

SAFETY PRODUCTS

# MKEY 6 Series Safety Switch Data Sheet

MKey 6 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 possibilities.



### 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.

**Ordering Information**

<b>Description</b>	<b>Material Housing</b>	<b>Material Head</b>	<b>Type</b>	<b>Order code</b>
MKEY 6, ½ NPT, No Key	Polyester	Polyester	MKEY 6	2TLA050005R1030
<b>MKEY 6 ½ NPT, Standard Key</b>	<b>Polyester</b>	<b>Polyester</b>	<b>MKEY 6</b>	<b>2TLA050005R1130</b>
MKEY 6, ½ NPT, Flat Key	Polyester	Polyester	MKEY 6	2TLA050005R1230
MKEY 6, ½ NPT, Plastic Flex Key	Polyester	Polyester	MKEY 6	2TLA050005R1330
MKEY 6, ½ NPT, Metal Flex Key	Polyester	Polyester	MKEY 6	2TLA050005R1430
MKEY 6, ½ NPT, SS Flex Key	Polyester	Polyester	MKEY 6	2TLA050005R1530
MKEY 6+, ½ NPT, No Key, 40N	Polyester	Polyester	MKEY 6+	2TLA050005R1031
<b>MKEY 6+ ½ NPT, Standard Key, 40N</b>	<b>Polyester</b>	<b>Polyester</b>	<b>MKEY 6+</b>	<b>2TLA050005R1131</b>
MKEY 6+, ½ NPT, Flat Key, 40N	Polyester	Polyester	MKEY 6+	2TLA050005R1231
MKEY 6+, ½ NPT, Plastic Flex Key, 40N	Polyester	Polyester	MKEY 6+	2TLA050005R1331
MKEY 6+, ½ NPT, Metal Flex Key, 40N	Polyester	Polyester	MKEY 6+	2TLA050005R1431
MKEY 6+, ½ NPT, SS Flex Key, 40N	Polyester	Polyester	MKEY 6+	2TLA050005R1531
MKEY 6 ½ NPT, No Key	Polyester	Stainless Steel	MKEY 6	2TLA050005R1040
<b>MKEY 6 ½ NPT, Standard Key</b>	<b>Polyester</b>	<b>Stainless Steel</b>	<b>MKEY 6</b>	<b>2TLA050005R1140</b>
MKEY 6, ½ NPT, Flat Key	Polyester	Stainless Steel	MKEY 6	2TLA050005R1240
MKEY 6, ½ NPT, Plastic Flex Key	Polyester	Stainless Steel	MKEY 6	2TLA050005R1340
MKEY 6, ½ NPT, Metal Flex Key	Polyester	Stainless Steel	MKEY 6	2TLA050005R1440
MKEY 6, ½ NPT, SS Flex Key	Polyester	Stainless Steel	MKEY 6	2TLA050005R1540
MKEY 6+, ½ NPT, No Key, 40N	Polyester	Stainless Steel	MKEY 6+	2TLA050005R1041
<b>MKEY 6+ ½ NPT, Standard Key, 40N</b>	<b>Polyester</b>	<b>Stainless Steel</b>	<b>MKEY 6+</b>	<b>2TLA050005R1141</b>
MKEY 6+, ½ NPT, Flat Key, 40N	Polyester	Stainless Steel	MKEY 6+	2TLA050005R1241
MKEY 6+, ½ NPT, Plastic Flex Key, 40N	Polyester	Stainless Steel	MKEY 6+	2TLA050005R1341
MKEY 6+, ½ NPT, Metal Flex Key, 40N	Polyester	Stainless Steel	MKEY 6+	2TLA050005R1441
MKEY 6+, ½ NPT, SS Flex Key, 40N	Polyester	Stainless Steel	MKEY 6+	2TLA050005R1541

NOTE: Anything in **bold** is typically stocked.**Accessories**

<b>Description</b>	<b>Material Housing</b>	<b>Order code</b>
<b>Standard Key</b>	<b>Stainless Steel</b>	<b>2TLA050040R0202</b>
<b>Flex Key with metal housing</b>	<b>Stainless Steel</b>	<b>2TLA050040R0203</b>
<b>Flex Key with stainless steel housing</b>	<b>Stainless Steel</b>	<b>2TLA050040R0204</b>
<b>Flat Key</b>	<b>Stainless Steel</b>	<b>2TLA050040R0220</b>
<b>½ NPT Cable Gland</b>	<b>Stainless Steel</b>	<b>2TLA050040R0001</b>

NOTE: Anything in **bold** is typically stocked.

<b>Technical Data</b>	
<b>Manufacturer</b>	
Address	ABB Electrification Sweden AB / JOKAB SAFETY Varlabergsvägen 11 SE-434 39 Kungsbacka Sweden
<b>Electrical characteristics</b>	
Utilization category	AC-15 A300 3A
Thermal current	10A
Rated insulation/withstand voltages	600 VAC /2500 VAC
Overload protection fuse (fuse externally)	10A (FF)
Contacts	2NC + 1NO
<b>General</b>	
Actuator Travel/Force for Positive Opening	6 mm/12N
Actuator entry minimum radius	175 mm Standard Key 100 mm Flexible Key
Protection class	IP67
Ambient temperature	-25...+80°C
<b>Size</b>	<b>See manual</b>
Conduit entries	½ NPT
Material	Die Cast Metal
Fixing	Body: 2 x M4
Maximum approach / withdrawal speed	600 mm/s
Holding Force	MKEY 6: 12N MKEY 6+: 40N
Vibration	IEC 68-2-6, 10-55 Hz+1 Hz, Excursion: 0.35 mm, 1 octave/min
<b>Safety-related characteristic data and Conformity</b>	
Conformity	ISO14119, IEC60947-5-1, EN60204-1 ISO 13849-1, UL60947-5-1
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	Type 1 Enclosures. Use 16 - 12AWG stranded copper insulated conductors rated 90°C minimum. (75C. ampacity). Terminal tightening torque 7lbs ins (0.8Nm). Intended for same polarity use and one polymeric conduit connection. Not suitable for connection to a rigid metal conduit system. Electrical Rating: Pilot Duty A300 240V.ac 3A. 6,000 cycles. Maximum ambient temperature 80°C. (Earth bonding terminal inside enclosure if required – use 16-12AWG conductors).

NOTE: A single MKey6 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 MKey6-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.

—  
ABB Inc.  
305 Gregson Drive  
Cary, North Carolina 27511  
United States  
electrification.us.abb.com/  
products/machine-motor-control

—  
We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB AG does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

—  
We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB AG.  
Copyright© 2022 ABB  
All rights reserved