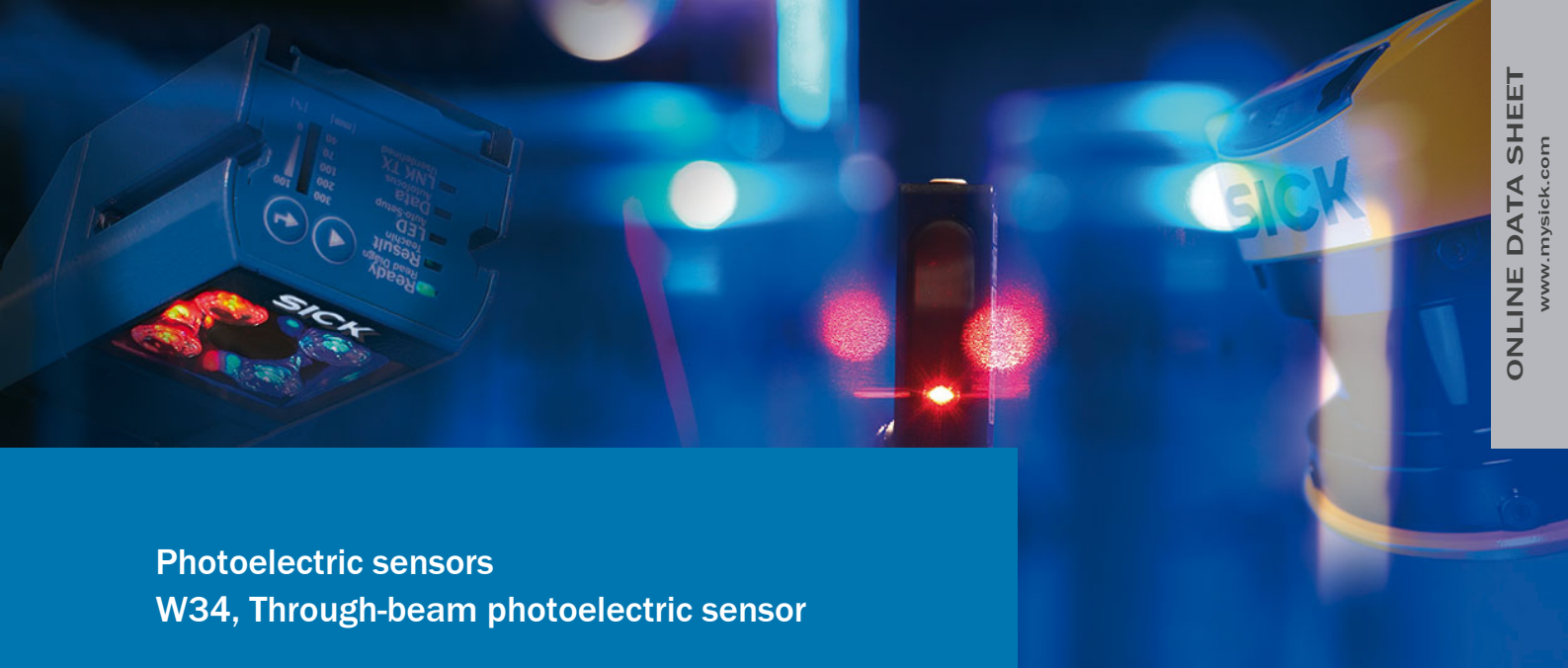




Photoelectric sensors W34, Through-beam photoelectric sensor

WS/WE34-R230



Model Name > [WS/WE34-R230](#)
Part No. > [1019257](#)



Illustration may differ

At a glance

- High operating reserve at a long range
- Switch selectable PNP or NPN output and light/dark switching
- Versions with DC voltage (10...30V) or universal AC/DC voltage (12 ... 240 V DC / 24 ... 240 V AC)
- Optional test input, adjustable ON and OFF time delays, alarm output
- M12 or terminal chamber connection: 90° rotatable
- UL approval

Your benefits

- High operating reserve at a long range minimizes downtime
- Alarm output provides early warning that maintenance may be needed
- Test input allows users to validate that the sensor is operating as expected
- The sensor cover protects configuration components against environmental hazards
- Adjustable time delay, alarm output, test input, and universal AC/DC voltage provide additional flexibility and reduce the number of part numbers needed



Features

Sensor/detection principle:	Through-beam photoelectric sensor
Dimensions (W x H x D):	27 mm x 92 mm x 70 mm
Housing design (light emission):	Rectangular
Sensing range max.:	0 m ... 60 m
Sensing range:	0 m ... 60 m
Type of light:	Visible red light
Light source:	LED ¹⁾
Wave length:	660 nm
Sensitivity adjustment:	Potentiometer
Angle of dispersion:	Ca. 1 °
Light spot size (distance):	Ø 700 mm (50 m)

