

Flat Rotary Switch FL/FS



Flat switch for direct soldering to printed circuits.

- Type FL with roller indexing, mounting height only 9,8 mm.
- Type FS with plastic indexing, mounting height only 10,4 mm.
- Max. 8 wafers per switch, type FL.
- Up to 6 circuits per wafer, type FL.
- Optional shorting or non-shorting switching mode.
- Insertable in 24-pole IC-sockets.
- Pins can be subsequently adjusted by stops.
- Fixing on PC board with 2 screws M2. For type FS with 4 screws M2 or 4 soldering pins.
- Fixing in front panel:
Two-point mounting M2 or central mounting with or without non-turn protection.

Special designs:

- watertight against front panel.
- enlarged distance between wafers.
- concentric shaft mechanism (hollow shaft).
- spring return function for first or last switch position.

1.0 Construction

1.1 Number of wafers max.	8 wafers, Type FL · 5 wafers, Type FS
1.2 Switching combinations per wafer	—
Design B, detent angle 60°	1x6 to 1x2; 2x3 to 2x2; 3x2; 4x2
Design E, detent angle 30°	1x12 to 1x2; 2x6 to 2x2; 3x4 to 3x2; 4x3 to 4x2 – Typ FL: 6x2
1.3 Contacts	Soldering pins, pluggable
1.4 Mounting on PC panel	Type FL/FS: Screws M2 or soldering lugs
1.5 Mounting at front panel	Central mounting or screws M2

2.0 Electrical Data

		AuNi-Version
2.1 Switching power max.	3 VA/W	
2.2 Switching voltage max.	60 V–	
2.3 Switching current max.	0,1 A	
2.4 Rest current max. at ∂u 20°C	2 A	
2.5 Test voltage	between contacts	800 V
	at 50 Hz	contact / ground
		780 V
2.6 Life expectancy without power	$\geq 25\,000$ cycles	
2.7 Contact resistance initial value	$< 30\text{ m}\Omega$	
2.8 Insulation resistance	$10^{11}\Omega$	

3.0 Mechanical Data

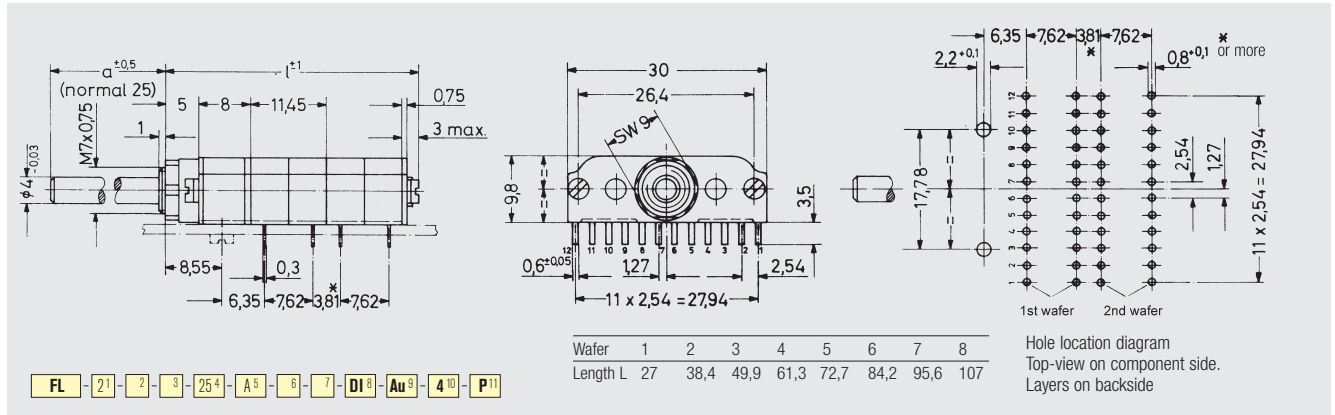
3.1 Stops	Adjustable
3.2 Operating torque acc. number of circuits	$\geq 3\text{ Ncm}$
3.3 Stop strength	$\geq 70\text{ Ncm}$
3.4 Dust protection	Sealed wafers

4.0 Other Data

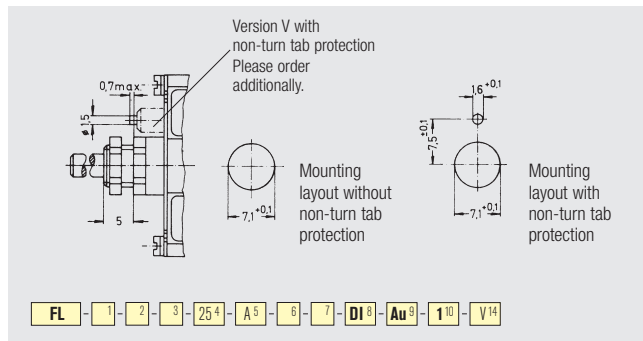
4.1 Contact material	Au over Ni barrier layer	
4.2 Insulating material	Wafer	Diallyphthalate, DAP; Code DI
	Rotor	Polyamide, PA
4.3 Soldering time and temperature	5 s at 260°C	

The bold-typed data in the yellow order blocks remain unchanged.
 Normal-typed data match the drawings and can be modified according to your wishes.
 Blanks need to be completed according to the ordering details on the inside front cover.

