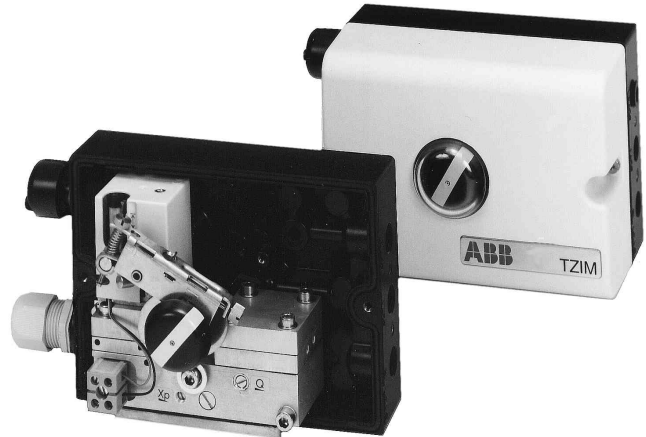


Field<sup>IT</sup>  
**Actuators & Positioners**  
**Electro-Pneumatic Positioners**  
Series TZIM

- Convenient, simple design
- For use on single or double acting linear or rotary actuators
- Immunity to shock and vibration, up to 10g @ 0 - 80 Hz.
- Mechanical position indicator
- Aluminum housing and plastic cover for harsh NEMA 4 environments.
- Wide operating temperature range -40°F to 185°F (-40°C to 85°C)
- Optional pressure gauge block and filter regulator



**Electro-Pneumatic Positioners**  
**Type TZIM**

## Electro-Pneumatic Positioner

The TZIM Electro-Pneumatic Positioner is a cost effective, compact, lightweight unit designed for basic positioner functions. Ideal for general purpose applications.

Highly immune to shock and vibration, the TZIM uses the same proven concept as the SENSYCON I/P units but with direct feedback from the actuator position to the force balance mechanism. With adjustable control parameters and continuous modulation of the actuator pressure, this unit can be matched to actuators of various sizes and supply air pressure providing for a very stable control loop.

## Engineering Specifications

### Input

Signal Range:	0/4...20 mA, Split range optional
Overload Capacity:	50 mA
Burden Voltage:	5 V DC
Input Resistance:	Approx. 200 $\Omega$ @ 20°C

### Output

Control Pressure:	Maximum Supply Pressure
Flow Capacity:	2.5 SCFM @ 20 psi 7 SCFM @ 90 psi
Output Configuration:	Single or double acting
Action:	Direct (increasing input signal) Reverse (Decreasing input signal) (For increasing pressure to actuator)
Effective Direction:	Direct = clockwise position feedback Reverse = counter clockwise position feedback (For increasing pressure to actuator)
Feedback Signal:	3/4" to 4" for linear drives (standard lever) 60° or 90° for rotary drives

### Power Supply

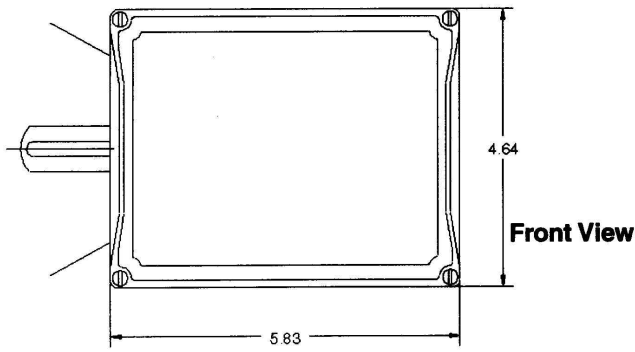
Instrument Air:	Per ISA-S7.3
Particle Size:	$\leq 3$ microns
Dew Point:	10° below minimum operating temperature
Oil Content:	1 ppm
Supply Pressure:	20 to 90 psig
Air Consumption:	<.3 SCFM @ 20 psi air supply and Kp 100

