

**Product Bulletin**

# 82HP Series

## Hermetic Pressure Transducer

**Voltage Output, Premium Accuracy, Standard Package**



The 82HP Series is ideally suited for severe industrial OEM applications. This is a *premium accuracy*, high level Vdc output that requires no end user amplification. Housed in

corrosion resistant stainless steel, the 82HP includes a hermetic front end with a variety of electrical connectors. This transducer is

available in sealed gage and vented gage from 15 psi up to 30,000 psi with several package options. Contact the factory regarding agency approvals.

### Features

- Low total error band.....
- Stainless steel housing.....
- EMC protected to 300 V/m.....
- Wide operating temperature range..... (-20° up to +100°C)
- Reverse polarity protection.....
- Small size.....
- Repeatability <0.05%.....
- High accuracy +/- 0.25% F.S. typ..... Static Error Band

### Benefits

- High accuracy through wide operating temperature range*
- Media Compatible*
- High reliability in noisy environments*
- Wide range of applications*
- Robust installation*
- More mounting options*
- Measurement confidence*
- Precise measurement for severe industrial OEM applications*

### Applications

- Compressors & Pumps
- Hydraulics & Pneumatics
- Agriculture & Construction Equipment
- Transportation & Off Road Vehicles
- Engine Controls & Monitors
- HVAC /Refrigeration
- Alternative Energy Management
- Load Management
- Process Control & Automation

## Technical Specifications

#### Pressure Ranges

- 15psig - 500psig
- 50psis - 30,000psis

#### Performance

- Accuracy... +/-0.25% F.S. typ (static error band @ 25°C)
- Total Thermal Effect Option B: +/- 0.005% F.S. / °C typ (-20°C to +100°C)
- Option C: +/-0.004% F.S. /°C typ (-20°C to +100.0°C)
- Operating temperature: -40°C to 125°C
- Storage temperature: -40°C to 150°C

#### Electrical

- VS... 4.5-5.5Vdc
- Vs... 8-30Vdc
- Vs... 9-32Vdc
- Vs... 12-30Vdc
- Vs... 4.75-5.25Vdc
- Vs... 9-30Vdc
- Supply current.....8 - 13mA
- Output current
- Source.....1.1 mA
- Sink..... 0.1 mA
- Output Load Range..... 4.0K ohms - no load
- Output Response Time..... 1ms
- Overvoltage protection..... 30 VDC
- Reverse Voltage Protection..... -5 VDC
- EMC(1MHz - 400 MHz)..... 300 V/m (400MHz-1GHz)..... 200 V/m
- Short Circuit Protected ..... Yes

- Vo... 0.5-4.5Vdc
- Vo... 0.5-4.5Vdc
- Vo... 1-6Vdc
- Vo... 0-10Vdc
- Vo... 0.25-4.75Vdc
- Vo... 1-5Vdc

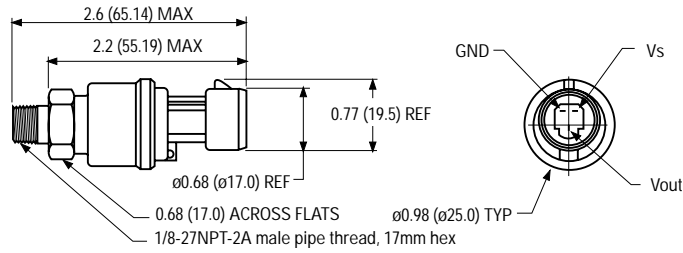
#### Physical

- Proof Pressure
- Up to 1,500 psi..... 2X
- Up to 7,000 psi..... 1.5X
- Up to 30,000 psi..... 1.2X
- Burst Pressure
- 3X
- Cycle Life
- 100M F.S. cycles, 25-80°C
- Random Vibration (up to 1kHz)
- 15g
- Drop (any axis)
- 1m
- Electrical Connection
- Packard Metri-Pack™
- Hirschman DIN
- wire leads

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## Dimensions (Typical)

in (mm)



## Ordering Information

### EXAMPLE:

Series	82HP	02	2	X	00500	S	S	0	B
Pressure Connection	1/8-27NPT-2A male pipe thread, 17mm hex								
Electrical Connection	Standard Packard Metri-Pack								
Voltage Input- Output	Power Input: 4.5-5.5Vdc, Device Output 0.5-4.5Vdc								
Pressure Range	0-500psi								
Pressure Reference	sealed gage								
EMC	standard-(300v/m 1MHz-400MHz)								
Potted Wire Lead Length	0								
Total Thermal Effect Option B									

### STANDARD OPTIONS

Series	82HP
Pressure Connection	02 1/8 - 27NPT-2A male pipe thread, 17mm hex 03 1/4 - 18UNF-2A male pipe thread, 17mm hex 04 7/16 - 20UNF-2A male o-ring per SAE J1926/2, 17mm hex 10 3/8 - 24UNF-2A male o-ring per SAE J1926/2, 17mm hex
Electrical Connection	2 Standard Packard Metri-Pack™ 3 Hirschman DIN 4 Wire leads
Voltage Input - Output	X Vs... 4.5-5.5Vdc Vo... 0.5-4.5Vdc T Vs... 8-30Vdc Vo... 0.5-4.5Vdc S Vs... 9-32Vdc Vo... 1-6Vdc W Vs... 12-30Vdc Vo... 0-10Vdc Z Vs... 4.75-5.25Vdc Vo... 0.25-4.75Vdc R Vs... 9-30Vdc Vo... 1.-5Vdc
Pressure Ranges	15psig - 500psig 50psis - 30,000psis (psig = sealed gage) (psig = vented gage)
Pressure Reference	S Sealed Gage G Vented gage
EMC	S 300v/m 1MHz-400Mhz B Meets Level 1 requirement of GMW 3097GS, radiated immunity Level 1 requirement of GMW 3097GS, bulk current injection noise C Meets Level 2 requirement of GMW 3097GS, radiated immunity Class B requirement of GMW 9112P, bulk current injection noise
Total Thermal Effect	B +/-0.005% F.S./°C typ (-20°C to +100°C) C +/-0.004% F.S./°C typ (-20°C to +100°C)

### SPECIAL OPTIONS

(Contact factory for availability)

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82HP



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