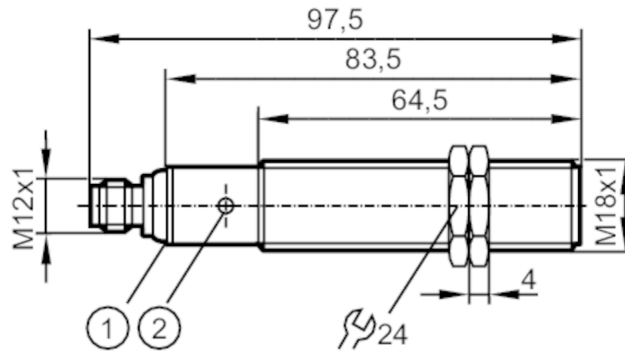


UGT520



Ultrasonic sensor

UGA02200F2KG/US



- 1 LEDs
- 2 teach button



Product characteristics

Electrical design	NPN
Output function	normally open / normally closed; (parameterisable)
Sensing range [mm]	200...2200
Housing	threaded type
Dimensions [mm]	M18 x 1 / L = 97.5

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	NPN
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

UGT520



Ultrasonic sensor

UGA02200F2KG/US

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
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]	125
Mechanical data		
Weight	[g]	101
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
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		

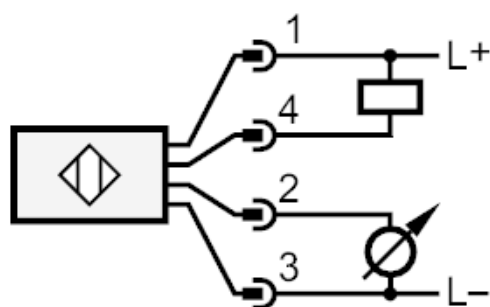
UGT520

Ultrasonic sensor

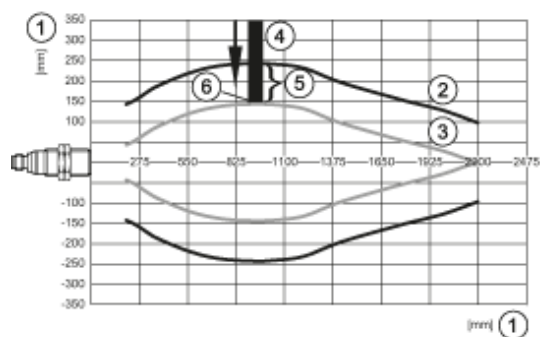
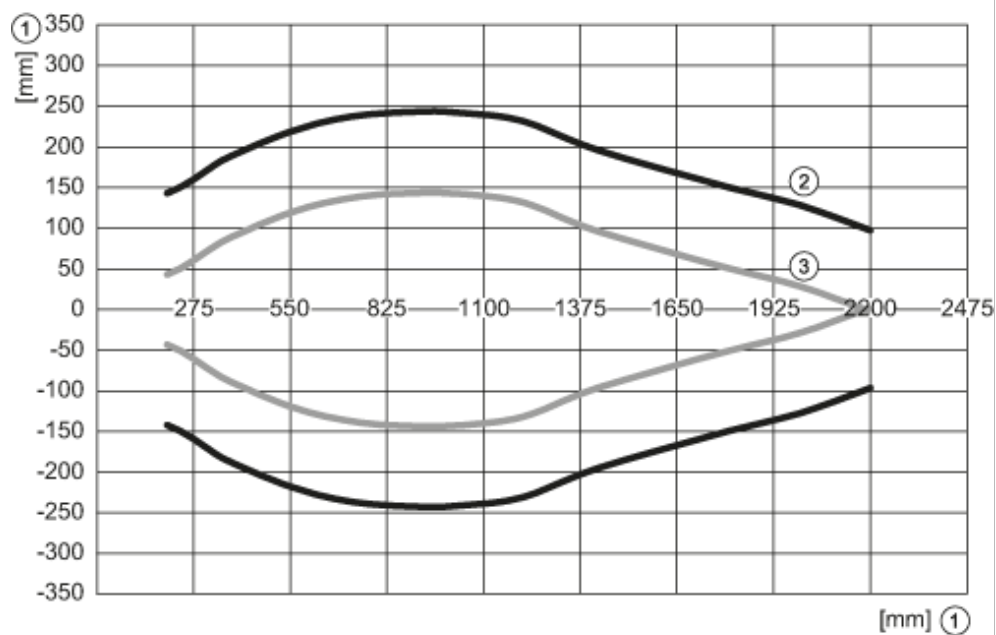
UGA02200F2KG/US



Connection



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