

## RAMO 22 T, M12, 1 NO, round collar, momentary contact function, frontring black, 1 NO, bezel yellow



### Description

Because it features the RAFI MICON 5 tactile switch, RAMO 22 T offers tactile feedback with a noticeable click. Due to the IP 66/IP69K degree of protection, it is recommended in particular for plant engineering and construction. RAMO 22 T requires a mounting hole diameter of 22.3 mm.



### technical data

#### > general

|   |  |
|---|--|
| Potential free  | yes  |
| Color   | black  |
| Bezel color   | yellow   |
| Property of bezel / mushroom                                | translucent  |
| Collar color  | black  |
| Front ring color  | black  |
| Luminous element color                                      | yellow   |
| 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  | 12.6 g   |
| Operating life  | 500,000 cycles   |
| B10   | 650,000 cycles   |
| 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   |
| Environment resistance                                      | IEC 60068-2-14<br>IEC 60068-2-30<br>IEC 60068-2-33<br>IEC 60068-2-78 |
| Salt-spray resistance according to standard                 | IEC 60068-2-11   |
| Impact resistance IK  | 05   |
| Minimum order quantity (MOQ)                                | 10 pcs.  |

#### direct links

> [RAFI eCatalog](#)

|   |                                      |
|---|--------------------------------------|
| 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                       | 40 mm                                |
| Outside dimension, width                        | 29.8 mm                              |
| Outside dimension, height                       | 29.8 mm                              |
| Mounting hole                                   | 22.3 mm                              |
| Mounting depth                                  | 30.2 mm                              |
| Installation height                             | 9.8 mm                               |
| Grid, min.                                      | 30 mm                                |
| <b>&gt; mechanical data</b>                     |                                      |
| Terminal on the rear                            | M12 4-pin A-coded                    |
| Fixing  | Threaded ring                        |
| Actuation function                              | momentary contact function           |
| Operating force, max.                           | 12 N                                 |
| Operating force, min.                           | 5 N                                  |
| Operating travel, max.                          | 1 mm                                 |
| Threaded ring torque, max.                      | 1.2 Nm                               |
| 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                             | 800 V                                |
| Operating voltage of the luminous element, min. | 20 V                                 |
| Operating voltage of the luminous element, max. | 28 V                                 |
| Rated voltage, min.                             | 0.02 V                               |
| Rated voltage, max.                             | 35 V                                 |
| Voltage type                                    | DC                                   |
| Rated operating current                         | 0.1 A                                |
| Rated operating voltage                         | 0.02-35 V                            |
| Rated current, min.                             | 0.00001 A                            |
| Rated current, max.                             | 0.1 A                                |
| Rated power, max.                               | 1 W                                  |
| Power loss                                      | 0.70030 W                            |
| Overvoltage category                            | 2                                    |
| Kind of short circuit protective device         | fuse 250 V / 0,1 A / 1,5 kA gG quick |

**1.10.011.001/0441**

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 800 V

**> Specifications according to UL 60947**

Rated voltage, max. 30 V DC (42,4 V peak)

UL Enclosure Type Rating front side  
type 4X indoor

Operating temperature, max. to 70 °C

UL/TÜV

**Use according to UL:**

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

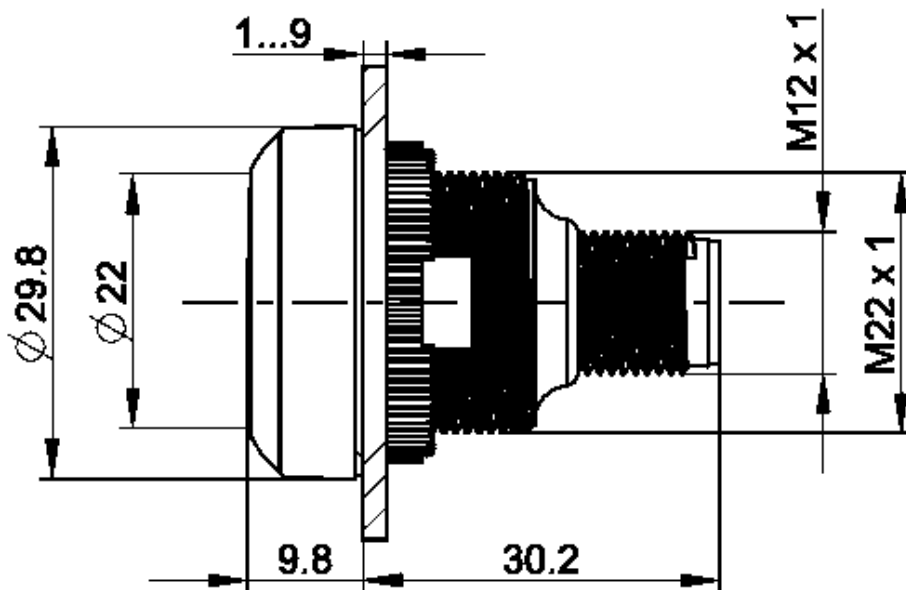
Installation only by trained personnel.

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**

