Guard Locking Switch Stainless Steel **Type: KLT-SS**

FEATURES:

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

IP69K

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

The KLT-SS Series Guard Locking switch is a tongue type safety interlock switch incorporating traditional mechanical anti-tamper tongue technology utilising IDEM Safety Switches patented cam system.

They interlock and hold closed guard doors to protect operators from moving or hazardous machinery.
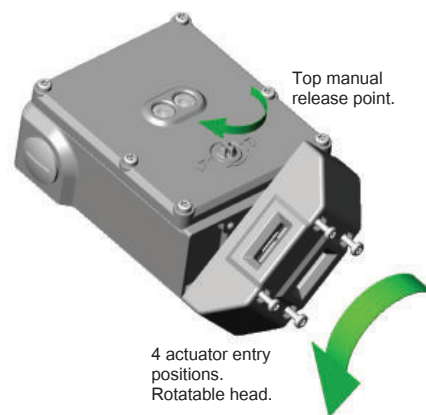They are particularly suited to where a high degree of anti-tamper technology is required to prevent accidental or deliberate attempts to by-pass the interlock.

The KLT-SS Solenoid Locking Switch has a mirror polished Stainless Steel 316 body design and have been developed with a maximum holding force of 3000N to keep medium to large guard doors closed until hazards have been removed.

IP69K enclosure protection is maintained by a double seal lid gasket design and metal fixings.

The KLT-SS has a low profile and fixing holes are on an industry standard 73mm centre to enable easy retrofitting to new or existing guards (or where extra anti-tamper is required).

The head rhas been designed to allow rotation to provide up to 4 actuator entry positions.

CONTACTS:

KLT-SS

4NC Safety Contacts

1NO Auxiliary Contact (Guard Open)
1NO Auxiliary Contact (Guard Locked)
(selectable option for LED2 Guard Locked)

LED1 RED Solenoid Power On
LED2 GREEN Switch Locked (if selected)

Top manual release point.

4 actuator entry positions. Rotatable head.

FUNCTIONAL SPECIFICATIONS:

Positive Break Contacts to EN60947-5-1
Mirror Polished (Ra10) Stainless Steel 316
Will fit on 73mm fixing centres
Connects to most Safety Relays to give up to PLe Cat.4
M23 Quick Connector version available for ease of installation
1 manual override points
LED diagnostics for Solenoid, Lock and faults

ACTUATOR OPTIONS (see p100)

A - Standard

HF - Heavy Duty Flexible

F - Flat

HFH - Heavy Duty Flexible Stainless Steel

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

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

Safety Classification and Reliability Data:

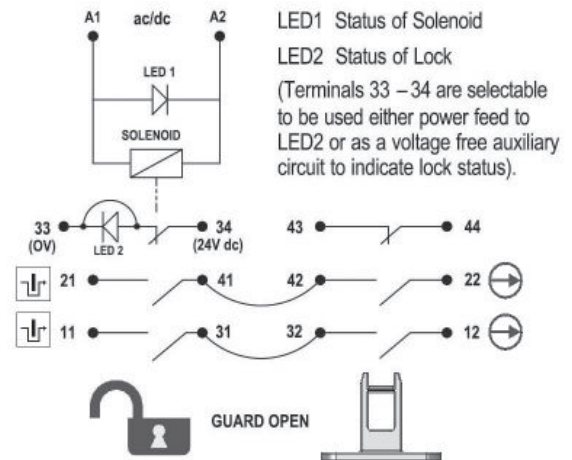|	
Mechanical Reliability B10d	2.5×10^6 operations at 100mA load
ISO13849-1	Up to PLe depending upon system architecture
EN62061	Up to SIL3 depending upon system architecture
Safety Data – Annual Usage	8 cycles per hour/24 hours per day/365 days MTTFd 356 years
Solenoid Voltage (by Sales Number)	24V ac/dc or 110V ac or 230V ac
Solenoid Wattage	12W
Thermal Current (Ith)	5A
Rated Insulation/Withstand Voltages	600Vac/2500Vac
Travel for Positive Opening	10mm
Maximum Approach/Withdrawal Speed	600mm/s
Holding Force	F1Max 3000N Fzh 2307N
Body Material	Polished Stainless Steel 316
Head Material	Polished Stainless Steel 316
Enclosure Protection	IP69K
Operating Temperature	-25C +40C
Vibration	IEC 68-2-6 10-55Hz + 1Hz Excursion 0.35mm 1 octave/min
Conduit Entry	Various (See Sales Number)
Fixing	2 x M5

