



P1200

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 $\pm 0.20\%$ 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.

FEATURES

- ◆ Typical Accuracy of < ±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 (mA max)	-	-	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

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 Pre	ssure	>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
Combined	d Non-linearity.	Hysteresis
and Non-	repeatability	<±0.15% F.R.O. (typ): ±0.20% F.R.O. max (BSL) – high range
Temperat	ure Range	
Operable	U	-65°F to 185°F (-54°C to 85°C) [P1221/4 -65°F to 250°F (-54°C to 120°C)]
Compens	ated	-4°F to 185°F (-20°C to 85°C) [P1221/4 -4°F to 212°F (-20°C to 100°C)]
Storage		-65°F to 250°F (-54°C to 120°C)
Combined	d Thermal Zero	
And Sens	itivity Shift	<±0.010% F.R.O./°F (±0.02% F.R.O./°C) over compensated temperature range
Total The	rmal Error Band	j*
(including	3 NLH) %F.R.O.	
		-4° to 185°F (-20°to 85 °C ±1.2% typical, ±2.0% max. (over compensated temperature range)
Shock Re	sistance	1000 g for 5 msec
Vibration Humidity	Resistance	Surpasses MIL STD810C Method 514-2 Curve L and EUROCAE ED 14A/RTCA 160A
Connecto	r Version	95% Relative humidity
Cable Ver	sion	Immersible to IP67
EMC		Emissions to EN55022 (CISPR 22) Limit B; Radiated Immunity to IEC 801-3 Level 3 10 V/m; Burst 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

DIMENSIONS





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	

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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