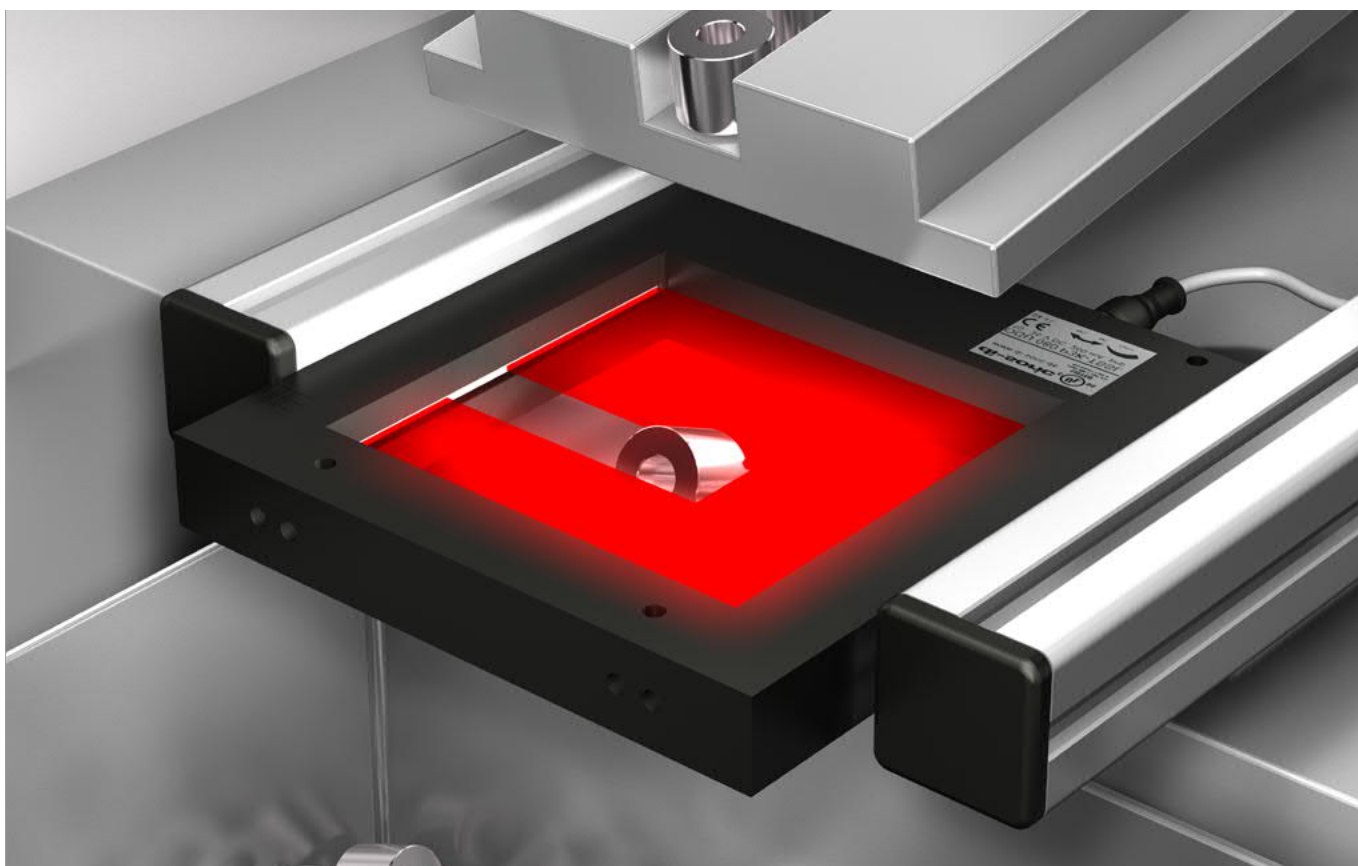
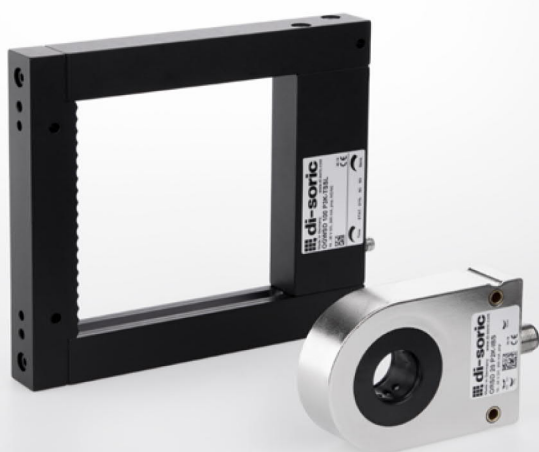


