



## FEATURES

- Heavy Industrial CE Approval
- 10 V/m EMI Protection
- Reverse Polarity Protection on Input
- Short Circuit Protection on Output
- Up to  $\pm 0.1\%$  Accuracy
- Up to  $\pm 0.75\%$  Total Error Band
- Compact Outline
- $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  Operating Temperature
- Weatherproof

## APPLICATIONS

- Industrial Process Control and Monitoring
- Advanced HVAC Systems
- Refrigeration Systems
- Automotive Test Stands
- Off-Road Vehicles
- Pumps and Compressors
- Hydraulic/Pneumatic Systems
- Agriculture Equipment
- Energy Generation and Management

## U5200

### Industrial Pressure Transducer

## SPECIFICATIONS

- **High Accuracy**
- **Compact**
- **Variety of Pressure Ports and Electrical Configurations**
- **Optional Stainless Steel Snubber**
- **CE Compliant and Weatherproof**
- **UL Certified**
- **Gage, Sealed, Absolute, Compound**
- **Expedite Configurations Available (10 Days)**

The U5200 pressure transducers from the UltraStable line of MEAS, with their modular design, offer maximum flexibility for different configurations. This latest series features high accuracy and a quick turnaround for demanding commercial and heavy industrial applications. This series is suitable for measurement of liquid or gas pressure, even for difficult media such as contaminated water, steam, and mildly corrosive fluids.

The wetted material is made of 316L stainless steel and the transducer's durability is excellent with no O-rings or organics exposed to the pressure media. The U5200 is weatherproof and exceeds the latest heavy industrial CE requirements including surge protection. The circuit is protected from reverse wiring at input and short circuit at output.

This product is geared to the OEM customer for low to mid volumes. MEAS stands ready to provide a custom design of the U5200 where the volume and application warrants. Additional configurations not listed are either available or possible. Please inquire for further information.

## STANDARD RANGES

Range (psi)	Range (Bar)	Gage	Sealed	Absolute	Compound
0 to 002	0 to .14	•	•	•	•
0 to 005	0 to .35	•	•	•	•
0 to 015	0 to 001	•	•	•	•
0 to 030	0 to 002	•	•	•	•
0 to 050	0 to 3.5	•	•	•	•
0 to 100	0 to 007	•	•	•	•
0 to 150	0 to 010	•	•	•	•
0 to 200	0 to 014	•	•	•	•
0 to 300	0 to 020	•	•	•	•
0 to 500	0 to 035	•	•	•	•
0 to 01k	0 to 070	•	•	•	•
0 to 03k	0 to 200	•	•	•	•
0 to 05k	0 to 350	•	•	•	•
0 to 10k	0 to 700	•	•	•	•

Intermediate ranges available upon request.

## PERFORMANCE SPECIFICATIONS

Ambient Temperature: 25°C (unless otherwise specified)

PARAMETERS	MIN	TYP	MAX	UNITS	NOTES
Accuracy (RSS of linearity, hysteresis, and repeatability)	-0.5		0.5	%F.S. BFSL	≤ 2psi @ 25°C
	-0.25		0.25	%F.S. BFSL	> 2psi and ≤ 5psi @ 25°C
	-0.1		0.1	%F.S. BFSL	> 5psi and ≤ 500psi @ 25°C
	-0.25		0.25	%F.S. BFSL	> 500psi and ≤ 5000psi @ 25°C
	-0.75		0.75	%F.S. BFSL	> 5000psi @ 25°C
Isolation, Body to any Lead	100			MΩ	@500V <sub>DC</sub>
Dielectric Strength			2	mA	@500V <sub>AC</sub> , 1min
Pressure Cycles	1.00E+6			0~FS Cycles	
Proof Pressure	3X		20k psi	Rated	
Burst Pressure	4X		20k psi	Rated	
Long Term Stability (1 year)	-0.1		0.1	%F.S.	
Total Error Band	-1.25		1.25	%F.S.	≤ 2psi
	-1.0		1.0	%F.S.	> 2psi and ≤ 5psi
	-0.75		0.75	%F.S.	> 5psi and ≤ 5000psi
	-1.25		1.25	%F.S.	> 5000psi
Compensated Temperature	-20		+85	°C	
Operating Temperature	-40		+125	°C	Except cable 105°C max
Storage Temperature	-40		+125	°C	Except cable 105°C max
Load Resistance (R <sub>L</sub> )	R <sub>L</sub> > 100k			Ω	Voltage Output
Load Resistance (R <sub>L</sub> )	< (Supply Voltage -9V) / 0.02A			Ω	Current Output
Current Consumption			5	mA	Voltage Output
Rise Time (10% to 90%)	<2ms (Voltage Output); <3ms (Current Output); Without Snubber				
Pressure Port Material	316L Stainless Steel; 316L Stainless Steel Snubber				
Shock	50g, 11msec Half Sine Shock per MIL-STD-202G, Method 213B, Condition A				
Vibration	±20g, MIL-STD-810C, Procedure 514.2, Fig 514.2-2, Curve L				

For custom configurations, consult factory.