

APPLICATION

Single & double-acting Positioner, input signal 4÷20mA or 0.2÷1bar for proportional control of rotary actuators. The positioner operates on the force-balance principle by comparing the standard signal transmitted from a pneumatic or an electronic controller device and the angular rotation of the stem, and conveys a positioning amplified pressure to the valve actuator.



FEATURES

Good dynamic response
adjustable High air flow capacity
Reverse action
Span adjusting over 50% of F.S.
Zero and Span adjustment (independent)
Split-Range operation
Direct and axial coupling to the actuator stem
Adjustable NAMUR standard bracket
3D position indicator
Very compact design
Insensitive to pressure variations

VALVE SPEED ADJUSTMENT

With splitted opening/closing speed adjustment should be made by simply turning a screw.

VALVE SPEED ADJUSTMENT

Positioners are able to regulate in independent easy way the opening and closing speed of the valve.

Acting on the "A" & "B" screws (see fig. 2 & fig.3) is possible obtain the following conditions :

- Fast opening / Slow closing
- Fast opening / Fast closing
- Slow opening / Fast closing
- Slow opening / Slow closing

This characteristic permit to solve problems like :
waterhammer, hunting, etc....

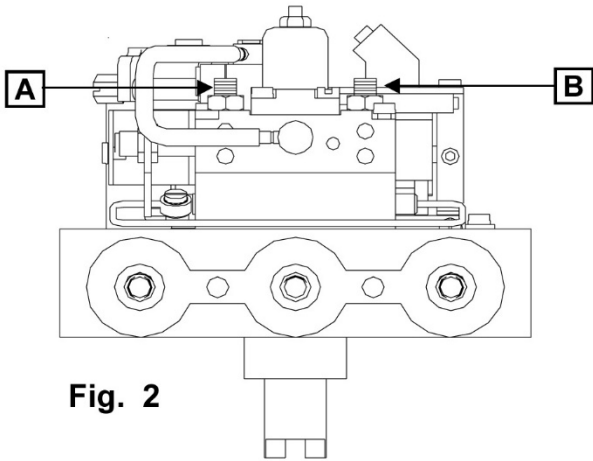


Fig. 2

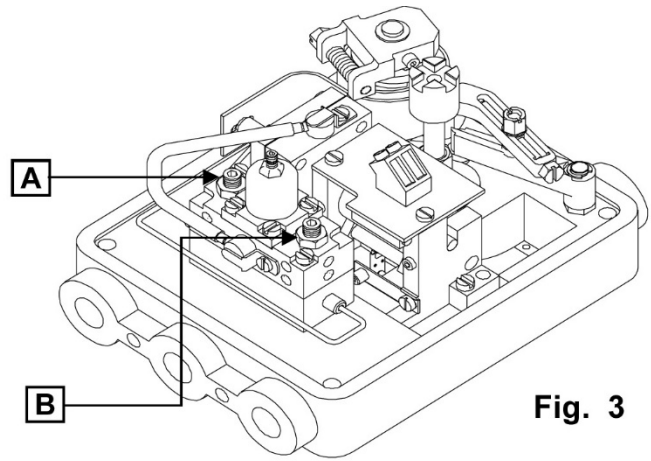


Fig. 3

MOUNTING BRACKET (VDI/VDE 3845)

The positioner are equipped whit bracket. It is suitable for any actuator (NAMUR std.), just changing the position of fixing screws.

