

lubrication systems



# PAPAOPAG PNEUMATIC PUMPS

for progressive systems

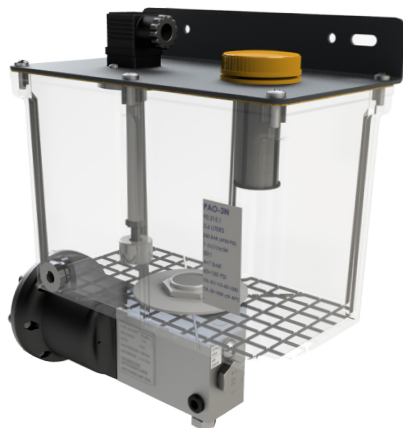


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All ILC products must only be used for their intended purposes, as specified in this brochure and in all instructions. If the product is supplied together with user instructions, the user is required to read them and comply with them. Not all lubricants are suitable for centralised lubrication systems. ILC lubrication systems or relative components cannot be used together with gas, liquid gas, pressurised gas in solution and liquids with vapour pressure exceeding normal atmospheric pressure (1013 bar) by more than 0.5 bar, maximum temperature permitted. Any type of dangerous materials, in particular those classified as such by European Community Directive (EC) 67/548/EEC, Article 2 (2), can only be used in ILC centralised lubrication systems or relative components upon consultation with ILC and after having received written approval from the company.

PA



PAO (oil) and PAG (grease) series pumps are pneumatically activated and are installed on systems that are provided with progressive dividers.

The pumping unit, which has a fixed or variable flow rate, is assembled under a plastic or metal tank having a capacity ranging between 4 and 12 litres (for oil) and 2.5/10 kg (for grease).

Below is a list of codes to use when ordering the pumping unit without a tank.

#### PA = fixed flow rate

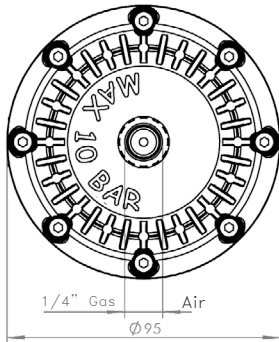
Code	Flow rate
90.300.1	1 cm <sup>3</sup> /cycle
90.300.2	1.5 cm <sup>3</sup> /cycle
90.300.3	2 cm <sup>3</sup> /cycle

#### PA = adjustable flow rate

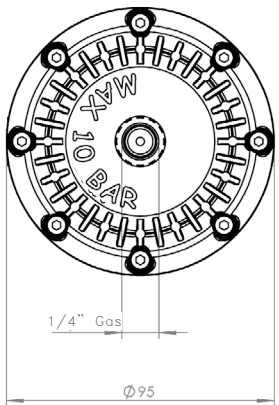
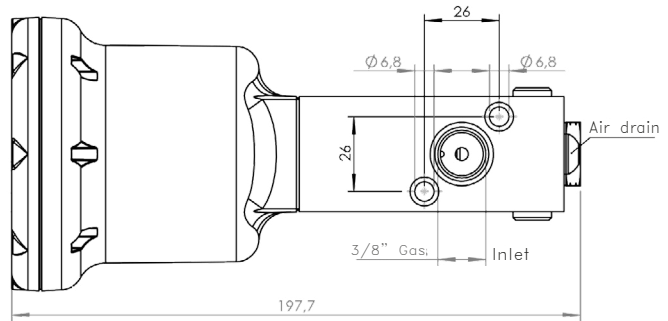
Code	Flow rate	A (fig.1)
90.300.0	0.3 cm <sup>3</sup> / cycle	9.5 mm
	1 cm <sup>3</sup> / cycle	16 mm
	1.5 cm <sup>3</sup> /cycle	24 mm
	2 cm <sup>3</sup> / cycle	29.5 mm

