

SAFETY PRODUCTS

MKEY 5 Series Safety Switch

Data Sheet

MKey 5 is a mechanical safety switch used for monitoring doors and hatches.

The switch is mounted on the frame and the actuator key on the moving part of the guard.

Option for a stainless steel head is also available.







Easy to install

Variety of actuators

Many types of actuators available depending on application.

Easy mounting

Rotating head allows for up to 8 actuating positions allowing for many mounting posibilities.



Continuous operation

Protect against unwanted stops

"Double wide seal gaskets" enables switches to keep its IP rating for the life of the switch.

Long Mechanical Life

Cam system in switches all rotate the same direction reducing wear giving long mechanical life and good tolerance to misalignment.



Optimum Interface

Small Design

Small footprint makes it easy to install in restricted space.

Industry Footprint

Standard industry footprint for smaller mechanical switches and ½ NPT conduit entry.

2022-08-28 1/3

Ordering Information

Description	Material Housing	Material Head	Type	Order code
MKEY 5, ½ NPT, No Key	Polyester	Polyester	MKEY 5	2TLA050003R1000
MKEY 5 ½ NPT, Standard Key	Polyester	Polyester	MKEY 5	2TLA050003R1100
MKEY 5, ½ NPT, Flat Key	Polyester	Polyester	MKEY 5	2TLA050003R1200
MKEY 5, ½ NPT, Plastic Flex Key	Polyester	Polyester	MKEY 5	2TLA050003R1300
MKEY 5, ½ NPT, Metal Flex Key	Polyester	Polyester	MKEY 5	2TLA050003R1400
MKEY 5, ½ NPT, SS Flex Key	Polyester	Polyester	MKEY 5	2TLA050003R1500
MKEY 5+, ½ NPT, No Key, 40N	Polyester	Polyester	MKEY 5+	2TLA050003R1001
MKEY 5+ ½ NPT, Standard Key, 40N	Polyester	Polyester	MKEY 5+	2TLA050003R1101
MKEY 5+, ½ NPT, Flat Key, 40N	Polyester	Polyester	MKEY 5+	2TLA050003R1201
MKEY 5+, ½ NPT, Plastic Flex Key, 40N	Polyester	Polyester	MKEY 5+	2TLA050003R1301
MKEY 5+, ½ NPT, Metal Flex Key, 40N	Polyester	Polyester	MKEY 5+	2TLA050003R1401
MKEY 5+, ½ NPT, SS Flex Key, 40N	Polyester	Polyester	MKEY 5+	2TLA050003R1501
MKEY 5, ½ NPT, No Key	Polyester	Stainless Steel	MKEY 5	2TLA050003R1010
MKEY 5 ½ NPT, Standard Key	Polyester	Stainless Steel	MKEY 5	2TLA050003R1110
MKEY 5, ½ NPT, Flat Key	Polyester	Stainless Steel	MKEY 5	2TLA050003R1210
MKEY 5, ½ NPT, Plastic Flex Key	Polyester	Stainless Steel	MKEY 5	2TLA050003R1310
MKEY 5, ½ NPT, Metal Flex Key	Polyester	Stainless Steel	MKEY 5	2TLA050003R1410
MKEY 5, ½ NPT, SS Flex Key	Polyester	Stainless Steel	MKEY 5	2TLA050003R1510
MKEY 5+, ½ NPT, No Key, 40N	Polyester	Stainless Steel	MKEY 5+	2TLA050003R1011
MKEY 5+ ½ NPT, Standard Key, 40N	Polyester	Stainless Steel	MKEY 5+	2TLA050003R1111
MKEY 5+, ½ NPT, Flat Key, 40N	Polyester	Stainless Steel	MKEY 5+	2TLA050003R1211
MKEY 5+, ½ NPT, Plastic Flex Key, 40N	Polyester	Stainless Steel	MKEY 5+	2TLA050003R1311
MKEY 5+, ½ NPT, Metal Flex Key, 40N	Polyester	Stainless Steel	MKEY 5+	2TLA050003R1411
MKEY 5+, ½ NPT, SS Flex Key, 40N	Polyester	Stainless Steel	MKEY 5+	2TLA050003R1511

 ${\sf NOTE: Anything \ in \ bold \ is \ typically \ stocked.}$

Accessories

Description	Material Housing	Order code
Standard Key	Stainless Steel	2TLA050040R0202
Flex Key with metal housing	Stainless Steel	2TLA050040R0203
Flex Key with stainless steel housing	Stainless Steel	2TLA050040R0204
Flat Key	Stainless Steel	2TLA050040R0220
1/2 NPT Cable Gland	Stainless Steel	2TLA050040R0001

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Technical Data

Manufacturer			
Address	ABB Electrification Sweden AB / JOKAB SAFETY		
	Varlabergsvägen 11		
	SE-434 39 Kungsbacka		
	Sweden		
Electrical characteristics			
Utilization category	AC-15 A300 3A		
Thermal current	10A		
Rated insulation/withstand voltages	500 VAC/2500 VAC		
Contacts	2NC + 1NO		
General			
Travel for positive opening	6 mm		
Actuator entry minimum radius	175 mm Standard Key		
	100 mm Flexible Key		
Protection class	IP67		
Ambient temperature	-25+80°C		
Size	See manual		
Conduit entries	½ NPT		
Material	Polyester (Head Polyester or S/Steel 316)		
Fixing	Body: 2 x M5		
	Actuator: 2 x M5		
Maximum approach / withdrawal speed	600 mm/s		
Holding Force	MKEY 5: 12N		
•	MKEY 5+: 40N		
Vibration	IEC 68-2-6, 10-55 Hz+1 Hz,		
	Excursion: 0.35 mm, 1 octave/min		
Safety-related characteristic data and Conformity			
Conformity	European Machinery Directive 2006/42/EC		
	EN ISO 12100:2010, EN 1088:1995+A2:2008,		
	EN 60204-1:2006+A1:2009 EN 60947-1:2007+A1:2011,		
	EN 60947-5-1:2004+A1:2009		
EN ISO 13849-1	Up to PL e, Cat. 4 depending on system architecture		
EN 62061	Up to SIL3 depending on system architecture		
Safety data			
B10d	2,500,000 operations at 100 mA load		
MTTFd	356 years (8 cycles per hour / 24 hours per day / 365 days		
	per year)		
Certifications	TÜV, cULus		
Information with regard to UL 508	Use 12AWG copper conductors only		
	Electrical Rating: A300 48W5		
	Type 1 Enclosure		
	Max. Switching Current / Volt / Amp: 120V 6A (720VA		
	break) PF 0.38,		
	240V 3A (720VA break) PF 0.38.		

NOTE: A single MKey5 can achieve performance level PL c according to EN ISO 13849 if used correctly with an ABB Jokab Safety safety relay, Pluto safety-PLC or Vital safety module. If two MKey5-switches are used for the same safety function, a performance level up to PL e can be achieved. Refer to EN ISO 13849 for details on how to achieve this if necessary.

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Cary, North Carolina 27511
United States
electrification.us.abb.com/
products/machine-motor-control

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