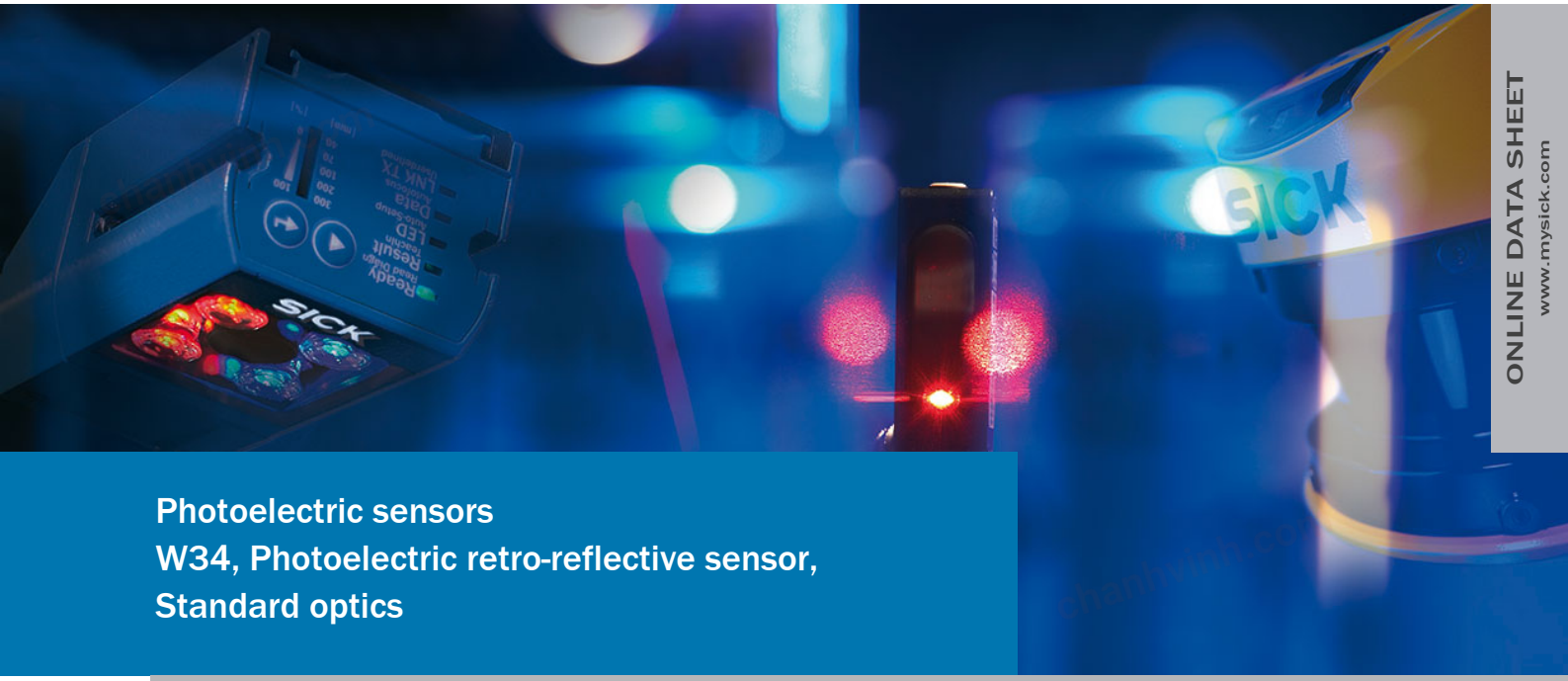
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www.mysick.com

Photoelectric sensors
W34, Photoelectric retro-reflective sensor, Standard optics

WL34-V240



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Sensor Intelligence.

