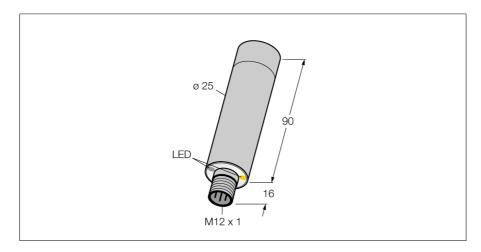
# Ultrasonic sensor receiver M25URBQ8

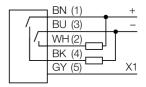




Design         smooth barrel           Dimensions         Ø25 x 106 mm           Housing material         metal, V4A 1.4401 (AISI 316)           Sonic converter material         metal, V4A 1.4401 (AISI 316)           Connection         male, M12 x 1           Protection class         IP67 / IP69K           Ambient temperature         -20+70 °C           Power-on indication         LED green           Switching state         LED yellow           Operating voltage         1030VDC           No-load current I₀         ≤ 35 mA           Response time         4 ms           Output function         NO contact, PNP/NPN           Switching frequency         125 Hz           Short-circuit protection         yes           Reverse polarity protection         complete           Wire breakage protection         opposed mode ultrasonic sensor           Operating mode         opposed mode ultrasonic sensor           Operating mode         opposed mode ultrasonic sensor	Type code	M25URBQ8		
Dimensions         Ø25 x 106 mm           Housing material         metal, V4A 1.4401 (AISI 316)           Sonic converter material         metal, V4A 1.4401 (AISI 316)           Connection         male, M12 x 1           Protection class         IP67 / IP69K           Ambient temperature         -20+70 °C           Power-on indication         LED green           Switching state         LED yellow           Operating voltage         1030VDC           No-load current I₀         ≤ 35 mA           Response time         4 ms           Output function         NO contact, PNP/NPN           Switching frequency         125 Hz           Short-circuit protection         yes           Reverse polarity protection         complete           Wire breakage protection         yes           Operating mode         opposed mode ultrasonic sensor	Ident no.	3079746		
Housing material  Sonic converter material  Connection  Protection class  Ambient temperature  Power-on indication  Switching state  Departing voltage  No-load current I₀  Response time  Output function  Switching frequency  Short-circuit protection  Switching woltage  No-contact, PNP/NPN  Switching frequency  Short-circuit protection  Wire breakage protection  Metal, V4A 1.4401 (AISI 316)  metal, V4A 1.4401  Metal, V4A	Design	smooth barrel	smooth barrel	
Sonic converter material       metal, V4A 1.4401 (AISI 316)         Connection       male, M12 x 1         Protection class       IP67 / IP69K         Ambient temperature       -20+70 °C         Power-on indication       LED green         Switching state       LED yellow         Operating voltage       1030VDC         No-load current I₀       ≤ 35 mA         Response time       4 ms         Output function       NO contact, PNP/NPN         Switching frequency       125 Hz         Short-circuit protection       yes         Reverse polarity protection       complete         Wire breakage protection       yes         Operating mode       opposed mode ultrasonic sensor	Dimensions	Ø25 x 106 mm		
Connection       male, M12 x 1         Protection class       IP67 / IP69K         Ambient temperature       -20+70 °C         Power-on indication       LED green         Switching state       LED yellow         Operating voltage       1030VDC         No-load current I₀       ≤ 35 mA         Response time       4 ms         Output function       NO contact, PNP/NPN         Switching frequency       125 Hz         Short-circuit protection       yes         Reverse polarity protection       complete         Wire breakage protection       yes         Operating mode       opposed mode ultrasonic sensor	Housing material	metal, V4A 1.4401 (AISI 316)		
Protection class Ambient temperature  Power-on indication Switching state  LED green LED yellow  Derating voltage No-load current I₀ Response time Vulturition No contact, PNP/NPN Switching frequency Short-circuit protection Reverse polarity protection Wire breakage protection  Derating mode  Power-on indication LED green  1030VDC  4 ms No contact, PNP/NPN  125 Hz Short-circuit protection yes  Power-on indication LED green  1030VDC  4 ms Ocontact, PNP/NPN  Complete yes	Sonic converter material	metal, V4A 1.4401 (AISI 316)		
