

22.5 mm RMQ-Titan Modular Pushbuttons—M22



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Product Description

Eaton's M22 industrial heavy-duty pushbutton line offers a wide array of functional, attractive and ergonomically designed illuminated and non-illuminated pushbuttons, selector switches, push-pulls, alternate action and twist-to-release 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 space-saving 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

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, emergency-stops, indicating lights, potentiometers and selector switches carry NEMA 4X, 13.

Marine classification societies: Bureau Veritas (BV), Germanischer Lloyd (GL), and Lloyd's Register of Shipping (LR) approved.



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Pushbuttons and Indicating Lights

22.5mm 22.5 mm RMQ-Titan Modular Pushbuttons—M22

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Features

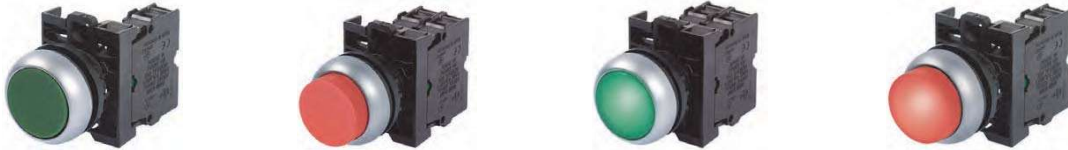
- Field convertible pushbuttons and mushroom operators from maintained to momentary status
- Field convertible selector switches from momentary to maintained operation and vice versa
- LED offering only for all illuminated operators
- Laser engraved pushbuttons, lenses and enclosures
- Heavy-duty construction with a minimum of IP66 and UL NEMA® 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 high-quality, 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, flush | | Non-illuminated, extended | | Illuminated, flush | | Illuminated, extended | |
|-------------------|-----------------------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Operator | Momentary | Maintained | Momentary | Maintained | Momentary | Maintained | Momentary | Maintained |
| Product Selection | Pages V7-T1-47 to V7-T1-49 | Pages V7-T1-50, V7-T1-51 | Pages V7-T1-52, V7-T1-53 | Pages V7-T1-54, V7-T1-55 | Pages V7-T1-57 to V7-T1-59 | Pages V7-T1-60, V7-T1-61 | Pages V7-T1-62, V7-T1-63 | Pages V7-T1-64, V7-T1-65 |

Indicating Lights



| Description | Flat | Conical |
|-------------------|---------------------------------|---------------------------------|
| Product Selection | Pages V7-T1-66, V7-T1-67 | Pages V7-T1-66, V7-T1-67 |

Emergency Stops



| | | | | |
|--------------------------|----------------------|----------------------|----------------------|-----------------------|
| Description | Non-illuminated | Illuminated | Key release | Mechanical indication |
| Product Selection | Page V7-T1-69 | Page V7-T1-69 | Page V7-T1-70 | Page V7-T1-70 |

Selector Switches



| | | | | |
|--------------------------|---------------------------------|---------------------------------|-----------------------------------|-----------------------------------|
| Description | Non-illuminated knob type | Non-illuminated rotary type | Illuminated | Key-operated |
| Product Selection | Pages V7-T1-74, V7-T1-75 | Pages V7-T1-76, V7-T1-77 | Pages V7-T1-79 to V7-T1-81 | Pages V7-T1-82 to V7-T1-85 |

Mushroom Head Pushbuttons



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

Double Pushbuttons



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

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Pushbuttons and Indicating Lights

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Four-Way Pushbuttons



| | | |
|--------------------------|----------------------|----------------------|
| Description | Non-interlocked | Interlocked |
| Operator | Momentary | Maintained |
| Product Selection | Page V7-T1-97 | Page V7-T1-97 |

Joysticks



| | |
|--------------------------|----------------------|
| Description | Joysticks |
| Product Selection | Page V7-T1-98 |

Potentiometers



| | |
|--------------------------|-----------------------|
| Description | Potentiometers |
| Product Selection | Page V7-T1-100 |

Acoustic Devices



| | |
|--------------------------|-----------------------|
| Description | Acoustic devices |
| Product Selection | Page V7-T1-100 |

Through-the-Door Operators



| | |
|--------------------------|----------------------------|
| Description | Through-the-door operators |
| Product Selection | Page V7-T1-101 |

Bulkhead Interfaces



| | |
|--------------------------|-----------------------|
| Description | Bulkhead interfaces |
| Product Selection | Page V7-T1-101 |

ASi Adapter Modules



| | |
|--------------------------|-----------------------|
| Description | ASi adapter modules |
| Product Selection | Page V7-T1-102 |

Palm Switches



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

Assembled Control Stations



| | |
|--------------------------|----------------------------|
| Description | Assembled control stations |
| Product Selection | Page V7-T1-10 |

M22-



Point-of-Purchase Units

| Color | Type | Contact 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-DLH-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 | Indicating 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. ⊖

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Pushbuttons and Indicating Lights

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Pushbuttons—Non-Illuminated and Illuminated



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| 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 |

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

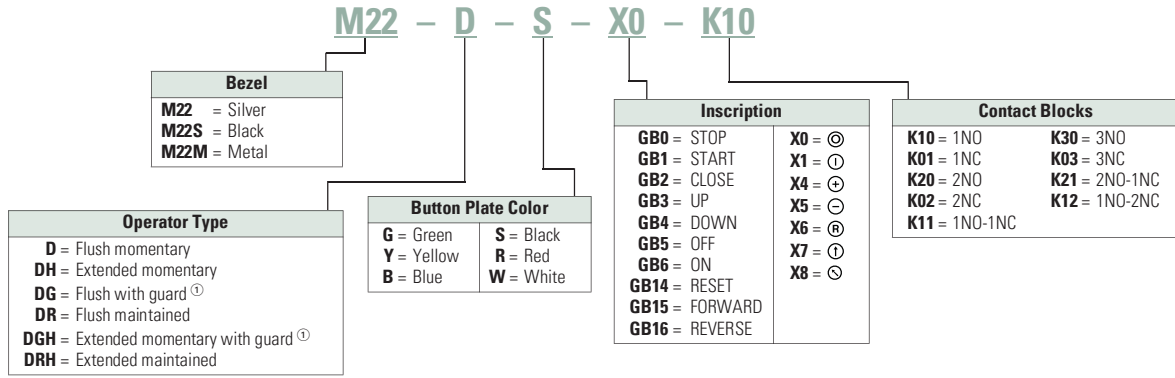
Protection Type

- 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

M22-D-G-K10



M22S-D-G-K10



M22M-D-G-K10



Complete Devices

| Button Color | Contact Block Configuration ^① | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
|--------------|--|-----------------------------|----------------------------|----------------------------|
| Black | NO | M22-D-S-K10 | M22S-D-S-K10 | M22M-D-S-K10 |
| | NC | M22-D-S-K01 | M22S-D-S-K01 | M22M-D-S-K01 |
| | 2NO | M22-D-S-K20 | M22S-D-S-K20 | M22M-D-S-K20 |
| | 2NC | M22-D-S-K02 | M22S-D-S-K02 | M22M-D-S-K02 |
| | 1NO-1NC | M22-D-S-K11 | M22S-D-S-K11 | M22M-D-S-K11 |
| Red | NO | M22-D-R-K10 | M22S-D-R-K10 | M22M-D-R-K10 |
| | NC | M22-D-R-K01 | M22S-D-R-K01 | M22M-D-R-K01 |
| | 2NO | M22-D-R-K20 | M22S-D-R-K20 | M22M-D-R-K20 |
| | 2NC | M22-D-R-K02 | M22S-D-R-K02 | M22M-D-R-K02 |
| | 1NO-1NC | M22-D-R-K11 | M22S-D-R-K11 | M22M-D-R-K11 |
| Green | NO | M22-D-G-K10 | M22S-D-G-K10 | M22M-D-G-K10 |
| | NC | M22-D-G-K01 | M22S-D-G-K01 | M22M-D-G-K01 |
| | 2NO | M22-D-G-K20 | M22S-D-G-K20 | M22M-D-G-K20 |
| | 2NC | M22-D-G-K02 | M22S-D-G-K02 | M22M-D-G-K02 |
| | 1NO-1NC | M22-D-G-K11 | M22S-D-G-K11 | M22M-D-G-K11 |

Note

^① All NC contact blocks are positively driven contact. ⊖

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Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons—M22

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Non-Illuminated Pushbuttons, Flush, Momentary

M22-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 |
| | Ⓛ | 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 ^③ | M22S-D-X-SWRGYB ^③ | M22M-D-X-SWRGYB ^③ |

M22S-D-G



M22M-D-G



M22-DG-G



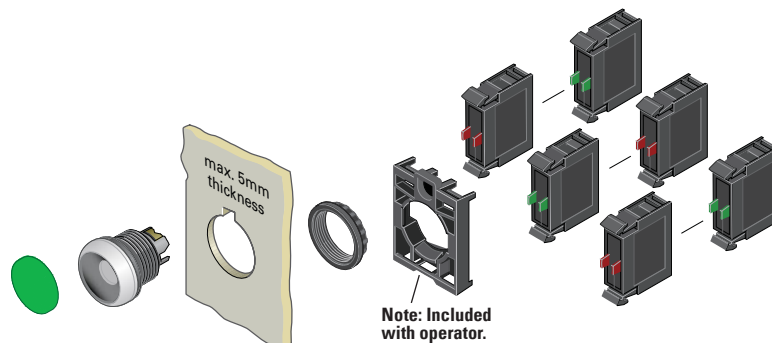
Silver Guarded

| Button Color | Inscription | Silver Bezel Catalog Number |
|--------------|-------------|------------------------------|
| Black | — | M22-DG-S |
| Red | — | M22-DG-R |
| Green | — | M22-DG-G |
| White | — | M22-DG-W |
| Blue | — | M22-DG-B |
| Yellow | — | M22-DG-Y |
| — | — | 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).

Non-Illuminated Pushbuttons, Flush, Momentary



Components

M22-XD-G



Button Plates ^①

| Color | Inscription | Catalog Number |
|--|-------------|----------------------------|
| Black | — | M22-XD-S ^② |
| | Custom | M22-XD-S-ETCH ^③ |
| | STOP | M22-XD-S-GB0 |
| | START | M22-XD-S-GB1 |
| | CLOSE | M22-XD-S-GB2 |
| | UP | M22-XD-S-GB3 |
| | DOWN | M22-XD-S-GB4 |
| | OFF | M22-XD-S-GB5 |
| | ON | M22-XD-S-GB6 |
| | TEST | M22-XD-S-GB9 |
| | FORWARD | M22-XD-S-GB15 |
| | REVERSE | M22-XD-S-GB16 |
| | RAISE | M22-XD-S-GB17 |
| | LOWER | M22-XD-S-GB18 |
| | ⊙ | M22-XD-S-X0 |
| | ⓪ | M22-XD-S-X1 |
| | Ⓛ | M22-XD-S-X2 |
| | + | M22-XD-S-X4 |
| | − | M22-XD-S-X5 |
| Ⓛ | M22-XD-S-X7 | |
| Red | — | M22-XD-R ^② |
| | Custom | M22-XD-R-ETCH ^③ |
| | STOP | M22-XD-R-GB0 |
| | OFF | M22-XD-R-GB5 |
| | ⊙ | M22-XD-R-X0 |
| Green | — | M22-XD-G ^② |
| | Custom | M22-XD-G-ETCH ^③ |
| | START | M22-XD-G-GB1 |
| | ON | M22-XD-G-GB6 |
| Blue | — | M22-XD-B ^② |
| | Custom | M22-XD-B-ETCH ^③ |
| | RESET | M22-XD-B-GB14 |
| | Ⓡ | M22-XD-B-X6 |
| White | — | M22-XD-W ^② |
| | Custom | M22-XD-W-ETCH ^③ |
| | START | M22-XD-W-GB1 |
| | ⓪ | 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 Bezel
Catalog Number ^④

M22-D-X



Black Bezel
Catalog Number ^④

M22S-D-X



Metal Bezel
Catalog Number ^④

M22M-D-X

Silver Guarded



Silver Bezel
Catalog Number ^④

M22-DG-X

M22-K10



M22-FK01



Contact Blocks ^①

| Terminal Type | Contact Configuration ^⑤ | 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 ^⑥ |
| | NO | M22-FK10 ^⑥ |

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. ⊖
- ⑥ Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

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Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons—M22

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Non-Illuminated Pushbuttons, Flush, Maintained ^①

M22-DR-S



M22S-DR-S



M22M-DR-S

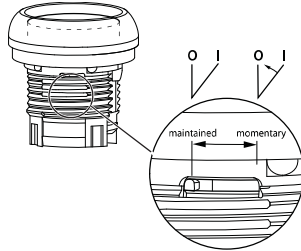


Operators Only ^②

| 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 |

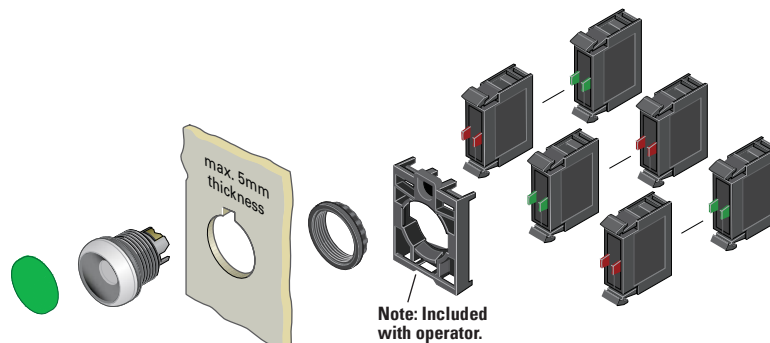
Notes

- ^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.

