

Model LM

Gage Pressure Transducer



DESCRIPTION

The Model LM pressure transducer is a cost efficient general purpose gage-only device. Each unit is constructed of welded stainless steel for durability in dry rugged environments. Both

gas and liquid pressure overloads of up to 50% over capacity are safely accepted.

FEATURES

- 1 psig to 10000 psig range
- Integral cable connection
- 1/4-18 NPT female pressure port
- mV/V output
- 0.5 % accuracy

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PERFORMANCE SPECIFICATIONS

| Characteristic | Measure |
|-----------------------|-------------------|
| Accuracy ¹ | ±0.5 % full scale |

ENVIRONMENTAL SPECIFICATIONS

| Characteristic | Measure |
|--------------------------|-------------------------------------|
| Temperature, operating | -54 °C to 121 °C [-65 °F to 250 °F] |
| Temperature, compensated | 16 °C to 71 °C [60 °F to 160 °F] |
| Temperature effect, zero | 0.01 % full scale/°F |
| Temperature effect, span | 0.02 % reading/°F |

ELECTRICAL SPECIFICATIONS

| Characteristic | Measure |
|------------------------------|---------------------|
| Excitation (calibration) | 10 Vdc |
| Excitation (acceptable) | 10 Vdc |
| Insulation resistance | 5000 mOhm @ 50 Vdc |
| Electrical termination (std) | Cable 0.91 m [3 ft] |

MECHANICAL SPECIFICATIONS

| Characteristic | Measure |
|----------------|--|
| Media | All gases/liquids compatible with wetted parts |
| Overload, safe | 50 % over capacity |
| Pressure port | 1/4-18 NPT female |
| Wetted parts | Stainless steel |
| Weight | 170 g [6 oz] |
| Case material | Stainless steel |

OPTION CODES

| | |
|---------------------------------|--|
| Range Code | Many range/option combinations are available in our quick-ship and fast-track manufacture programs. Please see http://sensing.honeywell.com/TMsensor-ship for updated listings. |
| Pressure ranges | 1, 2.5, 5, 15, 25, 50, 75, 100, 150, 200, 300, 500, 750, 1000, 1500, 2000, 3000, 5000, 7500, 10000 psig |
| Temperature compensation | 1a. 60 °F to 160 °F |
| Internal amplifiers | 2u. Unamplified, mV/V output |
| Pressure ports | 5a. 1/4-18 NPT female |
| Electrical termination | Cable 0.91 m [3 ft] |
| Special calibration | 9a. 10 point (5 up/5 down) @ 20 % increments 9b. 20 point (10 up/10 down) @ 10 % increments |

WIRING CODES

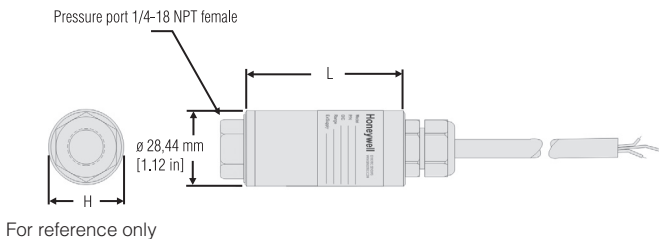
| Cable | Unamplified |
|-------|----------------|
| Red | (+) Excitation |
| Black | (-) Excitation |
| Green | (-) Output |
| White | (+) Output |