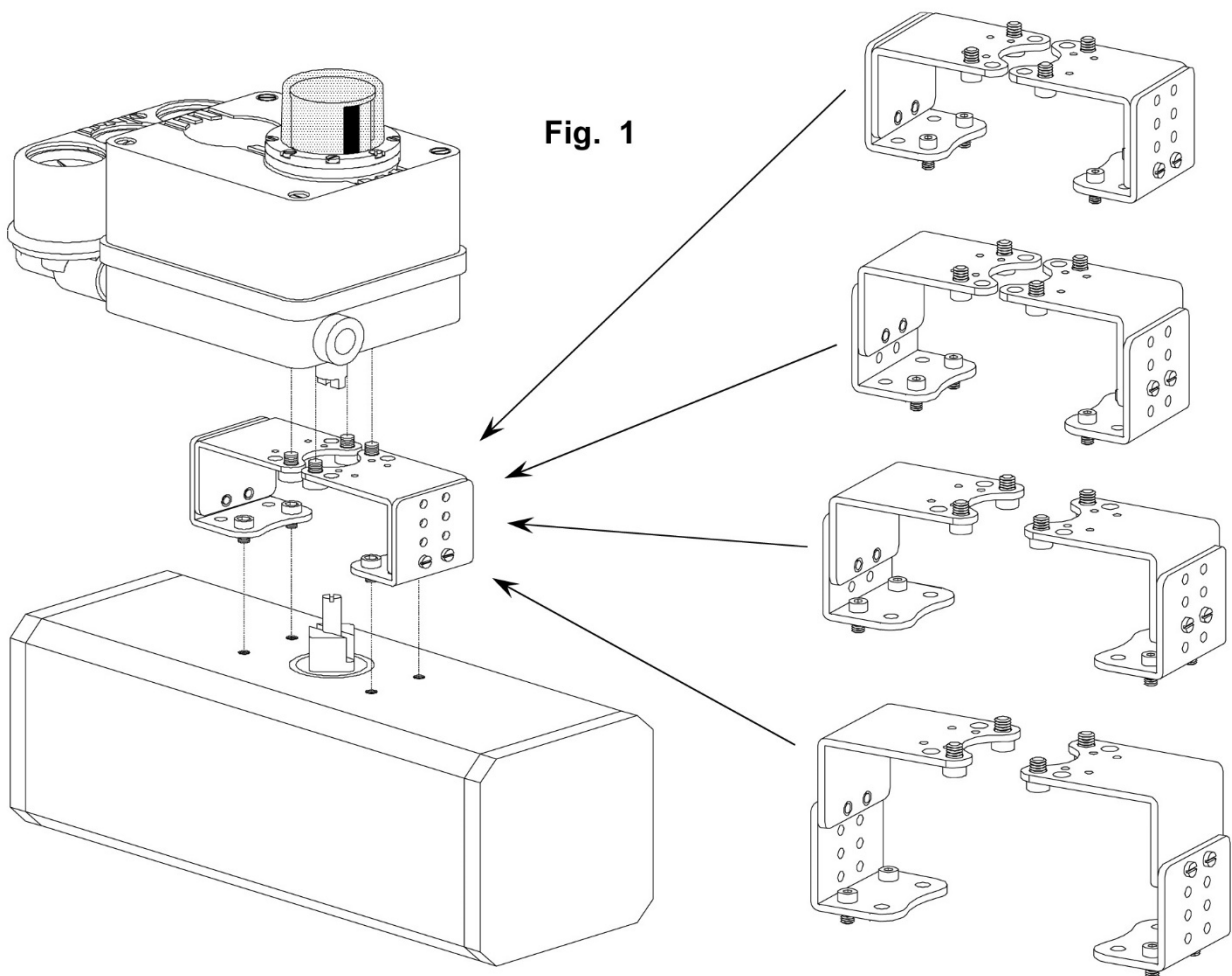


Fig. 1

ROTATION REVERSING

The std configuration of our positioner is for anti-clockwise rotation (see fig.4). To have the clockwise rotation you have to rotate the cam wheel as the arrow on Fig.5 and hold the bearing on "D" position.

Fig. 4

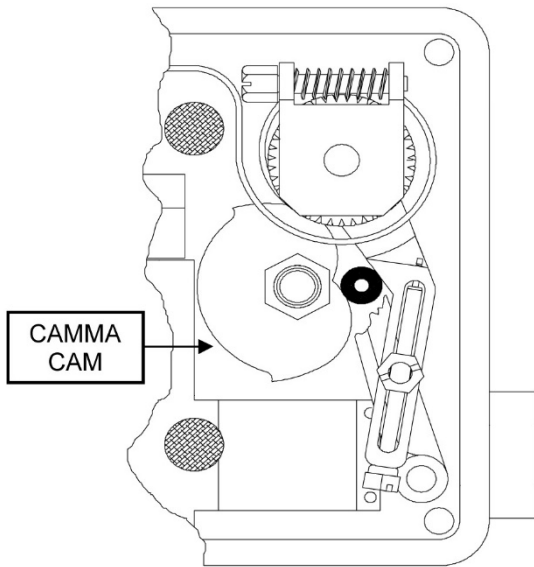
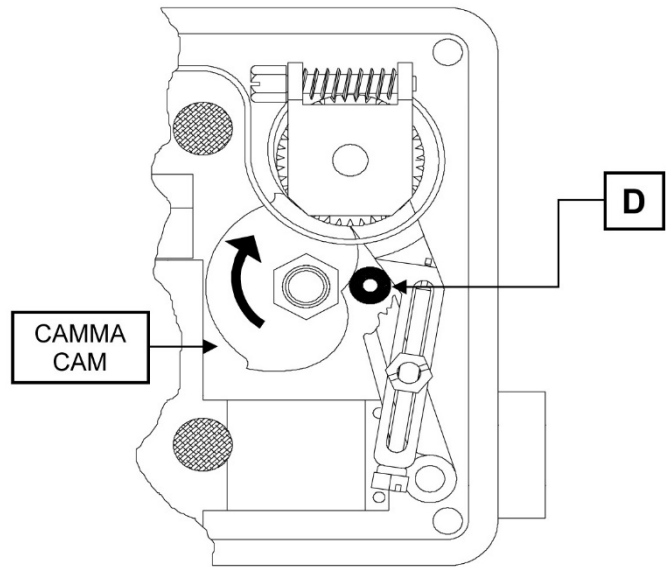
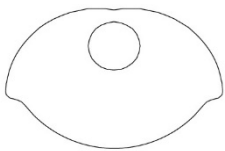


