MN-5 Series

Enclosed Basic Switch

◆ Features

- ✓ Basic switch made with additional durable enclosure
- ✓ Sealed actuators
- ✓ With terminal cover for IP65 rating

◆ Recognition(s)

- ✓ CE – EN60947
- ✓ UL – UL-508
- ✓ CCC – GB14048.5-2008
- ✓ RoHS Compliant
- ✓ Reach Unaffected

◆ Characteristics

Positive Opening	Electrical Contact	Terminal Type	Contact Form(s)	Poles & Throws	Actuation Sequence(s)
No	3 Points	Screw	Form C	SPDT Snap	Break(1) Make(2)

Operating Temp.	AC Rated	DC Rated	IP	Oil Resist	Dust Resist	Water Resist	Operating Speed
-10 to 80 Celsius	10A 250V	0.5A 125V	65	Yes	Yes	Yes	0.01mm to 50cm/sec

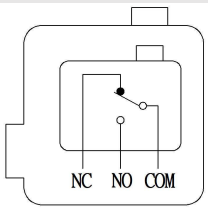
Operation Frequency	Contact Resistance	Insulation Resistance	Vibration
Mechanically: 120/min Electrically: 60/min	25mΩ max. (initial)	100MΩ min. (500VDC)	1.5mm amplitude at 10-55Hz

Storage Humidity	Service Life (min.)	Dielectric Strength
85% RH max	Mechanically: 10,000,000 operations Electrically: 500,000 operations	1000VAC, 50/60Hz for 1 minute between non-continuous terminals

Recommended tightening forces

Purpose	Screw type	Tightening
Mounting	M4	1.18~1.37 N·m
Panel Mount Screw Nut		2.94~4.92 N·m
Screw terminal		0.25±0.05 N·m

Circuitry



◆ Materials

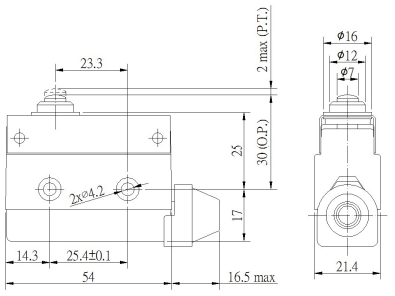
Actuation touch part	Electrical contact point	Enclosure
Nylon, or Stainless Steel, or Teflon	Silver-Nickel alloy	PBT plastic and stainless steel

◆ Nomenclature

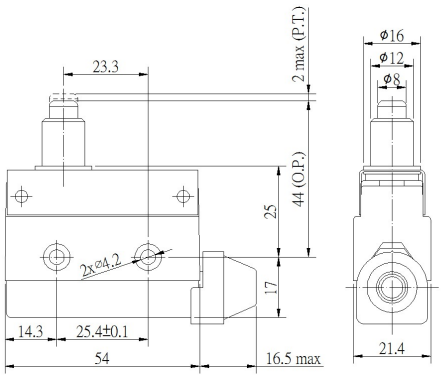
Series:	Actuator (and material):
MN –	**5100**
	5100 = Metallic plunger, short 5100-PT = Teflon plunger, short 5110 = Metallic Plunger 5110-PT = Teflon Plunger 5110L = Metallic Plunger, long 5110XL = Metallic Plunger, extra-long 5120 = Lever, straight, long 5121 = Lever, nylon roller, long 5124 = Lever, nylon roller, long, 1-way action 5140 = Lever, straight 5141 = Lever, nylon roller 5144 = Lever, nylon roller, 1-way action 5161 = Spring, metallic coil 5166 = Spring rod, nylon tip 5169 = Spring, cat whisker 5310 = Metallic Plunger, panel mount 5310-PT = Teflon Plunger, panel mount 5311 = Metallic Roller plunger, panel mount 5311-P = Nylon Roller plunger, panel mount 5311-PT = Teflon Roller plunger, panel mount 5312 = Cross metallic roller plunger 5312-P = Nylon Roller plunger, panel mount 5312-PT = Teflon Roller plunger, panel mount

