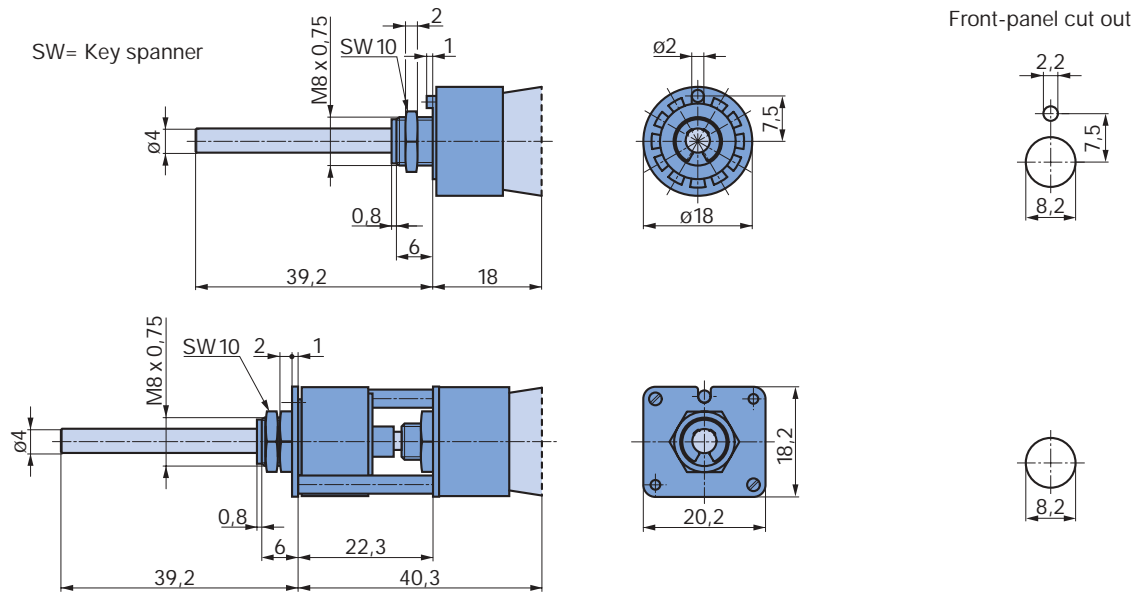
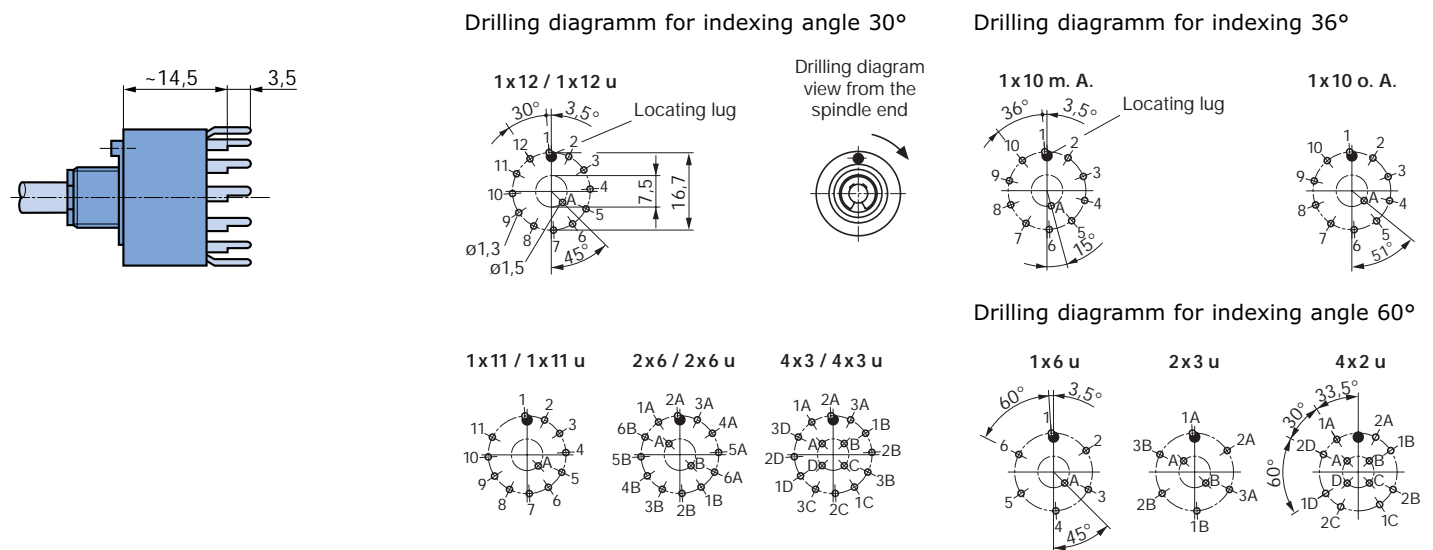


Rotary Switches Type 01

With solder eyelets



With pins for PCB mounting



Description

Rotary switch with bridge contact principle

Overall diameter
18 mm

Threaded bushing
M6 x 0,75 with 3 mm diameter shaft
M8 x 0,75 with 4 mm diameter shaft
M10 x 0,75 with 6 mm diameter shaft

Indexing angle
30° = 12 switching positions
36° = 10 switching positions
60° = 16 switching positions

On switches with fixed end-stop, adjustable stops can be set, by means of a plastic pin, on any position between 2 and the maximum (to be ordered separately).