## Frame and ring light barriers



Our frame and ring light barriers detect mostly small objects in a small to medium-sized detection field. They are used wherever metallic or non-metallic objects are to be detected not only periodically, but across a range, quickly and independent of surface.



|                                                  |    |
|--------------------------------------------------|----|
| OGSWD Frame design                               | 85 |
| ORSD Ring design                                 | 86 |
| ORR-Z Accessories for frame & ringlight barriers | 86 |

## OGSWD FRAME DESIGN

The OGWSW frame light sensors detect fast-moving and static objects in an established rectangular range of up to 300 x 397 mm. The devices have a robust metallic housing with collision protection and can be easily operated with a potentiometer.



| Technical data (typ.)        | +20 °C, 24 VDC         |
|------------------------------|------------------------|
| Emitted light                | Infrared light, 880 nm |
| Activation time              | 0.1 ms                 |
| Release time                 | 0.1 to 150 ms          |
| Pulse stretching             | 0.1 to 150 ms          |
| Ambient temperature          | 0 to 60 °C             |
| Protection type              | IP 67                  |
| Insulation voltage endurance | 500 V                  |
| Housing material             | Aluminum, anodized     |

|                    | Active zone / ring diameter (mm) | Housing design Size (mm) | Functional principle S = static / D = dynamic | Switching output | No-load current (mA) | Resolution, dynamic operation (mm) | Resolution, static operation (mm) | Ambient light immunity (kLx) | Service voltage (VDC) | Plug connector | Connection cable (optionally available) | Product description |
|--------------------|----------------------------------|--------------------------|-----------------------------------------------|------------------|----------------------|------------------------------------|-----------------------------------|------------------------------|-----------------------|----------------|-----------------------------------------|---------------------|
| OGSWD Frame design |                                  |                          |                                               |                  |                      |                                    |                                   |                              |                       |                |                                         |                     |
|                    | 25 x 23                          | 60 x 60 x 15             | S/D                                           | pnP              | 200 mA NO/NC         | 25                                 | Ø 0.7                             | Ø 1.0                        | 30                    | 10 to 35       | M8 TK ...                               | OGWSW 25 P3K-TSSL   |
|                    |                                  |                          |                                               | npN              |                      |                                    |                                   |                              |                       |                |                                         | OGWSW 25 N3K-TSSL   |
|                    | 40 x 49                          | 80 x 125 x 20            |                                               | pnP              |                      | 30                                 | Ø 0.7                             | Ø 1.0                        | 20                    | 18 to 35       |                                         | OGWSW 4055 P3K-TSSL |
|                    |                                  |                          |                                               | npN              |                      |                                    |                                   |                              |                       |                |                                         | OGWSW 4055 N3K-TSSL |
|                    | 70 x 62                          | 110 x 123 x 20           |                                               | pnP              |                      | 30                                 | Ø 1.5                             | Ø 2.0                        | 20                    | 18 to 35       |                                         | OGWSW 70 P3K-TSSL   |
|                    |                                  |                          |                                               | npN              |                      |                                    |                                   |                              |                       |                |                                         | OGWSW 70 N3K-TSSL   |
|                    | 100 x 92                         | 140 x 153 x 20           |                                               | pnP              |                      | 35                                 | Ø 2.5                             | Ø 3.0                        | 20                    | 18 to 35       |                                         | OGWSW 100 P3K-TSSL  |
|                    |                                  |                          |                                               | npN              |                      |                                    |                                   |                              |                       |                |                                         | OGWSW 100 N3K-TSSL  |
|                    | 150 x 142                        | 190 x 203 x 20           |                                               | pnP              |                      | 45                                 | Ø 3.0                             | Ø 5.0                        | 20                    | 18 to 35       |                                         | OGWSW 150 P3K-TSSL  |
|                    |                                  |                          |                                               | npN              |                      |                                    |                                   |                              |                       |                |                                         | OGWSW 150 N3K-TSSL  |
|                    | 250 x 242                        | 290 x 303 x 20           |                                               | pnP              |                      | 45                                 | Ø 5.0                             | Ø 8.0                        | 10                    | 22 to 26       |                                         | OGWSW 250 P3K-TSSL  |
|                    |                                  |                          |                                               | npN              |                      |                                    |                                   |                              |                       |                |                                         | OGWSW 250 N3K-TSSL  |
|                    | 300 x 397.5                      | 340 x 458.5 x 20         |                                               | pnP              |                      | 50                                 | Ø 5.0                             | Ø 10.0                       | 8                     | 22 to 26       |                                         | OGWSW 300 P3K-TSSL  |
|                    |                                  |                          |                                               | npN              |                      |                                    |                                   |                              |                       |                |                                         | OGWSW 300 N3K-TSSL  |

