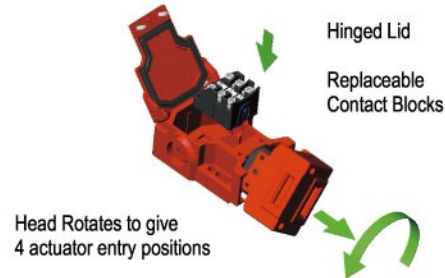
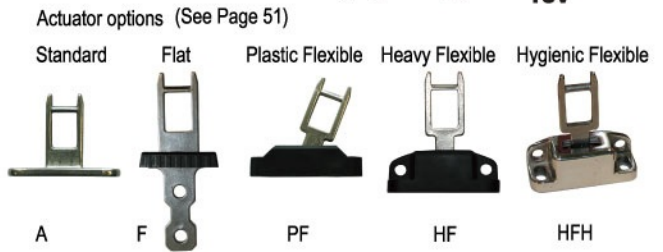


Kobra - Tongue Switches - Type: KP



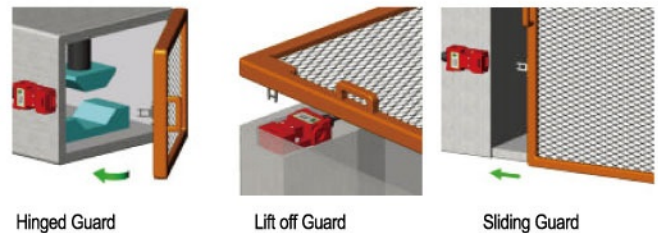
IDEM KP Interlock switches are designed to provide position interlock detection for moving guards.

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 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 material specification.



Functional Specification:

Positive break contacts to IEC 60947-5-1

High Functional Safety to ISO 13849-1

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 Fitting 52mm wide 98mm long 40mm fixing

Pre-Wired Explosion Proof



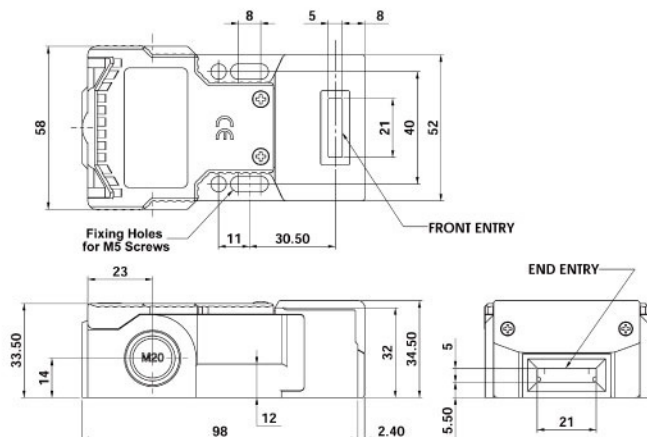
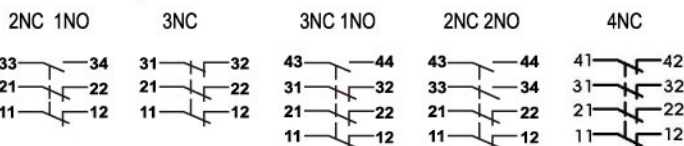
Classification Exd IIC T6 (-20 ≤ Ta ≤ +60C) Gb
Ex tb IIIC T85C (-20 ≤ Ta ≤ +60C) Db

Standards EN1088 IEC 60947-5-1 EN 60204-1
ISO 13849-1 EN62061 EN 954-1 UL508

Safety Classification and Reliability Data:

Mechanical Reliability B10d	2.5 x 10 ⁸ operations at 100mA load
EN 954-1	up to Category 4 with Safety Relay
ISO 13849-1	up to PLe depending upon system architecture
EN 62061	up to SIL3 depending upon system architecture
Safety Data - Annual Usage	8 cycles per hour / 24 hours per day / 365 days
PFHd	3.44 x 10 ⁻⁸
Proof Test Interval (Life)	35 years
MTTFd	356 years
Utilization Category	AC15 A300 3A.
Thermal Current (Ith)	5A
Rated Insulation / Withstand Voltages	500VAC / 2500 VAC
Travel for Positive Opening	8mm
Actuator entry minimum radius	175mm Standard 100mm Flexible
Maximum Approach / Withdrawal speed	600mm/s.
Body Material	Polyester
Head Material	Polyester or Stainless Steel 316
Enclosure Protection	IP67
Operating Temperature	-25C. +80C
Vibration	IEC 68-2-6, 10-55Hz+1Hz, Excursion: 0.35mm, 1 octave/min
Conduit Entry	Various (See Sales Part Numbers)
Fixing	2 x M5

