

Model SSA AC-AC

Sub-Sea Displacement Transducer



DESCRIPTION

Model SSA ac-ac displacement transducer is offered in ranges from ± 0.5 in up to ± 4.0 in stroke length. The oceanographic type of electrical plug allows the connection to be made underwater. This Sub-Sea displacement sensor are pressure rated to operate down to a depth of 7500 feet in sea water. The body of the sen-

sor is made from 316 SS with all-welded construction. Honeywell offers in-line amplifiers and digital indicators for both LVDT models that provide ± 5 Vdc, 10 Vdc or 4 mA to 20 mA and RS232 outputs with zero and span adjustments.

FEATURES

- ± 1.0 % non-linearity
- Submersible
- All welded 316 stainless steel construction
- Easy to operate
- Enhanced immunity to electrical noise
- Up to 2286 m [7500 ft] depth
- $\pm 12,7$ mm to 101,6 mm range [± 0.5 in to ± 4.0 in range]
- Infinite resolution
- Not RoHS compliant

Model SSA AC-AC

PERFORMANCE SPECIFICATIONS

Characteristic	Measure
Stroke range	±12,7 mm to 101,6 mm [±0.5 in to 4.0 in]
Non-linearity (max.)	±1.0 % full scale
Output sensitivity	Consult factory; 0.3 V RMS to 3.0 V RMS range dependent
Resolution	Infinite

ENVIRONMENTAL SPECIFICATIONS

Characteristic	Measure
Temperature, operating	-40 °C to 50 °C [-40 °F to 122 °F]
Temperature effect, zero (max.)	0.005 % full scale/°F
Temperature effect, span (max.)	0.005 % full scale/°F
Operating pressure	3500 psi

ELECTRICAL SPECIFICATIONS

Characteristic	Measure
Element type	ac-ac displacement transducer
Input supply (acceptable)	0.5 V RMS to 7 V RMS @ 5 kHz
Ripple	Not applicable
Electrical termination	Includes submersible, neoprene, and nickel-aluminum bronze connector molded to 1.83 m [6 ft] of neoprene jacketed 10,16 mm [0.40 in] diameter cable. The electrical connector may be mated under water up to 500 psi or 335,28 m [1100 ft]. Longer cable lengths are available up to 990,6 m [3250 ft]. Consult factory for information.

MECHANICAL SPECIFICATIONS

Characteristic	Measure
Case material	316 Stainless steel with all welded construction
Probe material	316 Stainless steel with all welded construction
Probe thread	M10 x 1.5

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]
HT	±101,6 mm [±4.0 in]

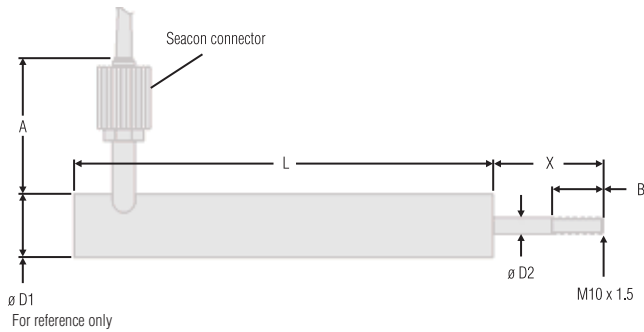
OPTION CODES

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 101,6 mm [±0.5 in to 4 in]
Electrical termination	Submersible, neoprene and nickel-aluminum bronze connector molded to 1.83 m [6.0 ft] of neoprene jacketed cable

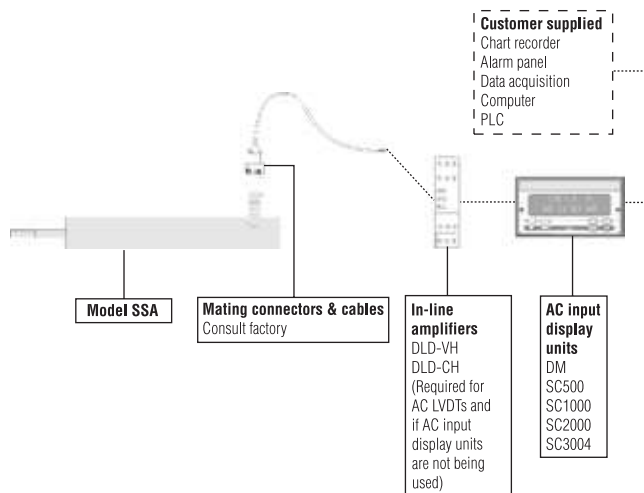
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MOUNTING DIMENSIONS

Range code	Available stroke range	L	X	D1	D2	A	B
HP	±12,7 mm [±0.5 in]	223,52 mm [8.8 in]	53,34 mm [2.1 in]	38,1 mm [1.5 in]	9,91 mm [0.39 in]	91,44 mm [3.6 in]	30,48 mm [1.2 in]
HQ	±25,4 mm [±1.0 in]	251,46 mm [9.9 in]	66,04 mm [2.6 in]	38,1 mm [1.5 in]	9,91 mm [0.39 in]	91,44 mm [3.6 in]	30,48 mm [1.2 in]
HR	±50,8 mm [±2.0 in]	345,44 mm [13.6 in]	91,44 mm [3.6 in]	38,1 mm [1.5 in]	9,91 mm [0.39 in]	91,44 mm [3.6 in]	30,48 mm [1.2 in]
HS	±76,2 mm [±3.0 in]	434,34 mm [17.1 in]	116,84 mm [4.6 in]	38,1 mm [1.5 in]	9,91 mm [0.39 in]	91,44 mm [3.6 in]	30,48 mm [1.2 in]
HT	±101,6 mm [±4.0 in]	535,94 mm [21.1 in]	142,24 mm [5.6 in]	38,1 mm [1.5 in]	9,91 mm [0.39 in]	91,44 mm [3.6 in]	30,48 mm [1.2 in]

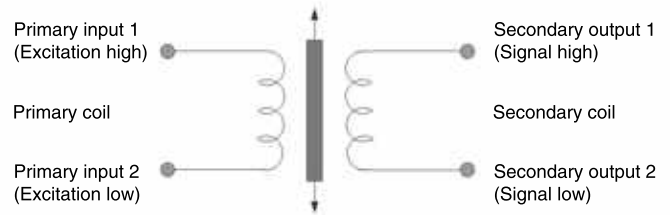


TYPICAL SYSTEM DIAGRAM



WIRING CODES

Wire color	Dual power supply
Black	Excitation high
White	Excitation low
Red	Signal high
Green	Signal low



Phasing: Output is in phase with supply when the armature is outward of the electrical zero position

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.