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Photoelectric sensors
W34, Photoelectric retro-reflective sensor, Standard optics

Model Name > WL34-V240
Part No. > 1019244





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:	Photoelectric retro-reflective sensor, Standard optics
Dimensions (W x H x D):	27 mm x 92 mm x 70 mm
Housing design (light emission):	Rectangular
Sensing range max.:	0.03 m ... 22 m [1]
Sensing range:	0.03 m ... 22 m [2]
Type of light:	Visible red light
Light source:	LED [3]
Wave length:	660 nm
Time type:	Time delay off, Switch on delay, Adjustable
Delay time:	Adjustable via time delay selector switch: 0.5 ... 10 s
Adjustment:	Potentiometer
Light spot size (distance):	Ø 250 mm (15 m)

[1] [2] PL80A [3] Average service life of 100,000 h at T_A = +25 °C

Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC [1]

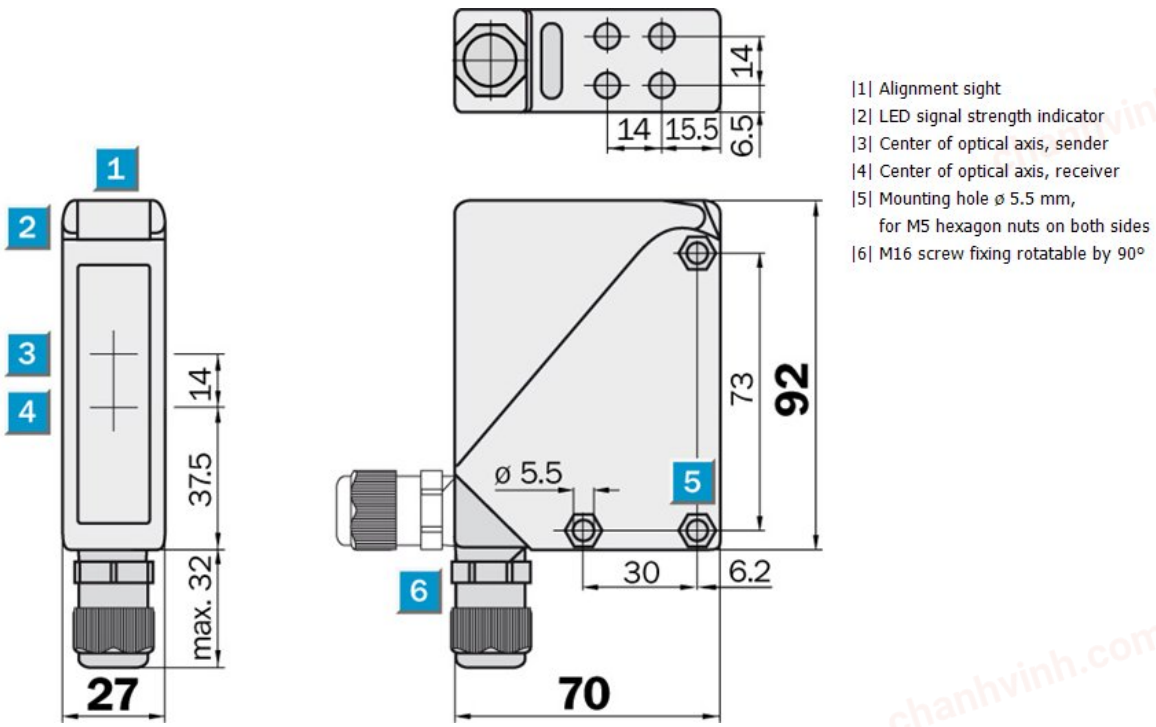
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Ripple:	< 5 Vpp [2]
Current consumption:	≤ 50 mA
Switching output:	NPN, PNP
Switching mode:	Dark-switching, Light switching
Switching mode selector:	Selectable via light/dark selector, Selectable via PNP/NPN selector
Output current Imax.:	100 mA
Response time:	≤ 500 µs [3]
Switching frequency:	1,000 Hz [4]
Connection type:	Terminal connection with M16 gland [5]
Circuit protection:::	A, C, D [6] [7] [8]
Protection class:	II [9]
Weight:	140 g
Polarisation filter:	✓
Housing material:	ABS, Plastic
Enclosure rating:	IP 67
Test input sender off:	TE to 0 V
Ambient temperature operation:	-40 °C ... +60 °C
Ambient storage temperature:	-40 °C ... +75 °C
UL File No.:	NRKH.E181493 & NRKH7.E181493

