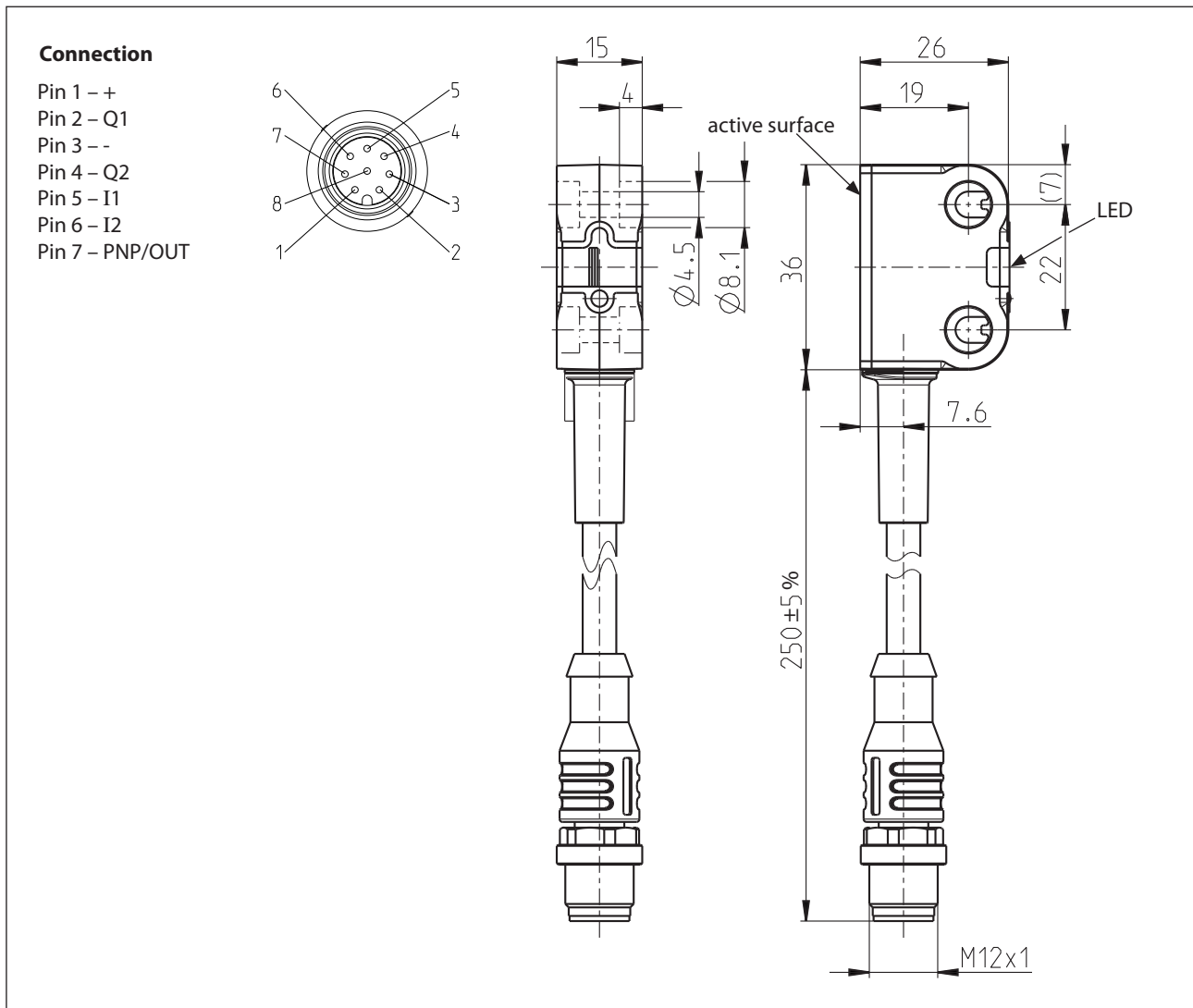


Safety switch

Series SRF

Description **SRF-4/1/1-E-U**

Article number **6075685094**



Sensing distance (Only in conjunction with actuator SRF-0.)


