



# S3N

## 95B010672

**S3N-PR-2-C01-P NBEAM PNP L/D 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

PNP L/D selectable by trimmer L/D Selectable

Output Function

L/D Selectable

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 |
|-----------|----------|

|                       |  |
|-----------------------|--|
| 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

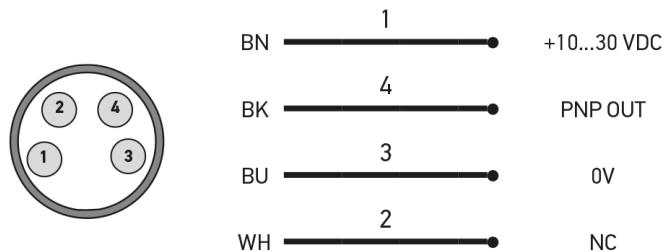
|            |             |
|------------|-------------|
| Dimensions | 11x31x19 mm |
|------------|-------------|

|                       |                |
|-----------------------|----------------|
| Operating Temperature | -25°C ... 55°C |
|-----------------------|----------------|

|                       |      |
|-----------------------|------|
| Mechanical Protection | IP67 |
|-----------------------|------|

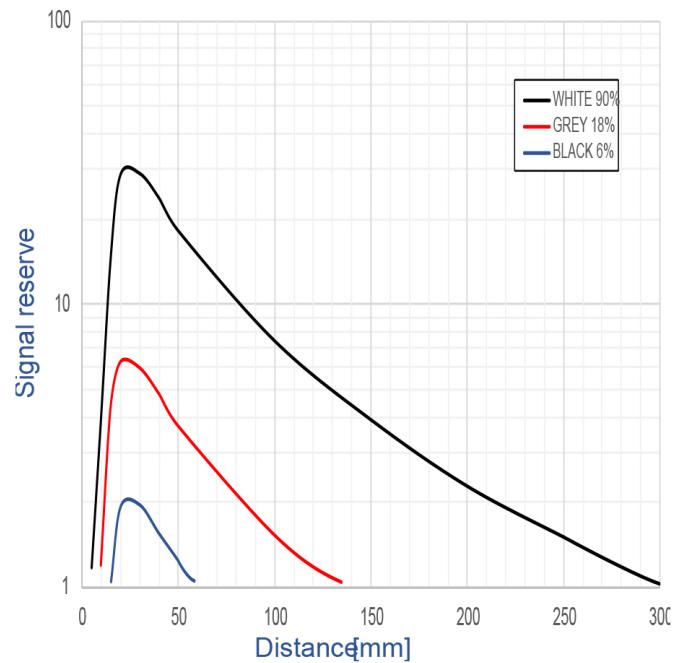
## CONNECTIONS

### Electrical diagram



## OTHERS

### Response curves



**Datasensing  
S.r.l.**

Strada S.Caterina, 235  
41122 Modena (MO)  
Tel. 059 420411  
Fax 059 253973  
E-mail  
info@datasensing.com

**date of  
printing**

05/02/2026  
04:27:47