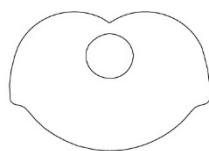
Fig. 5



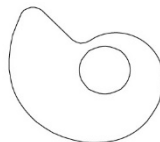
AVAILABLE CAM



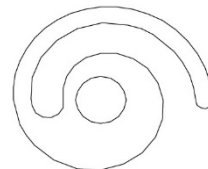
CAMMA 20°/30°
20°/30° CAM



CAMMA 60°/90°
60°/90° CAM



CAMMA 180°/270°
180°/270° CAM

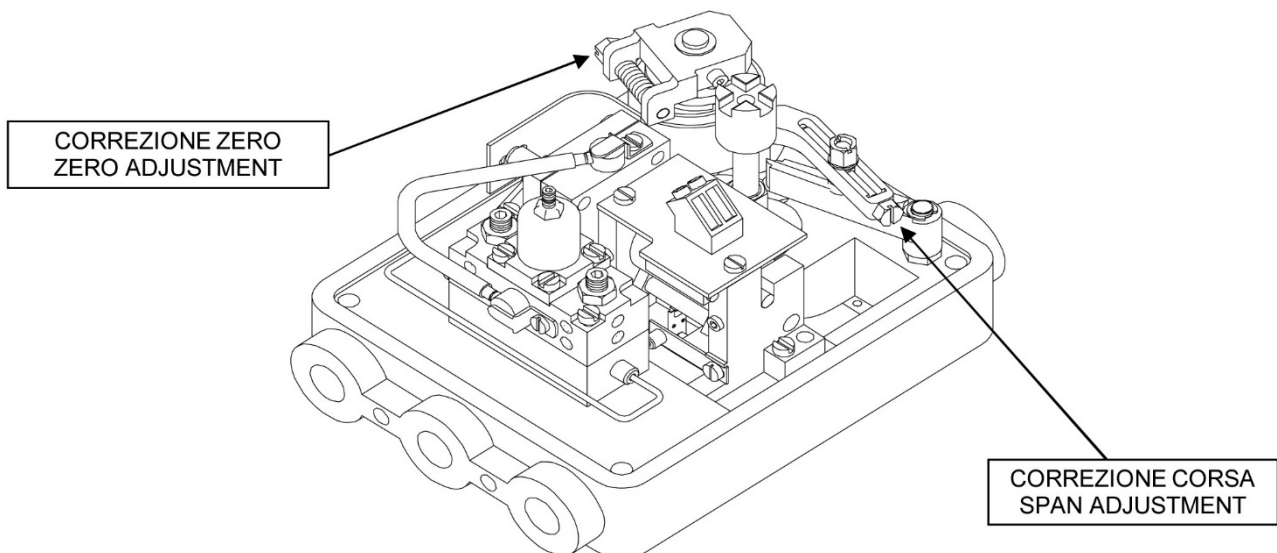


CAMMA 360°
360° CAM



CAMMA eqp 90°
90° eqp CAM

INDEPENDENT SPAN AND ZERO ADJUSTMENT



ACCESSORIES

One of the main feature of positioner is the modular design that permit to use in the same time different combinations, like limit switches, 4÷20 mA position transmitter, 3D position indicator

