Pushbuttons and Pilot Devices



Stacklights



Panel Meters



Operator Interfaces and Programming Software



4.1 Pushbutton and Pilot Devices

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For our complete product offering, see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E.

Product Overview

Pushbuttons and Pilot Devices Selection Guide





Description	M22—22.5 mm Modular Pushbuttons	10250T—30 mm Pushbuttons
	Page V9-T4-4	Page V9-T4-37
Ease of Use		
Mounting nut on operator installation	Yes	Yes
Mounting adapter installation/removal	Easy	—
Contact block installation	Snaps on mounting adapter	Screw in
Contact block/light unit installation/removal	Easy	Easy
Visible actuator indication from rear	Yes	Yes
Optional spring cage terminations	Yes	—
Optional quick-connect terminations	Yes	Yes
Built-in or separate anti-rotation locking ring installation	Built-in	Built-in
Mounting time	Low	Low
Removal time	Low	Low
Flexibility and Modularity		
Field convertible pushbuttons—color or inscribed button caps	Yes	—
Field convertible pushbuttons—maintained to momentary	Yes	—
Field convertible selector switches—momentary to maintained	Yes	—
Field convertible key selector switches—key removal position	Yes	—
Universal voltage range LED light units ①	Yes	—
Stackable contact blocks	Yes	—
Enclosed limit switch contacts ②	Yes	—
Safety and Security		
ISO/EN 13850/EN 418 rated E-stops	Yes	Yes
Safety yellow E-stop enclosures	Yes	—
Secure anti-rotation mounting	Good	Good
Self-monitoring contact blocks	Yes, available 4Q 2010	No
Communications		
ASi bus network communications	Yes	—
DeviceNet network communications	—	—
PROFIBUS-DP network communications	—	—
Esthetics and Ergonomics		
Low profile design	Yes	—
Low power integrated LED illuminated devices	Yes	—
Permanent and wear-resistant markings	Yes	—
Square bezel pushbuttons and pilot lights	—	—

Notes

① Eaton's M22 LED light units come in two convenient universal ranges: 12–30 Vac/Vdc and 85–244 Vac.

② Eaton's M22 pushbutton, selector switch, and E-stop operators can be attached directly to Eaton's LS Series miniature limit switches.

For our complete product offering, see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E.

Pushbuttons and Pilot Devices Selection Guide, continued





Description	M22—22.5 mm Modular Pushbuttons	10250T—30 mm Pushbuttons
Esthetics and Ergonomics		
Positive detent on selector switches	Very good	Fair
Ergonomic dome shaped E-stop and palm switches	Yes	—
Specialty Operator Types		
Acoustic indicators (buzzers)	Yes	—
Double pushbutton operators	Yes	No
Elevator E-stops (with mechanical flag indication)	Yes	—
EMO E-stops	—	No
Four-way pushbutton operators	Yes	—
Joysticks	Yes	—
Potentiometers	Yes	Yes
Reset pushbutton operators	Yes	Yes
Selector pushbutton (roto-push) operators	—	—
Selector switches with key monitoring	—	—
Toggle switches	—	—
Standards and Certifications		
China Compulsory Certification—CCC (China)	Yes	—
Conformité Européenne—CE (Europe)	Yes	Yes
Canadian Standard Association—CSA (Canada)	Yes	Yes
Gosudarstvennyy Standart Russia—GOST R (Russia)	Yes	—
Underwriter's Laboratories—UL (United States)	Yes	Yes
Marine Classification Societies		
American Bureau of Shipping—ABS (United States)	—	—
Bureau Veritas—BV (France)	Yes	—
Det Norske Veritas—DNV (Norway)	Yes	—
Germanischer Lloyd—GL (Germany)	Yes	—
Lloyd's Register—LR (United Kingdom)	Yes	—
Polski Regestre Statkow—PRS (Poland)	—	—
Registro Italiano Navale—RINA (Italy)	—	—
Russian Maritime Register of Shipping—RMRS (CIS)	—	—
Accessories		
USB socket bulkhead interface	Yes	—
RJ45 socket bulkhead interface	Yes	—
Padlock attachments for pushbuttons	—	Yes
Padlock attachments for selector switches	—	Yes
Padlock attachments for E-stops	No	—
Protective shrouds for E-stops	Yes	Yes
DIN rail mounting adapter	Yes	—

For our complete product offering, see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E.

M22—22.5 mm Modular Pushbutton



Features

Highly modular and versatile line

- Field convertible functions (pushbuttons and selector switches), maintained to momentary
- Customizable laser engraving capabilities

LED indicators

- 100,000 hours of life in high-vibration environments
- Lenses specifically designed for LED illumination

Rugged design

- Most pushbutton operators and contact blocks exceed 5 million mechanical operations
- All components have IP66 rating, and some carry IP67 and IP69K for washdown environment; see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1 for further technical data

Innovative technologies

- ASi communicating devices
- Palm switches

Standards and Certifications

Product Selection

Non-Illuminated Pushbuttons, Flush, Momentary

Complete Devices

	Bezel	Button Color	Contact Block Configuration ①	Catalog Number
M22-D-G-K10 	Silver	Black	NO	**M22-D-S-K10**
			NC	**M22-D-S-K01**
			2NO	**M22-D-S-K20**
			2NC	**M22-D-S-K02**
			1NO-1NC	**M22-D-S-K11**
		Red	NO	**M22-D-R-K10**
			NC	**M22-D-R-K01**
			2NO	**M22-D-R-K20**
			2NC	**M22-D-R-K02**
			1NO-1NC	**M22-D-R-K11**
		Green	NO	**M22-D-G-K10**
			NC	**M22-D-G-K01**
			2NO	**M22-D-G-K20**
			2NC	**M22-D-G-K02**
			1NO-1NC	**M22-D-G-K11**
M22S-D-G-K10 	Black	Black	NO	**M22S-D-S-K10**
			NC	**M22S-D-S-K01**
			2NO	**M22S-D-S-K20**
			2NC	**M22S-D-S-K02**
			1NO-1NC	**M22S-D-S-K11**
		Red	NO	**M22S-D-R-K10**
			NC	**M22S-D-R-K01**
			2NO	**M22S-D-R-K20**
			2NC	**M22S-D-R-K02**
			1NO-1NC	**M22S-D-R-K11**
		Green	NO	**M22S-D-G-K10**
			NC	**M22S-D-G-K01**
			2NO	**M22S-D-G-K20**
			2NC	**M22S-D-G-K02**
			1NO-1NC	**M22S-D-G-K11**

Note

① All NC contact blocks are positively driven contact. ⊖

Non-Illuminated Pushbuttons, Flush

Components

M22-XD-G



Button Plates ①

Color	Inscription	Catalog Number
Black	—	**M22-XD-S** ②
	Custom	**M22-XD-S-ETCH** ③
	STOP	**M22-XD-S-GB0**
	START	**M22-XD-S-GB1**
	CLOSE	**M22-XD-S-GB2**
	UP	**M22-XD-S-GB3**
	DOWN	**M22-XD-S-GB4**
	OFF	**M22-XD-S-GB5**
	ON	**M22-XD-S-GB6**
	TEST	**M22-XD-S-GB9**
	FORWARD	**M22-XD-S-GB15**
	REVERSE	**M22-XD-S-GB16**
	RAISE	**M22-XD-S-GB17**
	LOWER	**M22-XD-S-GB18**
	◎	**M22-XD-S-X0**
	①	**M22-XD-S-X1**
	⑪	**M22-XD-S-X2**
	⊕	**M22-XD-S-X4**
	⊖	**M22-XD-S-X5**
	↑	**M22-XD-S-X7**
Red	—	**M22-XD-R** ②
	Custom	**M22-XD-R-ETCH** ③
	STOP	**M22-XD-R-GB0**
	OFF	**M22-XD-R-GB5**
	◎	**M22-XD-R-X0**
Green	—	**M22-XD-G** ②
	Custom	**M22-XD-G-ETCH** ③
	START	**M22-XD-G-GB1**
	ON	**M22-XD-G-GB6**
	①	**M22-XD-G-X1**
Blue	—	**M22-XD-B** ②
	Custom	**M22-XD-B-ETCH** ③
	RESET	**M22-XD-B-GB14**
	Ⓡ	**M22-XD-B-X6**
White	—	**M22-XD-W** ②
	Custom	**M22-XD-W-ETCH** ③
	START	**M22-XD-W-GB1**
	①	**M22-XD-W-X1**
Yellow	—	**M22-XD-Y** ②
	Custom	**M22-XD-Y-ETCH** ③
Black, red, green	—	**M22-XD-SRG**
Black, white, red, green, yellow, blue	—	**M22-XD-SWRGYB**

Momentary Buttonless Operator

	Bezel	Catalog Number ④
M22-D-X 	Silver	**M22-D-X**
M22S-D-X 	Black	**M22S-D-X**
M22-DG-X 	Silver guarded	**M22-DG-X**

Maintained Buttonless Operator ⑤

	Bezel	Catalog Number ④
M22-DR-X 	Silver	**M22-DR-X**
M22S-DR-X 	Black	**M22S-DR-X**

Notes

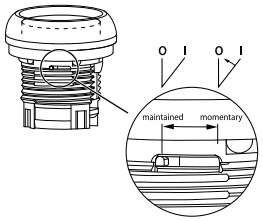
① For complete listing of available button plates and contact blocks, see Accessories, **Pages V9-T4-31** to **V9-T4-36**.

② Minimum order quantity of (10).

③ When ordering, specify inscription per catalog number suffix from the Symbols Library (see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1) into the Order Notes.
For example, M22-XD-S-ETCH; Order Notes: Mark with symbol X91, Line item #_.

④ Includes contact block mounting adapter.

⑤ Maintained pushbuttons can be converted in the field to momentary operation by switching the locking ring, which is accessible through the side of the operator body.



Non-Illuminated Pushbuttons, Extended, Momentary

Complete Devices

	Bezel	Button Color	Contact Block Configuration ①	Catalog Number
M22-DH-R-K10 	Silver	Red	NO	**M22-DH-R-K10**
			NC	**M22-DH-R-K01**
			2NO	**M22-DH-R-K20**
			2NC	**M22-DH-R-K02**
			1NO-1NC	**M22-DH-R-K11**
M22S-DH-R-K10 	Black	Red	NO	**M22S-DH-R-K10**
			NC	**M22S-DH-R-K01**
			2NO	**M22S-DH-R-K20**
			2NC	**M22S-DH-R-K02**
			1NO-1NC	**M22S-DH-R-K11**
M22-DGH-R-K10 	Silver guarded	Red	NO	**M22-DGH-R-K10**
			NC	**M22-DGH-R-K01**
			2NO	**M22-DGH-R-K20**
			2NC	**M22-DGH-R-K02**
			1NO-1NC	**M22-DGH-R-K11**

Note

① All NC contact blocks are positively driven contact. ⊖

Non-Illuminated Pushbuttons, Extended

Components

M22-XDH-R



Button Plates ①

Color	Inscription	Catalog Number
Black	—	**M22-XDH-S** ②
	Custom	**M22-XDH-S-ETCH** ③
	STOP	**M22-XDH-S-GB0**
	START	**M22-XDH-S-GB1**
	CLOSE	**M22-XDH-S-GB2**
	UP	**M22-XDH-S-GB3**
	DOWN	**M22-XDH-S-GB4**
	OFF	**M22-XDH-S-GB5**
	ON	**M22-XDH-S-GB6**
	TEST	**M22-XDH-S-GB9**
	FORWARD	**M22-XDH-S-GB15**
	REVERSE	**M22-XDH-S-GB16**
	RAISE	**M22-XDH-S-GB17**
	LOWER	**M22-XDH-S-GB18**
	◎	**M22-XDH-S-X0**
	Ⓘ	**M22-XDH-S-X1**
	Ⓘ Ⓘ	**M22-XDH-S-X2**
	⊕	**M22-XDH-S-X4**
	⊖	**M22-XDH-S-X5**
	ⓘ	**M22-XDH-S-X7**
Red	—	**M22-XDH-R** ②
	Custom	**M22-XDH-R-ETCH** ③
	STOP	**M22-XDH-R-GB0**
	OFF	**M22-XDH-R-GB5**
	◎	**M22-XDH-R-X0**
Green	—	**M22-XDH-G** ②
	Custom	**M22-XDH-G-ETCH** ③
	START	**M22-XDH-G-GB1**
	ON	**M22-XDH-G-GB6**
	Ⓘ	**M22-XDH-G-X1**
Blue	—	**M22-XDH-B** ②
	Custom	**M22-XDH-B-ETCH** ③
	RESET	**M22-XDH-B-GB14**
	Ⓡ	**M22-XDH-B-X6**
White	—	**M22-XDH-W** ②
	Custom	**M22-XDH-W-ETCH** ③
	START	**M22-XDH-W-GB1**
	Ⓘ	**M22-XDH-W-X1**
Yellow	—	**M22-XDH-Y** ②
	Custom	**M22-XDH-Y-ETCH** ③
Black, red, green	—	**M22-XDH-SRG**
Black, white, red, green, yellow, blue	—	**M22-XDH-SWRGYB**

Momentary Buttonless Operator

	Bezel	Catalog Number ④
M22-D-X 	Silver	**M22-D-X**
M22S-D-X 	Black	**M22S-D-X**
M22-DG-X 	Silver guarded	**M22-DG-X**

Maintained Buttonless Operator ⑤

	Bezel	Catalog Number ④
M22-DR-X 	Silver	**M22-DR-X**
M22S-DR-X 	Black	**M22S-DR-X**

Notes

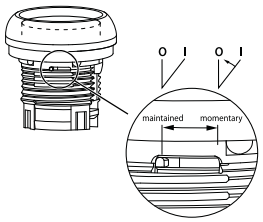
① For complete listing of available button plates and contact blocks, see Accessories, **Pages V9-T4-31** to **V9-T4-36**.

② Minimum order quantity of (10).

③ When ordering, specify inscription per catalog number suffix from the Symbols Library (see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1) into the Order Notes.
For example, M22-XDH-S-ETCH; Order Notes: Mark with symbol X91, Line item #_.

④ Includes contact block mounting adapter.

⑤ Maintained pushbuttons can be converted in the field to momentary operation by switching the locking ring, which is accessible through the side of the operator body.



Illuminated Pushbuttons, Flush, Momentary

Complete Devices

	Bezel	Button Color	Contact Block Configuration ①	Light Unit Voltage	Catalog Number
M22-DL-G-K01-G 	Silver	Red	NC	12–30 Vac/Vdc	**M22-DL-R-K01-R**
			NC	85–264 Vac	**M22-DL-R-K01-230R**
			2NC	12–30 Vac/Vdc	**M22-DL-R-K02-R**
			2NC	85–264 Vac	**M22-DL-R-K02-230R**
			1NO/1NC	12–30 Vac/Vdc	**M22-DL-R-K11-R**
			1NO/1NC	85–264 Vac	**M22-DL-R-K11-230R**
		Green	NO	12–30 Vac/Vdc	**M22-DL-G-K10-G**
			NO	85–264 Vac	**M22-DL-G-K10-230G**
			2NO	12–30 Vac/Vdc	**M22-DL-G-K20-G**
			2NO	85–264 Vac	**M22-DL-G-K20-230G**
			1NO/1NC	12–30 Vac/Vdc	**M22-DL-G-K11-G**
			1NO/1NC	85–264 Vac	**M22-DL-G-K11-230G**
		White	NO	12–30 Vac/Vdc	**M22-DL-W-K10-W**
			NO	85–264 Vac	**M22-DL-W-K10-230W**
			2NO	12–30 Vac/Vdc	**M22-DL-W-K20-W**
			2NO	85–264 Vac	**M22-DL-W-K20-230W**
			1NO/1NC	12–30 Vac/Vdc	**M22-DL-W-K11-W**
			1NO/1NC	85–264 Vac	**M22-DL-W-K11-230W**
M22S-DL-G-K01-G 	Black	Red	NC	12–30 Vac/Vdc	**M22S-DL-R-K01-R**
			NC	85–264 Vac	**M22S-DL-R-K01-230R**
			2NC	12–30 Vac/Vdc	**M22S-DL-R-K02-R**
			2NC	85–264 Vac	**M22S-DL-R-K02-230R**
			1NO/1NC	12–30 Vac/Vdc	**M22S-DL-R-K11-R**
			1NO/1NC	85–264 Vac	**M22S-DL-R-K11-230R**
		Green	NO	12–30 Vac/Vdc	**M22S-DL-G-K10-G**
			NO	85–264 Vac	**M22S-DL-G-K10-230G**
			2NO	12–30 Vac/Vdc	**M22S-DL-G-K20-G**
			2NO	85–264 Vac	**M22S-DL-G-K20-230G**
			1NO/1NC	12–30 Vac/Vdc	**M22S-DL-G-K11-G**
			1NO/1NC	85–264 Vac	**M22S-DL-G-K11-230G**
		White	NO	12–30 Vac/Vdc	**M22S-DL-W-K10-W**
			NO	85–264 Vac	**M22S-DL-W-K10-230W**
			2NO	12–30 Vac/Vdc	**M22S-DL-W-K20-W**
			2NO	85–264 Vac	**M22S-DL-W-K20-230W**
			1NO/1NC	12–30 Vac/Vdc	**M22S-DL-W-K11-W**
			1NO/1NC	85–264 Vac	**M22S-DL-W-K11-230W**

Note

① All NC contact blocks are positively driven contact. ⊖

Illuminated Pushbuttons, Flush

Components

M22-XDL-G



Button Lenses ①

Color	Inscription	Catalog Number
Red	—	**M22-XDL-R** ②
	Custom	**M22-XDL-R-ETCH** ③
	STOP	**M22-XDL-R-GB0**
	OFF	**M22-XDL-R-GB5**
	◎	**M22-XDL-R-X0**
Green	—	**M22-XDL-G** ②
	Custom	**M22-XDL-G-ETCH** ③
	START	**M22-XDL-G-GB1**
	ON	**M22-XDL-G-GB6**
	Ⓘ	**M22-XDL-G-X1**
Blue	—	**M22-XDL-B** ②
	Custom	**M22-XDL-B-ETCH** ③
	RESET	**M22-XDL-B-GB14**
	Ⓡ	**M22-XDL-B-X6**
White	—	**M22-XDL-W** ②
	Custom	**M22-XDL-W-ETCH** ③
Yellow	—	**M22-XDL-Y** ②
	Custom	**M22-XDL-Y-ETCH** ③

Momentary Buttonless Operator

	Bezel	Catalog Number ④
M22-DL-X 	Silver	**M22-DL-X**
M22S-DL-X 	Black	**M22S-DL-X**
M22-DGL-X 	Silver guarded	**M22-DGL-X**

Maintained Buttonless Operator ⑤

	Bezel	Catalog Number ④
M22-DRL-X 	Silver	**M22-DRL-X**
M22S-DRL-X 	Black	**M22S-DRL-X**

Notes

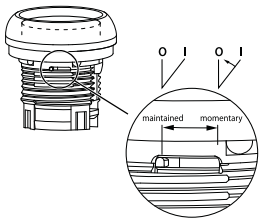
① For complete listing of available button plates and contact blocks, see Accessories, **Pages V9-T4-31** to **V9-T4-36**.

