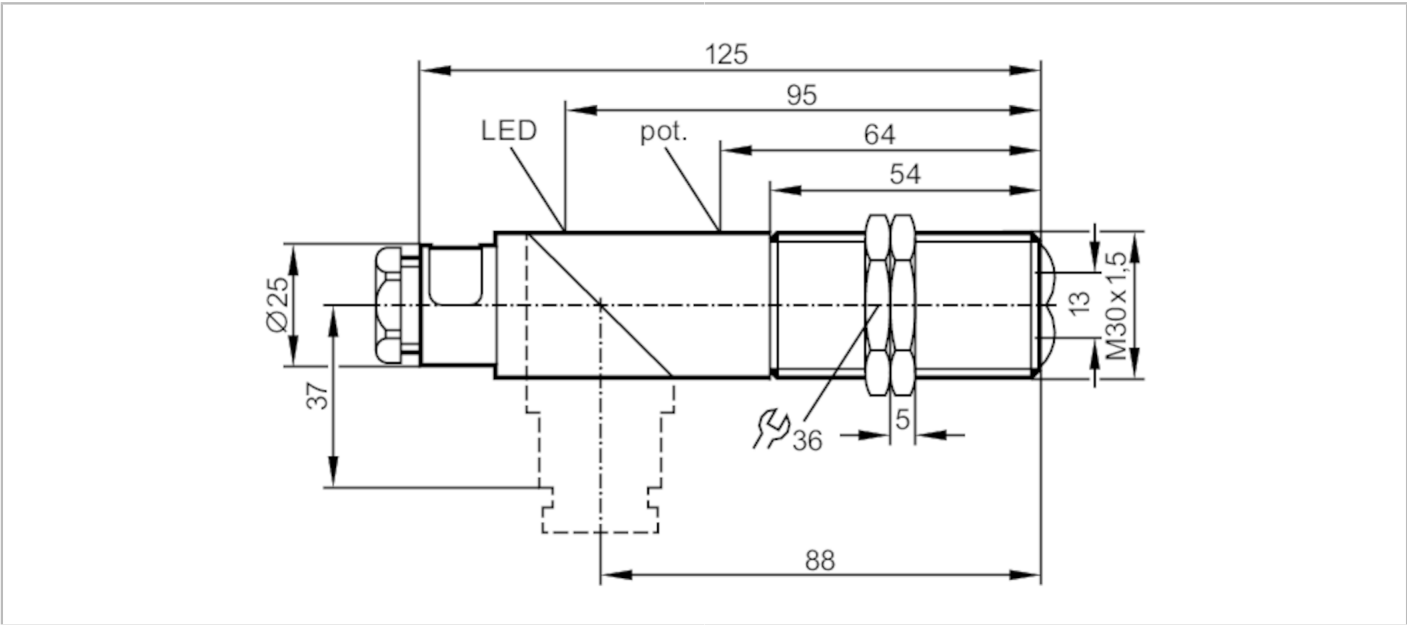




Diffuse reflection sensor

OIT-FBOA



| Product characteristics                         |      |                                       |
|-------------------------------------------------|------|---------------------------------------|
| Type of light                                   |      | Infrared light                        |
| Housing                                         |      | Threaded type                         |
| Application                                     |      |                                       |
| Function principle                              |      | Diffuse reflection sensor             |
| Electrical data                                 |      |                                       |
| Frequency AC                                    | [Hz] | 47...63                               |
| Operating voltage                               | [V]  | 20...250 AC/DC                        |
| Protection class                                |      | II                                    |
| Reverse polarity protection                     |      | no                                    |
| Type of light                                   |      | Infrared light                        |
| Wave length                                     | [nm] | 880                                   |
| Outputs                                         |      |                                       |
| Output function                                 |      | light-on/dark-on mode; (programmable) |
| Max. voltage drop switching output DC           | [V]  | 10.5                                  |
| Max. voltage drop switching output AC           | [V]  | 10.5                                  |
| Minimum load current                            | [mA] | 15                                    |
| Max. leakage current                            | [mA] | 6                                     |
| Permanent current rating of switching output AC | [mA] | 250; (350 (...50 °C))                 |
| Permanent current rating of switching output DC | [mA] | 250; (350 (...50 °C))                 |
| Short-time current rating of switching output   | [mA] | 2200; (10 ms / 0,5 Hz)                |
| Switching frequency AC                          | [Hz] | 25                                    |
| Switching frequency DC                          | [Hz] | 35                                    |



## Diffuse reflection sensor

OIT-FBOA

|                                      |                                                                             |
|--------------------------------------|-----------------------------------------------------------------------------|
| Short-circuit proof                  | no                                                                          |
| Overload protection                  | no                                                                          |
| <b>Monitoring range</b>              |                                                                             |
| Range [mm]                           | 3...700; (white paper 200 x 200 mm)                                         |
| Range adjustable                     | yes                                                                         |
| Max. light spot diameter [mm]        | 122                                                                         |
| Light spot dimensions refer to       | at maximum range                                                            |
| <b>Operating conditions</b>          |                                                                             |
| Ambient temperature [°C]             | -25...80                                                                    |
| Protection                           | IP 65                                                                       |
| <b>Tests / approvals</b>             |                                                                             |
| EMC                                  | EN 60947-5-2                                                                |
| MTTF [years]                         | 309                                                                         |
| <b>Mechanical data</b>               |                                                                             |
| Weight [g]                           | 127                                                                         |
| Housing                              | Threaded type                                                               |
| Dimensions [mm]                      | M30 x 1.5 / L = 125                                                         |
| Thread designation                   | M30 x 1.5                                                                   |
| Material                             | PBT; PPO modified                                                           |
| Lens material                        | PMMA                                                                        |
| <b>Displays / operating elements</b> |                                                                             |
| Display                              | Switching status 1 x LED, yellow                                            |
| <b>Electrical connection</b>         |                                                                             |
| Required protection                  | miniature fuse to IEC60127-2 sheet 1; ≤ 2 A; fast acting                    |
| <b>Accessories</b>                   |                                                                             |
| Items supplied                       | lock nuts: 2<br>screwdrivers                                                |
| <b>Remarks</b>                       |                                                                             |
| Remarks                              | Recommendation: check the unit for reliable function after a short circuit. |
| Pack quantity                        | 1 pcs.                                                                      |



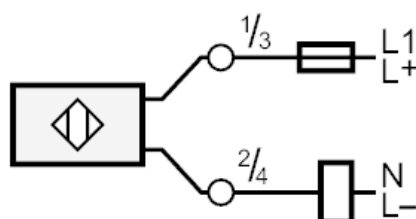
## Diffuse reflection sensor

OIT-FBOA

## Electrical connection

terminals: ...1.5 mm<sup>2</sup>; Cable sheath: Ø 7...13 mm; Cable gland: M20 X 1.5

## Connection



Note : miniature fuse to IEC60127-2 sheet 1 ≤ 2 A fast acting

## Diagrams and graphs

excess gain graph

