wenglor
the innovative family

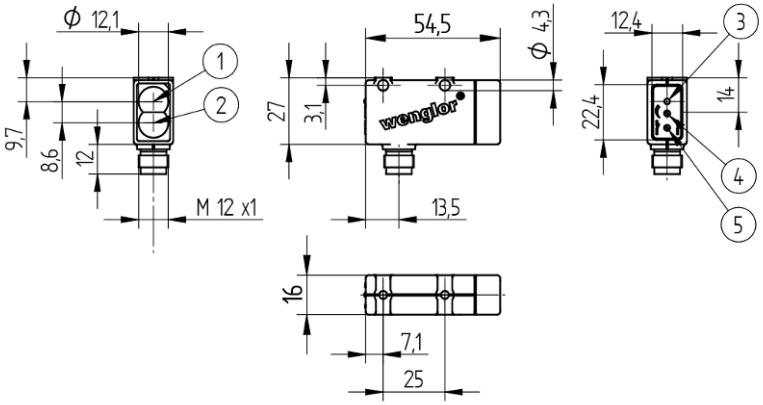
Technical Data

OLM104A0002

Retro-Reflex Sensor

Universal





Symbol	Key
1	Emitter diode
2	Receiver diode
3	Switching status indicator/contamination warning
4	Switching distance adjuster
5	On/off delay adjuster

EN

Dimensions in mm
Subject to change without notice
Version 0
www.wenglor.com

Technical data

Optical Data	
Range	10000 mm
Reference Reflector/Reflector Foil	RQ100BA
Min. Distance to Reflector	100 mm
Smallest Recognizable Part	> 2500 µm
Switching Hysteresis	< 15 %
Light Source	Laser, red
Wavelength	670 nm
Polarization Filter	yes
Service Life (T = +25 °C)	100000 h
Laser Class (EN 60825-1)	1
Max. Ambient Light	10000 Lux
Opening Angle	0.6 °
Light Spot Diameter	see table
Optics	Two-Lens Optic

Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (Ub = 24 V)	< 30 mA
Switching Frequency	500 Hz
Response Time	1 ms
Off-Delay	20 ms
Temperature Drift	< 10 %
Temperature Range	-10...60 °C
Switching Output Voltage Drop	< 2.5 V
PNP Switching Output/Switching Current	200 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Protection Class	III
FDA Accession Number	1120740-000

Mechanical Data	
Setting Method	Potentiometer
Housing Material	Plastic, PBT
Coated Optics	yes
Full Encapsulation	yes
Degree of Protection	IP67
Connection Type	Plug variant
Connection	M12 × 1; 4-pin

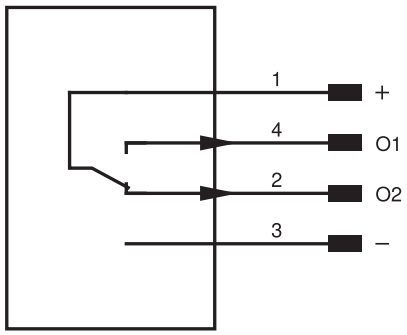
General Data	
Scope of delivery	1 × initial start-up instructions 1 × sensor

Adjustable parameters	
Circuit	NC NC+NO NO

All other parameters can be found in the product documentation.

BMECat data	
eCl@ss 5.1.4	27-27-09-02 Reflection light barrier
eCl@ss 6.x	27-27-09-02 Reflection light barrier
eCl@ss 7.0	27-27-09-02 Reflection light barrier
eCl@ss 7.1	27-27-09-02 Reflection light barrier
eCl@ss 8.x	27-27-09-02 Reflection light barrier
eCl@ss 10.0.1	27-27-09-02 Reflection light barrier

Technical illustrations



Pin	Pin function	Polarity	Circuit
1	Supply Voltage +		
2	Switching Output 2	PNP	Antivalent
3	Supply voltage 0 V		
4	Switching Output 1	PNP	NO

Table 1			
Working Distance	0,2 m	5 m	10 m
Light Spot Diameter	5 mm	35 mm	70 mm

Reflector data	
RQ100BA	0.1...10 m
RE18040BA	0.15...8 m
RQ84BA	0.1...9 m
RR84BA	0.1...9 m
RE9538BA	0.1...4 m
RE6151BM	0.15...9 m
RE6151BA	0.1...3.5 m
RR50_A	0.1...9 m
RE6040BA	0.1...10 m
RE8222BA	0.1...6 m
RR34_M	0.2...6 m
RE3220BM	0.2...4 m

Reflector data	
RE6210BM	0.25...3 m
RR25_M	0.2...5 m
RR25KP	0.15...2 m
RR21_M	0.2...3 m
ZRAE02B01	0.1...2.5 m
ZRME01B01	0.1...1.5 m
ZRME03B01	0.15...5.5 m
ZRMR02K01	0.15...2 m
ZRMS02_01	0.2...2.5 m
RF505	0.2...1.7 m
RF255	0.2...1.5 m
RF508	0.2...1.7 m
RF258	0.2...1.5 m
ZRAF07K01	0.2...1.5 m
ZRAF08K01	0.2...1.7 m
ZRDF__K01	0.15...8 m

Reflector type, mounting distance