

# RAMO 22 S, M12, round collar, 2 NO, Gold, M12 4-pin A-coded, frontring black, 1 x 90°, 1 x 40°, latching / momentary



#### fields of application

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

#### special features

- > Precise haptics
- > Safe gold contacts
- > Simple M12 plug&play connection
- > Protected contacts due to sealed housing











### 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.

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
	Dotontio

Potential free no Color black

Bezel color white Property of bezel / mushroom

transparent Collar color black Front ring color black Collar shape round -40 °C Operating temperature, min. 85 °C Operating temperature, max. -40 °C Storage temperature, min.

direct links

> RAFI eCatalog

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90 °C Storage temperature, max. illuminated No Packaging Box Packaging unit 2 pcs. net weight 16.5 g

Operating life 200,000 cycles B10 250,000 cycles

IP65

30 g at 11 ms amplitude semi-sinusoidal

5 g at 10...500 Hz

Pollution degree 2

Degree of protection, front side,

according to DIN EN 60529

Degree of protection, rear side, IP65 according to DIN EN 60529

UL Enclosure Type Rating front

side

type 4X indoor

Environment resistance IEC 60068-2-14 IEC 60068-2-30 IEC 60068-2-78

Shock resistance according to

standard IEC 60068-2-27

IEC 60068-2-11 Salt-spray resistance according to

standard

02 side Impact resistance IK

08 frontal

oscillation restistance according

to standard IEC 60068-2-6

MOQ order 2 pcs.

Pollution degree acc. to DIN EN

61010-1

RoHS compliant Yes

REACH compliant Yes

> mounting diameters

Outside dimension, length 29.8 mm Outside dimension, width 29.8 mm Outside dimension, height 53.9 mm Mounting hole 22.3 mm 30.1 mm Mounting depth Installation height 23.8 mm Grid, min. 30 mm

> mechanical data

Actuation function latching / momentary

Resistance to force on the side 300 N Contact function 2 NO Contact material Gold

Rotating angle 1 x 90°, 1 x 40° Threaded ring Fixing

Threaded ring torque, max. 1.2 Nm

Terminal on the rear M12 4-pin A-coded PIN 1 Normally open contact 1

Normally open contact 2

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PIN 2 Normally open contact 2

PIN 3 GND

PIN 4 Normally open contact 1

> electrical data

Rated insulation voltage 250 V
Rated surge voltage 2,500 V
Rated operating voltage 35 V (AC-15)

35 V (DC-13)

22 V

Operating voltage of the luminous

element, min.

Operating voltage of the luminous 26 V

element, max.

Rated voltage, min. 1 V
Rated voltage, max. 32 V
Voltage type DC
Rated operating voltage 1-32 V
Operating current of the luminous 25 mA

element, max.

Rated current, max. 0.1 A

Power loss 0.00080 W

Overvoltage category 2

Kind of short circuit protective fuse 250 V / 0,1 A / 1,5 kA gG quick

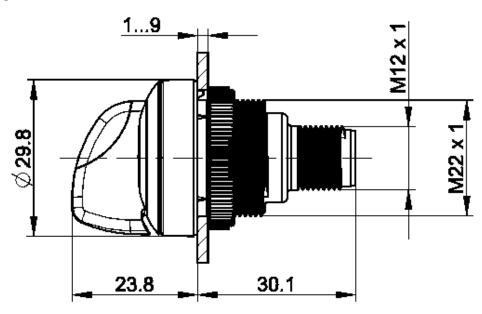
device

Conditional short circuit current 1,000 A

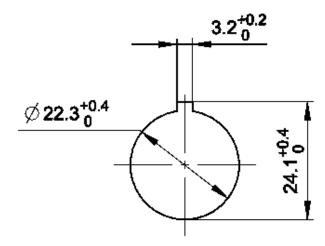


### drawings

### **Dimensioned drawing**



### Mounting hole drawing



acc. to IEC 60947-5-1



#### Schematic diagram

