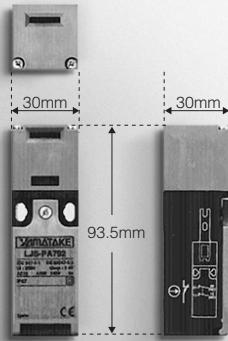


LJS-PA Series

Plastic safety interlock Switches.



For details on dimensions, see relevant drawings.

- UL/CSA/CE markings
- ⊖ Forced contact-opening mechanism (N.C. contact only)
- Compact size
- Superior IP67 seal
- Double-insulation structure with plastic housing (no grounding line connection required)
- Wide operating temperature range (-25 to +70°C)






CLICK

ORDER GUIDE

• Body

Contact type	Catalog listing
N.C. × 1 + N.O. × 1	LJS-PA592
N.C. × 2	LJS-PA792

• Tongued key

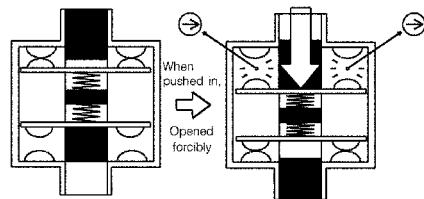
Shape	Catalog listing
Straight type 	LJS-Z11
Right angle type 	LJS-Z12
Adjustable type 	LJS-Z13

INTERNAL SWITCH

The internal switch of the **LJS-PA** Series has the N.C./N.O. electrically independent contact (Zb) structure.

Additionally, the contact forced open structure is used to forcibly open the contact (N.C. contact only) even if the contact is fused accidentally.

As the switch is pushed in, the contact is opened forcibly.



PERFORMANCE

Standards	Conformed standards	Product related: IEC 60947-5-1, EN 60947-5-1 Machine related: IEC 60204-1, EN 60204-1, EN 1088
	Approved standards	UL/CSA
Structure	Protective structure	IP67 (JIS C 0920) (IEC 60529)
	Electrical shock protection	class II (IEC 60536)
	Internal switch	Slow action
Electrical performance	Electrical rating	See separate Table 1.
	Rated energizing current (Ith)	10A
	Short-circuit protective device	Breaking fuse 10A type gG (gl)
	Rated insulation voltage (Ui)	500V IEC 60947-1, 300V UL/CSA
	Conditional rated short-circuit current	1,000A
	Rated impulse withstanding voltage (Uimp)	6,000V
Mechanical performance	Impact resistance	100m/s ² (11ms) IEC 60068-2-27
	Vibration resistance	50m/s ² (10 to 500Hz) IEC 60068-2-6
	Tongued key operating speed	0.01m/s to 0.5m/s
	Mechanical operation frequency	10 operations/min.
Life	Mechanical life	1,000,000 operations or more
	Electrical life	400,000 operations or more
Environmental conditions	Operating temperature range	-25 to +70°C (No freezing allowed.)
	Operating humidity range	85% RH or less
Recommended tightening torque	Body	0.49 to 0.69N-m (M4 screw)
	Terminal	0.8N-m (M3.5 binding machine screw)
	Cover	0.5N-m (M3 round head screw)
	Head	0.5N-m (M3 round head screw)

• Table 1. Electrical rating

AC-15: A300
(Ue=240V, Ie=3A or Ue=120V, Ie=6A)
DC-13: Q300
(Ue=250V, Ie=0.27A or Ue=125V, Ie=0.55A)

Category used AC-15: Solenoid load
DC-13: Solenoid load

Ue: Rated operating voltage
Ie: Rated operating current

CONTACT OPERATION

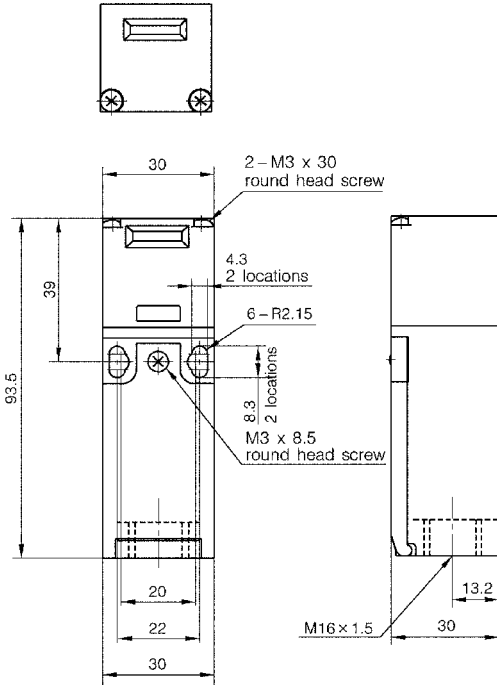
Catalog listing	LJS-PA592	LJS-PA792
<p>■ : Contact close</p> <p>□ : Contact open</p> <p>▨ : Transient state</p>	<p>Tongued key insertion (NORMAL) state</p>	<p>Tongued key insertion (NORMAL) state</p>
Circuit diagram		

