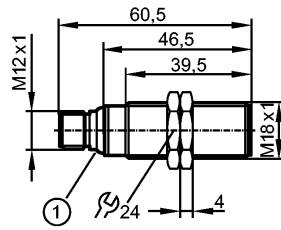




UGT211

UGC01200FOKG/US

Ultrasonic sensors



1: LEDs



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]	< 35
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	0.1
Converter frequency	[kHz]	200

Inputs

Teach		yes
Synchronisation		no
Multiplex		no

Outputs

Output function		normally open / closed programmable
Current rating	[mA]	100
Voltage drop	[V]	2.2
Short-circuit protection		yes
Overload protection		yes
Switching frequency	[Hz]	5

Monitoring range

Sensing range	[mm]	1200
blind zone	[mm]	80

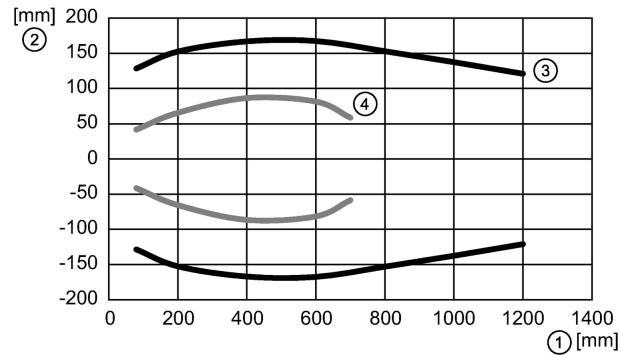


UGT211

UGC01200FOKG/US

Ultrasonic sensors

Response curve



1: Distance; 2: Sound beam; 3: Target 200 x 200 mm; 4: Target Ø 25 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	[%]	± 2.5
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:	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]	210
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		PBT; polyamide; Epoxid-Glaskeramik
Weight	[kg]	0.056

Displays / operating elements

Display	Switching status 1 LED yellow Echo LED 1 LED green
---------	---

Electrical connection

Connection	M12 connector
------------	---------------

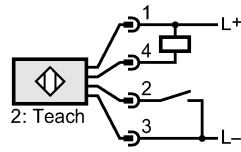
Wiring



UGT211

UGC01200FOKG/US

Ultrasonic sensors



2: Teach

Accessories

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

Remarks

Remarks	cULus - Class 2 source required
---------	---------------------------------

Pack quantity	[piece]	1
---------------	---------	---