IDEC

Think Automation and beyond...

E-Stop Switches
The Ultimate in Safety

PROTECTING PEOPLE & PRODUCTIVITY

For more than 70 years, IDEC has produced reliable and high-quality emergency stops, making the point of contact between humans and machines easy, safe and secure. By developing products that enhance the safety and well-being of workers and machinery, IDEC innovations have helped shape the global industrial automation marketplace. This includes collaboration with various agencies to increase international standardization within the manufacturing industry.

IDEC engineers spend years researching and testing to develop the ideal shape, size and feel for each emergency stop switch. As a result, IDEC provides safe, efficient and comfortable E-stops for any machine or application that needs to meet established international and US requirements for workplace safety.

THE WORLD'S
SAFEST
EMERGENCY STOP
SWITCHES

IDEC emergency stop switches transformed the way E-stops are designed by utilizing exclusive "Safe Break Action" technology to ensure a machine will stop. By automatically turning off the machine when the contact block and actuator are improperly installed or damaged, all IDEC E-stops meet or exceed International safety standards (ISO 13850 and EN60947-5-5) and reduce the effects of these failures.

Underwriters Laboratories (UL) Category NISD and NISD2 ratings allow IDEC X-series and XW emergency stop devices to perform a Category 0 or Category 1 stop function as defined in the ANSI/NFPA79, "Electrical Standard for Industrial Machinery." These devices have also been investigated for functionality, fire and electrical shock safety
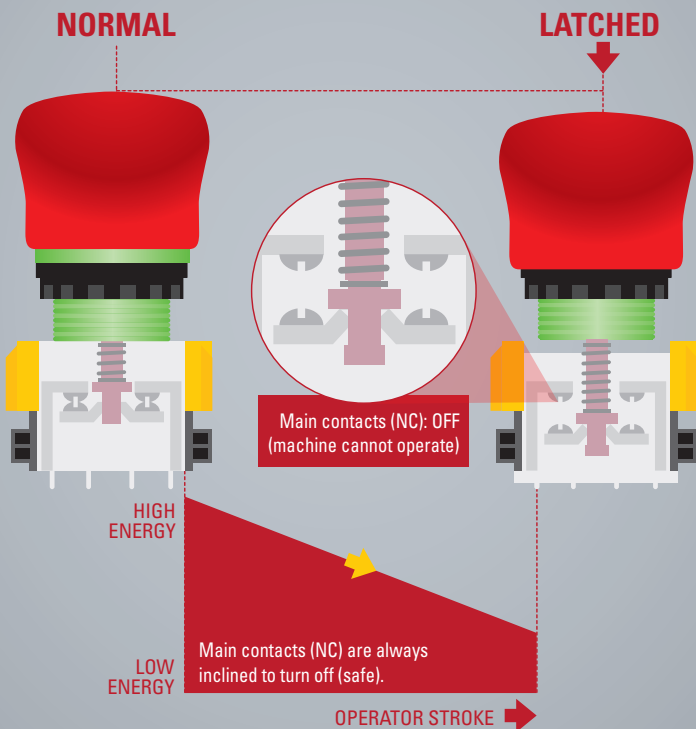
UL LISTED — EMERGENCY STOP DEVICE

c(UL)us

c ℛUℹus

CSA®

TÜV

CE

CCC(s)

Ex

IECEx — Class I Zone 1

OPERATOR
SAFETY
IS OUR PRIORITY

IDEC X-series switches use "Safe Break action," a unique reverse-energy structure that disconnects normally closed contacts, guaranteeing shut-off even if the emergency switch is damaged or the contact blocks separate.

