



## SPECIFICATIONS

- High Accuracy
- Compact
- Variety of Pressure Ports and Electrical Configurations
- High corresponding frequency >1KHz
- Multiple outputs 0~10VDC, 1~5VDC and 4~20mA
- Multiple connector optional

## FEATURES

- Sturdy flush diaphragm, impact resistance
- Pressure range up to 10000psi
- Variety of Pressure Ports
- Non linearity upto  $\pm 0.5\%$
- Up to  $\pm 1.0\%$  Total Error Band
- $-20^{\circ}\text{C} \dots +85^{\circ}\text{C}$  Compensated Temperature
- $-40^{\circ}\text{C} \dots +120^{\circ}\text{C}$  Operating Temperature

## APPLICATIONS

- Environmental-friendly chemical coatings and polyurethane equipment
- Food grade or medical equipment for pressure control
- Paint detection system
- Slurry of mud or coal, Mud slurry Pump, Paper pulp, Crude, Asphalt, etc.
- Oilfield drilling, Well logging, Offshore oil production stands, Oil well measuring instruments, etc
- Other industrial sites requiring resistance of blocking, high-strength vibration and impact

## STANDARD RANGES

Range (psi)	Range (Bar)	Gage	Seal	Absolute	Compound
0...150	0...10	•			●S
0...250	0...16	•			●S
0...300	0...20				●S
0...500	0...35	•			●S
0...750	0...50	•			• ●S
0...1000	0...70	•			• ●S
0...1500	0...100	•			•
0...2250	0...150	•			•
0...3000	0...200	•			•
0...3700	0...250	•			•
0...5000	0...350	•			•
0...6000	0...400	•			•
0...7500	0...500	•			•
0...10000	0...700	•			•
0...15000	0...1000	•			• ●S
0...22000	0...1500	•			• ●S

Note: Intermediate ranges available upon request. For "●S" ,plesae confirm with factory.

## PERFORMANCE SPECIFICATIONS

Ambient Temperature: 25°C (unless otherwise specified)

PARAMETERS	MIN	TYP	MAX	UNIT	NOTES
Accuracy (combined non linearity, hysteresis, and repeatability)	-0.3	±0.25	0.3	%F.S.BFSL	@ 25°C, > 5.0MPa
	-1.0	±0.5	1.00	%F.S.BFSL	@ 25°C, < 5.0MPa
Zero Error	-0.5	±0.25	0.5		@ 25°C
Full Scale Error	-1.0	±0.5	1.0		@ 25°C
Isolation (Body to any Lead)	1000			MΩ	@ 500VDC
Pressure Cycles	1X10 <sup>7</sup>			0~FS Cycles	
Proof Pressure	1.5X		15k psi	Rated	
Burst Pressure	2X		15k psi	Rated	
Long Term Stability (1 year)	-0.25	±0.25	0.25	%F.S	
Total Error Band (Over compensated temp range)	-1.0	±0.5	1.0	%F.S	>5.0MPa
	-2.0	±1.0	2.0		<5.0MPa
Compensated Temperature	-10		70	°C	
Operating Temperature	-20		120	°C	Except cable 105°C max
Storage Temperature	-40		120	°C	Except cable 105°C max
Load Resistance (RL)	RL > 100k			Ω	Voltage Output
Load Resistance (RL)	<Supply Voltage -9V) / 0.02A			Ω	Current Output
Current Consumption			10	mA	Voltage Output
Rise Time (10% to 90%)	<2ms (Voltage Output); <3ms (Current Output); Without Snubber				
Pressure Port Material	17-4PH				
Shock	50g, 11msec Half Sine Shock per MIL-STD-202G, Method 213B, Condition A				
Vibration	±20g, MIL-STD-810C, Procedure 514.2-2, Curve L				

Notes: For custom configurations, please consult factory.

Pressure range under 0...70bar, customer to ensure venting through mating connector.

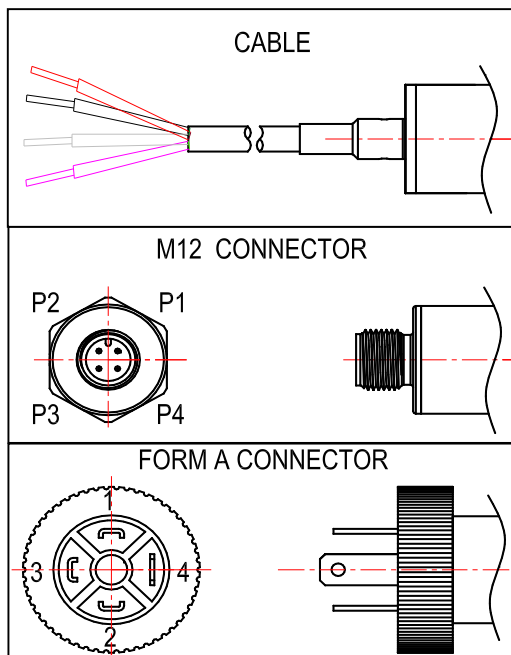
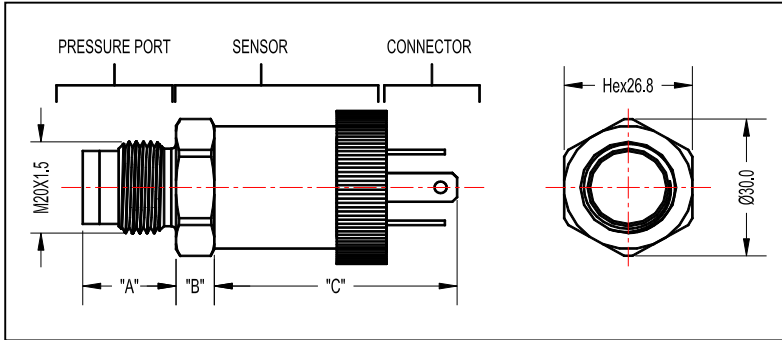
Compensated Temperature: The temperature range over which the product will produce an output proportional to pressure within the specified performance limits.

