

Stainless Steel Pressure Sensors

EA and EAF Models

EA Series

FEATURES

- Amplified output which eliminates the cost of external amplifiers
- Large choice of pressure ranges to meet a variety of application needs
- Rugged, lightweight Valox case
- Microprocessor compatible 1 Vdc to 6 Vdc or 1 kHz to 6 kHz span
- Manifold mounting for ease of installation

TYPICAL APPLICATIONS

- Agricultural sprayers and dusters
- Air conditioning and refrigeration
- Engine controls and monitors
- Environmental control systems
- Compressors
- Hydraulic controls
- Pneumatic controls
- Process control equipment
- Robotics
- Transmissions
- Water management



The EA manifold mount is designed for OEM uses requiring high output and corrosion resistance. It has operated through millions of pressure cycles without damage and is well-suited for the high cycle rates found in automatic equipment, robots, and hydraulic systems.

The EA has been approved by Underwriters Laboratories as a component in float and pressure operated motor controllers (file #E93356). Its pressure port, amplifier, and voltage supply regulator are packaged in a Valox case. A mating electrical connector is included with this low price transducer.

The EAF version outputs a low frequency signal which is ideal for electrically noisy environments as well as applications requiring long distance signal transmission or an interface to a microprocessor. The output signal is a frequency modulated square wave set from 1 kHz to 6 kHz.

⚠ 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 product sheet is for reference only. Do not use this document as a product installation guide.
- 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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SPECIFICATIONS

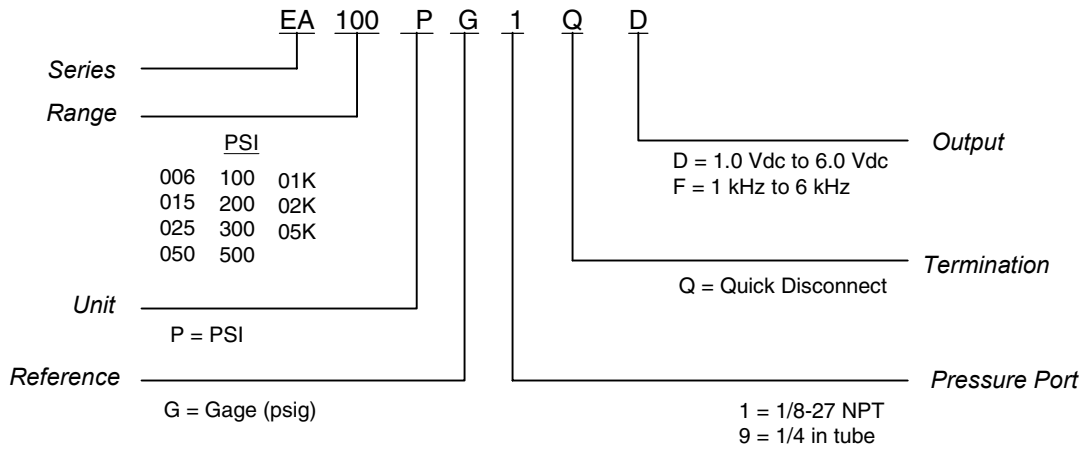
| Pressure Ranges | | |
|--------------------------------|--|---------------------------------------|
| | 0 to 6.0, 15.0, 25.0 50.0, 100, 200 and 300 psig | 0 to 500, 1000, 2000 and 5000 psig |
| Physical | | |
| Proof Pressure | 2 X rated range | 1.5 X rated range |
| Burst Pressure | 10 X rated range | 5 X rated range |
| Material in contact with media | Brazen assembly of 300 series stainless steel | |
| Shock Resistance | 50 g peak [5 milliseconds] | |
| Vibration Resistance | Meets MIL-STD 810C, Fig. 514-4, Curve AK, Time Schedule II, Random Vibration Test [Overall g rms = 20.7 minimum] | |
| Weight | Less than 3.0 oz [85.0 gm] with connector | |
| Electrical | | |
| | Voltage | Frequency |
| Span | 5.0 ± 0.1 Vdc [1.0 Vdc to 6.0 Vdc] | 5 ± 0.1 kHz [1 kHz to 6 kHz] |
| Excitation Voltage | 8.0 Vdc to 24.0 Vdc | 10.0 Vdc to 20.0 Vdc |
| Null Offset | 1.0 ± 0.15 Vdc | 1.0 ± 0.15 kHz |
| Supply Current (nominal) | 15.0 mA | 20.0 mA |
| Output Current (nominal) | Source | N/A |
| | Sink | 8.0 mA |
| Reverse Polarity Protection | No | |
| Insulation Resistance | Greater than 1000 megohms at 25.0 Vdc | |
| Electrical Connection | Automotive type Valox with crimp pins (supplied with sensor) | |
| Performance | | |
| Accuracy | ± 1.0% span from best fit straight line including effects of non-linearity, hysteresis, repeatability | |
| Operating Temperature Range | -55 °C to 100 °C [-67 °F to 212 °F] | |
| Compensated Temperature Range | -1 °C to 85 °C [30 °F to 185 °F] | |
| Thermal Effect on Zero | Less than ±1% span within any 55 °C [100 °F] range within the compensated temperature range | |
| Thermal Effect on Span | Less than ±1% within any 55 °C [100 °F] range within the compensated temperature range | |