- Conventional E-stops use spring pressure on Normally Closed (NC) contacts, which increases the likelihood of the e-stop failing in an unsafe condition

- Improper installation or excessive force may render them incapable of stopping a machine

- "Safe Break action" E-stops with reverse-energy structure always default to a safe condition
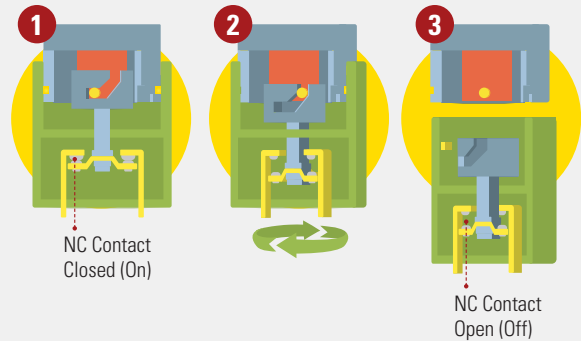
IDEC X-Series

With X series emergency stop switches, the potential energy level of the latched status is lower than that of normal status. In the event the switch is damaged due to excessive shocks, the NC contacts will turn off, thus stopping the machine (patented design).
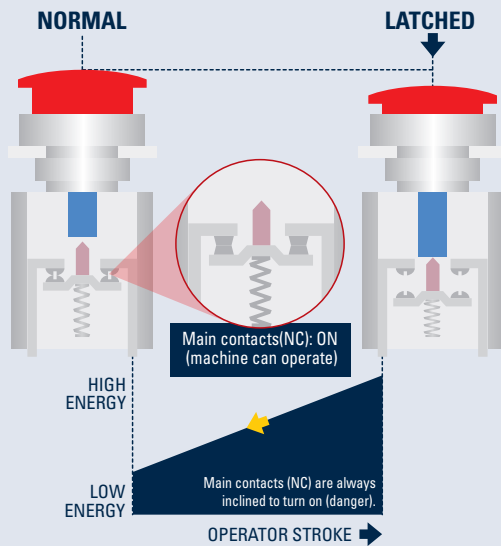
NORMAL   **LATCHED**

Main contacts (NC): OFF
(machine cannot operate)

HIGH ENERGY

LOW ENERGY

Main contacts (NC) are always inclined to turn off (safe).

OPERATOR STROKE

Fail-Safe Design

Normally Closed contacts are automatically opened if the contact block is not properly attached to the switch.

1   **2**   **3**

NC Contact
Closed (On)

NC Contact
Open (Off)

Conventional E-Stops

NORMAL   **LATCHED**

Main contacts(NC): ON
(machine can operate)

HIGH ENERGY

LOW ENERGY

Main contacts (NC) are always inclined to turn on (danger).

OPERATOR STROKE

Preventing accidental reset: Padlock E-stops

Developed to prevent unauthorized or accidental resetting of latched emergency stop switches by allowing the use of up to 12 personal padlocks, XN4E padlock-type E-stops increase operator safety during machine maintenance. By preventing any unauthorized resetting of the latched emergency stop switch, these switches make service safer to perform.

TWO-IN-ONE
E-STOPS
OFFER MORE

X-series emergency stops can be reset either by pulling or turning the operator (push-to-lock, pull/turn-to-reset). Traditional E-stops only offer a single reset option. With IDEC X-series E-stops, you get both options in one switch, providing an extra level of protection for workers when unforeseen events occur.

Turn Reset

Pull Reset

Space-saving designs

Designed with minimal behind-the-panel depths, there is an IDEC E-stop to fit even the shallowest panels.

actual size

19.5mm

27.9mm
Conventional emergency stop switch depth
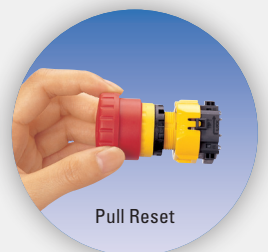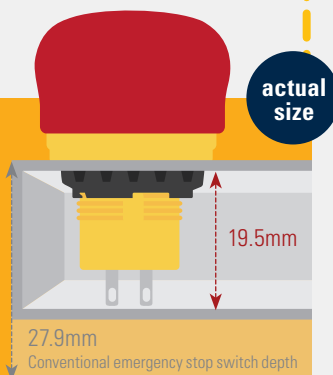
# AN E-STOP FOR EVERY
APPLICATION

IDEC E-stops can be used in any machine application requiring worker safety. Typical markets include, but are not limited to:

- Packaging
- Food & Beverage Processing
- Printing
- Pharmaceutical
- Chemical Processing
- Material Handling
- Machine Tools
- Plastics Processing

- Oil & Gas
- Petrochemical
- Paint Manufacturing & Paint Booths
- Semiconductor & Electronics Manufacturing
- Robotics
- Automotive
- People Moving

