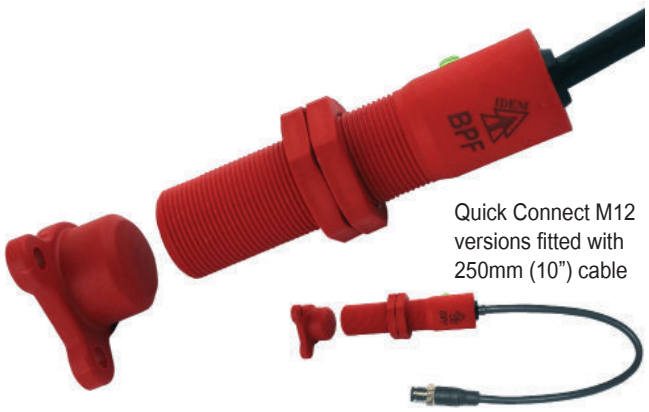
RFID Coded Non Contact **Type: BPF**

FEATURES:

M18 cylindrical fitting suitable for all industry applications.
Easy to install - M18 threaded body - easy to set
10mm typical switching distance.
Suitable for harsh environments of Food Processing and Packaging
High specification red polyester housing
For use in applications up to PLe/Cat4 (EN ISO 13849-1) and SIL3 (IEC 61508)
LED indication and Quick Connect versions available
Can be high pressure hosed at high temperature due to IP69K rating
2NC 1NO circuits - high switching life - no moving parts

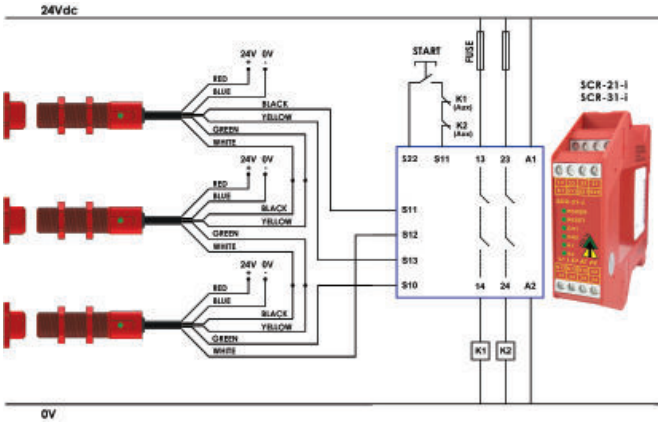
RFID Coded Actuation
Typical switching distance 10mm
Will operate with most Safety Relays

IP69K



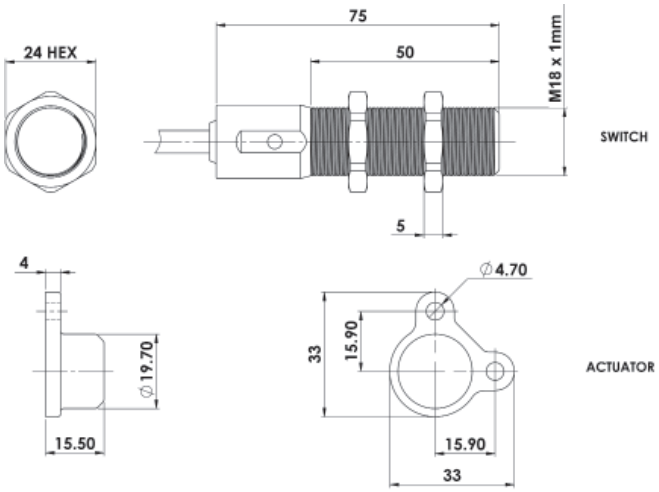
Quick Connect M12 versions fitted with 250mm (10") cable

CONNECTION EXAMPLE

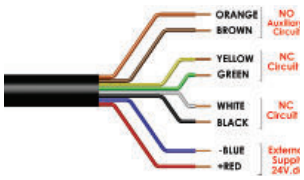


Three switches connected in series to an SCR-21-i or SCR-31-i to give Dual Channel monitoring with monitored Manual Start and Contactor Feedback Check

