

**FUNCTION-APPLICATIONS**

This oil-pneumatic device transforms a low pneumatic pressure (5 to 10 bar) into a high hydraulic pressure (>100 bar) and is suitable for use in operating low-travel clamping / gripping actuators.

Two models are available featuring 70 and 150 cm<sup>3</sup> of useful pressurised oil capacity.

**OPERATING PRINCIPLE**

Air pressure entering a piston causes movement of the piston rod in an oil-filled chamber. This causes the oil to reach a high pressure corresponding to the pneumatic pressure **multiplied** by the ratio of the areas of the piston and the piston rod (corresponding, in this product, to a gain factor of **20**). The device is single-acting with cut-off of the oil pressure on cut-off of the air pressure and return to the rest position by a return spring.

**SPECIFICATIONS**

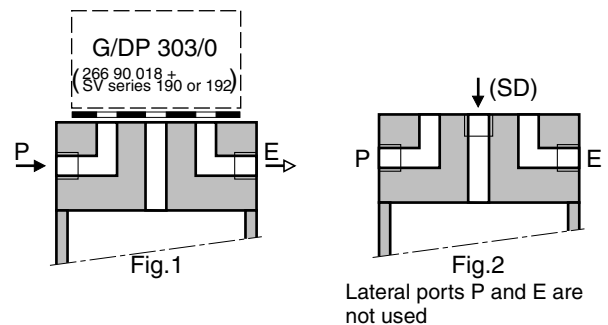
CONTROL FLUID : filtered neutral air or gas, with or without lubrication  
 CONTROL PRESSURE : 10 bar max.  
 OUTLET FLUID : SAE 10 oil  
 TEMPERATURE RANGE : +10°C to +40°C

**CONSTRUCTION**

Tube : hard anodised aluminium alloy  
 Piston rod : hardened chrome-plated steel (in 70 cm<sup>3</sup> version)  
 : hard chrome plated steel (in 150 cm<sup>3</sup> version)  
 Piston : steel and light alloy  
 Seals : NBR (nitrile), PUR (polyurethane) and TPE (thermoplastic polyester elastomer)  
 Hydraulic sealing : metal/metal (70 cm<sup>3</sup>) , metal-elastomer (150 cm<sup>3</sup>)  
 Hydraulic liner : perlitic cast iron  
 Ends : light alloy  
 Tiroids : steel  
 Oil reservoir bowl : polycarbonate (PC)  
 Oil reservoir filter : stainless steel  
 Springs : steel, quality II DIN 17223

The pressure booster is designed to be supplied in two alternative manners:

- Direct connection, at the upper end, to a 3/2 poppet type solenoid/air operated control valve, of the CNOMO 06.05.82/83, pad-mounting design, type G/DP 303/O, code **266 90 018** <sup>(1)</sup> + a series 190 or 192 pilots (see leaflet **P529**) with G1/2 pressure (P) and exhaust (E) ports on the sides (Fig.1).
- Direct connection to the pneumatic signal via the G1/2 port at the centreline of the upper end (SD) (Fig.2).



**SPECIFICATIONS**

Piston dia. (mm)	Useful capacity (cm <sup>3</sup> )	Air consumption at 6 bar per cycle l/min (ANR)	CONNECTION		PRESSURE BOOSTER CODE
			pneumatic (top)	hydraulic (bottom)	
125	70	10.3	CNOMO pad mounting 06.05.82/83	G1/4	<b>43331439</b>
			G1/2		<b>43331738</b>
	150	21.4	CNOMO pad mounting 06.05.82/83	G1/4	<b>43331438</b>
			G1/2		<b>43331737</b>

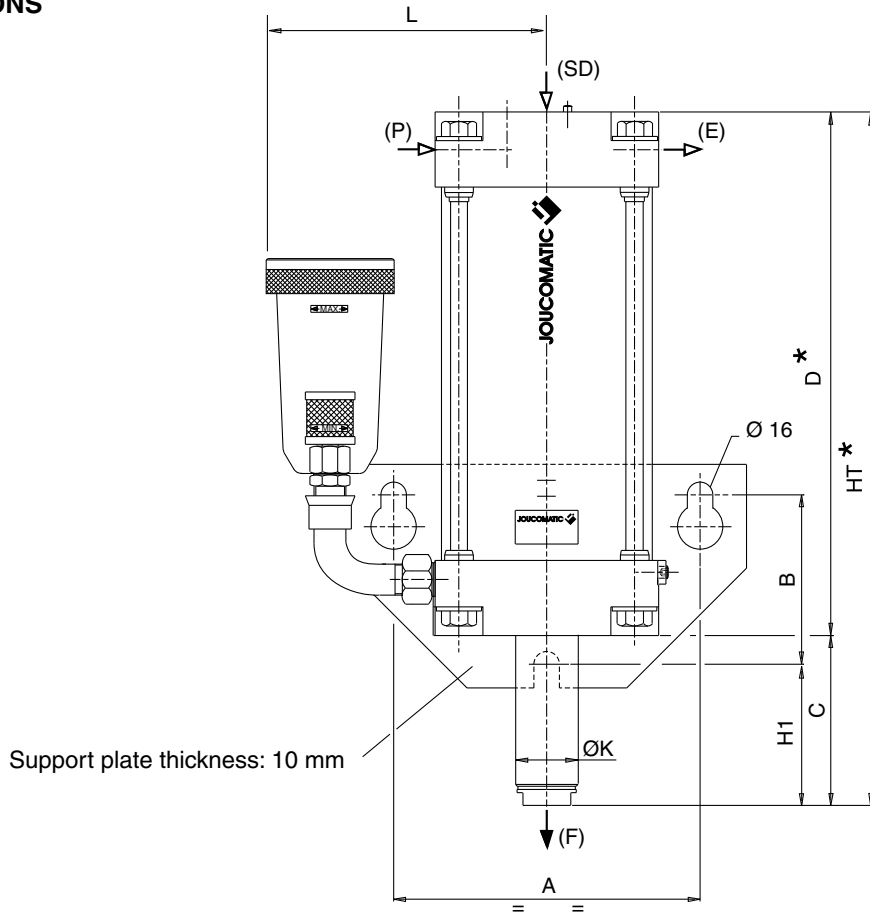
(1) Control valve and pilot valve are to be ordered separately from the intensifier, stating the quality and code of each component + the nature and voltage of the power supply. These are supplied uninstalled.

**OPTIONS**

- Pressure-booster with epoxy tube
- Pressure-booster with device enabling symmetric mounting relative to the standard version (oil reservoir bowl and pressure port (P) on right + central supply port (SD), G1/2)
- Pressure-booster without oil reservoir (for centralised supply)



**DIMENSIONS**



Nominal diameter (mm)	Capacity (cm <sup>3</sup> )	Port connection		DIMENSIONS (mm)								
		(P)-(E) (SD)	(F)	A	B	C	D*	H1	HT*	L	ØK	total thickness
125	70	G 1/2	G 1/4	192	106	107	327	88,5	434	166	39	150
	150	G 1/2	G 1/4	192	106	235	531	216,5	766	166	39	150

\* + 155 mm for GDP 303/O control valve

The optional symmetrical arrangement intensifier has three mounting holes at the front making it possible to turn the intensifier through 180° on the support plate.