## Pushbuttons and Indicating Lights


1.1 Toggle Switches-E10

Product Description . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-2
Product Selection . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-4
1.2 Pushbutton Control Stations-Assembled

Product Description . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-8
Product Selection . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-10
$1.3 \quad 16.2$ mm Pushbuttons-RMQ-16
Product Selection Guide . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-25
Product Selection . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-26
$1.4 \mathbf{2 2 . 5}$ mm RMQ-Titan Modular Pushbuttons - M22
Product Selection Guide . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-42
Product Selection . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-47
$1.5 \quad 22.5$ mm RMQ Compact Pushbuttons - C22
Product Selection Guide
V7-T1-133
Product Selection . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-135
1.6 Global Modular 30 mm Pilot Devices-M30 Flat Operators

Product Description
V7-T1-160
Product Selection . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-164
1.7 Global Compact 30 mm Pilot Devices-C30 Flat with Pigtail

Product Description
V7-T1-178
Product Selection
V7-T1-180
$1.8 \quad 30.5$ mm Square Multifunction Watertight/Oiltight—E30
Product Description
V7-T1-187
Product Selection . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-189
$1.9 \quad 30.5$ mm Heavy-Duty Watertight/Oiltight-10250T
Product Description . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-205
Product Selection . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-209
1.1030 .5 mm Corrosion Resistant Watertight/Oiltight—E34

Product Description
V7-T1-276
Product Selection . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-282
1.1230 .5 mm Class I Division 2 Hazardous Locations - 10250T/E34

Product Description
V7-T1-343
Catalog Number Selection . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-345

Pushbuttons and Indicating Lights


## Product Description

The E10 switches from Eaton's Electrical Sector are intended for general purpose light industrial use. Designed for retrofit and OEM applications.

## Features

General Purpose Toggles

- Various circuit functions include maintained and momentary
- Poles include from singlepole single-throw to fourpole double-throw
- Spade, screw, and solder terminations available
- Numerous ratings
- Short $11 / 32$ in and tall 15/32 in bat lever available
- Standard $15 / 32-32$ thd.
- Hardware furnished assembled


## Contents

Description

## Page

Toggle Switches-E10
Standards and Certifications . . . . . . . . . . . . . . V7-T1-3
Catalog Number Selection . . . . . . . . . . . . . . . . V7-T1-3
Product Selection
Toggle Switches . . . . . . . . . . . . . . . . . . . . . V7-T1-4
Hesitation Switches . . . . . . . . . . . . . . . . . . . V7-T1-5
Pushbuttons . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-5
Accessories . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-5
Technical Data and Specifications . . . . . . . . . . V7-T1-6
Circuit Diagrams . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-6
Dimensions . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-7

## Heavy-Duty Hesitation Switches

- One-hole panel mount
- Three position switch offers unique positive center stop feature to assure lever cannot be thrown from one side through the center OFF position without stopping
- Design feature is a major acceptance for motor reversing and speed control applications
- Prevents motor damage resulting from high current generation by counter EMF of the armature at the time of reversing
- Known as anti-plugging, hesitation, positive stop or positive off switch


## Non-Illuminated AC Rated Pushbuttons

- One-hole panel mount
- Medium-duty
- Spade and screw terminations available
- Various bushing lengths and button extensions
- Numerous ampere ratings with horsepower ratings


## Standards and Certifications

- UL Recognized
- CSA—File No. LR40068



## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.
Toggle Switches-E10 Series
Not to be used for ordering purposes


## Pushbuttons and Indicating Lights

Toggle Switches-E10

## Product Selection

## Toggle Switches

|  | E10 Series-AC Rated-Minimum Order Quantity 10 Pieces |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nomi <br> Ampe <br> 125V | 250V | gs <br> hp <br> 50 V | Poles and Throw | Function <br> UP <br> Position | ircuit with <br> CENTER <br> Position | ever In <br> DOWN <br> Position- <br> Keyway | Screw Terminal Catalog Number | 0.250 in ( 6.4 mm ) Spade Terminal Catalog Number | Solder Lug <br> Catalog Number |
| Single-Pole | Single-Pole |  |  |  |  |  |  |  |  |  |
|  | 6 | 3 | - | 1 P.S.T. | ON | None | OFF | E10T106AS | E10T106AP | E10T106AL |
|  | 15 | 10 | 3/4 |  |  |  |  | E10T115AS | E10T115AP | E10T115AL |
|  | 20 | 10 | 3/4 |  |  |  |  | E10E120AS | E10E120AP | E10E120AL |
|  | 6 | 3 | - | 1 P.D.T. | ON | OFF | ON | E10T106DS | E10T106DP | - |
|  | 15 | 10 | 3/4 |  |  |  |  | E10T115DS | E10T115DP | E10T115DL |
|  | 20 | 10 | 3/4 |  |  |  |  | E10E120DS | - | - |
|  | 6 | 3 | - | 1 P.D.T. | ON | None | ON | E10T106ES | - | - |
|  | 15 | 10 | 3/4 |  |  |  |  | E10T115ES | E10T115EP | E10T115EL |
|  | 20 | 10 | 3/4 |  |  |  |  | E10E120ES | - | - |
|  | - | 10 | 1/2 | 1 P.S.T. | OFF | None | (ON) | E10T115BS | E10T115BP | - |
|  |  |  |  | 1 P.D.T. | ON | OFF | (ON) | E10T115FS | E10T115FP | - |
|  |  |  |  | 1 P.D.T. | ON | None | (ON) | E10T115HS | E10T115HP | - |
|  |  |  |  | 1 P.D.T. | (ON) | OFF | (ON) | E10T115GS | E10T115GP | - |
| Two-Pole | Two-Pole |  |  |  |  |  |  |  |  |  |
|  | 6 | 3 | - | 2 P.S.T. | ON | None | OFF | E10T206AS | E10T206AP | - |
|  | 15 | 10 | $3 / 4$ |  |  |  |  | E10T215AS | E10T215AP | E10T215AL |
|  | 20 | 10 | 3/4 |  |  |  |  | E10E220AS | E10E220AP | E10E220AL |
|  | 6 | 3 | - | 2. P.D.T. | ON | OFF | ON | E10T206DS | E10T206DP | - |
|  | 15 | 10 | 3/4 |  |  |  |  | E10T215DS | E10T215DP | E10T215DL |
|  | 20 | 10 | 3/4 |  |  |  |  | E10E220DS | E10E220DP | - |
|  | 6 | 3 | - | 2 P.D.T. | ON | None | ON | E10T206ES | - | - |
|  | 15 | 10 | 3/4 |  |  |  |  | E10T215ES | E10T215EP | E10T215EL |
|  | 20 | 10 | 3/4 |  |  |  |  | E10E220ES | - | - |
|  | 15 | 10 | 1/2 | 2 P.S.T. | OFF | None | (ON) | E10T215BS | - | - |
|  |  |  |  | 2 P.D.T. | ON | None | (ON) | E10T215HS | E10T215HP | - |
|  |  |  |  | 2 P.D.T. | (ON) | OFF | (ON) | E10T215GS | E10T215GP | - |
| Three-Pole | Three-Pole |  |  |  |  |  |  |  |  |  |
|  | 15 | 10 | $3 / 4$ | 3 P.S.T. | ON | None | OFF | E10E315AS | E10E315AP | - |
|  |  |  |  | 3 P.D.T. | ON | OFF | ON | E10E315DS | E10E315DP | E10E315DL |
|  |  |  |  | 3 P.D.T. | ON | None | ON | E10E315ES | E10E315EP | E10E315EL |
| Four-Pole | Four-Pole |  |  |  |  |  |  |  |  |  |
|  | 15 | 10 | 3/4 | 4 P.S.T. | ON | None | OFF | E10E415AS | - | E10E415AL |
|  |  |  |  | 4 P.D.T. | ON | OFF | ON | E10E415DS | - | E10E415DL |
|  |  |  |  | 4P.D.T. | ON | None | ON | E10E415ES | - | E10E415EL |

Note
(1) See Circuit Diagrams on Page V7-T1-6

## Hesitation Switches



## Pushbuttons



E10 Series-Minimum Order Quantity 10 Pieces

| Nominal Ratings |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Amperes <br> 125 Vac |  | 250 Vac |  | hp <br> 125- <br> 250V | Poles and Throw ${ }^{1}$ | Contacts | Bushing <br> Length <br> in (mm) <br> Dim. "A" | Button <br> Extension <br> in (mm) <br> Dim. "B" | Typical Maximum Operating Force | Screw Terminal Catalog Number | Spade Terminal 0.250 in ( 6.4 mm ) Catalog Number |
| 6 | - | 3 | - | - | 1 P.S.T. | N0 | 0.69 (17.5) | 0.53 (13.5) | 0.9 lbs | E10P106RS | E10P106RP |
|  |  |  |  |  |  |  | 0.34 (8.6) | 0.25 (6.4) |  | E10P106JS | - |
| 15 | - | 10 | - | 1/3 | 1 P.S.T. | NO | 0.69 (17.5) | 0.53 (13.5) | 0.9 lbs | E10P115RS | E10P115RP |
|  |  |  |  |  |  |  | 0.34 (8.6) | 0.25 (6.4) |  | E10P115JS | - |
| 15 | 10 | 10 | 5 | 1/4 (2) | 1 P.D.T. | NO, NC | 0.69 (17.5) | 0.53 (13.5) | 1.0 lbs | E10P115LS | - |

## Accessories

|  | Description | Material/Notes | Catalog Number |
| :---: | :---: | :---: | :---: |
|  | Hexagon locknut | Zinc-chromate treated steel | E10TA101 |
|  | Knurled face nut | Zinc-chromate treated steel | E10TA102 |
|  | Internal tooth lockwasher | Cadmium plated steel | E10TA103 |
|  | Terminal screws | \#6-32 x $3 / 16$ in binding head | E10TA201 |
|  | Spade terminal adapter-0.250 in (6.4 mm) | Assembles to screw terminals | E10TA202 |
|  | ON-OFF indicating plate-vertical orientation | Burnished nickel finish steel | E10TA301 |
|  | OFF-ON indicating plate-horizontal orientation | Burnished nickel finish steel | E10TA302 |
| E10TA104 | Flip-up guard for toggle switches |  | E10TA104 |
| E10TA105 | Fixed shroud for toggle switches |  | E10TA105 |

[^0]
## Technical Data and Specifications

Toggle Switches

| Description | Specification |
| :--- | :--- |
| AC ratings | $6-20 \mathrm{~A}, 125 \mathrm{Vac}$ <br> $3-10 \mathrm{~A}, 250 \mathrm{Vac}$ <br>  <br>  <br>  <br>  <br> Max. $3 / 4 \mathrm{hp}$ at 250 Vac |
| DC ratings | $6-20 \mathrm{~A}, 28 \mathrm{Vdc}$ |
| Electrical life | 6,000 cycles make $/$ break at switch ampere rating |
| Operation | Slow make $/$ slow break mechanism with butt action for AC and low voltage DC applications <br> Maintained and momentary contacts |
| Poles/throws | 1 through 4, single and double throw |
| Mounting | One hole with threaded 0.468 in-32 bushing and $0.068 \times 0.035$ in $(1.7 \times 0.9 \mathrm{~mm})$ deep keyway <br> that serves as anti-rotational feature |
| Lever lengths | 0.563 in $(14.3 \mathrm{~mm})$ or 0.688 in $(17.5 \mathrm{~mm})$, bright nickel plated |
| Terminals | Screw, 0.250 in $(6.4 \mathrm{~mm})$ spade and solder lug |

Hesitation Switches

| Description | Specification |
| :--- | :--- |
| Operation | Slow make/slow break mechanism with butt action for AC and low voltage DC applications; maintained contacts; ideal <br> for reversing motor applications; interlock mechanism prevents operation of lever through center position until manual <br> pressure is momentarily relieved |
| AC ratings | $15 \mathrm{~A}, 125 \mathrm{Vac}$ |
|  | $10 \mathrm{~A}, 250 \mathrm{Vac}$ |
| Max. $3 / 4 \mathrm{hp}$ at 250 Vac |  |
| DC ratings | $15 \mathrm{~A}, 28 \mathrm{Vdc}$ |
| Poles/throws | 2,3 and 4, double throw only |
| Mounting | Single-pole with threaded 0.468 in -32 bushing and $0.068 \times 0.049$ in $(1.7 \times 1.2 \mathrm{~mm})$ deep keyway |
| Lever length | 0.687 in $(17.4 \mathrm{~mm})$, stainless steel |
| Terminals | Screw |

Pushbutton Actuators

| Description | Specification |
| :--- | :--- |
| AC ratings | 6-15A, $125 \mathrm{Vac}(\mathrm{NO})$ |
|  | 3-10A, $250 \mathrm{Vac}(\mathrm{NO})$ |
|  | Max. $1 / 3 \mathrm{hp}$ at $125 / 250 \mathrm{Vac}$ |
| Operation | Slow make $/$ slow break mechanism <br>  <br>  <br>  <br>  <br> Normally open contacts |
| Poles/throws | Single, single and double throw |
| Mounting | One hole with 0.468 in -32 threaded bushing and $0.068 \times 0.035$ in $(1.7 \times 0.9 \mathrm{~mm})$ deep keyway |
|  | Two bushing heights: $11 / 16$ in $(17.5 \mathrm{~mm})$ and $11 / 32$ in $(8.7 \mathrm{~mm})$ |
| Button extensions | $17 / 32$ in $(13.5 \mathrm{~mm})$ and $1 / 4$ in $(6.4 \mathrm{~mm})$, bright nickel plated |
| Terminals | Screw |

## Circuit Diagrams



## Dimensions

Approximate Dimensions in Inches (mm)
Toggle Switch Dimensions

| No. of Poles | Operation | Bushing Length A | Lever Length B | Screw Terminals |  |  | Spade Terminals |  |  | Solder Lug |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | C | D | E | C ${ }^{1}$ | D | E | C | D | E |
| 1 | Momentary and maintained | $\begin{aligned} & 0.47 \\ & (11.9) \end{aligned}$ | $\begin{aligned} & 0.56 \\ & (14.2) \end{aligned}$ | $\begin{aligned} & 1.00 \\ & (25.4) \end{aligned}$ | $\begin{aligned} & 1.17 \\ & (29.7) \end{aligned}$ | $\begin{aligned} & 0.63 \\ & (16.0) \end{aligned}$ | $\begin{aligned} & 1.13 \\ & (28.7) \end{aligned}$ | $\begin{aligned} & 1.13 \\ & (28.7) \end{aligned}$ | $\begin{aligned} & 0.63 \\ & (16.0) \end{aligned}$ | $\begin{aligned} & 1.00 \\ & (25.4) \end{aligned}$ | $\begin{aligned} & 1.13 \\ & (28.7) \end{aligned}$ | $\begin{aligned} & 0.63 \\ & (16.0) \end{aligned}$ |
| 2 | Maintained | $\begin{aligned} & 0.47 \\ & (11.9) \end{aligned}$ | $\begin{aligned} & 0.56 \\ & (14.2) \end{aligned}$ | $\begin{aligned} & 1.06 \\ & (26.9) \end{aligned}$ | $\begin{aligned} & 1.31 \\ & (33.3) \end{aligned}$ | $\begin{aligned} & 0.75 \\ & (19.1) \end{aligned}$ | $\begin{aligned} & \hline 1.19 \\ & (30.2) \end{aligned}$ | $\begin{aligned} & 1.31 \\ & (33.3) \end{aligned}$ | $\begin{aligned} & 0.75 \\ & (19.1) \end{aligned}$ | $\begin{aligned} & 1.06 \\ & (26.9) \end{aligned}$ | $\begin{aligned} & 1.31 \\ & (33.3) \end{aligned}$ | $\begin{aligned} & 0.75 \\ & (19.1) \end{aligned}$ |
|  | Momentary | $\begin{aligned} & \hline 0.47 \\ & (11.9) \end{aligned}$ | $\begin{aligned} & \hline 0.56 \\ & (14.2) \end{aligned}$ | $\begin{aligned} & \hline 1.25 \\ & (31.8) \end{aligned}$ | $\begin{aligned} & 1.31 \\ & (33.3) \end{aligned}$ | $\begin{aligned} & \hline 0.75 \\ & (19.1) \end{aligned}$ | $\begin{aligned} & \hline 1.31 \\ & (33.3) \end{aligned}$ | $\begin{aligned} & 1.31 \\ & (33.3) \end{aligned}$ | $\begin{aligned} & \hline 0.75 \\ & (19.1) \end{aligned}$ | $\begin{aligned} & \hline 1.25 \\ & (31.8) \end{aligned}$ | $\begin{aligned} & \hline 1.31 \\ & (33.3) \end{aligned}$ | $\begin{aligned} & \hline 0.75 \\ & (19.1) \end{aligned}$ |
| 3 | Maintained | $\begin{aligned} & \hline 0.47 \\ & (11.9) \end{aligned}$ | $\begin{aligned} & 0.69 \\ & (17.5) \end{aligned}$ | $\begin{aligned} & 1.27 \\ & (32.3) \end{aligned}$ | $\begin{aligned} & 1.34 \\ & (34.0) \end{aligned}$ | $\begin{aligned} & 1.44 \\ & (36.6) \end{aligned}$ | $\begin{aligned} & 1.37 \\ & (34.8) \end{aligned}$ | $\begin{aligned} & 1.34 \\ & (34.0) \end{aligned}$ | $\begin{aligned} & 1.44 \\ & (36.6) \end{aligned}$ | $\begin{aligned} & 1.23 \\ & (31.2) \end{aligned}$ | $\begin{aligned} & 1.34 \\ & (34.0) \end{aligned}$ | $\begin{aligned} & 1.44 \\ & (36.6) \end{aligned}$ |
| 4 | Maintained | $\begin{aligned} & \hline 0.47 \\ & (11.9) \end{aligned}$ | $\begin{aligned} & \hline 0.69 \\ & (17.5) \end{aligned}$ | $\begin{aligned} & 1.20 \\ & (30.5) \end{aligned}$ | $\begin{aligned} & 1.30 \\ & (33.0) \end{aligned}$ | $\begin{aligned} & 1.40 \\ & (35.6) \end{aligned}$ | $\begin{aligned} & 1.30 \\ & (33.0) \end{aligned}$ | $\begin{aligned} & 1.34 \\ & (34.0) \end{aligned}$ | $\begin{aligned} & 1.40 \\ & (35.6) \end{aligned}$ | $\begin{aligned} & \hline 1.23 \\ & (31.2) \end{aligned}$ | $\begin{aligned} & 1.34 \\ & (34.0) \end{aligned}$ | $\begin{aligned} & 1.44 \\ & (36.6) \end{aligned}$ |

## Toggle Switch



Hesitation Switch


Pushbutton Actuator


## Accessories



E10TA102
Knurled Face Nut


E10TA301
ON-OFF Indicating PlateVertical Orientation


E10TA302
ON-OFF Indicating PlateHorizontal Orientation


## Note

(1) Spade terminal adapters are used on 6 ampere and momentary screw terminal switches, adding $0.42 \mathrm{in}(10.7 \mathrm{~mm})$ to dimension C .


## Product Description

## M22 Assembled Control Stations

- M22 series operators
- Available in horizontal and vertical configurations
- Impact resistant polycarbonate enclosures
- Optional yellow covers
- Base mounting contact blocks and light units for quick wiring and vibration resistance


## Commercial Control Stations

- 10250T series operators
- Full front label
- Specific function labels on front of enclosure


## General Purpose Control Stations

- Construction grade
- General purpose wall mount
- Popular with contractors
- UL (NEMA) Type 1


## Special Purpose Control Stations

- Standard grade
- Polyester enclosure
- UL (NEMA) Type 3, 3R, 4, 4X, 13


## 10250H Series Heavy-Duty Control Stations

- 10250 H Series operators
- Dark brown polyester enclosure
- Protective rubber gaskets provide NEMA 3S rating on pushbuttons
- Top and bottom $3 / 4$ in NPT conduit entrances
- Includes alternate legend plates and spare mounting screws


## Contents

| Description | Page |
| :---: | :---: |
| Pushbutton Control Stations-Assembled |  |
| Features | V7-T1-9 |
| Product Selection |  |
| M22 Assembled Control Stations | V7-T1-10 |
| Commercial Control Stations | V7-T1-11 |
| General Purpose Control Stations | V7-T1-12 |
| Special Purpose Control Stations | V7-T1-13 |
| 10250H Series Heavy-Duty Control Stations | V7-T1-14 |
| 10250T Series Heavy-Duty 30.5 mm Control Stations | V7-T1-15 |
| Class I Division 2 10250T Series Heavy-Duty 30.5 mm Control Stations | V7-T1-16 |
| Class I Division 2 E34 Series Corrosion Resistant 30.5 mm Control Stations | V7-T1-17 |
| Accessories | V7-T1-17 |
| Custom Assembled Stations |  |
| Specification Form | V7-T1-18 |
| Renewal Parts | V7-T1-20 |
| Technical Data and Specifications | V7-T1-22 |
| Dimensions. | V7-T1-22 |

## 10250T Series Heavy-Duty $\mathbf{3 0 . 5} \mathbf{~ m m}$ Control Stations

- 10250T Series operators
- ASA 61 gray die-cast zinc enclosures
- Surface or flush mounting
- Single $3 / 4$ in NPT conduit entrance on one and two element stations
- Single 1 in NPT conduit entrance on three element stations


## Class I Division 2 10250T Series Heavy-Duty 30.5 mm Control Stations

- 10250T Series operators
- Factory sealed contact blocks
- Die-cast, polyester or stainless steel enclosures
- Approved for NEC Class I Division 2, Groups B, C and D or Class I Zone 2 Group IIB plus Hydrogen type hazardous locations

Class I Division 2 E34 Series Corrosion Resistant 30.5 mm Control Stations

- E34 Series operators
- Factory sealed contact blocks
- Die-cast, polyester or stainless steel enclosures
- Approved for NEC Class I Division 2 Groups B, C and D or Class I Zone 2 Group IIB plus Hydrogen type hazardous locations


## Features

## M22 Assembled Control

 Stations- IP66, UL (NEMA) Type 4X, 13
- Impact resistant polycarbonate enclosures
- Optional yellow cover
- $25 \%$ smaller depth than most competitor enclosures
- Base mounting contact blocks and light units for faster wiring and vibration resistance


## Commercial Control Stations

- ASA 61 gray die-cast zinc enclosures
- Pre-assembled and labeled for functions such as "Fuel Shut-Off"
- Great for commercial applications


## General Purpose Control Stations

- Construction grade
- General purpose wall mount
- Popular with contractors
- UL (NEMA) Type 1

Special Purpose Control Stations

- Standard grade
- Polyester enclosure
- UL (NEMA) Type 3, 3R, 4, 4X, 13


## 10250H Series Heavy-Duty

Control Stations

- Industrial grade
- Extra heavy-duty
- Polyester enclosure
- Booted buttons
- Outdoor installation
- UL (NEMA) Type 3, 3R, 3S, 4, 4X, 12, 13


## 10250T Series Heavy-Duty

30.5 mm Control Stations

- 30.5 mm operators
- Industrial grade
- Zinc die cast enclosure
- Popular with industrial end users
- UL (NEMA) Type 4, 4X, 12, 13


## Class I Division 2 Control Stations

- Available with 10250 T or E34 30.5 mm operators
- Zinc die cast, polyester or stainless steel enclosures
- Factory-sealed contact blocks
- Popular with industrial end users
- UL (NEMA) Type 4, 4X, 12, 13
- NEC Class I Division 2 Groups B, C and D


## Pushbuttons and Indicating Lights

Pushbutton Control Stations-Assembled

## Product Selection

## M22 Assembled Control Stations



One Element Control Stations

| Orientation | Description | Color | (1) | Inscription | Enclosure <br> Cover Color |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Horizontal | 40 mm mushroom head push-pull emergency stop operator | Red | NC | - | Yellow |
| Horizontal | 40 mm illuminated mushroom head push-pull emergency stop <br> operator, $85-264 ~ V a c ~$ | Red | NO-NC | - | Yellow |
| Horizontal | 40 mm mushroom head twist-to-release emergency stop operator | Red | NC | - | M22-C1-M2H |
| Horizontal | 40 mm mushroom head key-release emergency stop operator | Red | NC | - | Yellow |
| Horizontal | Flush pushbutton | Green | NO | © | Yellow |
| Horizontal | Flush pushbutton | Green | NO | START | Gray |
| Horizontal | Extended pushbutton | Red | NC | © | Gray |
| Horizontal | Extended pushbutton | Red | NC | STOP | M22-C1-M4H |
| Horizontal | Key-operated selector switch, two-position maintained | - | NO | OFF-ON | Gray |
| Horizontal | Knob type selector switch, three-position maintained | - | 2NO | HAND 0 AUTO | Gray |
| Horizontal | Double pushbutton | Green | NO | START | Gray |

Two Element Control Stations

| Orientation | Element 1 <br> Description | Color | © | Inscription | Element 2 <br> Description | Color | (1) | Inscription | Enclosure <br> Cover Color | Catalog Number |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Three Element Control Stations

| Orientation | Element 1 Description | Color | (1) | Inscription | Element 2 <br> Description | Color | (1) | Inscription | Element 3 <br> Description | Color | (1) | Inscription | Enclosure <br> Cover Color | Catalog Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Horizontal | Extended pushbutton | Red | NC | ( | Indicating light | White | $\begin{aligned} & 85-264 \\ & \text { Vac } \end{aligned}$ | - | Flush pushbutton | Green | NO | (1) | Gray | M22-C3-M1H |
| Vertical | Indicating light | White | $\begin{aligned} & 85-264 \\ & \text { Vac } \end{aligned}$ | - | Flush pushbutton | Green | NO | START | Extended pushbutton | Red | NC | STOP | Gray | M22-C3-M2V |
| Horizontal | Flush pushbutton | Green | NO | (1) | Extended pushbutton | Red | NC | ( | Flush pushbutton | Green | NO | (11) | Gray | M22-C3-M3H |
| Vertical | Flush pushbutton | Black | NO | OPEN | Extended pushbutton | Red | NC | STOP | Flush pushbutton | Black | NO | CLOSE | Gray | M22-C3-M4V |
| Vertical | Flush pushbutton | Black | NO | FORWARD | Flush pushbutton | Red | NC | STOP | Flush pushbutton | Black | NO | REVERSE | Gray | M22-C3-M5V |
| Vertical | Flush pushbutton | Black | NO | UP | Flush pushbutton | Red | NC | STOP | Flush pushbutton | Black | NO | DOWN | Gray | M22-C3-M6V |

## Notes

For assembled control stations not found in this selection, please contact the Eaton Technical Resource Center
at 1-877-ETN CARE (386-2273) or TRC@eaton.com.
(1) Contact block configuration.

## Commercial Control Stations



## Key Specifications

- 30.5 mm (10250T series) operators
- ASA 61 gray die-cast zinc enclosures
- Industrial grade
- UL®Type 4, 4X, 12, 13
- Single $3 / 4$ in NPT conduit entrance
- Dimensions-in (mm)
- Enclosure:
$3.88 \mathrm{~W} \times 4.00 \mathrm{H} \times 3.00 \mathrm{D}$
$(98.6 \times 101.6 \times 76.3)$
- Operator:
1.63 D (to enclosure) x
1.50 diameter
$(41.4 \times 38.1)$


## What is included?

Eaton's pre-assembled, enclosed emergency stop pushbutton stations include an operator, an enclosure, contact blocks and a variety of unique labels. Each label has white lettering on a red background indicating the function and red lettering on a white background indicating the operator type.

Available Catalog Numbers

| Catalog <br> Number ${ }^{(1)}$ | Operator | Enclosure <br> Color | Label |
| :--- | :--- | :--- | :--- |
| $\mathbf{1 0 2 5 0 T 5 B 6 2 - S 1 0 1 ~}$ | Push-Pull | Gray | EMERGENCY STOP |
| $\mathbf{1 0 2 5 0 T 5 B 6 2 - S 1 0 2 ~}$ | Push-Pull | Gray | EMERGENCY SHUT-OFF |
| $\mathbf{1 0 2 5 0 T 5 B 6 2 - S 1 0 3 ~}$ | Push-Pull | Gray | EMERGENCY GENERATOR STOP |
| $\mathbf{1 0 2 5 0 T 5 B 6 2 - S 1 0 4 ~}$ | Push-Pull | Gray | EMERGENCY HVAC SHUT-DOWN |
| $\mathbf{1 0 2 5 0 T 5 B 6 2 - S 1 0 5 ~}$ | Push-Pull | Gray | EMERGENCY ELECTRICAL DISCONNECT |
| $\mathbf{1 0 2 5 0 T 5 B 6 2 - S 1 0 6 ~}$ | Push-Pull | Gray | EMERGENCY BOILER SHUT-DOWN |
| $\mathbf{1 0 2 5 0 T 5 B 6 2 - S 1 0 7 ~}$ | Push-Pull | Gray | EMERGENCY CHILLER STOP |
| $\mathbf{1 0 2 5 0 T 5 B 6 2 - S 1 0 8 ~}$ | Push-Pull | Gray | EMERGENCY FUEL SHUT-OFF |
| $\mathbf{1 0 2 5 0 T 5 B 6 2 - S 1 0 9 ~}$ | Push-Pull | Gray | EMERGENCY REFRIGERATION STOP |
| $\mathbf{1 0 2 5 0 T 5 B 6 2 - S 1 1 0 ~}$ | Push-Pull | Gray | EMERGENCY POWER OFF |
| $\mathbf{1 0 2 5 0 T 5 B 6 2 - S 1 1 1 ~}$ | Push-Pull | Gray | EMERGENCY GAS SHUT-OFF |
| $\mathbf{1 0 2 5 0 T 5 B 6 2 - S 1 1 2 ~}$ | Push-Pull | Gray | EMERGENCY VENTILATION SHUT-DOWN |
| $\mathbf{1 0 2 5 0 T 5 B 6 2 - S 1 1 3 ~}$ | Push-Pull | Gray | GENERATOR |

Additional Contact Blocks
(Sold Separately)

| Catalog Number | Circuit <br> Configuration |
| :--- | :--- |
| $\mathbf{1 0 2 5 0 T 5 1}$ | 1NC |
| $\mathbf{1 0 2 5 0 T 5 3}$ | 1NO |
| $\mathbf{1 0 2 5 0 T 1}$ | NO-NC |
| $\mathbf{1 0 2 5 0 T 3}$ | 2NC |
| $\mathbf{1 0 2 5 0 T 2}$ | 2NO |

## Note

(1) Includes 1NO-1NC contact block.

## General Purpose Control Stations



## Notes

(1) Padlock attachment (10250H5110) must be purchased separately.
(2) Round button.

|  | Contact Symbol | Button Type/Color | Legends | Catalog Number |
| :---: | :---: | :---: | :---: | :---: |
| Selector Switch | One Element Enclosure Type |  |  |  |
|  |  | Three-position selector switch/black knob | RUN/OFF/AUTO | 10250 H 2538 |
| Two Button Station | Two Element Enclosure Type |  |  |  |
|  |  | Flush/green | START/STOP | 10250H2747 |
| Mechanically Interlocked Pushbuttons | $\operatorname{oio}_{1-\pi}^{o_{1}^{\prime}}$ | Flush/black (all) mech. interlocked | None ${ }^{1}$ | 10250H2544 |

## Special Purpose Control Stations

|  | Contact Symbol | Feature | Legends | Catalog Number |
| :---: | :---: | :---: | :---: | :---: |
| $\overline{10250 \mathrm{H}_{2}}$ | One Element Pushbutton Type |  |  |  |
|  | $\begin{array}{ll}  \\ \hline 0 \quad 0 \end{array}$ | Flush | START | 10250H2738 |
|  | 0 O |  | STOP | 10250 H 658 |
|  |  | With lock hasp | STOP | 10250H665 |
| 10250 H | Two Element Pushbutton Type |  |  |  |
|  | $\begin{gathered} \frac{1}{0} 0 \\ \hline \end{gathered}$ | Flush | START/STOP | 10250H364 |
|  |  | With lock hasp | START/STOP | 10250 H 671 |
|  |  | Buttons interlocked | FAST/SLOW | 10250ED664 |
|  | $\begin{gathered} \overline{0} \\ \\ \hline \end{gathered}$ |  | FOR/REV | 10250H2740 |
|  |  |  | UP/DOWN | 10250H2741 |
|  |  |  | OPEN/CLOSE | 10250H2742 |

## Note

(1) No legend on buttons. Specify any standard legend.