◆ Dimensions & Operating Characteristics

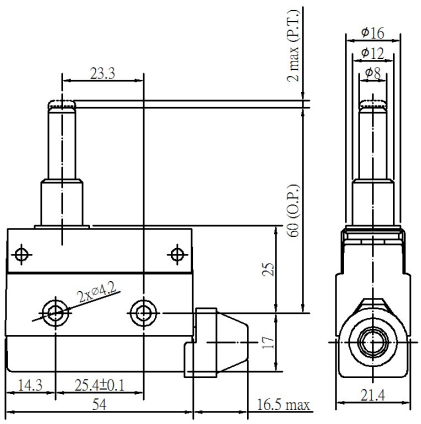
*Measurements in *millimeters*
*Actuation touch part materials does not affect operating characteristics



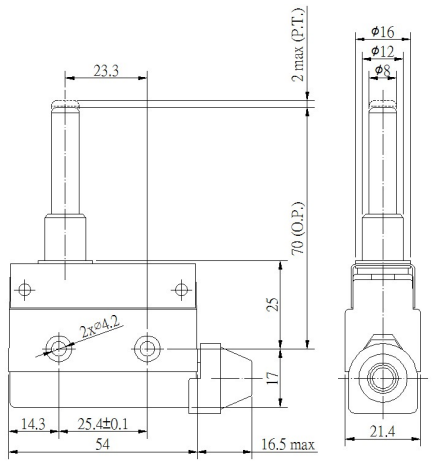
MN-5100	
OF MAX	600g
RF MIN	100g
PT MAX	2.0mm
OT MIN	0.8mm
OT MIN	0.8mm
OP	30±1.5mm



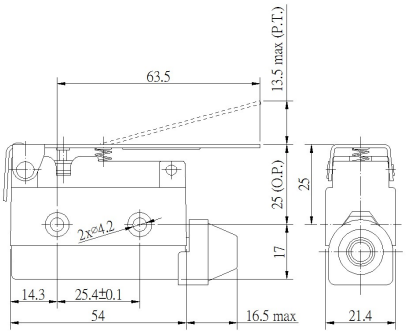
MN-5110	
OF MAX	600g
RF MIN	100g
PT MAX	2.0mm
OT MIN	5.0mm
PT MAX	2.0mm
OP	46.8±1.5mm



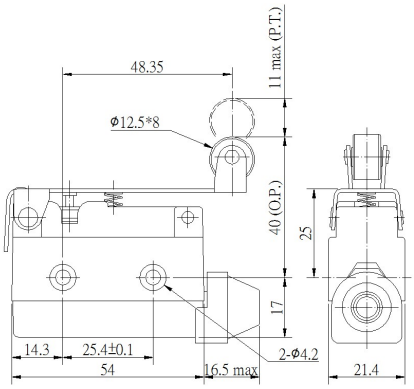
MN-5110L	
OF MAX	600g
RF MIN	100g
PT MAX	2.0mm
OT MIN	5.0mm
DT MAX	0.5mm
OP	60±1.5mm



MN-5110XL	
OF MAX	600g
RF MIN	100g
PT MAX	2.0mm
OT MIN	5.0mm
DT MAX	0.8mm
OP	70±1.5mm



MN-5120	
OF MAX	150g
RF MIN	40g
PT MAX	13.5mm
OT MIN	4.0mm
DT MAX	3.2mm
OP	25±2.0mm



MN-5121	
OF MAX	180g
RF MIN	50g
PT MAX	11.0mm
OT MIN	3.0mm
DT MAX	2.4mm
OP	40±1.9mm

