## Emergency Stop Stations: **Z-Range with OSSD**

### APPLICATIONS & FEATURES:







## **EMERGENCY STOPS WITH Z-RANGE:**

Our range of emergency stop buttons with OSSD (Output Signal Switching Device) outputs is engineered to meet the highest standards of industrial safety. These buttons are available in both durable plastic and premium 316 grade stainless steel, making them suitable for a variety of environments, including those with stringent hygiene or corrosion resistance requirements.

Designed in compliance with international safety standards such as ISO 13850, EN/IEC 60947-5-5, and EN/ISO 13849-1, these emergency stop buttons ensure reliable and immediate cessation of machinery operations during critical situations. The integrated LED indicators on the lid provide clear, real-time status visibility, enabling rapid and effective response during emergencies.

Built to integrate seamlessly with safety circuits, these emergency stop buttons not only meet but exceed the rigorous demands of modern industrial safety protocols. Whether you opt for the plastic or stainless steel variant, you can trust that these buttons deliver reliability and durability in even the most challenging environments.

- Available in Polyester Plastic or Stainless Steel 316
- Reliable Button Mechanism for Long Lifecycle
- OSSD Outputs for Series Connectivity
- Quick Connect for Fast Installation and Maintenance

## **APPLICATION:**

Emergency Stop Switches are mounted on machines and sections of plant conveyors that cannot be protected by guards.

In combination with any dual channel safety monitoring controllers these switches can be used as emergency stop devices and monitored for up to Category 4/PLe to ISO13849-1.

### OPERATION:

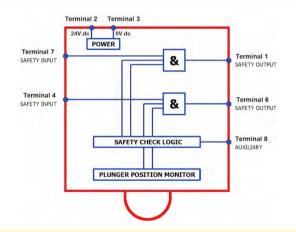
All Emergency Stop Switches conform to European Standard EN ISO 13850 and IEC 60947-5-5. They have a positive mechanical linkage between the switch contacts and the E-Stop Button.

The switches are mechanically latched and can then only be returned to the operational condition by twisting the button as required by EN ISO 13850 and IEC 60947-5-5.

## INTERNAL LED's (remove switch cover):



LED Function		Chatana
GREEN	RED	Status
ON	OFF	Inputs active, outputs enabled
OFF	ON	Outputs disabled
FLASHING	ON	Inputs missing, outputs disabled
OFF	FLASH 2Hz	Output fault (check for wiring short circuits)
OFF	FLASH 4Hz	Internal fault

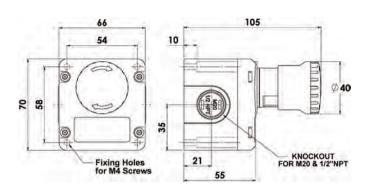


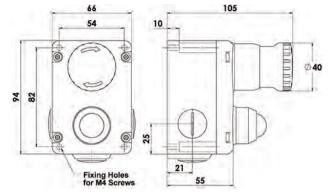
## **TECHNICAL SPECIFICATIONS:**

Standards			
IEC 60947-5-5 UL 60947-5-1 EN	ISO 13850		
Technical Data			
Rated Operating Voltage	24V DC -15% +10% Use SELV/PELV		
Power Consumption	0.7W		
Outputs Rated Voltage	24V DC		
Outputs max. / min.Current	0.2 A / 1mA		
Outputs Type	OSSD, PNP		
Inputs Rated Voltage / Current	24V DC / 2mA		
Auxiliary Signalling Output Rated	24V DC		
Auxiliary Signalling Output Max.	0.2 A PNP		
Mechanical Reliability B10d	1.5 x 10 6 operations		
Response Time Guard Open	60ms max.		
Response Time Inputs Off	20ms max.		
Operating Temperature	-20 / 50C		
Dielectric Withstand	250V AC		
Enclosure Protection	IP67 (Plastic) IP69K (S/Steel)		
	QC-M12 rated to IP67		
Body Material	Plastic or S/Steel 316		

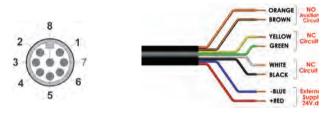
# Emergency Stop Stations: **Z-Range with OSSD**

