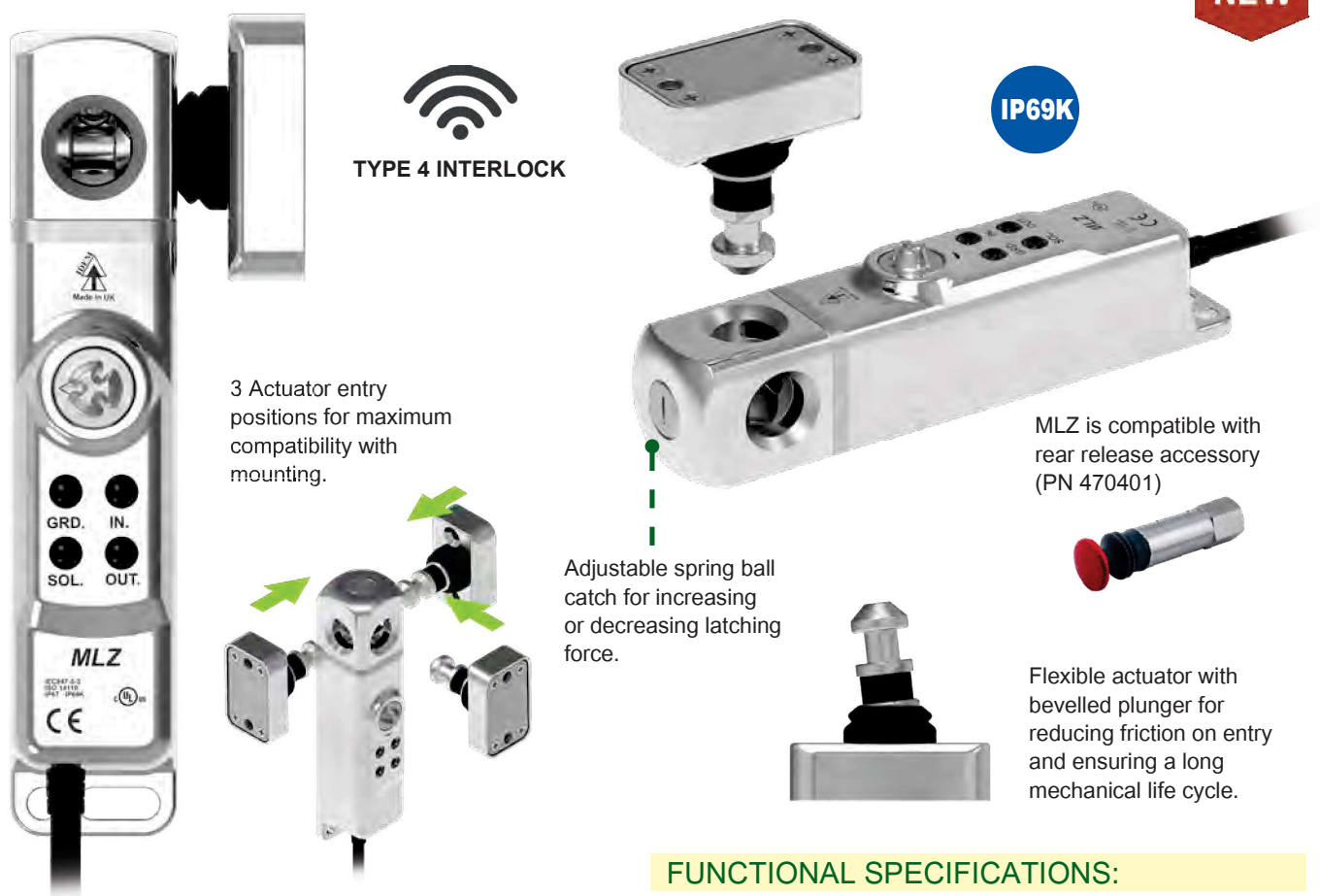


Hygienic RFID Guard Locking Switch S/Steel: MLZ

FEATURES:

NEW



OVERVIEW:

MLZ is the World's Smallest Type 4 Hygienic Guard Lock with RFID. This Compact Hygienic Safety Interlock Switch is manufactured from mirror polished 316 Stainless Steel and Tested to IP67 and IP69K for Extreme Washdown Environments.

The MLZ Hygienic RFID Guard Locking Switch is a 30mm-wide Stainless Steel safety interlock switch that houses three entry actuation points. The device's super-compact size means it is compatible with the narrowest of machine guard rails and requires no mounting plate, making it simple to install.

With actuation capability on three sides, this small but mighty device is also incredibly versatile making it applicable for a vast range of guarding applications.

Manufactured from mirror-polished 316 Stainless Steel to Ra4 standard, the device's diminutive size belies its strength and durability. Tested to IP67 and IP69K and suitable for SIP and CIP cleaning, this robust interlock is ideal for outdoor use as well as for strict washdown environments, particularly food contact, beverage, and pharmaceutical manufacturing.

Features:

- Type 4 Guard Locking Switch with RFID
- Compact Design for Easy Integration
- 4000N Holding Force
- Rear escape release options.
- High-Visibility Status Indicators
- Direct Machine Frame Mounting
- Built-In Cascading Function

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.
1 auxiliary circuits; guard position.

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

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)	Fzh 4000N
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)

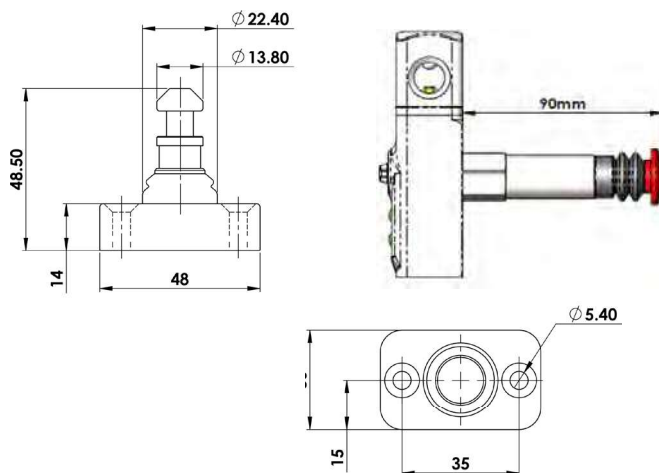
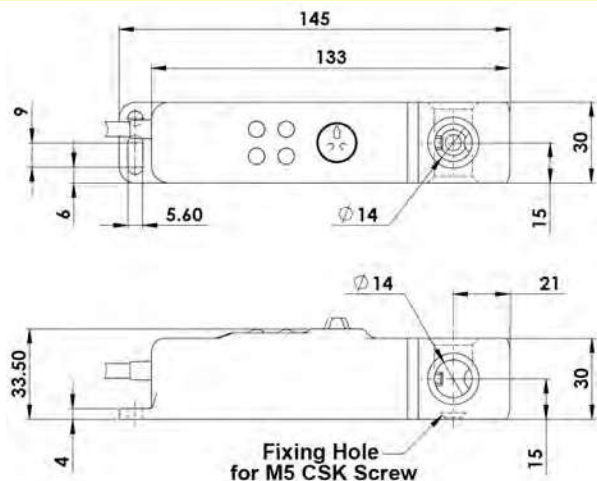
Safety Integrity Level	SIL 3
PFH (1/h)	4.80 E-10 Corresponds to 4.8% of SIL3
Proof Test Interval T _p	20a

Characteristic data according to EN ISO13849-1

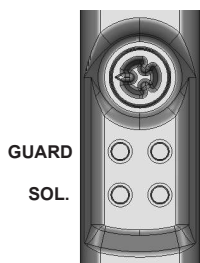
Performance Level	e	If both channels are used in conjunction with a SIL 3/PL e control device.
Category	Cat 4	
MTTF _d	1100a	
Diagnostic Coverage DC	99% (high)	

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DIMENSIONS:



INDICATION DIAGRAM:



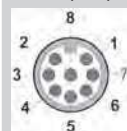
LED 1 Guard State	
Guard Locked	Green (Steady)
Guard Unlocked	Green (Flashing)
Incorrect Code	Red (Flashing)
Guard Open	Red
LED 2 Input	
Safety Inputs On	Green (Steady)
Safety Inputs Missing	Green (Flash)
Safety Inputs Off	Off
Internal Fault	Red (Steady)

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

LED 4 Solenoid	
Solenoid Energised	Red
Solenoid De-energised	Off

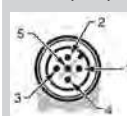
CONNECTIVITY:

Quick Connect Pin View from Switch (M12)



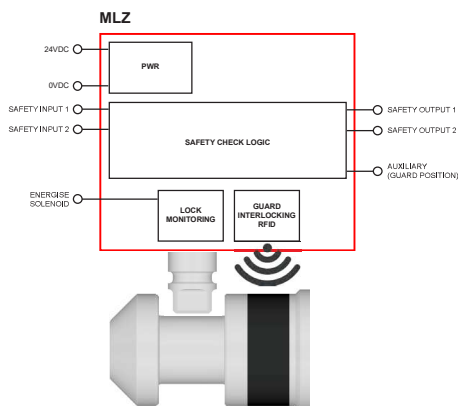
Quick Connect Pin View from Switch (M12)	Flying Lead Colour	Switch Circuit
2	Red	Supply +24V.dc
3	Blue	Supply 0V.dc
7	Black	Safety Input 1
1	White	Safety Output 1
4	Yellow	Safety Input 2
6	Green	Safety Output 2
8	Orange	Guard open signal +24V.dc
5	Brown	Solenoid enable +24V.dc

Quick Connect Pin View from Switch (M12)



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)

CONNECTION DIAGRAM:



ORDERING:

Part Number	Description
470001	MLZ 24VDC, 5m Pre-Wired (Inc. Actuator)
470002	MLZ 24VDC, 10m Pre-Wired (Inc. Actuator)
470004	MLZ 24VDC, 15m Pre-Wired (Inc. Actuator)
470005	MLZ 24VDC, 20m Pre-Wired (Inc. Actuator)
470003	MLZ 24VDC, M12-QC 8way on 250mm Flying Lead (Inc. Actuator)
470103	MLZ 24VDC, M12-QC 5way on 250mm Flying Lead (Inc. Actuator)
470420	Spare / Replacement Actuator
Accessories	
470410-L	MLZ Single Action Latching Pull Handle SS (Left)
470410-R	MLZ Single Action Latching Pull Handle SS (Right)
470402	Sliding Handle (Gate Bolt)
470403	Optional Spring Catch for Sliding Handle
470401	Rear Release Button (90mm)
470404	Rear Gasket Set for Switch and Actuator

470402



470410-L



470410-R



470403



470404



470401

