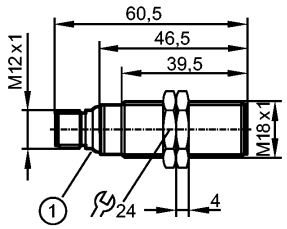
UGT502

UGB00300O2OG/US

Ultrasonic sensors



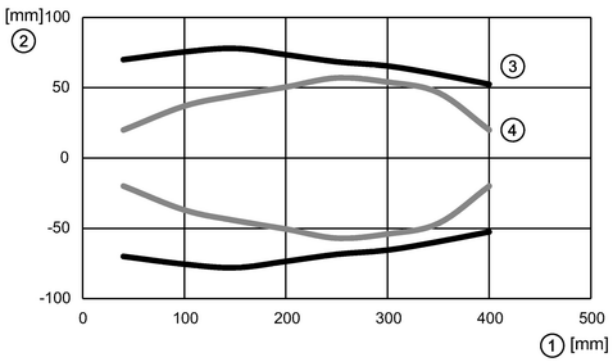
1: LEDs

Product characteristics		
Ultrasonic diffuse-reflection sensor		
Threaded type		
M18 x 1		
Connector		
Teach function		
Electrical data		
Electrical design		DC analogue
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]	300
Inputs		
Teach		yes
Synchronisation		no
Multiplex		no
Outputs		
Output function		0...10 V analogue
Current rating	[mA]	100
Voltage drop	[V]	2.2
Short-circuit protection		yes
Overload protection		yes
Analogue output		
voltage output	[V]	0...10
Min. load resistance	[Ω]	3000
Range		
Sensing range	[mm]	300
blind zone	[mm]	40

UGT502

UGB00300O2OG/US

Ultrasonic sensors

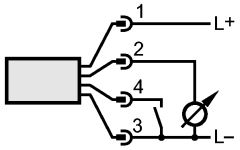
Response curve	 1: Distance; 2: Sound beam; 3: Target 100 x 100 mm; 4: Target Ø 25 mm	
Angle of aperture [°]	7 ±2	
Max. deviation from the 90° angle sensor / object [°]	± 4	
Accuracy / deviations		
Notes on the accuracy / deviation	The indicated values are reached after a warm-up time of ≥ 20 minutes	
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: EN 61000-4-3 HF radiated: EN 61000-4-4 Burst: EN 61000-4-6 HF conducted: EN 55011:	4 kV CD / plastics 8 kV AD / metal 3 V/m 2 kV 3 V 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]	0.095	
Displays / operating elements		
Display	Switching status 1 LED yellow Echo LED 1 LED green	
Electrical connection		
Connection	M12 connector	
Wiring		

UGT502

UGB00300O2OG/US

Ultrasonic sensors





4: Teach

Accessories

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

Remarks

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