Contact Block Options:



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

Kobra - Tongue Switches - Type: KP



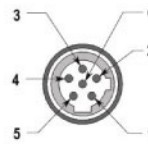
Contact operation at withdrawal of Actuator

2NC 1NO	6.8	6.0	0 mm
11/12	Open		
21/22	Open		
33/34		Open	

3NC (1NO)	6.8	6.0	0 mm
11/12	Open		
21/22	Open		
31/32	Open		
43/44		Open	

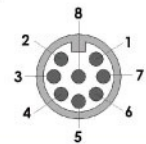
4NC	6.0	0 mm
11/12	Open	
21/22	Open	
31/32	Open	
41/42	Open	

2NC 2NO	6.8	6.0	0 mm
11/12	Open		
21/22	Open		
33/34		Open	
43/44		Open	



QC Quick Connect Versions

Quick Connect Pin view from switch



Quick Connect (QC) ½" UNF 6 Way Male (connector length 14mm)	Switch Circuit	Quick Connect (QC) M12 8 Way Male (on Flying Lead 250mm) Pin view from switch
1 5	11 / 12	1 7
2 6	21 / 22	6 5
3 4	33 / 34 or 31 / 32	4 3
	41 / 42 or 43 / 44	8 2

Accessories: (See Page 50)

Maintenance Lockout Actuator



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

Actuator with chain



Flat Actuator supplied with 300mm (12 inch) chain. Can be used where poor alignment exists and provides manual insertion of actuator by operator.

2 Colour LED Conduit Beacon
(Available voltages 24Vdc 110Vac 230Vac and M20 or ½" NPT)

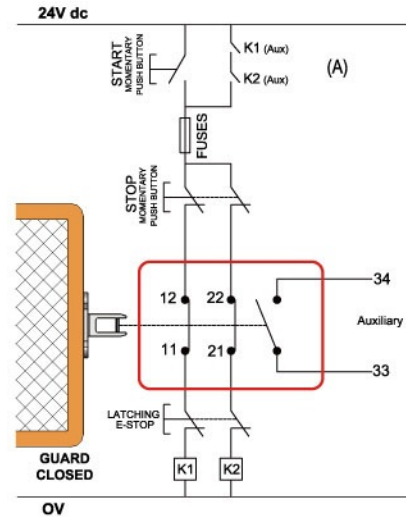


2 colour LED (3 wires) providing Steady Red and Steady Green. Fits to conduit entry and provides option for LED indication based upon switch contacts.

Guard Door Interlocked - Dual Channel (Non Monitored)

Application Example:

This system shows interlock switch circuits 11-12 and 21-22 configured to allow direct feed to contactor coils K1 and K2. This provides Dual Channel wiring and a check of the contactor feedback circuits through the auxiliary contacts (A) of K1 and K2. Opening the Interlock switch or depressing the E Stop will isolate power to the contactor coils. Re-start can only occur providing the Guard is closed, and the E-Stop is reset. System is shown with machine stopped, guard closed and the contactors able to be energised.



Female QC Leads	Length	Sales Number
M12 8 Way	5m. (15Ft.)	140101
M12 8 Way	10m. (30Ft.)	140102
½" UNF	2m. (6Ft.)	140141
½" UNF	5m. (15Ft.)	140142



Sales Numbers	Contacts	M20	½"NPT	QC ½" UNF 6 way	QC M12 8 Way
Kobra KP Switch	2NC 1NO	200001	200002	200003	200021
Kobra KP Switch	3NC	200004	200005	200006	200022
Kobra KP Switch	3NC 1NO	200007	200008		200023
Kobra KP Switch	2NC 2NO	200010	200011		200024
Kobra KP Switch	4NC	200013	200014		200025
Kobra KP Switch	1NC 1NO Ex	200016		3m. 4 Core Ex	
Kobra KP Switch	2NC Ex	200019		3m. 4 Core Ex	
Kobra KP Switch	2NC 2NO Ex	200026		3m. 8 Core Ex	
Actuator	Standard	Add A to Sales Part Number			
Actuator	Flat	Add F to Sales Part Number			
Actuator	Plastic Flexible	Add PF to Sales Part Number			
Actuator	Heavy Duty Flexible	Add HF to Sales Part Number			
Actuator	Heavy Duty S/Steel	Add HFH to Sales Part Number			
Stainless Steel Head Version		Add SS to Sales Part Number			
Actuator Holding - 40N. (3 pole versions only)		Add 40N to Part Number			

Ordering Example: Kobra KP M20 3NC with Stainless Steel Head and Heavy Duty Flexible Actuator Part No. 200004-HF-SS

Gold Plated Contacts available for low power circuits (5V. 5mA). Add GC to Part Number e.g. 200001-A-GC