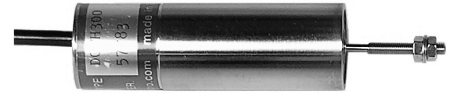


Model MS3 DC-DC

Miniature Displacement Transducer



DESCRIPTION

Model MS3 (free unguided armature) dc-dc miniature displacement transducer is ideally suited for multi-point applications with space constraints and provide a cost-effective alternative

to larger, more expensive units. This model is compatible with dc data logging equipment used for taking readings from strain gages or other dc operated transducers.

FEATURES

- Miniature design
- Cost efficient
- 0.25 % non-linearity
- Stainless steel construction
- ± 0.1 in to ± 0.4 in range
- Infinite resolution
- Single or dual supply wiring (field selectable)
- Free unguided armature
- Not RoHS compliant

Model MS3 DC-DC

PERFORMANCE SPECIFICATIONS

| Characteristic | Measure |
|----------------------|--|
| Stroke range | ±2,54 mm to 10,16 mm [±0.1 in to 0.4 in] |
| Non-linearity (max.) | ±0.25 % full scale |
| Output impedance | 2 ohm |
| Output load (min.) | 2000 ohm |
| Output sensitivity | ±5 Vdc or 0 Vdc to 10 Vdc (field selectable) |
| Resolution | Infinite |

ENVIRONMENTAL SPECIFICATIONS

| Characteristic | Measure |
|---------------------------------|------------------------------------|
| Temperature, operating | -50 °C to 70 °C [-58 °F to 158 °F] |
| Temperature effect, zero (max.) | 0.006 % full scale/°F |
| Temperature effect, span (max.) | 0.017 % full scale/°F |

ELECTRICAL SPECIFICATIONS

| Characteristic | Measure |
|------------------------|---|
| Element type | dc-dc displacement transducer |
| Power supply, single | 24 Vdc to 40 Vdc @ 30 mA |
| Power supply, dual | ±12 Vdc to ±20 Vdc @ 30 mA |
| Electrical termination | Multiconductor shielded cable (1.83 m [6 ft]) |

MECHANICAL SPECIFICATIONS

| Characteristic | Measure |
|----------------|-----------------|
| Case material | Stainless steel |
| Probe material | Stainless steel |
| Armature type | Free unguided |
| Probe thread | M3 x 0.5 |
| Weight | 73,5 g [2.6 oz] |

RANGE CODES

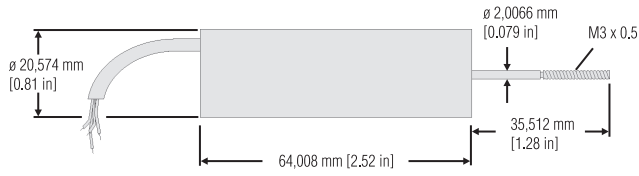
| Range Code | Available ranges |
|------------|---------------------|
| HM | ±2,54 mm [±0.1 in] |
| HN | ±5,08 mm [±0.2 in] |
| HF | ±7,62 mm [±0.3 in] |
| HG | ±10,16 mm [±0.4 in] |

OPTION CODES

| Range Code | Many range/option combinations are available in our quick-ship and fast-track manufacture programs. Please see http://sensing.honeywell.com/TMsensor-ship for updated listings. |
|------------------------------|--|
| Stroke ranges | ±25,4 mm to 101,6 mm [±0.1 in to 4 in] |
| Electrical termination | Multiconductor shielded cable (1.83 m [6 ft]) 6a. Bendix PTIH-10-6P right angle Bendix |
| Electrical cable orientation | Ra. Right angle |
| Mounting threads | 13a. 1/2-20 UNF 13f. 3/8-32 UNF |
| Improved linearity | L10. 0.1 % on some models |

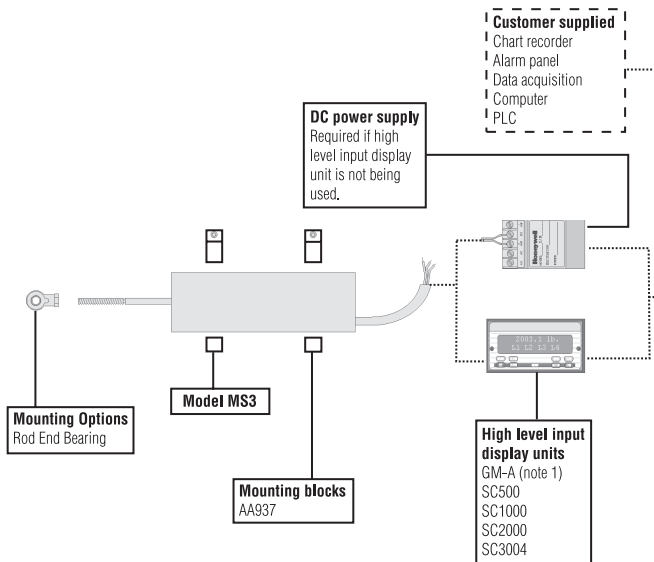
Miniature Displacement Transducer

MOUNTING DIMENSIONS



For reference only

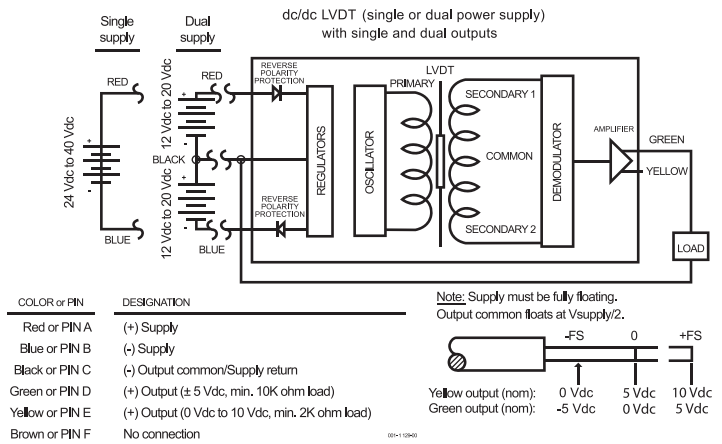
TYPICAL SYSTEM DIAGRAM



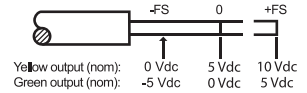
WIRING CODES

| Wire color | Dual supply | Single supply (floating)* | Outputs |
|------------|----------------------|---------------------------|-------------|
| Red | 12 V to 20 V input | 24 V to 40 V input | |
| Blue | -12 V to -20 V input | Supply negative | |
| Black | OV, I/P, O/P common | | |
| Yellow | | | 0 V to 10 V |
| Green | | | ±5 Vdc |

* Output common floats at voltage source/2



| COLOR or PIN | DESIGNATION |
|-----------------|--|
| Red or PIN A | (+) Supply |
| Blue or PIN B | (-) Supply |
| Black or PIN C | (-) Output common/Supply return |
| Green or PIN D | (+) Output (± 5 Vdc, min. 10K ohm load) |
| Yellow or PIN E | (+) Output (0 Vdc to 10 Vdc, min. 2K ohm load) |
| Brown or PIN F | No connection |



Model MS3 DC-DC

Miniature Displacement Transducer

NOTES

1. GM-A should not be used with an amplified displacement transducer unless using an external power supply to power the displacement transducer.

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.

For more information about Sensing and Control products, visit www.honeywell.com/sensing or call +1-815-235-6847

Email inquiries to info.sc@honeywell.com

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 catalogue 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.

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