

Notice of Discontinuation

YP05MGV80

Laser Distance Sensor Triangulation



EN

End-of-Life Notices

Discontinued product: YP05MGV80

Recommended replacement product: P1PC012

Discontinuation as of: 28.04.2026

Key Differences

The linearity deviation of the successor is similar relative to the working range of the discontinued product. The data sheet specifications refer to the maximum working range, which is larger for the successor product. At smaller distances, the linearity deviation decreases.

On the successor product, a contamination/error output can be configured as NC or NO on pin 2 via IO-Link. The successor product has a 5-pin M12 plug. The changed pin assignment must be observed.

Below you will find a detailed product comparison:

	Discontinued product YP05MGV80	Successor Product P1PC012
Visual data		
Working Range	43...53 mm	30...80 mm
Measuring Distance	48 mm	
Measuring Range	10 mm	30...80 mm
Resolution	20 µm	
Linearity	0.5 %	
Linearity Deviation	50 µm	80 µm
Light Source	Laser (red)	Laser (red)
Wavelength	655 nm	655 nm
Service Life (T = +25 °C)	100000 h	100000 h
Laser Class (EN 60825-1)	2	1
Max. Ambient Light	10000 Lux	10000 Lux
Light Spot Diameter	0.5 mm	
Light Spot Diameter		see Table 1
Technical data		
Supply Voltage	18...30 V DC	18...30 V DC
Current Consumption (U _b = 24 V)	< 30 mA	< 35 mA
Switching Frequency		650 Hz
Measuring Rate		2500 /s
Cut-Off Frequency	1 kHz	
Response Time	500 µs	< 0.77 ms
Temperature Drift (T _u < 10 °C, T _u > 40 °C)	5 µm/K	
Temperature Drift (10 °C < T _u < 40 °C)	5 µm/K	
Temperature Drift		< 7.5 µm/K
Temperature Range	-10...60 °C	-25...50 °C
Switching Output Voltage Drop		< 1.5 V
Switching Output/Switching Current		100 mA



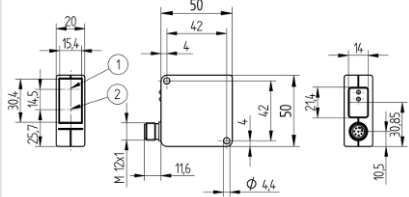
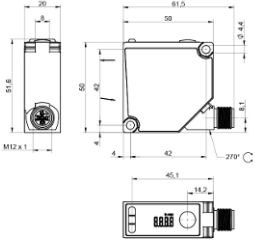

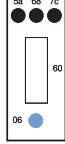
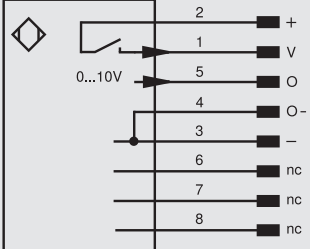
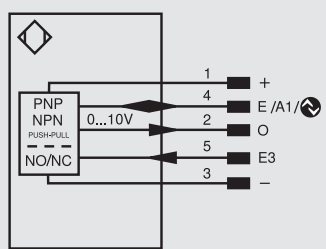
	Discontinued product YP05MGV80	Successor Product P1PC012
Error Output Voltage Drop	< 2.5 V	
PNP Error Output/Switching Current	200 mA	
Analog Output	0...10 V	0...10 V
Short Circuit Protection	yes	yes
Reverse Polarity Protection	yes	yes
Overload Protection	yes	yes
Interface		IO-Link NFC
Protection Class	III	III
FDA Accession Number		2512215-000
Mechanical Data		
Setting Method		Teach-In NFC
Housing Material	Plastic, PBT	Plastic, ABS
Optic Cover	Glass	Plastic, PMMA
Full Encapsulation	yes	
Degree of Protection	IP67	IP67 IP68
Connection	M12 × 1; 8-pin	M12 × 1; 5-pin
General data		
Scope of delivery	1 × initial start-up instructions 1 × laser warning sign 1 × sensor	1 × Z1PE002 mounting set 1 × initial start-up instructions 1 × sensor
Output functions		
Output	Analog Output Error Output	Analog Output PNP
Circuit		NO
Adjustable parameters		
Output		Error Output Push-pull NPN PNP
Circuit		NC NC/NO NO
Other parameters		Exposure time Laser light Switching hysteresis Teach-in mode Off-delay On-delay













Light spot diameter

P1PC012

Working Distance	30 mm	50 mm	80 mm
Spot Size	0,8 × 2,1 mm	0,5 × 1,7 mm	1,0 × 2,0 mm

Product Images/Technical Drawings/Connection Diagrams/Certifications

	Discontinued product YP05MGV80	Successor product P1PC012
Product image		
Dimensioned image	 <p>① Transmitter Diode ② Receiver Diode Screw M4 = 1 Nm</p>	 <p>① Transmitter Diode ② Receiver Diode Screw M4 = 1 Nm</p>
control panel	<p>P3</p>  <p>03 = Error Indicator 12 = Analog Output Indicator</p>	<p>X12</p>  <p>5a = Switching Status Indicator, O1 68 = Power LED 7c = Analog Output Indicator, AO 60 = display 06 = Teach Button</p>
connection diagram	<p>503</p> 	<p>241</p> 

	Discontinued product YP05MGV80		Successor product P1PC012	
Approvals		 RoHS		 RoHS
				
	 IND. CONT. EQ 72HL / E189727 For use in class 2 circuits	 LASER CLASS 1 EN60825-1:2024 A11:2021	 IND. CONT. EQ 72HL / E189727 For use in class 2 circuits	 LASER CLASS 1 EN60825-1:2024 A11:2021
			