

# RT-P4000S02

ZoneControl

**MULTITASK PHOTOELECTRIC SENSORS** 





## Illustration may differ



#### Ordering information

Туре	Part no.
RT-P4000S02	1063169

Other models and accessories → www.sick.com/ZoneControl

#### Detailed technical data

#### **Features**

Sensor/ detection principle	Photoelectric proximity sensor, Background suppression
Dimensions (W x H x D)	20.6 mm x 99.2 mm x 48.9 mm
Sensing range max.	60 mm 900 mm
Sensing range	60 mm 900 mm
Focus	7°
Type of light	Infrared light
Light source	LED <sup>1)</sup>
Light spot size (distance)	Ø 20 mm (500 mm)
Angle of dispersion	7°
Adjustment	Potentiometer, 9 turns
Special applications	ZoneControl
Special features	Cable with WAGO terminal 733-104

 $<sup>^{1)}</sup>$  Average service life: 100,000 h at  $T_{U}$  = +25 °C.

#### Mechanics/electronics

Supply voltage	10 V DC 30 V DC <sup>1)</sup>
Ripple	< 5 V <sub>pp</sub> <sup>2)</sup>
Current consumption	20 mA <sup>3)</sup>

<sup>1)</sup> Limit values

 $<sup>^{2)}\,\</sup>mbox{May}$  not exceed or fall below  $\mbox{U}_{\mbox{\scriptsize V}}$  tolerances.

 $<sup>^{</sup>m 3)}$  Without load and valve deenergized.

 $<sup>^{4)}</sup>$  Do not bend below 0 °C.

 $<sup>^{5)}</sup>$  A = V<sub>S</sub> connections reverse-polarity protected.

<sup>6)</sup> C = interference suppression.

 $<sup>^{7)}</sup>$  D = outputs overcurrent and short-circuit protected.

Switching output	PNP
Switching mode	Light switching
Signal voltage PNP HIGH/LOW	Approx. V <sub>S</sub> - 0.5 V / 0 V
Output current I <sub>max.</sub>	≤ 100 mA
Response time	2 ms
Switching frequency	250 Hz
Connection type	Cable with WAGO terminal, 600 mm <sup>4)</sup>
Circuit protection	A <sup>5)</sup> C <sup>6)</sup> D <sup>7)</sup>
Protection class	III
Weight	175 g
Special device	<b>√</b>
Housing material	Plastic, ABS
Enclosure rating	IP67
Shock and vibration resistance	According to IEC 68
Ambient operating temperature	-40 °C +60 °C
Ambient storage temperature	-40 °C +75 °C
UL File No.	NRKH.E189383 & NRKH7.E189383

<sup>1)</sup> Limit values.

# Safety-related parameters

MTTF <sub>D</sub>	1,525 years
<b>DC</b> <sub>avg</sub>	0%

#### Classifications

ECI@ss 5.0	27270904
ECI@ss 5.1.4	27270904
ECI@ss 6.0	27270904
ECI@ss 6.2	27270904
ECI@ss 7.0	27270904
ECI@ss 8.0	27270904
ECI@ss 8.1	27270904
ECI@ss 9.0	27270904
ECI@ss 10.0	27270904
ECI@ss 11.0	27270904
ETIM 5.0	EC002719
ETIM 6.0	EC002719

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<sup>&</sup>lt;sup>3)</sup> Without load and valve deenergized.

 $<sup>^{4)}</sup>$  Do not bend below 0  $^{\circ}\text{C}.$ 

 $<sup>^{5)}</sup>$  A = V<sub>S</sub> connections reverse-polarity protected.

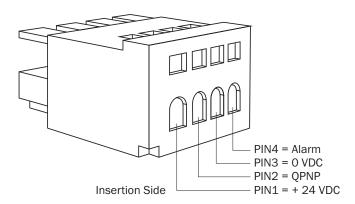
<sup>&</sup>lt;sup>6)</sup> C = interference suppression.

<sup>&</sup>lt;sup>7)</sup> D = outputs overcurrent and short-circuit protected.

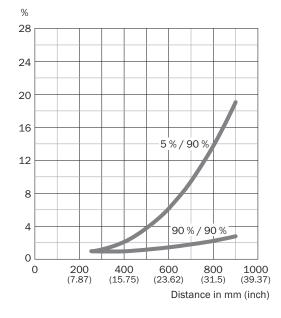
ETIM 7.0	EC002719
UNSPSC 16.0901	39121528

## Connection diagram

PIN assignment

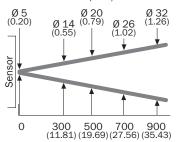


#### Characteristic curve



## Light spot size



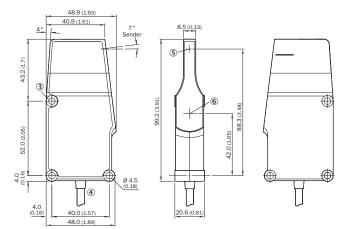


Distance in mm (inch)

#### Dimensional drawing (Dimensions in mm (inch))

#### R cable





- ① LED
- ② Potentiometer
- ③ Fixing hole
- 4 Cable
- ⑤ Center of optical axis, sender
- © Center of optical axis, receiver

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MULTITASK PHOTOELECTRIC SENSORS

#### Recommended accessories

Other models and accessories → www.sick.com/ZoneControl

Brief description	Туре	Part no.	
Mounting brackets and plates			
Mounting bracket, steel, zinc coated, mounting hardware included	BEF-WK-WTR	2051786	
	BEF-WN-RT/IRT	2074621	

# 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:**

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