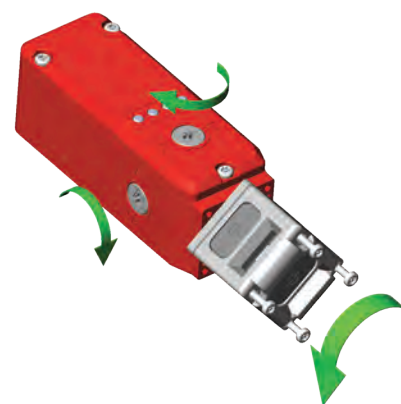


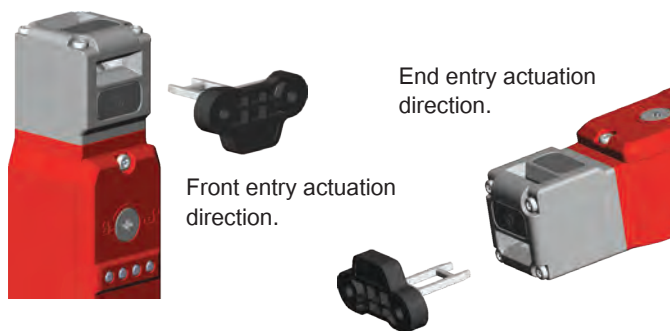
Z-Range with OSSD: KLP-Z-P2L, KLM-Z-P2L

FEATURES:



Unique design offering both Front or End entry actuation.

Head will rotate to give 8 actuator entry positions for full flexibility depending on application.



Power to Lock Guard Locking Switches: RFID-Coded with OSSD Outputs for CAT4, SIL3, PLe Safety in Accordance with the Latest International Safety Standards.

The KLP-Z-P2L and KLM-Z-P2L Series Guard Locking switches feature an RFID-coded sensor and OSSD outputs, ensuring reliable safety and security. These switches have a slim plastic or die-cast metal body design, developed with a holding force of 2000N (plastic) and 3000N (die-cast) to keep medium to large guard doors securely closed until hazards have been removed.

They operate on a **Power to Lock** - Spring to Unlock mechanism, making them suitable for applications where immediate unlocking is necessary upon removal or loss of power. (Note: They are not suitable for machines with a running down time.)

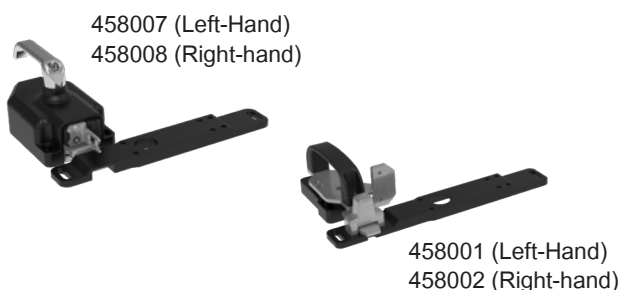
The high-specification plastic body offers high resistance to chemicals and washdown solutions, while the Stainless Steel Head provides robust protection of the cam interlock. The die-cast body is designed to withstand high levels of shock, making it ideal for exposed areas of machine guarding.

IP67 enclosure protection is ensured by a double seal lid gasket design and metal fixings, maintaining durability in demanding environments. With a slim profile, these switches are designed to fit on 50mm (2") frame sections or in applications where space is limited. Additionally, the head rotates to provide up to 8 actuator entry positions.

TECHNICAL SPECIFICATIONS:

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)	KLP (F1 Max 2000N) / KLM (F1 Max 3000)
Operating Frequency	1Hz
Material	KLP (Polyester) / KLM (Die-Cast)
Enclosure Protection	IP67
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

COMPATIBLE ACCESSORIES:



FUNCTIONAL SPECIFICATIONS:

Solid State OSSD Safety Outputs short circuit protected.

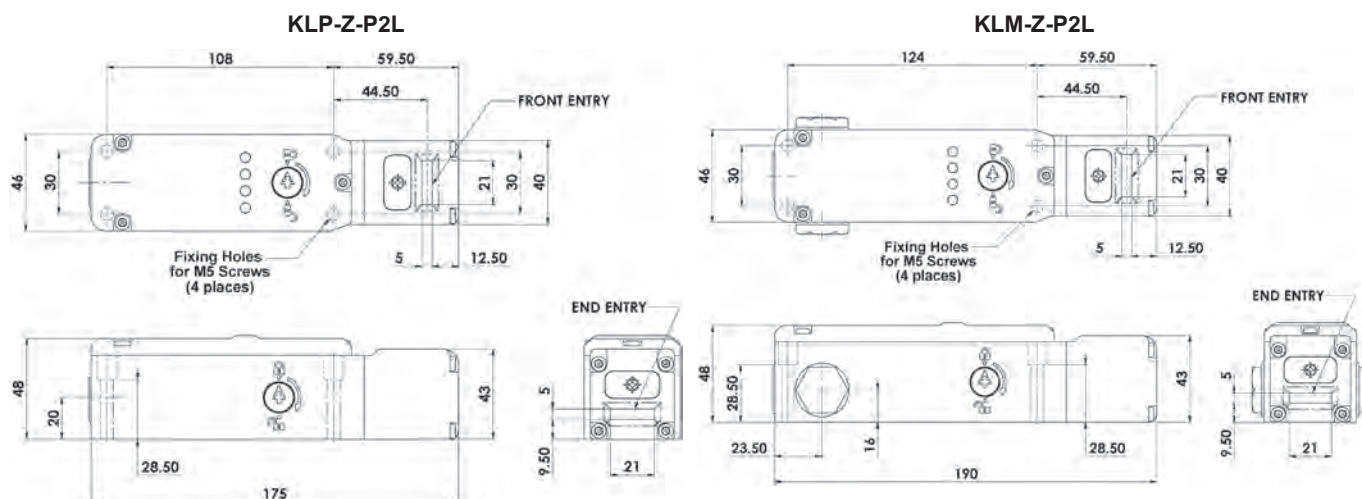
High Functional Safety to ISO13849-1, maintains PLe Interlocking via self-test technique when switches are connected in series to a safety controller or relay.

