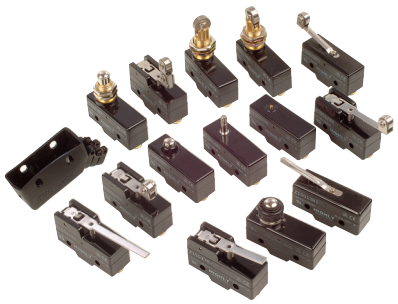


Features

- High precision basic switces in a variety of styles
- Wide margins of operating conditions increase the operating speed range
- Available for general purpose

Applications

- Automotive Door Latch,Steamer,Telephone,Air Conditioner,Humidifier,Alarm,SecurityDevice,Mixer & Chopper,Solder Gun,Neon Phone,Fax Machine,Joystick, Water Pump,Money Sorter,Food Processor,Electric Knife,Juice Maker.

Specifications

Electrical Characteristics	
Rating	H: 20(12)A 250/125VAC, 0.5A 250/125VDC ,UL 61058-1
	20(4)A 250VAC , EN 61058-1 15A 125VAC or 250VAC UL61058-1 CSA C22.2 NO.61058-1-09 0.5A 250/125VDC
Insulating Resistance	100MΩ Min (at 500 VDC)
Dielectric Strength	AC 1000V (50/60 Hz for 1 minute)
Contact Resistance	15mΩ Max. (Initial)
Mechanical Characteristics	
Operating Frequency	Mechanical:max. 100 operations/minute. Electrical:max. 20 operations/minute.
Operating Speed	0.5mm to 500mm/s (pin plunger models
Vibration	10 to 55Hz, 1.5 mm double amplitude
Operating Life	Electrical: 100,000 cycles. Mechanical: 1,000,000 cycles.
Climatic Characteristics	
Degree of Protection	IP40 (Excluding the terminals)
Operating Temperature	-0˚C ~ +55˚C
Operating Humidity	95% max. (for 5°C to 35°C)

Product Selection

Z15G □ □

1 2

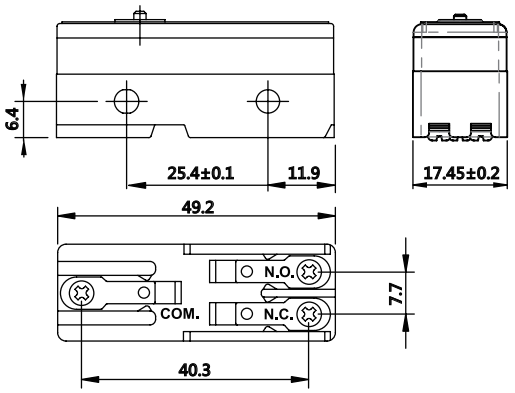
1. ACTUATOR TYPES	Solder Terminal	Screw Terminal
Pin plunger	1100	1300
Hinge lever	1101	1301
Short hinge roller lever	1103	1303
Slim spring plunger	1105	1305
Short spring plunger	1106	1306
Panel mount plunger	1107	1307
Panel mount roller plunger	1108	1308
Panel mount cross roller plunger	1118	1318
Hinge lever	1501	1701
Short Hinge lever	1502	1702
Hinge roller lever	1503	1703
Short hinge roller lever	1504	1704
Unidirectional short hinge roller lever	1544	1744

2.Standard

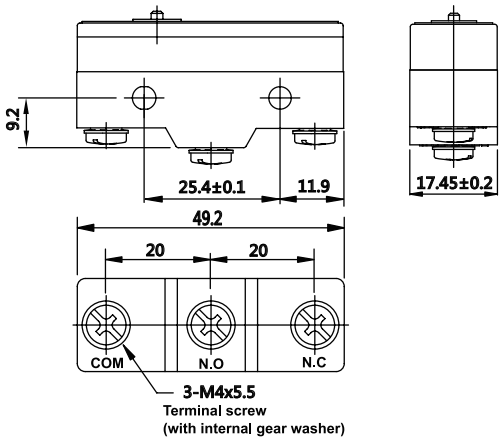
-	20(4)A 250VAC EN 61058-1 15A 125VAC or 250VAC UL 61058-1 CSA C22.2 NO.61058-1-09 0.5A 250/125VDC
H	20A(12A) 125/250VAC 0.5A 125/250VDC UL 61058-1

