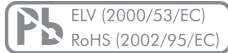


Selector Switch Type 01

- Compact 12 positions selector switch
- 25,000 switching cycles with up to 6.0 Ncm switching torque
- Gold plated contacts: 3 micron
- Robust metal housing with metal shaft
- Optional IP68 front panel sealing
- Operating temperature range: -40 to +85°C
- Various options and customization



Standard Product Variety

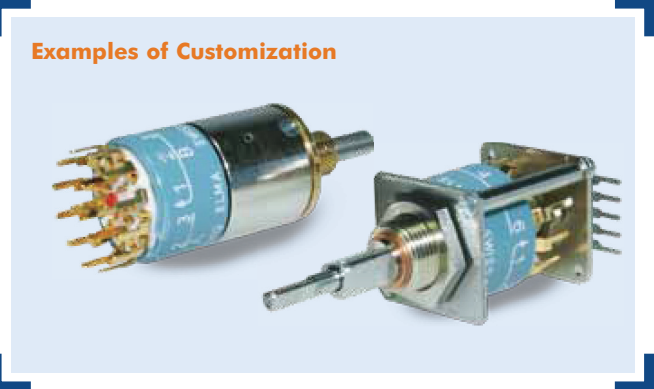
- Soldering eyelets or pins for PCB
- From 1 x 12 to 4 x 3 poles/positions per wafer
- Single or dual wafer
- 30, 36 or 60° indexing angle
- Shorting or non-shorting
- 2.0, 4.0 or 6.0 Ncm switching torque
- IP60 or IP68 front panel sealing
- Configurable end stops
- Shaft diameter: 3, 4 or 6 mm

Possible Customization

- Shaft dimensions and shape
- Bushing dimensions
- Switching torque
- Hollow shaft, inner shaft
- Others

Typical Applications

- Industrial controls
- Avionics, instrumentation, test systems
- Medical and audio equipment



Examples of Customization















Examples of Customization

- Interlock function; pull-to-turn
- Dual concentric version with E33 Encoder feed through










Selector Switch Type 01

Preference Types Selection Chart¹




Indexing Angle 30°, Shorting

| Contact Arrangement | Construction | Function (Poles x Positions) | With Solder Eyelets | With Pins for PCB |
|---|---|------------------------------|---------------------|-------------------|
|  |  | 1 x 12, endless rotating | 01-1123 | 01-1123-20 |
| |  | 2 x 12, endless rotating | 01-2123 | – |
| |  | 1 x 12 | 01-1183 | 01-1183-20 |
| |  | 2 x 12 | 01-2183 | – |
|  |  | 1 x 11 | 01-1113 | 01-1113-20 |
| |  | 2 x 11 | 01-2113 | – |
|  |  | 2 x 6 | 01-1263 | 01-1263-20 |
| |  | 4 x 6 | 01-2263 | – |
|  |  | 4 x 3 | 01-1433 | 01-1433-20 |
| |  | 8 x 3 | 01-2433 | – |









Indexing Angle 30°, Non-Shorting

| Contact Arrangement | Construction | Function (Poles x Positions) | With Solder Eyelets | With Pins for PCB |
|---|---|------------------------------|---------------------|-------------------|
|  |  | 1 x 12, endless rotating | 01-1124 | 01-1124-20 |
| |  | 1 x 12 | 01-1184 | 01-1184-20 |
|  |  | 1 x 11 | 01-1114 | 01-1114-20 |
|  |  | 2 x 6 | 01-1264 | 01-1264-20 |
|  |  | 4 x 3 | 01-1434 | 01-1434-20 |

Indexing Angle 36°, Shorting

| Contact Arrangement | Construction | Function (Poles x Positions) | With Solder Eyelets | With Pins for PCB |
|---|---|------------------------------|---------------------|-------------------|
|  |  | 1 x 10, endless rotating | 01-1103 | 01-1103-20 |
| |  | 1 x 10 | 01-1193 | 01-1193-20 |

Indexing Angle 60°, Non-Shorting

| Contact Arrangement | Construction | Function (Poles x Positions) | With Solder Eyelets | With Pins for PCB |
|---|---|------------------------------|---------------------|-------------------|
|  |  | 1 x 6, endless rotating | 01-1104 | 01-1104-20 |
|  |  | 1 x 6 | 01-1164 | 01-1164-20 |
|  |  | 2 x 3 | 01-1234 | 01-1234-20 |
|  |  | 4 x 2 | 01-1424 | 01-1424-20 |

Stop Pins

| Packaging Unit | Order Number |
|----------------|--------------|
| 10 pcs. | 4007-36 |
| 50 pcs. | 4007-35 |

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

¹ For other types/options, see type key.

Specifications

Mechanical Data

| | |
|---|---|
| Resolution: | 12 positions max. (30° indexing); shorting or non-shorting 10 positions max. (36° indexing); shorting 6 positions max. (60° indexing); non-shorting |
| Switching torque (new condition): | 2.0, 4.0 or 6.0 Ncm (+/- 25%), additional wafers may increase switching torque |
| Rotational life: | 25,000 switching cycles min. |
| Fastening torque of nut: | 300 Ncm max. |

Electrical Data

| | |
|---|--|
| Functions: | From 1 x 12 to 4 x 3 poles/positions per wafer (max. 2 wafers) |
| Switching mode: | Shorting (for 30° and 36° indexing) Non-shorting (for 30° and 60° indexing) |
| Load current: | 2 A max. (resistive load) |
| Switching voltage: | 42 VDC max. |
| Contact resistance (new condition): | 10 mOhms max. |
| Insulation resistance: | 10 ¹¹ Ohms min. (contact to contact/housing) |
| Switching capacitance: | 1 pF max. (contact to contact) |
| Dielectric withstanding voltage: | 500 VDC during 60 seconds |

Material Data

| | |
|----------------------------|---|
| Shaft: | Stainless steel |
| Bushing: | Nickel silver |
| Housing: | Fiber enforced plastic |
| Nut: | Brass with glossy nickel plating |
| Contact plating: | AuCo (hard gold); 3 μm |
| Insulation material: | Wafer: HF ceramic, rotor: Polybutylene (PBTB) |
| Soldering leads: | Alloy copper, AuCo plated (hard gold) |

Environmental Data

| | |
|--|---|
| Operating/storage temperature range: | -40 to +85°C |
| IP sealing: | IP60, optional IP68 (2 bar, 1 hour) shaft/front panel sealing |
| Vibration: | 10 G _{rms} max. @ 10 to 2000 Hz |
| Flammability: | UL94-HB |

Packaging Sizes

| | |
|-------------|---------|
| Tray: | 10 pcs. |
|-------------|---------|

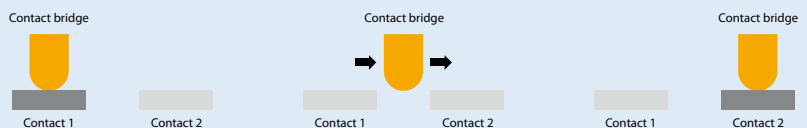
Soldering Conditions

| | |
|-----------------------|---|
| Hand soldering: | 340°C max. during 2 s max. |
| Wave soldering: | 280°C max. peak temperature during 5 s max. |

Switching Modes

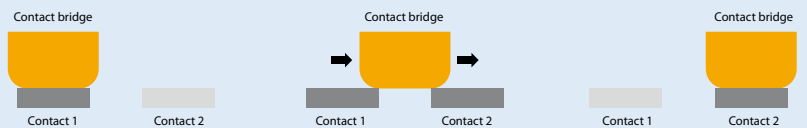
Non-Shorting

(break before make)



