

## RAMO 22 S, M12, round collar, 1 NO, Gold, M12 4-pin A-coded, frontring black, 1 x 90°, shape L, latching



### Description

The RAMO S selector switches offer a solution for every application thanks to a wide variety of contact functions, rotation angles, actuation functions and illuminated panels.

Just like all RAMO actuators, connection is simple using Plug&Play and without any manual wiring - with M12 sensor cables.



### technical data

#### > general

|   |  |
|---|--|
| Potential free  | yes  |
| Color   | black  |
| Bezel color   | white  |
| Property of bezel / mushroom                                | transparent  |
| Collar color  | black  |
| Front ring 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.                                   | 90 °C  |
| illuminated   | Yes  |
| Luminous elements   | LED  |
| Packaging   | Box  |
| Packaging unit  | 2 pcs.   |
| Net weight  | 16.9 g   |
| Operating life  | 200,000 cycles                                     |
| B10   | 250,000 cycles                                     |
| Degree of protection, front side, according to DIN EN 60529 | IP65   |
| Degree of protection, rear side, according to DIN EN 60529  | IP65   |
| Environment resistance                                      | IEC 60068-2-14<br>IEC 60068-2-30<br>IEC 60068-2-78 |
| Shock resistance according to standard IEC 60068-2-27       | 30 g at 11 ms amplitude semi-sinusoidal            |

#### direct links

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|  |                         |
|--|-------------------------|
| Salt-spray resistance according to standard                | IEC 60068-2-11          |
| Impact resistance IK                                       | 02 side<br>08 frontal   |
| Oscillation resistance according to standard IEC 60068-2-6 | 5 g at 10...500 Hz      |
| Minimum order quantity (MOQ)                               | 2 pcs.                  |
| Pollution degree acc. to DIN EN 61010-1                    | Pollution degree 2      |
| RoHS compliant   | Yes                     |
| REACH compliant  | Yes                     |
| Country of origin  | HU                      |
| <b>&gt; mounting diameters</b>                             |                         |
| Outside dimension, length                                  | 29.8 mm                 |
| Outside dimension, width                                   | 29.8 mm                 |
| Outside dimension, height                                  | 53.9 mm                 |
| Mounting hole  | 22.3 mm                 |
| Mounting depth   | 30.1 mm                 |
| Installation height  | 23.8 mm                 |
| Grid, min.   | 30 mm                   |
| <b>&gt; mechanical data</b>                                |                         |
| Terminal on the rear                                       | M12 4-pin A-coded       |
| Fixing   | Threaded ring           |
| Actuation function   | latching                |
| Threaded ring torque, max.                                 | 1.2 Nm                  |
| Rotating angle   | 1 x 90°, shape L        |
| Resistance to force on the side                            | 300 N                   |
| Contact function   | 1 NO                    |
| Contact material   | Gold                    |
| PIN 1  | Normally open contact 1 |
| PIN 2  | LED +                   |
| PIN 3  | GND                     |
| PIN 4  | Normally open contact 1 |
| <b>&gt; electrical data</b>                                |                         |
| Rated insulation voltage                                   | 250 V                   |
| Rated surge voltage  | 2,500 V                 |
| Operating voltage of the luminous element, min.            | 22 V                    |
| Operating voltage of the luminous element, max.            | 26 V                    |
| Rated voltage, min.  | 1 V                     |
| Rated voltage, max.  | 32 V                    |
| Voltage type   | DC                      |
| Rated operating voltage                                    | 1-32 V                  |
| Operating current of the luminous element, max.            | 25 mA                   |
| Rated current, max.  | 0.1 A                   |

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|   |                                      |
|---|--------------------------------------|
| Power loss                              | 0.00040 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                              |

**> Specifications according to IEC 60947-5-1**

|                         |              |
|-------------------------|--------------|
| Rated operating voltage | 35 V (AC-15) |
|                         | 35 V (DC-13) |
| Rated surge voltage     | 2,500 V      |

**> Specifications according to UL 60947**

|                                       |                |
|---------------------------------------|----------------|
| UL Enclosure Type Rating front side   | type 4X indoor |
| Operating temperature, max. to UL/TÜV | 85 °C          |

**Use according to UL:**

Only approved for Class 2 power sources or limited voltage/current.

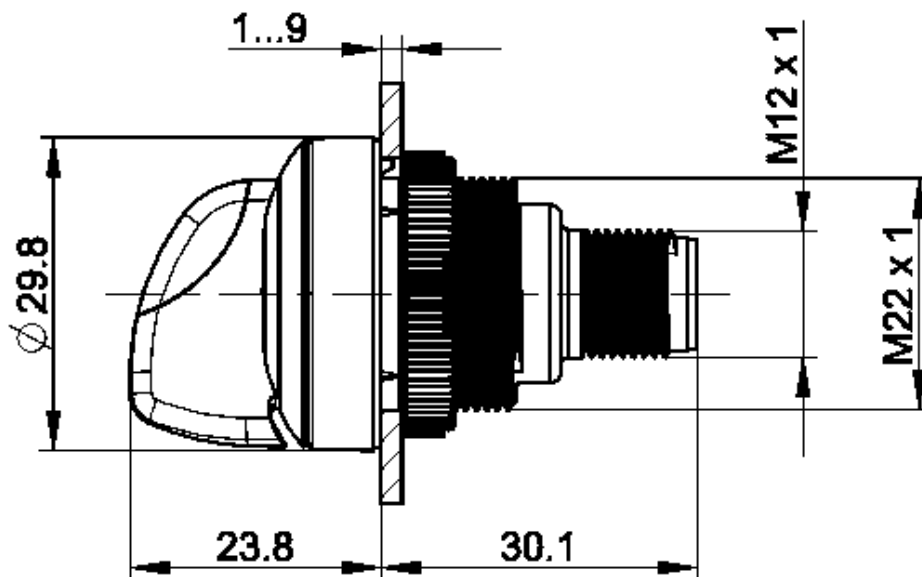
Installation only by trained personnel.

Type 4x Indoor only with cable "Cat. No. 7000-08061-0210100 PUR 4x0.25mm<sup>2</sup> with M8 plug, rated power max. 30VAC/DC 4A, manufactured by Murrelektronik GmbH" and "Cat. No. 7000-12221-0340100 PUR 4x0.34mm<sup>2</sup> with M12 connector, rated power max. 30VAC/DC 4A, manufactured by Murrelektronik GmbH" and "Cat. 30VAC/DC 4A, Manufacturer Murrelektronik GmbH" and "Cat. No. 7000-12221-0340100.

For use on a flat surface of a type 1 or type 4x enclosure (indoor).

**drawings**

**Dimensioned drawing**



**Mounting hole drawing**



acc. to IEC 60947-5-1

**Schematic diagram**

