

PRK 53.42 / RKR 53.42

Stainless steel sensors with autocollimation optics and red light with ranges of up to 3 m for transparent objects, both in a polarized design for glass panes (PRK devices) and a non-polarized design for foils (RKR devices).

Benefits:

- 316L stainless steel housing in HYGIENE-Design
- Enclosed optics design prevents bacterial carry-overs
- ECOLAB and CleanProof+ tested
- High switching frequency for detection of fast events
- Easy adjustment via lockable teach button or teach input

| Part no. | Part description | Operating range [m] Op. range limit [m] | Light source | Connection | Description |
|----------|------------------|--|--------------|---------------------------------------|--|
| 50112475 | PRK 53/6.42-S8 | 0 ... 3 m 0 ... 3.5 m | LED, red | Connector, M8, 4-pin, stainless steel | Application: detection of highly transparent bottles; Switching frequency: 1,000 Hz; Digital switching output 1: transistor, push-pull, light switching (PNP)/dark switching (NPN), DC, teach button, teach input, autocollimation, HYGIENE design |
| 50112476 | PRK 53/6D.42-S8 | 0 ... 3 m 0 ... 3.5 m | LED, red | Connector, M8, 4-pin, stainless steel | Application: detection of highly transparent bottles; Switching frequency: 1,000 Hz; Digital switching output 1: transistor, push-pull, dark switching (PNP)/light switching (NPN), DC, teach button, teach input, autocollimation, HYGIENE design |
| 50107607 | RKR 53/6.42-S8 | 0 ... 1.5 m 0 ... 1.8 m | LED, red | Connector, M8, 4-pin, stainless steel | Application: detection of highly transparent foils and glass panes; Switching frequency: 1,000 Hz; Digital switching output 1: transistor, push-pull, light switching (PNP)/dark switching (NPN), DC, teach button, teach input, autocollimation, HYGIENE design |

Detailed information on operating ranges in combination with reflectors can be found in the respective data sheet (online)

Diffuse sensors with background suppression

These diffuse sensors with precise adjustment via multiturn potentiometer are designed for particularly reliable switching. With models that work on nearly any background, optimized versions for highly glossy objects and objects with colored structures as well for the detection of gaps and openings are available.

HRTL 53 / HRTR 53

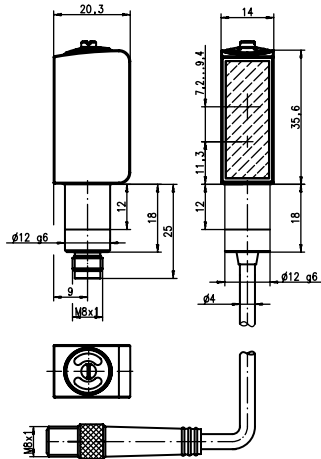
Depending on the design, these sensors offer a large range or small light spots for the reliable detection of glossy, structured objects. A model with elongated light spot specially produced for transparent objects or objects with openings is also available for delivery.

Benefits:

- 316L stainless steel housing in HYGIENE-Design
- Enclosed optics design prevents bacterial carry-overs
- ECOLAB and CleanProof+ tested
- Exact range adjustment via 8-turn potentiometer
- Collimated light beam propagation with small beam diameter permits identical switching behavior within the specified detection range

