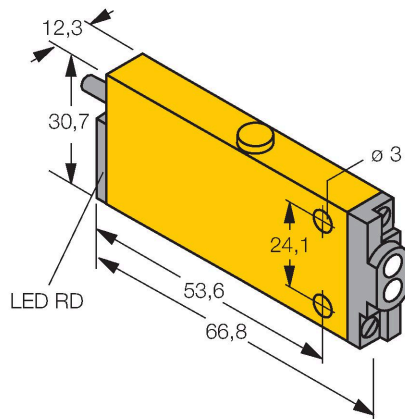


SMU315D

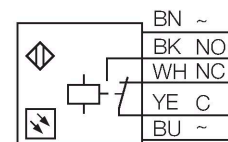
Photoelectric Sensor – Diffuse Mode Sensor



Features

- 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



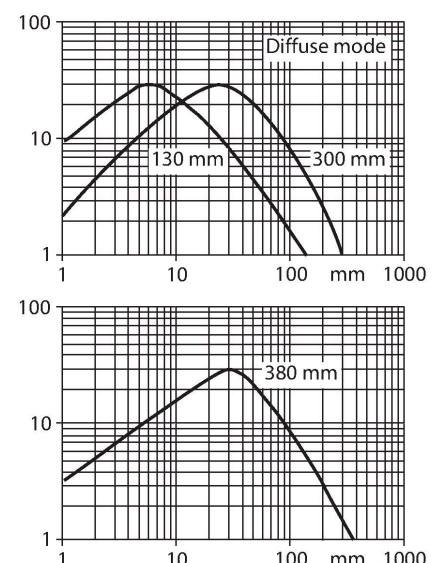
Technical data

Type	SMU315D
ID no.	3052570
Optical data	
Function	Proximity switch
Operating mode	Diffuse
Light type	IR
Wavelength	880 nm
Range	0...380 mm
Electrical data	
Operating voltage	24...240 VDC
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	≤ 0 ms
Response time typical	< 20 ms
Overcurrent release	> 220 mA
Max. DC switching capacity	1 W
Setting option	Potentiometer
Mechanical data	
Design	Rectangular with thread, Mini Beam
Dimensions	Ø 18 x 81 x 12.3 x 30.7 mm
Housing material	Plastic, Thermoplastic material, Yellow

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



Technical data

Lens	acrylic, Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	5
Core cross-section	0.5 mm ²
Ambient temperature	-20...+55 °C
Protection class	IP67
Special features	Encapsulated
Switching state	LED, Red
Excess gain indication	LED, red, flashing
Tests/approvals	
Approvals	CE, cURus, CSA

Accessories

	SMB18A 3033200 Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread		SMB18AFAM10 3012558 Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm
	SMB18SF 3052519 Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable		SMB312B 3025519 Mounting bracket, stainless steel, for MINI-BEAM NAMUR
	SMB3018SC 3053952 Mounting bracket, PTB black, for sensors with 18 mm thread		