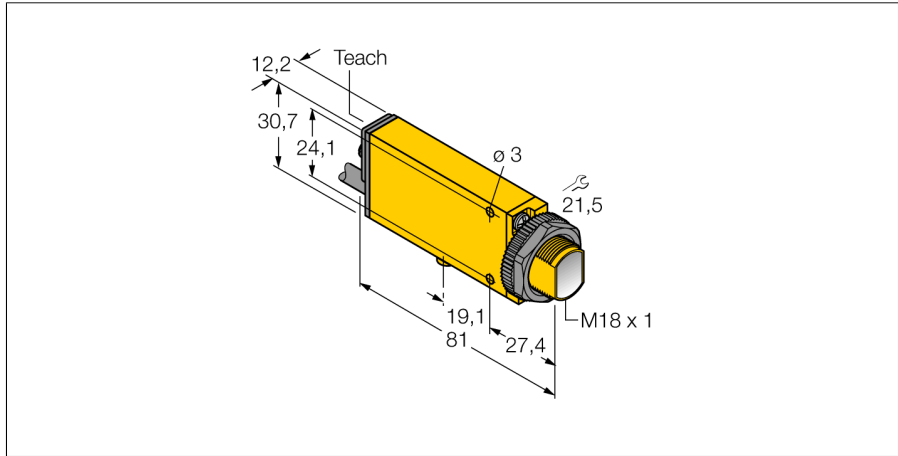
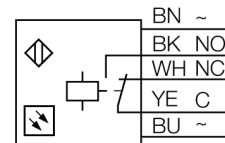


**Photoelectric sensor
convergent mode sensor
SMU315CV**



- 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	SMU315CV
Ident no.	3055248
Operating mode	convergent mode sensor
Light type	red
Wavelength	650 nm
Focal distance	16 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

