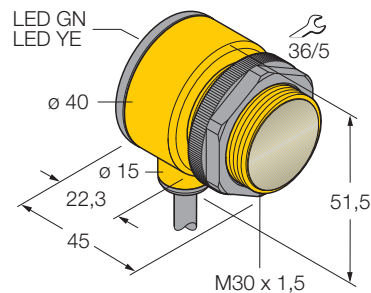


**photoelectric sensor  
receiver  
T30SP6R**

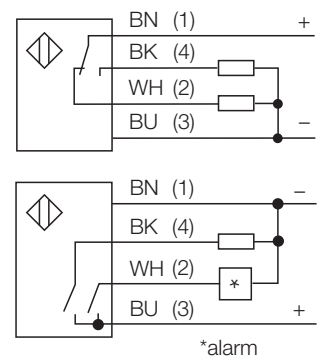
**TURCK**

Industrial  
Automation



- selectable light or dark operation or light operation with alarm function
- Connection cable, 2 m
- degree of protection IP68 - IP69K
- Operating voltage 10...30 VDC
- pnp switching output
- degree of protection IP69K

**Wiring diagram**

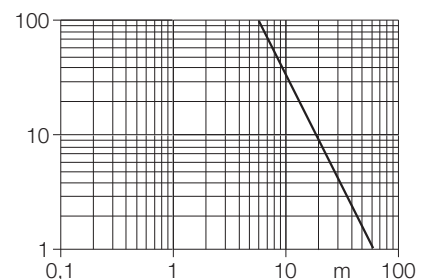


**Functional principle**

Opposed mode sensors consist of an emitter and receiver. They are installed opposite each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque targets. An excellent contrast between light and dark conditions and an extremely high excess gain are typical of this sensing mode, thus allowing operation over larger distances and under difficult conditions.

**Excess gain curve**

Excess gain in relation to the distance



|                              |                                |
|------------------------------|--------------------------------|
| <b>Type</b>                  | T30SP6R                        |
| Ident-No.                    | 3032489                        |
| <b>Operating mode</b>        | opposed mode sensor (receiver) |
| Range                        | 0... 60000 mm                  |
| Ambient temperature          | -40...+ 70°C                   |
| <b>Operating voltage</b>     | 10... 30 VDC                   |
| DC rated operational current | ≤ 150 mA                       |
| No-load current $I_0$        | ≤ 25 mA                        |
| Output function              | connection programmable, PNP   |
| Switching frequency          | ≤ 160Hz                        |
| Readiness delay              | ≤ 100 ms                       |
| Overcurrent release          | >220 mA                        |
| <b>Housing</b>               | cylindrical/threaded, T30      |
| Dimensions                   | 45x 40x 51.5mm                 |
| Housing material             | Plastic, PBT                   |
| Lens                         | plastic, Lexan                 |
| Electrical connection        | cables                         |
| Cable length                 | 2 m                            |
| Cable cross section:         | 4 x 0.5mm <sup>2</sup>         |
| Protection class             | IP68 / IP69K                   |
| <b>Operating voltage</b>     | LED green                      |
| Switching state              | LED yellow                     |
| Error indication             | LED green flashing             |
| Alarm display                | LED yellow flashing            |