

S₃N

95B010502

S3N-PH-5-M01-P BGS LASER 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

| Nominal sensing distance | 600mm |
|--------------------------|----------------|
| Sensitivity adjustment | 9 turn trimmer |

| Minimum sensing distance (blind zone) | 0mm |
|---------------------------------------|--|
| Application | |
| Function Principle | Blackground suppression |
| Notes | (class 1 LASER) white target Kodak 90% 100 x 100mm |
| Optic position | Radial 90° |
| Optic position | Radiai 90 |
| Functions | Background suppression |
| Outputs | |
| Output type | PNP L/D selectable by trimmer L/D Selectable |
| Output Function | L/D Selectable |
| Switching frequency | 1,5kHz |
| Response time | 333μs |
| Electrical data | |
| Operating Voltage | 1030VDC |
| No-Load supply current | $\leq 35 \text{mA}$ |
| Load current | ≤100mA |
| Leakage current | $\leq 300~\mu A$ |
| Output voltage drop | ≤2V@Iload=100mA |
| | |

≤10%

Max ripple content

| LED indicators | yellow OUTPUT LED, green POWER ON LED |
|----------------------------------|--|
| Short-circuit protection | Yes |
| Reverse Polarity Protection | Yes |
| Emission | LASER Red (650nm) class1 |
| Interference to external light | according to EN 60947-5-2: 2020 |
| Impulsive Overvoltage Protection | Yes |
| Insulation resistance | $>$ 20 M Ω 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 CDRH 1

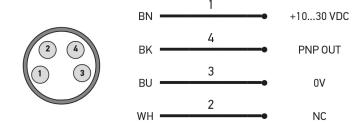
| EMC compatibility | EN 60947-5-2 |
|-----------------------|--|
| Shocks and vibrations | 0.5 mm amplitude, 10 55 Hz frequency, for every axis (EN60068-2-6) |

Generical Data

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

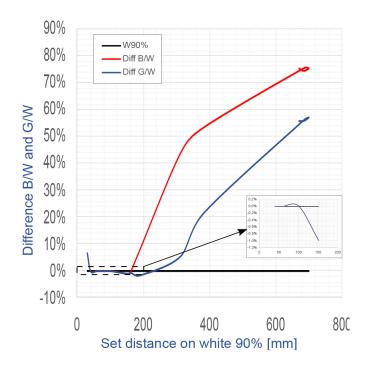
CONNECTIONS

Eletrical diagram



OTHERS

Response curves



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