

Product Bulletin

**84HP Series
Hermetic Pressure Transducer**

**Voltage Output, Premium Accuracy,
Enhanced Package**



The 84HP 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, includes a hermetic front end, with electric connectors. This transducer is available in sealed gage and vented

gage from 15 psi up to 30,000 psi with a variety of packages options. Contact factory regarding agency approvals.

Features

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

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

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°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.....8.2K 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

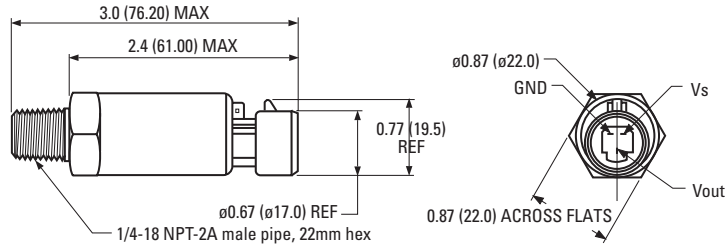
Physical

- 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) 20g
- Drop (any axis) 1m
- Electrical Connection Packard Metri-Pack™ Hirschman DIN wire leads

84HP Series Hermetic Pressure Transducer

Dimensions (Typical)

in (mm)



Ordering Information

EXAMPLE:

Series	84HP	06	2	X	00500	S	S	0	B
Pressure Connection	1/8-18NPT-2A male pipe, 22mm 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 B									

STANDARD OPTIONS

Series	84HP
Pressure Connection	05 3/8 - 24UNF-2A male o-ring 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 M10 x 1.0 male o-ring per ISO 6149, 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
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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
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Pressure Ranges	15psig - 500psig 50psis - 30,000psis (psic = sealed gage) (psig = vented gage)
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Pressure Reference	S Sealed Gage G Vented Gage
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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
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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)
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SPECIAL OPTIONS

(Contact factory for availability)

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84HP



Texas Instruments Incorporated
34 Forest St., MS 23-10
Attleboro, MA 02703-0964
Phone: 1-888-438-2214
Fax: (508) 236-2349
email: tisensors@ti.com
www.tisensors.com