

1200 Series / 1600 Series- **psibar** an OEM Transducer Featuring Exceptional Proof Pressure and Stability Specifications

- ▶ Gauge, Vacuum, and Compound Pressure Models
- ▶ General Purpose and Wash down Enclosures
- ▶ High Proof Pressure Achieved by Thicker Diaphragm Construction
- ▶ Voltage and Current Output Models

The **psibar** features stability and toughness via its CVD and ASIC design coupled with a thicker diaphragm. The thicker diaphragm enables **psibar** to survive most pressure spikes caused by pump ripple, solenoid valves, etc. The 1600 series extends the packaging options by providing an all welded stainless steel back end for demanding industrial applications. The **psibar**'s modular design enables special ordering of fittings, electrical cables, etc. for OEM applications. The ASIC and CVD technology enables Gems to offer almost any output over any pressure range.

Specifications

Input	
Pressure Range	Vacuum to 400 bar (6000 psi)
Proof Pressure	4 x Full Scale (FS) (<1% FS Zero Shift)
Burst Pressure	>35 x FS <= 4 bar (60 psi); >20 x FS <=40 bar (600 psi); >5 x FS <= 400 bar (6000 psi)
Fatigue Life	Designed for more than 100 million FS cycles
Performance	
Supply Voltage Sensitivity	0.01% FS/Volt
Long Term Drift	0.2% FS/year (non-cumulative)
Accuracy	0.5 % FS typical (optional 0.15% FS)
Thermal Error	2.0% FS typical
Compensated Temperatures	-20° to 80° C (-5° to 180° F)
Operating Temperatures	-40° to 125° C (-22° to 260° F) for elec. codes A, B, C, 1 -20° to 80° C (-5° to 180° F) for elec. codes 2, D, G, 3 -20° to 50° C (-5° to 125° F) for elec. code F temperatures >100°C supply is limited to 24 Vdc
Zero Tolerance	1% of span
Span Tolerance	1% of span
Mechanical Configuration	
Pressure Port	see ordering chart
Wetted Parts	17-4 PH Stainless Steel
Electrical Connection	see ordering chart
Enclosure	316 SS, 17-4 PH ss IP65 for elec. codes A,B,C,D,G,1,2,3 IP67 for elec. codes F IP30 for elec. code "3" with flying leads
Vibration	35g peak sinusoidal, 5 to 2000 Hz
Acceleration	100g steady acceleration in any direction 0.032% FS/g for 1 bar (15 psi) range decreasing logarithmically to 0.0007% FS/g for 400 bar (6000 psi) range.
Shock	Withstands free fall to IEC 68-2-32 procedure 1
Approvals	CE
Weight	approx. 100 grams (additional; cable 75 g/m)

Individual Specifications

Voltage Output units	
Output	see ordering chart
Supply Voltage (Vs)	1.5 Vdc above span to 35 Vdc
Min. Load Resistance	(FS output / 2) Kohms
Current Output units	
Output	4-20 mA (2 wire)
Supply Voltage (Vs)	24 Vdc, (7-35 Vdc)
Max. Loop Resistance	(Vs-7) x 50 ohms



Wire Code		Current Units (4-20mA)		
		(+)	(-)	EARTH
A, B, G "DIN"	PIN	1	2	4
C "10-6 Bayonet"	PIN	A	B	E
D cable		R	BK	DRAIN
F IP 67cable		R	BL	DRAIN
1 "8-4-Bayonet"	PIN	A	B	D
2 "cable"		R	BK	DRAIN
3 "conduit & cable"		R	BK	DRAIN

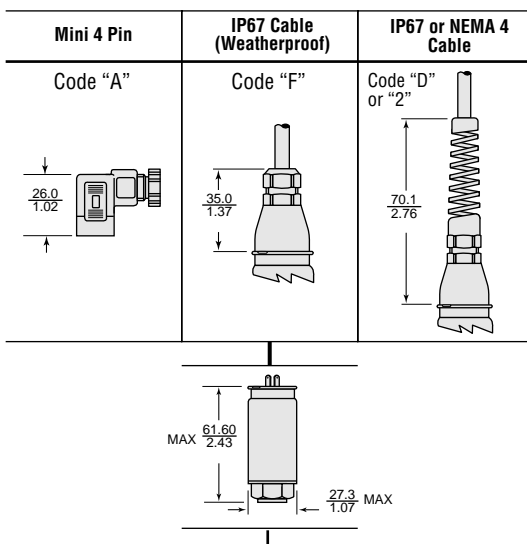
Wire Code		Voltage Units			
		IN+	COM	OUT+	EARTH
A, B, G "DIN"	PIN	1	2	3	4
C "10-6 Bayonet"	PIN	A	C	B	E
D cable		R	BK	W	DRAIN
F IP 67cable		R	W	Y	DRAIN
1 "8-4-Bayonet"	PIN	A	C	B	D
2 "cable"		R	BK	W	DRAIN
3 "conduit & cable"		R	BK	W	DRAIN

Cable Legend:

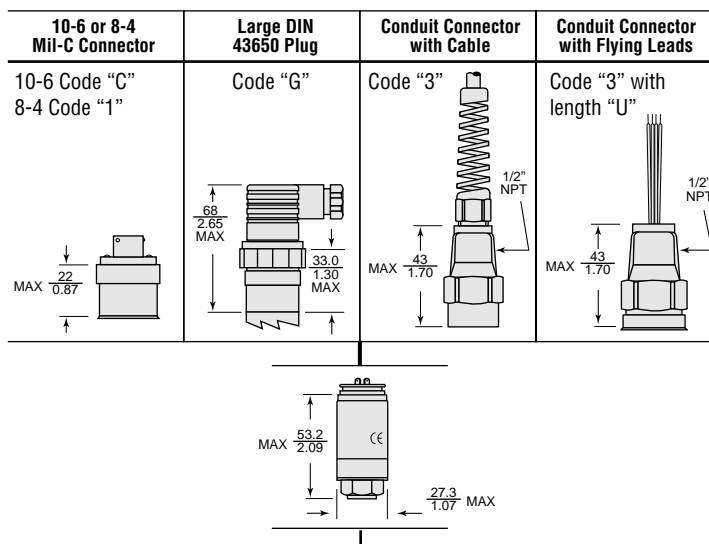
R = Red
BL = Blue
BK = Black
W = White
Y = Yellow

Dimensions

psibar 1200 Series



psibar 1600 Series



G1/4 Internal	G1/4 External	1/4 - 18 NPT	G1/2 Manometer	7/16 - 20 UNF-2A (SAE J514)	G1/4 Soft Seal	1/8 NPT	R 1/4	G 1/8
Code "00"	Code "01"	Code "02"	Code "03"	Code "04"	Code "05"	Code "08"	Code "0A"	Code "09"

How to Order

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

