### Honeywell

## **Model 811FM**

## Two-Wire Gage/Absolute Pressure Transmitter



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 <sup>2</sup>	±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
ВР	75 psig/a
BR	100 psig/a
CJ	150 psig/a
CL	200 psig/a
СР	300 psig/a
CR	500 psig/a
СТ	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 ½-14 NPT male conduit
Wetted diaphragm	10a. 316 stainless steel <sup>1</sup>

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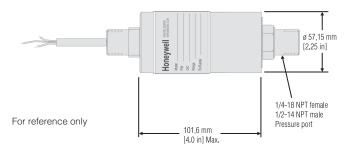
#### **INTERNAL AMPLIFIERS**

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 BI (+) Output W Case ground

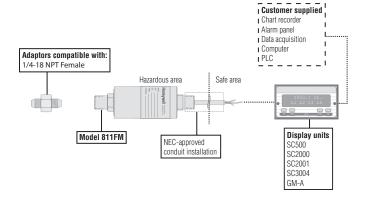
#### **WIRING CODES**

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**





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

### Two-Wire Gage/Absolute Pressure Transmitter

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.

# A 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.

### **A** 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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honeywell.com, or e-mail inquiries to info.tm@honeywell.com

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