Honeywell

Model S3C DC-DC



Miniature Displacement Transducer

DESCRIPTION

Model S3C (captive guided spring return 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)
- Captive guided spring return armature
- Not RoHS compliant

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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	Captive guided spring return
Probe thread	Not applicable
Weight	82,5 g [2.91 oz]

RANGE CODES

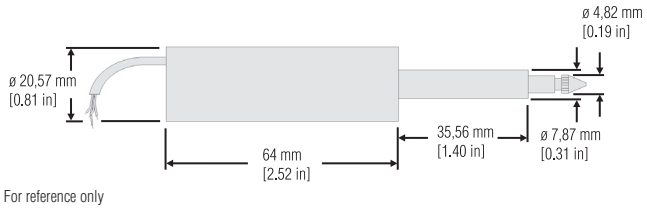
Range Code	Available ranges
HM	±2,54 mm [±0.1 in]
HN	±5,08 mm [±0.2 in]
HF	±7,62 mm [±0.3 in]
HG	±10,16 mm [±0.4 in]

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	±5,08 mm [±0.2 in], ±2,54 mm [±0.1 in], ±7,62 mm [±0.3 in], ±10,16 mm [±0.4 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

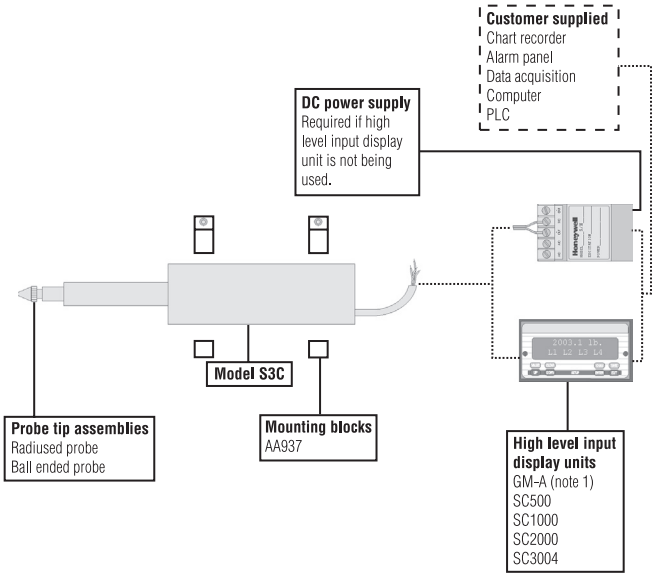
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MOUNTING DIMENSIONS



For reference only

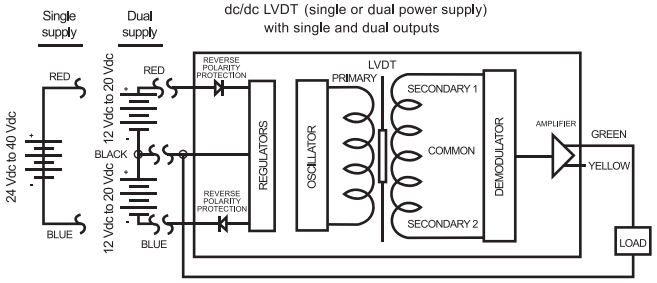
TYPICAL SYSTEM DIAGRAM



WIRING CODES

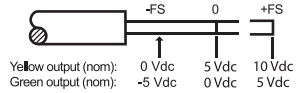
Wire color	Dual supply	Single supply (floating)*	Outputs
Red	12 V to 20 V input	24 V to 40 V input	–
Blue	-12 V to -20 V input	Supply negative	–
Black	OV, I/P, O/P common	–	–
Yellow	–	–	0 V to 10 V
Green	–	–	±5 Vdc

* 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

Note: Supply must be fully floating.
Output common floats at Vsupply/2.



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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.

⚠ 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 datasheet 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.

Find out more

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