

Notice of Discontinuation

CP24MHT80

Laser Distance Sensor Triangulation



EN

End-of-Life Notices

Discontinued product: CP24MHT80

Recommended Replacement Product: P1PC111
P1PC112

Discontinuation effective: 30.04.2027

Key Differences

In the successor model, the optical axis has been shifted.

On the successor product, the analog output cannot be switched between 4...20 mA and 0...10 V.

On the successor product, the switching point can be readjusted via the control panel, all other functions can be set via NCF or IO-Link.

The successor product has a 5-pin M12 plug. The existing connection equipment can continue to be used with the ZC4P003 adapter.

The successor product has a configurable error output via IO-Link.

In the successor product, mounting is no longer done using slotted holes.

The successor product has an IO-Link interface instead of RS-232.

Below is a detailed product comparison:

	Discontinued Product CP24MHT80	Successor Product P1PC112	Successor product P1PC111
Optical Data			
Working Range	40...160 mm	40...240 mm	40...240 mm
Measuring Range	120 mm	40...240 mm	40...240 mm
Reproducibility maximum	250 µm	200 µm	200 µm
Reproducibility: 1 Sigma	60 µm	20 µm	20 µm
Linearity Deviation	350 µm	400 µm	400 µm
Light Source	Laser (red)	Laser (red)	Laser (red)
Wavelength	660 nm	655 nm	655 nm
Service Life (T = +25 °C)	100000 h	100000 h	100000 h
Laser Class (EN 60825-1)	2	1	1
Max. Ambient Light	10000 Lux	10000 Lux	10000 Lux
Technical Specifications			
Supply Voltage	18...30 V DC	18...30 V DC	18...30 V DC
Current Consumption (U _b = 24 V)	< 80 mA	< 35 mA	< 35 mA
Switching Frequency		650 Hz	650 Hz
Measuring Rate	1500 /s	2500 /s	2500 /s
Measuring Rate (Resolution-Mode)	600 /s		
Response Time	< 660 µs	< 0.77 ms	< 0.77 ms
Response Time (Resolution Mode)	< 1660 µs		
Temperature Drift	< 30 µm/K	< 45 µm/K	< 45 µm/K
Temperature Range	-25...50 °C	-25...50 °C	-25...50 °C

	Discontinued Product CP24MHT80	Successor Product P1PC112	Successor product P1PC111
Analog Output	0...10 V	0...10 V	4...20 mA
Load Current Voltage Output	< 1 mA		
Current Output Load Resistance	< 500 Ohm		
Switching Output Voltage Drop		< 1.5 V	< 1.5 V
Switching Output/Switching Current		100 mA	100 mA
Short Circuit Protection		yes	yes
Reverse Polarity Protection		yes	yes
Overload Protection		yes	yes
Interface	RS-232	IO-Link NFC	IO-Link NFC
Transmission rate	38400 Bd		
Protection Class	III	III	III
FDA Accession Number	0820589-000	2512215-000	2512215-000
Mechanical Data			
Setting Method	Teach-In	Teach-In NFC	Teach-In NFC
Housing Material	Plastic, ABS Plastic, PC	Plastic, ABS	Plastic, ABS
Optic Cover	Plastic, PMMA	Plastic, PMMA	Plastic, PMMA
Degree of Protection	IP67	IP67 IP68	IP67 IP68
Connection	M12 × 1; 8-pin	M12 × 1; 5-pin	M12 × 1; 5-pin
General Specifications			
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	1 × Z1PE002 mounting set 1 × initial start-up instructions 1 × sensor
Output Functions			
Output	Analog Output Error Output	Analog Output PNP	Analog Output PNP
Circuit		NO	NO
Adjustable Parameters			
Output		Error Output Push-pull NPN PNP	Error Output Push-pull NPN PNP
Circuit		NC NC/NO NO	NC NC/NO NO
Other parameters	Scale analog output Exposure time Filter Resolution mode Laser light Speed mode	Exposure time Laser light Switching hysteresis Teach-in mode Off-delay On-delay	Exposure time Laser light Switching hysteresis Teach-in mode Off-delay On-delay

light spot diameter

CP24MHT80

Working Distance	40 mm	-	160 mm
Spot Size	0,5 × 1,2 mm	-	1 × 2,5 mm

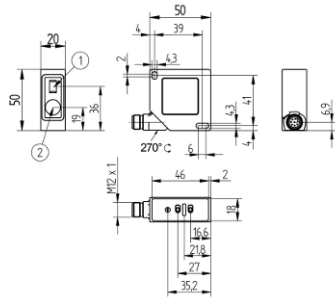
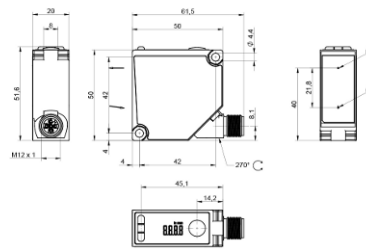
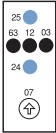
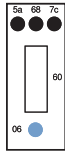
P1PC112

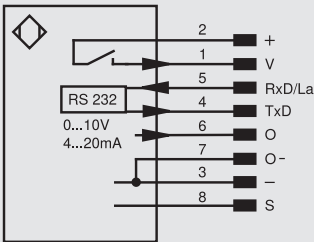
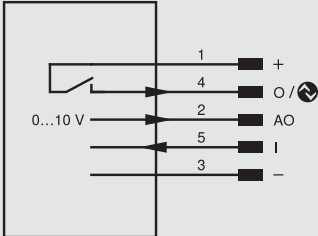
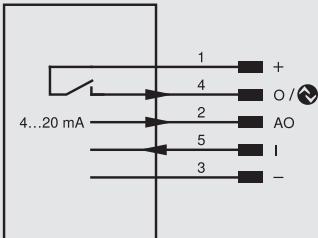
Working Distance	40 mm	140 mm	240 mm
Spot Size	1,1 × 3 mm	0,7 × 2,8 mm	0,4 × 2,7 mm

P1PC111

Working Distance	40 mm	140 mm	240 mm
Spot Size	1,1 × 3 mm	0,7 × 2,8 mm	0,4 × 2,7 mm

Product Images/Technical Drawings/Connection Diagrams/Certifications

	Discontinued Product CP24MHT80	Successor Product P1PC112 P1PC111
Product Image		
Dimensioned image	 ① Transmitter Diode ② Receiver Diode Screw M4 = 0.5 Nm	 ① Transmitter Diode ② Receiver Diode Screw M4 = 0.5 Nm
control panel	 03 = Error Indicator 07 = Selector Switch 12 = Analog Output Indicator 24 = Plus Button 25 = Minus Button 63 = Analog Output Current Indicator	 5a = Switching Status Indicator, O1 68 = Power LED 7c = Analog Output Indicator, AO 60 = display 06 = Teach Button

	Discontinued Product CP24MHT80	Successor Product P1PC112 P1PC111
connection diagram	529 	P1PC112  1 = Supply voltage + 2 = Analog output, 0...10 V 3 = Supply voltage 0 V 4 = Switching output, IO-Link, PNP, NO 5 = Input, active-high P1PC111  1 = Supply voltage + 2 = Analog output, 4...20 mA 3 = Supply voltage 0 V 4 = Switching output, IO-Link, PNP, NO 5 = Input, active-high

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Approvals		 RoHS		 RoHS
				
				
				