



# S3N

## 95B010202

**S3N-PR-2-C01-NL NBEAM NPN LIGHT CABLE**

**MINIATURE PHOTOELECTRIC SENSOR**

## OVERVIEW

- All models with visible and bright red emission
- LED and Laser emission models
- Multiple Background suppression functions
- Shiny and clear object detection
- Single, Double trimmer & Push Button models
- Diffuse proximity up to 100 cm
- Background suppression up to 800 mm (LED trimmer version)
- Polarized RRX 7 m (Red LED emission)
- Polarized RRX 12 m (Red Laser emission)
- Through-beam 20 m and Laser 30 m
- Connection with 2 m Cable or M8 connector
- Rugged IP67 Plastic miniature case
- M3 threaded holes on the front side with metal inserts
- State of the art IO-Link connectivity with extended Smart Tasks



## TECHNICAL FEATURES

### Detection properties

Nominal sensing distance	250mm
Sensitivity adjustment	1 turn trimmer

Minimum sensing distance (blind zone)

1mm

## Application

Function Principle

Diffuse beam

Notes

(narrow beam) White 90%

Optic position

Radial 90°

Functions

Diffuse beam

## Outputs

Output type

NPN Lon

Output Function

Lon

Switching frequency

1kHz

Response time

500µs

## Electrical data

Operating Voltage

10...30VDC

No-Load supply current

≤ 35mA

Load current

≤ 100mA

Leakage current

≤ 300 µA

Output voltage drop

≤ 2V @ Iload=100mA

Max ripple content

≤ 10%

LED indicators	yellow OUTPUT LED, green STABILITY LED
Short-circuit protection	Yes
Reverse Polarity Protection	Yes
Emission	LED Red (635nm)
Interference to external light	according to EN 60947-5-2 : 2020
Impulsive Overvoltage Protection	Yes
Insulation resistance	>20 MΩ 500 Vdc, between electronics and housing
Contact resistance	500 Vac 1 min., between electronics and housing
0,1µF @Vmax - 1µF @Vmin	Yes

#### Mechanical data

Housing Material	Plastic Polymer Fiber Glass reinforced
Connections	2m cable
Active Head Material	PMMA
Storage temperature	- 25°C...+70°C
Plug connector material	Metal
shaft material	POM, PMMA
Diameter/Dimension	Cubic

#### Test/Approvals

Approvals	CE cULus
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EMC compatibility	EN 60947-5-2
Shocks and vibrations	0.5 mm amplitude, 10 ... 55 Hz frequency, for every axis (EN60068-2-6)

#### Generical Data

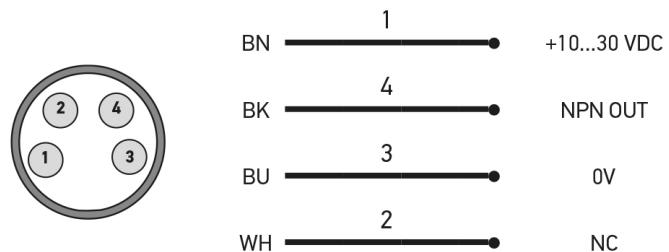
Dimensions	11x31x19 mm
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Operating Temperature	-25°C ... 55°C
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Mechanical Protection	IP67
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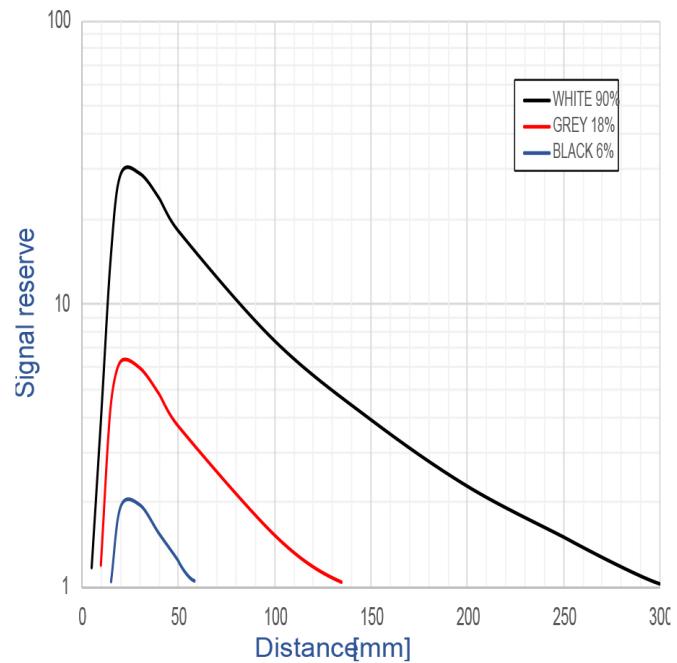
## CONNECTIONS

### Electrical diagram



## OTHERS

### Response curves



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