WT9-2N141

SICK
Sensor Intelligence.

WT9-2N141

Ordering information

Type	Part no.
WT9-2N141	1018302

Other models and accessories → www.sick.com/

Illustration may differ

Detailed technical data

Features

Functional principle	Photoelectric proximity sensor
Functional principle detail	Background suppression
Dimensions (W x H x D)	12 mm x 40 mm x 22 mm
Housing design (light emission)	Rectangular
Sensing range max.	10 mm … 20 mm [1]
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Type of light	Visible red light
Light source	LED

[1] Object with 90% remission (based on standard white, DIN 5033).

Mechanics/electronics

Supply voltage	10 V DC … 30 V DC
Ripple	< 5 V_{pp}
Current consumption	30 mA [1]
Switching output	NPN
Switching mode	Light/dark switching
Response time	≤ 625 µs [2]
Connection type	Cable, 2 m [3]
Conductor cross section	0.14 mm²
Housing material	Plastic, ABS

[1] Without load.
[2] Signal transit time with resistive load.
[3] Do not bend below 0 °C.

Optics material	Plastic, PMMA
Enclosure rating	IP69K
Ambient operating temperature	−40 °C ... +60 °C
Ambient temperature, storage	−40 °C ... +75 °C
UL File No.	NRKH.E181493 & NRKH7.E181493

[1] Without load.

[2] Signal transit time with resistive load.

[3] Do not bend below 0 °C.

Classifications

eCl@ss 5.0	27270904
eCl@ss 5.1.4	27270904
eCl@ss 6.0	27270904
eCl@ss 6.2	27270904
eCl@ss 7.0	27270904
eCl@ss 8.0	27270904
eCl@ss 8.1	27270904
eCl@ss 9.0	27270904
eCl@ss 10.0	27270904
eCl@ss 11.0	27270904
ETIM 5.0	EC002719
ETIM 6.0	EC002719
ETIM 7.0	EC002719
UNSPSC 16.0901	39121528

Connection type

Connection diagram

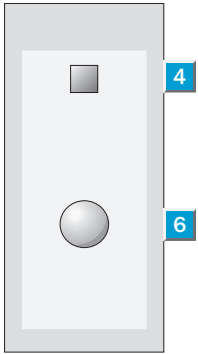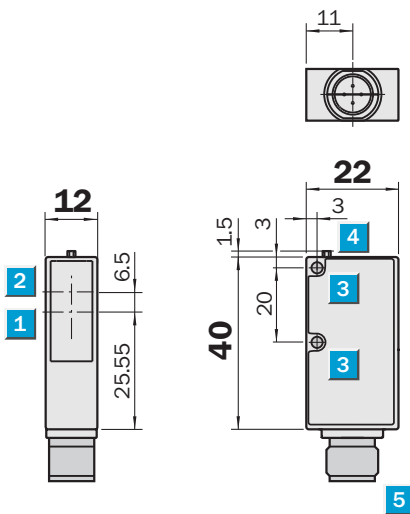| brn	L+
blk	Q
wht	$\overline{Q}$
blu	M

WT9-2N141
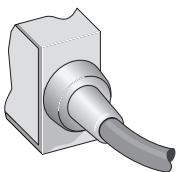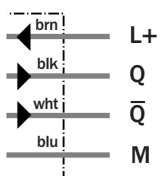
Characteristic curve
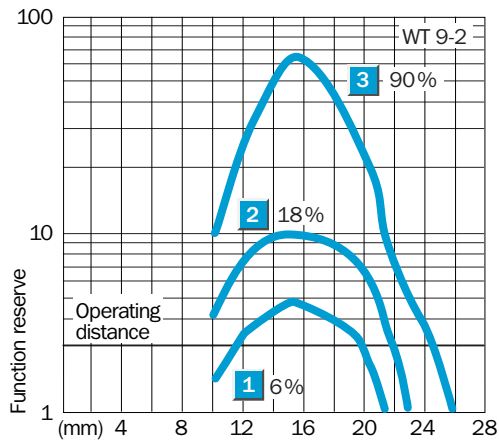
Adjustments

④ LED reception indicator, yellow
⑥ Teach-in button

Dimensional drawing (Dimensions in mm (inch))

① Center of optical axis, receiver
② Center of optical axis, sender
③ Mounting hole Ø 3.2 mm
④ LED signal strength indicator
⑤ Connector M12, 4-pin, 2m connection cable or 120mm cable with connector M12, 4-pin
⑥ Teach-in button

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

WORLDWIDE PRESENCE:

Contacts and other locations –**www.sick.com**

SICK AG | Waldkirch | Germany | www.sick.com

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