

# O5P502



## Retro-reflective sensor

O5P-FNKG/US100



- 1 programming buttons  
 2 When a M5 mounting screw is used, the max. tightening torque is 2 Nm.  
 receiver in upper lens  
 transmitter in lower lens



### Application

|                    |                         |
|--------------------|-------------------------|
| Function principle | Retro-reflective sensor |
|--------------------|-------------------------|

### Electrical data

|                             |      |            |
|-----------------------------|------|------------|
| Operating voltage           | [V]  | 10...36 DC |
| Current consumption         | [mA] | 20         |
| Protection class            |      | II         |
| Reverse polarity protection |      | yes        |
| Type of light               |      | red light  |
| Wave length                 | [nm] | 624        |



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| Outputs                                              |                                                              |                 |
|------------------------------------------------------|--------------------------------------------------------------|-----------------|
| Electrical design                                    | NPN                                                          |                 |
| Output function                                      | light-on/dark-on mode; (programmable)                        |                 |
| Max. voltage drop switching output DC [V]            | 2.5                                                          |                 |
| Permanent current rating of switching output DC [mA] | 200                                                          |                 |
| Switching frequency DC [Hz]                          | 2000                                                         |                 |
| Short-circuit protection                             | yes                                                          |                 |
| Type of short-circuit protection                     | pulsed                                                       |                 |
| Overload protection                                  | yes                                                          |                 |
| Detection zone                                       |                                                              |                 |
| Range referred to prismatic reflector [m]            | 0.075...10; (Prismatic reflector Ø 80 E20005)                |                 |
| Range adjustable                                     | yes                                                          |                 |
| Max. light spot diameter [mm]                        | 250                                                          |                 |
| Light spot dimensions refer to                       | at maximum range                                             |                 |
| Polarisation filter available                        | yes                                                          |                 |
| Operating conditions                                 |                                                              |                 |
| Ambient temperature [°C]                             | -25...60                                                     |                 |
| Protection                                           | IP 67                                                        |                 |
| Tests / approvals                                    |                                                              |                 |
| EMC                                                  | EN 60947-5-2                                                 |                 |
| MTTF [years]                                         | 438                                                          |                 |
| Mechanical data                                      |                                                              |                 |
| Weight [g]                                           | 66.2                                                         |                 |
| Housing                                              | rectangular                                                  |                 |
| Dimensions [mm]                                      | 56 x 18.2 x 46.8                                             |                 |
| Materials                                            | housing: PA; bezel: stainless steel; operator interface: TPU |                 |
| Lens material                                        | PMMA                                                         |                 |
| Lens alignment                                       | side lens                                                    |                 |
| Displays / operating elements                        |                                                              |                 |
| Display                                              | switching status                                             | 1 x LED, yellow |
| Teach function                                       | yes                                                          |                 |
| Electronic lock                                      | yes                                                          |                 |
| Remarks                                              |                                                              |                 |
| Remarks                                              | operating voltage "supply class 2" according to cULus        |                 |
| Pack quantity                                        | 1 pcs.                                                       |                 |
| Electrical connection                                |                                                              |                 |
| Connector: 1 x M12                                   |                                                              |                 |

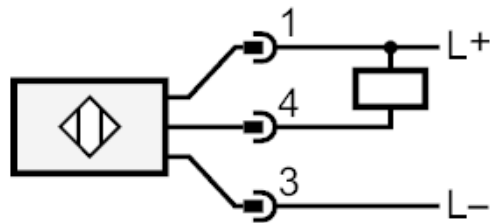
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### Connection





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### Diagrams and graphs

excess gain graph

