Proportional Control in Pneumatic Piston Valves

NORMALLY CLOSED

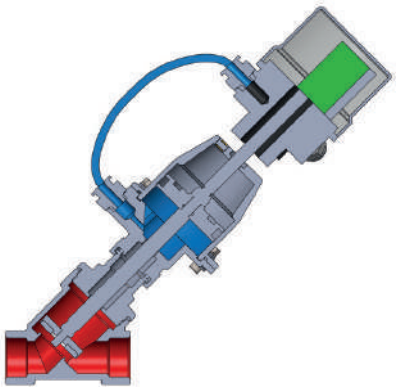
Application Areas

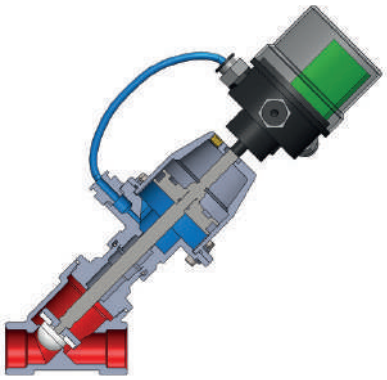
Water, Air, Vapour, Gas, Chemicals, Petrol Products, Food, Pharmaceutical, Sterilized Environment, Refining, Dye Machines, Packaging Machines, Drinking Water Station, Vacuum Applications, Oil, Petrol, Alcohol, Hydraulic Oil, Salt Water, Natural Gas, Acid

TORK Pneumatic Piston Valves can be controlled proportionally. In proportional valves, the orifice shaft sit is made in a special form. Therefore, it should be stated that the valve will be used proportionally in the orders.

Technical Features

Pilot Air Pressure : 4-8 bar
Environment Temperature : 0...50 °C
Electrical Protection Voltage : IP66 (EN 60529)
Setpoint : O-10 V
Current Setpoint : 4-20 mA
Supply Voltage : 24 VDC 10%
Coupling Connection Dimensions : G 1/8″





PPR80 Serie Proportional Piston Valves (Normally Closed)

Connection Size	Orifice Size	Working Pressure*		Actuator Type	KV	Fluid Temperature		Seal	Valve Type/ Order No	Weight
G″ (BSP)	mm	mm min	mm max	mm	lt/min	°C min	°C max		PP1080	kg
1/2″	15	-1	16	63	98	-10	180	PTFE	PP1080.03	2.800
3/4″	20	-1	12	63	170	-10	180	PTFE	PP1080.04	3.000
1″	25	-1	8	63	305	-10	180	PTFE	PP1080.05	3.300
1 1/4″	32	-1	12	80	460	-10	180	PTFE	PP1080.06	4.500
1 1/2″	40	-1	8	80	750	-10	180	PTFE	PP1080.07	5.850
2″	50	-1	6	80	1050	-10	180	PTFE	PP1080.08	6.350

For Proportional Control; Lineer Electro - Pneumatic Positioner

Type/ Order No	Description	Proportional Valve Type
PP 1080 Lineer Positioner	Input: 4-20mA 4-8 bar compressed supply air	It should be stated that the Proportional Valves will use proportionally.

* The maximum working pressure in the tables is given according to the pilot pressure of 6 bar.

Proportional Control in Pneumatic Piston Valves

- **Electrical waterproof connectors**
- **LED display**
- **Easy to start-up**

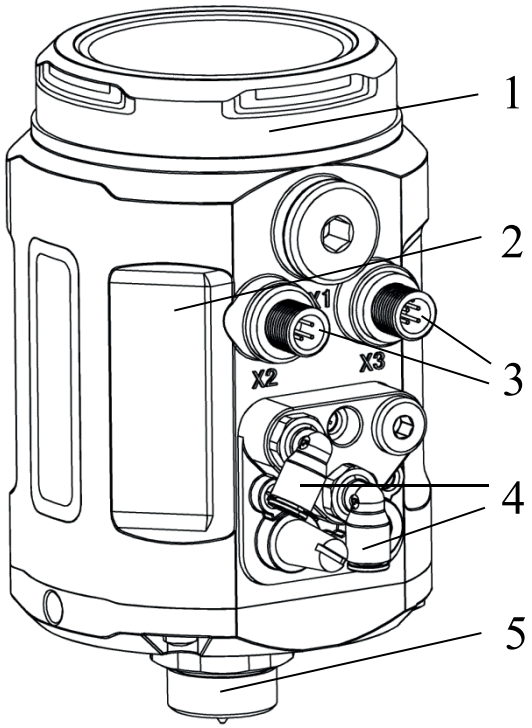
PP1080 series intelligent electropneumatic valve positioner is designed for integral pneumatic control valve, particularly suitable for angle seat valves and diaphragm valves.

The product is easy to operate. It can easily be operated via the keypad.

The positioner adjusts the valve position quickly and accurately through detecting the position sensor signal.

