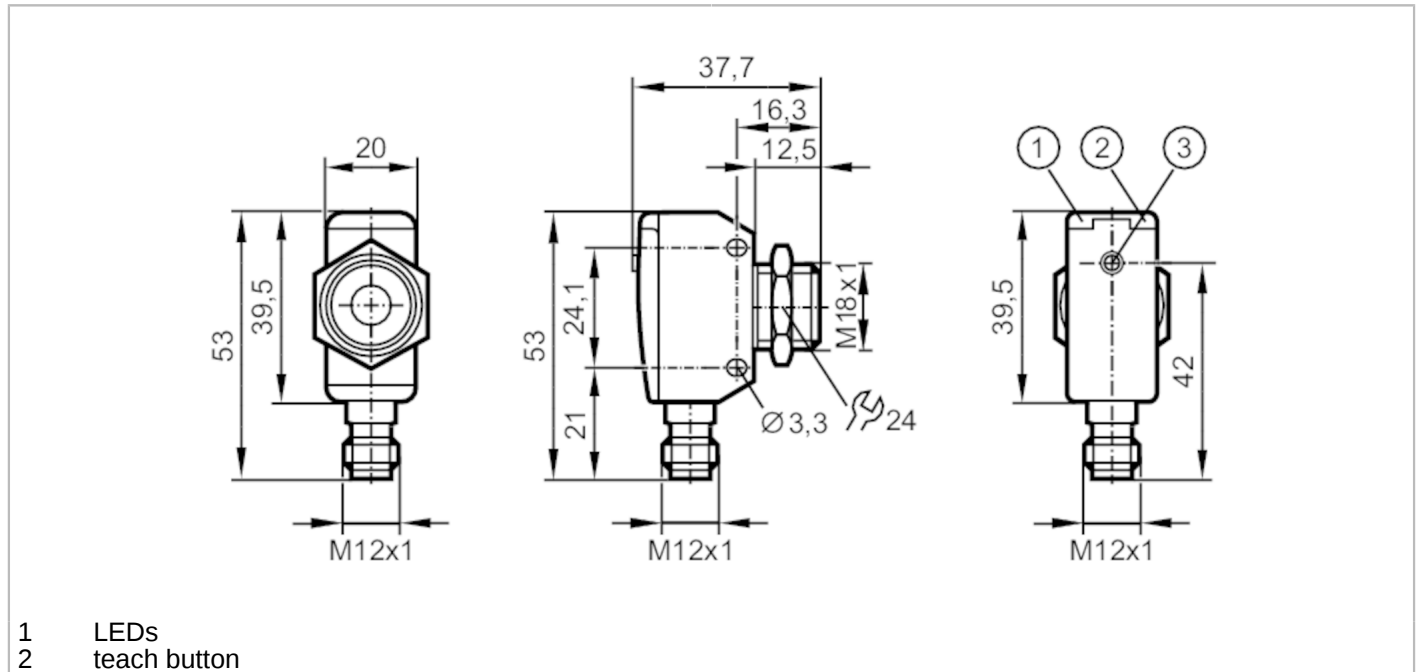


UGT591



Ultrasonic sensor

UGQ01200F2KG/US



- 1 LEDs
- 2 teach button



Product characteristics	
Electrical design	NPN
Output function	normally open / normally closed; (parameterisable)
Sensing range [mm]	80...1200
Housing	rectangular
Dimensions [mm]	M18 x 1
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
Inputs / outputs	
Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1

UGT591



Ultrasonic sensor

UGQ01200F2KG/US

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 voltage output	[V]	0...10
Min. load resistance	[Ω]	3000
Short-circuit protection		yes
Overload protection		yes
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 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]	190

UGT591



Ultrasonic sensor

UGQ01200F2KG/US

Mechanical data	
Weight [g]	97.5
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

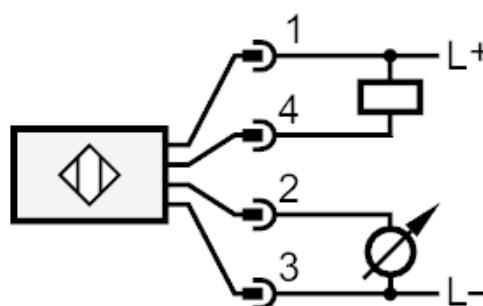
Remarks	
Remarks	operating voltage "supply class 2" according to cULus
Pack quantity	1 pcs.

Electrical connection

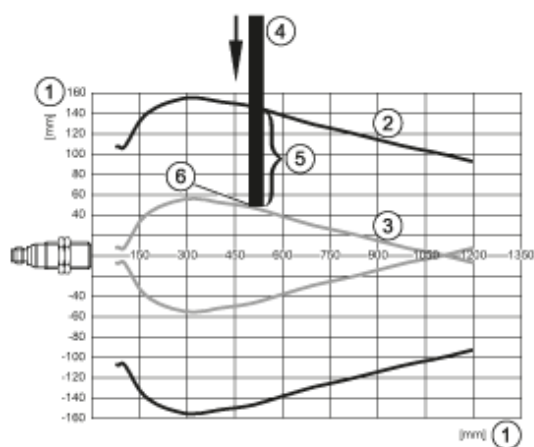
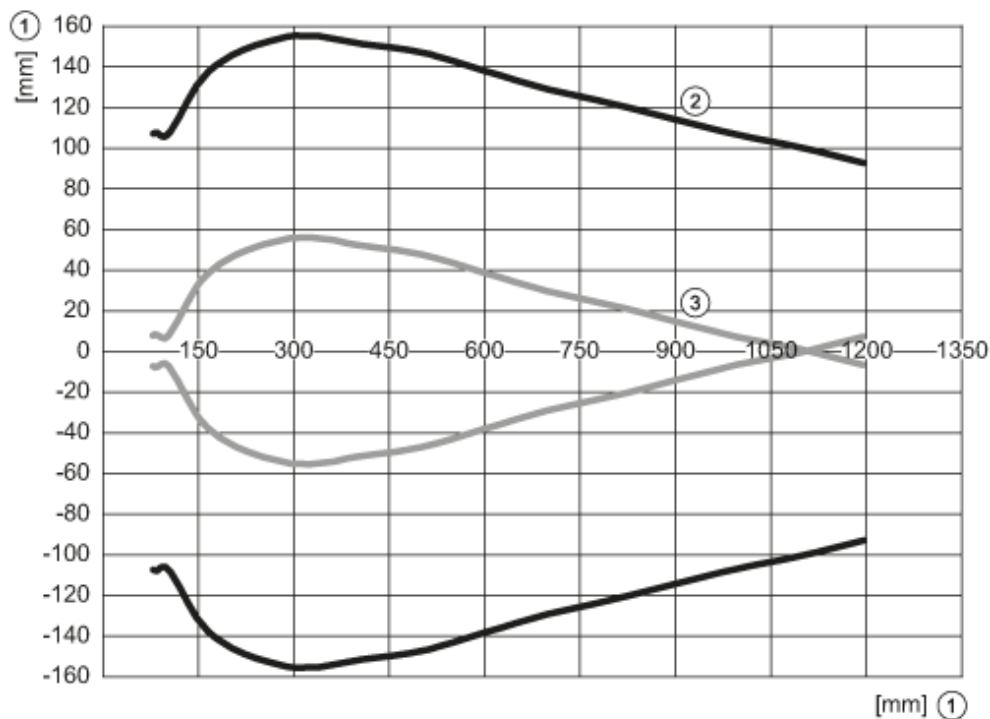
Connector: 1 x M12



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