

# 4700 Series – High Performance, High Stability, with 5:1 Turndown Capability Industrial Transmitters

- Gauge, Sealed and Absolute Models
- Submersible, General Purpose and Wash Down Enclosures
- IS Models

The 4700 series provides precise laboratory type measurements in a rugged industrial package complete with turndown capabilities. Exceptional levels of stability and other performance specifications are achieved by using a sputtered sensing element, which achieves a molecular fusion of a strain gauge material, an insulating material, and the 17-4 PH ss sensing element. Sputtered or thin film technology provides years of worry free measurements under demanding real world conditions.

### Specifications

Input Pressure Range	1 bar to 690 bar (10 to 10,000 psi)
Proof Pressure	2 x Full Scale (FS) for Stainless Steel Units
	1.5 x FS for Inconel Units
Burst Pressure	$>35 \times FS \le 10$ bar ranges
	>15 x FS ≤ 100 bar ranges
	>8 FS $\leq$ 690 bar ranges
Fatigue Life	3 million FS cycles
Performance	
Output	4-20 mA (2 wire)
Supply Voltage (Vs)	9.5 to 40 VDC (Ex IIG: 9.5 to 28 VDC)
Supply Voltage Sensitivity	0.005% of max. span/Volt
Long Term Drift	0.1% of max span per year non-cumulative
Accuracy	0.1 % FS typical
Thermal Error (typical)	0.8% of max span for performance code E
	0.5% of max span for performance code F
Compensated Temperatures	-25°C to +75°C (-13°F to +167°F)
Operating Temperatures	-25°C to +85°C (-13°F to +185°F) elec. conn. code C, G & L
	-20°C to +50°C (-4°F to +122°F) elec. conn. code M & 3
	-30°C to +100°C (-22°F to +212°F) process/media
Zero Tolerance	0.1% FS, typical
Span Tolerance	0.1% FS, typical
Zero Adjustment	±10% (100% at factory) by potentiometer
Span Adjustment	25% to 125% of span by potentiometer/switches
Max. Loop Resistance	(Vs-9.5) x 50 ohms
Mechanical Configuration	
Pressure Port	see ordering chart
Wetted Parts	17-4 PH ss (optional Inconel)
	[17-4 PH and 15-7 Mo Stainless Steel $\leq$ 1.6 bar (30 Psi)]
Electrical Connection	see ordering chart
Enclosure	318 Duplex ss, 17-4 PH ss and glass filled polyester
	IP40 for gauge datum & electrical conn. code C
	IP65 for absolute and sealed datum & elec. conn. code C IP65 for electrical connection code G
	IP68 for electrical connection code F
Vibration	35g peak sinusoidal, 5 to 2000 Hz
Acceleration	100g steady acceleration in any direction 0.05% FS/g
Acceleration	for 1 bar (15 psi) range decreasing logarithmically to
	0.0001% FS/g for 690 bar (10000 psi) range.
Shock	Withstands free fall to IEC 68-2-32 procedure 1
Approvals	CE, Lloyds Register, optional Intrinsically Safe EEx ia IIC T4 per
· · · · · · · · · ·	ATEX, (Quality Assurance Certificate Supplied), ABS Certified
Weight	approx. 305 g (additional; cable 75 grams/m)
	approx. coo g (additional, dable re granionity



# Dimensions mm (in.)

Max diameter 39 mm, all models





1/2 - 14 NPT conduit

### Code C



6 Pin Fixed Plug Size (10-6)

## Code G



Fixed Plug to DIN 43650 Mate Supplied

#### Code L



<sup>5</sup> Pin M12 x 1 Fixed Plug

#### Code M



Immersible IP68 to 200m WG