



ABB Jokab Safety
Safety switches & emergency stops
Food, beverage, pharmaceutical &
chemical industries

Power and productivity
for a better world™



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Safety solutions for harsh environments

ABB Jokab Safety has over two decades of worldwide hands-on experience in the design, engineering, manufacturing, and application of electronic safety components, safety fencing, and complete machine safety systems. Our goal has always been the protection of the manufacturing workforce - and it has made ABB Jokab Safety the leader in the machine safety industry.

We offer complete machine safety solutions that will help protect valuable staff and meet standards and regulations relevant to your business. ABB Jokab Safety has provided safety systems to all types of manufacturing companies throughout the world. Many manufacturers, large and small, have come to rely on our expertise for training, compliance guidance, system design and application.

It is common knowledge that the harshest environments for instrumentation and machinery are found in food, pharmaceutical and chemical related processes. Water, aggressive cleaning agents and chemicals under high pressure and temperatures form a vicious combination that penetrates almost any housing, causing electrical circuits to fail.

The best metal alloy to use in these kinds of applications is 316 Stainless Steel and ABB Jokab Safety have produced a full range of high specification mechanical interlock and non contact switches with fully Stainless Steel 316 housings.

IP69K stainless steel safety interlock switches

 <p>MKey 5Z</p>	<ul style="list-style-type: none"> • Universal fitting – established footprint suitable for most general applications • 60mm wide 100mm long • Replaceable contact blocks • Head can be rotated to give 4 actuator entry positions • Standard or flexible actuators 	<ul style="list-style-type: none"> Standards IEC947-5-1 UL508 Enclosures Stainless Steel 316 Protection IP69K / IP67 Ambient Temp. -25C, 80C Mechanical Life 2,500,000 operations Operational Rating AC15 A300 240V. 3A Contacts 2NC/1NO
 <p>MKey 6Z</p>	<ul style="list-style-type: none"> • Slim fitting suitable for all industry applications • Mirror surface finish • 40mm wide 118mm long • Head will rotate without removal to protect the head assembly and prevent tampering • Offers 8 actuator entry positions • Standard or flexible actuators 	<ul style="list-style-type: none"> Standards IEC947-5-1 UL508 Enclosures Stainless Steel 316 Protection IP69K / IP67 Ambient Temp. -25C, 80C Mechanical Life 2,500,000 operations Operational Rating AC15 A300 240V. 3A Contacts 2NC/1NO
 <p>MKey 8Z</p>	<ul style="list-style-type: none"> • Provides Guard Locking up to 2500N • Power solenoid to unlock • Choice of 24V, 110V or 230V operation • Slim 48mm wide 180mm long • The fixing holes are under the cover of the switch to prevent food trap areas • Suitable for all industry applications • 2 LED's provide independent diagnostics of solenoid and lock status • Standard and flexible actuators 	<ul style="list-style-type: none"> Standards IEC947-5-1 UL508 Enclosures Stainless Steel 316 Protection IP69K / IP67 Ambient Temp. -25C, 60C Mechanical Life 2,500,000 operations Operational Rating AC15 A300 240V. 3A Contacts 4NC/1NO Holding Force 2500N. (250kg) LED1 Solenoid status LED2 Actuator lock status

IP69K stainless steel rope pull e-stop switches



Line Strong 2Z

- Universal fitting – established footprint suitable for most general applications
- Available with integrated E-Stop button, Reset button and status LED
- Tension indicator for ease of installation
- The fixing holes are under the cover of the switch to prevent food trap areas

Standards	IEC947-5-1 UL508
Enclosures	Stainless Steel 316
Protection	IP69K / IP67
Ambient Temp.	-25C, 80C
Mechanical Life	2,500,000 operations
Operational Rating	AC15 A300 240V. 3A
Contacts	2NC/2NO
Safety Coverage	80m (100m with two)



Line Strong 3LZ / 3RZ

- Heavy duty rope pull switch for demanding applications and long distances
- Available with integrated E-Stop button, Reset button and status LED
- Tension indicator for ease of installation
- The fixing holes are under the cover of the switch to prevent food trap areas

Standards	IEC947-5-1 UL508
Enclosures	Stainless Steel 316
Protection	IP69K / IP67
Ambient Temp.	-25C, 80C
Mechanical Life	2,500,000 operations
Operational Rating	AC15 A300 240V. 3A
Contacts	4NC/2NO
Safety Coverage	100m(125m with two)



Line Strong 3DZ

- Double head heavy duty rope pull switch for demanding applications and extremely long distances
- Available with integrated E-Stop button, Reset button and status LED
- Tension indicator for ease of installation
- The fixing holes are under the cover of the switch to prevent food trap areas

