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
- Interlock function; pull-to-turn
- Dual concentric version with E33 Encoder feed through
## Preference Types Selection Chart

### Indexing Angle 30°, Shorting

<table>
<thead>
<tr>
<th>Contact Arrangement</th>
<th>Construction</th>
<th>Function (Poles x Positions)</th>
<th>With Solder Eyelets</th>
<th>With Pins for PCB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 x 12, endless rotating</td>
<td>01-1123</td>
<td>01-1123-20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 x 12, endless rotating</td>
<td>01-2123</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 x 12</td>
<td>01-1183</td>
<td>01-1183-20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 x 12</td>
<td>01-2183</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 x 11</td>
<td>01-1111</td>
<td>01-1113-20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 x 11</td>
<td>01-2113</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 x 6</td>
<td>01-1263</td>
<td>01-1263-20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 x 6</td>
<td>01-2263</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 x 3</td>
<td>01-1433</td>
<td>01-1433-20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 x 3</td>
<td>01-2433</td>
<td>–</td>
</tr>
</tbody>
</table>

### Indexing Angle 30°, Non-Shorting

<table>
<thead>
<tr>
<th>Contact Arrangement</th>
<th>Construction</th>
<th>Function (Poles x Positions)</th>
<th>With Solder Eyelets</th>
<th>With Pins for PCB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 x 12, endless rotating</td>
<td>01-1124</td>
<td>01-1124-20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 x 12</td>
<td>01-1184</td>
<td>01-1184-20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 x 11</td>
<td>01-1114</td>
<td>01-1114-20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 x 6</td>
<td>01-1264</td>
<td>01-1264-20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 x 3</td>
<td>01-1434</td>
<td>01-1434-20</td>
</tr>
</tbody>
</table>

### Indexing Angle 36°, Shorting

<table>
<thead>
<tr>
<th>Contact Arrangement</th>
<th>Construction</th>
<th>Function (Poles x Positions)</th>
<th>With Solder Eyelets</th>
<th>With Pins for PCB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 x 10, endless rotating</td>
<td>01-1103</td>
<td>01-1103-20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 x 10</td>
<td>01-1193</td>
<td>01-1193-20</td>
</tr>
</tbody>
</table>

### Indexing Angle 60°, Non-Shorting

<table>
<thead>
<tr>
<th>Contact Arrangement</th>
<th>Construction</th>
<th>Function (Poles x Positions)</th>
<th>With Solder Eyelets</th>
<th>With Pins for PCB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 x 6, endless rotating</td>
<td>01-1104</td>
<td>01-1104-20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 x 6</td>
<td>01-1164</td>
<td>01-1164-20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 x 3</td>
<td>01-1234</td>
<td>01-1234-20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 x 2</td>
<td>01-1424</td>
<td>01-1424-20</td>
</tr>
</tbody>
</table>

### Stop Pins

<table>
<thead>
<tr>
<th>Packaging Unit</th>
<th>Order Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 pcs.</td>
<td>4007-36</td>
</tr>
<tr>
<td>50 pcs.</td>
<td>4007-35</td>
</tr>
</tbody>
</table>

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).

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*1 For other types/options, see type key.
Selector Switch Type 01

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
Bushig: ................................................................ Nickel silver
Housing: ............................................................. Fiber enforced plastic
Nut: ...................................................................... Brass with glassy nickel plating
Contact plating: ................................................. AuCo (hard gold); 3 μm
Insulation material: ............................................ Wafer: HF ceramic, rotor: Polyethylene (PBTB)
Soldering leads: ................................................... Alloy copper, AuCo plated (hard gold)

Environmental Data
Operating/storage temperature range: ............... -40 to +85°C
IP sealing: .......................................................... IP66, optional IP68 (2 bar, 1 hour) shaft/front panel sealing
Vibration: ........................................................... 10 Gms 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)

Contact bridge
Contact 1  Contact 2
Contact 1  Contact 2
Contact 1  Contact 2

Contact bridge
Contact 1  Contact 2
Contact 1  Contact 2
Contact 1  Contact 2
Selector Switch Type 01

Drawings

With Solder Eyelets

With Pins for PCB Mounting

Special Shaft Diameter

Hollow Shaft System

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

<table>
<thead>
<tr>
<th>Ø</th>
<th>AL</th>
<th>Bushing</th>
<th>Nut Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 mm</td>
<td>59 mm</td>
<td>M6 x 0.75 x 6.0 mm</td>
<td>10 mm</td>
</tr>
<tr>
<td>6 mm</td>
<td>28 mm</td>
<td>M10 x 0.75 x 8.0 mm</td>
<td>14 mm</td>
</tr>
</tbody>
</table>

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.

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

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>-</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
</tr>
</thead>
</table>

**Number of Wafers**
- [ ]

**Number of Poles per Wafer**
- [ ]

**Factory set character**
- [ ]

**Switching Mode**
- 3 - Shorting
- 4 - Non-shorting

**Torque**
-  - 4.0 Ncm
-  M - 2.0 Ncm
-  N - 6.0 Ncm

**Shaft Diameter**
- 0 - 4 mm
-  M - 3 mm
-  N - 6 mm

**Factory Set End Stop**
- 00 - Standard
-  11 - 11 pos.
-  10 - 10 pos.
-  09 - 9 pos.
-  08 - 8 pos.
-  07 - 7 pos.
-  06 - 6 pos.
-  05 - 5 pos.
-  04 - 4 pos.
-  03 - 3 pos.
-  02 - 2 pos.

**Shaft Length (AL)**
- 000 - 59 mm (3 mm shaft)
-  39.2 mm (4 mm shaft)
-  28 mm (6 mm shaft)
-  xxx - Custom\(^1\)
  (e.g. 18.5 mm = 185)

**Pin Style, IP Sealing**
- 00 - Eyelets
-  20 - Pins for PCB
-  30 - Eyelets, IP68\(^2\)
-  70 - Pins for PCB, IP68\(^2\)

\(^1\) Customized Shaft Length
Please state shaft length (AL) measured from mounting face (max. AL = 80 mm).

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\(^2\) Only available for one wafer versions with 3 or 4 mm shaft diameter.