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)

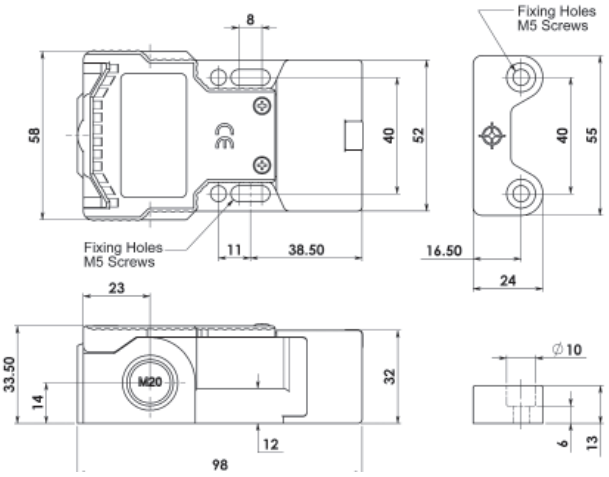
When used in combination with Dual Channel Safety Relays they can be used to provide up to PLe ISO13849-1 SIL3 EN62061.

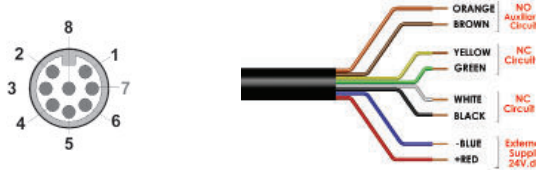
RFID Coded Actuation
Switching Tolerance up to 14mm
Will operate with most Safety Relays

IP69K

Pre-wired Versions (fully encapsulated)

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	

Standards:	ISO14119 EN60947-5-3 EN60204-1 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 0.25mm^2
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 T_1	20a
Characteristic Data according to EN ISO13849-1:	
Performance Level	e If both channels are used in combination with a SIL3/PLe 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	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	

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

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

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