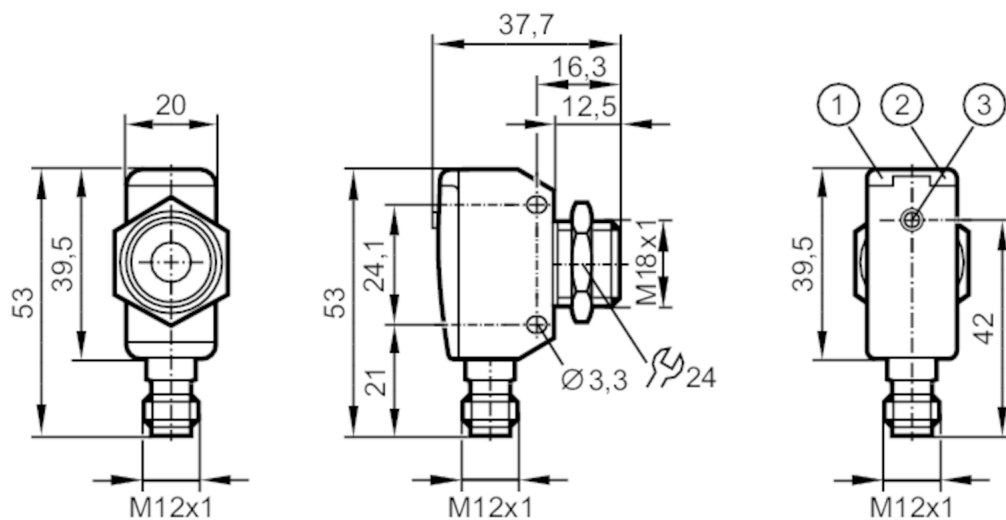


UGT590

Ultrasonic sensor

UGQ01200F1KG/US



- 1 LEDs
- 2 teach button



Electrical data

Operating voltage	[V]	10...30 DC; ("supply class 2" to cULus)
Current consumption	[mA]	< 35
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	0.1
Converter frequency	[kHz]	200

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]	5
Number of analogue outputs		1
Analogue current output	[mA]	4...20
Max. load	[Ω]	500
Short-circuit protection		yes
Overload protection		yes

UGT590



Ultrasonic sensor

UGQ01200F1KG/US

Detection zone		
Sensing range	[mm]	80...1200
Blind zone	[mm]	80
Angle of aperture cylindrical	[°]	±8
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 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]	205
Mechanical data		
Weight	[g]	98
Housing		rectangular
Dimensions	[mm]	M18 x 1
Thread designation		M18 x 1
Materials		1.4542 (17-4 PH / 630); PBT; PA; epoxy glass ceramics
Displays / operating elements		
Display	switching status	1 LED, yellow
	echo	1 LED, green
Accessories		
Accessories (supplied)		lock nuts: 1, stainless steel
Remarks		
Remarks		operating voltage "supply class 2" according to cULus
Pack quantity		1 pcs.
Electrical connection		
Connector: 1 x M12		

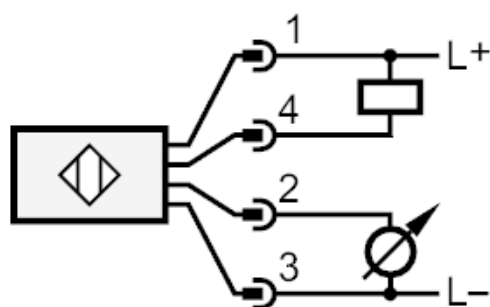
UGT590

Ultrasonic sensor

UGQ01200F1KG/US

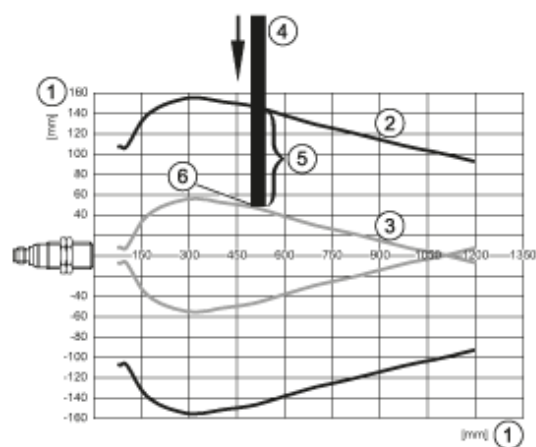
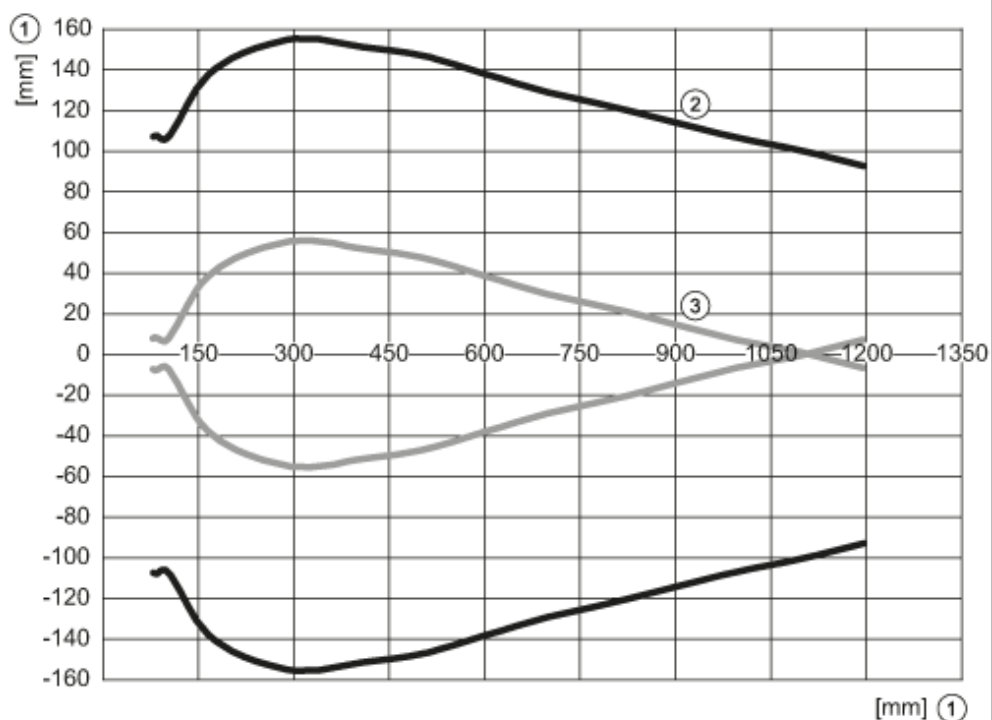


Connection





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