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

APPLICATIONS & FEATURES:

ES-P-Z

ESL-SS-Z

ESL-SS(P)-Z

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.

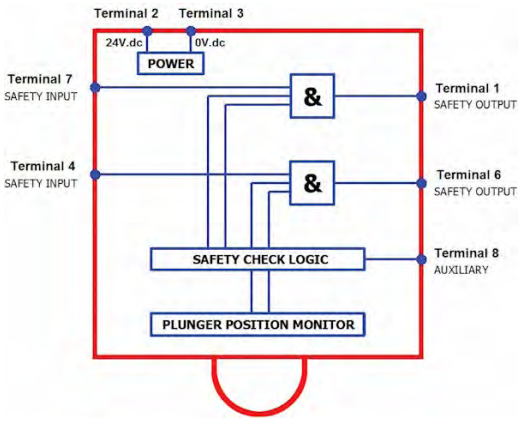
The switches are mechanically latched and can then only be returned to the operational condition by twisting the button as required by EN ISO 13850 and IEC 60947-5-5.

INTERNAL LED's (remove switch cover):

Green LED

Red LED

LED Function		Status
GREEN	RED	
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

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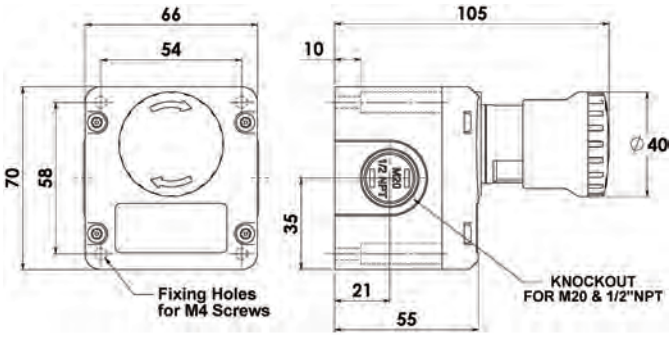
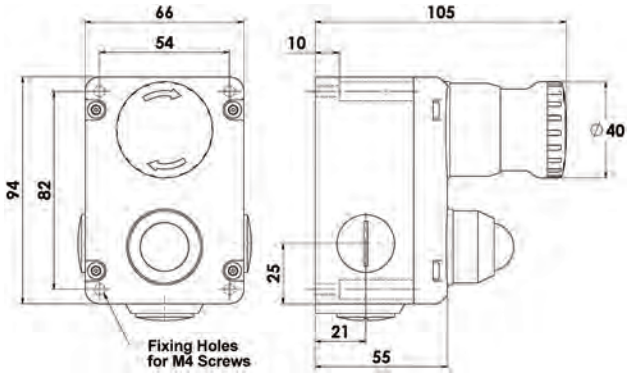
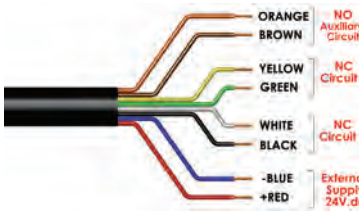
DIMENSIONS:

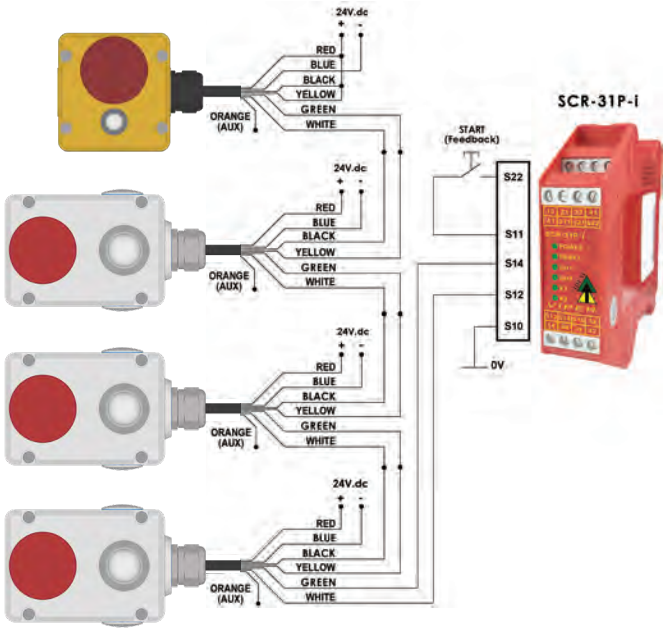




CONNECTIVITY:



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

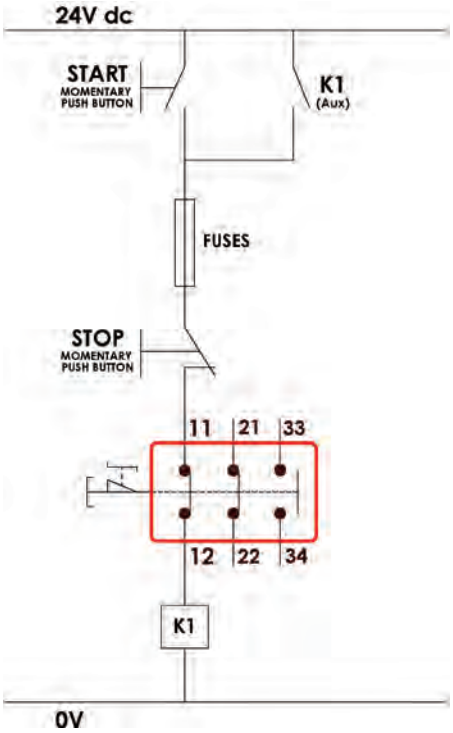
ESL-SSLP-Z

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

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

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.

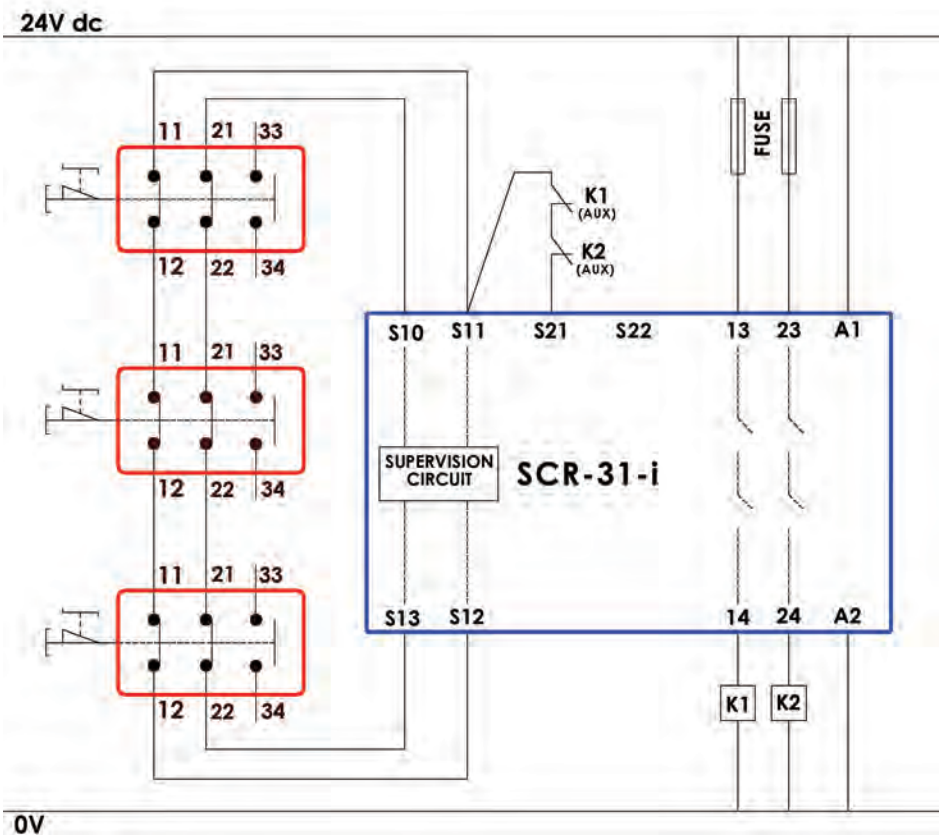
Pressing the Start button will cause the machine contactor K1 to close and latch via its own auxiliary contacts (K1 (Aux)).

