

### DIN-sized Multiple Limit Switch

- Conforms to DIN standard (DIN43 697, 43 695).
- High repeat accuracy (0.01 mm max.).
- Long life (10,000,000 mechanical operations min.).
- High sealing property (IP67) with rigid diecast aluminum case.

**EN FIN DE VIE**

### Ordering Information

Number of ganged actuators	Roller plunger	Bevel plunger
2	D4MB-231	D4MB-241
3	D4MB-331	D4MB-341
4	D4MB-431	D4MB-441
5	D4MB-531	D4MB-541
6	D4MB-631	D4MB-641
8	D4MB-831	D4MB-841
12	D4MB-1231	D4MB-1241

**Note:** Conduit threads conforming to various standards are available.

1. JIS B0202 (No symbol is suffixed to model when placing your order.)
  - a. With 2 to 5 actuators: G1/2
  - b. With 6 to 12 actuators: G3/4
2. DIN (Add suffix "G" to model when placing your order.)
  - a. With 2 to 5 actuators: PG16
  - b. With 6 to 12 actuators: PG21
3. ANSI (Add suffix "TS" to model when placing your order.)
  - a. With 2 to 5 actuators: 1/2-14NPT.
  - b. With 6 to 12 actuators: 3/4-14NPT.

<b>Switch unit (for replacement)</b>	D4MB-S100
<b>Actuators (for replacement)</b>	D4MB-A103 (Roller plunger model) D4MB-A124 (Bevel plunger model)

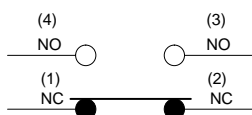
# Specifications

## ■ Ratings/Characteristics

<b>Electrical ratings</b>	10 A at 125 or 250 VAC, 0.8 A at 125 VDC, 0.4 A at 250 VDC
<b>Inrush current</b>	NC: 30 mA max., NO: 20 A max.
<b>Operating speed</b>	0.05 mm/s to 0.5 m/s
<b>Operating frequency</b>	Mechanical: 120 operations/min Electrical: 30 operations/min
<b>Insulation resistance</b>	100 M $\Omega$ min. (at 500 VDC)
<b>Contact resistance</b>	25 m $\Omega$ max. (initial)
<b>Dielectric strength</b>	1,000 VAC, 50/60 Hz for 1 min between terminals of same polarity 1,500 VAC, 50/60 Hz for 1 min between terminal and ground, and between each terminal and non-current-carrying metal part
<b>Vibration resistance</b>	Malfunction: 10 to 55 Hz, 1.5-mm double amplitude
<b>Shock resistance</b>	Destruction: Approx. 1,000 m/s <sup>2</sup> min. (approx. 100G min.) Malfunction: Approx. 200 m/s <sup>2</sup> min. (approx. 20G min.)
<b>Ambient temperature (see note)</b>	Operating: -10°C to 80°C
<b>Ambient humidity</b>	Operating: 95% max.
<b>Life expectancy</b>	Mechanical: 10,000,000 operations min. Electrical: 500,000 operations min.
<b>Enclosure ratings</b>	IEC: IP67 JIS: Jet-proof construction
<b>Weight</b>	Approx. 960 g with 4 plungers

**Note:** Temperature range below 0°C are based on absence freezing moisture or water.

### Contact Form



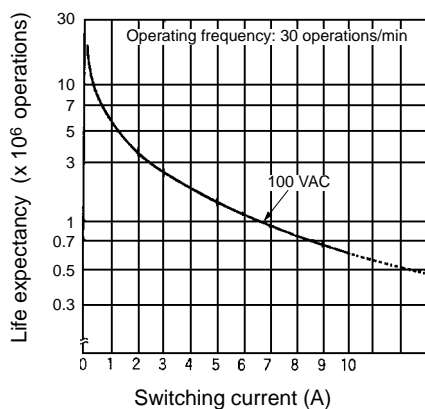
## ■ Operating Characteristics

<b>OF max.</b>	14.72 N (1,500 gf)
<b>RF min.</b>	4.91 N (500 gf)
<b>PT max.</b>	2.5 mm
<b>OT min.</b>	2.5 mm
<b>MD max.</b>	1 mm
<b>OP</b>	28±0.4 mm