## **DIMENSIONS:**

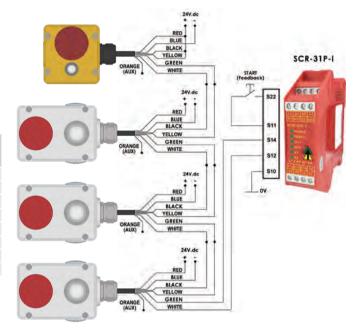




## **CONNECTIVITY:**



Quick Connect QC M12 8 Way Male Plug Pin view from Switch	Flying Lead Colour	Circuit (Actuator Present)
2	Red	Supply +24Vdc
3	Blue	Supply 0Vdc
7	Black	Safety Input 1
1	White	Safety Output 1
4	Yellow	Safety Input 2
6	Green	Safety Output 2
5		Not used
8	Orange	Auxiliary



## **ORDERING:**

ES-P-Z



**ESL-SSL-Z** 





SALES NUMBER	DESCRIPTION	MATERIAL		CONNECTIVITY
230300-Z	ES-P-Z (Left-Hand Connector)	Plastic		
230301-Z	ES-P-Z (Right-Hand Connector)	Plastic	2 OSSD / 1	QC-M12 8way 250mm
232300-Z	ESL-SSL-Z	Stainless Steel	AUX	Pigtail
232301-Z	ESL-SSLP-Z with Shroud	Stainless Steel		
		213230 01001		



SALES NUMBER	DESCRIPTION
140101	M12 Female 5m. 8 way
140102	M12 Female 10m. 8 way
140210-Z	Z-Range 8 ports, 8-pin M12 sockets, 24 VDC LED indicator(s)
140201	Patch Cord M12 Male to Female 2m
140202	Patch Cord M12 Male to Female 5m
140203	Patch Cord M12 Male to Female 10m
140206	T-Port M12 Connector
140207	M12 Short Plug

## Standard Duty Emergency Stops: ES-P (3 pole)

## **DESCRIPTION & FEATURES:**

IDEM ES-P Standard Duty Emergency Stop Switches have been designed to provide robust emergency stop protectionfor machines or exposed conveyors and are suitable for use within all industry sectors.

- Plastic bodies (IP67)
- Conformance to ISO13850, EN60947-5-1 and EN60947-5-5.
- A special lid safety trip mechanism means that the safety contacts will open if the lid is removed this provides an extra degree of anti-tamper.
- Button protection shroud versions with padlock holes to enable "Lock Off" in maintenance situations.
- 3 pole contact blocks provide positively operated switch contacts.







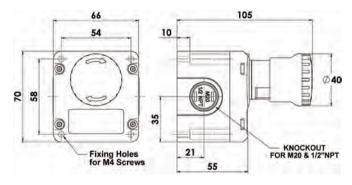
TYPE: ES-P (Plastic) Knock out for plastic version

SALES NUMBER	TYPE	CONDUIT ENTRY	CONTACTS
230001	ES-P	Knockout M20 / 1/2"NPT	2NC 1NO
230002	ES-P	Knockout M20 / 1/2"NPT	3NC

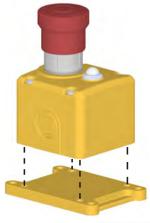
TYPE: ES-P(P) (Plastic) with button shroud Knock out for plastic version

SALES NUMBER	TYPE	CONDUIT ENTRY	CONTACTS
230003	ES-P (P)	Knockout M20 / 1/2"NPT	2NC 1NO
230004	ES-P (P)	Knockout M20 / 1/2"NPT	3NC

### **DIMENSIONS:**



TYPE: ES-P (PLASTIC)



External Mounting base for ES-P plastic emergency stops. PN: 230110

EN60947-5-1 EN60947-5-5 EN62061

UL 60947-5-1 ISO13850 ISO13849-1

1.5 x 10<sup>6</sup> 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

Safety Classification and Reliability Data:

Mechanical Reliability B10d ISO13849-1

EN62061

Safety Data - Annual Usage

Enclosure/Cover Material

Polyester/Stainless Steel 316 IP Rating IP69K - Stainless Steel 316 IP67 - Plastic Mounting 4 x M4

Mounting Position Anv

2 x M20 or 2 x 1/2" NPT (by Sales Number) Conduit Entries Knock out for Plastic version (ES-P)

