

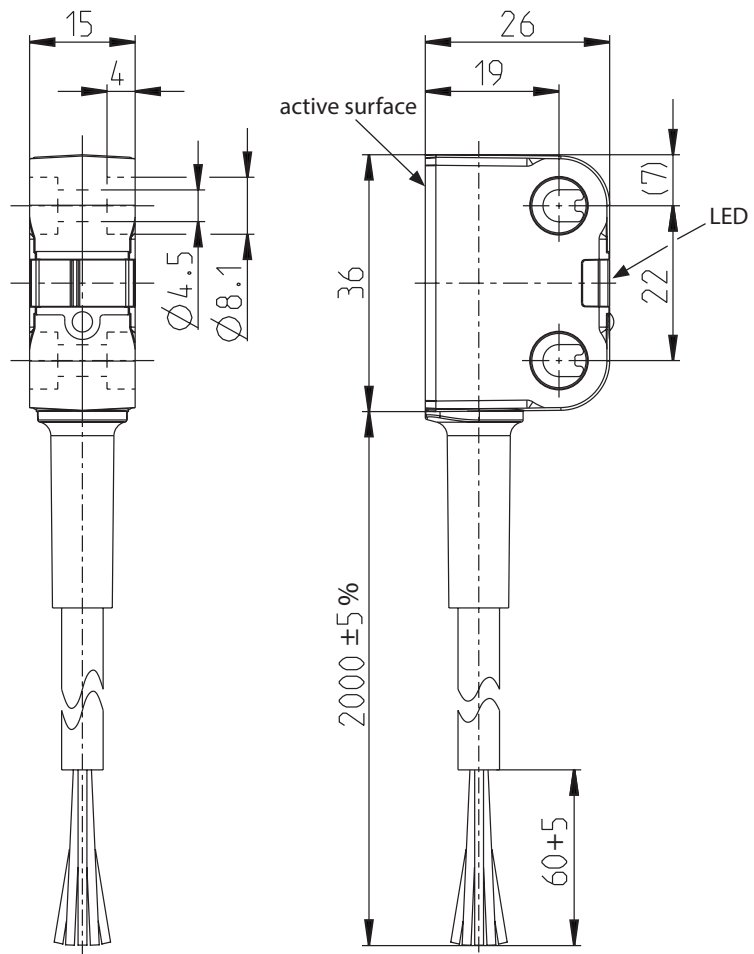
**Safety switch**  
Series SRF

Description **SRF-2/1/1-A2-L**

Article number **6075685118**

**Connection**

- BN – +
- WH – Q1
- BU – -
- BK – Q2
- GY – PNP/OUT



**Sensing distance** (Only in conjunction with associated actuator from BERNSTEIN AG)


|                                |          | 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 DC, Reverse polarity protection, +25 %, - 20 % PELV/SELV power supply unit |
| 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 operating frequency       | R         | 0,1 x $S_n$<br>≤ 1 Hz   |
| Switch-off                              | $t_s$     | max. 100 ms   |
| Time delay                              | $t_v$     | max. 2 s  |
| Electromagnetic interference            |           | according to EN IEC 60947-5-3 and EN 61326-3-1                                  |
| Emergency operation function            |           | activated   |
| Outputs Q1,Q2                           |           |   |
| Voltage level                           |           | according to Typ 3 EN 61131-2   |
| Switching element function              |           | PNP NO (OSSD)   |
| 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                          |           |   |
| Function                                |           | PNP, Off with closed safety guard   |
| Rated operating current                 | $I_e$     | 10 mA   |
| Switching elements                      |           | Sustained short-circuit and overload protection                                 |
| Voltage drop                            | $U_d$     | ≤ 3 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<br>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                              | ≤ 4000 m NHN  |
| Connection                            | Cable 5 x 0,34 mm <sup>2</sup> x 2 m ±5 %, PUR - Outer jacket         |
| Type of protection                    | IP69  |
| Protection class acc. to EN IEC 61558 | III   |

| Safety data      |                        |                        |
|------------------|------------------------|------------------------|
| Up to PL         | e                      | acc. to EN ISO 13849-1 |
| Category         | 4                      |                        |
| PFH <sub>D</sub> | 6x10 <sup>-9</sup> 1/h | acc. to DIN EN 62061   |
| SIL CL           | 3                      |                        |
| Service life     | 20 years               |                        |

| Standards |  |
|-----------|--|
|           | EN 60947-1, EN 60947-5-2, EN 61326-3-1                 |
|           | EN ISO 13849-1, EN 62061, EN 60947-5-3, EN ISO 13849-2 |
|           | EN 60204-1, ETSI EN 301489-1, ETSI EN 300330-1         |

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

| Approvals |   |
|-----------|---|
|           | TÜV Nord, cCSAus (class 2 Power source) |
|           | FCC ID: 2ABA6SRF                        |
|           | IC: 11535A-SRF                          |