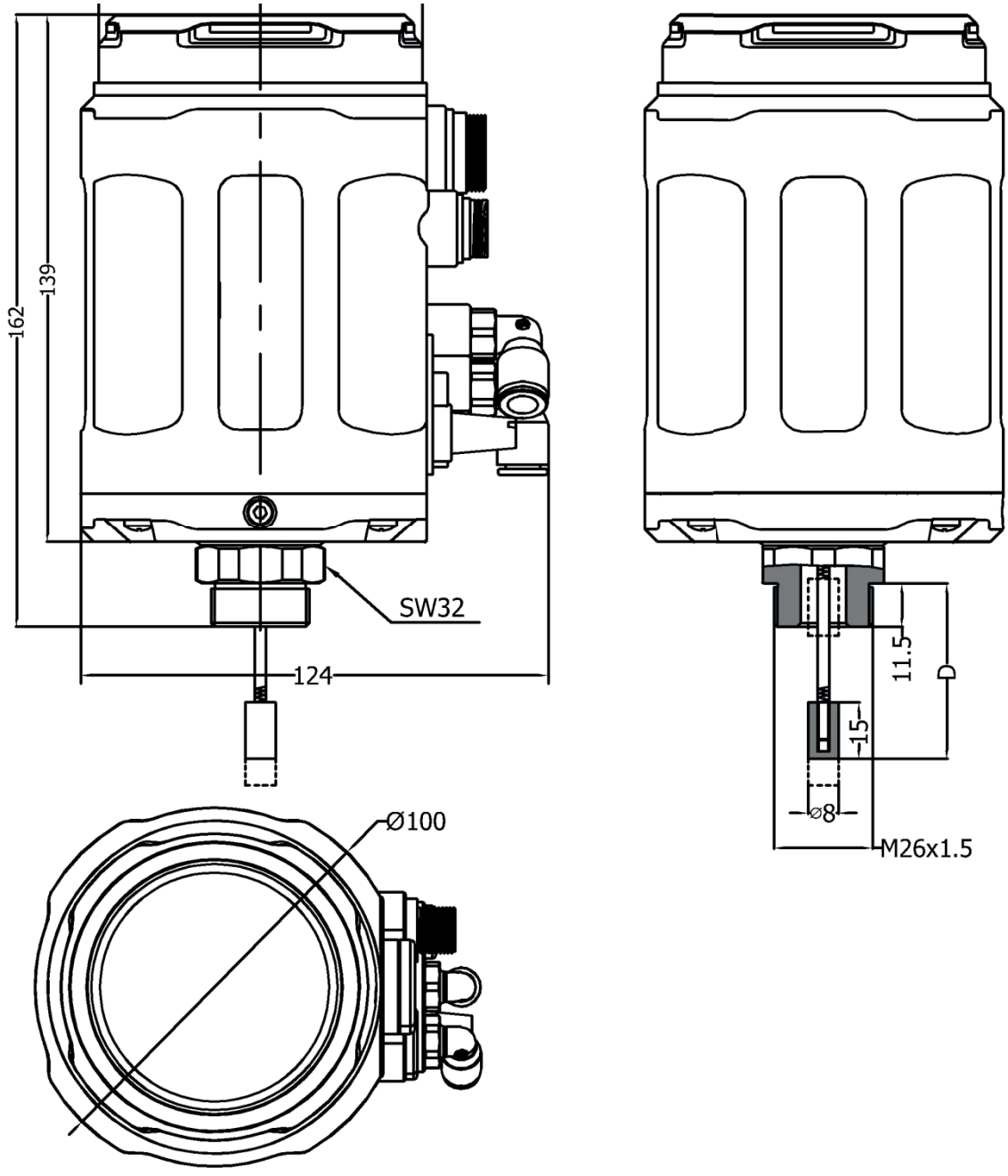
Technical data	
Material	PC、PA6-GF30、SI
Power supply	24V DC ±10%
Set-point signal	4 – 20 mA
Input resistance for set-point signal	120Ω
Control medium Dust concentration Particle density Pressure condensation point Oil concentration	neutral gases, air DIN ISO 8573-1 Solid particle size and density Class 3 Dew point Class 3 Oil content Class 3
Ambient temperature	0-70°C
Pneumatic connection	Plug-in hose connector G1/4(internal Φ6mm
Electrical connection	M12 3-pins B-coded (cable ø 4-6mm) M12 4-pins D-coded (cable ø 4-6mm)
Supply pressure	3~7 bar, specific values depending on the actuator
Air flow rate	17 l/min(input pressure of 0.6Mpa) 58 l/min(input pressure of 0.6Mpa ,only single-acting)
Stroke control range	Line 5-50mm Angle 90°
Installation	As required, Preferably with actuator in upright position, Screw
Protection class	IP66
Power consumption	<5W

