



## Diffuse reflection sensor

OGT-DBOA/LS-100-AK



1 pushbutton



## 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                                 |      | dark-on mode          |
| Max. voltage drop switching output DC           | [V]  | 8                     |
| Max. voltage drop switching output AC           | [V]  | 8                     |
| Minimum load current                            | [mA] | 5                     |
| Max. leakage current                            | [mA] | 1.7                   |
| Permanent current rating of switching output AC | [mA] | 90; (180 (...40 °C))  |
| Permanent current rating of switching output DC | [mA] | 90; (180 (...40 °C))  |
| Short-time current rating of switching output   | [mA] | 600; (20 ms / 0,5 Hz) |
| Switching frequency AC                          | [Hz] | 25                    |
| Switching frequency DC                          | [Hz] | 25                    |
| Short-circuit proof                             |      | no                    |
| Overload protection                             |      | no                    |



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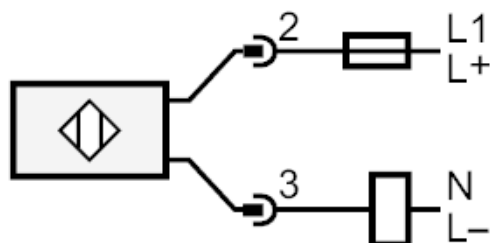
OGT-DBOA/LS-100-AK

| Detection zone                                                                      |                  |                                                                               |
|-------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------|
| Range                                                                               | [mm]             | 1...600; (white paper 200 x 200 mm 90 % remission)                            |
| Range adjustable                                                                    |                  | yes                                                                           |
| Max. light spot diameter                                                            | [mm]             | 169                                                                           |
| Light spot dimensions refer to                                                      |                  | at maximum range                                                              |
| Operating conditions                                                                |                  |                                                                               |
| Ambient temperature                                                                 | [°C]             | -25...80                                                                      |
| Protection                                                                          |                  | IP 67                                                                         |
| Tests / approvals                                                                   |                  |                                                                               |
| EMC                                                                                 | EN 60947-5-2     |                                                                               |
|                                                                                     | EN 55011         | class B                                                                       |
| MTTF                                                                                | [years]          | 338                                                                           |
| Mechanical data                                                                     |                  |                                                                               |
| Weight                                                                              | [g]              | 45.8                                                                          |
| Housing                                                                             |                  | threaded type                                                                 |
| Dimensions                                                                          | [mm]             | M18 x 1 / L = 76                                                              |
| Thread designation                                                                  |                  | M18 x 1                                                                       |
| Materials                                                                           |                  | PBT                                                                           |
| Lens material                                                                       |                  | PMMA                                                                          |
| Displays / operating elements                                                       |                  |                                                                               |
| Display                                                                             | switching status | 1 x LED, red                                                                  |
|                                                                                     | function         | 1 x LED, red flashing light                                                   |
| Electrical connection                                                               |                  |                                                                               |
| Required protection                                                                 |                  | miniature fuse to IEC60127-2 sheet 1; ≤ 2 A; fast acting                      |
| Accessories                                                                         |                  |                                                                               |
| Accessories (supplied)                                                              |                  | lock nuts: 2 x                                                                |
| Remarks                                                                             |                  |                                                                               |
| Remarks                                                                             |                  | Recommendation: Check the safe functioning of the unit after a short circuit. |
| Pack quantity                                                                       |                  | 1 pcs.                                                                        |
| Electrical connection                                                               |                  |                                                                               |
| Connector: 1 x 1/2"                                                                 |                  |                                                                               |
|  |                  |                                                                               |

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## Connection



Note : miniature fuse to IEC60127-2 sheet 1  $\leq 2$  A fast acting

## Diagrams and graphs

excess gain graph

