






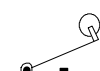


Economical, General-Purpose,
Enclosed Switch

- High precision and long life (10,000,000 mechanical operations)
- Gasket diaphragm seal provides high environmental resistance
- Suitable for applications demanding higher mechanical strength, dustproof and drip-proof properties
- Pre-wired types with molded terminals are available on special request



Ordering Information

■ LIMIT SWITCHES

Actuator type	Part number
Panel-mount plunger 	D4MC-5000
Panel-mount roller plunger 	D4MC-5020
Panel-mount crossroller plunger 	D4MC-5040
Short hinge lever 	D4MC-1020
Hinge lever 	D4MC-1000
Hinge roller lever 	D4MC-2000
Short hinge roller lever 	D4MC-2020
One-way action short hinge roller lever 	D4MC-3030

Note: For customized applications requiring molded terminal models, refer to customized models at the end of this data sheet.

Specifications

■ RATINGS

Rated voltage	Non-inductive load				Inductive load				Inrush current	
	Resistive load		Lamp load		Inductive load		Motor load		NC	NO
	NC	NO	NC	NO	NC	NO	NC	NO		
125 VAC	10 A		3 A	1.5 A	10 A		5 A	2.5 A	30 A max.	15 A max.
250 VAC	10 A		2.5 A	1.25 A	10 A		3 A	1.5 A		
8 VDC	10 A		3 A	1.5 A	6 A		5 A	2.5 A		
14 VDC	10 A		3 A	1.5 A	6 A		5 A	2.5 A		
30 VDC	6 A		3 A	1.5 A	5 A		5 A	2.5 A		
125 VDC	0.5 A		0.4 A		0.05 A		0.05 A			
250 VDC	0.25 A		0.2 A		0.03 A		0.03 A			

- Note: 1. Inductive loads have a power factor of 0.4 min. (AC) and a time constant of 7 ms max. (DC).
 2. Lamp load has an inrush current of 10 times the steady-state current.
 3. Motor load has an inrush current of 6 times the steady-state current.

■ CHARACTERISTICS

Operating speed	0.05 mm/s to 0.5 m/s (0.002 to 19.69 in/s) at panel mount plunger	
Operating frequency	Mechanical	120 operations/min
	Electrical	20 operations/min
Insulation resistance	100 M Ω min. (at 500 VDC)	
Contact resistance	15 m Ω (initial)	
Dielectric strength	1,000 VAC, 50/60 Hz for 1 min between non-continuous terminals 2,000 VAC, 50/60 Hz for 1 min between current-carrying metal parts and ground, and between each terminal and non-current-carrying part	
Vibration resistance	Malfunction	10 to 55 Hz, 1.5-mm double amplitude
Shock resistance	Destruction	1,000 m/s ² (approx. 100G) 3280 ft/s ²
	Malfunction	100 m/s ² (approx. 10G) 328.1 ft/s ²
Ambient temperature	Operating	-10°C to 80°C (14°F to 176°F) with no icing
Ambient humidity	Operating	35% to 95%
Life expectancy	Mechanical	10,000,000 operations min. (at rated OT value)
	Electrical	See <i>Engineering Data</i> .
Weight	Approx. 60 g (2.17 oz) at panel mount plunger	
Enclosure rating	IP67	

■ APPROVED STANDARDS

UL/CSA

D4MC Series A300: 0.5 A at 125 VDC, 0.25 A at 250 VDC (except molded terminal models)