General Purpose E-Stop Switches

safe break technology
See previous page for details.
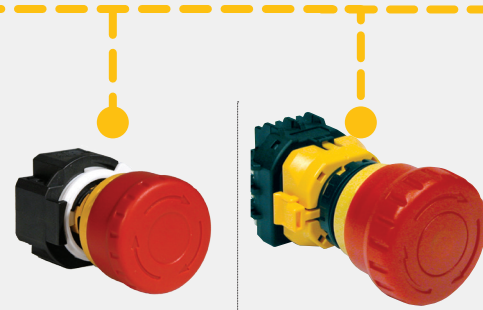
XA
Ideal for smaller machines. Mount in a 16mm hole and have shallow depth behind the panel.

XW
Feature rugged construction and mount in a 22mm panel hole secured from the back, so they cannot be defeated.

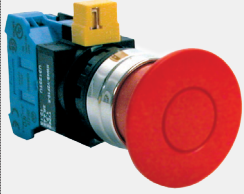|	XA	XW
panel hole size	16mm panel hole	22mm panel hole
operator sizes	Ø29mm, Ø40mm	Ø40mm, Ø60mm
number of contacts	up to 4	up to 4
terminal connection	PCB, solder, solder/tab	screw
operation	Push to lock, pull or turn to reset	Push to lock, pull or turn to reset
illumination		
certifications		

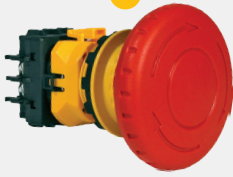## HW

A wide variety of options that can accommodate up to 6 contacts.

XN1E/XN5E

Offer robust construction with a shallow panel depth.

X6

Ergonomic, smooth and elegant design ideal for applications requiring cleanliness and prevention of dust.

XW

Smooth design features a large, ergonomic button that resists dirt and dust buildup.

XN4E

Add an additional layer of safety with a lockout feature that prevents unauthorized resetting of a latched e-stop.

Hazardous Location

EU2B

Ideal for applications in hazardous locations with explosive gases, such as oil & gas, petrochemical, painting and more.

HW	XN1E/XN5E	X6	XW	XN4E	EU2B
22mm panel hole	30mm panel hole	16mm panel hole	22mm panel hole	30mm panel hole	30mm panel hole
Ø29mm, Ø40mm, Ø60mm	Ø40mm, Ø60mm	Ø30mm, Ø40mm	Ø38mm	Ø44mm	Ø40mm
up to 6	up to 4	up to 2	up to 4	up to 4	up to 3
screw	screw	solder/tab	screw	screw	screw
Push to lock; pull, turn, or key to reset	Push to lock, pull or turn to reset	Push to lock, pull or turn to reset	Push to lock, pull or turn to reset	Push to lock, pull or turn to reset	Push to lock, pull or turn to reset
			Green visual indicator		

Keeping It Clean: Smooth E-stops

X6 and XW feature smooth buttons that resist dirt and dust buildup. These large, ergonomic buttons offer a sleek, updated look and user-friendly operation for applications requiring higher levels of cleanliness, such food and beverage.

X6 16MM E-STOPS

Operator		NC Contact	Part Number
	30mm Mushroom Pushlock Pull/Turn Reset Switch	1NC	AB6E-3BV01PTRH
		2NC	AB6E-3BV02PTRH
	40mm Mushroom Pushlock Pull/Turn Reset Switch	1NC	AB6E-4BV01PTRH
		2NC	AB6E-4BV02PTRH
	30mm Mushroom Pushlock Pull/Turn Reset Switch	1NC	AB6E-3BV01PTRM
		2NC	AB6E-3BV02PTRM
	40mm Mushroom Pushlock Pull/Turn Reset Switch	1NC	AB6E-4BV01PTRM
		2NC	AB6E-4BV02PTRM
	30mm Mushroom Pushlock Pull/Turn Reset Switch	1NC	AB6E-3BV01PTY
		2NC	AB6E-3BV02PTY
		1NC	AB6E-4BV01PTY
		2NC	AB6E-4BV02PTY