MN-5100

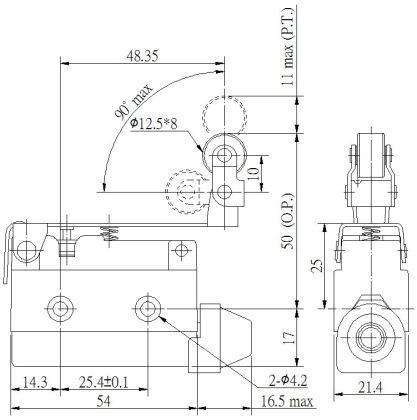
MN-5110

MN-5110L

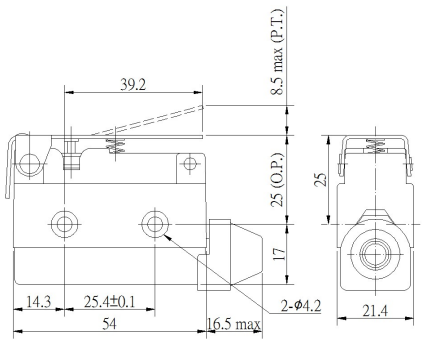
MN-5110XL

MN-5120

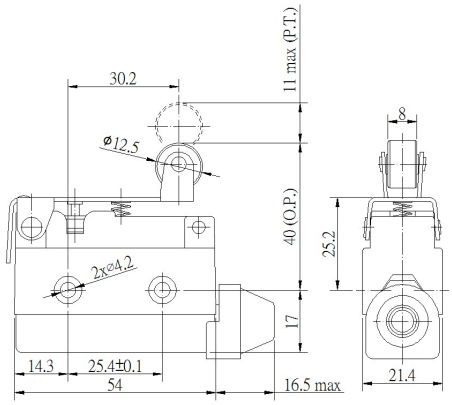
MN-5121



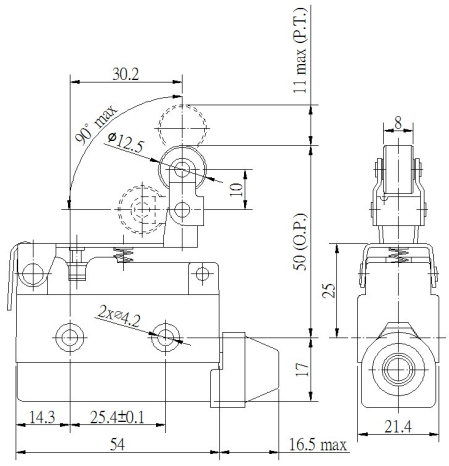
MN-5124	
OF MAX	200g
RF MIN	60g
PT MAX	11.0mm
OT MIN	3.0mm
DT MAX	2.4mm
OP	50±1.9mm



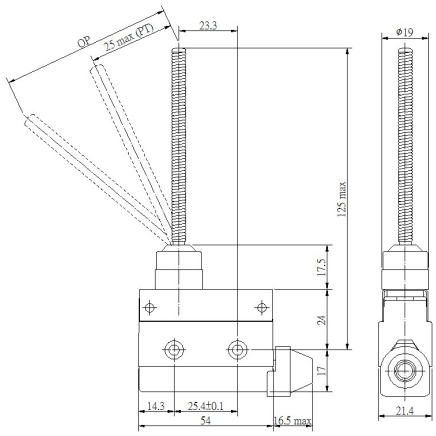
MN-5140	
OF MAX	220g
RF MIN	60g
PT MAX	8.5mm
OT MIN	2.5mm
DT MAX	2mm
OP	25±1.3mm



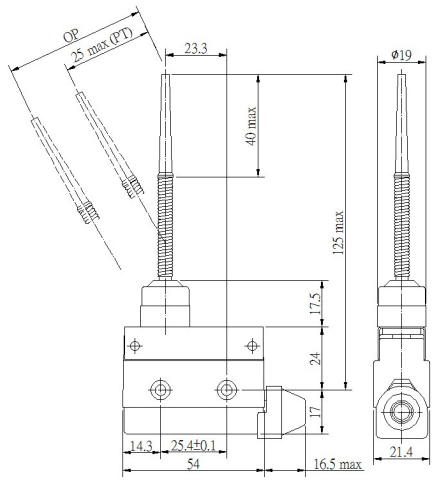
MN-5141	
OF MAX	240g
RF MIN	80g
PT MAX	6.5mm
OT MIN	2.0mm
DT MAX	1.5mm
OP	40±1.6mm



