GUARD LOCKING SAFETY INTERLOCK SWITCHES

### Guard Locking Switch Metal Type: SAMLOCK KLM

#### **FEATURES:**









#### Solenoid Locking Interlock Safety Switch featuring Guard Holding up to 3000N (300Kg) (F1Max)

The KLM Series Guard Locking safety switches have rugged Die Cast housings and have been developed with a high holding force of 3000N 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.

#### **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:

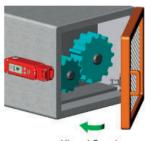
2 Solenoid/Lock 2 Actuator/Guard

1NO Auxiliary Circuit:

For indication of Actuator Status (guard open)

1NO Auxiliary Circuit:

For Lock Status (selectable with LED2)



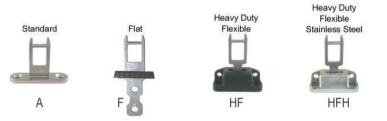


Hinged Guard

Sliding Guard

# Top or Side Manual Release points 8 actuator entry positions rotatable head

#### ACTUATOR OPTIONS (see p100)



Standards:

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

#### Safety Classification and Reliability Data:

Mechanical Reliability B10d ISO13849-1 EN62061

Safety Data - Annual Usage

Solenoid Voltage (by Sales Number) Solenoid Wattage LED 2 Supply Voltage Utilization Category

Thermal Current (lth) Rated Insulation/Withstand Voltages Travel for Positive Opening Actuator Entry Minimum Radius Maximum Approach/Withdrawal Speed

Holding Force Body Material Head Material Enclosure Protection Operating Temperature

Vibration Conduit Entry Fixing

2.5 x 10<sup>6</sup> operations at 100mA load Up to PLe depending upon system architecture Up to SIL3 depending upon system architecture 8 cycles per hour/24 hours per day/365 days MTTFd 356 years

24V ac/dc or 110Vac or 230Vac 12W

24Vdc AC15 A300 3A 600Vac/2500Vac

10mm 175mm Standard 100mm Heavy Duty

600mm/s F1Max 3000N Fzh 2307N Die Cast (painted red)

Die Cast (painted red) or Stainless Steel 316 IP67

-25C +50C

IFC 68-2-6 10-55Hz + 1Hz Excursion 0.35mm 1 octave/min Various (See Sales Number) 4 x M5

#### INSERTION OF ACTUATOR

6.0 5.0

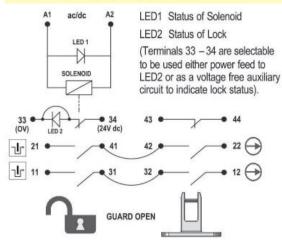
0mm

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.

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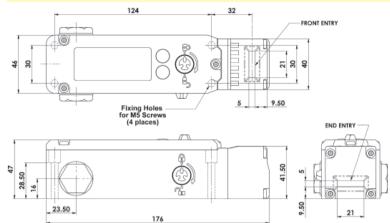
### SCHEMATIC CIRCUIT:











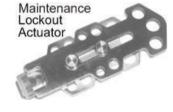
#### RELATED PRODUCTS & ACCESSORIES (see p100-101 and Gate Bolts Section 6)





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





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				
M00 40 We	40 (20#)	4.404.44				

Heavy Duty Flexible

S/Steel Heavy Duty Flexible

Stainless Steel Head Versions

#### **REAR MANUAL RELEASE VERSION**

Rear push button manual release version provides a means of escape

Add F

Add HF

to Sales Part Number

to Sales Part Number

Add HFH to Sales Part Number

Add SS to Sales Part Number

IVIZ3 IZ VVay	10111 (3011)	140144	from inside the guarded area.				12 Editii			
					944.404 4.					
		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

Ordering Examples:

Kobra Actuator

Kobra Actuator

Kobra Actuator