

Tongue Interlock Safety Switch Type: IDIS-1

FEATURES:

IDEM IDIS-1 Compact Safety Interlock switches are designed to provide position interlock detection for small moving guards.

They are designed to fit to the leading edge of sliding, hinged or lift off machine guards.

The rugged Stainless Steel actuator profile is designed to match a cam mechanism to provide a positively operated not easily defeatable interlock mechanism.

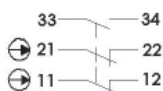
The compact body, 22mm fixing profile and rotatable head make them easy to install where space is restricted.

A Plastic Flexible Actuator is available for tight radius guards.

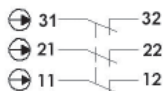
Contact blocks are replaceable with optional slow or snap break operation.

CONTACT BLOCK OPTIONS:

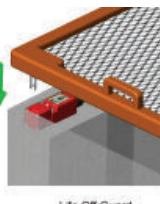
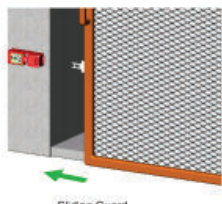
Slow Make Break 2NC 1NO



Slow Make Break 3NC



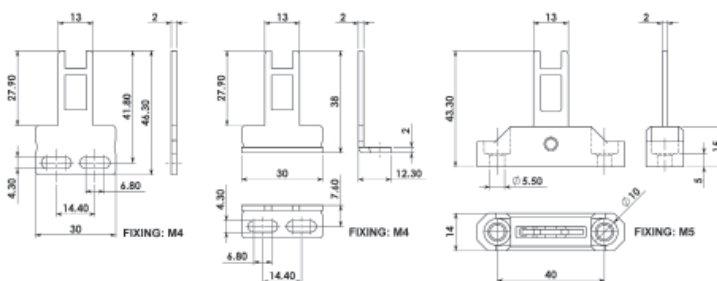
Snap Action 1NC 1NO



ACTUATOR OPTIONS:



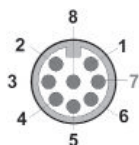
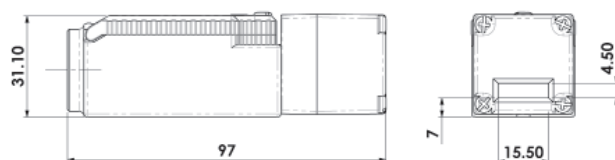
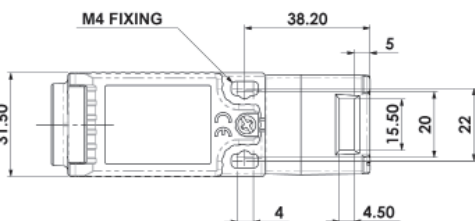
ACTUATOR DIMENSIONS:



Standards: ISO14119 EN60947-5-1 EN60204-1
ISO13849-1 EN62061 UL508

Safety Classification and Reliability Data:

Mechanical Reliability B10d	2.5 x 10 ⁶ operations at 100mA load
ISO13849-1	Up to PLe depending upon system architecture
EN62061	Up to SIL3 depending upon system architecture
Safety Data – Annual Usage	8 cycles per hour/24 hours per day/365 days
	MTTFd 356 years
Utilization Category	AC15 A300 3A
Thermal Current	10A
Rated Insulation/Withstand Voltages	600Vac/2500Vac
Travel for Positive Opening	6mm
Actuator Entry Minimum Radius	175mm Standard 100mm Flexible
Maximum Approach/Withdrawal Speed	600mm/s
Body Material	Polyester
Enclosure Protection	IP67
Vibration	IEC 68-2-6 10-55Hz + 1Hz
	Excursion 0.35mm 1 octave/min
Conduit Entry	Various (See Sales Number)
Fixing	2 x M4



Switch Circuit	Quick Connect (QC) M12 8 Way Male (on Flying Lead 250mm) Pin View from Switch
11/12	1 7
21/22 or 23/24	6 5
33/34 or 31/32	4 3



FEMALE QC LEADS	LENGTH	SALES NUMBER
M12 8 Way	5m (15ft)	140101
M12 8 Way	10m (30ft)	140102

PRODUCT	CONTACTS	SALES NUMBER		
		M20	1/2" NPT	QC M12 8 WAY
IDIS-1 Switch	2NC 1NO	190050	190051	190053
IDIS-1 Switch	3NC	190054	190055	190057
IDIS-1 Switch	1NC 1NO Snap	190058	190059	190061
Actuator	Flat	Add F to Sales Number		
Actuator	Angled	Add A to Sales Number		
Actuator	Plastic Flexible	Add PF to Sales Number		

Gold Plated Contacts available for low power circuits (5V 5mA).
Add GC to Sales Number e.g. 190050-GC

Tongue Interlock Safety Switch Type: INCH-1

FEATURES:

IDEM INCH-1 Compact Safety Interlock switches are designed to provide position interlock detection for small moving guards.