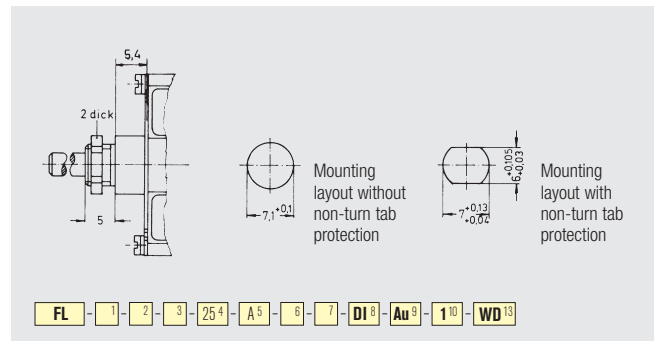
Dimensional Drawings · Dimensions in mm



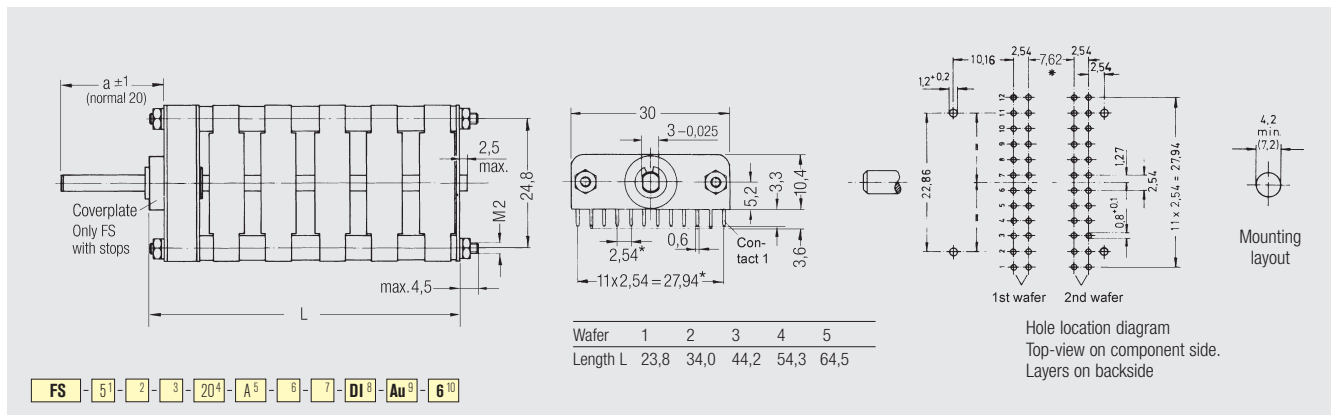
Version FL



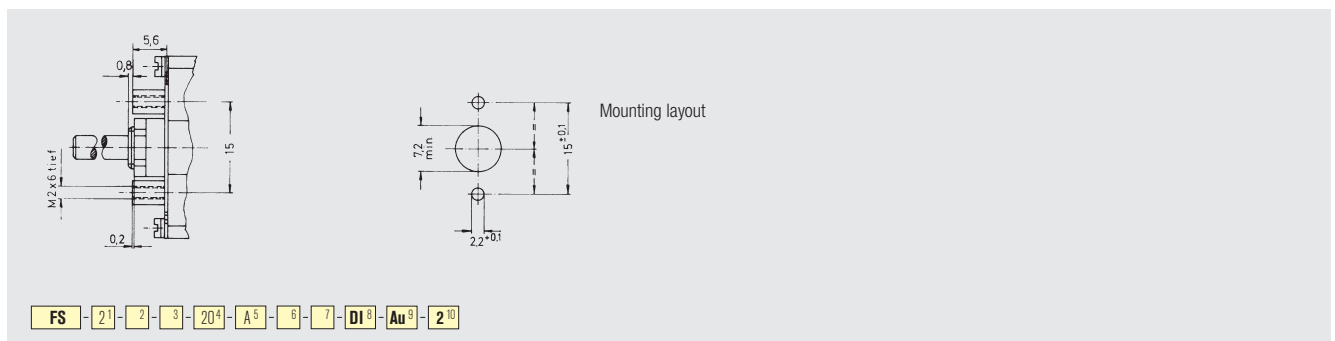
Version FL · Central mounting



Version FL · Central mounting watertight



Version FS



Version FS · Two-point mounting