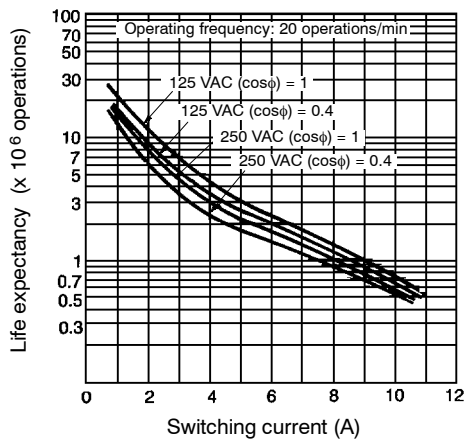
OPERATING CHARACTERISTICS

Model	D4MC-5000	D4MC-5020	D4MC-5040	D4MC-1020	D4MC-1000	D4MC-2000	D4MC-2020	D4MC-3030
OF max.	5.88 N (600 gf) 1.32 lbf	5.88 N (600 gf) 1.32 lbf		2.55 N (260 gf) 0.57 lbf	1.67 N (170 gf) 0.38 lbf	1.96 N (200 gf) 0.44 lbf	2.94 N (300 gf) 0.66 lbf	2.94 N (300 gf) 0.66 lbf
RF min.	0.98 N (100 gf) 0.22 lbf	0.98 N (100 gf) 0.22 lbf		0.34 N (35 gf) 0.08 lbf	0.25 N (25 gf) 0.06 lbf	0.39 N (40 gf) 0.08 lbf	0.39 N (40 gf) 0.08 lbf	0.39 N (40 gf) 0.08 lbf
PT max.	1.6 mm	1.6 mm		7 mm (See Note.)	10 mm (See Note.)	10 mm	6 mm (See Note.)	6 mm (See Note.)
OT min.	5 mm	5 mm		2.5 mm	4 mm	5 mm	2 mm	2 mm
MD max.	0.2 mm	0.2 mm		1.7 mm	3 mm	3 mm	1.5 mm	1.5 mm
OP	21.8±1.2 mm	33.4±1.2 mm		25±1 mm	25±1 mm	40±1 mm	40±1 mm	50±1 mm
FP max.	---	---		33 mm	36 mm	51 mm	47 mm	57.2 mm

Note: Reference values

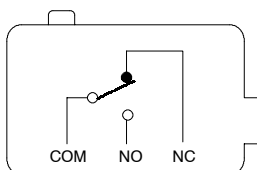
Engineering Data

ELECTRICAL LIFE EXPECTANCY



Operation

CONTACT FORM

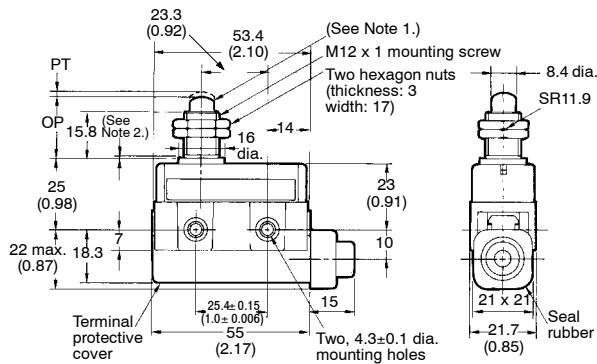


Dimensions

Unit: mm (inch)

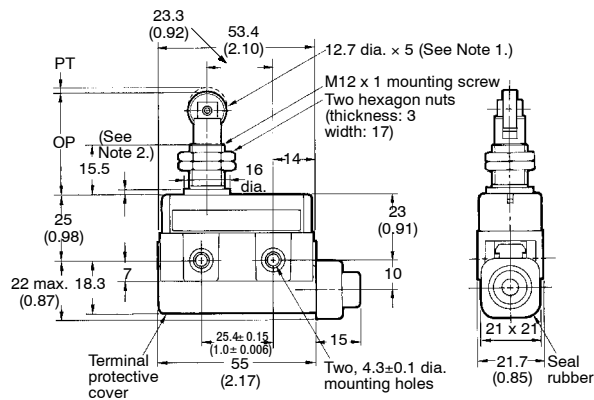
■ LIMIT SWITCHES

D4MC-5000



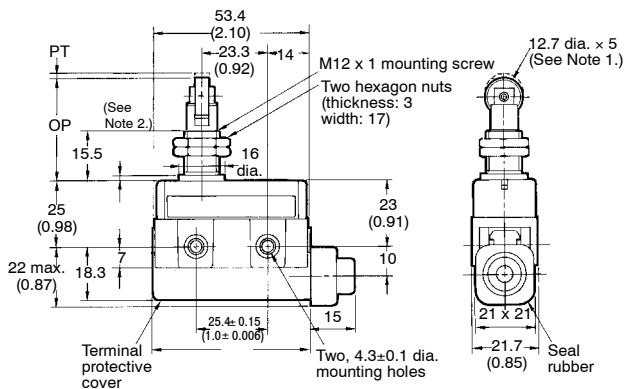
- Note: 1. Stainless steel plunger
2. The length of the imperfect threads is 1.5 mm maximum.