Non-Illuminated Pushbuttons, Flush, Maintained ^①



Components

M22-XD-S



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 |
| | ⊙ | M22-XD-S-X0 |
| | Ⓜ | M22-XD-S-X1 |
| | Ⓜ | M22-XD-S-X2 |
| | ⊕ | M22-XD-S-X4 |
| ⊖ | M22-XD-S-X5 | |
| Ⓜ | 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 |
| | ⊙ | M22-XD-R-X0 |
| | ⊕ | M22-XD-R-X7 |
| Green | — | M22-XD-G ^③ |
| | Custom | M22-XD-G-ETCH ^④ |
| | START | M22-XD-G-GB1 |
| | ON | M22-XD-G-GB6 |
| | Ⓜ | M22-XD-G-X1 |
| | Ⓜ | M22-XD-G-X7 |
| Blue | — | M22-XD-B ^③ |
| | Custom | M22-XD-B-ETCH ^④ |
| | RESET | M22-XD-B-GB14 |
| | Ⓜ | M22-XD-B-X6 |
| White | — | M22-XD-W ^③ |
| | Custom | M22-XD-W-ETCH ^④ |
| | START | M22-XD-W-GB1 |
| | Ⓜ | 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 Catalog Number ^⑤ | Black Bezel Catalog Number ^⑤ | Metal Bezel Catalog Number ^⑤ |
| M22-DR-X | M22S-DR-X | M22M-DR-X |

M22-K10



M22-FK01



Contact Blocks ^②

| Terminal Type | Contact Configuration ^⑥ | 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 ^⑦ |
| NO | M22-FK10 ^⑦ | |

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. ⊖
- ⑦ Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

1

Non-Illuminated Pushbuttons, Extended, Momentary

M22-DH-R-K10



M22S-DH-R-K10



M22M-DH-R-K10



Complete Devices

| Button Color | Contact Block Configuration ^① | 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 |
| | 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 |

M22-DGH-R-K10



Silver Guarded

| Button Color | Contact Block Configuration ^① | Silver Bezel Catalog Number |
|--------------|--|-----------------------------|
| Red | NO | M22-DGH-R-K10 |
| | NC | M22-DGH-R-K01 |
| | 2NO | M22-DGH-R-K20 |
| | 2NC | M22-DGH-R-K02 |
| | 1NO-1NC | M22-DGH-R-K11 |

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-GB0 | M22M-DH-R-GB0 |
| | ⊙ | 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-SRGR | M22S-DH-X-SRGR | M22M-DH-X-SRGR |
| ④ | — | M22-DH-X-SWRGYB | M22S-DH-X-SWRGYB | M22M-DH-X-SWRGYB |

M22-DGH-R-K10



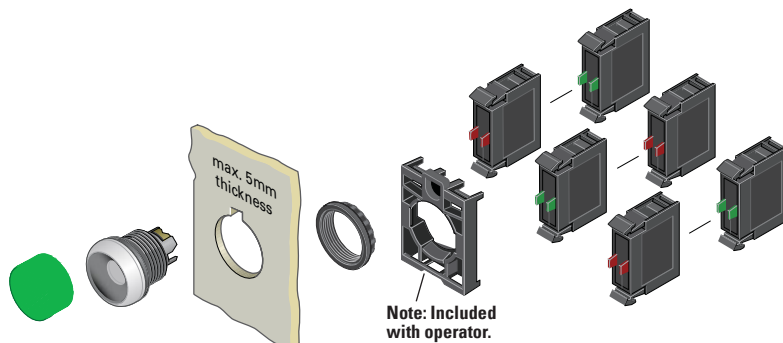
Silver Guarded

| Button Color | Inscription | Silver Bezel Catalog Number |
|--------------|-------------|-----------------------------|
| Black | — | M22-DGH-S |
| Red | — | M22-DGH-R |
| | STOP | M22-DGH-R-GB0 |
| | ⊙ | 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. ⊖
- 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).

Non-Illuminated Pushbuttons, Extended, Momentary



Components

M22-XDH-R



Button Plates ^①

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

Buttonless Operator



Silver Bezel
Catalog
Number ^④

M22-D-X



Black Bezel
Catalog
Number ^④

M22S-D-X



Metal Bezel
Catalog
Number ^④

M22M-D-X

Silver Guarded



Silver Bezel
Catalog
Number ^④

M22-DG-X

M22-K10



M22-FK01



Contact Blocks ^①

| Terminal Type | Contact Configuration ^⑤ | 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 ^⑥ |
| NO | M22-FK10 ^⑥ | |

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. ⊖
- ⑥ Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

1.4

Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons—M22

1 Non-Illuminated Pushbuttons, Extended, Maintained ^①

M22-DRH-W



M22S-DRH-W



M22M-DRH-W

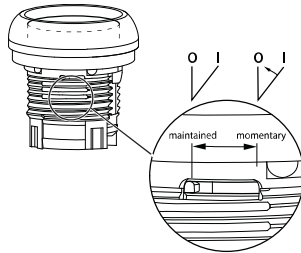


Operators Only ^②

| Button Color | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel 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 |

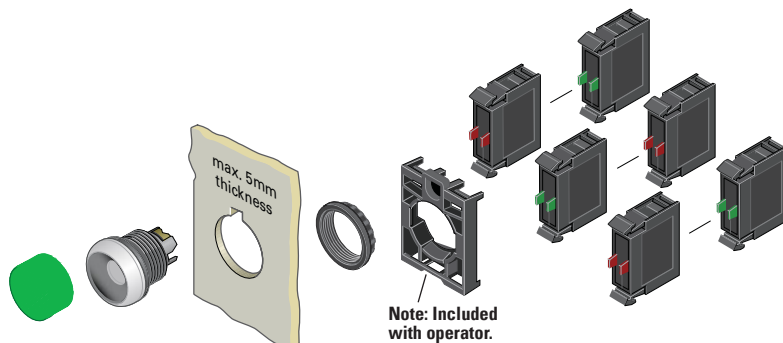
Notes

- 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.

Non-Illuminated Pushbuttons, Extended, Maintained ^①



Components

M22-XDH-W



Button Plates ^②

| Color | Inscription | Catalog Number |
|--|--------------|-----------------------------|
| Black | — | M22-XDH-S ^③ |
| | Custom | M22-XDH-S-ETCH ^④ |
| | STOP | M22-XDH-S-GB0 |
| | START | M22-XDH-S-GB1 |
| | CLOSE | M22-XDH-S-GB2 |
| | UP | M22-XDH-S-GB3 |
| | DOWN | M22-XDH-S-GB4 |
| | OFF | M22-XDH-S-GB5 |
| | ON | M22-XDH-S-GB6 |
| | TEST | M22-XDH-S-GB9 |
| | FORWARD | M22-XDH-S-GB15 |
| | REVERSE | M22-XDH-S-GB16 |
| | RAISE | M22-XDH-S-GB17 |
| | LOWER | M22-XDH-S-GB18 |
| | ⊙ | M22-XDH-S-X0 |
| | ① | M22-XDH-S-X1 |
| | ② | M22-XDH-S-X2 |
| ⊕ | M22-XDH-S-X4 | |
| ⊖ | M22-XDH-S-X5 | |
| Ⓜ | M22-XDH-S-X7 | |
| Red | — | M22-XDH-R ^③ |
| | Custom | M22-XDH-R-ETCH ^④ |
| | STOP | M22-XDH-R-GB0 |
| | OFF | M22-XDH-R-GB5 |
| | ⊙ | M22-XDH-R-X0 |
| | — | M22-XDH-G ^③ |
| Green | Custom | M22-XDH-G-ETCH ^④ |
| | START | M22-XDH-G-GB1 |
| | ON | M22-XDH-G-GB6 |
| | ① | M22-XDH-G-X1 |
| | — | M22-XDH-B ^③ |
| Blue | Custom | M22-XDH-B-ETCH ^④ |
| | RESET | M22-XDH-B-GB14 |
| | Ⓜ | M22-XDH-B-X6 |
| | — | M22-XDH-W ^③ |
| White | 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 Bezel
Catalog Number ^⑤

M22-DR-X



Black Bezel
Catalog Number ^⑤

M22S-DR-X



Metal Bezel
Catalog Number ^⑤

M22M-DR-X

M22-K10



M22-FK01



Contact Blocks ^②

| Terminal Type | Contact Configuration ^⑥ | 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 ^⑦ |
| | NO | M22-FK10 ^⑦ |

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. ⊖
- ⑦ Additional contacts may not be stacked behind M22-F type contact blocks. M22-F can be stacked behind standard M22 contacts only.

1.4

Pushbuttons and Indicating Lights

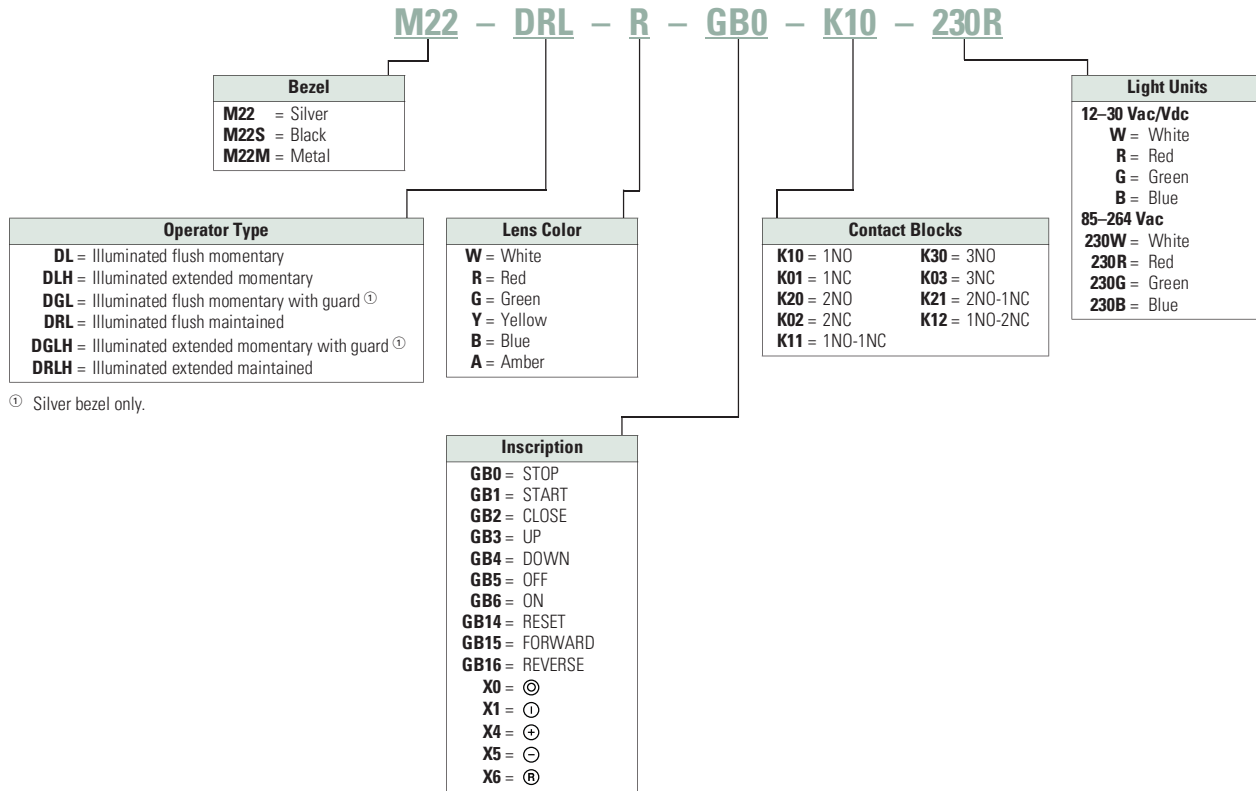
22.5 mm RMQ-Titan Modular Pushbuttons—M22

1

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 Pushbuttons, Flush, Momentary

M22-DL-G-K01-G



M22S-DL-G-K01-G



M22M-DL-G-K01-G



Complete Devices

| Button Color | Contact Block Configuration ^① | 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 Vac/Vdc | M22-DL-R-K02-R | M22S-DL-R-K02-R | M22M-DL-R-K02-R |
| | 2NC | 85–264 Vac | M22-DL-R-K02-230R | M22S-DL-R-K02-230R | M22M-DL-R-K02-230R |
| | 1NO/1NC | 12–30 Vac/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 Vac/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 |
| | 2NO | 12–30 Vac/Vdc | M22-DL-G-K20-G | M22S-DL-G-K20-G | M22M-DL-G-K20-G |
| | 2NO | 85–264 Vac | M22-DL-G-K20-230G | M22S-DL-G-K20-230G | M22M-DL-G-K20-230G |
| | 1NO/1NC | 12–30 Vac/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 Vac/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 |
| | 2NO | 12–30 Vac/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 Vac/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. ⊖

1.4

Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons—M22

1

Illuminated Pushbuttons, Flush, Momentary

M22-DL-G



M22S-DL-G



M22M-DL-G



M22-DGL-G



Operators Only [Ⓢ]

| Button Color | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
|--------------|-----------------------------|----------------------------|----------------------------|
| 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 |
| 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 |

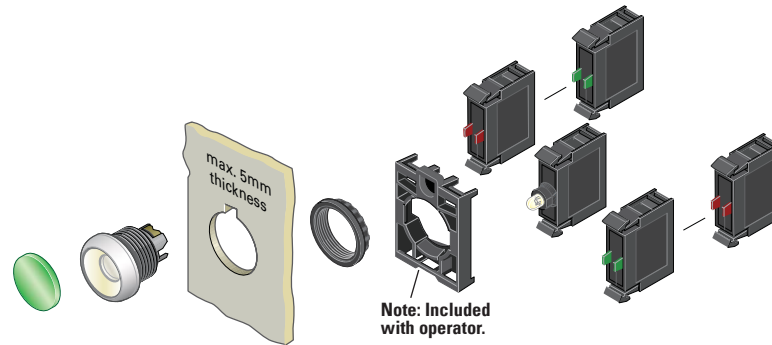
Silver Guarded

| Button Color | Silver Bezel Catalog Number |
|--------------|-----------------------------|
| Red | M22-DGL-R |
| Green | M22-DGL-G |
| White | M22-DGL-W |
| Blue | M22-DGL-B |
| Yellow | M22-DGL-Y |

Note

[Ⓢ] Includes contact block mounting adapter.

Illuminated Pushbuttons, Flush, Momentary



Components

M22-XDL-G



Button Lenses ^①

| Color | Inscription | Catalog Number |
|--------|-------------|-----------------------------|
| Red | — | M22-XDL-R ^② |
| | Custom | M22-XDL-R-ETCH ^③ |
| | STOP | M22-XDL-R-GB0 |
| | OFF | M22-XDL-R-GB5 |
| | Ⓞ | M22-XDL-R-X0 |
| Green | — | M22-XDL-G ^② |
| | Custom | M22-XDL-G-ETCH ^③ |
| | START | M22-XDL-G-GB1 |
| | ON | M22-XDL-G-GB6 |
| | Ⓢ | M22-XDL-G-X1 |
| Blue | — | M22-XDL-B ^② |
| | Custom | M22-XDL-B-ETCH ^③ |
| | RESET | M22-XDL-B-GB14 |
| | Ⓡ | M22-XDL-B-X6 |
| | White | — |
| Yellow | Custom | M22-XDL-W-ETCH ^③ |
| | — | M22-XDL-Y ^② |
| Amber | Custom | M22-XDL-Y-ETCH ^③ |
| | — | M22-XDL-A |
| — | Custom | M22-XDL-A-ETCH |

M22-DL-X



Buttonless Operator

| Silver Bezel Catalog Number ^④ | Black Bezel Catalog Number ^④ | Metal Bezel Catalog Number ^④ |
|--|---|---|
| M22-DL-X | M22S-DL-X | M22M-DL-X |

M22S-DL-X



M22M-DL-X



M22-DGL-X



Silver Guarded

| Silver Bezel Catalog Number ^④ |
|--|
| M22-DGL-X |

M22-LED-W



M22-FLED-



Light Units ^①

| Terminal Type | LED Color | Light Unit Voltage | Catalog Number |
|---------------|--|--------------------|---------------------------|
| Screw | White | 12–30 Vac/Vdc | M22-LED-W |
| | Red | | M22-LED-R |
| | Green | | M22-LED-G |
| | Blue | | M22-LED-B |
| Screw | White | 85–264 Vac | M22-LED230-W |
| | Red | | M22-LED230-R |
| | Green | | M22-LED230-G |
| | Blue | | M22-LED230-B |
| Spring-cage | White | 12–30 Vac/Vdc | M22-FLED-W |
| | Red | | M22-FLED-R |
| | Green | | M22-FLED-G |
| | Blue | M22-FLED-B | |
| | Red/Green/Yellow | 24 Vdc | M22-FLED-RG ^⑤ |
| | Red, Green, Blue, Yellow, White, Violet, Turquoise | | M22-FLED-RGB ^⑤ |

M22-K10



M22-FK01



Contact Blocks ^①

| Terminal Type | Contact Configuration ^⑥ | 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 ^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-XDL-R-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. ⊖
- ⑦ Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

1.4

Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons—M22

1

Illuminated Pushbuttons, Flush, Maintained ^①

M22-DRL-W-K10-W



M22S-DRL-W-K10-W



M22M-DRL-W-K10-W



Complete Devices

| Button Color | Contact Block Configuration ^② | 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 Vac/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 |
| | 2NO | 12–30 Vac/Vdc | M22-DRL-W-K20-W | M22S-DRL-W-K20-W | M22M-DRL-W-K20-W |
| | 2NO | 85–264 Vac | M22-DRL-W-K20-230W | M22S-DRL-W-K20-230W | M22M-DRL-W-K20-230W |
| | 2NC | 12–30 Vac/Vdc | 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 |

M22-DRL-W



M22S-DRL-W



M22M-DRL-W

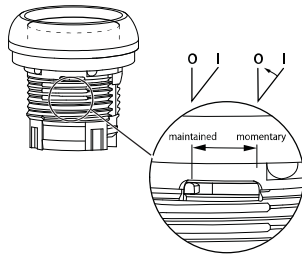


Operators Only ^③

| Button Color | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel 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 |

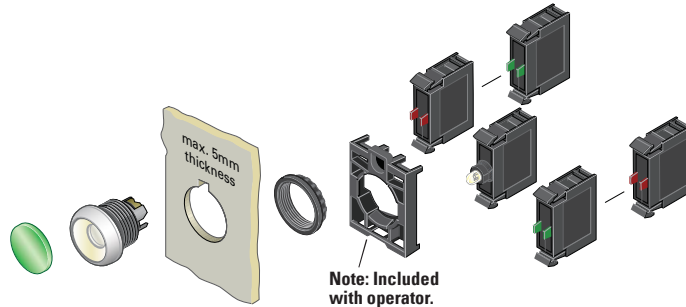
Notes

- 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.
- 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.