MTTFd 214 years

Tongue Settings Mounting M4 4.0Nm Lid T20 Torx M4 1.5Nm

Terminals 1.0Nm Ambient Temperature -25C +80C 10-500Hz 0.35mm Vibration Resistance 11ms 15g

Shock Resistance Weight 295g to 1000g Contact Type

EN60947-5-1 double break type Zb Snap Action up to 3NC (positive break) 1NO (Auxiliary)

Contact Material Silver

Clamp up to 2.5mm2 conductors Termination Rating Utilisation category AC15

Operational Rating Thermal Current (Ith) 10A Rated Insulation Voltage (U) 500V Withstand Voltage (Uimp) 2500V

Short Circuit Overload Protection Fuse externally 10A(FF)

# Standard Duty Emergency Stops: ES-SS (3 pole)

## **DESCRIPTION & FEATURES:**

IDEM ES-SS Standard Duty Emergency Stop Switches have been designed to provide robust emergency stop protection for machines or exposed conveyors and are suitable for use within virtually all industry sectors.

- Stainless Steel 316 Housing (IP69K).
- Conformance to ISO13850, EN60947-5-1 and EN60947-5-5.
- A special lid safety trip mechanism means that the safety contacts will open if the lid is removed this provides an extra degree of anti-tamper.
- Button protection shroud versions with padlock holes to enable "Lock Off" in maintenance situations.
- 3 pole contact blocks provide positively operated switch contacts.









TYPE: ES-SS Stainless Steel 316

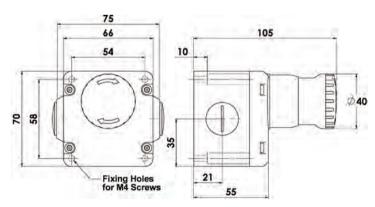
SALES NUMBER	TYPE	CONDUIT ENTRY	CONTACTS
231001	ES-SS	M20	2NC 1NO
231002	ES-SS	1/2"NPT	2NC 1NO
231003	ES-SS	M20	3NC
231004	ES-SS	1/2"NPT	3NC
Replacement Lid quote Sales Number: 231100			

TYPE: ES-SS(P) Stainless Steel 316 with button protection shroud and padlock holes

SALES NUMBER	TYPE	CONDUIT ENTRY	CONTACTS
231005	ES-SS(P)	M20	2NC 1NO
231006	ES-SS(P)	1/2"NPT	2NC 1NO
231007	ES-SS(P)	M20	3NC
231008	ES-SS(P)	1/2"NPT	3NC
Replacement Lid quote Sales Number: 231101			

Gold Plated Contacts available for low power circuits (5V 5mA). Ordering: Add GC to Part Number e.g. 230001-GC

## **DIMENSIONS:**



TYPE: ES-SS (STAINLESS STEEL 316)

EN60947-5-1 EN60947-5-5 EN62061 UL 60947-5-1 ISO13850 ISO13849-1

Safety Classification and Reliability Data: Mechanical Reliability B10d

ISO13849-1 EN62061

Safety Data - Annual Usage

Enclosure/Cover Material

IP Rating Mounting

Mounting Position

**Tongue Settings** 

Anv Conduit Entries

2 x M20 or 2 x 1/2" NPT (by Sales Number) Knock out for Plastic version (ES-P)

1.5 x 10<sup>6</sup> operations at 100mA load

Polyester/Stainless Steel 316

Up to PLe depending upon system architecture

Up to SIL3 depending upon system architecture

8 cycles per hour/24 hours per day/365 days

IP69K - Stainless Steel 316 IP67 - Plastic

Mounting M4 4.0Nm Lid T20 Torx M4 1.5Nm

Terminals 1.0Nm Ambient Temperature -25C +80C 10-500Hz 0.35mm Vibration Resistance Shock Resistance 11ms 15g

MTTFd 214 years

4 x M4

Weight 295a to 1000a Contact Type EN60947-5-1 double break type Zb Snap Action up to 3NC (positive break)

1NO (Auxiliary)

Contact Material Clamp up to 2.5mm<sup>2</sup> conductors Termination Rating Operational Rating

Utilisation category AC15 240V 3A Thermal Current (Ith) 10A Rated Insulation Voltage (U) 500V Withstand Voltage (Uimp) 2500V

Short Circuit Overload Protection Fuse externally 10A(FF)

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



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

## Heavy Duty Emergency Stops: GLES & GLES-SS

## **DESCRIPTION & FEATURES:**

IDEM GLES and GLES-SS Heavy Duty Emergency Stop Switches have been designed to provide robust emergency stop protection for machines or exposed conveyors, and are suitable for use within virtually all industry sectors.

Visual indication is available (large LEDs) to provide powerful indication of system and switch status from a distance, therefore enabling the rapid resetting of the system. Optional LED indication - Steady Green: Machine Running and Flashing Red: Machine Stopped.

Contact blocks provide up to 4 positively operated switch contacts. An optional Explosion Proof ATEX certified contact block version is available for potentially explosive areas.

- Heavy duty rugged die-cast metal body (painted yellow) or Stainless Steel 316 (Food Industry compatible).
- Conformance to ISO13850, EN60947-5-1 and EN60947-5-5.
- LED visual indication of status.
- All internal and external screws and fittings are Stainless Steel.
- Enclosure protection to IP67 washdown suitable.
- Easy to wire offering up to 4 conduit entry points for flexibility.



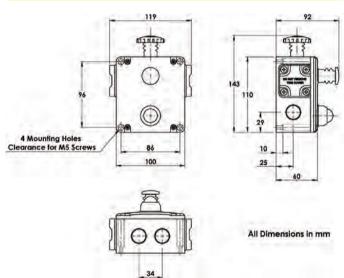


#### S/STEEL 316 SALES GLAND NUMBER M20 140120 1/2" NPT



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

## **DIMENSIONS:**



SALES NUMBER	TYPE	CONDUIT ENTRY	CONTACTS
146001	GLES	M20	4NC 2NO
146002	GLES	1/2"NPT	4NC 2NO
146003	GLES-Ex	3m 4 core Ex	1NC 1NO
146004	GLES-Ex	3m 8 core Ex	3NC 1NO
146005	GLES-Ex	3m 4 core Ex	2NC
146006	GLES-Ex	3m 8 core Ex	2NC 2NO
147001	GLES-SS	M20	4NC 2NO
147002	GLES-SS	1/2"NPT	4NC 2NO
147003	GLES-SS-Ex	3m 4 core Ex	1NC 1NO
147004	GLES-SS-Ex	3m 8 core Ex	3NC 1NO
147005	GLES-SS-Ex	3m 4 core Ex	2NC
147006	GLES-SS-Ex	3m 8 core Ex	2NC 2NO
A - 24Vdc		d Voltage Code to Sales Number (i.e. 146001 with 24Vdc LED	

Gold Plated Contacts available for low power circuits (5V 5mA). Ordering: Add GC to Part Number e.g. 146001-A-GC

## **TECHNICAL SPECIFICATIONS:**

EN60947-5-1 EN60947-5-5 EN62061 UL 60947-5-1 ISO13850 ISO13849-1

Up to SIL3 depending upon system architecture

Die-cast (painted yellow) or Stainless Steel 316

8 cycles per hour/24 hours per day/365 days

Safety Classification and Reliability Data:

Mechanical Reliability B10d 1.5 x 106 operations at 100mA load Up to PLe depending upon system architecture

ISO13849-1

EN62061

Safety Data - Annual Usage

Enclosure/Cover Material IP Rating

IP67 IP69K Mounting 4 x M5 Any

Mounting Position Conduit Entries

4 x M20 or 4 x 1/2" NPT (by Sales Number)

Tongue Settings Mounting M5 4.0Nm

Lid T20 Torx M4 1.5Nm

Terminals 1.0Nm -25C +80C

10-500Hz 0.35mm 11ms 15q

MTTFd 214 years

Ambient Temperature Vibration Resistance Shock Resistance

Weight

EX Contact Type

765g to 2050g 230V 4A (4-core) 230V 2.5A (8-core)

## Heavy Duty Emergency Stops: ESL-SS (4 pole)

## **DESCRIPTION & FEATURES:**

IDEM ESL-SS Standard Duty Emergency Stop Switches have been designed to provide robust emergency stop protection for machines or exposed conveyors, and are suitable for use within virtually all industry sectors.

- Stainless Steel 316 (IP69K) can be high pressure hosed with detergents at high temperature.
- Conformance to ISO13850, EN60947-5-1 and EN60947-5-5.
- A special lid safety trip mechanism means that the safety contacts will open if the lid is removed.
- Button protection shroud versions with padlock holes for "Lock Off" in maintenance situations.
- Optional 2-colour LED.





CONDUIT

ENTRY

M20

1/2"NPT

M20

1/2"NPT

M20

1/2"NPT



TYPE: ESL-SS(P) Stainless Steel 316 with Protection Shroud and Padlock Holes

SALES NUMBER	TYPE	CONDUIT	CONTACTS
_		ENIKI	
232009	ESL-SS(P)	M20	2NC 2NO
232010	ESL-SS(P)	1/2"NPT	2NC 2NO
232011	ESL-SS(P)	M20	3NC 1NO
232012	ESL-SS(P)	1/2"NPT	3NC 1NO
232013	ESL-SS(P)	M20	4NC
232014	ESL-SS(P)	1/2"NPT	4NC
Replacement Lid quote Sales Number: 232101			

Gold Plated Contacts available for low power circuits (5V 5mA). Add GC to Part Number e.g. 232001-GC

EXPLOSION PROOF MODELS ALSO AVAILABLE. PLEASE SEE PAGES 228 and 229.

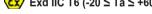
Replacement Lid quote Sales Number: 232100



Up to SIL3 depending upon system architecture







TYPE

**ESL-SS** 

ESL-SS

ESL-SS

ESL-SS

ESL-SS

FSL-SS

SALES

NUMBER

232001

232002

232003

232004

232005

232006





Standards: EN60947-5-1 EN60947-5-5 EN62061 UL 60947-5-1 ISO13850 ISO13849-1

CONTACTS

2NC 2NO

2NC 2NO

3NC 1NO

3NC 1NO

4NC

4NC

#### Safety Classification and Reliability Data:

Mechanical Reliability B10d 1.5 x 106 operations at 100mA load ISO13849-1 Up to PLe depending upon system architecture

EN62061

Safety Data - Annual Usage

8 cycles per hour/24 hours per day/365 days MTTFd 214 years Enclosure/Cover Material Stainless Steel 316 IP67 IP69K

IP Rating Mounting

Mounting Position

Any Conduit Entries 3 x M20 or 3 x 1/2" NPT (by Sales Number) Mounting M4 4.0Nm **Tongue Settings** 

Lid T20 Torx M4 1.5Nm Terminals 1.0Nm

Ambient Temperature -25C +80C Vibration Resistance 10-500Hz 0.35mm 11ms 15g Shock Resistance 1060g to 1190g Weight

EN60947-5-1 double break type Zb Contact Type Snap Action up to 4NC (positive break) 2NO (Auxiliary)

Contact Material Termination Rating Operational Rating Thermal Current (Ith) Rated Insulation Voltage (U) Withstand Voltage (Uimp)

Clamp up to 2.5mm2 conductors Utilisation category AC15

240V 3A 10A 500V 2500V

Short Circuit Overload Protection Fuse externally 10A(FF)

**IDEM** recommend their Stainless Steel 316 Gland with this switch.



S/STEEL 316	SALES
GLAND	NUMBER
M20	140120
1/2" NDT	1/10121





TYPE: ESL-SS(L) Stainless Steel 316 with 2-Colour LED

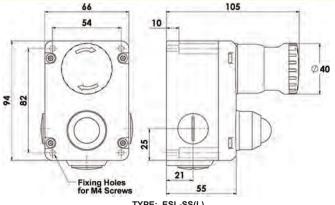
SALES NUMBER	TYPE	CONDUIT ENTRY	CONTACTS
232017	ESL-SS(L)	M20	2NC 2NO
232018	ESL-SS(L)	1/2"NPT	2NC 2NO
232019	ESL-SS(L)	M20	3NC 1NO
232020	ESL-SS(L)	1/2"NPT	3NC 1NO
232021	ESL-SS(L)	M20	4NC
232022	ESL-SS(L)	1/2"NPT	4NC
232023	ESL-SS(LP)	M20	2NC 2NO
232024	ESL-SS(LP)	1/2"NPT	2NC 2NO
232025	ESL-SS(LP)	M20	3NC 1NO
232026	ESL-SS(LP)	1/2"NPT	3NC 1NO
232027	ESL-SS(LP)	M20	4NC
232028	ESL-SS(LP)	1/2"NPT	4NC

ESL-SS(L) Replacement Lid: 232102- (A, B or C) ESL-SS(LP) Replacement Lid: 232103- (A, B or C) Steady Green/Flashing Red

A - 24Vdc B - 110Vac Steady Green/Steady Red AS - 24Vdc BS - 110Vac

Gold Plated Contacts available for low power Ordering: Add GC to Part Number e.g. 232017-GC

DIM	EN:	SIO	NS:



TYPE: ESL-SS(L)

**301** 

# Hygienic Emergency Stops Type: ESL-SS-WR (4 pole)

## **DESCRIPTION & FEATURES:**



## **OVERVIEW:**

The stainless steel Emergency Stop ESL-SS-WR is the latest addition to our hygienic product line. Designed specifically for stringent wash-down environments in the food, beverage, and pharmaceutical industries, this model meets the highest standards for hygiene and durability.

Constructed from 316-grade stainless steel with a mirror-polished finish, the ESL-SS-WR is easy to clean and completely non-absorbent, ensuring that a simple surface cleaning effectively removes all bacteria and germs. Its IP69K rating certifies its resistance to high-pressure,

high-temperature wash-downs, making it suitable for use in strict hygienic environments.

Furthermore, the ESL-SS-WR is engineered to resist external factors such as dents and scratches, which could threaten its hygienic integrity. This ensures a sealed and protected surface, maintaining its sanitary condition even in the most demanding applications.

- Stainless Steel 316 (IP69K) can be high pressure hosed with detergents at high temperature.
- Conformance to ISO13850, EN60947-5-1 and EN60947-5-5.
- Optional 2-colour LED.
- X-Ray and Metal detectable button material.
- Flat head screws for reducing potential food-traps.

## **APPLICATION:**

Emergency Stop Switches are mounted on machines and sections of plant conveyors that cannot be protected by guards.

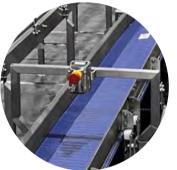
In combination with any dual channel safety monitoring controllers these switches can be used as emergency stop devices and monitored for up to Category 4/PLe to ISO13849-1.

## **OPERATION:**

All Emergency Stop Switches conform to European Standard EN ISO 13850 and IEC 60947-5-5. They have a positive mechanical linkage between the switch contacts and the E-Stop Button.

The switches are mechanically latched and can then only be returned to the operational condition by twisting the button as required by EN ISO 13850 and IEC 60947-5-5.





Installation on a conveyor in a food manufacturing facility.



## Suitable for use in Hygienic Design Zones

These are areas where equipment regularly and predictably comes in contact with food as it being produced. Food conveyors, mixers, nozzles and cooking surfaces are examples of Hygienic Design environments.



The button is designed using a special material that is both metal and x-ray detectable, for use in modern food production environments. Should the button be damaged and end up on the production line, it will be detected before entering the supply chain.

Flat screw heads removes the potential of a food trap within the "drive" section. The smooth surface area is easier to clean with rounded edges and sloped sides.

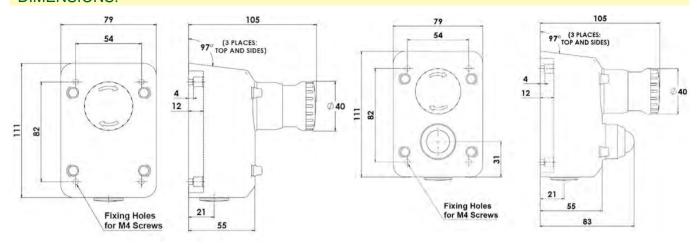




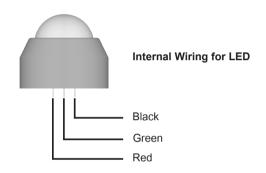
The ESL-SS-WR is comprised of mirror polished 316 stainless steel and combines the lid and body into a single part. This reduces the likelihood of food traps in the seam and the 10-degree angled surface ensures no liquid remains on the product at any time.

# Hygienic Emergency Stops Type: ESL-SS-WR (4 pole)

## **DIMENSIONS:**



## LED INDICATION:

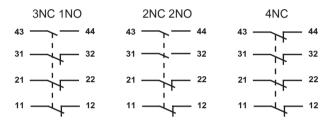


Black (or Terminal 2) is 0V (or Neutral for 110V and 230V ac versions). When power is applied to the Red wire (or Terminal 1), the LED will illuminate Red. When power is applied to the Green wire (or Terminal 3), the LED will illuminate Green.

GREEN ON	Run
RED ON	Stopped

## INTERNAL CONTACTS:

NC - Machine able to run



## **TECHNICAL SPECIFICATION:**

Standards		
IEC 60947-5-5 UL 60947-5-1 EN ISO 13850		
Technical Data		
Case Material	Stainless Steel 316	
Safety Contact type	IEC 60947-5-1 Double break Type Zb	
Contact Material	Silver	
Termination	Clamp up to 2.5 sq. mm conductors	
Rating	Utilisation Category : AC15	
Operational Rating	AC15 A300 240V. 3A /120V 6A. ac	
Thermal Current (Ith)Voltage	10A.	
Rated Insulation Voltage (Ui)	500V.	
Withstand Voltage (Uimp)	2500V	
Short Circuit Overload Protection	Fuse Externally 10A. (FF)	
Operating Temperature	-25C / 80C	
Enclosure Protection	IP69K Stainless Steel (NEMA 6)	

## **ORDERING:**

TYPE: ESL-SS-WR (Stainless Steel 316)

		•	•
SALES NUMBER	TYPE	CONDUIT ENTRY	CONTACTS
239001	ESL-SS-WR	M20	2NC 2NO
239002	ESL-SS-WR	1/2"NPT	2NC 2NO
239003	ESL-SS-WR	M20	3NC 1NO
239004	ESL-SS-WR	1/2"NPT	3NC 1NO
239005	ESL-SS-WR	M20	4NC
239006	ESL-SS-WR	1/2"NPT	4NC

TYPE: ESL-SSL-WR with LED (Stainless Steel 316)

SALES NUMBER	TYPE	CONDUIT ENTRY	CONTACTS
239017	ESL-SSL-WR	M20	2NC 2NO
239018	ESL-SSL-WR	1/2"NPT	2NC 2NO
239019	ESL-SSL-WR	M20	3NC 1NO
239020	ESL-SSL-WR	1/2"NPT	3NC 1NO
239021	ESL-SSL-WR	M20	4NC
239022	ESL-SSL-WR	1/2"NPT	4NC
Add Voltage Code to Sales Number			
Steady Green/Flashing Red A - 24Vdc B - 110Vac C - 230Vac			
Steady Green/Steady Red AS - 24Vdc BS - 110Vac CS - 230Vac			

**IDEM** recommend their Stainless Steel spacer kit and rubber mounting seal for improved hygiene. This accessory allows for easy cleaning behind the ESL-SS-WR.

SALES NUMBER	TYPE
239301	S/Steel Spacer Kit
239300	Rear Rubber Seal

**IDEM** recommend their Stainless Steel 316 Gland with this switch.



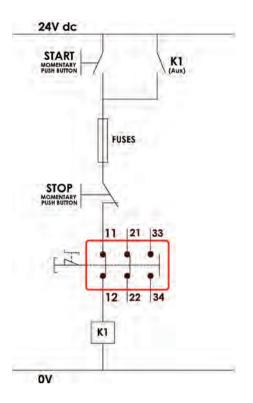
S/STEEL 316	SALES
GLAND	NUMBER
M20	140120
1/2" NPT	140121



# Application Information Emergency Stop Switches

## **APPLICATION 1:**





## Application 1: Single Channel E Stop and Stop/Start Circuit.

Used in applications with a lower risk, pressing the E Stop will stop the machine. The E Stop will latch and needs re-setting before the machine Start Button can be effective.

Pressing the Start button will cause the machine contactor K1 to close and latch via its own auxiliary contacts (K1 (Aux)).

