

Representative photograph, actual product appearance may vary.

- Installation Instructions - Multiple Languages
- Accessory: Power Supply
- Accessory: Software
- Specifications

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942-M0A-2D-1G1-220S

Series 942 Separate control box, 1,500 mm [59.0 in] scan dist two analog outputs (0 Vdc to 10 Vdc and 4 mA to 20 mA) , twc switching outputs PNP and digital link, to use with 942 or 947 head

Features

Four models with scan ranges from 0.9 m to 3,0 m
[2.95 ft to 9.84 ft]
Stainless steel M30 heads, IP65
Plastic control box with screw terminals, IP 40
Synchronising/hold input: To avoid mutual interference from several sensors, they are very sim synchronised by connecting their synchronising/hold input (pin 4) together. If the measure need stopped, connect the synchronising/hold input to the ground; the output stays stable.
Ultrasonic beam power (sensitivity) adjustable by switch
Four switching outputs, Open collector PNP: set points 1 and 2, adjustable by coded wheels ; L (target close), Overrange (target far or absent).
NO/NC adjustable by switch
Two Analog outputs (4 mA to 20 mA and 0 Vdc to 10 Vdc)
Temperature compensation

Typical Applications

Loop control
Tank level measurement (liquids, crops, etc.)
Reel diameter measurement
Tire manufacturing

Description

The 942 separate series are industrial controls performing distance measurement by using an ultrasonic beam. They are the most versat sensors of all the product range; they feature two analog outputs (4 20 mA and 0 V to 10 V), Four switching outputs, parallel data output serial link RS-232. The sensor head has no adjustment and may be n in the most remote or difficult places (top of tanks, inside of machine places.) The control box is mountable on DIN rail; it houses all the adjustments. Adjustment can be performed in a matter of seconds vi coding wheels and switches on the front panel of the control box. Adv programming is done on a PC, connected with the RS-232 link. The s (under Microsoft Windows) provides a very easy man-machine interfa extended possibilities: Digital Signal Processing parameters, cycle tin slope, etc.
942-M3A kits includes control box, cable, connector and head; a programming kit including soft RS-232 cable may be purchased separately.

Product Specifications	
Sensing Range	150 mm to 1,500 mm [6.0 in to 59.0 in]

Range Type	Middle range 1,0 m to 2,0 m [39.0 in to 79.0 in]
Supply Voltage	19 Vdc to 30 Vdc
Oscillating Frequency	220 KHz
Integrated Temperature Compensation	Yes
Repeatability	± 0.2 % ± 1,0 mm [0.039 in]
Output Type	Analog 4 mA to 20 mA, RS-232 Interface, Switching 2 x F Analog 0 Vdc to 10 Vdc
Switching Output Type	1 Normally Open/1 Normally Closed
Response Time	60 ms (target moving < 1 m/s)
Response Time (Target Present/Absent)	300 ms
Max. Switching Frequency	8 Hz
Adjustment Method	Thumb Wheels or PC software
Analog Output Slope Selection	Thumb Wheels or PC software
Operating Temperature Range	0 °C to 50 °C [32 °F to 122 °F]
Storage Temperature	-25 °C to 85 °C [-13 °F to 185 °F]
Linearity	0.3 % ± 2,0 mm [0.079 in]
Load Resistance	> 1.45 Kohm (Voltage), < 250 Ohm (Current)
Maximum Output Current	100 mA
Hysteresis	Programmable by software (default 1 %)
Adjustable Sensitivity	Switch (33 % or 100 %)
Indicators	5 LED
Additional Inputs/Outputs	Overrange, underrange, parallell outputs, Hold/Synchroni
Computer interface	RS-232, 3 wire
Memory	EEPROM (non-volatile)
Current Consumption	50 mA maximum
Circuit Protection	Reverse Polarity, voltage spikes on supply and output line short circuit on switching output
Housing Style	Separate head and control box
Housing Material	Polyethylenterephtalat
Sealing	IP 40
Mounting	Din rail or 2 holes dia. 4 mm
Termination Type	Screw terminals
Availability	Global
Normally Open/Normally Closed selection	Switch or software
UNSPSC Code	41111926

UNSPSC Commodity	41111926 Proximity sensors
Series	942 Series

Due to regional agency approval requirements, some products may not be available in your area.
Please contact your regional Honeywell office regarding your product of choice.

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