Note: All specifications are measured at 25 °C [77 °F] and at rated excitation unless otherwise specified.

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HOW TO ORDER

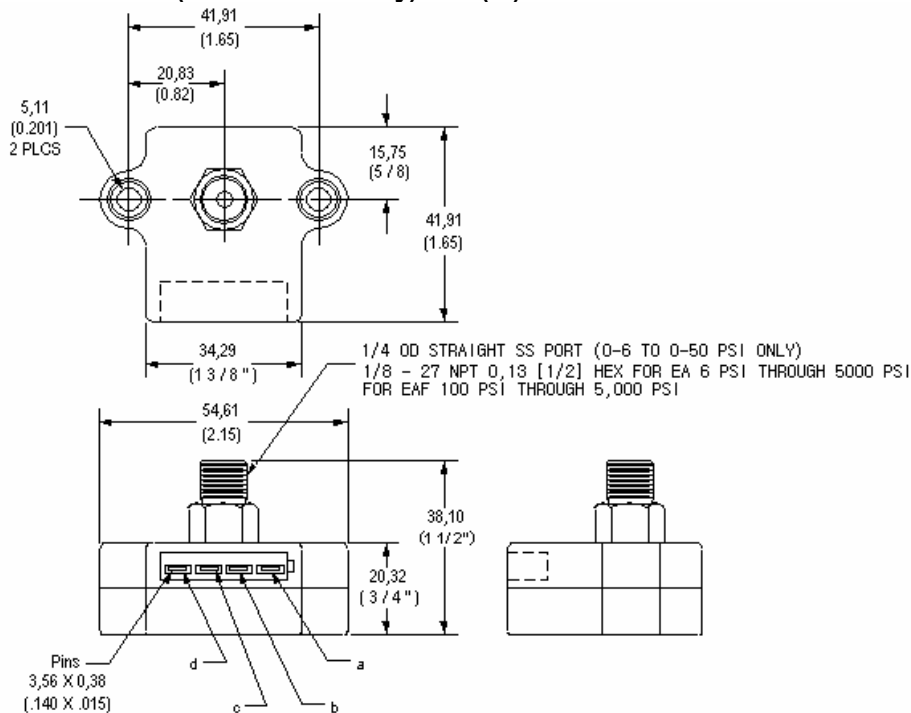


Note: Not all combinations are available. Minimum quantity orders apply. Contact Honeywell for more details

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DIMENSIONS (for reference only) mm (in)



PIN CONNECTIONS

| Pins | Voltage Output | Frequency Output |
|------|----------------|------------------|
| a | + Excitation | + Excitation |
| b | Signal Out | Signal Out |
| c | N/A | Enable |
| d | Ground | Ground |

WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. **The foregoing is Buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.**

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.

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.

For application assistance, current specifications, or name of the nearest Authorized Distributor, contact a nearby sales office. Or call:

1-800-537-6945 USA

1-800-737-3360 Canada

1-815-235-6847 International

FAX

1-815-235-6545 USA

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