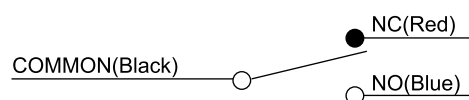


LS-3 Miniature Limit Switches

Feature

- Rugged aluminum alloy diecast housing
- High mechanical strength
- Oil resistance,waterproof and dustproof structure

Contact Form



Rating

Rated Voltage	Noninductive Load (A)				Inductive Load (A)			
	Resistance Load		Lamp Load		Inductive Load		Motor Load	
	NC	NO	NC	NO	NC	NO	NC	NO
125 VAC	5 (0.1)		1.5		3		2.5	
250 VAC	3		1		2		1.5	
8 VDC	5 (0.1)		2		5		3	
14 VDC	5 (0.1)		2		4		3	
30 VDC	4 (0.1)		2		3		3	
125 VDC	0.4		0.05		0.4		0.05	
250 VDC	0.2		0.03		0.2		0.03	

Characteristic

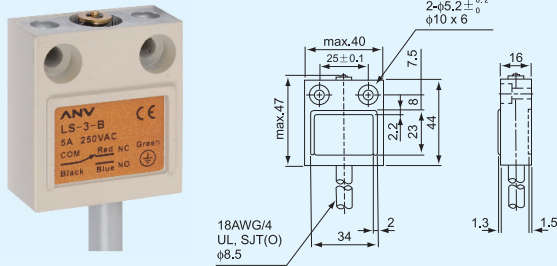
Rating	5A 125V,3A 250VAC
Operating speed	1mm~1m/s
Operating frequency	Mechanical:120 operations/min.Electrical:30 operations/min.
Contact resistance	15mΩmax.(initial)
Insulation resistance	100mΩmin.(at 500VDC)
Dielectric strength	1000VAC, 50/60 Hz for 1 minute between terminals of the same polarity
	1500VAC, 50/60 Hz for 1 minute between current-carrying and non-current-carrying metal parts
	1500VAC, 50/60 Hz for 1 minute between each terminal and ground
Vibration Frequency	10 to 55Hz,1.5mm double amplitude
Shock	Mechanical:Approx.1000m/s ² (Approx.100G'S) Electrical:Approx.500m/s ² (Approx.50G'S)
Ambient temperature	-10℃~+70℃
Ambient humidity	< 95% RH
Life	Mechanical: 10,000,000 operations/min. Electrical: 200,000 operations/min.
Weight	Approx.360g(cable length 3m) Approx.540g(cable length 5m)
Degree of protection	IP67

Operating Characteristic

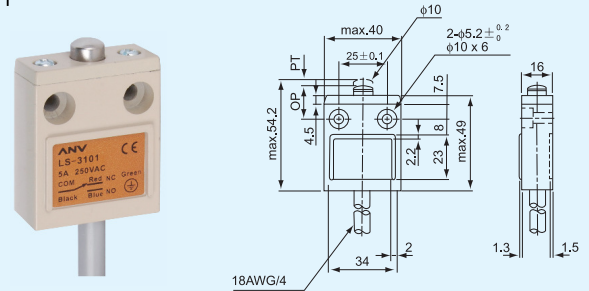
Models	LS-3101	LS-3102	LS-3103	LS-3104	LS-3110	LS-3111	LS-3112	LS-3113	LS-3169
OF(Max.)	1200gf(11.77N)	1200gf(11.77N)	1200gf(11.77N)	580gf(5.69N)	1200gf(11.77N)	1800gf(17.65N)	1800gf(17.65N)	1800gf(17.65N)	150gf(1.47N)
RF(Min.)	450gf(4.41N)	450gf(4.41N)	450gf(4.41N)	150gf(1.47N)	450gf(4.41N)	450gf(4.41N)	450gf(4.41N)	450gf(4.41N)	-
PT(Max.)	1.8mm	1.8mm	1.8mm	25	1.8mm	1.8mm	1.8mm	1.8mm	15°
OT(Min.)	3mm	3mm	3mm	40	3mm	3mm	3mm	3mm	-
MD(Max.)	0.2mm	0.2mm	0.2mm	3	0.2mm	0.2mm	0.2mm	0.2mm	-
OP	15.7±1mm	28.5±1mm	28.5±1mm	-	28.5±1mm	24.9±1mm	34.3±1mm	34.3±1mm	-

