

Model 811FM

Two-Wire Gage/Absolute Pressure Transmitter



DESCRIPTION

The two-wire Model 811FM transmitter has welded, stainless steel diaphragms for use with liquid, gas, or corrosive vapors. The model has a hermetically sealed, stainless steel cases which requires no adjustment. These transducers are corrosion

and shock resistant, as well as reverse polarity protected. The 4 mA to 20 mA output permits long cable runs up with a high signal-to-noise ratio. A dual pipe thread pressure fitting is provided for easy bulkhead mounting.

FEATURES

- 2 psig/a to 10000 psig/a range
- Bulkhead mounting
- All welded, stainless steel, "true gage or absolute" design
- Explosion proof
- 0.25 % accuracy

Model 811FM

PERFORMANCE SPECIFICATIONS

| Characteristic | Measure |
|-----------------------|--|
| Pressure ranges | 2, 5, 10, 15, 25, 50, 75, 100, 150, 200, 300, 500, 750, 1000, 1500, 2000, 3000, 5000, 7500, 10000 psig/a |
| Accuracy ² | ±0.25 % full scale |
| Linearity | ±0.15 % full scale |
| Hysteresis | ±0.10 % full scale |
| Non-repeatability | ±0.05 % full scale |
| Output | 4 mA to 20 mA |
| Resolution | Infinite |

ENVIRONMENTAL SPECIFICATIONS

| Characteristic | Measure |
|--------------------------|----------------------------------|
| Temperature, operating | -18 °C to 82 °C [0 °F to 180 °F] |
| Temperature, compensated | 16 °C to 71 °C [60 °F to 160 °F] |
| Temperature effect, zero | 0.01 % full scale/°F |
| Temperature effect, span | 0.01 % reading/°F |

ELECTRICAL SPECIFICATIONS

| Characteristic | Measure |
|------------------------------|---|
| Strained gage type | Bonded foil |
| Excitation (calibration) | 15 Vdc to 32 Vdc |
| Insulation resistance | 5000 mOhm @ 50 Vdc |
| Electrical termination (std) | 1/2-14 NPT male with 7/8 in wrench flat. 20 GA 0,61 m [2 ft] cable with case ground |

MECHANICAL SPECIFICATIONS

| Characteristic | Measure |
|-----------------------|--|
| Media | Gases, liquids compatible with wetted material |
| Overload, safe | 50 % over capacity |
| Pressure port | 1/4-18 NPT female; 1/2-14 NPT male |
| Wetted parts material | 17-4 PH stainless steel |
| Case material | Stainless steel |

RANGE CODES

| Range Code | Available ranges |
|------------|------------------|
| AR | 2 psig/a |
| AT | 5 psig/a |
| AV | 10 psig/a |
| BJ | 15 psig/a |
| BL | 25 psig/a |
| BN | 50 psig/a |
| BP | 75 psig/a |
| BR | 100 psig/a |
| CJ | 150 psig/a |
| CL | 200 psig/a |
| CP | 300 psig/a |
| CR | 500 psig/a |
| CT | 750 psig/a |
| CV | 1000 psig/a |
| DJ | 1500 psig/a |
| DL | 2000 psig/a |
| DN | 3000 psig/a |
| DR | 5000 psig/a |
| DT | 7500 psig/a |
| DV | 10000 psig/a |

OPTION CODES

| Range Code | Many range/option combinations are available in our quick-ship and fast-track manufacture programs. Please see http://measurementsensors.honeywell.com for updated listings. |
|--------------------------|--|
| Pressure ranges | 2, 5, 10, 15, 25, 50, 75, 100, 150, 200, 300, 500, 750, 1000, 1500, 2000, 3000, 5000, 7500, 10000 psig/a |
| Temperature compensation | 1a. 60 °F to 160 °F |
| Internal amplifiers | 2k. 4 mA to 20 mA, two-wire |
| Pressure ports | 5a. 1/4-18 NPT female and 1/2-14 NPT male with 25,4 mm [1 in] hex |
| Electrical termination | 6j. 0,61 m [2 ft] of 20 GA cable with 1/2-14 NPT male conduit |
| Wetted diaphragm | 10a. 316 stainless steel ¹ |

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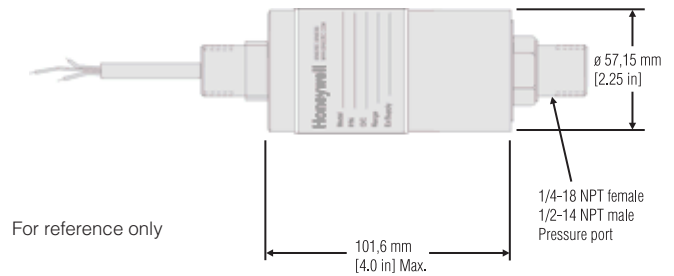
INTERNAL AMPLIFIERS

| Amplifier specifications | Current two-wire: Option 2k (std.) |
|----------------------------|--|
| Output signal | 4 mA to 20 mA |
| Input power (voltage) | 9 Vdc to 32 Vdc |
| Input power (current) | 4 mA to 24 mA |
| Frequency response | 2500 Hz |
| Power supply rejection | 60 db |
| Operating temperature | -29 °C to 85 °C [-20 °F to 185 °F] |
| Reverse voltage protection | Yes |
| Short circuit protection | Yes |
| Wiring code: cable | R (+) Supply Bl (+) Output W Case ground |

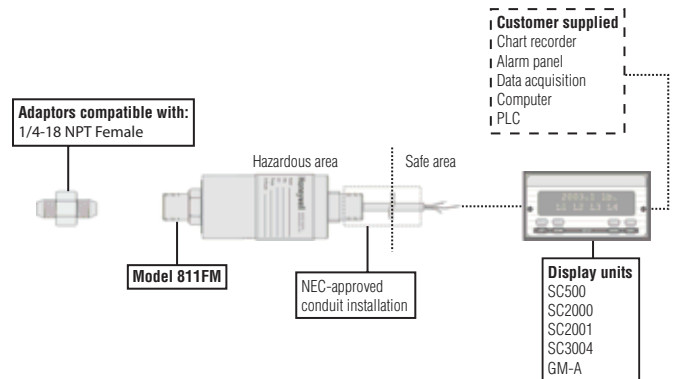
WIRING CODES

| Wire | Cable, two-wire current, 4 mA to 20 mA |
|-------|--|
| Red | (+) Supply |
| Black | (+) Output (4 mA to 20 mA) |
| White | Case ground |

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. Only available for ranges 25 psig/a to 500 psig/a.
2. 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.

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 datasheet 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.

Find out more

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To learn more about Honeywell's test and measurement products, call **+1-614-850-5000**, visit

<http://measurementsensors.honeywell.com>, or e-mail inquiries to **info.tm@honeywell.com**

Sensing and Control

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