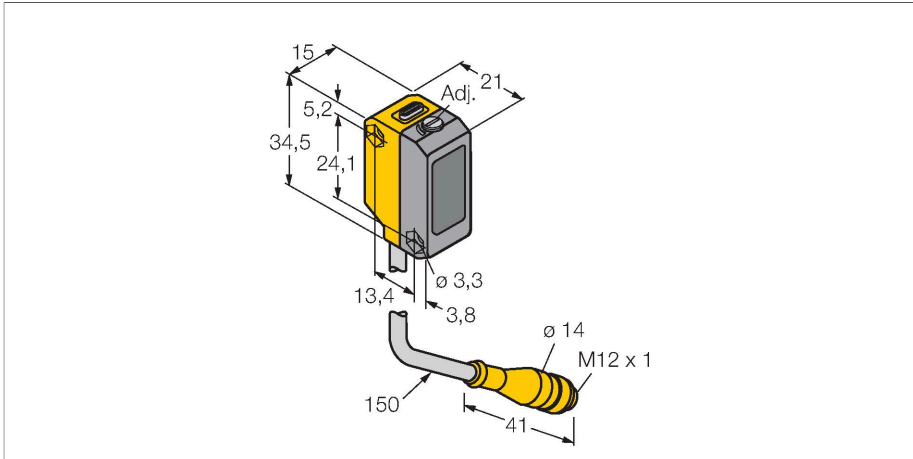


BSO2L250-BQ18-VP6X2-H1141-0.15

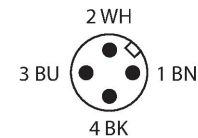
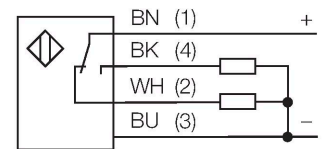
Photoelectric Sensor – Diffuse Mode Laser Sensor with Adjustable Background Suppression



Features

- Cable with male end, M12 x 1, 4-pin, PVC, 150 mm
- Protection class IP67
- LED, all-round visible
- Cut-off point adjusted via potentiometer

Wiring diagram



Technical data

Type	BSO2L250-BQ18-VP6X2-H1141-0.15
ID	7700252
Function	Diffuse mode sensor with adjustable background suppression
Light type	Red
Wavelength	658 nm
Laser class	▲ 2
Beam diameter	1 mm
Range	1...250 mm
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _{ss}
DC rated operational current	≤ 100 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO/NC, PNP
Current output	100 mA
Switching frequency	≤ 700 Hz
Design	Rectangular, QS18
Dimensions	21.1 x 15 x 34.5 mm
Housing material	Plastic, ABS
Lens	plastic, Acryl
Electrical connection	Cable with connector, M12 × 1, 0.15 m
Ambient temperature	-10...+50 °C
Protection class	IP67
Power-on indication	LED, Green
Switching state	LED, Yellow

Functional principle

Diffuse mode sensors with background suppression operate with a single emitter and several receiver elements, one for close range and one for long-range. The target's position and the optical structure of the sensor determine which receiver element gets the most light. The optics before the receiver is modified with the adjusting screw shifting this way the boundary between close and long-range. This operation determines whether the reflecting object is in or outside the measuring range.

Excess gain curves relating to the nearest and farthest cut-off point