#### Technical data

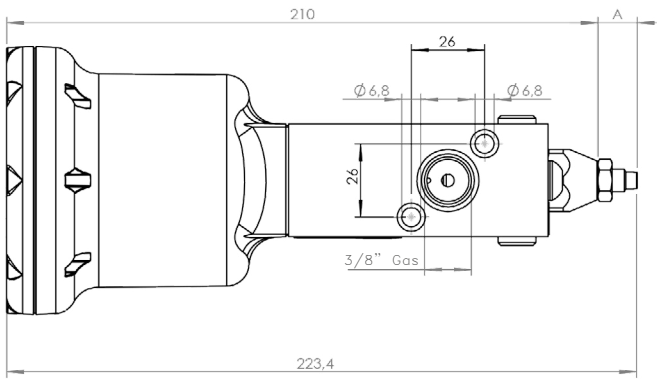
Flow rate	Fixed or adjustable
Operating pressure	350 Bar (4950 PSI)
Ratio	50:1
Inlet air pressure	FROM 4 Bar (57 PSI) TO 7 Bar (114 PSI)
Temperature	FROM -10 °C TO +80 °C
Delivery fitting	1/4" GAS
Cycles/minute	10 Max (Oil) 4 Max (grease)
Lubricants	Oils 50 – 1000 cSt 40°C Grease Max NLGI 3
Assembly	Vertical
Electric level	1 A - 150 V AC/DC - 20 W



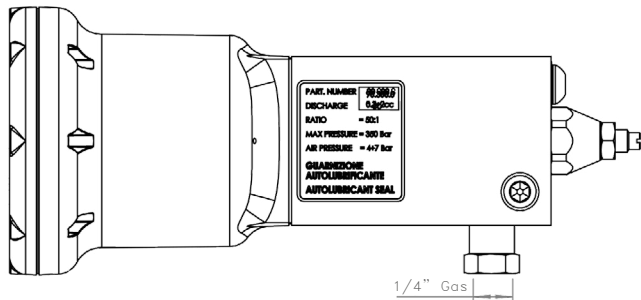
fixed flow rate



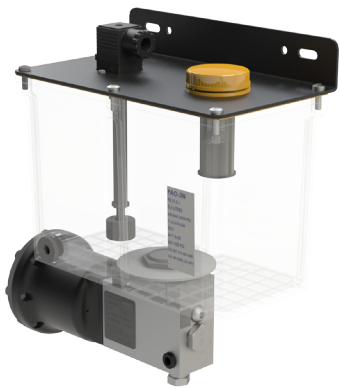
adjustable flow rate



(fig.1)



PAO



*plastic tank*



*metal tank*

PAO pneumatic pumps are intended for the provision of oil lubrication systems where progressive dividers are installed.

The pump is installed in the lower part of the tank and its piston is activated by the inflow of compressed air during the pumping phase. The piston only goes back to its original position, by means of a spring, by removing the air used to position it. They are also equipped with a minimum level indicator and cap with inlet filter.

**PAO with a plastic tank**

4 Litres	6 Litres	Flow rate
90.315.1	90.317.1	1 cm <sup>3</sup> / cycle
90.315.2	90.317.2	1.5 cm <sup>3</sup> /cycle
90.315.3	90.317.3	2 cm <sup>3</sup> / cycle
90.315.4	90.317.4	adjustable

