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

FEATURES:

## Solenoid Locking Door Interlock Safety Switch with Guard Holding up to 3000 N ( 300 Kg ) ( F 1 Max )

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 3000 N 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)

## FUNCTIONAL SPECIFICATIONS:

Positive Break Contacts to EN60947-5-1
Mirror Polished (Ra10) Stainless Steel 316
Will fit on 73 mm 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) |  |  |
| :---: | :---: | :---: |
|  | Standards: | ISO14119 EN60947-5-1 EN60204-1 ISO13849-1 EN62061 UL508 |
| $\leftrightarrow \square$ | Safety Classification and |  |
| A - Standard | Reliability Data: | $2.5 \times 10^{6}$ operations at 100 mA load |
|  | ISO13849-1 | Up to PLe depending upon system architecture |
| HF - Heavy Duty Flexible | EN62061 | Up to SIL3 depending upon system architecture |
| $\square$ Hr - Heavy Duty Flexible | Safety Data - Annual Usage | 8 cycles per hour/24 hours per day/365 days MTTFd 356 years |
| 8 | Solenoid Voltage (by Sales Number) | 24 V ac/dc or 110 V ac or 230 V ac |
|  | Solenoid Wattage | 12 W |
|  | Thermal Current (th) | 5A |
|  | Rated Insulation/Withstand Voltages | $600 \mathrm{Vac} / 2500 \mathrm{Vac}$ |
|  | Travel for Positive Opening | 10 mm |
|  | Maximum Approach/Withdrawal Speed | 600mm/s |
|  | Holding Force Body Material | F1Max 3000N Fzh 2307N Polished Stainless Steel 316 |
|  | Head Material | Polished Stainless Steel 316 |
|  | Enclosure Protection | IP69K |
| HFH - Heavy Duty Flexible | Operating Temperature | $-25 \mathrm{C}+40 \mathrm{C}$ |
| F - Flat Stainless Steel | Vibration | IEC 68-2-6 $\quad 10-55 \mathrm{~Hz}+1 \mathrm{~Hz}$ |
| For all IDEM switches the normally closed (NC) circuits are | Conduit Entry | Excursion 0.35 mm 1 octave/min Various (See Sales Number) |
| closed when the guard is closed actuator inserted. | Fixing | $2 \times \mathrm{M5}$ |

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DIMENSIONS:



| Quick Connect (QC) <br> M23 12 Way Male Plug <br> Connector Length 24mm <br> Pin View from Switch | KLT-SS <br> Switch Circuit |
| :---: | :---: |
| 13 | A1 A2 |
| 4 | $11 / 12$ |
| $7 \quad 8$ | $21 / 22$ |
| $2 \quad 5$ | $43 / 44$ |
| 9 | 33 |
| 10 | 34 |
| 12 | Earth |

## SCHEMATIC CIRCUIT:

KLT-SS Version (Mechanical only)


| FEMALE QC LEADS | LENGTH | SALES NUMBER |
| :---: | :---: | :---: |
| M23 | 12 Way | $5 \mathrm{~m}(15 \mathrm{ft})$ |
| M23 | 12 Way | $10 \mathrm{~m}(3 \mathrm{ft})$ |


| STAINLESS STEEL | SALES |  |
| :---: | :---: | :---: |
| 316 GLAND |  |  |
| 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 | 24 V ac/dc | 451001 | 451002 | 451003 |
| KLT-SS Switch | 110 V ac | 451004 | 451005 | 451006 |
| KLT-SS Switch | 230 V 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 |  |

