



ENGLISH

Datasheet

RS PRO Through Beam (Emitter) Photoelectric Sensor with Block Sensor

Stock No: 729-5176



Illustration may differ



Detailed technical data

Features

Sensor/ detection principle	Through-beam photoelectric sensor
Dimensions (W x H x D)	15.6 mm x 48.5 mm x 42 mm
Housing design (light emission)	Rectangular
Sensing range max.	0 m ... 20 m
Sensing range	0 m ... 15 m
Type of light	Visible red light
Light source	LED ¹⁾
Light spot size (distance)	Ø 220 mm (15 m)
Angle of dispersion	Approx. 1.5°
Wave length	633 nm
Adjustment	None

¹⁾ Average service life: 100,000 h at T_U = +25 °C.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC ¹⁾
Ripple	≤ 5 V _{pp} ²⁾

¹⁾ Limit values when operated in short-circuit protected network: max. 8 A.

²⁾ May not exceed or fall below U_v tolerances.

³⁾ Without load.

⁴⁾ Signal transit time with resistive load.

⁵⁾ With light/dark ratio 1:1.

⁶⁾ Do not bend below 0 °C.

⁷⁾ A = V_S connections reverse-polarity protected.

⁸⁾ C = interference suppression.

⁹⁾ D = outputs overcurrent and short-circuit protected.

Power consumption, sender	≤ 25 mA ³⁾
Power consumption, receiver	≤ 20 mA ³⁾
Switching output	PNP
Output function	Complementary
Switching mode	Light/dark switching
Signal voltage PNP HIGH/LOW	U _v - 2.5 V / approx. 0 V
Output current I_{max.}	100 mA
Response time	≤ 2.5 ms ⁴⁾
Switching frequency	200 Hz ⁵⁾
Connection type	Cable, 4-wire, 2 m ⁶⁾
Cable material	PVC
Conductor cross-section	0.25 mm ²
Circuit protection	A ⁷⁾ C ⁸⁾ D ⁹⁾
Protection class	II
Weight	200 g
Housing material	Plastic, ABS
Optics material	Plastic, PMMA
Enclosure rating	IP66 IP67 IP69K
Test input sender off	TE to 0 V
Ambient operating temperature	-30 °C ... +60 °C
Ambient storage temperature	-40 °C ... +75 °C
UL File No.	NRKH.E181493 & NRKH7.E181493
Part number of individual components	2063412 WS11-2D1130 2063413 WE11-2P1130

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2) May not exceed or fall below U_v tolerances.

3) Without load.

4) Signal transit time with resistive load.

5) With light/dark ratio 1:1.

6) Do not bend below 0 °C.

7) A = V_S connections reverse-polarity protected.

8) C = interference suppression.

9) D = outputs overcurrent and short-circuit protected.

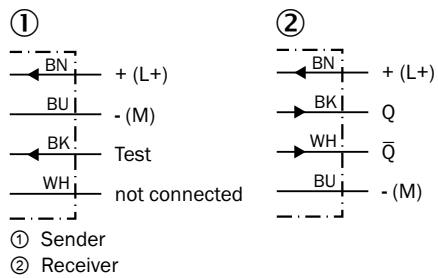
Classifications

ECl@ss 5.0	27270901
ECl@ss 5.1.4	27270901
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ECl@ss 6.2	27270901
ECl@ss 7.0	27270901
ECl@ss 8.0	27270901
ECl@ss 8.1	27270901

ECl@ss 9.0	27270901
ECl@ss 10.0	27270901
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ETIM 7.0	EC002716
UNSPSC 16.0901	39121528

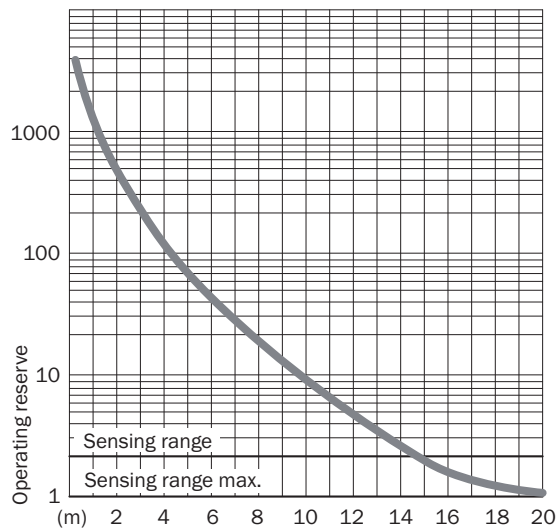
Connection diagram

Cd-088



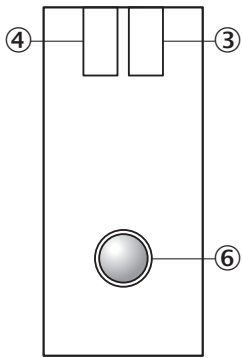
Characteristic curve

WSE11-2



Adjustments

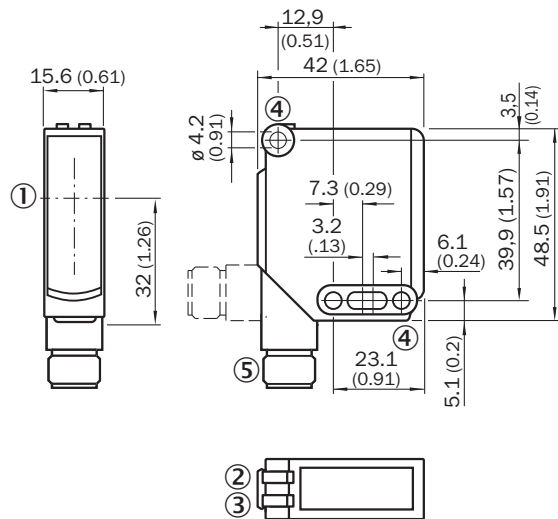
WTE11-2, WSE11-2



- ③ LED indicator green: Supply voltage active
- ④ LED indicator yellow: Status of received light beam
- ⑥ Adjustment sensing range: single teach-in button

Dimensional drawing (Dimensions in mm (inch))

WSE11-2



- ① Center of optical axis
- ② LED indicator green: Supply voltage active
- ③ LED indicator yellow: Status of received light beam
- ④ Mounting hole \varnothing 4.2 mm
- ⑤ M12 connector, 4-pin or cable

Brief description

Mounting brackets and plates



Mounting bracket, large, stainless steel, mounting hardware included

Plug connectors and cables



Head A: male connector, M12, 4-pin, straight
Head B: -
Cable: unshielded