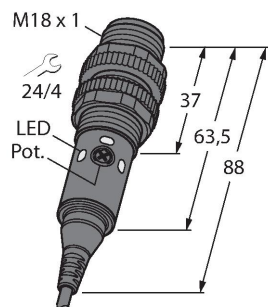


# S18-2VPDL-2M

## Photoelectric Sensor – Diffuse Mode Sensor



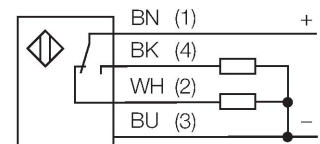
### Technical data

|                             |                                 |
|-----------------------------|---------------------------------|
| Type                        | S18-2VPDL-2M                    |
| ID                          | 3042165                         |
| <b>Optical data</b>         |                                 |
| Function                    | Proximity switch                |
| Operating mode              | Diffuse                         |
| Light type                  | Red                             |
| Wavelength                  | 624 nm                          |
| Range                       | 1...750 mm                      |
| <b>Electrical data</b>      |                                 |
| Operating voltage           | 10...30 VDC                     |
| Residual ripple             | < 10 % U <sub>ss</sub>          |
| No-load current             | ≤ 16 mA                         |
| Short-circuit protection    | yes / Cyclic                    |
| Reverse polarity protection | yes                             |
| Output function             | Complementary contact, PNP      |
| Readiness delay             | ≤ 100 ms                        |
| Response time typical       | < 1.5 ms                        |
| Setting option              | Potentiometer                   |
| <b>Mechanical data</b>      |                                 |
| Design                      | Tube, S18                       |
| Dimensions                  | Ø 18 x 88 mm                    |
| Housing material            | Plastic, Thermoplastic material |
| Lens                        | Acrylic                         |
| Electrical connection       | Cable, 2 m, PVC                 |
| Number of cores             | 4                               |
| Core cross-section          | 0.5 mm <sup>2</sup>             |
| Ambient temperature         | -40...+70 °C                    |

### Features

- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40...+70 °C
- Sensitivity adjusted via potentiometer
- Visible red LED light
- Operating voltage: 10...30 VDC
- PNP switching output, changeover

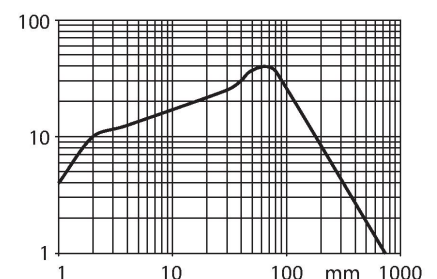
### Wiring diagram



### Functional principle

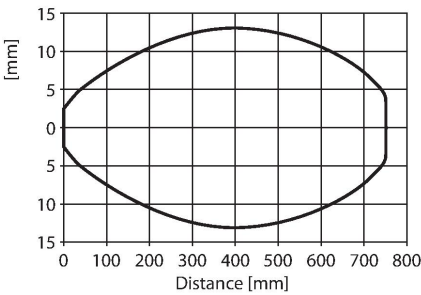
Emitter and receiver are incorporated in the same housing. The light reflected by the target is detected and causes the sensor to switch. The switching distance thereby depends largely on the reflectivity of the target.

### Excess Gain Curve



Technical data

|                        |                  |
|------------------------|------------------|
| Protection class       | IP67             |
| Power-on indication    | LED, Green       |
| Switching state        | 2 × LEDs, Yellow |
| Error indication       | Flashing         |
| Excess gain indication | LED              |
| Alarm display          | Flashing         |
| Tests/approvals        |                  |
| Approvals              | CE               |



Accessories

MW-186945004

Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

BST-18N6947215

Mounting clamp for threaded barrel sensors, without dead-stop; material: PA6

Accessories

| Dimension drawing                                        | Type          | ID      |                                                                                                                                                                                                                  |
|----------------------------------------------------------|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>M12 x 1<br/>15<br/>11.5<br/>42<br/>L<br/>50<br/>5</p> | RKC4.5T-2/TEL | 6625016 | Connection cable, female M12, straight, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a> |
| <p>15<br/>26.5<br/>32<br/>L<br/>50<br/>5</p>             | WKC4.5T-2/TEL | 6625028 | Connection cable, female M12, angled, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>   |