### Housing

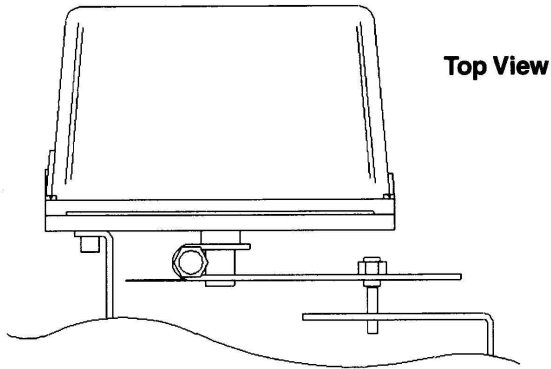
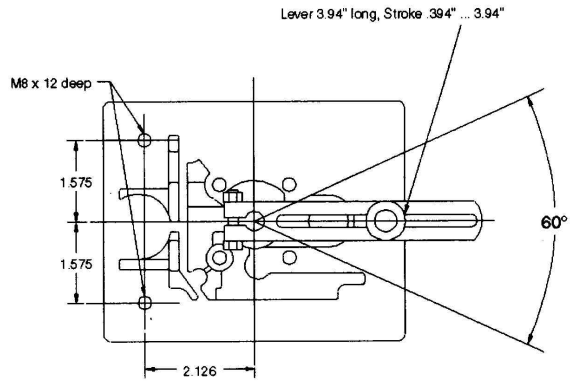
Material:	Aluminum base plate, plastic cover
Ingress:	NEMA 4
Connections:	Pneumatic: 1/4" NPT Electrical: 1/2" NPT
Weight:	3.3 lbs (1.5Kg)
Approvals:	CENELEC Eex ia IIC T4/T5/T6

### Transmission Data

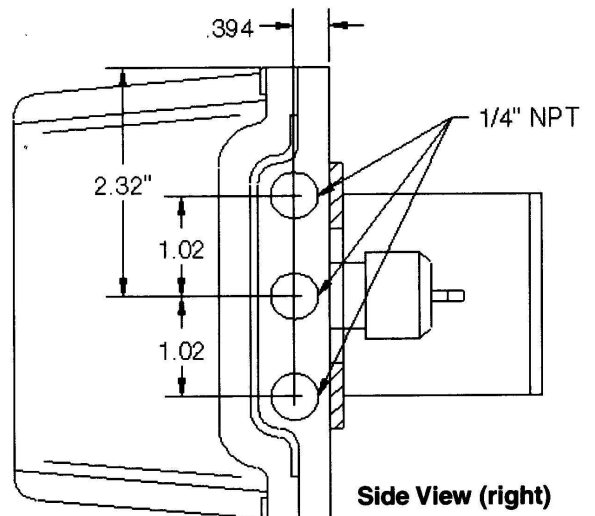
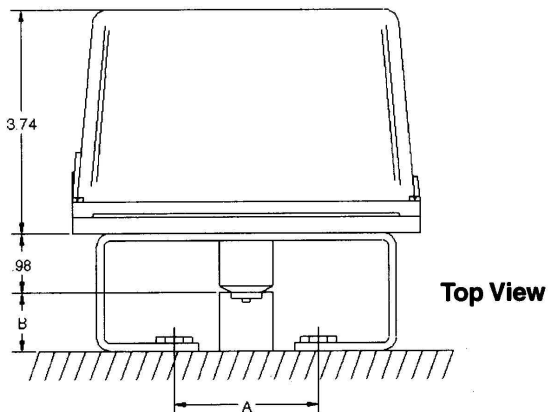
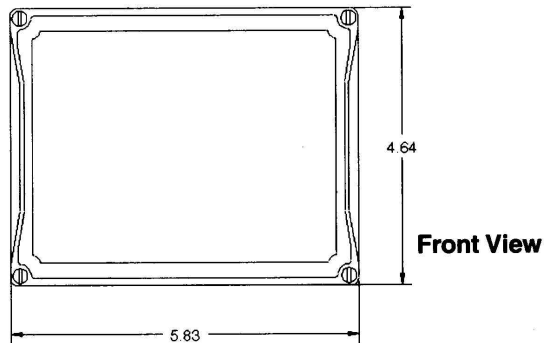
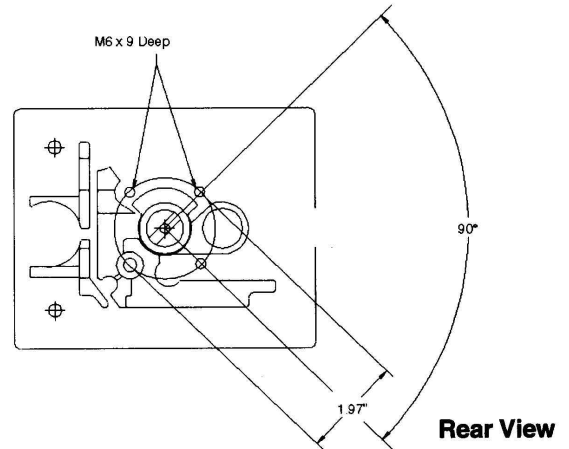
Feedback Configuration:	Cam Characterization
Linearity:	<3%
Hysteresis:	<0.5%
Response Value:	<0.2%
Amplification:	Kp 25 to 200, adjustable
Temperature Range:	-40 to 185°F (-40 to 85°C)
Temperature Effect:	<1% / 10K
Relative Humidity:	<75%, (95% for short time) non condensing
Supply Pressure Effect:	<0.3% / 15 psi
Vibration Effect:	<1% to 10g at 10 to 160 Hz
Mounting Orientation:	<0.5%
EMC:	Meets EMC Standard 89/336/EWG
CE Conformity:	Meets requirements of the EC Standard for the CE conformity mark



