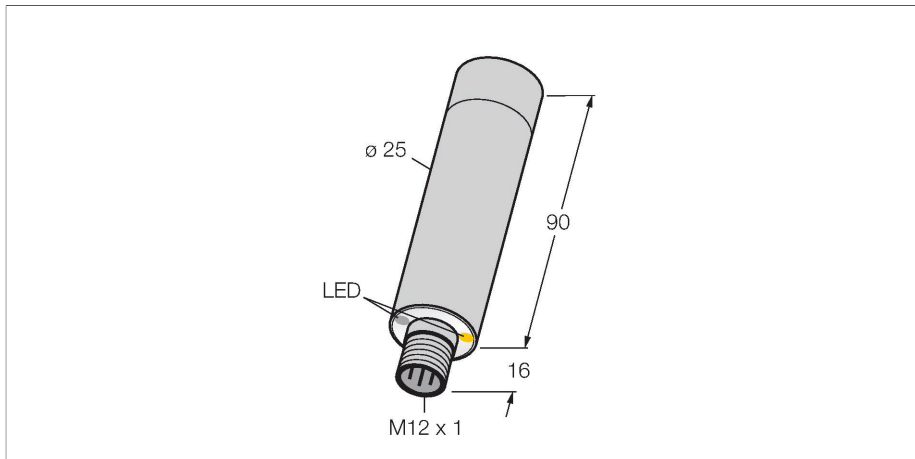


M25URBQ8

Ultrasonic Sensor – receiver

With Switching Output



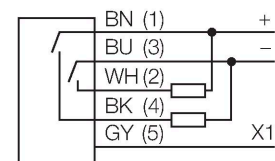
Technical data

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.

