


LJM Series



Compact Die-Cast Limit Switches with Positive Opening Mechanism



- UL/CE markings provided
-  forced contact-opening mechanism (N.C. contact only)
- Compact size
Superior IP67 seal
- Preleaded
- Wide operating temperature range (-25 to +70°C)

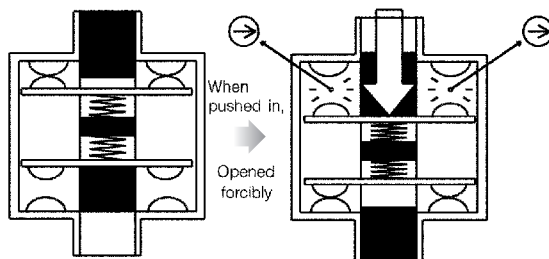


ORDER GUIDE

Actuator type	Cable length	Catalog listing
Roller plunger 	1m	LJM-B502
	3m	LJM-B5023
Roller lever 	1m	LJM-B515
	3m	LJM-B5153

INTERNAL SWITCH

Internal switches in the LJM Series have an N.C./N.O. electrically independent contact (Zb) structure. The positive opening mechanism is used to forcibly open the contacts (N.C. contacts only) even if they are fused accidentally.



PERFORMANCE

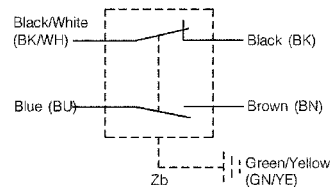
Standards	Compliance	Product related: IEC 60947-5-1, EN 60947-5-1 Machine related: IEC 60204-1, EN 60204-1
	Certification	UL
Structure	Protective structure	IP67 (IEC 60529)
	Electrical shock protection	class I (IEC 60536)
	Pollution degree	3
	Internal switch	Slow action
Electrical performance	Electrical rating	See Table 1.
	Dielectric strength	Between non-continuous terminals : 2,500Vac, 50/60Hz for 1min. Between each terminal and non-live metal part : 2,500Vac, 50/60Hz for 1min. Between each terminal and ground : 2,500Vac, 50/60Hz for 1min.
	Insulation resistance	100MΩ or more (by 500Vdc megger)
	Rated thermal current (Ith)	6A
	Short-circuit protection	6A breaking fuse type gG (gl)
	Rated insulation voltage (Ui)	400V IEC 60947-5-1, 300V UL508
	Conditional rated short-circuit current	1,000A
	Rated impulse withstand voltage (Uimp)	4,000V
Mechanical performance	Impact resistance	250m/s ² (18ms) IEC 60068-2-27
	Vibration resistance	250m/s ² (10 to 500Hz) IEC 60068-2-6
	Allowable operating speed	Minimum operating speed: 0.001m/s Maximum operating speed: (30° dog is used.) LJM-B502□: 0.1m/s, LJM-B515□: 1.5m/s
Life	Mechanical	10million operations or more
	Electrical	4million operations (up to 3,600 operations/hr.)
Ambient operating conditions	Temperature	-25 to +70°C (no freezing allowed.)
	Humidity	Max. 85%RH
Recommended tightening torque	Body	1.2 to 1.5N-m (M4 hexagon socket head cap bolt)

● Table 1. Electrical rating

AC-15: B300 (Ue=240V, Ie=1.5A) DC-13: R300 (Ue=250V, Ie=0.1A)
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Category used AC-15: Solenoid load
DC-13: Solenoid load
Ue: Rated operating voltage
Ie: Rated operating current

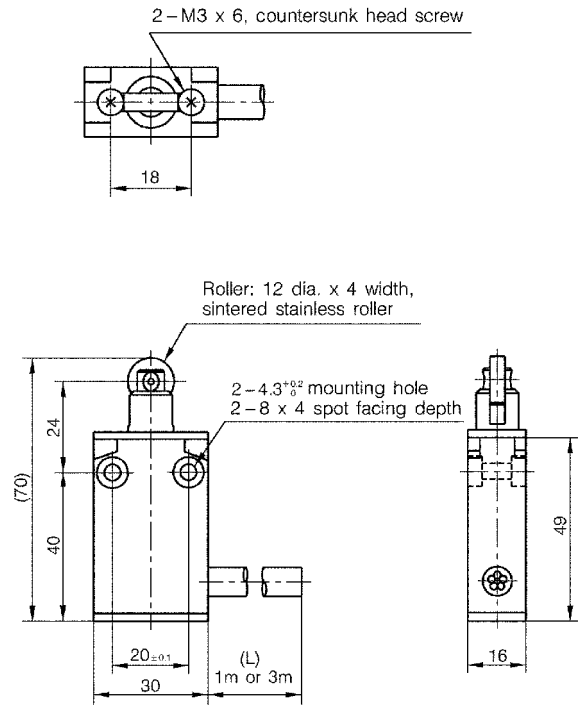
CONTACT TYPE AND WIRING



OPERATING CHARACTERISTICS AND EXTERNAL DIMENSIONS

(unit: mm)

Roller plunger:LJM-B502

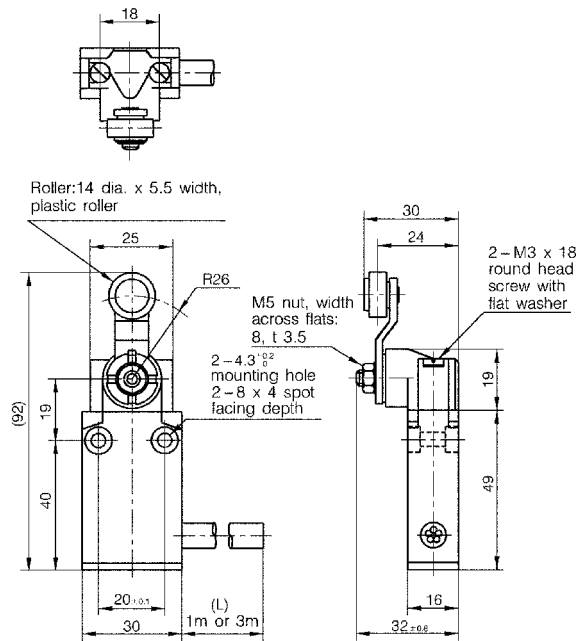


O.F. (operating force)	(N max.)	7.5
P.T. (pretravel)	(mm)	N.C.:1.8, N.O.:3*
T.T. (total travel)	(mm)	5.25*
P.O. (travel to positive opening position)	(mm min.)	3.2
P.O.F. (positive opening force)	(N min.)	37.5

*The table shows reference values only.

Note 1. The housing is made of zinc alloy painted blue.
 Note 2. The cable is an oil-resistant vinyl cabtyre round cable, 0.75mm², 5-core wire. Outside diameter: approx. 8mm. Sheath color: black.

Roller lever:LJM-B515



O.F. (operating force)	(N-m max.)	0.05
P.T. (pretravel)	(°)	N.C.:20, N.O.:40*
T.T. (total travel)	(°)	70*
P.O. (travel to positive opening position)	(° min.)	42
P.O.F. (positive opening force)	(N-m min.)	0.15

*The table shows reference values only.

Note 1. The housing is made of zinc alloy painted blue.
 Note 2. The cable is an oil-resistant vinyl cabtyre round cable, 0.75mm², 5-core wire. Outside diameter: approx. 8mm. Sheath color: black.