## Pushbuttons and Indicating Lights

Pushbutton Control Stations-Assembled

## 10250H Series Heavy-Duty Control Stations

Type H Control Stations-UL (NEMA) Type 3, 3S, 4, 4X, 12, 13

|  | Element Type |  | Feature | Circuit | Assembled <br> Legend <br> Plate | Unassembled Alternate Legend Plate | Catalog Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10250H | One Element |  |  |  |  |  |  |
|  | Pushbuttons |  | Without padlock hasp | 1NO-1NC | JOG | START | 10250H1881 |
|  |  |  |  |  |  | STOP |  |
|  |  |  |  |  |  | RUN |  |
|  |  |  | With padlock hasp | 1NC | STOP | - | 10250H4239 |
|  | Knob selector switch |  | Two-position | 1NO-1NC | OFF/ON | - | 10250H4526 |
|  |  |  | Three-position | 1NO-1NC | MAN/OFF/AUTO | - | 10250H4527 |
| 10250H | Two Element |  |  |  |  |  |  |
|  | Pushbuttons |  | Standard | 1NO-2NC | START/STOP | - | 10250H1884 |
|  |  |  |  | 2NO-2NC | RAISE/LOWER | FORWARD | 10250H1885 |
|  |  |  |  |  |  | REVERSE |  |
|  |  |  |  |  |  | OPEN |  |
|  |  |  |  |  |  | CLOSE |  |
|  |  |  | Standard and standard with padlock hasp | 1NO-2NC | START/STOP | - | 10250H4240 |
| $\overline{10250 H}$ | Three Element |  |  |  |  |  |  |
|  | Pushbuttons |  | Standard | 2NO-3NC | FOR/REV/STOP | START OPEN | 10250H1890 |
|  |  |  | Two standard and standard with padlock hasp |  |  | JOG CLOSE | 10250H4241 |
|  |  |  |  |  |  | RAISE FAST |  |
|  |  |  |  |  |  | LOWER SLOW |  |
|  | Indicating light and pushbuttons | 120 V | Light-red lens and two plain | 1NO-2NC | MOTOR <br> RUNNING <br> START/STOP | - | 10250H1913 |

## 10250T Series Heavy-Duty 30.5 mm Control Stations

|  | Complete Assembled Stations-UL (NEMA) Type 4, 4X, 12, 13 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Element Type ${ }^{1}$ | Features | Contact Block(s) | Legend | Surface Mounting Catalog Number | Flush Mounting Catalog Number |
| Break Glass Station | Break Glass Station |  |  |  |  |  |
|  | Break glass station (3) | Gray enclosure | NC (logic level) | EMERG. OFF | 10250TGS | - |
|  |  | Red enclosure |  |  | 10250TGR | - |
| One Element | One Element |  |  |  |  |  |
|  | Pushbutton | Standard | NO-NC | START | 10250 T3516 | 10250 T3573 |
|  |  |  | NC | STOP | 10250 T 3518 | 10250 T3575 |
|  |  |  | NO-NC | None | 10250 T 3540 | 10250 T3597 |
|  |  | Mushroom head | NO-NC | START | 10250 T 3517 | 10250 T3574 |
|  |  |  | NC | STOP | 10250 T3519 | 10250 T3576 |
|  |  | With lock hasp ${ }^{(4)}$ | NC | STOP | 10250 T3520 | 10250 T3577 |
|  | Selector switch | Two-position black knob | NO-NC | OFF/ON | 10250 T 3523 | 10250 T3580 |
|  |  | Three-position black knob | 2N0 | MAN/OFF/AUTO | 10250 T 3524 | 10250 T3581 |
|  | Push-pull three-position | Momentary red button | 2NC | START/STOP | $10250 T 3545$ | 10250 T3602 |
| Two Element | Two Element |  |  |  |  |  |
|  | Pushbuttons | Standard | 1NO-2NC | START/STOP | $10250 T 3525$ | 10250 T3582 |
|  |  |  | 2NO-2NC | RAISE/LOWER | 10250 T 3672 | 10250 T3673 |
|  |  |  | 2NO-2NC | None | $10250 T 3541$ | 10250 T3598 |
|  |  | With lock hasp ${ }^{4}$ | 1NO-2NC | START/STOP | 10250 T 3542 | 10250 T3599 |
|  |  | Standard and mushroom head | 1NO-2NC | START/STOP | 10250 T 3526 | 10250 T3583 |
|  |  | Standard with maintained contact ${ }^{\text {(5 }}$ | NO-NC | START/STOP | 10250 T3528 | 10250 T3585 |
|  |  |  | Plus NC |  |  |  |
| Three Element | Three Element |  |  |  |  |  |
|  | Pushbuttons | Standard | 2NO-3NC | FOR, REV, STOP | 10250 T 3532 | 10250 T3589 |
|  |  |  | 2NO-3NC | UP, DOWN, STOP | 10250 T3615 | - |
|  |  |  | 2NO-3NC | OPEN, CLOSE, STOP | 10250 T 3614 | - |
|  |  |  | 2NO-3NC | None, None, STOP | 10250 T3543 | 10250 T3600 |
|  |  | Two standard and with lock hasp | 2NO-3NC | None, None, STOP | 10250 T 3544 | 10250 T3601 |
|  | Indicating light (transformer type) and pushbuttons | Red lens - 120V | 1NO-2NC | MOTOR RUN, START/STOP | 10250 T3536 | 10250 T3593 |
|  |  | Red lens - 240V |  |  | 10250 T3537 | 10250 T3594 |
|  |  | Red lens - 480V |  |  | 10250 T3538 | 10250 T3595 |
|  |  | Red lens - 600V |  |  | 10250T3539 | 10250 T3596 |



Break Glass Kit

| Description | Catalog Number |
| :--- | :--- |
| Operator with hammer and 5 glass discs | 10250TBG |
| Glass discs only (5) | $\mathbf{1 0 2 5 0 T G L}$ |

## Notes

(1) Stop buttons are red-all others are black.
(2) NEMA 4-13, if properly mounted on a flat surface. Consists of front plate, legend, operator and contact blocks.
(3) Break glass stations will not function with Normally Open contact blocks.
(4) Lock is 10250TA2.
(5) Uses deep cover instead of shallow cover. Switch component is 10250TA67—mechanically interlocked operators.
(6) Shown assembled to contact block (contact block supplied separately).

Pushbuttons and Indicating Lights
Pushbutton Control Stations-Assembled

## Class I Division 2 10250T Series Heavy-Duty 30.5 mm Control Stations



UL (NEMA) Type 4, 4X, 12, 13; NEC Class I Division 2, Groups B, C and D

|  | Contact Symbol | Button <br> Type/Color | Legend <br> Marking | Die Cast <br> Enclosure <br> Catalog Number | Polyester Molded Enclosure Catalog Number | Stainless Steel <br> Enclosure <br> Catalog Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10250 T 7007$ | Single Pushbutton |  |  |  |  |  |
|  | $\begin{aligned} & \frac{1}{O} 1 \mathrm{NO} \\ & \mathrm{O} \quad 1 \mathrm{NC} \end{aligned}$ | Flush/green | START | 10250 T7003 | 10250T7003P | 10250T7003S |
|  |  | Extended/red | STOP | 10250 T7005 | 10250T7005P | 10250T7005S |
|  |  | Alum. jumbo mushroom/red | EMER. STOP (engraved button) | $10250 T 7007$ | 10250T7007P | 10250T7007S |
|  |  | Flush/black | No legend | 10250 T7009 | 10250T7009P | 10250T7009S |
| 10250T7023P | Two Pushbuttons |  |  |  |  |  |
|  | $\begin{gathered} \perp \perp 1 \mathrm{NO} \\ \mathrm{O} \quad \mathrm{O} \\ \mathrm{O} \quad \mathrm{O} 1 \mathrm{NC} \\ \text { Each Button } \end{gathered}$ | Flush/green | START | 10250 T7023 | 10250T7023P | 10250T7023S |
|  |  | Extended/red | STOP |  |  |  |
|  |  | Flush/black | No legend | 10250 T 7025 | 10250T7025P | 10250T7025S |
|  |  | Flush/black | No legend |  |  |  |
| 10250T7033S | Single Pilot Light-Two Pushbuttons |  |  |  |  |  |
|  | $\begin{aligned} & \begin{array}{l} \text { O. } \\ \frac{1}{O} 1 \mathrm{NO} \\ \mathrm{O} \quad \mathrm{O} 1 \mathrm{NC} \\ \text { Each Button } \end{array} \end{aligned}$ | 120 Vac red | No legend | 10250 T 7033 | 10250T7033P | 10250T7033S |
|  |  | Flush/green | START |  |  |  |
|  |  | Extended/red | STOP |  |  |  |
|  |  | 120 Vac red | No legend | 10250 T 7035 | 10250T7035P | 10250T7035S |
|  |  | Flush/black |  |  |  |  |
|  |  | Flush/black |  |  |  |  |

Three-Position Selector Switch

| $\longrightarrow-2 N O$ | Maintained <br> knob/black | HAND/OFF/AUTO | $10250 T 7011$ | 10250T7011P | 10250T7011S |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Maintained <br> knob/black | No legend | 1025077013 | 10250T7013P | 10250T7013S |  |



Class I Division 2 E34 Series Corrosion Resistant 30.5 mm Control Stations


Complete Assembled Stations-
UL (NEMA) Type 4, 4X, 12, 13; NEC Class I Division 2, Groups B, C and D

| Contact Symbol | Button Type/Color | Legend Marking | Die Cast <br> Enclosure <br> Catalog Number | Polyester Molded Enclosure Catalog Number | Stainless Steel Enclosure Catalog Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Single Pushbutton |  |  |  |  |  |
|  | Flush/green | START | E34EX7003 | E34EX7003P | E34EX7003S |
|  | Extended/red | STOP | E34EX7005 | E34EX7005P | E34EX7005S |
|  | Alum. jumbo mushroom/red | EMER. STOP (engraved button) | E34EX7007 | E34EX7007P | E34EX7007S |
|  | Flush/black | No legend | E34EX7009 | E34EX7009P | E34EX7009S |
| Two Pushbuttons |  |  |  |  |  |
| $\begin{aligned} & \frac{1}{\circ} 1 \mathrm{O} 0 \\ & \circ \mathrm{NO} \\ & \text { Each Button } \end{aligned}$ | Flush/green | START | E34EX7023 | E34EX7023P | E34EX7023S |
|  | Extended/red | STOP |  |  |  |
|  | Flush/black | No legend | E34EX7025 | E34EX7025P | E34EX7025S |
|  | Flush/black | No legend |  |  |  |

## Three-Position Selector Switch

| $\xrightarrow[-]{\mathrm{O}} 2 \mathrm{NO}$ | Maintained knob/black | HAND/OFF/AUTO | E34EX7011 | E34EX7011P | E34EX7011S |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Maintained knob/black | No legend | E34EX7013 | E34EX7013P | E34EX7013S |

Single Pushbutton Maintained

|  |  | Push-pull with jumbo <br> mushroom/red | EMER. STOP <br> (engraved button) | E34EX7019 | E34EX7019P |
| :--- | :--- | :--- | :--- | :--- | :--- |$\quad$ E34EX7019S

## Accessories



Type N Control Stations

| Description | Catalog Number |
| :--- | :--- |
| Padlock attachment—For field assembly on square button type <br> (except extended button types) | $\mathbf{1 0 2 5 0 \mathbf { H 5 1 1 0 }}$ |

Note
Use NEMA 4X 10250T operators where exposed to ultraviolet light, see Page V7-T1-16.

## Custom Assembled Stations Specification Form

## Ordering Instructions

## Step 1

Copy this ordering guide from catalog.

## Step 2

Specify 10250T or E34 pushbutton lines in the corresponding box on the following page.

| 10250T | Pages <br> V7-T1-205 to V7-T1-275 |
| :--- | :--- |
| E34 | Pages <br> V7-T1-276 to V7-T1-317 |
| 10250T and | Pages <br> E34 |
| V7-T1-343 to V7-T1-383 |  |
| Class I Div. 2 |  |

## Step 3

Check back of panel dimensions-specify single or double depth enclosure in the corresponding box on the following page.

## Step 4

Specify enclosure catalog number and price in the corresponding box on the following page. Enclosures can be found on Pages V7-T1-110, V7-T1-255 and V7-T1-305. For pricing, reference the most recent PAD or VISTA-line.

## Step 5

Specify catalog numbers for desired operator, legend plate, light unit, accessory and contact block(s) for each location in the enclosure in the corresponding box on the following page. (See position locations on this page.)


Position Locations

## Step 6

For non-standard legends, specify legend desired, letter size and location on the layout sketches on the following page. For limitations see Page V7-T1-254. For pricing, use the blank legend catalog number and "STAMP" Suffix (Ex.: 10250TS36STAMP) and reference the most recent PAD or VISTA-line.
Example: 10250TS36
Special
Legend
for Position \# $\qquad$


## Step 7

Fax Sheet 2 of this form to Eaton's TRC, Technical Resource Center, at 828-6510549 to the attention ofCustom Stations Order or email to TRC@eaton.com.
Within a few days you will receive a confirmation fax with the custom station part number and price.

## Step 8

Place your order over the VISTA System.

For Selector and Roto-Push Operators


## 10250T or E34

For single contact blocks or 1 NO-1 NC contact blocks, the mounting position of contacts must be specified. For example: If a $1 \mathrm{NO}-1 \mathrm{NC}$ contact block is required, specify if NO is to be mounted in Top A position or Bottom B position.
$\begin{array}{ll}\text { To }-\quad \text { Eaton's TRC, Custom Station Order } \\ & (828) \text { 651-0549 FAX, or email to TRC@ eaton.com }\end{array}$
From - Customer Name $\qquad$
Customer Contact $\qquad$
Phone Number $\qquad$
Fax Number $\qquad$
Email Address $\qquad$
Step 2)
10250T -STD Class I Division 2
E34


Step 4)


Step 5)

| Position | Operator | $\begin{array}{\|l} \hline \text { Price } \\ \text { U.S. } \end{array}$ | Light Unit | $\begin{aligned} & \hline \text { Price } \\ & \text { U.S. } \end{aligned}$ | Contact Block | Price U.S. \$ | A/L | B/R | Contact Block | $\begin{aligned} & \hline \text { Price } \\ & \text { U.S.\$ } \end{aligned}$ | A/L | B/R | Total Price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Position | Legend Plate | Price <br> U.S. $\$$ | Lens or Caps | Price <br> U.S. $\$$ | Accessory | Price <br> U.S. $\$$ | Total <br> Price |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |


|  | Total: |
| :---: | :---: |
| 10\% Adder for Assembled Stations |  |

## Step 6) Non-standard Legends

Special Legend for Position \#


Special Legend for Position \#


Special Legend for Position \#


# 1.2 <br> <br> Pushbuttons and Indicating Lights 

 <br> <br> Pushbuttons and Indicating Lights}

Pushbutton Control Stations-Assembled

## Renewal Parts

Type N Renewal Parts


One and Two Element Station


Three Element Station


One Element Indicating Light


Two Element Station with


Open Type Two Element

Assembled Stations-Type N

| Item <br> No. | Description | No. Req. | Part Number | Item No. | Description | No. Req. | Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type N-Square Buttons |  |  |  | Type N-Square Buttons, continued |  |  |  |
| 1 | Cover | 1 |  | 9 | Pushbutton element | 1 |  |
|  | Two element |  | 49-3524 |  | 1NO-1NC |  | 86-2588 |
|  | One element-top button |  | 49-3524-2 |  | 2NO |  | 86-2588-2 |
|  | One element-bottom button |  | 49-3524-3 |  | 1N0 |  | 86-2588-3 |
| 2 | Cover screw | 2 | 11-2168 |  | 1NC |  | 86-2588-4 |
| 3 | Pushbutton support bracket | 1 | 79-6649 | 10 | Cover | 1 | 49-3464 |
| 4 | Pushbutton support bracket screw | 1 | 11-2090 | 11 | Pushbutton support bracket | 1 | 79-6650 |
| 5 | Pushbutton spring | 2 | 69-2571 | 12 | Pushbutton-top position | 1 |  |
| 6 | Disc (when used-two element assembly) | 2 | 16-1960 |  | FORWARD/black |  | 53-1170-7 |
| 7 | Pushbutton-top position | 1 |  |  | UP/black |  | 53-1170-4 |
|  | START/green |  | 53-1169-3 |  | RAISE/black |  | 53-1170-5 |
|  | RAISE/black |  | 53-1169-66 |  | OPEN/black |  | 53-1170-9 |
|  | FORWARD/black |  | 53-1169-7 |  | FAST/black |  | 53-1170-6 |
|  | OPEN/black |  | 53-1169-9 | 13 | Pushbutton middle position | 1 |  |
|  | UP/blank |  | 53-1169-11 |  | REVERSE/black |  | 53-1169-15 |
|  | Blank/green |  | 53-1169 |  | DOWN/black |  | 53-1169-18 |
| 8 | Pushbutton-bottom position | 1 |  |  | LOWER/black |  | 53-1169-16 |
|  | STOP/red |  | 53-1202-2 |  | CLOSE/black |  | 53-1169-17 |
|  | Extended STOP/red |  | 53-1202-5 |  | SLOW/black |  | 53-1169-13 |
|  | REVERSE/black |  | 53-1169-8 | 14 | Pushbutton-bottom position | 1 |  |
|  | CLOSE/black |  | 53-1169-10 |  | STOP/red |  | 53-1201-2 |
|  | DOWN/black |  | 53-1169-12 | 15 | Pushbutton element | 1 |  |
|  | LOWER/black |  | 53-1169-6 |  | 2NO-3NC |  | 86-2593 |
|  | Blank/red |  | 53-1202 | 16 | Cover | 1 | 49-3524-4 |

Assembled Stations-Type N, continued

| Item No. | Description | No. Req. | Part Number |
| :---: | :---: | :---: | :---: |
| Type N-Square Buttons, continued |  |  |  |
| 17 | Lens | 1 |  |
|  | Clear |  | 28-494 |
|  | Red |  | 28-887-2 |
|  | Amber |  | 28-887-3 |
| 18 | Shield | 1 | 73-1337 |
| 19 | Shield screws | 4 | 11-2012 |
| 20 | Lamp (neon NE48) | 1 | 28-494 |
| 21 | Lamp receptacle | 1 | 28-902 |
| 22 | Lamp receptacle screw | 1 | 911-330F1 |
| 23 | Pilot light terminal base | 1 | 86-2586 |
| 24 | Lens | 1 |  |
|  | Clear |  | 28-887 |
|  | Red |  | 28-887-2 |
|  | Amber |  | 28-887-3 |
| 25 | Pushbutton support bracket | 1 | 79-6650-2 |
| 26 | Pushbutton element | 1 |  |
|  | 1NO-1NC |  | 86-2594 |


| Item No. | Description | No. Req. | Part Number |
| :---: | :---: | :---: | :---: |
| Type N-Round Buttons |  |  |  |
| Similar <br> to 27 | Pushbutton assembly and element for: |  |  |
|  | 10250H289 | 1 | 10250H2538 |
|  | 10250H364 | 1 | 86-353 |
|  | 10250H685 | 1 | 86-353-8 |
|  | 10250H665 | 1 | 86-353-8 |
|  | 10250H671 | 1 | 86-353 |
|  | 10250H2738 | 1 | 86-353-3 |
|  | 10250H2740 | 1 | 86-356 |
|  | 10250H2741 | 1 | 86-356 |
|  | 10250H2742 | 1 | 86-356 |

Type H Renewal Parts


Assembled Stations-Type H

| Item <br> No. | Description | No. <br> Req. | Part Number |
| :--- | :--- | :--- | :--- |
| Type $\mathbf{H}$ | Assembled Stations |  |  |
| 1 | Screw | 2 | $\mathbf{1 1 - 4 6 5 4}$ |
| 2 | Screw | 2 | $\mathbf{1 1 - 5 7 1 9}$ |
| 3 | Base | 1 | $\mathbf{1 7 - 1 6 5 6 0}$ |
| 4 | Contact blocks | See Page V7-T1-257 |  |
| 5 | 10250T operator | See Pages V7-T1-211 <br> to V7-T1-247 |  |
| 6 | Mounting plate | 1 | $\mathbf{1 7 - 1 9 5 2 4}$ |


| Item <br> No. | Description | No. <br> Req. | Part Number |
| :--- | :--- | :--- | :--- |
| Type |  |  |  |
| 7 | Screw |  |  |
| 8 | Diapsembled Stations | 4 | $\mathbf{1 1 - 9 5 3}$ |
| 9 | Mounting plate | 1 | $\mathbf{3 2 - 2 5 3 - 2}$ |
| 10 | Gasket | 1 | $\mathbf{1 7 - 1 9 5 2 2}$ |
| 11 | Base | 1 | $\mathbf{3 2 - 2 5 4}$ |
| 12 | Mounting plate | 1 | $\mathbf{1 7 - 1 6 5 6 1}$ |

## Pushbuttons and Indicating Lights

## Technical Data and Specifications

## Ratings

Maximum Ampere Ratings for Type N Control Stations

|  | Volts AC |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\mathbf{1 1 0}$ | $\mathbf{2 2 0}$ | $\mathbf{4 4 0}$ | $\mathbf{5 5 0}$ | $\mathbf{1 2 0}$ | $\mathbf{2 4 0}$ | $\mathbf{6 0 0}$ |
| Description | 30 | 15 | 7.5 | 6 | 1.0 | 0.5 | 0.1 |
| Make and emergency interrupt capacity | 3 | 1.5 | 0.75 | 0.6 | 1.0 | 0.5 | 0.1 |
| Normal load break | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Continuous current |  |  |  |  |  |  |  |

Maximum Ampere Ratings for Type H Control Stations

|  | Volts AC $\mathbf{5 0} / \mathbf{6 0} \mathbf{~ H z}$ |  | Volts DC |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Description | $\mathbf{1 2 0}$ | $\mathbf{2 4 0}$ | $\mathbf{4 8 0}$ | $\mathbf{6 0 0}$ | $\mathbf{1 2 5}$ | $\mathbf{2 5 0}$ |
| Make and emergency interrupt capacity | 60 | 30 | 15 | 12 | 1.1 | 0.55 |
| Normal load break | 6 | 3 | 1.5 | 1.2 | 1.1 | 0.55 |
| Continuous amperes | 10 | 10 | 10 | 10 | 10 | 10 |
| Voltamperes - |  |  |  |  |  |  |
| Make and emergency interrupt capacity | 7200 | 7200 | 7200 | 7200 | 138 | 138 |
| Normal load break | 720 | 720 | 720 | 720 | 138 | 138 |

## Dimensions

Approximate Dimensions in Inches (mm)

## Type N Control Stations



Single Button Station


Two Button Station


Three Button Station

Special Purpose Control Stations


Note
(1) 2.38 (60.5) for neon indicating light.

Approximate Dimensions in Inches (mm)

## Type H Control Stations

NEMA Type 3, 3R, 3S, 4, 4X, 13

| No. of <br> Elements | Dimensions <br> Wide | High | Deep |
| :--- | :--- | :--- | :--- |
| 1 and 2 | $4.50(114.3)$ | $8.25(209.6)$ | $4.50(114.3)$ |
| 3 | $4.50(114.3)$ | $10.75(273.1)$ | $4.25(108.0)$ |

## $10250 T$ and E34

Approximate Enclosure Dimensions

| Number <br> of <br> Elements | Surface Mounting <br> Dimensions in In (mm) |  |  | Mounting |  | Conduit <br> Entrance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wide A | High B | Deep C |  |  |  |
| Cast |  |  |  |  |  |  |
| 1 | $\begin{aligned} & \hline 3.88 \\ & (98.6) \end{aligned}$ | $\begin{aligned} & 4.00 \\ & (101.6) \end{aligned}$ | $\begin{aligned} & 3.00 \\ & (76.3) \end{aligned}$ | $\begin{aligned} & \hline 2.69 \\ & (68.3) \end{aligned}$ | $\begin{aligned} & \hline 3.25 \\ & (82.6) \end{aligned}$ | 3/4 |
| 2 | $\begin{aligned} & 3.88 \\ & (98.6) \end{aligned}$ | $\begin{aligned} & 5.88 \\ & (149.4) \end{aligned}$ | $\begin{aligned} & 3.00 \\ & (76.3) \end{aligned}$ | $\begin{aligned} & 2.69 \\ & (68.3) \end{aligned}$ | $\begin{aligned} & 5.13 \\ & (130.3) \end{aligned}$ | 3/4 |
| 3 | $\begin{aligned} & 3.88 \\ & (98.6) \end{aligned}$ | $\begin{aligned} & 7.75 \\ & (196.9) \end{aligned}$ | $\begin{aligned} & 3.00 \\ & (76.3) \end{aligned}$ | $\begin{aligned} & 2.69 \\ & (68.3) \end{aligned}$ | $\begin{aligned} & 7.00 \\ & (177.8) \end{aligned}$ | 1 |
| 4 | $\begin{aligned} & 33.88 \\ & (98.6) \end{aligned}$ | $\begin{aligned} & 9.63 \\ & (244.6) \end{aligned}$ | $\begin{aligned} & 3.00 \\ & (76.3) \end{aligned}$ | $\begin{aligned} & 2.69 \\ & (68.3) \end{aligned}$ | $\begin{aligned} & 8.88 \\ & (225.6) \end{aligned}$ | 1 |
| Polyester |  |  |  |  |  |  |
| 1 | $\begin{aligned} & 3.81 \\ & (96.8) \end{aligned}$ | $\begin{aligned} & \hline 6.63 \\ & (168.4) \end{aligned}$ | $\begin{aligned} & 3.38 \\ & (85.9) \end{aligned}$ | $\begin{aligned} & \hline 2.94 \\ & (74.7) \end{aligned}$ | $\begin{aligned} & 4.88 \\ & (124.0) \end{aligned}$ | (1) |
| 2 | $\begin{aligned} & 3.81 \\ & (96.8) \end{aligned}$ | $\begin{aligned} & 6.63 \\ & (168.4) \end{aligned}$ | $\begin{aligned} & 3.38 \\ & (85.9) \end{aligned}$ | $\begin{aligned} & 2.94 \\ & (74.7) \end{aligned}$ | $\begin{aligned} & 4.88 \\ & (124.0) \end{aligned}$ | (1) |
| 3 | $\begin{aligned} & \hline 3.81 \\ & (96.8) \end{aligned}$ | $\begin{aligned} & 8.88 \\ & (225.6) \end{aligned}$ | $\begin{aligned} & 3.38 \\ & (85.9) \end{aligned}$ | $\begin{aligned} & \hline 2.94 \\ & (74.7) \end{aligned}$ | $\begin{aligned} & \hline 7.13 \\ & (181.1) \end{aligned}$ | (1) |
| 4 | $\begin{aligned} & 3.81 \\ & (96.8) \end{aligned}$ | $\begin{aligned} & 6.63 \\ & (168.4) \end{aligned}$ | $\begin{aligned} & 3.38 \\ & (85.9) \end{aligned}$ | $\begin{aligned} & 2.94 \\ & (74.7) \end{aligned}$ | $\begin{aligned} & 4.88 \\ & (124.0) \end{aligned}$ | (1) |
| Stainless Steel |  |  |  |  |  |  |
| 1 | $\begin{aligned} & 3.00 \\ & (76.2) \end{aligned}$ | $\begin{aligned} & 3.50 \\ & (88.9) \end{aligned}$ | $\begin{aligned} & 3.00 \\ & (76.2) \end{aligned}$ | $\begin{aligned} & 1.50 \\ & (38.1) \end{aligned}$ | $\begin{aligned} & 4.25 \\ & (108.0) \end{aligned}$ | (1) |
| 2 | $\begin{aligned} & 3.50 \\ & (88.9) \end{aligned}$ | $\begin{aligned} & 6.75 \\ & (171.5) \end{aligned}$ | $\begin{aligned} & 3.00 \\ & (76.2) \end{aligned}$ | $\begin{aligned} & 1.50 \\ & (38.1) \end{aligned}$ | $\begin{aligned} & 7.50 \\ & (190.5) \end{aligned}$ | (1) |
| 3 | $\begin{aligned} & 3.50 \\ & (88.9) \end{aligned}$ | $\begin{aligned} & 9.00 \\ & (228.6) \end{aligned}$ | $\begin{aligned} & \hline 3.00 \\ & (76.2) \end{aligned}$ | $\begin{aligned} & 1.50 \\ & (38.1) \end{aligned}$ | $\begin{aligned} & 9.00 \\ & (228.6) \end{aligned}$ | (1) |
| 4 | $\begin{aligned} & 3.50 \\ & (88.9) \end{aligned}$ | $\begin{aligned} & 11.25 \\ & (285.8) \end{aligned}$ | $\begin{aligned} & 3.00 \\ & (76.2) \end{aligned}$ | $\begin{aligned} & 1.50 \\ & (38.1) \end{aligned}$ | $\begin{aligned} & 12.00 \\ & (304.8) \end{aligned}$ | (1) |

## Note

(1) No conduit entrance holes provided. Drill as required.

4 Mtg. Holes - 10-32 Screw Size for
1-4 Element Die Cast/ Stainless Steel Enclosure


Surface

Pushbuttons and Indicating Lights


## Product Overview

## Product Description

The RMO-16 pushbutton line offers a wide array of functional and attractively designed illuminated and non-illuminated pushbuttons, selector switches, emergency stops and indicating lights. The illuminated line is offered with either incandescent or LED. RMQ-16 devices are designed with two front-ofpanel operator sizes. The $18 \times 18 \mathrm{~mm}$ or $25 \times 25 \mathrm{~mm}$ square operators can help the user achieve over three times the information density compared with 22 mm ranges.

## Features

- Wide product breadth: RMQ-16 offers illuminated and non-illuminated pushbuttons, keyed, non-keyed, and illuminated selector switches, emergency stops, and a large variety of accessories
- Custom laser etching: Hundreds of standard markings available in addition to infinite possible custom images with laser etching
- High durability: Pushbuttons and selector switches rated for 3 million mechanical operations
- High information density: Square operators ( 18 mm or 25 mm ) allow for side-by-side mounting and achieve over three times the information density of typical 22 mm installations


## Contents

Description

## Page

| 16.2 mm Pushbuttons-RMO-16 |  |
| :---: | :---: |
| Product Selection Guide | V7-T1-25 |
| Pushbuttons-Non-Illuminated and Illuminated | V7-T1-26 |
| Indicating Lights | V7-T1-28 |
| Emergency Stops | V7-T1-29 |
| Selector Switches-Non-Illuminated, Illuminated and Keyed | V7-T1-30 |
| Accessories | V7-T1-34 |
| Technical Data and Specifications | V7-T1-37 |
| Dimensions | V7-T1-39 |

- Laser etched operators
- Heavy-duty construction with IP65 on front of panel operators
- LED or incandescent illumination available
- Front-of-panel operators available in either $18 \times 18 \mathrm{~mm}$ or $25 \times 25 \mathrm{~mm}$ sizes
- Safety rated emergency stops (IEC 60947-5, positively driven contacts)
- Mounting diameter 16.2 mm to EN 50007


## Standards and Certifications

- UL Listed
- CSA Certified
- IEC/EN 60947-5 VDE-0660
- IP65


RöHS
COMPLIANT

## Product Selection Guide

Pushbuttons


Indicating Lights


Emergency Stops


Selector Switches


| Description | Non-Illuminated | Illuminated | Keyed |
| :--- | :--- | :--- | :--- |
| Product Selection | Page V7-T1-30 | Page V7-T1-31 | Page V7-T1-32 |

## Pushbuttons and Indicating Lights

## Pushbuttons-Non-Illuminated and Illuminated

## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.
Pushbuttons-Non-IIluminated and Illuminated


## Product Selection

## Non-Illuminated Pushbuttons

- Momentary or maintained
- Customizable laser etched pushbutton operators
- 18 mm or 25 mm square operator
- 3 million mechanical operations
- IEC/EN 60947-5
- IP65
$\overline{\text { 018-D-GN Non-Illuminated Pushbuttons }}$


| Type | Button Color | Catalog Number <br> $18 \times 18 \mathrm{~mm}$ | $25 \times 25 \mathrm{~mm}$ |
| :---: | :---: | :---: | :---: |
| Momentary | Green | 018D-GN | 025D-GN |
|  | Red | 018D-RT | 025D-RT |
|  | Black | 018D-SW | 025D-SW |
|  | White | 018D-WS | 025D-ws |
|  | Blue | 018D-BL | 025D-BL |
|  | Yellow | 018D-GE | 025D-GE |
|  | Without | 018D-X (1) | 025D-X ${ }^{\text {® }}$ |
| Maintained | Green | 018DR-GN | Q25DR-GN |
|  | Red | 018DR-RT | Q25DR-RT |
|  | Black | O18DR-SW | Q25DR-SW |
|  | White | O18DR-WS | O25DR-WS |
|  | Blue | 018DR-BL | O25DR-BL |
|  | Yellow | 018DR-GE | Q25DR-GE |
|  | Without | 018DR-X ${ }^{\text {( }}$ | 025DR-X ${ }^{\text {( }}$ |

Note
(1) To order separate button plates, see Page V7-T1-36.