Standards	IEC947-5-1 UL508
Enclosures	Stainless Steel 316
Protection	IP69K / IP67
Ambient Temp.	-25C, 80C
Mechanical Life	2,500,000 operations
Operational Rating	AC15 A300 240V. 3A
Contacts	4NC/4NO
Safety Coverage	200m (can be connected in series for longer distances)



E Strong Z

- Heavy duty emergency stop switches provide robust protection for exposed conveyors or machines
- A special lid trip mechanism means that the safety contacts open if the lid is removed
- Available with integrated status LED or protective lockable shroud

Standards	IEC947-5-5 UL508
Enclosures	Stainless Steel 316
Protection	IP69K / IP67
Ambient Temp.	-25C, 80C
Mechanical Life	1,500,000 operations
Operational Rating	AC15 A300 240V. 3A
Contacts	2NC/2NO

IP69K stainless steel non-contact safety switches

Coded version with LED



Sense 3Z

- Small Stainless Steel Hygienic fitting
- Compact 50mm long – 22mm fixing holes
- 2NC 1NO circuits
- Status LED on Sense 3Z
- Sense 3Z sensing 14mm
- Sense 4Z sensing 12mm



Sense 5Z



Sense 7Z

- Wide Stainless Steel Hygienic fitting
- Wide 14mm thick with industry standard foot print
- 2NC 1NO circuits
- Status LED on Sense 5Z and 7Z
- Sense 5Z and 7Z sensing 14mm
- Sense 6Z and 8Z sensing 12mm



Sense 9Z

- Compact Stainless Steel Hygienic fitting
- Slim 20mm wide with industry standard foot print
- 2NC 1NO circuits
- Status LED on Sense 9Z
- Sense 9Z sensing 14mm
- Sense 10Z sensing 12mm



Sense 11Z

- Barrel Stainless Steel Hygienic fitting
- M30 threaded industry standard foot print
- 2NC 1NO circuits
- Status LED on Sense 11Z
- Sense 11Z sensing 10mm
- Sense 12Z sensing 10mm

Magnetic version



Sense 4Z



Sense 6Z



Sense 8Z



Sense 10Z



Sense 12Z

Standards	IEC947-5-5 UL508
Enclosures	Stainless Steel 316
Protection	IP69K / IP67
Sensing	10-14mm typical
Ambient Temp.	-25C, 80C
Mechanical Life	3,300,000 operations
Operational Rating	24V 200mA
Contacts	2NC/1NO

Standards	IEC947-5-5 UL508
Enclosures	Stainless Steel 316
Protection	IP69K / IP67
Sensing	10-12mm typical
Ambient Temp.	-25C, 105C
Mechanical Life	3,300,000 operations
Operational Rating	240V 1A
Contacts	2NC/1NO

Additional ABB Jokab Safety solutions for harsh environments



Eden E

- Non-contact, non-mechanical, non- magnetic Safety Category 4 sensor
- IP69 K for wash down applications
- 12mm +/- 2mm sensing distance
- Status LED for both sensor status as well as system status
- Up to 30 sensors can be wired in series and maintain Safety Category 4 to a Vital 1 Safety Controller



Knox

- Safety Category 4 locking switch for harsh environments and for machines with uncontrolled stopping times
- Power to lock and power to unlock
- Stainless Steel housing
- Lockout capabilities at the switch and emergency release handle for entrapment
- Status LED for both sensor status as well as system status
- Multiple sensors can be wired in series and maintain Safety Category 4



Focus II in Wet II

- Safety Category 4 Focus II light curtains in Wet II wash down protective tubes
- IP68 (IP69K) protection with ventilation fittings for purging
- +/- 20 degrees end cap adjustment for alignment aid
- Integrated muting, blanking, reset, External Device Monitoring and Presence Sensing Device Initiation functions
- Available beam coding for prevention of cross talk and built in LED alignment aid

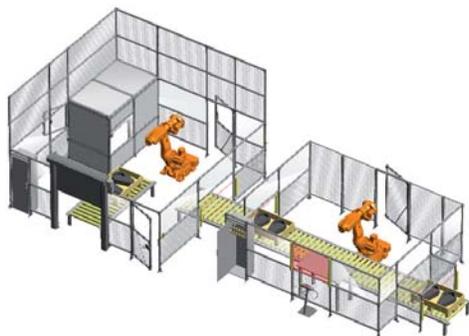


ABB Jokab Safety Fencing solutions

- ABB Jokab Safety Quick Guard fencing solutions are available in several different options, each configured exactly to your needs
- Available with various types of mesh, poly carbonate, weld glass, sound absorbing, and steel infill panels
- Designed to hold up to the harshest environments and allows for quick and easy mounting of all ABB Jokab Safety components
- All designs are done with SafeCAD software which calculates all needed components, cutting lists, weights and labor costs

Notes

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