# RAMO 22 I, M12, round collar, lamp white, bezel white, M12 4-pin A-coded



### fields of application

- Measurement-control-regulation
- Electrical engineering
- Mechanical and system engineering
- Vehicle construction
- Chemical industry
- Industrial robots

### special features

- Energy-efficient and bright LED signal lamp
- 180° field of vision
- Single-piece mono-housing
- Unique series with easy Plug&Play connection
- Completely tailored design – fits the RAFIX range of control components
- Installation size: 22.3 mm
- Available in a large range of colors

## description

RAMO I signal lamps extend the range with a bright, energy-efficient signal lamp. The concave bezel means the reflected beam angle and angle of vision are more than 180°. It also provides a different look to the RAMO T pushbuttons. The signal lamp is available in five colors. Just like all RAMO actuators, connection is simple using Plug&Play and without any manual wiring – with M12 sensor cables.

With the RAMO I FLEXLAB signal lamps an individual configuration of the lens color and labeling is possible by the customer. This allows maximum flexibility. Lenses are additionally required as accessories.

Additional information according to UL certificate:
For Class 2 Power Source or Limited Voltage / Limited Current only
Installation only by trained specialist personnel.
Type 4x Indoor only with cable "Cat. No. 7000-08061-0210100 PUR 4x0.25mm² with M8 connector, rated max. 30VAC/DC 4A, manufactured by Murrelektronik GmbH" and "Cat. No. 7000-12221-0340100 PUR 4x0.34mm² with M12 connector, rated max. 30VAC/DC 4A, manufactured by Murrelektronik GmbH"
For Use on a Flat Surface of a Type 1 or 4x indoor only Enclosure.

## technical data

**general**

| | |
|---|---|
| Color | black |
| Bezel color | white |
| Property of bezel / mushroom | translucent |

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| | |
|---|---|
| Collar color | black |
| Luminous element color | white |
| Collar shape | round |
| Operating temperature, min. | -40 °C |
| Operating temperature, max. | 85 °C |
| Storage temperature, min. | -40 °C |
| Storage temperature, max. | 85 °C |
| illuminated | Yes |
| Luminous elements | LED |
| Packaging | Box |
| Packaging unit | 10 pcs. |
| net weight | 12 g |
| Degree of protection, front side, according to DIN EN 60529 | IP66<br>IP67<br>IP69 |
| Degree of protection, rear side, according to DIN EN 60529 | IP66<br>IP67 |
| UL Enclosure Type Rating front side | type 4X indoor |
| Environment resistance | IEC 60068-2-14<br>IEC 60068-2-30<br>IEC 60068-2-78 |
| Salt-spray resistance according to standard | IEC 60068-2-11 |
| Impact resistance IK | 04 frontal |
| MOQ order | 10 pcs. |
| Pollution degree acc. to DIN EN 61010-1 | Pollution degree 2 |
| RoHS compliant | Yes |
| REACH compliant | Yes |

**direct links**

RAFI eCatalog

## mounting diameters

| | |
|---|---|
| Outside dimension, length | 29.8 mm |
| Outside dimension, width | 29.8 mm |
| Outside dimension, height | 41.8 mm |
| Mounting hole | 22.3 mm |
| Mounting depth | 30.2 mm |
| Installation height | 11.6 mm |
| Grid, min. | 30 mm |
| Collar dimension | 29.8 mm |

## mechanical data

| | |
|---|---|
| Resistance to force on the side | 300 N |
| Fixing | Threaded ring |
| Threaded ring torque, max. | 1.2 Nm |
| Terminal on the rear | M12 4-pin A-coded |
| PIN 2 | LED + |
| PIN 3 | GND |