## Illuminated Pushbuttons

- Momentary or maintained
- LED or incandescent
- 18 mm or 25 mm square operator
- 3 million mechanical operations
- IEC/EN 60947-5
- IP65
$\overline{\text { 018-LT-GE }}$ Illuminated Pushbuttons Without Bulb ©

| Type | Button <br> Color | Catalog Number ${ }^{(2)}$ $18 \times 18 \text { mm }$ | $25 \times 25 \mathrm{~mm}$ |
| :---: | :---: | :---: | :---: |
| Momentary | Green | 018LT-GN | 025LT-GN |
|  | Red | 018LT-RT | 025LT-RT |
|  | Black | 018LT-SW | 025LT-SW |
|  | White | 018LT-WS | 025LT-WS |
|  | Blue | 018LT-BL | 025LT-BL |
|  | Yellow | 018LT-GE | 025LT-GE |
| Maintained | Green | 018LTR-GN | 025LTR-GN |
|  | Red | 018LTR-RT | 025LTR-RT |
|  | Black | 018LTR-SW | 025LTR-SW |
|  | White | 018LTR-WS | 025LTR-WS |
|  | Blue | 018LTR-BL | 025LTR-BL |
|  | Yellow | 018LTR-GE | 025LTR-GE |

## Notes

(1) To order with incandescent 24 V bulb, insert a $\mathbf{/ W B}$ at the end of the catalog number. Example, Q18LT-GN/WB.
(2) For a complete selection of incandescent 24V bulbs and LEDs, see Page V7-T1-34.

## Pushbuttons and Indicating Lights

## 16.2 mm Pushbuttons—RMQ-16

## Indicating Lights

## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.
Indicating Lights-Flush and Extended


## Product Selection

## Indicating Lights

- LED or incandescent
- Flush and extended lenses
- 18 mm or 25 mm square operator
- 3 million mechanical operations
- IEC/EN 60947-5
- IP65

|  | Type | Button <br> Color | Catalog Number ${ }^{(2)}$ $18 \times 18 \text { mm }$ | $25 \times 25 \mathrm{~mm}$ |
| :---: | :---: | :---: | :---: | :---: |
| 018-LF-GE | Flush | Green | 018LF-GN | 025LF-GN |
|  |  | Red | 018LF-RT | 025LF-RT |
|  |  | White | 018LF-WS | 025LF-WS |
|  |  | Blue | 018LF-BL | 025LF-BL |
|  |  | Yellow | 018LF-GE | 025LF-GE |
| 018-LH-BL | Extended. | Green | 018LH-GN | 025LH-GN |
|  |  | Red | 018LH-RT | 025LH-RT |
|  |  | White | 018LH-WS | 025LH-WS |
|  |  | Blue | 018LH-BL | 025LH-BL |
|  |  | Yellow | 018LH-GE | 025LH-GE |

Notes
(1) To order with incandescent 24 V bulb, insert a /WB at the end of the catalog number. Example, 018-LF-GN/WB.
(2) For a complete selection of incandescent 24V bulbs and LEDs, see Page V7-T1-34.

## 16.2 mm Pushbuttons—RMQ-16

## Emergency Stops

## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.
Emergency Stops-Non-IIluminated and Illuminated


## Product Selection

Emergency Stops

- Push/pull operation
- Illuminated or non-illuminated
- Emergency stop (red) or Machine stop (black) available
- Suitable for use in safety applications
- IEC/EN 60947-5
- IP65



Note
(1) Includes built-in multiple LED 24 Vdc .

## Pushbuttons and Indicating Lights

## 16.2 mm Pushbuttons—RMQ-16

## Selector Switches-Non-Illuminated, Illuminated and Keyed

## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.
Selector Switches-Non-IIluminated


## Product Selection

## Non-Illuminated Selector Switches

- Momentary or maintained
- 18 mm or 25 mm square operator
- VS Anti-rotation feature
- 3 million mechanical operations
- IP65



## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.
Selector Switches-Illuminated


## Product Selection

## Illuminated Selector Switches

- LED or incandescent
- Momentary or maintained
- 18 mm or 25 mm square operator
- VS Anti-rotation feature
- 3 million mechanical operations
- IP65

| 018LWK1-GN | Selector Switches-IIluminated without Bulb (1) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Function | Position | Button Color | Switch Position | Catalog Number ${ }^{(2)}$ <br> $18 \times 18 \mathrm{~mm}$ | $25 \times 25 \mathrm{~mm}$ |
| - 7 | Momentary | 2 | Green |  | 018LWK1-GN | 025LWK1-GN |
|  |  |  | Red |  | 018LWK1-RT | 025LWK1-RT |
|  |  |  | White |  | 018LWK1-WS | 025LWK1-WS |
|  | Maintained |  | Green |  | 018LWK1R-GN | 025LWK1R-GN |
|  |  |  | Red | $\checkmark$ | 018LWK1R-RT | 025LWK1R-RT |
|  |  |  | White |  | 018LWK1R-WS | 025LWK1R-WS |
|  | Momentary | 3 | Green |  | 018LWK3-GN | 025LWK3-GN |
|  |  |  | Red |  | 018LWK3-RT | 025LWK3-RT |
|  |  |  | White |  | 018LWK3-WS | 025LWK3-WS |
|  | Maintained |  | Green |  | 018LWK3R-GN | 025LWK3R-GN |
|  |  |  | Red | $\checkmark$ | 018LWK3R-RT | 025LWK3R-RT |
|  |  |  | White |  | 018LWK3R-WS | 025LWK3R-WS |
|  | Maintained/ momentary |  | Green |  | 018LWK3R1-GN | 025LWK3R1-GN |
|  |  |  | Red |  | 018LWK3R1-RT | 025LWK3R1-RT |
|  |  |  | White |  | 018LWK3R1-WS | 025LWK3R1-WS |
|  | Momentary/ maintained |  | Green |  | 018LWK3R2-GN | 025LWK3R2-GN |
|  |  |  | Red | $\checkmark$ | 018LWK3R2-RT | 025LWK3R2-RT |
|  |  |  | White |  | 018LWK3R2-WS | 025LWK3R2-WS |

## Notes

(1) To order with incandescent 24 V bulb, insert a $/ \mathbf{W B}$ at the end of the catalog number. Example, 018LWK1-GN/WB
(2) For a complete selection of incandescent 24 V bulbs and LEDs, see Page V7-T1-34.

Pushbuttons and Indicating Lights

## 16.2 mm Pushbuttons—RMQ-16

## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.
Keyed Selector Switches-Two- and Three-Position


## Product Selection

## Keyed Selector Switches

- 5 color options
- Momentary or maintained
- 18 mm or 25 mm square operator
- VS Anti-rotation feature
- 3 million mechanical operations
- IP65

| 018S1 | Keyed Selector Switches-Two-Position |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Function | Button Color | Switch Position | Key Removal Position | Catalog Number $18 \times 18 \mathrm{~mm}$ | $25 \times 25 \mathrm{~mm}$ |
|  | Momentary | Black | $\forall$ | 0 | 018S1 | 025S1 |
|  | Maintained | Black | $\downarrow$ | 0 | 018S1R | 025S1R |
|  | Maintained | Black | V | 0 | 018S1R-A1 | 025S1R-A1 |

Keyed Selector Switches-Three-Position

| Function | Button Color | Switch Position | Key Removal Position | Catalog Number $18 \times 18 \text { mm }$ | $25 \times 25 \mathrm{~mm}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Momentary | Black |  | 0 | 018S3 | 025S3 |
| Maintained |  | $\downarrow$ | 0, II | 018S3R | 025S3R |
| Maintained |  | $\downarrow$ | 0 | 018S3R-A1 | 025S3R-A1 |
|  |  |  | 1,0 | 018S3R-A2 | 025S3R-A2 |
|  |  |  | 0,11 | 018S3R-A3 | 025S3R-A3 |
| Maintained/ momentary |  | $\downarrow$ | I, 0 | 018S3R-A4 | 025S3R-A4 |
|  |  |  | 0 | 018S3R-A5 | 025S3R-A5 |
| Momentary/ maintained |  |  | 0,11 | 018S3R-A6 | 025S3R-A6 |
|  |  |  | 0 | 018S3R-A7 | 025S3R-A7 |

## Note

(1) $\mathrm{I}=$ Key is removed at the left.
$0=$ Key is removed at the center.
II = Key is removed at the right.


Keyed Selector Switches, Multicolor-Two-Position

| Function | Button Color | Switch Position | Key Removal Position | Catalog Number $18 \times 18 \mathrm{~mm}$ | $25 \times 25 \mathrm{~mm}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Momentary | Green | 13 | 0 | 018S1-GN | 025S1-GN |
|  | Red |  |  | 018S1-RT | 025S1-RT |
|  | White |  |  | 018S1-WS | 025S1-WS |
|  | Blue |  |  | 018S1-BL | 025S1-BL |
| Maintained | Green | $V$ | 0 | 018S1R-GN | 025S1R-GN |
|  | Red |  |  | 018S1R-RT | 025S1R-RT |
|  | White |  |  | 018S1R-WS | 025S1R-WS |
|  | Blue |  |  | 018S1R-BL | 025S1R-BL |



Keyed Selector Switches, Multicolor-Three-Position

|  | Button <br> Color | Switch <br> Position | Key Removal <br> Position ${ }^{1}$ | Catalog Number <br> $\mathbf{1 8 \times 1 8} \mathbf{~ m m ~}$ | $\mathbf{2 5 \times 2 5} \mathbf{~ m m ~}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |

Note
(1) $I=K e y$ is removed at the left.
$0=$ Key is removed at the center.
II = Key is removed at the right.

Accessories


Insert Plate

| Size | Catalog <br> Number |  |
| :--- | :--- | :--- |
| $10 \times 22 \mathrm{~mm}$ | BLANK | $\mathbf{0 2 S 0 2 5}$ |

Legend Plate

| Size | Color | Catalog <br> Number |
| :--- | :--- | :--- |
| $25 \times 38 \mathrm{~mm}$ | Black | O25TS-X |
|  | Gray | O25TGR-X |

$\qquad$

Legend Plate-Complete

| Size | Etching |  |  | Catalog <br> Number |
| :---: | :---: | :---: | :---: | :---: |
| $25 \times 38$ | START |  |  | 025TS-111 |
|  | STOP |  |  | 025TS-110 |
|  | FAULT |  |  | 025TS-250 |
|  | HAND | 0 | AUTO | 025TS-197 |
|  | MAN | 0 | AUTO | 025TS-397 |
|  |  | 0 |  | 025TS-10 |
|  |  | 1 |  | 025TS-11 |
|  |  | 0 | 1 | 025TS-90 |
|  | I | 0 | II | 025TS-93 |


| ES16 | Codes for Extra Keys <br> Color |
| :--- | :--- | :--- |
| Green ES16-GN <br> Red ES16-RT <br> Black ES16 <br> White ES16-WS <br> Blue ES16-BL |  |



Emergency Stop Labels

| SOT11 |  | Emergency Stop Labels |
| :--- | :--- | :--- | :--- | :--- |



| SOT11 |  | Emergency Stop Labels |
| :--- | :--- | :--- | :--- | :--- |

## Extra Keys

## Pushbuttons and Indicating Lights

16.2 mm Pushbuttons—RMQ-16

| Button Plates | Button Plates |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Type | Color | Etching | Catalog Number | Type | Color | Etching | Catalog Number |
|  | $18 \times 18 \mathrm{~mm}$ | Black | - | 01 T 018 | $25 \times 25 \mathrm{~mm}$ | Black | - | 01 T025 |
|  |  |  | CUSTOM | 01T018-ETCH |  |  | CUSTOM | 01T025-ETCH |
|  |  |  | 1 | 21 T 018 |  |  | I | 21 T025 |
|  |  |  | 0 | $19 \mathrm{TO18}$ |  |  | 0 | 19 T 025 |
|  |  | White | - | 02 T 018 |  |  | "STOP" | 112 T 025 |
|  |  |  | CUSTOM | 02T018-ETCH |  |  | "ON" | 221 T025 |
|  |  |  | 1 | 207018 |  | White | - | 02 T 025 |
|  |  | Green | - | 03 T 018 |  |  | CUSTOM | 02T025-ETCH |
|  |  |  | CUSTOM | 03T018-ETCH |  |  | 1 | 207025 |
|  |  |  | $\square$ | 11 T 018 |  | Green | - | 03 T 225 |
|  |  | Red | - | 047018 |  |  | CUSTOM | 03T025-ETCH |
|  |  |  | CUSTOM | 04T018-ETCH |  |  | "START" | 111T025 |
|  |  |  | 0 | $10 \mathrm{TO18}$ |  |  | 1 | 11 1025 |
|  |  | Yellow | - | $05 \mathrm{TO18}$ |  | Red | - | 047025 |
|  |  |  | CUSTOM | 05T018-ETCH |  |  | CUSTOM | 04T025-ETCH |
|  |  | Blue | - | $06 \mathrm{T018}$ |  |  | "STOP" | 110 T 025 |
|  |  |  | CUSTOM | 06T018-ETCH |  |  | 0 | $10 \mathrm{TO25}$ |
|  |  |  |  |  |  |  | "OFF" | 217 T025 |
|  |  |  |  |  |  | Yellow | - | 05 T 025 |
|  |  |  |  |  |  |  | CUSTOM | 05T025-ETCH |
|  |  |  |  |  |  | Blue | - | $06 T 025$ |
|  |  |  |  |  |  |  | CUSTOM | 06T025-ETCH |

## Instructions for Ordering Laser Inscriptions

1. Identify part number to be inscribed.
2. Pick symbol from library and identify suffix code associated with the symbol.
3. Order part number already listed in the catalog with -ETCH suffix.
4. When placing an order by fax or Vistaline on the web, reference order item number and indicate appropriate symbol code or desired text.

## Example

To order a 25 mm green flush button plate with the inscription AUTO HAND:
Order Catalog Number 03TO25-ETCH.
AUTO HAND inscription is found on Page V7-T1-127 in the M22 Symbols Library, suffix code is X91. In the order notes, reference item number and suffix $\mathbf{X 9 1}$.
Note: For a complete list of available symbols, see Pages V7-T1-124 to V7-T1-130, M22 Symbols Library.

## Technical Data and Specifications

RMO-16

| Description | Unit | Specification <br> Contact Elements | Illuminated Pushbutton Operators (Maintained) | Illuminated Selector Switches | Indicating Lights |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Technical Data |  |  |  |  |  |
| Standards |  | UL, CSA, IEC/EN 60 947, VDE 0660, CE |  |  |  |
| Lifespan, mechanical (operations) | $\times 10^{5}$ | 100 | 30 (3) | 3 | - |
| Maximum operating frequency | Ops/h | 3600 | 3600 (1800) | 1800 | - |
| Operating force | N | 3 | 4 | - | - |
| Operating torque | Nm |  | - | $\leqq 0.2$ | - |
| Degree of protection to IEC/EN 60529 |  | IP20 with ISH2,8 | IP65 | IP65 | IP65 |
| Climatic proofing |  | Damp heat, constant, to IEC 60 068-2-3/Damp heat, cyclical, to IEC 60 068-2-30 |  |  |  |
| Ambient temperature |  |  |  |  |  |
| Open | ${ }^{\circ} \mathrm{C}$ | -25 to 60 | -25 to 60 | -25 to 60 | -25 to 60 |
| Enclosed | ${ }^{\circ} \mathrm{C}$ | -25 to 40 | -25 to 40 | -25 to 40 | -25 to 40 |
| Mounting position |  | As required | As required | As required | As required |
| Mechanical shock resistance to IEC 60 068-2-27 (half-sinusoidal shock, duration 11 ms ) | g | 40 | 40 | 40 | 40 |
| Terminal capacity (min./max.) | $\mathrm{mm}^{2}$ | 0.5/1.0 | 0.5/1.0 | 0.5/1.0 | 0.5/1.0 |
| Blade terminal |  | $2.8 \mathrm{~mm} \times 0.8 \mathrm{~mm}$ to DIN 46244 |  |  |  |
| Ferrule |  | $2.8 \mathrm{~mm} \times 0.8 \mathrm{~mm}$ to DIN 46247 and IEC 60760 |  |  |  |
| Dimensions |  | See Page V7-T1-39 | See Page V7-T1-39 | See Page V7-T1-39 | See Page V7-T1-39 |
| Contacts |  |  |  |  |  |
| Rated impulse withstand voltage $U_{\text {imp }}$ | V | 4000 | 800 | 800 | 800 |
| Rated insulation voltage $U_{i}$ | V | 250 | 250 | 250 | 250 |
| Overvoltage category/pollution degree |  | III/3 | III/3 | III/3 | III/3 |
| Rated operational voltage $U_{\mathrm{e}}$ (max.) | V | 250 | 24 | 24 | 24 |
| Rated operational current $/ e_{\text {e }}$ (max.) | A | 4 | - | - | - |
| Control circuit reliability at $24 \mathrm{Vdc} / 5 \mathrm{~mA}$ (Fault probability Hr ) |  | $<10^{-7},<1$ fault in $10^{7}$ operations |  |  |  |
| $5 \mathrm{Vdc} / 1 \mathrm{~mA}$ (Fault probability Hr ) |  | $<5 \times 10^{-6},<$ fault in $5 \times 10^{6}$ operations |  |  |  |
| Use of insulated ferrule ISH 2.8 |  |  |  |  |  |
| From $U_{\text {e }}$ |  | >24 Vac/dc recommended | >24 Vac/dc recommended | >24 Vac/dc recommended | >24 Vac/dc recommended |
| From $U_{\text {e }}$ |  | $>50 \mathrm{Vac}$ or 120 Vdc is mandatory, even on unused blade terminals |  |  |  |
| Maximum short-circuit protective device Fuseless | Type | FAZ-B6 | - | - | - |
| Fuse | A gG/gL | 10 | - | - | - |
| Switching Capacity |  |  |  |  |  |
| Rated operational current $/ \mathrm{e}$ AC-15 |  |  |  |  |  |
| 24 V | A | 4 | - | - | - |
| 48 V | A | 4 | - | - | - |
| 110 V | A | 4 | - | - | - |
| 230 V | A | 4 | - | - | - |
| DC-13 |  |  |  |  |  |
| 24 V | A | 3 | - | - | - |
| 42 V | A | 1.0 | - | - | - |
| 60 V | A | 0.8 | - | - | - |
| 110 V | A | 0.5 | - | - | - |
| 220 V | A | 0.2 | - | - | - |
| UL/CSA Data |  | UL listed File No. E 29 184, Guide No. NKCR/CSA certified File No. 46552 Class No. 321103 |  |  |  |
| Blade terminal |  | $0.110 \times 0.032$ in | $0.110 \times 0.032$ in | $0.110 \times 0.032$ in | $0.110 \times 0.032$ in |
| Fast-on connector |  | $0.110 \times 0.032$ in AMP \#60 197-1, 62 050-1 or equivalent |  |  |  |
| Rated voltage maximum AC | Vac | 300 | 24 | 24 | 24 |
| Contact rating code AC | E10/E01 | C300/0300 | - | - | - |
| Thermal continuous test current | A | 2.5 | - | - | - |
| Rated voltage maximum DC | Vdc | 300 | - | - | - |
| Contact rating code DC | E10/E01 | C300/R300 | - | - | - |
| Thermal continuous test current | A | 2.5 | - | - | - |

Pushbuttons and Indicating Lights

## 16.2 mm Pushbuttons—RMQ-16

RMQ-16, continued
$\left.\begin{array}{lllllll} & & \begin{array}{l}\text { Specification } \\ \text { Pushbutton Operators } \\ \text { (Maintained) }\end{array} & \text { Selector Switches } & \begin{array}{l}\text { Key-Released } \\ \text { Operators }\end{array} & \begin{array}{l}\text { Emergency Stop } \\ \text { Operators } \\ \text { (IIluminated) } \\ \text { Description }\end{array} \\ \hline \text { General Technical Data } & & & & \text { UL, CSA, IEC/EN 60 947, VDE 0660, CE }\end{array}\right]$

Lifespan, Electrical AC-15 to IEC/EN 60 947-5-1 at 230V


Note
(1) See illuminated selector switches on Page V7-T1-31 for contact values.

## Dimensions

Approximate Dimensions in mm [in]

## Actuating and Indicator Elements


Q...D-_, Q...DR-
Q...S_

Q...WK_

Q...LT-_, Q...LTR-_, Q...LF-
Q...LH-_
Q...LWK_


Q25PV_, Q25LPV_


## Pushbuttons and Indicating Lights

## Approximate Dimensions in mm [in]

## Front Fixing

Q18, Q25, E89, SRA, VS, M16


Drilling Dimensions
Drilling


RMO Screw Adapter
SRA

18.5 [0.73]


## Blanking Plates

025AS

Grid Dimension to IEC/EN 60947

025


Anti-Rotation Feature
vs


Minimum Grid Spacing Dimension

018


RMO-16 Label Mount

Q25TS-_


## Mounting Distance

Mounting



Note
(1) Exposed conductive part (metal)
$\mathbf{2 2 . 5} \mathbf{~ m m}$ RMQ-Titan Modular Pushbuttons-M22


## Product Description

Eaton's M22 industrial heavyduty pushbutton line offers a wide array of functional, attractive and ergonomically designed illuminated and nonilluminated pushbuttons, selector switches, push-pulls, alternate action and twist-torelease operators. The complete illuminated line is only offered in LED light units to ensure high-quality brightness and up to 100,000 hours of LED illumination. M22 operators are available with either a silver or black nylon colored or chrome metal bezel. The spacesaving modular construction of the M22 line makes on-the-job assembly fast and simplifies the stocking of both components and complete devices.

## NEW

Eaton has expanded M22 pilot devices with a metal bezel option. The new M22M pushbutton is an elegant chrome metal bezel that is attractive, durable and rugged for heavy-duty environments. M22M devices are configurable and complement components within the M22 line.

## 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
- Multi-color LED in the flat contact family allows versatility in design and reduces installation costs and footprint


## 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 Page V7-T1-113 for further technical data


## Innovative Technologies

- ASi communicating devices
- Palm switches


## Contents

## Description

## Page

22.5 mm RMQ-Titan Modular Pushbuttons-M22

Product Selection Guide . . . . . . . . . . . . . . . . . . V7-T1-42
Accessories . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-105
Coding Adapter Guide . . . . . . . . . . . . . . . . . . . V7-T1-112
Technical Data and Specifications . . . . . . . . . . V7-T1-113
Dimensions . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-117
Symbols Library. . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-123

## Standards and Certifications

All operators and components are IEC/EN 60947 VDE 0660.
All operators carry an IP66 rating with some rated for washdown environment with IP67 and IP69K.


All pushbuttons, emergencystops, indicating lights, potentiometers and selector switches carry NEMA 4X, 13.
Marine classification societies: Bureau Veritas

## (4L) $C \in$



BUREAT
VERITAS
(BV), Germanischer Lloyd (GL), and Lloyd's Register of Shipping (LR) approved.
Shipping (LR) approved.


## Pushbuttons and Indicating Lights

22.5 mm 22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Features

- Field convertible pushbuttons and mushroom operators from maintained to momentary status
- Field convertible selector switches from momentary to maintained operation and vice versa
- LED offering only for all illuminated operators
- Laser engraved pushbuttons, lenses and enclosures
- Heavy-duty construction with a minimum of IP66 and UL NEMA ${ }^{\circledR}$ type 4X / 13 on front of panel operators. Many operators even carry IP67 and IP69K, for the toughest applications
- Silver, black or chrome metal bezel now available
- Snap-lock contact blocks and light units for front or base mounting
- Notched hole mounting with anti-rotation tab and central nut mounting on each operator
- Over 5 million mechanical operations and 1.6 million electrical (reference specification sheet)
- Direct opening action normally closed contacts
- Unique and innovative offerings, such as four-way pushbuttons and USB/ RJ45 bulkhead interfaces
- Screw or spring-cage terminals


## Benefits

- Modular construction makes assembly fast and simplifies stocking of components and complete devices
- Field convertibility of operator status for pushbuttons and selector switches helps distributors and customers reduce inventory and increase functionality
- LED offering only for improved brightness quality and up to 100,000 hours of operation
- Plastic construction is corrosion resistant. Operators are designed for rugged environments, ideal for washdown applications (reference each operator's IP ratings and IEC/EN 60529 for ingress protection definition)
- Anti-rotation tab saves installation time and prevents operator rotation
- High mechanical and electrical life allows for use in tough and challenging applications
- Laser inscription capabilities allow for highquality, wear-resistant markings
- All normally closed (NC) contacts are direct opening action, i.e., NC contacts are physically forced open by direct linkage with the pushbutton operator in the unlikely event of contact weld
- Some M22 operators are capable of communication via ASi protocol
- M22 offers USB and RJ45 connections


## Product Selection Guide

Pushbuttons

|  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Description | Non-illuminated, flus |  | Non-illuminated, e | nded | Illuminated, flush |  | Illuminated, extend |  |
| Operator | Momentary | Maintained | Momentary | Maintained | Momentary | Maintained | Momentary | Maintained |
| Product Selection | $\begin{aligned} & \text { Pages V7-T1-47 to } \\ & \text { V7-T1-49 } \end{aligned}$ | $\begin{aligned} & \text { Pages V7-T1-50, } \\ & \text { V7-T1-51 } \end{aligned}$ | $\begin{aligned} & \text { Pages V7-T1-52, } \\ & \text { V7-T1-53 } \end{aligned}$ | $\begin{aligned} & \text { Pages V7-T1-54, } \\ & \text { V7-T1-55 } \end{aligned}$ | $\begin{aligned} & \text { Pages V7-T1-57 to } \\ & \text { V7-T1-59 } \end{aligned}$ | $\begin{aligned} & \text { Pages V7-T1-60, } \\ & \text { V7-T1-61 } \end{aligned}$ | $\begin{aligned} & \text { Pages V7-T1-62, } \\ & \text { V7-T1-63 } \end{aligned}$ | $\begin{aligned} & \text { Pages V7-T1-64, } \\ & \text { V7-T1-65 } \end{aligned}$ |

Indicating Lights

|  |  |  |
| :--- | :--- | :--- |
| Description | Flat | Conical |
| Product SelectionPages V7-T1-66, <br> V7-T1-67 | Pages V7-T1-66, <br> V7-T1-67 |  |

Emergency Stops


Selector Switches

|  |  |  |
| :--- | :--- | :--- |
| Description | Non-illuminated <br> knob type | Non-illuminated <br> rotary type |
| Pages V7-T1-74, <br> V7-T1-75 | Pages V7-T1-76, <br> V7-T1-77 | Pages V7-T1-79 <br> to V7-T1-81 |

Mushroom Head Pushbuttons

|  |  |  |
| :--- | :--- | :--- |
| Description | Non-illuminated | Non-illuminated |
| Operator | Momentary | Maintained |
| Product Selection | Pages V7-T1-88, <br> V7-T1-89 | Pages V7-T1-90, <br> V7-T1-91 |

Double Pushbuttons

|  | Extended pushbuttons <br> and center light | Flush top and center <br> light, extended bottom | Flush pushbuttons and <br> center light |
| :--- | :--- | :--- | :--- |
| Description | Momentary | Momentary | - |
| Operator | Page V7-T1-94 | Page V7-T1-94 |  |
| Product Selection | Page V7-T1-93 |  |  |

Pushbuttons and Indicating Lights
22.5 mm RMQ-Titan Modular Pushbuttons-M22

Four-Way Pushbuttons


Joysticks


Potentiometers

| Pescription | Potentiometers |
| :--- | :--- |
| Product Selection | V7-T1-100 |

Acoustic Devices


Bulkhead Interfaces


ASi Adapter Modules


| Description | Palm switches |
| :--- | :--- |
| Product Selection | Page V7-T1-103 |

Assembled Control Stations


Through-the-Door Operators



Point-of-Purchase Units

| Color | Type | Contact <br> Configuration ${ }^{(1)}$ | Catalog Number |
| :--- | :--- | :--- | :--- |
| Black | Flush momentary | NO/NC | M22-D-S-K11-P |
| Red | Extended momentary | NO/NC | M22-DH-R-K11-P |
| Green | Flush momentary | NO/NC | M22-D-G-K11-P |
| Red | Ext. illuminated (12-30V) momentary | NO/NC | M22-DLL-R-K11-R-P |
| Red | Ext. illuminated (85-264V) momentary | NO/NC | M22-DLH-R-K11-230R-P |
| White | Flush illuminated (12-30V) maintained | NO/NC | M22-DRL-W-K11-W-P |
| White | Flush illuminated (85-264V) maintained | NO/NC | M22-DRL-W-K11-230W-P |
| Red | Indicating light (12-30V) | - | M22-L-R-R-P |
| Green | Indicating light (12-30V) | - | M22-L-G-G-P |
| Red | Indicting light (85-264V) | - | M22-L-R-230R-P |
| Green | Indicating light (85-264 Vac) | - | M22-L-G-230G-P |
| Red | Twist-to-release E-stop | 1NO/2NC | M22-PVT-K12-P |
| Red | Illuminated (12-30V) push-pull E-stop | 1NO/2NC | M22-PVL-K12-R-P |
| Red | Illuminated (85-264V) push-pull E-stop | 1NO/2NC | M22-PVL-K12-230R-P |
| - | Two-position maintained V selector switch | NO/NC | M22-WKV-K11-P |
| - | Three-position momentary selector switch | NO/NC | M22-WK3-K22-P |

## Note

(1) All NC contact blocks are positively driven contact. $\Theta$

## Pushbuttons and Indicating Lights

## 1

## Pushbuttons-Non-Illuminated and Illuminated



## Pushbuttons-Non-Illuminated and Illuminated

## Product Description

Eaton's M22 pushbutton line is a complete, modular and versatile offering. From field-convertible maintained operators to customizable laser engraved buttons, the M22 pushbutton line provides endless opportunity for flexibility and reduced inventory. Each operator type provides options for ordering as complete or component parts allowing for a perfect fit for each application. All of this flexibility comes in a very rugged design.

## Features

- Field convertible from maintained to momentary (available on maintained pushbuttons only)
- Customizable laser engraving on all buttons
- LED offering only for improved brightness quality and up to 100,000 hours of operation
- More than five million mechanical operations on momentary and 1 million on maintained pushbuttons


## Contents

| Description | Page |
| :---: | :---: |
| Pushbuttons-Non-Illuminated and Illuminated |  |
| Non-Illuminated, Flush, Momentary | V7-T1-47 |
| Non-Illuminated, Flush, Maintained | V7-T1-50 |
| Non-Illuminated, Extended, Momentary | V7-T1-52 |
| Non-Illuminated, Extended, Maintained | V7-T1-54 |
| Illuminated, Flush, Momentary | V7-T1-57 |
| Illuminated, Flush, Maintained | V7-T1-60 |
| Illuminated, Extended, Momentary | V7-T1-62 |
| Illuminated, Extended, Maintained | V7-T1-64 |

- Modular construction makes assembly fast and simplifies stocking of components and complete devices
- Capable of communicating via ASi protocol with ASi adapter modules


## Protection Type

- IP67, IP69K
- NEMA 4X, 13


## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

## Non-Illuminated Pushbuttons



## Product Selection

Non-Illuminated Pushbuttons, Flush, Momentary


Note
(1) All NC contact blocks are positively driven contact. $\Theta$

## Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons-M22

Non-Illuminated Pushbuttons, Flush, Momentary


M22M-D-G


| Operators Only ${ }^{1}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Button Color | Inscription | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
| Black | - | M22-D-S | M22S-D-S | M22M-D-S |
| Red | - | M22-D-R | M22S-D-R | M22M-D-R |
|  | STOP | M22-D-R-GB0 | M22S-D-R-GB0 | - |
|  | ( $)$ | M22-D-R-X0 | M22S-D-R-X0 | M22M-D-R-X0 |
| Green | - | M22-D-G | M22S-D-G | M22M-D-G |
|  | START | M22-D-G-GB1 | M22S-D-G-GB1 | M22M-D-G-GB1 |
|  | (1) | M22-D-G-X1 | M22S-D-G-X1 | M22M-D-G-X1 |
| White | - | M22-D-W | M22S-D-W | M22M-D-W |
| Blue | - | M22-D-B | M22S-D-B | M22M-D-B |
| Yellow | - | M22-D-Y | M22S-D-Y | M22M-D-Y |
| - | - | M22-D-X-SRG ${ }^{(2)}$ | M22S-D-X-SRG ${ }^{(2)}$ | M22M-D-X-SRG ${ }^{(2)}$ |
|  | - | M22-D-X-SWRGYB ${ }^{\text {3 }}$ | M22S-D-X-SWRGYB ${ }^{\text {³ }}$ | M22M-D-X-SWRGYB ${ }^{3}$ |


| Silver Guarded   <br> Button <br> Color Inscription Silver Bezel <br> Catalog Number <br> Black - M22-DG-S <br> Red - M22-DG-R <br> Green - M22-DG-G <br> White - M22-DG-W <br> Blue - M22-DG-B <br> Yellow - M22-DG-Y <br> - - M22-DG-X-SRG ${ }^{(2)}$ - M22-DG-X-SWRGYB ${ }^{(3)}$ |
| :--- | :--- | :--- |

## Notes

(1) Includes contact block mounting adapter.
(2) Buttonless operator comes with three color buttons (black, red, green).
(3) Buttonless operator comes with all six color buttons (black, white, red, green, yellow, blue)


## Components



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 |
|  | (II) | M22-XD-S-X2 |
|  | ¢ | M22-XD-S-X4 |
|  | $\bigcirc$ | M22-XD-S-X5 |
|  | (1) | 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 ${ }^{\text {2 }}$ |
|  | Custom | M22-XD-B-ETCH ${ }^{(3)}$ |
|  | RESET | M22-XD-B-GB14 |
|  | (B) | 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 |

Buttonless Operator


Silver Guarded


Silver Bezel
Catalog
Number ${ }^{4}$
M22-DG-X


Notes
(1) For complete listing of available button plates and contact blocks, see Accessories, Pages V7-T1-105 to V7-T1-110.
(2) Minimum order quantity of (10).
${ }^{(3)}$ When ordering, specify inscription per catalog number suffix from the Symbols Library (see Pages V7-T1-123 to V7-T1-130) 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) All NC contact blocks are positively driven contact. $\Theta$
(6) Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

Pushbuttons and Indicating Lights
22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Non-Illuminated Pushbuttons, Flush, Maintained ${ }^{\text {© }}$

| M22-DR-S | Operators Only ${ }^{(2)}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| M22S-DR-S | Button Color | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
|  | Black | M22-DR-S | M22S-DR-S | M22M-DR-S |
|  | Red | M22-DR-R | M22S-DR-R | M22M-DR-R |
|  | Green | M22-DR-G | M22S-DR-G | M22M-DR-G |
|  | White | M22-DR-W | M22S-DR-W | M22M-DR-W |
|  | Blue | M22-DR-B | M22S-DR-B | M22M-DR-B |
|  | Yellow | M22-DR-Y | M22S-DR-Y | M22M-DR-Y |
|  | (3) | M22-DR-X-SRG | M22S-DR-X-SRG | M22M-DR-X-SRG |
|  | (4) | M22-DR-X-SWRGYB | M22S-DR-X-SWRGYB | M22M-DR-X-SWRGYB |
| M22M-DR-S |  |  |  |  |
|  |  |  |  |  |

## Notes

(1) 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.
(2) Includes contact block mounting adapter.
${ }^{(3)}$ Buttonless operator comes with three color buttons (black, red, green).
(4) Buttonless operator comes with all six color buttons (black, white, red, green, yellow, blue).


