# IDEM - TONGUE INTERLOCK SAFETY SWITCHES - KP

KP

200004F KP M20 '3NC' - flat actuator



- 4 Actuator entry positions with a rotatable head
- 3 pole or 4 pole contact blocks
- 3 conduit entries
- 52mm x 98mm 40mm fixing
- IP67 ingress protection rating



## Product description

### Features

IDEM KP Interlock switches are designed to provide position interlock detection for moving guards

They are designed to fit to the leading edge of sliding, hinged or lift off machine guards

They provide a forced disconnect of the safety contacts at the withdrawal of the actuator and have an anti-tamper not easily defeatable mechanism. The head can be rotated to give 4 actuator entry positions. For extra durability, Flexible Actuators and Stainless Steel head versions are available.



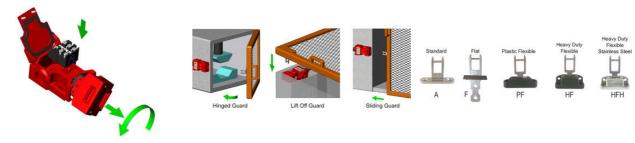
Contact blocks are replaceable with optional explosion proof versions. They are sealed to IP67 and survive most wash down solutions due to the high specification materials

#### Functional specifications

- Positive Break Contacts to EN60947-5-1
- High Functional Safety to ISO13849-1
- 3 pole, 4 pole or Explosion Proof Contact Blocks
- Stainless Steel Head version available
- Connects to most Safety Relays to give up to PLe Cat.4
- Industry Standard Fitting: 52mm wide 98mm long 40mm fixing

#### Specifications

| Actuator                            | Flat  |  |  |
|-------------------------------------|---|--|--|
| Annual usage                        | 8 cycles per day/24 hours per day/365 days                      |  |  |
| Approvals                           | ISO 14119, EN60947-5-1, EN60204-1, ISO 13849-1, EN62061, UL 508 |  |  |
| Atex approved                       | No  |  |  |
| Central Material                    | Polyester   |  |  |
| Conduit entry                       | M20   |  |  |
| Contacts                            | 3NC   |  |  |
| Head material                       | Polyester   |  |  |
| IP Class                            | IP67  |  |  |
| Maximum approach / withdrawal speed | 600   |  |  |
| Mechanical reliability B10d         | 2.5 x 10 <sup>6</sup> operations at 100mA load                  |  |  |
| Mounting                            | 2 x M5  |  |  |
| MTTFd                               | 356 years   |  |  |
| Operating temperature               | -2580°C   |  |  |
| PFHd                                | 3.44 x 10 <sup>-8</sup>   |  |  |
| PL                                  | e acc. ISO13849-1   |  |  |
| Rated insulation voltage            | 500V ac   |  |  |
| SIL                                 | 3 acc. EN62061  |  |  |
| Thermal current (Ith)               | 5   |  |  |
| Withstand voltage                   | 2500V ac  |  |  |











































| 2NC 1NO    | 3NC     | 3NC 1NO  | 2NC 2NO  | 4NC        |
|------------|---------|----------|----------|------------|
|            |         | 43 44    | 43 44    | ⊕41 42     |
| 33 — 34 ⊖  | 31-32   | 931 → 32 | 33 34    | ⊕31 - 1 32 |
| ⊕21———22 ⊕ | 21-1-22 | 1 ⊕21    | ⊕21 - 22 | ⊕21 - 22   |
| ⊕11-12 ⊕1  | 1-12    | 1 11-12  | ⊕11      | ⊕11 — 12   |

