

# UGT505



## Ultrasonic sensor

UGB00800020G/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]	230

### Inputs / outputs

Number of inputs and outputs	Number of analogue outputs: 1
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### Inputs

Synchronisation input	no
Multiplex input	no

### Outputs

Total number of outputs	1	
Number of analogue outputs	1	
Analogue voltage output	[V]	0...10
Min. load resistance	[Ω]	3000
Short-circuit protection		yes
Overload protection		yes

### Detection zone

Sensing range	[mm]	60...800
Blind zone	[mm]	60
Angle of aperture cylindrical	[°]	7; (±2)
Detection range hysteresis	[mm]	< 1
Max. deviation from the 90° angle sensor/object	[°]	± 4

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### Accuracy / deviations

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

### 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]	189	

### Mechanical data

Weight [g]	80	
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	
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### Remarks

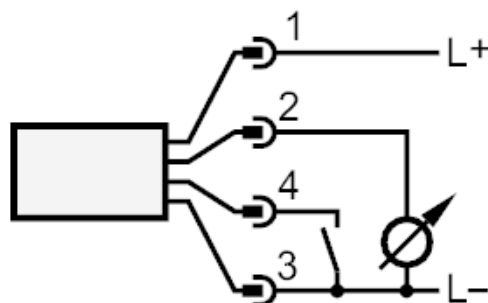
Remarks	operating voltage "supply class 2" according to cULus	
Pack quantity	1 pcs.	

### Electrical connection

Connector: 1 x M12

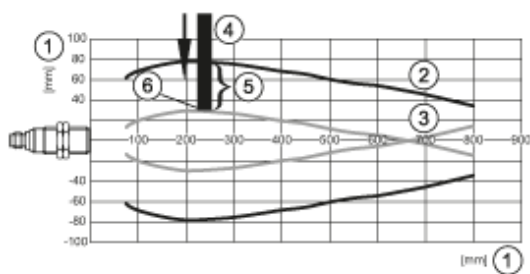
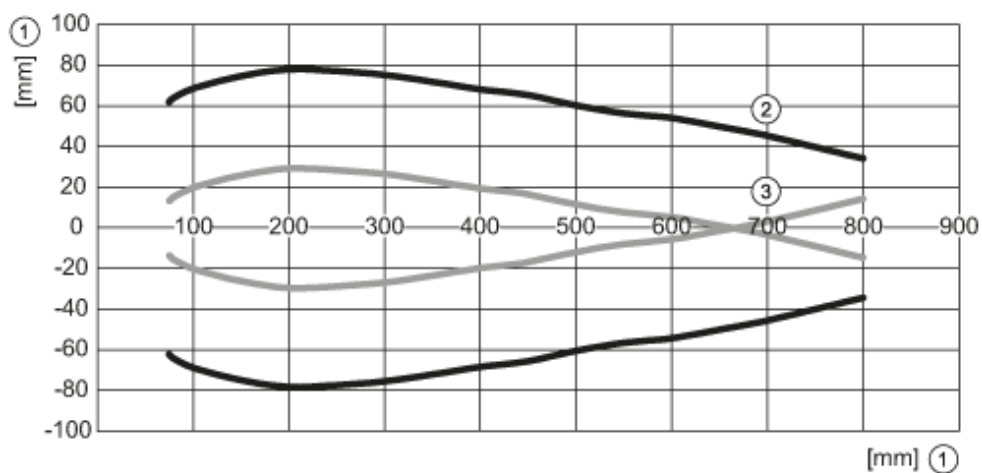


### Connection



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