MN-5144	
OF MAX	280g
RF MIN	100g
PT MAX	6.5mm
OT MIN	2.0mm
DT MAX	1.5mm
OP	50±1.6mm



MN-5161	
OF MAX	120g
RF MIN	-
PT MAX	25mm
OT MIN	11mm
DT MAX	-



MN-5166	
OF MAX	120g
RF MIN	-
PT MAX	25mm
OT MIN	11mm
DT MAX	-

MN-5124

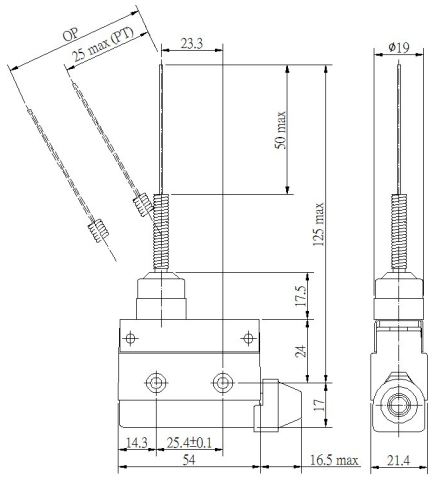
MN-5140

MN-5141

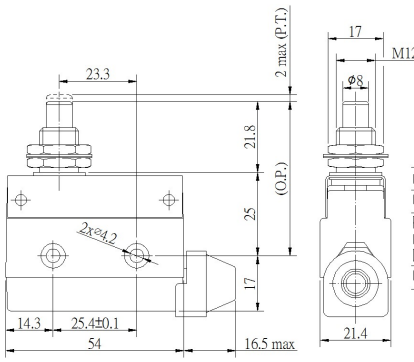
MN-5144

MN-5161

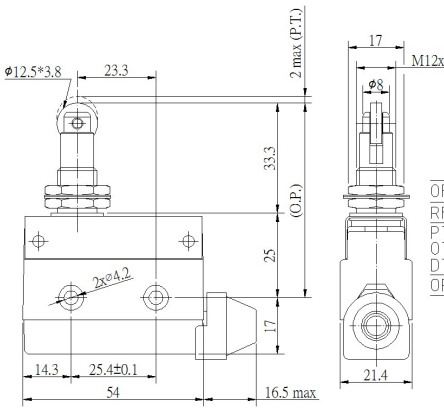
MN-5166



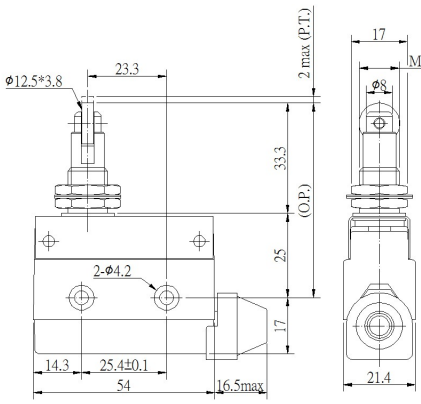
MN-5169	
OF MAX	120g
RF MIN	-
PT MAX	25mm
OT MIN	11mm
DT MAX	-



	MN-5310
OF MAX	600g
OF MIN	100g
PT MAX	2.0mm
OT MIN	6.0mm
DT MAX	0.8mm
OP	46.8±1.5mm



	MN-5311
OF MAX	600g
RF MIN	100g
PT MAX	2.0mm
OT MIN	6.0mm
DT MAX	0.8mm
OP	58.3±1.5mm



	MN-5312
OF MAX	600g
RF MIN	100g
PT MAX	2.0mm
OT MIN	6.0mm
DT MAX	0.8mm
OP	58.3±1.5mm

MN-5169

MN-5310

MN-5311

MN-5312