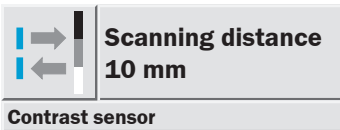


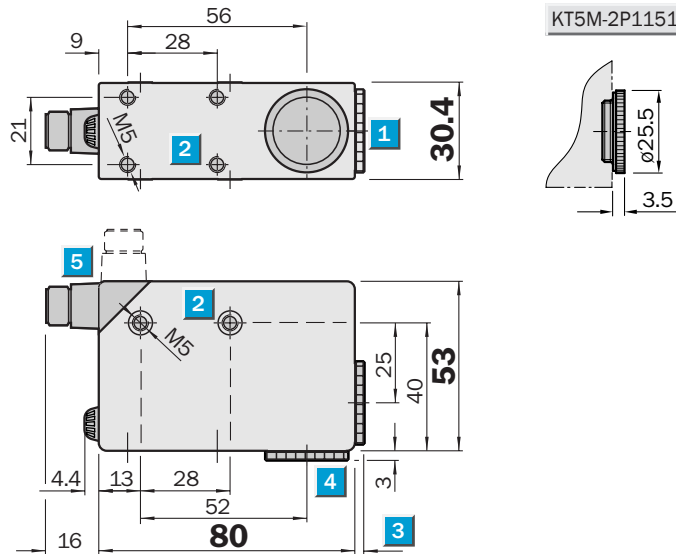
## KT5M-2 WHITE Contrast sensor



- White light source
- Manual switching threshold adjustment
- Adjustment switch for light/dark
- Switching frequency 10,000/s
- Analogue output
- Robust against fluttering materials

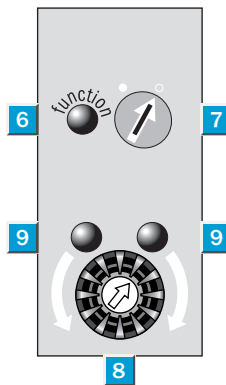


### Dimensional drawing



### Adjustments possible

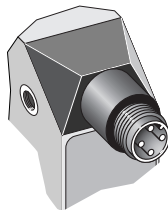
KT5M-2P1151



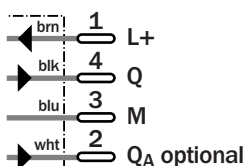
- 1 Lens (light transmission), can be replaced by item 4
- 2 M5 mounting holes, 5.5 mm deep
- 3 See dimensional drawing of lens
- 4 Blind screw, can be replaced by item 1
- 5 4-pin, M12 x 1 plug (rotatable through 90°)
- 6 Function signal indicator (yellow)
- 7 Operating mode selector switch
- Light-switching
- Dark-switching
- 8 Switching threshold adjustment
- 9 Adjustment indicators (green)

