

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

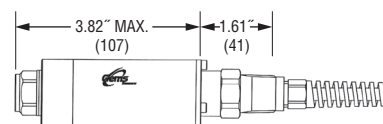
Input	
Pressure Range	4710, 10 to 10,000 psi; 4700, 1 bar to 690 bar
Proof Pressure	2 x Full Scale (FS) for Stainless Steel Units 1.5 x FS for Inconel Units
Burst Pressure	>35 x FS / 10 bar ranges >15 x FS ≤ 100 bar ranges >8 FS ≤ 690 bar ranges
Fatigue Life	3 million FS cycles
Performance	
Output	4-20 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	-13°F to +167°F (-25°C to +75°C)
Operating Temperatures	-13°F to +185°F (-25°C to +85°C) elec. conn. code C, G & L -4°F to +122°F (-20°C to +50°C) elec. conn. code M & 3 -22°F to +212°F (-30°C to +100°C) 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
Max. Loop Resistance	(Vs-8) 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 ≤ 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 for 15 psi (1 bar) range decreasing logarithmically to 0.0001% FS/g for 10000 psi (690 bar) 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)



Dimensions in. (mm)

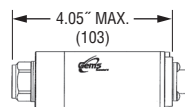
Max diameter 39mm, all models

Code 3



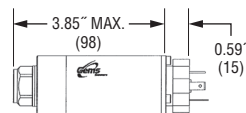
1/2 - 14 NPT conduit

Code C



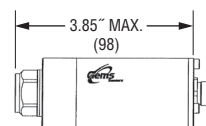
6 Pin Fixed Plug Size (10-6)

Code G



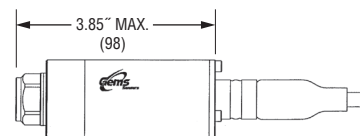
Fixed Plug to DIN 43650 Mate Supplied

Code L



5 Pin M12 x 1 Fixed Plug

Code M



Immersible IP68 to 200m WG

How to Order

Use the **bold** characters from the chart below to construct a product code

SELECT:

1. **4700** bar units, **4710** psi units
2. Output Response: **B** 4-20 mA Undamped
3. Pressure Datum: **G** gauge; **A** absolute
(For differential models and compound ranges consult sales)
4. Insert pressure range code from table below
5. Pressure Port see chart
6. Electrical Connection
C Fixed plug size 10-6, mate sold separately part # 499532-0006
G Fixed plug to DIN 43650 mating plug supplied; **L** M12 x 1 (5 pin)
M IP68 immersible cable; **3** 1/2-14 NPT Conduit
7. Approvals/Protection (For flame proof units see next page)
3 CE; **G** ATEX approved intrinsically safe EEIa IIC T4, Galvanic, isolators
8. Cable Length in meters (requires electrical connection code F)
000 No Cable; **001** 1 meter; **999** 999 meters
9. Static/Thermal Performance
E 0.2%/1.6%; **F** 0.2%/1.0%. 500mbar range performance code **E** only

Electrical Connections

Electrical Connection Code	Wiring		
	(+)	(-)	EARTH
G "DIN"	1	2	4
C "10-6 Bayonet"	A	B	E
F "IP 68 Cable"	R	BL	DRAIN

Cable Legend:

R = Red BL = Blue

4700 Model Bar Ranges	Range Code	Gauge (G)* Absolute (A)
0 to 500mb	N50	G, A
0 to 1	A10	G, A
0 to 1.6	A16	G, A
0 to 2.5	A25	G, A
0 to 4	A40	G, A
0 to 6	A60	G, A
0 to 10	B10	G, A
0 to 16	B16	G, A
0 to 25	B25	G, A
0 to 40	B40	G, A
0 to 60	B60	G, A
0 to 100	C10	G, A
0 to 160	C16	G, A
0 to 250	C25	G, A
0 to 400	C40	G, A
0 to 600	C60	G, A**
0 to 690	C69	G, A**

4710 Model PSI Ranges	Range Code	Gauge (G)* Absolute (A)
0 to 10	F10	G
0 to 15	F15	G, A
0 to 30	F30	G, A
0 to 60	F60	G, A
0 to 100	G10	G, A
0 to 150	G15	G, A
0 to 200	G20	G, A
0 to 300	G30	G, A
0 to 500	G50	G, A
0 to 1000	H10	G, A
0 to 1500	H15	G, A
0 to 3000	H30	G, A
0 to 5000	H50	G, A
0 to 6000	H60	G, A
0 to 10000	J60	G, A**

* For compound ranges please consult factory

** Inconel pressure port required.

Pressure Ports - See Page H-24 for Dimensions

Codes		Description
SS	Inconel	
OO	OK	G 1/4 internal
AO	AK	G 1/4 AT external
KO	KK	7/16-20 UNF 3A external
MO	MK	M14 x 1.5 external
PO	PK	G 1/2 AT external
BO	BK	1/4-18 NPT external
GO	GK	1/2-14 NPT external
SO	SK	7/16-20 UNJF external, MS 33656E4
Immersible		
10		Plastic nose cone
20		Nose cone with restrictor
30		Nose cone w/ss Sink Weight