② Minimum order quantity of (10).

③ When ordering, specify inscription per catalog number suffix from the Symbols Library (see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1) into the Order Notes.
For example, M22-XDL-R-ETCH; Order Notes: Mark with symbol X91, Line item #_.

④ Includes contact block mounting adapter.

⑤ Maintained pushbuttons can be converted in the field to momentary operation by switching the locking ring, which is accessible through the side of the operator body.



Illuminated Pushbuttons, Extended, Momentary

Complete Devices

M22-DLH-R-K11-R



M22S-DLH-R-K11-R



Bezel	Button Color	Contact Block Configuration ①	Light Unit Voltage	Catalog Number
Silver	Red	1NO/1NC	12–30 Vac/Vdc	**M22-DLH-R-K11-R**
		1NO/1NC	85–264 Vac	**M22-DLH-R-K11-230R**
	Green	2NO	12–30 Vac/Vdc	**M22-DLH-G-K20-G**
		2NO	85–264 Vac	**M22-DLH-G-K20-230G**
	White	2NO	12–30 Vac/Vdc	**M22-DLH-W-K20-W**
		2NO	85–264 Vac	**M22-DLH-W-K20-230W**
Black	Red	1NO/1NC	12–30 Vac/Vdc	**M22S-DLH-R-K11-R**
		1NO/1NC	85–264 Vac	**M22S-DLH-R-K11-230R**
	Green	2NO	12–30 Vac/Vdc	**M22S-DLH-G-K20-G**
		2NO	85–264 Vac	**M22S-DLH-G-K20-230G**
	White	2NO	12–30 Vac/Vdc	**M22S-DLH-W-K20-W**
		2NO	85–264 Vac	**M22S-DLH-W-K20-230W**

Note

① All NC contact blocks are positively driven contact. ⊖

Illuminated Pushbuttons, Extended

Components

M22-XDH-R



Button Lenses ①

Color	Inscription	Catalog Number
Red	—	**M22-XDLH-R** ②
	Custom	**M22-XDLH-R-ETCH** ③
	STOP	**M22-XDLH-R-GB0**
	OFF	**M22-XDLH-R-GB5**
	◎	**M22-XDLH-R-X0**
Green	—	**M22-XDLH-G** ②
	Custom	**M22-XDLH-G-ETCH** ③
	START	**M22-XDLH-G-GB1**
	ON	**M22-XDLH-G-GB6**
	Ⓘ	**M22-XDLH-G-X1**
Blue	—	**M22-XDLH-B** ②
	Custom	**M22-XDLH-B-ETCH** ③
	RESET	**M22-XDLH-B-GB14**
	Ⓡ	**M22-XDLH-B-X6**
White	—	**M22-XDLH-W** ②
	Custom	**M22-XDLH-W-ETCH** ③
Yellow	—	**M22-XDLH-Y** ②
	Custom	**M22-XDLH-Y-ETCH** ③

Momentary Buttonless Operator

M22-DL-X



M22S-DL-X



M22-DGL-X



Bezel	Catalog Number ④
Silver	**M22-DL-X**
Black	**M22S-DL-X**
Silver guarded	**M22-DGL-X**

Maintained Buttonless Operator ⑤

M22-DRL-X



M22S-DRL-X



Bezel	Catalog Number ④
Silver	**M22-DRL-X**
Black	**M22S-DRL-X**

Notes

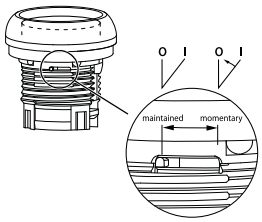
① For complete listing of available button plates and contact blocks, see Accessories, **Pages V9-T4-31** to **V9-T4-36**.

② Minimum order quantity of (10).

③ When ordering, specify inscription per catalog number suffix from the Symbols Library (see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1) into the Order Notes.
For example, M22-XDH-S-ETCH; Order Notes: Mark with symbol X91, Line item #_.

④ Includes contact block mounting adapter.

⑤ Maintained pushbuttons can be converted in the field to momentary operation by switching the locking ring, which is accessible through the side of the operator body.



Indicating Lights, Flush

M22-L-R-R



Complete Devices

Lens Color	Light Color	Light Unit Voltage	Catalog Number
White	White	12–30 Vac/Vdc	**M22-L-W-W**
Red	Red		**M22-L-R-R**
Green	Green		**M22-L-G-G**
Yellow	White		**M22-L-Y-W**
Blue	Blue		**M22-L-B-B**
Amber	White		**M22-L-A-W**
White	White	85–264 Vac	**M22-L-W-230W**
Red	Red		**M22-L-R-230R**
Green	Green		**M22-L-G-230G**
Yellow	White		**M22-L-Y-230W**
Blue	Blue		**M22-L-B-230B**
Amber	White		**M22-L-A-230W**

M22S-DLH-R-K11-R



Complete Press-to-Test Units

Bezel	Button Color	Light Unit Voltage	Catalog Number
Silver	Red	12–30 Vac/Vdc	**M22-T-R-R**
	Blue		**M22-T-B-B**
	Yellow		**M22-T-Y-W**
	Green		**M22-T-G-G**
	White		**M22-T-W-W**
	Red	85–264 Vac	**M22-T-R-230R**
	Blue		**M22-T-R-230B**
	Yellow		**M22-T-Y-230W**
	Green		**M22-T-G-230G**
	White		**M22-T-W-230W**
Black	Red	12–30 Vac/Vdc	**M22S-T-R-R**
	Blue		**M22S-T-B-B**
	Yellow		**M22S-T-Y-W**
	Green		**M22S-T-G-G**
	White		**M22S-T-W-W**
	Red	85–264 Vac	**M22S-T-R-230R**
	Blue		**M22S-T-B-230B**
	Yellow		**M22S-T-Y-230W**
	Green		**M22S-T-G-230G**
	White		**M22S-T-W-230W**

Components

M22-XL-R



Lenses ①

Color	Inscription	Catalog Number
Red	—	**M22-XL-R** ②
	Custom	**M22-XL-R-ETCH** ③
	OFF	**M22-XL-R-GB5**
Green	—	**M22-XL-G** ②
	Custom	**M22-XL-G-ETCH** ③
	ON	**M22-XL-G-GB6**
	REVERSE	**M22-XL-G-GB16**
Blue	—	**M22-XL-B** ②
	Custom	**M22-XL-B-ETCH** ③
	FAULT	**M22-XL-B-GB8**
White	—	**M22-XL-W** ②
	Custom	**M22-XL-W-ETCH** ③
	OFF	**M22-XL-W-GB5**
	ON	**M22-XL-W-GB6**
	FAULT	**M22-XL-W-GB8**
	FORWARD	**M22-XL-W-GB15**
Yellow	—	**M22-XL-Y** ②
	Custom	**M22-XL-Y-ETCH** ③
Amber	—	**M22-XL-A** ②
	Custom	**M22-XL-A-ETCH** ③

M22-L-X



Lensless Indicating Light

Catalog Number
M22-L-X

Notes

① For complete listing of available lenses and light units, see Accessories, **Pages V9-T4-31** to **V9-T4-36**.

② Minimum order quantity of (10).

③ When ordering, specify inscription per catalog number suffix from the Symbols Library (see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1) into the Order Notes. For example, M22-XL-R-ETCH; Order Notes: Mark with symbol X91, Line item #_.

Non-Illuminated Emergency Stops

M22-PV-K01



Complete Devices

Type	Color	Contact Block Configuration ①	Catalog Number
Push-pull	Red	NC	**M22-PV-K01**
		2NC	**M22-PV-K02**
		1NO-2NC	**M22-PV-K12**
Twist-to-release	Red	NC	**M22-PVT-K01**
		2NC	**M22-PVT-K02**
		1NO-2NC	**M22-PVT-K12**
Key release	Red	NC	**M22-PVS-K01**
		2NC	**M22-PVS-K02**
		1NO-2NC	**M22-PVS-K12**

Components

Operators Only ②

M22-PV



M22S-PVT



Type	Color	Catalog Number
Push-pull	Red	**M22-PV**
	Black	**M22S-PV**
Twist-to-release	Red	**M22-PVT**
	Black	**M22S-PVT**
Key release ③	Red	**M22-PVS** ④
		M22-PVS-MS2
		M22-PVS-MS3
		M22-PVS-MS4
		M22-PVS-MS5
		M22-PVS-MS6
		M22-PVS-MS7
		M22-PVS-MS8

Notes

① All NC contact blocks are positively driven contact. ⊖

② Includes contact block mounting adapter.

③ Key included. For identical locks and keys, use the same key code. One key is included with actuator; additional keys are available as accessories.

④ Includes Key Code MS1.

Illuminated Emergency Stops

M22-PVL-K01-R



Complete Devices

Type	Button Color	LED Color	Contact Block Configuration ①	Light Unit Voltage	Catalog Number
Push-pull	Red	Red	NC	12–30 Vac/Vdc	**M22-PVL-K01-R**
			2NC	12–30 Vac/Vdc	**M22-PVL-K02-R**
			1NO-2NC	12–30 Vac/Vdc	**M22-PVL-K12-R**
			NC	85–264 Vac	**M22-PVL-K01-230R**
			2NC	85–264 Vac	**M22-PVL-K02-230R**
			1NO-2NC	85–264 Vac	**M22-PVL-K12-230R**
Twist-to-release			NC	12–30 Vac/Vdc	**M22-PVLT-K01-R**
			2NC	12–30 Vac/Vdc	**M22-PVLT-K02-R**
			1NO-2NC	12–30 Vac/Vdc	**M22-PVLT-K12-R**
			NC	85–264 Vac	**M22-PVLT-K01-230R**
			2NC	85–264 Vac	**M22-PVLT-K02-230R**
			1NO-2NC	85–264 Vac	**M22-PVLT-K12-230R**

Components

Operators Only ②

M22-PVL



M22S-PVLT



Type	Color	Catalog Number
Push-pull	Red	**M22-PVL**
	Black	**M22S-PVL**
Twist-to- release	Red	**M22-PVLT**
	Black	**M22S-PVLT**

Notes

① All NC contact blocks are positively driven contact. ⊖

② Includes contact block mounting adapter.

Non-Illuminated Selector Switches

M22-WKV-K10



Complete Devices, Knob Type ①

Type	Switching Position	Bezel	Contact Block Configuration ②	Catalog Number
Two-position	Maintained 	Silver	NO	**M22-WRK-K10**
			1NO-1NC	**M22-WRK-K11**
			2NO-2NC	**M22-WRK-K22**
		Black	NO	**M22S-WRK-K10**
			1NO-1NC	**M22S-WRK-K11**
			2NO-2NC	**M22S-WRK-K22**
	Maintained V 	Silver	NO	**M22-WKV-K10**
			1NO-1NC	**M22-WKV-K11**
			2NO-2NC	**M22-WKV-K22**
		Black	NO	**M22S-WKV-K10**
			1NO-1NC	**M22S-WKV-K11**
			2NO-2NC	**M22S-WKV-K22**
Three-position	Maintained 	Silver	2NO	**M22-WRK3-K20**
			2NO-2NC	**M22-WRK3-K22**
		Black	2NO	**M22S-WRK3-K20**
			2NO-2NC	**M22S-WRK3-K22**

Notes

① Includes contact block mounting adapter.

② All NC contact blocks are positively driven contact. ⊖

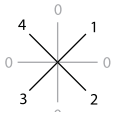
Non-Illuminated Selector Switches, continued

Components

M22-WK



Operators Only, Knob Type ①

Type	Switching Position	Bezel	Catalog Number
Two-position	Momentary ② 	Silver	**M22-WK**
		Black	**M22S-WK**
	Maintained 	Silver	**M22-WRK**
		Black	**M22S-WRK**
	Maintained V 	Silver	**M22-WKV**
		Black	**M22S-WKV**
Three-position	Momentary ② 	Silver	**M22-WK3**
		Black	**M22S-WK3**
	Maintained 	Silver	**M22-WRK3**
		Black	**M22S-WRK3**
	Maintained, return from left 	Silver	**M22-WRK3-2**
		Black	**M22S-WRK3-2**
	Maintained, return from right 	Silver	**M22-WRK3-1**
		Black	**M22S-WRK3-1**
Four-position	Maintained 	Silver	**M22-WRK4**
		Black	**M22S-WRK4**

Notes

① Includes contact block mounting adapter.

② Momentary selector switches can be converted in the field to maintained operation with the removal of a color coded adapter. See Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1.

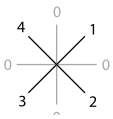
Non-Illuminated Selector Switches, continued

Components

M22S-WR3-X94



Operators Only, Rotary Type ①

Type	Switching Position	Bezel	Inscription	Catalog Number
Two-position	Momentary ② 	Silver	I-O	**M22-W**
		Black	I-O	**M22S-W**
	Maintained 	Silver	I-O	**M22-WR**
			Custom	**M22-WR-ETCH** ③
			AUTO-HAND	**M22-WR-X91**
			II-I	**M22-WR-X92**
		Black	I-O	**M22S-WR**
			Custom	**M22S-WR-ETCH** ③
			AUTO-HAND	**M22S-WR-X91**
			II-I	**M22S-WR-X92**
Three-position	Momentary ② 	Silver	I-O-II	**M22-W3**
		Black	I-O-II	**M22S-W3**
	Maintained 	Silver	I-O-II	**M22-WR3**
			Custom	**M22-WR3-ETCH** ③
			AUTO-O-MAN	**M22-WR3-X94**
		Black	I-O-II	**M22S-WR3**
			Custom	**M22S-WR3-ETCH** ③
			AUTO-O-MAN	**M22S-WR3-X94**
Four-position	Maintained 	Silver	0-1-0-2-0-3-0-4	**M22-WR4**
		Black	0-1-0-2-0-3-0-4	**M22S-WR4**

Notes

① Includes contact block mounting adapter.

② Momentary selector switches can be converted in the field to maintained operation with the removal of a color coded adapter. See Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1.

③ When ordering, specify inscription per catalog number suffix from the Symbols Library (see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1) into the Order Notes. For example, M22-WR3-ETCH; Order Notes: Mark with symbol X88, Line item #_.

Illuminated Selector Switches

Components

M22-WLK-W



4

Operators Only, Knob Type ①

Type	Switching Position	Bezel	Button Color	Catalog Number
Two-position	Momentary ② 	Silver	White	**M22-WLK-W**
			Red	**M22-WLK-R**
			Green	**M22-WLK-G**
			Yellow	**M22-WLK-Y**
			Blue	**M22-WLK-B**
		Black	White	**M22S-WLK-W**
			Red	**M22S-WLK-R**
			Green	**M22S-WLK-G**
			Yellow	**M22S-WLK-Y**
			Blue	**M22S-WLK-B**
	Maintained 	Silver	White	**M22-WRLK-W**
			Red	**M22-WRLK-R**
			Green	**M22-WRLK-G**
			Yellow	**M22-WRLK-Y**
			Blue	**M22-WRLK-B**
		Black	White	**M22S-WRLK-W**
			Red	**M22S-WRLK-R**
			Green	**M22S-WRLK-G**
			Yellow	**M22S-WRLK-Y**
			Blue	**M22S-WRLK-B**
	Maintained V 	Silver	White	**M22-WLKV-W**
			Red	**M22-WLKV-R**
			Green	**M22-WLKV-G**
			Yellow	**M22-WLKV-Y**
			Blue	**M22-WLKV-B**
		Black	White	**M22S-WLKV-W**
			Red	**M22S-WLKV-R**
			Green	**M22S-WLKV-G**
			Yellow	**M22S-WLKV-Y**
			Blue	**M22S-WLKV-B**

Notes

① Includes contact block mounting adapter.

② Momentary selector switches can be converted in the field to maintained operation with the removal of a color coded adapter. See Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1.

