

# MD and MDP Key Switches



The disc contact type ED is a momentary key switch with short travel and good tactile feedback.

The ED is the main component of the MD and MDP switches.

### MDP-Disc push-button key switch

Small momentary key switch equipped with button, can be mounted on printed circuit board.

### MD-Disc push-button key switch

Small momentary key switch including a protective rubber actuator.

A wide range of keyboards can be built by using the MD.

MD and MDP key pads are available in two contact materials:

- gold plated bronze
- silver plated bronze

## Construction

Function	Momentary
Contact arrangement	1 make contact = SPST
Distance between button centers, min.	12.7 (0.500)
Terminals	PC pins

## Electrical data

	Silver	Gold
Switching power max.	6 W AC/DC	3 W AC/DC
Switching voltage max.	100 V AC/DC	100 V AC/DC
Switching current max.	100 mA AC/DC	50 mA AC/DC
Dielectric strength (50 Hz/1 Min.)	300 V	300 V
Operating life with max. switching power	MD $\geq 10^6$ MDP $\geq 2 \times 10^5$	$\geq 5 \times 10^6$ $\geq 2 \times 10^5$
Contact resistance, initial	$\leq 10 \text{ m}\Omega$	$\leq 15 \text{ m}\Omega$
Insulation resistance	$\geq 10^{11} \Omega$	$\geq 10^{11} \Omega$
Contact bounce	$\leq 100 \mu\text{s}$	$\leq 100 \mu\text{s}$

## Mechanical data

	MD	MDP
Switching travel	0.6 (0.0236)	0.3 (0.0118)
Operating force	2.6N $\pm$ 25% (260 grams $\pm$ 25%)	2.4N $\pm$ 25% (240 grams $\pm$ 25%)

## Further data

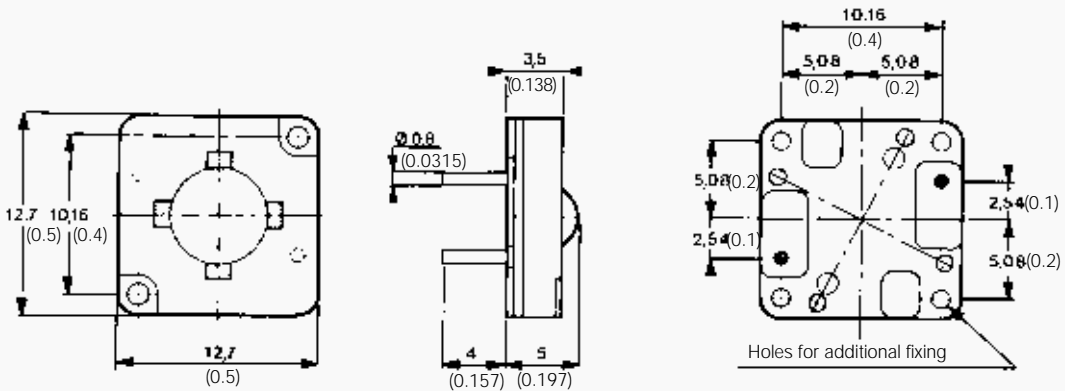
Contact material	Silver, Gold
Operating temperature	- 25°C to + 70°C <sup>1)</sup>
Storage temperature	- 40°C to + 85°C
Climatic category (days)	10 for silver version 56 for gold version
Soldering by static bath	255°C for 5 seconds

<sup>1)</sup> Special design for ambient temperature - 40°C to + 85°C (Type MD40) available (not washable in solvents)  
Note: MD40 disc keyswitch conforms to climatic category 40/85/56.

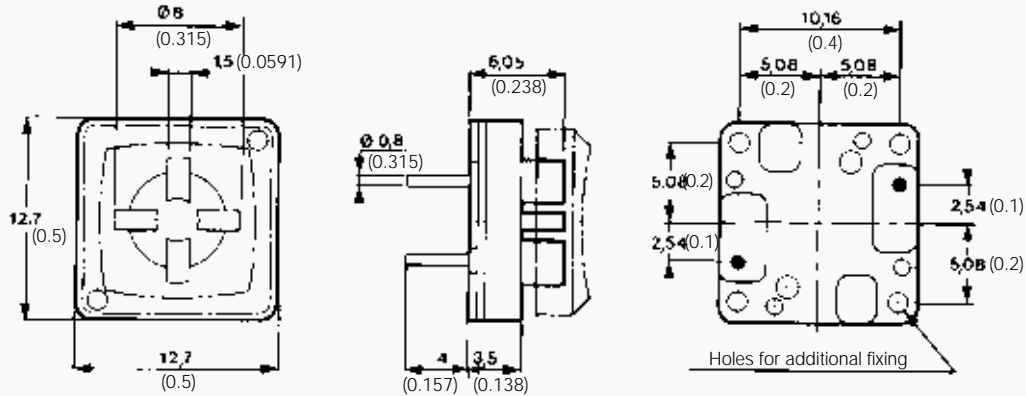
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## Dimensional Drawings

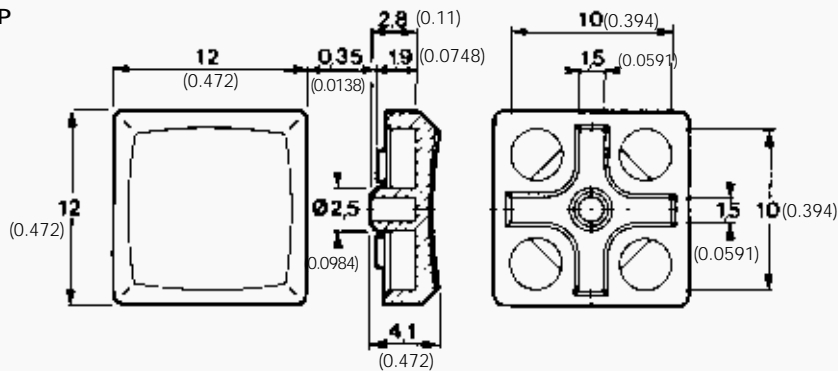
### MD



### MDP



### Button MDP



Ordering code		1	2	3
		Example: MD	AG	04
1	Designation: MD, MDP, MD40	→	→	→
2	Contact material: AG = silver, AU = gold	→	→	→
3	MDP button color: 01 = black, 02 = white, 03 = red, 04 = light grey, 05 = dark grey, 07 = blue	→	→	→