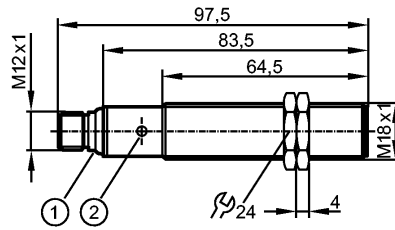




# UGT514

UGA02200E2KG/IO-LINK/US

Ultrasonic sensors



- 1: LEDs
- 2: teach button



## Product characteristics

Ultrasonic diffuse-reflection sensor

Threaded type

M18 x 1

Quick disconnect

Teach function

## Electrical data

Electrical design		DC PNP
Operating voltage [V]		10...30 DC; cULus - Class 2 source required
Current consumption [mA]		55
Protection class		III
Reverse polarity protection		yes
Power-on delay time [s]		< 0.3
Converter frequency [kHz]		200

## Inputs

Teach		yes
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## Outputs

Output function		1 x NO / NC programmable + 1 x voltage output
Current rating [mA]		100
Voltage drop [V]		2.2
Short-circuit protection		yes
Overload protection		yes
Analog output		
voltage output [V]		0...10
Min. load resistance [ $\Omega$ ]		3000
Switching frequency [Hz]		2

## Monitoring range

Sensing range [mm]		2200
blind zone [mm]		200

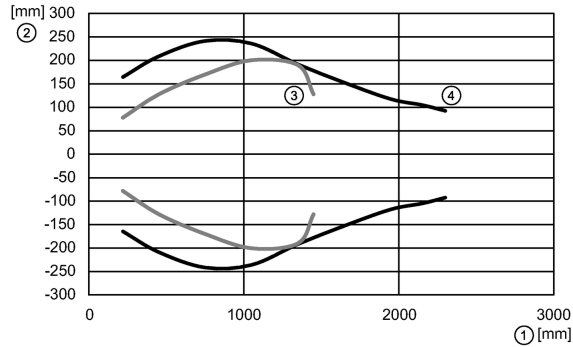


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## Response curve



1: Distance; 2: Sound beam; 3: Target Ø 25 mm; 4: Target 200 x 200 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
Linearity error	[%]	1
Resolution	[mm]	< 3
Repeatability	[%]	0.5

## Interfaces

IO-Link Device		
Transfer 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 class		A

## 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]	139
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		316L stainless steel / 1.4404; polyamide; Epoxid-Glaskeramik
Weight	[kg]	0.105



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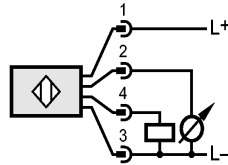
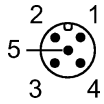
## Displays / operating elements

Display	Switching status 2 LED yellow Echo LED 1 LED green
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## Electrical connection

Connection	M12 connector
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### Wiring



Pin 4 = IO-Link

## Accessories

Accessories (included)	2 fixing nuts, stainless steel; 2 Flat SS washers
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## Remarks

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