**Overall dimensions (mm)**

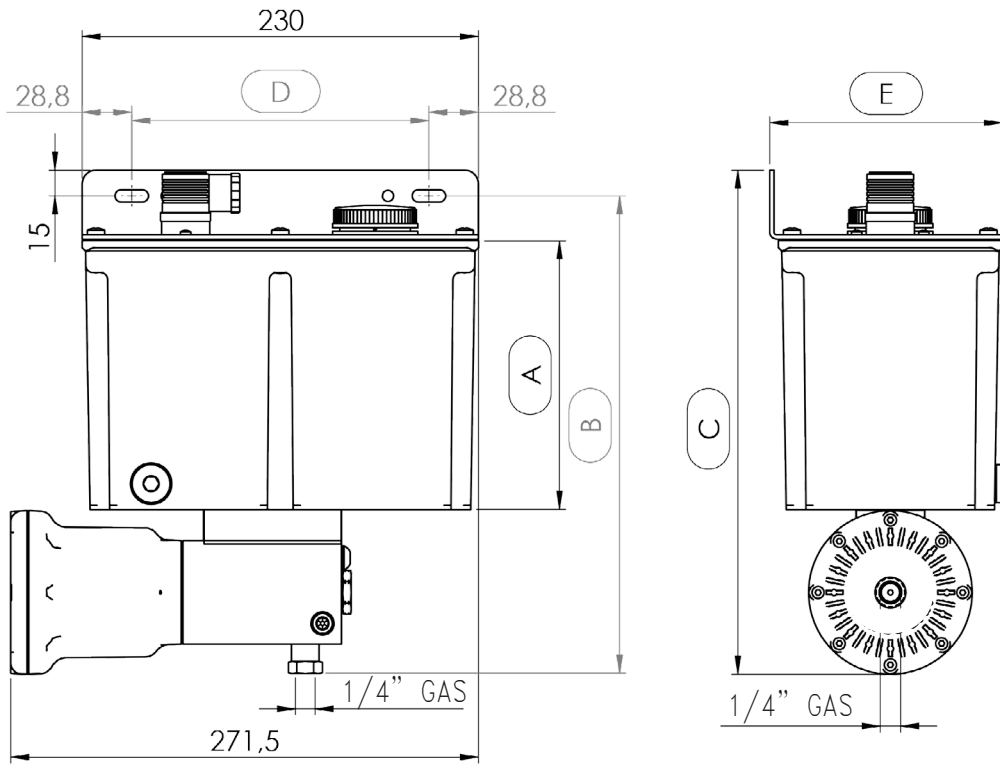
Tank	A	B	C	D	E
4 L	155	181	290.5	172	135
6 L	250	276	385.5	172	135

