MJ-7 Series

Heavy Duty Limit Switch

◆ Features

- ✓ Heavy duty aluminum limit switch
- ✓ Dust, water, and oil resistant; IP65
- ✓ PF1/2" or M20 threaded hole at bottom of switch
- ✓ 2-circuits in-1 switch

  ⚠ Be extremely cautious when planning & installing 2 circuits!

- ✓ 45° and 90° actuator travel types
- ✓ Terminals protected with protruding plastic insulation fins on sides

◆ 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	4 Points	Screw	Form Z	SPDT-NC-NO	Double Break(1) Double Make(2)

Operating Temp.	AC Rated	DC Rated	IP	Oil Resist	Dust Resist	Water Resist	Operating Speed
-10 to 80 Celsius	10A 125-300V	0.4A 250V, 0.8A 125V	65	Yes	Yes	Yes	1mm to 2m/sec

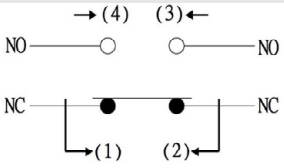
Operation Frequency	Contact Resistance	Insulation Resistance	Vibration
Mechanically: 120/min Electrically: 30/min	15mΩ max. (initial)	100MΩ min. (500VDC)	1.5mm amplitude at 10-55Hz

Storage Humidity	Service Life (min.)	Dielectric Strength
85% RH max	Mechanically: 15,000,000 operations Electrically: 500,000 operations	1000VAC, 50/60Hz for 1 minute between non-continuous terminals

Recommended tightening forces

Purpose	Screw type	Tightening
Mounting	M5	4.9~5.88 N·m
Enclosure cover		1.18±0.15 N·m
Screw terminal		0.25±0.05 N·m

Circuitry

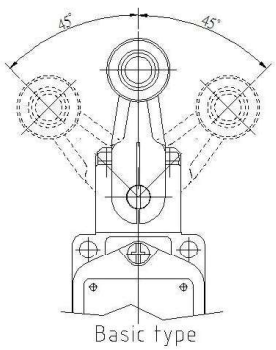


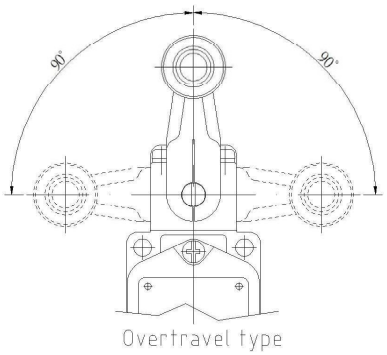
◆ Materials

Actuation touch part	Electrical contact point	Enclosure
Nylon, or Stainless Steel, or Plastic	Silver 99.9%	Aluminum alloy

◆ Nomenclature

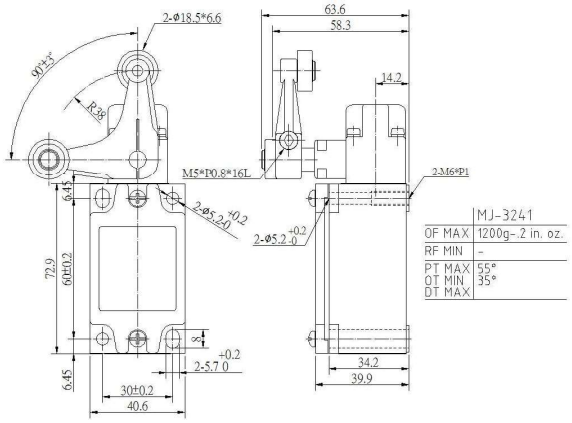
Series:	Actuator:	Through hole:
MJ –	**7101 –**	
	7101=Metallic Pin plunger 7102=Metallic Roller plunger 7102R=Cross metallic roller plunger 7103=Metallic Ball bearing plunger 7104=Side rotary, metallic roller, 45° travel 7104-PT=Side rotary, Teflon roller, 45° travel 7104-26= Side rotary, ⌀50mm rubber roller, 45° travel 7106=Spring, metallic coil 7107=Side rotary, adjustable metallic rod, 45° travel 7107L=Side rotary, adjustable metallic rod, long, 45° travel 7108=Side rotary, adjustable metallic roller, 45° travel 7108-PT=Side rotary, adjustable Teflon roller, 45° travel 7108-26= Side rotary, adjustable ⌀50mm rubber roller, 45° travel Side Rotary, Fork Lever Lock (Yoke), Nylon rollers 3241=Front/Back Facing nylon rollers, 90° travel 3242=Front/Back Facing nylon rollers, 90° travel 3243=Front Facing nylon rollers, 90° travel 3244=Back Facing nylon rollers, 90° travel Over Travel, 90° travel 7204=Side rotary, metallic roller 7204-26=Side rotary, ⌀50mm rubber roller 7207=Side rotary, adjustable metallic rod 7207L=Side rotary, adjustable metallic rod, long 7208=Side rotary, adjustable metallic roller 7208-26= Side rotary, adjustable ⌀50mm rubber roller	*Blank*=PF1/2” M20=M20 thread (cable gland excluded)



