



**High Performance Smart Positioner engineered for reliability, ease of use and long service life, even under harsh working environments**

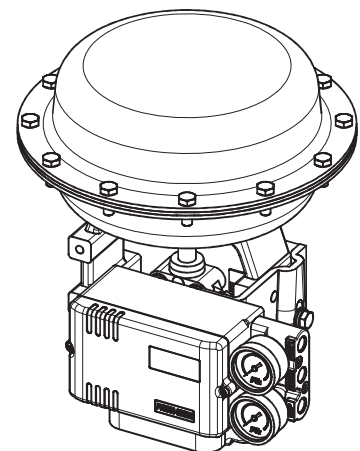
Moniteur's Series 71 Smart Positioner has been designed to excel in the harsh working conditions found in the toughest environments. Compared with other smart positioners, the Series 71 is easier to calibrate and program, is more resistant to dirty air and vibration, and has the lowest cost of ownership.

The Series 71 has a wide range of communication options including HART, Profibus and Foundation Fieldbus. It also carries ATEX and IECEx certification for Intrinsically Safe and Flameproof. For severely corrosive environments a stainless steel enclosure is available. Check out the long list of features:

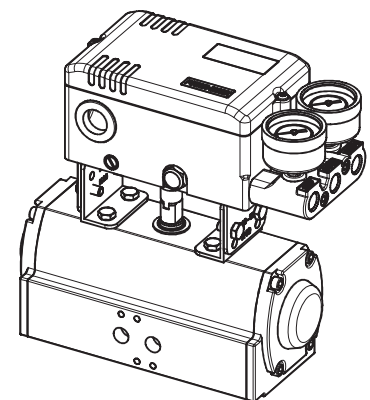


**Features**

- ▶ One touch calibration including automatic detection of direct acting or reverse acting - regardless of air connections - speeds installation and commissioning
- ▶ The same positioner is used for single or double acting actuators, simplifying inventory
- ▶ Compact design is ideal for small actuators
- ▶ Unique torque motor design provides enhanced resistance to vibration and dirty air
- ▶ Extremely low air consumption - the positioner pays for itself in one year when compared to traditional designs
- ▶ Programmable characteristic curve with 17 points
- ▶ Multi-size stainless steel NAMUR bracket (to IEC 60534-6-2) included with rotary positioner
- ▶ Stainless Steel NAMUR bracket (to IEC 60534-6-2) available for Linear positioner
- ▶ Improved control of high friction globe and ball valves by eliminating over-travel and hunting
- ▶ Positioner diagnostics monitor operation and automatically provide error messages when abnormal conditions arise
- ▶ Actuator test function



**Linear Type**



**Rotary Type**

**Options**

- ▶ Cast Stainless Steel Enclosure
- ▶ 4-20 mA Output
- ▶ 2x SPDT limit switches, 2x alarm limit
- ▶ HART Communication (v. 7)
- ▶ Foundation Fieldbus communication
- ▶ Profibus communication
- ▶ Certified ATEX / IECEx Intrinsically Safe or Flameproof versions \*
- ▶ Remote mount version with cable lengths up to 10m
- ▶ Fail freeze



