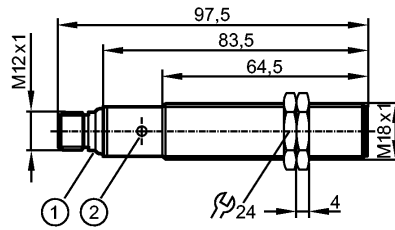




# UGT516

UGA01600F1KG/US

Ultrasonic sensors



- 1: LEDs
- 2: teach button



### Product characteristics

Ultrasonic diffuse-reflection sensor

Threaded type

M18 x 1

Quick disconnect

Teach function

### Electrical data

Electrical design		DC NPN
Operating voltage	[V]	10...30 DC; cULus - Class 2 source required
Current consumption	[mA]	55
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	< 0.3
Converter frequency	[kHz]	230

### Inputs

Teach		yes
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### Outputs

Output function		1 x NO / NC programmable + 1 x analog current
Current rating	[mA]	100
Voltage drop	[V]	2.2
Short-circuit protection		yes
Overload protection		yes
Analog output		
current output	[mA]	4...20
Max. load	[Ω]	500
Switching frequency	[Hz]	3

### Monitoring range

Sensing range	[mm]	1600
blind zone	[mm]	150

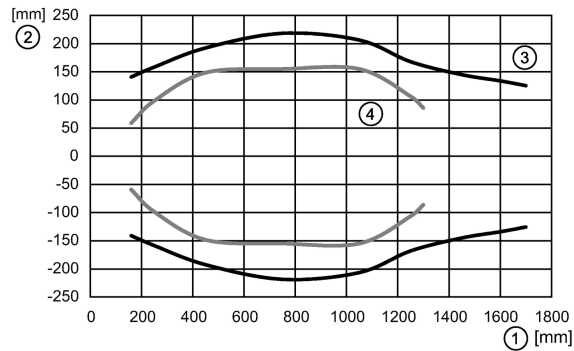


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## Response curve



1: Distance; 2: Sound beam; 3: Target 200 x 200 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
Linearity error	[%]	1
Resolution	[mm]	< 3
Repeatability	[%]	0.5

### 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]	146
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		EN 60068-2-27 Ea yes

### Mechanical data

Housing materials		316L stainless steel / 1.4404; polyamide; Epoxid-Glaskeramik
Weight	[kg]	0.1

### Displays / operating elements

Display		Switching status 2 LED yellow Echo LED 1 LED green
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### Electrical connection

Connection		M12 connector
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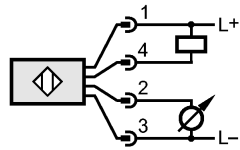
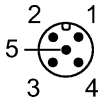
### Wiring



# UGT516

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Ultrasonic sensors



### 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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