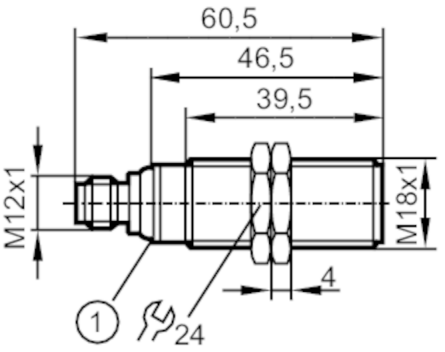
UGT523

Ultrasonic sensor

UGB01200FOKG/US



1 LEDs

Product characteristics		
Electrical design		NPN
Output function		normally open / closed; (configurable)
Sensing range	[mm]	80...1200; (Target: 200 x 200 mm)
Housing		Threaded type
Dimensions	[mm]	M18 x 1 / L = 60.5
Electrical data		
Operating voltage	[V]	10...30 DC; (cULus - Class 2 source required)
Current consumption	[mA]	< 35
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	< 0.3
Converter frequency	[kHz]	200
Inputs / outputs		
Number of inputs and outputs		Number of digital outputs: 1
Inputs		
Synchronization input		no
Multiplex input		no
Outputs		
Total number of outputs		1
Electrical design		NPN
Number of digital outputs		1
Output function		normally open / closed; (configurable)
Max. voltage drop switching output DC	[V]	2.2
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	5
Short-circuit protection		yes
Overload protection		yes

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Monitoring range			
Sensing range	[mm]	80...1200; (Target: 200 x 200 mm)	
Blind zone	[mm]	80	
Angle of aperture cylindrical	[°]	14; (±2)	
Max. deviation from the 90° angle sensor/object	[°]	± 4	
Accuracy / deviations			
Temperature compensation		yes	
Hysteresis	[%]	< 1	
Switch-point drift	[%]	-2.5...2.5	
Linearity error of analog output	[%]	< 1	
Resolution	[mm]	2	
Notes on the accuracy / deviation		The indicated values are reached after a warm-up time of min. 20 minutes	
Operating conditions			
Ambient temperature	[°C]	-20...70	
Storage temperature	[°C]	-30...80	
Protection		IP 67	
Tests / approvals			
EMC		EN 61000-4-2 ESD	4 kV CD / 8 kV AD
		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, vibration duration 5 min., 30 min. per axis with resonance or 55 Hz
Shock resistance		EN 60068-2-27 Ea	yes
MTTF	[years]	210	
UL approval		Ta	-20...70 °C
		voltage supply	Class 2
		File number UL	E174191
Mechanical data			
Weight	[g]	79	
Housing		Threaded type	
Dimensions	[mm]	M18 x 1 / L = 60.5	
Thread designation		M18 x 1	
Material		stainless steel (1.4404 / 316L); PA; epoxy glass ceramics	
Tightening torque	[Nm]	50	
Displays / operating elements			
Display		Switching status	1 x LED, yellow
		echo	1 x LED, green
Accessories			
Items supplied		lock nuts: 2, stainless steel	

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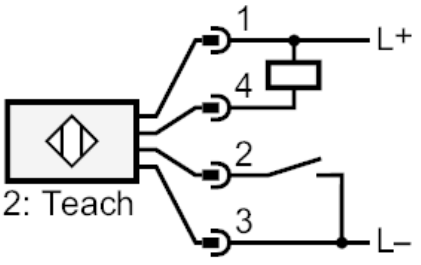
Remarks	
Remarks	cULus - Class 2 source required
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A



Connection



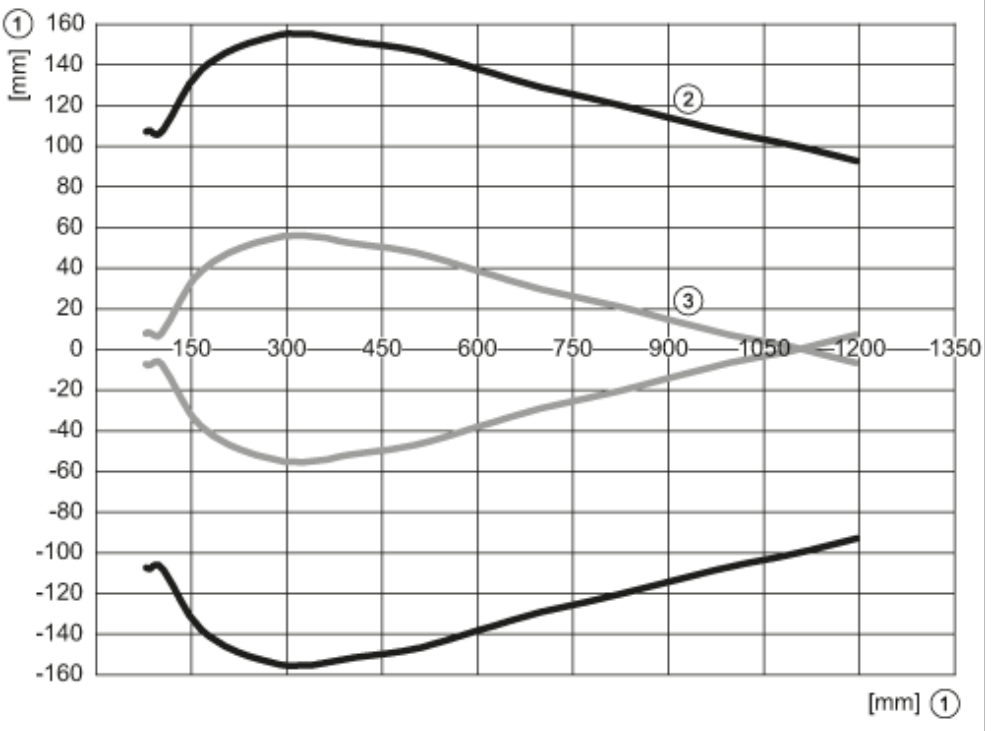
2: Teach

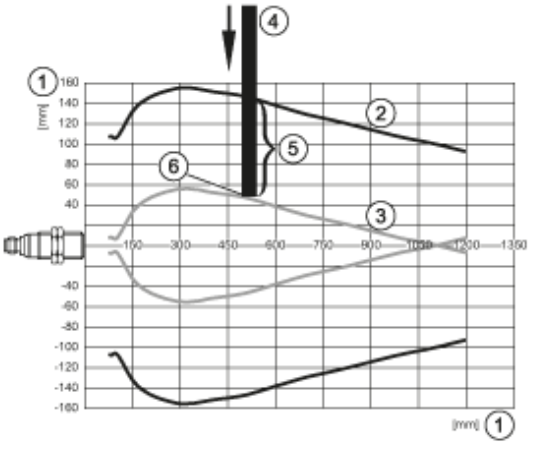
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Diagrams and graphs





1: Distance

2: Monitoring range

3: switch-on/switch-off graph

4: Target 200 x 200 mm

5: 50 % of the target in the detection zone

6: Set point