\* Use SS2 Series

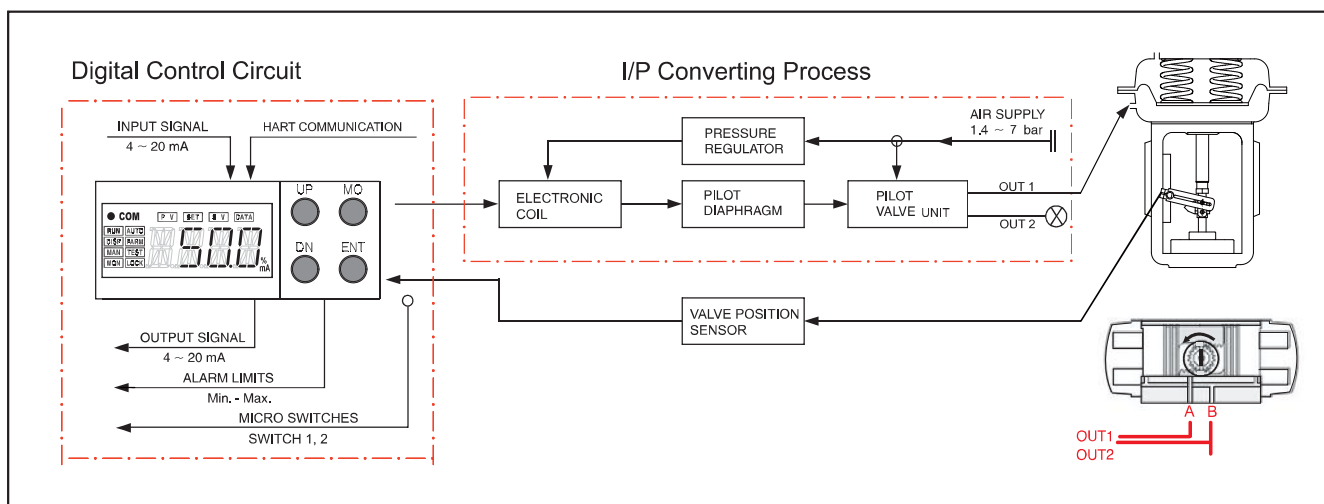


## Specifications

Input Signal	4 - 20 mA @ 24 VDC
Min. / Max. Current	3.6 mA / 50 mA
Voltage Drop (Resistance)	Without Hart : 8.7 VDC (435Ω @ 20 mA) With Hart : 9.4 VDC (470Ω @ 20 mA)
Stroke / Angle	Linear type : 5 - 130 mm * Rotary type : 25 - 120°
Air Supply Pressure	1.4 - 7.0 bar ( 20 - 100 psi ), filtered, compressed dry and non-oiled to meet Class 3 of ISO 8573-1
Output Pressure Range	0 - 100% of supply air pressure
Air Capacity	80 ℓ/min = 4.8 N m <sup>3</sup> /h = 2.8 scfm (Sup = 1.4 bar) 233 ℓ/min = 14 N m <sup>3</sup> /h = 8.2 scfm (Sup = 6 bar)
Air Consumption	2 ℓ/min = 0.12 N m <sup>3</sup> /h = 0.07 scfm (Sup = 1.4 ~ 6 bar)
Characteristic	Linearity < ±0.3% F.S      Sensitivity < 0.2% F.S Hysteresis < 0.2% F.S      Repeatability < 0.2% F.S
Performance Characteristic	Linear, EQ %, Quick open, User set (17 points)
LCD Indication	4-digit LCD indicator
Adjustable Speed	1 - 1000 (lowest 1, highest 1000)
Scan Time	2ms
Shut-off Value	Range 0 - 10% of position signal
Valve Action	direct action (DA) / reverse action (RA)
Operating Temperature	- 30 ~ +80 °C (- 22 ~ +176 °F) **
Pneumatic Connections	PT(Rc) 1/4 or NPT 1/4
Electrical Connections	2 x PF(G) 1/2 or NPT 1/2
Protection Class	IP66, intrinsically safe (IECEX / ATEX / KC Exia IIC T5)
Body Material	Aluminum die-cast / powder-painted
Weight	1.6 kg

\* Up to 200mm on request    \*\* -40°C on request

## Principle of Operation



If 4-20 mA input signal is supplied, the micro processor compares input signal with position feedback and sends control signal to the I/P converting module. Pneumatic signal from the I/P converting module operates the valve and the valve stays at the desired position.

# For Linear and Rotary Actuators General Purpose & Hazardous Areas

## How to Order

71

**E**  
Operation

**W**  
Protection

**4**  
Comm

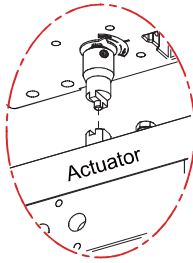
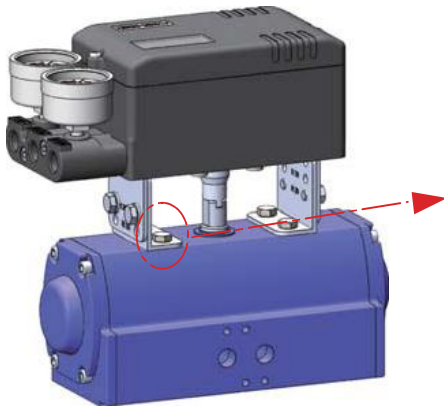
**N**  
Feedback

— Options

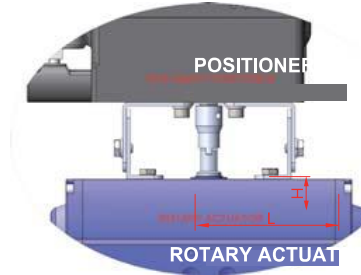
Description	Code	
Housing Material	71	Cast Aluminum
	71S	Cast Stainless Steel
Actuator Operation	E	Rotary NAMUR
	L1	Linear 5-30mm
	L2	Linear 5-65mm
	L3	Linear 5-130mm
	L4	Linear 80-200mm
Protection Class	W	Weatherproof IP66
	I	Intrinsically Safe *
	F	Flameproof *

Description	Code	
Communication :	4	4-20 mA
	H	HART
	P	Profibus PA
	F	Foundation Fieldbus
Position Feedback :	N	None
	T	4-20 Output
	S	2 x SPDT Switches
	B	4-20 Output + Switches
	Options :	F
R03		Remote Mount, where cable length is 3m

