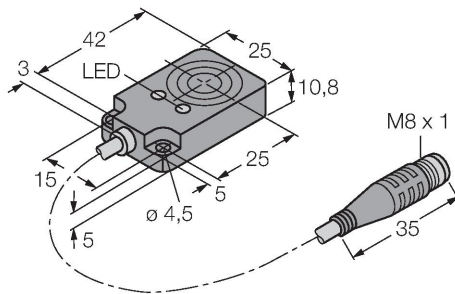


# BC8-Q10-RN6X2-0.85-V1131/S90

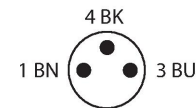
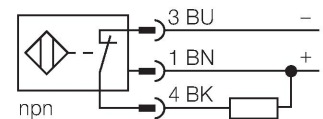
## Capacitive Sensor



### Features

- Rectangular, height 10.8mm
- Active face on top
- Plastic, PBT-GF30-V0
- Fixed settings
- DC 3-wire, 10...30 VDC
- NC contact, NPN output
- M8 x 1 connector

### Wiring diagram



### Functional principle

Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as non-conductive metal objects.

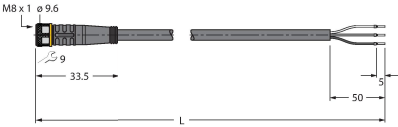
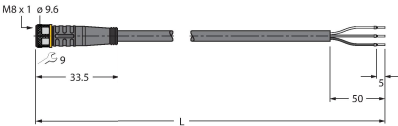
### Technical data

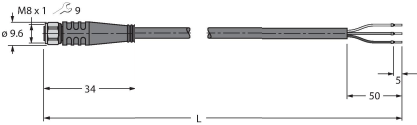
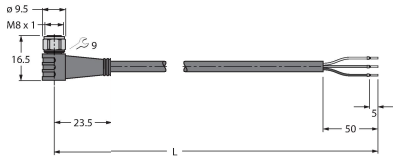
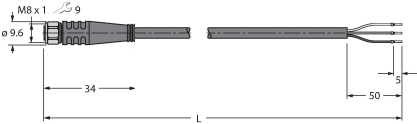
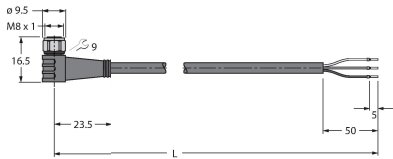
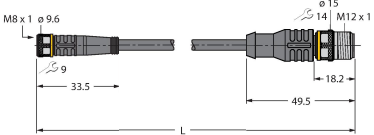
|                                        |                                                           |
|----------------------------------------|-----------------------------------------------------------|
| Type                                   | BC8-Q10-RN6X2-0.85-V1131/S90                              |
| ID                                     | 2620114                                                   |
| Special version                        | S90 Corresponds to:With PUR cable                         |
| Rated switching distance (flush)       | 8 mm                                                      |
| Rated switching distance (non-flush)   | 8 mm                                                      |
| Secured operating distance             | $\leq (0.72 \times S_n)$ mm                               |
| Hysteresis                             | 1...20 %                                                  |
| Temperature drift                      | Typical 20 %                                              |
| Repeat accuracy                        | $\leq 2$ % of full scale                                  |
| Ambient temperature                    | -25...+70 °C                                              |
| <b>Electrical data</b>                 |                                                           |
| Operating voltage $U_B$                | 30 VDC                                                    |
| Ripple $U_{ss}$                        | $\leq 10$ % $U_{Bmax}$                                    |
| DC rated operating current $I_e$       | $\leq 200$ mA                                             |
| No-load current                        | $\leq 15$ mA                                              |
| Residual current                       | $\leq 0.1$ mA                                             |
| Switching frequency                    | 0.1 kHz                                                   |
| Oscillation frequency                  | According to EN 60947-5-2, 8.2.6.2 Table 9: 0.1...2.0 MHz |
| Isolation test voltage                 | 0.5 kV                                                    |
| Output function                        | 3-wire, NC contact, NPN                                   |
| Short-circuit protection               | yes/Cyclic                                                |
| Voltage drop at $I_e$                  | $\leq 1.8$ V                                              |
| Wire break/reverse polarity protection | yes/Complete                                              |
| <b>Tests/approvals</b>                 |                                                           |
| Approvals                              | UL                                                        |
| UL registration number                 | E210608                                                   |

Technical data

| Mechanical data       |                                            |
|-----------------------|--------------------------------------------|
| Design                | Rectangular, Q10                           |
| Dimensions            | 42 x 25 x 10.8 mm                          |
| Housing material      | Plastic, PBT-GF30-V0                       |
| Active area material  | PBT-GF30-V0                                |
| Electrical connection | Connector, M8 × 1                          |
| Cable quality         | Ø 3 mm, Lif9Y-11Y, PUR, 0.85 m             |
| Core cross-section    | 3 x 0.14 mm²                               |
| Vibration resistance  | 55 Hz (1 mm)                               |
| Shock resistance      | 30 g (11 ms)                               |
| Protection class      | IP67                                       |
| MTTF                  | 1080 years acc. to SN 29500 (Ed. 99) 40 °C |
| Power-on indication   | LED, Green                                 |
| Switching state       | LED, Yellow                                |

Accessories

| Dimension drawing                                                                   | Type        | ID      |                                                                                                                        |
|-------------------------------------------------------------------------------------|-------------|---------|------------------------------------------------------------------------------------------------------------------------|
|  | PKG3M-2/TXL | 6625550 | Connection cable, M8 female connector, straight, 3-pin, cable length: 2 m, jacket material: PUR, black; cULus approval |
|  | PKW3M-2/TXL | 6625556 | Connection cable, M8 female connector, angled, 3-pin, cable length: 2 m, jacket material: PUR, black; cULus approval   |
|  | PKG3M-2/TEL | 6625058 | Connection cable, M8 female connector, straight, 3-pin, cable length: 2 m, jacket material: PVC, black; cULus approval |
|  | PKW3M-2/TEL | 6625064 | Connection cable, M8 female connector, angled, 3-pin, cable length: 2 m, jacket material: PVC, black; cULus approval   |

| Dimension drawing                                                                   | Type                | ID      |                                                                                                                                                              |
|-------------------------------------------------------------------------------------|---------------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | PKGV3M-2/TEL        | 6625385 | Connection cable, M8 female connector, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: PVC, black; cULus approval         |
|    | PKWV3M-2/TEL        | 6625391 | Connection cable, M8 female connector, angled, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: PVC, black; cULus approval           |
|    | PKGV3M-2/TXL        | 6627803 | Connection cable, M8 female connector, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: PUR, black; cULus approval         |
|  | PKWV3M-2/TXL        | 6628798 |                                                                                                                                                              |
|  | PKG4M-2-RSC4.4T/TXL | 6627063 | Extension cable, M8 female connector, straight, 4-pin to M12 male connector, straight, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval |