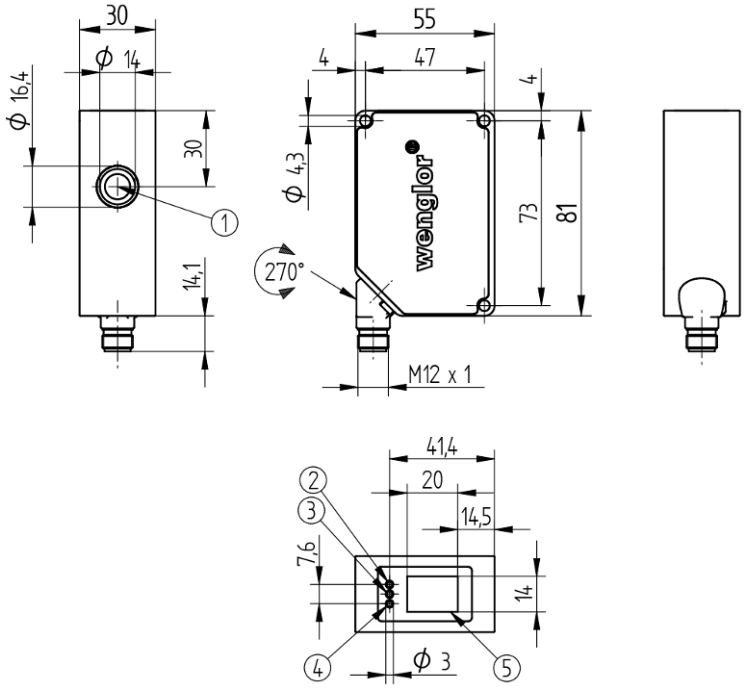
wenglor
the innovative family

Technical Data
UMS123U035
Distance Sensor





Symbol	Key
1	Active surface
2	Down button
3	Enter button
4	Up button
5	Indicator

EN

Dimensions in mm
Subject to change without notice
Version 2
www.wenglor.com

Technical data

Ultrasonic Data	
Working Range	100...1200 mm
Measuring Range	1100 mm
Reproducibility maximum	1 mm
Linearity Deviation	4 mm
Resolution	0.2 mm
Ultrasonic Frequency	225 kHz
Opening Angle	< 12 °
Service Life (T = +25 °C)	100000 h
Switching Hysteresis	5 mm

Electrical Data	
Supply Voltage	18...30 V DC
Current Consumption (Ub = 24 V)	< 30 mA
Switching Frequency	7 Hz
Response Time	< 72 ms
Temperature Range	-30...60 °C
Number of Switching Outputs	2
Switching Output Voltage Drop	< 2.5 V
PNP Switching Output/Switching Current	100 mA
Analog Output	4...20 mA
Synchronous Mode	up to 40 sensors
Multiplex Mode	up to 16 sensors
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Interface	IO-Link V1.0
Protection Class	III

Mechanical Data	
Setting Method	Menu (OLED) IO-Link
Housing Material	Plastic, ABS
Sensing face	Epoxy resin/glass bubble mixture Plastic, PBT Silicone
Degree of Protection	IP67
Connection Type	Plug variant
Connection	M12 × 1; 5-pin

Safety-relevant Data	
MTTFd (EN ISO 13849-1)	509.66 a

General Data	
Scope of delivery	1 × BEF-SET-34 mounting set 1 × initial start-up instructions 1 × sensor

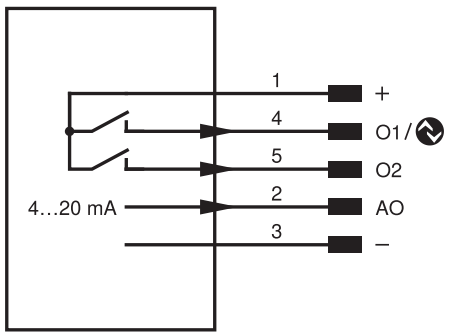
Adjustable parameters	
Analog output	4...20 mA 0...10 V
Output	Error Output PNP
Circuit	NC NO NC/NO
Other parameters	Multiplex mode Synchronous mode Adjustable sonic cone Teach mode Filter

All other parameters can be found in the product documentation.

Display brightness may decrease with age. This does not result in any impairment of the sensor function.

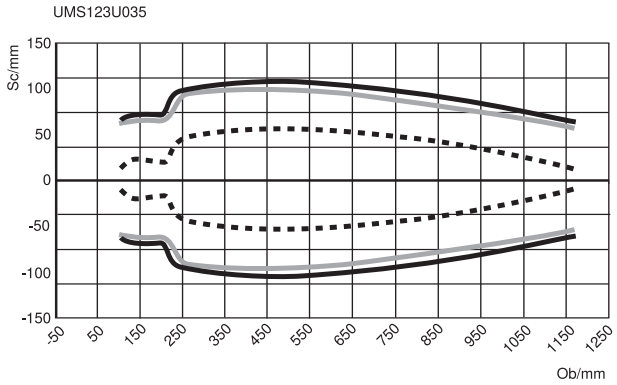
BMECat data	
eCl@ss 5.1.4	27-27-08-04 Ultrasonic distance sensor
eCl@ss 6.x	27-27-08-04 Ultrasonic distance sensor
eCl@ss 7.0	27-27-08-04 Ultrasonic distance sensor
eCl@ss 7.1	27-27-08-04 Ultrasonic distance sensor
eCl@ss 8.x	27-27-08-04 Ultrasonic distance sensor
eCl@ss 10.0.1	27-27-08-04 Ultrasonic distance sensor

Technical illustrations



Pin	Pin function	Polarity	Circuit	Signal type
1	Supply Voltage +			
2	Analog output			4...20 mA
3	Supply voltage 0 V			
4	Switching Output 1 IO-Link	PNP	NO	
5	Error output	PNP	NO	

Illustration 1: Characteristic response curve



Characteristic curves show the position of the center or the front edge of the measured object (100 × 100 mm plate) at the time of switching.

Ob = Object

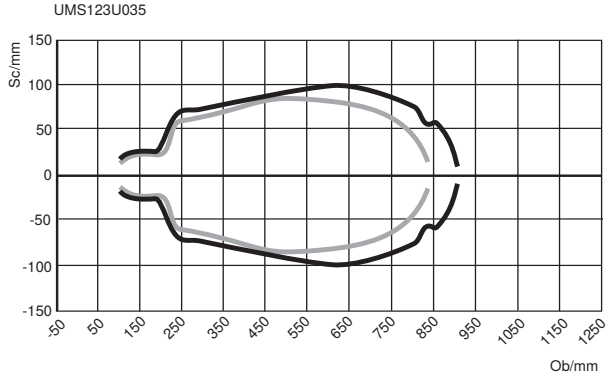
Sc = Sonic cone width

— Standard sonic cone (center of the measured object)

— Extra-narrow sonic cone (center of the measured object)

▪▪▪ Standard sonic cone (front edge of the measured object)

Illustration 2: Characteristic response curve



Characteristic curves show the position of the center or the front edge of the measured object (Ø 25 mm rod) at the time of switching.

Ob = Object

Sc = Sonic cone width

— Standard sonic cone (center of the measured object)

— Extra-narrow sonic cone (center of the measured object)