

# MKey 9 Guard locking plastic safety switches



## Solenoid Locking Interlock Safety Switches featuring Guard Holding up to 1800N. (180Kg.)

The MKey 9 Series Guard Locking switches have a slim plastic body design and have been developed with a holding force of 1800N to keep medium guard Doors closed until hazards have been removed.

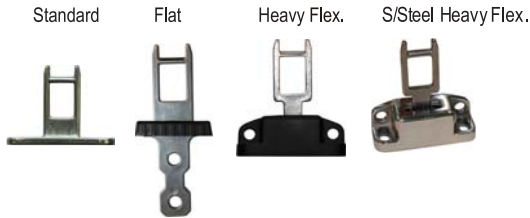
The high specification plastic body has a high resistance to chemical and washdown solutions, and the Stainless Steel Head provides a durable robust protection of the cam interlock

IP67 enclosure protection is maintained by a double seal lid gasket design and metal fixings.

They have a slim profile and are designed to fit on 50mm (2in.) frame sections or to applications where space is restricted. The Head will rotate to provide up to 8 actuator entry positions.

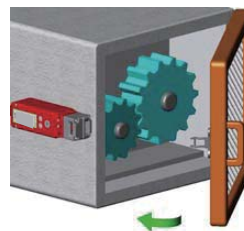
An LED is available to indicate Lock Status.

Accessories include a Sliding Handle Bolt and lock off actuators.

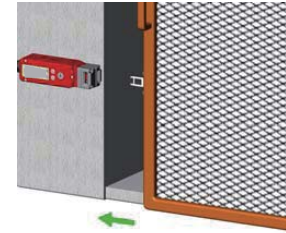


Spring to lock when actuator is inserted. Energise solenoid to unlock.

Stainless Steel Head



Hinged Guard



Sliding Guard

### Functional Specification:

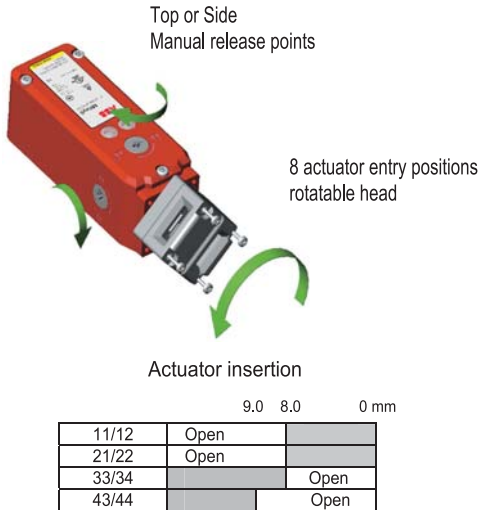
Positive break contacts to IEC947-5-1

High Functional Safety to ISO 13849-1

2NC Safety Circuits - Solenoid/Lock and Actuator/Guard wired in series  
 1NO Circuit Auxiliary circuit for indication of actuator status (Guard open)  
 1NO Circuit Auxiliary circuit for Lock Status (selectable with LED2)

High specification polyester housings Stainless Steel Head

Connects to most Safety Relays to give up to up to Ple Cat.4.



Top or Side Manual release points

8 actuator entry positions rotatable head

Actuator insertion

9.0 8.0 0 mm

11/12	Open	
21/22	Open	
33/34		Open
43/44		Open

For all ABB Jokab Safety switches the normally closed (NC) circuits are closed when the guard is closed actuator inserted.

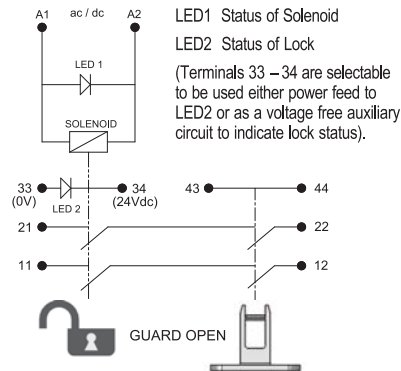
Standards	EN1088 IEC 947-5-1 EN 60204-1 ISO 13849-1 EN62061 EN 954-1 UL508
Safety Classification and Reliability Data:	
Mechanical Reliability B10d	2.5 x 10 <sup>6</sup> operations at 100mA load up to Category 4 with Safety Relay
EN 954-1	up to PLe depending upon system architecture
ISO 13849-1	up to SIL3 depending upon system architecture
EN 62061	
Safety Data - Annual Usage	8 cycles per hour / 24 hours per day / 365 days
PFHd	3.44 x 10 <sup>-6</sup>
Proof Test Interval (Life)	35 years
MTTFd	356 years
Solenoid Voltage (by part number)	24V ac/dc or 110V. ac or 230V. ac
Solenoid Wattage	12W.
LED 2 Supply Voltage	24V dc
Utilization Category	AC15 A300 3A.
Thermal Current (Ith)	5A
Rated Insulation / Withstand Voltages	600VAC / 2500 VAC
Travel for Positive Opening	10mm
Actuator entry minimum radius	175mm Standard 60mm Heavy Duty
Maximum Approach / Withdrawal speed	600mm/s.
Body Material	Polyester
Head Material	Stainless Steel 316
Enclosure Protection	IP67
Operating Temperature	-25C. 55C.
Vibration	IEC 68-2-6, 10-55Hz+1Hz, Excursion: 0.35mm, 1 octave/min
Conduit Entry Fixing	Various (See Sales Part Numbers) 4 x M5

