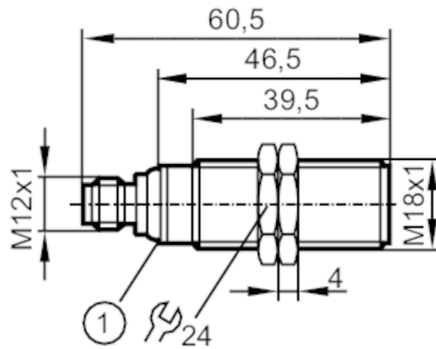


UGT502

Ultrasonic sensor

UGB0030002OG/US



1 LEDs



Electrical data

Operating voltage	[V]	10...30 DC; ("supply class 2" to cULus)
Current consumption	[mA]	< 35
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	0.1
Converter frequency	[kHz]	300

Inputs

Synchronisation input	no
Multiplex input	no

Outputs

Analogue voltage output	[V]	0...10
Min. load resistance	[Ω]	3000
Short-circuit protection		yes
Overload protection		yes

Detection zone

Sensing range	[mm]	40...300
Blind zone	[mm]	40
Angle of aperture cylindrical	[°]	7; (±2)
Detection range hysteresis	[mm]	< 1
Max. deviation from the 90° angle sensor/object	[°]	± 4

Accuracy / deviations

Notes on the accuracy / deviation	The indicated values are reached after a warm-up time of 20 minutes.	
Temperature compensation		yes
Hysteresis	[%]	< 1
Switch point drift	[%]	-2.5...2.5
Linearity error of analogue output	[%]	< 1

UGT502



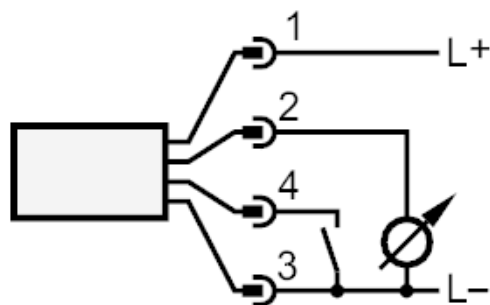
Ultrasonic sensor

UGB00300020G/US

Operating conditions		
Ambient temperature	[°C]	-20...70
Protection		IP 67
Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / plastics
		8 kV AD / metal
	EN 61000-4-3 HF radiated	3 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	3 V
	EN 55011	Class A
Vibration resistance	EN 60068-2-6 Fc	(10-55) Hz 1 mm amplitude, oscillation period 5 min., 30 min. per axis at resonance or 55 Hz
Shock resistance	EN 60068-2-27 Ea	yes
MTTF	[years]	193
Mechanical data		
Weight	[g]	95
Housing		threaded type
Dimensions	[mm]	M18 x 1 / L = 60.5
Thread designation		M18 x 1
Materials		stainless steel (1.4404 / 316L); PA; epoxy glass ceramics
Displays / operating elements		
Display	switching status	1 LED, yellow
	echo	1 LED, green
Accessories		
Accessories (supplied)		lock nuts: 2, stainless steel
Remarks		
Remarks		operating voltage "supply class 2" according to cULus
Pack quantity		1 pcs.
Electrical connection		
Connector: 1 x M12		
		



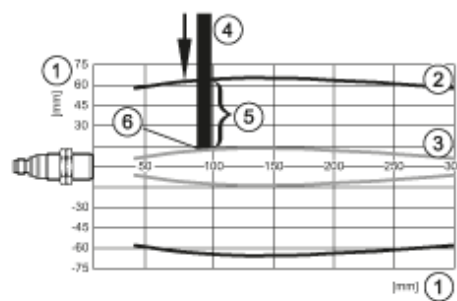
Connection



4: Teach



Diagrams and graphs



- 1: distance
- 2: Detection zone
- 3: switch-on/switch-off graph
- 4: Target 100 x 100 mm
- 5: 50 % of the target in the detection zone
- 6: switch point