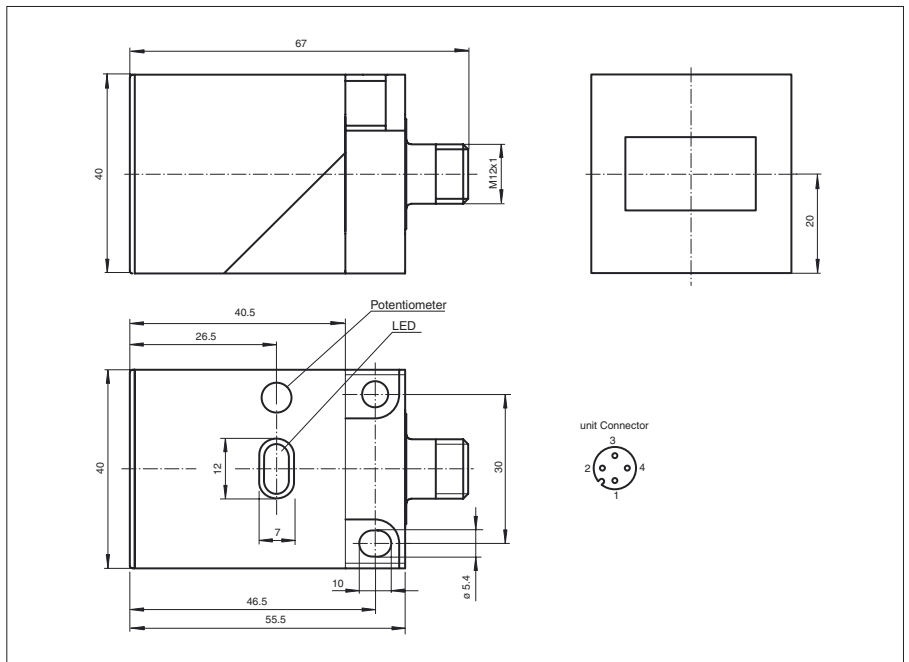## Model Number

OBT200-L2F-E5-V1

Diffuse mode sensor

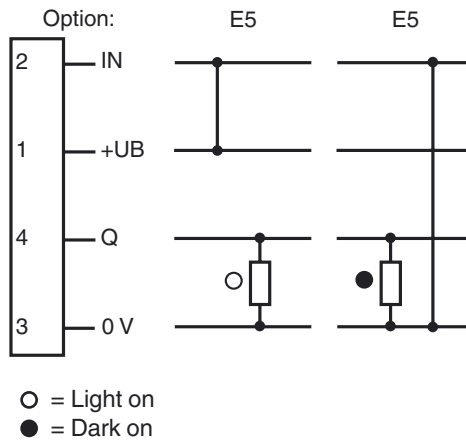with 4-pin, M12 x 1 connector

Features

- Sensor for the detection of round, strongly reflecting objects.

- Suitable for detecting gaps between glasses or PET bottles

- Objects arranged in a row can be detected without interruption of the signal

- The gap width can be adjusted via a potentiometer (Range 5 ... 20 mm)

Dimensions

Electrical connection

○ = Light on
● = Dark on

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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Technical data

General specifications

Detection range	10 ... 30 mm
Adjustment range	5 ... 20 mm
Reference target	PET bottle
Light source	LED
Light type	modulated visible red light
Operating mode	light/dark on, programmable
Ambient light limit	10000 Lux

Indicators/operating means

Function indicator	LED yellow: switching state LED red: pre-fault indication
Control elements	sensitivity adjustment (Gap between the bottles)

Electrical specifications

Operating voltage	U_B	10 ... 30 V DC
Ripple		10 %
No-load supply current	I_0	$\leq$ 30 mA
Time delay before availability	t_v	$\leq$ 80 ms

Input

Control input	light on +UB dark on: 0 V

Output

Switching type		light/dark on
Signal output		1 PNP, complementary short-circuit protected, reverse polarity protected (E5)
Switching voltage		max. 30 V DC
Switching current		max. 200 mA
Voltage drop	U_d	$\leq$ 2.5 V
Switch-on delay	t_{on}	$\geq$ 1 ms
Switching frequency	f	$\leq$ 100 Hz
Response time		$\leq$ 5 ms

Ambient conditions

Ambient temperature	0 ... 50 °C (32 ... 122 °F)
Storage temperature	-40 ... 80 °C (-40 ... 176 °F)

Mechanical specifications

Degree of protection	IP67
Connection	4-pin, M12 x 1 connector
Material	
Housing	PBT
Optical face	scratch resistant plastic lens
Mass	60 g

Compliance with standards and directives

Standard conformity	
Product standard	EN 60947-5-2

Approvals and certificates

CE conformity	yes
CCC approval	CCC approval / marking not required for products rated ≤36 V

The sensor detects the distance between curved, strongly reflecting objects   (e.g. bottles).
The switch output is activated, if the distance between the objects exceeds a preset value.
The value can be adjusted, via the potentiometer, within the limits 5 ... 20 mm.

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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