

RFID Coded Non Contact Type: KPF

FEATURES:

Industry housing shape 52mm wide 98mm long 40mm fixing
 2NC 1NO semi conductor outputs for connection to safety relay
 Visual LED indication of switch status
 Fully encapsulated sealing and pre-wired 2m, 5m or 10m cable
 Wide 14mm sensing with high tolerance to misalignment
 M12 8 Way Quick Connect version available (flying lead 150mm)

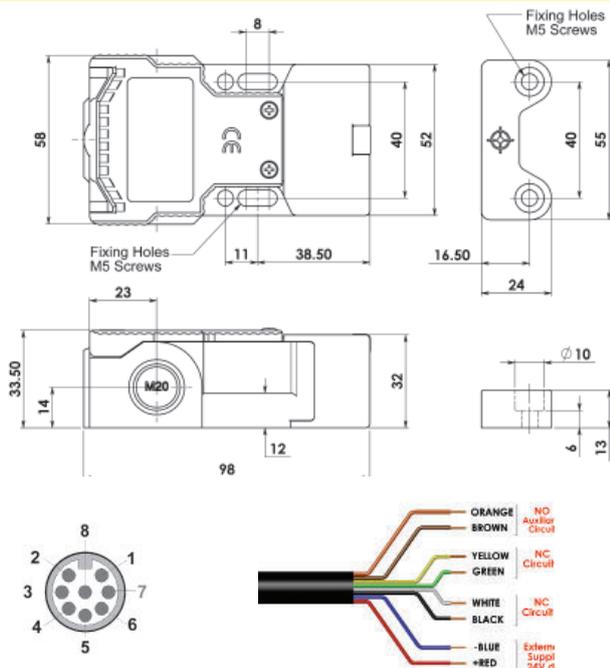
APPLICATION:

IDEM KPF RFID Coded Non Contact switches have been designed to interlock hinged, sliding or removable guard doors. They have an industry standard fixing and are specifically advantageous where:

- (a) severe guard alignment exists using traditional tongue type versions
- (b) long mechanical life is required (no moving or touching parts)

When used in combination with Dual Channel Safety Relays they can be used to provide up to PLe ISO13849-1 SIL3 EN62061.

DIMENSIONS:



Quick Connect QC M12 8 Way Male Plug Pin view from Switch	Flying Lead Colour	Circuit (Actuator Present)	Output Types Solid State
8	Orange	Auxiliary NO	200mA Max. 24Vdc
5	Brown	Auxiliary NO	
4	Yellow	Safety NC2	200mA Max. 24Vdc
6	Green	Safety NC2	
7	Black	Safety NC1	200mA Max. 24Vdc
1	White	Safety NC1	
2	Red	Supply +24Vdc	Supply 24Vdc +/- 10%
3	Blue	Supply 0Vdc	

SALES NUMBER	MASTER CODED (same code every switch)	CABLE LENGTH
408101	KPF-M-RFID END Cable (pre-wired)	5M
408102	KPF-M-RFID END Cable (pre-wired)	10M
408103	KPF-M-RFID END Cable (pre-wired)	QC-M12
408104	KPF-M-RFID LEFT Cable (pre-wired)	5M
408105	KPF-M-RFID LEFT Cable (pre-wired)	10M
408106	KPF-M-RFID LEFT Cable (pre-wired)	QC-M12
408107	KPF-M-RFID RIGHT Cable (pre-wired)	5M
408108	KPF-M-RFID RIGHT Cable (pre-wired)	10M
408109	KPF-M-RFID RIGHT Cable (pre-wired)	QC-M12
408201	Replacement Actuator Master Coded	

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

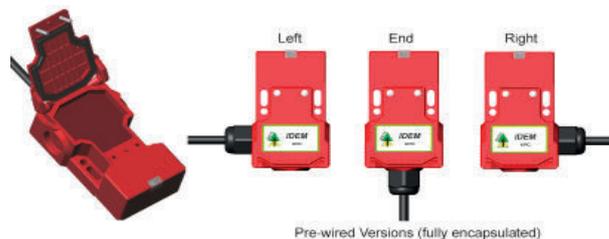


RFID Coded Actuation

Switching Tolerance up to 14mm

Will operate with most Safety Relays

IP69K



Standards: ISO14119 EN60947-5-3 EN62024-1 ISO13849-1 EN62061 UL508

Safety Classification and Reliability Data:

Minimum switched current: 10V.dc 1mA
 Dielectric Withstand: 250V.ac
 Insulation Resistance: 100 Mohms
 Recommended setting gap: 5mm
 Switching Distance: Sao 8mm Close Sar 20mm Open
 Tolerance to Misalignment: 5mm in any direction from 5mm setting gap
 Switching frequency: 1.0 Hz maximum
 Approach speed: 200mm/m to 1000mm/s
 Body material: Polyester
 Temperature Range: -25/55C
 Enclosure Protection: IP67/IP69K
 Cable Type: PVC 6 or 8 core 6mm OD Conductors 0.25mm²
 Mounting Bolts: 2 x M4 Tightening torque 1.0 Nm
 Mounting Position: Any

Characteristic Data according to IEC62061 (used as a sub system):

Safety Integrity Level SIL3
 PFH (1/h) 4.77E-10 Corresponds to 4.8% of SIL3
 PFD 4.18E-05 Corresponds to 4.2% of SIL3
 Proof Test Interval T₁ 20a

Characteristic Data according to EN ISO13849-1:

Performance Level e If both channels are used in combination with a SIL3/PLc control device
 Category Cat4
 MTTFd 1100a
 Diagnostic Coverage DC 99% (high)
 Number of operating days per year: d_{op} = 365d
 Number of operating hours per day: h_{op} = 24h
 B10d not mechanical parts implemented

When the product is used deviant from these assumptions (different load, operating frequency, etc.) the values have to be adjusted accordingly.

SALES NUMBER	UNIQUELY CODED (every switch unique activation)	CABLE LENGTH
408001	KPF-U-RFID END Cable (pre-wired)	5M
408002	KPF-U-RFID END Cable (pre-wired)	10M
408003	KPF-U-RFID END Cable (pre-wired)	QC-M12
408004	KPF-U-RFID LEFT Cable (pre-wired)	5M
408005	KPF-U-RFID LEFT Cable (pre-wired)	10M
408006	KPF-U-RFID LEFT Cable (pre-wired)	QC-M12
408007	KPF-U-RFID RIGHT Cable (pre-wired)	5M
408008	KPF-U-RFID RIGHT Cable (pre-wired)	10M
408009	KPF-U-RFID RIGHT Cable (pre-wired)	QC-M12



140101	Female QC Lead	M12 Female 5m. 8 way
140102	Female QC Lead	M12 Female 10m. 8 way