**Note:** The above operating characteristic data are applicable to only one plunger.

# Engineering Data

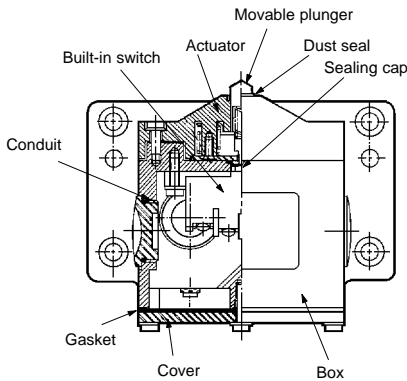
## Electrical Life Expectancy (Resistive Load)



# Nomenclature

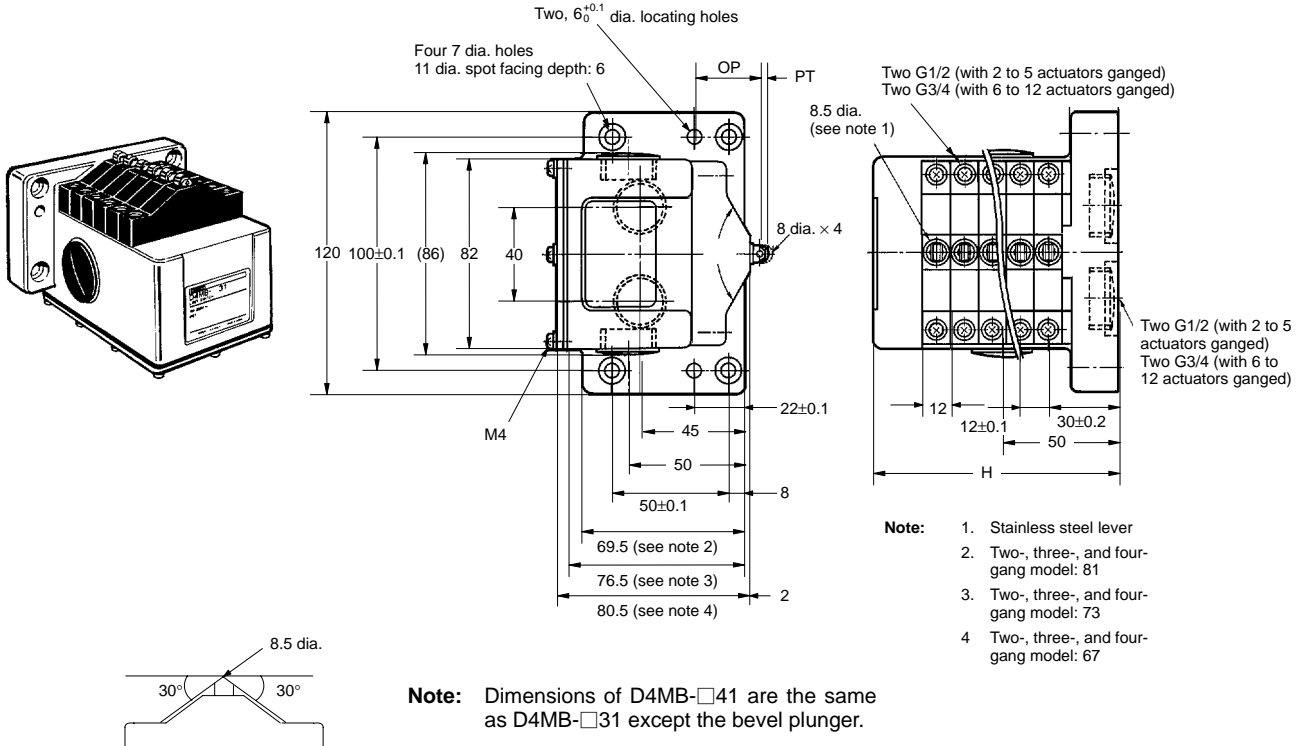
## On Sealing Properly

D4MB employs a dust seal between the head and the plunger so as to prevent the ingress of chips, dust, or foreign matter into the head. Oil or water, if any, intruding into the head is drained through the groove provided between the head and the box. In addition, convex parts are provided between the box and cover for improved local interference, thus providing the switch with sealing property as high as 1 kg/cm<sup>2</sup> min. (meeting DIN40 050 IP67).



# Dimensions

- Note:** 1. All units are in millimeters unless otherwise indicated.  
 2. Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions.



Number of plungers	Dimension H
2	70 mm
3	80 mm
4	90 mm
5	105 mm
6	120 mm
8	140 mm
12	200 mm

**ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.**

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Cat. No. C40-E1-6A