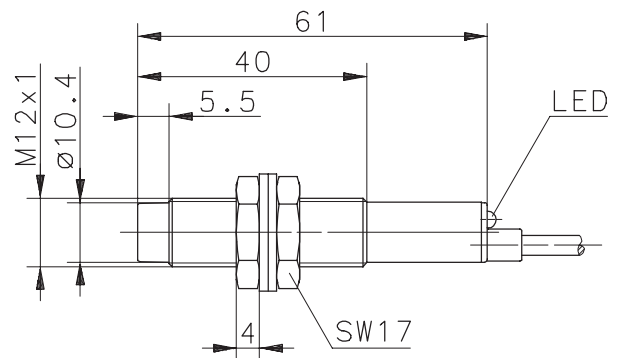
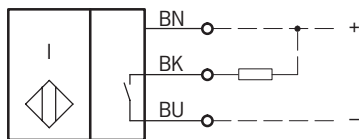


**Anschlußschema**



**Kenndaten nach EN 60947-5-2**

**Elektrische Daten**

|                                    |           |                                                                               |
|------------------------------------|-----------|-------------------------------------------------------------------------------|
| Bemessungsbetriebsspannungsbereich | $U_B$     | 10 - 30V DC                                                                   |
| Bemessungsisolationsspannung       | $U_I$     | 75V DC                                                                        |
| Bemessungsstoßspannungsfestigkeit  | $U_{imp}$ | 500V                                                                          |
| Spannungsfall                      | $U_d$     | $\leq 1,5V$ (zuzüglich 0,06 V pro m Anschlußleitung und 200 mA Last bei 20°C) |
| Gebrauchskategorie                 |           | DC-13                                                                         |
| Bemessungsbetriebsstrom            | $I_e$     | $\leq 200mA$                                                                  |
| Reststrom                          | $I_r$     | $< 0,1mA$                                                                     |
| Leerlaufstrom                      | $I_0$     | $< 11mA$                                                                      |
| Schutzart                          |           | IP 67                                                                         |
| Art des Kurzschlußschutzes         |           | taktend                                                                       |
| Bemessungsschaltabstand            | $s_n$     | 4mm                                                                           |
| gesicherter Schaltabstand          | $s_a$     | 0 ... 3,2mm                                                                   |
| Wiederholgenauigkeit               | $R$       | $\leq 5\%$                                                                    |
| Hysterese                          | $H$       | $\approx 10\%$                                                                |
| Schaltfrequenz                     | $f$       | 400Hz                                                                         |
| Schaltelementfunktion              |           | DC, Schließer                                                                 |
| Einbauart                          |           | nicht bündig                                                                  |
| Verpolschutz                       |           | ja                                                                            |
| Ausgang                            |           | dauerkurzschluß- und überlastfest                                             |
| Bereitschaftsverzug                | $t_v$     | $\leq 50ms$                                                                   |

**Elektromagnetische Verträglichkeit (EMV)**

|                                       |               |
|---------------------------------------|---------------|
| Hochfrequenzbeeinflussungsfestigkeit  | IEC 61000-4-3 |
| Elektrostatische Entladungsfestigkeit | IEC 61000-4-2 |
| Transientenfestigkeit                 | IEC 61000-4-4 |
| Störaussendung                        | EN55011       |
| Stoßspannungsfestigkeit               | IEC 255-5     |

**Mechanische Daten**

|                     |                                                         |
|---------------------|---------------------------------------------------------|
| Umgebungstemperatur | -25°C bis +70°C                                         |
| Frontkappe          | PA 6.6, schwarz                                         |
| Gehäuse             | Messing, vernickelt                                     |
| Funktionsanzeige    | LED, gelb                                               |
| Anschlußart         | Kabel 3 x 0,14mm <sup>2</sup> x 2m, PVC-Mantel, schwarz |
| Befestigungshilfen  | 2 x Sechskantmutter und 2 x Zahnscheibe                 |

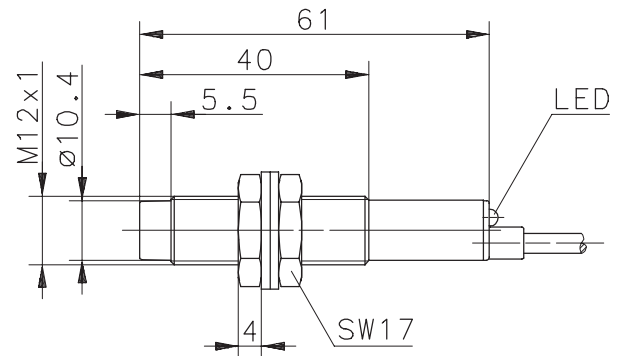
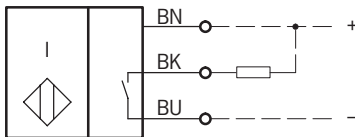
# Technical Data

## Inductive Proximity Switch

Type: **KIN-M12NS/004-KL2**

Part.-No.: **650.2304.001**

### Wiring Diagram



### Technical Data according to EN 60947-5-2

#### Electrical Data

|                                  |           |                                                                |
|----------------------------------|-----------|----------------------------------------------------------------|
| Operational voltage range        | $U_B$     | 10 - 30V DC                                                    |
| Rated insulation voltage         | $U_i$     | 75V DC                                                         |
| Rated impulse withstand voltage  | $U_{imp}$ | 500V                                                           |
| Voltage drop                     | $U_d$     | $\leq 1,5V$ [add. 0,06 V per m cable and 200 mA Load at 20 °C] |
| Utilization category             |           | DC-13                                                          |
| Rated operational current        | $I_e$     | $\leq 200mA$                                                   |
| Off-state current                | $I_r$     | $< 0,1mA$                                                      |
| No-load supply current           | $I_0$     | $< 11mA$                                                       |
| Type of protection               |           | IP 67                                                          |
| Short-circuit protection         |           | pulsed                                                         |
| Rated operating distance         | $s_n$     | 4mm                                                            |
| Assured operating distance       | $s_a$     | 0 ... 3,2mm                                                    |
| Repeat accuracy                  | $R$       | $\leq 5\%$                                                     |
| Differential travel (hysteresis) | $H$       | $\approx 10\%$                                                 |
| Frequency of operating cycles    | $f$       | 400Hz                                                          |
| Switching function               |           | DC, N.O.                                                       |
| Mounting                         |           | non flush                                                      |
| False polarity protection        |           | yes                                                            |
| Output                           |           | permanent overload and s.c.p.                                  |
| Time delay before availability   | $t_v$     | $\leq 50ms$                                                    |

#### Elektromagnetic compatibility (EMC)

|                                         |               |
|-----------------------------------------|---------------|
| Electromagnetic field test              | IEC 61000-4-3 |
| Electrostatic discharge test            | IEC 61000-4-2 |
| Electrical fast transient immunity test | IEC 61000-4-4 |
| Radiated disturbance field strength     | EN55011       |
| Impulse voltage withstandability        | IEC 255-5     |

#### Mechanical Data

|                       |                                                               |
|-----------------------|---------------------------------------------------------------|
| Operating temperature | -25°C bis +70°C                                               |
| Front cap             | PA 6.6, black                                                 |
| Housing               | brass, nickel plated                                          |
| Indication            | LED, yellow                                                   |
| Termination type      | Cable 3 x 0,14mm <sup>2</sup> x 2m; PVC - Outer jacket, black |
| For attachment        | 2 x hexagon nut and 2 x toothed washer                        |