Illuminated Pushbuttons, Flush, Maintained ^①



Components

M22-XDL-W



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 |
| | Ⓛ | M22-XDL-G-X1 |
| Blue | — | M22-XDL-B ^③ |
| | Custom | M22-XDL-B-ETCH ^④ |
| | RESET | M22-XDL-B-GB14 |
| | Ⓜ | M22-XDL-B-X6 |
| White | — | M22-XDL-W ^③ |
| | Custom | M22-XDL-W-ETCH ^④ |
| Yellow | — | M22-XDL-Y ^③ |
| | Custom | M22-XDL-Y-ETCH ^④ |
| Amber | — | M22-XDL-A |
| | Custom | M22-XDL-A-ETCH |

M22-DRL-X



M22S-DRL-X



M22M-DRL-X



Buttonless Operator

| Silver Bezel Catalog Number ^⑤ | Black Bezel Catalog Number ^⑤ | Metal Bezel Catalog Number ^⑤ |
|--|---|---|
| M22-DRL-X | M22S-DRL-X | M22M-DRL-X |

M22-LED-W



Light Units ^②

| Terminal Type | LED Color | Light Unit Voltage | Catalog Number |
|---------------|--|--------------------|---------------------------|
| Screw | White | 12–30 Vac/Vdc | M22-LED-W |
| | Red | | M22-LED-R |
| | Green | | M22-LED-G |
| | Blue | | M22-LED-B |
| Screw | White | 85–264 Vac | M22-LED230-W |
| | Red | | M22-LED230-R |
| | Green | | M22-LED230-G |
| Spring-cage | White | 12–30 Vac/Vdc | M22-FLED-W |
| | Red | | M22-FLED-R |
| | Green | M22-FLED-G | |
| | Blue | M22-FLED-B | |
| | Red/Green/Yellow | 24 Vdc | M22-FLED-RG ^⑥ |
| | Red, Green, Blue, Yellow, White, Violet, Turquoise | | M22-FLED-RGB ^⑥ |

M22-FLED-



M22-K10



Contact Blocks ^②

| Terminal Type | Contact Configuration ^⑦ | 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 ^⑧ |
| | 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 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.
- ⑧ Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

1

Illuminated Pushbuttons, Extended, Momentary

M22-DLH-R-K11-R



M22S-DLH-R-K11-R



Complete Devices

| Button Color | Contact Block Configuration ^① | Light Unit Voltage | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
|--------------|--|--------------------|-----------------------------|----------------------------|----------------------------|
| 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 |
| Green | 2NO | 12–30 Vac/Vdc | M22-DLH-G-K20-G | M22S-DLH-G-K20-G | M22M-DLH-G-K20-G |
| | 2NO | 85–264 Vac | M22-DLH-G-K20-230G | M22S-DLH-G-K20-230G | M22M-DLH-G-K20-230G |
| White | 2NO | 12–30 Vac/Vdc | M22-DLH-W-K20-W | M22S-DLH-W-K20-W | M22M-DLH-W-K20-W |
| | 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 Catalog Number | Black Bezel Catalog Number |
|--------------|--------------------|-----------------------------|----------------------------|
| Red | 12–30 Vac/Vdc | M22-T-R-R | M22S-T-R-R |
| Blue | | M22-T-B-B | M22S-T-B-B |
| Yellow | | M22-T-Y-W | M22S-T-Y-W |
| Green | | M22-T-G-G | M22S-T-G-G |
| White | | M22-T-W-W | M22S-T-W-W |
| Red | 85–264 Vac | M22-T-R-230R | M22S-T-R-230R |
| Blue | | M22-T-R-230B | M22S-T-B-230B |
| Yellow | | M22-T-Y-230W | M22S-T-Y-230W |
| Green | | M22-T-G-230G | M22S-T-G-230G |
| White | | M22-T-W-230W | M22S-T-W-230W |

M22-DLH-R



M22S-DLH-R



M22M-DLH-R



Operators Only ^②

| Button Color | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel 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

M22-DGLH-R

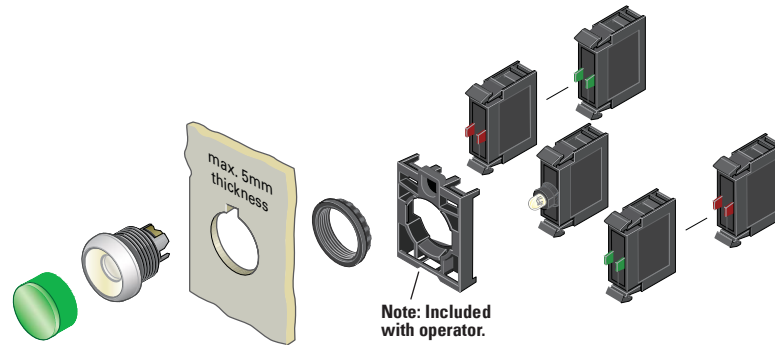


| Button Color | Silver Bezel Catalog Number |
|--------------|-----------------------------|
| Red | M22-DGLH-R |
| Green | M22-DGLH-G |
| White | M22-DGLH-W |
| Blue | M22-DGLH-B |
| Yellow | M22-DGLH-Y |

Notes

- ① All NC contact blocks are positively driven contact. ↻
- ② Includes contact block mounting adapter.

Illuminated Pushbuttons, Extended, Momentary



Components

M22-XDH-R



Button Lenses ①

| Color | Inscription | Catalog Number |
|--------|-------------|-------------------|
| Red | — | M22-XDLH-R ② |
| | Custom | M22-XDLH-R-ETCH ③ |
| | STOP | M22-XDLH-R-GB0 |
| | OFF | M22-XDLH-R-GB5 |
| | Ⓞ | M22-XDLH-R-X0 |
| Green | — | M22-XDLH-G ② |
| | Custom | M22-XDLH-G-ETCH ③ |
| | START | M22-XDLH-G-GB1 |
| | ON | M22-XDLH-G-GB6 |
| | ⓪ | M22-XDLH-G-X1 |
| Blue | — | M22-XDLH-B ② |
| | Custom | M22-XDLH-B-ETCH ③ |
| | RESET | M22-XDLH-B-GB14 |
| | Ⓜ | M22-XDLH-B-X6 |
| White | — | M22-XDLH-W ② |
| Yellow | Custom | M22-XDLH-W-ETCH ③ |
| | — | M22-XDLH-Y ② |
| Amber | Custom | M22-XDLH-Y-ETCH ③ |
| | — | M22-XDLH-A |
| | Custom | M22-XDLH-A-ETCH |

M22-DL-X



Buttonless Operator

| Silver Bezel Catalog Number ① | Black Bezel Catalog Number ④ | Metal Bezel Catalog Number ④ |
|-------------------------------|------------------------------|------------------------------|
| M22-DL-X | M22S-DL-X | M22M-DL-X |

M22S-DL-X



M22M-DL-X



M22-DGL-X



Silver Guarded

| Silver Bezel Catalog Number ① |
|-------------------------------|
| M22-DGL-X |

M22-LED-W



Light Units ①

| Terminal Type | LED Color | Light Unit Voltage | Catalog Number |
|---------------|--|--------------------|----------------|
| Screw | White | 12–30 Vac/Vdc | M22-LED-W |
| | Red | | M22-LED-R |
| | Green | | M22-LED-G |
| | Blue | | M22-LED-B |
| Screw | White | 85–264 Vac | M22-LED230-W |
| | Red | | M22-LED230-R |
| | Green | | M22-LED230-G |
| Spring-cage | White | 12–30 Vac/Vdc | M22-FLED-W |
| | Red | | M22-FLED-R |
| | Green | | M22-FLED-G |
| | Blue | | M22-FLED-B |
| | Red/Green/Yellow | 24 Vdc | M22-FLED-RG ⑤ |
| | Red, Green, Blue, Yellow, White, Violet, Turquoise | | M22-FLED-RGB ⑤ |

M22-FLED-



M22-K10



Contact Blocks ①

| Terminal Type | Contact Configuration ⑥ | 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 ⑦ |
| | NO | M22-FK10 ⑦ |

M22-FK01



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. Ⓞ
- ⑦ Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

1.4

Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons—M22

1

Illuminated Pushbuttons, Extended, Maintained ^①

M22-DRLH-W



M22S-DRLH-W



M22M-DRLH-W

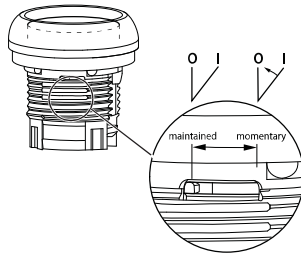


Operators Only ^②

| Button Color | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
|--------------|--------------------------------|-------------------------------|-------------------------------|
| 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 |
| 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 |

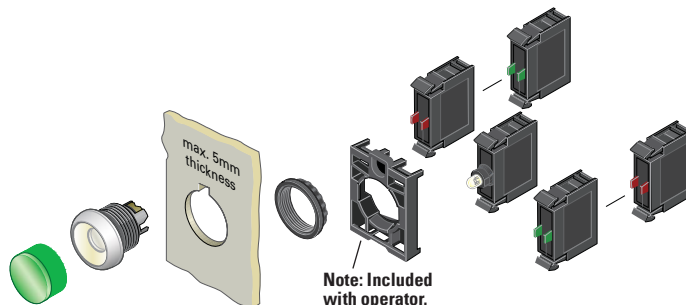
Notes

- 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.

Illuminated Pushbuttons, Extended, Maintained ^①



Components

M22-XDLH-W



Button Lenses ^②

| 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 |
| | Ⓢ | 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 |
| | Ⓢ | M22-XDLH-G-X1 |
| Blue | — | M22-XDLH-B ^③ |
| | Custom | M22-XDLH-B-ETCH ^④ |
| | RESET | M22-XDLH-B-GB14 |
| | Ⓢ | M22-XDLH-B-X6 |
| | White | — |
| Yellow | Custom | M22-XDLH-W-ETCH ^④ |
| | — | M22-XDLH-Y ^③ |
| | Custom | M22-XDLH-Y-ETCH ^④ |
| Amber | — | M22-XDLH-A |
| | Custom | M22-XDLH-A-ETCH |

M22-DRL-X



M22S-DRL-X



M22M-DRL-X



Buttonless Operator

| Silver Bezel Catalog Number ^⑤ | Black Bezel Catalog Number ^⑤ | Metal Bezel Catalog Number ^⑤ |
|--|---|---|
| M22-DRL-X | M22S-DRL-X | M22M-DRL-X |

M22-LED-W



M22-FLED-__



Light Units ^②

| Terminal Type | LED Color | Light Unit Voltage | Catalog Number |
|---------------|-----------|--|---------------------------|
| Screw | White | 12–30 Vac/Vdc | M22-LED-W |
| | Red | | M22-LED-R |
| | Green | | M22-LED-G |
| | Blue | | M22-LED-B |
| Screw | White | 85–264 Vac | M22-LED230-W |
| | Red | | M22-LED230-R |
| | Green | | M22-LED230-G |
| | Blue | | M22-LED230-B |
| Spring-cage | White | 12–30 Vac/Vdc | M22-FLED-W |
| | Red | | M22-FLED-R |
| | Green | | M22-FLED-G |
| | Blue | | M22-FLED-B |
| | 24 Vdc | Red/Green/Yellow | M22-FLED-RG ^⑥ |
| | | Red, Green, Blue, Yellow, White, Violet, Turquoise | M22-FLED-RGB ^⑥ |

M22-K10



M22-FK01



Contact Blocks ^②

| Terminal Type | Contact Configuration ^⑦ | 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 ^⑧ |
| | 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 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.
- ⑥ Please see color input key on **Page V7-T1-108**.
- ⑦ All NC contact blocks are positively driven contact. ⊖
- ⑧ Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

1.4

Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons—M22

1

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

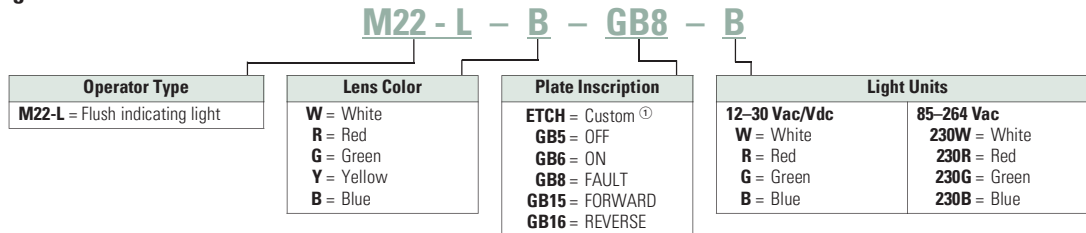
Protection Type

- 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. Use white light unit with yellow 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. For example, M22-L-B-ETCH; Order Notes: Mark with symbol X91, Line item #...