ORSD RING DESIGN

The ORSD ring light barriers are used in feed control and for counting small parts. They reliably detect fast-moving and static objects in a round detection area and in tubes with a diameter of 20 mm or smaller. The devices have a metallic housing and can be easily operated with a potentiometer.

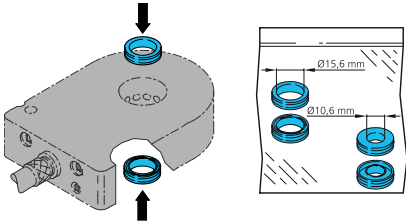


| Technical data (typ.)        | +20 °C, 24 VDC         |
|------------------------------|------------------------|
| Emitted light                | Infrared light, 880 nm |
| Activation time              | 0.1 ms                 |
| Release time                 |                        |
| Pulse stretching             | 1 to 150 ms            |
| Ambient temperature          | 0 to 60 °C             |
| Protection type              | IP 67                  |
| Insulation voltage endurance | 500 V                  |
| Housing material             | Plastic PA             |
|                              |                        |

|                                                                                   | Active zone / ring diameter<br>(mm) | Housing design<br>Size (mm) | Functional principle<br>S= static / D= dynamic | Switching output | No-load current (mA) | Resolution, dynamic operation<br>(mm) | Resolution, static operation<br>(mm) | Ambient light immunity (kLx) | Service voltage (VDC) | Plug connector | Connection cable<br>(optionally available) | Product description       |
|-----------------------------------------------------------------------------------|-------------------------------------|-----------------------------|------------------------------------------------|------------------|----------------------|---------------------------------------|--------------------------------------|------------------------------|-----------------------|----------------|--------------------------------------------|---------------------------|
| ORSD Ring design                                                                  |                                     |                             |                                                |                  |                      |                                       |                                      |                              |                       |                |                                            |                           |
|  | Ø 20.6                              | 60 x 85 x 20                | S/D                                            | pnp              | 200 mA<br>NO         | 30                                    | Ø 1.5                                | Ø 1.5                        | 5                     | 10 to 35       | M12                                        | VK ...<br>ORSD 20 P2K-IBS |

ORR-Z ACCESSORIES FOR FRAME & RINGLIGHT BARRIERS

The adapter rings enable adaptation of the ringlight barrier to supply tubes with a diameter of 10 or 15 mm.

| Adapter set for ORSD 20 P2K-IBS ring light barrier                                  |                           |               |
|-------------------------------------------------------------------------------------|---------------------------|---------------|
|  |                           |               |
|                                                                                     |                           |               |
|                                                                                     | Adapter ring Ø 10 mm (2x) |               |
|                                                                                     | Adapter ring Ø 15 mm (2x) | ORSD-AR-10/15 |