XA 16MM E-STOPS
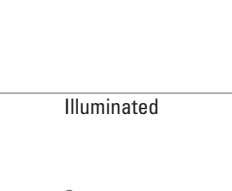
Illumination	Operator	NC Contact	NO Contact	Part Number
Non-Illuminated	29mm Mushroom PCB Terminals	1NC	1NO	XA1E-BV311V-R
		2NC	–	XA1E-BV302V-R
		3NC	1NO	XA1E-BV313V-R
		4NC	–	XA1E-BV304V-R
	29mm Mushroom Solder Terminals	1NC	1NO	XA1E-BV311-R
		2NC	–	XA1E-BV302-R
		3NC	1NO	XA1E-BV313-R
		4NC	–	XA1E-BV304-R
Illuminated	29mm Mushroom PCB Terminals (24V AC/DC)	1NC	1NO	XA1E-LV311Q4V-R
		2NC	–	XA1E-LV302Q4V-R
		3NC	1NO	XA1E-LV313Q4V-R
		4NC	–	XA1E-LV304Q4V-R
	29mm Mushroom Solder Terminals (24V AC/DC)	1NC	1NO	XA1E-LV311Q4-R
		2NC	–	XA1E-LV302Q4-R
		3NC	1NO	XA1E-LV313Q4-R
		4NC	–	XA1E-LV304Q4-R
Non-Illuminated	40mm Mushroom PCB Terminals	1NC	1NO	XA1E-BV411V-R
		2NC	–	XA1E-BV402V-R
		3NC	1NO	XA1E-BV413V-R
		4NC	–	XA1E-BV404V-R
	40mm Mushroom Solder Terminals	1NC	1NO	XA1E-BV411-R
		2NC	–	XA1E-BV402-R
		3NC	1NO	XA1E-BV413-R
		4NC	–	XA1E-BV404-R
Illuminated	40mm Mushroom PCB Terminals (24V AC/DC)	1NC	1NO	XA1E-LV411Q4V-R
		2NC	–	XA1E-LV402Q4V-R
		3NC	1NO	XA1E-LV413Q4V-R
		4NC	–	XA1E-LV404Q4V-R
	40mm Mushroom Solder Terminals (24V AC/DC)	1NC	1NO	XA1E-LV411Q4-R
		2NC	–	XA1E-LV402Q4-R
		3NC	1NO	XA1E-LV413Q4-R
		4NC	–	XA1E-LV404Q4-R

XW 22MM E-STOPS

Illumination	Operator	NC Contact	NO Contact	Part Number
Non-Illuminated	40mm Mushroom Screw Terminals	1NC	1NO	XW1E-BV411M-R
		2NC	–	XW1E-BV402M-R
		2NC	2NO	XW1E-BV422M-R
		3NC	1NO	XW1E-BV413M-R
	60mm Mushroom Screw Terminals	4NC	–	XW1E-BV404M-R
		1NC	1NO	XW1E-BV511M-R
		2NC	–	XW1E-BV502M-R
		2NC	2NO	XW1E-BV522M-R
Illuminated[1]	40mm Mushroom Screw Terminals (24V AC/DC)	1NC	1NO	XW1E-LV411Q4M-R
		2NC	–	XW1E-LV402Q4M-R
		2NC	2NO	XW1E-LV422Q4M-R
		3NC	1NO	XW1E-LV413Q4M-R
		4NC	–	XW1E-LV404Q4M-R
	40mm Mushroom Push-ON LED[2] 24VAC/DC	2NC	1NO	XW1E-TV412Q4M-R

1. The light is independent of the position of the switch, except for push-on LED type.
2. The light only operates when the switch is pressed as it is internally wired.

XW 22MM E-STOPS WITH MECHANICAL INDICATOR

Illumination	Operator	NC Contact	NO Contact	Part Number
Non-Illuminated	38mm Mushroom	1NC	—	XW1E-BV4TG01MR
		2NC	—	XW1E-BV4TG02MR
		3NC	—	XW1E-BV4TG03MR
		4NC	—	XW1E-BV4TG04MR
	38mm Mushroom	1NC	1NO	XW1E-BV4TG11MR
		2NC	1NO	XW1E-BV4TG12MR
		3NC	1NO	XW1E-BV4TG13MR
		2NC	2NO	XW1E-BV4TG22MR
Illuminated	38mm Mushroom with built-in 24V AC/DC LED	1NC	—	XW1E-LV4TG01Q4MR
		2NC	—	XW1E-LV4TG02Q4MR
		3NC	—	XW1E-LV4TG03Q4MR
		4NC	—	XW1E-LV4TG04Q4MR
	38mm Mushroom with built-in 24V AC/DC LED	1NC	1NO	XW1E-LV4TG11Q4MR
		2NC	1NO	XW1E-LV4TG12Q4MR
		3NC	1NO	XW1E-LV4TG13Q4MR
		2NC	2NO	XW1E-LV4TG22Q4MR

HW 22MM E-STOPS

Operator	Bezel	NC Contact	NO Contact	Part Number
40mm Mushroom Pushlock Turn Reset	Plastic	–	1NO	HW1B-V4F10-R
		1NC	–	HW1B-V4F01-R
		1NC	1NO	HW1B-V4F11-R
		2NC	–	HW1B-V4F02-R
	Metal	–	1NO	HW4B-V4F10-R
		1NC	–	HW4B-V4F01-R
		1NC	1NO	HW4B-V4F11-R
		2NC	–	HW4B-V4F02-R
40mm Mushroom Push-Pull Reset	Plastic	–	1NO	HW1B-Y2F10-R
		1NC	–	HW1B-Y2F01-R
		1NC	1NO	HW1B-Y2F11-R
		2NC	–	HW1B-Y2F02-R
	Metal	–	1NO	HW4B-Y2F10-R
		1NC	–	HW4B-Y2F01-R
		1NC	1NO	HW4B-Y2F11-R
		2NC	–	HW4B-Y2F02-R
40mm Mushroom Pushlock Key Reset	Plastic	–	1NO	HW1B-X4F10-R
		1NC	–	HW1B-X4F01-R
		1NC	1NO	HW1B-X4F11-R
		2NC	–	HW1B-X4F02-R
	Metal	–	1NO	HW4B-X4F10-R
		1NC	–	HW4B-X4F01-R
		1NC	1NO	HW4B-X4F11-R
		2NC	–	HW4B-X4F02-R
40mm Mushroom EMO Pushlock Turn Reset	Plastic	–	1NO	HW1B-V4F10-R-EMO-2
		1NC	–	HW1B-V4F01-R-EMO-2
		1NC	1NO	HW1B-V4F11-R-EMO-2
		2NC	–	HW1B-V4F02-R-EMO-2
	Metal	–	1NO	HW4B-V4F10-R-EMO-2
		1NC	–	HW4B-V4F01-R-EMO-2
		1NC	1NO	HW4B-V4F11-R-EMO-2
		2NC	–	HW4B-V4F02-R-EMO-2
60mm Mushroom Pushlock Turn Reset	Plastic	–	1NO	HW1B-V5F10-R
		1NC	–	HW1B-V5F01-R
		1NC	1NO	HW1B-V5F11-R
		2NC	–	HW1B-V5F02-R

HW 22MM UNIBODY E-STOPS

Illumination	Operator	Bezel	Lamp	NC Contact	NO Contact	Part Number
Non-Illuminated	40mm Mushroom Pushlock Turn Reset	Plastic	–	1NC	1NO	HW1E-BV4F11-R
				2NC	–	HW1E-BV4F02-R
Illuminated	40mm Mushroom Pushlock Turn Reset (24V AC/DC)	Plastic	Incandescent	1NC	1NO	HW1E-LV4F11Q-R-24V
			Incandescent	2NC	–	HW1E-LV4F02Q-R-24V
			LED	1NC	1NO	HW1E-LV4F11QD-R-24V
			LED	2NC	–	HW1E-LV4F02QD-R-24V

HN 30MM UNIBODY E-STOPS

Illumination	Operator	Bezel	Lamp	NC Contact	NO Contact	Part Number
Non-Illuminated	40mm Mushroom Pushlock Turn Reset	Plastic	–	1NC	1NO	HN1E-BV4F11-R
				2NC	–	HN1E-BV4F02-R
Illuminated	40mm Mushroom Pushlock Turn Reset (24V AC/DC)	Plastic	Incandescent	1NC	1NO	HN1E-LV4F11Q-R-24V
			Incandescent	2NC	–	HN1E-LV4F02Q-R-24V
			LED	1NC	1NO	HN1E-LV4F11QD-R-24V
			LED	2NC	–	HN1E-LV4F02QD-R-24V

EU2B 30MM HAZARDOUS LOCATION E-STOPS

Illumination	Operator	Terminals	NC Contact	NO Contact	Part Number
Non-Illuminated	ø40 Mushroom	Fingersafe	1NC	-	EU2B-YBV301FR
			1NC	1NO	EU2B-YBV311FR
			2NC	-	EU2B-YBV302FR
			2NC	1NOsf	EU2B-YBV312FR
			3NC	-	EU2B-YBV303FR
		Standard Screw	1NC	-	EU2B-YBV301CR
			1NC	1NO	EU2B-YBV311CR
			2NC	-	EU2B-YBV302CR
			2NC	1NO	EU2B-YBV312CR
			3NC	-	EU2B-YBV303CR

XN1E 30MM E-STOPS

Illumination	Operator	NC Contact	NO Contact	Part Number
Non-Illuminated	40mm Mushroom	1NC	1NO	XN1E-BV411MR
		2NC	–	XN1E-BV402MR
		2NC	2NO	XN1E-BV422MR
		3NC	1NO	XN1E-BV413MR
		4NC	–	XN1E-BV404MR
	60mm Mushroom	1NC	1NO	XN1E-BV511MR
		2NC	–	XN1E-BV502MR
		2NC	2NO	XN1E-BV522MR
		3NC	1NO	XN1E-BV513MR
		4NC	–	XN1E-BV504MR
Illuminated	40mm Mushroom LED (24V AC/DC)	1NC	1NO	XN1E-LV411Q4MR
		2NC	–	XN1E-LV402Q4MR
		2NC	2NO	XN1E-LV422Q4MR
		3NC	1NO	XN1E-LV413Q4MR
		4NC	–	XN1E-LV404Q4MR
	40mm Mushroom Push-ON LED[2] (24V AC/DC)	2NC	1NO	XN1E-TV412Q4MR

XN4E 30MM PADLOCK E-STOPS

Illumination	Operator	NC Contact	NO Contact	Part Number
Non-Illuminated	44mm Mushroom	1NC	1NO	XN4E-BL411MR
		2NC	–	XN4E-BL402MR
		2NC	2NO	XN4E-BL422MR
		3NC	1NO	XN4E-BL413MR
		4NC	–	XN4E-BL404MR
Illuminated	44mm Mushroom LED (24V AC/DC)	1NC	1NO	XN4E-LL411Q4MR
		2NC	–	XN4E-LL402Q4MR
		2NC	2NO	XN4E-LL422Q4MR
		3NC	1NO	XN4E-LL413Q4MR
		4NC	–	XN4E-LL404Q4MR
	44mm Mushroom Push-ON LED[2] (24V AC/DC)	2NC	1NO	XN4E-TL412Q4MR

XN5E 30MM FLUSH MOUNT BEZEL E-STOPS

Illumination	Operator	NC Contact	NO Contact	Part Number
Non-Illuminated	40mm Mushroom	1NC	1NO	XN5E-BV411MR
		2NC	–	XN5E-BV402MR
		2NC	2NO	XN5E-BV422MR
		3NC	1NO	XN5E-BV413MR
		4NC	–	XN5E-BV404MR
Illuminated	40mm Mushroom LED (24V AC/DC)	1NC	1NO	XN5E-LV411Q4MR
		2NC	–	XN5E-LV402Q4MR
		2NC	2NO	XN5E-LV422Q4MR
		3NC	1NO	XN5E-LV413Q4MR
		4NC	–	XN5E-LV404Q4MR
	40mm Mushroom Push-ON LED[2] (24V AC/DC)	2NC	1NO	XN5E-TV412Q4MR
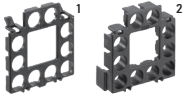
HW E-STOP ENCLOSURES