Ambient temperature  -20+70 °C  Power-on indication Switching state  LED green LED yellow  Operating voltage 1030VDC No-load current I₀ ≤ 35 mA Response time 4 ms Output function NO contact, PNP/NPN Switching frequency 125 Hz Short-circuit protection Reverse polarity protection Wire breakage protection  Operating mode  opposed mode ultrasonic sensor	Connection	male, M12 x 1		
Power-on indication       LED green         Switching state       LED yellow         Operating voltage       1030VDC         No-load current I₀       ≤ 35 mA         Response time       4 ms         Output function       NO contact, PNP/NPN         Switching frequency       125 Hz         Short-circuit protection       yes         Reverse polarity protection       complete         Wire breakage protection       yes         Operating mode       opposed mode ultrasonic sensor	Protection class	IP67 / IP69K		
Switching state  LED yellow  Operating voltage  No-load current I₀  Response time  Output function  No contact, PNP/NPN  Switching frequency  Short-circuit protection  Reverse polarity protection  Wire breakage protection  Operating mode  LED yellow  1030VDC  4 ms  NO contact, PNP/NPN  125 Hz  Short-circuit protection  yes  Operating mode  opposed mode ultrasonic sensor	Ambient temperature	-20+70 °C		
Operating voltage       1030VDC         No-load current I₀       ≤ 35 mA         Response time       4 ms         Output function       NO contact, PNP/NPN         Switching frequency       125 Hz         Short-circuit protection       yes         Reverse polarity protection       complete         Wire breakage protection       yes    Operating mode opposed mode ultrasonic sensor	Power-on indication	LED green		
No-load current $I_0$ $\leq 35 \text{ mA}$ Response time 4 ms Output function NO contact, PNP/NPN Switching frequency 125 Hz Short-circuit protection yes Reverse polarity protection complete Wire breakage protection yes  Operating mode opposed mode ultrasonic sensor	Switching state	LED yellow		
Response time 4 ms Output function NO contact, PNP/NPN Switching frequency 125 Hz Short-circuit protection yes Reverse polarity protection complete Wire breakage protection yes  Operating mode opposed mode ultrasonic sensor	Operating voltage	1030VDC		
Output function NO contact, PNP/NPN Switching frequency 125 Hz Short-circuit protection yes Reverse polarity protection complete Wire breakage protection yes  Operating mode opposed mode ultrasonic sensor	No-load current I₀	≤ 35 mA		
Switching frequency Short-circuit protection Reverse polarity protection Wire breakage protection  Operating mode  125 Hz yes complete yes  opposed mode ultrasonic sensor	Response time	4 ms		
Short-circuit protection yes Reverse polarity protection complete Wire breakage protection yes  Operating mode opposed mode ultrasonic sensor	Output function	NO contact, PNP/NPN		
Reverse polarity protection complete Wire breakage protection yes  Operating mode opposed mode ultrasonic sensor	Switching frequency	125 Hz		
Wire breakage protection yes  Operating mode opposed mode ultrasonic sensor	Short-circuit protection	yes		
Operating mode opposed mode ultrasonic sensor	Reverse polarity protection	complete		
	Wire breakage protection	yes		
Range 050 cm	Operating mode	opposed mode ultrasonic sensor		
	Range	050 cm		

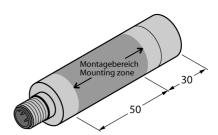
- Sonic transducer face and sleeve made of V4A 1.4401 (AISI 316)
- Max. range 50 cm
- Protection class IP68 / IP69K, fully encapsulated with housing cover made of polysulphone
- Suitable for 200,000 cleaning cycles with water at 85°C for a duration of 15 min and subsequent fast cooling
- Operating voltage 10...30 VDC
- Switching output PNP/NPN, NO contact
- Male connector, M12x1, 5-pole
- 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.





# **Ultrasonic sensor** receiver M25URBQ8

## **Accessories**

Type code	Ident no.	Description	Dimension drawing
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	

## Wiring accessories

Type code	Ident no.	Description	Dimension drawing
MQDCWD-530	3010185		