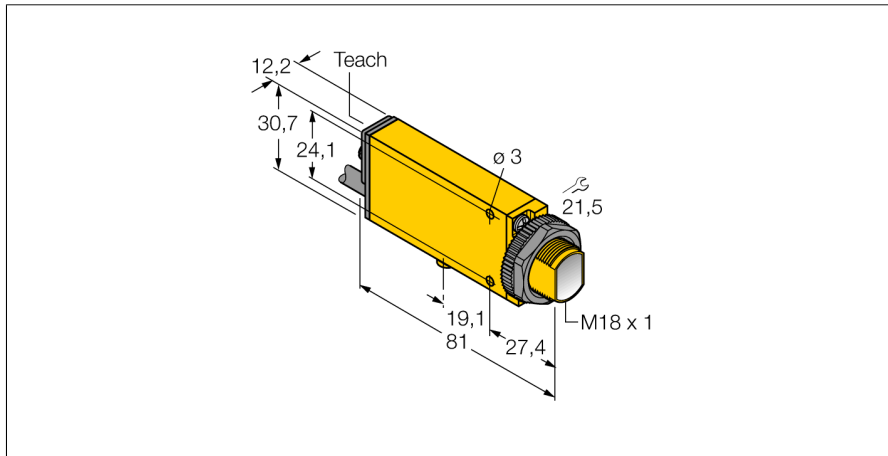


**Photoelectric sensor
retroreflective sensor
SMU315LV**

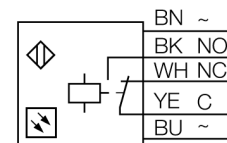
TURCK

Industrial
Automation



- 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	SMU315LV
Ident no.	3052572
Operating mode	retro-reflective sensor
Light type	red
Wavelength	650 nm
Range	0...5000 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	0.025 kHz
Switching frequency	≤ 25 Hz
Readiness delay	≤ 100 ms
Overcurrent release	> 220 mA
Max. DC switching capacity	1 W
Design	rectangular, Mini Beam
Dimensions	81 x 30.7 x 12.3 mm
Housing material	plastic, PBT, yellow
Lens	acrylic, acrylic
Connection	cable, PVC
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

Retro-reflective sensors incorporate emitter and receiver in a single compact housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. An object is detected when it interrupts this beam. Retro-reflective sensors incorporate some of the advantages of opposed mode sensors (good contrast and high excess gain). Further it is merely required to install and wire a single device. A smaller sensing range and susceptibility of devices without polarisation filter can be of disadvantage when shiny objects have to be detected.

Excess gain curve

Excess gain in relation to the distance (type LV)

