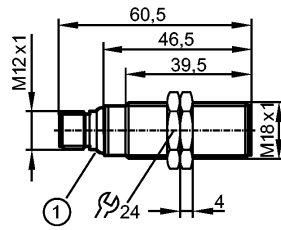




# UGT501

UGB00300010G/US

Ultrasonic sensors



1: LEDs



## Product characteristics

Ultrasonic diffuse-reflection sensor

Threaded type

M18 x 1

Quick disconnect

Teach function

## Electrical data

Electrical design	DC analog
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]	0.1
Converter frequency [kHz]	300

## Inputs

Teach	yes
Synchronisation	no
Multiplex	no

## Outputs

Output function	1x analogue 4...20 mA
Short-circuit protection	yes
Overload protection	yes
Analogue output	
current output [mA]	4...20
Max. load [ $\Omega$ ]	500

## Monitoring range

Sensing range [mm]	300
blind zone [mm]	40

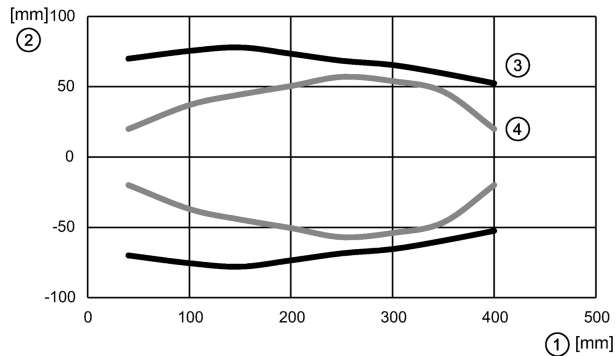


# UGT501

UGB0030001OG/US

Ultrasonic sensors

## Response curve



1: Distance; 2: Sound beam; 3: Target 100 x 100 mm; 4: Target Ø 25 mm

Angle of aperture	[°]	7 ± 2
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
Linearity error	[%]	< 1
Resolution	[mm]	3
Repeatability	[%]	< 0.7

## Environment

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
MTTF	[Years]	213
Vibration resistance		(10-55) Hz 1 mm amplitude, vibration duration 5 min., 30 min. per axis with resonance or 55 Hz
	EN 60068-2-6 Fc	
Shock resistance		yes
	EN 60068-2-27 Ea	

## Mechanical data

Housing materials		316L stainless steel / 1.4404; polyamide; Epoxid-Glaskeramik
Weight	[kg]	0.095

## Displays / operating elements

Display		Switching status 1 LED yellow Echo LED 1 LED green
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## Electrical connection

Connection		M12 connector
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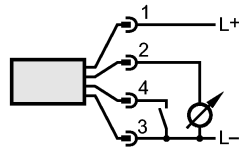
## Wiring



# UGT501

UGB0030001OG/US

Ultrasonic sensors



4: Teach

### Accessories

Accessories (included)	2 fixing nuts, stainless steel; 2 Flat SS washers
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### Remarks

Remarks	cULus - Class 2 source required
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Pack quantity	[piece]	1
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