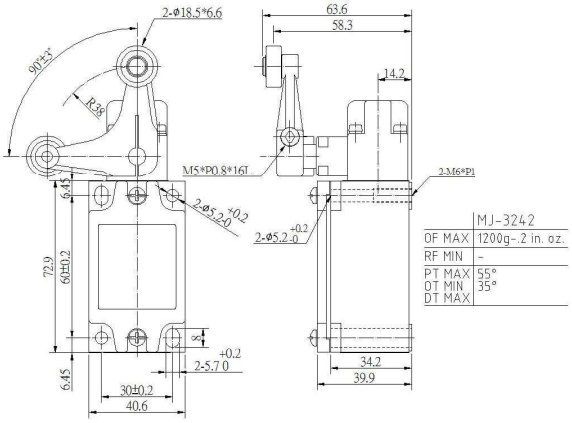


◆ Dimensions & Operating Characteristics

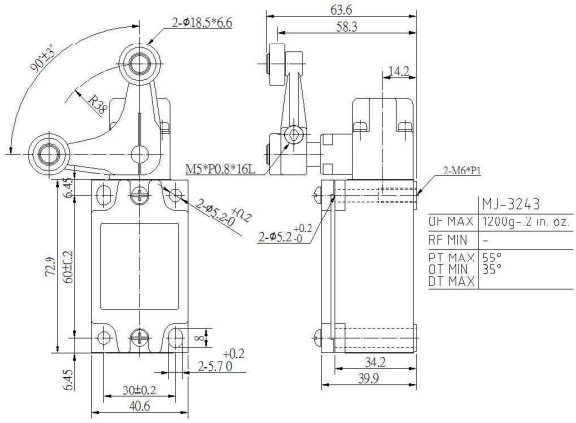
*Measurements in *millimeters*



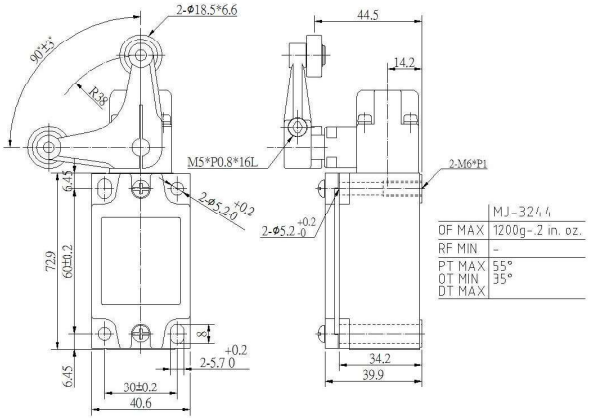
	MJ-3241
OF MAX	1200g-.2 in. oz.
RF MIN	-
PT MAX	55°
OT MIN	35°
DT MAX	



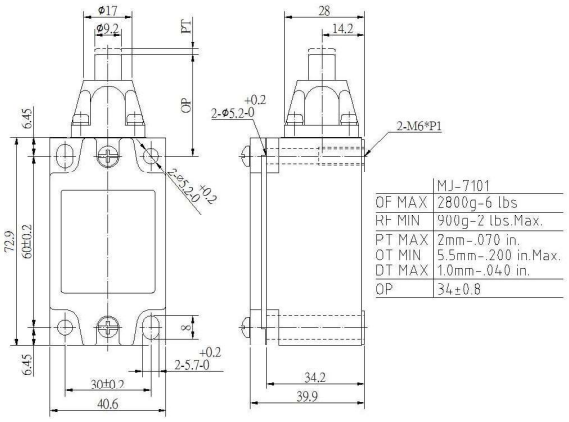
	MJ-3242
OF MAX	1200g-.2 in. oz.
RF MIN	-
PT MAX	55°
OT MIN	35°
DT MAX	