Size & Reset	Bezel	NO Contact	NO Contact	Part Number
29mm Pushlock Turn Reset	Plastic	1NC	1NO	FB1W-HW1B-V311R
		2NC	–	FB1W-HW1B-V302R
	Metal	1NC	1NO	FB1W-HW4B-V311R
		2NC	–	FB1W-HW4B-V302R
40mm Pushlock Turn Reset	Plastic	1NC	1NO	FB1W-HW1B-V411R
		2NC	–	FB1W-HW1B-V402R
	Metal	1NC	1NO	FB1W-HW4B-V411R
		2NC	–	FB1W-HW4B-V402R
40mm Push-Pull Reset	Plastic	1NC	1NO	FB1W-HW1B-Y211R
		2NC	–	FB1W-HW1B-Y202R
	Metal	1NC	1NO	FB1W-HW4B-Y211R
		2NC	–	FB1W-HW4B-Y202R
40mm Pushlock Key Reset	Plastic	1NC	1NO	FB1W-HW1B-X411R
		2NC	–	FB1W-HW1B-X402R
	Metal	1NC	1NO	FB1W-HW4B-X411R
		2NC	–	FB1W-HW4B-X402R
40mm EMO Pushlock Turn Reset	Plastic	1NC	1NO	FB1W-HW1B-V411R-EMO-2
		2NC	–	FB1W-HW1B-V402R-EMO-2
	Metal	1NC	1NO	FB1W-HW4B-V411R-EMO-2
		2NC	–	FB1W-HW4B-V402R-EMO-2

XW E-STOP ENCLOSURES

Size & Reset	NO Contact	NO Contact	Part Number
40mm Non-Illuminated	2NC	2NO	FB1W-XW1E-BV422MR
	3NC	1NO	FB1W-XW1E-BV413MR
	4NC	–	FB1W-XW1E-BV404MR
40mm Illuminated	2NC	2NO	FB1W-XW1E-LV422MR
	3NC	1NO	FB1W-XW1E-LV413MR
	4NC	–	FB1W-XW1E-LV404MR
60mm Non-Illuminated	2NC	2NO	FB1W-XW1E-BV522MR
	3NC	1NO	FB1W-XW1E-BV513MR
	4NC	–	FB1W-XW4E-BV504MR

ACCESSORIES

Description	Model	Part Number
Replacement LED Unit: Solder Terminal	XA	XA9Z-LED2R
Replacement LED Unit: PCB Terminal		XA9Z-LED2VR
Terminal Cover for contact block		XA9Z-VL2
Terminal Cover for contact block[1]	XW and XN	XW9Z-VL2M
IP20 Fingersafe Cover[2]		XW9Z-VL2MF
Locking Ring Wrench	XN	XN9Z-T1
Locking Ring Twist Wrench		TWST-T1
Lockout Hasp[3]		XN9Z-HASP421

NAMEPLATES

Size and Style	ID	OD	Part Number
16mm Blank Ø60mm	16mm	60mm	HAAV4-0
16mm "Emergency Stop" Ø60mm	16mm	60mm	HAAV4-27
22mm Blank Ø60mm	22mm	60mm	HWAV-0
22mm "Emergency Stop" Ø60mm	22mm	60mm	HWAV-27
22mm "Emergency Stop" Ø80mm For Jumbo Mushroom	22mm	80mm	HWAV5-27
30mm Blank ø60mm	30mm	60mm	HNAV-0
30mm "Emergency Stop" ø60mm	30mm	60mm	HNAV-27

SWITCH GUARDS

E-Stop Series	E-Stop Type	Applicable Standard	Part Number
16mm XA	29mm & 40mm Mushroom Head	SEMI S2 Compliant (Approved by TUV)	XA9Z-KG1
22mm HW & XW	29mm & 40mm Mushroom Head	SEMI S2-0703, 12.5.1 Compliant	HW9Z-KG1
		SEMI S2 Compliant (Approved by TUV)	HW9Z-KG3
	29mm & 40mm Mushroom Head	SEMI S2-0703 12.5.1 & SEMATECH Compliant	HW9Z-KG2
	60mm Mushroom Head	SEMI S2 Compliant (Approved by TUV) & SEMATECH	HW9Z-KG4

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