Terminal

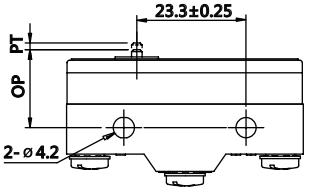
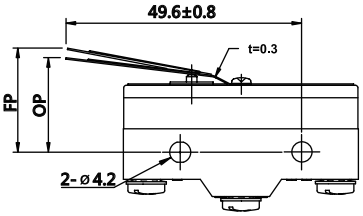
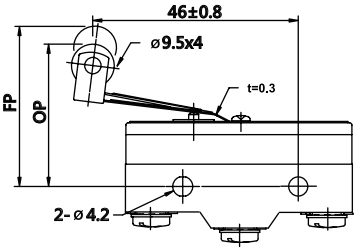
Solder Type

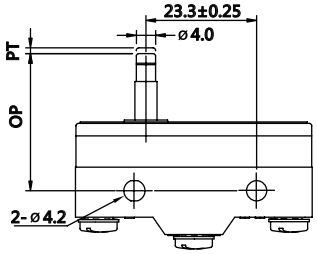
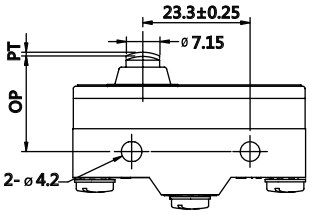
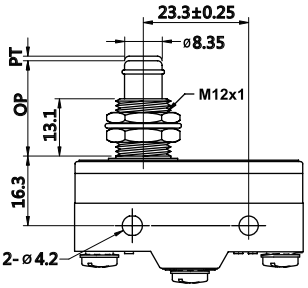


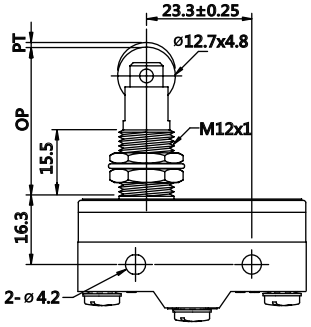
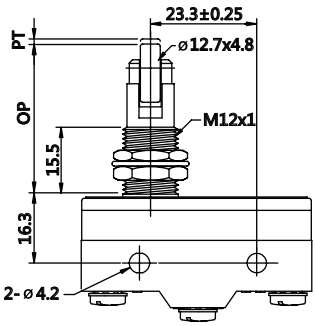
Screw Type



Operating Characteristics

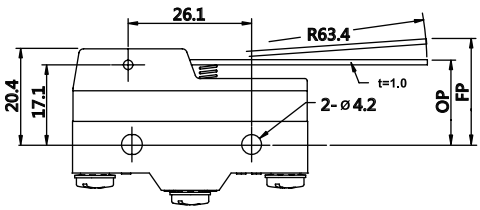
Actuator Type 1300 Pin Plunger		1301 Hinge Lever	1303 Short Hinge Lever
			
Operating Force max.	300±50gf	141gf	141gf
Pretravel max.	0.4mm	4.0mm	4.0mm
Overtravel min.	0.13mm	1.6mm	1.6mm
Movement Differential max.	0.05mm	1.30mm	1.30mm
Free Position max.	----------	20.6mm	31.8mm
Operating Position	15.9±0.4mm	17.4±0.8mm	28.6±0.8mm

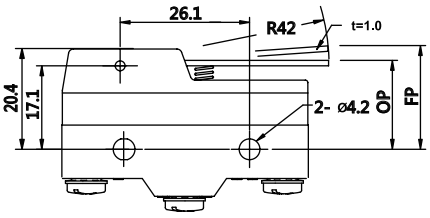
Actuator Type 1305 Slim spring Plunger		1306 Short Spring Plunger	1307 Panel Mount Plunger
			
Operating Force max.	300±50gf	300±50gf	300±50gf
Pretravel max.	0.4mm	0.4mm	0.4mm
Overtravel min.	1.6mm	2.5mm	5.5mm
Movement Differential max.	0.05mm	0.05mm	0.05mm
Free Position max.	----------	----------	
Operating Position	28.2±0.5mm	21.5±0.5mm	21.8±0.8mm

Actuator Type 1308 Panel Mount Roller Plunger		1318 Panel Mount Cross Roller Plunger
		
Operating Force max.	300±50gf	300±50gf
Pretravel max.	0.4mm	0.4mm
Overtravel min.	1.6mm	1.6mm
Movement Differential max.	0.05mm	0.05mm
Free Position max.	----------	----------
Operating Position	33.4±1.2mm	33.4±1.2mm

Operating Characteristics

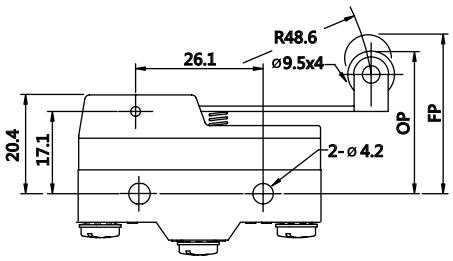
Actuator Type 1701 Hinge Lever		1702 Short Hinge