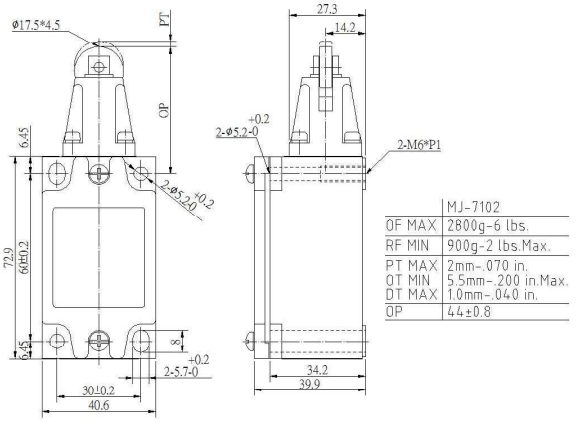
	MJ-3243
OF MAX	1200g-.2 in. oz.
RF MIN	-
PT MAX	55°
OT MIN	35°
DT MAX	



	MJ-3244
OF MAX	1200g-.2 in. oz.
RF MIN	-
PT MAX	55°
OT MIN	35°
DT MAX	



	MJ-7101
OF MAX	2800g-6 lbs
RF MIN	900g-2 lbs.Max.
PT MAX	2mm-.070 in.
OT MIN	5.5mm-.200 in.Max.
DT MAX	1.0mm-.040 in.
OP	34±0.8



	MJ-7102
OF MAX	2800g-6 lbs.
RF MIN	900g-2 lbs.Max.
PT MAX	2mm-.070 in.
OT MIN	5.5mm-.200 in.Max.
DT MAX	1.0mm-.040 in.
OP	44±0.8


