



## FEATURES

- Heavy Industrial
- Integral Pressure Cavity, No leakage
- Reverse Polarity Protection on Input
- Short Circuit Protection on Output
- Up to  $\pm 0.1\%$  Accuracy
- Up to  $\pm 1.0\%$  Total Error Band
- $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  Operating Temperature

## STANDARD RANGES

Range(MPa)	Range(Bar)	Gage
0...160	0...1600	•
0...250	0...2500	•
0...350	0...4000	•
0...500	0...5000	•
0...750	0...7000	•
0...1000	0...10000	•

Note: Intermediate ranges available upon request, please confirm with factory.

## SPECIFICATIONS

- High Accuracy
- Compact
- Variety of Pressure Ports and Electrical Configurations
- CE Compliant and Weatherproof
- Excellent Stability

## APPLICATIONS

- Water Jet Cutting
- Test Bench
- Hydraulic Press
- Ultra-high Booster Pump
- High-pressure pasteurization; pasteurization
- High pressure cleaning

## PERFORMANCE SPECIFICATIONS

Ambient Temperature: 25°C (unless otherwise specified)

PARAMETERS	MIN	TYP	MAX	UNIT	NOTES
Accuracy (combined non linearity, hysteresis, and repeatability)	-1.5	±0.75	1.5	%F.S.BFSL	>750MPa
	-1	±0.5	1	%F.S.BFSL	<750MPa
	-0.5	±0.25	0.5	%F.S.BFSL	<500MPa
	-0.25	±0.1	0.25	%F.S.BFSL	<250MPa
Zero Error	-0.5	±0.5	0.5	%F.S.BFSL	@ 25°C
Full Scale Error	-0.5	±0.5	0.5	%F.S.BFSL	@ 25°C
Isolation (Body to any Lead)	100			MΩ	@ 250VDC
Pressure Cycles	1X10 <sup>7</sup>			0~FS Cycles	
Proof Pressure	2X		1500 bar	Rated	Not exceeding the threaded connection strength
Burst Pressure	3X		1500 bar	Rated	
Long Term Stability (1 year)	-0.25		0.25	%F.S	
Total Error Band	-1	±1	1	%F.S	Over compensated temp range
Compensated Temperature	0		70	°C	
Operating Temperature	-20		125	°C	Except cable 105°C max
Storage Temperature	-40		125	°C	Except cable 105°C max
Load Resistance (RL)	RL > 100k			Ω	Voltage Output
Load Resistance (RL)	< (供电电压 -9V) / 0.02A			Ω	Current Output
Current Consumption			5	mA	Voltage Output
Rise Time (10% to 90%)	<3ms (电压输出) ; <2ms (电流输出); 无阻尼				
Pressure Port Material	17-4PH (进口本卡特)				
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.

