

Retroreflective sensor (glass)

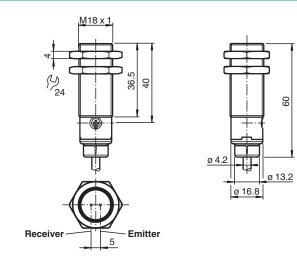


Function

The optical sensors of this series have an M18 threaded housing that is optionally available in plastic or metal. The sensors are robust and versatile.

Focusing on the essential requirements simplifies selection and commissioning, saving time and costs.

Dimensions



Technical Data

General specifications

acheral specifications	
Effective detection range	0 3.5 m in glass mode;
Reflector distance	0 3.5 m in glass mode;
Threshold detection range	3.5 m
Reference target	reflector C110-2
Light source	LED
Light type	modulated visible red light
Polarization filter	yes
Diameter of the light spot	approx. 190 mm at a distance of 3.5 m
Angle of divergence	approx. 2.6 °

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

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MTFF ₀ 666 a Mission Time (T _w) 20 a Diagnostic Coverage (DC) 0% Diagnostic Coverage (DC) 0% Operation indicator LED green: or power on flashing (4 Hz) - short circuit Function indicator Velow LED: Permanently of -boject detected Flashing (4 Hz) - insufficient operating reserve Control elements potentiometer for Teach-In Control elements ispherically switchable Control elements 18 % - clear glass bottles 40 % - colored glass or opaque materials Control elements 10 30 V DC No-load supply current 10 25 mA Protection class 11 NP output, short-circuit protected, reverse polarity protected, open collector Signal output The switching type of the sensor is adjustable. The default setting is: 0 - Pin4: PNP output / dark-on LD-On - VM+1: Low-active input Signal output The switching type of the sensor is adjustable. The default setting is: 0 - Pin4: PNP output / dark	Technical Data		
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Switching frequencyf500 HzResponse time≤ 1 msConformityEN 60947-5-2Product standardEN 60947-5-2Approvals and certificatesE87056, cULus Listed, class 2 power supply, type rating 1Mubient conditions-40 60 °C (-40 140 °F)Storage temperature-40 60 °C (-40 140 °F)Storage temperature-40 60 °C (-40 158 °F)Degree of protectionIP67Connection2 m fixed cableMaterial-HousingMaken jenkelOptical facePMMAOptical facePVC	Switching current		max. 100 mA, resistive load
Response time ≤ 1 ms Conformity Froduct standard Product standard EN 60947-5-2 Approvals and certificates E87056, cULus Listed, class 2 power supply, type rating 1 Ambient conditions -40 60 °C (-40 140 °F) Ambient temperature -40 60 °C (-40 140 °F) Storage temperature -40 70 °C (-40 158 °F) Mechanical specifications -40 70 °C (-40 158 °F) Degree of protection IP67 Connection 2 m fixed cable Material - Mousing brass, nickel-plated Optical face PMMA Cable PVC	Voltage drop	U_d	≤2 V DC
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Approvals and certificatesUL approvalE87056 , cULus Listed , class 2 power supply , type rating 1Ambient conditionsAmbient temperature-40 60 °C (-40 140 °F)Storage temperature-40 70 °C (-40 158 °F)Mechanical specificationsIP67Connection2 m fixed cableMaterialIP67Housingbrass, nickel-platedOptical facePMMAOptical facePMMAOptical facePVC	Conformity		
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Mechanical specifications Degree of protection IP67 Connection 2 m fixed cable Material IP67 Housing brass, nickel-plated Optical face PMMA Cable PVC	Ambient temperature		-40 60 °C (-40 140 °F)
Degree of protection IP67 Connection 2 m fixed cable Material Housing brass, nickel-plated Optical face PMMA Cable PVC	Storage temperature		-40 70 °C (-40 158 °F)
Connection 2 m fixed cable Material Housing brass, nickel-plated Optical face PMMA Cable PVC	Mechanical specifications		
Material Housing brass, nickel-plated Optical face PMMA Cable PVC	Degree of protection		IP67
Housing brass, nickel-plated Optical face PMMA Cable PVC	Connection		2 m fixed cable
Optical face PMMA Cable PVC	Material		
Cable PVC	Housing		brass, nickel-plated
	Optical face		РММА
Mass approx. 70 g	Cable		PVC
	Mass		approx. 70 g

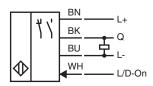
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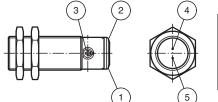
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Connection

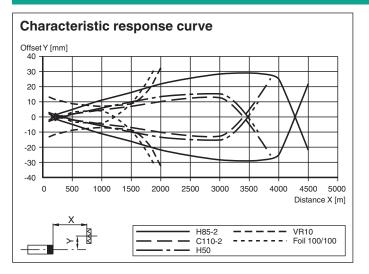


Indication



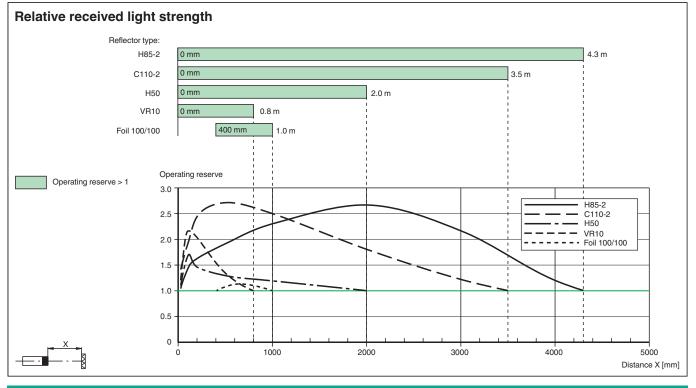
Operating display	green
Signal display	yellow
Teach-In and Mode selection	
Emitter	
Receiver	
	Signal display Teach-In and Mode selection Emitter

Characteristic Curve



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

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Teach-In

Apply the operating voltage to the sensor. The operating indicator lights up green. The sensor is automatically set to the last teach-in setting. Mount a suitable reflector opposite the sensor. The reflector can be taught-in in teach-in mode.

Switch position	Description
Т	Teach-in mode
CI	Contrast 1
CII	Contrast 2

Teach-in mode:

To start the teach-in mode, set the switch to the "T" position when light beam is free (no target).

• Wait approx. 3 seconds until the yellow and green signal indicators flash slowly and simultaneously (2.5 Hz).

• Turn the switch to contrast I or contrast II.

To indicate the end of the teach-in mode, the yellow and green signal indicators flash alternately for approx. 5 seconds.
Teach-in successful: The green and yellow signal indicators flash slowly and alternately (2.5 Hz) for approximately 5 seconds. The contrast selected will be activated. The yellow signal indicator lights up permanently.

The sensor is ready for operation.

Teach-in unsuccessful: The green and yellow signal indicators flash quickly and alternately (8 Hz) for approx. 5 seconds. The contrast selected will be activated. The sensor is set to the previous valid teach-in setting.

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

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