D4MC-5020



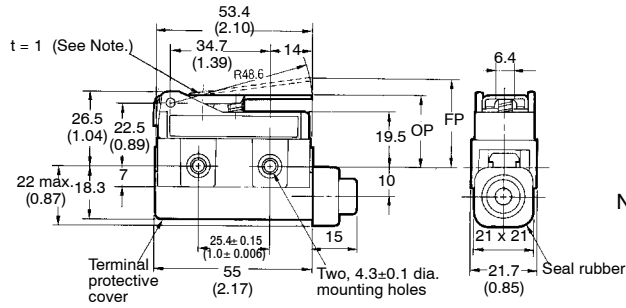
- Note: 1. Stainless steel roller
2. The length of the imperfect threads is 1.5 mm maximum.

D4MC-5040



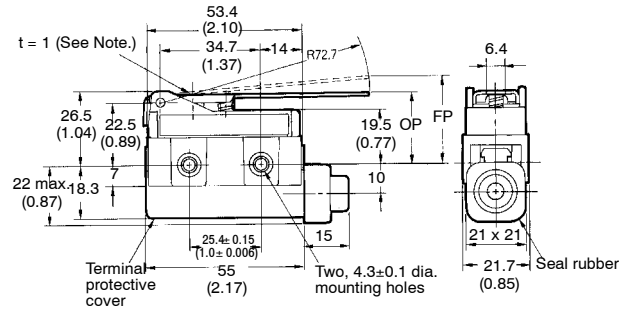
- Note: 1. Stainless steel roller
2. The length of the imperfect threads is 1.5 mm maximum.

D4MC-1020



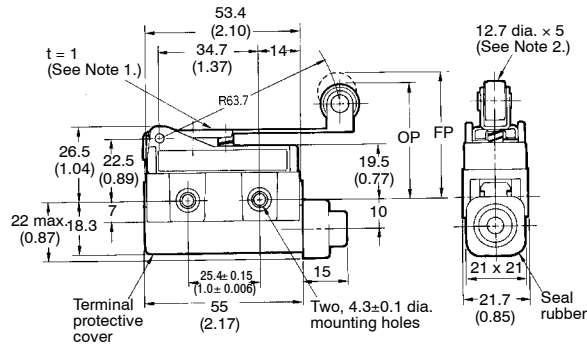
Note: Stainless steel lever

D4MC-1000



Note: Stainless steel lever

D4MC-2000

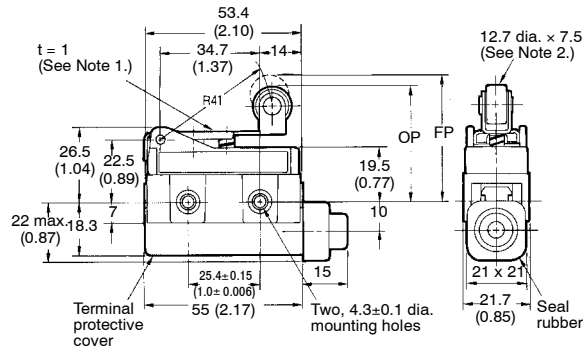


Note: 1. Stainless steel lever
2. Plastic roller

Note: Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions.

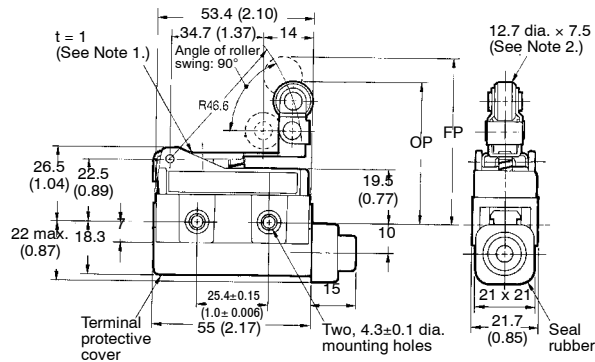
Unit: mm (inch)

D4MC-2020



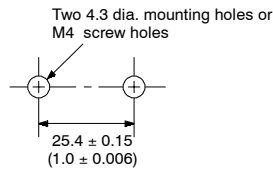
- Note: 1. Stainless steel lever
- 2. Plastic roller

D4MC-3030



- Note: 1. Stainless steel lever
- 2. Plastic roller

Mounting Holes



Note: Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.