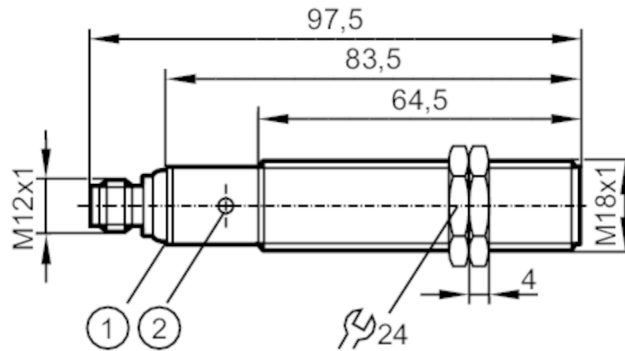


UGT514



Ultrasonic sensor

UGA02200E2KG/IO-LINK/US



- 1 LEDs
- 2 teach button



Electrical data

Operating voltage	[V]	10...30 DC; ("supply class 2" to cULus)
Current consumption	[mA]	55
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	< 0.3
Converter frequency	[kHz]	200

Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1
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Outputs

Total number of outputs		2
Electrical design		PNP
Number of digital outputs		1
Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2.2
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	2
Number of analogue outputs		1
Analogue voltage output	[V]	0...10
Min. load resistance	[Ω]	3000
Short-circuit protection		yes
Overload protection		yes
Resolution of analogue output		< 3 mm

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Ultrasonic sensor

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Detection zone		
Sensing range	[mm]	200...2200
Blind zone	[mm]	200
Angle of aperture cylindrical	[°]	8; (±2)
Detection range hysteresis	[mm]	< 1
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 min. 20 minutes	
Temperature compensation		yes
Hysteresis	[%]	1
Switch point drift	[%]	-2...2
Linearity error of analogue output	[%]	1
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
SDCI standard		IEC 61131-9
Profiles		Smart Sensor: Process Data Variable; Device Identification
SIO mode		yes
Required master port type		A
Min. process cycle time	[ms]	3.2
Operating conditions		
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
MTTF	[years]	139
Mechanical data		
Weight	[g]	103.5
Housing		threaded type
Dimensions	[mm]	M18 x 1 / L = 97.5
Thread designation		M18 x 1
Materials		stainless steel (1.4404 / 316L); PA; epoxy glass ceramics

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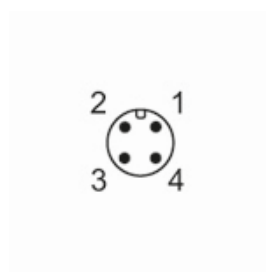
Ultrasonic sensor

UGA02200E2KG/IO-LINK/US

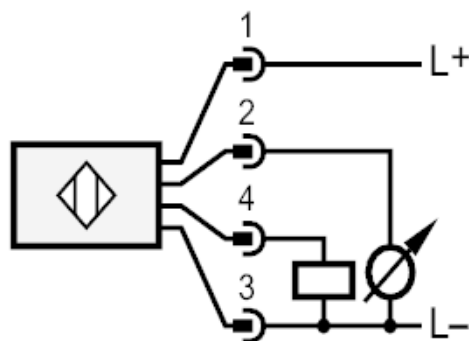
Displays / operating elements		
Display	switching status	2 LED, yellow
	echo	1 LED, green
Accessories		
Accessories (supplied)	lock nuts: 2, stainless steel	
Remarks		
Remarks	operating voltage "supply class 2" according to cULus	
Pack quantity	1 pcs.	

Electrical connection

Connector: 1 x M12

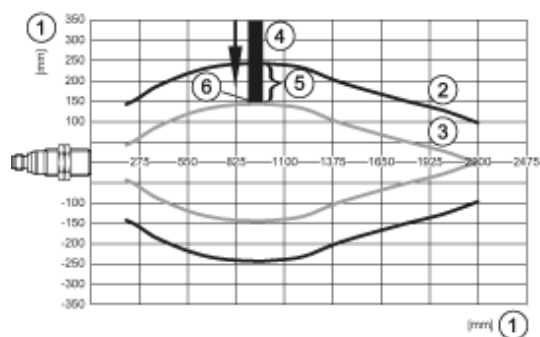
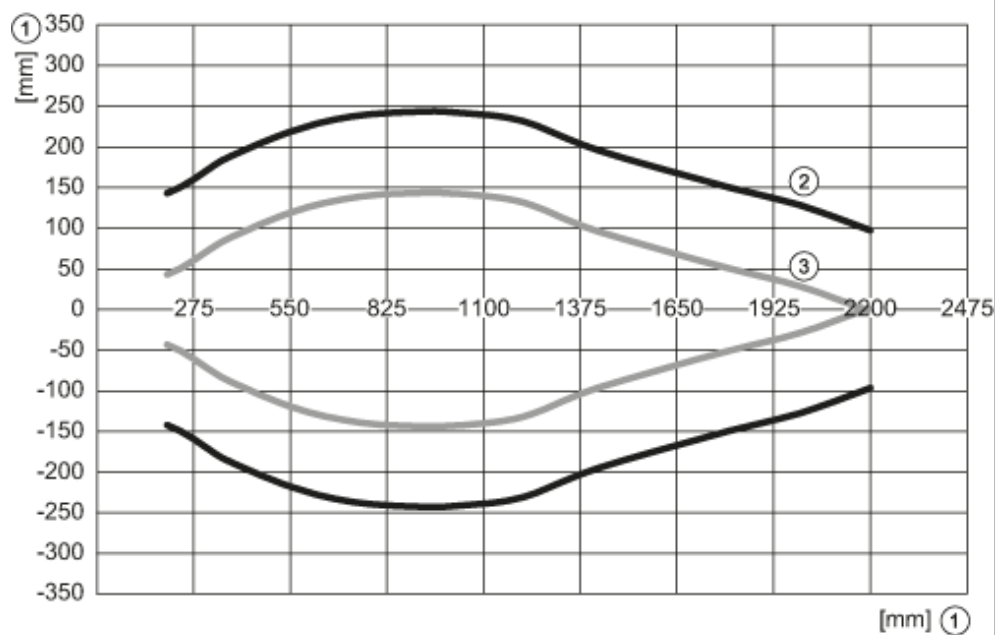


Connection



Pin 4 = IO-Link

Diagrams and graphs



- 1: distance
- 2: Detection zone
- 3: switch-on/switch-off graph
- 4: Target 200 x 200 mm
- 5: 50 % of the target in the detection zone
- 6: switch point