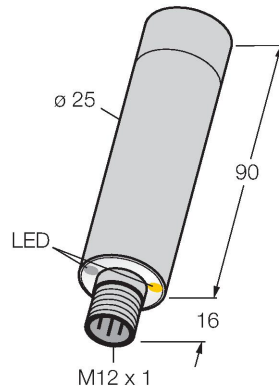


M25URBQ8

Ultrasonic Sensor – receiver

With Switching Output



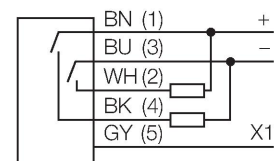
Technical data

Type	M25URBQ8
ID	3079746
Ultrasonic data	
Function	Opposed mode sensor
Range	0...500 mm
Ultrasound frequency	140 kHz
Electrical data	
Operating voltage	10...30 VDC
No-load current	≤ 35 mA
Response time typical	< 3 ms
Readiness delay	≤ 250 ms
Output function	NO contact, PNP/NPN
Switching frequency	≤ 125 Hz
Short-circuit protection	yes
Reverse polarity protection	Complete
Wire breakage protection	yes
Mechanical data	
Design	Tube, M25
Radiation direction	straight
Dimensions	Ø 25 x 106 mm
Housing material	Metal, Stainless steel
Transducer material	Metal, 1.4401 (AISI 316)
Electrical connection	Connector, M12 × 1, PVC
Ambient temperature	-20...+70 °C
Relative humidity	95 %

Features

- Sonic transducer face and sleeve made of V4A 1.4401 (AISI 316)
- Max. range 50 cm
- Protection class IP68 / IP69K, fully encapsulated with housing cover made of polysulphone
- Suitable for 200,000 cleaning cycles with water at 85°C for a duration of 15 min and subsequent fast cooling
- Operating voltage 10...30 VDC
- Switching output PNP/NPN, NO contact
- M12 × 1 male, 5-pin
- Programmable high and low sensitivity

Wiring diagram

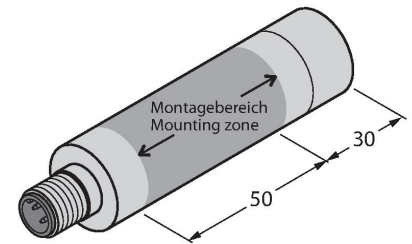


Functional principle

Ultrasonic sensors use ultrasonic waves for non-contact and wear-free detection of many objects. Regardless of whether the object is transparent or opaque, metallic or non-metallic, or of liquid, solid or powdery consistency. Even environmental conditions such as spray, dust or rain hardly affect their function. The sensitivity is adjusted via pin 5 (X1): Connection to 24 V DC (+) or no connection enables normal sensitivity to detect 30 mm objects over the entire measuring range. Connection to 0 V DC (-) enables high sensitivity to detect 15 mm objects at a max. range of 40 cm.

Technical data

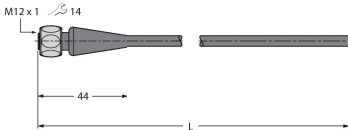
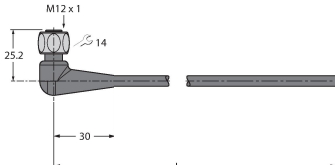
Protection class	IP67 IP69
Power-on indication	LED, Green
Switching state	LED, Yellow
Tests/approvals	
Approvals	CE



Accessories

SMBM25A 3081589 Mounting bracket, ceiling mount for M25U sensors, stainless steel, FDA conform	SMBM25B 3010370 Mounting bracket, ceiling mount for M25U sensors, stainless steel, FDA conform

Accessories

Dimension drawing	Type	ID	
	MQDCWD-530	3010185	Connection cable, M12 female connector, straight, 5-pin, stainless steel coupling nut, cable length: 2 m, jacket material: TPE, gray; temperature range: -40...+105 °C
	RKH4.5-2/TFG	6933455	
	WKH4.5-2/TFG	6933548	Connection cable, M12 female connector, angled, 5-pin, stainless steel coupling nut, cable length: 2 m, jacket material: TPE, gray; temperature range: -40...+105 °C