[1] Limit values [2] May not exceed or fall short of V_S tolerances [3] Signal transit time with resistive load [4] With light/dark ratio 1:1 [5] Connection rotable by 90° [6] A = V_S connections reverse-polarity protected [7] C = interference suppression [8] D = outputs overcurrent and short-circuit protected [9] Reference voltage: 50 V DC

Dimensional drawing

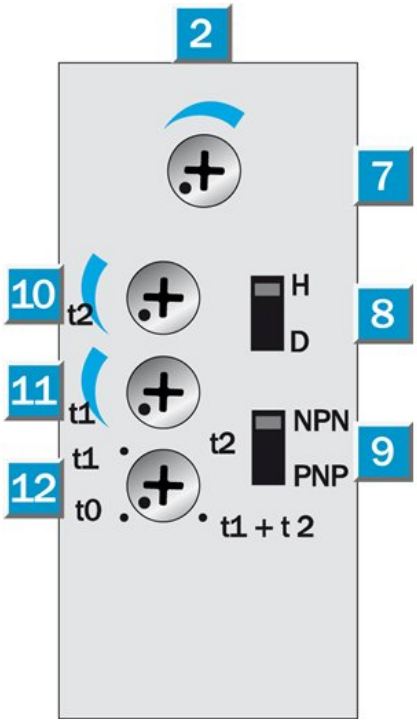


|1| Alignment sight
|2| LED signal strength indicator
|3| Center of optical axis, sender
|4| Center of optical axis, receiver
|5| Mounting hole ø 5.5 mm,
for M5 hexagon nuts on both sides
|6| M16 screw fixing rotatable by 90°

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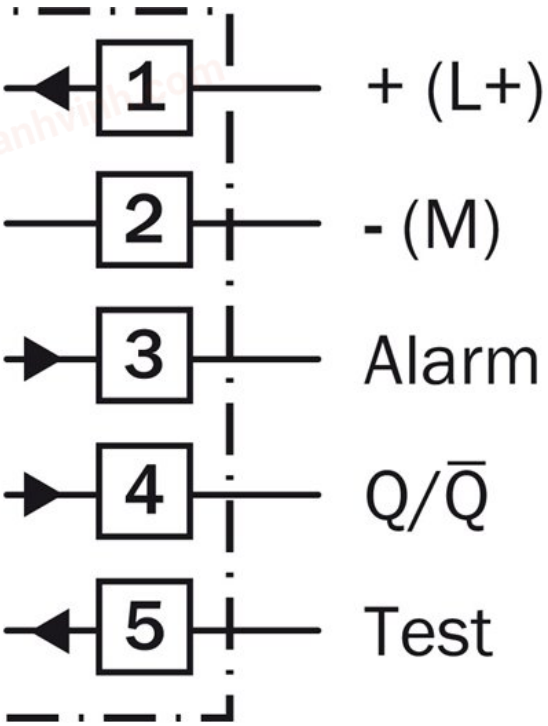
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Adjustments possible



|2| LED signal strength indicator
|7| Sensitivity adjustment
|8| Light/dark selector
|9| NPN/ PNP selector
|10| Time control t2=OFF-delay
|11| Time control t1=ON-delay
|12| time delay selector switch

