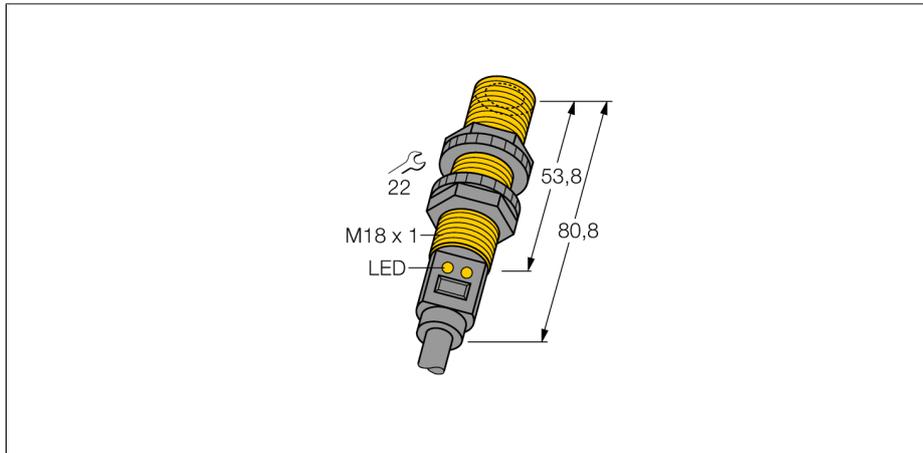


**ultrasonic sensor
diffuse mode sensor
S18UIA**

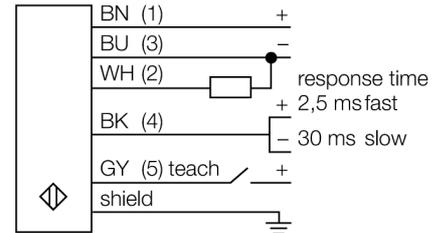
TURCK

Industrial
Automation



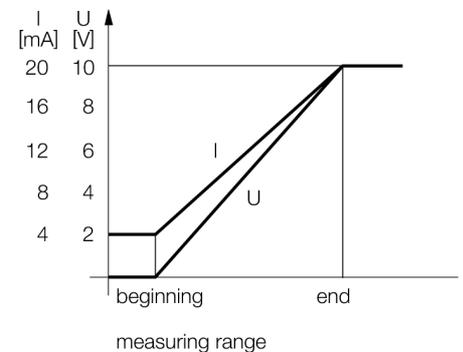
- compact housing style
- cable, 2m
- temperature compensation
- very small blind zone
- measuring range adjustable via teach-in

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	S18UIA
Ident-No.	3002702
Range	3...30 cm
Ultrasound frequency	300 kHz
Temperature drift	± 0.3 % of full scale
Repeatability	≥ ± 0.25 mm
Edge lengths of the nominal actuator	50 mm
Ambient temperature	-20...+60 °C
Operating voltage	10...30VDC
No-load current I ₀	≤ 100 mA
Current output	4...20mA
Load resistance	≤ 1000 Ω
Short-circuit protection	yes
Reverse polarity protection	complete
Wire breakage protection	yes
Design	cylindrical/threaded, S18U
Dimensions	80.8 mm
Housing diameter	Ø 18 mm
Thread length	53.8 mm
Housing material	Plastic, PBT
Connection	cable
Cable length	2 m
Cable cross section	5 x 0.5 mm ²
Protection class	IP67
MTTF	53years acc. to SN 29500 (Ed. 99) 40 °C
Operating voltage	LED
Switching state	LED
Display ' Object detected '	LED green