

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



### fields of application

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

### special features

- Key stroke with tactile feedback or mushroom pushbutton with latching actuator
- Based on the RAFI MICON 5 short-travel keyswitch with gold contacts, which has proven itself millions of times over
- > Single-part, closed housing
- Unique series with easiest Plug&Play connection
- Completely tailored design fits the RAFIX range of control components
- Installation size: 22.3 mm
- > Plug & Play connection M12
- Custom print options, including FLEXLAB bezels
- > Can be illuminated in many colors
- > Redundant version with 2 NO contacts
- > Pushbutton with black mushroom head



### 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.

As a further product variant, the RAMO 22 T mushroom pushbutton offers a latching pushbutton option for every application. It is characterised by form and function as for an emergency stop, but is only declared as a pushbutton. Various contact functions are possible.

### Additional information according to UL certificate:

- > Only approved for Class 2 Power Source or Limited Voltage / Limited Current.
- > Installation only by trained specialist personnel.
- Type 4x Indoor only with cable "Cat. No. 7000-08061-0210100 PUR 4x0.25mm<sup>2</sup> with M8 connector, rated max. 30VAC/DC 4A, manufactured by Murrelektronik GmbH" and "Cat. No. 7000-12221-0340100 PUR 4x0.34mm<sup>2</sup> 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.

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## 1.10.011.001/0440

### technical data

Installation height



> general		
Potential free	yes	direct links
Color	black	> RAFI eCatalog
Bezel color	yellow	
Property of bezel / mushroom	translucent	
Collar color	black	
Front ring color	metallic silver	
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	12.6 g	
Operating life	500,000 cycles	
B10	650,000 cycles	
Degree of protection, front side,	IP66	
according to DIN EN 60529	IP67	
	IP69	
Degree of protection, rear side,	IP66	
according to DIN EN 60529	IP67	
UL Enclosure Type Rating front side	type 4X indoor	
Environment resistance	IEC 60068-2-14	
	IEC 60068-2-30	
	IEC 60068-2-33	
	IEC 60068-2-78	
Salt-spray resistance according to standard	IEC 60068-2-11	
shock resistance	05	
MOQ order	10 pcs.	
Pollution degree acc. to DIN EN 61010-1	Pollution degree 2	
RoHS compliant	Yes	
REACH compliant	Yes	
> mounting diameters		
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	
	0.0	

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9.8 mm

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	Grid, min.	30 mm
>	mechanical data	
	Actuation function	momentary contact function
	Operating force, max.	12 N
	Operating force, min.	5 N
	Operating travel, max.	1 mm
	Resistance to force on the side	300 N
	Contact function	1 NO
	Contact material	Gold
	Fixing	Threaded ring
	Threaded ring torque, max.	1.2 Nm
	Terminal on the rear	M12 4-pin A-coded
	PIN 1	Normally open contact 1
	PIN 2	LED +
	PIN 3	GND
	PIN 4	Normally open contact 1
>	electrical data	
	Rated insulation voltage	250 V
	Rated surge voltage	800 V
	Rated operating voltage	35 V (AC-15)
		35 V (DC-13)
	Operating voltage of the luminous	20 V
	element, min.	22.)/
	Operating voltage of the luminous element, max.	28 V
	Rated voltage, min.	0.02 V
	Rated voltage, max.	35 V
	Rated voltage, max. acc. to UL 60947	30 V DC (42,4 V peak)
	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
	Conditional short circuit current	1,000 A

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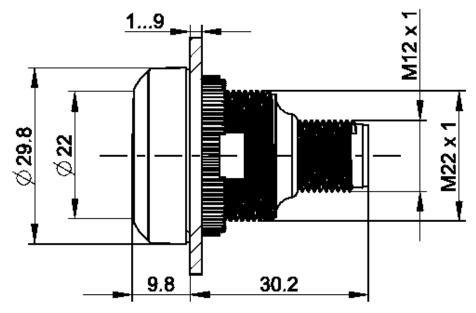
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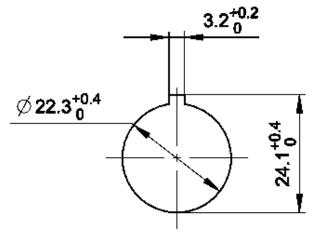


### drawings

### **Dimensioned drawing**



### Mounting hole drawing



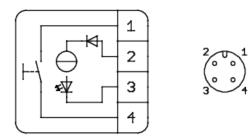
acc. to IEC 60947-5-1

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Schematic diagram



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