



Photoelectric sensors Series 14

The economical solution for your application

Sensor Solutions
Motion Control
Vision Technologies
Process Instrumentation

Photoelectric sensors Series 14

The flexible product family

Highlights

- **A large line of sensors**
Baumer offers you the entire product spectrum from diffuse sensors up to laser sensors for transparent objects
- **A variety of connection options**
Now with durable M8 metallic plug connection, M12 plug connection or cable version
- **Transparent housing base**
Ensures good LED visibility from all sides
- **Ingenious accessories**
The right accessories guarantee optimal installation

Your benefit

- The new Series 14 provides the right technology for every user – no compromises and complete reverse compatibility
- Greater freedom in connector selection: The new, patented cable output requires no additional installation depth – the ideal solution where space is limited
- Service friendly commissioning and increased security during operation
- Saves installation time and offers flexible and efficient sensor mounting



Two connector versions – smart cable output

You can now select from the following connection options for every sensor version:

- Durable, metallic M8 plug connector (S35A)
- Now also available with M12 plug connectors (S14)
- New cable outputs for installation in particularly tight areas, including corners
- Option: Flylead connectors

The new Series 14 housing design offers you greater flexibility!

Series 14 – the right solution for every application.

Positioning

Print marks such as those employed for example for strip advertising can be quickly, precisely and securely detected by a diffuse sensor.



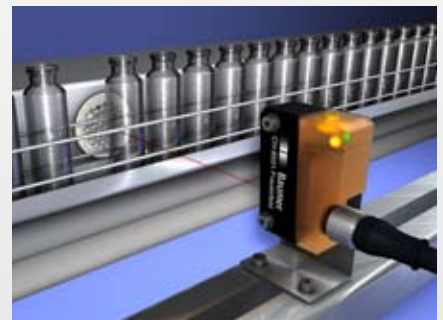
Difficult object surroundings

With proper background suppression, diffuse sensors can securely and precisely detect objects against even a reflective background. Laser models are also available for very small objects.



Transparent objects

For transparent objects such as glassy drug ampoules, retro-reflective sensors offer the right solution. They reliably meet their needs even if the environment alters. The easily visible LEDs simplify installation, adjustment and help support operation.



Typical fields of application

- Packaging industry
- Warehousing and conveyor technology
- Graphics industry
- Handling and robotics industry
- Textile industry

The right accessories

Using the new frame adapter allows sensors to be simply and easily installed on frames and sheet metal using a simple snap-on fixing. The Sensofix installation kit provides the necessary degree of flexibility to optimally align and install the sensor. The proper accessories are vital to the correct security of any sensor application. For through beam sensors, a slot aperture sticker supports the secure detection of particularly small objects. A broad spectrum of appropriate reflectors are available for use with retro-reflective sensors.



Product overview of the series 14 photoelectric range

Diffuse sensors

Light source	Red light	Laser
Sensing distance Tw	5 ... 600 mm	20 ... 300 mm
Response time	< 1 ms	< 0,15 ms
Sensitivity adjustment	Pot 270°	Teach-in
Ordering information	FZDK 14	OZDK 14

Diffuse sensors

with background suppression

foreground sup.

Light source	Red light	Laser	Red light
Sensing distance Tw	20 ... 500 mm	20 ... 350 mm	55 ... 200 mm
Response time	< 0,5 ms	< 0,5 ms	< 0,5 ms
Sensing distance adjustment	Pot or Teach-in	Pot, 9 turns	Teach-in
Ordering information	FHDK 14	OHDK 14	FNDK 14

Retro-reflective sensors

Light source	Red light	Laser
Nominal range Sn	7,2 m	11 m
Response time	< 1 ms	< 0,25 ms
Sensitivity adjustment	None	Teach-in
Ordering information	FPDK 14	OPDK 14

Retro-reflective sensors with single lens optics

Light source	Red light	Laser
Nominal range Sn	3,8 m	11 m
Response time	< 1 ms	< 0,25 ms
Sensitivity adjustment	None	Teach-in
Special features	Single lens optics	Single lens optics
Ordering information	FPDK 14	OPDK 14

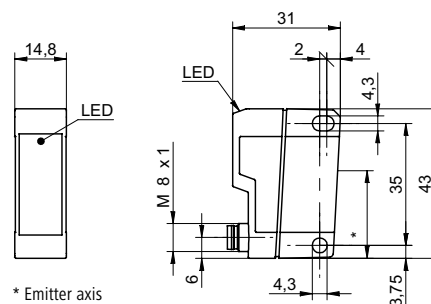
Retro-reflective sensors for transparent objects

Light source	Red light	Laser
Nominal range Sn	8 m	5,2 m
Response time	< 0,1 ms	< 0,25 ms
Sensitivity adjustment	Teach-in	Teach-in
Special features		Single lens optics
Ordering information	FRDK 14	OPDK 14

Through beam sensors

Light source	Red light	Laser
Nominal range Sn	15 m	10 m
Response time	< 1,2 ms	< 0,5 ms
Sensitivity adjustment	None	None
Special features	Test input	
Ordering information	FEDK 14 / FSDK 14	OSDK 14 / OEDK 14

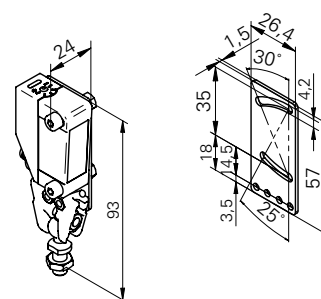
Dimension drawing



* Emitter axis

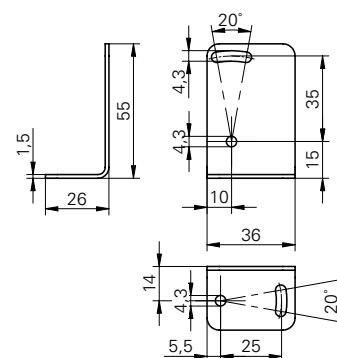
Accessories

SENSOFIX



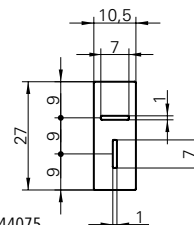
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Mounting bracket



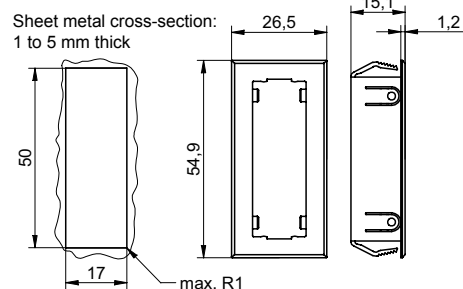
Part number: 10134964

Slot aperture stickers



Part number: 10144075

Frame adapter



Part number: 11002450

More info on Series 14 at www.baumerelectric.com/en/314.html

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