# TL501AKQ
# LED Signal Light  –   Monochrome Multifunction Acoustic Signaller
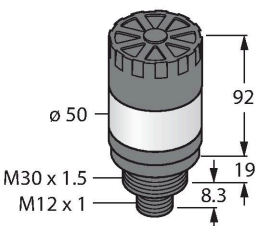


## Technical data

| Type | TL501AKQ |
|---|---|
| ID | 3804942 |
| **Signal and display data** | |
| Purpose | LED indicator light |
| Function | Tower light |
| Light type | RGB |
| Dimmable | Programmable |
| Features of color 1 | RGB, Programmable |
| Acoustic signal | Continuous tone, 92 dB |
| **Electrical data** | |
| Operating voltage $U_B$ | 18…30  VDC |
| DC rated operating current $I_e$ | ≤ 45 mA |
| Operating voltage $U_B$ | 21…27 VAC |
| Max. current consumption per color | 100  mA |
| Max. current consumption of beeper | 25  mA |
| Communication protocol | IO-Link |
| Input type | Communication protocol |
| Response time typical | < 20  ms |
| **IO-Link** | |
| IO-Link specification | V 1.1 |
| Communication mode | COM 2 (38.4 kBaud) |
| Process data width | 16 bit |
| Frame type | Type_2_2 |
| Function pin 4 | IO-Link |
| Maximum cable length | 20 m |

## Features

- Plastic housing, black
- EMI and RFI immune
- Protection class IP50
- M12 x 1 male
- Flexible display with RGB LEDs
- Control of user-defined or predefined light colors
- Flashing function, alternation, two-colored display and intensity check
- Control and parametrization exclusively via IO-Link

## Wiring diagram
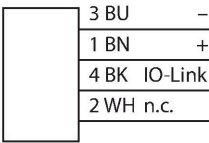


## Functional principle

The TL50 Pro IO-Link tower lights provide highly visible status displays and clear user guidance throughout the entire system. Each tower light is assembled from RGB LED elements and is available with or without beeper. They are ready to use in just a few steps and can be mounted directly on machines, on the switch cabinet or in locations to be monitored within production lines. The corresponding RGB LEDs are parameterized via an IO-Link interface. This allows predefined colors and user-defined colors within the RGB color space to be controlled, with or without lighting animations. The lighting animations include a flashing function, intensity check, rotation, alternation and two-colored displays. Compared with the
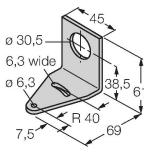
## Technical data

| | |
|---|---|
| Included in the SIDI GSDML | Yes |
| **Mechanical data** | |
| Cascadable | No |
| Design | Smooth barrel, TL50 |
| Dimensions | Ø 50 x 119.3  mm |
| Housing material | Plastic, ABS, Black |
| Window material | Polycarbonate, diffuse |
| Electrical connection | Connector, M12 × 1, PVC |
| Number of cores | 4 |
| Ambient temperature | -20…+50  °C |
| Relative humidity | 0…95 % |
| Protection class | IP50 |
| **Tests/approvals** | |
| Approvals | CE, UL listed |

standard TL50 variants, the TL50 Pro IO-Link tower lights allow a variety of models to be implemented using just one display.
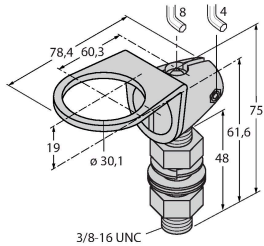
## Accessories

| SMB30A | 3032723 |
|---|---|

Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread
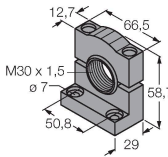
| SMB30FA | 3074005 |
|---|---|

Montagewinkel; Werkstoff VA 1.4401

| SMB30SC | 3052521 |
|---|---|

Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable

## Accessories

| Dimension drawing | Type | ID | |
|---|---|---|---|
| | RKC4.4T-2/TEL | 6625013 | Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval |

| Dimension drawing | Type | ID | |
|---|---|---|---|
|  | WKC4.4T-2/TEL | 6625025 | Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval |