Heavy-Duty Hygienic RFID Guard Locking Switch S/Steel **Type: HLZ**

FEATURES:

NEW

TYPE 4 INTERLOCK

11,000N HOLDING FORCE

Adjustable spring ball catch for increasing or decreasing latching force.

IP69K

MLZ is compatible with rear release accessory (PN 470401)

3 Actuator entry positions for maximum compatibility with mounting.

Flexible actuator with bevelled plunger for reducing friction on entry and ensuring a long mechanical life cycle.

FUNCTIONAL SPECIFICATIONS:

Solid State OSSD Safety Outputs short circuit protected.

High Functional Safety to ISO13849-1. Guard interlocking and lock monitoring to CAT 4, PL e and SIL 3. Safety ratings are maintained with up to 30 devices in series.

Safety circuits are active when the guard is closed and locked.
2 auxiliary circuits; one for guard position and one for lock position.

4 diagnostic LED's to display guard position, lock, input/output signals and fault status.

The HLZ, is a Type 4 guard locking switch with RFID, designed for safety and reliability in even the most demanding environments. Engineered with precision and manufactured from premium 316 grade stainless steel, the HLZ boasts a stunning mirror-polished finish that is both durable and hygienic.

Manufactured from 316 grade stainless steel, the HLZ ensures superior resistance to corrosion and wear, making it a robust and long-lasting solution. It has been rigorously tested to meet IP69K standards, making it ideal for stringent washdown environments and offering protection against water and dust ingress.

The HLZ incorporates an integrated RFID coded sensor for tamper proof security and reliability in guard locking applications. It delivers an impressive holding force of 11,000N, providing robust protection and stability. With OSSD outputs, the HLZ ensures safe and reliable operation, and it is suitable for series connectivity of up to 30 units while CAT / SIL is maintained due to OSSD technology, performance level is a measure of reliability of an individual device.

Designed for versatile mounting, the head of the HLZ features three entry positions, allowing for seamless integration into machine guarding systems. The spring-loaded tongue actuator accommodates greater tolerance to misalignment, ensuring consistent performance. Clear and easily visible LEDs on the lid display all device states, facilitating straightforward monitoring and maintenance. The spacious design of the HLZ supports pre-wiring via M20 conduit entries, simplifying installation and enhancing cable management.

The HLZ is perfect for a variety of industrial applications requiring stringent safety standards and reliable performance, including food and beverage processing, pharmaceutical manufacturing,

Technical Specification	
Standards	IEC60947-5-3, ISO14119, ISO13849-1, IEC62061
Supply Voltage	24VDC (-15% / +10%)
Power Consumption	50mA (no load) 500mA peak (solenoid energised)
Safety Outputs	24VDC, 0.2A
Auxiliary Outputs	24VDC, 0.1A
Rated Insulation Voltage	500VAC
Holding Force (ISO14119)	F1 Max 11,000N
Operating Frequency	1Hz
Material	Stainless Steel 316
Enclosure Protection	IP67/IP69K
Operating Temperature	-25C to +40C
Mechanical Life Expectancy	2.5 x 10^6 cycles
Vibration and Shock are tested to IEC 60068-2-6 and -2-27	IEC88-2-6, 10-55Hz + 1Hz Excursion 0.35mm 1 octave/min

Characteristic data according to IEC62061 (used as a subsystem)

Safety Integrity Level	SIL 3	
PFH (1/h)	4.80 E-10	Corresponds to 4.8% of SIL3
Proof Test Interval T_1	20a	

Charateristic data according to EN ISO13849-1

Performance Level	e	If both channels are used in conjunction with a SIL 3/PLe control device.
Category	Cat 4	
$MTTF_d$	1100a	
Diagnostic Coverage DC	99% (high)	

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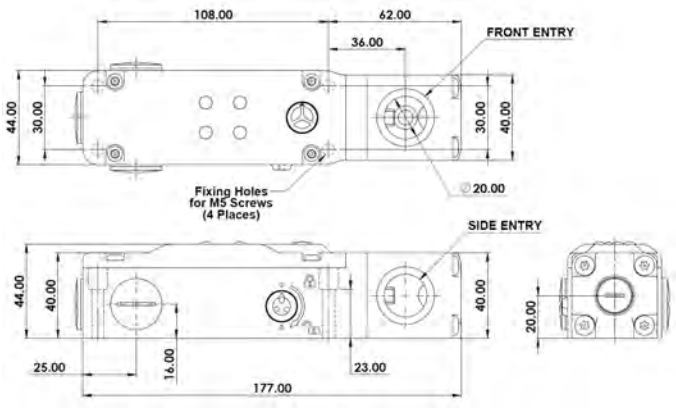
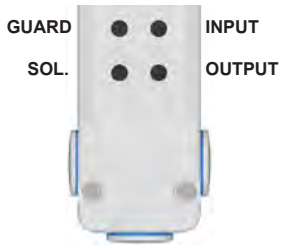
DIMENSIONS:



