



# An all-rounder despite the corners.



## New photoelectric design OG-Cube in metal housing with M18 thread.

- Small, compact and strong: a sensor with high optical performance.
- Excellent quality at an attractive price.
- Through-beam, retro-reflective and diffuse reflection sensors (background suppression).
- Easy teach mode for fast set-up.
- Universal mounting and large selection of fixing accessories.

|                                    |  |                                  |                             |
|------------------------------------|--|----------------------------------|-----------------------------|
| <p><b>Robust metal version</b></p> | <p><b>TEACH-IN</b><br/>for simple operation.</p> | <p><b>High sensing range</b></p> | <p><b>M12 connector</b></p> |
|------------------------------------|--|----------------------------------|-----------------------------|

### New design: OG-Cube

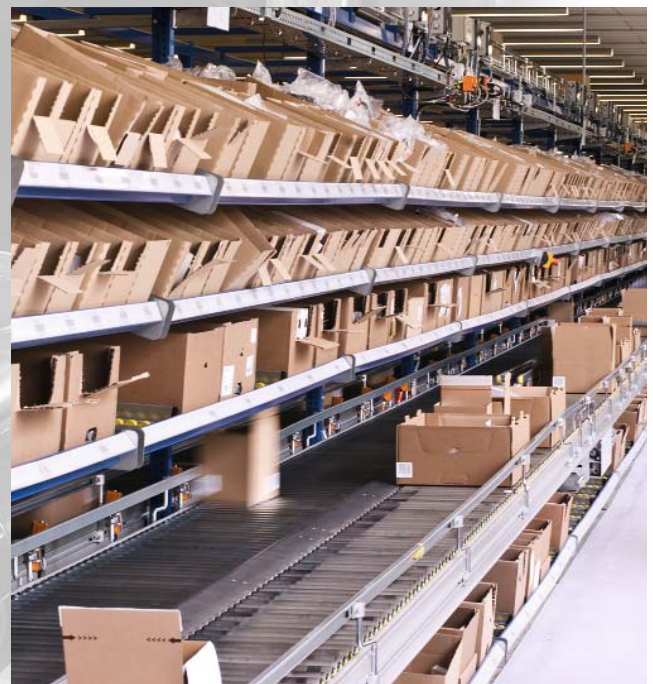
This sensor was developed for use in harsh industrial environments. The tried-and-tested technology of the well-known OG series is now integrated in a stable, rectangular metal housing.

### Long ranges, small design

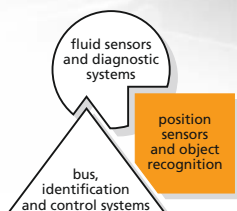
The photoelectric sensors are distinguished by long ranges of 4 m for retro-reflective sensors and 200 mm for diffuse reflection sensors. Together with the small housing design both features provide more flexibility for the construction of plant and machinery.

### Time-savings during installation and set-up

The teach mode and the extensive range of fixing components ensure fast and cost-saving installation.



Fast processes in packaging technology. Ideal for the design OG Cube.