Appearance and Dimension

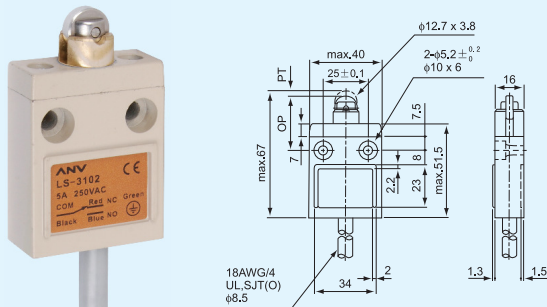
LS-3-B



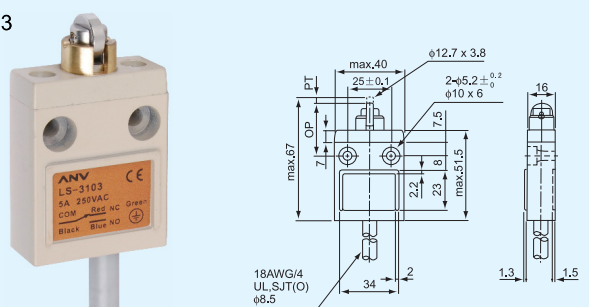
LS-3101



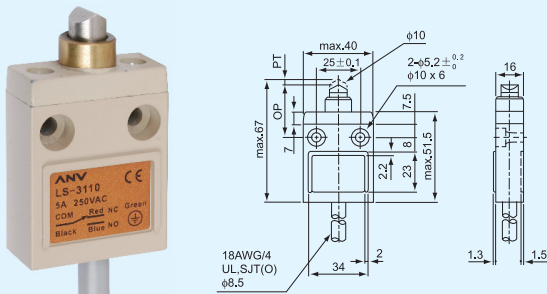
LS-3102



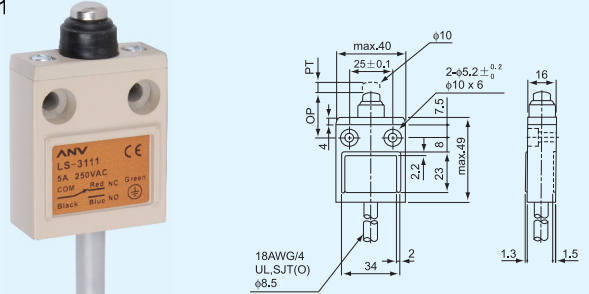
LS-3103



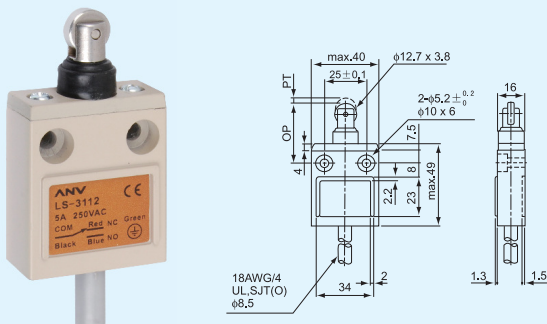
LS-3110



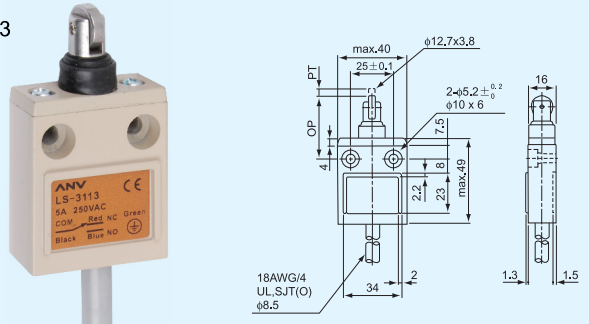
LS-3111



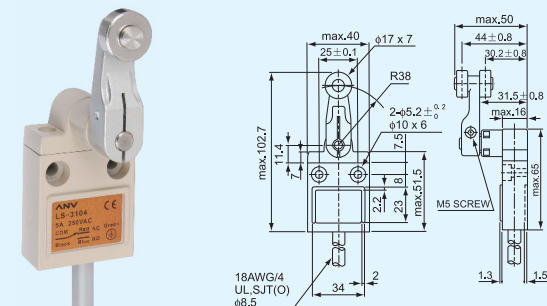
LS-3112



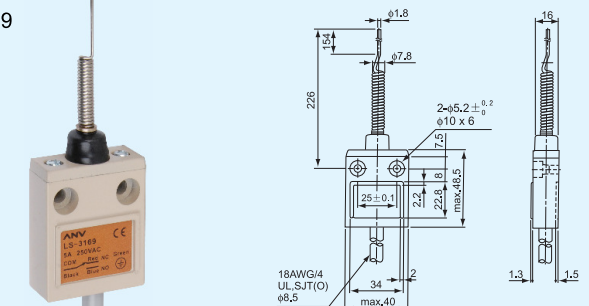
LS-3113



LS-3104

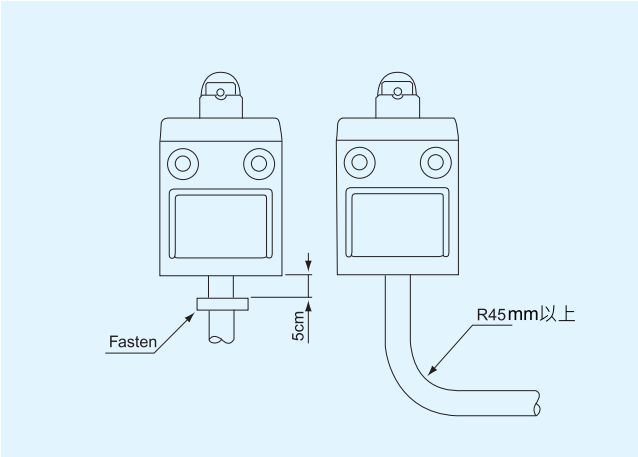


LS-3169



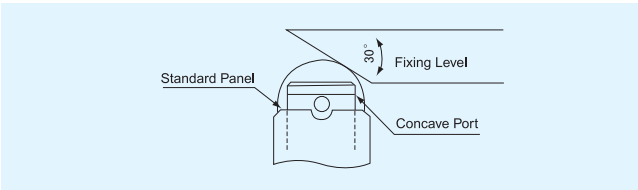
Fastening of the switch cable

The switch bodies are filled with resin for sealing purposes. To avoid stressing the cable and switch body, fasten the switch at 5 cm or farther away from the switch body, should the wire be bent, the bending radius shall be at least 45mm.



Installation

The service life and accuracy of switches will be effected by the shape of actuator operation frequency & over travel. So the angular of the fixing level should be about 30°, the surface finish of the fixing level should be over, the hardness is from HV400~500. When installing, the position of the concave part should be above the standard panel.

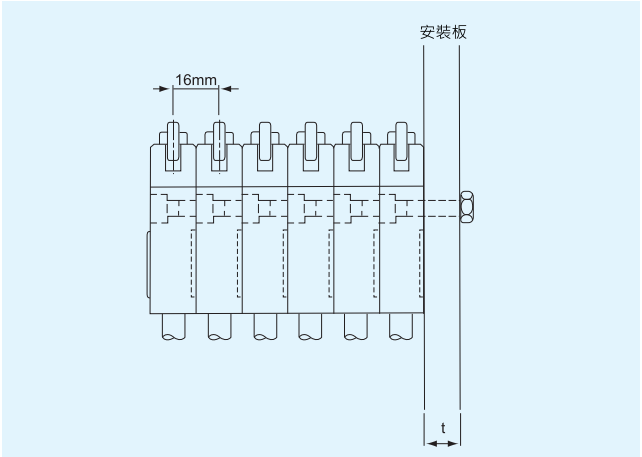


Contact types



Switch bank mounting

A maximum of six switches may be mounted together as a switch bank. During the installation, the convex part of the switch back. The mounting panel shall be 6mm or thicker.



Mounting

Recommended tightening torque according to the following form.

Model	Screw type	Torque
1	M5 fastening screws	43.4~52lb.in (50~60kgf·cm)
2	M3.5 installing screws	6.9~7.9lb.in (8~9kgf·cm)

Mounting holes

Mount the switch body to a rigid mounting panel using two M5 screws.