## Mounting to Rotary Actuator



**NAMUR Type Mounting**  
( VDI/VDE 3845,  
IEC 60534-6-2 )

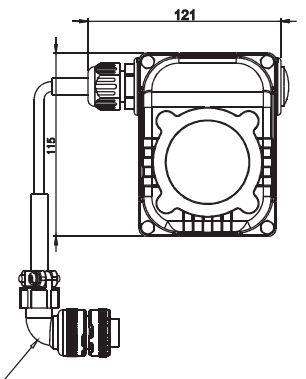
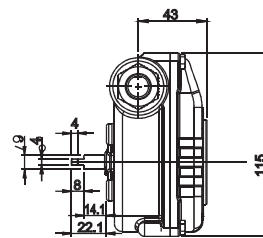
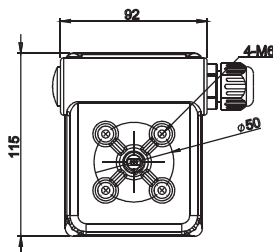
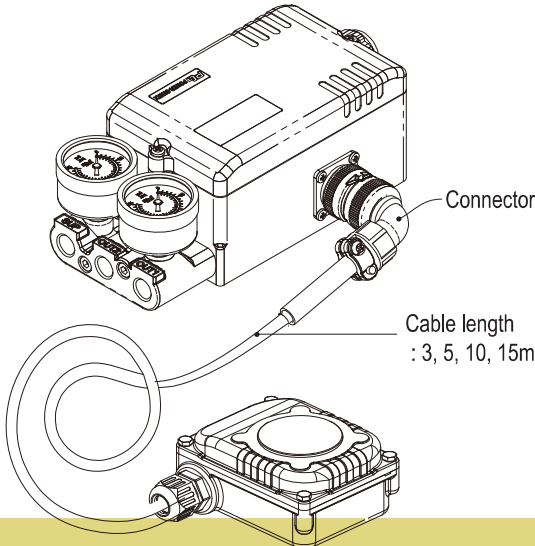


**Size Variation of Multi-Size Bracket**

- 1) 80 x 30 x 20 (H), 4) 130 x 30 x 20 (H)
- 2) 80 x 30 x 30 (H), 5) 130 x 30 x 30 (H)
- 3) 80 x 30 x 50 (H), 6) 130 x 30 x 50 (H)

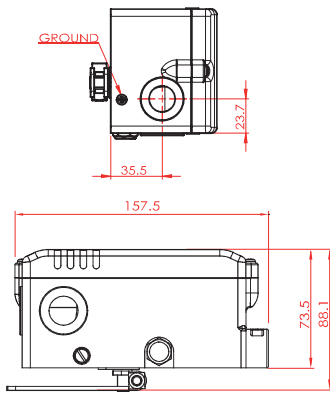
H : Rotary Actuator Shaft Height  
L : Length ( 80 or 130mm )

## Remote Mount Version



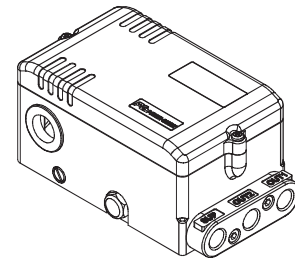
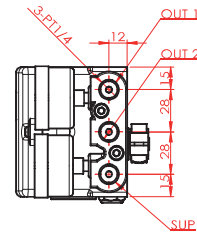
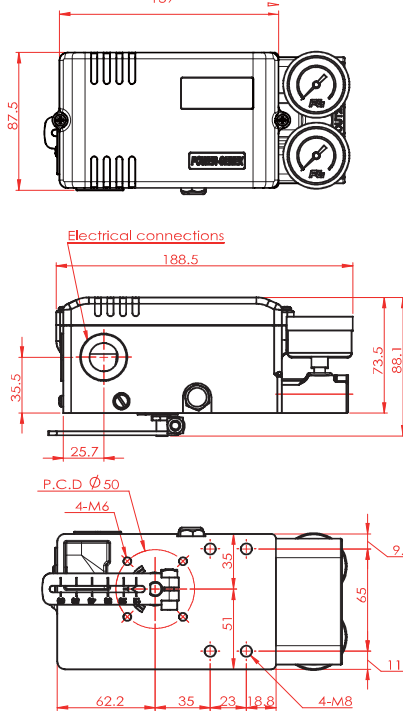
\* Use SS2 Series

### Linear Type



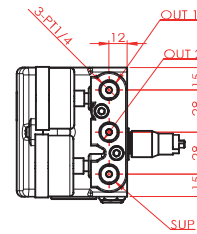
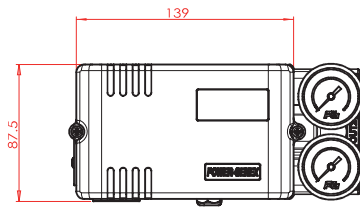
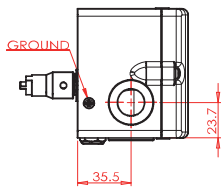
< Without Gauge Block >

### Dimensions



Without Gauge Block

### Rotary Type



**Moniteur**  
Making Valve Automation Easier

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