GUARD LOCKING SAFETY INTERLOCK SWITCHES

Guard Locking Switch Plastic Type: LEILOCK KL1-P

FEATURES:









Solenoid Locking Interlock Safety Switch featuring Guard Holding up to 1400N (140Kg) (F1Max)

The KL1-P Series Guard Locking switches have a compact plastic body design and have been developed with a holding force of 1400N to keep small to medium quard doors closed until hazards have been removed.

IP67 enclosure protection is maintained by a double seal lid gasket design and metal fixings.

The KL1-P switch has a low profile and fixing holes are on an industry standard 40mm centre to enable easy fitting to new or existing guards (or where replacement of a non locking tongue switch is required).

The head will rotate to provide up to 4 actuator entry positions.

CONTACTS/LED DIAGNOSTICS:

STANDARD - Version 1:

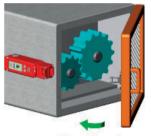
EXTRA LED2 - Version 2:

LED1 Solenoid Power

2NC Safety Contacts 1NO Auxiliary Contact (Guard Open) 1NO Auxiliary Contact (Lock Open) LED1 Solenoid Power

2NC Safety Contacts 1NO Auxiliary Contact (Guard Open) LED2 Lock Status: Closed and Locked







Hinged Guard

Sliding Guard





FUNCTIONAL SPECIFICATIONS:

Positive Break Contacts to EN60947-5-1

High Functional Safety to ISO13849-1

High specification polyester housing with Stainless Steel Head Connects to most Safety Relays to give up to PLe Cat.4

Will fit on 40mm fixing centres

2 manual override points

Universal M12 8 way microlock

Quick Connector version available for ease of installation

ACCESSORIES (see p100-101)



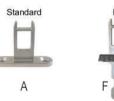
Fits to switch aperture during maintenance and provides multiple padlock holes.

INSERTION OF ACTUATOR

0mm

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

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 Version Supply Voltage **Utilization Category** Thermal Current (Ith) Rated Insulation/Withstand Voltages Travel for Positive Opening Actuator Entry Minimum Radius Maximum Approach/Withdrawal Speed Holding Force Body Material Head Material

> Vibration Conduit Entry

Enclosure Protection

2.5 x 106 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

10mm 175mm Standard 100mm Heavy Duty 600mm/s F1Max 1400N Fzh 1076N Polyester Stainless Steel 316 **IP67** -25C +50C

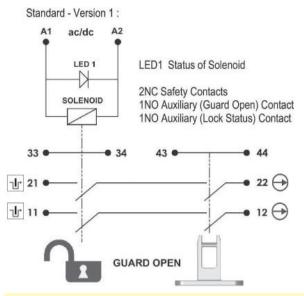
Operating Temperature IEC 68-2-6 10-55Hz + 1Hz Excursion 0.35mm 1 octave/min Various (See Sales Number) Fixing 2 x M5

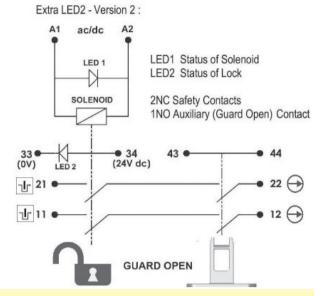
600Vac/2500Vac

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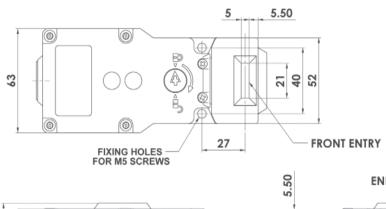
SCHEMATIC CIRCUITS:

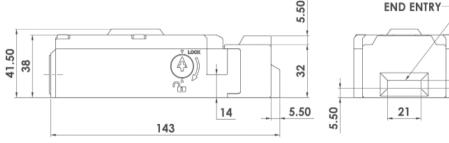






DIMENSIONS:





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



Quick Connect (QC) M12 8 Way Male (on Flying Lead 250mm) Pin View from Switch		Switch Circuit		
2	7	A1 A2		
4	6	11/12		
8	5	21/22		
3	1	43/44		

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

SALES NUMBER	SOLENOID VOLTAGE	M20	1/2" NPT	QC M12	M20	1/2" NPT
Kobra KL1-P Switch	24V ac/dc	221001	221002	221003	221301	221302
Kobra KL1-P Switch	110V ac	221004	221005	221006	221304	221305
Kobra KL1-P Switch	230V ac	221007	221008	221009	221307	221308
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				

STANDARD VERSION 1

(Solenoid LED only)

EXTRA LED VERSION 2

(Lock Status)

Kobra KL1-P 24V Solenoid M20 Conduit LED2 Version Heavy Flexible Actuator: Sales Number: 221301-HF Kobra KL1-P 110V Solenoid 1/2" NPT Conduit Standard Version Standard Actuator: Sales Number: 221005-A