**PAO with a metal tank**

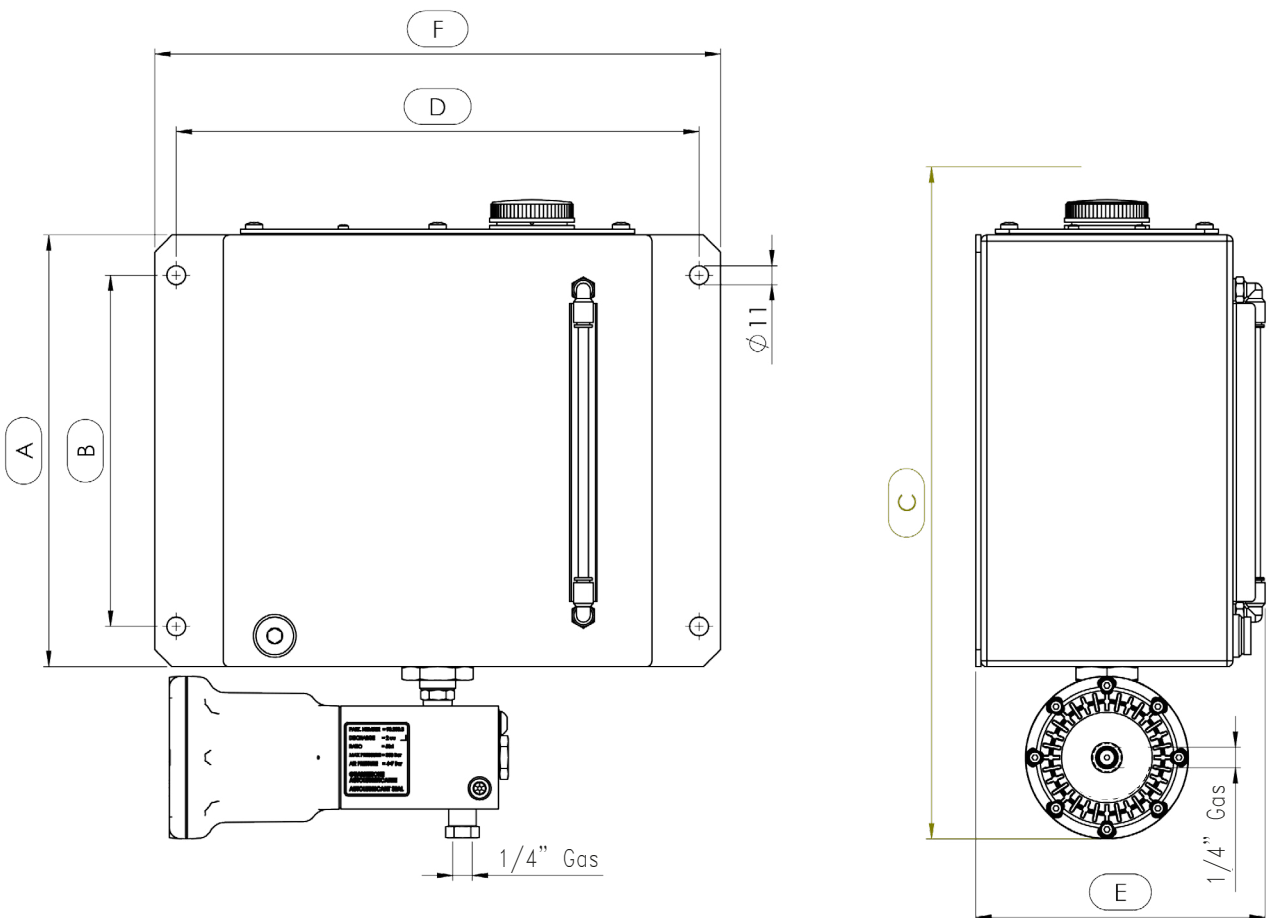
5 Litres	8 Litres	12 Litres	Flow rate
90.314.1	90.316.1	90.317.5	1 cm <sup>3</sup> / cycle
90.314.2	90.316.2	90.317.6	1.5 cm <sup>3</sup> /cycle
90.314.3	90.316.3	90.317.7	2 cm <sup>3</sup> / cycle
90.314.4	90.316.4	90.317.8	adjustable

**Overall dimensions (mm)**

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



PAO 4-6 Litres (plastic)



PAO 5-8-12 Litres (metal)

PAG



*plastic tank*



*metal tank*

PAG pneumatic pumps are intended for the provision of grease lubrication systems where progressive dividers are installed.

