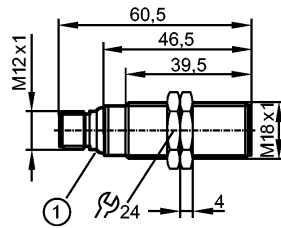




UGT503

UGB00800EOKG/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
Voltage drop [V]	2.2
Short-circuit protection	yes
Overload protection	yes
Switching frequency [Hz]	5

Range

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

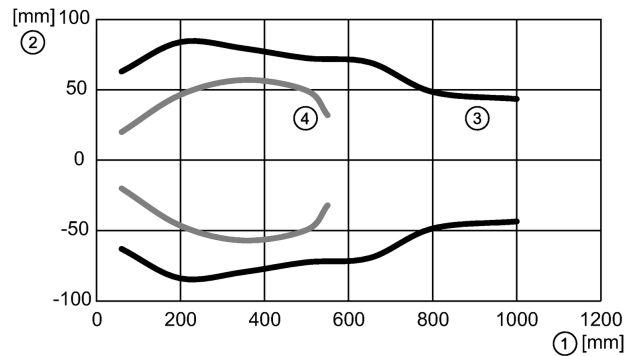


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Ultrasonic sensors

Response curve



1: Distance; 2: Sound beam; 3: Target 100 x 100 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 [%]

± 2.5

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

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]

0.095

Displays / operating elements

Display

Switching status 1 LED yellow
Echo LED 1 LED green

Electrical connection

Connection

M12 connector

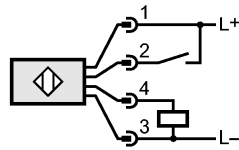
Wiring



UGT503

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Ultrasonic sensors



2: Teach

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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