They are designed to fit to the leading edge of sliding, hinged or lift off machine guards.

The rugged Stainless Steel actuator profile is designed to match a cam mechanism to provide a positively operated not easily defeated interlock mechanism.

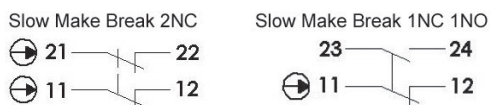
The compact body only 25mm wide with 18mm fixing centres and rotatable head make them easy to install where space is restricted.

The rotatable heads have dual actuator entry positions to give up to 8 different entry positions.

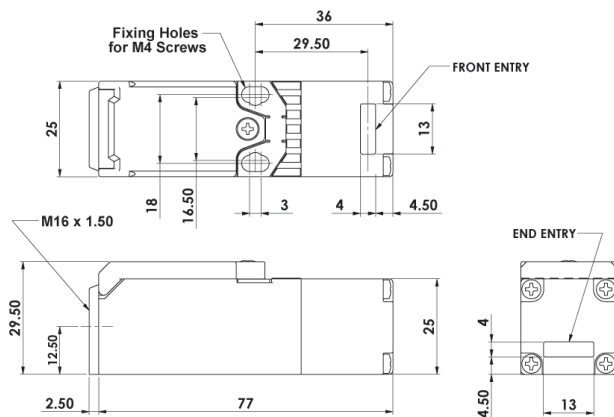
A Plastic Flexible Actuator is available for tight radius guards.

Contact blocks are replaceable 2NC or 1NC 1NO.

CONTACT BLOCK OPTIONS:



PRODUCT DIMENSIONS:



CONTACT OPERATION:

2NC:	4.0	0mm	1NC 1NO:	4.5	4.0	0mm
11/12	Open		11/12	Open		
21/22	Open		23/24		Open	

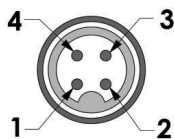


Stainless Steel Guide:

To assist with guard alignment IDEM recommend that you use the Stainless Steel Guide accessory (supplied with two stainless steel self-tapping screws).

SALES NUMBER - INCH 1 STAINLESS STEEL GUIDE

140179



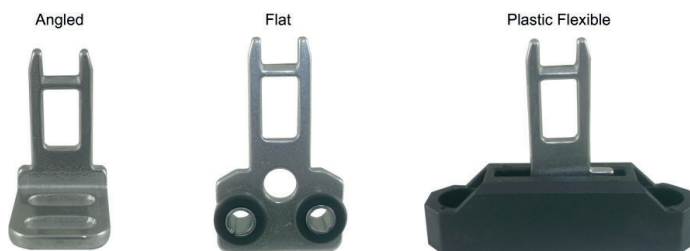
Quick Connect (QC)
M12 4 Way Male
(on Flying Lead 250mm)
Pin View from Switch

Switch Circuit	
11/12	1 3
21/22 or 23/24	4 2

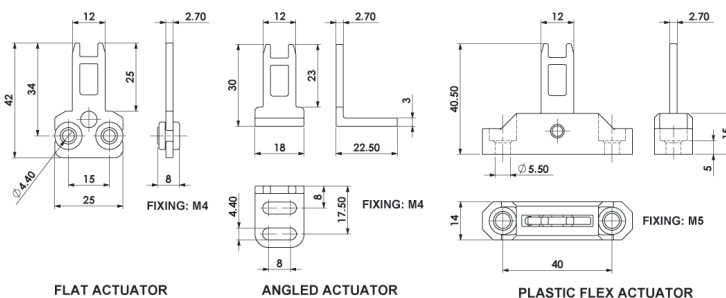
STAINLESS STEEL HEAD



INCH-1 ACTUATOR OPTIONS:



ACTUATOR DIMENSIONS:



Standards: ISO14119 EN60947-5-1 EN60204-1
ISO13849-1 EN62061 UL508

Safety Classification and Reliability Data:

Mechanical Reliability B10d
ISO13849-1
EN62061
Safety Data – Annual Usage
2.5 x 10⁶ operations at 100mA load
Up to PLE depending upon system architecture
Up to SIL3 depending upon system architecture
8 cycles per hour/24 hours per day/365 days
MTTFd 356 years

Utilization Category AC15 A300 3A
Thermal Current 10A
Rated Insulation/Withstand Voltages 600Vac/2500Vac
Travel for Positive Opening 6mm
Actuator Entry Minimum Radius 150mm Standard 100mm Flexible
Maximum Approach/Withdrawal Speed 600mm/s
Body Material UL approved glass fibre Polyester
Head Material Stainless Steel 316
Enclosure Protection IP67
Vibration IEC 68-2-6 10-55Hz + 1Hz
Excursion 0.35mm 1 octave/min
Conduit Entry M16
Fixing 2 x M4

