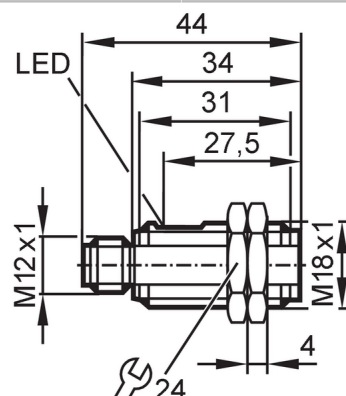


# OGP102



## Retro-reflective sensor

OGP-DNKG/US



### Product characteristics

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

### Application

|                    |                                             |
|--------------------|---------------------------------------------|
| Special feature    | polarization filter                         |
| Function principle | Retro-reflective sensor                     |
| Application        | For use in conveying and materials handling |

### Electrical data

|                             |      |            |
|-----------------------------|------|------------|
| Operating voltage           | [V]  | 10...30 DC |
| Current consumption         | [mA] | 20         |
| Protection class            |      | III        |
| Reverse polarity protection |      | yes        |
| Type of light               |      | red light  |

### Outputs

|                                                 |      |              |
|-------------------------------------------------|------|--------------|
| Electrical design                               |      | NPN          |
| Output function                                 |      | dark-on mode |
| Max. voltage drop switching output DC           | [V]  | 2.5          |
| Permanent current rating of switching output DC | [mA] | 200          |
| Switching frequency DC                          | [Hz] | 1000         |
| Short-circuit protection                        |      | yes          |
| Overload protection                             |      | yes          |

### Monitoring range

|                                       |      |                                               |
|---------------------------------------|------|-----------------------------------------------|
| Range referred to prismatic reflector | [m]  | 0.05...2.5; (Prismatic reflector Ø 80 E20005) |
| Range adjustable                      |      | no                                            |
| Max. light spot diameter              | [mm] | 200                                           |
| Light spot dimensions refer to        |      | at maximum range                              |
| Polarization filter available         |      | yes                                           |

### Operating conditions

|                     |      |          |
|---------------------|------|----------|
| Ambient temperature | [°C] | -25...60 |
|---------------------|------|----------|

# OGP102



## Retro-reflective sensor

OGP-DNKG/US

|            |                                                        |
|------------|--------------------------------------------------------|
| Protection | IP 67; (in conjunction with a corresponding connector) |
|------------|--------------------------------------------------------|

### Tests / approvals

|      |              |      |
|------|--------------|------|
| EMC  | EN 60947-5-2 |      |
| MTTF | [years]      | 1161 |

### Mechanical data

|                    |      |                  |
|--------------------|------|------------------|
| Weight             | [g]  | 14.6             |
| Housing            |      | Threaded type    |
| Dimensions         | [mm] | M18 x 1 / L = 44 |
| Thread designation |      | M18 x 1          |
| Material           |      | housing: ABS     |
| Lens material      |      | front lens:PMMA  |

### Displays / operating elements

|         |                  |                 |
|---------|------------------|-----------------|
| Display | Switching status | 1 x LED, yellow |
|---------|------------------|-----------------|

### Accessories

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

### Remarks

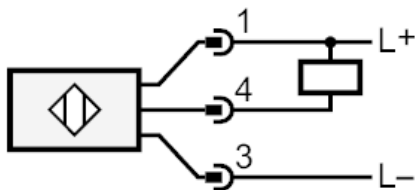
|               |        |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

### Electrical connection

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



### Connection



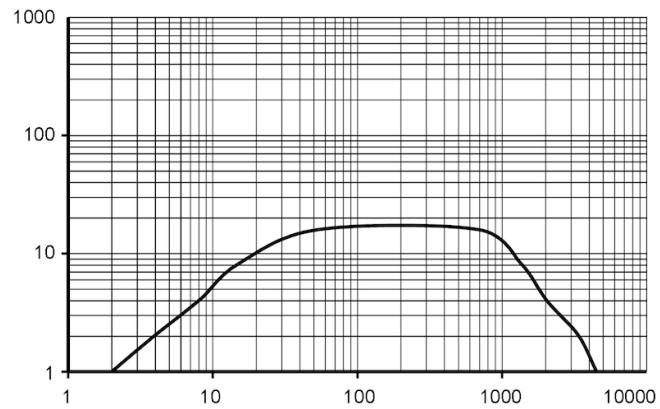


## Retro-reflective sensor

OGP-DNKG/US

### Diagrams and graphs

excess gain graph



x: distance [mm]

y: excess gain factor