# MKey 9 Guard locking plastic safety switches



MKey 9	
2TLA050007R0012	Mkey9, Sol M20, 24V No Key
2TLA050007R1012	Mkey9, Sol NPT, 24V No Key
2TLA050007R2012	Mkey9, Sol QC, 24V No Key
2TLA050007R0013	Mkey9, Sol M20, 110V No Key
2TLA050007R1013	Mkey9, Sol NPT, 110V No Key
2TLA050007R2013	Mkey9, Sol QC, 110V No Key
2TLA050007R0014	Mkey9, Sol M20, 230V No Key
2TLA050007R1014	Mkey9, Sol NPT, 230V No Key
2TLA050007R2014	Mkey9, Sol QC, 230V No Key
2TLA050007R0112	Mkey9, Sol M20, 24V Std. Key
2TLA050007R1112	Mkey9, Sol NPT, 24V Std. Key
2TLA050007R2112	Mkey9, Sol QC, 24V Std. Key
2TLA050007R0113	Mkey9, Sol M20, 110V Std. Key
2TLA050007R1113	Mkey9, Sol NPT, 110V Std. Key
2TLA050007R2113	Mkey9, Sol QC, 110V Std. Key
2TLA050007R0114	Mkey9, Sol M20, 230V Std. Key
2TLA050007R1114	Mkey9, Sol NPT, 230V Std. Key
2TLA050007R2114	Mkey9, Sol QC, 230V Std. Key
2TLA050007R0212	Mkey9, Sol M20, 24V Flat Key
2TLA050007R1212	Mkey9, Sol NPT, 24V Flat Key
2TLA050007R2212	Mkey9, Sol QC, 24V Flat Key
2TLA050007R0213	Mkey9, Sol M20, 110V Flat Key
2TLA050007R1213	Mkey9, Sol NPT, 110V Flat Key
2TLA050007R2313	Mkey9, Sol QC, 110V Flat Key
2TLA050007R0314	Mkey9, Sol M20, 230V Flat Key
2TLA050007R1314	Mkey9, Sol NPT, 230V Flat Key
2TLA050007R2214	Mkey9, Sol QC, 230V Flat Key
2TLA050007R0412	Mkey9, Sol M20, 24V Met. Flex Key
2TLA050007R1412	Mkey9, Sol NPT, 24V Met. Flex Key
2TLA050007R2422	Mkey9, Sol QC, 24V Met. Flex Key
2TLA050007R0413	Mkey9, Sol M20, 110V Met. Flex Key
2TLA050007R1413	Mkey9, Sol NPT, 110V Met. Flex Key
2TLA050007R2423	Mkey9, Sol QC, 110V Met. Flex Key
2TLA050007R0414	Mkey9, Sol M20, 230V Met. Flex Key
2TLA050007R1414	Mkey9, Sol NPT, 230V Met. Flex Key
2TLA050007R2424	Mkey9, Sol QC, 230V Met. Flex Key
2TLA050007R0512	Mkey9, Sol M20, 24V SS Flex Key
2TLA050007R1512	Mkey9, Sol NPT, 24V SS Flex Key
2TLA050007R2522	Mkey9, Sol QC, 24V SS Flex Key
2TLA050007R0513	Mkey9, Sol M20, 110V SS Flex Key
2TLA050007R1513	Mkey9, Sol NPT, 110V SS Flex Key
2TLA050007R2523	Mkey9, Sol QC, 110V SS Flex Key
2TLA050007R0514	Mkey9, Sol M20, 230V SS Flex Key
2TLA050007R1514	Mkey9, Sol NPT, 230V SS Flex Key
2TLA050007R2524	Mkey9, Sol QC, 230V SS Flex Key

Schematic circuit:



QC Quick Connect  
Connector Length 24mm



Quick Connect (QC) M23 12 way Male Plug (Pin view from switch)		Switch Circuit
1	3	A1 A2
4	6	11 / 12
7	8	21 / 22
2	5	43 / 44
9	10	33 / 44

Dimensions:

