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Product Bulletin

86HP Series
Hermetic Pressure Transducer

Current Output, Premium Accuracy, Enhanced Package

The 86HP Series is ideally suited for severe industrial OEM applications. This is a *premium accuracy*, high level mA output that requires no end user amplification. Housed in corrosion resistant stainless steel, the 86HP 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.

Features

High Accuracy +/- 0.25% F.S. typ..... Static Error Band

Low Total Error Band..... (-20°C to +100°C

Stainless Steel Housing.....

EMC Protected to 20V/M.....

Wide Operating Temperature Range..... (-40° up to +100°C)

Reverse Polarity Protection.....

Small Size.....

Repeatability <0.05%.....

Benefits

Precise Measurement for Severe Industrial OEM Applications

High Accuracy Over Wide Operating Temperature Range

Media Compatible

High Reliability in Noisy Environments

Wide Range of Applications

Robust Installation

More Mounting Options

Measurement Confidence

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

0-15 psig through 0-500 psig

0-500 psis through 0-30,000 psis

Performance

Accuracy... +/-0.25% F.S. typ (static error band @ 25°C)

Total Thermal Effect

Option B: +/-0.008% F.S. / °C typ (-20°C to +100°C)

Option C: +/-0.006% F.S. / °C typ (-20°C to +100°C)

Operating Temperature: -40°C to +100°C

Storage Temperature: -40°C to +120°C

Electrical

Vs... 10 - 32Vdc Io... 4 - 20mA

Output Load Range	(Vs-10Vdc) / 20mA
Output Response Time	2ms
Overvoltage Protection	32 Vdc
Reverse Voltage Protection	-30 Vdc
Short Circuit Protected	Yes

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 minimum
Cycle Life	100M F.S. cycles, 25-80°C
Random Vibration (up to 1kHz)	20g
Drop (any axis)	1m
Electrical Connection	Packard Metri-Pack™ Hirschman DIN Wire Leads Hirschman Mini DIN Truncated cone cable

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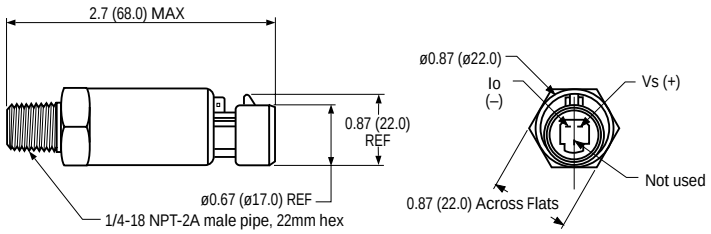
Dimensions (Typical)

in (mm)



Ordering Information

EXAMPLE: **86HP 06 2 Y 00500 S S 0 A**

Series	86HP
Pressure Connection	1/4-18NPT-2A male pipe, 22mm
Electrical Connection	Standard Packard Metri-Pack
Device Input-Output	Power Input: 10-32Vdc, Device Output 4-20mA
Pressure Range	0-500psi
Pressure Reference	Sealed Gage
EMC	Standard-(20V/m, 1MHz-400MHz)
Potted Wire Lead Length	0
Total Thermal Effect	Option B

STANDARD OPTIONS

Series	**86HP**
Pressure Connection	**05** 3/8 - 24UNF-2A male o-ring thread per SAE J514, 22mm hex **06** 1/4 - 18NPT-2A male pipe, 22mm hex **07** 7/16 - 20UNF-2A male o-ring per SAE J514, 22mm hex **12** M14 x 1.5 male o-ring thread per ISO 6149, 22mm hex **14** 1/8-27 NPT-2A male pipe, 22mm hex
Electrical Connection	**2** Standard Packard Metri-Pack™ **3** Hirschman DIN **4** Wire leads
Device Input - Output	**Y** Vs... 10-32Vdc Io... 4-20mA
Pressure Ranges	0-15 psig through 0-500 psig 0-500 psis through 0-30,000 psis (psis = sealed gage) (psig = vented gage)
Pressure Reference	**S** Sealed gage **G** Vented gage
EMC	**S** 20v/m, 1MHz-400Mhz
Wire Leads	**0** No wire (Packard, DIN) **1** 1 meter length **2** 2 meter length
Total Thermal Effect	**B** +/-0.008% F.S./^{o}C typ (-20^{o}C to +100^{o}C) **C** +/-0.006% F.S./^{o}C typ (-20^{o}C to +100^{o}C)

SPECIAL OPTIONS

(Contact factory for availablility)

Packard Metri-pack is a trademark of Delphi Packard Electric Systems.

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TEXAS INSTRUMENTS