

AUTHORIZED DISTRIBUTOR



# 1200

#### **SPECIFICATIONS**

- **Rugged Design for Harsh Environments**
- High Burst Pressure Limit
- **High Reliability**
- Low and High Level Output Signals •

The P1200 Series pressure transducers and transmitters provide high accuracy pressure measurement of liquids and gases. These robust transducers combine hybrid electronics with highly reliable strain gauge sensing technology to offer superior performance in rugged applications. Constructed from media compatible 17-4 PH stainless steel, the P1200 provides exceptional performance in extreme environments.

Accuracy of the P1200 is guaranteed to be within ±0.20% F.R.O. over a wide temperature compensated range of -20°C to 80°C. The P1200 is available with either cable or connector terminations or offers a variety of outputs including 0-20 mV, 0-100 mV, 0-5 V and 4-20 mA. Six selectable pressure ports are available to suit most application requirements. Pressure ranges include 0-75 psi to 10,000 psi (0-5 bar to 700 bar) and can be referenced in absolute, sealed or vented gauge. The P1200 Series maintains a high burst rate of greater that 20x the rated pressure and 5x overpressure limit without damage to the sensor due to a positive over travel stop.

For parts requiring RoHS compliance, please contact factory.

SENSOR SOLUTIONS ///P1200 ALTHEN **SENSORS & CONTROLS** 

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# **FEATURES**

- Typical Accuracy of  $< \pm 0.15\%$  F.R.O. •
- Cable/Connector Termination
- Stainless Steel Media Isolated •
- **5x Overpressure Protection** •
- High and Low Level Output •

## **APPLICATIONS**

- Vehicle Brake System Monitoring •
- **Gas Production** •
- Farm Machinery •
- Hydraulic Control Monitoring •

Series	P1200	P1230	P1240	P1260	P1280
Model Number	P1221/3	P1231/3	P1241/3	P1261/3	P1281/3
Input Voltage	10VDC	10VDC	10VDC	18-32VDC	10-36VDC
	(12 V max)	(12 V max)	(12 V max)		
Impedance (ohms)	1000 to 1600	-	-	-	-
Current (mA max)	10	12	12	25	-
Full Range Output (±2%)	20mV	100mV	5VDC	5VDC	4-20 mA (16 mA±2%)
Impedance (ohm)	1000 ±50	<10	<10	<10	Load Resistance 1300 ohm (max) at 36VDC
Current(mAmax)	-	-	5	5	-
Frequency	2.5 to 40 kHz	2 kHz	2 kHz	1 kHz	1 kHz
Response					
Residual	<±2	<±2	<±2	<±2	4.0 mA +2-0
Unbalance					
Weight oz (gm)	3.4 (95)	4.4 (125)	4.4 (125)	4.4 (125)	4.4 (125)

#### **PERFORMANCE SPECS**

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# COMMON SPECIFICATIONS

Pressure Ranges	
High (psi)	0-75, 100, 150, 220, 250, 350, 500, 750, 1000, 1500, 2200, 2900, 3500, 5000, 7500,
	10,000
(bar)	0-5, 7, 10, 15, 20, 25, 35, 50, 70, 100, 150, 200, 250, 350, 500, 700
DIN (bar)	6, 10, 16, 25, 40, 60, 100, 160, 250, 400, 600
Pressure References	Vented gauge (Sensors should only breathe dry noncorrosive gases. Sealed gauge and absolute to
	special order).
Pressure Limit	>5x full range pressure or 12,000 psi (830 bar), whichever is less.
Burst Pressure	>20 x full range pressure or 22,000 psi (1,520 bar), whichever is less
Pressure Media	Liquids or gases compatible with 17-4 PH stainless steel
<b>0</b>	
Combined Non-linearity	· •
and Non-repeatability	<±0.15% F.R.O. (typ); ±0.20% F.R.O. max (BSL) – high range
Temperature Range	
Operable Common stad	-65°F to 185°F (-54°C to 85°C) [P1221/4 -65°F to 250°F (-54°C to 120°C)]
Compensated	-4°F to 185°F (-20°C to 85°C) [P1221/4 -4°F to 212°F (-20°C to 100°C)]
Storage Combined Thermal Zero	-65°F to 250°F (-54°C to 120°C)
And Sensitivity Shift Total Thermal Error Ban	<±0.010% F.R.O./°F (±0.02% F.R.O./°C) over compensated temperature range
(including NLH)%F.R.O	
Shock Resistance	-4° to 185°F (-20°to 85 °C ±1.2% typical, ±2.0% max. (over compensated temperature range) 1000 g for 5 msec
Vibration Resistance	Surpasses MIL STD810C Method 514-2 Curve L and EUROCAE ED 14A/RTCA 160A
Humidity	Sulpasses Mile STD010C Melliou S14-2 Curve L and EOROCAE ED 14A/RTCA 100A
ConnectorVersion	95% Relative humidity
Cable Version	Immersible to IP67
EMC	Emissions to EN55022 (CISPR 22) Limit B; Radiated Immunity to IEC 801-3 Level 3 10 V/m; Burst
ENIC	Transients to IEC 801-4 Level 3 (2kV); Electrostatic Discharge to IEC 801-2 Level 2 (4kV contact);
	Surges to IEC 801-5 class 3 (2kV).
Insulation Resistance	500  MOhm at 50 VDC



