

Notice of Discontinuation
XM98PAH2
Retro-Reflex Sensor Universal



EN

End-of-Life Notices

Discontinued Product: XM98PAH2

Recommended replacement product: P1ML201

Discontinuation date: 31.07.2027

Key Differences

The successor product has an IO-Link interface.

For the successor product, the on- and off-delay can be parameterized via IO-Link.

The BEF-SET-04 mounting set from the discontinued product is not compatible; the Z1ME002 mounting set must be used.

The ZSM-NN-02 protective housing is not compatible with the successor product.

Below is a detailed product comparison:

	Discontinued Product XM98PAH2	Successor Product P1ML201
Optical Data		
Range	15000 mm	20000 mm
Reference Reflector/Reflector Foil	RQ100BA	RE6151BM
Smallest Recognizable Part	> 2500 µm	
Switching Hysteresis	< 15 %	< 10 %
Light Source	Laser (red)	Laser collimated (red)
Polarization Filter	yes	yes
Service Life (T = +25 °C)	100000 h	100000 h
Laser Class (EN 60825-1)	2	1
Max. Ambient Light	10000 Lux	10000 Lux
Opening Angle	0.6 °	
Optics	Two-Lens Optic	Two-Lens Optic
Electrical Specifications		
Supply Voltage	10...30 V DC	10...30 V DC
Supply Voltage with IO-Link		18...30 V DC
Current Consumption (U _B = 24 V)	< 30 mA	< 20 mA
Switching Frequency	3 kHz	2000 Hz
Switching frequency (speed mode)		3500 Hz
Response Time	166 µs	0.25 ms
Response time (speed mode)		0.14 ms
Off-Delay	5 ms	
Temperature Drift	< 10 %	< 10 %
Temperature Range	-10...60 °C	-25...60 °C
Switching Output Voltage Drop	< 2.5 V	< 2 V
Switching Output/Switching Current		100 mA
PNP Switching Output/Switching Current	200 mA	
Residual Current Switching Output		< 50 µA
Short Circuit Protection	yes	yes

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Reverse Polarity Protection	yes	yes
Overload Protection		yes
Lockable		yes
Interface		IO-Link V1.1
Protection Class	III	III
Mechanical Specifications		
Setting Method	Potentiometer	Potentiometer
Housing Material	Plastic, PBT	Plastic, ABS-GF
Full Encapsulation	yes	
Degree of Protection	IP67	IP67 IP68
Connection	M12 × 1; 4-pin	M12 × 1; 4-pin
Safety Technology Data		
MTTFd (EN ISO 13849-1)		2268.09 a
Output Functions		
Output	PNP	PNP
Circuit	NC+NO	NC+NO
Adjustable Parameters		
Output		Push-pull NPN PNP
Circuit	NC NC+NO NO	inactive Error output NC NC+NO NO
Other parameters		Off-delay On-delay Mode of operation Hysteresis Switching point Emitted light

Reflector Data

	Discontinued Product XM98PAH2	Successor Product P1ML201
RE6151BM	0.1...10 m	0.2...20 m
RQ100BA	0.08...15 m	0.4...27 m

Light spot diameter

XM98PAH2

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

P1ML201

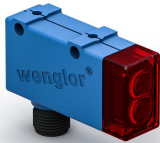
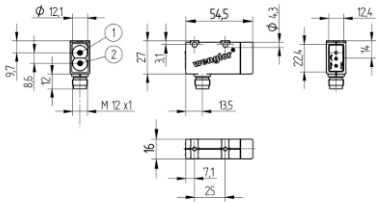
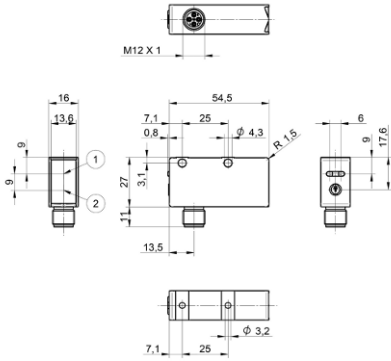
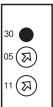
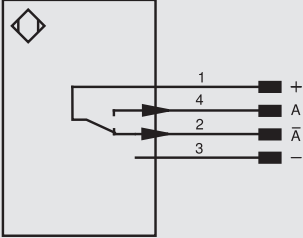
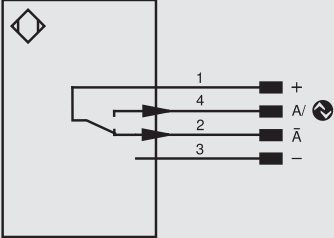
Table 1			
Working Distance	3 m	10 m	20 m
Light Spot Diameter	20 mm	50 mm	80 mm

Smallest detectable part

P1ML201

Table 2			
Distance, Sensor to Reflector	3 m	10 m	20 m
Smallest Recognizable Part	2,5 mm	8 mm	50 mm

Product Images/Technical Drawings/Connection Diagrams/Certifications

	Discontinued product XM98PAH2	Successor Product P1ML201
Product image		
Dimensioned image	 ① Transmitter Diode ② Receiver Diode Screw M4 = 1 Nm	 ① Transmitter Diode ② Receiver Diode Screw M4 = 0.5 Nm
Control panel	 05 = Switching Distance Adjuster 30 = Switching Status/Contamination Warning 11 = ON-Delay/OFF-Delay Adjuster	 05 = Switching Distance Adjuster 30 = Switching Status/Contamination Warning 68 = Power LED
Connection diagram		

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Approvals		