



**USER FRIENDLY LIKE NO OTHER
MINIATURE PHOTOELECTRIC SENSORS
ML100 SERIES**



ML100 – USER FRIENDLY LIKE NO OTHER

POWERBEAM: THE RIGHT LIGHT SPOT FOR THE RIGHT APPLICATION

- Photoelectric sensors with PowerBeam use the most modern LED technology
- Best light spot for a variety of applications
- Uniform light spot provides excellent visibility with no central bond spot
- Best alignment capability over the entire operating range
- Light spot visibility optimized for human vision

CLEAR INDICATION OF OPERATING STATUS

- Excellent visibility of the status LEDs from long distances and different directions
- Power and switching status with weak signal indication
- Clear feedback of sensor status



GENERAL FEATURES

- General-purpose photoelectric sensors
- Miniature rectangular housing
- All basic photoelectric functions
- Metal M3 x 0.5 threaded mounting holes
- Sensitivity adjuster
- Light on/Dark on switch
- Very low current consumption
- Suitable for cold storage applications
- Protection against mutual interference
- Polarization reliably detects shiny objects
- Insensitive to ambient lighting
- Shock and vibration resistant

TYPES

ML100-8-H

Background suppression sensor with sensing range of 350 mm

ML100-8

Diffuse mode sensor with sensing range of 1 m

ML100-55

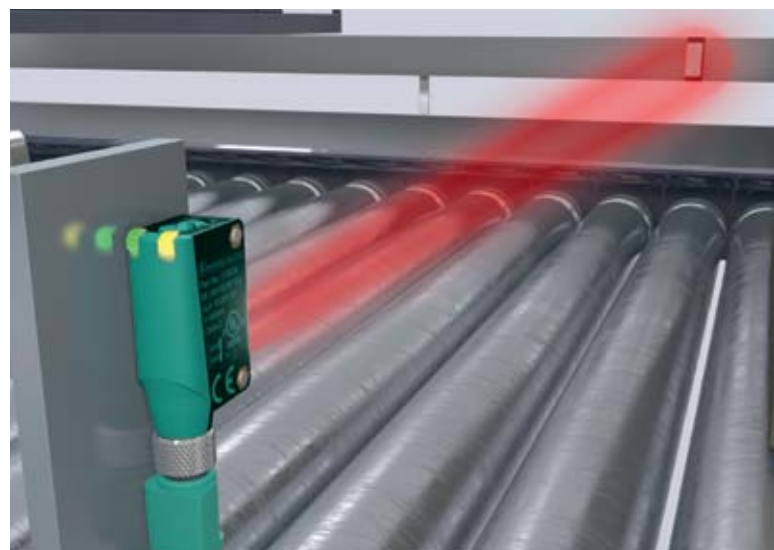
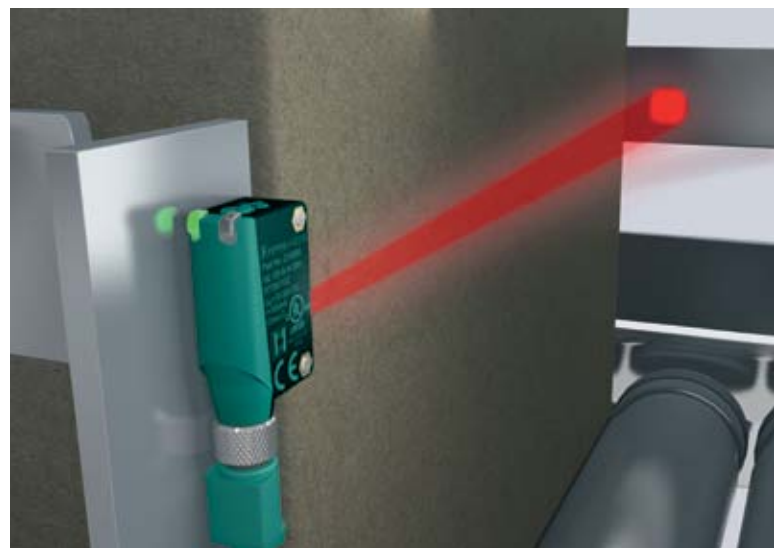
Polarized retroreflective sensor with detection range of 7 m on small reflectors (50 x 50 mm)

M100/MV100

Thru-beam sensor with detection range of 30 m

Background suppression and diffuse mode sensors provide a very bright, small, and sharp light spot for simple setup, best switching accuracy, and very reliable detection of black objects.

Retroreflective and thru-beam sensors provide a more visible and larger light spot for easier alignment, greater detection range, and better stability control.



TECHNICAL DATA

Detection range	Retroreflective sensor	0 m ... 7 m
	Thru-beam sensor	0 m ... 30 m
Sensing range	Diffuse mode sensor	0 m ... 1000 mm
	Background suppression sensor	5 mm ... 350 mm
Light source	red light, 640 nm	
Angle of divergence	± 2°	
Indicator – LEDs	green: Power-On, yellow: object detected, stability control	
Operating elements	potentiometer for light on/dark on and sensitivity adjustment	
Operating voltage	10 V DC ... 30 V DC, class 2	
Current consumption	< 20 mA	
Switching type	light on/dark on, switchable	
Signal output	NPN, PNP	
Switching frequency	1000 Hz / 250 Hz	
Response time	0.5 ms / 2 ms	
Ambient temperature	-30 °C ... 60 °C	
Protection degree	IP67	
Connection	fixed cable, M8 connector, Pigtail M8 and M12	



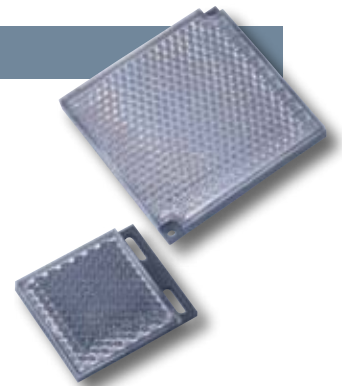
ACCESSORIES

CORDSETS

V31-GM-2M-PVC	straight connection, M8, 4-pin with 2 m PVC cable
V31-WM-2M-PVC	right-angle connection, 90° M8, 4-pin with 2 m PVC cable
V31-GM-2M-PUR	straight connection, M8, 4-pin with 2 m cable
V31-WM-2M-PUR	right-angle connection, 90° M8, 4-pin with 2 m cable
V1-W-2M-PUR	straight connection, M12, 4-pin with 2 m PVC cable
V1-G-2M-PVC	right-angle connection, 90° M12, 4-pin with 2 m PVC cable
V1-W-2M-PVC	straight connection, M12, 4-pin with 2 m cable
V1-G-2M-PUR	right-angle connection, 90° M12, 4-pin with 2 m cable

REFLECTORS

- Reflector H50 (50 mm x 50 mm)
- Reference reflector
- Reflector H60 (40 mm x 60 mm)
- Reflector H85-2 (85 mm x 85 mm)



STANDARD MOUNTING BRACKET FOR ML100 SERIES

OMH-10 – mounting bracket

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