Product Selection

Indicating Lights, Flush

M22-L-R-R



Complete Devices

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

Operators Only ^①

M22-L-R



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

M22-LH-R

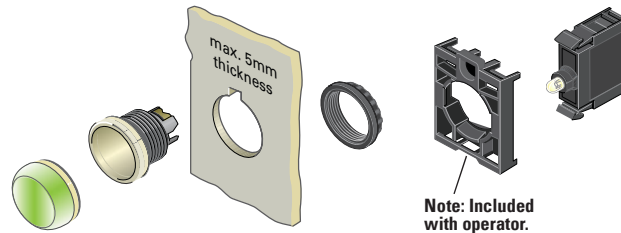


| Lens Color | Catalog Number |
|----------------|----------------|
| Conical | |
| White | M22-LH-W |
| Red | M22-LH-R |
| Green | M22-LH-G |
| Yellow | M22-LH-Y |
| Blue | M22-LH-B |
| Amber | M22-LH-A |

Note

^① Includes contact block mounting adapter.

Indicating Lights, Flush



Components

M22-XL-R



Lenses ①

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

M22-LED-W



M22-FLED-__



Light Units ①④

| Terminal Type | LED Color | Light Unit Voltage | Catalog Number |
|---------------|--|--------------------|-----------------------|
| Screw | White | 12–30 Vac/Vdc | M22-LED-W |
| | Red | | M22-LED-R |
| | Green | | M22-LED-G |
| | Blue | | M22-LED-B |
| Screw | White | 85–264 Vac | M22-LED230-W |
| | Red | | M22-LED230-R |
| | Green | | M22-LED230-G |
| | Blue | | M22-LED230-B |
| Spring-cage | White | 12–30 Vac/Vdc | M22-FLED-W |
| | Red | | M22-FLED-R |
| | Green | | M22-FLED-G |
| | Blue | | M22-FLED-B |
| | Red/Green/Yellow | 24 Vdc | M22-FLED-RG ⑤ |
| | Red, Green, Blue, Yellow, White, Violet, Turquoise | | M22-FLED-RGB ⑤ |

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



Lensless Indicating Light

| Catalog Number |
|----------------|
| M22-L-X |

1

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 key-release, 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

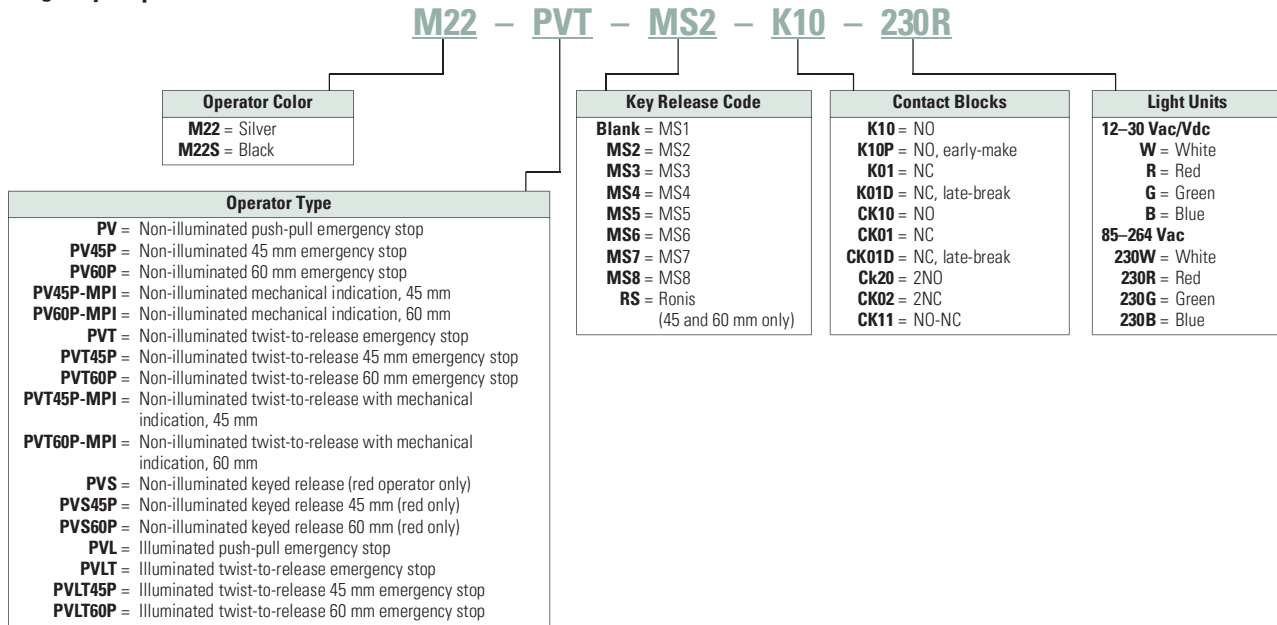
Protection Type

- 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

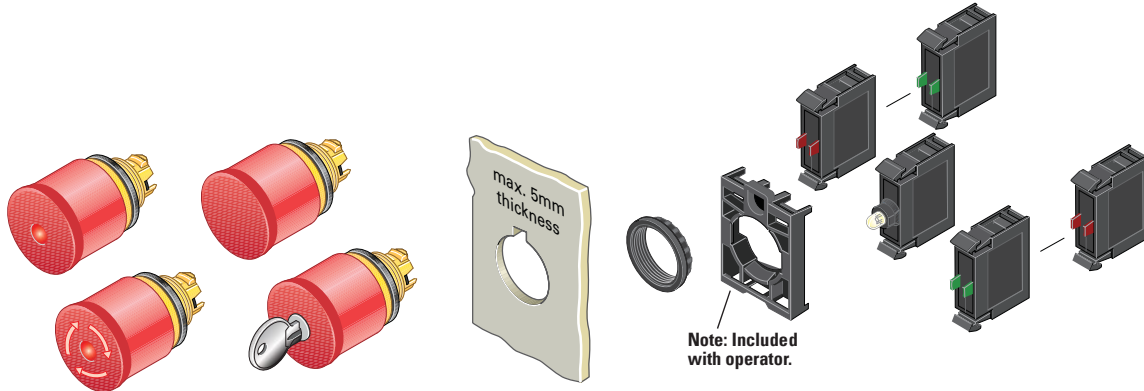
| Type | Button Color | LED Color | Contact Block Configuration ^① | Light Unit Voltage | Catalog Number | |
|---|------------------------|-----------|--|--------------------------|--------------------|--------------------------|
| M22-PV-K01 | | | | | | |
|  | Non-Illuminated | | | | | |
| | Push-pull | 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. ⊖

1

Non-Illuminated 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 |

M22-PVS60P-MS1



Key Release Emergency Stops ^②

| Actuator Size | Key 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 |
| 60 mm | Ronis | M22-PVS45P-RS |
| | 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 |

M22-PVT45P-MPI



Twist-to-Release Emergency Stops

| Illumination/Indication | Actuator Size | Catalog Number |
|-------------------------|---------------|-----------------------|
| None | 35 mm | M22-PVT |
| | 45 mm | M22-PVT45P |
| | 60 mm | M22-PVT60P |
| LED illumination | 35 mm | M22-PVLT |
| | 45 mm | M22-PVLT45P |
| | 60 mm | M22-PVLT60P |
| Mechanical indication | 45 mm | M22-PVT45P-MPI |
| | 60 mm | M22-PVT60P-MPI |

M22S-PVLT



Machine Stop Operators (Black) ^①

| Illumination | Type | Actuator Size | Catalog Number |
|------------------|------------------|---------------|------------------|
| Non-illuminated | Push-pull | 35 mm | M22S-PV |
| | Twist-to-release | 35 mm | M22S-PVT |
| LED illumination | Push-pull | 35 mm | M22S-PVL |
| | Twist-to-release | 35 mm | M22S-PVLT |

Notes





^① Includes contact block mounting adapter.

^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.

Contact Blocks ^①

| | Terminal Type | Mounting Location ^② | Contact Configuration ^③ | Catalog Number | |
|---|------------------------------|--------------------------------|---|---|----------------------|
|  | Screw | Front | NO | M22-K10 | |
| | | | NO, early-make | M22-K10P | |
| | | | NC | M22-K01 | |
| | | | NC, late-break | M22-K01D | |
| | | | NC ^④ | M22-K01PV6 | |
| | | | SMCB, NC | M22-K01SMC10 | |
| | | | SMCB, 2NC | M22-K02SMC10 | |
| | | | Base | SMCB, NC | M22-KC01SMC10 |
| | | | SMCB, 2NC | M22-KC02SMC10 | |
| | | |  | Self-monitoring (1NC and 1NO in series) | Front |
| 2NC | M22-K02SMC10 | | | | |
| Base | 1NC | M22-KC01SMC10 | | | |
| 2NC | M22-KC02SMC10 | | | | |
|  | Self-monitoring spring-cage | | NC | M22-FK01SMC10 | |
| | | | 3NC | M22-AFK03SMC10 | |
|  | Spring-cage | Front | NO | M22-CK10 | |
| | | | NC | M22-CK01 | |
| | | | NC, late-break | M22-CK01D | |
| | | | 2NO | M22-CK20 | |
| | | | 2NC | M22-CK02 | |
| | | | NO-NC | M22-CK11 | |
| | | | NC | M22-FK01 ^⑤ | |
| NO | M22-FK10 ^⑤ | | | | |

Light Units ^①

| | Terminal Type | LED Color | Light Unit Voltage | Catalog Number |
|---|---------------|-----------|--------------------|----------------------|
|  | Screw | White | 12–30 Vac/Vdc | M22-LED-W |
| | | Red | 12–30 Vac/Vdc | M22-LED-R |
|  | Screw | White | 85–264 Vac | M22-LED230-W |
| | | Red | 85–264 Vac | M22-LED230-R |
|  | Screw | White | 207–264 Vac | M22-LED230H-W |
| | | Red | 207–264 Vac | M22-LED230H-R |
|  | Spring-cage | White | 12–30 Vac/Vdc | M22-FLED-W |
| | | Red | 12–30 Vac/Vdc | M22-FLED-R |






M22-ES-MS1



Extra Keys ^⑥

| For 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

| Description | Voltage | Catalog Number |
|---|------------|------------------------|
|  M22-XGPV | — | M22-XGPV |
|  M22G-XGPV | — | M22G-XGPV |
|  M22-MGTA | — | M22-MGTA |
|  M22-PL-PV | — | M22-PL-PV |
|  M22-XPV60-Y-120 | 24 Vac/Vdc | M22-XPV60-Y-24 |
| | 120 Vac | M22-XPV60-Y-120 |
| | 230 Vac | M22-XPV60-Y-230 |

Notes

- ① For complete listing of available contact blocks, see Accessories, Pages V7-T1-105 to V7-T1-110.
- ② Self-monitoring contact blocks (SMCB type) cannot be used with illuminated emergency stops.
- ③ All NC contact blocks are positively driven contact. ⊖
- ④ Allows up to six contact blocks to be utilized, For use only with only M22-PV_.
- ⑤ Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.
- ⑥ For use with key release operators only. One key included with operator.

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.

1

Selector Switches



Contents

Description

| | <i>Page</i> |
|------------------------------------|-----------------|
| Selector Switches | |
| Non-Illuminated Switches | V7-T1-73 |
| Illuminated Switches | V7-T1-78 |
| Key Operated | V7-T1-82 |

Selector Switches

Product Description

Eaton’s M22 selector switch line offers an almost endless variety of options in maintained/momentary, key-removal 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
- 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

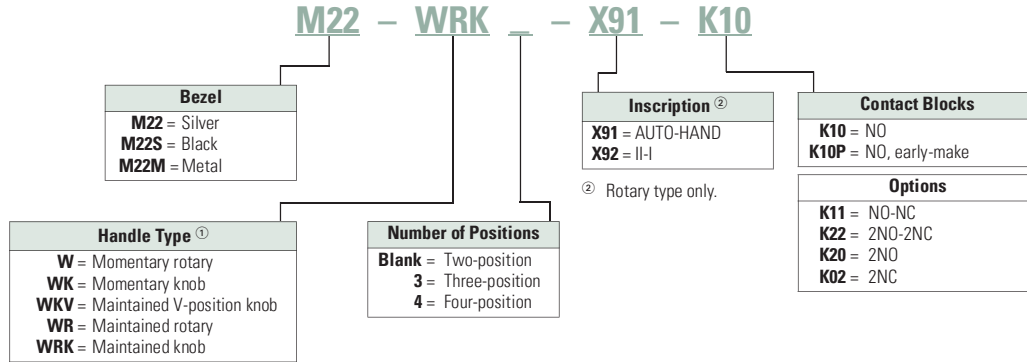
Protection Type

- 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-Illuminated Selector Switches



^① All momentary selector switches can be converted in the field to maintained operation with the removal of a color-coded adapter.

1

Product Selection

Non-Illuminated Selector Switches

M22-WKV-K10



M22M-WKV-K10



Complete Devices, Knob Type ①

| Type | Switching Position | Contact Block Configuration ② | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
|----------------|------------------------------|-------------------------------|-----------------------------|----------------------------|----------------------------|
| Two-position | Maintained 40° | NO | M22-WRK-K10 | M22S-WRK-K10 | M22M-WRK-K10 |
| | | 1NO-1NC | M22-WRK-K11 | M22S-WRK-K11 | M22M-WRK-K11 |
| | | 2NO-2NC | M22-WRK-K22 | M22S-WRK-K22 | M22M-WRK-K22 |
| | Maintained V 60° | NO | M22-WKV-K10 | M22S-WKV-K10 | M22M-WKV-K10 |
| | | 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 60° I 0 II 60° | 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. (⊖)

Non-Illuminated Selector Switches

Components




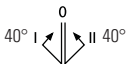



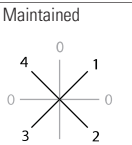
M22-WK



M22M-WK



Operators Only, Knob Type ^①

| Type | Switching Position | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
|----------------|--|-----------------------------|----------------------------|----------------------------|
| Two-position | Momentary ^②  | M22-WK | M22S-WK | M22M-WK |
| | Maintained  | M22-WRK | M22S-WRK | M22M-WRK |
| | Maintained V  | M22-WKV | M22S-WKV | M22M-WKV |
| Three-position | Momentary ^②  | M22-WK3 | M22S-WK3 | M22M-WK3 |
| | Maintained  | M22-WRK3 | M22S-WRK3 | M22M-WRK3 |
| | Maintained, return from left  | M22-WRK3-2 | M22S-WRK3-2 | M22M-WRK3-2 |
| | Maintained, return from right  | M22-WRK3-1 | M22S-WRK3-1 | M22M-WRK3-1 |
| | Maintained  | M22-WRK4 | M22S-WRK4 | M22M-WRK4 |

Notes

- ① Includes contact block mounting adapter.
- ② Momentary selector switches can be converted in the field to maintained operation with the removal of a color coded adapter. See **Page V7-T1-112**.

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Non-Illuminated Selector Switches

Components

M22S-WR3-X94



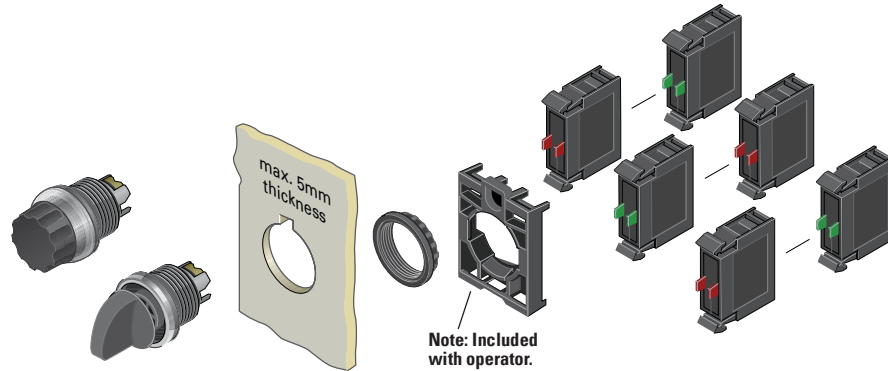
Operators Only, Rotary Type ^①

| 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-O | M22-WR | M22S-WR | M22M-WR |
| | | Custom | M22-WR-ETCH ^③ | M22S-WR-ETCH ^③ | M22M-WR-ETCH ^③ |
| | | 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 | I-O-II | M22-W3 | M22S-W3 | M22M-W3 |
| | Maintained | I-O-II | 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 #_.

Non-Illuminated Selector Switches



Components

M22-K10





M22-FK01



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 |
| 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 |

Accessories

| | Description | Catalog Number |
|--|-----------------------------------|-----------------|
| M22-XW  | Plunger bridge ^④ | M22-XW |
| M22-XWS  | Key cover | M22-XWS |
| M22-XC-R  | Key withdraw adapter ^⑤ | M22-XC-R |
| M22-XC-Y  | Coding adapter | M22-XC-Y |
| M22-XGWK  | Guard ring | M22-XGWK |

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. ⊖
- ^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.

1.4

Pushbuttons and Indicating Lights

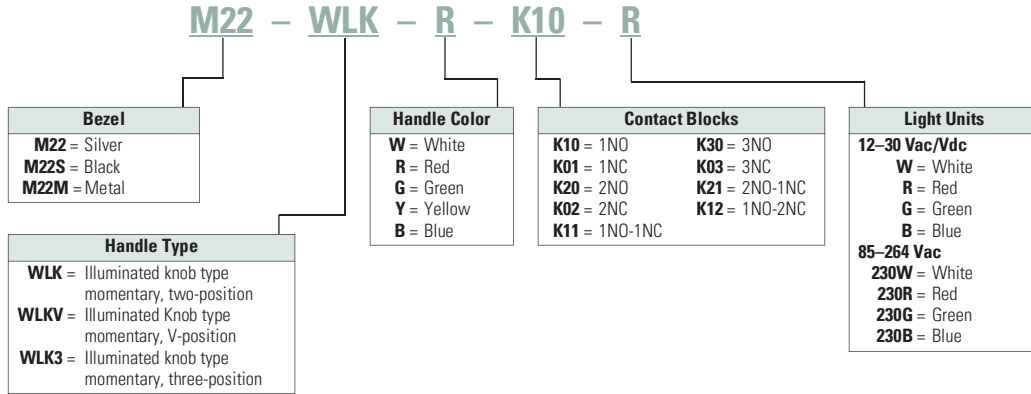
22.5 mm RMQ-Titan Modular Pushbuttons—M22

1

Catalog Number Selection

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

Illuminated Selector Switches



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 |
| | | 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 |
| | Red | M22-WRLK-R | M22S-WRLK-R | M22M-WRLK-R | |
| | 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 |
| | | 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**.

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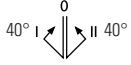



Illuminated Selector Switches

Components

M22-WLK3-W

Operators Only, Knob Type ^①



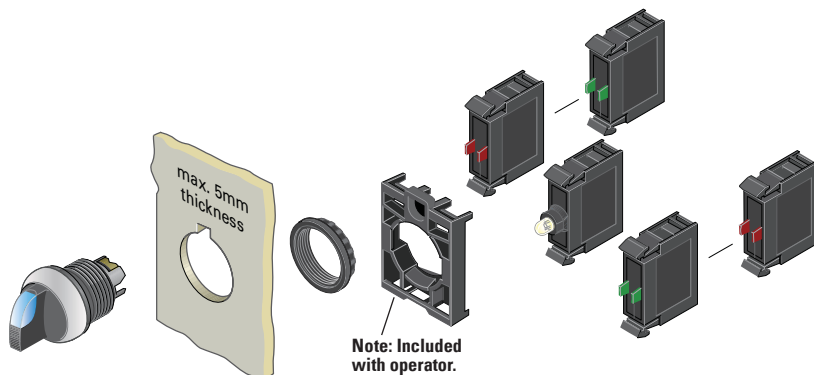
| Type | Switching Position | Button Color | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number | |
|------------------------------|---|---|-----------------------------|----------------------------|----------------------------|----------------|
| Three-position | Momentary ^②  | White | M22-WLK3-W | M22S-WLK3-W | M22M-WLK3-W | |
| | | Red | M22-WLK3-R | M22S-WLK3-R | M22M-WLK3-R | |
| | | Green | M22-WLK3-G | M22S-WLK3-G | M22M-WLK3-G | |
| | | Yellow | M22-WLK3-Y | M22S-WLK3-Y | M22M-WLK3-Y | |
| | | Blue | M22-WLK3-B | M22S-WLK3-B | M22M-WLK3-B | |
| | Maintained |  | White | M22-WRLK3-W | M22S-WRLK3-W | M22M-WRLK3-W |
| | | | Red | M22-WRLK3-R | M22S-WRLK3-R | M22M-WRLK3-R |
| | | | Green | M22-WRLK3-G | M22S-WRLK3-G | M22M-WRLK3-G |
| | | | Yellow | M22-WRLK3-Y | M22S-WRLK3-Y | M22M-WRLK3-Y |
| | | | Blue | M22-WRLK3-B | M22S-WRLK3-B | M22M-WRLK3-B |
| | Maintained, return from right |  | White | M22-WRLK3-1-W | M22S-WRLK3-1-W | M22M-WRLK3-1-W |
| | | | Red | M22-WRLK3-1-R | M22S-WRLK3-1-R | M22M-WRLK3-1-R |
| Green | | | M22-WRLK3-1-G | M22S-WRLK3-1-G | M22M-WRLK3-1-G | |
| Yellow | | | M22-WRLK3-1-Y | M22S-WRLK3-1-Y | M22M-WRLK3-1-Y | |
| Blue | | | M22-WRLK3-1-B | M22S-WRLK3-1-B | M22M-WRLK3-1-B | |
| Maintained, return from left |  | White | M22-WRLK3-2-W | M22S-WRLK3-2-W | M22M-WRLK3-2-W | |
| | | Red | M22-WRLK3-2-R | M22S-WRLK3-2-R | M22M-WRLK3-2-R | |
| | | Green | M22-WRLK3-2-G | M22S-WRLK3-2-G | M22M-WRLK3-2-G | |
| | | Yellow | M22-WRLK3-2-Y | M22S-WRLK3-2-Y | M22M-WRLK3-2-Y | |
| | | Blue | M22-WRLK3-2-B | M22S-WRLK3-2-B | M22M-WRLK3-2-B | |

Notes

^① Includes contact block mounting adapter.

^② Momentary selector switches can be converted in the field to maintained operation with the removal of a color coded adapter. See [Page V7-T1-112](#).

Illuminated Selector Switches



M22-LED-W



M22-FLED-__



M22-K10



M22-FK01



Light Units ^①

| Terminal Type | LED Color ^② | Light Unit Voltage | Catalog Number | |
|---------------|---|--------------------|----------------|---------------------------|
| Screw | White | 12–30 Vac/Vdc | M22-LED-W | |
| | Red | | M22-LED-R | |
| | Green | | M22-LED-G | |
| | Blue | | M22-LED-B | |
| Screw | White | 85–264 Vac | M22-LED230-W | |
| | Red | | M22-LED230-R | |
| | Green | | M22-LED230-G | |
| | Blue | | M22-LED230-B | |
| Spring-cage | White | 12–30 Vac/Vdc | M22-FLED-W | |
| | Red | | M22-FLED-R | |
| | Green | | M22-FLED-G | |
| | Blue | | M22-FLED-B | |
| | Red/Green/ Yellow | | 24 Vdc | M22-FLED-RG ^③ |
| | Red, Green, Blue, Yellow, White, Violet, Turquoise | | | M22-FLED-RGB ^④ |

Contact Blocks ^①

| Terminal Type | Contact Configuration ^④ | 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 ^⑤ |
| | NO | M22-FK10 ^⑤ |

Accessories

| | Description | Catalog Number |
|----------|-----------------------------------|----------------|
| M22-XW | Plunger bridge ^⑥ | M22-XW |
| M22-XWS | Key cover | M22-XWS |
| M22-XC-R | Key withdraw adapter ^⑦ | M22-XC-R |
| M22-XC-Y | Coding adapter | M22-XC-Y |
| M22-XGWK | Guard ring | M22-XGWK |

Notes

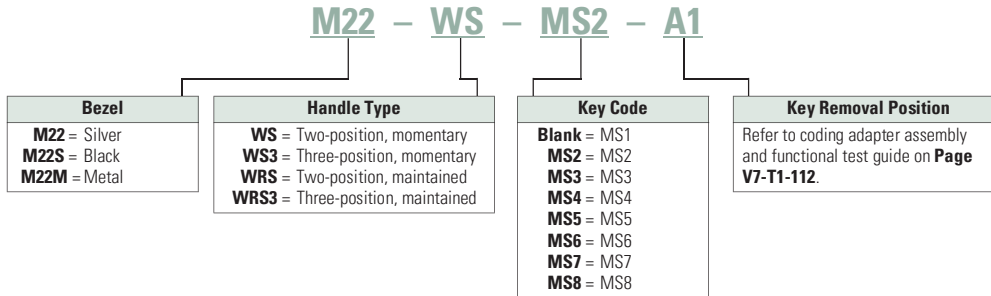
- ① For complete listing of available light units and contact blocks, see Accessories, Pages V7-T1-105 to V7-T1-110.
- ② Select the same color LED element as lens color; for yellow lens, choose a white LED. Select a white lens if utilizing multi-color LED, M22-FLED-RG or M22-FLED-RGB.
- ③ Please see color input key on Page V7-T1-108.
- ④ All NC contact blocks are positively driven contact. ⊖
- ⑤ Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.
- ⑥ Plunger needed to actuate center-mounted contact blocks. Used for non-illuminated three-position selector switches only.
- ⑦ Enables a keyed selector switch to be set to user-selected key withdraw position.

1

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 ^{①②}

Components

M22-WS



M22S-WRS



Operators Only ^③

| Type | Switching Position | Key Removal Position | Key Code | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number | |
|--------------|-------------------------------|---------------------------------------|----------|-----------------------------|----------------------------|----------------------------|---------------------|
| Two-position | Momentary ^④ 40° | Return from right, key removable left | MS1 | M22-WS | M22S-WS | M22M-WS | |
| | | | MS2 | M22-WS-MS2 | M22S-WS-MS2 | M22M-WS-MS2 | |
| | | | MS3 | M22-WS-MS3 | M22S-WS-MS3 | M22M-WS-MS3 | |
| | | | MS4 | M22-WS-MS4 | M22S-WS-MS4 | M22M-WS-MS4 | |
| | | | MS5 | M22-WS-MS5 | M22S-WS-MS5 | M22M-WS-MS5 | |
| | | | MS6 | M22-WS-MS6 | M22S-WS-MS6 | M22M-WS-MS6 | |
| | | | MS7 | M22-WS-MS7 | M22S-WS-MS7 | M22M-WS-MS7 | |
| | | | MS8 | M22-WS-MS8 | M22S-WS-MS8 | M22M-WS-MS8 | |
| Two-position | Maintained 40° | Key removable left | MS1 | M22-WRS-A1 | M22S-WRS-A1 | M22M-WRS-A1 | |
| | | | MS2 | M22-WRS-MS2-A1 | M22S-WRS-MS2-A1 | M22M-WRS-MS2-A1 | |
| | | | MS3 | M22-WRS-MS3-A1 | M22S-WRS-MS3-A1 | M22M-WRS-MS3-A1 | |
| | | | MS4 | M22-WRS-MS4-A1 | M22S-WRS-MS4-A1 | M22M-WRS-MS4-A1 | |
| | | | MS5 | M22-WRS-MS5-A1 | M22S-WRS-MS5-A1 | M22M-WRS-MS5-A1 | |
| | | | MS6 | M22-WRS-MS6-A1 | M22S-WRS-MS6-A1 | M22M-WRS-MS6-A1 | |
| | | | MS7 | M22-WRS-MS7-A1 | M22S-WRS-MS7-A1 | M22M-WRS-MS7-A1 | |
| | | | MS8 | M22-WRS-MS8-A1 | M22S-WRS-MS8-A1 | M22M-WRS-MS8-A1 | |
| | Key removable left/right | | | MS1 | M22-WRS | M22S-WRS | M22M-WRS |
| | | | | MS2 | M22-WRS-MS2 | M22S-WRS-MS2 | M22M-WRS-MS2 |
| | | | | MS3 | M22-WRS-MS3 | M22S-WRS-MS3 | M22M-WRS-MS3 |
| | | | | MS4 | M22-WRS-MS4 | M22S-WRS-MS4 | M22M-WRS-MS4 |
| | | | | MS5 | M22-WRS-MS5 | M22S-WRS-MS5 | M22M-WRS-MS5 |
| | | | | MS6 | M22-WRS-MS6 | M22S-WRS-MS6 | M22M-WRS-MS6 |
| | | | | MS7 | M22-WRS-MS7 | M22S-WRS-MS7 | M22M-WRS-MS7 |
| | | | | MS8 | M22-WRS-MS8 | M22S-WRS-MS8 | M22M-WRS-MS8 |