Number of poles per wafer
1, 2 or 4 (poles)

Switching mode
Shorting or non-shorting

Contact material
Gold flash and Gold plated 3 μ m

Terminals
Solder eyelets or PCB mountable

Rotary Switches Type 01

Technical information

Mechanical data

Indexing mechanism

30° = 12 positions
shorting or non-shorting

36° = 10 positions
shorting

60° = 6 positions
non-shorting

Switching torque with 1 wafer, 1 pole

Standard:
4 Ncm ± 25%
Special:
2 Ncm ± 25%
6 Ncm ± 25%

*Max. admissible tightening torque
for nuts (shaft diameter 4 mm)*
max. 300 Ncm

Vibration resistance
10–2000 Hz/10 g

Mechanical life
> 25000 switching cycles

Temperature range
– 40 °C to + 85 °C

Material data

Housing

plastic with metal threaded bush

Shaft

stainless steel

Insulation material

Wafers: HF-ceramic
Rotor: polybutylene (PBTB)

Contact material

Rivet (copper) and
segment (brass)

- gold flash
10 µm silver coated, gold flashed
approx. 0,2 µm
- 3 µm gold plated
3 µm gold plating on 3 µm nickel
layer

Wiper (brass)

- gold flash
10 µm silver plated, gold flashed
approx. 0,2 µm
- 3 µm gold plated

Soldering data

Handsoldering

Ceramic wafer ≤ 10 s/≤ 350 °C

Machine soldering

Wave ≤ 5 s/≤ 260 °C

Electrical data

Application data

Voltage < 42 V
Current < 2 A

Switching capacity with resistive load:

2 V/1,0 A AC/DC
24 V/0,5 A AC/DC
42 V/0,4 A AC/DC

Switching mode

shorting or non-shorting

Contact and lead resistance

< 10 mΩ in new condition

Insulation resistance measured

with 500 VDC, for 1 min
> 10¹¹ Ω contact to contact
> 10¹¹ Ω contact to earth

Capacitance

1 pF contact to contact

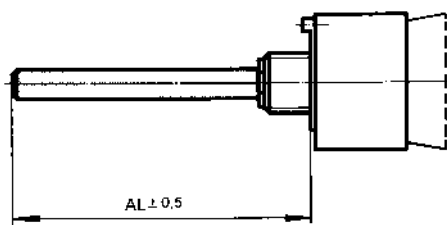
Test voltage at 50 Hz and 60% rela-

tive humidity, for 1 min
750 rms contact to contact
750 rms contact to earth
500 rms with more than one circuit

Special Options Type 01

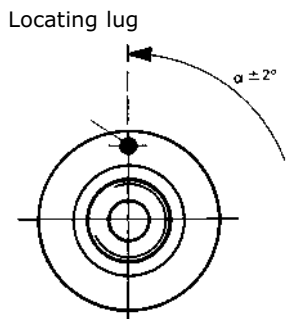
Ordering an option

To order a special option please use the order form on page 99.
Please specify your requirements and fax it to your local contact or to Elma.



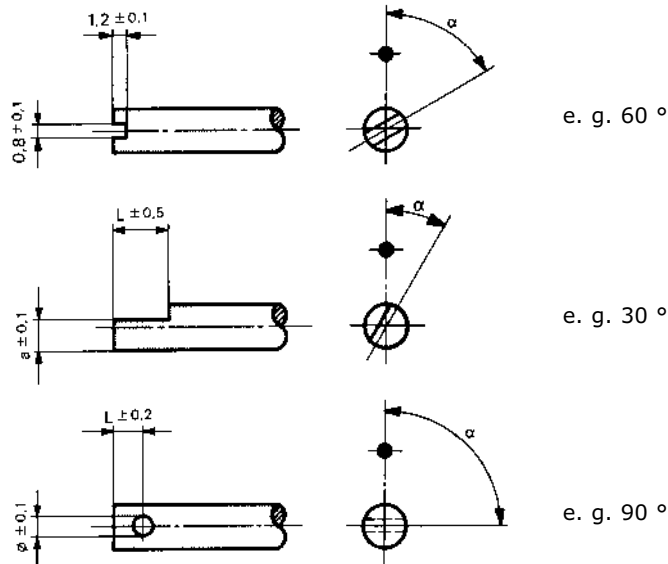
Special shaft length

To order, state the shaft length AL as shown in diagram, measured from mounting face. Please specify shaft length on page 99.



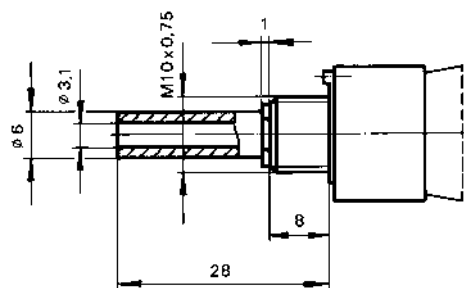
Angle in ° from locating lug.
Switch on position 1

Special types of shaft



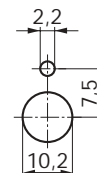
Specially machined shafts are available. Please specify dimensions on page 99.

