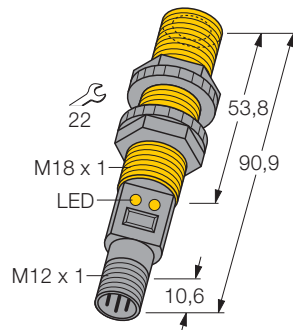


ultrasonic sensor
diffuse mode sensor
S18UBAQ

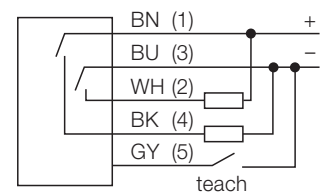
TURCK

Industrial
Automation



- compact housing style
- connection via M12 x 1 connector
- temperature compensation
- very small blind zone
- switching range adjustable via teach-in
- adjustable retro-reflective mode

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	S18UBAQ
Ident-No.	3002712
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
Hysteresis	≤ 0.7 mm
Ambient temperature	-20...+ 60°C
Operating voltage	10... 30 VDC
No-load current I ₀	≤ 100 mA
Output function	NO contact, pnp/npn
Short-circuit protection	yes
Reverse polarity protection	complete
Switching frequency	≤ 8Hz
Wire breakage protection	yes
Housing	cylindrical/threaded, S18U
Dimensions	90.9mm
Housing diameter	Ø 18mm
Thread length	53.8 mm
Housing material	Plastic, PBT
Electrical connection	Connectors, M12 x 1
Cable length	2 m
Cable cross section:	5 x 0.5mm ²
Protection class	IP67
Switching state	LED yellow
Display ' Object detected '	LED green