Illuminated Selector Switches, continued

Components

M22-WLK3-W



Operators Only, Knob Type ①

Type	Switching Position	Bezel	Button Color	Catalog Number
Three-position	Momentary ② 	Silver	White	**M22-WLK3-W**
			Red	**M22-WLK3-R**
			Green	**M22-WLK3-G**
			Yellow	**M22-WLK3-Y**
			Blue	**M22-WLK3-B**
		Black	White	**M22S-WLK3-W**
			Red	**M22S-WLK3-R**
			Green	**M22S-WLK3-G**
			Yellow	**M22S-WLK3-Y**
			Blue	**M22S-WLK3-B**
	Maintained 	Silver	White	**M22-WRLK3-W**
			Red	**M22-WRLK3-R**
			Green	**M22-WRLK3-G**
			Yellow	**M22-WRLK3-Y**
			Blue	**M22-WRLK3-B**
		Black	White	**M22S-WRLK3-W**
			Red	**M22S-WRLK3-R**
			Green	**M22S-WRLK3-G**
			Yellow	**M22S-WRLK3-Y**
			Blue	**M22S-WRLK3-B**
	Maintained, return from right 	Silver	White	**M22-WRLK3-1-W**
			Red	**M22-WRLK3-1-R**
			Green	**M22-WRLK3-1-G**
			Yellow	**M22-WRLK3-1-Y**
			Blue	**M22-WRLK3-1-B**
		Black	White	**M22S-WRLK3-1-W**
			Red	**M22S-WRLK3-1-R**
			Green	**M22S-WRLK3-1-G**
			Yellow	**M22S-WRLK3-1-Y**
			Blue	**M22S-WRLK3-1-B**
	Maintained, return from left 	Silver	White	**M22-WRLK3-2-W**
			Red	**M22-WRLK3-2-R**
			Green	**M22-WRLK3-2-G**
			Yellow	**M22-WRLK3-2-Y**
			Blue	**M22-WRLK3-2-B**
		Black	White	**M22S-WRLK3-2-W**
			Red	**M22S-WRLK3-2-R**
			Green	**M22S-WRLK3-2-G**
			Yellow	**M22S-WRLK3-2-Y**
			Blue	**M22S-WRLK3-2-B**

Notes

① Includes contact block mounting adapter.

② Momentary selector switches can be converted in the field to maintained operation with the removal of a color coded adapter. See Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1.

Key-Operated Selector Switches ①②

For additional key code options, see Volume 7—Solid-State Motor Control, CA08100008E, Tab 1.

Components

Operators Only ③

	Type	Switching Position	Key Code	Bezel	Key Removal Position	Catalog Number
M22-WS 	Two-position	Momentary ④ 	MS1	Silver	Return from right, key removable left	**M22-WS**
				Black	Return from right, key removable left	**M22S-WS**
M22S-WRS 	Two-position	Maintained 	MS1	Silver	Key removable left	**M22-WRS-A1**
					Key removable left/right	**M22-WRS**
			MS1	Black	Key removable left	**M22S-WRS-A1**
					Key removable left/right	**M22S-WRS**
M22-WS3-X93 	Three-position	Momentary ④ 	MS1	Silver	Return from left/right, key removable center	**M22-WS3**
				Black	Return from left/right, key removable center	**M22S-WS3**
		Maintained 	MS1	Silver	Key removable center	**M22-WRS3-A1**
					Key removable center/left	**M22-WRS3-A2**
					Key removable center/right	**M22-WRS3-A3**
					Key removable left/right	**M22-WRS3**
					Return from left, key removable center	**M22-WRS3-A7**
					Return from left, key removable center/right	**M22-WRS3-A6**
					Return from right, key removable left/center	**M22-WRS3-A4**
					Return from right, key removable center	**M22-WRS3-A5**
				Black	Key removable center	**M22S-WRS3-A1**
					Key removable center/left	**M22S-WRS3-A2**
					Key removable center/right	**M22S-WRS3-A3**
					Key removable left/right/center	**M22S-WRS3**
				Black	Return from left, key removable center	**M22S-WRS3-A7**
					Return from left, key removable center/right	**M22S-WRS3-A6**
					Return from right, key removable left/center	**M22S-WRS3-A4**
					Return from right, key removable center	**M22S-WRS3-A5**

Notes

① Includes one key.

② Key removal positions can be modified in the field using coding adapters; see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1.

③ Includes contact block mounting adapter.

④ Momentary selector switches can be converted in the field to maintained operation with the removal of a color coded adapter. See Volume 7—Logic Control, Operator Interface and Connectivity Solutions CA08100008E, Tab 1.

Mushroom Head Pushbuttons ①

Momentary Complete Devices

	Bezel	Button Color	Contact Block Configuration ②	Catalog Number
M22-DP-R-K01 	Silver	Red	NC	**M22-DP-R-K01**
			2NC	**M22-DP-R-K02**
			1NO-2NC	**M22-DP-R-K12**
			1NO-1NC	**M22-DP-R-K11**
M22S-DP-R-K01 	Black	Red	NC	**M22S-DP-R-K01**
			2NC	**M22S-DP-R-K02**
			1NO-2NC	**M22S-DP-R-K12**
			1NO-1NC	**M22S-DP-R-K11**

Non-Illuminated Mushroom Head Pushbuttons, Maintained ① ③

Complete Devices

	Bezel	Button Color	Contact Block Configuration ④	Catalog Number
M22-DP-R-K01 	Silver	Red	NC	**M22-DRP-R-K01**
			2NC	**M22-DRP-R-K02**
			1NO-2NC	**M22-DRP-R-K12**
			1NO-1NC	**M22-DRP-R-K11**
M22S-DP-R-K01 	Black	Red	NC	**M22S-DRP-R-K01**
			2NC	**M22S-DRP-R-K02**
			1NO-2NC	**M22S-DRP-R-K12**
			1NO-1NC	**M22S-DRP-R-K11**

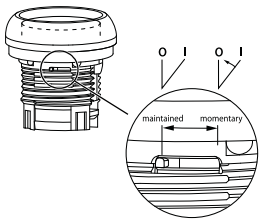
Notes

① 35 mm diameter mushroom head button.

② Includes contact block mounting adapter. ⊖

③ Maintained pushbuttons can be converted in the field to momentary operation by switching the locking ring, which is accessible through the side of the operator body.

④ All NC contact blocks are positively driven contact. ⊖



Non-Illuminated Mushroom Head Pushbuttons ①

Components

M22-XDP-G



Mushroom Head Plates

Color	Inscription	Catalog Number
Black	——	**M22-XDP-S** ②
	Custom	**M22-XDP-S-ETCH** ③
	STOP	**M22-XDP-S-GB0**
	START	**M22-XDP-S-GB1**
	FORWARD	**M22-XDP-S-GB15**
	REVERSE	**M22-XDP-S-GB16**
	UP	**M22-XDP-S-GB3**
	DOWN	**M22-XDP-S-GB4**
	OFF	**M22-XDP-S-GB5**
	ON	**M22-XDP-S-GB6**
	◎	**M22-XDP-S-X0**
	①	**M22-XDP-S-X1**
	⊕	**M22-XDP-S-X4**
	⊖	**M22-XDP-S-X5**
	↑	**M22-XDP-S-X7**
Red	—	**M22-XDP-R** ②
	Custom	**M22-XDP-R-ETCH** ③
	STOP	**M22-XDP-R-GB0**
	OFF	**M22-XDP-R-GB5**
	◎	**M22-XDP-R-X0**
Green	—	**M22-XDP-G** ②
	Custom	**M22-XDP-G-ETCH** ③
	START	**M22-XDP-G-GB1**
	ON	**M22-XDP-G-GB6**
	◎	**M22-XDP-G-X0**
	①	**M22-XDP-G-X1**
White	—	**M22-XDP-W** ②
	Custom	**M22-XDP-W-ETCH** ③
Yellow	—	**M22-XDP-Y** ②
	Custom	**M22-XDP-Y-ETCH** ③

M22-DP-G-X



Momentary Insertless Mushroom Head Operators

Bezel	Color	Catalog Number
Silver	Black	**M22-DP-S-X**
	Red	**M22-DP-R-X**
	Green	**M22-DP-G-X**
	Yellow	**M22-DP-Y-X**
Black	Black	**M22S-DP-S-X**
	Red	**M22S-DP-R-X**
	Green	**M22S-DP-G-X**
	Yellow	**M22S-DP-Y-X**

M22-DRP-G-X



Maintained Insertless Mushroom Head Operators ④

Bezel	Color	Catalog Number
Silver	Black	**M22-DRP-S-X**
	Red	**M22-DRP-R-X**
	Green	**M22-DRP-G-X**
	Yellow	**M22-DRP-Y-X**
Black	Black	**M22S-DRP-S-X**
	Red	**M22S-DRP-R-X**
	Green	**M22S-DRP-G-X**
	Yellow	**M22S-DRP-Y-X**

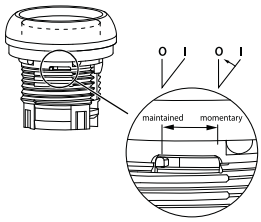
Notes

① 35 mm diameter mushroom head button.

② Minimum order quantity of (10).

③ When ordering, specify inscription per catalog number suffix from the Symbols Library (see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1) into the Order Notes.
For example, M22-XDP-S-ETCH; Order Notes: Mark with symbol X91, Line item #_.

④ Maintained pushbuttons can be converted in the field to momentary operation by switching the locking ring, which is accessible through the side of the operator body.



Components

Double Pushbuttons, Extended Pushbuttons and Center Light, Momentary

Operators Only ①

	Bezel	Color Top	Color Bottom	Inscription Top	Inscription Bottom	Catalog Number
M22-DDL-GR-GB1-GB0 	Silver	Green	Red	—	—	**M22-DDL-GR**
				Custom	Custom	**M22-DDL-GR-ETCH** ②
				ⓘ	◎	**M22-DDL-GR-X1-X0**
				START	STOP	**M22-DDL-GR-GB1-GB0**
		White	Black	—	—	**M22-DDL-WS**
				Custom	Custom	**M22-DDL-WS-ETCH** ②
				ⓘ	◎	**M22-DDL-WS-X1-X0**
				START	STOP	**M22-DDL-WS-GB1-GB0**
		Black	Black	—	—	**M22-DDL-S**
				Custom	Custom	**M22-DDL-S-ETCH** ②
				—	—	**M22-DDL-S-X4-X5**
				ⓘ	ⓘ	**M22-DDL-S-X7-X7**
M22S-DDL-GR-X1-X0 	Black	Green	Red	—	—	**M22S-DDL-GR**
				Custom	Custom	**M22S-DDL-GR-ETCH** ②
				ⓘ	◎	**M22S-DDL-GR-X1-X0**
				START	STOP	**M22S-DDL-GR-GB1-GB0**
		White	Black	—	—	**M22S-DDL-WS**
				Custom	Custom	**M22S-DDL-WS-ETCH** ②
				ⓘ	◎	**M22S-DDL-WS-X1-X0**
				START	STOP	**M22S-DDL-WS-GB1-GB0**
		Black	Black	—	—	**M22S-DDL-S**
				Custom	Custom	**M22S-DDL-S-ETCH** ②
				⊕	—	**M22S-DDL-S-X4-X5**
				ⓘ	ⓘ	**M22S-DDL-S-X7-X7**

Notes

① Includes contact block mounting adapter.

② When ordering, specify inscription per catalog number suffix from the Symbols Library (see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1) into the Order Notes. For example, M22-DDL-S-ETCH; Order Notes: Mark with symbol X91, Line item #_.

Double Pushbuttons, Flush Top Pushbuttons and Center Light, Momentary

Operators Only ①

	Bezel	Color Top	Color Bottom	Inscription Top	Inscription Bottom	Catalog Number
M22-DDLF-GR 	Silver	Green	Red	—	—	**M22-DDLF-GR**
				Custom	Custom	**M22-DDLF-GR-ETCH** ②
		White	Black	—	—	**M22-DDLF-WS**
				Custom	Custom	**M22-DDLF-WS-ETCH** ②
		Green	Red	ⓘ	◎	**M22-DDLF-GR-X1-X0**
		White	Black	ⓘ	◎	**M22-DDLF-WS-X1-X0**
M22S-DDLF-GR-X1-X0 	Black	Green	Red	—	—	**M22S-DDLF-GR**
				Custom	Custom	**M22S-DDLF-GR-ETCH** ②
		White	Black	—	—	**M22S-DDLF-WS**
				Custom	Custom	**M22S-DDLF-WS-ETCH** ②
		Green	Red	ⓘ	◎	**M22S-DDLF-GR-X1-X0**
		White	Black	ⓘ	◎	**M22S-DDLF-WS-X1-X0**

Double Pushbuttons, Flush Top Pushbutton and Center Light, Extended Bottom Pushbutton, Momentary

Operators Only ①

	Bezel	Color Top	Color Bottom	Inscription Top	Inscription Bottom	Catalog Number
M22-DDLM-GR 	Silver	Green	Red	—	—	**M22-DDLM-GR**
				Custom	Custom	**M22-DDLM-GR-ETCH** ②
		White	Black	—	—	**M22-DDLM-WS**
				Custom	Custom	**M22-DDLM-WS-ETCH** ②
		Green	Red	ⓘ	◎	**M22-DDLM-GR-X1-X0**
		White	Black	ⓘ	◎	**M22-DDLM-WS-X1-X0**
M22-DDLM-GR-X1-X0 	Black	Green	Red	—	—	**M22S-DDLM-GR**
				Custom	Custom	**M22S-DDLM-GR-ETCH** ②
		White	Black	—	—	**M22S-DDLM-WS**
				Custom	Custom	**M22S-DDLM-WS-ETCH** ②
		Green	Red	ⓘ	◎	**M22S-DDLM-GR-X1-X0**
		White	Black	ⓘ	◎	**M22S-DDLM-WS-X1-X0**

Notes

① Includes contact block mounting adapter.

② When ordering, specify inscription per catalog number suffix from the Symbols Library (see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1) into the Order Notes. For example, M22-DDLM-GR-ETCH; Order Notes: Mark with symbol X91, Line item #_.

Four-Way Pushbuttons, Momentary

Components

M22-D4-S-X7



Operators Only ①

Type	Bezel	Color	Inscription	Catalog Number
Non-interlocked	Silver	Black	—	**M22-D4-S**
			Custom	**M22-D4-S-ETCH** ②
			Directional arrows	**M22-D4-S-X7**
	Black	Black	—	**M22S-D4-S**
			Custom	**M22S-D4-S-ETCH** ②
			Directional arrows	**M22S-D4-S-X7**
Interlocked	Silver	Black	—	**M22-DI4-S**
			Custom	**M22-DI4-S-ETCH** ②
			Directional arrows	**M22-DI4-S-X7**
	Black	Black	—	**M22S-DI4-S**
			Custom	**M22S-DI4-S-ETCH** ②
			Directional arrows	**M22S-DI4-S-X7**

Joysticks

Components

M22-WJ2H



Operators Only ①

Bezel	Number of Directions	Switching Position	Catalog Number
Silver	Two-position horizontal	Momentary	**M22-WJ2H**
	Two switch points		**M22-WJ2H-2P**
	Two-position horizontal	Maintained	**M22-WRJ2H**
	Two-position vertical	Momentary	**M22-WJ2V**
	Two switch points		**M22-WJ2V-2P**
	Two-position vertical	Maintained	**M22-WRJ2V**
	Four-position	Momentary	**M22-WJ4**
	Two switch points		**M22-WJ4-2P**
	Four-position	Maintained	**M22-WRJ4**
Black	Two-position horizontal	Momentary	**M22S-WJ2H**
	Two switch points		**M22S-WJ2H-2P**
	Two-position horizontal	Maintained	**M22S-WRJ2H**
	Two-position vertical	Momentary	**M22S-WJ2V**
	Two switch points		**M22S-WJ2V-2P**
	Two-position vertical	Maintained	**M22S-WRJ2V**
	Four-position	Momentary	**M22S-WJ4**
	Two switch points		**M22S-WJ4-2P**
	Four-position	Maintained	**M22S-WRJ4**

Notes

① Includes contact block mounting adapter.

② When ordering, specify inscription per catalog number suffix from the Symbols Library (see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1) into the Order Notes. For example, M22-DDLM-GR-ETCH; Order Notes: Mark with symbol X91, Line item #_

Potentiometers

M22-R10K



Complete Devices

Bezel	Resistance Rk	Catalog Number
Silver	1	**M22-R1K**
	4.7	**M22-R4K7**
	10	**M22-R10K**
	47	**M22-R47K**
	100	**M22-R100K**
	470	**M22-R470K**
Black	1	**M22S-R1K**
	4.7	**M22S-R4K7**
	10	**M22S-R10K**
	47	**M22S-R47K**
	100	**M22S-R100K**
	470	**M22S-R470K**
Oversized Knob		
Silver	1	**M22-R1K-RH**
	4.7	**M22-R4K7-RH**
	10	**M22-R10K-RH**
	47	**M22-R47K-RH**
	100	**M22-R100K-RH**
	470	**M22-R470K-RH**
Black	1	**M22S-R1K-RH**
	4.7	**M22S-R4K7-RH**
	10	**M22S-R10K-RH**
	47	**M22S-R47K-RH**
	100	**M22S-R100K-RH**
	470	**M22S-R470K-RH**

Acoustic Devices

M22-AMC-XAM



Complete Devices

Description	Decibel Rating	Catalog Number
Indicator with buzzer, black continuous tone, 18–30 Vac/Vdc	83 dB/ 10 cm	**M22-AMC-XAM**
Indicator with buzzer, black pulsed tone, 18–30 Vac/Vdc	83 dB/ 10 cm	**M22-AMC-XAMP**

M22-XAM



Components

Description	Decibel Rating	Catalog Number
Indicator without buzzer, black	83 dB/ 10 cm	**M22-AMC**
Buzzer only, continuous tone, 18–30 Vac/Vdc	83 dB/ 10 cm	**M22-XAM**
Buzzer only, pulsed tone, 18–30 Vac/Vdc	83 dB/ 10 cm	**M22-XAMP**

Through-the-Door Operators ①

Complete Devices

M22-DZ-B-X6



Color	Inscription	Catalog Number
Blue	—	**M22-DZ-B**
	RESET	**M22-DZ-B-GB14**
	Ⓡ	**M22-DZ-B-X6**
Red	—	**M22-DZ-R**
	◎	**M22-DZ-R-X0**
	STOP	**M22-DZ-R-GB0**

Buttonless Operator

M22-DZ-X



Bezel	Catalog Number
Silver	**M22-DZ-X**

Button Plates ②

M22-XD-B



Color	Inscription	Catalog Number
Blue	—	**M22-XD-B** ③
	RESET	**M22-XD-B-GB14**
	Ⓡ	**M22-XD-B-X6**
Red	—	**M22-XD-R** ③
	◎	**M22-XD-R-X0**
	STOP	**M22-XD-R-GB0**

Bulkhead Interfaces

USB Socket ④⑤

M22-USB-SA



Description	Catalog Number
Used for USB connection USB 2.0 Type A plug IP65 when closed IP20 when connected	**M22-USB-SA**

RJ45 Socket ⑥

M22-RJ45-SA



Description	Catalog Number
Used for RJ45 Ethernet connection IP65 when closed IP20 when connected	**M22-RJ45-SA**

Notes

① The pushrod is 3.24 in long and can be cut to length.
② Any combination of plate color and inscription is available.
③ Minimum order quantity of (10).
④ USB interface is complete with 2-ft-long USB cable.
⑤ UL and CSA pending.
⑥ RJ45 interface is an eight-wire connector.

