#### **APPLICATIONS**

AUTOMOTIVE brake systems fuel rail/injection engine oil continuously variable transmissions active suspensions

ENERGY MANAGEMENT 'smart' compressors

# **Model DG** • PRESSURE TRANSDUCER

The Model DG is designed to meet the needs of the OEM whose applications demand a pressure transducer for hostile high temperature environments. The DG's combination of rugged packaging, internal signal amplification, and low price make it ideal for many automotive, compressor, and hydraulic applications.

The steel case seals the internal electronics from the surrounding environment. The pressure media contacts only 300 series stainless. From 5V excitation, the DG's 4.5 V ratiometric output can interface directly to many microprocessors with onboard A/D converters. This eliminates typical transducer support circuitry, lowering system cost and speeding system design.

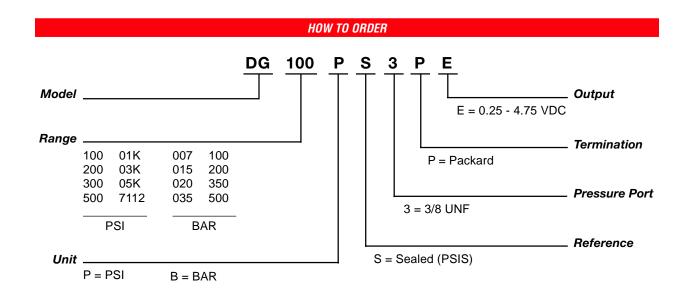


### **FEATURES**

- Meets SAE J1211 specifications for under hood applications
- 100 through 7000 PSIS ranges
- Integral automotive type connector
- Reverse polarity and output protection
- Ratiometric output
- · Sealed steel case

## **BENEFITS**

- High reliability in tough, hostile environments
- Suitable for many applications
- Speeds installation
- Not damaged by wiring errors
- Increased accuracy for microprocessor applications
- Complete protection for electronics
- High Temperature 125° C



## **TECHNICAL SPECIFICATIONS**

# RANGE

0-100, 200, 300, 500, 1000, 3000, 5000, 7000 PSI 20, 35, 100, 200, 350, 500 BAR all ranges are sealed

## **PHYSICAL**

| Proof Pressure                 | 1.5 x rated range without damage |  |
|--------------------------------|----------------------------------|--|
| Burst Pressure                 | 5 x rated range without bursting |  |
| Material in Contact with Media | 300 series SS                    |  |

Shock Resistance 50 g's peak (5 milliseconds) resonance search per SAE J1211

Meets MIL-STD 810C, Figure 514-5, Curve AK, Time Schedule II Tandom Vibration Test (Overall g rms = 20.7 minimum)

|                                       | · •   |  |  |
|---------------------------------------|---|--|--|
| Weight                                | approx. 3 oz (85 gm)  |  |  |
| ELECTRICAL                            |   |  |  |
| Output Voltage                        | 0.25 to 4.75 V min to max pressure  |  |  |
| Excitation Voltage                    | +5 Vdc ±0.25 V  |  |  |
| Null Offset                           | 0.25 V nominal  |  |  |
| Supply Current (max)                  | 20 mA   |  |  |
| Output                                |   |  |  |
| Minimum load                          | 100 K ohms  |  |  |
| Sink (max)                            | 0.3 mA  |  |  |
| Reverse Polarity Prote                | ection YES  |  |  |
| Insulation Resistance                 | 1000 megohms at 25 Vdc  |  |  |
| Electrical Connection<br>Requires Pac | Packard Metri-Pack™<br>kard #12065287 mating connector (P/N 3685901)<br>Order separately. |  |  |

# PERFORMANCE

| Accuracy  | $\pm 1\%$ of FSO from best fit straight line.                   |                |  |  |
|-----------|---|----------------|--|--|
|           | Includes effects of non-linearity, hysteresis and repeatability |                |  |  |
| Operating | and Compensated   | -40° to 257° F |  |  |

| Operating and Compensated | -40° to 257° F     |
|---------------------------|--------------------|
| Temperature Range         | (-40° to 125° C)   |
| Storage                   | -40° to 302° F     |
| Temperature Range         | (-40° to 150° C)   |
| Total Error               | ± 4% of full scale |

(Includes the effects of zero output error, calibration error, temperature, non-linearity, hysteresis, and repeatability)

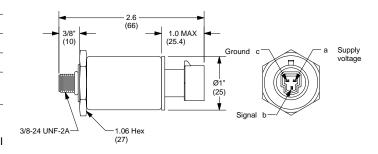
NOTE: All specifications are measured at 25°C and rated excitation unless otherwise specified.

Honeywell Sensing and Control products are protected by one or more of the following patents: U.S. 4,667,158; 4,327,350; 4,368,575; 4,912,409; 4,864,232; 4,866,378; 5,068,607; U.K.2054954; Japan I498268; France 80I4767; 8101087.

Additional U.S. and Foreign patents pending.

## **DIMENSIONS**

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



#### 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 litems 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.

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