

Notice of Discontinuation

HT77MGV80

Reflex Sensor with Background Suppression



EN

Notice of discontinuation

Discontinued product: HT77MGV80

Recommended alternative product: P1PY217
OY1P303P0102

Discontinued on: 31.03.2026

Key differences

Both alternative products are based on the principle of time-of-flight measurement with laser light (observe laser warnings). Alternative product 1 features a large working range and blue laser light with a large, rectangular light spot. Alternative product 2 works with red laser light with a small light spot. A contamination output can be parameterized for the alternative products.

Below you will find a detailed product comparison:

	Discontinued product HT77MGV80	Alternative product 1 P1PY217	Alternative product 2 OY1P303P0102
Product group	Reflex Sensor with Background Suppression	Laser Distance Sensor Time of Flight	Laser Distance Sensor Time of Flight
Photo of Product			
Optical data			
Working Range	300...1300 mm	0...5000 mm	50...3050 mm
Measuring Distance	800 mm		
Measuring Range	1000 mm	50...5000 mm	3000 mm
Reproducibility maximum		3 mm*	1 mm
Linearity Deviation		15 mm*	
Linearity Deviation (200...3050 mm)			7 mm
Linearity Deviation (50...200 mm)			15 mm
Linearity	5 %		
Switching Hysteresis	50 mm		3...20 mm
Light Source	Infrared Light	Laser (blue)	Laser (red)
Wavelength	880 nm	445 nm	660 nm
Laser Class (EN 60825-1)		2	1
Service Life (T = +25 °C)	100000 h	100000 h	100000 h
Max. Ambient Light	10000 Lux	100000 Lux	10000 Lux
Beam Divergence			< 2 mrad
Electrical data			
Supply Voltage	18...30 V DC	18...30 V DC	18...30 V DC
Current Consumption (U _b = 24 V)	< 50 mA	< 60 mA	< 70 mA

	Discontinued product HT77MGV80	Alternative product 1 P1PY217	Alternative product 2 OY1P303P0102
Cut-Off Frequency	50 Hz		
Switching Frequency			250 Hz
Measuring Rate		100 /s*	1...500 /s
Measuring Rate (max.)		500 /s*	
Response Time	10 ms		
On-/Off-Delay			0...10000 ms
Temperature Drift	500 µm/K	< 0,4 mm/K	< 0.4 mm/K
Temperature Range	-10...60 °C	-40...50 °C	-40...50 °C
Number of Switching Out-puts			2
Switching Output Voltage Drop	< 2.5 V		< 2.5 V
Switching Output/Switching Current			100 mA
PNP Switching Output/Switching Current	200 mA		
Error Output Voltage Drop	< 2.5 V		
PNP Error Output/Switching Current	200 mA		
Analog Output	0...10 V	0...10 V	4...20 mA
Output Current Analog Out-put	500 µA		
Short Circuit Protection	yes	yes	yes
Reverse Polarity Protection	yes	yes	yes
Overload Protection	yes	yes	yes
Teach Mode			HT, VT, FT, TP
Interface		IO-Link V1.1.3	IO-Link V1.1
Baud Rate		COM3	
Protection Class	III	III	III
FDA Accession Number		2412451-000	
Mechanical data			
Setting Method		(OLED)/Bluetooth menu	Menu (OLED)
Housing Material	Plastic, PBT	Plastic, ABS	Plastic, ABS Plastic, PC
Optic Cover		Plastic, PMMA	Plastic, PMMA
Degree of Protection	IP67	IP67 IP68	IP68
Connection	M12 × 1; 8-pin	M12 × 1; 5-pin	M12 × 1; 4-pin
Output functions			
Output	Analog Output Error Output PNP	Analog Output PNP	Analog Output Error Output
Circuit	NO	NO	
Adjustable parameters			
analog output		0...10 V	0...10 V 4...20 mA
Output		Error Output Warning output	Analog Output Error Output Push-pull