ASi Adapter Modules

M22-ASI



Complete Devices

Description	Catalog Number
ASi adapter module	**M22-ASI**
ASi adapter module for base mounting	**M22-ASI-C**
ASi adapter module for E-stop	**M22-ASI-S**
ASi adapter module for E-stop base mounting	**M22-ASI-CS**

Complete Devices

Operator, Base and Contact Blocks ①

Button Color	Contact Block Configuration ②	Catalog Number
Momentary		
Black	1NO-1NC	**FAK-S-KC11-I**
Red	1NO-1NC	**FAK-R-KC11-I**
Yellow	1NO-1NC	**FAK-Y-KC11-I**
Maintained		
Red	NC	**FAK-R-V-KC01-IY**
	2NC	**FAK-R-V-KC02-IY**
	1NO-2NC	**FAK-R-V-KC12-IY**
	1NO-1NC	**FAK-R-V-KC11-IY**

FAK-S-KC11-I



FAK-R-V-KC01-IY



Notes

① For complete listing of available contact blocks, see Accessories, **Pages V9-T4-31** to **V9-T4-36**.

② All NC contact blocks are positively driven contact.

Accessories

Mounting Adapters

	Description	Catalog Number
M22-A 	Contact block mounting adapter. ①	**M22-A**
M22-A4 	Contact block mounting adapter, four-position (for use with four-way pushbuttons, joysticks and four-position selector switches only). ①	**M22-A4**
M22-LS 	Allows mounting of M22 pushbuttons to LS-Titan limit switch bodies (for the full LS-Titan catalog section, see **PG08301004E**).	**M22-LS**

Contact Blocks

M22-K10; 

Mounting Location	Terminal Type	Contact Configuration ②	Package Qty.	Catalog Number
Front	Screw	NO	1	**M22-K10**
		NO	25	**M22-K10-B25**
		NO	100	**M22-K10-B100**
		NO, early-make	1	**M22-K10P**
		NC	1	**M22-K01**
		NC	25	**M22-K01-B25**
		NC	100	**M22-K01-B100**
		NC, late-break	1	**M22-K01D**
Base		NO	1	**M22-KC10**
		NO	25	**M22-KC10-B25**
		NO	100	**M22-KC10-B100**
		NC	1	**M22-KC01**
		NC	25	**M22-KC01-B25**
		NC	100	**M22-KC01-B100**
Front	Spring cage	NO	1	**M22-CK10**
		NC	1	**M22-CK01**
		NC, late-break	1	**M22-CK01D**
		2NO ③	1	**M22-CK20**
		2NC ③	1	**M22-CK02**
		NO-NC ③	1	**M22-CK11**
Base		NO	1	**M22-CKC10**
		NC	1	**M22-CKC01**

Notes

① Included with each operator.
② All NC contact blocks are positively driven contact. ⊖
③ Not stackable.

M22-LED-W



Light Units

Terminal Type	Mounting Location	LED Color	Light Unit Voltage	Catalog Number
Screw	Front	White	12–30 Vac/Vdc	**M22-LED-W**
		Red		**M22-LED-R**
		Green		**M22-LED-G**
		Blue		**M22-LED-B**
		White	85–264 Vac	**M22-LED230-W**
		Red		**M22-LED230-R**
		Green		**M22-LED230-G**
		Blue		**M22-LED230-B**
		White	207–264 Vac	**M22-LED230H-W**
		Red		**M22-LED230H-R**
		Green		**M22-LED230H-G**
		Blue		**M22-LED230H-B**
	Base	White	12–30 Vac/Vdc	**M22-LEDC-W**
		Red		**M22-LEDC-R**
		Green		**M22-LEDC-G**
		Blue		**M22-LEDC-B**
		White	85–264 Vac	**M22-LEDC230-W**
		Red		**M22-LEDC230-R**
		Green		**M22-LEDC230-G**
		Blue		**M22-LEDC230-B**
		White	207–264 Vac	**M22-LEDC230H-W**
		Red		**M22-LEDC230H-R**
		Green		**M22-LEDC230H-G**
		Blue		**M22-LEDC230H-B**
Spring cage	Front	White	12–30 Vac/Vdc	**M22-CLED-W**
		Red		**M22-CLED-R**
		Green		**M22-CLED-G**
		Blue		**M22-CLED-B**
		White	85–264 Vac	**M22-CLED230-W**
		Red		**M22-CLED230-R**
		Green		**M22-CLED230-G**
		Blue		**M22-CLED230-B**
	Base	White	12–30 Vac/Vdc	**M22-CLEDC-W**
		Red		**M22-CLEDC-R**
		Green		**M22-CLEDC-G**
		Blue		**M22-CLEDC-B**
		White	85–264 Vac	**M22-CLEDC230-W**
		Red		**M22-CLEDC230-R**
		Green		**M22-CLEDC230-G**
		Blue		**M22-CLEDC230-B**

M22-XLED60



LED Resistor and Test Elements

Terminal Type	Mounting Location	Element Type	Voltage	Catalog Number
Screw	Front	Resistor ①②	42–60 Vac/Vdc	**M22-XLED60**
			220 Vdc	**M22-XLED220**
		Test	12–240 Vac/Vdc	**M22-XLED-T**
			85–264 Vac	**M22-XLED230-T**

Legend Plate Holders and Inserts, Pushbuttons and Double Pushbuttons ③

M22S-ST-X



Description	Inscription	Catalog Number
Legend plate holder, without legend plate insert, for pushbuttons	—	**M22S-ST-X**
Legend plate holder, without legend plate insert, for double pushbuttons	—	**M22S-STDD-X**

M22-XST-GB0



Description	Inscription	Catalog Number
Legend plate insert	—	**M22-XST**
	Custom	**M22-XST-ETCH** ④
	STOP	**M22-XST-GB0**
	START	**M22-XST-GB1**
	OFF	**M22-XST-GB5**
	ON	**M22-XST-GB6**
	RUN	**M22-XST-GB7**
	FAULT	**M22-XST-GB8**
	OFF ON	**M22-XST-GB10**
	MAN. AUTO	**M22-XST-GB11**
	MAN. O AUTO	**M22-XST-GB12**
	HAND AUTO	**M22-XST-D11**
	HAND O AUTO	**M22-XST-D12**
	1	**M22-XST-X52**
	2	**M22-XST-X53**
	O I	**M22-XST-X88**
	O - I	**M22-XST-X89**
	I O II	**M22-XST-X93**

Notes

① Resistor units to be used with 12–30V light units.
② Refer to **IL04716002E** for use of resistor elements in series for higher DC voltage.
③ Legend plates are IP66 and NEMA 4X/13.
④ When ordering, specify inscription per catalog number suffix from the Symbols Library (see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1) into the Order Notes. For example, M22-XD-S-ETCH; Order Notes: Mark with symbol X91, Line item #_.

Example

To order a legend plate for a pushbutton with non-standard markings (FORWARD):

1. Select legend plate holder—M22S-ST-X.
2. Select legend plate insert—M22-XST-ETCH.
3. Select FORWARD from the Symbols Library, Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1, identified by GB15 suffix.
4. Indicate on the order form in the order notes—suffix GB15, line item # ___ .

Legend Plates, Complete ①

	Description		Inscription	Catalog Number
M22S-ST-GB0 	For use with pushbuttons and indicating lights	Legend plate holder with insert	STOP	**M22S-ST-GB0**
			START	**M22S-ST-GB1**
			OFF	**M22S-ST-GB5**
			ON	**M22S-ST-GB6**
			RUN	**M22S-ST-GB7**
			FAULT	**M22S-ST-GB8**
			1	**M22S-ST-X52**
			2	**M22S-ST-X53**
	Selector switches	—	OFF ON	**M22S-ST-GB10**
			MAN. AUTO	**M22S-ST-GB11**
			MAN. O AUTO	**M22S-ST-GB12**
			HAND AUTO	**M22S-ST-D11**
			HAND O AUTO	**M22S-ST-D12**
			O I	**M22S-ST-X88**
			O - I	**M22S-ST-X89**
			I O II	**M22S-ST-X93**
M22-XZK 	Emergency-stop operators	Rectangular yellow legend plate	—	**M22-XZK**
			Custom	**M22-XZK-ETCH** ②
			EMERGENCY-STOP	**M22-XZK-GB99**
M22-XYK 		Square yellow legend plate	—	**M22-XYK**
			—	**M22-XYK-ETCH** ②
			EMERGENCY-STOP four-language	**M22-XYK1**
			EMERGENCY-STOP (top and bottom)	**M22-XYK5**
		Round yellow legend plate, 90 mm	—	**M22-XAK**
			Custom	**M22-XAK-ETCH** ②
			EMERGENCY-STOP four-language	**M22-XAK1**
			EMERGENCY-STOP (top and bottom)	**M22-XAK5**
M22-XBK1 		Round yellow legend plate, 60 mm	—	**M22-XBK**
			Custom	**M22-XBK-ETCH** ②
			EMERGENCY-STOP four-language	**M22-XBK1**
			EMERGENCY-STOP (top and bottom)	**M22-XBK5**
M22-XCK1 	Four-way pushbutton, joystick and four-position selector switches	Silver square legend plate	—	**M22-XCK**
			Custom	**M22-XCK-ETCH** ②
			Four directional arrows	**M22-XCK1**
			0-1-0-2-0-3-0-4	**M22-XCK2**
			Two directional arrows	**M22-XCK3**

Notes

① Legend plates are IP66 and NEMA 4X/13.

② When ordering, specify inscription per catalog number suffix from the Symbols Library (see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E, Tab 1) into the Order Notes. For example, M22-XD-S-ETCH; Order Notes: Mark with symbol X91, Line item #_.

Surface Mounting Enclosures ①

M22-IY1-PG



Description	Catalog Number
Yellow top, black base for emergency-stop operators	M22-IY1-PG

M22-IY-PG



One-element enclosure	M22-I1-PG
Two-element enclosure	M22-I2-PG
Three-element enclosure	M22-I3-PG
Four-element enclosure	M22-I4-PG
Six-element enclosure	M22-I6-PG
M20 connecting screw	M22-XI
M20 cord grip	V-M20

Flush Mounting Plates, Aluminum

M22-EY1



Finish	Rating	Catalog Number
One Hole		
Yellow paint for emergency-stop operators	—	M22-EY1
Gray anodized	IP65	M22-E1
Two Holes		
Gray anodized	IP65	M22-E2
Three Holes		
Gray anodized	IP65	M22-E3
Four Holes		
Gray anodized	IP65	M22-E4
Five Holes		
Gray anodized	IP65	M22-E5
Six Holes		
Anodized	IP40	M22-E6

Shrouds, Plastic

M22-H1



Description	Rating	Catalog Number
One-element	IP55	M22-H1
Two-element	IP55	M22-H2
Three-element	IP55	M22-H3
Four-element	IP40	M22-H4
Five-element	IP40	M22-H5
Six-element	IP40	M22-H6
Mounting plate	—	M22-XE5
Plaster keys for flush mounting	—	M22-UPE

Selector Switch Accessories

M22-XW



Description	Catalog Number
Plunger bridge ②	M22-XW

M22-XWS



Key cover	M22-XWS

M22-XC-R



Key withdraw adapter ③	M22-XC-R

M22-XC-Y



Coding adapter	M22-XC-Y

M22-XGWK



Guard ring	M22-XGWK

Emergency Stop Operator Accessories

M22-XGPV



Description	Catalog Number
Yellow guard ring	M22-XGPV

M22G-XGPV



Gray guard ring	M22G-XGPV

M22-PL-PV



Sealing shroud	M22-PL-PV

Blanking Plugs

M22-B



Color	Catalog Number
Gray	M22-B
Black	M22S-B

Notes

① Requires use of base mounted contact blocks.

② Plunger needed to actuate center-mounted contact blocks. Used for non-illuminated three-position selector switches only.

③ Enables a keyed selector switch to be set to user-selected key withdraw position.

Mounting Accessories

	Description	Catalog Number
M22-TC and M22-TA 	Telescopic clip with top-hat rail	**M22-TC**
	Telescopic clip	**M22-TA**
	Telescopic clip extension	**M22-TCV**
M22-IVS 	DIN rail mounting adapter	**M22-IVS**
M22-GR 	Mounting ring	**M22-GR**
M22-MS 	Mounting ring tool	**M22-MS**
M22S-R30 	Adapter ring set for 30 mm holes	**M22S-R30**

M22-T-D and M22-T-DD


Protective Diaphragm

For Use with …	Catalog Number
Flush pushbuttons and indicating lights	**M22-T-D**
Double pushbuttons	**M22-T-DD**

M22-ADC4


Dust Covers

Description	Catalog Number
Contact block dust cover	**M22-XKDP**
Operator dust cover, max three contact blocks	**M22-ADC**
Operator dust cover, max four contact blocks	**M22-ADC4**

Kits

Description	Catalog Number
Includes one each: M22-XW, M22-XC-R, M22-XC-Y, M22S-B, M22-A, M22-XD-SWRGYB	**M22-KT1**

10250T—30 mm Pushbuttons



Features

- Heavy-duty zinc die-cast construction
- Enclosed silver contacts with reliability nibs
- Diaphragm seals with drainage holes
- Grounding nibs on the operator casing

Product Selection

10250T—30 mm Pushbuttons

Flush Button



Extended Button



Mushroom Button



Jumbo Mushroom



Non-Illuminated Pushbutton Units—UL (NEMA) Type 3, 3R, 4, 4X, 12, 13

Contact Type	Button Color	Catalog Number Flush Button	Extended Button	Mushroom Button	Jumbo Mushroom ①
1NO	Black	**10250T23B**	**10250T25B**	**10250T26B**	**10250T27B**
	Red	**10250T23R**	**10250T112-53**	**10250T122-53**	**10250T172-53**
	Green	**10250T23G**	**10250T25G**	**10250T26G**	**10250T27G**
	Yellow	**10250T23Y**	**10250T25Y**	**10250T26Y**	**10250T27Y**
	Red—Engraved EMERG. STOP	—	—	—	**10250T17213-53**
1NC	Black	**10250T101-51**	**10250T111-51**	**10250T121-51**	**10250T171-51**
	Red	**10250T102-51**	**10250T25R**	**10250T26R**	**10250T27R**
	Green	**10250T103-51**	**10250T113-51**	**10250T123-51**	**10250T173-51**
	Yellow	**10250T104-51**	**10250T120-51**	**10250T124-51**	**10250T174-51**
	Red—Engraved EMERG. STOP	—	—	—	**10250T29**
1NO-1NC	Black	**10250T30B**	**10250T31B**	**10250T32B**	**10250T33B**
	Red	**10250T30R**	**10250T31R**	**10250T32R**	**10250T33R**
	Green	**10250T30G**	**10250T31G**	**10250T32G**	**10250T33G**
	Yellow	**10250T30Y**	**10250T31Y**	**10250T32Y**	**10250T33Y**
	Red—Engraved EMERG. STOP	—	—	—	**10250T33**
2NO	Black	**10250T101-2**	**10250T111-2**	**10250T121-2**	**10250T171-2**
	Red	**10250T102-2**	**10250T112-2**	**10250T122-2**	**10250T172-2**
	Green	**10250T103-2**	**10250T113-2**	**10250T123-2**	**10250T173-2**
	Yellow	**10250T104-2**	**10250T120-2**	**10250T124-2**	**10250T174-2**
	Red—Engraved EMERG. STOP	—	—	—	**10250T17213-2**
2NC	Black	**10250T101-3**	**10250T111-3**	**10250T121-3**	**10250T171-3**
	Red	**10250T102-3**	**10250T112-3**	**10250T122-3**	**10250T172-3**
	Green	**10250T103-3**	**10250T113-3**	**10250T123-3**	**10250T173-3**
	Yellow	**10250T104-3**	**10250T120-3**	**10250T124-3**	**10250T174-3**
	Red—Engraved EMERG. STOP	—	—	—	**10250T17213-3**

Note

① Anodized aluminum head is not suitable for use in ultraviolet light applications.