**Applications:**  
Conveying, packaging machinery, automotive and handling

| Range [m]  | Light spot diameter [mm] | Light-on/dark-on mode | current consumption [mA] | Electrical design | Protection | Order no.     |
|--|--------------------------|-----------------------|--------------------------|-------------------|------------|---------------|
| <b>Diffuse reflection sensor with background suppression · M12 connector · 3 wires</b> |                          |                       |                          |                   |            |               |
| 0.015...0.2  | 13                       | programmable          | 25                       | DC PNP            | IP 67, III | <b>OGH580</b> |
| 0.015...0.2  | 13                       | programmable          | 25                       | DC NPN            | IP 67, III | <b>OGH581</b> |
| 0.1 (fixed)  | 7                        | • / -                 | 25                       | DC PNP            | IP 67, III | <b>OGH280</b> |
| 0.1 (fixed)  | 7                        | • / -                 | 25                       | DC NPN            | IP 67, III | <b>OGH282</b> |
| 0.2 (fixed)  | 13                       | • / -                 | 25                       | DC PNP            | IP 67, III | <b>OGH281</b> |
| 0.2 (fixed)  | 13                       | • / -                 | 25                       | DC NPN            | IP 67, III | <b>OGH283</b> |
| <b>Retro-reflective sensor with polarisation filter · M12 connector · 3 wires</b>      |                          |                       |                          |                   |            |               |
| 0.1...4  | 160                      | - / •                 | 20                       | DC PNP            | IP 67, III | <b>OGP280</b> |
| 0.1...4  | 160                      | - / •                 | 20                       | DC NPN            | IP 67, III | <b>OGP282</b> |
| 0.1...4  | 160                      | • / -                 | 20                       | DC PNP            | IP 67, III | <b>OGP281</b> |
| 0.1...4  | 160                      | • / -                 | 20                       | DC NPN            | IP 67, III | <b>OGP283</b> |
| <b>Through-beam sensor – transmitter · M12 connector</b>                               |                          |                       |                          |                   |            |               |
| 20   | 800                      | -                     | 20                       | -                 | IP 67, III | <b>OGS280</b> |
| <b>Through-beam sensor – receiver · M12 connector · 3 wires</b>                        |                          |                       |                          |                   |            |               |
| 20   | -                        | - / •                 | 20                       | DC PNP            | IP 67, III | <b>OGE280</b> |
| 20   | -                        | - / •                 | 20                       | DC NPN            | IP 67, III | <b>OGE282</b> |
| 20   | -                        | • / -                 | 20                       | DC PNP            | IP 67, III | <b>OGE281</b> |





**Accessories**

| Type  | Description   | Order no.     |
|---|---|---------------|
|  | Clamp for mounting rod Ø 12 mm, diecast zinc, steel                 | <b>E20721</b> |
|  | Clamp for mounting rod Ø 12 mm, high-grade stainless steel          | <b>E21207</b> |
|  | Clamp for mounting rod Ø 12 mm, diecast zinc, steel                 | <b>E20720</b> |
|  | Clamp for mounting rod Ø 12 mm, high-grade stainless steel          | <b>E21206</b> |
|  | Cylinder bolt, M10 x 45 mm, tin-plated steel                        | <b>E21208</b> |
|  | Cylinder bolt, M10 x 45 mm, high-grade stainless steel              | <b>E21209</b> |
|  | Cube for mounting on an aluminium profile, M10 thread, diecast zinc | <b>E20951</b> |
|  | Mounting rod, 100 mm, Ø 12 mm, M10 thread, stainless steel          | <b>E20938</b> |
|  | Angle bracket for type M18, stainless steel                         | <b>E10736</b> |

**Common technical data**

| Type OG Cube                           |                               |
|--|-------------------------------|
| Type of light                          | red light 624 nm              |
| Operating voltage [V DC]               | 10...30                       |
| Short-circuit protection, pulsed       | •                             |
| Reverse polarity / overload protection | • / •                         |
| Voltage drop [V]                       | < 2.5                         |
| Current rating [mA]                    | 200                           |
| Switching frequency [Hz]               | 1000                          |
| Housing material                       | Metallic alloy, PA, LCP, EPDM |
| Function display                       | LED                           |
| Operation indication                   | green                         |
| Switching status                       | yellow                        |
| Operating temperature [°C]             | -25...60                      |

**Connectors and splitter boxes**

| Type  | Description                        | Order no.     |
|---|------------------------------------|---------------|
|  | M12 socket<br>2 m black, PUR cable | <b>EVC001</b> |
|  | M12 socket<br>5 m black, PUR cable | <b>EVC002</b> |
|  | M12 socket<br>2 m black, PUR cable | <b>EVC004</b> |
|  | M12 socket<br>5 m black, PUR cable | <b>EVC005</b> |