Note: This pilot device features a selectable function switch that enables the device to be set to either maintained or momentary operation.


## Components



Button Plates (2)

| Color | Inscription | Catalog Number |
| :---: | :---: | :---: |
| Black | - | M22-XD-S ${ }^{(3)}$ |
|  | Custom | M22-XD-S-ETCH ${ }^{(4)}$ |
|  | 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 |
|  | (0) | M22-XD-S-X0 |
|  | (1) | M22-XD-S-X1 |
|  | (11) | M22-XD-S-X2 |
|  | + | M22-XD-S-X4 |
|  | $\bigcirc$ | M22-XD-S-X5 |
|  | (1) | M22-XD-S-X7 |
| Red | - | M22-XD-R ${ }^{(3)}$ |
|  | Custom | M22-XD-R-ETCH ${ }^{(4)}$ |
|  | STOP | M22-XD-R-GB0 |
|  | OFF | M22-XD-R-GB5 |
|  | (0) | M22-XD-R-X0 |
| Green | - | M22-XD-G ${ }^{(3)}$ |
|  | Custom | M22-XD-G-ETCH ${ }^{4}$ |
|  | START | M22-XD-G-GB1 |
|  | ON | M22-XD-G-GB6 |
|  | (1) | M22-XD-G-X1 |
| Blue | - | M22-XD-B ${ }^{(3)}$ |
|  | Custom | M22-XD-B-ETCH ${ }^{4}$ |
|  | RESET | M22-XD-B-GB14 |
|  | (B) | M22-XD-B-X6 |
| White | - | M22-XD-W ${ }^{3}$ |
|  | Custom | M22-XD-W-ETCH ${ }^{(4)}$ |
|  | START | M22-XD-W-GB1 |
|  | (1) | M22-XD-W-X1 |
| Yellow | - | M22-XD-Y ${ }^{(3)}$ |
|  | Custom | M22-XD-Y-ETCH ${ }^{(4)}$ |
| Black, red, green | - | M22-XD-SRG |
| Black, white, red, green, yellow, blue | - | M22-XD-SWRGYB |

Buttonless Operator


Silver Bezel

\section*{Catalog} Number ${ }^{5}$ |  | Number ${ }^{\text {5 }}$ | Mumber |
| :--- | :--- | :--- |
| M22-DR-X | M22S-DR-X | M22M-DR-X |


| M22-K10 | Contact Blocks ${ }^{(2)}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | Terminal Type | Contact Configuration ${ }^{6}$ | Catalog Number |
|  | Screw | NO | M22-K10 |
|  |  | NO, early-make | M22-K10P |
|  |  | NC | M22-K01 |
|  |  | $\overline{\mathrm{NC}}$, late-break | M22-K01D |
| M22-FK01 | Spring-cage | NO | M22-CK10 |
|  |  | NC | M22-CK01 |
|  |  | NC, late-break | M22-CK01D |
|  |  | 2NO | M22-CK20 |
|  |  | 2NC | M22-CK02 |
|  |  | NO-NC | M22-CK11 |
|  |  | NC | M22-FK01 ${ }^{(7)}$ |
|  |  | NO | M22-FK10 ${ }^{(8)}$ |

## Notes

(1) 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.
(2) For complete listing of available button plates and contact blocks, see Accessories, Pages V7-T1-105 to V7-T1-110.
${ }^{(3)}$ Minimum order quantity of (10).
(4) When ordering, specify inscription per catalog number suffix from the Symbols Library (see Pages V7-T1-123 to V7-T1-130) into the Order Notes. For example, M22-XD-S-ETCH; Order Notes: Mark with symbol X91, Line item \#_.
(5) Includes contact block mounting adapter.
(6) All NC contact blocks are positively driven contact. $\Theta$
(7) Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

Pushbuttons and Indicating Lights
22.5 mm RMQ-Titan Modular Pushbuttons-M22

Non-Illuminated Pushbuttons, Extended, Momentary

| M22-DH-R-K10 | Complete Devices |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Button Color | Contact Block Configuration | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
|  | Red | NO | M22-DH-R-K10 | M22S-DH-R-K10 | M22M-DH-R-K10 |
|  |  | NC | M22-DH-R-K01 | M22S-DH-R-K01 | M22M-DH-R-K01 |
| M22S-DH-R-K10 |  | 2NO | M22-DH-R-K20 | M22S-DH-R-K20 | M22M-DH-R-K20 |
|  |  | 2NC | M22-DH-R-K02 | M22S-DH-R-K02 | M22M-DH-R-K02 |
|  |  | 1NO-1NC | M22-DH-R-K11 | M22S-DH-R-K11 | M22M-DH-R-K11 |



| Silver Guarded <br> Button <br> Color | Contact Block <br> Configuration |  |
| :--- | :--- | :--- |
| Red | NO | Silver Bezel <br> Catalog Number |
|  | NC | M22-DGH-R-K10 |
|  | M22-DGH-R-K01 |  |
|  | 2NO | M22-DGH-R-K20 |
|  | M22-DGH-R-K02 |  |
|  |  | M22-DGH-R-K11 |

M22-DH-R


M22S-DH-R


M22M-DH-R


Operators Only ${ }^{(2)}$

| Button Color | Inscription | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
| :---: | :---: | :---: | :---: | :---: |
| Black | - | M22-DH-S | M22S-DH-S | M22M-DH-S |
| Red | - | M22-DH-R | M22S-DH-R | M22M-DH-R |
|  | STOP | M22-DH-R-GB0 | M22S-DH-R-GBO | M22M-DH-R-GBO |
|  | ( 0 | M22-DH-R-X0 | M22S-DH-R-X0 | M22M-DH-R-X0 |
| Green | - | M22-DH-G | M22S-DH-G | M22M-DH-G |
| White | - | M22-DH-W | M22S-DH-W | M22M-DH-W |
| Blue | - | M22-DH-B | M22S-DH-B | M22M-DH-B |
| Yellow | - | M22-DH-Y | M22S-DH-Y | M22M-DH-Y |
| (3) | - | M22-DH-X-SRG | M22S-DH-X-SRG | M22M-DH-X-SRG |
| (4) | - | M22-DH-X-SWRGYB | M22S-DH-X-SWRGYB | M22M-DH-X-SWRGYB |


| Silver Guarded <br> Button <br> Color <br> Inscription | Silver Bezel <br> Catalog Number |  |
| :--- | :--- | :--- |
| Black | - | M22-DGH-S |
| Red | - | M22-DGH-R |
|  | STOP | M22-DGH-R-GB0 |
|  | O | M22-DGH-R-X0 |
| Green | - | M22-DGH-G |
| White | - | M22-DGH-W |
| Blue | - | M22-DGH-B |
| Yellow | - | M22-DGH-Y |

## Notes

${ }^{(1)}$ All NC contact blocks are positively driven contact. $\Theta$
(2) Includes contact block mounting adapter.
${ }^{(3)}$ Buttonless operator comes with three color buttons (black, red, green).
${ }^{(4)}$ Buttonless operator comes with all six color buttons (black, white, red, green, yellow, blue).

## Components



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 |
|  | (0) | M22-XDH-S-X0 |
|  | (1) | M22-XDH-S-X1 |
|  | (11) | M22-XDH-S-X2 |
|  | $\oplus$ | M22-XDH-S-X4 |
|  | $\bigcirc$ | M22-XDH-S-X5 |
|  | (1) | M22-XDH-S-X7 |
| Red | - | M22-XDH-R ${ }^{(2)}$ |
|  | Custom | M22-XDH-R-ETCH ${ }^{(3)}$ |
|  | STOP | M22-XDH-R-GBO |
|  | OFF | M22-XDH-R-GB5 |
|  | (0) | 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 |
|  | (1) | M22-XDH-G-X1 |
| Blue | - | M22-XDH-B ${ }^{2}$ |
|  | Custom | M22-XDH-B-ETCH ${ }^{(3)}$ |
|  | RESET | M22-XDH-B-GB14 |
|  | ( ${ }^{\text {a }}$ | M22-XDH-B-X6 |
| White | - | M22-XDH-W ${ }^{(2)}$ |
|  | Custom | M22-XDH-W-ETCH ${ }^{(3)}$ |
|  | START | M22-XDH-W-GB1 |
|  | (1) | 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 |

Buttonless Operator


Silver Guarded


Silver Bezel
Catalog
Number ${ }^{4}$
M22-DG-X

| M22-K10 | Contact Blocks ${ }^{(1)}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | Terminal Type | Contact Configuration ${ }^{5}$ | Catalog Number |
|  | Screw | N0 | M22-K10 |
|  |  | NO, early-make | M22-K10P |
|  |  | NC | M22-K01 |
|  |  | $\overline{\mathrm{NC}}$, late-break | M22-K01D |
| M22-FK01 | Spring-cage | NO | M22-CK10 |
|  |  | NC | M22-CK01 |
|  |  | $\overline{\mathrm{NC}}$, late-break | M22-CK01D |
|  |  | 2NO | M22-CK20 |
|  |  | 2NC | M22-CK02 |
|  |  | NO-NC | M22-CK11 |
|  |  | NC | M22-FK01 ${ }^{\text {® }}$ |
|  |  | NO | M22-FK10 ${ }^{\text {® }}$ |

## Notes

(1) For complete listing of available button plates and contact blocks, see Accessories, Pages V7-T1-105 to V7-T1-110.
${ }^{2}$ ) Minimum order quantity of (10).
${ }^{(3)}$ When ordering, specify inscription per catalog number suffix from the Symbols Library (see Pages V7-T1-123 to V7-T1-130) into the Order Notes. For example, M22-XDH-S-ETCH; Order Notes: Mark with symbol X91, Line item \#_.
(4) Includes contact block mounting adapter.
${ }^{(5)}$ All NC contact blocks are positively driven contact. $\Theta$
(6) Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

Pushbuttons and Indicating Lights
22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Non-IIluminated Pushbuttons, Extended, Maintained ${ }^{\text {(1) }}$



M22S-DRH-W


Operators Only ${ }^{(2)}$

| Button Color | Silver Bezel <br> Catalog Number | Black Bezel <br> Catalog Number | Metal Bezel <br> Catalog Number |
| :--- | :--- | :--- | :--- |
| Black | M22-DRH-S | M22S-DRH-S | M22M-DRH-S |
| Red | M22-DRH-R | M22S-DRH-R | M22M-DRH-R |
| Green | M22-DRH-G | M22S-DRH-G | M22M-DRH-G |
| White | M22-DRH-W | M22S-DRH-W | M22M-DRH-W |
| Blue | M22-DRH-B | M22S-DRH-B | M22M-DRH-B |
| Yellow | M22-DRH-Y | M22S-DRH-Y | M22M-DRH-Y |
| $(3)$ | M22-DRH-X-SRG | M22S-DRH-X-SRG | M22M-DRH-X-SRG |
| 4$)$ | M22-DRH-X-SWRGYB | M22S-DRH-X-SWRGYB | M22M-DRH-X-SWRGYB |

M22M-DRH-W


## Notes

(1) 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.
(2) Includes contact block mounting adapter.
${ }^{(3)}$ Buttonless operator comes with three color buttons (black, red, green).
(4) Buttonless operator comes with all six color buttons (black, white, red, green, yellow, blue).


Note: This pilot device features a selectable function switch that enables the device to be set to either maintained or momentary operation.


## Components



Button Plates (2)

| Color | Inscription | Catalog Number |
| :---: | :---: | :---: |
| Black | - | M22-XDH-S ${ }^{(3)}$ |
|  | Custom | M22-XDH-S-ETCH ${ }^{4}$ |
|  | STOP | M22-XDH-S-GBO |
|  | 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 |
|  | (0) | M22-XDH-S-X0 |
|  | (1) | M22-XDH-S-X1 |
|  | (11) | M22-XDH-S-X2 |
|  | $\oplus$ | M22-XDH-S-X4 |
|  | $\Theta$ | M22-XDH-S-X5 |
|  | (1) | M22-XDH-S-X7 |
| Red | - | M22-XDH-R ${ }^{\text {3 }}$ |
|  | Custom | M22-XDH-R-ETCH ${ }^{4}$ |
|  | STOP | M22-XDH-R-GB0 |
|  | OFF | M22-XDH-R-GB5 |
|  | (0) | M22-XDH-R-X0 |
| Green | - | M22-XDH-G ${ }^{(3)}$ |
|  | Custom | M22-XDH-G-ETCH ${ }^{4}$ |
|  | START | M22-XDH-G-GB1 |
|  | ON | M22-XDH-G-GB6 |
|  | (1) | M22-XDH-G-X1 |
| Blue | - | M22-XDH-B ${ }^{(3)}$ |
|  | Custom | M22-XDH-B-ETCH ${ }^{4}$ |
|  | RESET | M22-XDH-B-GB14 |
|  | ( ${ }^{\text {a }}$ | M22-XDH-B-X6 |
| White | - | M22-XDH-W ${ }^{(3)}$ |
|  | Custom | M22-XDH-W-ETCH ${ }^{4}$ |
|  | START | M22-XDH-W-GB1 |
|  | (1) | M22-XDH-W-X1 |
| Yellow | - | M22-XDH-Y ${ }^{(3)}$ |
|  | Custom | M22-XDH-Y-ETCH ${ }^{(4)}$ |
| Black, red, green | - | M22-XDH-SRG |
| Black, white, red, green, yellow, blue | - | M22-XDH-SWRGYB |

Buttonless Operator


Silver Beze

\section*{Catalog} Number ${ }^{5}$ |  | Number ${ }^{\text {5 }}$ | Number ${ }^{5}$ |
| :--- | :--- | :--- |
| M22-DR-X | M22S-DR-X | M22M-DR-X |


| M22-K10 | Contact Blocks ${ }^{(2)}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | Terminal Type | Contact <br> Configuration ${ }^{6}$ | Catalog Number |
|  | Screw | NO | M22-K10 |
|  |  | NO, early-make | M22-K10P |
|  |  | NC | M22-K01 |
|  |  | NC, late-break | M22-K01D |
| M22-FK01 | Spring-cage | N0 | M22-CK10 |
|  |  | NC | M22-CK01 |
|  |  | NC, late-break | M22-CK01D |
|  |  | 2NO | M22-CK20 |
|  |  | 2NC | M22-CK02 |
|  |  | NO-NC | M22-CK11 |
|  |  | NC | M22-FK01 ${ }^{(3)}$ |
|  |  | NO | M22-FK10 ${ }^{(3)}$ |

## Notes

(1) 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.
(2) For complete listing of available button plates and contact blocks, see Accessories, Pages V7-T1-105 to V7-T1-110
(3) Minimum order quantity of (10).
(4) When ordering, specify inscription per catalog number suffix from the Symbols Library (see Pages V7-T1-123 to V7-T1-130) into the Order Notes. For example, M22-XDH-S-ETCH; Order Notes: Mark with symbol X91, Line item \#_
(5) Includes contact block mounting adapter.
(6) All NC contact blocks are positively driven contact. $\Theta$
(7) Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.
Illuminated Pushbuttons

22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Product Selection

Illuminated Pushbuttons, Flush, Momentary

| M22-DL-G-K01-G | Complete Devices |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Button <br> Color | Contact Block <br> Configuration | Light Unit Voltage | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
|  | Red | NC | 12-30 Vac/Vdc | M22-DL-R-K01-R | M22S-DL-R-K01-R | M22M-DL-R-K01-R |
|  |  | NC | 85-264 Vac | M22-DL-R-K01-230R | M22S-DL-R-K01-230R | M22M-DL-R-K01-230R |
|  |  | 2NC | $12-30 \mathrm{Vac} / \mathrm{Vdc}$ | M22-DL-R-K02-R | M22S-DL-R-K02-R | M22M-DL-R-K02-R |
| M22S-DL-G-K01-G |  | 2NC | 85-264 Vac | M22-DL-R-K02-230R | M22S-DL-R-K02-230R | M22M-DL-R-K02-230R |
|  |  | 1NO/1NC | $12-30 \mathrm{Vac} / \mathrm{Vdc}$ | M22-DL-R-K11-R | M22S-DL-R-K11-R | M22M-DL-R-K11-R |
|  |  | 1NO/1NC | 85-264 Vac | M22-DL-R-K11-230R | M22S-DL-R-K11-230R | M22M-DL-R-K11-230R |
|  | Green | NO | $12-30 \mathrm{Vac} / \mathrm{Vdc}$ | M22-DL-G-K10-G | M22S-DL-G-K10-G | M22M-DL-G-K10-G |
|  |  | NO | 85-264 Vac | M22-DL-G-K10-230G | M22S-DL-G-K10-230G | M22M-DL-G-K10-230G |
|  |  | 2N0 | $12-30 \mathrm{Vac} / \mathrm{Vdc}$ | M22-DL-G-K20-G | M22S-DL-G-K20-G | M22M-DL-G-K20-G |
| M22M-DL-G-K01-G |  | 2 NO | 85-264 Vac | M22-DL-G-K20-230G | M22S-DL-G-K20-230G | M22M-DL-G-K20-230G |
|  |  | 1NO/1NC | $12-30 \mathrm{Vac} / \mathrm{Vdc}$ | M22-DL-G-K11-G | M22S-DL-G-K11-G | M22M-DL-G-K11-G |
|  |  | 1NO/1NC | 85-264 Vac | M22-DL-G-K11-230G | M22S-DL-G-K11-230G | M22M-DL-G-K11-230G |
|  | White | NO | $12-30 \mathrm{Vac} / \mathrm{Vdc}$ | M22-DL-W-K10-W | M22S-DL-W-K10-W | - |
|  |  | NO | 85-264 Vac | M22-DL-W-K10-230W | M22S-DL-W-K10-230W | M22M-DL-W-K10-230W |
|  |  | 2N0 | $12-30 \mathrm{Vac} / \mathrm{Vdc}$ | M22-DL-W-K20-W | M22S-DL-W-K20-W | - |
|  |  | 2NO | 85-264 Vac | M22-DL-W-K20-230W | M22S-DL-W-K20-230W | M22M-DL-W-K20-230W |
|  |  | 1NO/1NC | $12-30 \mathrm{Vac} / \mathrm{Vdc}$ | M22-DL-W-K11-W | M22S-DL-W-K11-W | - |
|  |  | 1NO/1NC | 85-264 Vac | M22-DL-W-K11-230W | M22S-DL-W-K11-230W | M22M-DL-W-K11-230W |

Note
(1) All NC contact blocks are positively driven contact. $\Theta$

## Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons-M22

Illuminated Pushbuttons, Flush, Momentary

| M22-DL-G | Operators Only ${ }^{(1)}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Button Color | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
| 11 | Red | M22-DL-R | M22S-DL-R | M22M-DL-R |
| , | Green | M22-DL-G | M22S-DL-G | M22M-DL-G |
|  | White | M22-DL-W | M22S-DL-W | M22M-DL-W |
| M22S-DL-G | Blue | M22-DL-B | M22S-DL-B | M22M-DL-B |
|  | Yellow | M22-DL-Y | M22S-DL-Y | M22M-DL-Y |
|  | Amber | M22-DL-A | M22S-DL-A | M22M-DL-A |

M22M-DL-G


M22-DGL-G


Silver Guarded

| Button Color | Silver BezeI <br> Catalog Number |
| :--- | :--- |
| Red | M22-DGL-R |
| Green | M22-DGL-G |
| White | M22-DGL-W |
| Blue | M22-DGL-B |
| Yellow | M22-DGL-Y |

Note
(1) Includes contact block mounting adapter.


## Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Illuminated Pushbuttons, Flush, Maintained ${ }^{\text {( }}$



M22S-DRL-W-K10-W


Complete Devices

| Button Color | Contact Block Configuration | Light Unit Voltage | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| White | NO | 12-30 Vac/Vdc | M22-DRL-W-K10-W | M22S-DRL-W-K10-W | M22M-DRL-W-K10-W |
|  | NO | 85-264 Vac | M22-DRL-W-K10-230W | M22S-DRL-W-K10-230W | M22M-DRL-W-K10-230W |
|  | NC | $12-30 \mathrm{Vac} / \mathrm{Vdc}$ | M22-DRL-W-K01-W | M22S-DRL-W-K01-W | M22M-DRL-W-K01-W |
|  | NC | 85-264 Vac | M22-DRL-W-K01-230W | M22S-DRL-W-K01-230W | M22M-DRL-W-K01-230W |
|  | 2N0 | $12-30 \mathrm{Vac} / \mathrm{Vdc}$ | M22-DRL-W-K20-W | M22S-DRL-W-K20-W | M22M-DRL-W-K20-W |
|  | 2N0 | 85-264 Vac | M22-DRL-W-K20-230W | M22S-DRL-W-K20-230W | M22M-DRL-W-K20-230W |
|  | 2NC | $12-30 \mathrm{Vac} / \mathrm{Ndc}$ | M22-DRL-W-K02-W | M22S-DRL-W-K02-W | M22M-DRL-W-K02-W |
|  | 2NC | 85-264 Vac | M22-DRL-W-K02-230W | M22S-DRL-W-K02-230W | M22M-DRL-W-K02-230W |
|  | 1NO/1NC | 12-30 Vac/Vdc | M22-DRL-W-K11-W | M22S-DRL-W-K11-W | M22M-DRL-W-K11-W |
|  | 1NO/1NC | 85-264 Vac | M22-DRL-W-K11-230W | M22S-DRL-W-K11-230W | M22M-DRL-W-K11-230W |



M22S-DRL-W


Operators Only ${ }^{3}$

| Button Color | Silver Bezel <br> Catalog Number | Black Bezel <br> Catalog Number | Metal Bezel <br> Catalog Number |
| :--- | :--- | :--- | :--- |
| Red | M22-DRL-R | M22S-DRL-R | M22M-DRL-R |
| Green | M22-DRL-G | M22S-DRL-G | M22M-DRL-G |
| White | M22-DRL-W | M22S-DRL-W | M22M-DRL-W |
| Blue | M22-DRL-B | M22S-DRL-B | M22M-DRL-B |
| Yellow | M22-DRL-Y | M22S-DRL-Y | M22M-DRL-Y |
| Amber | M22-DRL-A | M22S-DRL-A | M22M-DRL-A |

M22M-DRL-W


## Notes

(1) 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.
(2) All NC contact blocks are positively driven contact. $\Theta$
(3) Includes contact block mounting adapter.


Note: This pilot device features a selectable function switch that enables the device to be set to either maintained or momentary operation.


Note: Included
with operator.

Components


Button Lenses ${ }^{2}$

| Color | Inscription | Catalog Number |
| :---: | :---: | :---: |
| Red | - | M22-XDL-R ${ }^{(3)}$ |
|  | Custom | M22-XDL-R-ETCH ${ }^{4}$ |
|  | STOP | M22-XDL-R-GB0 |
|  | OFF | M22-XDL-R-GB5 |
|  | ( | M22-XDL-R-X0 |
| Green | - | M22-XDL-G ${ }^{3}$ |
|  | Custom | M22-XDL-G-ETCH ${ }^{(4)}$ |
|  | START | M22-XDL-G-GB1 |
|  | ON | M22-XDL-G-GB6 |
|  | (1) | M22-XDL-G-X1 |
| Blue | - | M22-XDL-B ${ }^{3}$ |
|  | Custom | M22-XDL-B-ETCH ${ }^{(4)}$ |
|  | RESET | M22-XDL-B-GB14 |
|  | ( ${ }^{\text {a }}$ | M22-XDL-B-X6 |
| White | - | M22-XDL-W ${ }^{\text {3 }}$ |
|  | Custom | M22-XDL-W-ETCH ${ }^{(4)}$ |
| Yellow | - | M22-XDL-Y ${ }^{\text {3 }}$ |
|  | Custom | M22-XDL-Y-ETCH ${ }^{(4)}$ |
| Amber | - | M22-XDL-A |
|  | Custom | M22-XDL-A-ETCH |

Buttonless Operator


M22S-DRL-X


M22M-DRL-X


| M22-LED-W | Light Units ${ }^{(2)}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Terminal Type | LED Color | Light Unit Voltage | Catalog Number |
| M22-FLED-_ | Screw | White | $\begin{aligned} & 12-30 \\ & \mathrm{Vac} / \mathrm{Vdc} \end{aligned}$ | M22-LED-W |
|  |  | Red |  | M22-LED-R |
|  |  | Green |  | M22-LED-G |
|  |  | Blue |  | M22-LED-B |
|  | Screw | White | $\begin{aligned} & 85-264 \\ & \text { Vac } \end{aligned}$ | M22-LED230-W |
|  |  | Red |  | M22-LED230-R |
|  |  | Green |  | M22-LED230-G |
|  |  | Blue |  | M22-LED230-B |
|  | Spring-cage | White | $\begin{aligned} & 12-30 \\ & \mathrm{Vac} / \mathrm{Vdc} \end{aligned}$ | M22-FLED-W |
|  |  | Red |  | M22-FLED-R |
|  |  | Green |  | M22-FLED-G |
|  |  | Blue |  | M22-FLED-B |
|  |  | Red/Green/ Yellow | 24 Vdc | M22-FLED-RG ${ }^{\text {® }}$ |
|  |  | Red, Green, Blue, Yellow, White, Violet, Turquoise |  | M22-FLED-RGB ${ }^{\text {® }}$ |


| M22-K10 | Contact Blocks ${ }^{(2)}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | Terminal Type | Contact Configuration ${ }^{\text {(3) }}$ | Catalog Number |
|  | Screw | NO | M22-K10 |
|  |  | NO, early-make | M22-K10P |
|  |  | NC | M22-K01 |
|  |  | NC, late-break | M22-K01D |
|  | Spring-cage | N0 | M22-CK10 |
| M22-FK01 |  | NC | M22-CK01 |
|  |  | $\overline{\mathrm{NC}}$, late-break | M22-CK01D |
|  |  | 2NO | M22-CK20 |
|  |  | 2NC | M22-CK02 |
|  |  | NO-NC | M22-CK11 |
|  |  | NC | M22-FK01 ${ }^{\text {8 }}$ |
|  |  | NO | M22-FK10 ${ }^{\text {® }}$ |

## Notes

(1) 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.
(2) For complete listing of available button lenses, light units and contact blocks, see Accessories, Pages V7-T1-105 to V7-T1-110.
${ }^{(3)}$ Minimum order quantity of (10).
(4) When ordering, specify inscription per catalog number suffix from the Symbols Library (see Pages V7-T1-123 to V7-T1-130) into the Order Notes. For example, M22-XDL-R-ETCH; Order Notes: Mark with symbol X91, Line item \#_.
(5) Includes contact block mounting adapter.
(6) Please see color input key on Page V7-T1-108.
${ }^{(7)}$ All NC contact blocks are positively driven contact. $\Theta$
(8) Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

## Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Illuminated Pushbuttons, Extended, Momentary

| M22-DLH-R-K11-R | Complete Devices |  |  | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Button Color | Contact Block Configuration | Light Unit Voltage |  |  |  |
|  | Red | 1NO/1NC | 12-30 Vac/Vdc | M22-DLH-R-K11-R | M22S-DLH-R-K11-R | M22M-DLH-R-K11-R |
|  |  | 1NO/1NC | 85-264 Vac | M22-DLH-R-K11-230R | M22S-DLH-R-K11-230R | M22M-DLH-R-K11-230R |
| M2 | Green | 2N0 | $12-30 \mathrm{Vac} / \mathrm{Vdc}$ | M22-DLH-G-K20-G | M22S-DLH-G-K20-G | M22M-DLH-G-K20-G |
| - |  | 2N0 | 85-264 Vac | M22-DLH-G-K20-230G | M22S-DLH-G-K20-230G | M22M-DLH-G-K20-230G |
|  | White | 2N0 | $12-30 \mathrm{Vac} / \mathrm{Vdc}$ | M22-DLH-W-K20-W | M22S-DLH-W-K20-W | M22M-DLH-W-K20-W |
| $2$ |  | 2NO | 85-264 Vac | M22-DLH-W-K20-230W | M22S-DLH-W-K20-230W | M22M-DLH-W-K20-230W |

Complete Press-to-Test Units


| Button Color | Light Unit Voltage | Silver Bezel <br> Catalog Number | Black Bezel <br> Catalog Number |
| :--- | :--- | :--- | :--- |
| Red | $12-30 \mathrm{Vac} / \mathrm{Vdc}$ |  | M22-T-R-R |

Operators Only ${ }^{(2)}$

| Button Color | Silver Bezel <br> Catalog Number | Black Bezel <br> Catalog Number | Metal Bezel <br> Catalog Number |
| :--- | :--- | :--- | :--- |
| Red | M22-DLH-R | M22S-DLH-R | M22M-DLH-R |
| Green | M22-DLH-G | M22S-DLH-G | M22M-DLH-G |
| White | M22-DLH-W | M22S-DLH-W | M22M-DLH-W |
| Blue | M22-DLH-B | M22S-DLH-B | M22M-DLH-B |
| Yellow | M22-DLH-Y | M22S-DLH-Y | M22M-DLH-Y |
| Amber | M22-DLH-A | M22S-DLH-A | M22M-DLH-A |



Silver Guarded

| Button Color | Silver Bezel <br> Catalog Number |
| :--- | :--- |
| Red | M22-DGLH-R |
| Green | M22-DGLH-G |
| White | M22-DGLH-W |
| Blue | M22-DGLH-B |
| Yellow | M22-DGLH-Y |

## Notes

(1) All NC contact blocks are positively driven contact. $\Theta$
(2) Includes contact block mounting adapter.