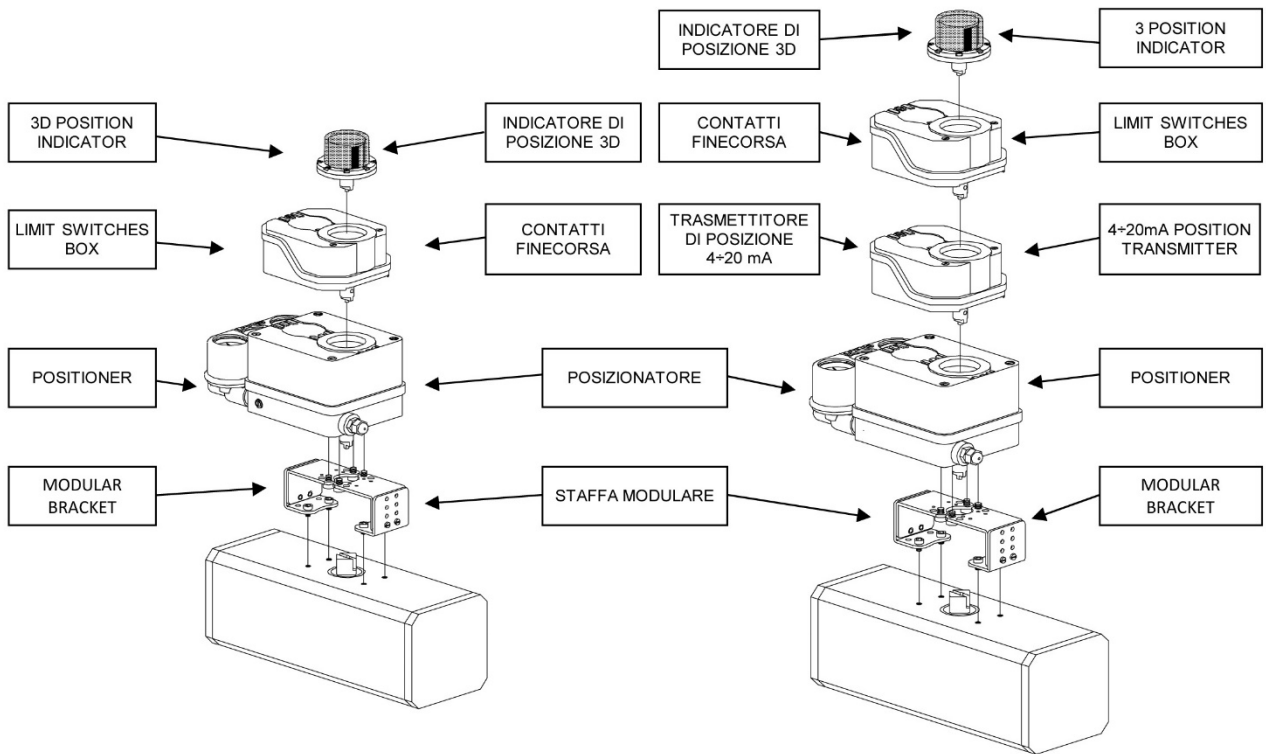


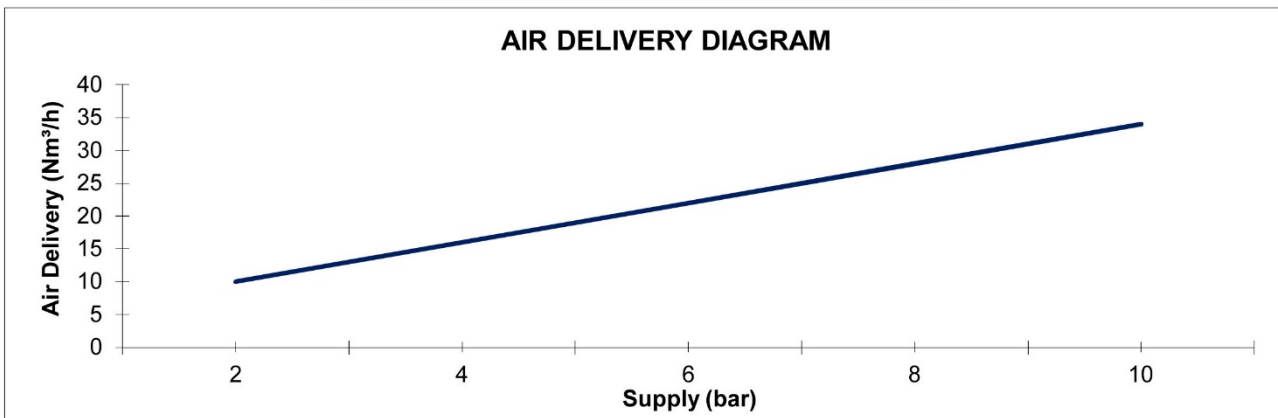
Fig. 6

Fig. 7

Limit switches (electric, inductive or pneumatic) box (PTL7)
Position transmitter, 4+20mA (PTL7)
Gauges for indication of outputs and supply air