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.

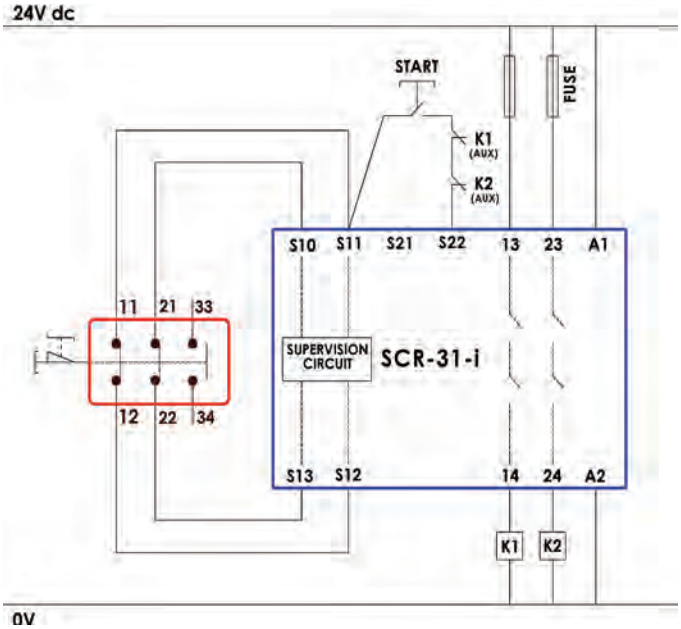
Multiple E-Stop switches connected dual circuit to a Safety Relay.

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.

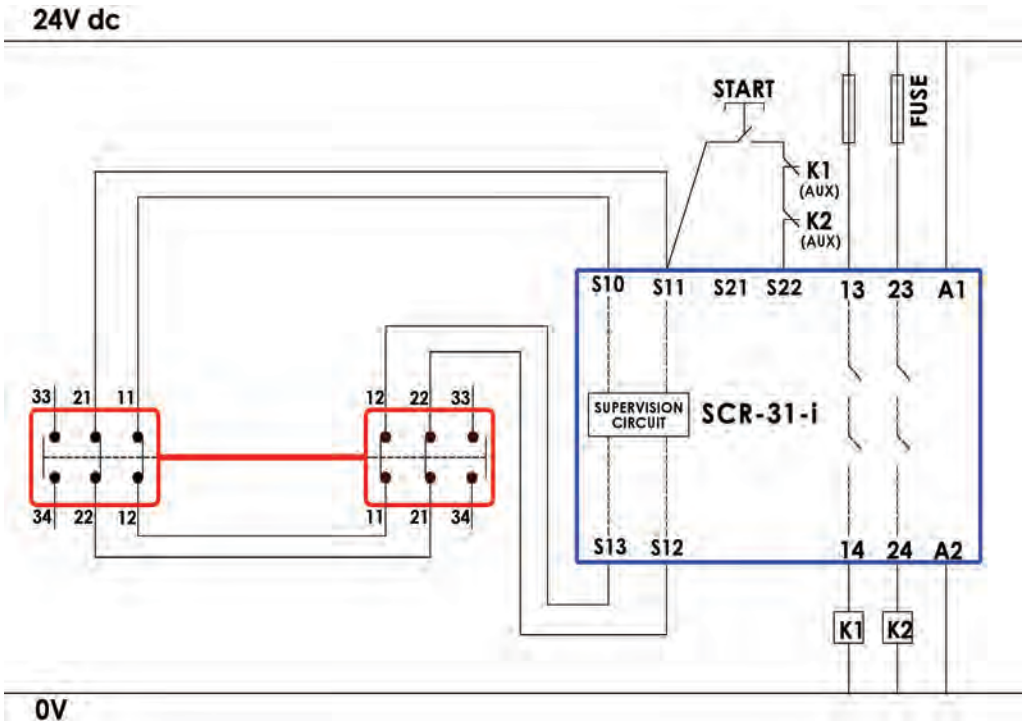
Activating the E Stop Switch will open contactors K1 and K2 and stop the machine.

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