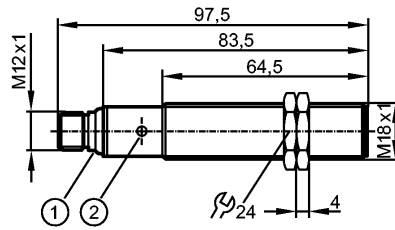




UGT513

UGA02200E1KG/US

Ultrasonic sensors



- 1: LEDs
2: teach button



Product characteristics

Ultrasonic diffuse-reflection sensor
Threaded type
M18 x 1
Connector
Teach function

Electrical data

Electrical design	DC PNP
Operating voltage [V]	10...30 DC
Current consumption [mA]	55
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	< 0.3
Converter frequency [kHz]	200

Inputs

Teach	yes
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Outputs

Output function	1 x NO / NC programmable + 1 x current output
Current rating [mA]	100
Voltage drop [V]	2.2
Short-circuit protection	yes
Overload protection	yes
Analogue output	
current output [mA]	4...20
Max. load [Ω]	500
Switching frequency [Hz]	2

Range

Sensing range [mm]	2200
blind zone [mm]	200

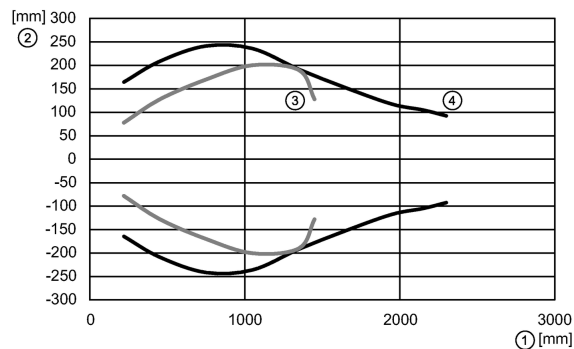


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Ultrasonic sensors

Response curve



1: Distance; 2: Sound beam; 3: Target Ø 25 mm; 4: Target 200 x 200 mm

Angle of aperture [°]	8 ± 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
Vibration resistance	(10-55) Hz 1 mm amplitude, oscillation period 5 min., 30 min. per axis at resonance or 55 Hz EN 60068-2-6 Fc
Shock resistance	EN 60068-2-27 Ea yes

Mechanical data

Housing materials	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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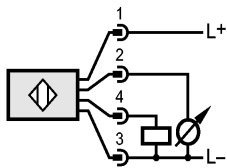
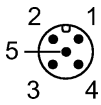
Wiring



UGT513

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Ultrasonic sensors



Accessories	
Accessories (included)	2 fixing nuts, stainless steel; 2 washers, stainless steel
Remarks	
Remarks	cULus - Class 2 source required
Pack quantity	[piece]1