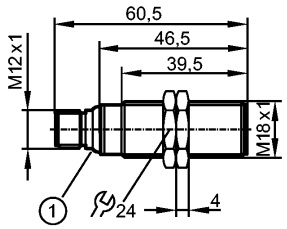
UGT201

UGC00800EOKG/US

Ultrasonic sensors



1: LEDs

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]	< 35
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	0.1
Converter frequency	[kHz]	230

Inputs

Teach	yes
Synchronisation	no
Multiplex	no

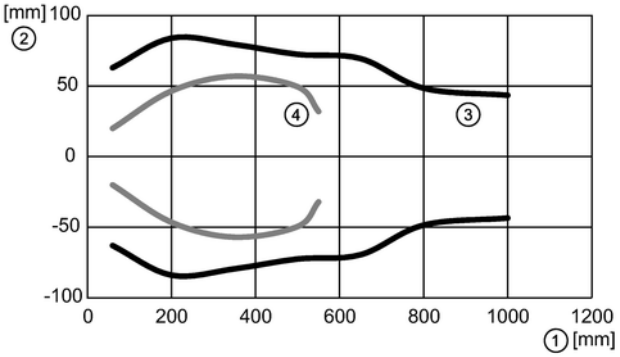
Outputs

Output function		normally open / closed programmable
Current rating	[mA]	100
Short-circuit protection		yes
Overload protection		yes
Switching frequency	[Hz]	5

Range

Sensing range	[mm]	800
blind zone	[mm]	60

Response curve



1: Distance; 2: Sound beam; 3: Target 100 x 100 mm; 4: Target Ø 25 mm

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Ultrasonic sensors

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: EN 61000-4-3 HF radiated: EN 61000-4-4 Burst: EN 61000-4-6 HF conducted: EN 55011:	4 kV CD / plastics 8 kV AD / metal 3 V/m 2 kV 3 V 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		PBT; polyamide; Epoxid-Glaskeramik
Weight	[kg]	0.095

Displays / operating elements

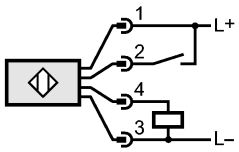
Display		Switching status 1 LED yellow Echo LED 1 LED green

Electrical connection

Connection		M12 connector

Wiring





2: Teach

Accessories

Accessories (included)		2 fixing nuts (plastic); 2 rubber washers

Remarks

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