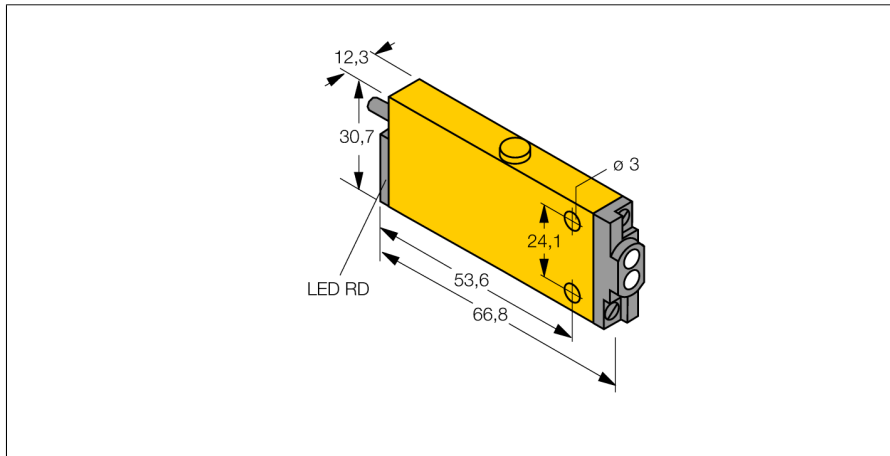


**Photoelectric sensor  
diffuse mode sensor  
SMU315W**

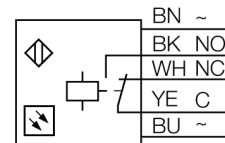
**TURCK**

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**



<b>Type code</b>	SMU315W
Ident no.	3052571
<b>Operating mode</b>	diffuse mode sensor
Light type	IR
Wavelength	880 nm
Range	0...130 mm
Ambient temperature	-20...+55 °C
<b>Operating voltage</b>	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
<b>Design</b>	rectangular, Mini Beam
Dimensions	66.8 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 <sup>2</sup>
Protection class	IP67
<b>Switching state</b>	LED red
Excess gain indication	LED red flashing

**Functional principle**

Diffuse mode sensors incorporate the emitter and receiver in a single housing. However, diffuse mode sensors do not detect the interruption of the light beam like opposed mode sensors, but the reflection of the target. A target is detected if it reflects a sufficient amount of light back to the receiver. The switching distance of diffuse mode sensors thus largely depends on the reflectivity of the target.

**Excess gain curve**

Excess gain in relation to the distance

