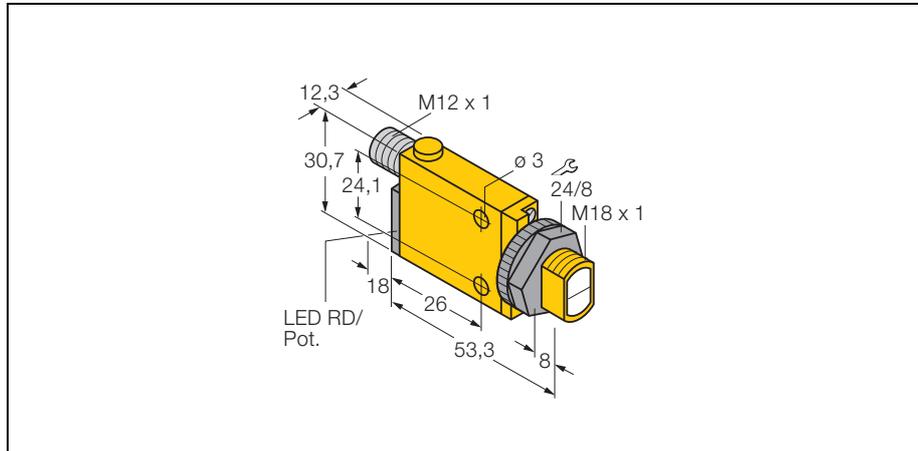
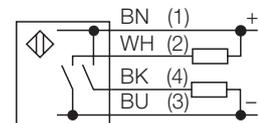


Photoelectric sensor receiver SM31RLQD



- compact housing style
- Reverse polarity and short-circuit protection
- connector M12 x 1
- light/dark operate
- sensitivity adjustable via potentiometer
- alignment indication

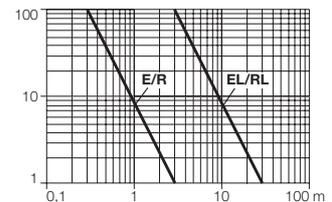
Wiring diagram



Opposed mode sensors consist of a separate emitter and receiver. These are installed directly opposite each other so that the light from the emitter is aimed 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 targets. An excellent contrast between light and dark conditions and an extremely high excess gain are typical of this sensing mode, thus allowing operation over larger distances and under difficult conditions.

Excess gain curve

Excess gain in relation to the distance



Type	SM31RLQD
Ident-No.	3062951
Operating mode	Opposed mode (receiver)
Operating temperature	-20 ...+ 70 °C
Rated operational voltage (DC) U_B	10... 30 VDC
Rated operational current (DC) I_e	≤ 150 mA
No-load current I_0	≤ 25 mA
Short-circuit protection	yes, cyclic
Reverse polarity protection	yes
Output function	normally open, PNP/NPN
Switching frequency	≤ 500 Hz
Max. switch-on delay	≤ 100 ms
Overload trip point	>220 mA
Housing style	rectangular; Mini Beam
Dimensions	71,3 x 12,3 x 30,7 mm
Housing material	plastic, PBT
Lens	Kunststoff, Acryl
Wiring	connector, M12 x 1
Degree of protection	IP67
Switching status indication	LED red
Excess gain indication	LED red flashing