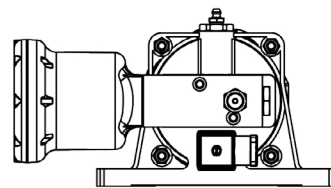
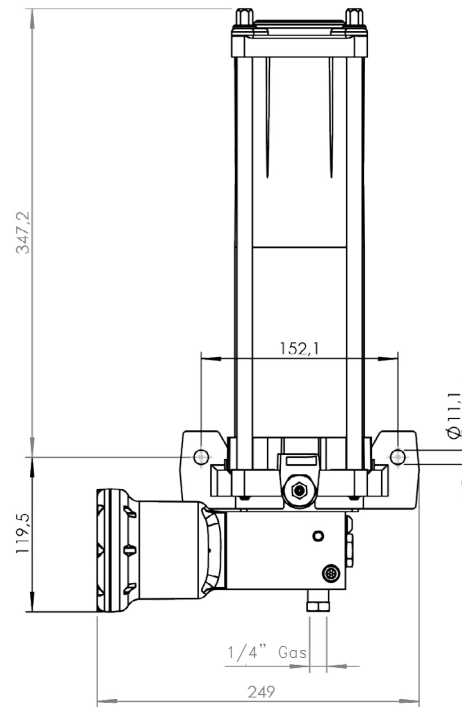
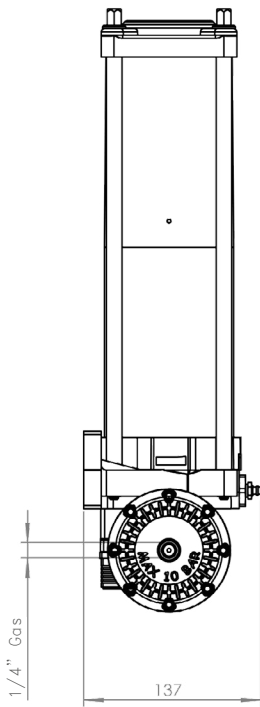
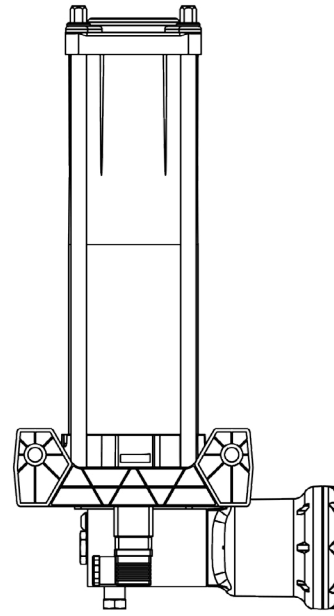
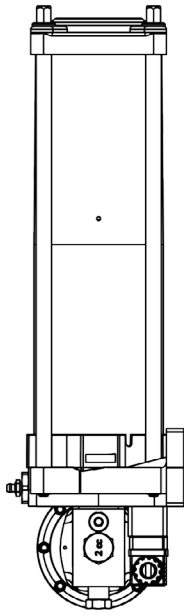
The pump is installed in the lower part of the tank and its piston is activated by the inflow of compressed air during the pumping phase. The piston only goes back to its original position, by means of a spring, by removing the air used to position it. They are also equipped with a minimum level indicator and filling grease nipple.

**PAG with a plastic tank**

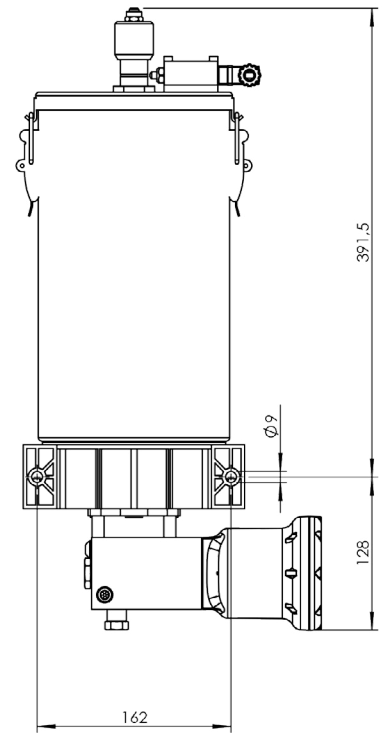
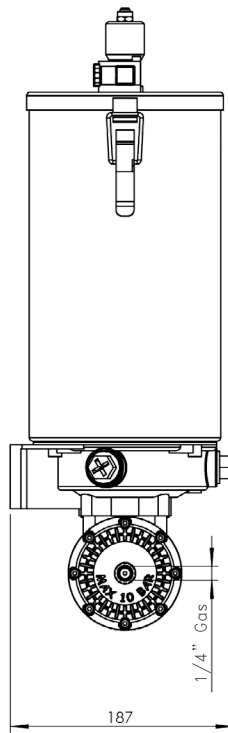
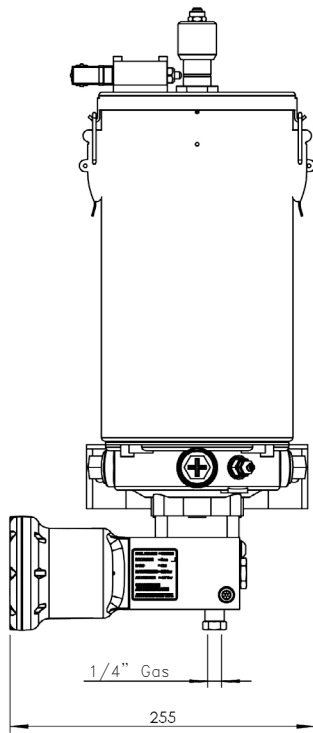
2.5 Kg	Flow rate
90.304.1	1 cm <sup>3</sup> / cycle
90.304.2	1.5 cm <sup>3</sup> /cycle
90.304.3	2 cm <sup>3</sup> / cycle
90.304.4	adjustable