DIMENSIONS:



OPERATING DIRECTION:



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
413001	BPF-M-RFID	5M
413002	BPF-M-RFID	10M
413003	BPF-M-RFID	QC-M12
413200	Replacement Actuator Master Coded	

SALES NUMBER	UNIQUELY CODED (every switch unique activation)	CABLE LENGTH
413101	BPF-U-RFID	5M
413102	BPF-U-RFID	10M
413103	BPF-U-RFID	QC-M12

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:	-25/80C
Enclosure Protection:	IP67/IP69K
Cable Type:	PVC 8 core 6mm OD Conductors 0.25mm^2

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.

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

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

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)

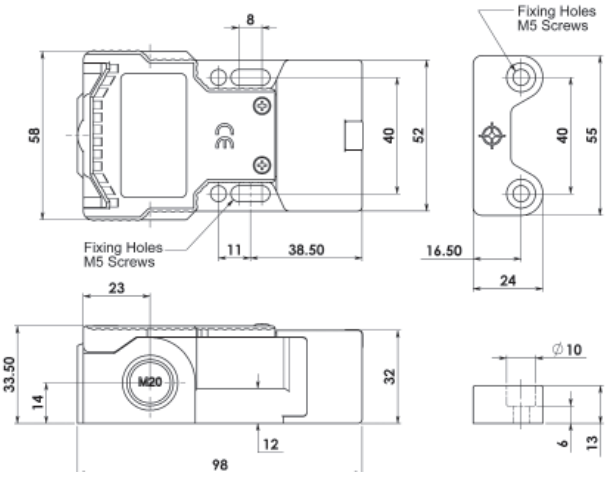
When used in combination with Dual Channel Safety Relays they can be used to provide up to PLe ISO13849-1 SIL3 EN62061.

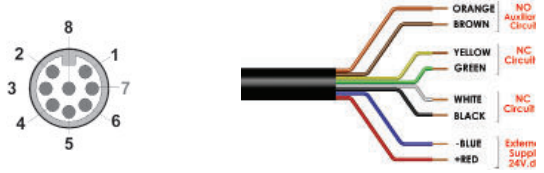
RFID Coded Actuation
Switching Tolerance up to 14mm
Will operate with most Safety Relays

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

RFID Coded Non Contact **Type: LPF**

FEATURES:

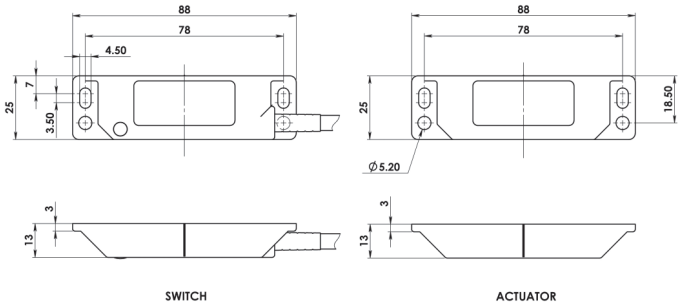
Popular European fitting suitable for all industry applications
LED indication
Can be high pressure hosed at high temperature due to IP69K rating
Wide sensing at 14mm with high tolerance to misalignment
High specification polyester housing with integral back plate
Quick Connect versions available
Up to: PLe ISO13849-1
2NC 1NO circuits - high switching life - no moving parts
Magnet holding option available for use with small guards

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

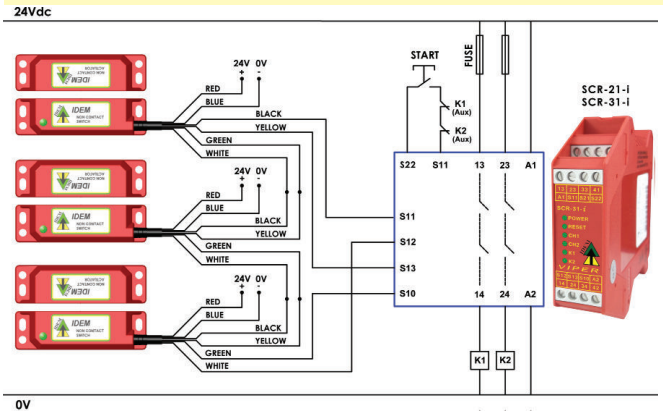
IP69K

Quick Connect M12 versions fitted with 250mm (10") cable

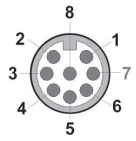
DIMENSIONS:

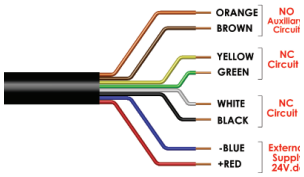


CONNECTION EXAMPLE



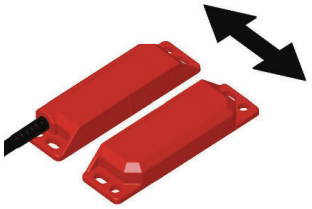
Three switches connected in series to an SCR-21-i or SCR-31-i to give
Dual Channel monitoring with monitored Manual Start and Contactor Feedback Check





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	

OPERATING DIRECTION:



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:	-25/80C
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
404101	LPF-M-RFID	2M
404102	LPF-M-RFID	5M
404103	LPF-M-RFID	10M
404104	LPF-M-RFID	QC-M12
404201	Replacement Actuator Master Coded	

SALES NUMBER	UNIQUELY CODED (every switch unique activation)	CABLE LENGTH
404001	LPF-U-RFID	2M
404002	LPF-U-RFID	5M
404003	LPF-U-RFID	10M
404004	LPF-U-RFID	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

RFID Coded Non Contact **Type: SPF**

FEATURES:

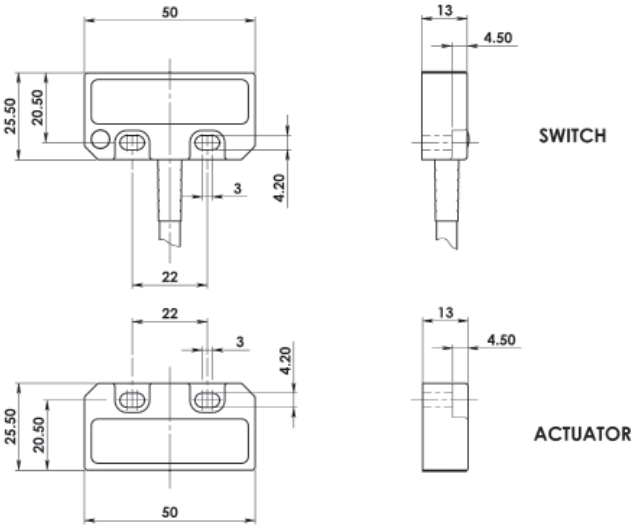
Universal fitting - established 22mm footprint suitable for most applications
Withstands environments where high humidity or hose down is required
High specification and durable polyester housing
Wide 14mm sensing with high tolerance to misalignment
Up to: PLe ISO13849-1
2NC 1NO circuits - high switching life - no moving parts
Quick Connect versions available

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

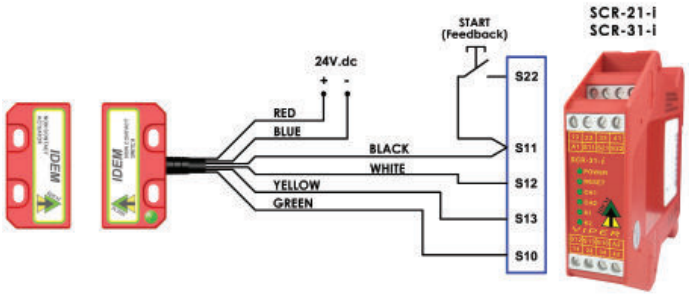
IP69K

Quick Connect M12 versions fitted with 250mm (10") cable

DIMENSIONS:

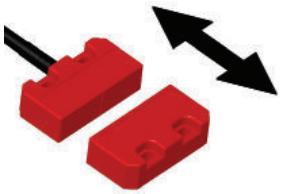


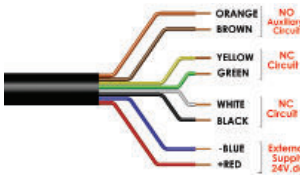
CONNECTION EXAMPLE:



Single switch connected to an SCR-21-i or SCR-31-i to give Dual Channel Monitoring with Manual Start.

