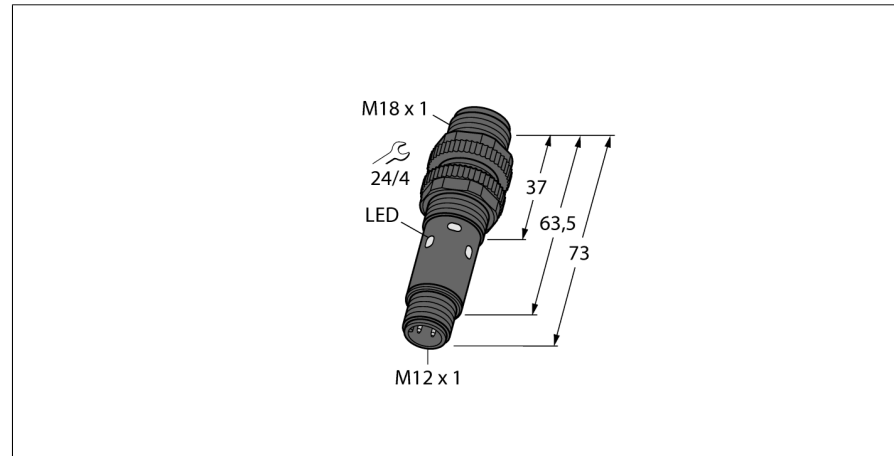


**Photoelectric sensor
opposed mode sensor (emitter)
S18-2NAEL-Q8**



- Male M12 x 1, 5-pin
- Protection class IP67
- Ambient temperature: -40...+70 ° C
- Selectable light/dark operation or light operation with alarm function

Wiring diagram



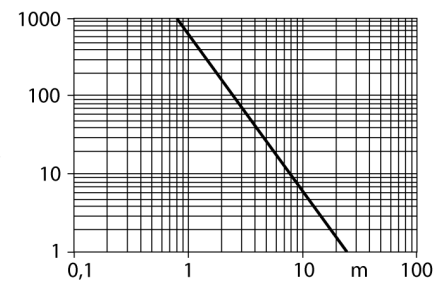
Functional principle

Opposed mode sensors consist of an emitter and a receiver. They are installed opposite to each other whereby the emitted light aims directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque objects. The excellent light/dark contrast and the very high excess gain are typical for this function mode and enable operation over large distances and under difficult conditions.

Excess gain curve

Excess gain in relation to distance

Excess gain curve



Type code	S18-2NAEL-Q8
Ident no.	3042192
Operating mode	opposed mode sensor (emitter)
Light type	red
Wavelength	624 nm
Range	0...25000 mm
Ambient temperature	-40...+70 °C
Operating voltage	10...30VDC
Residual ripple	< 10 % U _s
No-load current I ₀	≤ 17 mA
Short-circuit protection	yes/ cyclic
Reverse polarity protection	yes
Readiness delay	≤ 100 ms
Response time	< 2.5 ms
Design	cylindrical/threaded, S18
Dimensions	73 mm
Housing diameter	18 mm
Housing material	plastic, ABS
Connection	male, M12 x 1
Cable cross section	2 mm ²
Protection class	IP67
Power-on indication	LED green

