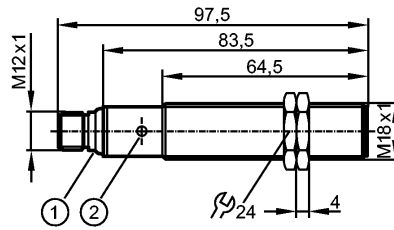




UGT510

UGA01600E1KG/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
-------	--	-----

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]	3

Range

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

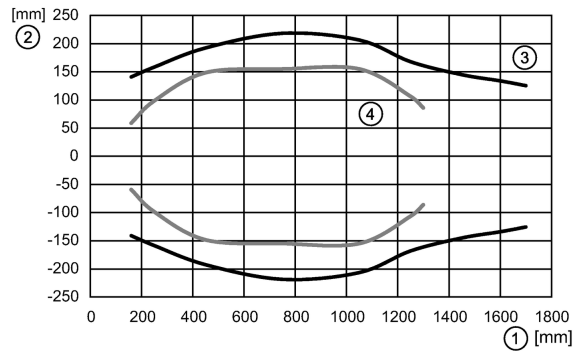


UGT510

UGA01600E1KG/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

(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

Electrical connection

Connection

M12 connector

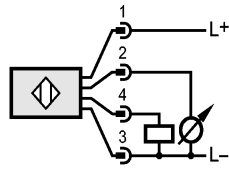
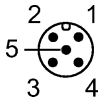
Wiring



UGT510

UGA01600E1KG/US

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
---------------	---------	---