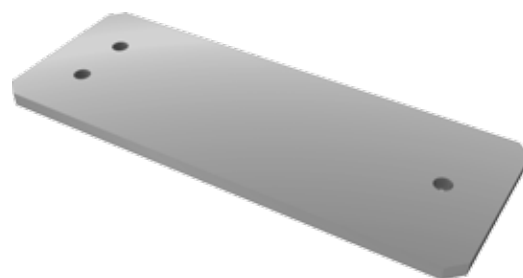
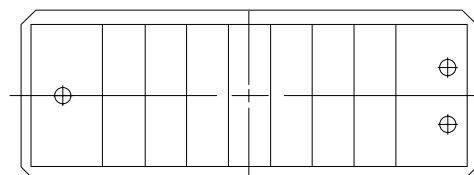
DPA



DPM

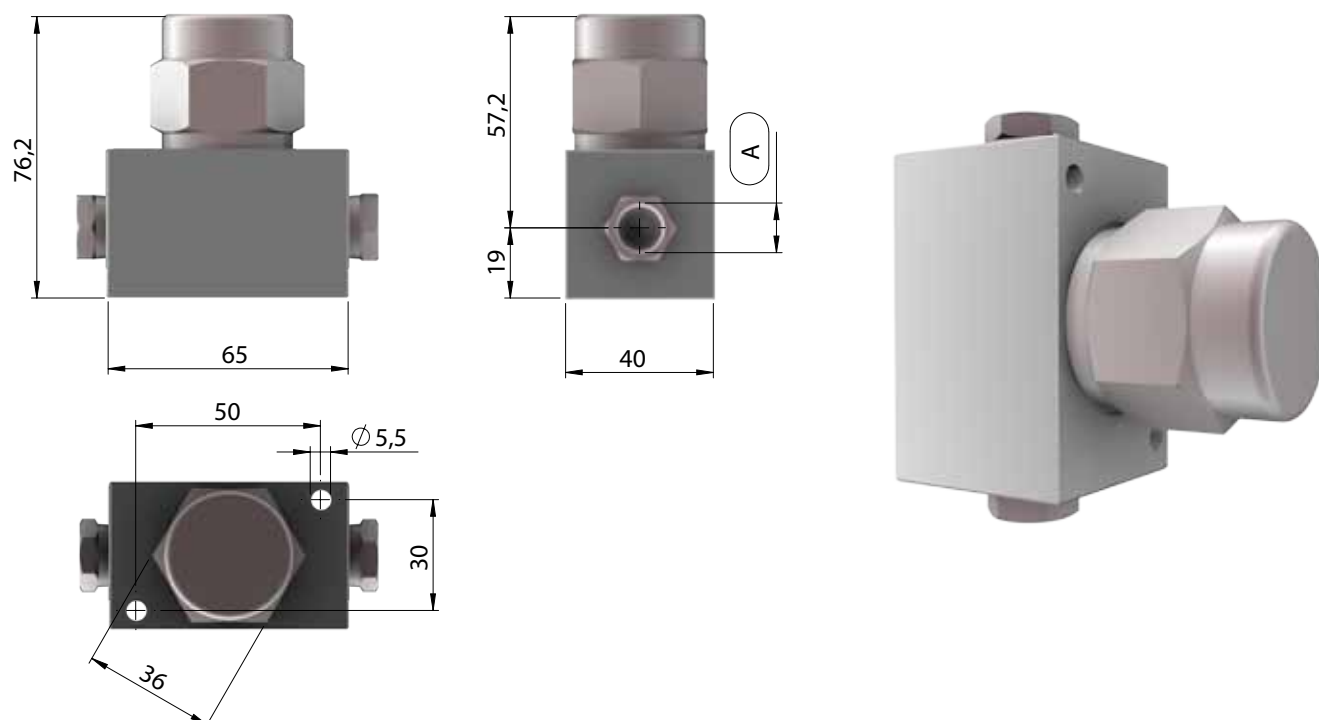


DPX



PART NUMBER	ØA	B	C	ØD	L	CHF
08.113.0.03	BRACKET	3	3, 4, 5	3, 4, 5	100	65
08.113.0.04	BRACKET	4	6	6	120	85
08.113.0.05	BRACKET	5	7, 8	7, 8	140	105
08.113.0.06	BRACKET	6	9	9	160	125
08.113.0.07	BRACKET	7	10	10	180	145
08.113.0.08	BRACKET	8		11, 12	200	165
08.113.0.09	BRACKET	9			220	185
08.113.0.10	BRACKET	10			240	205
08.113.0.11	BRACKET	11			260	225
08.113.0.12	BRACKET	12			280	245
08.113.0.13	BRACKET	13			300	265
08.113.0.14	BRACKET	14			320	285
08.113.0.15	BRACKET	15			340	305