24V Full Voltage Illuminated Pushbutton



Illuminated Pushbutton Units—UL (NEMA) Type 3, 3R, 4, 4X, 12, 13

Type	Voltage	Color	LED/Lamp Number	Catalog Number Illuminated Pushbutton 1NO	1NO-1NC	1NC
LED Lamp						
Full voltage	24 Vac/Vdc	Red	Bayonet base	**10250T397LRD24-53**	**10250T397LRD24-1**	**10250T397LRD24-51**
		Green		**10250T397LGD24-53**	**10250T397LGD24-1**	**10250T397LGD24-51**
		Amber		**10250T397LAD24-53**	**10250T397LAD24-1**	**10250T397LAD24-51**
		Yellow		**10250T397LYD24-53**	**10250T397LYD24-1**	**10250T397LYD24-51**
		Blue		**10250T397LLD24-53**	**10250T397LLD24-1**	**10250T397LLD24-51**
		White		**10250T397LWD24-53**	**10250T397LWD24-1**	**10250T397LWD24-51**
	120 Vac	Red		**10250T397LRD2A-53**	**10250T397LRD2A-1**	**10250T397LRD2A-51**
		Green		**10250T397LGD2A-53**	**10250T397LGD2A-1**	**10250T397LGD2A-51**
		Amber		**10250T397LAD2A-53**	**10250T397LAD2A-1**	**10250T397LAD2A-51**
		Yellow		**10250T397LYD2A-53**	**10250T397LYD2A-2**	**10250T397LYD2A-51**
		Blue		**10250T397LLD2A-53**	**10250T397LLD2A-1**	**10250T397LLD2A-51**
		White		**10250T397LWD2A-53**	**10250T397LWD2A-1**	**10250T397LWD2A-51**
Transformer	120 Vac	Red		**10250T411LRD06-53**	**10250T411LRD06-1**	**10250T411LRD06-51**
		Green		**10250T411LGD06-53**	**10250T411LGD06-1**	**10250T411LGD06-51**
		Amber		**10250T411LAD06-53**	**10250T411LAD06-1**	**10250T411LAD06-51**
		Yellow		**10250T411LYD06-53**	**10250T411LYD06-1**	**10250T411LYD06-51**
		Blue		**10250T411LLD06-53**	**10250T411LLD06-1**	**10250T411LLD06-51**
		White		**10250T411LWD06-53**	**10250T411LWD06-1**	**10250T411LWD06-51**
Incandescent Lamp						
Full voltage	24 Vac/Vdc	Red	#757	**10250T476C21-53**	**10250T476C21-1**	**10250T476C21-51**
		Green		**10250T476C22-53**	**10250T476C22-1**	**10250T476C22-51**
		Amber		**10250T476C43-53**	**10250T476C43-1**	**10250T476C43-51**
		Yellow		**10250T476C23-53**	**10250T476C23-1**	**10250T476C23-51**
		Blue		**10250T476C24-53**	**10250T476C24-1**	**10250T476C24-51**
		Clear		**10250T476C25-53**	**10250T476C25-1**	**10250T476C25-51**
		White		**10250T476C26-53**	**10250T476C26-1**	**10250T476C26-51**
Resistor	120 Vac/Vdc	Red	120MB	**10250T471C21-53**	**10250T471C21-1**	**10250T471C21-51**
		Green		**10250T471C22-53**	**10250T471C22-1**	**10250T471C22-51**
		Amber		**10250T471C43-53**	**10250T471C43-1**	**10250T471C43-51**
		Yellow		**10250T471C23-53**	**10250T471C23-1**	**10250T471C23-51**
		Blue		**10250T471C24-53**	**10250T471C24-1**	**10250T471C24-51**
		Clear		**10250T471C25-53**	**10250T471C25-1**	**10250T471C25-51**
		White		**10250T471C26-53**	**10250T471C26-1**	**10250T471C26-51**
Transformer	120 Vac	Red	#755	**10250T75R** ①	**10250T76R** ①	**10250T77R** ①
		Green		**10250T75G** ①	**10250T76G** ①	**10250T77G** ①
		Amber		**10250T75A** ①	**10250T76A** ①	**10250T77A** ①
		Yellow		**10250T75Y** ①	**10250T76Y** ①	**10250T77Y** ①
		Blue		**10250T75B** ①	**10250T76B** ①	**10250T77B** ①
		Clear		**10250T75C** ①	**10250T76C** ①	**10250T77C** ①
		White		**10250T75W** ①	**10250T76W** ①	**10250T77W** ①

Note

① For flashing module catalog number 10250TFL1, add suffix code **FM** to listed catalog number. Example: 10250T75R**FM**.

Indicating Light Units

24V Full Voltage Illuminated Light



120 Vac Transformer PresTest



Indicating Light Units—UL (NEMA) Type 3, 3R, 4, 4X, 12, 13 ①

Type	Voltage	Color	LED/Lamp Number	Catalog Number 24V Full Voltage Indicating Light—Red Catalog Number 10250T206NC1N	Catalog Number 120V AC Transformer PresTest—Green Catalog Number 10250T74NG
LED Lamp					
Full voltage	24 Vac/Vdc	Red	Bayonet base	**10250T197LRP24**	**10250T297LRP24**
		Green		**10250T197LGP24**	**10250T297LGP24**
		Amber		**10250T197LAP24**	**10250T297LAP24**
		Yellow		**10250T197LYP24**	**10250T297LYP24**
		Blue		**10250T197LLP24**	**10250T297LLP24**
		White		**10250T197LWP24**	**10250T297LWP24**
	120 Vac	Red		**10250T197LRP2A**	**10250T297LRP2A**
		Green		**10250T197LGP2A**	**10250T297LGP2A**
		Amber		**10250T197LAP2A**	**10250T297LAP2A**
		Yellow		**10250T197LYP2A**	**10250T297LYP2A**
		Blue		**10250T197LLP2A**	**10250T297LLP2A**
		White		**10250T197LWP2A**	**10250T297LWP2A**
Transformer	120 VAC	Red		**10250T181LRP06**	**10250T221LRP06**
		Green		**10250T181LGP06**	**10250T221LGP06**
		Amber		**10250T181LAP06**	**10250T221LAP06**
		Yellow		**10250T181LYP06**	**10250T221LYP06**
		Blue		**10250T181LLP06**	**10250T221LLP06**
		White		**10250T181LWP06**	**10250T221LWP06**
Incandescent Lamp					
Full voltage	24 Vac/Vdc	Red	#757	**10250T206NC1N**	**10250T235NC21**
		Green		**10250T206NC2N**	**10250T235NC22**
		Amber		**10250T206NC19N**	**10250T235NC43**
		Yellow		**10250T206NC3N**	**10250T235NC23**
		Blue		**10250T206NC4N**	**10250T235NC24**
		Clear		**10250T206NC5N**	**10250T235NC25**
		White		**10250T206NC6N**	**10250T235NC26**
Resistor	120 Vac/Vdc	Red	120MB	**10250T201NC1N**	**10250T231NC21**
		Green		**10250T201NC2N**	**10250T231NC22**
		Amber		**10250T201NC19N**	**10250T231NC43**
		Yellow		**10250T201NC3N**	**10250T231NC23**
		Blue		**10250T201NC4N**	**10250T231NC24**
		Clear		**10250T201NC5N**	**10250T231NC25**
		White		**10250T201NC6N**	**10250T231NC26**
Transformer ②	120 VAC	Red	#755	**10250T34R**	**10250T74NR**
		Green		**10250T34G**	**10250T74NG**
		Amber		**10250T34A**	**10250T74NA**
		Yellow		**10250T34Y**	**10250T74NY**
		Blue		**10250T34B**	**10250T74NB**
		Clear		**10250T34C**	**10250T74NC**
		White		**10250T34W**	**10250T74NW**

Notes

① Standard indicating lights are rated UL (NEMA) 3S as well.

② For flashing lamp, add letter **F** to listed catalog number. Example: 10250T34R**F**.

Two-Position Push-Pull Units—UL (NEMA) Type 3, 3R, 4, 4X, 12, 13

Operator Position ①

	Pull	Push	Button Type/Color	Contact Type	Mounting Location A	Mounting Location B	Catalog Number
Two-Position Maintained Push, Maintained Pull							
10250T5B62-1X 	0 X	X 0	40 mm/red	1NO			**10250T5B62-1X**
				1NC			
10250T5B63-1X 	0 X	X 0	40 mm engraved EMERG. STOP/red	1NO			**10250T5B63-1X**
				1NC			
10250T5J63-1X 	0 X	X 0	65 mm aluminum engraved EMERG. STOP/red	1NO			**10250T5J63-1X**
				1NC			
10250ED1080-2 	0 X	X 0	65 mm aluminum engraved EMERG. STOP/red	1NO			**10250ED1080-2**
			Special security jumbo mushroom head	1NC			

Three-Position Push-Pull Units—UL (NEMA) Type 3, 3R, 4, 4X, 12, 13

10250T_



Operator Position ①

	Pull	Intermediate	Push	Button Type/Color	Contact Type	Mounting Location A	Mounting Location B	Catalog Number
Three-Position Maintained Push, Momentary Pull								
	X X	0 X	0 0	40 mm/black	1NC			**10250T9B60-3X**
				40 mm/red	1NC			**10250T9B62-3X**
				40 mm engraved EMERG. STOP/red				**10250T9B63-3X**
Three-Position Momentary Push, Momentary Pull								
	X X	0 X	0 0	40 mm/black	1NC			**10250T4B60-3X**
				40 mm/red	1NC			**10250T4B62-3X**
	0 X	0 0	X 0	40 mm/black	1NO			**10250T10B60-1X**
				40 mm/red	1NC			**10250T10B62-1X**

Note

① X = closed circuit, 0 = open circuit.

Two-Position Push-Pull Operator



Two-Position Illuminated Maintained Push, Maintained Pull—UL (NEMA) Type 3, 3R, 4, 4X, 12, 13

Operator Position ①

Maintained—Pull	Maintained—Push	Lamp	Type	Voltage	Contact Type	Mounting Location A	Mounting Location B	LED/Lamp Number	Red Standard Push-Pull Catalog Number
0 X	X 0	LED	Full Voltage	24 Vac/Vdc	1NO			Bayonet base	**10250T597LRD24-1X**
				120 Vac/Vdc	1NC				**10250T597LRD2A-1X**
			Transformer	24 Vac					**10250T589LRD06-1X**
				120 Vac					**10250T563LRD06-1X**
0 X	X 0	Incandescent	Full voltage	24 Vac/Vdc	1NO			#757	**10250T579C47-1X**
			Resistor	120 Vac/Vdc	1NC			120MB	**10250T580C47-1X**
			Transformer	24 Vac				#755	**10250T589C47-1X**
				120 Vac					**10250T563C47-1X**

Three-Position Push-Pull Operator



Three-Position Illuminated Momentary Push, Momentary Pull—UL (NEMA) Type 3, 3R, 4, 4X, 12, 13

Operator Position ①

Momentary—Pull	Maintained—Intermediate	Momentary—Push	Lamp	Type	Voltage	Contact Type	Mounting Location A	Mounting Location B	LED/Lamp Number	Red Standard Push-Pull Catalog Number
0 X	0 0	X 0	LED	Full voltage	24 Vac/Vdc	1NO			Bayonet base	**10250T1097LRD24-1X**
					120 Vac	1NC				**10250T1097LRD2A-1X**
				Transformer	24 Vac					**10250T1089LRD06-1X**
					120 Vac					**10250T1063LRD06-1X**
X X	0 X	0 0		Full voltage	24 Vac/Vdc	1NC			Bayonet base	**10250T497LRD24-3X**
					120 Vac	1NC				**10250T497LRD2A-3X**
				Transformer	24 Vac					**10250T489LRD06-3X**
					120 Vac					**10250T463LRD06-3X**
0 X	0 0	X 0	Incan-descent	Full voltage	24 Vac/Vdc	1NO			#757	**10250T1079C47-1X**
				Resistor	120 Vac	1NC			120MB	**10250T1080C47-1X**
				Transformer	24 Vac				#755	**10250T1089C47-1X**
					120 Vac					**10250T1063C47-1X**
X X	0 X	0 0		Full voltage	24 Vac/Vdc	1NC			#757	**10250T479C47-3X**
				Resistor	120 Vac	1NC			120MB	**10250T480C47-3X**
				Transformer	24 Vac				#755	**10250T489C47-3X**
					120 Vac					**10250T463C47-3X**

Note

① X = closed circuit, 0 = open circuit.

Three-Position Push-Pull Operator



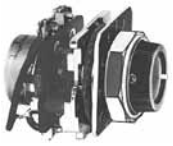
Three-Position Illuminated Maintained Push, Momentary Pull—UL (NEMA) Type 3, 3R, 4, 4X, 12, 13

Operator Position ①

Momentary—Pull	Maintained—Intermediate	Momentary—Push	Lamp	Type	Voltage	Contact Type	Mounting Location A	Mounting Location B	LED/ Lamp Number	Red Standard Push-Pull Catalog Number
X	0	0	LED	Full voltage	24 Vac/Vdc	1NC			Bayonet base	**10250T997LRD24-3X**
X	X	0			120 Vac	1NC				**10250T997LRD2A-3X**
				Transformer	24 Vac					**10250T989LRD06-3X**
					120 Vac					**10250T963LRD06-3X**
X	0	0	Incan-descent	Full voltage	24 Vac/Vdc	1NC			#757	**10250T979C47-3X**
X	X	0		Resistor	120 Vac	1NC			120MB	**10250T980C47-3X**
				Transformer	24 Vac				#755	**10250T989C47-3X**
					120 Vac					**10250T963C47-3X**

Potentiometers

Vertical or Horizontal ② **One-Hole Mounting**



Potentiometer with Knob and Standard Dial Plate—Linear Type ±10%—UL (NEMA) Type 3, 3R, 4, 12, 13

Potentiometer Ohms	Catalog Number
2 Watt (60V Max.) Single Potentiometer with Standard Aluminum Dial Plate ③④	
1000	**10250T331**
2500	**10250T332**
5000	**10250T338**
10000	**10250T333**
25000	**10250T334**
50000	**10250T335**
Operator only ⑤	**10250T330**
Alternative—black plastic large legend with standard markings	**E34LP99**

Notes

① X = closed circuit, 0 = open circuit.

② Shown with standard aluminum dial plate.

③ Large dial plate with space for legend is available at no charge. To order, add suffix **36** to catalog number. Example: 10250T331**36**. To order separately, see footnote ④ below.

④ Large dial plate has space at top for 15 letters. 3/32 in high. For custom stamped legend plates, order legend plate as separate item **10250TR30** and specify stamping.

⑤ For use with commercially purchased potentiometers having shaft dimensions per dimension drawing

Selector Switch Units

Two-Position Maintained Switch



Two-Position Selector Switch—UL (NEMA) Type 3, 3R, 4, 4X, 12, 13

Operator Position ①		Operator Action ②	Contact Type	Mounting Location A	Mounting Location B	Non-Illuminated Black Knob Catalog Number ③	Non-Illuminated Black Lever Catalog Number ③	Illuminated—120V Transformer Red Knob Catalog Number ③	Illuminated—120V Transformer Red Lever Catalog Number ③
X	0	M M	1NC			10250T20K**B**	10250T20L**B**	10250ED1117-K**R**	10250ED1117-L**R**
0	X		1NO						

Three-Position Maintained Switch



Three-Position Selector Switch—UL (NEMA) Type 3, 3R, 4, 4X, 12, 13

Operator Position ①			Operator Action ②	Contact Type	Mounting Location A	Mounting Location B	Non-Illuminated Black Knob Catalog Number ③	Non-Illuminated Black Lever Catalog Number ③	Illuminated—120V Transformer Red Knob Catalog Number ③	Illuminated—120V Transformer Red Lever Catalog Number ③
X	0	0	M M M	1NO			10250T21K**B**	10250T21L**B**	10250ED1117-2K**R**	10250ED1117-2L**R**
0	0	X		1NO						
X	0	0		1NO			10250T22K**B**	10250T22L**B**	10250ED1117-3K**R**	10250ED1117-3L**R**
0	X	0		2NC (Series)						
0	0	X		1NO						

Four-Position Maintained Switch



Four-Position Selector Switch—UL (NEMA) Type 3, 3R, 4, 4X, 12, 13

Operator Position ①				Operator Action ②	Contact Type	Mounting Location A	Mounting Location B	Non-Illuminated Black Knob Catalog Number ③	Non-Illuminated Black Lever Catalog Number ③	Illuminated—120V Transformer Red Knob Catalog Number ③	Illuminated—120V Transformer Red Lever Catalog Number ③
X	0	0	0	M M M M	1NC			10250T46K**B**	10250T46L**B**	10250ED1117-4K**R**	10250ED1117-4L**R**
0	X	0	0		1NO						
0	0	X	0		1NO						
0	0	0	X		1NC						

Color Selection

Illuminated

Color	Code Letter	Color	Code Letter	Color	Code Letter
Red	**R**	White	**W**	Amber	**A**
Green	**G**	Blue	**B**	Clear	**C**

Non-Illuminated

Color	Code Letter	Color	Code Letter	Color	Code Letter
Black	**B**	Green	**G**	Blue	**L**
Red	**R**	White	**W**	Orange	**O**

Notes

① X = closed circuit, 0 = open circuit.

② M = Maintained.

③ To order different type or color selector switch, substitute the underlined character with appropriate suffix code from the Color Selection table. Example: 10250T20K**G**.