### Connection type

KT5M-2P1151



4-pin, M12



| Technical data  |  | KT5M-2 | P1151 |  |  |  |  |  |  |  |  |
|---|--|--------|-------|--|--|--|--|--|--|--|--|
| <b>Scanning distance</b>  | 10 ± 3 mm                                    |        |       |  |  |  |  |  |  |  |  |
| from front edge of lens   |  |        |       |  |  |  |  |  |  |  |  |
| <b>Light spot dimension</b>                                     | 1.2 x 4.2 mm                                 |        |       |  |  |  |  |  |  |  |  |
| <b>Light spot position</b>                                      | Longitudinal                                 |        |       |  |  |  |  |  |  |  |  |
| <b>Light source <sup>1)</sup>; light type;</b>                  | LED; white light;                            |        |       |  |  |  |  |  |  |  |  |
| <b>Supply voltage V<sub>S</sub></b>                             | 10 ... 30 V DC <sup>2)</sup>                 |        |       |  |  |  |  |  |  |  |  |
| Residual ripple <sup>3)</sup>                                   | < 5 V <sub>pp</sub>                          |        |       |  |  |  |  |  |  |  |  |
| Current consumption <sup>4)</sup>                               | < 80 mA                                      |        |       |  |  |  |  |  |  |  |  |
| <b>Switching outputs</b>  | Light-/dark-switching, selectable            |        |       |  |  |  |  |  |  |  |  |
|   | PNP: HIGH = V <sub>S</sub> - < 2 V/LOW = 0 V |        |       |  |  |  |  |  |  |  |  |
| Output current I <sub>A</sub> max.                              | 100 mA                                       |        |       |  |  |  |  |  |  |  |  |
| Response time <sup>5)</sup> ; switching frequency <sup>6)</sup> | 50 µs; 10000/s                               |        |       |  |  |  |  |  |  |  |  |
| Time delay  | No timing element                            |        |       |  |  |  |  |  |  |  |  |
| <b>Analogue output Q<sub>A</sub></b>                            | 0.3 ... 10 mA                                |        |       |  |  |  |  |  |  |  |  |
| <b>Switching threshold</b>                                      | Adjustable (standard type)                   |        |       |  |  |  |  |  |  |  |  |
| <b>Connection type</b>  | Plug 4-pin, M12                              |        |       |  |  |  |  |  |  |  |  |
| <b>VDE protection class <sup>7)</sup></b>                       | <input type="checkbox"/>                     |        |       |  |  |  |  |  |  |  |  |
| <b>Enclosure rating</b>   | IP 67  |        |       |  |  |  |  |  |  |  |  |
| <b>Circuit protection <sup>8)</sup></b>                         | A, B, C                                      |        |       |  |  |  |  |  |  |  |  |
| <b>Ambient temperature T<sub>A</sub></b>                        | Operation -10 ... +55 °C                     |        |       |  |  |  |  |  |  |  |  |
|   | Storage -25 ... +75 °C                       |        |       |  |  |  |  |  |  |  |  |
| <b>Shock load</b>   | To IEC 68                                    |        |       |  |  |  |  |  |  |  |  |
| <b>Weight</b>   | Approx. 400 g                                |        |       |  |  |  |  |  |  |  |  |
| <b>Housing</b>  | Cast zinc                                    |        |       |  |  |  |  |  |  |  |  |

<sup>1)</sup> Average service life 100,000 h at T<sub>A</sub> = +25 °C  
<sup>2)</sup> Limit values

<sup>3)</sup> May not exceed or fall short of V<sub>S</sub> tolerances  
<sup>4)</sup> Without load

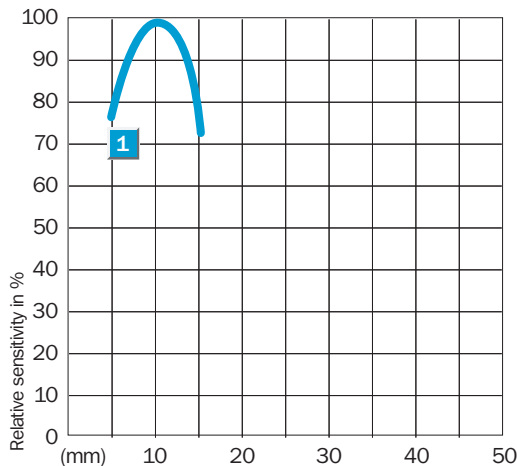
<sup>5)</sup> Signal transit time with resistive load  
<sup>6)</sup> With light/dark ratio 1:1  
<sup>7)</sup> Reference voltage 50 V DC

<sup>8)</sup> A = V<sub>S</sub> connections reverse-polarity protected  
 B = Outputs short-circuit protected  
 C = Interference pulse suppression

| Order information |           |
|-------------------|-----------|
| Type              | Order no. |
| KT5M-2P1151       | 1044400   |

**Scanning distance**

**1** Scanning distance 10 mm



**Great Britain**  
 Phone +44 (0)1727 83 11 21  
 E-Mail info@sick.co.uk

**USA**  
 Phone +1(952) 941-6780  
 tollfree +1-800-325-7425  
 E-Mail info@sickusa.com

**Australia**  
 Phone +61 3 9497 4100  
 tollfree +1800 33 48 02  
 E-Mail sales@sick.com.au

More representatives and agencies in all major industrial nations at [www.sick.com](http://www.sick.com)

