

LEAD

IMC SOLUTIONS



LD180 Digital Positioner



The LD180 Series Digital valve positioner is a loop powered instrument.

As a control part of the pneumatic valve set, this positioner is widely used in petroleum, chemical, electric generation, metal production, light industry and other fields of automation systems. Intrinsically Safe or Explosion Proof can be used in hazardous locations.

The LD 180 Series Digital electro-pneumatic valve positioner accepts 4-20 mA valve setting signal from the control system; at the same time, it receives the actual valve signal through the local sensors; the two signals are compared by control software in order to control the feeding and exhaust of the air to the actuator, driving the valve to reach the set point.

The LD 180 Series positioner is based on microprocessor technology. It can overcome friction and the imbalance power on the control valve well, and improve the response speed of the control valve. This sets the position rapidly and accurately.

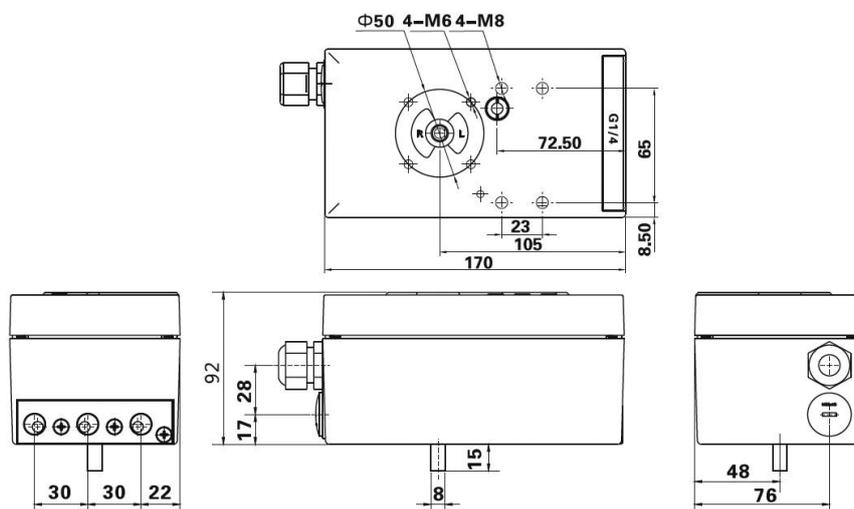
Key features and benefits

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|---|---|
| Compact design | Ultra low air consumption |
| Aluminum housing | Autotuning system for calibration |
| Intrinsically safe or Explosion Proof | Auto-diagnosis system |
| Heavy duty design | Suitable for: |
| High reliability | - Standard, offshore, sandstorm, copper |
| Integrated fail in place on loss of signal device | free ambient conditions |
| Integrated position transmitter | - Linear or Rotary valve |
| Display for calibration | - Single and double acting actuators |
| Optional glue sealing for PCBA | - Low and high ambient temperature |
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Technical specifications

Housing material	Aluminum	Hysteresis	0.2% of full stroke
Operating pressure	P min = 1.4 bar P max = 7 bar Design pressure = 10 bar	Environmental humidity	5% - 95%RH
Static air consumption	0.036 Nm ³ /h (0.02 SCFM) at 400kPa (60 psi)	Operating temperature	-40°C / +80°C
Feeding connection	1/4" NPT	Signal	4-20 mA
Output connection	1/4" NPT	Sensitivity	0.1% of signal range
Pilot signal connection	1/2" NPT	Repeatability	0.2% of the full stroke
CV max	Inlet = 0.12 Outlet = 0.12	Accuracy	0.5% of the full stroke
Communication	Hart	Input independence	455Ω/20mA
		Weight	2kg Intrinsically safe 4kg Explosion Proof

Dimensional drawing



LEAD LD180 Digital Valve Positioner

LD18	-										
Explosion Proof											
5	Intrinsically Safe Exia IIC T4/T6										
8	Explosion Proof Exd IIC T4/T6										
Action											
1	Single action										
2	Double action										
Communication											
0	Without										
H	Hart										
Feedback output											
0	Without										
F	4~20mA										
Mounting Types											
L	Linear										
R	Rotary										
Lightning Protection											
0	Without										
1	With										
Connections											
M	Electrical 1/2"NPT Air supply 1/4"NPT										
P	Electrical 1/2"NPT Air supply G1/4"										
G	Electrical M20x1.5 Air supply G1/4"										
N	Electrical M20x1.5 Air supply 1/4"NPT										
Optional Function											
0	Without										
S	Stainless Steel Pressure Gages										
B	Fail in place (freeze)										
Z	Position Limit Swithes										
K											
Attached Code											
1											