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the innovative family

Notice of Discontinuation

P1NH705

Reflex Sensor with background suppression electronic



EN

Available as PDF file only
Version 1.0
www.wenglor.com

End-of-Life Notices

Discontinued Product:	P1NH705
Recommended replacement product:	P1NH706 P1PH704
Discontinuation date:	31.03.2027

Key Differences

Alternative Product 1 is the closest alternative to the discontinued product in terms of functionality and electrical/optical properties. It should be noted, however, that Alternative 1 has a different format (1P – 50 × 50 × 20 mm). Alternative Product 2, on the other hand, corresponds to the 1N format and thus offers a mechanically closer alternative. It offers a significantly higher switching frequency and shorter response time, but features mechanical rather than electronic adjustment and therefore has a different functional design.

Below you will find a detailed product comparison:

	Discontinued Product P1NH705	Alternative Product 1 P1PH704	Alternative Product 2 P1NH706
Visual Data			
Range	300 mm	300 mm	300 mm
Setting Range	65...300 mm	65...300 mm	65...300 mm
Switching Hysteresis	< 2 %	< 2 %	< 1 %
Light Source	Laser, red	Laser, red	Laser, red
Wavelength	655 nm	655 nm	655 nm
Service Life (T = +25 °C)	100000 h	100000 h	100000 h
Laser Class (EN 60825-1)	1	1	1
Max. Ambient Light	10000 Lux	10000 Lux	10000 Lux
Optical axis	Aligned	Aligned	Aligned
Switching point	Calibrated	Calibrated	Calibrated
Principle	Triangulation	Triangulation	Triangulation
Electrical Specifications			
Supply Voltage	15...30 V DC	15...30 V DC	10...30 V DC
Supply Voltage with IO-Link	18...30 V DC	18...30 V DC	18...30 V DC
Current Consumption (Ub = 24 V)	< 15 mA	< 15 mA	< 15 mA
Switching Frequency	800 Hz	800 Hz	1000 Hz
Switching Frequency (interference-free mode)	500 Hz	500 Hz	500 Hz
Response Time	1.25 ms	1.25 ms	0.5 ms
Response time (interference-free mode)	1.5 ms	1.5 ms	1 ms
Temperature Drift	< 3 %	< 3 %	< 2 %
Temperature Range	-25...60 °C	-25...60 °C	-25...60 °C
Switching Output Voltage Drop	< 2 V	< 2 V	< 2 V
Switching Output/Switching Current	100 mA	100 mA	100 mA
Short Circuit Protection	yes	yes	yes

	Discontinued Product P1NH705	Alternative Product 1 P1PH704	Alternative Product 2 P1NH706
Reverse Polarity Protection	yes	yes	yes
Overload Protection	yes	yes	yes
Interface	IO-Link V1.1	IO-Link V1.1	IO-Link V1.1
Protection Class	III	III	III
Mechanical Specifications			
Setting Method	Potentiometer	Potentiometer	Single-turn
Housing Material	Plastic, ABS/PC	Plastic, ABS/PC	Plastic, ABS/PC
Optic Cover	Plastic, PMMA	Plastic, PMMA	Plastic, PMMA
Degree of Protection	IP67 IP68	IP67 IP68	IP67 IP68
Connection	M12 × 1; 4-pin	M12 × 1; 4-pin	M12 × 1; 4-pin
Output Functions			
Output	NPN	NPN	NPN
Circuit	NC+NO	NC+NO	NC+NO
Adjustable Parameters			
Output	Push-pull NPN PNP	Push-pull NPN PNP	Push-pull NPN PNP
Circuit	NC NO inactive Error output NC+NO	NC NO inactive Error output NC+NO	NC NO inactive Error output NC+NO
Other parameters	Off-delay On-delay Mode of operation Hysteresis Switching point Emitted light	Off-delay On-delay Mode of operation Hysteresis Switching point Emitted light	Off-delay On-delay Mode of operation Hysteresis Switching point Emitted light

Light spot diameter

P1NH705

Table 1			
Detection Range	60 mm	150 mm	300 mm
Light Spot Diameter	3 mm	2,5 mm	1,5 mm

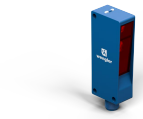
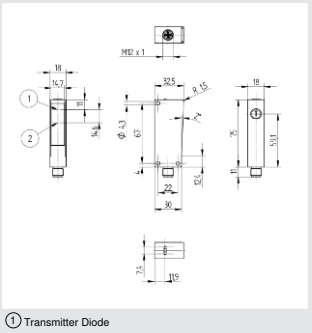
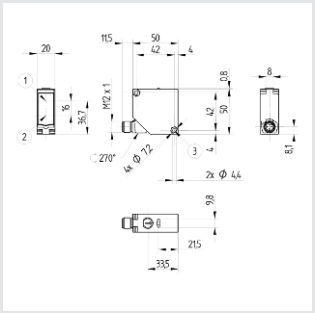
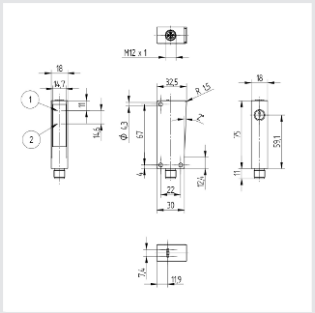
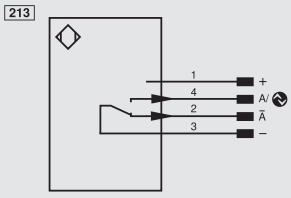
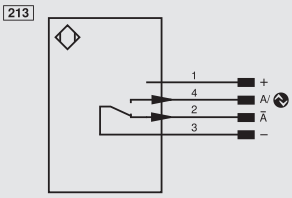
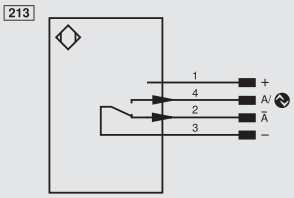
P1PH704

Table 1			
Detection Range	65 mm	150 mm	300 mm
Light Spot Diameter	3 mm	2,5 mm	2 mm

P1NH706

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Detection Range	65 mm	150 mm	300 mm
Light Spot Diameter	3 mm	2,5 mm	1,5 mm

Product Images/Technical Drawings/Connection Diagrams/Certifications

	Discontinued Product P1NH705	Alternative Product 1 P1PH704	Alternative Product 2 P1NH706
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	 ① Transmitter Diode ② Receiver Diode Screw M4 = 0.5 Nm
control panel	 05 = Switching Distance Adjuster 30 = Switching Status/Contamination Warning 68 = Power LED	 30 = Switching Status/Contamination Warning 05 = Switching Distance Adjuster 68 = Power LED	 05 = Switching Distance Adjuster 30 = Switching Status/Contamination Warning 68 = Power LED
connection diagram			
Approvals			