



503FR Fixed Range Pressure Transmitter

Form 1173

The Series 503FR fixed range pressure transmitter is a compact loop powered pressure transmitter that accurately and reliably measures system pressure at an economical price. The 316 stainless steel pressure port, viton o-ring seal and ceramic sensor make the wetted parts of the 503FR pressure transmitter chemically compatible with most gases and liquids.

Features

- Ranges from 5 to 2000 psig
- 0.25% accuracy
- 4-20 mA, loop powered
- EMI/RFI protection option
- Intrinsically Safe option
- NEMA 4X, IP65 housing



503FR



Product Specifications

Accuracy (Linearity, Hysteresis and Repeatability)	+0.25% of span (BFSL)	Output	4 to 20 mA, loop powered
Zero Offset/Span Offset	+1.0% of span @ 77°F (25°C)	Loop Resistance	700 ohms maximum @ 24 VDC
Temperature Range		Circuit Protection	Reverse polarity (EMI/RFI option)
Compensated	32 to 176°F (0 to 80°C)	Construction	316SS housing, ceramic (Al ₂ O ₃) diaphragm, Viton o-ring
Operating	-4 to 176°F (-20 to 80°C)	Process Connection	1/4" NPT(F)
Storage	-40 to 176°F (-40 to 80°C)	Electrical Connection	
Temperature Effect	+1% of span/100°F, Calibrated @ 77°F (25°C)	Size	1/2" NPT(M) environmentally sealed
Long Term Stability	+0.1% of span per year	Termination	24 AWG shielded cable, 6 foot length
Over Pressure Protection	1.5X span	Shipping Weight	1.1 lb (499 kg)
Response Time	< 25 ms	Warranty	1 year
Supply Voltage	10-32 VDC (IS option 28 VDC maximum)		

Design and specifications are subject to change without notice.

Agency Approvals

Agency	Safety Method	Approval	Model(s)
CENELEC	Intrinsically Safe	EEx ia IIC T4	503FR-xxx-IS
CE Marked	EMC Directive 89/336/EEC	IEC 801, Parts 2, 3 & 4	503FR-xxx-IS 503FR-xxx-CE

Registered Quality System to ISO 9001

Sample Model Number

503FR- 50 - IS

503FR Fixed Range Pressure Transmitter with 0-50psi range and certified Intrinsically Safe.

Range		1	2 Accessories	
0-5 psi (0-0.35 bar)	5	503FR	CE	CE marked, EMI/RFI Protected
0-10 psi (0-0.7 bar)	10		IS	Intrinsically Safe; CE Marked, EMI/RFI Protected
0-15 psi (0-1.0 bar)	15		RR	SS tag wired to control with customer specified tag information
0-25 psi (0-1.7 bar)	25			
0-50 psi (0-3.5 bar)	50			
0-200 psi (0-14 bar)	200			
0-500 psi (0-35 bar)	500			
0-1000 psi (0-70 bar)	1K			
0-2000 psi (0-140 bar)	2K			
				IS

Dimensions

Dimensions shown are for reference only. Contact the factory for certified dimension drawings.
Linear = mm/in.

503FR