MAXIMUM OPERATING PRESSURE 500 bar OVERALL DIMENSIONS



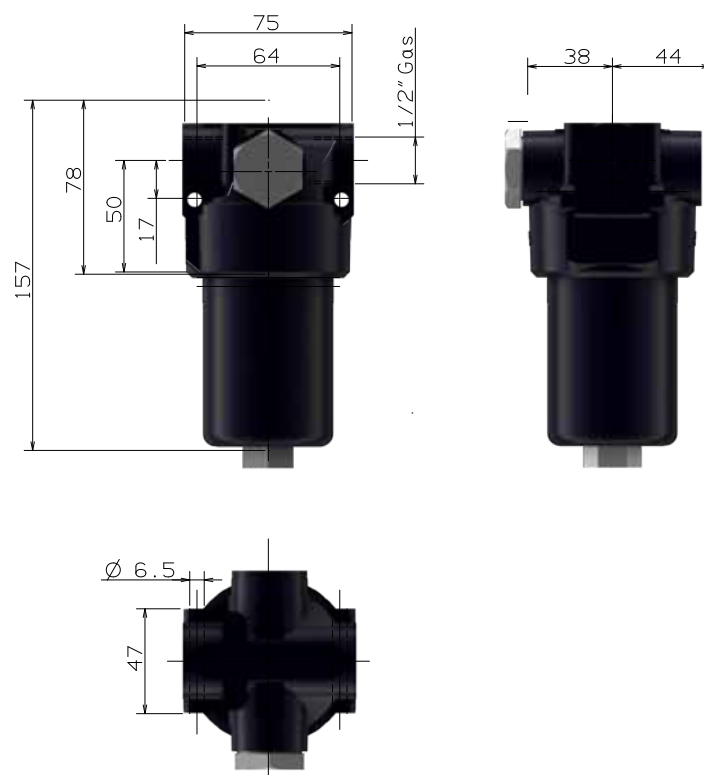
Oil filters ordering codes

PART NUMBER	MICRON	CONNECTION "A"	SPARE CARTRIDGE
07.260.0	25	1/4"	07.262.0
07.260.1	40	1/4"	07.262.1
07.260.2	60	1/4"	07.262.2
07.260.3	125	1/4"	07.262.3
07.260.4	25	3/8"	07.262.0
07.260.5	40	3/8"	07.262.1
07.260.6	60	3/8"	07.262.2
07.260.7	125	3/8"	07.262.3

Grease filters ordering codes

PART NUMBER	MICRON	CONNECTION	SPARE CARTRIDGE
07.261.0	150	1/4"	07.262.4
07.261.1	300	1/4"	07.262.5
07.261.2	150	3/8"	07.262.4
07.261.3	300	3/8"	07.262.5
07.261.4	150	1/2"	07.262.4
07.261.5	300	1/2"	07.262.5

HIGH PRESSURE LINE FILTERS



ELECTRICAL FEATURES

FILTERING DEGREE	10-25-60 MICRON
FILTERING SURFACE	350 cm ²
MAXIMUM OPERATING PRESSURE	200 bar
CONNECTIONS	1 / 2"
ELECTRIC INDICATOR VOLTAGE	250V AC 150V DC
PROTECTION RATING	IP – 65
DISCHARGE (OIL 30 cSt)	50 L/1'
LUBRICANTS USED	OILS ISO 6473 / 4
OPERATING TEMPERATURE	FROM - 25°C TO + 110°C

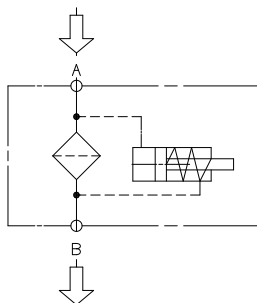
Ordering codes

PART NUMBER	CODE	FILTERING	VISUAL INDICATOR	ELECTRIC INDICATOR
07.280.0	FMP - 10	10 MICRON		
07.280.1	FMP - 25	25 MICRON		
07.280.2	FMP - 60	60 MICRON		
07.281.0	FMP - 10	10 MICRON	***	
07.281.1	FMP - 25	25 MICRON	***	
07.281.2	FMP - 60	60 MICRON	***	
07.282.0	FMP - 10	10 MICRON		***
07.282.1	FMP - 25	25 MICRON		***
07.282.2	FMP - 60	60 MICRON		***

VISUAL CLOGGING INDICATOR

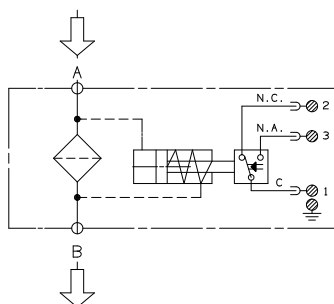
It displays clogging of the filtering element by the tablet changing colour (from green to red).

ORDERING CODE 14.610.1

**ELECTRIC CLOGGING INDICATOR**

In addition to changing colour, this version sends an electric filtering element clogging signal.