| | | min. | typ. | max. |
|--------------------------------|----------|-------|-------|-------|
| Rated sensing distance | S_n | | 13 mm | |
| Assured sensing distance – On | S_a | 10 mm | | |
| Hysteresis | H | | 2 mm | |
| Assured sensing distance – Off | S_{ar} | | | 25 mm |

| Electrical Data | | |
|---|------------|--|
| Rated operating voltage | U_e | 24 V, Reverse polarity protection, +25 %, - 20 % |
| Voltage level | | according to Typ 3 EN 61131-2 |
| Rated insulation voltage | U_i | 75 V DC |
| Rated impulse withstand voltage | U_{imp} | 500 V |
| Rated conditional short circuit current | | 100 A |
| No-load current | I_0 | ≤ 50 mA |
| Transponder frequency | | 125 kHz |
| Repeatability | R | 0,1 x S_n |
| operating frequency | | ≤ 1 Hz |
| Switch-off | t_a | max. 100 ms + 7 ms x following SRF |
| Time delay | t_v | max. 2 s |
| Electromagnetic interference | | according to EN IEC 60947-5-3 and EN 61326-3-1 |
| Outputs Q1,Q2 | | |
| Switching element function | | pnp NO |
| Rated operating current | I_e | 100 mA |
| Leakage current | I_r | ≤ 1 mA DC |
| Switching elements | | Sustained short-circuit and overload protection |
| Voltage drop | U_d | ≤ 3 V |
| Type of short circuit protection | | thermal / digital (clocking) |
| Utilization category | | DC-13 |
| Output PNP/OUT | | |
| Rated operating current | I_e | 10 mA |
| Switching elements | | Sustained short-circuit and overload protection |
| Voltage at Do | V_{High} | ≥ $U_e - 1,5 V$ |
| Utilization category | | current limited |

| Mechanical Data | |
|---------------------------------------|---|
| Enclosure | PA66 + PA6, red |
| Tension relief | TPE, black |
| Mounting | 2 holes Ø 4,5 (for M4 screws) |
| Indication | 1 x LED red / green operating state 1 x LED yellow Actuating state |
| Shock and Swing | acc. to EN IEC 60947-5-2 |
| Ambient temperature | -25°C ... +70°C |
| Storage temperature | -25°C ... +70°C |
| Maximum relative humidity | 93 % @ 40 °C without condensation |
| Altitude | ≤ 2000 m NHN |
| Connection | 0,25 m cable with plug connector M12 male, 8-pole |
| Type of protection | IP69 |
| Protection class acc. to EN IEC 61558 | III |

| Safety data (according to EN ISO 13849-1) | |
|---|-------------------------------|
| Up to PL | e |
| Category | 4 |
| Service life | 20 years |
| PFHD module 1 | 6×10^{-9} 1/h |
| SILCL | 3 (according to DIN EN 62061) |

| Standards | |
|-----------|--|
| | ISO 12100, EN ISO 13849-1:2015, EN ISO 13849-2:2012, |
| | IEC 62061:2013, IEC 61508, IEC 62061: 2013, IEC 61508, |
| | ISO 60947-5-2, ISO 60947-5-3:2013, ISO 14119, EN 61326-3-1, EN 61131-2 |

| EU-Conformity | |
|---------------|--|
| | according to directive 2006/42/EG (Safety-of-Machinery-Directive) |
| | according to directive 2011/65/EU (RoHS II) |
| | according to directive 2014/30/EU (EMV-Richtlinie) |
| | according to directive 2014/53/EU (RED) |
| | according to directive 2012/19/EU (EU-WEEE II)  |

| Approvals (in preparation) | |
|----------------------------|---|
| | TÜV Nord, cCSAus (class 2 Power source) |

| Notes | |
|--|--|
| The specified protection classification (IP code) applies only when an appropriate plug connector is used. | |