

S3N

95B010072

S3N-PR-5-C01-PD NBEAM PNP DARK 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	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 Don
Output Function	Don
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

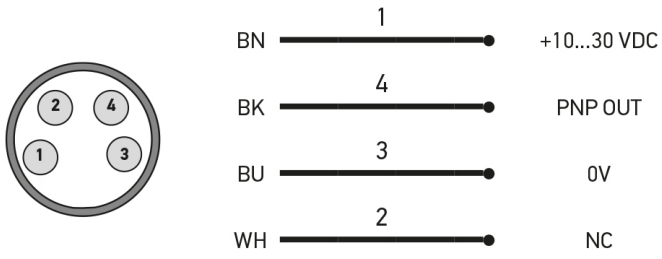
EMC compatibility	EN 60947-5-2
Shocks and vibrations	0.5 mm amplitude, 10 … 55 Hz frequency, for every axis (EN60068-2-6)

Generical Data

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

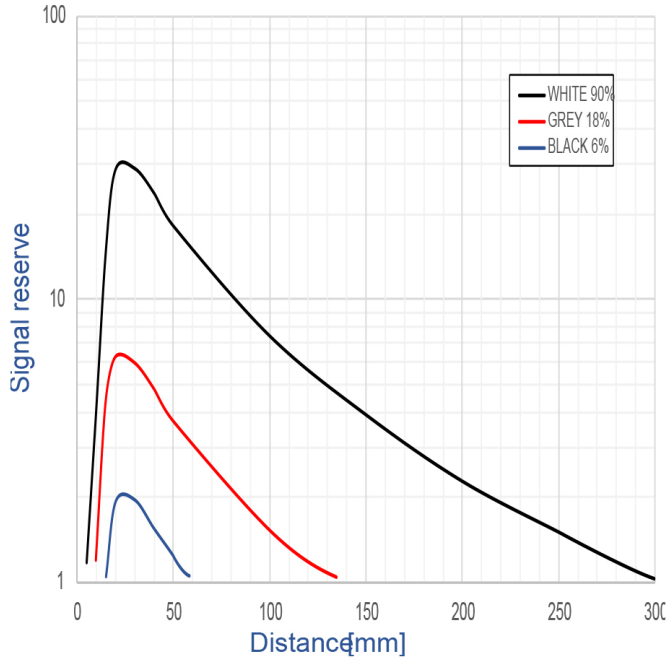
CONNECTIONS

Eletrical diagram



OTHERS

Response curves



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