OPERATING DIRECTION:





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:	-25/80C
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
405101	SPF-M-RFID	2M
405102	SPF-M-RFID	5M
405103	SPF-M-RFID	10M
405104	SPF-M-RFID	QC-M12
405201	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.

SALES NUMBER	UNIQUELY CODED (every switch unique activation)	CABLE LENGTH
405001	SPF-U-RFID	2M
405002	SPF-U-RFID	5M
405003	SPF-U-RFID	10M
405004	SPF-U-RFID	QC-M12

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

RFID Coded Non Contact **Type: WPF**

FEATURES:

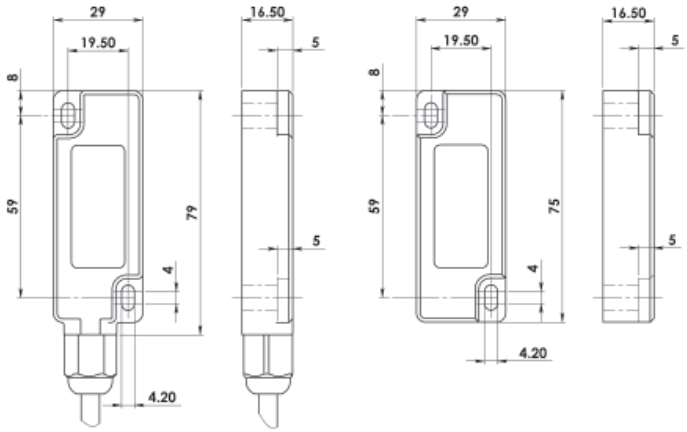
Designed with a slim fitting making it suitable for all industry applications
Wide 14mm sensing with high tolerance to misalignment
High specification and durable polyester housing
Wide 14mm sensing with high tolerance to misalignment
LED indication - no moving parts - survives shock and vibration
Up to: PLe ISO13849-1
2NC 1NO circuits - high switching life - no moving parts
Quick Connect versions available

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

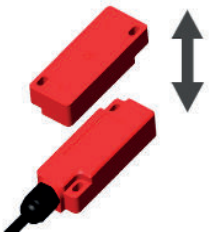
IP69K

Quick Connect M12 versions fitted with 250mm (10") cable

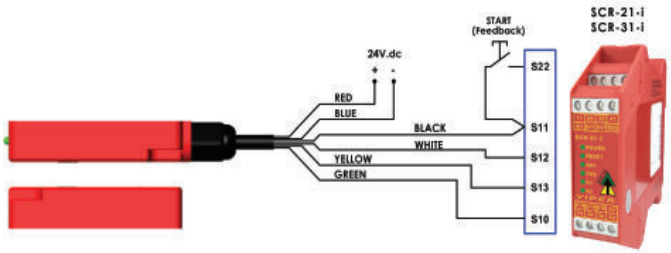
DIMENSIONS:



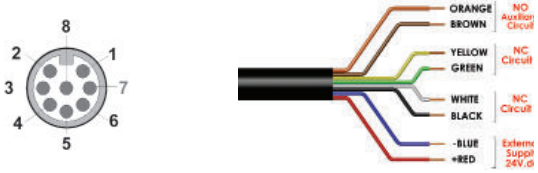
OPERATING DIRECTION:



CONNECTION EXAMPLE



One switch connected to an SCR-21-i or SCR-31-i to give Dual Channel monitoring with manual start and contactor feedback check.



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
407102	WPF-M-RFID	5M
407103	WPF-M-RFID	10M
407104	WPF-M-RFID	QC-M12
407201	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.

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	UNIQUELY CODED (every switch unique activation)	CABLE LENGTH
407002	WPF-U-RFID	5M
407003	WPF-U-RFID	10M
407004	WPF-U-RFID	QC-M12

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