

Valve Positioner

Series FC800
Rotary / Linear



Description

The FLUCON Series FC800 pneumatic positioner which utilizes a unique spool valve, is a cam characterized, force balanced instrument that is simple, rugged, and very user friendly for calibration and maintenance. The NEMA 4 X housing, is cast aluminum, with an electrostatically applied polyester coating for excellent resistance against a wide range of environmental conditions. This unit operates on a standard 3-15 psi instrument signal (12 psi span-optional 24 psi), and can provide years of trouble free service in many tough applications. The gauge block is cast into the unit and therefore standard. The large indicator has scaling to operate in both direct and reverse directions.

Integrated Characteristic

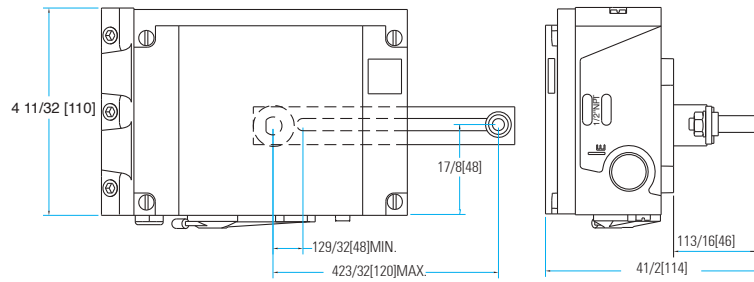
- Modular construction, base pneumatic unit can be quickly field converted to a fully functioned electro-pneumatic unit.
- Suitable for Linear/Rotary quarter turn actuator. Single /Double acting.
- Vibration, Position and Shock Insensitive.
- Corrosion resistance aluminum die-cast and powder coated.
- Different type of spindles (Drive) and cams for wide range of application and actuators.
- High gain pilot valve provides quick and accurate valve/actuator response.
- High supply pressure upto 145 psig (10 Bar).
- FM, CSA & ATEX* approvals For Intrinsically Safe (FC8001/FC8002) and Explosion-proof (FC80011/FC80012) operation.
- Optional Position Transmitter 4~20mA DC.

