

SAFETY PRODUCTS

MKEY 6Z Series Safety Switch Data Sheet

MKey 6Z 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.

Comes standard with a stainless steel 316 enclosure and IP69K rating.



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

Description	Material Housing	Material Head	Type	Order code
MKEY 6Z, ½ NPT, No Key	Stainless Steel	Stainless Steel	MKEY 6Z	2TLA050005R1020
MKEY 6Z ½ NPT, Standard Key	Stainless Steel	Stainless Steel	MKEY 6Z	2TLA050005R1120
MKEY 6Z, ½ NPT, Flat Key	Stainless Steel	Stainless Steel	MKEY 6Z	2TLA050005R1220
MKEY 6Z, ½ NPT, Plastic Flex Key	Stainless Steel	Stainless Steel	MKEY 6Z	2TLA050005R1320
MKEY 6Z, ½ NPT, Metal Flex Key	Stainless Steel	Stainless Steel	MKEY 6Z	2TLA050005R1420
MKEY 6Z ½ NPT, SS Flex Key	Stainless Steel	Stainless Steel	MKEY 6Z	2TLA050005R1520
MKEY 6Z+, ½ NPT, No Key, 40N	Stainless Steel	Stainless Steel	MKEY 6Z+	2TLA050005R1021
MKEY 6Z+ ½ NPT, Standard Key, 40N	Stainless Steel	Stainless Steel	MKEY 6Z+	2TLA050005R1121
MKEY 6Z+, ½ NPT, Flat Key, 40N	Stainless Steel	Stainless Steel	MKEY 6Z+	2TLA050005R1221
MKEY 6Z+, ½ NPT, Plastic Flex Key, 40N	Stainless Steel	Stainless Steel	MKEY 6Z+	2TLA050005R1321
MKEY 6Z+, ½ NPT, Metal Flex Key, 40N	Stainless Steel	Stainless Steel	MKEY 6Z+	2TLA050005R1421
MKEY 6Z+, ½ NPT, SS Flex Key, 40N	Stainless Steel	Stainless Steel	MKEY 6Z+	2TLA050005R1521

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
½ NPT Cable Gland	Stainless Steel	2TLA050040R0001

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

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	600 VAC / 2500 VAC
Overload protection fuse (fuse externally)	10A (FF)
Contacts	2NC + 1NO
General	
Actuator Travel/Force for Positive Opening	6mm/12N
Actuator entry minimum radius	175 mm Standard Key 100 mm Flexible Key
Protection class	IP67, IP69K
Ambient temperature	-25...+80°C
Size	See manual
Conduit entries	½ NPT
Material	Stainless Steel
Fixing	2 x M4
Maximum approach / withdrawal speed	600 mm/s
Holding Force	MKEY 6Z: 12N MKEY 6Z+: 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	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 MKey6Z 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 MKey6Z-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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