



## Retro-reflective sensor

O6P-FPKG/0,30m/US



- 1 output function switch  
 2 potentiometer sensitivity  
 Receiver in upper lens  
 transmitter in lower lens



## Product characteristics

|               |             |
|---------------|-------------|
| Type of light | red light   |
| Housing       | rectangular |

## Application

|                    |                                             |
|--------------------|---------------------------------------------|
| System             | polarization filter                         |
| Function principle | Retro-reflective sensor                     |
| Application        | suited for use in the machine tool industry |

## Electrical data

|                             |      |              |
|-----------------------------|------|--------------|
| Operating voltage           | [V]  | 10...30 DC   |
| Current consumption         | [mA] | 12; ((24 V)) |
| Protection class            |      | III          |
| Reverse polarity protection |      | yes          |
| Type of light               |      | red light    |
| Wave length                 | [nm] | 633          |

## Outputs

|                                                 |      |                                     |
|-------------------------------------------------|------|-------------------------------------|
| Electrical design                               |      | PNP                                 |
| Output function                                 |      | light-on/dark-on mode; (selectable) |
| Max. voltage drop switching output DC           | [V]  | 2.5                                 |
| Permanent current rating of switching output DC | [mA] | 100                                 |
| Switching frequency DC                          | [Hz] | 1000                                |
| Short-circuit protection                        |      | yes                                 |
| Type of short-circuit protection                |      | yes (non-latching)                  |

# O6P404



## Retro-reflective sensor

O6P-FPKG/0,30m/US

| Monitoring range                            |                  |                                                                        |
|---------------------------------------------|------------------|------------------------------------------------------------------------|
| Range referred to prismatic reflector       | [m]              | 0.05...5; (Prismatic reflector Ø 80 E20005)                            |
| Range adjustable                            |                  | yes                                                                    |
| Max. light spot diameter                    | [mm]             | 150                                                                    |
| Light spot dimensions refer to              |                  | at maximum range                                                       |
| Polarization filter available               |                  | yes                                                                    |
| Operating conditions                        |                  |                                                                        |
| Ambient temperature                         | [°C]             | -25...60                                                               |
| Protection                                  |                  | IP 65; IP 67; IP 68                                                    |
| Tests / approvals                           |                  |                                                                        |
| EMC                                         |                  | EN 60947-5-2                                                           |
| MTTF                                        | [years]          | 895                                                                    |
| UL approval                                 |                  | UL approval number E020                                                |
| Mechanical data                             |                  |                                                                        |
| Weight                                      | [g]              | 50                                                                     |
| Housing                                     |                  | rectangular                                                            |
| Dimensions                                  | [mm]             | 34.8 x 13 x 21                                                         |
| Material                                    |                  | housing: stainless steel (1.4404 / 316L); plastics: PPSU; sealing: FKM |
| Lens material                               |                  | PMMA                                                                   |
| Lens alignment                              |                  | Side sensing                                                           |
| Tightening torque                           | [Nm]             | 1; (screws)                                                            |
| Displays / operating elements               |                  |                                                                        |
| Display                                     | Switching status | 1 x LED, yellow                                                        |
|                                             | Power            | 1 x LED, green                                                         |
| Remarks                                     |                  |                                                                        |
| Remarks                                     |                  | cULus - Class 2 source required                                        |
| Pack quantity                               |                  | 1 pcs.                                                                 |
| Electrical connection                       |                  |                                                                        |
| Cable: 0.3 m, PUR; 3 x 0.25 mm <sup>2</sup> |                  |                                                                        |
| Connector: 1 x M12; coding: A               |                  |                                                                        |
|                                             |                  |                                                                        |



## Retro-reflective sensor

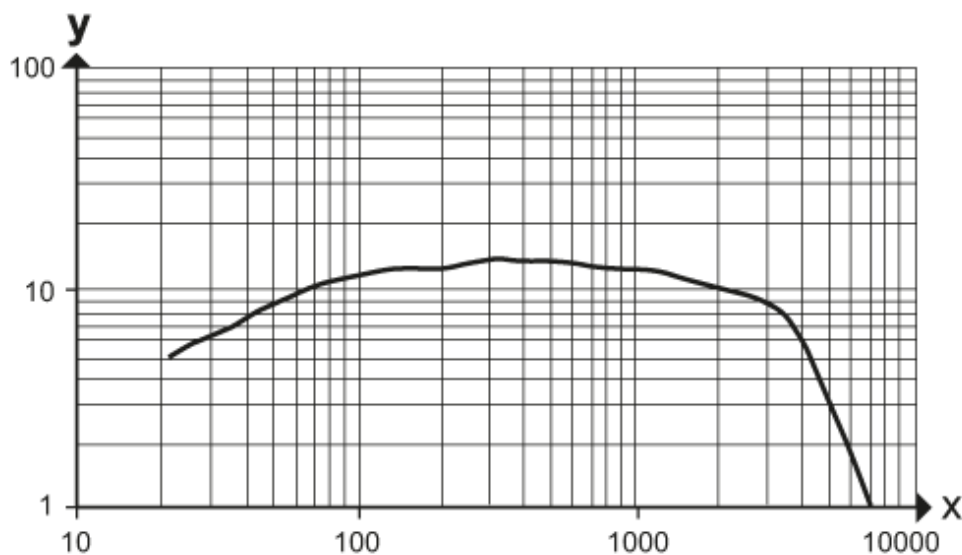
O6P-FPKG/0,30m/US

### Connection



### Diagrams and graphs

excess gain graph



x: distance [mm]

y: excess gain factor