Operating Temperature: The temperature range over which the product will produce an output proportional to pressure but may not remain within the specified performance limits.

Storage Temperature: The temperature range over which the product can be stored safely in occasions without pressure applied or power input and remains rated performance. Beyond this temperature range may cause permanent damage to the product.

All configurations are built with supply voltage reverse and output short-circuit protections.

### DIMENSIONS [mm]



### CONNECTION TYPE

CODE	CONNECTION TYPE	DIM C (MAX)
1	Cable 1m	1.97 [50.0]
4	M12	1.85 [47.9]
5	FORM A	2.05 [52.0]

### PRESSURE PORT

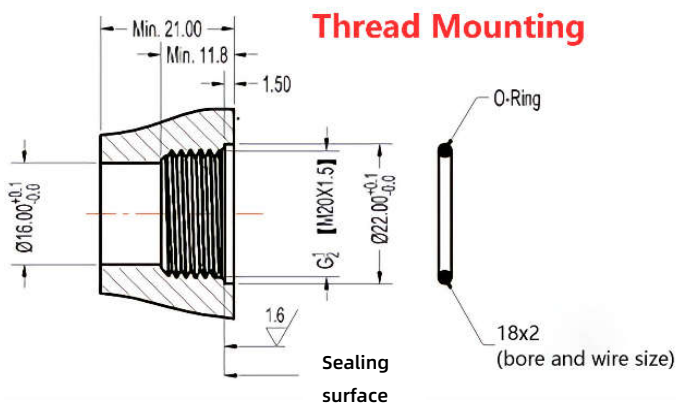
CODE	PRESSURE PORT TYPE		
	PORT	DIM A	DIM B
2	M20 x 1.5 mm ISO 6149-2	0.661 [16.8]	0.3 [8.0]
9	G1/4 DIN 3852 FORM E GASKET DIN3869-14 NBR	0.512 [13.00]	0.3 [8.0]
A	G1/2	0.787 [20.0]	0.315 [8.0]
X	客户定制	待定	待定

### WEATHERPROOF

WEATHER-PROOF RATING		
CODE	CONNECTION TYPE	IP CODE
1	Cable 1m	IP67
4	M12	IP67
5	FORM A	IP65

### OUTPUTS

CODE	OUTPUT SIGNAL	SUPPLY VOLTAGE
1	0.5 - 4.5V	5 ± 0.25V
	RATIOMETRIC	PROTECTED to 16V
2	1 - 5V	8 - 36V
3	4 - 20mA	9 - 36V
4	0 - 5V	8 - 36V
5	0 - 10V	13 - 36V
6	1 - 6V	8 - 36V
7	0.5 - 4.5V	7.5 - 36V



## WIRING

Current Output Wiring				
CONNECTION	+SUPPLY	-SUPPLY	NC.PINS	P REF VENT
M12	1	2	3,4	Hole Through Connector
FORM A	1	2	3,4	
Cable	RED	BLACK		Hole Through Housing

Voltage Output Wiring					
CONNECTION	+SUPPLY	+OUTPOT	COMMON	NC.PINS	P REF VENT
M12	1	3	2	4	Hole Through Connector
FORM C	1	3	2	4	
Cable	RED	WHITE (GREEN)	BLACK	-	Hole Through Housing

## CONNECTION TYPES

CONNECTION TYPES			
CONNECTION	DESCRIPTION	MATING HOUSING P/N	MATING TERMINAL PIN
M12	BINDER SERIES 713, 09 3431 77 04 OR EQUIV	4-POS FEMALE CONNECTOR	-
FORM A	OMAL ARB03S or ARB03R	OMAL AHB6733 3+PE	-
Cable	4-WIRE,22 AWG, UNSHIELDED,PVC,105°C	-	-

Notes: Transmitter of gage pressure type requires vent to atmosphere on the pressure reference side.

This is accomplished via cable from the transmitter (the end of the cable should be terminated to clean and dry area) or through the customer mating connector/cable assembly which has internal vent path.

## ORDERING INFORMATION

FP51	3	5	-	1	0	1	9	-	050B	G
Model	Output	Connection	-	Port Material	Snubber	Label	Pressure Port	-	Pressure Range	Pressure Type
FP51	1= 0.5-4.5V 比例输出 2= 1-5V 3= 4-20mA 4= 0-5V 5= 0-10V 6= 1-6V 7= 0.5-4.5V X= Customer Special	1= Cable 4= M12 5= FORM A X= Customer Special		1= 304Screw+ 17-4Diaphragm X= Customer Special	0= No Snubber	0= No Label (OEM) 1= Adhesive Label 2= Laser Marking	2= M20 x 1.5 9= G1/4 DIN 3852 A= G1/2 X= Customer Special		0...50Bar B= Bar M= Mpa P= PSI K= Kpa	G= Gauge C= Compound

Note: For shielded cable or other connector requirements, please consult the factory.