

# RAMO 22 T, mushroom pushbutton, M12, collar round, latching, 2 NC



## 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.

## technical data

### > general

Potential free	yes
Legending	Arrows
Color	black
Color of mushroom	black
Legending color	black
Collar color	black
Collar shape	round
Operating temperature, min.	-40 °C
Operating temperature, max.	85 °C
Storage temperature, min.	-40 °C
Storage temperature, max.	90 °C
illuminated	No
Packaging	Box
Packaging unit	2 pcs.
net weight	27.8 g
Operating life	50,000 cycles
B10	65,000 cycles
B10d	84,500 cycles
Degree of protection, front side, according to DIN EN 60529	IP66
Degree of protection, rear side, according to DIN EN 60529	IP65 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
Impact resistance IK	07 side 08 frontal
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	30 mm
Outside dimension, width	30 mm
Outside dimension, height	69.7 mm
Mounting hole	22.3 mm
Mounting depth	30.1 mm
Installation height	39.6 mm
Grid, min.	30 mm

### direct links

> [RAFI eCatalog](#)

### > mechanical data

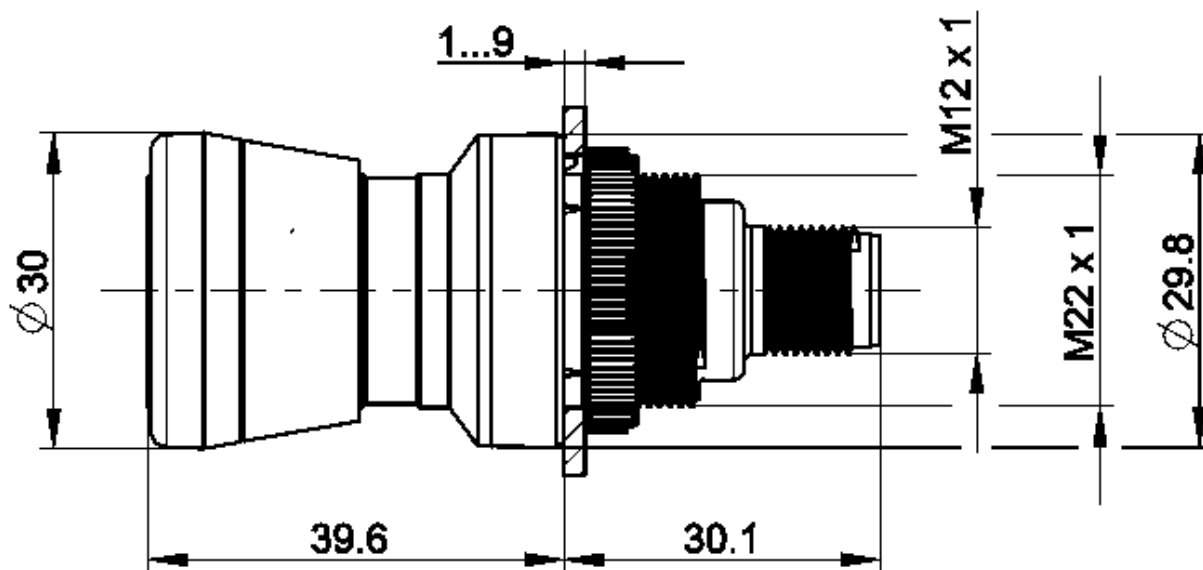
Actuation function	latching
Resistance to force on the side	300 N
Contact function	2 NC
Contact material	Gold
Resetting	by rotating
Fixing	Threaded ring
Threaded ring torque, max.	1.2 Nm
Terminal on the rear	M12 4-pin A-coded
PIN 1	Normally closed contact 1
PIN 2	Normally closed contact 1
PIN 3	Normally closed contact 2
PIN 4	Normally closed contact 2

### > electrical data

Rated insulation voltage	250 V
Rated surge voltage	2,500 V
Rated operating voltage	35 V (AC-15) 35 V (DC-13)
Rated voltage, min.	1 V
Rated voltage, max.	35 V
Voltage type	DC
Rated operating current	0.1 A
Rated operating voltage	1-35 V
Rated current, min.	0.001 A
Rated current, max.	0.1 A
Power loss	0.00080 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

**drawings**

**Dimensioned drawing**



**Mounting hole drawing**



acc. to IEC 60947-5-1

**Schematic diagram**