ORDERING CODE 14.610.0



SOLENOID VALVES



PART NUMBER	DESCRIPTION
14.660.0	Solenoid valve
	Connections: 1/4" Gas
	Insertion diameter (mm): 6
	Discharge (Nl/min): 620
	Max pressure (bar): 10
14.660.1	Coil 24 V DC
14.660.2	Coil 115 V AC
14.660.3	Coil 230 V AC
14.660.4	Coil 24 V AC



PART NUMBER	DESCRIPTION
14.663.5	Solenoid valve
	Connections: 1/8" Gas
	Insertion diameter (mm): 1.5
	Discharge (Nl/min): 60
	Max pressure (bar): 10
14.660.1	Coil 24 V DC
14.660.2	Coil 115 V AC
14.660.3	Coil 230 V AC
14.660.4	Coil 24 V AC



PART NUMBER	DESCRIPTION
14.662.5	Solenoid valve
	Connections: 3/8" Gas
	Insertion diameter (mm): 10
	Discharge (Nl/min): 1500
	Max pressure (bar): 10
14.662.1	Coil 24 V DC
14.662.2	Coil 115 V AC
14.662.3	Coil 230 V AC
14.662.4	Coil 24 V AC



PART NUMBER	DESCRIPTION
A91.111010	Solenoid Valve Connector

PROGRESSIVE SYSTEMS

AVERAGE VISCOSITY GRADE cSt 40°C	ISO SYMBOL
10	ISO VG-10
15	ISO VG-15
22	ISO VG-22
32	ISO VG-32
46	ISO VG-46
68	ISO VG-68
100	ISO VG-100
150	ISO VG-150
220	ISO VG-220
320	ISO VG-320
460	ISO VG-460
680	ISO VG-680
1000	ISO VG-1000

NLGI GRADE	ASTM PENETRATION INDEX
000	445 – 475
00	400 – 430
0	355 – 385
1	310 – 340
2	265 – 295
3	220 – 250
4	175 – 205
5	130 – 160
6	85 – 115

NLGI : NATIONAL LUBRICATING GREASE INSTITUTE
ASTM : AMERICAN SOCIETY FOR TESTING AND MATERIALS

VISCOSITY COMPARISON TABLE

cSt 40° C	SUS 100°F	E 50°C	cSt 40° C	SUS 100°F	E 50°C	cSt 40° C	SUS 100°F	E 50°C
2	32.64	1,119	41	190.5	5,465	200	925.6	26.32
3	36.05	1,217	42	195.0	5,590	210	971.8	27.65
4	39.15	1,308	43	199.5	5,720	220	1018	28.95
5	42.36	1,400	44	204.1	5,845	230	1065	30.28
6	45.57	1,481	45	208.7	5,975	240	1111	31.60
7	48.77	1,563	46	213.3	6,105	250	1157	32.90
8	52.07	1,653	47	217.9	6,235	260	1203	34.25
9	55.48	1,746	48	222.5	6,365	270	1249	35.55
10	58.88	1,837	49	227.1	6,495	280	1296	36.85
11	62.39	1,928	50	231.7	6,630	290	1342	38.18
12	66.00	2,020	55	254.8	7,238	300	1388	39.50
13	69.70	2,120	60	277.8	7,896	310	1434	40.80
14	73.50	2,219	65	300.8	8,554	320	1480	42.12
15	77.31	2,323	70	323.8	9,912	330	1527	43.45
16	81.21	2,434	75	347.0	9,870	340	1574	44.75
17	85.22	2,540	80	370.2	10.53	350	1620	46.10
18	89.32	2,664	85	393.3	11.19	360	1666	47.40
19	93.43	2,755	90	416.5	11.85	370	1712	48.70
20	97.64	2,870	95	439.5	12.51	380	1759	50.00
21	101.8	2,984	100	462.6	13.16	390	1805	51.35
22	106.1	3,100	105	485.8	13.82	400	1851	52.65
23	110.4	3,215	110	509.0	14.47	450	2082	59.25
24	114.7	3,335	115	532.1	15.14	500	2314	65.80
25	119.0	3,455	120	555.3	15.80	550	2545	72.40
26	123.4	3,575	125	578.5	16.45	600	2777	79.00
27	127.8	3,695	130	601.6	17.11	650	3008	85.60
28	132.3	3,820	135	624.7	17.76	700	3239	92.20
29	136.7	3,945	140	647.9	18.43	750	3471	98.80
30	141.1	4,070	145	671.1	19.08	800	3702	105.3
31	145.5	4,195	150	694.2	19.75	850	3934	111.9
32	149.9	4,320	155	717.2	20.40	900	4165	118.5
33	154.4	4,445	160	740.4	21.05	950	4396	125.0
34	158.9	4,570	165	763.4	21.72	1000	4628	131.6
35	163.4	4,695	170	786.6	22.38			
36	167.9	4,825	175	809.7	23.03			
37	172.4	4,955	180	832.9	23.70			
38	176.9	5,080	185	856.1	24.35			
39	181.4	5,205	190	879.3	25.00			
40	185.9	5,355	195	902.5	26.67			

cSt = CENTISTOKES 40°C

SUS = SAYBOLT INTERNATIONAL 100°F

E° = ENGLER 50°C