Technical Specification

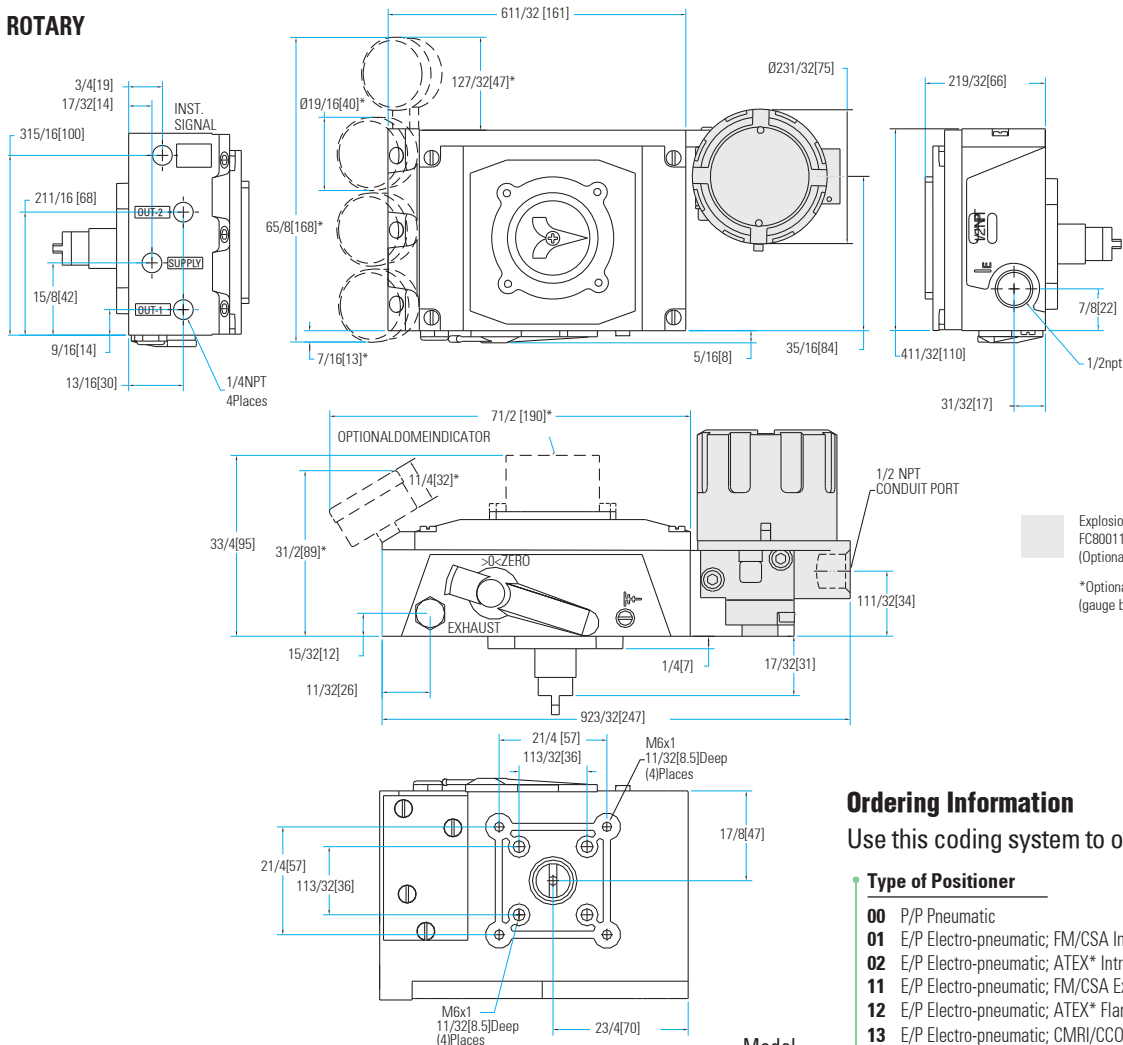
FC800 Positioner Pneumatic 800P		Electro-Pneumatic 800EP	
Input Signal :	3-15 PSI (0.2-1.0 Bar)	4-20 mA	(Ri <250ohms)
Supply pressure :	<145 PSI (<10 Bar)	21.8-145 PSI	(1.5 -10 Bar)
Linearity error :	<0.7 f.s	<1.0% f.s	
Hysteresis :	<0.4 f.s.	<0.6% f.s	
Repeatability :	<0.3 f.s.	<0.5% f.s	
Pressure Gain :	750 P out / P in	750 P out / P in	
@87 PSI (600kPa)	49% P out / % P in	49 % P out / % P in	
acc.to ISA S75.13			
Air Delivery :	SCFM SLPM	SCFM SLPM	
@29 PSI (2.0 Bar)	9.5 270	9.5 270	
@87 PSI (6.0 Bar)	28.3 800	28.3 800	
@145 PSI (10.0 Bar)	47.1 1350	47.1 1350	
Air Consumption:	SCFM SLPM	SCFM SLPM	
@29 PSI (2.0 Bar)	0.18 5	0.2 5.7	
@87 PSI (6.0 Bar)	0.53 15	0.6 17.0	
@145 PSI (10.0 Bar)	0.88 25	1.0 28.3	
Temp Range :	-40° to 185° F	-40° to 85° C	
Port Sizes :	Pneumatic: ¼" NPT; ½" Gauge Ports	Electric: ½" NPT; M20-1.5 (ATEX)	
Ingress & Corrosion : Protection	Nema 4X and IP 66		
Coating	Polyester Epoxy Optional-Nickel		
Weight :	3.5 lbs (1.6 kg)	3.8 lbs (1.7kg)	

Dimensional Drawings FC800 Inch (mm)

LINEAR



ROTARY



Explosion-Proof I/P
FC80011/FC80012
(Optional)

*Optional pressure gauges
(gauge brand dependent)

Ordering Information

Use this coding system to order

Type of Positioner

- 00 P/P Pneumatic
- 01 E/P Electro-pneumatic; FM/CSA Intrinsically Safe
- 02 E/P Electro-pneumatic; ATEX* Intrinsically Safe
- 11 E/P Electro-pneumatic; FM/CSA Explosion-proof
- 12 E/P Electro-pneumatic; ATEX* Flame-proof
- 13 E/P Electro-pneumatic; CMRI/CCOE Explosion-proof

Model

FC800 -

Type of Motion	Spindle	Options-1 Indicator	Options-2
R Rotary	0 Namur (Rotary)	A Arrow (Std. Rotary)	0 None (Standard)
L Linear	1 Standard (Linear)	D Dome (Option)	1 SPTM (Internal)
	2 Optional (Consult Factory)	N None (Std. Linear)	2 SPTM (External)
			3 L/S (Internal)
			4 L/S (External)
			5 SPTM+L/S (Internal)
			6 SPTM+L/S (External)

Due to high temperature and / or internal SPTM, LS option positioner must be none explosion proof type.



Approvals

Model

FC80001 FM & CSA Intrinsically Safe;
Class I, Division 1, Groups A, B, C, D
Class I, Zone 0, Group IIC
Class I, Division 2, Groups A, B, C, D
Class I, Zone 2, Group IIC

FC800011 FM & CSA Intrinsically Safe; Explosion-proof Intrinsically Safe: Class I, II & III, Division 1, Groups A, B, C, D, E, F, G
Explosion-proof: Class I, Division 1, Groups B, C, D
Dust-Ignition-proof: Class II/III, Division 1, Groups E, F, G

* Approvals Pending



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