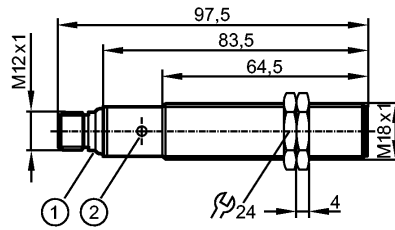




UGT511

UGA01600E2KG/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]	230

Inputs

Teach		yes
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Outputs

Output function		1 x NO / NC programmable + 1 x voltage output
Current rating	[mA]	100
Voltage drop	[V]	2.2
Short-circuit protection		yes
Overload protection		yes
Analogue output		
voltage output	[V]	0...10
Min. load resistance	[Ω]	3000
Switching frequency	[Hz]	3

Range

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

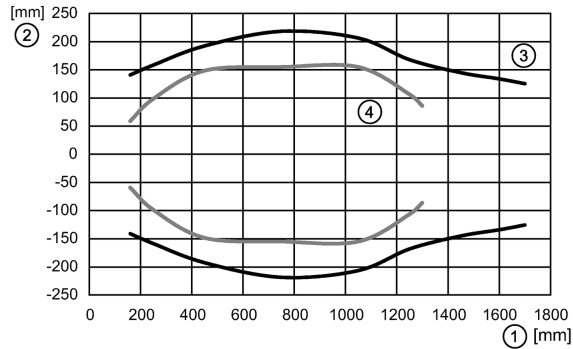


UGT511

UGA01600E2KG/US

Ultrasonic sensors

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
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

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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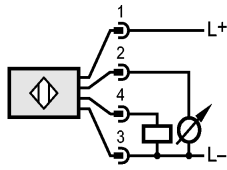
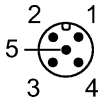
Wiring



UGT511

UGA01600E2KG/US

Ultrasonic sensors



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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