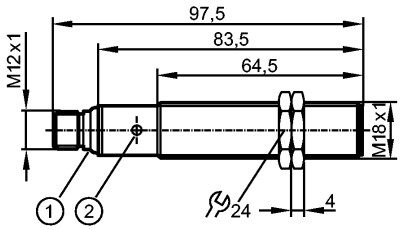
UGR500

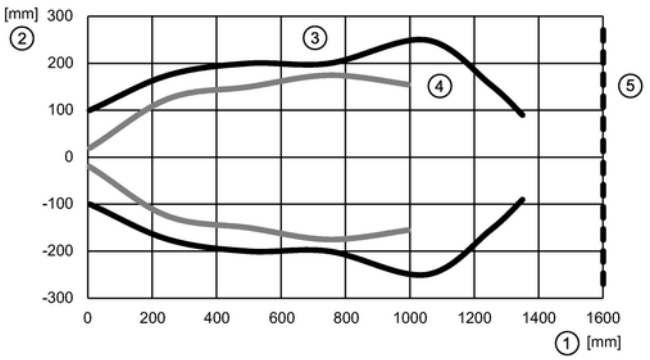
UGA01600EOKG/US

Ultrasonic sensors



1: LEDs
2: teach button

Product characteristics		
Ultrasonic retro-reflective 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]	≤ 0.5
Converter frequency	[kHz]	230
Inputs		
Teach		yes
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]	2
Range		
Sensing range	[mm]	1600
Min. distance object / reflector	[mm]	250
Response curve		



1: Distance; 2: Sound beam; 3: Target 200 x 200 mm; 4: Target Ø 25 mm; 5: Reflector

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Angle of aperture [°]	± 8	
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	

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	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

Mechanical data

Housing materials	1.4404; polyamide; Epoxid-Glaskeramik
Weight [kg]	0.1

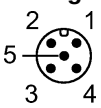
Displays / operating elements

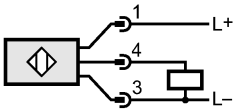
Display	Switching status	2 LED yellow
	Echo LED	1 LED green

Electrical connection

Connection	M12 connector

Wiring





Accessories

Accessories (included)	2 fixing nuts, stainless steel; 2 washers, stainless steel

Remarks

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