



## 503FR Fixed Range Pressure Transmitter

Form 1173

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

Design and specifications are subject to change without notice.

### Agency Approvals

Approval	Safety Method	Approval	Model(s)
ATEX	Intrinsically Safe	II 1 G EEx ia IIC T4 (Tamax=90°C)	503FR-xxx-IS
CE Marked	EMC Directive 89/336/ EEC	IEC 801, Parts 2, 3 & 4	503FR-xxx-IS 503FR-xxx-CE

Sample Model Number

### 503FR- 50 - IS

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

Range		1
0-5 psi (0-0.35 bar)	5	
0-10 psi (0-0.7 bar)	10	
0-15 psi (0-1.0 bar)	15	
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	
503FR	50	

  

2 Accessories	
CE	CE marked, EMI/RFI Protected
IS	Intrinsically Safe; CE Marked, EMI/RFI Protected
RR	SS tag wired to control with customer-specified tag information
IS	← Model Number

### Test Certificates

Series 503FR	Certificates	C1	C2	C3	C4	C8	B1	B7	A1	A2	A3	A4	A5
	Calibration	◆						◆	◆	◆	◆	◆	◆
Hydrostatic Pressure Test		◆					◆		◆	◆	◆	◆	◆
Inspection Report			◆				◆	◆			◆	◆	
Compliance / Conformance					◆			◆	◆	◆		◆	◆
Typical Material of Wetted Parts						◆	◆	◆	◆	◆	◆	◆	◆

### Dimensions

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

### 503FR