MJ-3241


MJ-3242

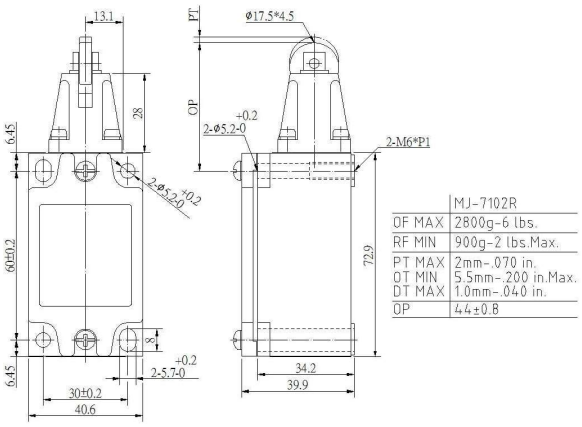

MJ-3243


MJ-3244

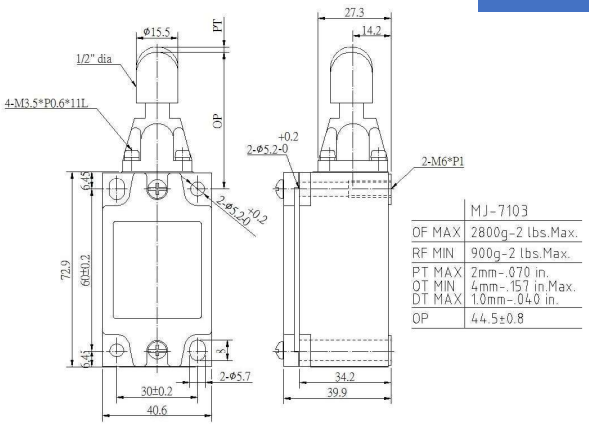

MJ-7101


MJ-7102

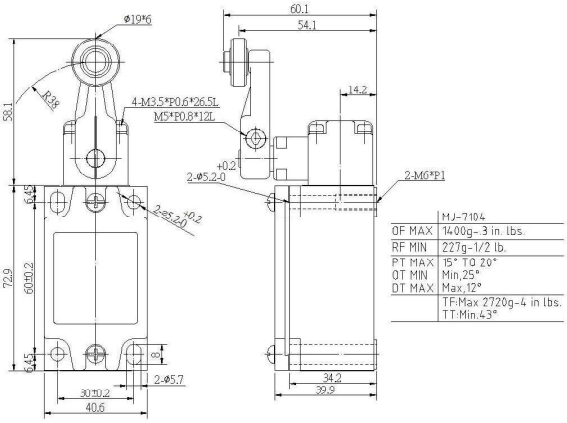
MJ-7



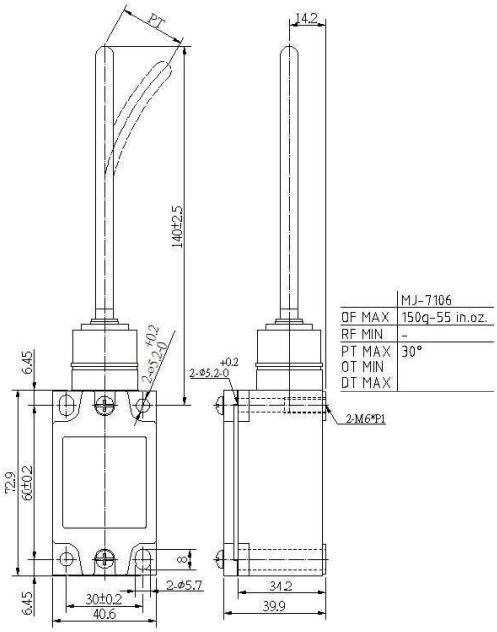
	MJ-7102R
OF MAX	2800g-6 lbs.
RF MIN	900g-2 lbs.Max.
PT MAX OT MIN DT MAX	2mm-.070 in. 5.5mm-.200 in.Max. 1.0mm-.040 in.
OP	44±0.8



	MJ-7103
OF MAX	2800g-2 lbs.Max.
RF MIN	900g-2 lbs.Max.
PT MAX OT MIN DT MAX	2mm-.070 in. 4mm-.157 in.Max. 1.0mm-.040 in.
OP	44.5±0.8



	MJ-7104
OF MAX	1400g-.3 in. lbs.
RF MIN	227g-1/2 lb.
PT MAX OT MIN DT MAX	15° TO 20° Min.25° Max.12°
	TF:Max 2720g-4 in lbs. TT:Min.43°



