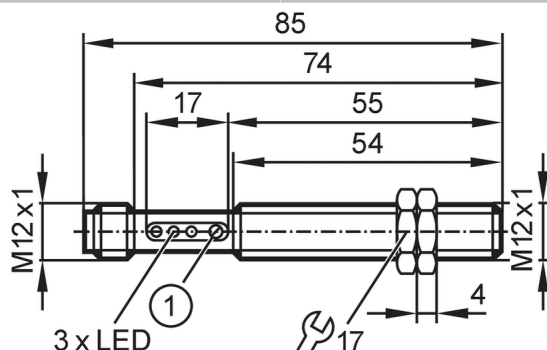




## Through-beam sensor receiver

OFE-FPKG/US-100



1 potentiometer



## Product characteristics

|               |                |
|---------------|----------------|
| Type of light | Infrared light |
| Housing       | Threaded type  |

## Application

|                    |                         |
|--------------------|-------------------------|
| Special feature    | Function check output   |
| Function principle | Through-beam sensor     |
| Application        | Industrial applications |

## Electrical data

|                             |      |                |
|-----------------------------|------|----------------|
| Operating voltage           | [V]  | 10...36 DC     |
| Current consumption         | [mA] | < 30           |
| Protection class            |      | II             |
| Reverse polarity protection |      | yes            |
| Type of light               |      | Infrared light |
| Wave length                 | [nm] | 880            |

## Outputs

|                                                 |      |                                       |
|-------------------------------------------------|------|---------------------------------------|
| Electrical design                               |      | PNP                                   |
| Output function                                 |      | light-on/dark-on mode; (programmable) |
| Max. voltage drop switching output DC           | [V]  | 2.5                                   |
| Function check output                           |      | yes                                   |
| Max. voltage drop of function check output      | [V]  | 3.5                                   |
| Max. current load for function check output     | [mA] | 10                                    |
| Permanent current rating of switching output DC | [mA] | 200                                   |
| Switching frequency DC                          | [Hz] | 320                                   |
| Short-circuit protection                        |      | yes                                   |
| Type of short-circuit protection                |      | yes (non-latching)                    |
| Overload protection                             |      | yes                                   |

## Monitoring range

|                        |          |
|------------------------|----------|
| Transmitter / receiver | receiver |
|------------------------|----------|



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|                  |     |     |
|------------------|-----|-----|
| Range            | [m] | < 4 |
| Range adjustable |     | yes |

## Operating conditions

|                     |      |          |
|---------------------|------|----------|
| Ambient temperature | [°C] | -25...60 |
| Protection          |      | IP 65    |

## Tests / approvals

|             |                    |                         |
|-------------|--------------------|-------------------------|
| EMC         | EN 60947-5-2       |                         |
| MTTF        | [years]            | 652                     |
| UL approval | Ta                 | < 40 °C                 |
|             | Enclosure type     | Type 1                  |
|             | voltage supply     | Limited Voltage/Current |
|             | UL approval number | E030                    |
|             | File number UL     | E174191                 |

## Mechanical data

|                    |      |                                    |
|--------------------|------|------------------------------------|
| Weight             | [g]  | 40.7                               |
| Housing            |      | Threaded type                      |
| Dimensions         | [mm] | M12 x 1 / L = 74                   |
| Thread designation |      | M12 x 1                            |
| Material           |      | housing: brass white bronze coated |
| Lens material      |      | front lens:PMMA                    |

## Displays / operating elements

|         |                  |                 |
|---------|------------------|-----------------|
| Display | Switching status | 1 x LED, yellow |
|         | Power            | 1 x LED, green  |
|         | Function         | 1 x LED, red    |

## Accessories

|                |              |
|----------------|--------------|
| Items supplied | lock nuts: 2 |
|                | screwdrivers |

## Remarks

|               |        |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

## Electrical connection

Connector: 1 x M12; coding: A; Contacts: 4





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Connection



2 Function check output

Diagrams and graphs

excess gain graph