| Part no. | Part description | Operating range [m] Op. range limit [m] | Light source | Connection | Description |
|----------|-------------------|--|---------------|---------------------------------------|--|
| 50115203 | HRTL 53/66-S8 | 0.015 ... 0.4 m 0.015 ... 0.4 m | Laser, 1, red | Connector, M8, 4-pin, stainless steel | Switching frequency: 2,000 Hz; Digital switching output 1: transistor, push-pull, light switching (PNP)/dark switching (NPN); Digital switching output 2: transistor, push-pull, dark switching (PNP)/light switching (NPN), DC, multiturn potentiometer, HYGIENE design |
| 50115202 | HRTL 53/66,5000 | 0.015 ... 0.4 m 0.015 ... 0.4 m | Laser, 1, red | Cable, 5,000 mm, 4-wire | Switching frequency: 2,000 Hz; Digital switching output 1: transistor, push-pull, light switching (PNP)/dark switching (NPN); Digital switching output 2: transistor, push-pull, dark switching (PNP)/light switching (NPN), DC, multiturn potentiometer, HYGIENE design |
| 50107499 | HRTR 53/66-S8 | 0.005 ... 0.4 m 0.005 ... 0.4 m | LED, red | Connector, M8, 4-pin, stainless steel | Switching frequency: 1,000 Hz; Digital switching output 1: transistor, push-pull, light switching (PNP)/dark switching (NPN); Digital switching output 2: transistor, push-pull, dark switching (PNP)/light switching (NPN), DC, multiturn potentiometer, HYGIENE design |
| 50121900 | HRTR 53/66,5000 | 0.005 ... 0.4 m 0.005 ... 0.4 m | LED, red | Cable, 5,000 mm, 4-wire | Switching frequency: 1,000 Hz; Digital switching output 1: transistor, push-pull, light switching (PNP)/dark switching (NPN); Digital switching output 2: transistor, push-pull, dark switching (PNP)/light switching (NPN), DC, multiturn potentiometer, HYGIENE design |
| 50107503 | HRTR 53/66-S-S8 | 0.005 ... 0.2 m 0.005 ... 0.2 m | LED, red | Connector, M8, 4-pin, stainless steel | Switching frequency: 1,000 Hz; Digital switching output 1: transistor, push-pull, light switching (PNP)/dark switching (NPN); Digital switching output 2: transistor, push-pull, dark switching (PNP)/light switching (NPN), DC, multiturn potentiometer, small light spot (S), HYGIENE design |
| 50121899 | HRTR 53/66-S,5000 | 0.005 ... 0.2 m 0.005 ... 0.2 m | LED, red | Cable, 5,000 mm, 4-wire | Switching frequency: 1,000 Hz; Digital switching output 1: transistor, push-pull, light switching (PNP)/dark switching (NPN); Digital switching output 2: transistor, push-pull, dark switching (PNP)/light switching (NPN), DC, multiturn potentiometer, small light spot (S), HYGIENE design |
| 50120622 | HRTR 53/66-V-S8 | 0.015 ... 0.1 m 0.015 ... 0.1 m | LED, red | Connector, M8, 4-pin, stainless steel | Application: detection of high-gloss or polished surfaces; Switching frequency: 1,000 Hz; Digital switching output 1: transistor, push-pull, light switching (PNP)/dark switching (NPN); Digital switching output 2: transistor, push-pull, dark switching (PNP)/light switching (NPN), DC, multiturn potentiometer, V-optics, HYGIENE design |
| 50107507 | HRTR 53/66-XL-S8 | 0.005 ... 0.1 m 0.005 ... 0.1 m | LED, red | Connector, M8, 4-pin, stainless steel | Switching frequency: 1,000 Hz; Digital switching output 1: transistor, push-pull, light switching (PNP)/dark switching (NPN); Digital switching output 2: transistor, push-pull, dark switching (PNP)/light switching (NPN), DC, multiturn potentiometer, extra long light spot (XL), HYGIENE design |
| 50122261 | HRTR 53/66-VXL-S8 | 0.01 ... 0.09 m 0.01 ... 0.09 m | LED, red | Connector, M8, 4-pin, stainless steel | Application: detection of top layers; Switching frequency: 1,000 Hz; Digital switching output 1: transistor, push-pull, light switching (PNP)/dark switching (NPN); Digital switching output 2: transistor, push-pull, dark switching (PNP)/light switching (NPN), DC, multiturn potentiometer, V-optics, extra long light spot (XL), HYGIENE design |

Dimensioned drawings: 53 series



53 series

ACCESSORIES: 53 SERIES

Connection technology

Connection cables

| Part no. | Part description | Connection 1 | No. of pins | Cable length | Sheathing material |
|----------|--------------------|-------------------------------|-------------|--------------|--------------------|
| 50106154 | K-D M8W-4P-2m-FAB | Connector, M8, angled, female | 4-pin | 2,000 mm | FAB |
| 50110273 | K-D M8W-4P-10m-FAB | Connector, M8, angled, female | 4-pin | 10,000 mm | FAB |
| 50106152 | K-D M8A-4P-2m-FAB | Connector, M8, axial, female | 4-pin | 2,000 mm | FAB |
| 50106153 | K-D M8A-4P-5m-FAB | Connector, M8, axial, female | 4-pin | 5,000 mm | FAB |
| 50110274 | K-D M8A-4P-10m-FAB | Connector, M8, axial, female | 4-pin | 10,000 mm | FAB |

Further connection cables can be found on our website

Mounting systems

Rod mounts

| Part no. | Part description | Design | Fastening at device | Fastening at system | Material |
|----------|----------------------|-----------------|---------------------|---------------------|-----------------|
| 50116817 | BTU 053M.5F-D12-A090 | Mounting system | Screw type | For 12 mm rod | Stainless steel |

Further rod mounts can be found on our website

Reflectors and reflective tapes

Standard reflectors

| Part no. | Part description | Design | Reflective surface | Fastening | Material |
|----------|------------------|-------------|--------------------|---------------------------------|----------|
| 50081283 | TKS 20X40 | Rectangular | 16 mm × 38 mm | Through-hole mounting, adhesive | Plastic |
| 50040820 | TKS 40X60 | Rectangular | 37 mm × 56 mm | Through-hole mounting, adhesive | Plastic |
| 50022816 | TKS 100X100 | Rectangular | 96 mm × 96 mm | Through-hole mounting, adhesive | Plastic |

Dimensional tolerances for all specified dimensions: ± 0.2 mm
Further standard reflectors can be found on our website

Micro-triad-type reflectors

| Part no. | Part description | Design | Reflective surface | Fastening | Material |
|----------|------------------|-------------|--------------------|---------------------------------|----------|
| 50104130 | MTKS 20x40.1 | Rectangular | 17 mm × 38 mm | Through-hole mounting, adhesive | Plastic |
| 50117583 | MTKS 50x50.1 | Rectangular | 50 mm × 50 mm | Through-hole mounting, adhesive | Plastic |

Dimensional tolerances for all specified dimensions: ± 0.2 mm
Further micro-triad-type reflectors can be found on our website

Reflective tapes for standard applications

| Part no. | Part description | Design | Reflective surface | Fastening | Material |
|----------|------------------|-------------|--------------------|---------------|----------|
| 50108300 | REF 4-A-50x50 | Rectangular | 50 mm × 50 mm | Self-adhesive | Plastic |

Further reflective tapes can be found on our website