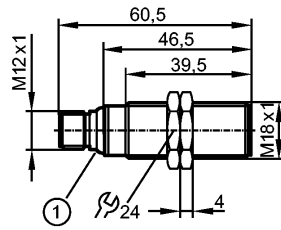




# UGT501

UGB00300010G/US

Ultrasonic sensors



1: LEDs



## Product characteristics

Ultrasonic diffuse-reflection sensor

Threaded type

M18 x 1

Connector

Teach function

## Electrical data

Electrical design		DC analogue
Operating voltage	[V]	10...30 DC
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
Voltage drop	[V]	2.2
Short-circuit protection		yes
Overload protection		yes
Analogue output		
current output	[mA]	4...20
Max. load	[Ω]	500

## Range

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

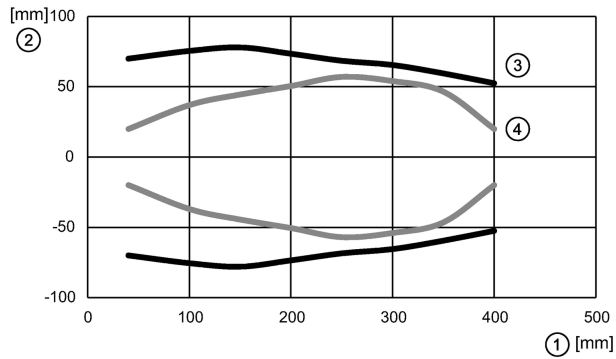


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## Response curve



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
Vibration resistance		(10-55) Hz 1 mm amplitude, oscillation period 5 min., 30 min.
	EN 60068-2-6 Fc	per axis at resonance or 55 Hz
Shock resistance	EN 60068-2-27 Ea	yes

## Mechanical data

Housing materials		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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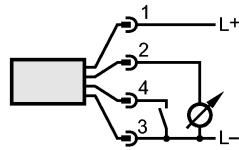
## Wiring



# UGT501

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Ultrasonic sensors



4: Teach

### Accessories

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

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