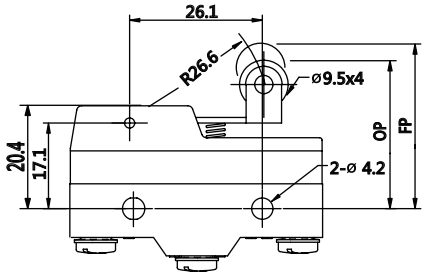




Operating Force max.	70gf	90gf
Pretravel max.	10.0mm	7.0mm
Overtravel min.	5.6mm	3.5mm
Movement Differential max.	1.27mm	1.00mm
Free Position max.	28.2mm	26.2mm
Operating Position	19.0±0.8mm	19.0±0.8mm

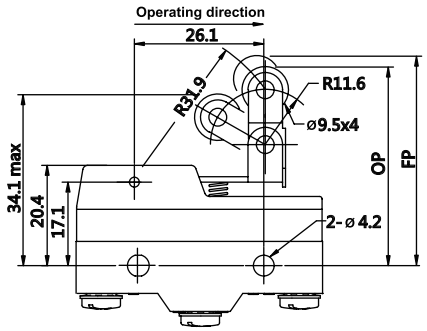
Actuator Type 1703 Hinge Roller Lever		1704 Short Hinge Roller Lever

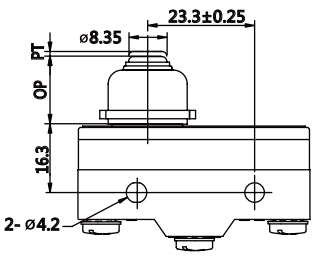




Operating Force max.	100gf	160gf
Pretravel max.	7.1mm	2.7mm
Overtravel min.	4.0mm	2.4mm
Movement Differential max.	1.02mm	0.50mm
Free Position max.	36.5mm	32.5mm
Operating Position	30.2±0.8mm	30.2±0.4mm

Actuator Type 1744 Unidirectional Short Hinge Roller Lever		ZP15G1306





Operating Force max.	170gf	1200gf
Pretravel max.	2.7mm	2.5mm
Overtravel min.	2.4mm	1.6mm
Movement Differential max.	0.50mm	0.20mm
Free Position max.	43.6mm	----------
Operating Position	41.3±0.8mm	28.2±0.5mm

Operating Characteristics

1.1 Operating stroke setting

- Setting an operating dog in the direction where the actuator moves and detaching the dog from the actuator completely when the switch is at the free position (FP).
- 70% to 100% of the overtravel (OT) is appropriate for the switch stroke setting.
- Avoiding an impact operation as much as possible as it can cause life deterioration.

1.2 Insulation and wiring in switch mounting

- Paying attention to creepage distance/clearance distance for insulation after wiring onto the terminal when a mounting frame is made of metal.
- Using an appropriate separator when a sufficient insulation distance is not secured in wiring onto the terminal.

1.3 Wiring work

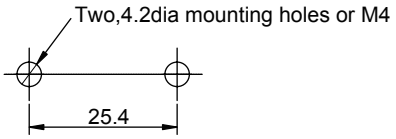
- The rough standard for soldering work is as follows: Capacity of soldering iron: 30 to 40W (350°C at the iron tip) Soldering time: 5 seconds max.Not applying any external force for 1 minute after soldering.
- Applying only the minimum required amount of flux. It can cause a contact failure if flux enters the switch.

1 .4 Usage/storage environment

- Avoiding the place where a corrosive gas is generated or temperature changes enters the switch. of high temperature or humidity, dusts and others.
- It is recommended that the switch should be inspected before use if it is stored for more than 3 to 6 months.

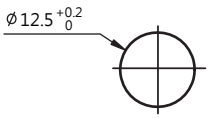
1.5 Mounting

- Using M4 mounting screws with flate washers or spring washers to secure a tight mounting. Tightening the screws with the torque of 1.18 to 1.47 Nm.
- Referring to the figure the below for mounting-hole processing drawing.

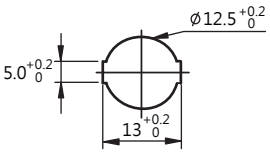


- When mounting the Switch to a panel, use a tightening torque of 2.94 to 4.9 Nm for the hexagonal nuts on the actuator.
- Do not use the M12 mounting screw and the case mounting hole at the same time, or excessive pulling force will be imposed on the switch and the case and cover may be damaged.

Panel Mount Plunger



Panel Mount Roller Plunge



Terminal Covere

AA8000 TERMINAL COVER FOR CARRYsw WITH Z15G SERIES