



S3N

95B010780

S3N-PR-5-B03-OZ RRX POL IOL 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	12m
Sensitivity adjustment	Push Button TEACH-IN

Minimum sensing distance (blind zone)

0,1m

Application

Function Principle

Polarized retroreflective

Notes

On R7 reflector (class 1 LASER)

Optic position

Radial 90°

Functions

Polarized retroreflective

Outputs

Output type

IO-Link

Output Function

IO-Link

Switching frequency

1kHz

Response time

500µs

Electrical data

Operating Voltage

10...30VDC

No-Load supply current

≤ 35mA

Load current

≤100mA

Leakage current

≤ 400 µA

Output voltage drop

≤2V@Iload=100mA

Max ripple content

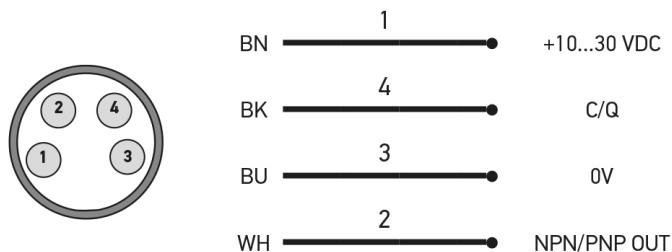
≤10%

LED indicators	yellow OUTPUT LED, green Power ON LED and user interface interaction during teach, blu LED IO-Link Activity
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 IO-Link
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

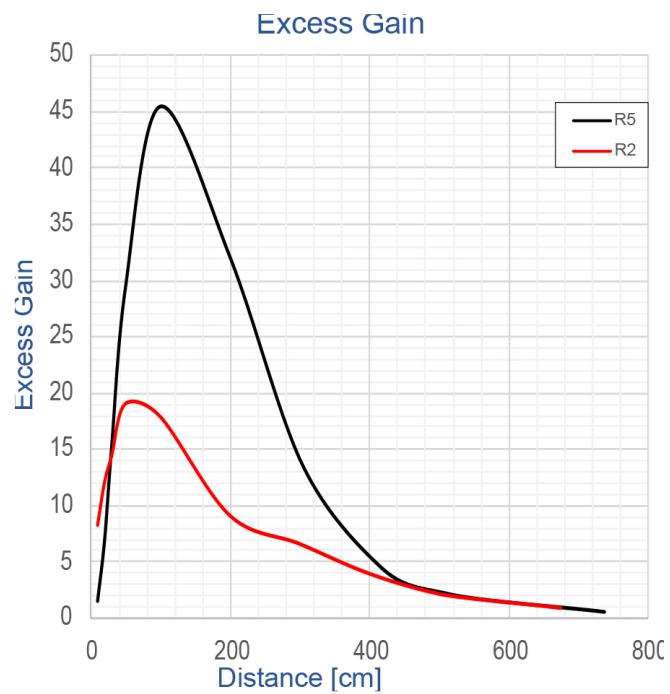
CONNECTIONS

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**

16/02/2026
03:48:38