	MJ-7106
OF MAX	150g-55 in.oz.
RF MIN	-
PT MAX OT MIN DT MAX	30°

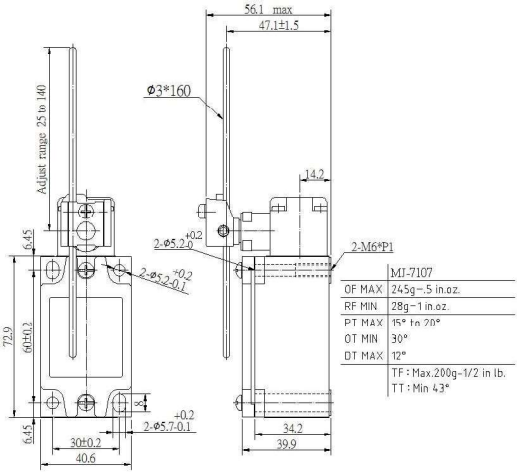
MJ-7102R

MJ-7103

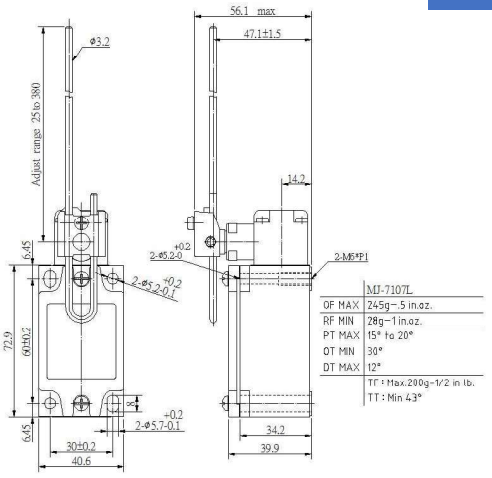
MJ-7104

MJ-7106

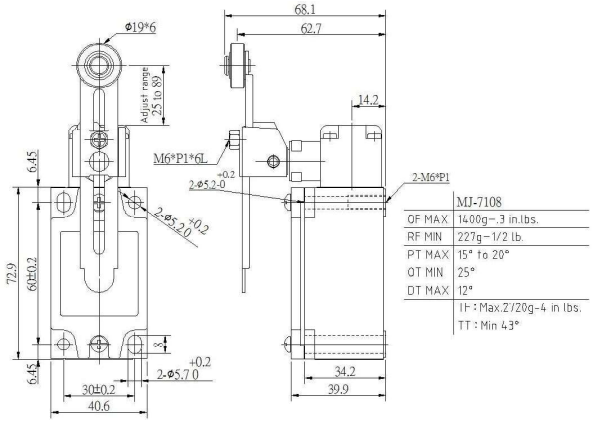
MJ-7



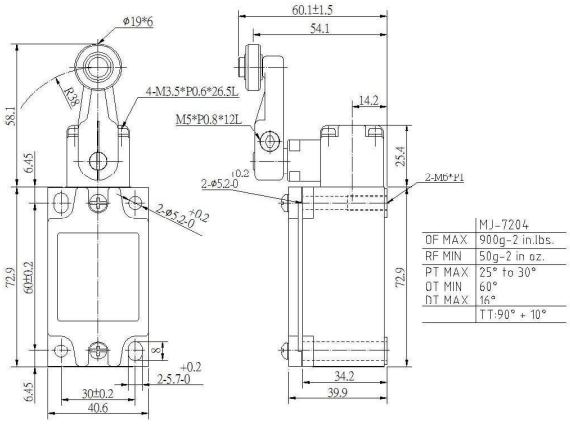
	MJ-7107
OF MAX	245g-.5 in.oz.
RF MIN	28g-1 in.oz.
PT MAX	15° to 20°
OT MIN	30°
DT MAX	12°
	TF : Max.200g-1/2 in lb.
	TT : Min 43°



	MJ-7107L
OF MAX	245g-.5 in.oz.
RF MIN	28g-1 in.oz.
PT MAX	15° to 20°
OT MIN	30°
DT MAX	12°
	TF : Max.200g-1/2 in lb.
	TT : Min 43°



	MJ-7108
OF MAX	1400g-.3 in.lbs.
RF MIN	227g-1/2 lb.
PT MAX	15° to 20°
OT MIN	25°
DT MAX	12°
	TF : Max.2/20g-4 in lbs.
	TT : Min 43°



	MJ-7204
OF MAX	900g-2 in.lbs.
RF MIN	50g-2 in oz.
PT MAX	25° to 30°
OT MIN	60°
DT MAX	16°
	TT:90° + 10°

