

# Protected

## → 83 106

- Double break switching
- Options for operation in stable positions
- Choice of actuators and fixing positions



### Main specifications

	Standard 83 106 0	2 stable lever positions 83 106 4	2 stable plunger positions 83 106 7
<b>Function</b>			
I (changeover)	W3	●	●
I (changeover)	W1 - W2	●	●
R (normally closed)	W1 - W2 - W3	●	●
C (normally open)	W1 - W2 - W3	●	●
<b>Electrical characteristics</b>			
Rating nominal / 250 V AC (A)	5	5	5
Rating thermal / 250 V AC (A)	17.5	17.5	17.5
<b>Mechanical characteristics</b>			
Maximum operating force (N)	4	0.45	2
Min. Release force (N)	1	-	-
Tripping point (mm)	11.45 <sup>+0.2 -0.25</sup>	-	-
Min. overtravel (mm)	0.7	-	-
Mechanical life (operations)	10 <sup>7</sup>	10 <sup>6</sup>	10 <sup>6</sup>
Max. permitted overtravel force (N)	20	-	-
Rest position max. (mm)	12.75	-	-
differential travel (mm)	0.5 <sup>+0.2</sup>	-	-
Ambient operating temperature (°C)	-40 → +85	-40 → +85	-40 → +85
Contact gap (mm)	0.4 x 2	0.4 x 2	0.4 x 2
Weight (g)	8	9	8

### Additional specifications

#### Components

##### Material

- Case : polyamide UL94V2 (83 106)
- Contacts : nickel silver

##### Levers

- Mild steel (zinc)
- Roller : polyamide
- Adjusting screws : self-retaining
- Plates : iridescent passivated mild steel (zinc)

**NB** : Fixing holes for these microswitches have metal ferrules.

### Product adaptations



- Special levers
- Reinforced spring
- Special contacts
- Approvals : UL - cUL

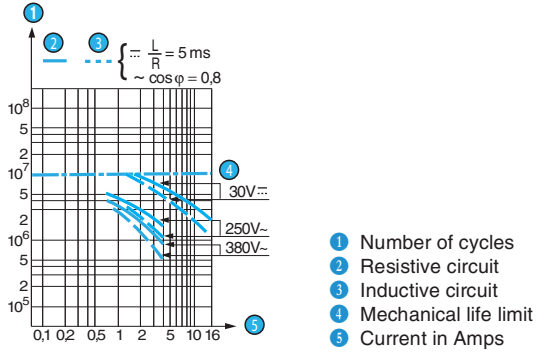
## Principles

### Double break changeover switch



## Curves

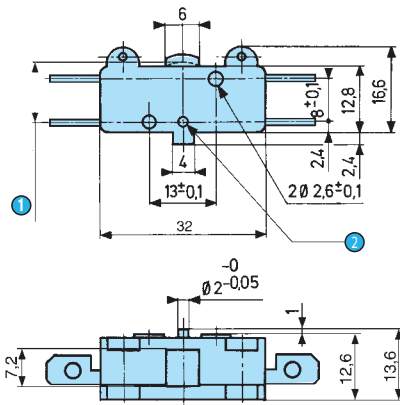
### Operating curve for types 83 106 0 / 4 / 7