**TZIM Attached to Linear Actuator**



**TZIM Attached to Rotary Actuator**



## Ordering Information

### Electro-Pneumatic Positioner TZIM

	<b>1 8 3 3 3</b>					
<b>Basic Model</b>						
Electro-pneumatic						
Aluminum case with plastic hood, protection IP 65						
Universal attachment to linear and rotary actuators .....	1					
<b>Explosion protection</b>						
Without .....		1				
CENELEC Eex ia IIC .....		2				
<b>Input Signal/Valve action</b>						
4...20 mA, direct (for increasing pressure in the actuator) .....			1			
0...20 mA, direct (for increasing pressure in the actuator) .....			2			
20...4 mA, reverse (for increasing pressure in the actuator) .....				5		
20...0 mA, reverse (for increasing pressure in the actuator) .....				6		
<b>Characteristic curve</b>						
Linear .....					1	
Other characteristic curves on request						
<b>Output</b>						
Single acting .....						1
Double acting (Under preparation) .....						2
<b>Connections</b>						
Thread Pg 13.5 for cable and G 1/4" for air pipe .....						1
Thread 1/2" NPT for cable and 1/4" NPT for air pipe .....						2
Thread Pg 13.5 for cable and 1/4" NPT for air pipe .....						3
<b>Accessory Items</b>						<b>Catalog No.</b>
Mounting Kit for Linear actuators, according to DIN/IEC 534 (Namur) with lever for stroke 10 - 35mm (includes lever arm and mounting hardware)						18391-4-7959125
Mounting Kit for Linear actuators, according to DIN/IEC 534 (Namur) for stroke 20...100mm						18391-4-7959126
Rotary actuators, 60° or 90° according to VDI/VDE 3845 (Coupling Only) (Attachment bracket has to be ordered separately).						18391-4-7959110
<b>Instruction Bulletin</b> <i>(One copy is supplied with order)</i>						42/18-57-2XA

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