Coded Magnetic Actuation   Switching Tolerance up to 10mm

Compact yet robust fitting suitable for all small guard applications.
LED indication.
Hygienic screw covers ensure suitability for Food Processing washdown.
Cost effective interlock solution.
Wide sensing at 10mm.
High Specification polyester housing with backplate
Can be mounted unobtrusively in channels or behind doors, left or right cable exit
Up to: PLe ISO 13849-1 SIL 3 EN 62061 Cat 4 EN 954-1
2NC 1NO circuits - High switching life - no moving parts

<table>
<thead>
<tr>
<th>Quick Connect (QC)</th>
<th>Flying Lead Colours</th>
<th>Circuit (Actuator Present)</th>
<th>Output Types Solid State</th>
</tr>
</thead>
<tbody>
<tr>
<td>M12 8 way Male Plug</td>
<td>Orange</td>
<td>Auxiliary NO or NC</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td>(Pin view from switch)</td>
<td>Brown</td>
<td>Auxiliary NO or NC</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td></td>
<td>Yellow</td>
<td>Safety NC2 +ve</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td></td>
<td>Green</td>
<td>Safety NC2 -ve</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>Safety NC1 +ve</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>Safety NC1 -ve</td>
<td>Supply 24Vdc +/-10%</td>
</tr>
<tr>
<td></td>
<td>Red</td>
<td>Supply +24Vdc</td>
<td>Supply 24Vdc +/-10%</td>
</tr>
<tr>
<td></td>
<td>Blue</td>
<td>Supply 0Vdc</td>
<td>Supply 24Vdc +/-10%</td>
</tr>
</tbody>
</table>

Connection example - coded switches:

Single switch connected to an SCR-2 or SCR-3 to give Dual Channel monitoring with Automatic Start.

<table>
<thead>
<tr>
<th>Sales Number</th>
<th>Type</th>
<th>Cable Length</th>
<th>Circuits</th>
</tr>
</thead>
<tbody>
<tr>
<td>114101</td>
<td>MPC Cable Right</td>
<td>2M</td>
<td>2NC</td>
</tr>
<tr>
<td>114102</td>
<td>MPC Cable Right</td>
<td>5M</td>
<td>2NC</td>
</tr>
<tr>
<td>114103</td>
<td>MPC Cable Right</td>
<td>10M</td>
<td>2NC</td>
</tr>
<tr>
<td>114104</td>
<td>MPC Cable Right</td>
<td>QC-M12*</td>
<td>2NC</td>
</tr>
<tr>
<td>114105</td>
<td>MPC Cable Right</td>
<td>2M</td>
<td>2NC</td>
</tr>
<tr>
<td>114106</td>
<td>MPC Cable Right</td>
<td>5M</td>
<td>2NC</td>
</tr>
<tr>
<td>114107</td>
<td>MPC Cable Right</td>
<td>10M</td>
<td>2NC</td>
</tr>
<tr>
<td>114108</td>
<td>MPC Cable Right</td>
<td>QC-M12*</td>
<td>2NC</td>
</tr>
<tr>
<td>114117</td>
<td>MPC Cable Right</td>
<td>2M</td>
<td>3NC</td>
</tr>
<tr>
<td>114118</td>
<td>MPC Cable Right</td>
<td>5M</td>
<td>3NC</td>
</tr>
<tr>
<td>114119</td>
<td>MPC Cable Right</td>
<td>10M</td>
<td>3NC</td>
</tr>
<tr>
<td>114120</td>
<td>MPC Cable Right</td>
<td>QC-M12*</td>
<td>3NC</td>
</tr>
<tr>
<td>114109</td>
<td>MPC Cable Left</td>
<td>2M</td>
<td>2NC</td>
</tr>
<tr>
<td>114110</td>
<td>MPC Cable Left</td>
<td>5M</td>
<td>2NC</td>
</tr>
<tr>
<td>114111</td>
<td>MPC Cable Left</td>
<td>10M</td>
<td>2NC</td>
</tr>
<tr>
<td>114112</td>
<td>MPC Cable Left</td>
<td>QC-M12*</td>
<td>2NC</td>
</tr>
<tr>
<td>114113</td>
<td>MPC Cable Left</td>
<td>2M</td>
<td>2NC</td>
</tr>
<tr>
<td>114114</td>
<td>MPC Cable Left</td>
<td>5M</td>
<td>2NC</td>
</tr>
<tr>
<td>114115</td>
<td>MPC Cable Left</td>
<td>10M</td>
<td>2NC</td>
</tr>
<tr>
<td>114116</td>
<td>MPC Cable Left</td>
<td>QC-M12*</td>
<td>2NC</td>
</tr>
<tr>
<td>114121</td>
<td>MPC Cable Left</td>
<td>2M</td>
<td>3NC</td>
</tr>
<tr>
<td>114122</td>
<td>MPC Cable Left</td>
<td>5M</td>
<td>3NC</td>
</tr>
<tr>
<td>114123</td>
<td>MPC Cable Left</td>
<td>10M</td>
<td>3NC</td>
</tr>
<tr>
<td>114124</td>
<td>MPC Cable Left</td>
<td>QC-M12*</td>
<td>3NC</td>
</tr>
</tbody>
</table>

* Other QC sizes available upon request

Note: 2NC 1NO versions have 2NC Safety and 1NO Auxiliary Circuits
3NC versions have 2NC Safety and 1NC Auxiliary Circuits
Available without LED if required
Coded Magnetic Actuation  Switching Tolerance up to 14mm

Popular European fitting suitable for all industry applications.
Can be high pressure hosed at high temperature - IP69K
Wide 14mm sensing - high tolerance to misalignment
LED indication
Up to: PLe ISO 13849-1 SIL 3 EN 62061 Cat 4 EN 954-1
2NC 1NO circuits - High switching life - no moving parts
Quick connect versions.
Magnet Holding versions for use with small guards

Connection example - coded switches
Three switches connected in series to an SCR-2 or SCR-3 to give Dual Channel monitoring with auto start and contactor feedback check.

---

EUROCODE - Coded Non Contact - Type: LPC

Specified to 80C but designed to work up to 100C
Will operate with most EN 954-1 Cat.4 Safety Relays

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

For Magnetic Holding versions add 10N to Part Number
Example: LPC 2NC 1NO 5m. with Magnetic Hold Part 110006-10N
Note: 2NC 1NO versions have 2NC Safety and 1NO Auxiliary Circuits
3NC versions have 2NC Safety and 1NC Auxiliary Circuits
Available without LED if required

---

Quick Connect (QC) M12 8 way Male Plug (Pin view from switch)

<table>
<thead>
<tr>
<th>Circuit</th>
<th>Flying Lead Colours</th>
<th>Output Types Solid State</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Orange</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td>5</td>
<td>Brown</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td>4</td>
<td>Yellow</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td>6</td>
<td>Green</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td>7</td>
<td>Black</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td>1</td>
<td>White</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td>2</td>
<td>Red</td>
<td>Supply +24Vdc</td>
</tr>
<tr>
<td>3</td>
<td>Blue</td>
<td>Supply 0Vdc</td>
</tr>
</tbody>
</table>

---

For all IDEM switches the NC circuits are closed when the guard is closed and the actuator present
IDECODE - Coded Non Contact - Type: SPC

Coded Magnetic Actuation  Switching Tolerance up to 14mm

Will operate with most Safety Relays  Specified to 80C but designed to work up to 100C

Universal fitting - established 22mm fixing footprint suitable for most general applications.

Withstands environments where high humidity or hose down is required.

Durable polyester housing.

Wide 14mm sensing and high tolerance to misalignment.

Up to: PLe ISO 13849-1 SIL 3 EN 62061 Cat 4 EN 954-1 2NC 1NO circuits - High switching life - no moving parts

Quick connect versions.

Quick Connect (QC) M12 8 way Male Plug (Pin view from switch)

Flying Lead Colours: 8 Orange 5 Brown 4 Yellow 6 Green 7 Black 1 White 2 Red 3 Blue

Circuit (Actuator Present): Auxiliary NO or NC  Auxiliary NO or NC  Safety NC2 +ve Safety NC2 -ve Safety NC1 +ve Safety NC1 -ve Supply +24Vdc Supply 0Vdc

Output Types: 200mA Max. 24Vdc 200mA Max. 24Vdc 200mA Max. 24Vdc 100mA Max. 24Vdc 100mA Max. 24Vdc

Solid State: 10% 10% 10% 10% 10%

Standards
EN1088  IEC 60947-5-3  EN 62041-4
EN 954-1  ISO 13849-1  EN 62061  EN 954-1  UL508

Safety Classification and Reliability Data:
Switching Reliability: 3.3 x 10^8 operations at 100mA load
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
Proof Test Intervals (Life): 47 years
MTTFd: 470 years
Safety Channel 1 NC: 24V dc 0.2 A Max. Rating
Safety Channel 2 NC: 24V dc 0.2 A Max. Rating
Minimum switched current: 10V, dc 1mA
Dielectric withstand: 2500V ac
Insulation Resistance: 100 Mohms
Recommended setting gap: 5mm
Switching Distance: 10 mm Close
(Target to target)
Tolerance to misalignment: 5 mm in any direction from 5 mm setting gap
Switching frequency: 1.0 Hz maximum
Approach speed: 200mm/m., to 1000mm/s.
Body Material: UL approved polyester
Temperature Range: -25 +80C
Enclosure Protection: IP69K IPE7
Shock Resistance: IEC 68-2-27 11ms 30g
Vibration Resistance: IEC 68-2-6 10-55 Hz, 1mm
Cable Type: PVC or 6 or 8 core 6mm O.D.
Mounting Bolts: 2 x M4 Tightening torque 1.8 Nm
Mounting Position: Any

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

For all IDEM switches the NC circuits are closed when the guard is closed and the actuator present

Note: 2NC 1NO versions have 2NC Safety and 1NO Auxiliary Circuits
3NC versions have 2NC Safety and 1NC Auxiliary Circuits
Available without LED if required
Coded Magnetic Actuation  Switching Tolerance up to 14mm

Slim fitting suitable for all industry applications.
Easy to install within narrow frame structures.
Durable polyester housing.
Wide 14mm sensing and high tolerance to misalignment.
LED indication
Up to: PLe ISO 13849-1 SIL 3 EN 62061 Cat 4 EN 954-1
2NC 1NO circuits - High switching life - no moving parts
Quick connect versions.

Connection example - coded switches

Quick Connect (QC) M12 8 way Male Plug
(Pin view from switch)

<table>
<thead>
<tr>
<th>Quick Connect Lead</th>
<th>Circuit (Actuator Present)</th>
<th>Output Types Solid State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flying Lead Colours</td>
<td>Auxiliary NO or NC</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td>8 Orange</td>
<td>Auxiliary NO or NC</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td>5 Brown</td>
<td>Safety NC2 +ve</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td>4 Yellow</td>
<td>Safety NC2 -ve</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td>6 Green</td>
<td>Safety NC1 +ve</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td>7 Black</td>
<td>Safety NC1 -ve</td>
<td>Supply 24Vdc +/- 10%</td>
</tr>
<tr>
<td>1 White</td>
<td>Supply +24Vdc</td>
<td>Supply 24Vdc +/- 10%</td>
</tr>
<tr>
<td>2 Red</td>
<td>Supply 0Vdc</td>
<td></td>
</tr>
<tr>
<td>3 Blue</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Specified to 80C but designed to work up to 100C.
Will operate with most Safety Relays

Three switches connected in series to an SCR - 2 or SCR - 3 to give Dual Channel monitoring with auto start and contactor feedback check. Optional auxiliary circuits provide for remote signalling from each switch.

Sales Number  Type  Cable Length  Circuits
115001  Idecode CPC  2M  2NC
115002  Idecode CPC  5M  2NC
115003  Idecode CPC  10M  2NC
115004  Idecode CPC  QC-M12  2NC
115005  Idecode CPC  2M  2NC  1NO
115006  Idecode CPC  5M  2NC  1NO
115007  Idecode CPC  10M  2NC  1NO
115008  Idecode CPC  QC-M12  2NC  1NO

Available without LED if required

For all IDEM switches the NC circuits are closed when the guard is closed and the actuator present.
Coded Magnetic Actuation  Switching Tolerance up to 14mm

Slim fitting suitable for all industry applications.
Wide 14mm sensing high tolerance to misalignment.
LED indication - no moving parts - survives shock and vibration
Up to: PLe ISO 13849-1 SIL 3 EN 62061 Cat 4 EN 954-1
2NC 1NO circuits - High switching life - no moving parts
Quick connect versions.

<table>
<thead>
<tr>
<th>Quick Connect (QC)</th>
<th>Flying Lead Colours</th>
<th>Circuit (Actuator Present)</th>
<th>Output Types Solid State</th>
</tr>
</thead>
<tbody>
<tr>
<td>M12 8 way Male Plug (Pin view from switch)</td>
<td>Orange</td>
<td>Auxiliary NO or NC</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td></td>
<td>Brown</td>
<td>Auxiliary NO or NC</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td></td>
<td>Yellow</td>
<td>Safety NC2 +ve</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td></td>
<td>Green</td>
<td>Safety NC2 -ve</td>
<td>200mA Max. 24Vdc</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>Safety NC1 +ve</td>
<td>Supply 24Vdc +/- 10%</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>Safety NC1 -ve</td>
<td>Supply 24Vdc +/- 10%</td>
</tr>
<tr>
<td></td>
<td>Red</td>
<td>Supply +24Vdc</td>
<td>Supply 24Vdc +/- 10%</td>
</tr>
<tr>
<td></td>
<td>Blue</td>
<td>Supply 0Vdc</td>
<td>Supply 24Vdc +/- 10%</td>
</tr>
</tbody>
</table>

Connection example - coded switches

One Switch connected to an SCR-2 or SCR-3 to give Dual Channel monitoring with manual start and contactor feedback check.

Standards
EN6098, IEC 60947-5-3 EN 6204-1
ISO 13849-1 EN62061 EN 954-1 UL508

Safety Classification and Reliability Data:
Switching Reliability
3.3 x 10^9 operations at 100mA load 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
PHM
2.5 x 10^6
Proof Test Interval (Life)
47 years
MTTFd
470 years
Safety Channel 1 NC
24V dc 0.2 A Max. Rating
Safety Channel 2 NC
24V dc 0.2 A Max. Rating
Safety Channel 3 NO
24V dc 0.2 A Max. Rating
Minimum switched current
10V, dc 1mA
Dielectric withstand
250V ac
Insulation Resistance
100 Megohms
Recommended setting gap
5mm
Switching Distance:
(10mm Close, 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
UL approved polyester
Temperature Range
-25 - +80°C
Enclosure Protection
IP69K IPE6
Shock Resistance
IEC 68-2-27 11ms 30g
Vibration Resistance
IEC 68-2-6 10-55 Hz 1mm
PVC 6 or 8 core 6mm O.D.
Mounting Bolts
2 x M4 Tightening torque 1.0Nm
Mounting Position
Any

Available without LED if required
For all IDEM switches the NC circuits are closed when the guard is closed and the actuator present

www.idemsafety.com
Coded Magnetic Actuation  Switching Tolerance up to 10mm

Cylindrical fitting suitable for all industry applications.
Easy to install - M30 threaded body - easy to set
Wide 10mm sensing
Robust, suitable for harsh environments
Can be flush mounted
LED indication
Up to: PLc ISO 13849-1 SIL 3 EN 62061 Cat 4 EN 954-1
2NC 1NO circuits - High switching life - no moving parts
Quick connect versions.

Connection example - coded switches

EN954-1:
One switch to one Safety Relay - Cat.4
Multiple switches to one Safety Relay - Cat.3.

Quick Connect (QC)
M12 8 way Molex Plug
(Pin view from switch)

Flying Lead Colours
Circuit (Actuator Present)
Output Types Solid State

<table>
<thead>
<tr>
<th>Number</th>
<th>Type</th>
<th>Cable Length</th>
<th>Circuits</th>
</tr>
</thead>
<tbody>
<tr>
<td>116001</td>
<td>idecode RPC</td>
<td>2M</td>
<td>2NC</td>
</tr>
<tr>
<td>116002</td>
<td>idecode RPC</td>
<td>5M</td>
<td>2NC</td>
</tr>
<tr>
<td>116003</td>
<td>idecode RPC</td>
<td>10M</td>
<td>2NC</td>
</tr>
<tr>
<td>116004</td>
<td>idecode RPC</td>
<td>QC-M12</td>
<td>2NC</td>
</tr>
<tr>
<td>116005</td>
<td>idecode RPC</td>
<td>2M</td>
<td>2NC 1NO</td>
</tr>
<tr>
<td>116006</td>
<td>idecode RPC</td>
<td>5M</td>
<td>2NC 1NO</td>
</tr>
<tr>
<td>116007</td>
<td>idecode RPC</td>
<td>10M</td>
<td>2NC 1NO</td>
</tr>
<tr>
<td>116008</td>
<td>idecode RPC</td>
<td>QC-M12</td>
<td>2NC 1NO</td>
</tr>
<tr>
<td>116105</td>
<td>idecode RPC</td>
<td>2M</td>
<td>3NC</td>
</tr>
<tr>
<td>116106</td>
<td>idecode RPC</td>
<td>5M</td>
<td>3NC</td>
</tr>
<tr>
<td>116107</td>
<td>idecode RPC</td>
<td>10M</td>
<td>3NC</td>
</tr>
<tr>
<td>116108</td>
<td>idecode RPC</td>
<td>QC-M12</td>
<td>3NC</td>
</tr>
</tbody>
</table>

Note: 2NC 1NO versions have 2NC Safety and 1NO Auxiliary Circuits
3NC versions have 2NC Safety and 1NC Auxiliary Circuits

Available without LED if required
Coded Non Contact - Type: KOBRA CODE - KPC

Coded Magnetic Actuation  Switching Tolerance up to 10mm  Plastic Housing
Will operate with most Safety Relays  Front and End Actuation

Application:
IDEK KPC Coded Non Contact switches are designed to interlock hinge, sliding or removal guard doors. They have an industry standard fixing and are specifically advantageous when:

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:
PLc ISO 13849-1  SIL 3 EN 62061  Cat.4 EN 954-1

Features:
Industry housing shape 52mm wide  98mm long  40mm fixing
2NC 1NO semiconductor outputs for connection to safety relay
Visual LED indication of switch status
Fully encapsulated sealing and pre - wired 2m., 5m., or 10m. cable
M12 8 way Quick connect version - flying lead 150mm

Sensing principle:

Standards EN1088 IEC 60947-5-3  EN 6204-1
ISO 13849-1 EN 62061  EN 954-1  UL508

Safety Classification and Reliability Data:
Switching Reliability 3.3 x 10^6 operations at 100mA load
up to Category 4 with Safety Relay
EN 954-1
ISO 13849-1
EN 62061

Recommended setting gap 5mm

Safety Data - Annual Usage

PFHd
2.52 x 10^6

Proof Test Interval (LIF): 47 years
MTTFd 470 years

Safety Channel 1 NC
24V dc 0.2 A Max. Rating
Safety Channel 2 NC
24V dc 0.2 A Max. Rating
Safety Channel 3 NO
24V dc 0.2 A Max. Rating

Minimum switched current
10V dc 1mA

Dielectric withstand 250V ac
Insulation Resistance 100 Mohms

Switching Distance: 5mm in any direction from 5mm setting gap
(Target to target)

Tolerance to misalignment

Approach speed
200mm/m. to 1000mm/s.

Body Material
UL approved polyester

Temperature Range
-25 +60C

Enclosure Protection
IP67 (NEMA 6)

Shock Resistance
IEC 68-2-17 11ms 30g

Vibration Resistance
IEC 68-2-6 10-55 Hz. 1mm

Cable Type
PVC 8 core 6mm O.D.

Mounting Bolts
2 x 5M Tightening torque 1.0 Nm

Mounting Position
Any

Sales
Number
120001
120002
120003
120004
120005
120006
120007
120008
120009
120012

Type
Idcode KPC
Idcode KPC
Idcode KPC
Idcode KPC
Idcode KPC
Idcode KPC
Idcode KPC
Idcode KPC
Idcode KPC
Idcode KPC

Conduit or cable exit
Pre-wired 2m.  End  2NC 1NO
Pre-wired 5m.  End  2NC 1NO
Pre-wired 10m.  End  2NC 1NO
Pre-wired 2m.  Left  2NC 1NO
Pre-wired 5m.  Left  2NC 1NO
Pre-wired 10m.  Left  2NC 1NO
Pre-wired 2m.  Right  2NC 1NO
Pre-wired 5m.  Right  2NC 1NO
Pre-wired 10m.  Right  2NC 1NO
QC M12  8 way 150mm  End  2NC 1NO

Circuits