2 Safety Circuits - closed when switch is locked and machine able to run.
1 Auxiliary circuit for indication of Guard status (Guard open).

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

Z-Range with OSSD: KLP-Z-P2L, KLM-Z-P2L

DIMENSIONS:



INDICATION:



LED 1 Guard State

Guard Locked	Green
Guard Unlocked	Green (Flashing)
Incorrect Code	Red (Flashing)
Guard Open	Red

LED 2 Input

Safety Inputs On	Green
Safety Inputs Off	Off

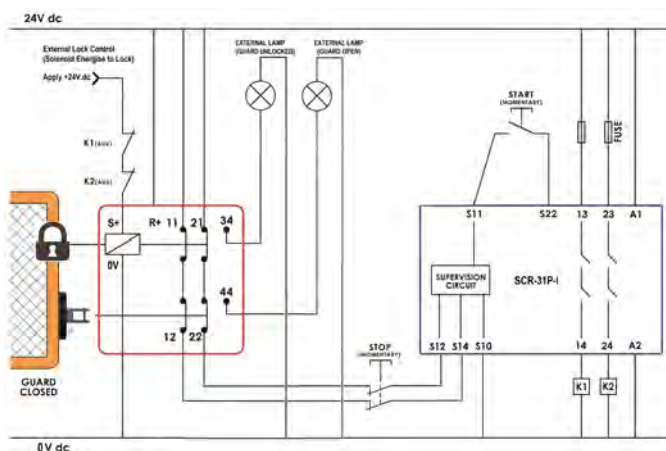
LED 3 Output

Safety Outputs On	Green
Safety Outputs Off	Off

LED 4 Solenoid

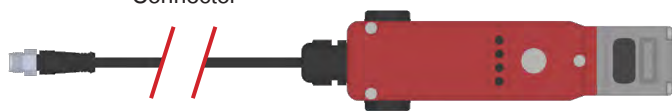
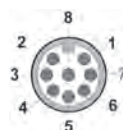
Solenoid Energised	Red
Solenoid De-energised	Off

CONNECTION DIAGRAM:



CONNECTIVITY:

250mm Pigtail
Connector



Quick Connect (QC) M12 8 Way Male Plug Pin View from Switch	Terminal	Function	Switch Circuit	Rating	FEMALE QC LEADS	LENGTH	SALES NUMBER
2	R+	24V dc	Supply 24V dc	50mA max.	M12 8 Way	5m (15ft)	140101
3	0V	0V dc	Supply 0V dc (Ground)		M12 8 Way	10m (30ft)	140102
7	11	Safety Input 1	Safety Circuit 1	200mA max.			
1	12	Safety Output 1					
4	21	Safety Input 2	Safety Circuit 2	200mA max.			
6	22	Safety Output 2					
8	44	Auxiliary (Guard Open)	Guard open signal +24V dc out	200mA max.			
N/A	34	Auxiliary (Guard Locked)	Guard unlocked signal +24V dc out	200mA max.			
5	S+	Lock	Lock signal apply +24V dc	500mA max.			

ORDERING:

KLP-Z-P2L

Part Number	Description	Material
455021AZ	KLP-Z-P2L M20 - Std Actuator	Plastic
455021HFZ	KLP-Z-P2L M20 - Heavy Duty Actuator	Plastic
455022AZ	KLP-Z-P2L 1/2" NPT - Std Actuator	Plastic
455022HFZ	KLP-Z-P2L 1/2" NPT - Heavy Duty Actuator	Plastic
455023AZ	KLP-Z-P2L QC-M12 - Std Actuator	Plastic
455023HFZ	KLP-Z-P2L QC-M12 - Heavy Duty Actuator	Plastic

KLM-Z-P2L

Part Number	Description	Material
454021AZ	KLM-Z-P2L M20 - Std Actuator	Die-Cast
454021HFZ	KLM-Z-P2L M20 - Heavy Duty Actuator	Die-Cast
454022AZ	KLM-Z-P2L 1/2" NPT - Std Actuator	Die-Cast
454022HFZ	KLM-Z-P2L 1/2" NPT - Heavy Duty Actuator	Die-Cast
454023AZ	KLM-Z-P2L QC-M12 - Std Actuator	Die-Cast
454023HFZ	KLM-Z-P2L QC-M12 - Heavy Duty Actuator	Die-Cast