

S5N

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S5N-MA-5-A00-PP

EXTENDED RANGE OF STANDARD "ONE FOR ALL"  
PHOTOELECTRIC TUBULAR M18 SENSORS

# OVERVIEW

- All optic functions
- Improved EMI immunity
- Improved ambient light immunity
- Improved laser safety level
- M18 flat plastic with universal mounting
- Short plastic housing models
- Available in M18 metal housing
- Stainless steel housing models
- Axial or radial optics, cable or connector
- Standard 4-wire NO-NC NPN or PNP output
- M12 pigtail models available
- IO-Link connectivity V1.1 with double channel

# TECHNICAL FEATURES

Detection properties

|                          |    |
|--------------------------|----|
| Nominal sensing distance | 4m |
|--------------------------|----|

|                        |     |
|------------------------|-----|
| Sensitivity adjustment | n/a |
|------------------------|-----|

Application

|                    |                 |
|--------------------|-----------------|
| Function Principle | Retroreflective |
|--------------------|-----------------|

|                |                           |
|----------------|---------------------------|
| Description    | Tubular M18 - axial optic |
| Optic position | axial                     |
| Functions      | Retroreflective           |

Outputs

|                     |           |
|---------------------|-----------|
| Output type         | PNP NO+NC |
| Output Function     | NO+NC     |
| Switching frequency | 1kHz      |
| Response time       | 500µs     |

Electrical data

|                             |                                        |
|-----------------------------|----------------------------------------|
| Operating Voltage           | 10...30VDC                             |
| No-Load supply current      | ≤ 35 mA                                |
| Load current                | ≤100mA                                 |
| Leakage current             | ≤10µA                                  |
| Output voltage drop         | ≤2V@Iload=100mA                        |
| LED indicators              | yellow OUTPUT LED, green STABILITY LED |
| Short-circuit protection    | YES                                    |
| Reverse Polarity Protection | Yes                                    |
| Emission                    | LED Infrared                           |
|                             |                                        |

|                                  |                                                 |
|----------------------------------|-------------------------------------------------|
| 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 |

**Mechanical data**

|                      |                             |
|----------------------|-----------------------------|
| Dimensions           | Ø18x57                      |
| Material             |                             |
| Housing material     | Metal - Nickel plated brass |
| Connections          | M12 plug                    |
| Active Head Material | PMMA                        |
| Storage temperature  | - 25°C...+70°C              |
| Diameter/Dimension   | M18                         |

**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) |

**Accessories**

|                      |              |
|----------------------|--------------|
| Supplied Accessories | nuts M18 x 1 |
|----------------------|--------------|

**Generical Data**

|                       |                                  |
|-----------------------|----------------------------------|
| Dimensions            | M18x57                           |
| Operating Temperature | - 25°C...+ 55°C (Without freeze) |
| Mechanical Protection | IP67                             |

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