Shorting

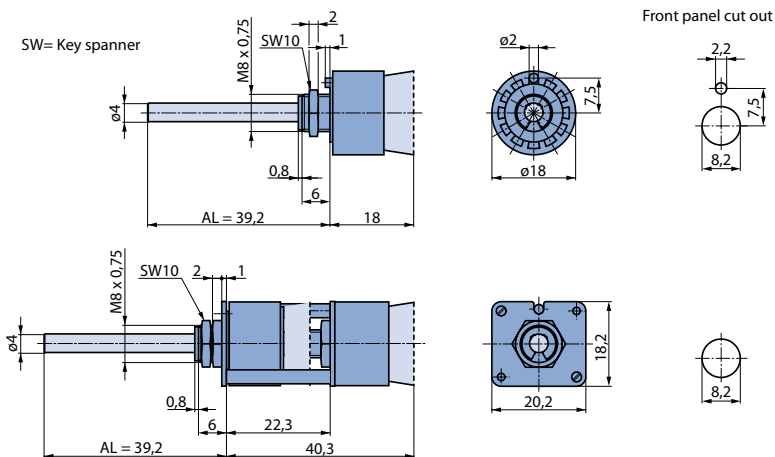
(make before break)



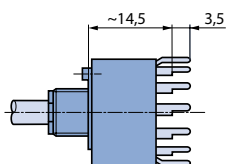
Selector Switch Type 01

Drawings

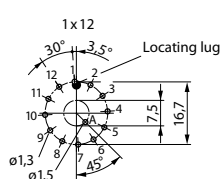
With Solder Eyelets



With Pins for PCB Mounting



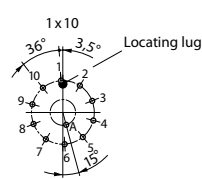
Drilling diagram for 30° indexing angle



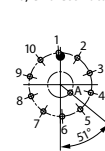
Drilling diagram view from the shaft end



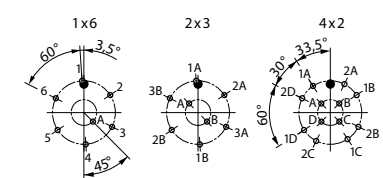
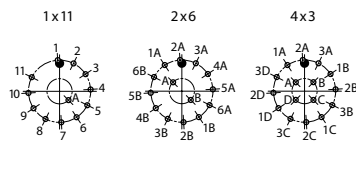
Drilling diagram for 36° indexing



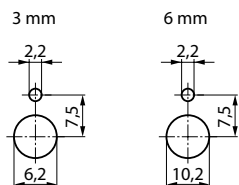
1 x 10, endless rotating



Drilling diagram for 60° indexing angle



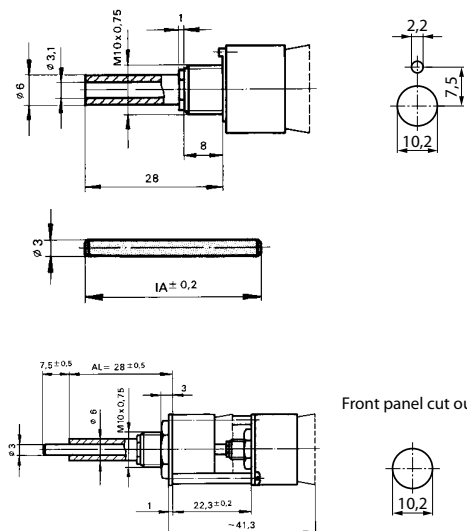
Special Shaft Diameter



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

| ϕ | AL | Bushing | Nut Size |
|--------|-------|---------------------|----------|
| 3 mm | 59 mm | M6 x 0.75 x 6.0 mm | 10 mm |
| 6 mm | 28 mm | M10 x 0.75 x 8.0 mm | 14 mm |

Hollow Shaft System



Hollow Shaft

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

Inner Shaft

Must be ordered separately for switches with hollow shaft.

