

Guard Locking Switch Plastic: 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 guard 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.

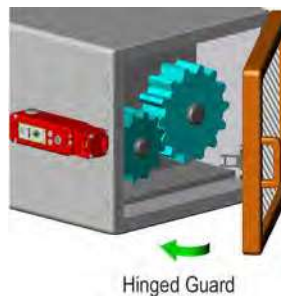
CONTACTS/LED DIAGNOSTICS:

STANDARD - Version 1:

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

EXTRA LED2 - Version 2:

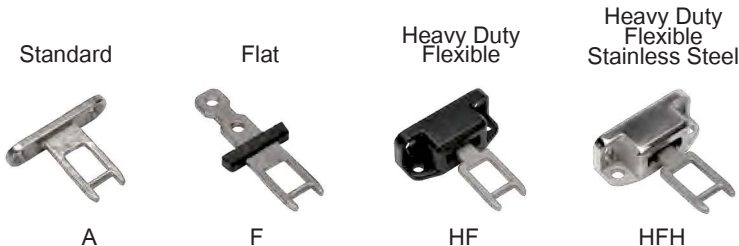
2NC Safety Contacts
1NO Auxiliary Contact (Guard Open)
LED2 Lock Status:
Closed and Locked
LED1 Solenoid Power



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

ACTUATOR OPTIONS (see p154)



ACCESSORIES (see p155)

MAINTENANCE LOCKOUT ACTUATOR

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



INSERTION OF ACTUATOR

	6.0	5.0	0mm
11/12	Open		
21/22	Open		
33/34			Open
43/44			Open

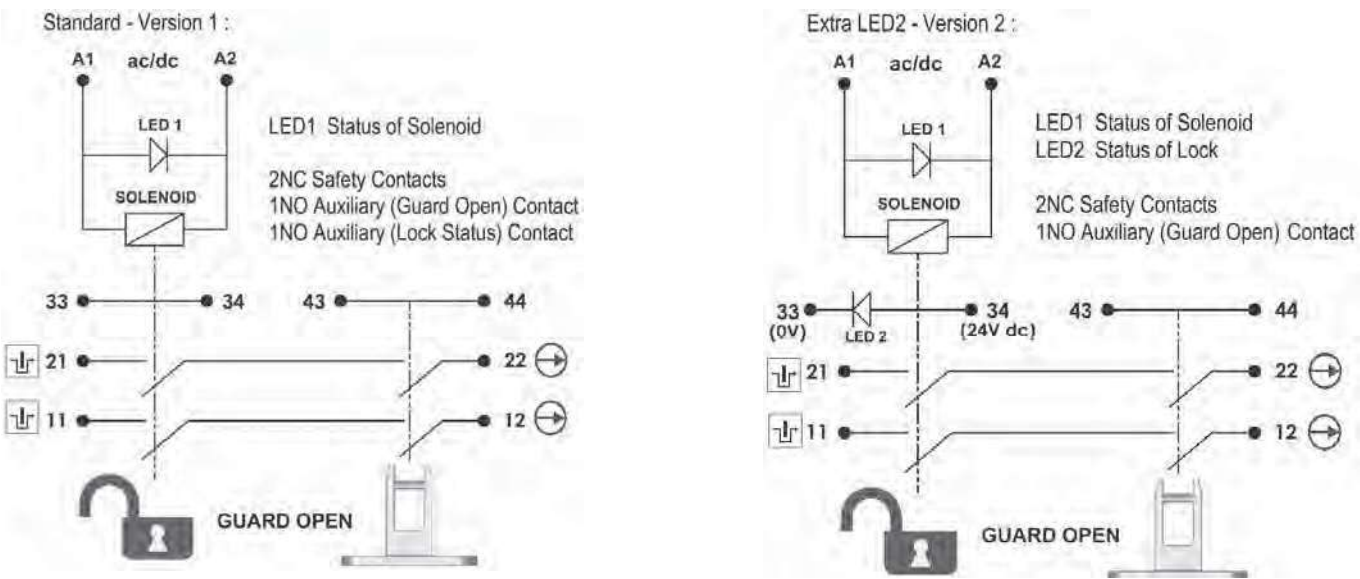
Standards: ISO14119 EN60947-5-1 EN60204-1
ISO13849-1 EN62061 UL 60947-5-1

Safety Classification and Reliability Data:

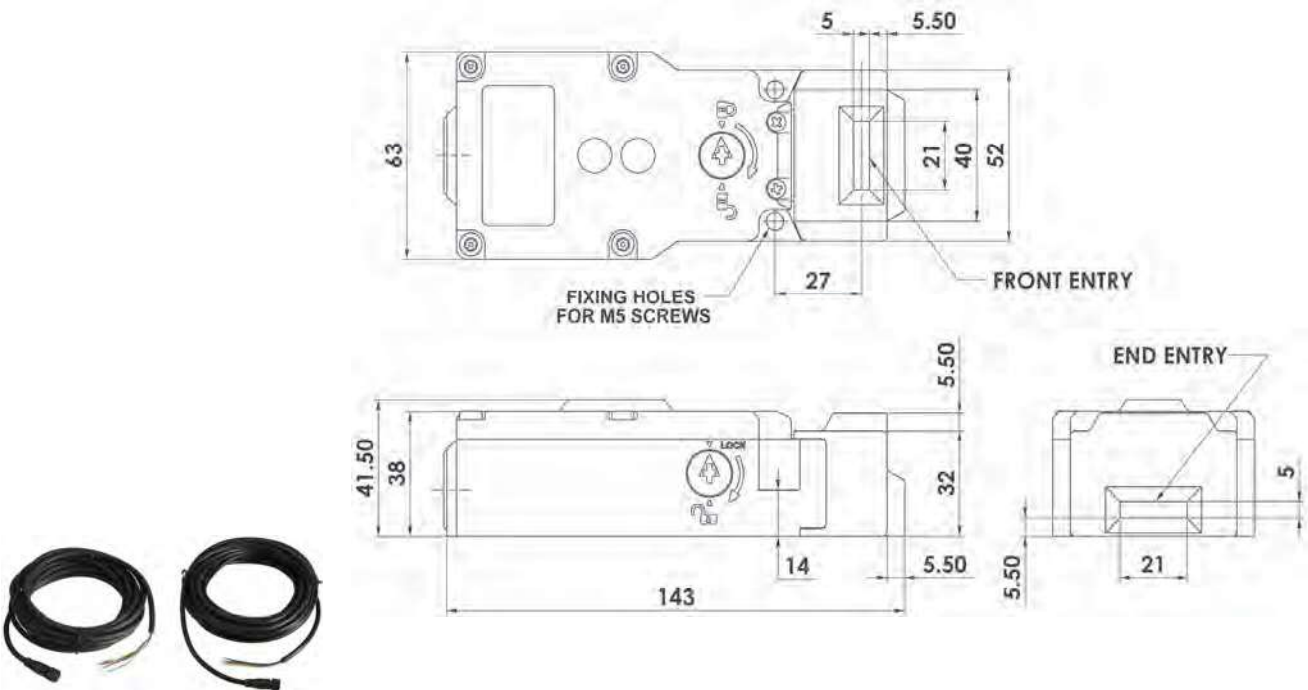
Mechanical Reliability B10d	2.5 x 10 ⁶ operations at 100mA load
ISO13849-1	Up to PLe depending upon system architecture
EN62061	Up to SIL3 depending upon system architecture
Safety Data – Annual Usage	8 cycles per hour/24 hours per day/365 days
	MTTFd 356 years
Solenoid Voltage (by Sales Number)	24V ac/dc or 110Vac or 230Vac
Solenoid Wattage	12W
LED 2 Version 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 1400N Fzh 1076N
Body Material	Polyester
Head Material	Stainless Steel 316
Enclosure Protection	IP67
Operating Temperature	-25C +50C
Vibration	IEC 68-2-6 10-55Hz + 1Hz
Conduit Entry	Excursion 0.35mm 1 octave/min
Fixing	Various (See Sales Number)
	2 x M5

Guard Locking Switch Plastic: LEILOCK KL1-P

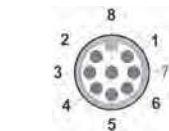
SCHEMATIC CIRCUITS:



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



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				

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

Ordering Examples:
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