OPERATING CHARACTERISTICS AND EXTERNAL DIMENSIONS

(unit: mm)

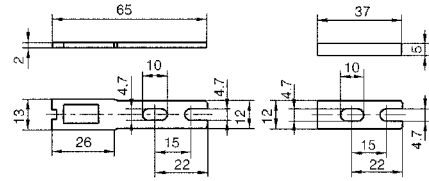
• Body

Tongued key removal strength	10N
Forced opening force (Min.)	15N

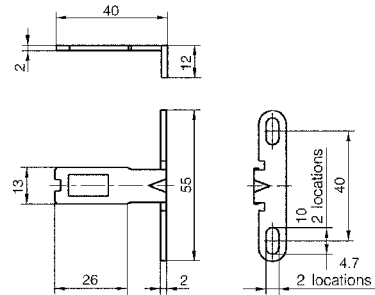


• Tongued key

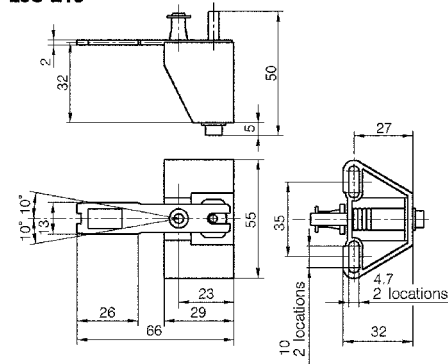
LJS-Z11



LJS-Z12

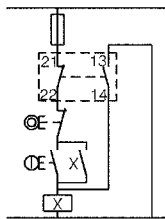


LJS-Z13

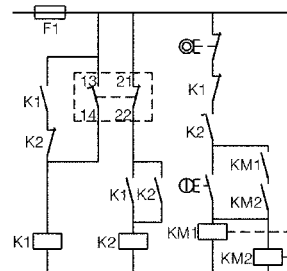


CIRCUIT EXAMPLES

- Example of circuit in category 1 of EN 954-1
N.C. + N.O.



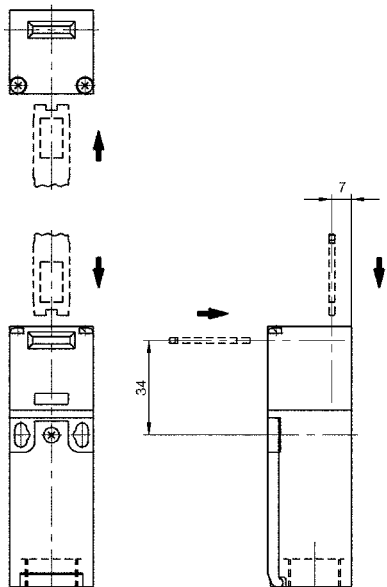
- Example of circuit in category 3 of EN 954-1
N.C. + N.O.



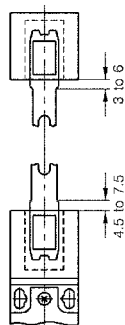
The reset is activated when the tongued key is removed, and then it is inserted.

Note: For mechanical/electrical redundancy, add another switch with the contact forced open mechanism.

● Diagram of tongued key position



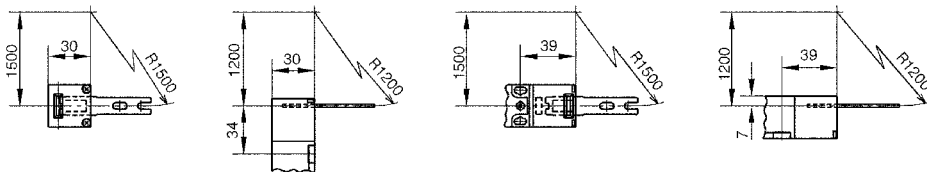
● Diagram of tongued key insertion position



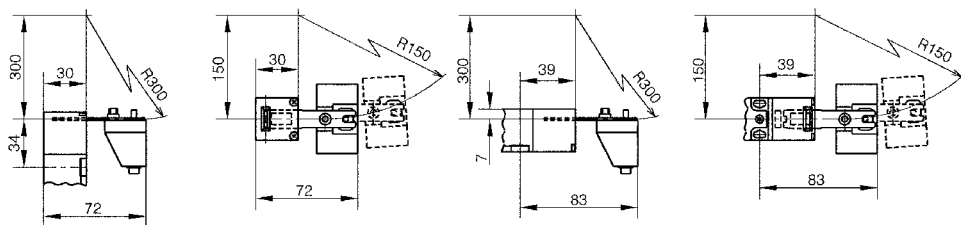
(unit: mm)

● Actuation radius of tongued key

LJS-Z11/Z12



LJS-Z13



HANDLING PRECAUTIONS

● Mounting the switch

- Always tighten each part of the safety switch with the recommended tightening torque stated in the product specification. If any part is tightened excessively, this might cause damage to the screw and/or other parts. Additionally, insufficient tightening may lead to lowering of various characteristics, such as switch sealing ability.