Components

| M22－XDH－R | Button Lenses ${ }^{(1)}$ |  | Catalog Number |
| :---: | :---: | :---: | :---: |
|  | Color | Inscription |  |
|  | Red | － | M22－XDLH－R ${ }^{(2)}$ |
|  |  | Custom | M22－XDLH－R－ETCH ${ }^{(3)}$ |
|  |  | STOP | M22－XDLH－R－GB0 |
|  |  | OFF | M22－XDLH－R－GB5 |
|  |  | （ ${ }^{\text {a }}$ | 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 |
|  |  | （1） | M22－XDLH－G－X1 |
|  | Blue | － | M22－XDLH－B ${ }^{(2)}$ |
|  |  | Custom | M22－XDLH－B－ETCH ${ }^{(3)}$ |
|  |  | RESET | M22－XDLH－B－GB14 |
|  |  | （B） | 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 ${ }^{(3)}$ |
|  | Amber | － | M22－XDLH－A |
|  |  | Custom | M22－XDLH－A－ETCH |



M22M－DL－X


Buttonless Operator

| Silver Bezel <br> Catalog | Black BezeI <br> Catalog | Metal Bezel <br> Catalog |
| :--- | :--- | :--- |
| Number $^{4}$ | Number $^{4}$ | Number ${ }^{4}{ }^{4}$ |


| Silver Guarded |
| :--- |
| Silver Bezel |
| Catalog |
| Number ${ }^{4}$ |
| M22－DGL－X |



| M22-K10 | Contact Blocks ${ }^{1}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | Terminal Type | Contact Configuration | Catalog Number |
|  | Screw | N0 | M22－K10 |
|  |  | NO，early－make | M22－K10P |
|  |  | NC | M22－K01 |
|  |  | $\overline{\text { NC，late－break }}$ | M22－K01D |
|  | Spring－cage | NO | M22－CK10 |
| M22－FK01 |  | NC | M22－CK01 |
|  |  | NC，late－break | M22－CK01D |
|  |  | 2N0 | M22－CK20 |
|  |  | 2NC | M22－CK02 |
|  |  | NO－NC | M22－CK11 |
|  |  | NC | M22－FK01 ${ }^{(7)}$ |
|  |  | NO | M22－FK10 ${ }^{(7)}$ |

## Notes

（1）For complete listing of available button lenses，light units and contact blocks，see Accessories，Pages V7－T1－105 to V7－T1－110．
（2）Minimum order quantity of（10）．
${ }^{3}$ When ordering，specify inscription per catalog number suffix from the Symbols Library（see Pages V7－T1－123 to V7－T1－130）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）Please see color input key on Page V7－T1－108．
（6）All NC contact blocks are positively driven contact．$\Theta$
（7）Additional contacts may not be stacked behind M22－F type contact blocks， M22－F can be stacked behind standard M22 contacts only．

## Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Illuminated Pushbuttons, Extended, Maintained ©

| M22-DRLH-W | Operators Only ${ }^{(2)}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\bigcirc$ | Button Color | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
| 11 | Red | M22-DRLH-R | M22S-DRLH-R | M22M-DRLH-R |
|  | Green | M22-DRLH-G | M22S-DRLH-G | M22M-DRLH-G |
|  | White | M22-DRLH-W | M22S-DRLH-W | M22M-DRLH-W |
| M22S-DRLH-W | Blue | M22-DRLH-B | M22S-DRLH-B | M22M-DRLH-B |
|  | Yellow | M22-DRLH-Y | M22S-DRLH-Y | M22M-DRLH-Y |
|  | Amber | M22-DRLH-A | M22S-DRLH-A | M22M-DRLH-A |

M22M-DRLH-W


## Notes

(1) 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.
(2) Includes contact block mounting adapter.


Note: This pilot device features a selectable function switch that enables the device to be set to either maintained or momentary operation.


## Components



M22S-DRL-X


M22M-DRL-X


| Color | Inscription | Catalog Number |
| :---: | :---: | :---: |
| Red | - | M22-XDLH-R ${ }^{(3)}$ |
|  | Custom | M22-XDLH-R-ETCH ${ }^{4}$ |
|  | STOP | M22-XDLH-R-GB0 |
|  | OFF | M22-XDLH-R-GB5 |
|  | (O) | M22-XDLH-R-X0 |
| Green | - | M22-XDLH-G ${ }^{(3)}$ |
|  | Custom | M22-XDLH-G-ETCH ${ }^{(4)}$ |
|  | START | M22-XDLH-G-GB1 |
|  | ON | M22-XDLH-G-GB6 |
|  | (1) | M22-XDLH-G-X1 |
| Blue | - | M22-XDLH-B ${ }^{(3)}$ |
|  | Custom | M22-XDLH-B-ETCH ${ }^{(4)}$ |
|  | RESET | M22-XDLH-B-GB14 |
|  | (B) | M22-XDLH-B-X6 |
| White | - | M22-XDLH-W ${ }^{(3)}$ |
|  | Custom | M22-XDLH-W-ETCH ${ }^{(4)}$ |
| Yellow | - | M22-XDLH-Y ${ }^{(3)}$ |
|  | Custom | M22-XDLH-Y-ETCH ${ }^{(4)}$ |
| Amber | - | M22-XDLH-A |
|  | Custom | M22-XDLH-A-ETCH |


| Buttonless | Operator |  |
| :--- | :--- | :--- |
| Silver Bezel | Black Bezel | Metal Bezel |
| Catalog | Catalog | Catalog |
| Number ${ }^{\circledR}$ | Number ${ }^{\text {® }}$ | Number ${ }^{\text {® }}$ |
| M22-DRL-X | M22S-DRL-X | M22M-DRL-X |

## M22-FK01



## Notes

(1) 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.
(2) For complete listing of available button lenses, light units and contact blocks, see Accessories, Pages V7-T1-105 to V7-T1-110.
(3) Minimum order quantity of (10).
(4) When ordering, specify inscription per catalog number suffix from the Symbols Library (see Pages V7-T1-123 to V7-T1-130) into the Order Notes. For example, M22-XDLH-S-ETCH; Order Notes: Mark with symbol X91, Line item \#_.
(5) Includes contact block mounting adapter.
(8) Please see color input key on Page V7-T1-108.
(7) All NC contact blocks are positively driven contact. $\Theta$
(8) Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

## Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Indicating Lights

## Product Description

Eaton's M22 indicating lights use the combination of a durable, bright LED unit and modern lenses designed specifically for this type of LED to create a bright and visible indicating light.

As with the pushbuttons, the indicating light lenses can be laser engraved. Indicating lights can be ordered as complete devices, including lens and LED unit, or as modular components.

## Features

- Customizable laser engraving on all lenses
- LED offering only for improved brightness quality and up to 100,000 hours of operation
- Lenses designed specifically for LED illumination
- Modular construction makes assembly fast and simplifies stocking of components and complete devices
- Capable of communicating via ASi protocol with ASi adapter modules
Protection Type
- IP67, IP69K
- NEMA 4X, 13


## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

## Indicating Lights



Note: Light unit should match color of lens.
(1) When ordering, specify inscription per catalog number suffix from the Symbols Library (see Pages V7-T1-123 to V7-T1-130) into the Order Notes. Use white light unit with yellow lens.

## Product Selection

## Indicating Lights, Flush



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 |

## Operators Only ${ }^{\text {(1) }}$



| Lens Color | Catalog Number |  | Lens Color | Catalog Number |
| :---: | :---: | :---: | :---: | :---: |
| Flat |  | M22-LH-R | Conical |  |
| White | M22-L-W |  | White | M22-LH-W |
| Red | M22-L-R |  | Red | M22-LH-R |
| Green | M22-L-G |  | Green | M22-LH-G |
| Yellow | M22-L-Y |  | Yellow | M22-LH-Y |
| Blue | M22-L-B |  | Blue | M22-LH-B |
| Amber | M22-L-A |  | Amber | M22-LH-A |

## Note

[^1]

Components


| Lenses ${ }^{1}$ |  |  | M22-LED-W |
| :---: | :---: | :---: | :---: |
| Color | Inscription | Catalog Number |  |
| Flat |  |  | 陼 |
| 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 ${ }^{3}$ | M22-FLED- |
|  | ON | M22-XL-G-GB6 |  |
|  | REVERSE | M22-XL-G-GB16 |  |
| Blue | - | M22-XL-B ${ }^{(2)}$ |  |
|  | Custom | M22-XL-B-ETCH ${ }^{3}{ }^{\text {3 }}$ |  |
|  | FAULT | M22-XL-B-GB8 |  |
| White | - | M22-XL-W ${ }^{(2)}$ | 12 |
|  | Custom | M22-XL-W-ETCH ${ }^{3}$ |  |
|  | OFF | M22-XL-W-GB5 |  |
|  | ON | M22-XL-W-GB6 |  |


| Light Units ${ }^{(14)}$ |  |  |  |
| :---: | :---: | :---: | :---: |
| Terminal Type | $\begin{aligned} & \text { LED } \\ & \text { Color } \end{aligned}$ | Light Unit Voltage | Catalog Number |
| Screw | White | $\begin{aligned} & 12-30 \\ & \mathrm{Vac} / \mathrm{Vdc} \end{aligned}$ | M22-LED-W |
|  | Red |  | M22-LED-R |
|  | Green |  | M22-LED-G |
|  | Blue |  | M22-LED-B |
| Screw | White | $\begin{aligned} & \hline 85-264 \\ & -\mathrm{Vac} \end{aligned}$ | M22-LED230-W |
|  | Red |  | M22-LED230-R |
|  | Green |  | M22-LED230-G |
|  | Blue |  | M22-LED230-B |
| Spring-cage | White | $\begin{aligned} & 12-30 \\ & \mathrm{Vac} / \mathrm{Vdc} \end{aligned}$ | M22-FLED-W |
|  | Red |  | M22-FLED-R |
|  | Green |  | M22-FLED-G |
|  | Blue |  | M22-FLED-B |
|  | Red/Green/ Yellow | 24 Vdc | M22-FLED-RG ${ }^{\text {(5) }}$ |
|  | Red, Green, Blue, Yellow, White, Violet, Turquoise |  | M22-FLED-RGB ${ }^{\text {( }}$ |

## Notes

(1) For complete listing of available lenses and light units, see Accessories,

Pages V7-T1-105 to V7-T1-110.
(2) Minimum order quantity of (10).
${ }^{(3)}$ When ordering, specify inscription per catalog number suffix from the Symbols Library (see Pages V7-T1-123 to V7-T1-130) into the Order Notes.
For example, M22-XL-R-ETCH; Order Notes: Mark with symbol X91, Line item \#_
${ }^{(4)}$ Select the same color LED element as lens color; for yellow and amber lenses, choose a white LED.
(5) Please see color input key on Page V7-T1-108.
M22-L-X

Pushbuttons and Indicating Lights
22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Emergency Stops

## Product Description

Eaton's M22 emergency stops are a durable and reliable solution to a variety of e-stop applications. With standard push-pull, as well as twist-to-release and keyrelease, illuminated options and red or black operators, the M22 e-stop is a robust solution. As with all operators, they can be ordered as a ready to install complete device or as modular components for the perfect fit.

## Features

- Push-pull and twist to release options available as well as illuminated and keyed release
- LED offering only for improved brightness quality and up to 100,000 hours of operation
- More than 100,000 mechanical operations
- Capable of communicating via ASi protocol with ASi adapter modules
- Suitable for use in safety applications up to
Category-4 or Sil-3


## Protection Type

- Up to IP69K for increased protection. Check ecat.eaton.com for specifics
- NEMA 4X, 13


## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

Emergency Stops


## Product Selection

Non-Illuminated and Illuminated Emergency Stops

|  | Complete Devices |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Type | Button <br> Color | LED <br> Color | Contact Block <br> Configuration | Light Unit Voltage | Catalog Number |
| M22-PV-K01 | Non-Illuminated |  |  |  |  |  |
|  | 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 |
| M22-PVL-K01-R | Illuminated |  |  |  |  |  |
|  | Push-pull | Red | Red | NC | 12-30 Vac/Vdc | M22-PVL-K01-R |
|  |  |  |  | 2NC |  | M22-PVL-K02-R |
|  |  |  |  | 1NO-2NC |  | M22-PVL-K12-R |
|  |  |  |  | NC | 85-264 Vac | M22-PVL-K01-230R |
|  |  |  |  | 2NC |  | M22-PVL-K02-230R |
|  |  |  |  | 1NO-2NC |  | M22-PVL-K12-230R |
|  | Twist-to-release | Red | Red | NC | 12-30 Vac/Vdc | M22-PVLT-K01-R |
|  |  |  |  | 2NC |  | M22-PVLT-K02-R |
|  |  |  |  | 1NO-2NC |  | M22-PVLT-K12-R |
|  |  |  |  | NC | 85-264 Vac | M22-PVLT-K01-230R |
|  |  |  |  | 2NC |  | M22-PVLT-K02-230R |
|  |  |  |  | 1NO-2NC |  | M22-PVLT-K12-230R |

Note
(1) All NC contact blocks are positively driven contact. $\Theta$
22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Non-IIluminated and Illuminated Emergency Stops




## Components

| M22-PVL | Push-Pull Emergency Stops |  |  |
| :---: | :---: | :---: | :---: |
|  | Illumination/Indication | Actuator Size | Catalog Number |
|  | None | 35 mm | M22-PV |
|  |  | 45 mm | M22-PV45P |
|  |  | 60 mm | M22-PV60P |
|  | LED illumination | 35 mm | M22-PVL |
|  |  | 45 mm | M22-PVL45P |
|  |  | 60 mm | M22-PVL60P |
|  | Mechanical indication | 45 mm | M22-PV45P-MPI |
|  |  | 60 mm | M22-PV60P-MPI |



Twist-to-Release Emergency Stops

| Illumination/Indication | Actuator <br> Size | Catalog <br> Number |
| :--- | :--- | :--- |
| None | 35 mm | M22-PVT |
| 45 mm | M22-PVT45P |  |
| 60 mm | M22-PVT60P |  |
| LED illumination | $\frac{35 \mathrm{~mm}}{45 \mathrm{~mm}}$ | M22-PVLT |
|  | M22-PVLT45P |  |
| Mechanical indication | $\frac{45 \mathrm{~mm}}{}$ | M22-PVLT60P |
|  | $\mathbf{6 0 \mathrm { mm }}$ | M22-PVT45P-MPI |


| M22S-PVLT | Machine Stop Operators (Black) ${ }^{(1)}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Illumination | Type | Actuator Size | Catalog Number |
|  | Non-illuminated | Push-pull | 35 mm | M22S-PV |
|  |  | Twist-torelease | 35 mm | M22S-PVT |
|  | LED illumination | Push-pull | 35 mm | M22S-PVL |
|  |  | Twist-torelease | 35 mm | M22S-PVLT |


| M22-PVS60P-MS1 | Key Release Emergency Stops ${ }^{(2)}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | Actuator Size | Kеу Code | Catalog Number |
|  | 35 mm | MS1 | M22-PVS ${ }^{(3)}$ |
|  |  | MS2 | M22-PVS-MS2 |
|  |  | MS3 | M22-PVS-MS3 |
|  |  | MS4 | M22-PVS-MS4 |
|  |  | MS5 | M22-PVS-MS5 |
|  |  | MS6 | M22-PVS-MS6 |
|  |  | MS7 | M22-PVS-MS7 |
|  |  | MS8 | M22-PVS-MS8 |
|  | 45 mm | MS1 | M22-PVS45P |
|  |  | MS2 | M22-PVS45P-MS2 |
|  |  | MS3 | M22-PVS45P-MS3 |
|  |  | MS4 | M22-PVS45P-MS4 |
|  |  | MS5 | M22-PVS45P-MS5 |
|  |  | MS6 | M22-PVS45P-MS6 |
|  |  | MS7 | M22-PVS45P-MS7 |
|  |  | MS8 | M22-PVS45P-MS8 |
|  |  | Ronis | M22-PVS45P-RS |
|  | 60 mm | MS1 | M22-PVS60P |
|  |  | MS2 | M22-PVS60P-MS2 |
|  |  | MS3 | M22-PVS60P-MS3 |
|  |  | MS4 | M22-PVS60P-MS4 |
|  |  | MS5 | M22-PVS60P-MS5 |
|  |  | MS6 | M22-PVS60P-MS6 |
|  |  | MS7 | M22-PVS60P-MS7 |
|  |  | MS8 | M22-PVS60P-MS8 |
|  |  | Ronis | M22-PVS60P-RS |

## Notes

(1) Includes contact block mounting adapter.
${ }^{2}$ 2 Key included. For identical locks and keys, use the same key code. One key is included with actuator; additional keys are available as accessories.
${ }^{3}$ Includes Key Code MS1.
Maximum number of contacts: four M22-(C)K01, ...10, or two M22-(C)K02, ...20, .. 11 . Refer to IL or technical data sheet for more information.



## Pushbuttons and Indicating Lights



## Selector Switches

## Product Description

Eaton's M22 selector switch line offers an almost endless variety of options in maintained/momentary, keyremoval and illuminated devices. The coding adapters used for maintained/ momentary and key removal positions make the M22 stand out from competitive devices. By simply adding or removing a coding adapter from inside the operator, the end-user can change the function of the button. Operator options include standard knob, rotary head, illuminated and keyed versions. As with all operators, they can be ordered as a ready to install complete device or as modular components to meet application specific requirements.

## Features

- Adding or removing coding adapters allows for field convertibility of maintained/momentary and key removal positions
- LED offering only for improved brightness quality and up to 100,000 hours of operation
- More than 100,000 mechanical operations


## Contents

Description
Selector Switches
Non-Illuminated Switches . . . . . . . . . . . . . . . . . . V7-T1-73
Illuminated Switches . . . . . . . . . . . . . . . . . . . . V7-T1-78
Key Operated . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-82

- Coding adapter options make assembly fast and simplify stocking of different configurations of selector switches
- Capable of communicating via ASi protocol with ASi adapter modules


## Protection Type

- IP66
- NEMA 4X, 13


## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

## Non-IIluminated Selector Switches



## Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Product Selection

Non-Illuminated Selector Switches

| M22-WKV-K10 | Complete Devices, Knob Type (1) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Type | Switching Position | Contact Block Configuration | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
|  | Two-position | Maintained | NO | M22-WRK-K10 | M22S-WRK-K10 | M22M-WRK-K10 |
|  |  | $40^{\circ}$ | 1NO-1NC | M22-WRK-K11 | M22S-WRK-K11 | M22M-WRK-K11 |
|  |  | $\checkmark$ | 2NO-2NC | M22-WRK-K22 | M22S-WRK-K22 | M22M-WRK-K22 |
| M22M-WKV-K10 |  |  |  |  |  |  |
| P |  | Maintained V | NO | M22-WKV-K10 | M22S-WKV-K10 | M22M-WKV-K10 |
|  |  | - $60^{\circ}$ | 1NO-1NC | M22-WKV-K11 | M22S-WKV-K11 | M22M-WKV-K11 |
|  |  |  | 2NO-2NC | M22-WKV-K22 | M22S-WKV-K22 | M22M-WKV-K22 |
|  | Three-position | Maintained | 2NO | M22-WRK3-K20 | M22S-WRK3-K20 | M22M-WRK3-K20 |
|  |  |  | 2NO-2NC | M22-WRK3-K22 | M22S-WRK3-K22 | M22M-WRK3-K22 |

## Notes

(1) Includes contact block mounting adapter.
(2) All NC contact blocks are positively driven contact. $\Theta$

## Non-Illuminated Selector Switches

## Components



## 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 Page V7-T1-112

## Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Non-IIluminated Selector Switches

## Components

| M22S-WR3-X94 | Operators Only, Rotary Type ${ }^{\text {® }}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Type | Switching Position | Inscription | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
|  | Two-position | Momentary ${ }^{(2)}$ | I-O | M22-W | M22S-W | M22M-W |
|  |  | Maintained | I-0 | M22-WR | M22S-WR | M22M-WR |
|  |  | 40 | Custom | M22-WR-ETCH ${ }^{(3)}$ | M22S-WR-ETCH ${ }^{(3)}$ | M22M-WR-ETCH ${ }^{(3)}$ |
|  |  | $V$ | AUTO-HAND | M22-WR-X91 | M22S-WR-X91 | M22M-WR-X91 |
|  |  |  | II-I | M22-WR-X92 | M22S-WR-X92 | M22M-WR-X92 |
|  | Three-position | Momentary ${ }^{(2)}$ | 1-0-\|I | M22-W3 | M22S-W3 | M22M-W3 |
|  |  | Maintained | 1-0-\|| | M22-WR3 | M22S-WR3 | M22M-WR3 |
|  |  |  | Custom | M22-WR3-ETCH ${ }^{(3)}$ | M22S-WR3-ETCH ${ }^{(3)}$ | M22M-WR3-ETCH ${ }^{(3)}$ |
|  |  |  | AUTO-O-MAN | M22-WR3-X94 | M22S-WR3-X94 | M22M-WR3-X94 |
|  | Four-position | Maintained | 0-1-0-2-0-3-0-4 | M22-WR4 | M22S-WR4 | M22M-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 Page V7-T1-112.
${ }^{(3)}$ When ordering, specify inscription per catalog number suffix from the Symbols Library (see Pages V7-T1-123 to V7-T1-130) into the Order Notes. For example, M22-WR3-ETCH; Order Notes: Mark with symbol X88, Line item \#_


## Components

| M22-K10 | Contact Blocks ${ }^{(1)}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | Terminal Type | Contact Configuration ${ }^{(2)}$ | Catalog Number |
|  | Screw | NO | M22-K10 |
|  |  | NO, early-make | M22-K10P |
|  |  | NC | M22-K01 |
|  |  | NC, late-break | M22-K01D |
| M22-FK01 | Spring-cage | N0 | M22-CK10 |
|  |  | NC | M22-CK01 |
|  |  | NC, late-break | M22-CK01D |
|  |  | 2NO | M22-CK20 |
|  |  | 2NC | M22-CK02 |
|  |  | NO-NC | M22-CK11 |
|  |  | NC | M22-FK01 ${ }^{(3)}$ |
|  |  | NO | M22-FK10 ${ }^{(3)}$ |



Notes
(1) For complete listing of available contact blocks, see Accessories, Pages V7-T1-105 to V7-T1-110.
(2) All NC contact blocks are positively driven contact. $\Theta$
${ }^{(3)}$ Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.
(4) Plunger needed to actuate center-mounted contact blocks. Used for non-illuminated three-position selector switches only.
(5) Enables a keyed selector switch to be set to user-selected key withdraw position.

## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

## Illuminated Selector Switches


22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Product Selection

## Illuminated Selector Switches

## Components

| M22-WLK-W | Operators Only, Knob Type (1) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Type | Switching Position | Button Color | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
|  | Two-position | Momentary ${ }^{(2)}$ | White | M22-WLK-W | M22S-WLK-W | M22M-WLK-W |
|  |  | $\rightarrow 40^{\circ}$ | Red | M22-WLK-R | M22S-WLK-R | M22M-WLK-R |
|  |  |  | Green | M22-WLK-G | M22S-WLK-G | M22M-WLK-G |
|  |  |  | Yellow | M22-WLK-Y | M22S-WLK-Y | M22M-WLK-Y |
|  |  |  | Blue | M22-WLK-B | M22S-WLK-B | M22M-WLK-B |
|  |  | Maintained | White | M22-WRLK-W | M22S-WRLK-W | M22M-WRLK-W |
|  |  |  | Red | M22-WRLK-R | M22S-WRLK-R | M22M-WRLK-R |
|  |  | $\checkmark$ | Green | M22-WRLK-G | M22S-WRLK-G | M22M-WRLK-G |
|  |  |  | Yellow | M22-WRLK-Y | M22S-WRLK-Y | M22M-WRLK-Y |
|  |  |  | Blue | M22-WRLK-B | M22S-WRLK-B | M22M-WRLK-B |
|  |  | Maintained V | White | M22-WLKV-W | M22S-WLKV-W | M22M-WLKV-W |
|  |  | $>60^{\circ}$ | Red | M22-WLKV-R | M22S-WLKV-R | M22M-WLKV-R |
|  |  |  | Green | M22-WLKV-G | M22S-WLKV-G | M22M-WLKV-G |
|  |  |  | Yellow | M22-WLKV-Y | M22S-WLKV-Y | M22M-WLKV-Y |
|  |  |  | Blue | M22-WLKV-B | M22S-WLKV-B | M22M-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 Page V7-T1-112.

Pushbuttons and Indicating Lights
22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Illuminated Selector Switches

## Components

|  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## 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 Page V7-T1-112.


## Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

## Key-Operated Selector Switches



## Product Selection

Key-Operated Selector Switches ${ }^{\text {(1) } 2 ~}$

## Components



## Notes

(1) Includes one key.
${ }^{(2)}$ Key removal positions can be modified in the field using coding adapters; see chart on Page V7-T1-112.
${ }^{(3)}$ 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 Page V7-T1-112.

Key-Operated Selector Switches ${ }^{\text {©(2) }}$
Components


M22M-WS3-X93


Operators Only, continued ${ }^{(3)}$

| Type | Switching Position |
| :---: | :---: |
| Three-position | Momentary ${ }^{(4)}$ |
|  | $\left.40^{\circ}, \quad \stackrel{0}{\\|}\right\rangle^{140^{\circ}}$ |

Key Removal Position
Return from left/right,
key removable center

Three-position Maintained

Notes
(1) Includes one key
${ }^{(2)}$ Key removal positions can be modified in the field using coding adapters; see chart on Page V7-T1-112.
(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 Page V7-T1-112.

Key-Operated Selector Switches ${ }^{\text {(12) }}$
Components


Operators Only, continued (3)

M22M-WS3-X93



## Notes

(1) Includes one key.
(2) Key removal positions can be modified in the field using coding adapters; see chart on Page V7-T1-112.
(3) Includes contact block mounting adapter.

## Key-Operated Selector Switches



## Components

| M22-K10 | Contact Blocks ${ }^{(1)}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | Terminal Type | Contact Configuration ${ }^{(2)}$ | Catalog Number |
|  | Screw | NO | M22-K10 |
|  |  | NO, early-make | M22-K10P |
|  |  | NC | M22-K01 |
|  |  | NC, late-break | M22-K01D |
| M22-FK01 | Spring-cage | NO | M22-CK10 |
|  |  | NC | M22-CK01 |
|  |  | NC, late-break | M22-CK01D |
|  |  | 2NO | M22-CK20 |
|  |  | 2NC | M22-CK02 |
|  |  | NO-NC | M22-CK11 |
|  |  | NC | M22-FK01 ${ }^{(3)}$ |
|  |  | NO | M22-FK10 ${ }^{(3)}$ |
| M22-ES-MS1 | Extra Keys |  |  |
|  | Key Code |  | Catalog Number |
|  | MS1 |  | M22-ES-MS1 |
|  | MS2 |  | M22-ES-MS2 |
|  | MS3 |  | M22-ES-MS3 |
|  | MS4 |  | M22-ES-MS4 |
|  | MS5 |  | M22-ES-MS5 |
|  | MS6 |  | M22-ES-MS6 |
|  | MS7 |  | M22-ES-MS7 |
|  | MS8 |  | M22-ES-MS8 |


|  | Accessories <br> Description |
| :--- | :--- |
| Plunger bridge ${ }^{(4)}$ |  |
|  |  |
| M22-XW |  |

## Pushbuttons and Indicating Lights

## 22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Mushroom Head Pushbuttons

## Product Description

Eaton's M22 mushroom head operators are a durable and unique way to include standard pushbutton functionality. Like the standard pushbutton line, the maintained pushbuttons are field convertible to momentary. They also offer laser engraving and a robust five million mechanical operations on the standard momentary operator. As with all operators, they can be ordered as a ready to install complete device or as modular components.

## Features

- Field convertible from maintained to momentary (available on maintained pushbuttons only)
- Customizable laser engraving on all buttons
- More than five million mechanical operations on momentary and one million on maintained pushbuttons
- Modular construction makes assembly fast and simplifies stocking of components and complete devices
- Capable of communicating via ASi protocol with ASi adapter modules

Protection Type

- IP67, IP69K
- NEMA 4X, 13


## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

## Mushroom Head Pushbuttons



## Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons-M22

## 1

## Product Selection

Mushroom Head Pushbuttons, Momentary ${ }^{(1)}$

| M22-DP-R-K01 | Complete Devices |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Button Color | Contact Block Configuration | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
|  | Red | NC | M22-DP-R-K01 | M22S-DP-R-K01 | M22M-DP-R-K01 |
|  |  | 2NC | M22-DP-R-K02 | M22S-DP-R-K02 | M22M-DP-R-K02 |
|  |  | 1NO-2NC | M22-DP-R-K12 | M22S-DP-R-K12 | M22M-DP-R-K12 |
| M22S-DP-R-K01 |  | 1NO-1NC | M22-DP-R-K11 | M22S-DP-R-K11 | M22M-DP-R-K11 |

M22M-DP-R-K01


M22-DP-G
Operators Only ${ }^{(2)}$


M22S-DP-G


| Button Color | Silver Bezel <br> Catalog Number | Black Bezel <br> Catalog Number | Metal Bezel <br> Catalog Number |
| :--- | :--- | :--- | :--- |
| Black | M22-DP-S | M22S-DP-S | M22M-DP-S |
| Red | M22-DP-R | M22S-DP-R | M22M-DP-R |
| Green | M22-DP-G | M22S-DP-G | M22M-DP-G |
| Yellow | M22-DP-Y | M22S-DP-Y | M22M-DP-Y |

M22M-DP-G


## Notes

(1) 35 mm diameter mushroom head button.
(2) Includes contact block mounting adapter. $\Theta$

Non-Illuminated Mushroom Head Pushbuttons, Momentary ${ }^{\text {( }}$


Components


| 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 |
|  | (0) | M22-XDP-S-X0 |
|  | (1) | M22-XDP-S-X1 |
|  | $\oplus$ | M22-XDP-S-X4 |
|  | $\bigcirc$ | M22-XDP-S-X5 |
|  | (1) | 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 |
|  | ( ${ }^{\text {a }}$ | 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 |
|  | (0) | 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-K10 | Contact Blocks ${ }^{4}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | Terminal Type | Contact <br> Configuration | Catalog Number |
|  | Screw | NO | M22-K10 |
|  |  | NO, early-make | M22-K10P |
|  |  | NC | M22-K01 |
|  |  | NC, late-break | M22-K01D |
|  | Spring-cage | NO | M22-CK10 |
| M22-FK01 |  | NC | M22-CK01 |
|  |  | NC, late-break | M22-CK01D |
|  |  | 2NO | M22-CK20 |
|  |  | 2NC | M22-CK02 |
|  |  | NO-NC | M22-CK11 |
|  |  | NC | M22-FK01 ${ }^{\text {6 }}$ |
|  |  | NO | M22-FK10 ${ }^{\text {6 }}$ |

## 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 Pages V7-T1-123 to V7-T1-130) into the Order Notes. For example, M22-XDP-S-ETCH; Order Notes: Mark with symbol X91, Line item \#_.
${ }^{4}$ For complete listing of available contact blocks, see Accessories, Pages V7-T1-105 to V7-T1-110.
${ }^{(5)}$ All NC contact blocks are positively driven contact. $\Theta$
(6) Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

Pushbuttons and Indicating Lights
22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Product Selection

Non-Illuminated Mushroom Head Pushbuttons, Maintained ${ }^{\text {© }}$

| M22-DRP-R-K01 | Complete Devices |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Button Color | Contact Block Configuration ${ }^{(3)}$ | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
|  | Red | NC | M22-DRP-R-K01 | M22S-DRP-R-K01 | M22M-DRP-R-K01 |
|  |  | 2NC | M22-DRP-R-K02 | M22S-DRP-R-K02 | M22M-DRP-R-K02 |
|  |  | 1NO-2NC | M22-DRP-R-K12 | M22S-DRP-R-K12 | M22M-DRP-R-K12 |
| M22S-DRP-R-K01 |  | 1NO-1NC | M22-DRP-R-K11 | M22S-DRP-R-K11 | M22M-DRP-R-K11 |



M22M-DRP-R-K01


M22S-DRP-G
Operators Only


| Button Color | Silver Bezel <br> Catalog Number | Black Bezel <br> Catalog Number | Metal Bezel <br> Catalog Number |
| :--- | :--- | :--- | :--- |
| Black | M22-DRP-S | M22S-DRP-S | M22M-DRP-S |
| Red | M22-DRP-R | M22S-DRP-R | M22M-DRP-R |
| Green | M22-DRP-G | M22S-DRP-G | M22M-DRP-G |
| Yellow | M22-DRP-Y | M22S-DRP-Y | M22M-DRP-Y |

## Notes

(1) 35 mm diameter mushroom head button.
${ }^{(2)}$ 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.
${ }^{(3)}$ All NC contact blocks are positively driven contact. $\Theta$


Note: This pilot device features a selectable function switch that enables the device to be set to either maintained or momentary operation.



