

Notice of Discontinuation

**YP05MGVL80**

**Laser Distance Sensor Triangulation**



EN

# End-of-Life Notices

Discontinued product: YP05MGVL80

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 YP05MGVL80	Successor Product P1PC012
<b>Visual data</b>		
Working Range	43...53 mm	30...80 mm
Measuring Distance	48 mm	
Measuring Range	10 mm	30...80 mm
Resolution	4 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
<b>Technical data</b>		
Supply Voltage	18...30 V DC	18...30 V DC
Current Consumption (U <sub>b</sub> = 24 V)	< 30 mA	< 35 mA
Switching Frequency		650 Hz
Measuring Rate		2500 /s
Cut-Off Frequency	100 Hz	
Response Time	5 ms	< 0.77 ms
Temperature Drift (T <sub>u</sub> < 10 °C, T <sub>u</sub> > 40 °C)	5 µm/K	
Temperature Drift (10 °C < T <sub>u</sub> < 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



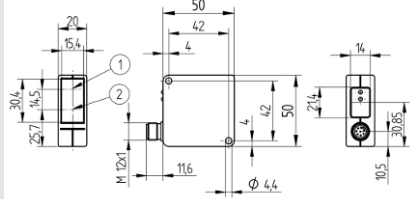
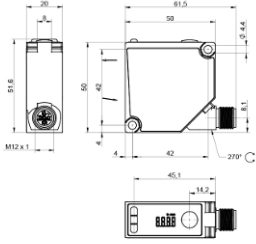

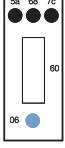
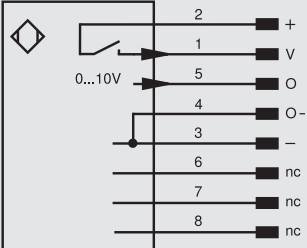
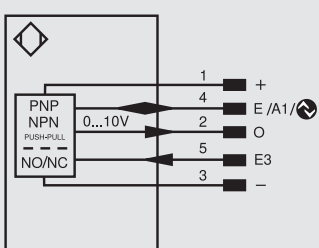
	Discontinued product YP05MGVL80	Successor Product P1PC012
Error Output Voltage Drop	< 2.5 V	
PNP Error Output/Switching Current	200 mA	
Analog Output	0...10 V	0...10 V
Short Circuit Protection	yes	yes
Reverse Polarity Protection	yes	yes
Overload Protection	yes	yes
Interface		IO-Link NFC
Protection Class	III	III
FDA Accession Number		2512215-000
<b>Mechanical Data</b>		
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
<b>General data</b>		
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
<b>Output functions</b>		
Output	Analog Output Error Output	Analog Output PNP
Circuit		NO
<b>Adjustable parameters</b>		
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 YP05MGVL80	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><b>P3</b></p>  <p>03 = Error Indicator 12 = Analog Output Indicator</p>	<p><b>X12</b></p>  <p>5a = Switching Status Indicator, O1 68 = Power LED 7c = Analog Output Indicator, AO 60 = display 06 = Teach Button</p>
connection diagram	<p><b>503</b></p> 	<p><b>241</b></p> 

	Discontinued product YP05MGVL80		Successor product P1PC012	
Approvals	