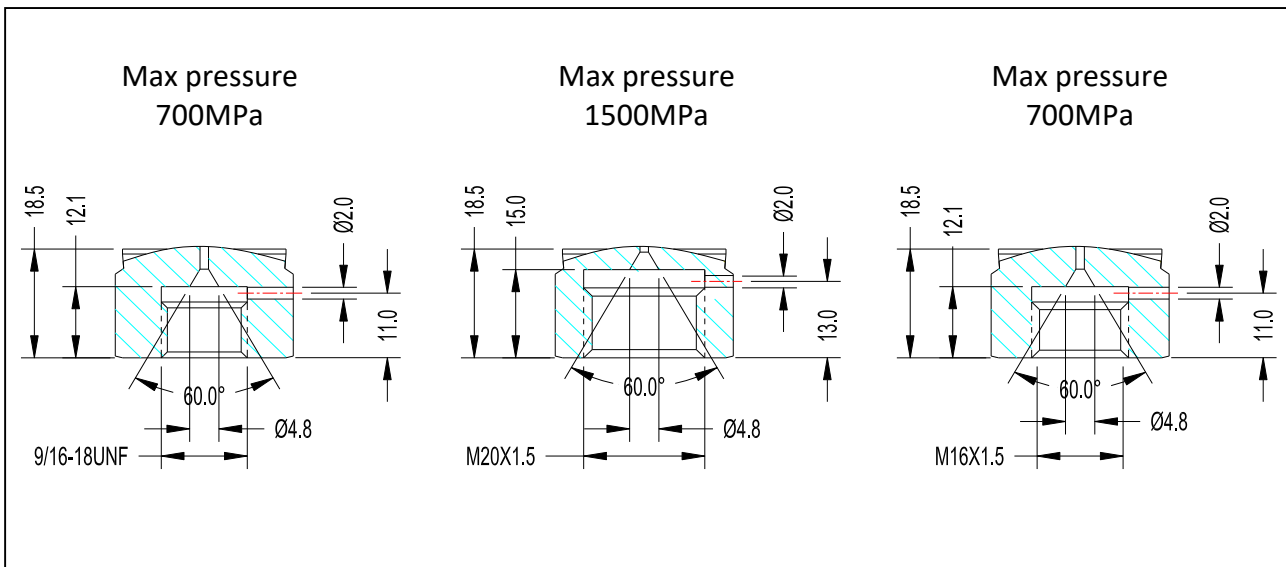
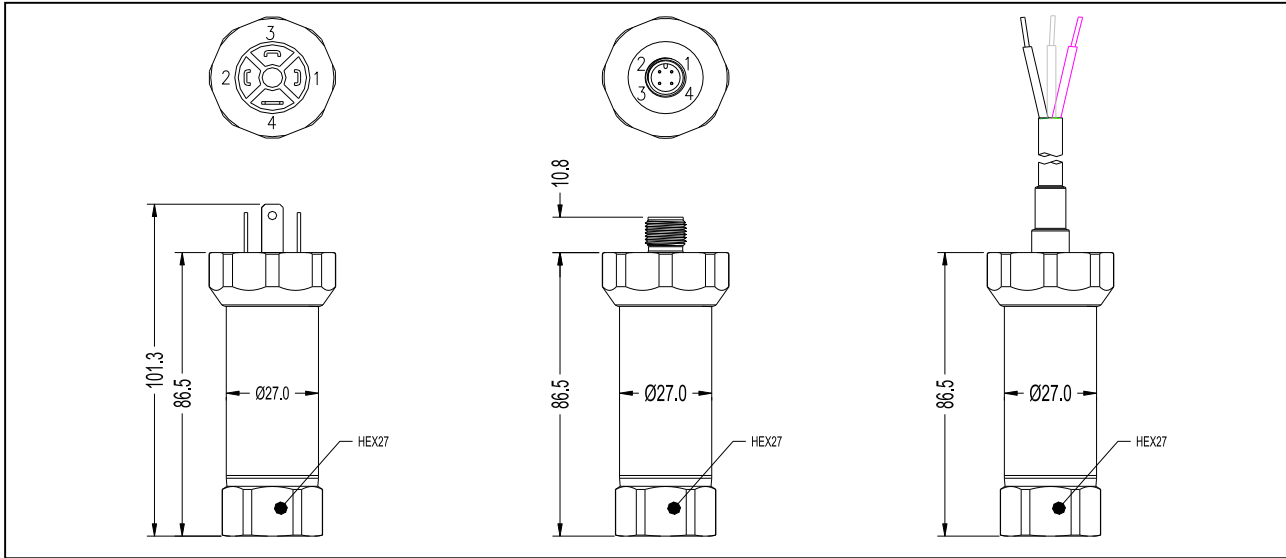
**Compensated Temperature:** The temperature range over which the product will produce an output proportional to pressure within the specified performance limits.

**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]**



**WEATHERPROOF**

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

**OUTPUT**

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
Cable	RED	BLACK	WHITE (GREEN)	NA
M12	1	2	3,4	
FORM A	1	2	3,4	

Voltage Output Wiring					
CONNECTION	+SUPPLY	+OUTPOT	COMMON	NC.PINS	P REF VENT
Cable	RED	WHITE	BLACK	GREEN	NA
M12	1	3	2	4	
FORM A	1	3	2	4	

## CONNECTION TYPES

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

## ORDERING INFORMATION

HP51	3	5	-	1	1	2	9	-	500M	G
Model	Output	Connection	-	Diaphragm Material	Port Housing Material	Label	Pressure Port	-	Pressure Range	Accuracy
HP51	1= 0.5-4.5V RATIOMETRIC 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= 316L 2= 17-4PH X= Customer Special	1= 316	0= No Label (OEM) 1= Adhesive Label 2= Laser Marking	1= M16 X 1.5 2= M20 x 1.5 3= 9/16-18UNF X= Customer Special		0...500MPa B= Bar M= Mpa P= PSI K= Kpa	A= ±0.1%FS B= ±0.25%FS C= ±0.5%FS

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