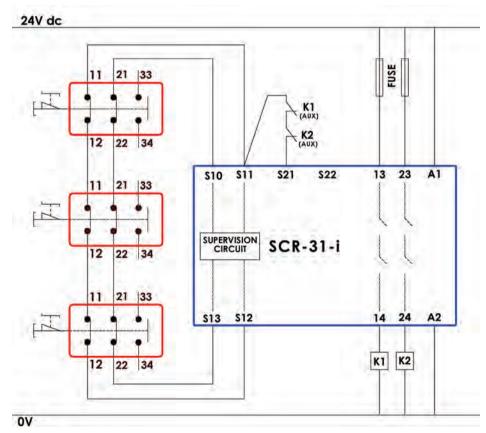
No wiring cross monitoring, all wiring should be protected and the components chosen for correct durability and ratings.

Regular checks of the Safety Function is required.

Stop Category 0 EN60204-1

## **APPLICATION 2:**





Application 2: Dual Channel E-Stops in Series with wiring cross-monitoring and auto reset.

Multiple E-Stop switches connected dual circuit to a Safety Relay.

Generally used on machines with a medium risk. Activating any E Stop Switch will open the outputs from contactors K1 and K2 and stop the machine. The E Stop switch will latch. Re-setting the E Stop switch will enable the machine contactors K1 and K2 to close providing the feedback circuit check from both contactors (K1 K2 Aux) is closed. Due to series wiring and multiple devices, not all contact or wiring faults will be detected before the next start up.

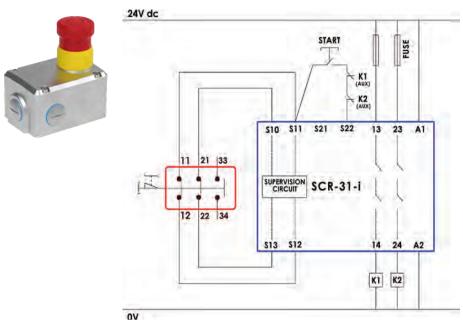
Regular checks of the Safety Function is required.

Stop Category 0

EN60204-1

# Application Information Emergency Stop Switches

## **APPLICATION 3:**



Application 3: Dual Channel E Stop with wiring cross-monitoring and external manual reset.

Single E-Stop switch connected dual circuit to a Safety Relay.

Generally used on machines with a high risk.

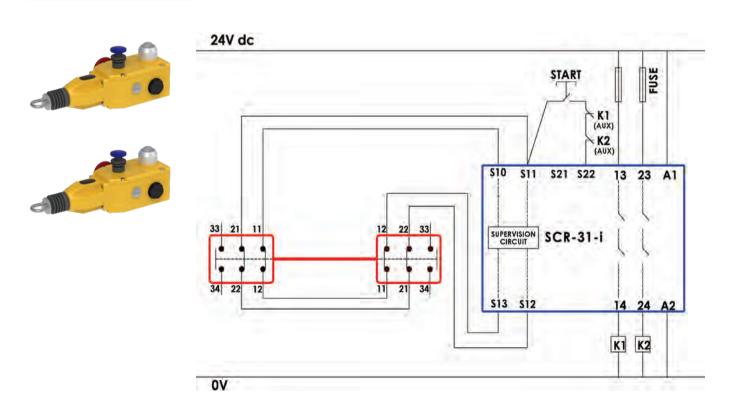
Activating the E Stop Switch will open contactors K1 and K2 and stop the machine.

The E Stop switch will latch and need to be reset before the Start Button can be effective.

Pressing the Start Button will cause the machine contactors K1 and K2 to close providing the feedback circuit check from both contactors (K1 K2 Aux) is closed. A failure of one of the switching elements of the E Stop switch or wiring short circuit will be detected at least before the next start up.

Stop Category 0 EN60204-1

## **APPLICATION 4:**



## Application 4: Dual Channel Rope Pull E-Stop Switches with wiring cross-monitoring and external manual reset.

Generally used on conveyor applications with a high risk.

Activating the Rope Pull Switch will open the Safety Relay outputs and stop the machine.

The Rope Pull Switches, (one or both), will latch and need re-setting before the Start Button can be effective.

Pressing the Start button will cause the machine contactors K1 and K2 to close providing the feedback circuit check from both contactors (K1 K2 Aux) is closed. A failure of one of the switching elements of the E-Stop switch or wiring short circuit will be detected at least before the next start up.

Stop Category 0 EN60204-1