

# Moniteur

## **SERIES 50 SIPART SMART POSITIONER**



Moniteur's Series 50 SIPART Electropneumatic "Smart" Positioner is nothing less than the most advanced and accurate positioner in the world. Its advanced technology brings these unique benefits to the process industries:

**True Zero Bleed Technology** - Piezoelectric air switching technology vastly reduces plant air consumption while providing more accurate control.

**Auto Commissioning of the Valve/Actuator** - At the touch of a button, the SIPART's microprocessor cycles the control valve and adjusts itself automatically, providing high quality control even under unfavorable operating conditions.

**On Board Keypad** - All functions are controlled with just three keys, including setting the valve characteristic, adjusting the stroke, accessing valve diagnostics and many more.

**Digital Readout of Valve Position**

**Local Operation including Auto-Manual Operation**

**On-Board Valve Diagnostics**

**Same Positioner for linear or rotary actuators**

**Intrinsically Safe and Explosion-Proof** models available

**HART Protocol and PROFIBUS** modules available

### **Principle of Operation**

The SERIES 50 SIPART electro-pneumatic positioner works in a completely different way than conventional I/P positioners. Comparison of the setpoint and the actual value takes place electronically with a microcontroller. If the microcontroller detects a deviation, it uses a 5-way switch procedure to control internal piezoelectric valves, which in turn regulate the flow of air into the actuating chambers. When connected to a loop powered 2-wire system, the SERIES 50 draws its power exclusively from the 4-20mA setpoint signal. The SERIES 50 delivers a level of accuracy and consistency not previously obtainable.

**Below:** The SERIES 50 with the cover off. Just three keys access all of the pre-programmed functions.



### **Industry Approvals:**

**FM / CSA**  
Class 1, Division 2,  
Intrinsically Safe

### Intelligent Part Number System

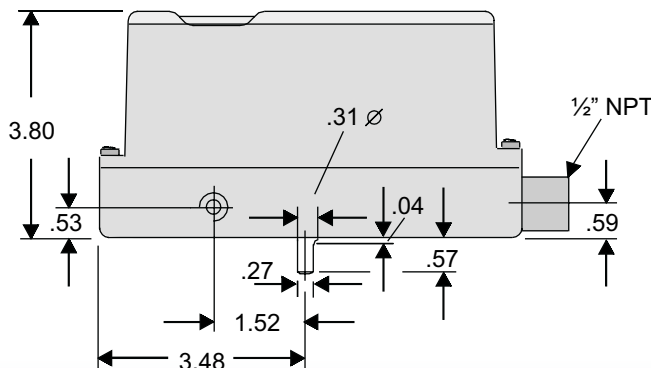
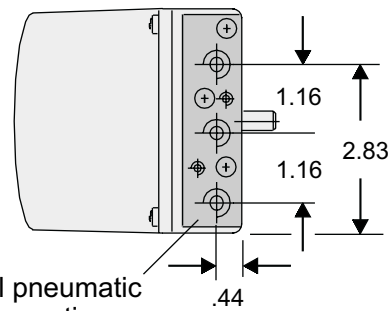
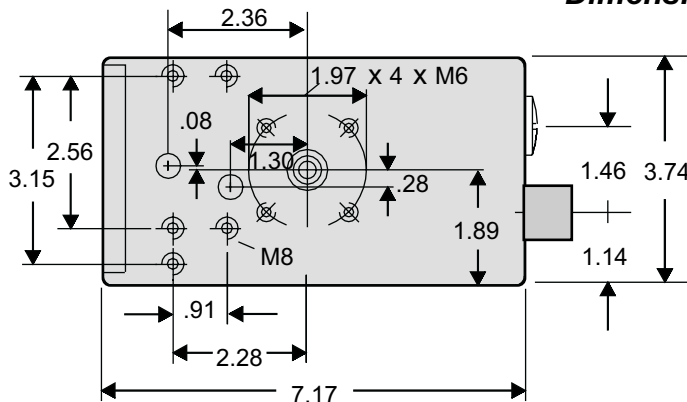
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Series		Type			Hart	Alarm	Feedback	Gauges

Description	Code	Description	Code	Description	Code
<b>Series: Series 50</b>		<b>Hart Module</b>		<b>Position Feedback</b>	
IEC Zone 1	50	None	0	None	0
FM/CSA Div. 2	51	With Module	1	4-20 mA	1
FM/CSA Ex-Proof	52				
<b>Type</b>		<b>Alarm Module</b>		<b>Gauges</b>	
Single Acting	SR	None	0	None	N
Double Acting	DA	With Module	1	With Gauges (SR)	S
				With Gauges (DA)	D

### Specifications

Mounting Position:	Any, exhaust / shaft not upwards	Temperature Range:	-22° F to +176° F
Linear - Travel Range:	3 to 130 mm	Vibration Resistance:	8g at 100 Hz
Angle of Feedback Shaft:	16° to 90°	Enclosure Protection:	Nema 4, 4x
Rotary - Angle of Rotation:	30° to 100°	Enclosure Material:	Fiber-reinforced Macrolon
Connection - electric:	1/2" NPT	Pressure Display Block:	Anodized Aluminum
Connection - pneumatic:	1/4" NPT	Input:	4 to 20 mA
Controller: Five Way Switch:	Self-Adjusting	Current to maintain:	>3.6mA
Response Time:	1.5 secs.	Required load voltage:	10V, 11V w/HART

### Dimensions



### Mounting kits

Linear, 2 to 35 mm stroke	BKT-PS101
Lever for > 35 to 130 mm stroke	BKT-PS102
Rotary*, NAMUR 80 x 30 x 20	BKT-PS001
NAMUR 80 x 30 x 30	BKT-PS002
NAMUR 130 x 30 x 30	BKT-PS003
NAMUR 130 x 30 x 50	BKT-PS004

\*Rotary kits include precision zero-hysteresis coupler