

## 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

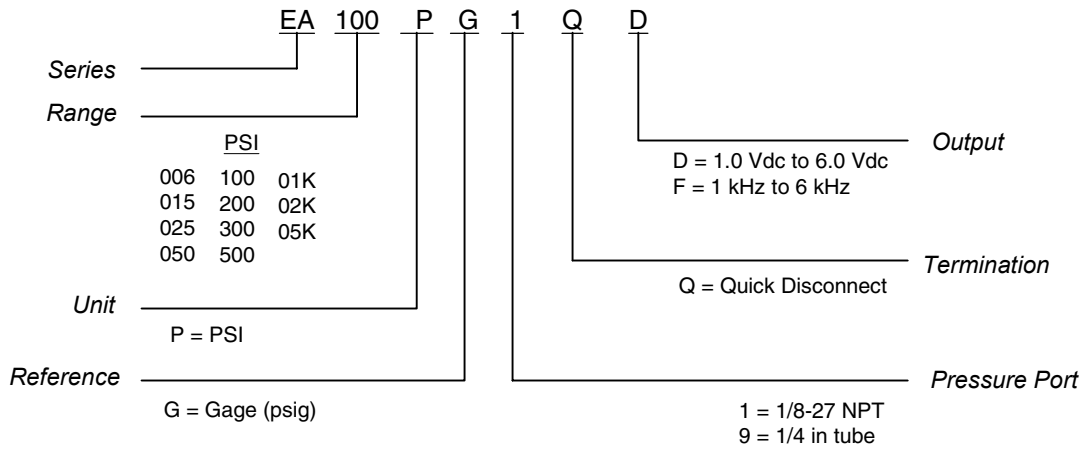
<b>Pressure Ranges</b>		
	0 to 6.0, 15.0, 25.0 50.0, 100, 200 and 300 psig	0 to 500, 1000, 2000 and 5000 psig
<b>Physical</b>		
Proof Pressure	2 X rated range	1.5 X rated range
Burst Pressure	10 X rated range	5 X rated range
Material in contact with media	Brazen assembly of 300 series stainless steel	
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	
<b>Electrical</b>		
	<b>Voltage</b>	<b>Frequency</b>
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 10.0 mA Sink 5.0 mA	N/A 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)	
<b>Performance</b>		
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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*EA Series*

## HOW TO ORDER

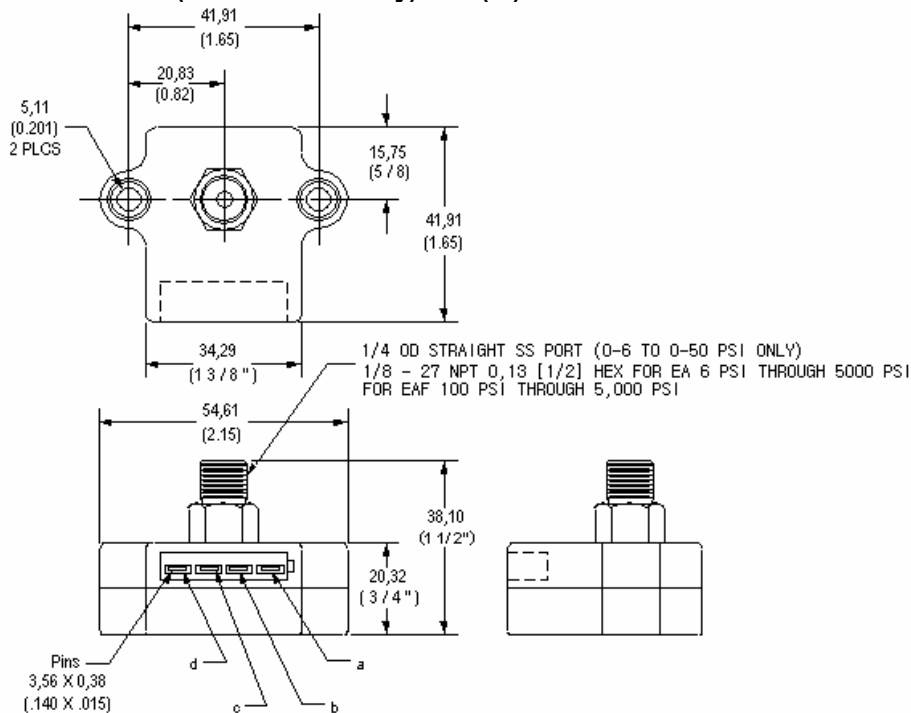


**Note:** Not all combinations are available. Minimum quantity orders apply. Contact Honeywell for more details

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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

### INTERNET

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**Honeywell**

## Sensing and Control

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