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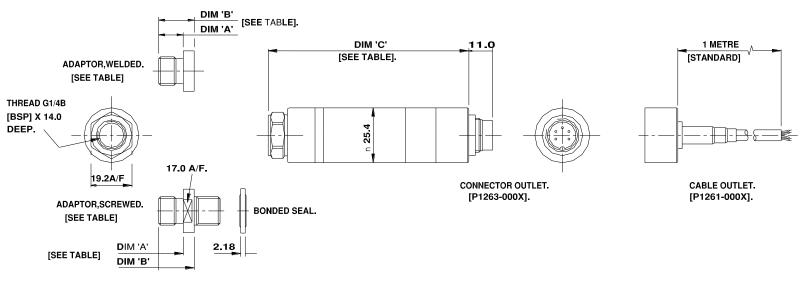
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# **DIMENSIONS**



Male Connector Part Number:	Amphenol T3262 000
Mating Female Connector:	Amphenol T3361 004

Adapters					
Thread Size	Code Welded	Α	В	Code Screw In	В
G1/4A (BSP) (F)	0001				
G1/4A (BSP) (M)	0002	0.46 (11.7)	0.67 (16.9)	0022	0.70 (17.8)
M14 x 1.5 (M)	0003	0.40 (10.2)	0.61 (15.4)	0023	0.62 (15.8)
7/16"-20UNF-2A (M)	0004	0.56 (14.3)	0.77 (19.5)	0024	0.78 (19.8)
1/4"-18NPT (M)	0005	0.67 (17.0)	0.87 (22.2)	0025	0.92 (23.4)
M10 x 1.0 (F)	0006		0.60 (15.2)	0026	0.61 (15.4)
1/4"-18NPT (F)	0009				

	Dimension C		
	0 to 5 - 50 bar	0 to 70 - 700 bar	
P1221/3-00XX	65.0	66.5	
P1231/3-00XX	79.0	80.5	
P1241/3-00XX	79.0	80.5	
P1261/3-00XX	93.4	95.0	
P1281/3-00XX	79.0	80.5	

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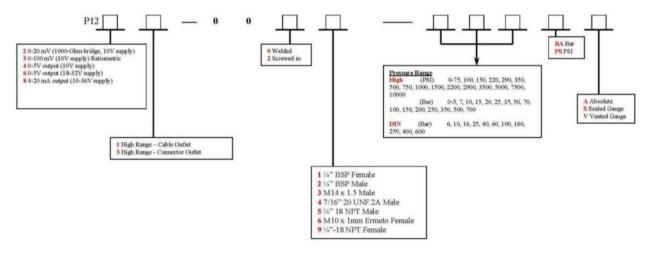
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## CONNECTIONS



#### **ORDERING INFORMATION**



NOTE: Unit comes standard with 1 meter of cable.

For a different cable length, add 2 digits "xx" to the end of the configuration above indicating the length desired. Max 20 meters.

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