



Smartest valve control device meeting a dynamic performance and a precise setting with a piezoelectric technology and an optimized auto-calibration program

Features

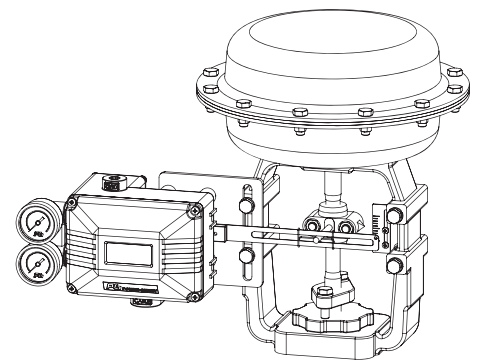
- ▶ Auto-Calibration for optimum conditions
- ▶ Precise control performance and high dynamic response
- ▶ Easy operation with four-key pads and full text graphical LCD
- ▶ Single and double acting
- ▶ Low air consumption due to piezo electric microvalve
- ▶ Pressure regulator built-in to eliminate variations in supply air pressure
- ▶ Problem-free characteristics on a small actuator
- ▶ High resistance against shock and vibration
- ▶ Mounting on linear actuators according to IEC 534

Options

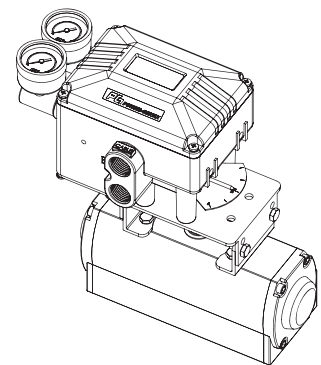
- ▶ Position transmitter (4...20mA output signal)
- ▶ 2 x alarm limit (Min., Max.)
- ▶ Explosion proof type (KC Ex d IIB+H₂ T6 IP66)
- ▶ HART communication (FSK)

Specifications

Input Signal	4 - 20 mA @ 24 VDC
Voltage Drop	8.5 VDC @ 20 mA (425 Ω)
Min. / Max. Current	3.6 mA / 50 mA
Required Load Voltage (≅ Ω @ 20mA)	Without HART : 8.5V (≅425 Ω) With HART : 9.2V (≅460 Ω)
Air Supply Pressure	1.4 - 7.0 bar (20 - 100 psi) Filtered compressed dry and non-oiled air
Output Pressure	0 - 100% supply air pressure / single or double action
Shut-off Value	Range 0 - 5% of position signal
Air Capacity	80 ℓ/min = 4.8 N ^m /h = 2.8 scfm (Sup = 1.4 bar)
Air Consumption	1.3 ℓ/min = 0.08 N ^m /h = 0.05 scfm (Sup = 1.4 ~ 6 bar)
Humidity Limits	< 90% RH, non-condensing
Stroke / Angle	5 ~ 80mm (max. up to 150mm) 0 ~ 90° (max. up to 100°)
Adjustable Speed	1 - 1000 (lowest 1, highest 1000)
LCD Indication	4-digit LCD indicator
Scan Time	2 ms
Valve Action	Position 0 - 100% / direct action (DA) / reverse action (RA)
Characteristic Curve	Linear, E.Q.% (1:25 or 1:50), Quick open Linearity <= 0.3% / sensitivity <= 0.2% / hysteresis <= 0.2%
Operating Temperature	- 30 ~ +70 °C
Protection Class	IP66, flameproof (KC Ex d IIB+H ₂ T6 IP66)
Body Material	Aluminum die-cast
Pneumatic Connections	PT(Rc) 1/4 or NPT 1/4
Electrical Connections	2 x PF(G) 1/2 or NPT 1/2
Weight	2.5 kg



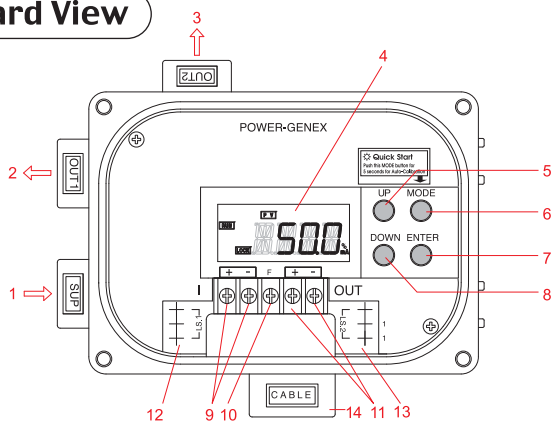
- SSL (Linear Type)