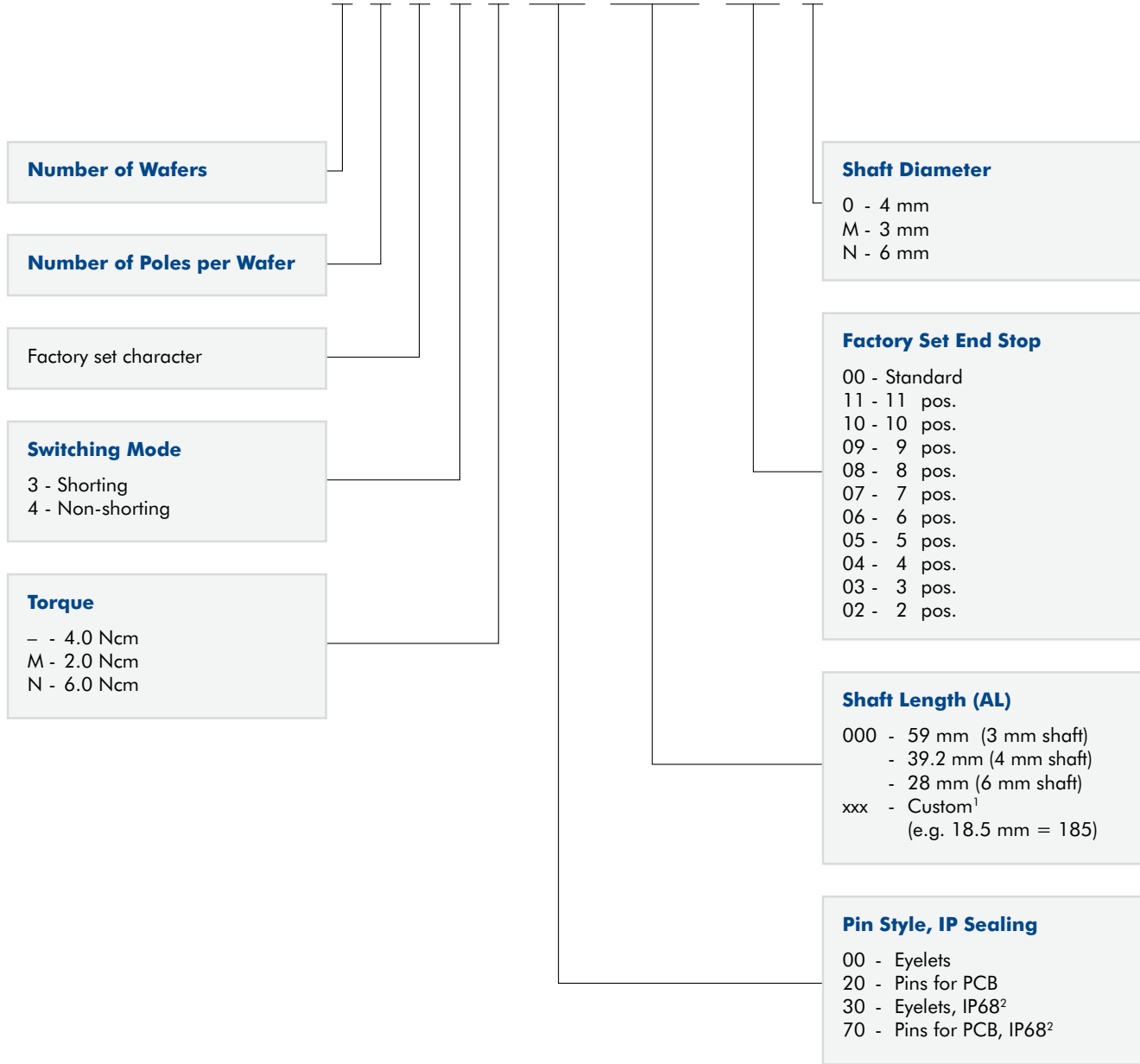
Switches with 2 Drive Shafts

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.

Selector Switch Type 01

Type Key

0 1 - X X X X - X X X X X X X X



² Only available for one wafer versions with 3 or 4 mm shaft diameter.

¹ Customized Shaft Length

Please state shaft length (AL) measured from mounting face (max. AL = 80 mm).

