#### **APPLICATIONS**

AGRICULTURAL SPRAYERS AND DUSTERS

AIR CONDITIONING AND REFRIGERATION

COMPRESSORS

ENGINE CONTROLS AND MONITORS

ENVIRONMENTAL CONTROL SYSTEMS

HYDRAULIC CONTROLS

PNEUMATIC CONTROLS

PROCESS CONTROL EQUIPMENT

**ROBOTICS** 

**TRANSMISSIONS** 

WATER MANAGEMENT

# **Model EA • PRESSURE TRANSDUCER**

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 to 6 kHz.



# **FEATURES**

- Amplified output
- 0-6 to 0-5000 PSIG
- Valox case
- 1-6 Vdc or 1-6 kHz span
- Manifold mount

# **BENEFITS**

- For use by OEM
- Wide range of application
- Rugged, lightweight
- Compatible with microprocessors
- Ease of installation

#### HOW TO ORDER G Q D 100 1 Model Output D = 1-6 VDCF = 1-6 KHzRange 050 300 02K 006 **Termination** 015 100 500 05K 025 200 01K Q = Quick Disconnect PSI **Pressure Port** 1 = 1/8 NPTUnit 3 = 3/8 UNF P = PSI9 = 1/4 Tube Reference G = Gage (PSIG)

# **TECHNICAL SPECIFICATIONS**

#### RANGE

0-6, 15, 0-50, 100, 200, 0-500,1000, 25 psig 300 psig 2000,5000 psig (0-.414, 1.03,(0-3.45, 6.89,(0-34.5, 68.9,1.72 bar g) 13.8, 20.7 bar g) 138, 345 bar g) (bar values are approximate)

# **PHYSICAL**

| Proof<br>Pressure   | 2 x rated range without damage    | 2 x rated range without damage    | 1.5 x rated range without damage |
|---------------------|-----------------------------------|-----------------------------------|----------------------------------|
| Burst<br>Pressure   | 10 x rated range without bursting | 10 x rated range without bursting | 5 x rated range without bursting |
| Material in Contact |                                   | Brazed assembly                   |                                  |

With Media of 300 series stainless steel Shock Resistance 50 g's peak, (5 milliseconds)

Meets MIL-STD 810C, Figure 514-5, Curve AK, Vibration Resistance Time Schedule II, Random Vibration Test

(Overall g rms 20.7 minimum)

14/-:---

| Weight                      | Less than 3 oz (85 gm) with connector |               |         |                      |  |
|-----------------------------|---------------------------------------|---------------|---------|----------------------|--|
| ELECTRICAL                  | Voltage                               |               | ı       | Frequency            |  |
| Span                        | 5 ±0.1 Vdc (1-6 Vdc)                  |               | 5 ±0.   | 5 ±0.1 kHz (1-6 kHz) |  |
| Excitation Voltage          | 8 to 2                                | 24Vdc         | 10      | 0 to 20 Vdc          |  |
| Null Offset                 | 1.0 ±0.                               | 15 Vdc        | 1.0     | 0 ±0.15 kHz          |  |
| Supply Current (nominal)    | 15 mA                                 | 15 n          | nΑ      | 20 mA                |  |
| Output Current              | Source                                | 10 n          | nA      |                      |  |
| (nominal)                   | Sink                                  | 5m            | A       | 8mA                  |  |
| Reverse Polarity Protection |                                       | NO            |         |                      |  |
| Inculation Decistor         | oo groo                               | stor than 100 | 0 magak | ame at 25 Vda        |  |

greater than 1000 megohms at 25 Vdc Insulation Resistance **Electrical Connection** Automotive type Valox with crimp pins

(Supplied with transducer)

#### **PERFORMANCE**

| Accuracy | $\pm 1\%$ span from best fit straight line including effects of |
|----------|---|
|          | non-linearity hysteresis and repeatability                      |

| Operating                        | -67° to 212° F                  |
|----------------------------------|---------------------------------|
| Temperature Range                | (-55° to 100° C)                |
| Compensated<br>Temperature Range | 30° to 185° F<br>(-1° to 85° C) |

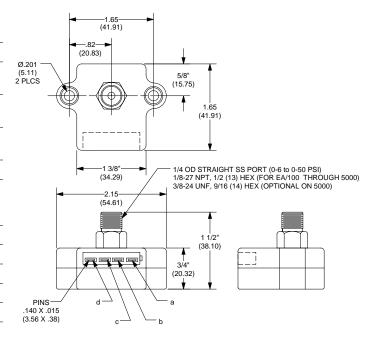
Less than ±1% span -any 100° F (55° C) range Thermal Effect On Zero within the compensated temperature range.

Thermal Effect Less than ±1% -any 100° F (55° C) range On Span within the compensated range.

NOTE: All specifications are measured at 25° C and rated excitation unless otherwise specified.

#### **DIMENSIONS**

xx.xx = inches(xx.x) = mm



### **VOLTAGE / FREQUENCY OUTPUTS**

| Pins | Voltage Output | Frequency<br>Output |
|------|----------------|---------------------|
| а    | + Excitation   | + Excitation        |
| b    | Signal Out     | Signal Out          |
| С    | 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.

Item # 1062000 M.G. 3/01 Rev. A





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