Legend Plates

Square Legend Plate



1/2 Round Legend Plate



For Pushbutton Operators and Indicating Lights—Standard

Legend	Color of Field	Square ① Catalog Number	1/2 Round Catalog Number	Legend	Color of Field	Square ① Catalog Number	1/2 Round Catalog Number
Blank—see table on Page V9-T4-46.							
Letters on Legend Plates Below are 3/16 in High							
CLAMP	Black	**10250TS90**	**10250TM90**	OFF	Red	**10250TS24**	**10250TM24**
CLOSE		**10250TS73**	**10250TM11**	ON	Black	**10250TS25**	**10250TM25**
DOWN		**10250TS74**	**10250TM12**	OPEN		**10250TS26**	**10250TM26**
EMERG. STOP	Red	**10250TS13**	**10250TM13**	OUT		**10250TS27**	**10250TM27**
FAST	Black	**10250TS75**	**10250TM14**	POWER ON		**10250TS80**	**10250TM80**
FASTER		**10250TS87**	**10250TM87**	RAISE		**10250TS28**	**10250TM28**
FEEDER ON		**10250TS94**	**10250TM94**	READY		**10250TS86**	**10250TM86**
FEEDER OFF		**10250TS95**	**10250TM95**	RESET		**10250TS29**	**10250TM29**
FORWARD		**10250TS15**	**10250TM15**	REVERSE		**10250TS30**	**10250TM30**
HIGH		**10250TS16**	**10250TM16**	RUN		**10250TS31**	**10250TM31**
IN		**10250TS17**	**10250TM17**	SAFE		**10250TS85**	**10250TM85**
INCH		**10250TS18**	**10250TM18**	SLOW		**10250TS32**	**10250TM32**
JOG		**10250TS19**	**10250TM19**	SLOWER		**10250TS88**	**10250TM88**
JOG FOR.		**10250TS20**	**10250TM20**	START		**10250TS33**	**10250TM33**
JOG REV.		**10250TS21**	**10250TM21**	STOP	Red	**10250TS34**	**10250TM34**
LOW		**10250TS22**	**10250TM22**	TEST	Black	**10250TS83**	**10250TM83**
LOWER		**10250TS23**	**10250TM23**	TRANSFER		**10250TS93**	**10250TM93**
LUBE-FAIL		**10250TS92**	**10250TM92**	TRIP		**10250TS84**	**10250TM84**
MOTOR RUN		**10250TS81**	**10250TM81**	UNCLAMP		**10250TS91**	**10250TM91**
MOTOR STOP		**10250TS82**	**10250TM82**	UP		**10250TS35**	**10250TM35**

Blank Plastic Legend Plates—Square

Color Lettering	Field	Standard Catalog Number	Jumbo ② Catalog Number	Extra Large Catalog Number
Black	White or silver ③	**10250TSP76**	**10250TLP76**	**10250TEP76**
White	Red or black ③	**10250TSP77**	**10250TLP77**	**10250TEP77**

Notes

① Square legend plates have a satin aluminum field. Color is on lower portion.
② Cannot be used on cast enclosures except for top row. Suitable for most sheet metal enclosures.
③ If legend plate is to be engraved, specify field color required.

Square Legend Plate



1/2 Round Legend Plate



For Selector Switch and Roto-Push Operators—Standard Size

Legend	Color of Field	Square ① Catalog Number	1/2 Round Catalog Number
Blank—see table on Page V9-T4-46.			
Two-Position—5/32 in High Lettering			
FOR. REV.	Black	**10250TS38**	**10250TM38**
HAND AUTO		**10250TS39**	**10250TM39**
HIGH LOW		**10250TS40**	**10250TM40**
JOG RUN		**10250TS41**	**10250TM41**
MAN. AUTO		**10250TS67**	**10250TM67**
OFF ON		**10250TS42**	**10250TM42**
OPEN CLOSE		**10250TS43**	**10250TM43**
RUN JOG		**10250TS44**	**10250TM44**
SAFE RUN		**10250TS45**	**10250TM45**
START JOG		**10250TS46**	**10250TM46**
START STOP		**10250TS47**	**10250TM47**
UP DOWN		**10250TS48**	**10250TM48**
Three-Position—1/8 in High Lettering			
AUTO OFF HAND	Black	**10250TS49**	**10250TM49**
FOR. OFF REV.		**10250TS50**	**10250TM50**
FOR. SAFE REV.		**10250TS69**	**10250TM69**
HAND OFF AUTO		**10250TS51**	**10250TM51**
MAN. OFF AUTO		**10250TS68**	**10250TM68**
OPEN OFF CLOSE		**10250TS53**	**10250TM53**
RUN SAFE JOG		**10250TS70**	**10250TM70**
UP OFF DOWN		**10250TS54**	**10250TM54**
ON STOP SAFE	Red	**10250TS71**	**10250TM71**

70 mm Round—Plastic Legend Plate



45 mm and 70 mm Plastic—Round

Lettering	Color Field	Catalog Number
45 mm		
Blank	Yellow or red ②	**10250TRP78**
70 mm		
Blank	Yellow or red ②	**10250TRP76**
Red EMERG. STOP	Yellow	**10250TRP79**

For Push-Pull Units ③

Legend	Color of Field	Square ① Catalog Number	1/2 Round Catalog Number
Standard Size—Letters on Legend Plates Below are 3/32 in High			
PULL START/PUSH STOP	Green/red	**10250TPP2**	**10250TR2**
PUSH ON/PULL OFF	Black	**10250TPP5**	**10250TR5**
PULL OPEN/PUSH CLOSE	Black	**10250TPP8**	**10250TR8**
PULL UP/PUSH DOWN	Black	**10250TPP11**	**10250TR11**
Jumbo Size—Letters on Legend Plates Below are 1/8 in High			
PULL START/PUSH STOP	Green/red	**10250TPP3**	**10250TR3**
PULL ON/PUSH OFF	Black	**10250TPP6**	**10250TR6**
PULL OPEN/PUSH CLOSE	Black	**10250TPP9**	**10250TR9**
PULL UP/PUSH DOWN	Black	**10250TPP12**	**10250TR12**

Notes

① Square legend plates have a satin aluminum field. Color is on lower portion.
② If legend plate is to be engraved, specify field color required.
③ All push-pull legend plates include the symbols ≠ ∅ in the center of the plate.

Blank and Custom Engraved Legend Plates

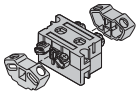
Style	Color	Small Catalog Number	Standard Catalog Number	Jumbo ① Catalog Number	Extra Large ② Catalog Number	Four-Position Selector Switch Custom ③ Catalog Number	Four-Position Selector Switch Standard Catalog Number	Push-Pull with Symbols ④ Standard Catalog Number	Push-Pull with Symbols ④ Jumbo ① Catalog Number
Square ⑤	Black	**10250TMS36**	**10250TS36**	**10250TL36**	—	**10250TS76**	**10250TS72**	**10250TPP17**	**10250TPP18**
	Red	**10250TMS37**	**10250TS37**	**10250TL37**	—	—	—	—	—
	Green/red	—	—	—	—	—	—	**10250TPP20**	**10250TPP21**
	Satin alum.	—	—	—	**10250TNP99**	—	—	—	—
1/2 Round	Black	**10250TP36**	**10250TM36**	**10250TJ36**	—	—	**10250TM72**	**10250TR17**	**10250TR18**
	Red	**10250TP37**	**10250TM37**	**10250TJ37**	—	—	—	—	—
	Green/red	—	—	—	—	—	—	**10250TR20**	**10250TR21**
	Satin alum.	—	**10250TM89**	**10250TJ89**	—	—	—	—	—

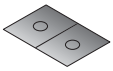
Notes

① Cannot be used on cast enclosures except for top row. Suitable for most sheet metal enclosures.
② When used to meet Ford Motor Co. specifications, specify engraved legend. Cannot be used on standard cast or sheet metal enclosures.
③ Slightly larger than standard size for legends requiring more space—fits cast enclosures.
④ All push-pull legend plates include the symbols ≠ ∅ in the center of the plate.
⑤ Square legend plates have a satin aluminum field. Color is on lower portion.

Accessories

Accessories

	Description	Catalog Number
	Padlock Attachments	
10250TA2 	**Padlocking Attachment for Flush Pushbutton Operators** Permits locking NC contacts in open position with 1/4 in padlock. Will not lock NO contact.	**10250TA2**
10250TA26 	**Padlocking Attachment for Use with Extended Pushbutton** Permits locking NC contacts in open position with 1/4 in padlock.	**10250TA26**
10250TA36 	**Padlocking Cover Guard** Cover locked over flush button makes it unaccessible or on extended button locks NC contacts open. Takes 1/4 in shank size padlock.	**10250TA36**
10250TA38 	**Padlock Hasp or Flip-Up Guard** When used with a 1/4 in padlock, makes flush and long button and knob selector switch unaccessible, but not locked down. Without the padlock, it is a flip-up guard. Padlock hasp can be removed before assembly.	**10250TA38**
10250TA63 	**Padlocking Attachment for Use with Flexible Weather Resistant Boot** Used on long button operators. Stainless steel. Use only for locking NC contacts open.	**10250TA63**
10250TA64 	**Padlock Attachment** For use with illuminated pushbuttons and maintained push-pull operators having standard button or lens only. Use 1/4 in padlock. Locks in down position only.	**10250TA64**
10250TA11 	**Padlocking Attachment for Non-Illuminated Knob Selector Switches** Provision for up to 5, 1/4 in padlocks.	**10250TA11**
	Shrouds and Guards	
10250TA6 	**Shroud for Mushroom Head Operator** Prevents accidental operation. (Not for push-pull operators.)	**10250TA6**
10250TA12 	**Extended Retaining Nut** Replaces standard nut and provides guard for flush head pushbutton operators.	**10250TA12**
10250TA15 	**Guard for Illuminated Pushbutton**	**10250TA15**
10250TA56_ 	**Shroud** For jumbo mushroom head operator. Gray Yellow	**10250TA56** **10250TA56Y**
10250ED1241 	**Half Shroud—Yellow** For jumbo mushroom head operator.	**10250ED1241**
10250TA101 	**Fingerproof Shroud** 10 per package Fits new style contact blocks and light units.	**10250TA101**

	Description	Catalog Number
	Boots	
10250TA_ 	**Flexible Weather Resistant Boot** For use with button operators (extended buttons preferred). Temperature to –25°F (–32°C). (See **Page V9-T4-48** for 10250TA96 Tightening Tool.) Black Red Green	 **10250TA3** **10250TA4** ① **10250TA10**
10250TA25 	**Transparent Boot** For regular illuminated pushbutton operators and PresTest—Temperature to –38°F (–39°C). ②	**10250TA25**
10250TA4_ 	**Boot for Flush Pushbutton** Clear Black Red Green	 **10250TA46** **10250TA47** **10250TA48** **10250TA49**
	Hardware and Kits	
10250TK3 	**Thrust Washers** To meet Ford Motor Co. mounting specifications.	**10250TK3**
10250TK5 	**Contact Block Tape Seal** Seals plunger openings on last contact block. Order in multiples of 10 pieces.	**10250TK5**
56-9337 	**Selector Switch Operator Gasket** Seals out dust from getting in between the cam and contact block plungers. Supplied as standard with all selector switches.	**56-9337**
10250TA3_ 	**Special Retaining Nut** To accommodate thick panel: Indicating lights PresTest, pushbuttons and selector switches	 **10250TA30** **10250TA31**
10250TA62 	**Terminal Block** Two terminals, each will accommodate two wire terminations.	**10250TA62**
10250TA8 	**Spacer Ring** Used when legend plate is not required.	**10250TA8**
10250TA79 	**Stacking Screw** Replaces transformer mounting screws on indicating light so terminal block 10250TA62 can be mounted to light to support and connect a series resistor. This screw also fits all contact blocks. Order in multiples of 10.	**10250TA79**

Notes

① Should not be used on flush button for STOP function.

② Not suitable for single contact block depth cast enclosure. Cover is too thick.

Accessories, continued

	Description	Catalog Number
	Hardware and Kits, continued	
10250TA2_ 	**Base Mounting Spacers** ① Equivalent to contact block in depth—complete with screws, washers, etc.	
	1 block deep	**10250TA22**
	2 block deep	**10250TA23**
10250TKG_ 	**Grounding Kits** Kits consist of a ring connector and a #6 screw for mounting connector to rear of contact block mounting screw.	
	All components except standard indicating lights and PresTest indicating lights.	**10250TKG1**
	Standard indicating lights	**10250TKG2** ②
	PresTest indicating lights	**10250TKG3** ②
10250TA7_ 	**Contact Block Terminal Jumpers** Available in multiples of 100 only.	
	Terminal to terminal—within block (short)	
	100 per pkg.	**10250TA70**
	1000 per pkg.	**10250TA70-2**
	Terminal to terminal—block to block (long)	
	100 per pkg.	**10250TA71**
	1000 per pkg.	**10250TA71-2**
	Special Operators and Attachments	
10250TA5 	**Wobble Stick** Complete with retaining nut—fits standard button.	**10250TA5**
10250TA14 	**Lever Operator** For use with two vertically mounted flush pushbuttons.	**10250TA14**
10250TA_ 	**Maintained Contact Attachment Release Button Assembly** ① Mechanically interlocks with another pushbutton and contact block (not included). Provides mode indication. Minimum hole centers 1.62 in (41.1 mm), maximum 2.31 in (58.8 mm).	
	Black	**10250TA17**
	Red	**10250TA18**
	Green	**10250TA19**
	Yellow	**10250TA20**
	Same with long button—black	**10250TA39**
10250TA1 	**Maintained Contact Attachment** ① Mechanically interlocks two buttons and provides position indication for one. Use with two pushbutton operators and one or more contact blocks.	**10250TA1**
10250TA13 	**Roto-Push Lever Operator** Used to provide lever operation for Roto-Push operators.	**10250TA13**

	Description	Catalog Number
	Special Light Modules	
10250TA79 	**Master Test (Dual Input) Module** Internal Form C relay suitable for either AC or DC applications. Total electrical isolation between monitored and test circuit. Fits all illuminated 10250T, E22, E30 and E34 devices.	
	48 Vdc	**10250TMT8**
10250TFL_ 	**Flasher Module** Changes any AC illuminated device to a controlled flashing light. Fits 10250T, E30 and E34 devices.	
	24V	**10250TFL2**
	120V	**10250TFL1**
10250ED986-4 	**Flashing Incandescent Lamp** For use with 120V transformer type or 6V full voltage type indicating lights including PresTest and most E29 devices.	**10250ED986-4**
	Hole Plugs	
10250TA7 	**Plug** For unused holes—steel, painted gray (stainless steel, use **E30KT5**)	**10250TA7**
	Tools	
10250TA95 	Octagonal 10250T (notched to fit over selector switch lever), E29 and E30	**10250TA95**
E22CW 	E22, E30, E34 and octagonal 10250T (will not fit over selector switch levers)	**E22CW**
10250TA96 	**Tool for Tightening Boots** Used to install boot Catalog Numbers 10250TA3, A4, A10 and A25.	**10250TA96**
10250TA102 	**10250T, E34 Allen Wrench** Used for removal of jumbo mushroom head.	**10250TA102**
10250TA74 	**Lamp Removal Tools** For transformer type illuminated pushbuttons, push-pull and selector switches. Fits #12 lamp.	**10250TA74**
E30KV1 	For full voltage and resistor type illuminated pushbuttons, push-pull and selector switches and E30.	**E30KV1**
E29KLT 	Standard indicating lights. Fits #44, #755, #6S6 and #10S6.	**E29KLT**

Notes

① Component only. Not to be used for custom built (factory assembled) stations.
② Not suitable for single contact block depth cast enclosure. Cover is too thick.

Product Overview

Product Selection Guide



Description	E26
	Page V9-T4-50
Standards and Certifications	
	CE 60947-5-1 UL 508—File #E131568 cUL C22.2 No. 14—File #E131568
Ingress protection	Stacklight base and light units: IP65, Type 4, 4X and 13 Alarm units: IP20, Type 1
Electrical shock protection	Stacklight base and light unit: IP2X Alarm units: IP0X
Technical Data and Specifications	
Mechanical ratings	Shock (IEC 68-2-27): 11 ms, 15g Vibration (IEC 68-2-6): 10 sweeps 10–150 Hz, 2g Bump (IEC 68-2-29): 1000 pulses, 6 ms, 15g
Climate conditions	Operating: maximum 104°F (40°C) at 95% RH, Temperature –4° to 140°F (–20° to 60°C) Storage: temperature –40° to 176°F (–40° to 80°C)
Materials	Cover: polycarbonate Lenses: polycarbonate Stacklight base: nylon Extension tubes: aluminum Mounting base: zinc die cast
Terminals	14–30 AWG (2.5–0.05 mm^2) for single conductors and 18–26 AWG (0.75–0.14 mm^2) for two conductors of the same size. Do not mix solid and stranded wire in the same terminal. Recommended tightening torque is 4.4–5.3 lb-in (0.5–0.6 Nm)
Electrical ratings	Insulation voltage (U_i): 690V Operational voltage (U_e): 250V Impulse withstand voltage (U_{imp}): 1.5 kV
Bulb specifications	Incandescent lamp type: BA15d Maximum lamp wattage: 6W Bulbs—average life: Incandescent: 7,000–12,000 hrs. (based on voltage) Xenon flasher: 20,000 hrs. LED: 60,000–100,000 hrs. (based on colors)
LED/Incandescent comparison	Incandescent lamps Average operating life of 7,000 hours Each lamp can be used with any color lens Low cost results in short-term savings
	LED lamps Average operating life of 60,000–100,000 hours Low power consumption Extended life results in long-term savings

For our complete product offering, see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E.

