


# S3N

## 95B010612

### S3N-PR-5-B01-P RRX POL PNP L/D 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

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|---|---|
| Nominal sensing distance | 7m |
| Sensitivity adjustment | 1 turn trimmer |

| | |
|---|---|
| Minimum sensing distance (blind zone) | 0,05m |

Application

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|---|---|
| Function Principle | Polarized retroreflective |
| Notes | On R5 reflector |
| Optic position | Radial 90° |
| Functions | Polarized retroreflective |

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 | 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 |

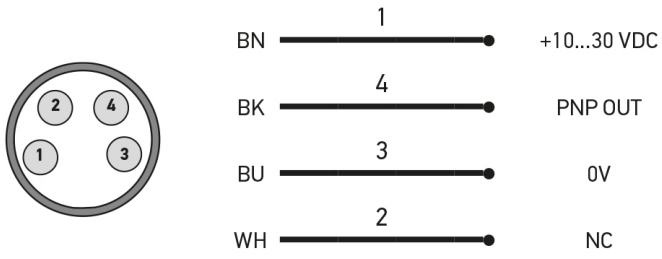
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|---|---|
| EMC compatibility | EN 60947-5-2 |
| Shocks and vibrations | 0.5 mm amplitude, 10 … 55 Hz frequency, for every axis (EN60068-2-6) |

Generical Data

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

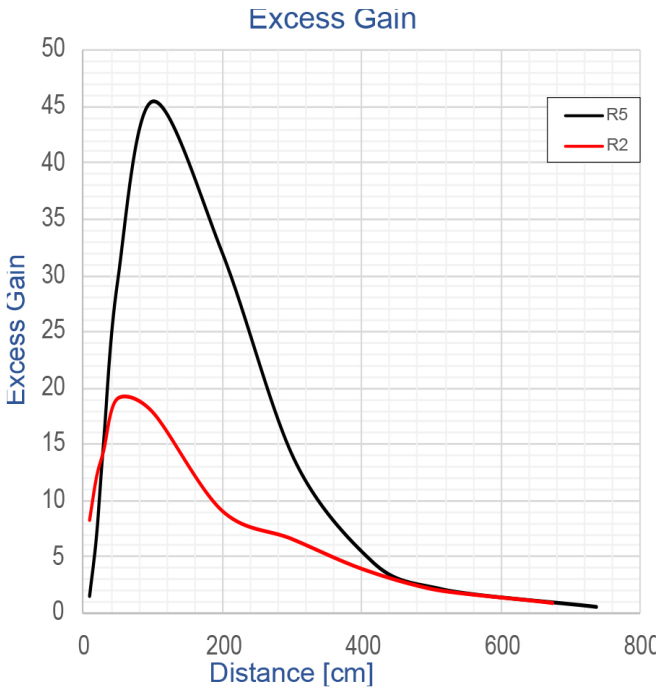
# CONNECTIONS

Eletrical diagram




# OTHERS

Response curves




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