EPC 010

ELECTRONIC POSITION CONTROLLER

PNEUMATIC DIVISION

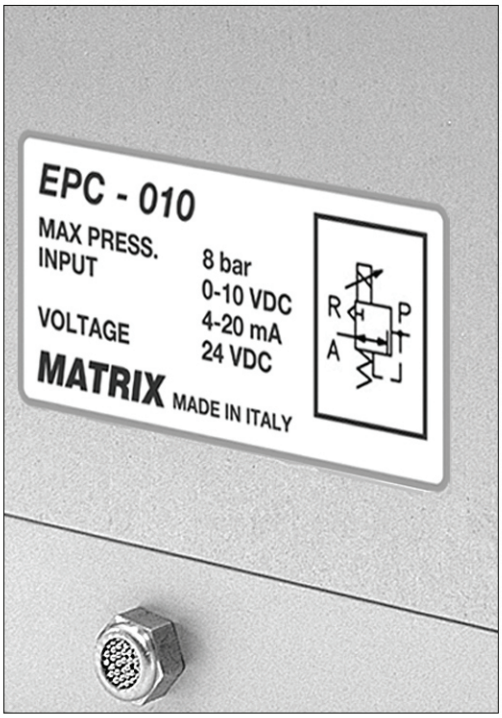
MATRIX
mechatronics

EPC 010 - ELECTRONIC POSITION CONTROLLER

Position controller made for connecting directly to single-acting actuators (ball-valves, butterfly valves, poppet / angle valves, regulators, single-acting linear cylinders, etc.). Closed loop actuation with standard electronic pilot signlas. Suitable for two/three way free-flow proportional pneumatic valve with position control by displacement transducer and linear actuators single/double acting with internal/external transducer/potenziometer.

GENERAL CHARACTERISTICS

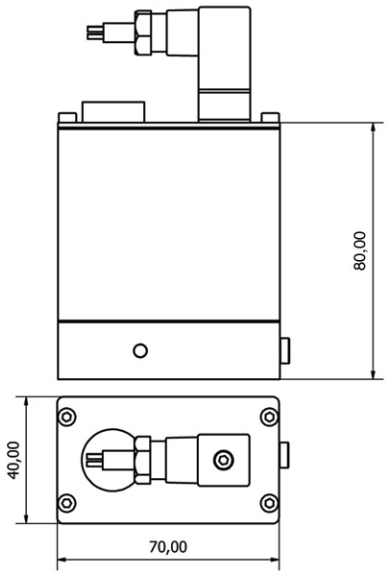
Dimensions	-	80 x 70 x 40 mm
Weight	-	440 g
Degree of protection	-	IP65
Pneumatic connections	-	G 1/8
Operating temperature	-	-10 to +50 C°
Handled fluid	-	Filtered, non-lubricated and dry air
Degree of filtration	-	50 µ
Supply voltage	-	24 Vdc ± 10%
Maximum absorbed power	-	2 W
Input signal	-	4-20mA / 0-10 V
Maximum flowrate	-	60dm³/ min at 6 bar
Positioner working pressure	-	1 - 8 bar
Sensibility	-	< 1% E.S.
Linearity	-	< 1% E.S.
Hysteresis	-	< 1% E.S.
Repeatability	-	< 1% E.S.
Failsafe function	-	Return to original position



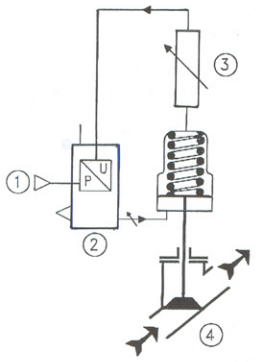
REGULATIONS

For the regulation of minimum and maximum position it's necessary to unscrew the two screws on the lower side and remove carefully the aluminium cover, pushing the displacement transducer connecting cable while taking off the printed circuit board, until it's possible to see the LED. Supply the positioner.
Start position regulation - Put the actuator on starting position (original position), give 0% input signal (4mA - 0V), rotate the TR1 trimmer ccw until the LED becomes red, rotate the TR1 trimmer cw until the LED becomes green.
End position regulation - Give 100% input signal (20mA - 10V), rotate the TR2 trimmer ccw until the LED becomes red, rotate the TR1 trimmer cw until the LED becomes green. Reinstall the aluminium cover and fasten it with the screws.

GENERAL DIMENSIONS



TYPICAL APPLICATION



1. Pneumatic connection 6/8 bar
2. EPC010 positioner 0-10V / 4-20 mA
3. Displacement transducer
4. Pneumatic valve