## electrical data

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| | |
|---|---|
| Rated insulation voltage | 250 V |
| Rated surge voltage | 800 V |
| Rated operating voltage | DC 20 - 28 V |
| Operating voltage of the luminous element, min. | 20 V |
| Operating voltage of the luminous element, max. | 28 V |
| Voltage type | DC |
| Rated operating current | 0.01 A |
| Rated operating voltage | 20-28 V |
| Operating current of the luminous element, min. | 8 mA |
| Operating current of the luminous element, max. | 12 mA |
| Power loss | 0.70000 W |
| Overvoltage category | 2 |
| Kind of short circuit protective device | fuse 250 V / 0,1 A / 1,5 kA gG quick |
| Conditional short circuit current | 1,000 A |

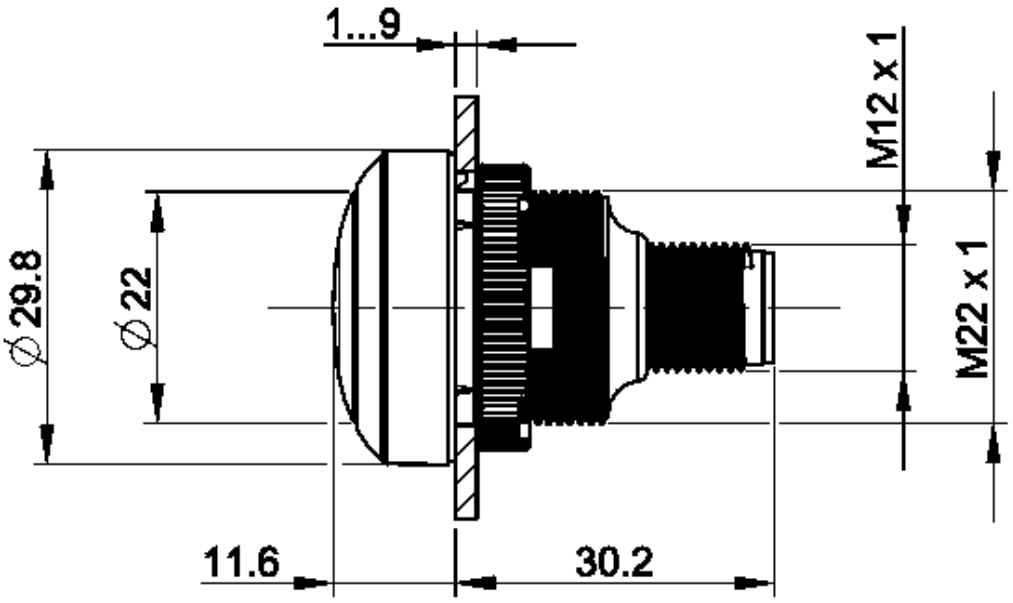
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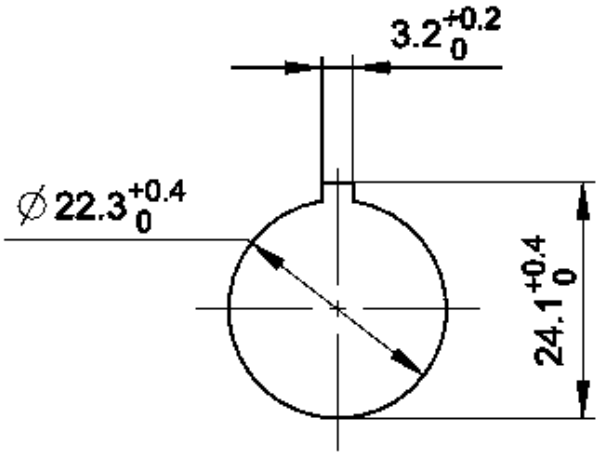
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## drawings

### Dimensioned drawing




### Mounting hole drawing



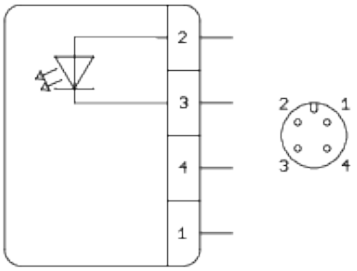

acc. to IEC 60947-5-1

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## Schematic diagram




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