

PRESSURE TRANSDUCER

Kar-tech's pressure transducers are a simple, standard, and reliable way to bring system pressure into a control system. They are the ideal solution for sensing pressure in all of your most demanding applications. We use a media isolated metal diaphragm design combined with Application Specific Integrated Circuits (ASIC) to create the perfect marriage of value and performance.

We normally stock a 0 - 3,000 PSI and 0 - 5,000 PSI version. Both versions boast an accuracy of $\pm 0.5\%$ full scale with as little as 2% total error over a temperature range of -40°C to 120°C .

Our pressure transducers are offered with two output options: 4mA to 20mA and 0.5VDC to 4.5VDC, both of which are available through our online store, and in OEM volumes with preferred pricing.

FEATURES

- All-weather rated to IP67
- Accurate and fast with less than a 2mS response time
- Reverse voltage protection to help prevent mis-firing
- No internal elastomeric seals, translates to no-ring compatibility issues
- All parts are metal wetted for use in a wide-range of fluid applications
- Amplified outputs eliminate the need for external amplifiers

PERFORMANCE

Response time	< 2mS
EMI/RFI	EMI: EN50081-1/-2 EMC: EN50082-2
Accuracy	$\pm 0.5\%$ F.S.O. best fit straight line.
Total error band	$\pm 2\%$ Typical ($\pm 3\%$ Max.) F.S.O. Includes: zero offset error, span error, thermal effect on zero and thermal effect on span, non-linearity, hysteresis, nonrepeatability
Operating temperature (& Storage temperature)	-40° to 120°C (-40° to 257°F)



PHYSICAL

Range	0-3000 PSI / 0-5000 PSI
Proof pressure	6000 PSI / 10,000 PSI
Burst pressure	30,000 PSI / 50,000 PSI
Material in contact with media	Port: Stainless Steel 304L; Diaphragm: Haynes 214 Alloy
Weight	4.4oz (124g)

ENVIRONMENTAL

Shock	50 g peak (5 m), 100 g peak (11 m)
Vibration	Meets MIL-STD 810-C

ELECTRICAL

PARAMETER	4-20mA	0-5V
Zero output	4 mA	0.5 VDC
Full scale span	20 mA	4.5 VDC
Excitation	10-30 VDC	10-30 VDC
Supply current	N/A	1mA
Source (nominal)	N/A	1mA
Sink (nominal)	N/A	1mA
Supply rejection ratio	90 dB	90 dB
Supply rejection ratio	N/A	25 Ω max.

