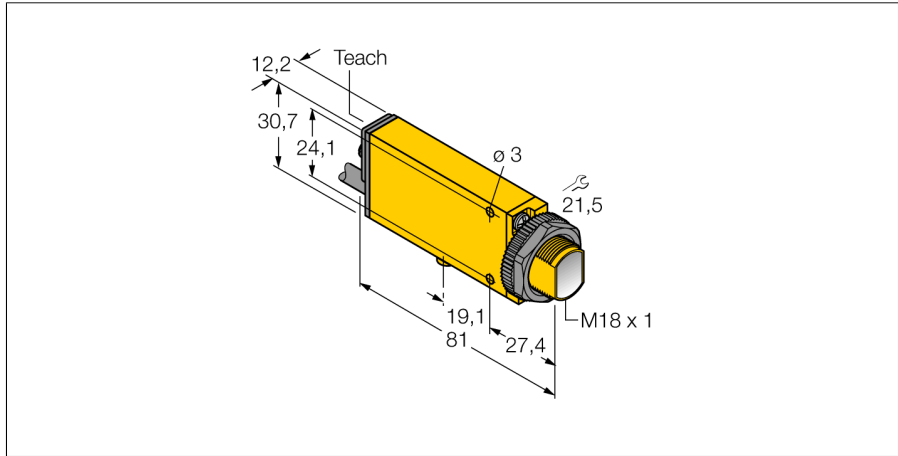
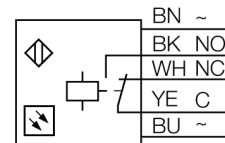


**Photoelectric sensor
convergent mode sensor
SMU315CV2**



- Cable, PVC, 2 m
- Protection class IP67
- Sensitivity adjustable via potentiometer
- Alignment indicator
- Operating voltage: 24...240 VDC or 24...240 VAC
- Relay output

Wiring diagram



| | |
|------------------------------|-------------------------|
| Type code | SMU315CV2 |
| Ident no. | 3055249 |
| Operating mode | convergent mode sensor |
| Light type | red |
| Wavelength | 650 nm |
| Focal distance | 43 mm |
| Ambient temperature | -20...+55 °C |
| Operating voltage | 24...240VDC |
| Operating voltage | 24...240 VAC |
| DC rated operational current | ≤ 3000 mA |
| AC rated operational current | ≤ 3000 mA |
| Output function | NO/NC , Relay output |
| Switching frequency | ≤ 25 Hz |
| Max. DC switching capacity | 1 W |
| Design | rectangular, Mini Beam |
| Dimensions | 81 x 12.3 x 30.7 mm |
| Housing material | plastic, PBT, yellow |
| Lens | plastic, acrylic |
| Connection | cable |
| Cable length | 2 m |
| Cable cross section | 5 x 0.5 mm ² |
| Protection class | IP67 |
| Switching state | LED red |
| Excess gain indication | LED red flashing |

Functional principle

Convergent mode sensors are equipped with a lens in front of the emitter diode that produces a small and intense focal point at a defined distance from the sensor. Similar to diffuse mode sensors, the light reflected by the target is evaluated. Convergent mode sensors are ideal for detection of small targets or colour marks and edge guiding or positioning control of transparent materials. The targets must always be within the focal depth of the sensors. The focal depth is defined as the area in front of or behind the focal point within which the object can be detected. Based on the intense light concentration in the focal point, convergent mode sensors are capable of detecting targets with a low reflectivity.

Excess gain curve

Excess gain in relation to the distance

