

# Photoelectrics Diffuse-Reflective Type CGPS-UR, DC, Plastic Housing



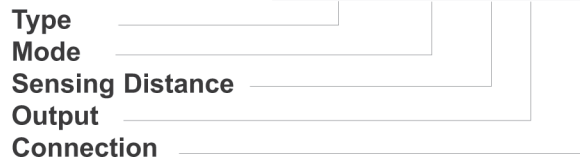
- Ultra short body length
- 100 & 300 mm sensing range
- Dual output – NO & NC in single unit
- Supply Voltage: 10 to 30 VDC
- Cable and plug versions
- IP66
- CE marked, UL and cUL approved

## Product Description

The CGPS-UR... is a family of cost-effective general purpose diffuse photoelectric sensors in a compact and versatile 18mm housing. They are useful for simple applications where a basic sensor provides adequate sensing performance, or for applications requiring a compact sensor with exceptional sensing range. The sensors are simple to use and easy to install. The sensors have both Normally open and Normally closed outputs, making them versatile for any installation.

## Ordering Key

**CGPS-UR-10N-M8**



## Type Selection

| Housing Diameter | Sensing Distance | Output N.O. & N.C. | 2 m cable   | M8 Connector   | M8 Connector w/lead |
|------------------|------------------|--------------------|-------------|----------------|---------------------|
| M18              | 100 mm           | NPN                | CGPS-UR-10N | CGPS-UR-10N-M8 | CGPS-UR-10N-PG      |
| M18              | 100 mm           | PNP                | CGPS-UR-10P | CGPS-UR-10P-M8 | CGPS-UR-10P-PG      |
| M18              | 300 mm           | NPN                | CGPS-UR-30N | CGPS-UR-30N-M8 | CGPS-UR-30N-PG      |
| M18              | 300 mm           | PNP                | CGPS-UR-30P | CGPS-UR-30P-M8 | CGPS-UR-30P-PG      |

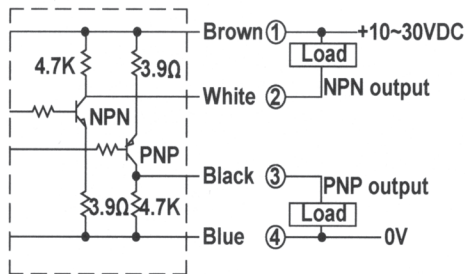
## Specifications

|  |                    |   |   |
|--|--------------------|---|---|
| <b>Sensing Distance (<math>S_n</math>)</b><br>Adjustable | 100 mm & 300 mm    | <b>Ambient Light Immunity</b>   | Lamplight < 10, 000 Lux<br>Sunlight < 20, 000 Lux   |
| <b>Sensitivity Adjustment</b>                            | 270° Potentiometer | <b>Response Time</b><br><b>Operating Frequency</b>                                  | 1 ms<br>1 KHz                                       |
| <b>Rated Operational Voltage (<math>U_B</math>)</b>      | 10 - 30 VDC        | <b>Output indication (LED functions)</b>  | Green: Power ON<br>Yellow: Output ON                |
| <b>Ripple (<math>U_{rpp}</math>)</b>                     | < 20%              | <b>Environment</b><br>Overvoltage Category<br>Pollution degree<br>Degree of protect | III<br>3<br>IP 66                                   |
| <b>Output Current</b>                                    | 150 mA maximum     | <b>Operating Temperature</b>  | -20 °C - to +80 °C;<br>-4F to +176F<br>35% - 85% RH |
| <b>No Load Supply Current (<math>I_o</math>)</b>         | < 30 mA            |   |   |