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 ①②
Components

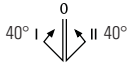

M22-WS3-X93



M22M-WS3-X93



Operators Only, continued ③

| Type | Switching Position | Key Removal Position | Key Code | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
|----------------------------|--|--|----------------|---|---------------------------------|----------------------------|
| Three-position | Momentary ④  | Return from left/right, key removable center | MS1 | M22-WS3 | M22S-WS3 | M22M-WS3 |
| | | | MS2 | M22-WS3-MS2 | M22S-WS3-MS2 | M22M-WS3-MS2 |
| | | | MS3 | M22-WS3-MS3 | M22S-WS3-MS3 | M22M-WS3-MS3 |
| | | | MS4 | M22-WS3-MS4 | M22S-WS3-MS4 | M22M-WS3-MS4 |
| | | | MS5 | M22-WS3-MS5 | M22S-WS3-MS5 | M22M-WS3-MS5 |
| | | | MS6 | M22-WS3-MS6 | M22S-WS3-MS6 | M22M-WS3-MS6 |
| | | | MS7 | M22-WS3-MS7 | M22S-WS3-MS7 | M22M-WS3-MS7 |
| | | | MS8 | M22-WS3-MS8 | M22S-WS3-MS8 | M22M-WS3-MS8 |
| | | | Three-position | Maintained  | Key removable left/center/right | MS1 |
| MS2 | M22-WRS3-MS2-A1 | M22S-WRS3-MS2-A1 | | | | M22M-WRS3-MS2-A1 |
| MS3 | M22-WRS3-MS3-A1 | M22S-WRS3-MS3-A1 | | | | M22M-WRS3-MS3-A1 |
| MS4 | M22-WRS3-MS4-A1 | M22S-WRS3-MS4-A1 | | | | M22M-WRS3-MS4-A1 |
| MS5 | M22-WRS3-MS5-A1 | M22S-WRS3-MS5-A1 | | | | M22M-WRS3-MS5-A1 |
| MS6 | M22-WRS3-MS6-A1 | M22S-WRS3-MS6-A1 | | | | M22M-WRS3-MS6-A1 |
| MS7 | M22-WRS3-MS7-A1 | M22S-WRS3-MS7-A1 | | | | M22M-WRS3-MS7-A1 |
| MS8 | M22-WRS3-MS8-A1 | M22S-WRS3-MS8-A1 | | | | M22M-WRS3-MS8-A1 |
| Key removable center/left | MS1 | M22-WRS3-A2 | | | M22S-WRS3-A2 | M22M-WRS3-A2 |
| | MS2 | M22-WRS3-MS2-A2 | | | M22S-WRS3-MS2-A2 | M22M-WRS3-MS2-A2 |
| | MS3 | M22-WRS3-MS3-A2 | | | M22S-WRS3-MS3-A2 | M22M-WRS3-MS3-A2 |
| | MS4 | M22-WRS3-MS4-A2 | | | M22S-WRS3-MS4-A2 | M22M-WRS3-MS4-A2 |
| | MS5 | M22-WRS3-MS5-A2 | | | M22S-WRS3-MS5-A2 | M22M-WRS3-MS5-A2 |
| | MS6 | M22-WRS3-MS6-A2 | | | M22S-WRS3-MS6-A2 | M22M-WRS3-MS6-A2 |
| | MS7 | M22-WRS3-MS7-A2 | | | M22S-WRS3-MS7-A2 | M22M-WRS3-MS7-A2 |
| | MS8 | M22-WRS3-MS8-A2 | | | M22S-WRS3-MS8-A2 | M22M-WRS3-MS8-A2 |
| Key removable center/right | MS1 | M22-WRS3-A3 | | | M22S-WRS3-A3 | M22M-WRS3-A3 |
| | MS2 | M22-WRS3-MS2-A3 | | | M22S-WRS3-MS2-A3 | M22M-WRS3-MS2-A3 |
| | MS3 | M22-WRS3-MS3-A3 | | | M22S-WRS3-MS3-A3 | M22M-WRS3-MS3-A3 |
| | MS4 | M22-WRS3-MS4-A3 | | | M22S-WRS3-MS4-A3 | M22M-WRS3-MS4-A3 |
| | MS5 | M22-WRS3-MS5-A3 | | | M22S-WRS3-MS5-A3 | M22M-WRS3-MS5-A3 |
| | MS6 | M22-WRS3-MS6-A3 | | | M22S-WRS3-MS6-A3 | M22M-WRS3-MS6-A3 |
| | MS7 | M22-WRS3-MS7-A3 | | | M22S-WRS3-MS7-A3 | M22M-WRS3-MS7-A3 |
| | MS8 | M22-WRS3-MS8-A3 | | | M22S-WRS3-MS8-A3 | M22M-WRS3-MS8-A3 |
| Key removable left/right | MS1 | M22-WRS3 | | | M22S-WRS3 | M22M-WRS3 |
| | MS2 | M22-WRS3-MS2 | | | M22S-WRS3-MS2 | M22M-WRS3-MS2 |
| | MS3 | M22-WRS3-MS3 | | | M22S-WRS3-MS3 | M22M-WRS3-MS3 |
| | MS4 | M22-WRS3-MS4 | | | M22S-WRS3-MS4 | M22M-WRS3-MS4 |
| | MS5 | M22-WRS3-MS5 | | | M22S-WRS3-MS5 | M22M-WRS3-MS5 |
| | MS6 | M22-WRS3-MS6 | | | M22S-WRS3-MS6 | M22M-WRS3-MS6 |
| | MS7 | M22-WRS3-MS7 | | | M22S-WRS3-MS7 | M22M-WRS3-MS7 |
| | MS8 | M22-WRS3-MS8 | | | M22S-WRS3-MS8 | M22M-WRS3-MS8 |

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**.

1

Key-Operated Selector Switches ^{①②}

Components

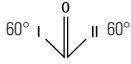

M22-WS3-X93



M22M-WS3-X93



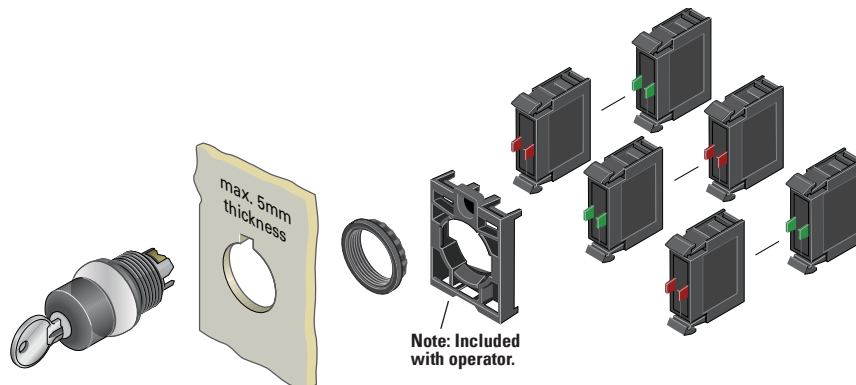
Operators Only, continued ^③

| Type | Switching Position | Key Removal Position | Key Code | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
|----------------|--|--|-----------------|-----------------------------|----------------------------|----------------------------|
| Three-position | Maintained  | Return from left, key removable center | MS1 | M22-WRS3-A7 | M22S-WRS3-A7 | M22M-WRS3-A7 |
| | | | MS2 | M22-WRS3-MS2-A7 | M22S-WRS3-MS2-A7 | M22M-WRS3-MS2-A7 |
| | | | MS3 | M22-WRS3-MS3-A7 | M22S-WRS3-MS3-A7 | M22M-WRS3-MS3-A7 |
| | | | MS4 | M22-WRS3-MS4-A7 | M22S-WRS3-MS4-A7 | M22M-WRS3-MS4-A7 |
| | | | MS5 | M22-WRS3-MS5-A7 | M22S-WRS3-MS5-A7 | M22M-WRS3-MS5-A7 |
| | | | MS6 | M22-WRS3-MS6-A7 | M22S-WRS3-MS6-A7 | M22M-WRS3-MS6-A7 |
| | | | MS7 | M22-WRS3-MS7-A7 | M22S-WRS3-MS7-A7 | M22M-WRS3-MS7-A7 |
| | | | MS8 | M22-WRS3-MS8-A7 | M22S-WRS3-MS8-A7 | M22M-WRS3-MS8-A7 |
| | Return from left, key removable center/right | MS1 | M22-WRS3-A6 | M22S-WRS3-A6 | M22M-WRS3-A6 | |
| | | MS2 | M22-WRS3-MS2-A6 | M22S-WRS3-MS2-A6 | M22M-WRS3-MS2-A6 | |
| | | MS3 | M22-WRS3-MS3-A6 | M22S-WRS3-MS3-A6 | M22M-WRS3-MS3-A6 | |
| | | MS4 | M22-WRS3-MS4-A6 | M22S-WRS3-MS4-A6 | M22M-WRS3-MS4-A6 | |
| | | MS5 | M22-WRS3-MS5-A6 | M22S-WRS3-MS5-A6 | M22M-WRS3-MS5-A6 | |
| | | MS6 | M22-WRS3-MS6-A6 | M22S-WRS3-MS6-A6 | M22M-WRS3-MS6-A6 | |
| | | MS7 | M22-WRS3-MS7-A6 | M22S-WRS3-MS7-A6 | M22M-WRS3-MS7-A6 | |
| | | MS8 | M22-WRS3-MS8-A6 | M22S-WRS3-MS8-A6 | M22M-WRS3-MS8-A6 | |
| Three-position | Maintained  | Return from right, key removable left/center | MS1 | M22-WRS3-A4 | M22S-WRS3-A4 | M22M-WRS3-A4 |
| | | | MS2 | M22-WRS3-MS2-A4 | M22S-WRS3-MS2-A4 | M22M-WRS3-MS2-A4 |
| | | | MS3 | M22-WRS3-MS3-A4 | M22S-WRS3-MS3-A4 | M22M-WRS3-MS3-A4 |
| | | | MS4 | M22-WRS3-MS4-A4 | M22S-WRS3-MS4-A4 | M22M-WRS3-MS4-A4 |
| | | | MS5 | M22-WRS3-MS5-A4 | M22S-WRS3-MS5-A4 | M22M-WRS3-MS5-A4 |
| | | | MS6 | M22-WRS3-MS6-A4 | M22S-WRS3-MS6-A4 | M22M-WRS3-MS6-A4 |
| | | | MS7 | M22-WRS3-MS7-A4 | M22S-WRS3-MS7-A4 | M22M-WRS3-MS7-A4 |
| | | | MS8 | M22-WRS3-MS8-A4 | M22S-WRS3-MS8-A4 | M22M-WRS3-MS8-A4 |
| | Return from right, key removable center | MS1 | M22-WRS3-A5 | M22S-WRS3-A5 | M22M-WRS3-A5 | |
| | | MS2 | M22-WRS3-MS2-A5 | M22S-WRS3-MS2-A5 | M22M-WRS3-MS2-A5 | |
| | | MS3 | M22-WRS3-MS3-A5 | M22S-WRS3-MS3-A5 | M22M-WRS3-MS3-A5 | |
| | | MS4 | M22-WRS3-MS4-A5 | M22S-WRS3-MS4-A5 | M22M-WRS3-MS4-A5 | |
| | | MS5 | M22-WRS3-MS5-A5 | M22S-WRS3-MS5-A5 | M22M-WRS3-MS5-A5 | |
| | | MS6 | M22-WRS3-MS6-A5 | M22S-WRS3-MS6-A5 | M22M-WRS3-MS6-A5 | |
| | | MS7 | M22-WRS3-MS7-A5 | M22S-WRS3-MS7-A5 | M22M-WRS3-MS7-A5 | |
| | | MS8 | M22-WRS3-MS8-A5 | M22S-WRS3-MS8-A5 | M22M-WRS3-MS8-A5 | |

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



M22-FK01



M22-ES-MS1



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 |
| 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 |

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

| | Description | Catalog Number |
|---------------------|-----------------------------------|-----------------|
| M22-XW | Plunger bridge ^④ | M22-XW |
| M22-XWS | Key cover | M22-XWS |
| M22-XC-R | Key withdraw adapter ^⑤ | M22-XC-R |
| M22-XC-Y | Coding adapter | M22-XC-Y |
| M22-XGWK | Guard ring | M22-XGWK |

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.
- ^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.

1

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

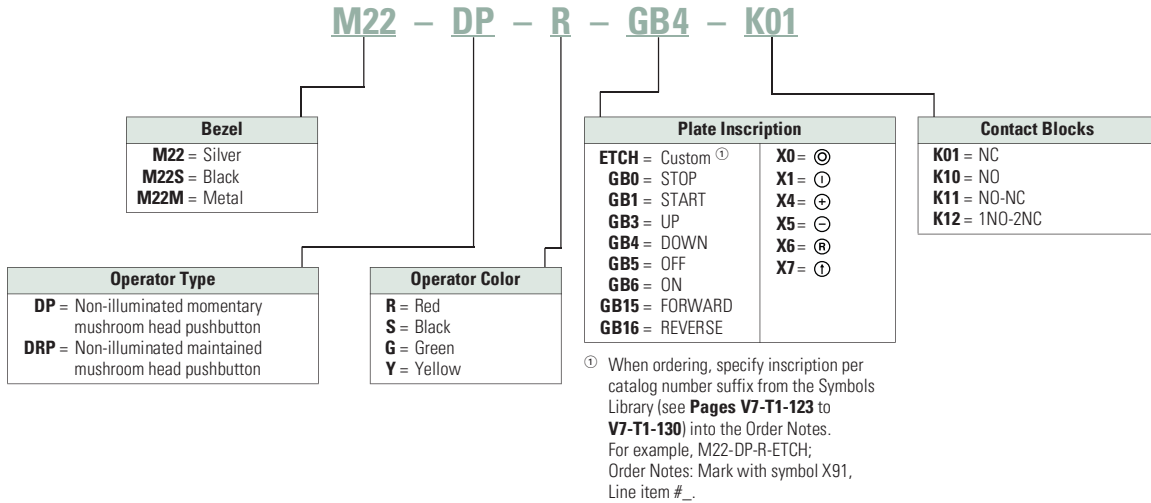
Protection Type

- 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



1

Product Selection

Mushroom Head Pushbuttons, Momentary ^①

M22-DP-R-K01



M22S-DP-R-K01



M22M-DP-R-K01



Complete Devices

| Button Color | Contact Block Configuration ^② | 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 |
| | 1NO-1NC | M22-DP-R-K11 | M22S-DP-R-K11 | M22M-DP-R-K11 |

M22-DP-G



M22S-DP-G



M22M-DP-G



Operators Only ^②

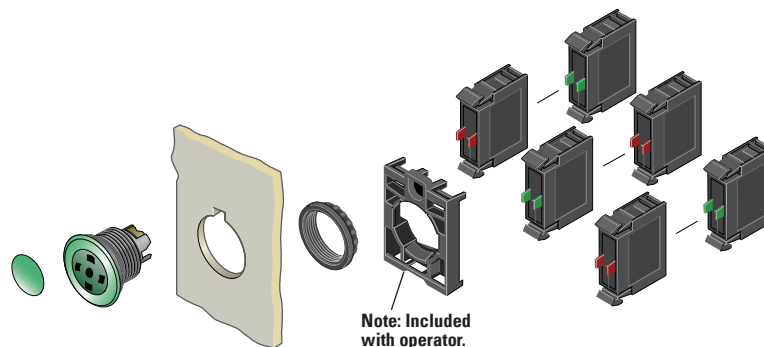
| Button Color | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel Catalog Number |
|--------------|-----------------------------|----------------------------|----------------------------|
| Black | M22-DP-S | M22S-DP-S | M22M-DP-S |
| Red | M22-DP-R | M22S-DP-R | M22M-DP-R |
| Green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

Notes

^① 35 mm diameter mushroom head button.