Components M22-XDP-G

| Mushroom Head Plates ${ }^{(3)}$ |  |  |
| :---: | :---: | :---: |
| Color | Inscription | Catalog Number |
| Black | - | M22-XDP-S ${ }^{4}$ |
|  | Custom | M22-XDP-S-ETCH ${ }^{\text { }}$ |
|  | 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 |
|  | $\oplus$ | M22-XDP-S-X4 |
|  | $\bigcirc$ | M22-XDP-S-X5 |
|  | (1) | M22-XDP-S-X7 |
| Red | - | M22-XDP-R ${ }^{(4)}$ |
|  | Custom | M22-XDP-R-ETCH ${ }^{\text { }}$ |
|  | STOP | M22-XDP-R-GB0 |
|  | OFF | M22-XDP-R-GB5 |
|  | ( ${ }^{\text {a }}$ | M22-XDP-R-X0 |
| Green | - | M22-XDP-G ${ }^{4}$ |
|  | Custom | M22-XDP-G-ETCH ${ }^{(5)}$ |
|  | START | M22-XDP-G-GB1 |
|  | ON | M22-XDP-G-GB6 |
|  | ( | M22-XDP-G-X0 |
|  | (1) | M22-XDP-G-X1 |
| White | - | M22-XDP-W ${ }^{4}$ |
|  | Custom | M22-XDP-W-ETCH ${ }^{\text {® }}$ |
| Yellow | - | M22-XDP-Y ${ }^{4}$ |
|  | Custom | M22-XDP-Y-ETCH ${ }^{(5)}$ |



| $\overline{\text { M22-K10 }}$ | Contact Blocks ${ }^{(3)}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | Terminal Type | Contact <br> Configuration ${ }^{6}$ | Catalog Number |
|  | Screw | N0 | M22-K10 |
|  |  | NO, early-make | M22-K10P |
|  |  | NC | M22-K01 |
|  |  | NC, late-break | M22-K01D |
|  | Spring-cage | NO | M22-CK10 |
| M22-FK01 |  | NC | M22-CK01 |
| + |  | NC, late-break | M22-CK01D |
|  |  | 2NO | M22-CK20 |
|  |  | 2NC | M22-CK02 |
|  |  | NO-NC | M22-CK11 |
|  |  | NC | M22-FK01 ${ }^{\text {(7) }}$ |
|  |  | NO | M22-FK10 ${ }^{(7)}$ |

## Notes

(1) 35 mm diameter mushroom head button.
(2) 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.
(3) For complete listing of available button plates and contact blocks, see Accessories, Pages V7-T1-105 to V7-T1-110.
${ }^{4}$ Minimum order quantity of (10).
(5) When ordering, specify inscription per catalog number suffix from the Symbols Library (see Pages V7-T1-123 to V7-T1-130) into the Order Notes. For example, M22-XDP-S-ETCH; Order Notes: Mark with symbol X91, Line item \#_.
(6) All NC contact blocks are positively driven contact. $\Theta$
(7) Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

## Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Double Pushbuttons

## Product Description

Eaton's M22 double pushbutton line is perfect for applications such as motor and pump starting, as well as anytime space is limited. In addition to the two buttons that fit in one 22 mm hole is the integrated white indicating light between them. These three operators allow for multiple functions to occur in a single space. Green/red, black/white and black/black color options along with laser engraving allow for further custom applications.

## Features

- Flush and extended, as well as color options allow for the perfect combination button
- Integrated indicating light adds even more functionality in one standard 22 mm hole
- Customizable laser engraving on all buttons
- LED offering only for improved brightness quality and up to 100,000 hours of operation
- More than 200,000 mechanical operations
- Capable of communicating via ASi protocol with ASi adapter modules


## Protection Type

- IP66
- NEMA 4X, 13


## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

## Double Pushbuttons



## Product Selection

## Components

## Double Pushbuttons, Extended Pushbuttons and Center Light, Momentary

|  | Operators Only ${ }^{(1)}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bezel | Color Top | Bottom | Inscription Top | Bottom | Catalog Number |
| M22-DDL-GR-GB1-GB0 | Silver | Green | Red | - | - | M22-DDL-GR |
|  |  |  |  | Custom | Custom | M22-DDL-GR-ETCH ${ }^{(2)}$ |
|  |  |  |  | (1) | ( ${ }^{\text {a }}$ | M22-DDL-GR-X1-X0 |
|  |  |  |  | START | STOP | M22-DDL-GR-GB1-GB0 |
|  |  | White | Black | - | - | M22-DDL-WS |
|  |  |  |  | Custom | Custom | M22-DDL-WS-ETCH ${ }^{(2)}$ |
|  |  |  |  | (1) | ( ${ }^{\text {a }}$ | 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 |
|  |  |  |  | ( ${ }^{\text {¢ }}$ | (1) | M22-DDL-S-X7-X7 |
| M22S-DDL-GR-X1-X0 | Black | Green | Red | - | - | M22S-DDL-GR |
|  |  |  |  | Custom | Custom | M22S-DDL-GR-ETCH ${ }^{(2)}$ |
|  |  |  |  | (1) | (0) | M22S-DDL-GR-X1-X0 |
|  |  |  |  | START | STOP | M22S-DDL-GR-GB1-GB0 |
|  |  | White | Black | - | - | M22S-DDL-WS |
|  |  |  |  | Custom | Custom | M22S-DDL-WS-ETCH ${ }^{(2)}$ |
|  |  |  |  | (1) | ( ${ }^{\text {a }}$ | 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 |
|  |  |  |  | (1) | (1) | 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 Pages V7-T1-123 to V7-T1-130) into the Order Notes. For example, M22-DDL-S-ETCH; Order Notes: Mark with symbol X91, Line item \#_.

Pushbuttons and Indicating Lights
22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Double Pushbuttons, Flush Top Pushbuttons and Center Light, Momentary

Operators Only ${ }^{(1)}$

|  | Bezel | $\begin{aligned} & \text { Color } \\ & \text { Top } \end{aligned}$ | Bottom | Inscription Top | 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 | (1) | ( | M22-DDLF-GR-X1-X0 |
|  |  | White | Black | (1) | ( | 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 | (1) | © | M22S-DDLF-GR-X1-X0 |
|  |  | White | Black | (1) | ( | M22S-DDLF-WS-X1-X0 |

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

|  | Operators Only ${ }^{(1)}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bezel | $\begin{aligned} & \text { Color } \\ & \text { Top } \end{aligned}$ | Bottom | Inscription Top | 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 | (1) | ( ${ }^{\text {( }}$ | M22-DDLM-GR-X1-X0 |
|  |  | White | Black | (1) | (0) | 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 | (1) | ( | M22S-DDLM-GR-X1-X0 |
|  |  | White | Black | (1) | ( | 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 Pages V7-T1-123 to V7-T1-130) into the Order Notes. For example, M22-DDLM-GR-ETCH; Order Notes: Mark with symbol X91, Line item \#_.

## Double Pushbuttons



Pushbuttons and Indicating Lights
22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Four-Way Pushbuttons

## Product Description

Eaton's M22 four-way pushbutton is a truly unique offering. A four-way pushbutton offers four different buttons mounted in a single 22 mm hole. This is ideal not only for an application with limited space, but also directional applications (when ordered with the four arrow engraving option). Another unique option is the interlocked version, which prevents two opposite buttons from being actuated at the same time.

## Features

- Four buttons in one operator allows for increased functionality in limited space
- Optional interlocking option, which prevents two buttons from being actuated at the same time
- Customizable laser engraving on all buttons for directional or other applications
- Capable of communicating via ASi protocol with ASi adapter modules


## Protection Type

- IP66


## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

## Four-Way Pushbuttons



## Product Selection

## Four-Way Pushbuttons, Momentary



## Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Joysticks

## Product Description

Eaton's M22 joystick line comes in a wide variety of options. From vertical and horizontal two-position switches to the maintained four-position, these operators fit a variety of applications. An additional option, two switch points, allows for eight isolated circuits to be actuated individually on a single operator.

## Features

- Available in four-position and two-position
- Two switch point option allows for two contacts in each direction (up to eight total contacts in one operator)
- Capable of communicating via ASi protocol with ASi adapter modules


## Protection Type

- IP66


## Product Selection

## Joysticks

## Components

| M22-WJ2H | Operators ${ }^{(1)}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Directions | Switching Position | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
|  | Two-position horizontal | Momentary | M22-WJ2H | M22S-WJ2H | M22M-WJ2H |
|  | Two switch points |  | M22-WJ2H-2P | M22S-WJ2H-2P | M22M-WJ2H-2P |
| M22M-WJ2H | Two-position horizontal | Maintained | M22-WRJ2H | M22S-WRJ2H | M22M-WRJ2H |
|  | Two-position vertical | Momentary | M22-WJ2V | M22S-WJ2V | M22M-WJ2V |
|  | Two switch points |  | M22-WJ2V-2P | M22S-WJ2V-2P | M22M-WJ2V-2P |
|  | Two-position vertical | Maintained | M22-WRJ2V | M22S-WRJ2V | M22M-WRJ2V |
|  | Four-position | Momentary | M22-WJ4 | M22S-WJ4 | M22M-WJ4 |
|  | Two switch points |  | M22-WJ4-2P | M22S-WJ4-2P | M22M-WJ4-2P |
|  | Four-position | Maintained | M22-WRJ4 | M22S-WRJ4 | M22M-WRJ4 |

Note
(1) Includes contact block mounting adapter.

## Joysticks



| Terminal Type | Contact <br> Configuration | Catalog Number |
| :---: | :---: | :---: |
| Screw | NO | M22-K10 |
|  | NO, early-make | M22-K10P |
|  | NC | M22-K01 |
|  | NC, late-break | M22-K01D |
| Spring-cage | NO | M22-CK10 |
|  | NC | M22-CK01 |
|  | NC, late-break | M22-CK01D |
|  | 2NO | M22-CK20 |
|  | 2NC | M22-CK02 |
|  | NO-NC | M22-CK11 |
|  | NC | M22-FK01 ${ }^{4}$ |
|  | NO | M22-FK10 ${ }^{4}$ |

## Notes

(1) Includes contact block mounting adapter.
(2) For complete listing of available contact blocks, see Accessories, Pages V7-T1-105 to V7-T1-110.
${ }^{(3)}$ All NC contact blocks are positively driven contact. $\Theta$
(4) Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

## Joystick with Double Contact

The joystick allows the control of up to four directions of movement on machines. Different variants of the joystick have two/fourpositions and other variants have two settings for each position. This allows, for example, two-
 speed settings for each direction. For this application, a standard normally open contact and an early-make contact are fitted in series. Momentary contact and latching contact versions are available.


Pushbuttons and Indicating Lights
22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Potentiometers

## Product Description

Eaton's M22 potentiometers allow for a ready to use operator in a conveniently sized package. M22 potentiometers include the resistive element, instead of just a knob, and a built in legend surrounding the knob. The slim design, with integrated contacts and the range of resistances available, allows for a quick install.

## Features

- Scale markings on the knob allows the operator to be used without an additional legend plate
- Oversized knob option available
- Slim design allows for space saving and simple wiring and installation


## Protection Type

- IP66
- NEMA 4X, 13


## Product Selection

## Potentiometers



| Complete Devices |  |  |
| :---: | :---: | :---: |
| Bezel | Resistance <br> 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 |
| Metal | 1 | M22M-R1K |
|  | 4.7 | M22M-R4K7 |
|  | 10 | M22M-R10K |
|  | 47 | M22M-R47K |
|  | 100 | M22M-R100K |
|  | 470 | M22M-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 |
| Metal | 1 | M22M-R1K-RH |
|  | 4.7 | M22M-R4K7-RH |
|  | 10 | M22M-R10K-RH |
|  | 47 | M22M-R47K-RH |
|  | 100 | M22M-R100K-RH |
|  | 470 | M22M-R470K-RH |

## Acoustic Devices

## Product Description

Eaton's M22 acoustic devices are a simple and aesthetic way to add a buzzer or indicator to any application. Fitting in the same 22 mm hole, these devices can be ordered in continuous or pulsed tone and with or without the IP40 enclosure.

## Features

- Continuous or pulsed tone available
- $83 \mathrm{~dB} / 10 \mathrm{~cm}$ decibel rating
- Slim design allows for space saving and simple wiring and installation


## Protection Type

- IP40
- NEMA 12


## Product Selection

## Acoustic Devices



| M22-XAM | Buzzers |  |  |
| :---: | :---: | :---: | :---: |
|  | Description | Decibel Rating | Catalog Number |
|  | Indicator without buzzer, black | $\begin{aligned} & 83 \mathrm{~dB} / \\ & 10 \mathrm{~cm} \end{aligned}$ | M22-AMC |
|  | Buzzer only, continuous tone, $18-30 \mathrm{Vdc}$ | $\begin{aligned} & 83 \mathrm{~dB} / \\ & 10 \mathrm{~cm} \end{aligned}$ | M22-XAM |
|  | Buzzer only, pulsed tone, $18-30 \mathrm{Vdc}$ | $\begin{aligned} & 83 \mathrm{~dB} / \\ & 10 \mathrm{~cm} \end{aligned}$ | M22-XAMP |

## Through-the-Door Operators

## Product Description

Eaton's M22 through-the-door operators use the same familiar flush pushbutton look with the addition of a cut-to-length rod that allows for a simple reset operator.

## Features

- Customizable laser engraving on all buttons
- More than five million mechanical operations
- Pushrod can be cut to length


## Protection Type

- IP67, IP69K
- NEMA 4X, 13


## Product Selection

Through-the-Door Operators ${ }^{\text {© }}$

| M22-DZ-B-X6 | Complete Devices |  |  |
| :---: | :---: | :---: | :---: |
|  | Color | Inscription | Catalog Number |
|  | Blue | - | M22-DZ-B |
|  |  | RESET | M22-DZ-B-GB14 |
|  |  | (B) | M22-DZ-B-X6 |
|  | Red | - | M22-DZ-R |
|  |  | © | M22-DZ-R-X0 |
|  |  | STOP | M22-DZ-R-GB0 |


| M22-DZ-X | Buttonless Operator |  |  |
| :---: | :---: | :---: | :---: |
|  | Silver |  | M22-DZ-X |
|  | Metal |  | M22M-DZ-X |
| M22-XD-B | Button Plates ${ }^{(2)}$ |  |  |
|  | Color | Inscription | Catalog Number |
|  | Blue | - | M22-XD-B ${ }^{(3)}$ |
|  |  | RESET | M22-XD-B-GB14 |
|  |  | ( ${ }^{\text {a }}$ | M22-XD-B-X6 |
|  | Red | - | M22-XD-R ${ }^{(3)}$ |
|  |  | () | M22-XD-R-X0 |
|  |  | STOP | M22-XD-R-GB0 |

## Bulkhead Interfaces

## Product Description

Eaton's M22 bulkhead interfaces are another unique offering in the M22 line. This device allows for a secure connection to any USB or RJ45 connected device within an enclosure or panel. With an IP65 rating when closed, these devices are not only convenient, but robust and reliable.

## Features

- Convenient and safe way to make a data connection to inside of the panel without opening the panel door


## Protection Type

- IP65 when closed, IP20 when connected


## Product Selection

## Bulkhead Interfaces



RJ45 Socket ${ }^{\text {© }}$
Used for RJ45 Ethernet connection IP65 when closed, IP20 when connected.

| Bezel | Catalog Number |
| :--- | :--- |
| Silver | M22-RJ45-SA |

[^2]
## ASi Adapter Modules

## Product Description

Eaton's M22 ASi adapter modules add functionality to every operator in the M22 line. These devices can be connected to any operator that uses contact blocks or LED units. The simple snapon design allows for a quick integration of an entire application of operators to a communicating network.

## Features

- Allows compatible operators to communicate on an ASi network
- Not only can the status of a contact block be read, but LEDs can be illuminated by an ASi adapter
- ASi adapters simply clip on to the back of the contact blocks and LEDs
- Insulation displacement connectors allow for installation of adapters without any tools
- Two integrated LEDs indicate status of communications


## Protection Type

- IP20


## Product Selection

## ASi Adapter Modules

| M22-ASI | Complete Devices <br> Description | Catalog Number |
| :--- | :--- | :--- | :--- |

## Palm Switches



## Product Description

Eaton's M22 palm switches are an oversized button that mount directly to an enclosure base. This allows for a standalone button that can be mounted anywhere. The enclosure uses basemounted contact blocks, which allows for quick wiring and mounting. The palm switches come in momentary or maintained versions. As with other M22 operators, the palm switches are available as complete devices, including the enclosure and contact blocks or as modular components.

## Features

- Oversized operator in black, red and yellow color options
- Button integrated directly into an enclosure
- Base mounting contact blocks allow for simple wiring and installation
- More than one million mechanical operations on momentary and 100,000 on maintained operators


## Protection Type

- IP67, IP69K
- NEMA 4X, 13


## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

## Palm Switches, Type 4X/13 Enclosure



## Product Selection

## Complete Devices

|  | Operator, Base and Contact Blocks ${ }^{(1)}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | Button Color | Contact Block Configuration | Catalog Number |
| FAK-S-KC11-I | Momentary |  |  |
|  | Black | 1NO-1NC | FAK-S-KC11-I |
|  | Red | 1NO-1NC | FAK-R-KC11-I |
|  | Yellow | 1NO-1NC | FAK-Y-KC11-I |
| FAK-R-V-KC01-IY | 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 |
| Notes |  |  |  |
| (1) For complete listing of available contact blocks, see Accessories, Pages V7-T1-105 to V7-T1-110. |  |  |  |
| (2) All NC contact blocks are positively driven contact. $\Theta$ |  |  |  |

## Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Components

| FAK-S | Operat <br> Type | Button Color | Catalog Number |
| :---: | :---: | :---: | :---: |
|  | Momentary | Black | FAK-S |
|  |  | Red | FAK-R |
|  |  | Yellow | FAK-Y |
|  | Maintained | Red | FAK-R-V-Y |

FAK-IU $\quad$| Palm Switch Enclosure Base |
| :--- |
| Catalog Number |

| M22-K10 | Contact Blocks ${ }^{(1)}$ <br> Terminal <br> Type | Contact <br> Configuration ${ }^{(2)}$ | Catalog Number |
| :--- | :--- | :--- | :--- | :--- |

## Notes

(1) For complete listing of available contact blocks, see Accessories, Pages V7-T1-105 to V7-T1-110
(2) All NC contact blocks are positively driven contact. $\Theta$
(3) Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.
22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Accessories



## Note

[^3]
## Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons-M22


| M22-LED-W |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |


| M22-XLED60 | LED Resistor and Test Elements |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Terminal Type | Mounting Location | Element Type | Voltage | Catalog Number |
|  | Screw | Front | Resistor ${ }^{(2)(3)}$ | 42-60 Vac/Vdc | M22-XLED60 |
|  |  |  |  | 220 Vdc | M22-XLED220 |
|  |  |  | Test | 12-240 Vac/Vdc | M22-XLED-T |
|  |  |  |  | 85-264 Vac | M22-XLED230-T |

Notes
(1) Please see color input key on Page V7-T1-108.
(2) Resistor units to be used with 12-30V light units.
${ }^{(3)}$ Refer to IL04716002E for use of resistor elements in series for higher DC voltage.

Pushbuttons and Indicating Lights
22.5 mm RMQ-Titan Modular Pushbuttons-M22

Multi-Color LED Input Guide

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | X1 | X2 | X3 | X4 |
| Catalog Number |  | +R | +G | +B | GND |
| M22-FLED-RG | Red | $\square$ | - | - | $\square$ |
|  | Green | - | $\square$ | - | $\square$ |
|  | Yellow | $\square$ | $\square$ | - | ■ |
| M22-FLED-RGB | Red | $\square$ | - | - | $\square$ |
|  | Green | - | $\square$ | - | $\square$ |
|  | Yellow | ■ | $\square$ | - | ■ |
|  | White | ■ | $\square$ | $\square$ | $\square$ |
|  | Blue | - | - | $\square$ | $\square$ |
|  | Violet | $\square$ | - | $\square$ | $\square$ |
|  | Turquoise | - | $\square$ | $\square$ | $\square$ |


|  | Description | Inscription | Catalog Number |
| :---: | :---: | :---: | :---: |
| M22S-ST-X | 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-GB0STOP | Legend plate insert | - | M22-XST |
|  |  | Custom | M22-XST-ETCH ${ }^{(2)}$ |
|  |  | 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 0 AUTO | M22-XST-D12 |
|  |  | 1 | M22-XST-X52 |
|  |  | 2 | M22-XST-X53 |
|  |  | 01 | M22-XST-X88 |
|  |  | $0-1$ | M22-XST-X89 |
|  |  | 1011 | M22-XST-X93 |

## Notes

(1) Legend plates are IP66 and NEMA 4X/13.
${ }^{(2)}$ When ordering, specify inscription per catalog number suffix from the Symbols Library (see Pages V7-T1-123 to V7-T1-130) 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, Pages V7-T1-123 to V7-T1-130, identified by GB15 suffix.
4. Indicate on the order form in the order notes-suffix GB15, line item \# $\qquad$


## Notes

(1) Legend plates are IP66 and NEMA 4X/13.
(2) When ordering, specify inscription per catalog number suffix from the Symbols Library (see Pages V7-T1-123 to V7-T1-130) into the Order Notes. For example, M22-XD-S-ETCH; Order Notes: Mark with symbol X91, Line item \#_.

Pushbuttons and Indicating Lights
22.5 mm RMQ-Titan Modular Pushbuttons-M22


Surface Mounting Enclosures ${ }^{\circledR}$

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



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.

| M22-H1 | Shrouds, Plastic <br> Description | Rating | Catalog Number |
| :--- | :--- | :--- | :--- |
|  | One-element IP55 M22-H1  <br> Two-element IP55 M22-H2  <br> Three-element IP55 M22-H3  <br> Four-element IP40 M22-H4  <br>  Five-element IP40 M22-H5 <br> Six-element IP40 M22-H6  <br> Mounting plate - M22-XE5  <br>  Plaster keys for <br> flush mounting - M22-UPE |  |  |



## Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons-M22

## Coding Adapter Guide

## Selector Switches



Two-Position Selector Switch

| Top (B) | Bottom (A) | Catalog Number | Function |
| :--- | :--- | :--- | :--- |
|  | M22(S)-W(L)(K) | Momentary |  |
| $\square \square$ |  |  |  |
|  |  | M22(S)-WR(L)(K) | Maintained |

Three-Position Selector Switch

| Top (B) | Bottom (A) | Catalog Number | Function <br> Left | Right |
| :--- | :--- | :--- | :--- | :--- |
| $\square$ | $\square$ | M22(S)-W(L)(K)3 | Momentary | Momentary |
|  |  | M22(S)-WR(L)(K)3 | Maintained | Maintained |
|  |  | M22(S)-WR(L)(K)3-1 | Maintained | Momentary |
|  |  | M22(S)-WR(L)(K)3-2 | Momentary | Maintained |
|  |  |  |  |  |

Two-Position Key-Operated Selector Switch

| Top (B) | Bottom (A) | Catalog Number | Center <br> Key Withdraw | Right <br> Function | Key Withdraw |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | M22(S)-WS | Yes | Momentary | No |  |
|  | M22(S)-WRS | Yes | Maintained | Yes |  |
|  |  | M22(S)-WRS-A1 | Yes | Maintained | No |
|  |  |  |  |  |  |

Three-Position Key-Operated Selector Switch

| Top (B) | Bottom (A) | Catalog Number | Left Function | Key Withdraw | Center Key Withdraw | Right Function | Key Withdraw |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1]$ | $\square$ | M22(S)-WS3 | Momentary | No | Yes | Momentary | No |
|  |  | M22(S)-WRS3 | Maintained | Yes | Yes | Maintained | Yes |
|  |  | M22(S)-WRS3-A1 | Maintained | No | Yes | Maintained | No |
|  |  | M22(S)-WRS3-A2 | Maintained | Yes | Yes | Maintained | No |
|  |  | M22(S)-WRS3-A3 | Maintained | No | Yes | Maintained | Yes |
| $\square \square$ |  | M22(S)-WRS3-A4 | Maintained | Yes | Yes | Momentary | No |
| [1] |  | M22(S)-WRS3-A5 | Maintained | No | Yes | Momentary | No |
|  | $\square$ | M22(S)-WRS3-A6 | Momentary | No | Yes | Maintained | Yes |
|  | $\square \square$ | M22(S)-WRS3-A7 | Momentary | No | Yes | Maintained | No |

## Technical Data and Specifications

Pushbuttons, Indicating Lights, Selector Switches and Emergency-Stop Operators

| Description |  |  | Momentary Pushbuttons | Maintained Pushbuttons | Indicating Lights, <br> Buzzers and <br> Potentiometers | Emergency-Stop Operators | Selector <br> Switches | Key-Operated Operators | Double <br> Pushbuttons |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General |  |  |  |  |  |  |  |  |  |
| Standards |  |  | IEC/EN 60947 VDE 0660 UL \#E29184 | IEC/EN 60947 VDE 0660 UL \#E29184 | IEC/EN 60947 <br> VDE 0660 <br> UL \#E29184 | IEC/EN 60947 <br> VDE 0660 <br> UL \#340491 | IEC/EN 60947 VDE 0660 UL \#E29184 | IEC/EN 60947 <br> VDE 0660 <br> UL \#E29184 | IEC/EN 60947 VDE 0660 UL \#E29184 |
| Lifespan, mechanical | Operations | $\times 10^{6}$ | >5 | >1 | - | $>0.1$ | >0.1 | $>0.1$ | $>0.2$ |
| Operating frequency | Operations/h |  | $\geq 3600$ | $\geq 1800$ | - | $\geq 600$ | $\geq 2000$ | $\geq 100$ | $\geq 3600$ |
| Actuating force |  | n | $\geq 5$ | $\geq 5$ | - | $\geq 50$ | - | - | $\geq 5$ |
| Operating torque (screw terminals) |  | Nm | - | - | - | - | $\geq 0.3$ | $\geq 0.5$ | - |
| Protection Type |  |  |  |  |  |  |  |  |  |
| IP |  |  | IP67, IP69K | IP67, IP69K | Indicating lights: IP67, 69K <br> Buzzers: IP40 <br> Potentiometers: IP66 | IP67, IP69K | IP66 | IP66 | IP66 |
| UL type |  |  | 4X, 13 | 4X, 13 | Indicating lights: $4 \mathrm{X} / 13$ <br> Buzzers: 12 <br> Potentiometers: 4X/13 | 4X, 13 | 4X, 13 | 4X, 13 | 4X, 13 |
| Climatic proofing |  |  | Damp heat, co Damp heat, | nt, according to lo IEC 60068-2 | $60068-2-78$ |  |  |  |  |
| Ambient temperature, operating |  | $\begin{aligned} & {\stackrel{ }{ }{ }^{\circ} \mathrm{F}}^{(0 \mathrm{C}} \end{aligned}$ | $\begin{aligned} & -13 \text { to } 158 \\ & (-25 \text { to } 70) \end{aligned}$ | $\begin{aligned} & -13 \text { to } 158 \\ & (-25 \text { to } 70) \end{aligned}$ | $\begin{aligned} & -13 \text { to } 158 \\ & (-25 \text { to } 70) \end{aligned}$ | $\begin{aligned} & -13 \text { to } 158 \\ & (-25 \text { to } 70) \end{aligned}$ | $\begin{aligned} & -13 \text { to } 158 \\ & (-25 \text { to } 70) \end{aligned}$ | $\begin{aligned} & -13 \text { to } 158 \\ & (-25 \text { to } 70) \end{aligned}$ | $\begin{aligned} & -13 \text { to } 158 \\ & (-25 \text { to } 70) \end{aligned}$ |
| Mounting position |  |  | As required | As required | As required | As required | As required | As required | As required |
| Mechanical shock resistance to IEC 60068-2-27 shock duration 11 ms , half-sinusoidal |  | g | >30 | >30 | >30 | >50 | >30 | >30 | >30 |
| Terminal Capacities |  |  |  |  |  |  |  |  |  |
| Solid |  | AWG | - | - | 20-16 | - | - | - | - |
|  |  | $\mathrm{mm}^{2}$ |  | - | 0.5-1.5 | - |  | - |  |
| Stranded |  | AWG | - | - | 20-16 | - | - | - | - |
|  |  | $\mathrm{mm}^{2}$ |  | - | 0.5-1.5 | - |  | - |  |
| Contacts |  |  |  |  |  |  |  |  |  |
| Rated impulse withstand voltage | $\mathrm{U}_{\text {imp }}$ | Vac | - | - | 4000 | - | - | - | - |
| Rated insulation voltage | $U_{i}$ | V | - | - | 2500 | - | - | - | - |
| Overvoltage category/ pollution degree |  |  | - | - | III/3 | - | - | - | - |

## Pushbuttons and Indicating Lights

## 22.5 mm RMQ-Titan Modular Pushbuttons-M22

Contact Blocks and Light Units

| Description |  |  | Contact Blocks | LED <br> Light Units |
| :---: | :---: | :---: | :---: | :---: |
| General |  |  |  |  |
| Standards |  |  | IEC/EN 60947 <br> VDE 0660 <br> UL \#E29184 | IEC/EN 60947 VDE 0660 UL \#E29184 |
| Lifespan, mechanical | Operations | $\times 10^{6}$ | >5 | - |
| Operating frequency | Operations/h |  | $\geq 3600$ | - |
| Actuating force |  | n | $\geq 5$ | - |
| Operating torque (screw terminals) |  | Nm | $\leq 0.8$ | - |
| Protection Type |  |  |  |  |
| IP |  |  | IP20 | IP20 |
| UL type |  |  | - | - |
| Climatic proofing |  |  | Damp heat, constant, according to IEC 60068-2-78 Damp heat, cyclical to IEC 60068-2-30 |  |
| Ambient temperature, operating |  | ${ }^{\circ} \mathrm{F}\left({ }^{\circ} \mathrm{C}\right)$ | -13 to 158 (-25 to 70) | -13 to 158 (-25 to 70) |
| Mounting position |  |  | As required | As required |
| Mechanical shock resistance to IEC 60068-2-27 shock duration 11 ms , half-sinusoidal |  | g | >30 | >30 |
| Terminal Capacities |  |  |  |  |
| Solid |  | AWG | 18-14 | 18-14 |
|  |  | $\mathrm{mm}^{2}$ | 0.75-2.5 | 0.75-2.5 |
| Stranded |  | AWG | 20-14 | 20-14 |
|  |  | $\mathrm{mm}^{2}$ | 0.5-2.5 | 0.5-2.5 |
| Contacts |  |  |  |  |
| Rated impulse withstand voltage | $\mathrm{U}_{\text {imp }}$ | Vac | 6000 | 6000 |
| Rated insulation voltage | $U_{i}$ | V | 500 | 500 |
| Overvoltage category/ pollution degree |  |  | III/3 | III/3 |
| NEMA contact ratings |  |  | A600, 0300 | - |
| Current draw |  |  | - | 5-15 mA |
| Control Circuit Reliability |  |  |  |  |
| at $24 \mathrm{Vdc} / 5 \mathrm{~mA}$ | $\mathrm{HF}_{\text {F }}$ | Fault probability | $<10^{-1},<1$ fault in $10^{7}$ operations | - |
| at $5 \mathrm{Vdc} / 1 \mathrm{~mA}$ | $\mathrm{H}_{\mathrm{F}}$ | Fault probability | $<5 \times 10^{-6},<1$ fault in $5 \times 10^{6}$ operations | - |
| Max. Short-Circuit Protective Device |  |  |  |  |
| Fuse | gG/gL | A | 10 | - |
| Switching Capacity |  |  |  |  |
| Rated Operational Current |  |  |  |  |
| AC-15 |  |  |  |  |
| 115 V | $\mathrm{I}_{\mathrm{e}}$ | A | 6 | - |
| 230 V | $\mathrm{I}_{\mathrm{e}}$ | A | 6 | - |
| 400 V | $\mathrm{I}_{\mathrm{e}}$ | A | 4 | - |
| 500 V | $\mathrm{I}_{\mathrm{e}}$ | A | 2 | - |
| DC-13 |  |  |  |  |
| 24 V | $\mathrm{I}_{\mathrm{e}}$ | A | 3 | - |
| 42 V | $\mathrm{I}_{\mathrm{e}}$ | A | 1.7 | - |
| 60 V | $\mathrm{I}_{\mathrm{e}}$ | A | 1.2 | - |
| 110 V | $\mathrm{I}_{\mathrm{e}}$ | A | 0.6 | - |
| 220 V | $\mathrm{I}_{\mathrm{e}}$ | A | 0.3 | - |
| Lifespan, Electrical |  |  |  |  |
| AC-15 |  |  |  |  |
| 230V/0.5A | Operations | $\times 10^{6}$ | 1.6 | - |
| 230V/1.0A | Operations | $\times 10^{6}$ | 1 | - |
| 230V/3.0A | Operations | $\times 10^{6}$ | 0.7 | - |
| DV-13 |  |  |  |  |
| $12 \mathrm{~V} / 2.8 \mathrm{~A}$ | Operations | $\times 10^{6}$ | 1.2 | - |