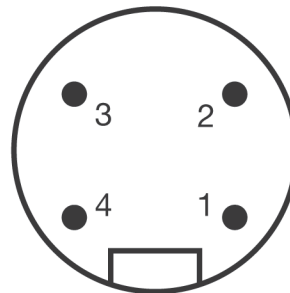
### Specifications (con't):

|                           |                                 |                     |                      |
|---------------------------|---------------------------------|---------------------|----------------------|
| <b>Leakage Current</b>    | 0.8 mA Maximum                  | <b>Housing</b>      | Intensive PBT        |
| <b>Residual Voltage</b>   | 0.1 V Maximum                   | <b>Lens</b>         | PMMA                 |
| <b>Protection</b>         | Short Circuit, Reverse Polarity | <b>Connection</b>   |                      |
| <b>Transient Voltage</b>  | 2 kV / 1 $\mu$ s                | Cable               | 2m                   |
| <b>Light Source</b>       | Infrared LED                    | Plug                | M8 x 1               |
| <b>Dielectric Voltage</b> | 2.5 kV                          | Pig-tail            | M8 Plug w / 6" Cable |
|                           |                                 | <b>Mating Cable</b> |                      |
|                           |                                 | M8 plug             | CONG5A - .. series   |
|                           |                                 | <b>Weight</b>       |                      |
|                           |                                 | Cable version       | 85 g                 |
|                           |                                 | M12                 | 25 g                 |
|                           |                                 | M8 plug version     | 20 g                 |
|                           |                                 | <b>Approvals</b>    | UL, cUL, CE          |

### Wiring Diagram:

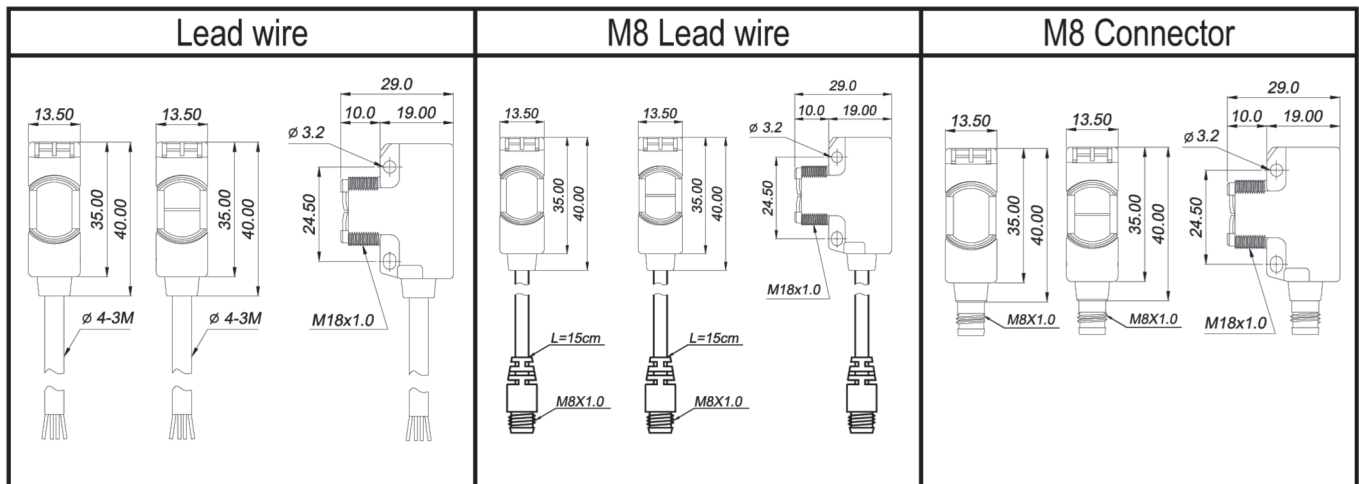


### Connection Diagram:



Pin1: +v Brown  
 Pin2: N.C. Output White  
 Pin4: N.O. Output Black  
 Pin3: 0v Blue

### Dimensions:



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### **Other Information:**

|                              |   |
|------------------------------|---|
| <b>Accessories:</b>          | CONM54NF-... for models with M8 plug  |
| <b>Delivery Contents:</b>    | <ul style="list-style-type: none"><li>• Photoelectric sensor</li><li>• 1 nut</li><li>• 1 mounting bracket</li><li>• 1 screwdriver (on models with adjustable sensitivity)</li></ul> |
| <b>Compliance/Approvals:</b> |   |