- SSR (Rotary Type)

Note : Equal percentage or Quick-open option is available. Please contact for more details

Board View



- 1 : Air supply
- 2 : Output 1
- 3 : Output 2
- 4 : Display LCD
- 5 : Up key
- 6 : Mode key
- 7 : Enter key
- 8 : Down key
- 9 : Input signal (+, -)
- 10 : Frame ground
- 11 : Output signal (+, -)
- 12 : Alarm limit 1
- 13 : Alarm limit 2
- 14 : Electrical connections

Air Connections

- SSL (Linear Type)

Direct Acting (DA)		Reverse Acting (RA)	
As the input signal increases, Valve stem moves downwards Actuator : DA Switch position : DA		As the input signal increases, Valve stem moves upwards Actuator : RA Switch position : RA	
As the input signal increases, Valve stem moves downwards Actuator : DA Switch position : DA		As the input signal increases, Valve stem moves upwards Actuator : RA Switch position : RA	
As the input signal increases, Valve stem moves downwards Switch position : DA		As the input signal increases, Valve stem moves upwards Switch position : RA	

- SSR (Rotary Type)

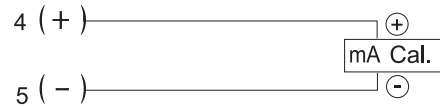
Spring Return	Double Acting	Double Acting
As the input signal increases, Actuator shaft rotates counter-clockwise	As the input signal increases, Actuator shaft rotates counter-clockwise	As the input signal increases, Actuator shaft rotates clockwise
	Spring Return	Double Acting
Reverse Acting	Out 1 : piped, Out2 : plugged	Out 1 : piped to Actuator port A, Out2 : piped to Actuator port B
Direct Acting	Out 1 : plugged, Out2 : piped	Out 1 : piped to Actuator port B, Out2 : piped to Actuator port A

Measuring 4–20mA Output Signal

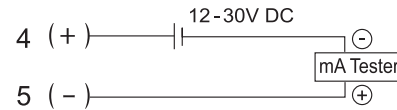
1) Specifications

Output Signal	4 - 20 mA, 2 - wire
Power Supply Rating	15 - 30V DC
Recommended Power Supply	24V DC
Operating Temperature	-20 - +70°C
Input Impedance	0 - 430Ω
Characteristic	Linear
Linearity	1.0 % F.S.
Hysteresis	0.5 % F.S.
Repeatability	± 0.5 % F.S.
Adjustment	Zero and span
Rotary Angle	50...90° (max. 100°)

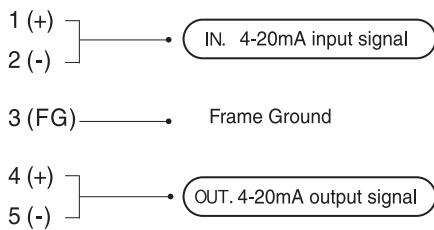
2) With mA Loop Calibrator



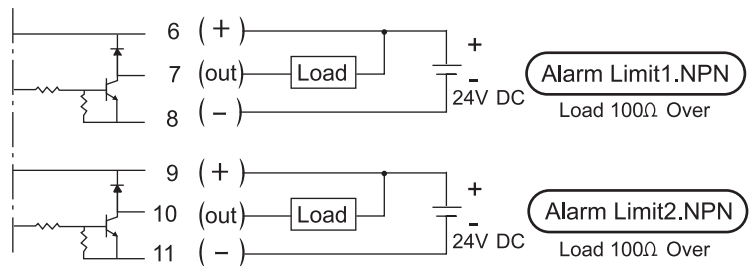
3) With Multi-Meter



Electrical Connections



Setting Alarm Limits



How to Order

SS

Actuator Operation

Protection Class

Feedback Lever

Pressure Gauge (SUP. OUT)