PRODUCT	CONTACTS	SALES NUMBER	
		M16	QC M12 4 WAY
INCH-1 Switch	2NC	222001	222002
INCH-1 Switch	1NC 1NO	222003	222004
Actuator	Flat	Add F to Sales Number	
Actuator	Angled	Add A to Sales Number	
Actuator	Plastic Flexible	Add PF to Sales Number	

Gold Plated Contacts available for low power circuits (5V 5mA).
Add GC to Sales Number e.g. 222001-GC

KOBRA - Stainless Steel Switch Type: HYGIECAM MK1-SS

FEATURES:

IDEM's new MK1-SS Compact Safety Interlock switches are designed to provide position interlock detection for small moving guards.

They are designed to fit to the leading edge of sliding, hinged or lift off machine guards.

Mirror polished surface finish to RA10 makes the MK1-SS ideally suited to the food processing and packaging environments.

The rugged Stainless Steel actuator profile is designed to match a cam mechanism to provide a positively operated not easily defeatable interlock mechanism.

The compact body, 30mm wide with 22mm fixing centres and rotatable head make them easy to install where space is restricted.

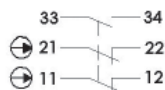
The rotatable heads have dual actuator entry positions to give up to 8 different entry positions.

A Plastic Flexible Actuator is available for tight radius guards.

Contact blocks are replaceable.

CONTACT BLOCK:

Slow Make Break 2NC 1NO



FUNCTIONAL SPECIFICATIONS:

Positive Break Contacts to EN60947-5-1

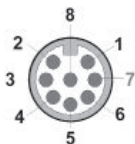
High Functional Safety to ISO13849-1

3 pole

Connects to most Safety Relays to give up to PLe Cat.4

Industry Standard Fitting:

98mm long 30mm wide 22mm fixing



Switch Circuit	Quick Connect (QC) M12 8 Way Male (on Flying Lead 250mm) Pin View from Switch
11/12	1 7
21/22	6 5
33/34	4 3
Earth	8



FEMALE QC LEADS	LENGTH	SALES NUMBER
M12 8 Way	5m (15ft)	140101
M12 8 Way	10m (30ft)	140102



IP69K



ACTUATOR OPTIONS:

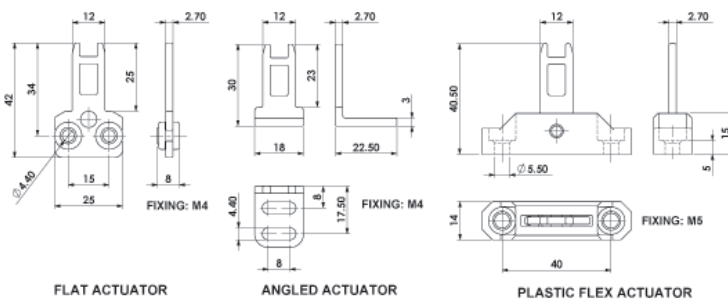
Angled

Flat

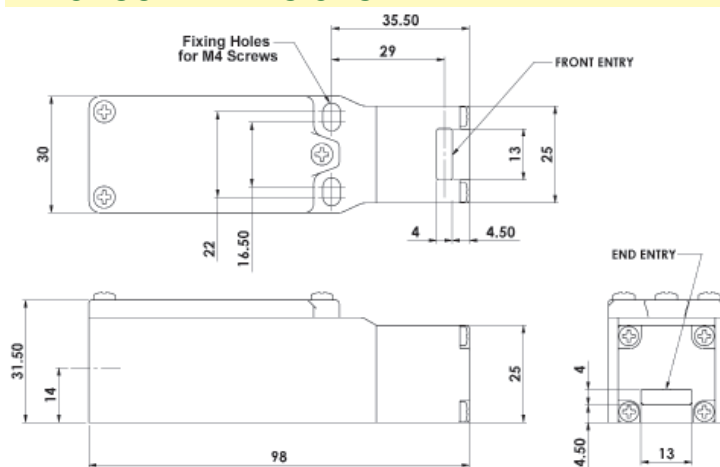
Plastic Flexible



ACTUATOR DIMENSIONS:



PRODUCT DIMENSIONS:



PRODUCT	CONTACTS	SALES NUMBER		
		M20	1/2" NPT	QC M12 8 WAY
MK1-SS Switch	2NC 1NO	224001	224002	224003
Actuator	Flat	Add F to Sales Number		
Actuator	Angled	Add A to Sales Number		
Actuator	Plastic Flexible	Add PF to Sales Number		

Gold Plated Contacts available for low power circuits (5V 5mA).
Add GC to Sales Number e.g. 224001-GC

KOBRA - Stainless Steel Switch Type: HYGIECAM MK1-SS

CONTACT OPERATION AT WITHDRAWAL OF ACTUATOR:



2NC 1NO 4.5 4.0 0mm

11/12	Open	
21/22	Open	
33/34		Open

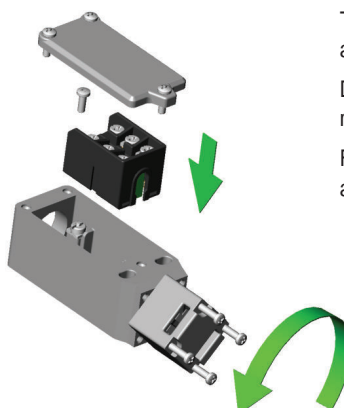


Stainless Steel Guide:

To assist with guard alignment IDEM recommend that you use the Stainless Steel Guide accessory (supplied with two x M3 stainless steel screws).

SALES NUMBER - MK1-SS STAINLESS STEEL GUIDE

140179-SS

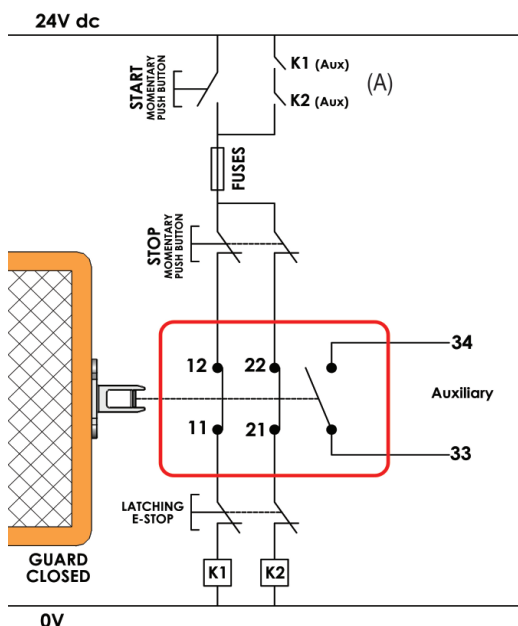


The head can be rotated to give 8 actuator entry positions.

Designed with a removable lid to fit replaceable contact blocks.

For extra durability flexible actuators are available.

APPLICATION EXAMPLE



Guard Door Interlocked - Dual Channel (Non Monitored)

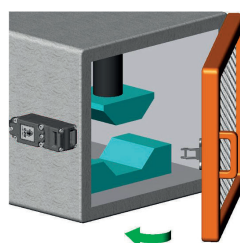
This system shows interlock switch circuits 11-12 and 21-22 configured to allow direct feed to contactor coils K1 and K2.

This provides Dual Channel wiring and a check of the contactor feedback circuits through the auxiliary contacts (A) of K1 and K2.

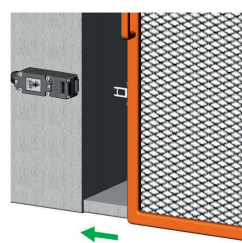
Opening the interlock switch or depressing the Emergency Stop will isolate power to the contactor coils.

Re-start can only occur providing the Guard is closed, and the Emergency Stop is reset.

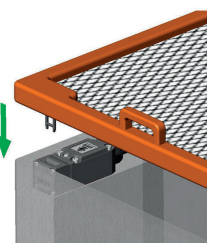
The system is shown with the Machine Stopped, the Guard Closed and the contactors able to be energised.



Hinged Guard



Sliding Guard



Lift Off Guard

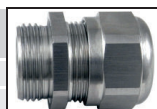
Standards: ISO14119 EN60947-5-1 EN60204-1
ISO13849-1 EN62061 UL508

Safety Classification and Reliability Data:

Mechanical Reliability B10d2.5 x 10⁶ operations at 100mA load
ISO13849-1 Up to PLe depending upon system architecture
EN62061 Up to SIL3 depending upon system architecture
Safety Data – Annual Usage 8 cycles per hour/24 hours per day/365 days
MTTFd 356 years
Utilization Category AC15 A300 3A
Thermal Current 10A
Rated Insulation/Withstand Voltages 600Vac/2500Vac
Travel for Positive Opening 6mm
Actuator Entry Minimum Radius 150mm Standard 100mm Flexible
Maximum Approach/Withdrawal Speed 600mm/s
Body Material Stainless Steel 316 (mirror polished finish)
Enclosure Protection IP69K
IEC 68-2-6 10-55Hz + 1Hz
Vibration Excursion 0.35mm 1 octave/min
Conduit Entry Various (See Sales Number)
Fixing 2 x M4
Mounting Position Any

IDEM recommend using our Stainless Steel 316 Gland with this switch.

STAINLESS STEEL 316 GLAND	SALES NUMBER
M20	140120
1/2" NPT	140121



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