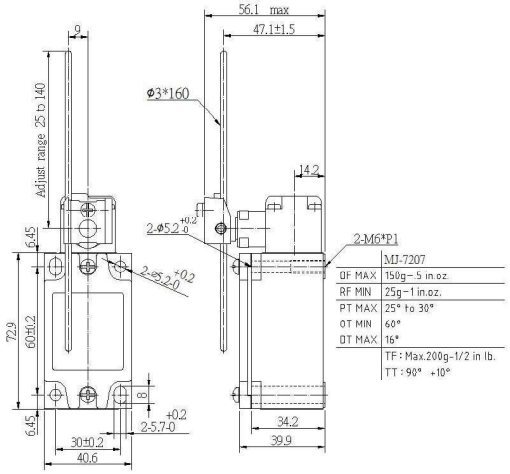
MJ-7107

MJ-7107L

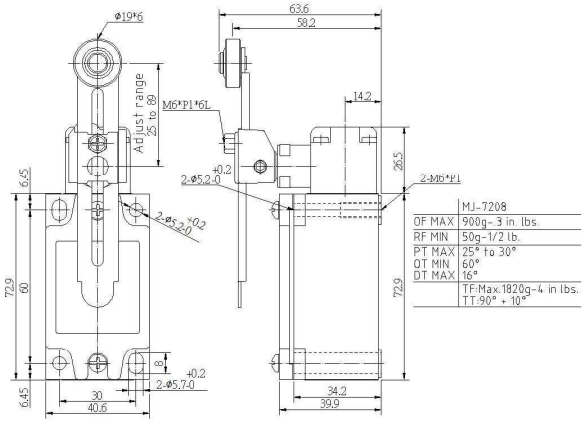
MJ-7108

MJ-7204

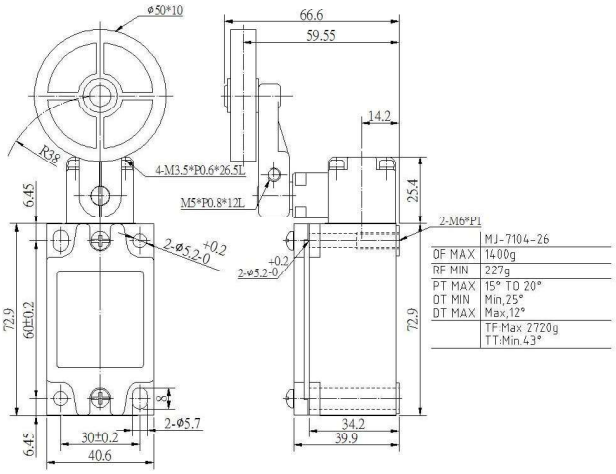
MJ-7



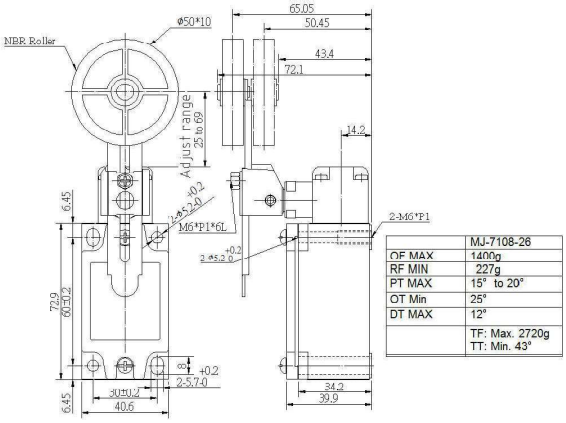
	MJ-7207
OF MAX	150g-.5 in.oz.
RF MIN	25g-1 in.oz.
PT MAX	25° to 30°
OT MIN	60°
DT MAX	16°
	TF: Max.200g-1/2 in lb. TT : 90° +10°



	MJ-7208
OF MAX	900g-.3 in. lbs.
RF MIN	50g-1/2 lb.
PT MAX	25° to 30°
OT MIN	60°
DT MAX	16°
	TF:Max.1820g-4 in lbs. TT:90° + 10°



	MJ-7104-26
OF MAX	1400g
RF MIN	227g
PT MAX	15° TO 20°
OT MIN	Min.25°
DT MAX	Max.12°
	TF:Max. 2720g TT:Min.43°



	MJ-7108-26
OF MAX	1400g
RF MIN	227g
PT MAX	15° to 20°
OT Min	25°
DT MAX	12°
	TF: Max. 2720g TT: Min. 43°

MJ-7207

MJ-7208

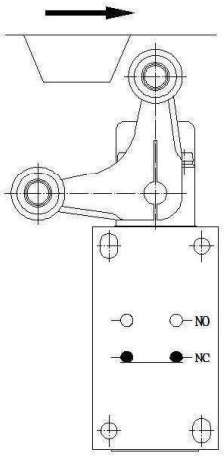
MJ-7104-26

MJ-7108-26

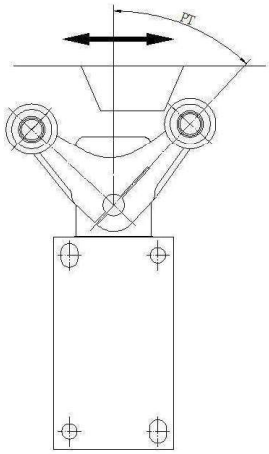
◆ Handling and Usage

Operation of Fork Lock Lever switches:

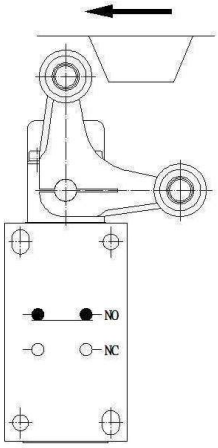
NC terminal: ON



NO terminal: ON

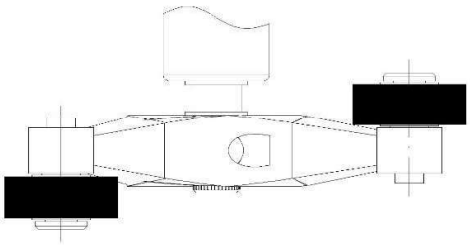


NO terminal: ON

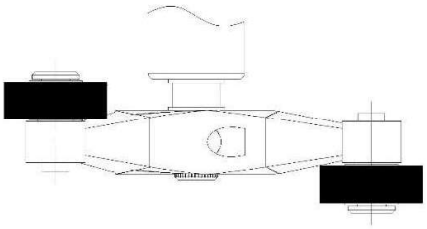


Fork Lock Lever roller positions:

MJ-3241



MJ-3242



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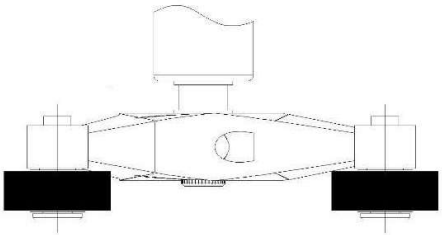

MJ-3244