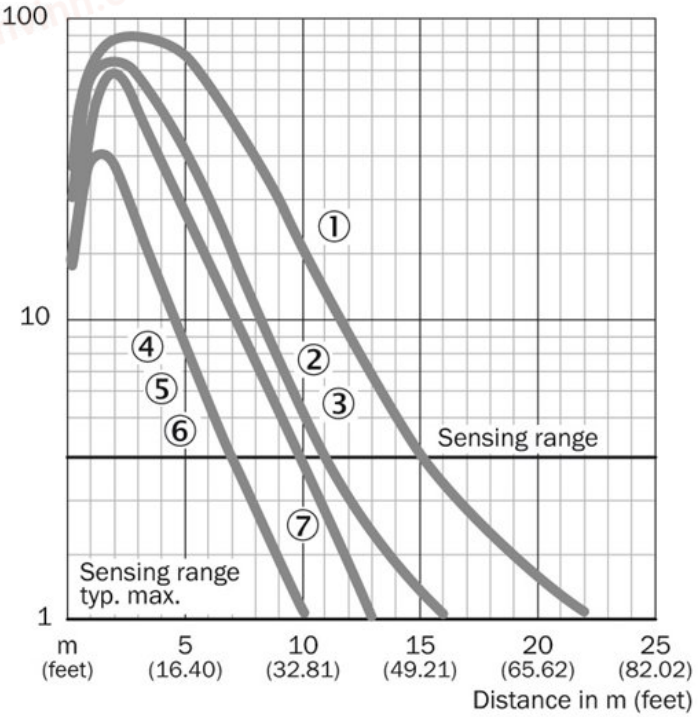
Connection diagram



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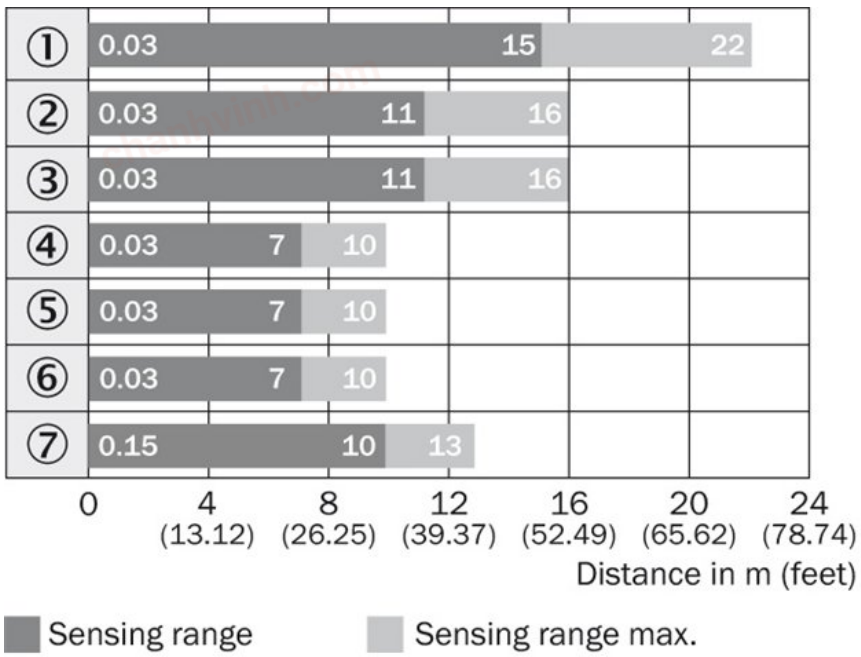
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Characteristic curve



|1| PL80A
|2| PL50A
|3| PL40A
|4| PL30A
|5| PL20A
|6| Reflective tape Diamond Grade
|7| C110A

Sensing range diagram

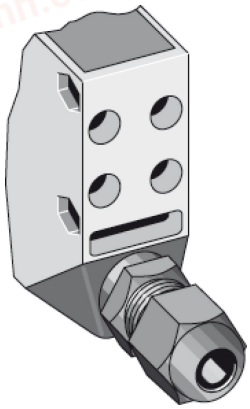


|1| PL80A
|2| PL50A
|3| PL40A
|4| PL30A
|5| PL20A
|6| Reflective tape Diamond Grade
|7| C110A

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