

Guard Locking Switch Metal Type: SAMLOCK KLM

FEATURES:



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STAINLESS STEEL HEAD

Spring to lock when actuator is inserted. Energise solenoid to unlock.

FUNCTIONAL SPECIFICATIONS:

Positive Break Contacts to EN60947-5-1
High Functional Safety to ISO13849-1
Stainless Steel 316 Head version available
Connects to most Safety Relays to give up to PLe Cat.4
Quick Connector version available for ease of installation

4NC Safety Circuits:
2 Solenoid/Lock 2 Actuator/Guard
1NO Auxiliary Circuit:
For indication of Actuator Status (guard open)
1NO Auxiliary Circuit:
For Lock Status (selectable with LED2)



INSERTION OF ACTUATOR

6.0 5.0 0mm

11/12	Open	
21/22	Open	
33/34		Open
43/44		Open

For all IDEM switches the normally closed (NC) circuits are closed when the guard is closed actuator inserted.



Solenoid Locking Interlock Safety Switch featuring Guard Holding up to 2000N (200Kg) (F1Max)

The KLM Series Guard Locking safety switches have rugged Die Cast housings and have been developed with a high holding force of 2000N to keep medium to large guard doors closed until hazards have been removed.

They have a slim profile and are designed to fit on 50mm (2") frame sections or to applications where space is restricted.

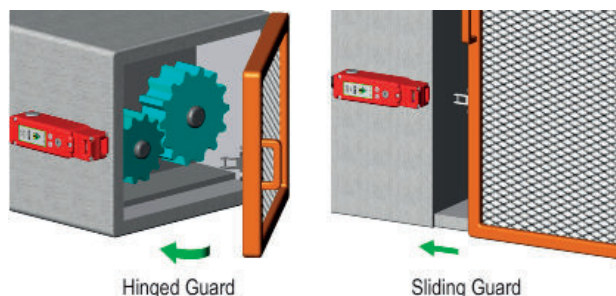
The Head will rotate to provide up to 8 actuator entry positions.

They have 2 independent contact blocks to individually monitor the Lock Status and Door Status.

An LED is available to indicate Lock Status.

Versions are available offering a Rear Manual Escape Release.

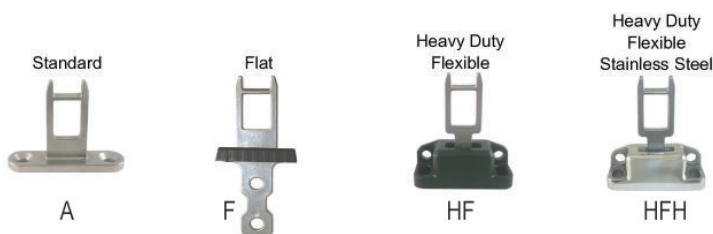
Accessories include a Sliding Handle Bolt to provide holding of heavy or hinged doors and lock off actuators.



Hinged Guard

Sliding Guard

ACTUATOR OPTIONS (see p76)

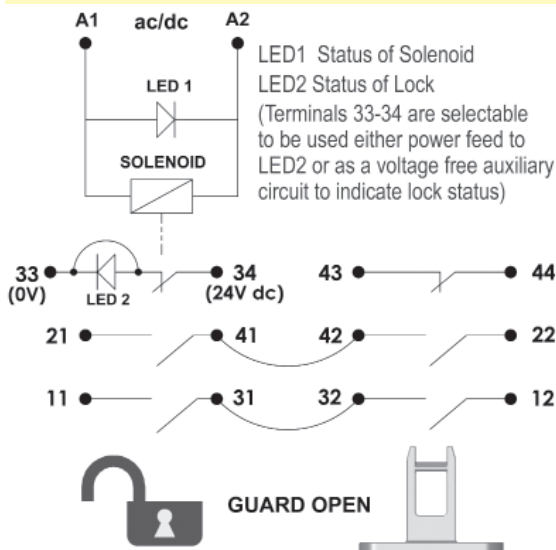


Standards: ISO14119 EN60947-5-1 EN60204-1
ISO13849-1 EN62061 UL508

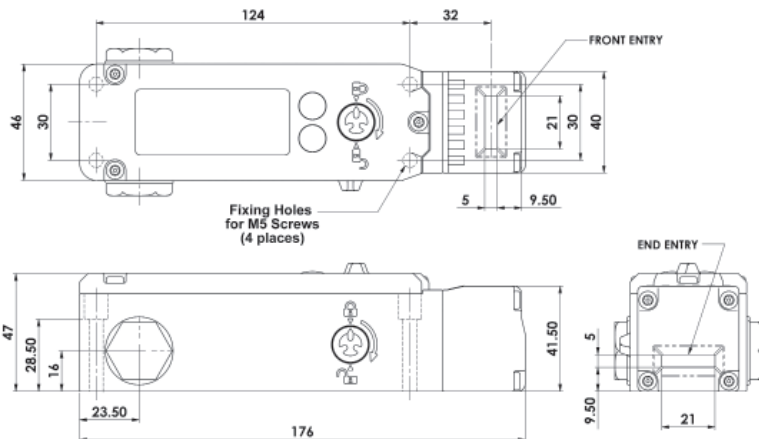
Safety Classification and Reliability Data:
Mechanical Reliability B10d 2.5 x 10⁶ operations at 100mA load
ISO13849-1 Up to PLe depending upon system architecture
EN62061 Up to SIL3 depending upon system architecture
Safety Data – Annual Usage 8 cycles per hour/24 hours per day/365 days
PFHd 3.44 x 10⁻⁹
Proof Test Interval (Life) 35 years
MTTFd 356 years
Solenoid Voltage (by Sales Number) 24V ac/dc or 110Vac or 230Vac
Solenoid Wattage 12W
LED 2 Supply Voltage 24Vdc
Utilization Category AC15 A300 3A
Thermal Current (Ith) 5A
Rated Insulation/Withstand Voltages 600Vac/2500Vac
Travel for Positive Opening 10mm
Actuator Entry Minimum Radius 175mm Standard 100mm Heavy Duty
Maximum Approach/Withdrawal Speed 600mm/s
Holding Force F1Max 2000N Fzh 1538N
Body Material Die Cast (painted red)
Head Material Die Cast (painted red) or Stainless Steel 316
Enclosure Protection IP67
Operating Temperature -25C +50C
Vibration IEC 68-2-6 10-55Hz + 1Hz
Excursion 0.35mm 1 octave/min
Conduit Entry Various (See Sales Number)
Fixing 4 x M5

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SCHEMATIC CIRCUIT:



DIMENSIONS:



RELATED PRODUCTS & ACCESSORIES (see p70-75)



Sliding Handle Gate Bolt with Lock Off Feature

GATE BOLT LOCK

Rugged metal construction, easy to install on sliding or hinged guards.

Holes for fitting padlocks during maintenance.

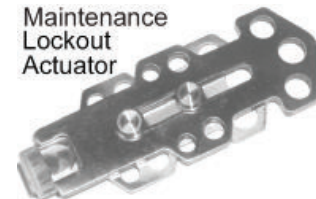
Painted yellow and comes with plastic handle and flat actuator.

2 Colour LED Conduit Beacon

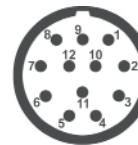


2 colour LED (3 wires) Steady Red and Steady Green. Fits to conduit entry and provides option for LED indication based upon switch contacts.

Maintenance Lockout Actuator



Fits to switch aperture during maintenance and provides multiple padlock holes.



Quick Connect (QC) M23 12 Way Male Plug Connector Length 24mm Pin View from Switch			Switch Circuit	
1	3		A1	A2
4	6		11/12	
7	8		21/22	
2	5		43/44	
	9		33	
	10		34	
	12		Earth	

FEMALE QC LEADS	LENGTH	SALES NUMBER
M23 12 Way	5m (15ft)	140143
M23 12 Way	10m (30ft)	140144

REAR MANUAL RELEASE VERSION

Rear push button manual release version provides a means of escape from inside the guarded area.

STANDARD MANUAL RELEASE
LID AND SIDE



MANUAL RELEASE
LID ONLY (Not SIDE)



NO MANUAL RELEASE
FITTED (Blanked)



SALES NUMBER	SOLENOID VOLTAGE	M20	1/2" NPT	QC M23	M20	1/2" NPT	QC M23	M20	1/2" NPT	QC M23
Kobra KLM Switch	24V ac/dc	202001	202002	202003	202401	202402	202403	202301	202302	202303
Kobra KLM Switch	110V ac	202004	202005	202006	202404	202405	202406	202304	202305	202306
Kobra KLM Switch	230V ac	202007	202008	202009	202407	202408	202409	202307	202308	202309

Kobra Actuator	Standard	Add A	to Sales Part Number
Kobra Actuator	Flat	Add F	to Sales Part Number
Kobra Actuator	Heavy Duty Flexible	Add HF	to Sales Part Number
Kobra Actuator	S/Steel Heavy Duty Flexible	Add HFH	to Sales Part Number
Stainless Steel Head Versions		Add SS	to Sales Part Number

Ordering Examples:

Kobra KLM 24V Solenoid M20 Conduit Standard Manual Release Stainless Steel Head Flat Actuator: Sales Number: 202001-SS-F

Kobra KLM 110V Solenoid 1/2" NPT Conduit No Manual Release Standard Actuator: Sales Number: 202305-A