E26 Stacklights



Features

- Modular construction
- Six lens colors
- Variety of lamp types and voltages
- Mono-tonal, bi-tonal and intermittent audible alarms
- Combination of visible and audible alarms
- Modular components reduce inventory requirements, increase flexibility
- Steady and flashing modes allow one light to signal multiple conditions
- No-tools assembly permits easy lamp replacement

One, two and three-Light assembled stacklights:

- Base mountable
- Incandescent or LED versions
- 24V and 120V versions

Catalog Number Selection

E26 Stacklights

E26X 9 KM L 39R W – V4

Mounting Base ①

Code	Description	Component Catalog No.
W	None (base mount)	—
4	3/4 in NPT hub, chrome	E26S10**4**
8	Standard three-hole	E26S10**8**
9	Standard four-hole	E26S10**9**

Extension Tube

Code	Description	Component Catalog No.
W	None (base mount)	—
	Gray Aluminum	
HM	20 mm 3/4 in NPT	E26B**HM**
JM	160 mm 3/4 in NPT	E26B**JM**
KM	360 mm 3/4 in NPT	E26B**KM**
MM	760 mm 3/4 in NPT	E26B**MM**
	Black Aluminum	
HU	20 mm 3/4 in NPT	E26B**HU**
JU	160 mm 3/4 in NPT	E26B**JU**
KU	360 mm 3/4 in NPT	E26B**KU**
MU	760 mm 3/4 in NPT	E26B**MU**
RU	Right angle 3/4 in NPT	E26B**RU**

Stacklight Base

Code	Description	Component Catalog No. ②
L	Standard	E26B**L**
F	Flashing ③	E26B**F**_

Alarm

Code	Description	Component Catalog No. ②
W	None	—
Q	Mono-tonal	E26B**Q**_
N	Bi-tonal	E26B**N**_
P	Intermittent	E26B**P**_

Voltage ⑤

Code	Description
V1	12V
V2	24V
V3	48V
V4	120V
V5 ④	240V

Light Module

Code	Description	Component Catalog No. ②
0	Clear incandescent	E26B**0**_
2	Red incandescent	E26B**2**_
3	Green incandescent	E26B**3**_
4	Yellow incandescent	E26B**4**_
6	Blue incandescent	E26B**6**_
9	Amber incandescent	E26B**9**_
W	White cluster LED with clear lens	E26B**W**_
R	Red cluster LED with red lens	E26B**R**_
G	Green cluster LED with green lens	E26B**G**_
Y	Yellow cluster LED with yellow lens	E26B**Y**_
B	Blue cluster LED with blue lens	E26B**B**_
A	Amber cluster LED with amber lens	E26B**A**_
W1	White cylindrical LED with clear lens ④	E26B**W1**_
R1	Red cylindrical LED with red lens ④	E26B**R1**_
G1	Green cylindrical LED with green lens ④	E26B**G1**_
Y1	Yellow cylindrical LED with yellow lens ④	E26B**Y1**_
B1	Blue cylindrical LED with blue lens ④	E26B**B1**_
A1	Amber cylindrical LED with amber lens ④	E26B**A1**_
M	Flashing white cluster LED with clear lens	E26B**M**_
E	Flashing red cluster LED with red lens	E26B**E**_
U	Flashing green cluster LED with green lens	E26B**U**_
V	Flashing yellow cluster LED with yellow lens	E26B**V**_
K	Flashing blue cluster LED with blue lens	E26B**K**_
Z	Flashing amber cluster LED with amber lens	E26B**Z**_
X0	Xenon flasher with clear lens	E26B**X0**_
X2	Xenon flasher with red lens	E26B**X2**_
X3	Xenon flasher with green lens	E26B**X3**_
X4	Xenon flasher with yellow lens	E26B**X4**_
X6	Xenon flasher with blue lens	E26B**X6**_
X9	Xenon flasher with amber lens	E26B**X9**_

Voltage Codes

Voltage Code	Incandescent Lamp	Cluster LED	Cylindrical LED	Xenon Flasher	Flasher Base/Alarm
(Blank)	No lamp supplied	No LED supplied	No LED supplied	—	—
V1	12 Vac/Vdc	12 Vac/Vdc	12 Vac/Vdc	12 Vac/Vdc	12 Vac/Vdc
V2	24 Vac/Vdc	24 Vac/Vdc	24 Vac/Vdc	24 Vac/Vdc	24 Vac/Vdc
V3	48 Vac/Vdc	48 Vac/Vdc	48 Vac/Vdc	48 Vac/Vdc	48 Vac/Vdc
V4	120 Vac/Vdc	120 Vac	120 Vac	120 Vac	120 Vac/Vdc
V5	240 Vac/Vdc	240 Vac	—	240 Vac	240 Vac/Vdc

Notes

① Unless base mount is specified, an extension tube must be selected for a complete unit.
② Component catalog numbers for flashing bases, alarm units and light modules are incomplete and require the addition of a suffix code to specify the required voltage rating. See table above.
③ Flashing base is for use with incandescent lamps.
④ 240V not available for cylindrical LEDs.
⑤ If no voltage is specified, assembled stacklight will be supplied without lamps or LEDs.

Product Selection

Assembled Units

One-Light Unit Stacklight

Volts AC/DC	Alarm	First Level Color	Illumination Type	Catalog Number
24V	None	Red	Incandescent—steady	**E26XWWL2W-V2**
24V	None	Red	Cylindrical LED—steady	**E26XWWLR1W-V2**
24V	None	Green	Incandescent—steady	**E26XWWL3W-V2**
24V	None	Green	Cylindrical LED—steady	**E26XWWLG1W-V2**
24V	None	Amber	Incandescent—steady	**E26XWWL9W-V2**
24V	None	Amber	Cylindrical LED—steady	**E26XWWLA1W-V2**
120V	None	Red	Incandescent—steady	**E26XWWL2W-V4**
120V ①	None	Red	Cylindrical LED—steady	**E26XWWLR1W-V4**
120V	None	Green	Incandescent—steady	**E26XWWL3W-V4**
120V ①	None	Green	Cylindrical LED—steady	**E26XWWLG1W-V4**
120V	None	Amber	Incandescent—steady	**E26XWWL9W-V4**
120V ①	None	Amber	Cylindrical LED—steady	**E26XWWLA1W-V4**

Two-Light Unit Stacklight

Volts AC/DC	Alarm	First Level Color	Illumination Type	Second Level Color	Illumination Type	Catalog Number
24V	None	Green	Incandescent—steady	Red	Incandescent—steady	**E26XWWL32W-V2**
24V	None	Green	Cylindrical LED—steady	Red	Cylindrical LED—steady	**E26XWWLG1R1W-V2**
120V	None	Green	Incandescent—steady	Red	Incandescent—steady	**E26XWWL32W-V4**
120V ①	None	Green	Cylindrical LED—steady	Red	Cylindrical LED—steady	**E26XWWLG1R1W-V4**

Three-Light Unit Stacklight

Volts AC/DC	Alarm	First Level Color	Illumination Type	Second Level Color	Illumination Type	Third Level Color	Illumination Type	Catalog Number
24V	None	Green	Incandescent—steady	Amber	Incandescent—steady	Red	Incandescent—steady	**E26XWWL392W-V2**
24V	None	Green	Cylindrical LED—steady	Amber	Cylindrical LED—steady	Red	Cylindrical LED—steady	**E26XWWLG1A1R1W-V2**
120V	None	Green	Incandescent—steady	Amber	Incandescent—steady	Red	Incandescent—steady	**E26XWWL392W-V4**
120V ①	None	Green	Cylindrical LED—steady	Amber	Cylindrical LED—steady	Red	Cylindrical LED—steady	**E26XWWLG1A1R1W-V4**

Note

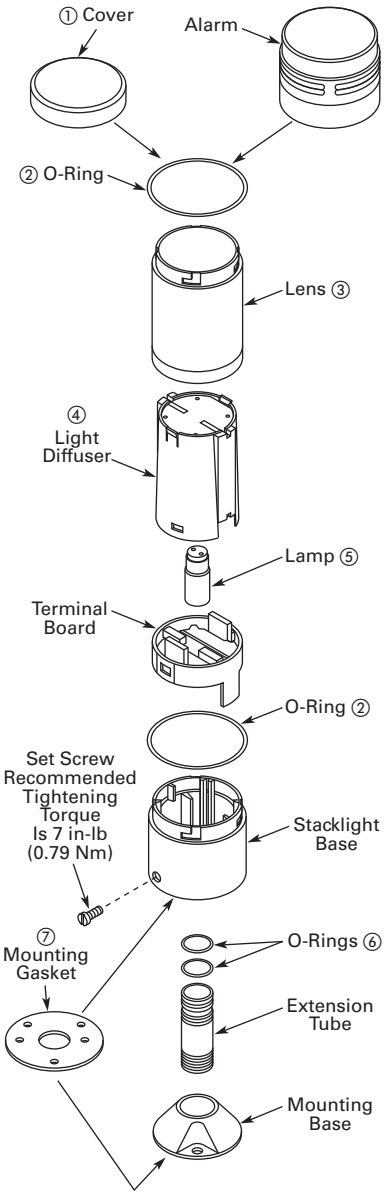
① LED modules have very low current draw and should not be used with triac output devices like PLC triac output modules. It is recommended that dry contact outputs be used to switch 120 Vac modules.

Replacement Parts

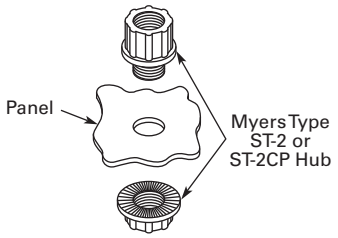
Stacklight Replacement Parts

Description	Notes	Diagram	Catalog Number
Replacement cover	Normally included with stacklight base	**1**	**E26S68**
Replacement lens O-ring	Normally included with light modules	**2**	**E26S106** ①
Replacement lenses	Clear	**3**	**E26S38**
	Red		**E26S39**
	Green		**E26S40**
	Yellow		**E26S41**
	Blue		**E26S42**
	Amber		**E26S43**
Replacement Xenon strobe dual high (does not include lenses)	12 Vac/Vdc	**4**	**E26S33**
	24 Vac/Vdc		**E26S34**
	48 Vac/Vdc		**E26S35**
	120 Vac		**E26S36**
	240 Vac		**E26S37**
Replacement diffusers	White—normally supplied with incandescent light modules	**4**	**E26S31**
	Clear—normally supplied with LED light modules		**E26S32**
Replacement lamps	12V	**5**	**E26S8**
	24V		**E26S9**
	48V		**E26S10**
	120V		**E26S11**
	240V		**E26S12**
Replacement extension tube O-rings	Normally included with extension tubes	**6**	**E26S107** ②
Replacement mounting gasket ③	Normally included with stacklight base	**7**	**E26S105**
Lamp removal tool	For E26 and E22 incandescent lamps		**E22BA3**

Typical Stacklight Assemblies



Typical Stacklight Assembly (Exploded View)



Alternate Conduit Hub

Notes

① Sold in packages of 5 pieces.
② Sold in packages of 10 pieces.
③ Mounting gaskets have two sets of mounting holes—one set with center-to-center spacing of 1.75 in (44.5 mm) and another set with center-to-center spacing of 1.65 in (42 mm).

Product Overview

Product Selection Guide

Description	 E5 Panel Meters	 Eclipse Series Panel Meters
	Page V9-T4-55	**Page V9-T4-55**
Number of digits	5	4
Display technology	7-segment LED	7-segment LED
Display character height	8 mm	14 mm
Panel cut-out size	1/32 DIN (25 x 50 mm)	1/8 DIN (45 x 92 mm)
Available outputs	None	Dual relay, analog, RS-485
Available inputs	0–10V/2–10V/0–20 mA/4–20 mA	DC volt, AC volt, DC amp, AC amp, 5A AC, Temperature (J, K, T, PT100 RTD), 4–20 mA/0–10V/1–5V
Front panel protection	IP65	NEMA 4X
Connection method	Screw terminal	Depluggable screw terminals
Scaling	Programmable end points, linear interpolation	Programmable end points, linear interpolation
Input power options	10–30 Vdc	9–30 Vdc or 85–264 Vac
Update time	500 ms	400 ms
Automatic min/max capture	Yes	Yes
Input for display-hold	Yes	—

For our complete product offering, see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E.

Digital Panel Meters



Features

E5-324-E digital panel meters
- Galvanic isolation with protection against incorrect polarity
- Automatic min/max value detection
- Freely programmable characteristic curve end points
- Input range:
  - Single current measuring input (0/4–20 mA)
  - Single voltage measuring input (0/2–10V)

Eclipse Series digital panel meters
- Four full digits
- 1/8 DIN size
- Red, LED display
- Scalable display
- Flashing alarms
- Min/max data hold
- Optional analog, relay and RS-485 outputs
- Type 4X

Catalog Number Selection

Digital Panel Meters

Eclipse Series

5770 X – 4 X X

Power Supply	Input Option	Output Option ①
0 = DC (9–30 Vdc) **1** = AC (85–265 Vac)	**0** = DC volt **1** = AC volt TRMS **2** = DC amp **3** = AC amp TRMS **4** = 5A AC TRMS **5** = Process (4–20 mA, 0–10V, 1–5V) **6** = Temperature (J, K, T, PT100 RTD)	**0** = No option **1** = Dual relay **2** = Analog output (4–20 mA and 0–10V) **3** = Dual relay, analog output (4–20 mA and 0–10V) **4** = RS-485 communications **5** = Dual relay, RS-485 **6** = Analog, RS-485 (4–20 mA and 0–10V) **7** = Dual relay, analog, RS-485 (4–20 mA and 0–10V)

Product Selection

E5-324-E0402



E5-324-E0402

Description	Catalog Number
LED digital panel meter, 24 x 48 mm	**E5-324-E0402**

Eclipse Series



Eclipse Series

Description	Catalog Number
Digital ammeter—5A AC, 85–264 Vac power	**57701440**
Digital ammeter—5A AC, 85–264 Vac power, 2 relay outputs	**57701441**
Digital process meter—4–20 mA/0–10V, 85–264 Vac power	**57701450**
Digital process meter—4–20 mA/0–10V, 85–264 Vac power, 2 relay outputs	**57701451**
Digital process meter—4–20 mA/0–10V, 85–264 Vac power, 2 relay outputs and analog retransmission	**57701453**
Digital temperature meter, 85–264 Vac power	**57701460**
Digital temperature meter, 85–264 Vac power, 2 relay outputs	**57701461**

Note

① Output options 0, 2, 4 are not available for models -41X and -43X.

Product Overview

Operator Interfaces and Programming Software Selection Guide





Description	ELC-GP Graphics Panel	HMi Operator Interface
	Page V9-T4-59	**Page V9-T4-60**
Screen size	Two-line and four-line	3.5 in, 5.7 in, 8.0 in and 10.4 in
Screen options	Monochrome	Blue mode, grey scale, 256 color STN or 65k color TFT
Interface	Keypad only	Resistive touchscreen only or touchscreen and keypad
Communication ports	2 serial	3 serial; 1 or 2 USB; Expansion port for Ethernet Modbus TCP or Local I/O
Simultaneous protocols	1	3 or 4
Ethernet drivers	—	Yes
Upload/download	Serial cable	Serial, Ethernet, and/or USB
Operating system	Proprietary	Proprietary
Third-party software support	—	—
Screen saver	—	Yes

Operator Interfaces and Programming Software Selection Guide, continued





Description	XV Operator Interface	XP Operator Interface
	Page V9-T4-62	**Page V9-T4-65**
Screen size	3.5 in, 5.7 in, 7.0 in, 8.4 in and 10.4 in	8.4 in, 10.4 in, 12.1 in, 15.0 in and blind node (no screen)
Screen options	Color TFT, 64k colors; resolutions from QVGA (320 x 240) to WVGA (800 x 480)	Color TFT, 16 million colors; resolutions from SVGA (800 x 600) to UVGA (1600 x1200)
Interface	Resistive touchscreen	Infrared, non-reflective safety glass
Communication ports	Ethernet, RS-232 and/or RS-485, USB	2 serial; 2 Ethernet; removable CompactFlash; 4 USB; VGA
Simultaneous protocols	3	5 or 8
Ethernet drivers	Yes	Yes
Upload/download	Serial, Ethernet, USB	Serial, Ethernet, USB
Operating system	Windows CE 5.0 Professional	Windows XP Embedded (protected)
Third-party software support	—	Yes
Screen saver	Yes	Yes

For our complete product offering, see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E.