## Dimensions

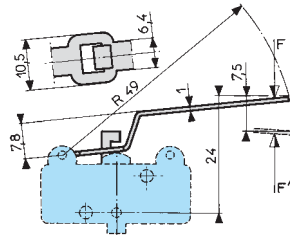
### → Product

83 106

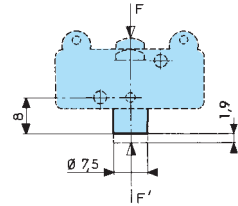


- 1 OL = 10.65
- 2 Ø 2<sup>+0.01 +0.65</sup> Depth 1.2

83 106 4

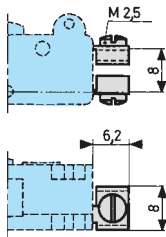


83 106 7

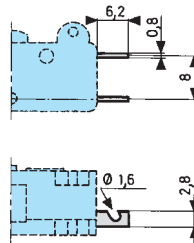


### → Connections

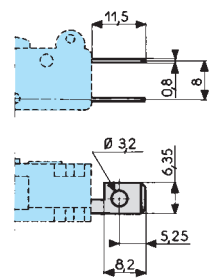
W1 screw



W2 solder

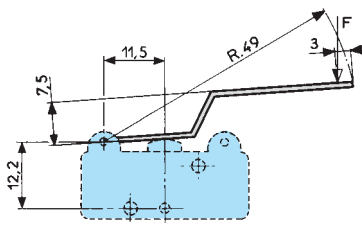


W3 for 6.35 mm clips



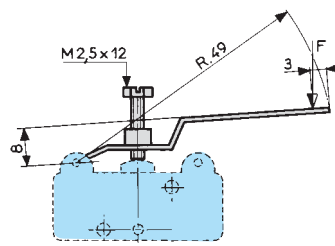
→ Actuators

A



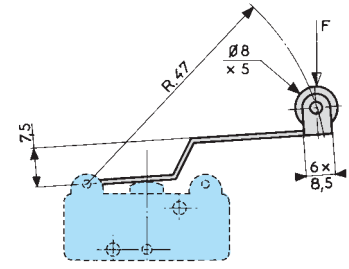
Lever cross-section 1 x 6.4 mm

B



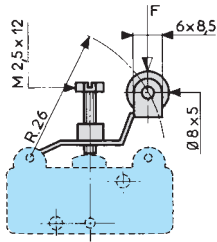
Lever cross-section 1 x 6.4 mm

E



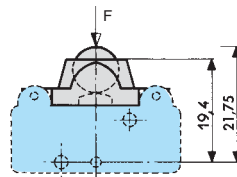
Lever cross-section 1 x 6.4 mm

Q

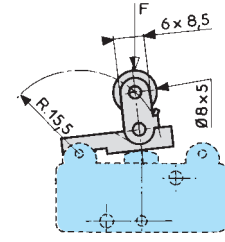


Lever cross-section 1 x 6.4 mm

B9



V3

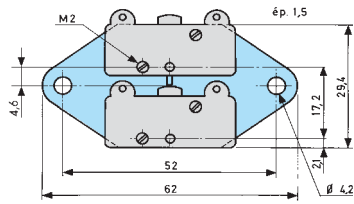


Lever cross-section 1 x 6.4 mm

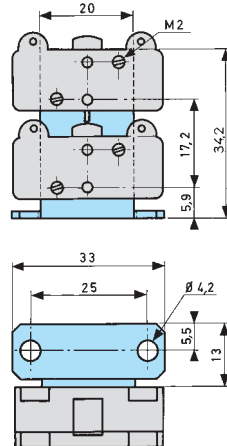
1

→ Mounting accessories

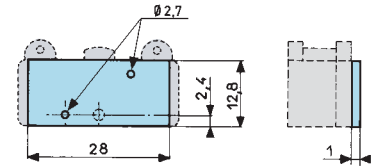
O2  
2-pole side mounting plate



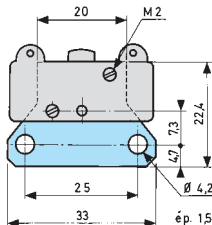
K2  
2-pole vertical mounting plate



Y  
Side plate









H  
Horizontal single-pole mounting plate



Unless indicated, the thickness of plates is 1.5 mm

## Actuators and fixing positions

### Actuators and fixing positions

Actuators		AR49	BR47	ER47	Q	V3 R15.5	B9
							
Operating force - max.	N	1.2	1.2	1.2	2.8	4	4
Release force - min.	N	0.25	0.25	0.2	0.45	0.8	1
Pre-travel - max.	mm	6.2	6.2	6.2	3.2	1.45	1.5
Differential travel	mm	2.1 ±0.9	2.1 ±0.9	2.1 ±0.9	1.05 ±0.4	0.5 ±0.2	0.5 ±0.2
Total travel max.	mm	7.5	8.4	7.5	4.5	1.9	1.9

Except where otherwise indicated, the flat and roller levers are mounted as shown in the dimensional drawings (mounted on the left).

### Mounting accessories

Y Side plate



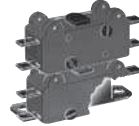
H Horizontal single-pole mounting plate



O2 2-pole side mounting plate



K2 2-pole vertical mounting plate



## Other information

### Mounting - Operation

See basic technical concepts