INDICATION DIAGRAM:



LED 1 Guard State	
Guard Locked	Green (Steady)
Guard Unlocked	Green (Flashing)
Incorrect Code	Red (Flashing)
Guard Open	Red

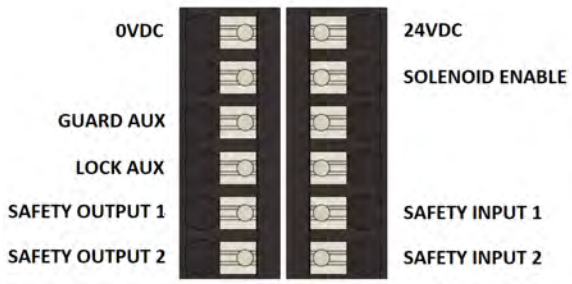
LED 2 Input	
Safety Inputs On	Green (Steady)
Safety Inputs Missing	Green (Flash)
Safety Inputs Off	Off
Internal Fault	Red (Steady)

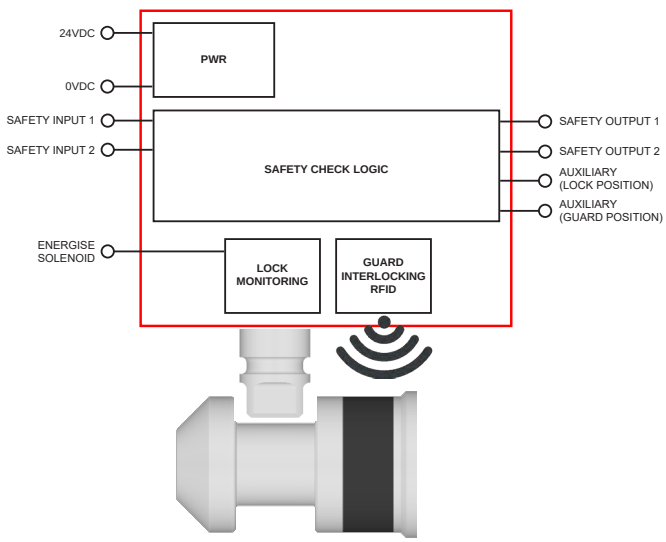
LED 4 Solenoid	
Solenoid Energised	Red
Solenoid De-energised	Off

LED 3 Output	
Safety Outputs On	Green (Steady)
Safety Outputs Off	Off
External Fault	Red (Flashng)

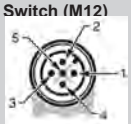
TERMINAL BLOCK:

For pre-wiring options, see terminal block layout below.





Quick Connect Pin View from Switch (M12) 	Flying Lead Colour	Switch Circuit
2	Red	Supply +24V.dc
3	Blue	Supply 0V.dc
7	Black	Safety Input 1
1	White	Safety Output 1
4	Yellow	Safety Input 2
6	Green	Safety Output 2
8	Orange	Guard open signal +24V.dc
5	Brown	Solenoid enable +24V.dc

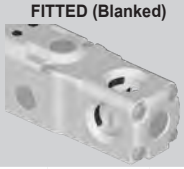
Quick Connect Pin View from Switch (M12) 	Switch Circuit
1	Supply +24V.dc
2	Safety Output 1
3	Supply 0V.dc
4	Safety Output 2
5	Unlock (Solenoid enable +24V.dc)

FEMALE QC LEADS	LENGTH	SALES NUMBER
M12 8 Way	5m (15ft)	140101
M12 8 Way	10m (30ft)	140102

ORDERING:

Manual Release Key
(order separately - not supplied with switches)

Sales Number: 140123

SALES NUMBERS	STANDARD MANUAL RELEASE LID AND SIDE 			MANUAL RELEASE LID ONLY (Not SIDE) 			NO MANUAL RELEASE FITTED (Blanked) 		
	M20	1/2" NPT	QC M12	M20	1/2" NPT	QC M12	M20	1/2" NPT	QC M12
HLZ Switch with Standard Actuator	471001	471002	471003	471401	471402	471403	471301	471302	471303

140120

470401

Accessories	
470401	Rear Release Button (90mm)
140120	Stainless Steel M20 Gland for IP69K Seal