AIR DELIVERY

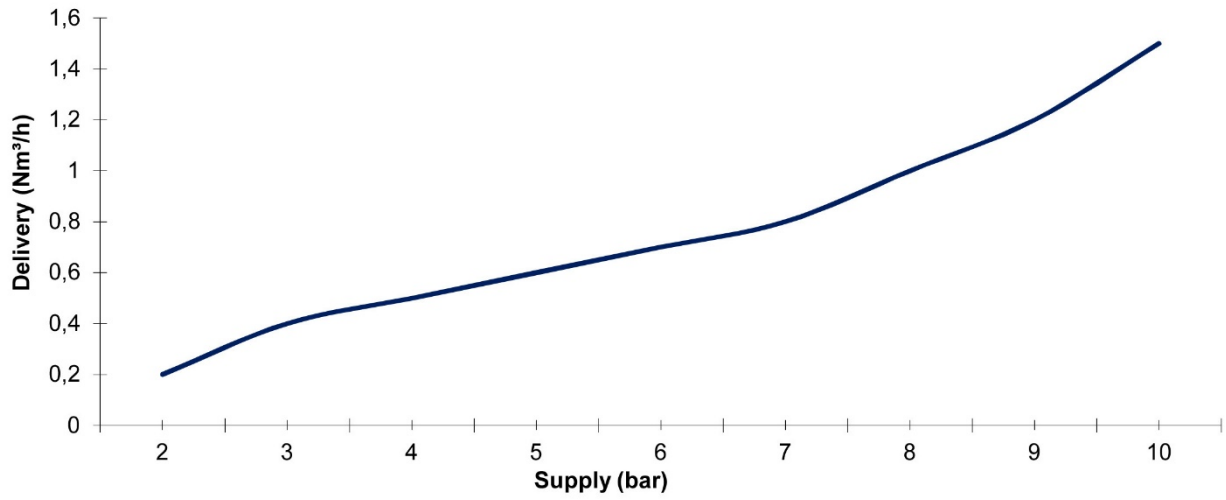
Test effected with pipe 6 x 8 mm	
4 BAR SUPPLY	adjustable from 1 to 16 Nm ³ /h
6 BAR SUPPLY	adjustable from 1 to 22 Nm ³ /h
8 BAR SUPPLY	adjustable from 1 to 28 Nm ³ /h
10 BAR SUPPLY	adjustable from 1 to 34 Nm ³ /h



AIR CONSUMPTION

Test effected with pipe 6 x 8 mm	
4 BAR SUPPLY	max 0,4 Nm ³ /h
6 BAR SUPPLY	max 0,8 Nm ³ /h
8 BAR SUPPLY	max 1,0 Nm ³ /h
10 BAR SUPPLY	max 1,5 Nm ³ /h

AIR CONSUMPTION DIAGRAM



TECHNICAL DATA

MOUNTING		ISO recommended mounting bracket
CAM (Direct and reverse action)		0÷20° (*) 0÷60° (standard) 0÷90° (standard) 0÷180° (*) 0÷270° (*) 0÷360° (*) Equal percentage EQP (*) other cam (*)
PNEUMATIC CONNECTIONS		1/4" NPT
SUPPLY AIR PRESSURE		3... 10 bar
OUTPUT		0...100 % of the supply air pressure
REPEATIBILITY	R99P	≤ 0,1 % of full range
	R99E - PVP11BE.1	≤ 0.2 % of full range
HYSTERESIS	R99P	≤ 0,6 % of full range
	R99E - PVP11BE.1	≤ 1 % of full range
NON LINEARITY	R99P	≤ 1,7 % of full range
	R99E - PVP11BE.1	≤ 2 % of full range
PROTECTION CLASS		IP55
WEIGHT WITH GAUGES		≈2,4 Kg
AMBIENT TEMPERATURE	R99P	-40...+80 °C
	R99E - PVP11BE.1	-40...+70 °C
STORAGE TEMPERATURE		-40...+80 °C
INPUT	R99P	3÷15 Psi (0,2÷1 bar) other input (*)
	R99E - PVP11BE.1	4 ÷ 20 mA other input(*)
ELECTRIC CONNECTIONS (R99E and PVP11BE.1)		Cable gland PG9 other connections (*)
Ui		≤ 30 V
Ii		≤ 150 mA
Pi		≤ 0,80 W
Impedance		Max 250 Ω
Ci		≈ 0 (negligible)
Li		≈ 0 (negligible)

(*) on request