Structure



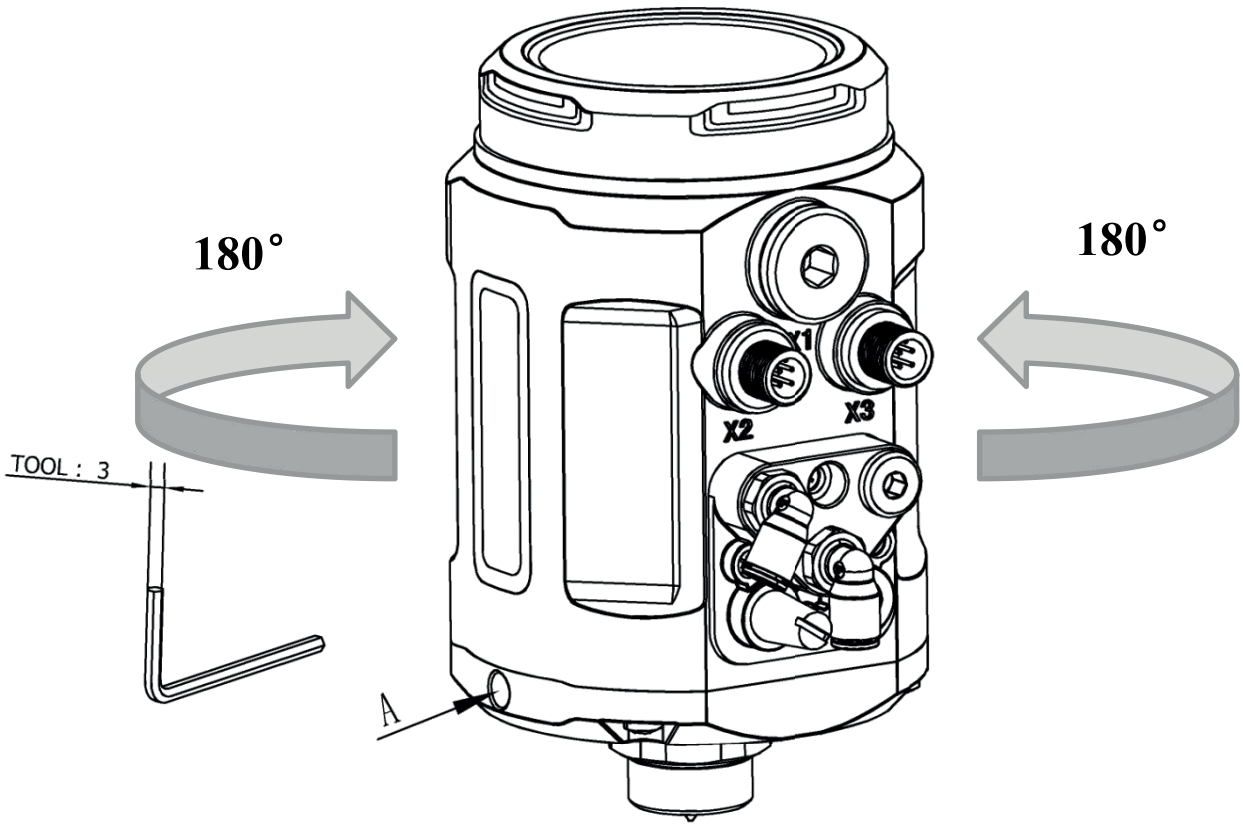
1. **Protective cover**
2. **Main body casing**
3. **Electrical connection**
4. **Pneumatic connection**
5. **Actuator connection**

Dimensions

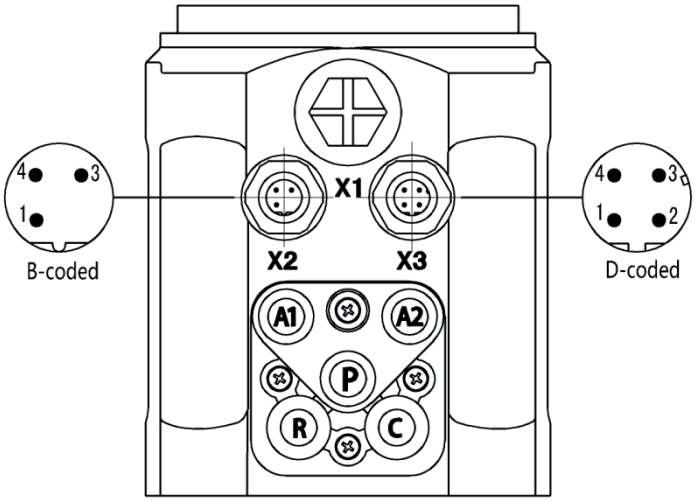


Interface angle adjustment

The angle can be adjusted between the positioner and the valve. If need to adjust the interface angle, relaxing the hexagon screw in place A first. Then adjusting the angle clockwise or counter-clockwise in 180° range. After adjusting the angle, locking the angle by the hexagon screw.



Electrical connections



X2(optional)		
Pin	Description	Signal type
1	Analogue signal output +	4 – 20 mA
3	Analogue signal output GND	GND
4	NC	NULL

X3		
Pin	Description	Signal type
1	Power supply +	+24 V
2	Power supply GND	GND
3	Set signal input +	4 – 20 mA
4	Set signal input GND	GND

Pneumatic connections

P	Air supply enter(built-in filter, filter size 5 μm)
R	Air exhaust
C	Check valve
A1	Pilot air outlet 1
A2	Pilot air outlet 2