Guard Locking Switch Stainless Steel **Type: KLT-SS**

DIMENSIONS:

Fixing Holes for M5 Screws

FRONT ENTRY

END ENTRY
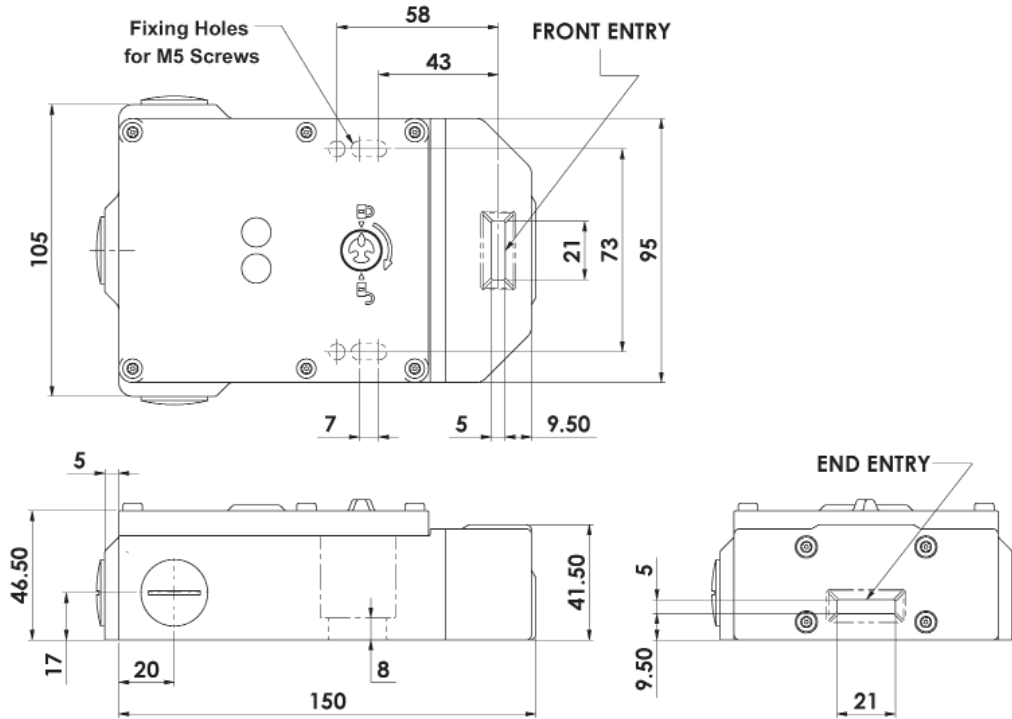
SCHEMATIC CIRCUIT:

KLT-SS Version (Mechanical only)

LED1 Status of Solenoid
LED2 Status of Lock
(Terminals 33 – 34 are selectable to be used either power feed to LED2 or as a voltage free auxiliary circuit to indicate lock status).

GUARD OPEN

Quick Connect (QC) M23 12 Way Male Plug Connector Length 24mm Pin View from Switch	KLT-SS Switch Circuit
1 3	A1 A2
4	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

STAINLESS STEEL 316 GLAND	SALES NUMBER
M20	140120
1/2" NPT	140121

IDEM recommend using our Stainless Steel 316 Gland with this switch.

SALES NUMBER	SOLENOID VOLTAGE	M20	1/2" NPT	QC M23
KLT-SS Switch	24V ac/dc	451001	451002	451003
KLT-SS Switch	110V ac	451004	451005	451006
KLT-SS Switch	230V ac	451007	451008	451009
KLT-SS Actuator	Standard	Add A	to Sales Part Number	
KLT-SS Actuator	Flat	Add F	to Sales Part Number	
KLT-SS Actuator	Heavy Duty Flexible	Add HF	to Sales Part Number	
KLT-SS Actuator	Stainless Steel Heavy Duty Flexible	Add HFH	to Sales Part Number	

Ordering Example: KLT-SS M20 24V ac/dc Heavy Duty Flexible Actuator: Sales Number: 451001-HF