Software Product Selection Guide

Description	Visual Designer	Galileo	HMI*i*Soft	ELCSoftGP
				
Overview	Feature-rich software package with SCADA functionality and web serving capabilities that can be run on XV, XP, ePro PS operator interfaces or personal computers	Intuitive visualization tool. Use Galileo on XV-102-H_ units or on XV units running CoDeSys when a stronger visualization package is needed	Use **HMI*i*** Soft to create, edit, upload and download applications to the **HMI*i*** family of operator interfaces	Use ELCSoftGP to create, edit, upload and download applications to ELC Graphics Panels
Catalog ID				
Development software seat license	VISUALDCE (CE hardware) VISUALDXP5 (5-pack of VISUALDXP) VISUALDCE5 (5-pack of VISUALDCE) VISUALDXP (PCs, XPe, and CE hardware)	SW-GALILEO-S SW-GALILEO-M	HMISOFT	ELCSOFTGP
Runtime software for a PC	VISUALRTPC	•	N/A	N/A
Time-Saving Editor Features				
Online and offline simulation	•	•	•	—
Macro capability	•	•	•	—
VB scripting	•	—	—	—
Math and Logic	•	•	•	—
Multi-language	•	•	•	—
System/internal variables	•	•	•	—
Auto-scale application to different resolution/screen size	•	•	•	—
Scripting (IF, THEN, ELSE, GOTO)	•	•	•	—
Symbol factory/library	•	•	•	—
Master pages	• Screen groups	• Screen groups	•	—
User-created controls	•	•	—	—
Customizable application symbols	•	•	—	—
Action lists/math worksheets	•	• With macros	• With macros	—
Reusable controls, images and pages	• Via indirect tag and/or PLC assignments	•	—	—
Advanced search and replace	•	•	—	—
Advanced context sensitive help	•	•	—	—
Conversion of legacy PanelMate™ configurations	•	—	—	—
Optional PanelBuilder™ conversion utility	•	—	—	—
Online configuration/editing	•	—	—	—

Software Product Selection Guide, continued









Description	Visual Designer	Galileo	HMiSoft	ELCSoftGP
Runtime Features				
Clock synchronization	•	•	•	•
Sound actions or control	•	•	•	•
Security	• Advanced multi-level	•	• Multi-level	•
Pop-up screens	• And group screens	•	•	—
Animated graphics	•	•	•	—
Real-time trending	•	•	•	—
Recipes	•	•	•	—
Report generation	•	•	—	—
Timer scheduling	•	•	•	—
Calendar scheduling	•	—	—	—
Notification of data and events via e-mail/text messaging	•	—	—	—
Data archiving	•	•	•	—
Archive to shared network drive	•	No (–)	—	—
Alarm and event archiving	•	•	—	—
Historical trending	•	•	•	—
Import/export from XML	•	•	—	—
Database interface	• ADO.net compliant	—	—	—
Vision system interfaces	•	•	—	—
Secure document and Web network browser	•	—	—	—
Remote access and control without having to install software on the remote PC	• Web Thin Client with Internet Explorer	—	—	—
Automatic scaling of Web clients	•	—	—	—
Remote desktop	• With UltraVNC and RemoteClient	• VNC and RemoteClient	—	—
Launch/control third-party applications	•	—	—	—
2-touch controls for safety	•	—	—	—
Embedded PLC logic	—	—	•	—

ELC-GP Graphics Panel



Features

- Simple to program and easily connects to ELC products
- Protocols—include Modbus ASCII/RTU, ASCII Slave and vendor-specific protocols from Allen-Bradley®, Siemens®, Mitsubishi®, Koyo® and many more

Catalog Number Selection

ELC-GP Graphics Panel

ELC-GP

ELC-GP 02

Series	Display
ELC-GP = ELC Graphics Panel	**02** = Monochromatic, two-line **04** = Monochromatic, four-line

Product Selection

Graphics Panels

Description	Catalog Number
160 x 32 pixels, 10 function keys, monochrome	**ELC-GP02**
128 x 64 pixels, 10 function keys, monochrome	**ELC-GP04**

Accessories

Software and Accessories

Description	Catalog Number
Programming software for GP units	**ELCSOFTGP**
Program transfer module	**ELC-GPXFERMOD**
Cable, PC to ELC-GPxx, 9.8 ft (3m)	**ELC-CBPCGP3**
Power supply, 24 watt, 1 amp	**ELC-PS01**
Power supply, 48 watt, 2 amp	**ELC-PS02**

HM*i* Operator Interface



Features

- All units offer RS-232, RS-485 and RS-422 communications
- 6-, 8- and 10-inch models offer Ethernet communication options
- Retentive internal data storage

Catalog Number Selection

HM*i* Operator Interface

HM*i*

HMI 04 C UNB

Series	Display	Options	Options
HM*i* = Operator interface **HM*i*VU** = Advanced operator interface	**04** = 4 in LCD **06** = 6 in LCD **08** = 8 in LCD **10** = 10 in LCD	**C** = Color TFT	**UNB** = No Ethernet **UNBE** = Ethernet onboard

Product Selection

HM*i* Operator Interface

Description	Catalog Number
4-inch color TFT without expansion slot	**HMI04CU**
6-inch color TFT, no Ethernet	**HMIVU06CUNB**
8-inch color TFT, with Ethernet	**HMIVU08CUNBE**
10-inch color TFT, with Ethernet	**HMIVU10CUNBE**

Accessories

Software and Accessories

Description	Catalog Number
Programming software	**HMISOFT**

Kits

Description	Catalog Number
HM*i* spare parts kits (includes several power connectors, battery doors, gaskets, mounting clips, etc.)	**HMI-SPKIT**

Cable

Description	Catalog Number
1 meter cable to connect between the **HM*i*** and Eaton Logic Controller (ELC)	**ELC-CBPCELC1**
3 meter cable to connect between the **HM*i*** and Eaton Logic Controller (ELC)	**ELC-CBPCELC3**

Power Supply

Description	Catalog Number
1 amp 24 Vdc power supply	**ELC-PS01**
2 amp 24 Vdc power supply	**ELC-PS02**

XV Operator Interface



Features

- All XV models have a Microsoft Windows CE operating system
- Pre-licensed with Visual Designer runtime for up to 1500 tags, three simultaneous communication drivers, and one Web session
- Field upgrades are available for up to 4000 tags, three drivers, and two, four or eight simultaneous Web sessions

Catalog Number Selection

XV Operator Interface

XV

XV – 102 – B3 – 35TQRG – 10

Family
XV = Microsoft Windows CE operating system

Performance Class
102 = CE, plastic housing, 2nd gen
152 = CE, metal housing, 2nd gen

Features Base Unit Variant ①
B = Retentive memory
D = Retentive memory, USB host, RS-232
E = Retentive memory, USB host, SmartWire-DT
H = Galileo only unit, USB host

Features Additional COMM Options
3 = 1-RS-232
4 = 1-RS-485
6 = 1-CANopen
8 = 1-PROFIBUS
E = 1-SmartWire-DT

Display Size
35 = 3.5-inch
57 = 5.7-inch
70 = 7.0-inch
84 = 8.4-inch
10 = 10.4-inch

Display Technology
TQR = TFT (QVGA) resistive
TVR = TFT (VGA) resistive
TWR = TFT (widescreen) resistive

OS Build
C = XSoft-CoDeSys/Galileo
G = CE Professional OS and Visual Designer runtime 1500 tags ②
L = Galileo only unit

Branding and Bezel
10 = Standard blank front bezel with Eaton branded product label

Product Selection

XV Operator Interface



XV Operator Interface with Visual Designer

Description	Catalog Number
XV 3.5-inch TFT, plastic housing, resistive touch, Ethernet and RS-232	**XV-102-B3-35TQRG-10**
XV 3.5-inch TFT, plastic housing, resistive touch, Ethernet and RS-485	**XV-102-B4-35TQRG-10**
XV 5.7-inch TFT, plastic housing, resistive touch, Ethernet, RS-232, RS-485	**XV-102-D4-57TVRG-10**
XV 7.0-inch TFT wide screen, plastic housing, resistive touch, Ethernet, RS-232, RS-485	**XV-102-D4-70TWRG-10**
XV 5.7-inch TFT, metal housing, resistive touch, Ethernet, RS-232, RS-485	**XV-152-D4-57TVRG-10**
XV 8.4-inch TFT, metal housing, resistive touch, Ethernet, RS-232, RS-485	**XV-152-D4-84TVRG-10**
XV 10.4-inch TFT, metal housing, resistive touch, Ethernet, RS-232, RS-485	**XV-152-D4-10TVRG-10**

Notes

① All 1xx performance class units have 400 MHz processor, 64 MB DRAM, 1 x 10/100 Ethernet, and 1 x USB device.

② Standard software on embedded hardware. These XV models have a Microsoft Windows CE 5.0 Professional operating system and are pre-licensed with Visual Designer runtime for up to 1500 tags, 3 simultaneous communication drivers, and 1 Web session. Field upgrades are available for up to 4000 tags, 3 drivers, and 2, 4 or 8 simultaneous Web sessions.

XV Operator Interface with XSoft-CoDeSys

Description	Catalog Number
XV 3.5-inch TFT plastic housing, resistive touch, CANopen	**XV-102-B6-35TQRC-10**
XV 3.5-inch TFT plastic housing, resistive touch, PROFIBUS	**XV-102-B8-35TQRC-10**
XV 3.5-inch TFT plastic housing, resistive touch, SmartWire-DT	**XV-102-BE-35TQRC-10**
XV 5.7-inch TFT plastic housing, resistive touch, CANopen	**XV-102-D6-57TVRC-10**
XV 5.7-inch TFT plastic housing, resistive touch, PROFIBUS	**XV-102-D8-57TVRC-10**
XV 5.7-inch TFT plastic housing, resistive touch, CANopen, SmartWire-DT	**XV-102-E6-57TVRC-10**
XV 5.7-inch TFT plastic housing, resistive touch, PROFIBUS, SmartWire-DT	**XV-102-E8-57TVRC-10**
XV 7.0-inch TFT plastic housing, resistive touch, CANopen	**XV-102-D6-70TWRC-10**
XV 7.0-inch TFT plastic housing, resistive touch, PROFIBUS	**XV-102-D8-70TWRC-10**
XV 7.0-inch TFT plastic housing, resistive touch, CANopen, SmartWire-DT	**XV-102-E6-70TWRC-10**
XV 7.0-inch TFT plastic housing, resistive touch, PROFIBUS, SmartWire-DT	**XV-102-E8-70TWRC-10**
XV 5.7-inch TFT metal housing, resistive touch, CANopen	**XV-152-D6-57TVRC-10**
XV 5.7-inch TFT metal housing, resistive touch, PROFIBUS	**XV-152-D8-57TVRC-10**
XV 5.7-inch TFT metal housing, resistive touch, CANopen, SmartWire-DT	**XV-152-E6-57TVRC-10**
XV 5.7-inch TFT metal housing, resistive touch, PROFIBUS, SmartWire-DT	**XV-152-E8-57TVRC-10**
XV 8.4-inch TFT metal housing, resistive touch, CANopen	**XV-152-D6-84TVRC-10**
XV 8.4-inch TFT metal housing, resistive touch, PROFIBUS	**XV-152-D8-84TVRC-10**
XV 8.4-inch TFT metal housing, resistive touch, CANopen, SmartWire-DT	**XV-152-E6-84TVRC-10**
XV 8.4-inch TFT metal housing, resistive touch, PROFIBUS, SmartWire-DT	**XV-152-E8-84TVRC-10**
XV 10.4-inch TFT metal housing, resistive touch, CANopen	**XV-152-D6-10TVRC-10**
XV 10.4-inch TFT metal housing, resistive touch, PROFIBUS	**XV-152-D8-10TVRC-10**
XV 10.4-inch TFT metal housing, resistive touch, CANopen, SmartWire-DT	**XV-152-E6-10TVRC-10**
XV 10.4-inch TFT metal housing, resistive touch, PROFIBUS, SmartWire-DT	**XV-152-E8-10TVRC-10**

XV Operator Interface with Galileo Only



Description	Catalog Number
XV 3.5-inch TFT plastic housing, resistive touch, Ethernet RS-232	**XV-102-H3-35TQRL-10**
XV 3.5-inch TFT plastic housing, resistive touch, Ethernet RS-485	**XV-102-H4-35TQRL-10**
XV 5.7-inch TFT plastic housing, resistive touch, Ethernet RS-232	**XV-102-H3-57TVRL-10**
XV 5.7-inch TFT plastic housing, resistive touch, Ethernet RS-485	**XV-102-H4-57TVRL-10**
XV 7.0-inch TFT plastic housing, resistive touch, Ethernet RS-232	**XV-102-H3-70TWRL-10**
XV 7.0-inch TFT plastic housing, resistive touch, Ethernet RS-485	**XV-102-H4-70TWRL-10**

Visual Designer



Visual Designer Software

Description	Catalog Number
Visual Designer Development Software License Key	
For CE hardware	**VISUALDCE**
For PCs, XPe and CE hardware	**VISUALDXP**
For CE hardware, 5-pack of VISUALDCE	**VISUALDCE5**
For PCs, XPe hardware, 5-pack of VISUALDXP	**VISUALDXP5**

Galileo Software



Galileo Development Software

Description	Catalog Number
Single-seat license	**SW-GALILEO-S**
Multiple-seat license	**SW-GALILEO-M**

XSoft-CoDeSys-2



XSoft-CoDeSys-2 Software

Description	Catalog Number
Single Seat License	**SW-XSOFT-CODESYS-2-S**
Multiple Seat License (3)	**SW-XSOFT-CODESYS-2-M**

Accessories

XV Family Accessories

Description	Catalog Number
SD memory card for all XV models	**MEMORY-SD-A1-S**
Spare part kit for XV-102 models—1 power connector, 8 mounting brackets, 1 sealing strip, 1 touch pen	**ACC-TP-57-KG-1 XV-102**
Spare part kit for XV-152 models—1 power connector, 8 mounting brackets, 1 sealing strip, 1 touch pen	**ACC-TP-10-12-RES-1**

XP Operator Interface



Features

- All XP models have a Microsoft Windows XP embedded operating system
- Pre-licensed with Visual Designer runtime
- Standard models are licensed for 4000 tags, five simultaneous communication drivers, and one Web session
- Enterprise models are licensed for 64,000 tags, eight simultaneous communication drivers, and one Web session
- Field upgrades are available for up to 64,000 tags, eight drivers, and 2, 4, 8, 16, 32, 64, 128, or 256 simultaneous Web sessions

Catalog Number Selection

XP Operator Interface

XP

XP – 702 – F0 – 84TSIK – 10

Family
XP = X86 Microsoft Windows XPe operating system

Performance Class
702 = XPe, metal housing, 2nd gen

Features Base Unit Variant ①	Features Additional COMM Options
E = 1 GHz Celeron with 1 GB RAM 4 GB C drive CF and 1 GB D drive CF **F** = 1.8 GHz Pentium with 2GB RAM 4 GB C drive CF and 1 GB D drive CF	**0** = No additional communication options

Display Size	Display Technology	OS Build ②
84 =8.4 in **10** =10.4 in **12** =12.1 in **15** =15.0 in **BOX** = Blind node (no display)	**TSI** = TFT (SVGA) Infrared **TXI** = TFT (XVGA) Infrared **Blank** = No display	**J** = XPe OS and License Visual Designer Runtime 4000 tags **K** = XPe OS and License Visual Designer Runtime 64,000 tags

Branding and Bezel
10 = Standard blank front bezel with Eaton branded product label

Notes

① All 7xx Performance Class units have 1 x 10/100, 1 x 10/100/1000 Ethernet, 4 x USB Host V2.0, 2 x RS-232.

② Standard software on embedded hardware.

Product Selection

XP Operator Interface



XP Operator Interface

Description	Catalog Number
XP 8.4 in TFT, 1 GHz Celeron, 1 GB RAM, 4 GB C drive, 1 GB D drive, 4000 tags, 5 drivers, 1 Web session	**XP-702-E0-84TSIJ-10**
XP 10.4 in TFT, 1 GHz Celeron, 1 GB RAM, 4 GB C drive, 1 GB D drive, 4000 tags, 5 drivers, 1 Web session	**XP-702-E0-10TSIJ-10**
XP 12.1 in TFT, 1 GHz Celeron, 1 GB RAM, 4 GB C drive, 1 GB D drive, 4000 tags, 5 drivers, 1 Web session	**XP-702-E0-12TXIJ-10**
XP 15.0 in TFT, 1 GHz Celeron, 1 GB RAM, 4 GB C drive, 1 GB D drive, 4000 tags, 5 drivers, 1 Web session	**XP-702-E0-15TXIJ-10**
XP blind node (no display), 1 GHz Celeron, 1 GB RAM, 4 GB C drive, 1 GB D drive, 4000 tags, 5 drivers, 1 Web session	**XP-702-E0-BOXJ-10**
XP 8.4 in TFT, 1.8 GHz Pentium, 2 GB RAM, 4 GB C drive, 1 GB D drive, 64k tags, 8 drivers, 1 Web session	**XP-702-F0-84TSIK-10**
XP 10.4 in TFT, 1.8 GHz Pentium, 2 GB RAM, 4 GB C drive, 1 GB D drive, 64k tags, 8 drivers, 1 Web session	**XP-702-F0-10TSIK-10**
XP 12.1 in TFT, 1.8 GHz Pentium, 2 GB RAM, 4 GB C drive, 1 GB D drive, 64k tags, 8 drivers, 1 Web session	**XP-702-F0-12TXIK-10**
XP 15.0 in TFT, 1.8 GHz Pentium, 2 GB RAM, 4 GB C drive, 1 GB D drive, 64k tags, 8 drivers, 1 Web session	**XP-702-F0-15TXIK-10**
XP blind node (no display), 1.8 GHz Pentium, 2 GB RAM, 4 GB C drive, 1 GB D drive, 64k tags, 8 drivers, 1 Web session	**XP-702-F0-BOXK-10**

Visual Designer



Visual Designer Software

Description	Catalog Number
Visual Designer Development Software License Key	
For PCs, XPe and CE hardware	**VISUALDXP**
For PCs, XPe hardware, 5-pack of VISUALDXP	**VISUALDXP5**
For a PC Runtime software license with a maximum of 64k tags, 8 drivers, 1 Web session	**VISUALRTPC**
Visual Designer development software and PC runtime software licenses for a max of 64k tags, 8 drivers, 1 Web session	**VISUALRTDEVPC**

Galileo Software



Galileo Development Software

Description	Catalog Number
Single-seat license	**SW-GALILEO-S**
Multiple-seat license	**SW-GALILEO-M**

XSoft-CoDeSys-2



XSoft-CoDeSys-2 Software

Description	Catalog Number
Single Seat License	**SW-XSOFT-CODESYS-2-S**
Multiple Seat License (3)	**SW-XSOFT-CODESYS-2-M**