	Discontinued product HT77MGV80	Alternative product 1 P1PY217	Alternative product 2 OY1P303P0102
			NPN PNP Contamination Output
Other parameters		Off-delay On-delay Sensitivity Filter Emitted light Sensor localization Teach mode Unit of measure Measuring mode	Off-delay Scale analog output On-delay Filter Hysteresis Emitted light Teach mode
		* Depending on mode	

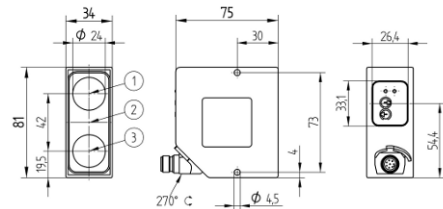
Technical drawings/connection diagrams/approvals

connection diagram			
control panel	T5 13 = Upper Potentiometer 14 = Lower Potentiometer 01 = Switching Status Indicator 33 = Analog Voltage Output/Error Warning	X6 68 = Power LED 5a = Switching Status Indicator, A1 20 = Enter key 60 = display 7c = Analog Output Indicator, O	X2 20 = Enter key 22 = Up key 23 = Down key 60 = display

Approvals		 RoHS		 RoHS		 RoHS
						
	 IND. CONT. EQ 72HL / E189727 For use in class 2 circuits		 IND. CONT. EQ 72HL / E189727 For use in class 2 circuits		 IND. CONT. EQ 72HL / E189727 For use in class 2 circuits	
			 LASER CLASS 1 EN 60825-1:2014+A11:2021		 LASER CLASS 1 EN 60825-1:2014+A11:2021	

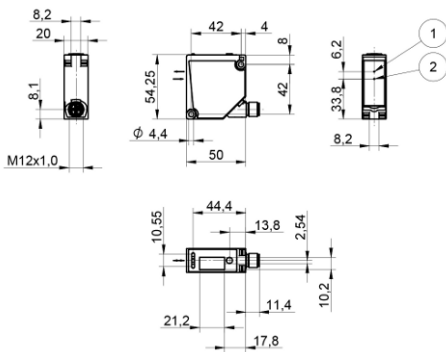
Dimensioned images

HT77MGV80



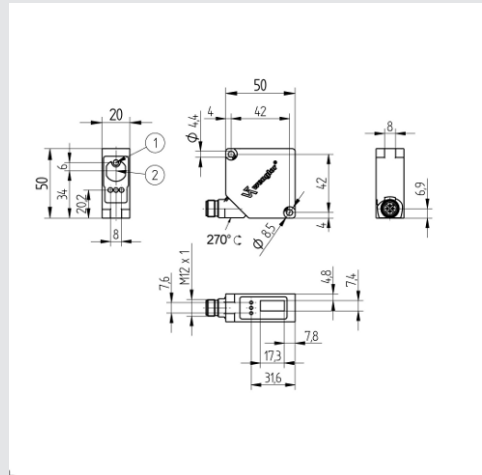
- ① Receiver Diode
 - ② Transmitter Diode
 - ③ Receiver Diode
- Screw M4 = 1 Nm

P1PY217



- ① Transmitter Diode
 - ② Receiver Diode
- Screw M4 = 0.5 Nm

OY1P303P0102



- ① Transmitter Diode
 - ② Receiver Diode
- Screw M4 = 0.5 Nm

Light spot diameter and resolution

HT77MGV80

Working Distance	300 mm	800 mm	1300 mm
Light Spot Diameter	6 mm	18 mm	30 mm
Resolution	0,2 mm	8 mm	30 mm

P1PY217

Working Distance	0 m	2,5 m	5 m
Spot Size	2,5 × 5 mm	25 × 60 mm	65 × 160 mm

OY1P303P0102

Working Distance	0 m	3 m
Light Spot Diameter	5 mm	9 mm