USER FRIENDLY LIKE NO OTHER

MINIATURE PHOTOELECTRIC SENSORS
SERIES ML100

PEPPERL+FUCHS

SENSING YOUR NEEDS

ML100 –
USER FRIENDLY LIKE NO OTHER

PEPPERL+FUCHS
Part No. 210535
ML100-55/95/102
U_B= 10-30V DC
I=100mA
Class 2
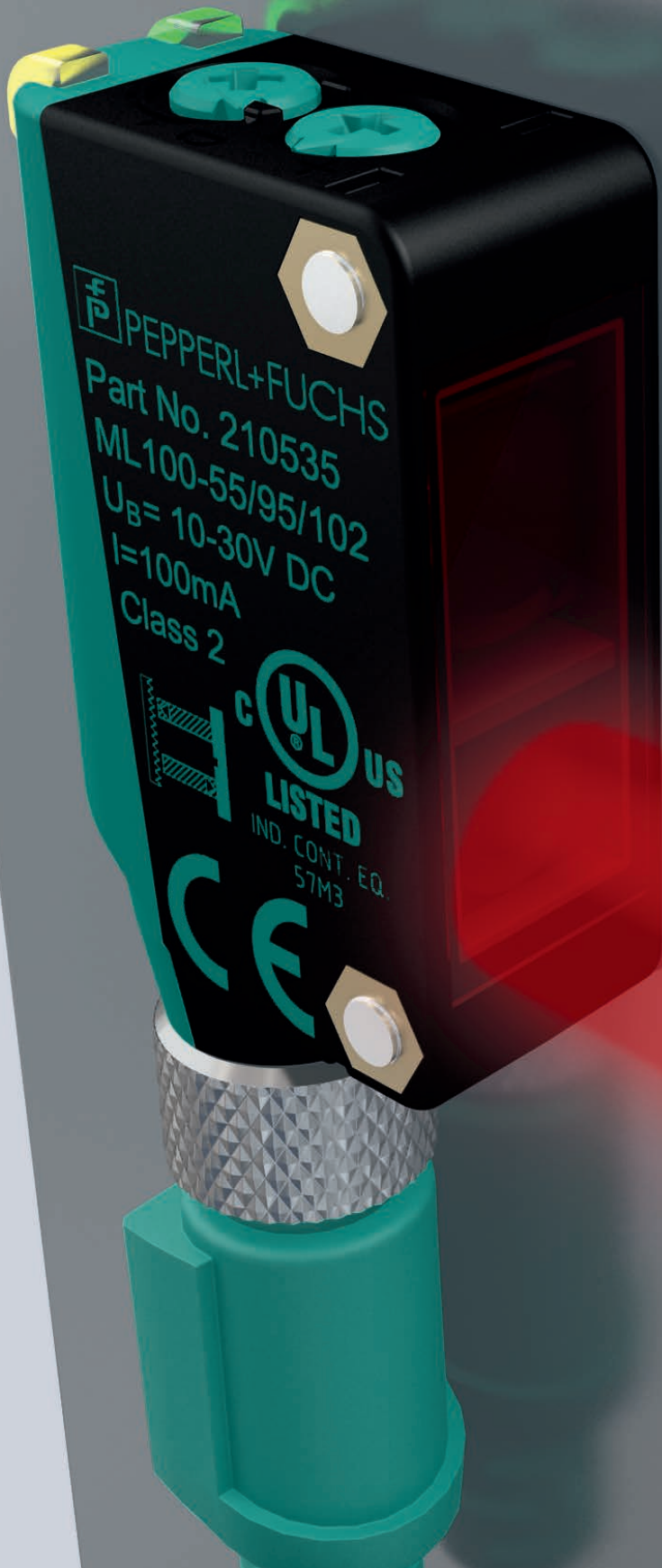
POWERBEAM: THE RIGHT LIGHT SPOT FOR THE RIGHT APPLICATION

- 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 series ML100
- 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-H-100
Background suppression sensor with multiple light spots and sensing range of 100 mm