¹⁾ Average service life of 100,000 h at T_A = +25 °C

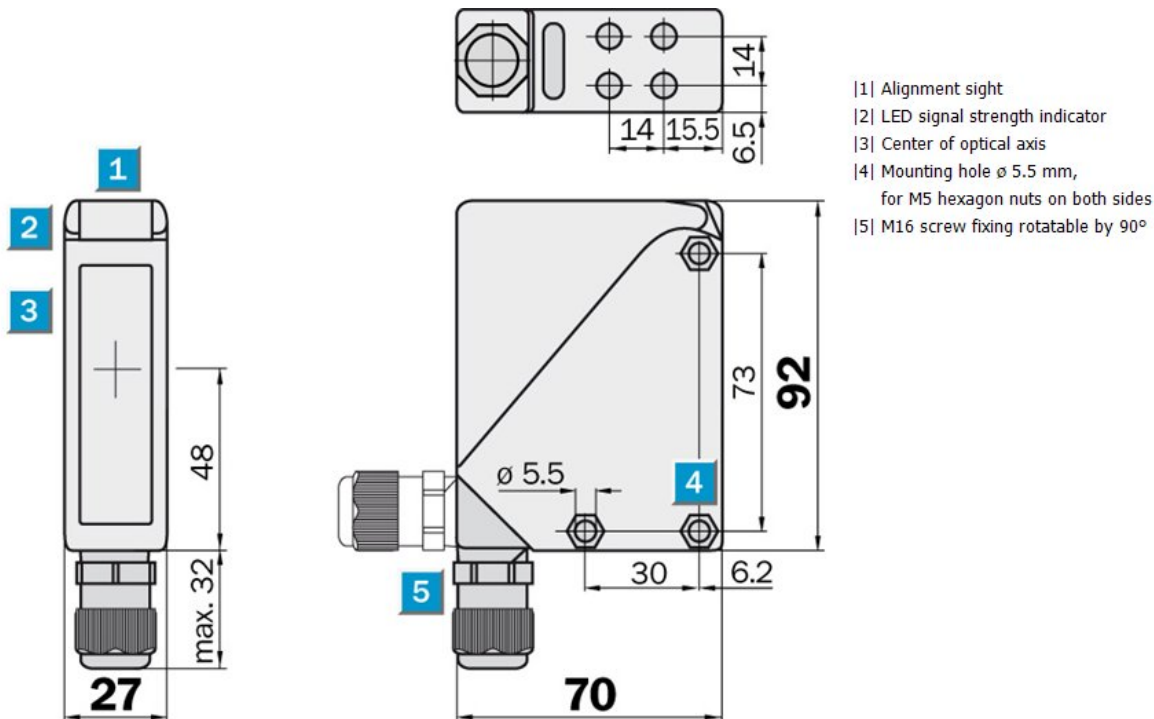
Mechanics/electronics

Supply voltage::	12 V DC ... 240 V DC, 24 ... 240 V AC ^{1) 2)}
Power consumption:	< 2 VA
Output type:	Relay ³⁾

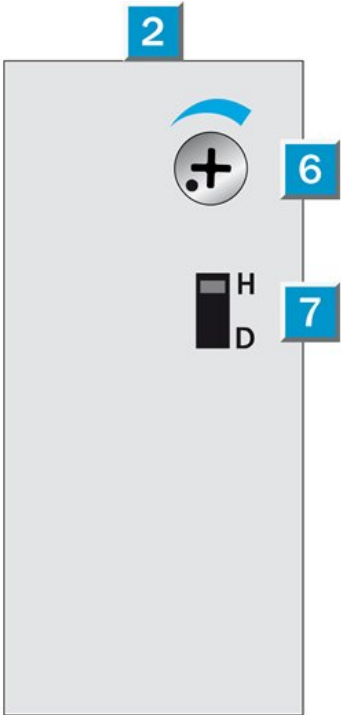
Output function:	Change-over contacts
Switching mode:	Dark-switching, Light switching ⁴⁾
Output characteristic:	Electrically isolated
Switching mode selector:	Selectable via light/dark selector
Switching current (switching voltage):	4 A (24 V DC), 4 A (250 V AC)
Response time:	≤ 10 ms
Switching frequency:	10 Hz ⁵⁾
Angle of reception:	Ca. 2.5 °
Connection type:	Terminal connection with M16 gland ⁶⁾
Circuit protection::	A, C ^{7) 8)}
Protection class:	II ⁹⁾
Weight:	280 g
Special device:	-
Housing material:	ABS, Plastic
Enclosure rating:	IP 67
Usage category:	AC-15, DC-13, According to EN 60947-1
Ambient operating temperature:	-40 °C ... 60 °C
Ambient storage temperature:	-40 °C ... 75 °C
UL File-No.:	UL No. NRKH.E181493 & cUL No. NRKH7.E181493
Part number of individual components:	Receiver, WE34-R230, 2022815, Sender, WS34-U230, 2022823

