

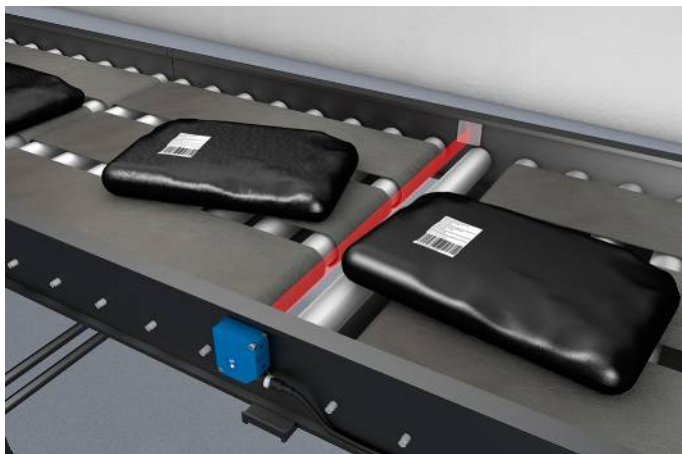
Retro-Reflex Sensor with Light Band

P1EL100 LASER



- Compensation of uneven conveyor belt areas with dynamic teach-in
- Dynamic readjustment of the switching threshold
- Flexible mounting options thanks to 180° rotatable plug
- Precise front edge detection with non-uniform objects

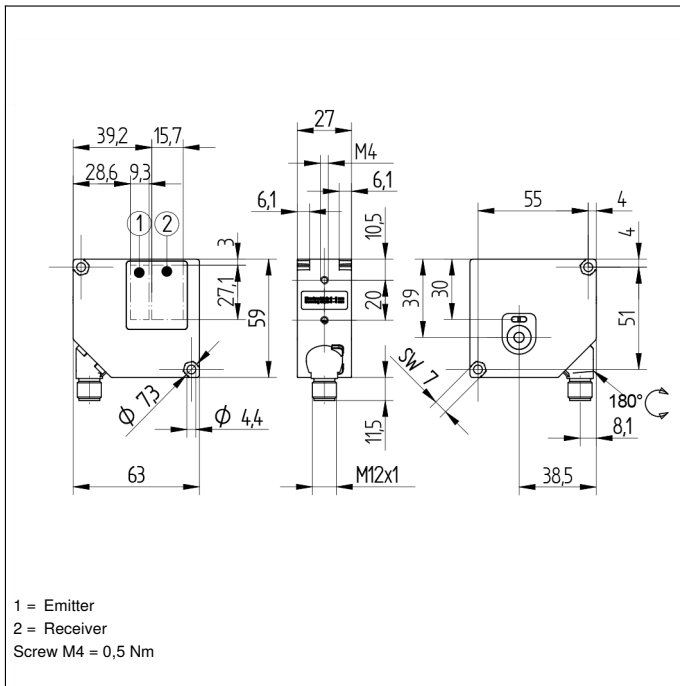
The Retro-Reflex Sensor with Light Band scans a significantly larger range than a retro-reflex sensor with a dot-shaped light spot. This makes it ideally suitable for reliably detecting the front edges of objects with irregular shapes or variable sizes. The sensor's collimated laser light band is absolutely homogeneous and can thus be precisely aligned to the conveyor belt's level. The sensor detects objects from as little as just four millimeters over its entire range and light band height. The compact format can be integrated into the smallest of spaces, for example in the side panels of conveyor systems.



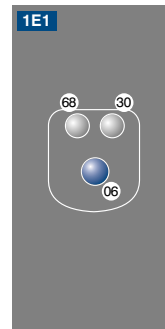
Optical Data	
Range	1600 mm
Reference Reflector/Reflector Foil	Z90R007
Smallest Recognizable Part	4 mm
Light Source	Laser (red)
Wavelength	650 nm
Service Life (T = +25 °C)	100000 h
Laser Class (EN 60825-1)	1
Max. Ambient Light	10000 Lux
Light Strip Height	27 mm
Electrical Data	
Supply Voltage	12...30 V DC
Current Consumption (U _b = 24 V)	< 30 mA
Switching Frequency	275 Hz
Response Time	1,8 ms
Temperature Range	-30...60 °C
Switching Output Voltage Drop	< 2,5 V
PNP Switching Output/Switching Current	100 mA
Residual Current Switching Output	< 50 μA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Protection Class	III
Mechanical Data	
Setting Method	Teach-In
Housing Material	Plastic
Degree of Protection	IP67/IP68
Connection	M12 × 1; 4-pin
Optic Cover	PMMA
PNP NO	●
Connection Diagram No.	150
Control Panel No.	1E1
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	110

Complementary Products

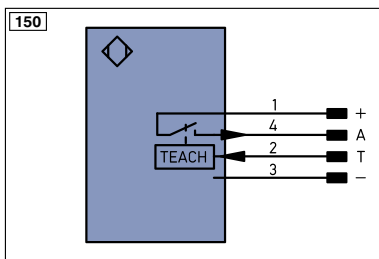
PNP-NPN Converter BG2V1P-N-2M



Ctrl. Panel



- 06 = Teach Button
- 30 = Switching Status/Contamination Warning
- 68 = Supply Voltage Indicator



Feasible reflector distance

Reflector type, mounting distance

Z90R004	0,4...1,6 m	Z90R009	0,4...1,6 m
Z90R005	0,4...1,6 m	ZRDF03K01	0,4...1,6 m
Z90R007	0,4...1,6 m	ZRDF10K01	0,4...1,6 m
Z90R008	0,4...1,6 m		

