

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

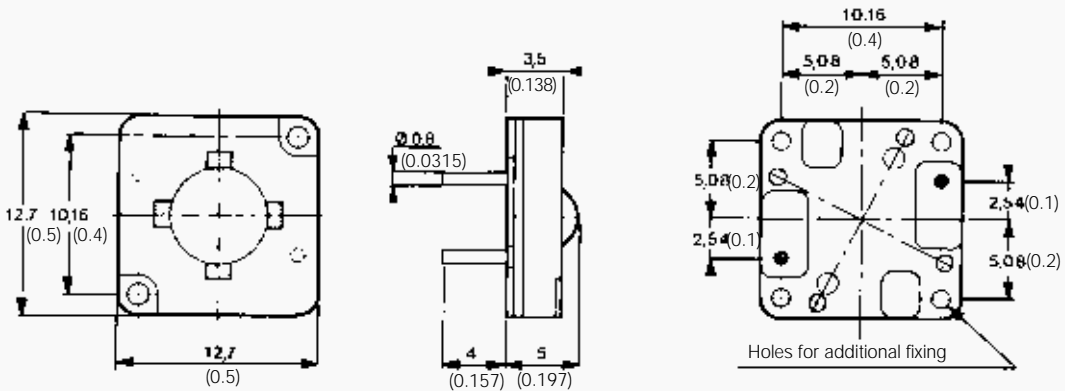
| | |
|--------------------------|--|
| Contact material | Silver, Gold |
| Operating temperature | - 25°C to + 70°C ¹⁾ |
| Storage temperature | - 40°C to + 85°C |
| Climatic category (days) | 10 for silver version 56 for gold version |
| Soldering by static bath | 255°C for 5 seconds |

¹⁾ 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.

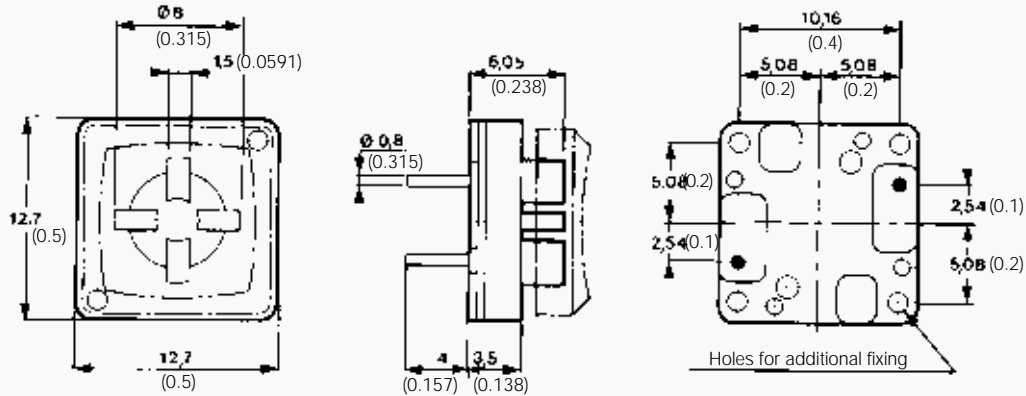
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Dimensional Drawings

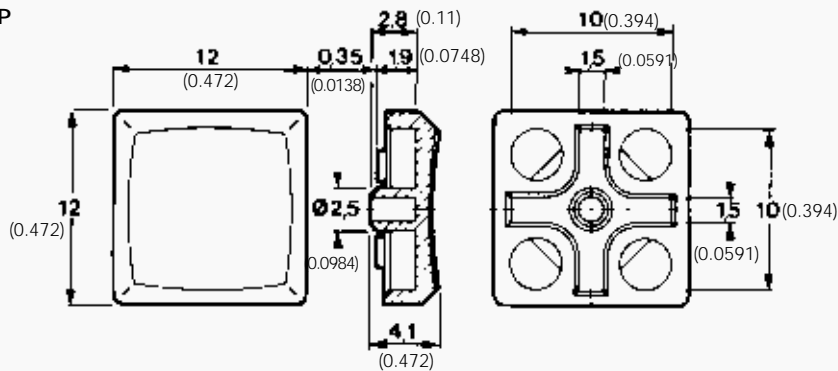
MD



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 | → | → | → |