

Model VL7A AC-AC



Long Stroke Displacement Transducer

DESCRIPTION

Model VL7A (spring return armature) ac-ac long stroke displacement transducer is designed for measuring static and dynamic displacements from ± 0.5 in to ± 3.0 in. This model achieve

impressive 0.25 % full scale non-linearities. Displacement transducer bodies and probes are constructed of stainless steel for durability in harsh, industrial environments.

FEATURES

- 0.25 % non-linearity
- Stainless steel construction
- 12,7 mm to 76,2 mm [0.5 in to 3.0 in] range
- Enhanced immunity to electrical noise
- Infinite resolution
- -58 °F to 257 °F operating range (standard)
- Spring return armature
- Not RoHS compliant

Model VL7A AC-AC

PERFORMANCE SPECIFICATIONS

| Characteristic | Measure |
|--------------------------|---|
| Stroke range | ±12,7 mm to 76,2 mm [±0.5 in to 3.0 in] |
| Non-linearity (max.) | ±0.25 % full scale |
| Non-repeatability (max.) | <20 microinches |
| Output sensitivity | See table |
| Resolution | Infinite |

ENVIRONMENTAL SPECIFICATIONS

| Characteristic | Measure |
|---------------------------------|-------------------------------------|
| Temperature, operating | -50 °C to 125 °C [-58 °F to 257 °F] |
| Temperature effect, zero (max.) | 0.006 % full scale/°F |
| Temperature effect, span (max.) | 0.006 % full scale/°F |

ELECTRICAL SPECIFICATIONS

| Characteristic | Measure |
|---------------------------|----------------------------------|
| Element type | ac-ac displacement transducer |
| Input supply (calibrated) | 5 V RMS @ 5 kHz |
| Input supply (acceptable) | 1 V to 7 V RMS @ 2 kHz to 10 kHz |
| Electrical termination | Multiconductor shielded cable |

MECHANICAL SPECIFICATIONS

| Characteristic | Measure |
|---------------------|------------------------------|
| Case material | Stainless steel |
| Probe material | Stainless steel |
| Armature type | Captive guided spring return |
| Probe thread | Not applicable |
| Weight | See table |
| Spring force (max.) | 4 oz/in |

RANGE CODES

| Range Code | Available ranges |
|------------|--------------------|
| HP | ±12,7 mm [±0.5 in] |
| HQ | ±25,4 mm [±1.0 in] |
| HR | ±50,8 mm [±2.0 in] |
| HS | ±76,2 mm [±3.0 in] |

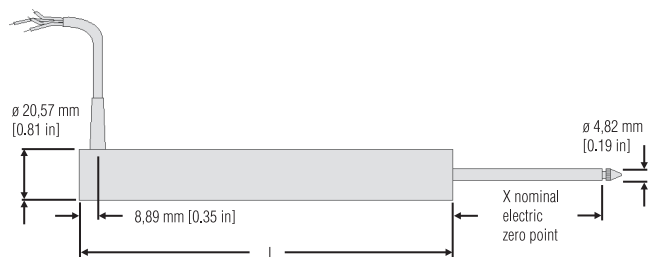
OPTION CODES

| 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 | ±12,7 mm to ±50,8 mm [±0.5 in to ±2.0 in]; 76,2 mm [±3.0 in] |
| Electrical termination | Multiconductor shielded cable (1,83 m [6 ft]) TM405. Axial Bendix connector on body radial (side) TM406. Bendix connector on body |
| Electrical cable orientation | TM49. Axial cable exit |
| Mounting threads | TM511. 13/16-32 UNF |
| Improved linearity | L10. ±0.1 % max. linearity (less than or equal to 101,6 mm [±4.0 in]) |
| Higher temperature | TM315. 204 °C [400 °F] up to 101,6 mm [±4.0 in] |

Long Stroke Displacement Transducer

MOUNTING DIMENSIONS

| Range code | Available stroke range | L | X | Approx. unit weight | Typical full scale output at 3 V RMS |
|------------|------------------------|----------------------|-------------------|---------------------|--------------------------------------|
| HP | ±12,7 mm [±0.5 in] | 135,89 mm [5.35 in] | 38,1 mm [1.5 in] | 184,27 g [6.5 oz] | 2.4 V RMS |
| HQ | ±25,4 mm [±1.0 in] | 161,29 mm [6.35 in] | 63,5 mm [2.5 in] | 226,8 g [8.0 oz] | 3.0 V RMS |
| HR | ±50,8 mm [±2.0 in] | 279,4 mm [11.0 in] | 76,2 mm [3.0 in] | 396,89 g [14 oz] | 4.8 V RMS |
| HS | ±76,2 mm [±3.0 in] | 389,89 mm [15.35 in] | 114,3 mm [4.5 in] | 481,94 g [17 oz] | 4.5 V RMS |

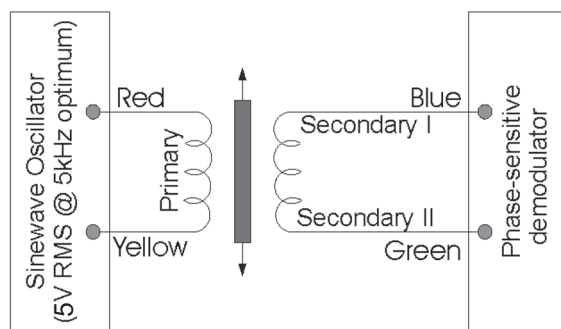
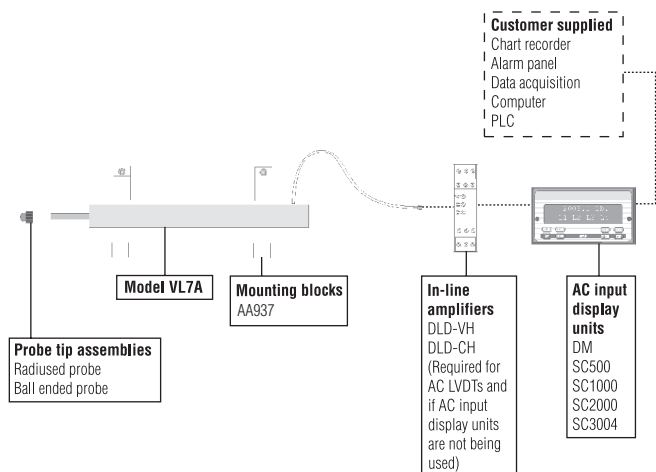


For reference only

WIRING CODES

| Wire color | Supply |
|------------|---|
| Red | (+) supply (calibrated @ 3 V RMS, 5 kHz) |
| Yellow | Supply return |
| Blue | Output |
| Green | Output return |
| Black | Secondary center tap (normally not connected) |

TYPICAL SYSTEM DIAGRAM



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.

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9