



# S3N

## 95B010012

**S3N-PR-5-C11-PL DIFF PNP LIGHT M8**  
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

1m

Sensitivity adjustment

1 turn trimmer

Minimum sensing distance (blind zone)	0mm
---------------------------------------	-----

### Application

Function Principle	Diffuse beam
--------------------	--------------

Notes	white target Kodak 90% 400 x 400mm
-------	------------------------------------

Optic position	Radial 90°
----------------	------------

Functions	Diffuse beam
-----------	--------------

### Outputs

Output type	PNP 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	M8 plug 4pin
Active Head Material	PMMA
Storage temperature	- 25°C...+70°C
Plug connector material	Metal
shaft material	POM, PMMA
Diameter/Dimension	Cubic

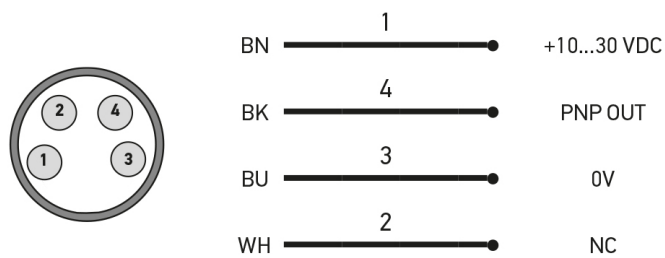
#### Test/Approvals

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)
<b>Generical Data</b>	
Dimensions	11x31x19 mm
Operating Temperature	-25°C ... 55°C
Mechanical Protection	IP67

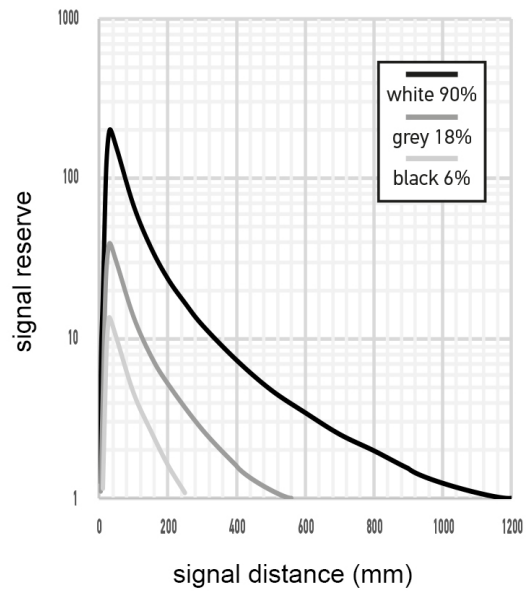
## CONNECTIONS

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**  
02/06/2026  
19:41:38