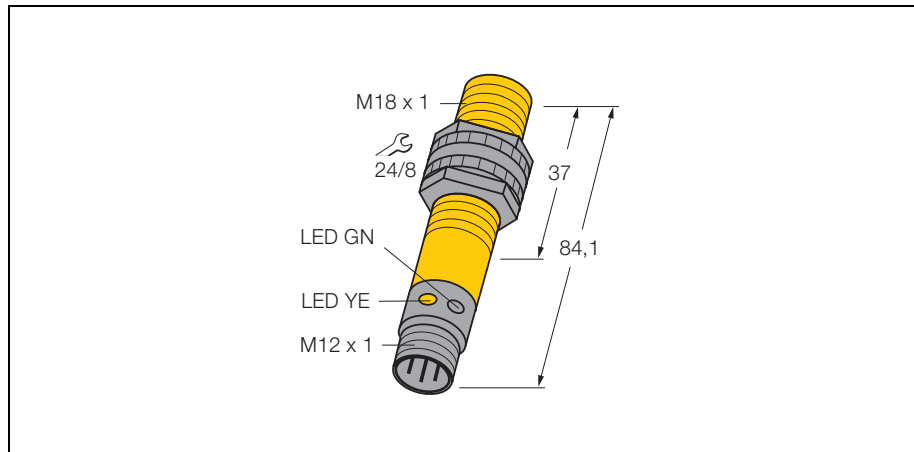


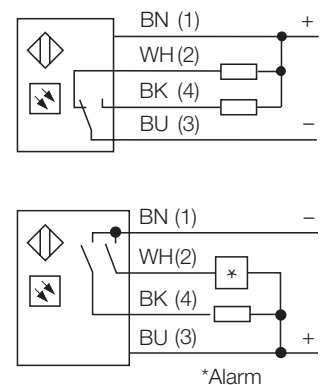
## Photoelectric sensor diffuse mode sensor with background suppression S18SN6FF100Q



|                                                        |                                                              |
|--------------------------------------------------------|--------------------------------------------------------------|
| <b>Type</b>                                            | S18SN6FF100Q                                                 |
| Ident-No.                                              | 3848800                                                      |
| <b>Operating mode</b>                                  | Diffuse mode sensors with fixed-field background suppression |
| Type of light                                          | IR                                                           |
| Wave length                                            | 880 nm                                                       |
| Sensing range [mm]                                     | 0... 100 mm                                                  |
| Operating temperature                                  | -40 ...+ 70 °C                                               |
| <b>Rated operational voltage (DC) <math>U_B</math></b> | 10... 30 VDC                                                 |
| Rated operational current (DC) $I_B$                   | ≤ 150 mA                                                     |
| No-load current $I_0$                                  | ≤ 35 mA                                                      |
| Short-circuit protection                               | yes, cyclic                                                  |
| Reverse polarity protection                            | yes                                                          |
| Output function                                        | connection programmable, NPN                                 |
| Switching frequency                                    | ≤ 160 Hz                                                     |
| Max. switch-on delay                                   | ≤ 100 ms                                                     |
| Overload trip point                                    | >220 mA                                                      |
| <b>Housing style</b>                                   | cylindrical/thread; S18                                      |
| Dimensions                                             | 84,1 mm                                                      |
| Housing material                                       | plastic, PBT                                                 |
| Lens                                                   | Kunststoff, Acryl                                            |
| Wiring                                                 | connector, M12 x 1                                           |
| Degree of protection                                   | IP68 - IP69K                                                 |
| <b>Supply voltage indication</b>                       | LED green                                                    |
| Switching status indication                            | LED yellow                                                   |
| Error indication                                       | LED green flashing                                           |
| Alarm indication                                       | LED yellow flashing                                          |

- selectable light or dark operation or light operation with alarm function
- M12 x 1 connector
- connector M12 x 1

### Wiring diagram



The emitter and receiver are incorporated in a single housing. The light reflection of the target is detected and triggers the sensor to switch. Thus the switching distance depends largely on the reflectivity of the target.

### Excess gain curve

Excess gain in relation to the distance