Contact Element Note: $>200 \mathrm{Vac} / 60 \mathrm{~Hz}:-25 / 55^{\circ} \mathrm{C}$

| Palm Switches |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Description |  |  | Momentary | Maintained | FAK-R-V-KC11-I |
| General |  |  |  |  |  |
| Standards |  |  | $\begin{aligned} & \text { IEC/EN } 60947 \\ & \text { VDE } 0660 \end{aligned}$ | $\text { IEC/EN } 60947$ $\text { VDE } 0660$ | $\begin{aligned} & \text { IEC/EN } 60947 \\ & \text { VDE } 0660 \end{aligned}$ |
| Lifespan, mechanical | Operations | $\times 10^{6}$ | >1 | $>0.1$ | $>0.1$ |
| Operating frequency | Operations/h |  | $\geq 3600$ | $\geq 600$ | $\geq 600$ |
| Actuating force |  | n | 20-40 | 40-60 | 15-25 |
| Operating torque |  | Nm | - | - | - |
| Degree of protection, IEC/EN 60529 |  | IP | IP67, IP69K | IP67, IP69K | IP65 |
|  |  | UL Type | 4X, 13 | 4X, 13 | 4X, 13 |
| Climatic proofing |  |  | Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 |  |  |
| Ambient temperature, operating |  | ${ }^{\circ} \mathrm{F}\left({ }^{\circ} \mathrm{C}\right)$ | -73 to 104 (-25 | -73 to $104(-25$ to 40) | -73 to $104(-25$ to 40) |
| Mounting position |  |  | As required |  |  |
| Mechanical shock resistance to IEC 60068-2-27 shock duration 11 ms , half-sinusoidal |  | g | >15 | >15 | >15 |
| ASi Adapter Modules |  |  |  |  |  |
| Description |  | M22-ASI |  | M22-ASI-C |  |
| General |  |  |  |  |  |
| Standards |  | IEC/EN 60947, DIN EN 50295 |  | IEC/EN 60947, DIN EN 50295 |  |
| Radio interference suppression |  | $\begin{aligned} & \text { EN } 55011, \\ & \text { EN } 55022 \end{aligned}$ |  | $\begin{aligned} & \hline \text { EN 55011, } \\ & \text { EN } 55022 \end{aligned}$ |  |
| Limit value class |  | - |  | - |  |
| Protection type |  | IP20 |  | IPOO |  |
| Climatic proofing |  | Damp heat, constant, to IEC 60068-2-78, cyclical, to IEC 60068-2-30 |  |  |  |
| Ambient temperature, operating | ${ }^{\circ} \mathrm{F}\left({ }^{\circ} \mathrm{C}\right)$ | -13 to 131 (-25 to 55) |  | -13 to 131 (-25 to 55) |  |
| Shock resistance shock duration 11 ms | g | >30 |  | >30 |  |
| Vibration to IEC 60068-2-27 (amplitude 1 mm ) | Hz | - |  | - |  |
| Dimensions | mm | - |  | - |  |
| Weight | kg | - |  | - |  |
| Mounting |  | Front mounting |  | Front mounting |  |
| Mounting position |  | As required |  | As required |  |
| Power Supply |  |  |  |  |  |
| Rated voltage to AS-interface specification | Vdc | 26.5-31.6 |  | 26.5-31.6 |  |
| Connection technique |  | Yellow plug-in terminal as insulation piercing terminal |  | Two cables onboard |  |
| Power supply |  | Completely from the AS-interface cable |  |  |  |
| Addressing |  | Via connection to AS-interface cable |  |  |  |
| Total power consumption of the AS-interface | mA | $\geq 40$ |  | $\geq 40$ |  |
| AS-interface |  | - |  | - |  |
| Rated operational current at full load | mA | - |  | - |  |
| Rated operational current when idle (no I, 0 set) | mA | - |  | - |  |
| Status LEDs |  | POWER AS-interface cable: green LED on the rear side of the element |  | POWER AS-interface cable: green LED on the board |  |
|  |  | ERROR AS-interface, AS-interface master failure: red LED on the rear side of the element |  | ERROR AS-interface, AS-interface master failure: red LED on the board |  |

Pushbuttons and Indicating Lights
22.5 mm RMQ-Titan Modular Pushbuttons-M22

| Description |  | M22-ASI-S | M22-ASI-CS |
| :---: | :---: | :---: | :---: |
| Inputs |  |  |  |
| Inputs, protected against short-circuit | Number | Two (normally 22V/5 mA) | Two (normally 22V/5 mA) |
| Voltage range | Vdc | - | - |
| Rated current per input | mA | - | - |
| High signal level | V | - | - |
| Low signal | mA | - | - |
| Length of connecting cables | cm | - | - |
| Outputs |  |  |  |
| Outputs, protected against short-circuit | Number | One (normally 19V/8 mA) | One (normally 19V/8 mA) |
| Voltage range | Vdc | - | - |
| Max. Current Carrying Capacity |  |  |  |
| All outputs |  | - | - |
| $\Sigma$ three external outputs |  | - | - |
| Length of connecting cables | cm | - | - |
| Profile |  | S-3.A.E | S-3.A.E |
| Specification |  | 2.1 | 2.1 |
| Addresses | Number | 62 | 62 |
| Emergency-Stop Circuits |  |  |  |
| Connection of the AS-interface line |  | Yellow plug terminal with insulation piercing | Two cables on the circuit board |
| Power supply |  | Complete from AS-interface, cable 26.5-31.6 Vdc | Complete from AS-interface, cable 26.5-31.6 Vdc |
| Fixing |  | Front mounted | Base mounted |
| Addressing |  | Via AS-interface cable | Via AS-interface cable |
| Max. total current | A | 45 mA | 45 mA |
| Ambient temperature, operating | ${ }^{\circ} \mathrm{F}\left({ }^{\circ} \mathrm{C}\right)$ | -13 to 131 (-25 to 55) | -13 to 131 (-25 to 55) |
| Shock resistance |  | $30 \mathrm{~g} / 11 \mathrm{~ms}$ as per IEC 60068-2-27 | $30 \mathrm{~g} / 11 \mathrm{~ms}$ as per IEC 60068-2-27 |
| Protection type |  | IP20 | IPOO |
| Climatic proofing |  | Damp heat, constant, to IEC 60068-2-78, cyclical, to IEC 60068-2-30 | Damp heat, constant, to IEC 60068-2-78, cyclical, to IEC 60068-2-30 |
| Mounting position |  | As required | As required |
| Standards |  | $\begin{aligned} & \text { EN } 50178 \\ & \text { EN } 50295 \end{aligned}$ | $\begin{aligned} & \text { EN } 50178 \\ & \text { EN } 50295 \end{aligned}$ |
| Inputs |  | Two-channel input ( $22 \mathrm{~V} / 5 \mathrm{~mA}$ ) (moduled by code sequence) (two break contact sets M22-K01) | Two-channel input ( $22 \mathrm{~V} / 5 \mathrm{~mA}$ ) (moduled by code sequence) (two break contact sets M22-K01) |
| Outputs |  | One output, typically 19V/8 mA, short-circuit proof | One output, typically 19V/8 mA, short-circuit proof |
| Status Displays |  |  |  |
| Power, AS-interface cable |  | Green LED on the back | Green LED on the back |
| AS-interface error, AS-interface master failure |  | Red LED on the back | Red LED on the back |
| Profile |  | S-7.B.E | S-7.B.E |

## Dimensions

Approximate Dimensions in Inches (mm)
Operators and Indicating Lights


Pushbuttons


M22-DG(L)--
M22...-DD-_


M22...-DH-


## M22-D, Base Mounted



Selector Switches Operators


M22...-WL-_


Key-Operated Selector Switches
M22...-W(R)S-_


Indicating Light
M22-L


## Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons-M22

Approximate Dimensions in Inches (mm)
Illuminated Pushbuttons
M22...-DL-
M22...-DLH_


Mushroom Head Pushbutton
M22...-DP-_


Emergency-Stop Operators
$\mathrm{M22-PV}$
$\mathrm{M}_{22} \mathrm{~S}-\mathrm{PV}_{-}^{-}$
$\mathrm{M} 222-\mathrm{PV}^{\mathrm{M} 2-\mathrm{PV}_{-}}$


Potentiometer
M22(S)-R_


Contact Block Mounting Adapter


Front Mounted Centering Adapter


Front Mounted Indicating Light


Pushbutton, Complete Devices


Approximate Dimensions in Inches (mm)


Pushbuttons and Indicating Lights with M22-TC Telescopic Clip and M22-TVC Extension


| A | B | C | D | E | F | G | H |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1.77 | $2.36-3.94$ | 0.79 | 0.79 | 0.18 | 0.39 | 154 | 0.39 |
| $(45)$ | $(60-100)$ | $(20)$ | $(20)$ | $(4.5)$ | $(10)$ | $(39)$ | $(10)$ |

(1) Top-hat rail to IEC/EN 60715.

Palm Switches
FAK_

(1) $3 \times \mathrm{M} 20$ lateral, $1 \times \mathrm{M} 16$ in bottom.

## Front Mounted Mounting Plate

M22-E


| Catalog Number | a1 | e | Catalog Number | a1 | e |
| :---: | :---: | :---: | :---: | :---: | :---: |
| M22-E(Y) ${ }^{(1)}$ | 2.83 (72) | 2.21 (56) | M22-E4 | 6.73 (171) | 6.10 (155) |
| M22-E2 | 4.13 (105) | 3.50 (89) | M22-E5 | 8.03 (204) | 7.40 (188) |
| M22-E3 | 5.43 (138) | 4.80 (122) | M22-E6 | 9.33 (237) | 8.70 (221) |

Base Mounted Surface Mounting Enclosure
M22-I_


| $\begin{array}{l}\text { Catalog } \\ \text { Number }\end{array}$ | $\begin{array}{l}\text { Mounting } \\ \text { Locations }\end{array}$ | $\mathbf{a}$ | $\mathbf{b}$ | $\mathbf{e}$ | Cable Entries |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |$]$

## Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons-M22

Approximate Dimensions in Inches (mm)

## Covers

M22-H


| Catalog <br> Number | a2 | Cable Entry | Style |
| :--- | :--- | :--- | :--- |
| $\mathbf{M 2 2 - H 1}$ | $1.65(42)$ | $3 \times$ M20 | One-piece |
| M22-H2 | $2.95(75)$ | $4 \times$ M20 |  |
| M22-H3 | $4.25(108)$ | $4 \times$ M20 |  |
| M22-H4 | $5.55(141)$ | $4 \times$ M20 | Split |
| M22-H5 | $6.85(174)$ | $5 \times$ M20 |  |
| M22-HE6 | $8.15(207)$ | $6 \times$ M20 |  |

## Connecting Screw


(1) Gasket.

Shroud with Plaster Keys
M22-UPE
(2) Box for closing off when plastering.
(3) Plaster thickness less than 8 mm .
(4) Plaster thickness more than 8 mm .


## Legend Plates

M22S-ST-_


M22S-STDD-X


Mounting Hole with Lug Slot

Approximate Dimensions in Inches (mm)

## Grid Dimension to IEC/EN 60947



Grid Dimension for Various Combinations


Pushbutton Diaphragm
Pushbutton diaphragm cannot be combined with label mount.

| $1+1$ | Catalog Number | A $\geq$ | B $\geq$ |
| :---: | :---: | :---: | :---: |
|  | M22(S)-_(IEC/EN 60947) | 1.18 (30.0) | 1.97 (50.0) |
|  | RMO-Titan min. | 1.18 (30.0) | 1.58 (40.0) |
| (i) | M22-D_ + M22-T-D | 1.30 (33.0) | 1.58 (40.0) |
|  | M22-D(R)P | 1.50 (38.0) | 1.58 (40.0) |
|  | M22-PV | 1.50 (38.0) | 1.58 (40.0) |
|  | M22-PV(L) + M22-PL-PV | 1.89 (48.0) | 2.20 (56.0) |
|  | M22-PV(L)(S_) + M22-D_ | 1.30 (33.0) | 1.58 (40.0) |
|  | M22-DDL | 1.18 (30.0) | 2.17 (55.0) |
|  | M22-DDL_ + M22-T-DD | 1.30 (33.0) | 2.28 (58.0) |
|  | M22-ST_ | 1.18 (30.0) | 1.97 (50.0) |
|  | M22-STDD | 1.18 (30.0) | 2.95 (75.0) |
|  | M22-CK | 1.18 (30.0) | 1.77 (45.0) |
|  | M22-CLED | 1.18 (30.0) | 1.77 (45.0) |
|  | M22-XAK | 3.54 (90.0) | 3.54 (90.0) |
|  | M22-XZK | 1.30 (33.0) | 2.04 (52.0) |
|  | M22-XBK | 2.36 (60.0) | 2.36 (60.0) |
|  | M22-XYK | 1.97 (50.0) | 1.97 (50.0) |
|  | M22-D4 | 2.17 (55.0) | 2.17 (55.0) |
|  | M22-WR... 4 | 1.97 (50.0) | 1.97 (50.0) |
|  | M22-W...J4 | 1.97 (50.0) | 1.97 (50.0) |

Grid Dimension for M22-DD_


Grid Dimension for M22-DDL_

(1) Pushbutton diaphragm cannot be combined with label mount.

## Emergency Stop Sealing Cover

## M22-PL-PV



## Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons-M22

Approximate Dimensions in Inches (mm)
Blanking Plugs
M22...B-


Pushbutton Diaphragm


Guard Ring

## M22-XGWK



## M22-XGPV



## Key Cover

M22-xws


Emergency Stop Legend Plate


M22-X(Y)ZK


M22-XYK-_


Joystick
M22...W...J_


Four-Way Pushbutton
M22...-D...4-_


## Symbols Library

Instructions for Ordering Laser Inscriptions

1. Identify part number to be inscribed.
2. Pick symbol from library and identify suffix code associated with the symbol.
3. Order part number already listed in the catalog with -ETCH suffix.
4. When placing an order by fax or Vistaline on the Web, reference order item number and indicate appropriate suffix code.

## Example

To order a green flush button plate with the inscription AUTO HAND:
Order Catalog Number: M22-XD-G-ETCH (see Page V7-T1-49).
AUTO HAND inscription is found on Page V7-T1-127 in the Symbols Library, suffix code is X91.
In the order notes, reference item number and suffix X91.

Letter height 3 mm : max. three lines, max. 12 characters per line.
Letter height 5 mm : max. two lines, max. eight characters per line.

Note: For symbols or text not found in the Symbols Library, please contact the
Eaton Technical Resource Center at 1-877-ETN CARE (386-2273) or TRC@eaton.com.

Letter Height Specifications: $\leq$ five characters; letter height $=0.197$ in $(5 \mathrm{~mm}) .>$ five characters; letter height $=0.118 \mathrm{in}(3 \mathrm{~mm})$.


Text-German

| Inscription | Catalog <br> Number Suffix | Inscription | Catalog <br> Number Suffix |
| :---: | :---: | :---: | :---: |
| Halt | D0 | Langsam | D25 |
| Start |  | HAND | D28 |
| $\angle U$ | D2 | AUTO | D29 |
| Auf | D3 | Einrichten | D30 |
| $A b$ | D4 | Tippen | D31 |
| Aus | D5 | Öffnen | D32 |
| En | D6 | Steuerspannung | D33 |
| Betrieb |  | Start Automatik | D34 |
| Störung | D8 | Lampentest | D35 |
| Prüfung | D9 | Phasenkontrolle | D36 |
| Aus Ein |  | Alarn | D37 |
| HAND AUTO | D11 | Alarm - Reset | D38 |
| HAND 0 AUTO | D12 | Sammelstörung | D39 |
| Antrieb | D13 | Quittieren | D40 |
| Entsperren | D14 | Quittierung | D41 |
| Vorwärts | D15 | Steuerung Ein | D42 |
| Rückwärts | D16 | Steuerung Aus | D43 |
| Heben | D17 | Störung quittieren | D44 |
| Senken | D18 | FUHER <br> int. ext. | D72 |
| Links | D19 | $\begin{aligned} & \text { HEIZUNG } \\ & 1 \end{aligned}$ | D73 |
| Rechts | D20 | $\begin{gathered} \text { AUS- } \\ \text { BLASEN } \end{gathered}$ | D74 |
| Bremsen | D21 | SOLLWERT <br> int. ext. | D75 |
| Hoch | D22 | Not-Aus | D99 |
| Niedrig | D23 | Not - Aus quittieren | D100 |

Text Size: $\mathbf{5} \mathbf{~ m m}$-Max. five characters per line.


Letter Height Specifications: $\leq$ five characters; letter height $=0.197$ in $(5 \mathrm{~mm}) .>$ five characters; letter height $=0.118$ in ( 3 mm ).

Text-French


Symbols


Pushbuttons and Indicating Lights
22.5 mm RMQ-Titan Modular Pushbuttons-M22

1

Inscription

Pushbuttons and Indicating Lights
22.5 mm RMQ-Titan Modular Pushbuttons-M22



Text Size: $\mathbf{3} \mathbf{~ m m} — M a x$. eight characters in first line; 10 characters in second line; eight characters in third line. $\square$ Text Size: $5 \mathbf{m m}$ Max. five characters per line. $A B C D E$

Pushbutton and Indicating Lights
22.5 mm RMQ-Titan Modular Pushbuttons-M22


Text Size: 5 mm—Max. five characters per line. $\square$
22.5 mm RMO Compact Pushbuttons-C22


## Product Overview

## Product Description

Eaton's C22 compact pushbutton line offers an industry leading array of functional, attractive, and ergonomically designed "all-in-one" illuminated and non-illuminated pushbuttons, selector switches, emergency stops and indicating lights. The complete illuminated line is only offered in LED light units to ensure high-quality brightness and up to 100,000 hours of LED illumination. C22 operators are available with either a silver or black bezel and share the exact same front of the panel look and feel as Eaton's M22 line. The C22's compact, "all-in-one" design with the contact block(s) and operators integral provides the user with a simple solution.

The 2017 product extension C22 with pigtail has more than doubled the portfolio. The C22 with pigtail now allows customers the ability to directly mount the product without the need for pushbutton enclosures. With three different connection methods and multiple lengths, the C22 with pigtail can be used for a wide range of applications.

## Wide Product Breadth

- In addition to the standard compact offering of indicating lights and pushbuttons, Eaton's C22 offers keyed and non-keyed operators and emergency stops
- Styles with standard laser etch markings with the ability to use custom M22 laser etched buttons in conjunction with C22 buttonless operators
- Pigtail lengths vary from 0.2 to 3.5 m and allow two connection options-M12 and flying lead


## Contents

Description

## Page

22.5 mm RMQ Compact Pushbuttons-C22

| Product Selection Guide | V7-T1-133 |
| :---: | :---: |
| Pushbuttons-Non-Illuminated and Illuminated | V7-T1-134 |
| Indicating Lights | V7-T1-143 |
| Emergency Stops | V7-T1-146 |
| Selector Switches | V7-T1-148 |
| Technical Data and Specifications | V7-T1-152 |
| Dimensions | V7-T1-154 |

V7-T1-154

## LED Indicators

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


## Rugged Design

- Pushbuttons (momentary) rated for 5 million mechanical operations and selector switches (non-keyed) rated for 1 million mechanical operations
- All components have IP65 rating, and some carry IP67 and IP69K for washdown environment, which also means oil tight
- C22 with pigtail has an IP65 rear rating, eliminating the need for an enclosure in dust and water jet applications


## Standards and Certifications

All operators are IEC/EN 60947 VDE 0660, UL Listed, and CSA Certified.
All operators carry an IP65, IP66, IP67 or IP69K rating.
All products carry ratings of NEMA 1, 3R, 4X, 12 and 13


IBUREAUU


Pushbuttons and Indicating Lights

## 22.5 mm RMQ Compact Pushbuttons-C22

## Features

- Field convertible maintained pushbuttons from maintained to momentary
- LED offering only for all illuminated operators
- Heavy-duty construction with a minimum of IP65 and UL NEMA ${ }^{\circledR}$ Type $4 \mathrm{X} / 13$ on front of panel operators. Many operators even carry IP67 and IP69K, for the toughest applications
- Silver or black colored nylon bezels
- Notched hole mounting with anti-rotation tab and central nut mounting on each operator
- Pushbuttons (momentary) rated for 5 million mechanical operations and selector switches (non-keyed) rated for 1 million mechanical operations
- Unique compact offerings, including keyed and nonkeyed operators and emergency stops


## Benefits

- Compact, "all-in-one" operator and contact block design simplifies product selection, inventory, and installation
- Field convertibility of pushbuttons and selector switches helps distributors and customers reduce inventory and increase functionality
- LED offering only for improved brightness quality and up to 100,000 hours of operation
- Plastic construction is corrosion resistant
- Eliminate enclosure, on machine installations
- Operators are designed for rugged environments, ideal for wash-down applications (reference each operator's IP ratings for ingress protection definition)
- Anti-rotation tab saves installation time and prevents operator rotation
- High mechanical and electrical life allows for use in tough and challenging applications
- Laser inscription capabilities allow for high quality, wear-resistant markings
- By having a compact design emergency stop, the C22 design eliminates the need for self-monitoring contact blocks
- M12 connections allow connection directly into communications systems such as SmartWire-DT or AS6


Product Selection Guide

| Pushbuttons |  |  |  |  |  |  | Illuminated, flush, pigtail |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| (M12/flying lead) |  |  |  |  |  |  |  |

Indicating Lights


Emergency Stops


## Pushbuttons and Indicating Lights



## Pushbuttons-Non-IIluminated and Illuminated

## Product Description

Eaton's C22 Compact
Pushbuttons are a complete line of monoblock type pushbuttons with the contact blocks, mounting adapter, and operator all-in-one. The C22 pushbuttons offer the same look and feel as their modular counterpart, the M22. They also carry many of the same rugged ratings and options, such as field convertibility and LED technology. They also feature IP65 rear ratings when purchased with pigtail, M12/flying lead.
Note: For additional accessories, please see Pages V7-T1-105 to V7-T1-111, 22.5 mm Modular Pushbuttons-M22 Accessories.

## Features

- Field convertible maintained pushbuttons from maintained to momentary
- LED offering only for improved brightness quality and up to 100,000 hours of operation
- Pushbuttons (momentary) rated for 5 million mechanical operations
- Pigtail option allows direct machine mounting


## Contents

| Description | Page |
| :---: | :---: |
| Pushbuttons-Non-Illuminated and Illuminated |  |
| Non-Illuminated Pushbuttons, Flush, Momentary | V7-T1-135 |
| Non-Illuminated Pushbuttons, Flush, Momentary, with Pigtail | V7-T1-136 |
| Non-Illuminated Pushbuttons, Flush, Maintained | V7-T1-137 |
| Non-Illuminated Pushbuttons, Flush, Maintained, with Pigtail | V7-T1-138 |
| Illuminated, Flush, Momentary | V7-T1-139 |
| Illuminated Pushbuttons, Flush, |  |
| Illuminated Pushbuttons, Flush, Maintained | V7-T1-141 |
| Illuminated Pushbuttons, Flush, |  |
| Maintained, with Pigtail | V7-T1-142 |
| Indicating Lights | V7-T1-143 |
| Emergency Stops | V7-T1-146 |
| Selector Switches | V7-T1-148 |
| Technical Data and Specifications | V7-T1-152 |
| Dimensions | V7-T1-154 |

## Protection Type

- IP67/IP69K
- NEMA 4X, 13
- IP65 rear (pigtail devices)


## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

## Non-Illuminated Pushbuttons



## Product Selection

Non-Illuminated Pushbuttons, Flush, Momentary

| C22(S)-D-_ | Non-Illuminated Pushbuttons, Flush, Momentary |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Button Color | Button Etching | Contact Block Configuration | Black Bezel Catalog Number |
|  | Green | - | 1N0 | C22S-D-G-K10 |
|  |  | - | 2N0 | C22S-D-G-K20 |
|  |  | - | 1NO/1NC | C22S-D-G-K11 |
|  | Red | - | 1NC | C22S-D-R-K01 |
|  |  | - | 2NC | C22S-D-R-K02 |
|  |  | - | 1NO/1NC | C22S-D-R-K11 |
|  | Black | - | 1NC | C22S-D-S-K01 |
|  |  | - | 2NC | C22S-D-S-K02 |
|  |  | - | 1NO/1NC | C22S-D-S-K11 |
|  | White | - | 1N0 | C22S-D-W-K10 |
|  |  | - | 2N0 | C22S-D-W-K20 |
|  |  | - | 1NO/1NC | C22S-D-W-K11 |
|  | Buttonless | - | 1N0 | C22S-D-X-K10 |
|  |  | - | 2N0 | C22S-D-X-K20 |
|  |  | - | 1NC | C22S-D-X-K01 |
|  |  | - | 2NC | C22S-D-X-K02 |
|  |  | - | 1NO/1NC | C22S-D-X-K11 |

Pushbuttons and Indicating Lights
22.5 mm RMQ Compact Pushbuttons-C22

Non-Illuminated Pushbuttons, Flush, Momentary, with Pigtail


Non-Illuminated Pushbuttons, Flush, Maintained

| C22(S)-DR-- | Non-Illuminated Pushbuttons, Flush, Maintained |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Button Color | Button Etching | Contact Block Configuration | Black Bezel Catalog Number |
|  | Green | - | 1N0 | C22S-DR-G-K10 |
|  |  | - | 2NO | C22S-DR-G-K20 |
|  |  | - | 1NO/1NC | C22S-DR-G-K11 |
|  | Red | - | 1NC | C22S-DR-R-K01 |
|  |  | - | 2NC | C22S-DR-R-K02 |
|  |  | - | 1NO/1NC | C22S-DR-R-K11 |
|  | Black | - | 1NC | C22S-DR-S-K01 |
|  |  | - | 2NC | C22S-DR-S-K02 |
|  |  | - | 1NO/1NC | C22S-DR-S-K11 |
|  | White | - | 1N0 | C22S-DR-W-K10 |
|  |  | - | 2N0 | C22S-DR-W-K20 |
|  |  | - | 1NO/1NC | C22S-DR-W-K11 |
|  | Buttonless | - | 1N0 | C22S-DR-X-K10 |
|  |  | - | 2N0 | C22S-DR-X-K20 |
|  |  | - | 1NC | C22S-DR-X-K01 |
|  |  | - | 2NC | C22S-DR-X-K02 |
|  |  | - | 1NO/1NC | C22S-DR-X-K11 |



Note: 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.

Pushbuttons and Indicating Lights
22.5 mm RMQ Compact Pushbuttons-C22

Non-Illuminated Pushbuttons, Flush, Maintained, with Pigtail

| C22-DR-- | Non-Iluminated Pushbuttons, Flush, Maintained, with Pigtail |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Button Color | Contacts | Connector Length | Connector Type | Silver Bezel Catalog Number |
|  | Green | 1N0 | 0.2 | M12 | C22-DR-G-K10-P1 |
|  |  | 1N0 | 0.5 | M12 | C22-DR-G-K10-P3 |
|  |  | 1N0 | 1 | M12 | C22-DR-G-K10-P5 |
|  |  | 1N0 | 1 | Flying lead | C22-DR-G-K10-P62 |
|  |  | 1N0 | 3.5 | Flying lead | C22-DR-G-K10-P65 |
|  | Red | 1NC | 0.2 | M12 | C22-DR-R-K01-P1 |
|  |  | 1NC | 0.5 | M12 | C22-DR-R-K01-P3 |
|  |  | 1NC | 1 | M12 | C22-DR-R-K01-P5 |
|  |  | 1NC | 1 | Flying lead | C22-DR-R-K01-P62 |
|  |  | 1NC | 3.5 | Flying lead | C22-DR-R-K01-P65 |
|  | Black | 1NC | 0.2 | M12 | C22-DR-S-K01-P1 |
|  |  | 1NC | 0.5 | M12 | C22-DR-S-K01-P3 |
|  |  | 1NC | 1 | M12 | C22-DR-S-K01-P5 |
|  |  | 1NC | 1 | Flying lead | C22-DR-S-K01-P62 |
|  |  | 1NC | 3.5 | Flying lead | C22-DR-S-K01-P65 |
|  | White | 1N0 | 0.2 | M12 | C22-DR-W-K10-P1 |
|  |  | 1N0 | 0.5 | M12 | C22-DR-W-K10-P3 |
|  |  | 1N0 | 1 | M12 | C22-DR-W-K10-P5 |
|  |  | 1N0 | 1 | Flying lead | C22-DR-W-K10-P62 |
|  |  | 1N0 | 3.5 | Flying lead | C22-DR-W-K10-P65 |
|  | Buttonless | 1N0 | 0.2 | M12 | C22-DR-X-K10-P1 |
|  |  | 1N0 | 0.5 | M12 | C22-DR-X-K10-P3 |
|  |  | 1N0 | 1 | M12 | C22-DR-X-K10-P5 |
|  |  | 1N0 | 1 | Flying lead | C22-DR-X-K10-P62 |
|  |  | 1N0 | 3.5 | Flying lead | C22-DR-X-K10-P65 |
|  |  | 2NO | 1 | Flying lead | C22-DR-X-K20-P62 |
|  |  | 2N0 | 3.5 | Flying lead | C22-DR-X-K20-P65 |
|  |  | 1NC/1NO | 1 | Flying lead | C22-DR-X-K11-P62 |
|  |  | 1NC/1NO | 3.5 | Flying lead | C22-DR-X-K11-P65 |
|  |  | 1NC | 0.2 | M12 | C22-DR-X-K01-P1 |
|  |  | 1NC | 0.5 | M12 | C22-DR-X-K01-P3 |
|  |  | 1NC | 1 | M12 | C22-DR-X-K01-P5 |
|  |  | 1NC | 1 | Flying lead | C22-DR-X-K01-P62 |
|  |  | 1NC | 3.5 | Flying lead | C22-DR-X-K01-P65 |
|  |  | 2NC | 1 | Flying lead | C22-DR-X-K02-P62 |
|  |  | 2NC | 3.5 | Flying lead | C22-DR-X-K02-P65 |

## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.
Illuminated Pushbuttons


## Product Selection

Illuminated, Flush, Momentary
$\overline{\text { C22(S)-DL-_ Illuminated Pushbuttons, Flush, Momentary }}$

| LED Color | Button <br> Color | Voltage | Button Etching | Contact Block Configuration | Black Bezel Catalog Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Green | Green | $24 \mathrm{Vac} / \mathrm{Vdc}$ | - | 1N0 | C22S-DL-G-K10-24 |
|  |  | 120 Vac | - | 1N0 | C22S-DL-G-K10-120 |
|  |  | 230 Vac | - | 1N0 | C22S-DL-G-K10-230 |
|  |  | $24 \mathrm{Vac} / \mathrm{Vdc}$ | X1 | 1N0 | C22S-DL-G-X1-K10-24 |
|  |  | 120 Vac | X1 | 1N0 | C22S-DL-G-X1-K10-120 |
|  |  | 230 Vac | X1 | 1N0 | C22S-DL-G-X1-K10-230 |
|  | Buttonless | $24 \mathrm{Vac} / \mathrm{Vdc}$ | - | 1N0 | C22S-DL-XG-K10-24 |
|  |  | 120 Vac | - | 1N0 | C22S-DL-XG-K10-120 |
|  |  | 230 Vac | - | 1N0 | C22S-DL-XG-K10-230 |
| Red | Red | $24 \mathrm{Vac} / \mathrm{Vdc}$ | - | 1NC | C22S-DL-R-K01-24 |
|  |  | 120 Vac | - | 1NC | C22S-DL-R-K01-120 |
|  |  | 230 Vac | - | 1NC | C22S-DL-R-K01-230 |
|  |  | $24 \mathrm{Vac} / \mathrm{Vdc}$ | X0 | 1NC | C22S-DL-R-X0-K01-24 |
|  |  | 120 Vac | X0 | 1NC | C22S-DL-R-X0-K01-120 |
|  |  | 230 Vac | X0 | 1NC | C22S-DL-R-XO-K01-230 |
|  | Buttonless | $24 \mathrm{Vac} / \mathrm{Vdc}$ | - | 1NC | C22S-DL-XR-K01-24 |
|  |  | 120 Vac | - | 1NC | C22S-DL-XR-K01-120 |
|  |  | 230 Vac | - | 1NC | C22S-DL-XR-K01-230 |
| White | White | $24 \mathrm{Vac} / \mathrm{Vdc}$ | - | 1N0 | C22S-DL-W-K10-24 |
|  |  | 120 Vac | - | 1N0 | C22S-DL-W-K10-120 |
|  |  | 230 Vac | - | 1N0 | C22S-DL-W-K10-230 |
|  |  | $24 \mathrm{Vac} / \mathrm{Vdc}$ | X1 | 1N0 | C22S-DL-W-X1-K10-24 |
|  |  | 120 Vac | X1 | 1N0 | C22S-DL-W-X1-K10-120 |
|  |  | 230 Vac | X1 | 1N0 | C22S-DL-W-X1-K10-230 |
|  | Buttonless | $24 \mathrm{Vac} / \mathrm{Vdc}$ | - | 1N0 | C22S-DL-XW-K10-24 |
|  |  | 120 Vac | - | 1N0 | C22S-DL-XW-K10-120 |
|  |  | 230 Vac | - | 1N0 | C22S-DL-XW-K10-230 |
| Blue | Blue | $24 \mathrm{Vac} / \mathrm{Vdc}$ | - | 1N0 | C22S-DL-B-K10-24 |
|  |  | 120 Vac | - | 1N0 | C22S-DL-B-K10-120 |
|  |  | 230 Vac | - | 1N0 | C22S-DL-B-K10-230 |
|  | Buttonless | $24 \mathrm{Vac} / \mathrm{Vdc}$ | - | 1N0 | C22S-DL-XB-K10-24 |
|  |  | 120 Vac | - | 1N0 | C22S-DL-XB-K10-120 |
|  |  | 230 Vac | - | 1N0 | C22S-DL-XB-K10-230 |

Pushbuttons and Indicating Lights

## 22.5 mm RMQ Compact Pushbuttons-C22

## Illuminated Pushbuttons, Flush, Momentary, with Pigtail

$\overline{\text { C22-DL-_ Illuminated Pushbuttons, Flush, Momentary, with Pigtail }}$


Illuminated Pushbuttons, Flush, Maintained


Illuminated Pushbuttons, Flush, Maintained

| LED Color | Button Color | Voltage | Contact Block Configuration | Black Bezel Catalog Number |
| :---: | :---: | :---: | :---: | :---: |
| Green | Green | $24 \mathrm{Vac} / \mathrm{Vdc}$ | 1N0 | C22S-DRL-G-K10-24 |
|  |  | 120 Vac | 1N0 | C22S-DRL-G-K10-120 |
|  |  | 230 Vac | 1N0 | C22S-DRL-G-K10-230 |
|  | Buttonless | $24 \mathrm{Vac} / \mathrm{Vdc}$ | 1N0 | C22S-DRL-XG-K10-24 |
|  |  | 120 Vac | 1N0 | C22S-DRL-XG-K10-120 |
|  |  | 230 Vac | 1N0 | C22S-DRL-XG-K10-230 |
| Red | Red | $24 \mathrm{Vac} / \mathrm{Vdc}$ | 1NC | C22S-DRL-R-K01-24 |
|  |  | 120 Vac | 1NC | C22S-DRL-R-K01-120 |
|  |  | 230 Vac | 1NC | C22S-DRL-R-K01-230 |
|  | Buttonless | $24 \mathrm{Vac} / \mathrm{Vdc}$ | 1NC | C22S-DRL-XR-K01-24 |
|  |  | 120 Vac | 1NC | C22S-DRL-XR-K01-120 |
|  |  | 230 Vac | 1NC | C22S-DRL-XR-K01-230 |
| White | White | $24 \mathrm{Vac} / \mathrm{Vdc}$ | 1N0 | C22S-DRL-W-K10-24 |
|  |  | 120 Vac | 1N0 | C22S-DRL-W-K10-120 |
|  |  | 230 Vac | 1N0 | C22S-DRL-W-K10-230 |
|  | Buttonless | $24 \mathrm{Vac} / \mathrm{Vdc}$ | 1N0 | C22S-DRL-XW-K10-24 |
|  |  | 120 Vac | 1N0 | C22S-DRL-XW-K10-120 |
|  |  | 230 Vac | 1N0 | C22S-DRL-XW-K10-230 |
| Blue | Blue | $24 \mathrm{Vac} / \mathrm{Vdc}$ | 1N0 | C22S-DRL-B-K10-24 |
|  |  | 120 Vac | 1N0 | C22S-DRL-B-K10-120 |
|  |  | 230 Vac | 1N0 | C22S-DRL-B-K10-230 |
|  | Buttonless | $24 \mathrm{Vac} / \mathrm{Vdc}$ | 1N0 | C22S-DRL-XB-K10-24 |
|  |  | 120 Vac | 1N0 | C22S-DRL-XB-K10-120 |
|  |  | 230 Vac | 1N0 | C22S-DRL-XB-K10-230 |



Note: 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.

