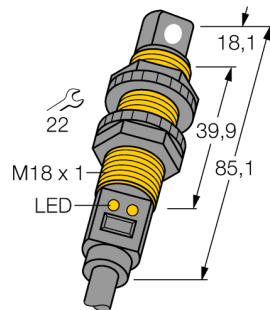


ultrasonic sensor
diffuse mode sensor
S18UIAR

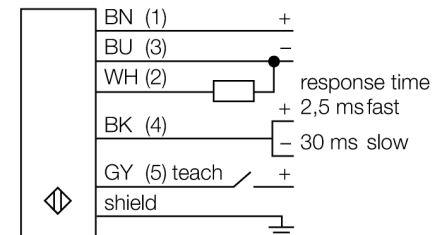
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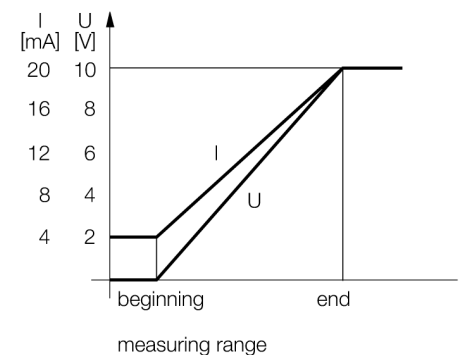
- compact housing style
- cable, 2m
- temperature compensation
- very small blind zone
- measuring range adjustable via teach-in

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.



Type code	S18UIAR
Ident no.	3002708
Design	cylindrical/threaded, S18U
Dimensions	Ø18x 85.1 mm
Housing material	Plastic, PBT
Connection	cable, 2
Protection class	IP67
Ambient temperature	-20...+60 °C
Operating voltage	LED
Switching state	•
Operating voltage	10...30VDC
No-load current I_0	≤ 100 mA
Load resistance	≤ 1000 Ω
Response time	3 ms
Current output	4...20mA
Short-circuit protection	yes
Reverse polarity protection	complete
Wire breakage protection	yes
Range	3...30 cm
Ultrasound frequency	300 kHz
Repeatability	$\geq \pm 0.25$ mm
Edge lengths of the nominal actuator	50 mm

ultrasonic sensor
diffuse mode sensor
S18UIAR

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Accessories

Type code	Ident no.	Description	Dimension drawing
SMB18A	3033200	Mounting bracket, stainless steel, for sensors with 18 mm thread	
SMB18FM	3079421	mounting bracket, black, M22 x1.5 mm, male thread, female thread M18 x 1, for sensors with 18 mm thread	
SMB18SF	3052519	Mounting bracket, PTB black steel, for sensors with 18 mm thread	

Function accessories

Type code	Ident no.	Description	Dimension drawing
UWG18-5.0	3077342	Ultrasonic focussing-adaptor for QS18U and S18U, internal diameter 5.0 mm	
UWG18-6.4	3076952	Ultrasonic focussing-adaptor for QS18U and S18U, internal diameter 6.4 mm	