wenglor
the innovative family

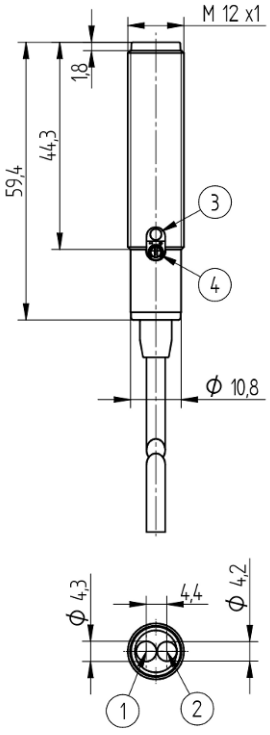
Technical Data

HO08PA

Reflex Sensor

with background suppression electronic





Symbol	Key
1	Emitter diode
2	Receiver diode
3	Switching status indicator/contamination short circuit warning
4	Switching distance adjuster

EN

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

Technical data

Optical Data	
Range	80 mm
Setting Range	25...80 mm
Switching Hysteresis	see Table 1
Light Source	LED, red
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Light Spot Diameter	see table 1
Principle	Triangulation

Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (Ub = 24 V)	< 40 mA
Switching Frequency	1 kHz
Response Time	500 µs
Temperature Drift	< 5 %
Temperature Range	-25...60 °C
Switching Output Voltage Drop	< 2.5 V
PNP Switching Output/Switching Current	200 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Protection Class	III

Mechanical Data	
Setting Method	Potentiometer
Housing Material	Brass, nickel-plated
Full Encapsulation	yes
Degree of Protection	IP67
Connection Type	Cable variants
Connection	Cable; 4-wire
Cable length (L)	2 m
Cable Jacket Material	PVC
Wire cross-section	0.14 mm^2

Safety-relevant Data	
MTTFd (EN ISO 13849-1)	2489.75 a

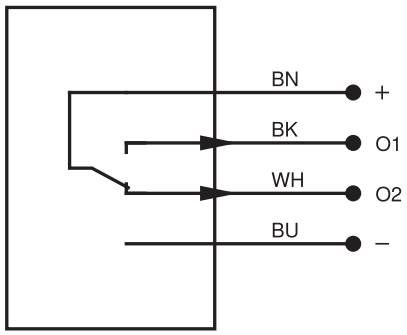
General Data	
Scope of delivery	1 × initial start-up instructions 1 × MUTTER-M12-E001 hex nut 1 × sensor

Adjustable parameters	
Circuit	NC NC+NO NO

All other parameters can be found in the product documentation.

BMECat data	
eCl@ss 5.1.4	27-27-09-04 Light scanner w. background masking
eCl@ss 6.x	27-27-09-04 Light scanner w. background masking
eCl@ss 7.0	27-27-09-04 Light scanner w. background masking
eCl@ss 7.1	27-27-09-04 Light scanner w. background masking
eCl@ss 8.x	27-27-09-04 Light scanner w. background masking
eCl@ss 10.0.1	27-27-09-04 Light scanner w. background masking

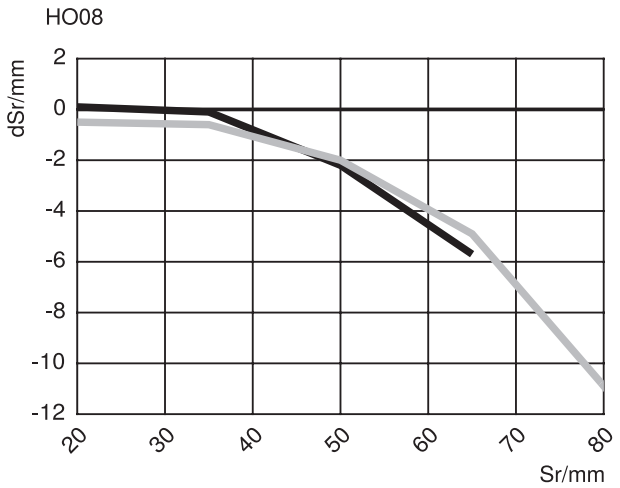
Technical illustrations



Wire color	Pin function	Polarity	Circuit
Brown	Supply Voltage +		
White	Switching Output 2	PNP	Antivalent
Blue	Supply voltage 0 V		
Black	Switching Output 1	PNP	NO

Table 1			
Detection Range	40 mm	60 mm	80 mm
Light Spot Diameter	3 mm	5 mm	7 mm
Switching Hysteresis	< 2 mm	< 3 mm	< 8 mm

Illustration 1: Switching Distance Deviation



Typical characteristic curve based on white, 90 % remission

Sr = Switching Distance
dSr = Switching Distance Change

black 6 % remission
grey 18 % remission

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