

SMU315D W/30' Photoelectric Sensor – Diffuse Mode Sensor



Technical data

Туре	SMU315D W/30'
ID no.	3062423
Optical data	
Function	Proximity switch
Operating mode	Diffuse
Light type	IR
Wavelength	880 nm
Range	0380 mm
Electrical data	
Operating voltage	24240 VDC
Operating voltage	24240 VAC
DC rated operational current	≤ 3000 mA
AC rated operational current	≤ 3000 mA
Output function	NO/NC, Relay output
Switching frequency	≤ 25 Hz
Readiness delay	≤ 0 ms
Response time typical	< 20 ms
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
Lens	plastic, Acrylic
Electrical connection	Cable, 9 m, PVC
Number of cores	5
Core cross-section	0.5 mm ²

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



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





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Ambient temperature	-20+55 °C
Protection class	IP67
Switching state	LED, Red
Excess gain indication	LED, red, flashing
Tests/approvals	
Approvals	CE, cURus, CSA

Accessories



3033200 Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread



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



3025519 Mounting bracket, stainless steel, for MINI-BEAM NAMUR



3053952 Mounting bracket, PTB black, for sensors with 18 mm thread