^② Includes contact block mounting adapter. ↻

Non-Illuminated Mushroom Head Pushbuttons, Momentary ①



Components

M22-XDP-G



Mushroom Head Plates

| Color | Inscription | Catalog Number |
|--------|--------------|------------------|
| Black | — | M22-XDP-S ② |
| | Custom | M22-XDP-S-ETCH ③ |
| | STOP | M22-XDP-S-GB0 |
| | START | M22-XDP-S-GB1 |
| | FORWARD | M22-XDP-S-GB15 |
| | REVERSE | M22-XDP-S-GB16 |
| | UP | M22-XDP-S-GB3 |
| | DOWN | M22-XDP-S-GB4 |
| | OFF | M22-XDP-S-GB5 |
| | ON | M22-XDP-S-GB6 |
| | ⊙ | M22-XDP-S-X0 |
| | Ⓜ | M22-XDP-S-X1 |
| | + | M22-XDP-S-X4 |
| | − | M22-XDP-S-X5 |
| Ⓜ | M22-XDP-S-X7 | |
| Red | — | M22-XDP-R ② |
| | Custom | M22-XDP-R-ETCH ③ |
| | STOP | M22-XDP-R-GB0 |
| | OFF | M22-XDP-R-GB5 |
| Green | — | M22-XDP-G ② |
| | Custom | M22-XDP-G-ETCH ③ |
| | START | M22-XDP-G-GB1 |
| | ON | M22-XDP-G-GB6 |
| | ⊙ | M22-XDP-G-X0 |
| White | — | M22-XDP-W ② |
| | Custom | M22-XDP-W-ETCH ③ |
| | — | M22-XDP-Y ② |
| Yellow | — | M22-XDP-Y ② |
| | Custom | M22-XDP-Y-ETCH ③ |

M22-DP-G-X



Insertless Mushroom Head Operators

| Bezel | Color | Catalog Number |
|--------|--------|----------------|
| Silver | Black | M22-DP-S-X |
| | Red | M22-DP-R-X |
| | Green | M22-DP-G-X |
| | Yellow | M22-DP-Y-X |
| Black | Black | M22S-DP-S-X |
| | Red | M22S-DP-R-X |
| | Green | M22S-DP-G-X |
| | Yellow | M22S-DP-Y-X |
| Metal | Black | M22M-DP-S-X |
| | Red | M22M-DP-R-X |
| | Green | M22M-DP-G-X |
| | Yellow | M22M-DP-Y-X |

M22-K10



Contact Blocks ④

| Terminal Type | Contact Configuration ⑤ | 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 ⑥ |
| NO | M22-FK10 ⑥ | |

M22-FK01



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. ⊖
- ⑥ Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

1.4

Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons—M22

1

Product Selection

Non-Illuminated Mushroom Head Pushbuttons, Maintained ^{①②}

M22-DRP-R-K01



M22S-DRP-R-K01



M22M-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 |
| | 1NO-1NC | M22-DRP-R-K11 | M22S-DRP-R-K11 | M22M-DRP-R-K11 |

M22-DRP-G



M22S-DRP-G




M22M-DRP-G

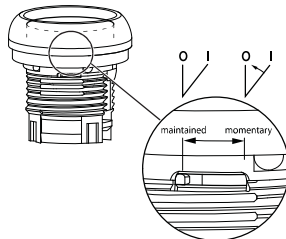


Operators Only

| Button Color | Silver Bezel Catalog Number | Black Bezel Catalog Number | Metal Bezel 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 |

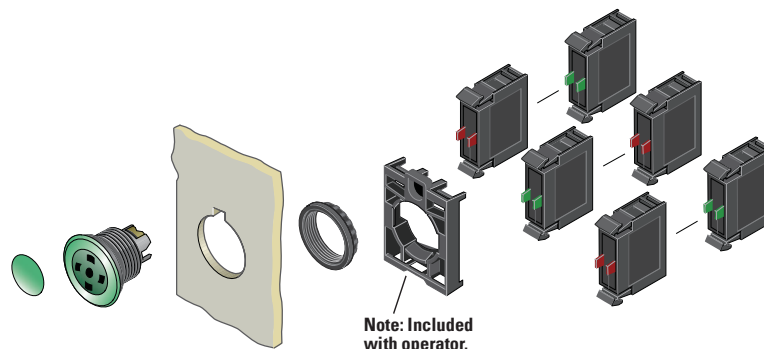
Notes

- 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. 



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

Non-Illuminated Mushroom Head Pushbuttons, Maintained ^{①②}



Components

M22-XDP-G



Mushroom Head Plates ^③

| Color | Inscription | Catalog Number |
|-------|--------------|-----------------------------|
| Black | — | M22-XDP-S ^④ |
| | Custom | M22-XDP-S-ETCH ^⑤ |
| | STOP | M22-XDP-S-GB0 |
| | START | M22-XDP-S-GB1 |
| | FORWARD | M22-XDP-S-GB15 |
| | REVERSE | M22-XDP-S-GB16 |
| | UP | M22-XDP-S-GB3 |
| | DOWN | M22-XDP-S-GB4 |
| | OFF | M22-XDP-S-GB5 |
| | ON | M22-XDP-S-GB6 |
| | ⊙ | M22-XDP-S-X0 |
| | ① | M22-XDP-S-X1 |
| | + | M22-XDP-S-X4 |
| | − | M22-XDP-S-X5 |
| ⊖ | M22-XDP-S-X7 | |
| Red | — | M22-XDP-R ^④ |
| | Custom | M22-XDP-R-ETCH ^⑤ |
| | STOP | M22-XDP-R-GB0 |
| | OFF | M22-XDP-R-GB5 |
| Green | — | M22-XDP-G ^④ |
| | Custom | M22-XDP-G-ETCH ^⑤ |
| | START | M22-XDP-G-GB1 |
| | ON | M22-XDP-G-GB6 |
| White | — | M22-XDP-W ^④ |
| | Custom | M22-XDP-W-ETCH ^⑤ |
| | — | M22-XDP-Y ^④ |
| | Custom | M22-XDP-Y-ETCH ^⑤ |

M22-DRP-G-X



Insertless Mushroom Head Operators

| Bezel | Color | Catalog Number |
|--------|--------|----------------|
| Silver | Black | M22-DRP-S-X |
| | Red | M22-DRP-R-X |
| | Green | M22-DRP-G-X |
| | Yellow | M22-DRP-Y-X |
| Black | Black | M22S-DRP-S-X |
| | Red | M22S-DRP-R-X |
| | Green | M22S-DRP-G-X |
| | Yellow | M22S-DRP-Y-X |
| Metal | Black | M22M-DRP-S-X |
| | Red | M22M-DRP-R-X |
| | Green | M22M-DRP-G-X |
| | Yellow | M22M-DRP-Y-X |

M22-K10



Contact Blocks ^③

| Terminal Type | Contact Configuration ^⑥ | 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 ^⑦ |
| NO | M22-FK10 ^⑦ | |

M22-FK01



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. ⊖
- ⑦ Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

1.4

Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons—M22

1

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

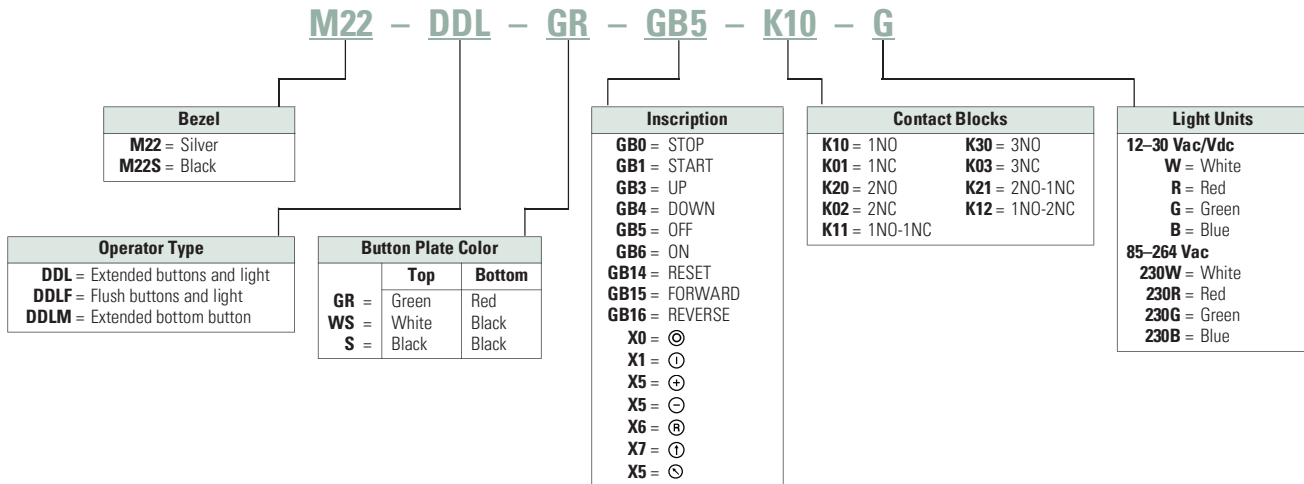
Protection Type

- 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 | |
|--|--------|-----------|--------|-----------------|-------------------------------------|--------------------------------------|-------------------------------------|
|  <p>M22-DDL-GR-GB1-GB0</p> | Silver | Green | Red | — | — | M22-DDL-GR | |
| | | | | Custom | Custom | M22-DDL-GR-ETCH ^② | |
| | | | | Ⓜ | Ⓜ | M22-DDL-GR-X1-X0 | |
| | | | | START | STOP | M22-DDL-GR-GB1-GB0 | |
| | | | | — | — | M22-DDL-WS | |
| | | | | Custom | Custom | M22-DDL-WS-ETCH ^② | |
| | | White | Black | Black | — | — | M22-DDL-WS-X1-X0 |
| | | | | | Ⓜ | Ⓜ | M22-DDL-WS-GB1-GB0 |
| | | | | | START | STOP | M22-DDL-WS-GB1-GB0 |
| | | | | | — | — | M22-DDL-S |
| | | | | | Custom | Custom | M22-DDL-S-ETCH ^② |
| | | | | | — | — | M22-DDL-S-X4-X5 |
|  <p>M22S-DDL-GR-X1-X0</p> | Black | Green | Red | — | — | M22S-DDL-GR | |
| | | | | Custom | Custom | M22S-DDL-GR-ETCH ^② | |
| | | | | Ⓜ | Ⓜ | M22S-DDL-GR-X1-X0 | |
| | | | | START | STOP | M22S-DDL-GR-GB1-GB0 | |
| | | | | — | — | M22S-DDL-WS | |
| | | | | Custom | Custom | M22S-DDL-WS-ETCH ^② | |
| | | White | Black | Black | — | — | M22S-DDL-WS-X1-X0 |
| | | | | | Ⓜ | Ⓜ | M22S-DDL-WS-GB1-GB0 |
| | | | | | START | STOP | M22S-DDL-WS-GB1-GB0 |
| | | | | | — | — | M22S-DDL-S |
| | | | | | Custom | Custom | M22S-DDL-S-ETCH ^② |
| | | | | | + | — | M22S-DDL-S-X4-X5 |
| Black | Black | Black | — | — | M22S-DDL-S-X7-X7 | | |
| | | | Ⓜ | Ⓜ | M22S-DDL-S-X7-X7 | | |
| | | | START | STOP | M22S-DDL-S-X7-X7 | | |
| | | | — | — | M22S-DDL-S | | |
| | | | Custom | Custom | M22S-DDL-S-ETCH ^② | | |
| | | | + | — | M22S-DDL-S-X4-X5 | | |

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 #_.

1.4



Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons—M22

1



Double Pushbuttons, Flush Top Pushbuttons and Center Light, Momentary

Operators Only ^①

| | Bezel | Color Top | Bottom | Inscription Top | Bottom | Catalog Number |
|--|--------|-----------|--------|-----------------|--------|---------------------------------------|
| M22-DDLF-GR  | Silver | Green | Red | — | — | M22-DDLF-GR |
| | | White | Black | — | — | M22-DDLF-WS |
| | | Green | Red | ① | ⊙ | M22-DDLF-GR-X1-X0 |
| | | White | Black | ① | ⊙ | M22-DDLF-WS-X1-X0 |
| | | Custom | Custom | — | — | M22-DDLF-GR-ETCH ^② |
| M22S-DDLF-GR-X1-X0  | Black | Green | Red | — | — | M22S-DDLF-GR |
| | | White | Black | — | — | M22S-DDLF-WS |
| | | Green | Red | ① | ⊙ | M22S-DDLF-GR-X1-X0 |
| | | White | Black | ① | ⊙ | M22S-DDLF-WS-X1-X0 |
| | | Custom | Custom | — | — | M22S-DDLF-GR-ETCH ^② |

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

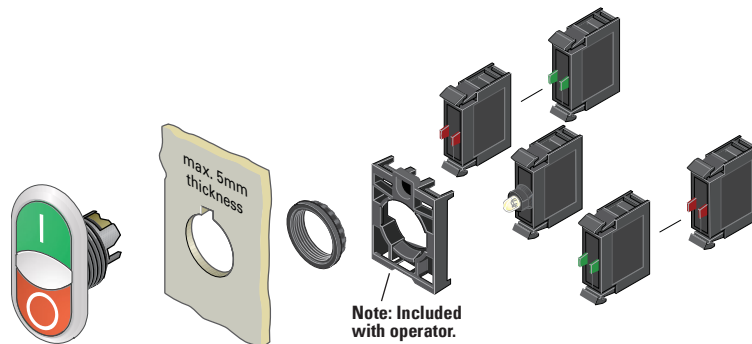
Operators Only ^①

| | Bezel | Color Top | Bottom | Inscription Top | Bottom | Catalog Number |
|--|--------|-----------|--------|-----------------|--------|---------------------------------------|
| M22-DDLM-GR  | Silver | Green | Red | — | — | M22-DDLM-GR |
| | | White | Black | — | — | M22-DDLM-WS |
| | | Green | Red | ① | ⊙ | M22-DDLM-GR-X1-X0 |
| | | White | Black | ① | ⊙ | M22-DDLM-WS-X1-X0 |
| | | Custom | Custom | — | — | M22-DDLM-GR-ETCH ^② |
| M22S-DDLM-GR-X1-X0  | Black | Green | Red | — | — | M22S-DDLM-GR |
| | | White | Black | — | — | M22S-DDLM-WS |
| | | Green | Red | ① | ⊙ | M22S-DDLM-GR-X1-X0 |
| | | White | Black | ① | ⊙ | M22S-DDLM-WS-X1-X0 |
| | | Custom | Custom | — | — | M22S-DDLM-GR-ETCH ^② |

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



M22-LED-W



Light Units ①

| Terminal Type | LED Color | Light Unit Voltage | Catalog Number |
|---------------|---|--------------------|-----------------------|
| Screw | White | 12–30 | M22-LED-W |
| | Red | Vac/Vdc | M22-LED-R |
| | Green | | M22-LED-G |
| | Blue | | M22-LED-B |
| Screw | White | 85–264 | M22-LED230-W |
| | Red | Vac | M22-LED230-R |
| | Green | | M22-LED230-G |
| | Blue | | M22-LED230-B |
| Spring-cage | White | 12–30 | M22-FLED-W |
| | Red | Vac/Vdc | M22-FLED-R |
| | Green | | M22-FLED-G |
| | Blue | | M22-FLED-B |
| | Red/Green/ Yellow | 24 Vdc | M22-FLED-RG ② |
| | Red, Green, Blue, Yellow, White, Violet, Turquoise | | M22-FLED-RGB ② |

M22-FLED-



M22-K10



Contact Blocks ①

| Terminal Type | Contact Configuration ③ | 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 |

M22-FK01



Notes

- ① For complete listing of available light units and contact blocks, see Accessories, Pages V7-T1-105 to V7-T1-110.
- ② Please see color input key on Page V7-T1-108.
- ③ All NC contact blocks are positively driven contact. ⊖
- ④ Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