**PAG with a metal tank**

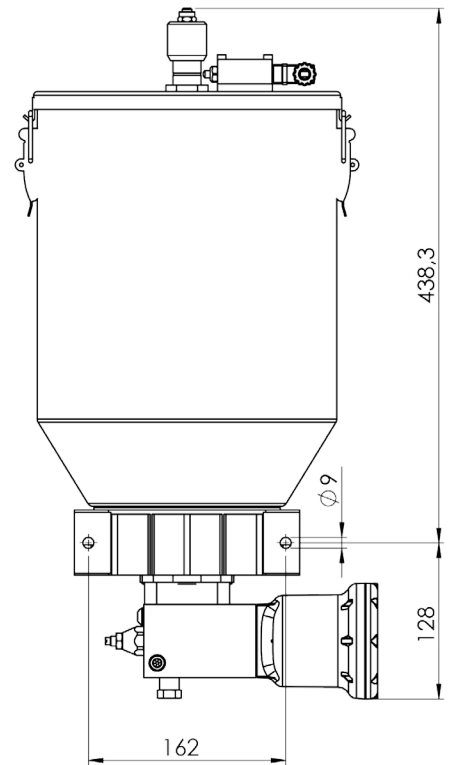
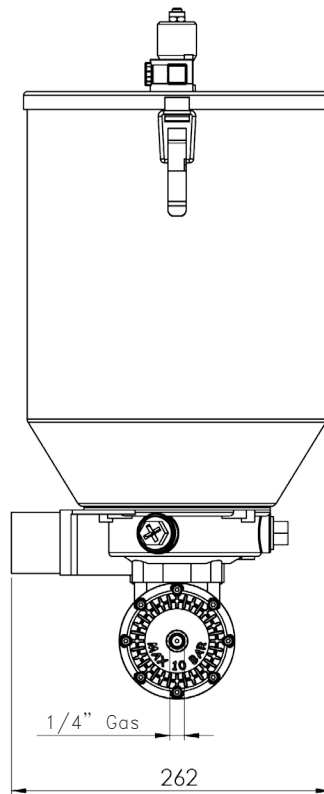
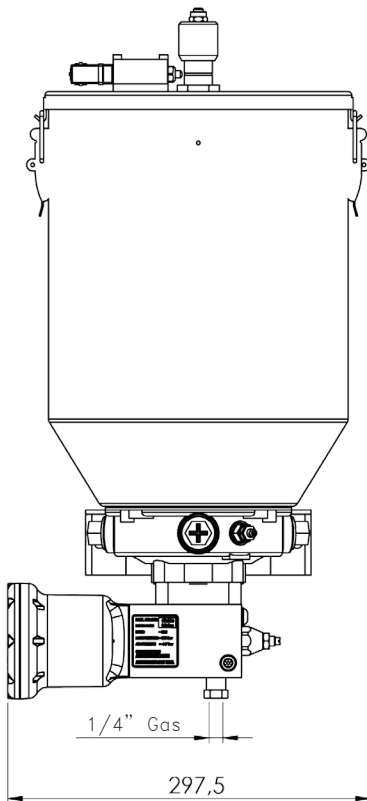
5 Kg	10 Kg	Flow rate
90.311.3	90.311.6	1 cm <sup>3</sup> / cycle
90.311.4	90.311.7	1.5 cm <sup>3</sup> /cycle
90.311.5	90.311.8	2 cm <sup>3</sup> / cycle
90.311.2	90.311.9	adjustable







PAG 5 Kg (metal)



PAG 10 Kg (metal)