ML100-8-HW
Background evaluation sensor with sensing range of 350 mm

ML100-8
Diffuse mode sensor with sensing range of 1000 mm

ML100-8-W
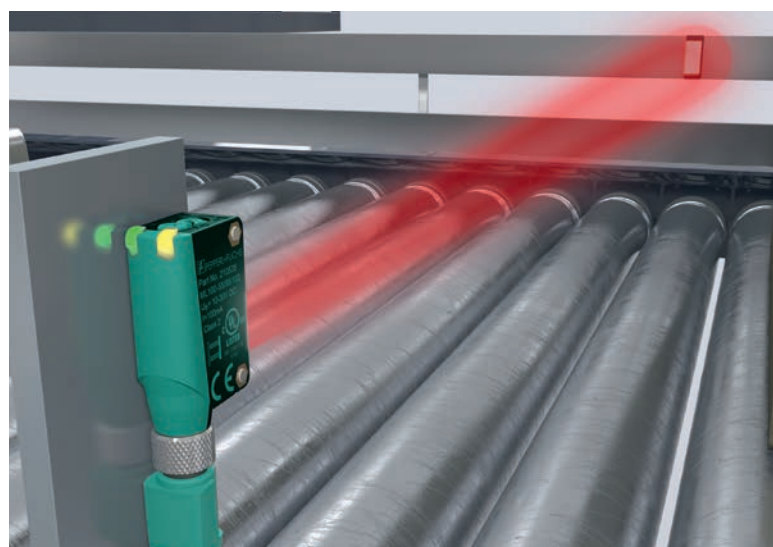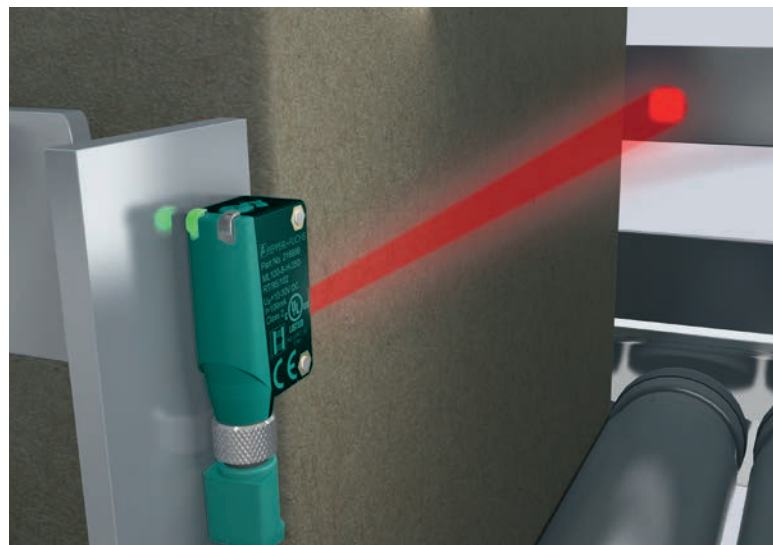Diffuse mode sensor with wide light spot and sensing range of 200 mm

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 dark black objects.

Retroreflective and thru-beam sensors provide a more visible and larger light spot for easiest alignment, greatest detection range, and best 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
	Diffuse mode sensor with wide light spot	0 mm … 200 mm
	Background suppression sensor	5 mm … 350 mm
	Background suppression sensor with multiple light spots	20 mm … 100 mm
	Background evaluation 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 / 500 Hz / 250 Hz	
Response time	0,5 ms / 1 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)
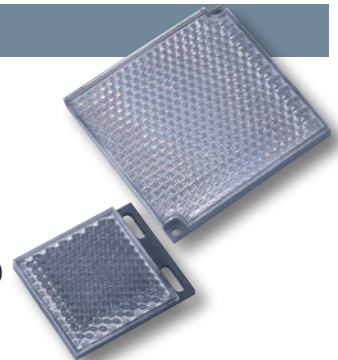
STANDARD MOUNTING BRACKET FOR SERIES ML100

OMH-10 – mounting bracket

www.pepperl-fuchs.com

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