



## Model PSC422 Pressure Transducer for Low cost General Purpose Industrial Applications

PSC422 Pressure Transducer incorporates a piezoresistive ceramic sensor capsule in a low profile form factor that provides media isolation and robust construction. The structure is well suited for use in harsh media environments and chemical applications as the media is in contact with the back face of the diaphragm with the thick film bridge measurement isolated on the opposite side. ASIC digital compensation and temperature correction provides high accuracy and a wide operating temperature range. Voltage outputs available: 0.5-4.5 VDC Ratiometric, 0.0 – 5.0 VDC, 1.0 – 5 VDC.

Wetted parts are ceramic, FKM O-ring (NBR, HNBR, CR optional), Brass (316 stainless steel optional alternative). Vent hole and protection are applied onto the structure reference.



- Gauge Pressures / Sealed Gauge Pressures
- ASIC Temperature Compensated
- 3 % Total Error Band
- Recommended load resistance: >10,000 ohms
- Process Fitting: see column Z
- Electrical Connection: Packard connector

### Sample Applications:

- Water, waste water
- Air compressors

PSC422 Ordering Model NO.: PSC422-H-O-W-X-Y-Z					
H	O	W	X	Y	Z
Housing	Output Type	Pressure Range	Pressure Type	O-ring Material	Port Type
A = 316 stainless steel	B = 0.5 ~ 4.5V	1 = 30 psi	G = Gauge	1 = FKM	1 = 1/8-27 NPT
B = Brass	(Ratiometric)	2 = 50 psi	S = Sealed Gauge	2 = NBR	2 = 1/4-18 NPT
	D = 1.0 ~ 1.5V	3 = 75 psi		3 = HNBR	3 = DIN3852-A-G1/4
	E = 0.5 ~ 4.5V	4 = 150 psi		4 = CR	4 = DIN3852-E-G1/4
	G = 0 ~ 5 V			5 = Special	5 = DIN3852-A-M10*1.0
					6 = DIN3852-A-M12*1.5
					7 = 7/16-20 UNF
					8 = DIN3852-A-M14*1.5
					9 = 1/8-27 NPT-Female
					X = Special

Electrical data	PSC422-H-B (Ratiometric)	PSC422-H-D (1.0~5.0VDC)	PSC422-H-E (0.5~4.5VDC)	PSC422-H-G (0~5VDC)
Supply Voltage	4.75 ~ 5.25 VDC	9 ~ 32 VDC	9 ~ 32 VDC	9 ~ 32 VDC
Output	0.5 ~ 4.5 VDC	1.0 ~ 5.0 VDC	0.5 ~ 4.5 VDC	0 ~ 5 VDC
Supply Current	< 3 mA	< 3 mA	< 3 mA	< 3 mA
Over Voltage Protection	16 V			
Reverse Polarity Protection	-16 V	-16 V	-16 V	-16 V



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Performance (specified @ 25 °C)	
Accuracy (Best fit straight line)	± 1.0% BFSL
Error	± 3.0% FS
Zero/Span Offset Tolerance	± 2.0% FS
Stability (typical)	< ±0.25% full scale per year
Compensated Temperature Range	-20°C ~ 85°C
Operating Temperature Range	-40°C ~ 100°C
Storage Temperature Range	-40°C ~ 125°C
Burst Pressure	3 X Full Scale
Proof Pressure	2 X Full Scale
Pressure Cycles	More than 4 million full scale cycles
Mechanical Vibration	20 g, 10 - 2000 Hz
Mechanical Shock	IEC 60068-2-27, 50 g, 11 ms pulse
Ingress Rating	IP67



Agency Approvals	
IEC61000-4-2	Electrostatic Discharge immunity: 8kV Contact; 15kV Air; 3 Discharges; Class B. Unit Survived.
IEC61000-4-3	EM Field Immunity: 30V/m.

### Structure reference (Unit: Inch[mm])

