

SU SERIES ULTRASONIC SENSORS



M18 (18mm) plastic – DC or analog output

- High resolution
- 2 DC models available with adjustable sensitivity
- 3 Analog models available
- Complete overload protection
- IP67 rated
- LED status indicator on DC models

Cables and Accessories

Cables and accessories can be found starting on page 16–48.

SU Series Ultrasonic DC Output Sensor Selection Chart

Part Number	Price	Sensing Range	Output State	Logic	Connection	Wiring
SU1-B0-0A		100 to 600mm (3.94-23.62in)	N.O.	PNP	2m (6.5') axial cable	Diagram 1
SU2-A0-0A		200 to 1500mm (7.87-59.06in)		PNP	2m (6.5') axial cable	

SU Series Ultrasonic Analog Output Sensor Selection Chart

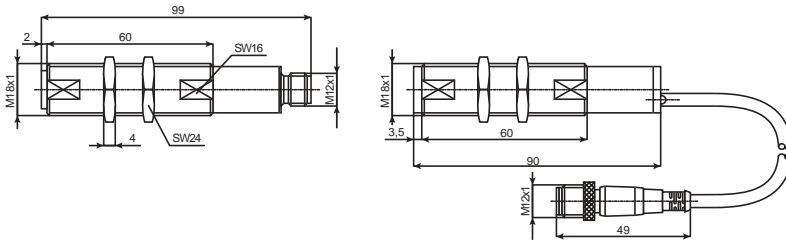
Part Number	Price	Sensing Range	Output	Connection	Wiring
SU1-B1-0A		100 to 600mm (3.94-23.62in)	0-10VDC	2m (6.5') axial cable	Diagram 2
SU1-B1-0E				M12 (12mm) connector	
SU2-A1-0E		200 to 1500mm (7.87-59.06in)	M12 (12mm) connector		

Specifications

Type	SU1-B0-0A	SU2-A0-0A	SU1-B1-0*	SU2-A1-0E
Differential Travel	±2.5%	±2.0%		-
Repeatability		0.2%		±2mm
Operating Voltage		15-30VDC		18-30VDC
Linearity Error		-		≤0.3%
No-load Supply Current			≤35mA	
Load Current	≤500mA			≤5mA
Leakage Current			≤10µA	
Voltage Drop	≤2.5 volts			-
Output Type		PNP / N.O.		0-10VDC
Ultrasonic Frequency	300KHz	180KHz	300KHz	180KHz
Ultrasonic Beam Angle			8°	
Switching Frequency	25Hz	8Hz		-
Max. Response Time		-	50ms	150ms
(tv) Time Delay Before Availability	≤200ms			≤500ms
Control Input			Hold / Sync	
Sensitivity Adjustment	Yes			-
Input Voltage Transient Protection		Yes, only if transient peak does not exceed 30VDC		
Input Power Polarity Reversal Protection		Yes		
Output Power Short-Circuit Protection		Yes (switch autoresets after overload is removed)		
Temperature Range		-25° to +70° C (-13° to 158° F)		
Temperature Compensation		Yes		
Protection Degree		IEC IP67		
LED Indicators	Yellow (output energized)			-
Housing Material		PBT		
Tightening Torque		3Nm (2.21lb./ft.)		
Weight (cable/connector)		54g (1.90oz) / 38g (1.34oz.)		

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Dimensions



Wiring Diagrams

Diagram 1

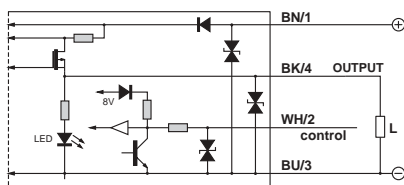
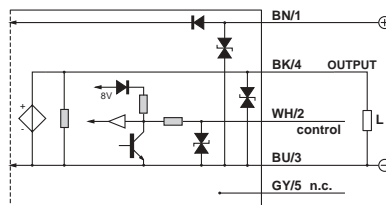
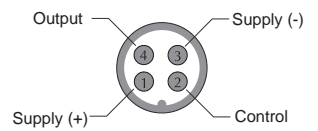


Diagram 2



Connectors



Characteristic Curves

Analog Output