Pushbuttons and Indicating Lights

## 22.5 mm RMQ Compact Pushbuttons-C22

## Illuminated Pushbuttons, Flush, Maintained, with Pigtail

| C22_DRL-G-_ | Illuminated Pushbuttons, Flush, Maintained, with Pigtail |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Button Color | Contacts | Connector Length | Connector Type | Silver Bezel Catalog Number |
|  | Green | 1N0 | 0.2 | M12 | C22-DRL-G-K10-24-P1 |
|  |  | 1N0 | 0.5 | M12 | C22-DRL-G-K10-24-P3 |
|  |  | 1N0 | 1 | M12 | C22-DRL-G-K10-24-P5 |
|  |  | 1N0 | 1 | Flying lead | C22-DRL-G-K10-24-P62 |
|  |  | 1N0 | 3.5 | Flying lead | C22-DRL-G-K10-24-P65 |
|  | Red | 1NC | 0.2 | M12 | C22-DRL-R-K01-24-P1 |
|  |  | 1NC | 0.5 | M12 | C22-DRL-R-K01-24-P3 |
|  |  | 1NC | 1 | M12 | C22-DRL-R-K01-24-P5 |
|  |  | 1NC | 1 | Flying lead | C22-DRL-R-K01-24-P62 |
|  |  | 1NC | 3.5 | Flying lead | C22-DRL-R-K01-24-P65 |
|  | Blue | 1N0 | 0.2 | M12 | C22-DRL-B-K10-24-P1 |
|  |  | 1N0 | 0.5 | M12 | C22-DRL-B-K10-24-P3 |
|  |  | 1N0 | 1 | M12 | C22-DRL-B-K10-24-P5 |
|  |  | 1N0 | 1 | Flying lead | C22-DRL-B-K10-24-P62 |
|  |  | 1N0 | 3.5 | Flying lead | C22-DRL-B-K10-24-P65 |
|  | White | 1N0 | 0.2 | M12 | C22-DRL-W-K10-24-P1 |
|  |  | 1N0 | 0.5 | M12 | C22-DRL-W-K10-24-P3 |
|  |  | 1N0 | 1 | M12 | C22-DRL-W-K10-24-P5 |
|  |  | 1N0 | 1 | Flying lead | C22-DRL-W-K10-24-P62 |
|  |  | 1N0 | 3.5 | Flying lead | C22-DRL-W-K10-24-P65 |

## Indicating Lights



## Indicating Lights

## Product Description

C22 indicating lights use a combination of a durable, bright LED unit and modern lenses designed specifically for this type of LED to create a bright and visible indicating light.
Indicating lights with pigtail have options for M12 or flying lead connectors, providing high degree of protection options.

Note: For additional accessories, please see Pages V7-T1-105 to V7-T1-111, 22.5 mm Modular Pushbuttons-M22 Accessories.

## Features

- LED offering only for improved brightness quality and up to 100,000 hours of operation
- Lenses specifically designed for LED illumination
- Units with pigtail allow for direct machine mounting with high degree of protection backside


## Contents

## Description

## Page

Pushbuttons-Non-Illuminated and
Illuminated
Indicating Lights
Catalog Number Selection . . . . . . . . . . . . . . . . V7-T1-144
Product Selection . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-144
Emergency Stops . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-146
Selector Switches . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-148
Technical Data and Specifications . . . . . . . . . . . . . V7-T1-152
Dimensions ..................................... . . V7-T1-154

## Protection Type

- IP67/IP69K
- NEMA 4X, 13
- IP65 rear rating with pigtail


## Pushbuttons and Indicating Lights

## 22.5 mm RMQ Compact Pushbuttons-C22

## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.
Indicating Lights


## Product Selection

## Indicating Lights

| C22-L- | Indicating Lights |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Lens Color | LED Color | Voltage | Catalog Number |
|  | Green | Green | $24 \mathrm{Vac} / \mathrm{Vdc}$ | C22-L-G-24 |
|  |  |  | 120 Vac | C22-L-G-120 |
|  |  |  | 230 Vac | C22-L-G-230 |
|  | Red | Red | $24 \mathrm{Vac} / \mathrm{Vdc}$ | C22-L-R-24 |
| - |  |  | 120 Vac | C22-L-R-120 |
| 17 |  |  | 230 Vac | C22-L-R-230 |
|  | White | White | $24 \mathrm{Vac} / \mathrm{Vdc}$ | C22-L-W-24 |
|  |  |  | 120 Vac | C22-L-W-120 |
|  |  |  | 230 Vac | C22-L-W-230 |
|  | Yellow | White | $24 \mathrm{Vac} / \mathrm{Vdc}$ | C22-L-Y-24 |
|  |  |  | 120 Vac | C22-L-Y-120 |
|  |  |  | 230 Vac | C22-L-Y-230 |
|  | Blue | Blue | $24 \mathrm{Vac} / \mathrm{Vdc}$ | C22-L-B-24 |
|  |  |  | 120 Vac | C22-L-B-120 |
|  |  |  | 230 Vac | C22-L-B-230 |
|  | Without Lens | Green | $24 \mathrm{Vac} / \mathrm{Vdc}$ | C22-L-XG-24 |
|  |  |  | 120 Vac | C22-L-XG-120 |
|  |  |  | 230 Vac | C22-L-XG-230 |
|  |  | Red | $24 \mathrm{Vac} / \mathrm{Vdc}$ | C22-L-XR-24 |
|  |  |  | 120 Vac | C22-L-XR-120 |
|  |  |  | 230 Vac | C22-L-XR-230 |
|  |  | White | $24 \mathrm{Vac} / \mathrm{Vdc}$ | C22-L-XW-24 |
|  |  |  | 120 Vac | C22-L-XW-120 |
|  |  |  | 230 Vac | C22-L-XW-230 |
|  |  | Blue | $24 \mathrm{Vac} / \mathrm{Vdc}$ | C22-L-XB-24 |
|  |  |  | 120 Vac | C22-L-XB-120 |
|  |  |  | 230 Vac | C22-L-XB-230 |

Note
(1) Use white LED for both white and yellow lenses.

## C22 with Pigtail LED Options

|  | C22 with Pigtail LED Options $24 \mathrm{Vac} / \mathrm{Vdc}$ only indicating lights. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Color | Connector Type | $0.2 \mathrm{~m}$ <br> Catalog Number | 0.5 m Catalog Number | $1.0 \mathrm{~m}$ <br> Catalog Number | 3.5 m Catalog Number |
|  | Green | M12 | C22-L-G-24-P1 | C22-L-G-24-P3 | C22-L-G-24-P5 | - |
|  |  | Flying lead | - | - | C22-L-G-24-P62 | C22-L-G-24-P65 |
|  | Red | M12 | C22-L-R-24-P1 | C22-L-R-24-P3 | C22-L-R-24-P5 | - |
|  |  | Flying lead | - | - | C22-L-R-24-P62 | C22-L-R-24-P65 |
|  | White | M12 | C22-L-W-24-P1 | C22-L-W-24-P3 | C22-L-W-24-P5 | - |
|  |  | Flying lead | - | - | C22-L-W-24-P62 | C22-L-W-24-P65 |
|  | Yellow | M12 | C22-L-Y-24-P1 | C22-L-Y-24-P3 | C22-L-Y-24-P5 | - |
|  |  | Flying lead | - | - | C22-L-Y-24-P62 | C22-L-Y-24-P65 |
|  | Blue | M12 | C22-L-B-24-P1 | C22-L-B-24-P3 | C22-L-B-24-P5 | - |
|  |  | Flying lead | - | - | C22-L-B-24-P62 | C22-L-B-24-P65 |

Pushbuttons and Indicating Lights
22.5 mm RMQ Compact Pushbuttons-C22

Emergency Stops


## Emergency Stops

## Product Description

C22 emergency stops are a durable and reliable solution to a variety of e-stop applications. This compact e-stop, available as twist-torelease and keyed-release on pigtail products, is a simple product that eliminates the need for self-monitoring contact blocks, all while still meeting almost all of the industry safety standards.

E-stops with pigtails allow for direct machine mounting, eliminating the need for an enclosure with high degree of rear protection. Flying leads also allow for quick termination to nearby controls or functional safety devices.

Note: For additional accessories, please see Pages V7-T1-105 to V7-T1-111, 22.5 mm Modular Pushbuttons-M22 Accessories.

## Features

- Available in push-pull, twist-release, twist-release with indicator, and key release on buttons with pigtails 38 mm through 60 mm operators
- Available with M12 or flying lead pigtails, allowing direct machine mounting and easy reliable connections
- Meet functional safety requirements for E-stops


## Contents

| Description | Page |
| :---: | :---: |
| Pushbuttons-Non-Illuminated and Illuminated | V7-T1-134 |
| Indicating Lights | V7-T1-143 |
| Emergency Stops |  |
| Non-Illuminated, Twist-Release | V7-T1-147 |
| Selector Switches | V7-T1-148 |
| Technical Data and Specifications | V7-T1-152 |
| Dimensions | V7-T1-154 |

## Protection Type

- Up to IP69K for increased protection. Check ecat.eaton.com for specifics
- NEMA 4X, 13


## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

## Emergency Stops



## Product Selection

Non-Illuminated, Twist-Release

| C22-PVT | Non-Illuminated Emergency Stops, Twist-Release |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Release Method | Operator Size | Contact Block Configuration | Catalog Number |
|  | Twist-release | 45 mm | 2NC | C22-PVT45P-K02 |
|  |  |  | 1NO/1NC | C22-PVT45P-K11 |
|  |  | 60 mm | 2NC | C22-PVT60P-K02 |
|  |  |  | 1NO/1NC | C22-PVT60P-K11 |

## E-stop

|  | Release Method | Operator Size | Contacts | Connector Length | Connector Type | Catalog Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C22-PV-K11-P62 | Push-pull | 38 mm | 2NC | 1 | Flying lead | C22-PV-K02-P62 |
|  |  | 38 mm | 2NC | 3.5 | Flying lead | C22-PV-K02-P65 |
|  |  | 38 mm | 1NO/1NC | 1 | Flying lead | C22-PV-K11-P62 |
|  |  | 38 mm | 1NO/1NC | 3.5 | Flying lead | C22-PV-K11-P65 |
|  |  | 45 mm | 2NC | 0.2 | M12, 5-pole | C22-PV-K02-P10 |
| C22-PVT-K02-P65 | Twist release | 38 mm | 2NC | 1 | Flying lead | C22-PVT-K02-P62 |
|  |  | 38 mm | 2NC | 3.5 | Flying lead | C22-PVT-K02-P65 |
|  |  | 38 mm | 1NO/1NC | 1 | Flying lead | C22-PVT-K11-P62 |
|  |  | 38 mm | 1NO/1NC | 3.5 | Flying lead | C22-PVT-K11-P65 |
|  |  | 45 mm | 2NC | 1 | Flying lead | C22-PVT45P-K02-P62 |
|  |  | 45 mm | 2NC | 3.5 | Flying lead | C22-PVT45P-K02-P65 |
|  |  | 45 mm | 1NO/1NC | 1 | Flying lead | C22-PVT45P-K11-P62 |
|  |  | 45 mm | 1NO/1NC | 3.5 | Flying lead | C22-PVT45P-K11-P65 |
|  |  | 45 mm | 2NC | 0.2 | M12, 5-pole | C22-PVT45P-K02-P10 |
| $\begin{aligned} & \text { C22-PVT45PMPIK } \\ & \text { 02-P65 } \end{aligned}$ | Twist release mechanical indication | 45 mm | 2NC | 1 | Flying lead | C22-PVT45PMPIK02-P62 |
|  |  | 45 mm | 2NC | 3.5 | Flying lead | C22-PVT45PMPIK02-P65 |
|  |  | 45 mm | 1NO/1NC | 1 | Flying lead | C22-PVT45PMPIK11-P62 |
|  |  | 45 mm | 1NO/1NC | 3.5 | Flying lead | C22-PVT45PMPIK11-P65 |

Note: $\ominus=$ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1.

## Pushbuttons and Indicating Lights

22.5 mm RMQ Compact Pushbuttons-C22


## Selector Switches

## Product Description

With over 20 variations of operation and 8 varieties of key codes, the C22 line offers a very complete line of selector switches.

Pigtail units come in M12 or flying lead options.
Note: For additional accessories, please see Pages V7-T1-105 to V7-T1-111, 22.5 mm Modular Pushbuttons-M22 Accessories.

## Features

- Selector switch (nonkeyed) rated for 1 million mechanical operations
- Rear pigtails provide IP65 front and rear ratings, eliminating enclosure requirements and reducing installation times


## Contents

Description

## Page

Pushbuttons-Non-Illuminated and
Illuminated
V7-T1-134
Indicating Lights . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-143
Emergency Stops . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-146
Selector Switches
Non-Illuminated, Knob Type
V7-T1-149
Technical Data and Specifications . . . . . . . . . . . . . V7-T1-152
Dimensions . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V7-T1-154

## Protection Type

- IP65
- NEMA 4X, 13


## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

## Selector Switches—Non-Keyed



## Product Selection

## Non-Illuminated, Knob Type

| $\begin{aligned} & \hline \text { C22(S)-WK-J } \\ & \text { C22(S)-WRK_ } \end{aligned}$ | Non-Illuminated Selector Switches, Knob Type |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Type | Switching Position | Contact Block Configuration | Black Bezel Catalog Number |
|  | Two-position | Momentary | 1N0 | C22S-WK-K10 |
|  |  | $40^{\circ}$ | 2N0 | C22S-WK-K20 |
|  |  | $V$ | 1NC | C22S-WK-K01 |
|  |  |  | 2NC | C22S-WK-K02 |
|  |  |  | 1NO/1NC | C22S-WK-K11 |
|  |  | Momentary | 1N0 | C22S-WKV-K10 |
|  |  | $>7^{60}$ | 2 NO | C22S-WKV-K20 |
|  |  |  | 1NC | C22S-WKV-K01 |
|  |  |  | 2NC | C22S-WKV-K02 |
|  |  |  | 1NO/1NC | C22S-WKV-K11 |
|  |  | Maintained | 1N0 | C22S-WRK-K10 |
|  |  | $40^{\circ}$ | 2N0 | C22S-WRK-K20 |
|  |  | $\checkmark$ | 1NC | C22S-WRK-K01 |
|  |  |  | 2NC | C22S-WRK-K02 |
|  |  |  | 1NO/1NC | C22S-WRK-K11 |
|  |  | Maintained | 1N0 | C22S-WRKV-K10 |
|  |  | $\searrow 60^{\circ}$ | 2N0 | C22S-WRKV-K20 |
|  |  |  | 1NC | C22S-WRKV-K01 |
|  |  |  | 2NC | C22S-WRKV-K02 |
|  |  |  | 1NO/1NC | C22S-WRKV-K11 |
|  | Three-position | Momentary | 2NO | C22S-WK3-K20 |
|  |  | $40^{\circ}<\\|>40^{\circ}$ | 2NC | C22S-WK3-K02 |
|  |  |  | 1NO/1NC | C22S-WK3-K11 |
|  |  | Maintained | 2N0 | C22S-WRK3-K20 |
|  |  | $60^{\circ}$ | 2NC | C22S-WRK3-K02 |
|  |  |  | 1NO/1NC | C22S-WRK3-K11 |

Note: Momentary selector switches can be field converted to maintained.

Pushbuttons and Indicating Lights

## 22.5 mm RMQ Compact Pushbuttons-C22

## Non-IIluminated Selector Switches, Knob Type, with Pigtail



## Catalog Number Selection

Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

## Selector Switches-Keyed



## Non-Illuminated Selector Switches, Key Operated, with Pigtail

|  | Non-Illuminated Selector Switches, Key Operated, with Pigtail |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Position | Switching Position | Contacts | Connector Length | Connector Type | Silver Bezel Catalog Number |
|  | Two-position | Momentary | 1NC | 1 m | Flying lead | C22-WS-MS1-K01-P62 |
|  |  | $40^{\circ}$ | 1NC | 3.5 m | Flying lead | C22-WS-MS1-K01-P65 |
|  |  | / | 1N0 | 0.2 m | M12 | C22-WS-MS1-K10-P1 |
|  |  |  | 1N0 | 1 m | M12 | C22-WS-MS1-K10-P5 |
|  |  |  | 1N0 | 1 m | Flying lead | C22-WS-MS1-K10-P62 |
|  |  |  | 1N0 | 3.5 m | Flying lead | C22-WS-MS1-K10-P65 |
|  |  |  | 1NO/1NC | 1 m | Flying lead | C22-WS-MS1-K11-P62 |
|  |  |  | 1NO/1NC | 3.5 m | Flying lead | C22-WS-MS1-K11-P65 |
|  |  |  | 2NC | 1 m | Flying lead | C22-WS-MS1-K02-P62 |
|  |  |  | 2NC | 3.5 m | Flying lead | C22-WS-MS1-K02-P65 |
|  |  |  | 2NO | 1 m | Flying lead | C22-WS-MS1-K20-P62 |
|  |  |  | 2NO | 3.5 m | Flying lead | C22-WS-MS1-K20-P65 |
|  |  | Maintained | 1NC | 1 m | Flying lead | C22-WRS-MS1-K01-P62 |
|  |  | > $60^{\circ}$ | 1NC | 3.5 m | Flying lead | C22-WRS-MS1-K01-P65 |
|  |  |  | 1N0 | 0.2 m | M12 | C22-WRS-MS1-K10-P1 |
|  |  |  | 1N0 | 1 m | M12 | C22-WRS-MS1-K10-P5 |
|  |  |  | 1N0 | 1 m | Flying lead | C22-WRS-MS1-K10-P62 |
|  |  |  | 1N0 | 3.5 m | Flying lead | C22-WRS-MS1-K10-P65 |
|  |  |  | 1NO/1NC | 1 m | Flying lead | C22-WRS-MS1-K11-P62 |
|  |  |  | 1NO/1NC | 3.5 m | Flying lead | C22-WRS-MS1-K11-P65 |
|  |  |  | 2NC | 1 m | Flying lead | C22-WRS-MS1-K02-P62 |
|  |  |  | 2NC | 3.5 m | Flying lead | C22-WRS-MS1-K02-P65 |
|  |  |  | 2NO | 1 m | Flying lead | C22-WRS-MS1-K20-P62 |
|  |  |  | 2NO | 3.5 m | Flying lead | C22-WRS-MS1-K20-P65 |
|  | Three-position | Momentary | 1NO/1NC | 1 m | Flying lead | C22-WS3-MS1-K11-P62 |
|  |  | $40^{\circ}, \\|>40^{\circ}$ | 1NO/1NC | 3.5 m | Flying lead | C22-WS3-MS1-K11-P65 |
|  |  | $V$ | 2NC | 1 m | Flying lead | C22-WS3-MS1-K02-P62 |
|  |  |  | 2NC | 3.5 m | Flying lead | C22-WS3-MS1-K02-P65 |
|  |  |  | 2NO | 1 m | Flying lead | C22-WS3-MS1-K20-P62 |
|  |  |  | 2NO | 3.5 m | Flying lead | C22-WS3-MS1-K20-P65 |
|  |  | Maintained | 1NO/1NC | 1 m | Flying lead | C22-WRS3-MS1-K11-P62 |
|  |  | $60^{\circ}, \\|, 60^{\circ}$ | 1N0/1NC | 3.5 m | Flying lead | C22-WRS3-MS1-K11-P65 |
|  |  |  | 2NC | 1 m | Flying lead | C22-WRS3-MS1-K02-P62 |
|  |  |  | 2NC | 3.5 m | Flying lead | C22-WRS3-MS1-K02-P65 |
|  |  |  | 2NO | 1 m | Flying lead | C22-WRS3-MS1-K20-P62 |
|  |  |  | 2NO | 3.5 m | Flying lead | C22-WRS3-MS1-K20-P65 |

Pushbuttons and Indicating Lights

## 22.5 mm RMQ Compact Pushbuttons-C22

## Technical Data and Specifications

## 22.5 mm RMO Compact Pushbuttons-C22

| Description | Unit |  | Pushbutton Actuators Illuminated Pushbuttons C22 |  | Indicator Lights C22 | Selector Switch Actuators C22 | Key-Operated Buttons C22 | Emergency Stop/ Emergency Switching OFF Pushbuttons C22 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General |  |  |  |  |  |  |  |  |
| Standards |  |  | IEC/EN 60947 VDE 0660 |  |  |  |  |  |
| Lifespan, mechanical | Operations | $\times 10^{6}$ | 5 | 1 | - | 1 | 0.1 | 0.05 |
| Operating frequency | Operations/h |  | $\geq 3600$ | $\geq 3600$ | - | $\geq 2000$ | $\geq 100$ | $\geq 300$ |
| Actuating force |  | N | $\geq 5$ | $\geq 5$ | - | - | - | $\geq 50$ |
| Operating torque |  | Nm | - | - | - | $\geq 0.3$ | $\geq 0.5$ | - |
| Terminal screw tightening torque |  | Nm | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| Threaded ring tightening torque |  | Nm | 2 | 2 | 2 | 2 | 2 | 2 |
| Protection type |  |  | IP67, IP69K | IP67, IP69K | IP67, IP69K | IP65 | IP66 | IP67, IP69K |
| Climatic proofing |  |  | Damp heat, constant, to IEC 60068-2-78 <br> Damp heat, cyclic, to IEC 60068-2-30 |  |  |  |  |  |
| Ambient temperature |  |  |  |  |  |  |  |  |
| Open |  | ${ }^{\circ} \mathrm{C}$ | $-25^{\circ}$ to $70^{\circ}$ | $-25^{\circ}$ to $70^{\circ}$ | $-25^{\circ}$ to $70^{\circ}$ | $-25^{\circ}$ to $70^{\circ}$ | $-25^{\circ}$ to $70^{\circ}$ | $-25^{\circ}$ to $70^{\circ}$ |
| Storage |  | ${ }^{\circ} \mathrm{C}$ | $-30^{\circ}$ to $80^{\circ}$ | $-30^{\circ}$ to $80^{\circ}$ | $-30^{\circ}$ to $80^{\circ}$ | $-30^{\circ}$ to $80^{\circ}$ | $-30^{\circ}$ to $80^{\circ}$ | $-30^{\circ}$ to $80^{\circ}$ |
| Mounting position |  |  | As required | As required | As required | As required | As required | As required |
| Mechanical shock resistance to IEC 60068-2-27 Shock duration 11 ms , half-sinusoidal |  | g | 30 | 30 | 30 | 30 | 30 | 30 |
| Terminal capacities |  |  |  |  |  |  |  |  |
| Solid |  | $\mathrm{mm}^{2}$ | $2 \times 0.5-1.5$ | $2 \times 0.5-1.5$ | $2 \times 0.5-1.5$ | $2 \times 0.5-1.5$ | $2 \times 0.5-1.5$ | $2 \times 0.5-1.5$ |
| Flexible with ferrule |  | $\mathrm{mm}^{2}$ | $2 \times 0.5-1.5$ | $2 \times 0.5-1.5$ | $2 \times 0.5-1.5$ | $2 \times 0.5-1.5$ | $2 \times 0.5-1.5$ | $2 \times 0.5-1.5$ |
| Contacts |  |  |  |  |  |  |  |  |
| Rated impulse withstand voltage | $\mathrm{U}_{\text {imp }}$ | Vac | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 |
| Rated insulation voltage | $\mathrm{U}_{\mathrm{i}}$ | V | 250 | 250 | 250 | 250 | 250 | 250 |
| Overvoltage category/pollution degree |  |  | III/3 | III/3 | III/3 | III/3 | III/3 | III/3 |
| Control circuit reliability at $5 \mathrm{Vdc} / 1 \mathrm{~mA}$ | $\mathrm{H}_{\mathrm{F}}$ | Fault probability | Values follow | Values follow | - | Values follow | Values follow | Values follow |
| at $17 \mathrm{Vdc} / 7 \mathrm{~mA}$ | $\mathrm{HF}_{\text {F }}$ | Fault probability | N/O contact: s 1 failure per N/C contact: 1 failure per | stically determin $\times 10^{6}$ operation stically determin $\times 10^{6}$ operation | - | $\mathrm{N} / \mathrm{O}$ cont <br> N/C conta | t: statistically det $17 \times 10^{6}$ oper t: statistically det $0.9 \times 10^{6}$ oper | ined 1 failure per s ined 1 failure per ns |
| at $24 \mathrm{Vdc} / 5 \mathrm{~mA}$ | $\mathrm{HF}_{\text {F }}$ | Fault probability | Values follow | Values follow | - | Values follow | Values follow | Values follow |
| Max. short-circuit protective device |  |  |  |  |  |  |  |  |
| Fuse | $\mathrm{gG} / \mathrm{gL}$ | A | 10 | 10 | - | 10 | 10 | 10 |

22.5 mm RMQ Compact Pushbuttons - C22, continued

| Description | Unit |  | Push-button Actuators Illuminated Pushbuttons C22 |  | Indicator Lights C22 | Selector Switch <br> Actuators C22 | Key-Operated Buttons C22 | Emergency Stop/ Emergency Switching OFF Pushbuttons C22 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Momentary | Maintained |  |  |  |  |
| Switching Capacity |  |  |  |  |  |  |  |  |
| Rated operational current |  |  |  |  |  |  |  |  |
| AC-15 |  |  |  |  |  |  |  |  |
| 24 V | $\mathrm{I}_{\mathrm{e}}$ | A | 4 | 4 | - | 4 | 4 | 4 |
| 110 V | $\mathrm{I}_{\mathrm{e}}$ | A | 2 | 2 | - | 2 | 2 | 2 |
| 230 V | $\mathrm{I}_{\mathrm{e}}$ | A | 1.5 | 1.5 | - | 1.5 | 1.5 | 1.5 |
| DC-13 |  |  |  |  |  |  |  |  |
| 24 V | $\mathrm{I}_{\mathrm{e}}$ | A | 3 | 3 | - | 3 | 3 | 3 |
| 60 V | $\mathrm{I}_{\mathrm{e}}$ | A | 1 | 1 | - | 1 | 1 | 1 |
| 110 V | $\mathrm{I}_{\mathrm{e}}$ | A | 0.6 | 0.6 | - | 0.6 | 0.6 | 0.6 |
| 220 V | $\mathrm{I}_{\mathrm{e}}$ | A | 0.3 | 0.3 | - | 0.3 | 0.3 | 0.3 |
| Lifespan, electrical |  |  |  |  |  |  |  |  |
| AC-15 |  |  |  |  |  |  |  |  |
| $230 \mathrm{~V} / 0.5 \mathrm{~A}$ | Operations | $\times 10^{6}$ | 0.4 | 0.4 | - | 0.4 | 0.4 | 0.4 |
| 230V/1.0A |  | $\times 10^{6}$ | 0.6 | 0.6 | - | 0.6 | 0.6 | 0.6 |

## Contact Travel

Contact Travel Diagram
Contact closedContact open


## Pushbuttons and Indicating Lights

## 22.5 mm RMQ Compact Pushbuttons-C22

## Dimensions

Approximate Dimensions in mm [in]

## Illuminated Pushbuttons

## Flat

C22(S)-DRL_/C22(S)-DL_


## Pushbutton Actuators

## Flat

C22(S)-DR_/C22(S)-D_


Indicating Lights
Flat
C22-L_


## Extended

C22(S)-DRLH_/C22(S)-DLH_


## Extended

C22(S)-DRH_/C22(S)-DH_


## Approximate Dimensions in mm [in]

## Emergency Stop/Emergency Switching OFF Pushbuttons

C22-PVT45P_


C22-PVT45P-MS


C22-PVT60P_


C22-PVT45P-RS_


C22-PVT60P-MS


C22-PVT60P-MS



## Pushbuttons and Indicating Lights

22.5 mm RMQ Compact Pushbuttons-C22

## Approximate Dimensions in mm [in]

## Selector Switch Actuators

## Selector Switch Actuators/V Position

C22(S)-W(R)K_


C22(S)-W(R)KV


## Key Operated Actuators

C22(S)-WS(3)-MS_/C22(S)-WRS(3)-MS_


C22(S)-WS(3)-RS_/C22(S)-WRS(3)-RS_


Approximate Dimensions in mm [in]
Pushbuttons, M12A
C22-D...-P1/-P3/-P5


Pushbuttons, Unterminated Cable End, Flying Lead C22-D...-P/-P62/-P65


Indicator Lights, M12A
C22-L-...-P1/-P3/-P5


Indicator Lights, Unterminated Cable End, Flying Lead C22-L-...-P62/-P65


## Pushbuttons and Indicating Lights

## 22.5 mm RMQ Compact Pushbuttons-C22

Approximate Dimensions in mm [in]
Emergency Switching Off, M12A
C22-PVT...-P10


Emergency Switching Off, Unterminated Cable End, Flying Lead C22-PVT...-P62/-P65


Emergency Switching Off, M12
C22-PV-...-P10


Emergency Switching Off, Unterminated Cable End, Flying Lead C22-PV-...-P62/-P65


Approximate Dimensions in mm [in]
Key-Operated Buttons, M12A
C22-W(R)S(3)-MS1-...-P1/-P5


Key-Operated Buttons, Unterminated Cable End, Flying Lead C22-W(R)S(3)-MS1-...-P62/-P65



[^0]:    Notes
    Interlock mechanism prevents operation of lever through the center position until pressure is momentarily relieved.
    Designed for control and protection of reversing motors.
    (1) See Circuit Diagrams on Page V7-T1-6.
    (2) Rated $1 / 4 \mathrm{hp}$ at $125 \mathrm{~V}, 1 / 2 \mathrm{hp}$ at 250 V .

[^1]:    (1) Includes contact block mounting adapter.

[^2]:    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.
    ${ }^{(5)}$ USB interface is UL Listed, CSA approved and USB 3.0.
    (6) RJ45 interface is an eight-wire connector.

[^3]:    (1) Refer to the Symbols Library, (see Pages V7-T1-123 to V7-T1-130), for symbol image.

