

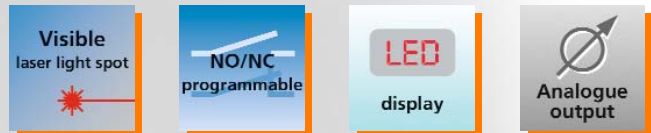


The longsighted sensor – with winning technology.



Compact distance sensor with 75 m range referred to prismatic reflector.

- Use at daylight up to 100,000 lux.
- 2 switching outputs, one configurable as an analogue output.
- Excellent price / performance ratio.
- Scalable measuring range.
- Wide range of accessories, e.g. mounting and fine adjustment unit.



PMD technology (winner of the Hermes Award 2005)

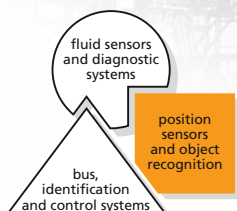
Due to the innovative on-chip time-of-flight measurement system with PMD technology (Photonic Mixer Device) the O1D106 is a distance sensor with the capacities of a measurement system, at the price of a standard sensor.

Compact distance sensor with a range of 75 m

With the reflectors available as an option distances from 1 m to 75 m can be measured. Applications are versatile: the sensor can, for example, be used for position monitoring of cranes.

Extensive range of accessories

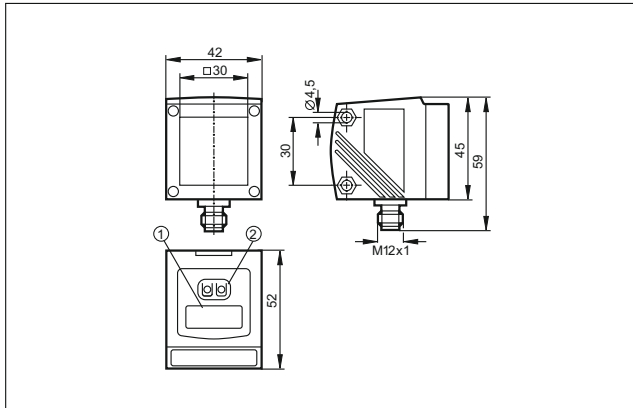
The range of accessories includes large prismatic reflectors as well as a mounting and fine adjustment unit for easy fixing and precise alignment of the sensor.



Applications:
Distance measurement in automation technology

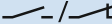
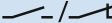
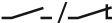
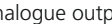
| Electrical design | Light spot diameter [mm] | Operating voltage [V] | Current consumption [mA] | Measuring frequency [Hz] | Operating temperature [°C] | Protection | Order no. |
|--|--------------------------|-----------------------|--------------------------|--------------------------|----------------------------|------------|---------------|
| M12 connector · laser protection class 2 · measuring range 1...75 m | | | | | | | |
| DC PNP | 150 (at 75 m) | 18...30 DC | < 150 | max. 33, adjustable | -10...60 | IP 65, III | O1D106 |

Dimensions



- 1) 4-digit alphanumeric display
- 2) Programming buttons






Further technical data

| Type O1D106 | |
|--|---|
| Repeatability at a measuring frequency of 1 Hz | ± 15 mm |
| Accuracy at a measuring frequency of 1 Hz | ± 35 mm |
| Extraneous light LUX | max. 100,000 |
| Output function | OUT1  programmable OUT2  programmable or analogue (4...20 mA, scaleable) (0...10 V, scaleable) |
| Short-circuit protection, pulsed | • |
| Rev. polarity / overl. protection | • / • |
| EMC | EN 60947-5-2 |
| Material | housing: diecast zinc front lens: glass LED window: polycarbonate |
| Programming options |  /  , window function, analogue output, hysteresis function |
| Function display | |
| Switching status | LED |
| Operation | LED |
| Distance value, programming | 4-digit alphanumeric display |

Accessories

| Type | Description | Order no. |
|---|---|---------------|
|  | Mounting and fine adjustment unit, aluminium | E1D100 |
|  | Clamp, diecast zinc for mounting and fine adjustment unit | E20717 |
|  | Mounting rod, 100 mm long, Ø 12 mm, M10 thread, stainless steel | E20938 |
|  | Mounting rod, Ø 12 mm, M10 thread, stainless steel | E20940 |
|  | Cube for mounting on an aluminium profile, M10 thread, diecast zinc | E20951 |
|  | Prismatic reflector 270 x 240 mm (plastic) | E21159 |
| | Prismatic reflector 95 x 95 mm (plastic) | E20454 |

Connectors and splitter boxes

| Type | Description | Order no. |
|---|------------------------------------|---------------|
|  | M12 socket, 5 m orange, PVC cable | EVT001 |
|  | M12 socket, 10 m orange, PVC cable | EVT002 |
|  | M12 socket, 5 m orange, PVC cable | EVT004 |
|  | M12 socket, 10 m orange, PVC cable | EVT005 |
|  | M12 socket, 5 m black, PUR cable | EVC002 |
| | M12 socket, 10 m black, PUR cable | EVC003 |
| | M12 socket, 5 m black, PUR cable | EVC005 |
| | M12 socket, 10 m black, PUR cable | EVC006 |

ifm article no. 7511246 · Printed in Germany on non-chlorine paper. · We reserve the right to make technical alterations without prior notice. · 11.2007

Position sensors and object recognition