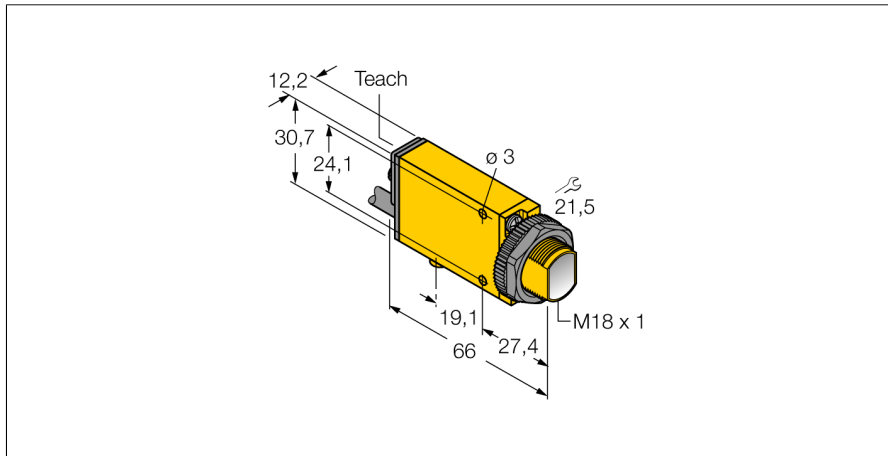
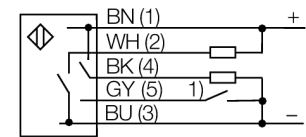


**Photoelectric sensor
diffuse mode sensor
SME312DV**



- Cable, PVC, 2 m
- Protection class IP67
- Teach-in function
- Operating voltage: 10...30 VDC
- Switching output, bipolar
- Light/dark operation

Wiring diagram



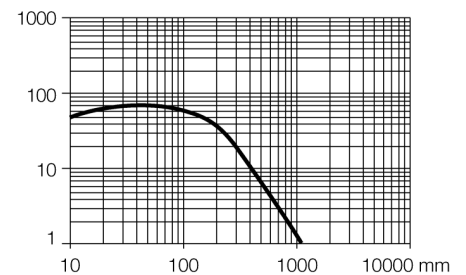
1) external programming line

Functional principle

Identical to retro-reflective sensors, emitter and receiver circuitry are incorporated in the same housing of the diffuse mode sensors. However, diffuse mode sensors do not detect the interruption of the light beam 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. This type of sensor is especially suited for detection of transparent objects (diffuse mode sensor with or without background suppression or convergent mode sensors).

Excess gain curve

Excess gain in relation to the distance



Type code	SME312DV
Ident no.	3064083
Operating mode	diffuse mode sensor
Light type	red
Wavelength	650 nm
Range	0...1100 mm
Ambient temperature	-20...+70 °C
Operating voltage	10...30VDC
Residual ripple	< 10 % U _s
No-load current I ₀	≤ 45 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, PNP/NPN
Switching frequency	1 kHz
Readiness delay	≤ 100 ms
Overcurrent release	> 220 mA
Design	rectangular, Mini Beam Expert
Dimensions	66 x 12.3 x 30.7 mm
Housing material	plastic, PBT, yellow
Lens	plastic, acrylic
Connection	cable, PVC
Cable length	2 m
Cable cross section	5 x 0.5 mm ²
Protection class	IP67
Power-on indication	LED green
Switching state	LED yellow
Excess gain indication	LED red flashing

Photoelectric sensor
diffuse mode sensor
SME312DV

TURCK

Industrial
Automation

Accessories

Type code	Ident no.	Description	Dimension drawing
SMB18A	3033200	Mounting bracket, 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, PTB black steel, for sensors with 18 mm thread	
SMB312B	3025519	Mounting bracket, stainless steel, for MINI-BEAM NAMUR	
SMB3018SC	3053952	Mounting bracket, PTB black, for sensors with 18 mm thread	