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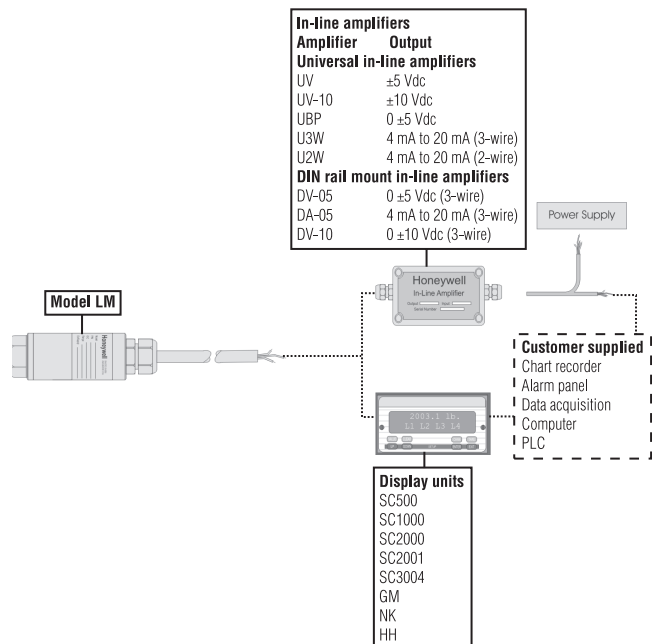
RANGE CODES

| Pressure range (psig) | 1 | 2.5 | 5 | 15 | 30 | 50 | 75 | 100 | 150 | 200 | 300 | 500 | 750 | 1000 | 1500 | 2000 | 3000 | 5000 | 7500 | 10000 |
|--|---------------------|-----|----|-------------|-----|-----|-----|-----|-------------------------|------|-------|------|------|------------|------|------|------|------|--------|-------|
| RANGE CODE | AP | AS | AT | BJ | BM | BN | BP | BR | CJ | CL | CP | CR | CT | CV | DJ | DL | DN | DR | DT | DV |
| L mm [in] | 57,4 [2.26] | | | 56,6 [2.23] | | | | | 51 [2.00] | | | | | 45 [1.78] | | | | | | |
| Hex mm [in] psia | 25,4 [1.0] | | | 25,4 [1.0] | | | | | 22,2 [0.875] | | | | | 19 [0.75] | | | | | | |
| Over pressure (test) (psi) | 4 | 10 | 20 | 50 | 100 | 150 | 150 | 150 | 150 % full scale | | | | | | | | | | | |
| Over pressure (burst) (psi) | Consult factory | | | | | | | | 600 | 800 | 1,2 K | 2 K | 2 K | 4 K | 6 K | 8 K | 12 K | 15 K | 20 K | 20 K |
| Natural frequency (Hz) | Consult factory | | | | | | | | 9,8 K | 11 K | 14 K | 18 K | 22 K | 30 K | 48 K | 54 K | 66 K | 85 K | >100 K | |
| Port volume mm ³ [in ³] | 2,5 [0.15] | | | | | | | | 2,8 [0.17] | | | | | 3,1 [0.12] | | | | | | |
| Output (mV/V) | 5 | | | 10 | | | | | 2 | | | | | | | | | | | |
| Wetted parts | 316 stainless steel | | | | | | | | 17-4 PH stainless steel | | | | | | | | | | | |
| Bridge resistance | 5000 ohm | | | | | | | | 350 ohm | | | | | | | | | | | |
| Strain gage type | Silicon | | | | | | | | Foil | | | | | | | | | | | |

MOUNTING DIMENSIONS AND CHARACTERISTICS



TYPICAL SYSTEM DIAGRAM



SPECIAL REQUIREMENTS (CONSULT FACTORY)

Have a special requirement? New case pressure, different cable lengths, electrical connectors, or materials? Consult our factory by calling +1 614-850-5000 (800-848-6564). Customization is key to our test and measurement business. Special outputs, wiring codes, and calibrations are all standard to us.

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NOTES

1. Accuracies stated are expected for best-fit straight line for all errors including linearity, hysteresis & non-repeatability thru zero.

Warranty. Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

For more information about Sensing and Control products, visit www.honeywell.com/sensing or call +1-815-235-6847

Email inquiries to info.sc@honeywell.com

WARNING **PERSONAL INJURY**

- DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

WARNING **MISUSE OF DOCUMENTATION**

- The information presented in this catalogue is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

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