Hollow shaft

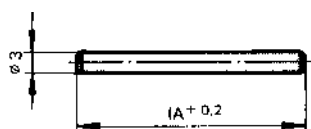


Hollow shaft to allow concentric operation of either two switches or, for example, a switch and a potentiometer. The inner shaft (ø 3 mm) must be ordered separately.

Please complete order form on page 99. Front-panel cut out



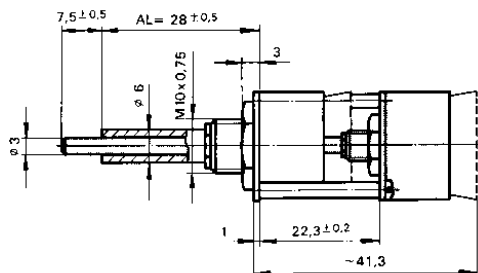
Inner shaft



Must be ordered separately for switches with hollow shaft. Please complete order form on page 99.

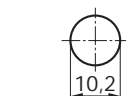
Special Options Type 01

Switches with 2 drive shafts



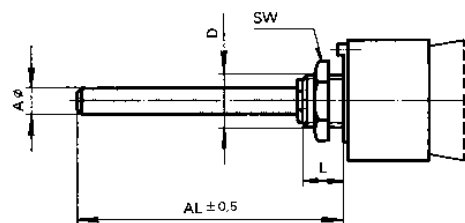
It is possible for two switches to be operated individually by concentric shafts on the same mounting. When ordering, the type number of each switch should be given and specified on order form page 99.

Front-panel cut out



Special shaft diameters

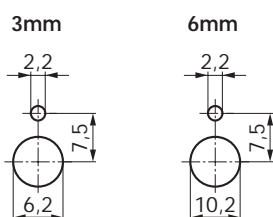
Type 01 switches are also available with the following shaft diameters:



Aφ	D	SW	L	AL Standard	AL max.
3 mm	M 6 x 0,75	10 mm	6,0 mm	59 mm	80 mm
6 mm	M 10 x 0,75	14 mm	8,0 mm	28 mm	28 mm

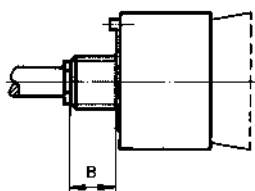
Please complete order form on page 99.

Front-panel cut out



Shortened bushing

Please state dimension B (Dimension B = min. 3 mm) on page 99.

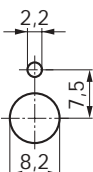
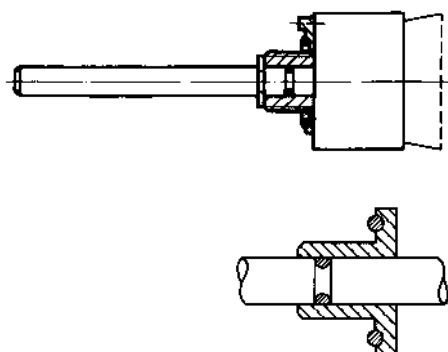


Waterproof

For 1 wafer switch with 4 mm ø shaft only; to prevent water penetrating behind the front panel and into the mechanism. Waterproof up to 1 bar (IP 68)

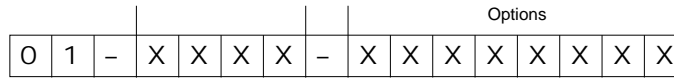
Please complete order form on page 99.

Front-panel cut out



Ordering Code to Rotary Switches Type 01

This code specifies
the function of the switch



Switch Type

Number of wafers

Number of poles

Factory set character

0 = gold flash shorting
1 = gold flash non-shorting
3 = 3 µm gold shorting
4 = 3 µm gold non-shorting

- = Standard Md 4 Ncm
M = Md (torque) 2 Ncm
N = Md (torque) 6 Ncm

0 = shaft 4 mm Standard
M = shaft 3 mm
N = shaft 6 mm

00 = Standard
11 = BG 11 Pos.
10 = BG 10 Pos.
09 = BG 9 Pos.
08 = BG 8 Pos.
07 = BG 7 Pos.
06 = BG 6 Pos.
05 = BG 5 Pos.
04 = BG 4 Pos.
03 = BG 3 Pos.
02 = BG 2 Pos.
(BG = special end stop)

000 = Standard AL 59 mm
3 mm shaft
= Standard AL 39,2 mm
4 mm shaft
= Standard AL 28 mm
6 mm shaft
= XXX = AL (shaft length)
(z.B. 18,5mm = 185)

00 = Standard
20 = GS (solder pins for PCB)
30 = WD (waterproof)
70 = GS/WD
(solder pins for PCB/ waterproof)

Md = Switching torque
AL = Shaft length
BG = Special end stop
GS = With solder pins for PCB mounting
WD = Waterproof