Position Feedback

HART Communication

Connection Threads

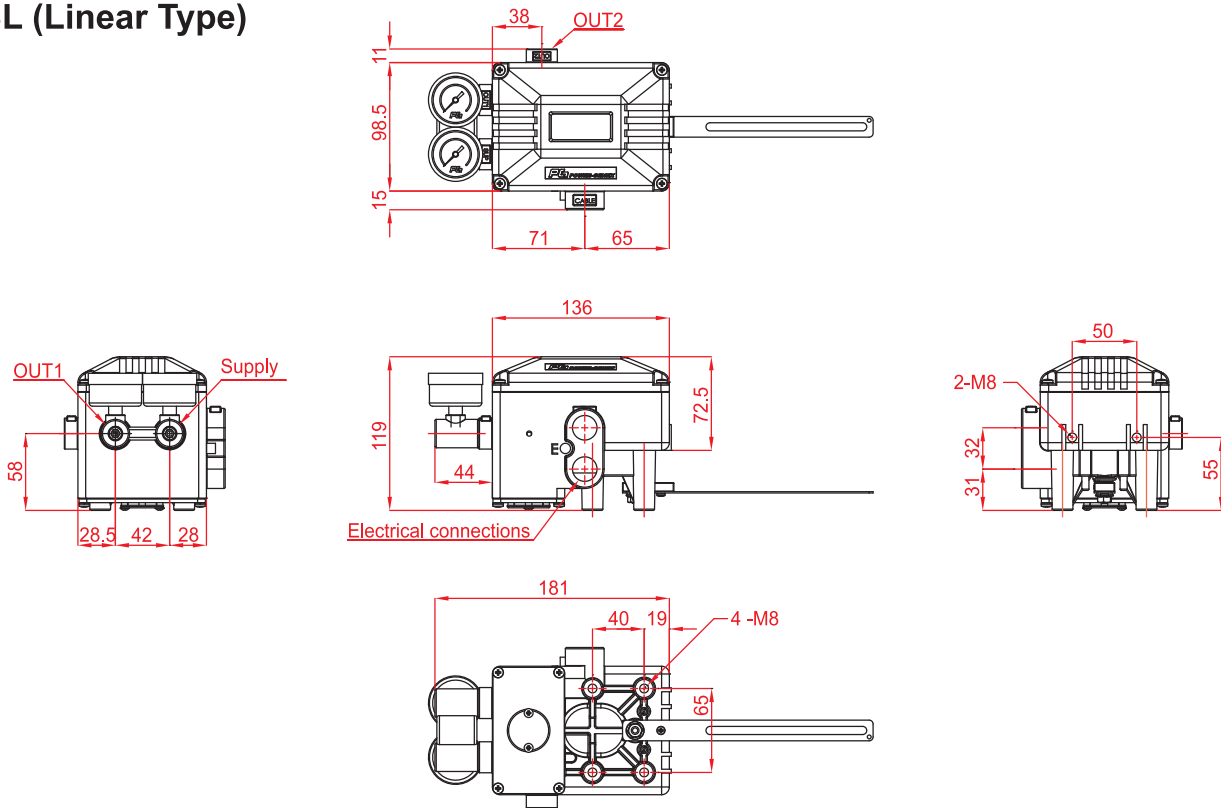
Mounting Bracket

Description	Code
Actuator Operation :	L : Linear type R : Rotary type
Protection Class :	F : Flameproof (KC Ex d IIB+H ₂ T6 IP66) W : Weatherproof to IP66
Feedback Lever :	A : Stroke (5~40mm) B : Stroke (5~80mm) C : Stroke (up to 150mm) F : Fork lever N : NAMUR shaft(direct mounting)
Pressure Gauge :	1 : 6 bar (90 psi) 2 : 10 bar (150 psi)

Description	Code
Position Feedback :	N : None O : Position transmitter (4~20mA output signal) L : 2 x alarm limit M : O + L
HART Communication :	N : None H : HART Communication
Connection Threads : (pneumatic - electrical)	3 : PT(Rc) 1/4 - PF(G) 1/2 4 : NPT 1/4 - NPT 1/2 5 : PT(Rc) 1/4 - M20 x 1.5
Mounting Bracket :	N : None L : DIN / IEC 534 R : Multi-size bracket for DIN VDI/VDE 3845 (130x30x50 bracket on request)

Dimensions

- SSL (Linear Type)



- SSR (Rotary Type)