1) Limit values 2) ±10 % 3) 4) Provide suitable spark suppression for inductive or capacitive loads 5) With light/dark ratio 1:1 6) Connection rotatable by 90° 7) A = V_S
connections reverse-polarity protected 8) C = interference suppression 9) Rated voltage 250 V AC/DC

Dimensional drawing



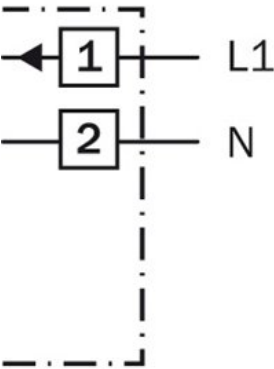
Adjustments possible



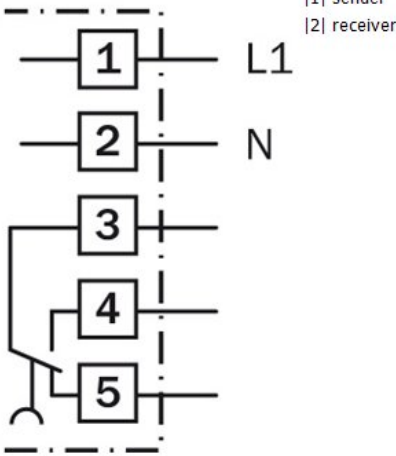
- |2| LED signal strength indicator
- |6| Sensitivity adjustment
- |7| Light/dark selector

Connection diagram

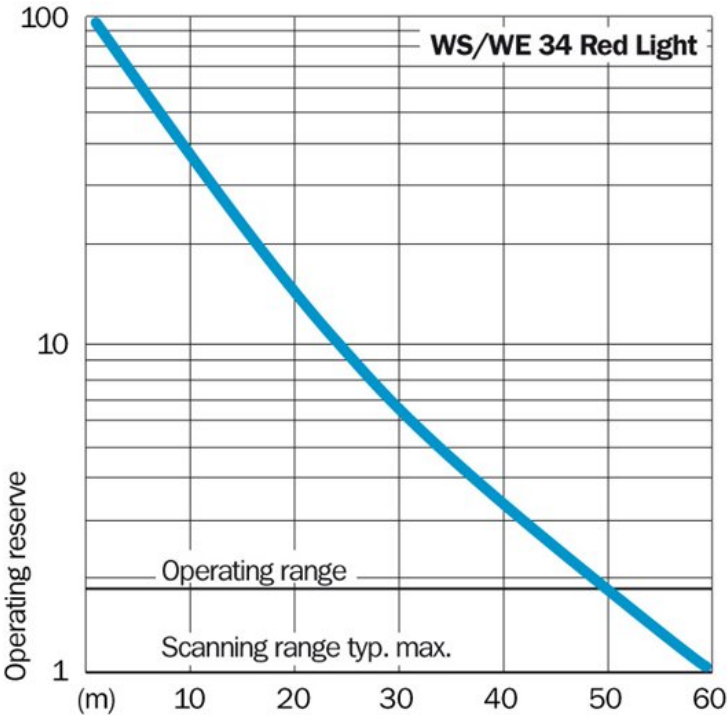
①



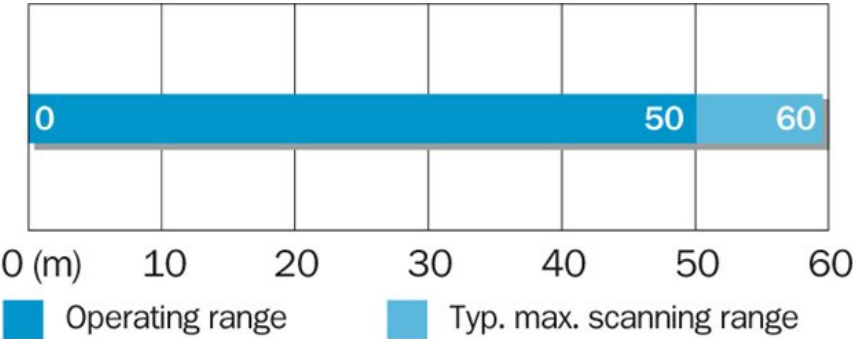
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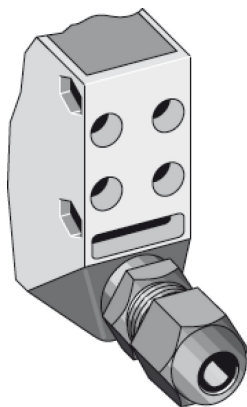
Characteristic curve



Sensing range diagram



Connection type



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