1

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

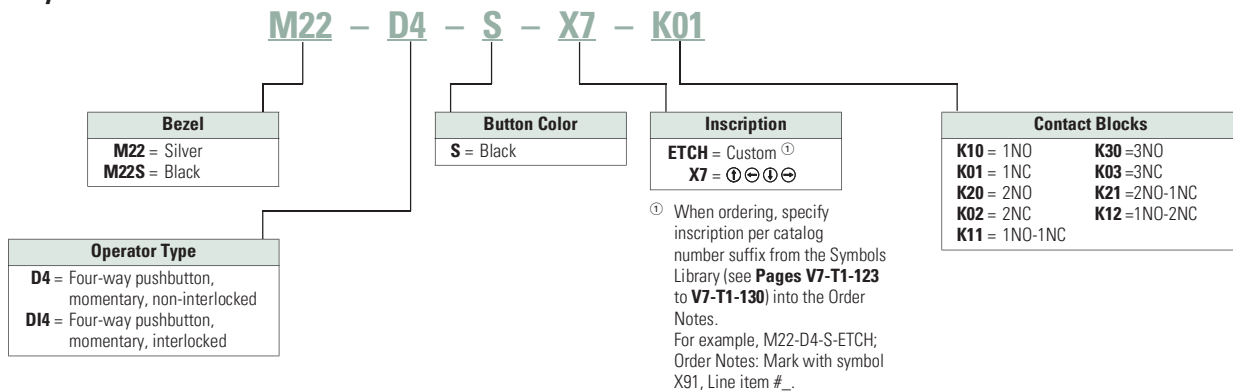
Protection Type

- IP66

Catalog Number Selection

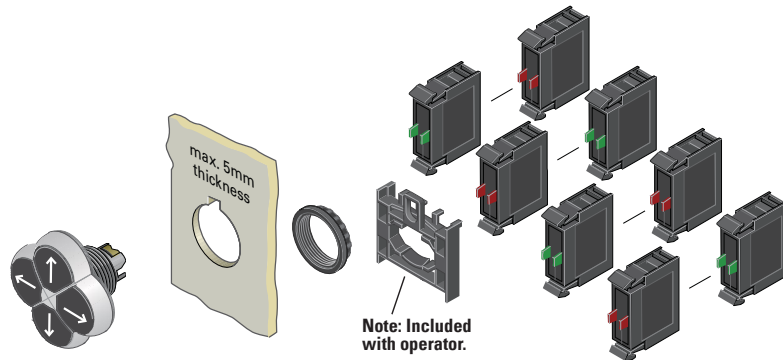
Catalog Number Selection is for illustrative purposes only and not to be used to create new catalog numbers.

Four-Way Pushbuttons



Product Selection

Four-Way Pushbuttons, Momentary



Components

M22-D4-S-X7



Operators Only ①

| Type | Bezel | Color | Inscription | Catalog Number |
|-----------------|--------|-------|--------------------|--------------------------|
| Non-interlocked | Silver | Black | — | M22-D4-S |
| | | | Custom | M22-D4-S-ETCH ③ |
| | | | Directional arrows | M22-D4-S-X7 |
| | Black | Black | — | M22S-D4-S |
| | | | Custom | M22S-D4-S-ETCH ③ |
| | | | Directional arrows | M22S-D4-S-X7 |
| Interlocked | Silver | Black | — | M22-DI4-S |
| | | | Custom | M22-DI4-S-ETCH ③ |
| | | | Directional arrows | M22-DI4-S-X7 |
| | Black | Black | — | M22S-DI4-S |
| | | | Custom | M22S-DI4-S-ETCH ③ |
| | | | Directional arrows | M22S-DI4-S-X7 |

M22-K10



M22-FK01



Contact Blocks ①②

| Terminal Type | Contact 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 ⑤ |
| | NO | M22-FK10 ⑤ |

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 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-D4-S-ETCH; Order Notes: Mark with symbol X91, Line item #_.
- ④ All NC contact blocks are positively driven contact. (⊖)
- ⑤ Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

1.4

Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons—M22

1

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



M22M-WJ2H



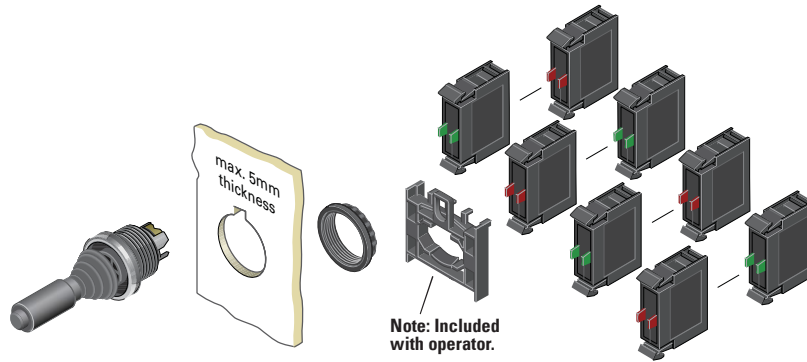
Operators ^①

| 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 |
| 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



M22-K10



M22-FK01



Contact Blocks ^{①②}

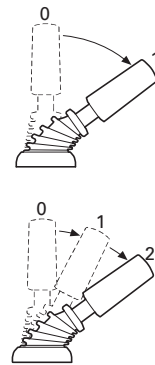
| Terminal Type | Contact Configuration ^③ | Catalog Number |
|---------------|------------------------------------|------------------------------|
| Screw | NO | M22-K10 |
| | NO, early-make | M22-K10P |
| | NC | M22-K01 |
| | NC, late-break | M22-K01D |
| Spring-cage | NO | M22-CK10 |
| | NC | M22-CK01 |
| | 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. \ominus
- 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/four-positions 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.



1

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

M22-R10K



M22M-R10K



Complete Devices

| Bezel | Resistance Rk | Catalog Number |
|--------|---------------|-------------------|
| Silver | 1 | M22-R1K |
| | 4.7 | M22-R4K7 |
| | 10 | M22-R10K |
| | 47 | M22-R47K |
| | 100 | M22-R100K |
| Black | 470 | M22-R470K |
| | 1 | M22S-R1K |
| | 4.7 | M22S-R4K7 |
| | 10 | M22S-R10K |
| | 47 | M22S-R47K |
| Metal | 100 | M22S-R100K |
| | 470 | M22S-R470K |
| | 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 |
| Black | 470 | M22-R470K-RH |
| | 1 | M22S-R1K-RH |
| | 4.7 | M22S-R4K7-RH |
| | 10 | M22S-R10K-RH |
| | 47 | M22S-R47K-RH |
| Metal | 100 | M22S-R100K-RH |
| | 470 | M22S-R470K-RH |
| | 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 dB / 10 cm decibel rating
- Slim design allows for space saving and simple wiring and installation

Protection Type

- IP40
- NEMA 12

Product Selection

Acoustic Devices

M22-AMC-XAM



Complete Devices

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

M22-XAM



Buzzers

| Description | Decibel Rating | Catalog Number |
|---|----------------|-----------------|
| Indicator without buzzer, black | 83 dB/10 cm | M22-AMC |
| Buzzer only, continuous tone, 18–30 Vdc | 83 dB/10 cm | M22-XAM |
| Buzzer only, pulsed tone, 18–30 Vdc | 83 dB/10 cm | 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 ^①

M22-DZ-B-X6



Complete Devices

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

M22-DZ-X



Buttonless Operator

| Bezel | Catalog Number |
|--------|----------------|
| 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 |
| | Ⓡ | 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

M22-USB-SA



USB Socket ^{④⑤}

Used for USB connection plug IP65 when closed, IP20 when connected.

| Bezel | Catalog Number |
|--------|----------------|
| Silver | M22-USB-SA |

M22-RJ45-SA



RJ45 Socket ^④

Used for RJ45 Ethernet connection IP65 when closed, IP20 when connected.

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

Notes

- ① The pushrod is 3.24 in long and can be cut to length.
- ② Any combination of plate color and inscription is available.
- ③ Minimum order quantity of (10).
- ④ USB interface is complete with 2-ft-long USB cable.
- ⑤ USB interface is UL Listed, CSA approved and USB 3.0.
- ⑥ RJ45 interface is an eight-wire connector.

1

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 snap-on 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

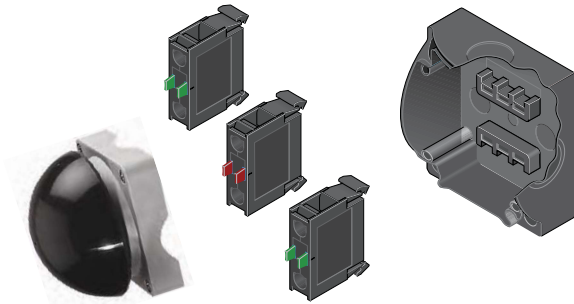
Protection Type

- IP20

Product Selection**ASi Adapter Modules****M22-ASi****Complete Devices**

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

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 base-mounted 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

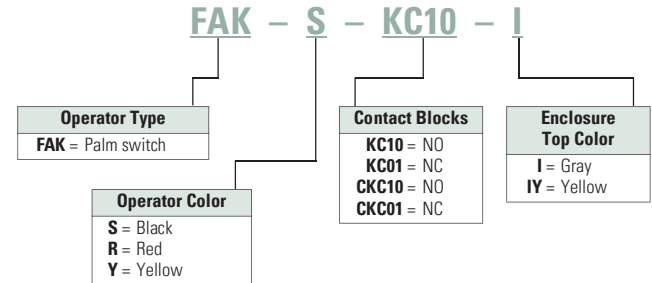
Protection Type

- 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 ② | 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. ⊖

1.4

Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons—M22

1

Components

FAK-S



Operators Only

| Type | Button Color | Catalog Number |
|------------|--------------|------------------|
| Momentary | Black | FAK-S |
| | Red | FAK-R |
| | Yellow | FAK-Y |
| Maintained | Red | FAK-R-V-Y |

FAK-IU



Palm Switch Enclosure Base

Catalog Number

FAK-IU

M22-K10



Contact Blocks ^①


| Terminal Type | Contact Configuration ^② | Catalog Number |
|---------------|------------------------------------|------------------------------|
| Screw | NO | M22-KC10 |
| | NC | M22-KC01 |
| Spring-cage | NO | M22-CKC10 |
| | NC | M22-CKC01 |
| | NC | M22-FK01 ^③ |
| | NO | M22-FK10 ^③ |

M22-FK01



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. 

^③ Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

Accessories

M22-XD-S



M22-XDH-R



M22-XDP-G



Button Plates

| Color | Inscription | Catalog Number Flush Pushbutton | Catalog Number Extended Pushbutton | Catalog Number Mushroom Head Button |
|--|-------------|------------------------------------|---------------------------------------|--|
| Black | — | M22-XD-S | M22-XDH-S | M22-XDP-S |
| White | — | M22-XD-W | M22-XDH-W | M22-XDP-W |
| Red | — | M22-XD-R | M22-XDH-R | M22-XDP-R |
| Green | — | M22-XD-G | M22-XDH-G | M22-XDP-G |
| Yellow | — | M22-XD-Y | M22-XDH-Y | M22-XDP-Y |
| Blue | — | M22-XD-B | M22-XDH-B | — |
| Black, white, red, green, yellow, blue | — | M22-XD-SWRGYB | M22-XDH-SWRGYB | — |
| Black, red, green | — | M22-XD-SRG | M22-XDH-SRG | — |
| Black | Custom | M22-XD-S-ETCH | M22-XDH-S-ETCH | M22-XDP-S-ETCH |
| White | Custom | M22-XD-W-ETCH | M22-XDH-W-ETCH | M22-XDP-W-ETCH |
| Red | Custom | M22-XD-R-ETCH | M22-XDH-R-ETCH | M22-XDP-R-ETCH |
| Green | Custom | M22-XD-G-ETCH | M22-XDH-G-ETCH | M22-XDP-G-ETCH |
| Yellow | Custom | M22-XD-Y-ETCH | M22-XDH-Y-ETCH | M22-XDP-Y-ETCH |
| Blue | Custom | M22-XD-B-ETCH | M22-XDH-B-ETCH | — |
| Black | STOP | M22-XD-S-GB0 | M22-XDH-S-GB0 | M22-XDP-S-GB0 |
| Red | STOP | M22-XD-R-GB0 | M22-XDH-R-GB0 | M22-XDP-R-GB0 |
| Black | START | M22-XD-S-GB1 | M22-XDH-S-GB1 | M22-XDP-S-GB1 |
| White | START | M22-XD-W-GB1 | M22-XDH-W-GB1 | — |
| Green | START | M22-XD-G-GB1 | M22-XDH-G-GB1 | M22-XDP-G-GB1 |
| Black | CLOSE | M22-XD-S-GB2 | M22-XDH-S-GB2 | — |
| Black | UP | M22-XD-S-GB3 | M22-XDH-S-GB3 | M22-XDP-S-GB3 |
| Black | DOWN | M22-XD-S-GB4 | M22-XDH-S-GB4 | M22-XDP-S-GB4 |
| Black | OFF | M22-XD-S-GB5 | M22-XDH-S-GB5 | M22-XDP-S-GB5 |
| Red | OFF | M22-XD-R-GB5 | M22-XDH-R-GB5 | M22-XDP-R-GB5 |
| Black | ON | M22-XD-S-GB6 | M22-XDH-S-GB6 | M22-XDP-S-GB6 |
| Green | ON | M22-XD-G-GB6 | M22-XDH-G-GB6 | M22-XDP-G-GB6 |
| Black | TEST | M22-XD-S-GB9 | M22-XDH-S-GB9 | — |
| Blue | RESET | M22-XD-B-GB14 | M22-XDH-B-GB14 | — |
| Black | FORWARD | M22-XD-S-GB15 | M22-XDH-S-GB15 | M22-XDP-S-GB15 |
| Black | REVERSE | M22-XD-S-GB16 | M22-XDH-S-GB16 | M22-XDP-S-GB16 |
| Black | RAISE | M22-XD-S-GB17 | M22-XDH-S-GB17 | — |
| Black | LOWER | M22-XD-S-GB18 | M22-XDH-S-GB18 | — |
| Black | ⊙ | M22-XD-S-X0 | M22-XDH-S-X0 | M22-XDP-S-X0 |
| Red | ⊙ | M22-XD-R-X0 | M22-XDH-R-X0 | M22-XDP-R-X0 |
| Green | ⊙ | — | — | M22-XDP-G-X0 |
| Black | ⓪ | M22-XD-S-X1 | M22-XDH-S-X1 | M22-XDP-S-X1 |
| White | ⓪ | M22-XD-W-X1 | M22-XDH-W-X1 | — |
| Green | ⓪ | M22-XD-G-X1 | M22-XDH-G-X1 | M22-XDP-G-X1 |
| Black | ⓪ | M22-XD-S-X2 | M22-XDH-S-X2 | — |
| Green | ⓪ | M22-XD-G-X2 | M22-XDH-G-X2 | — |
| Black | + | M22-XD-S-X4 | M22-XDH-S-X4 | M22-XDP-S-X4 |
| Black | - | M22-XD-S-X5 | M22-XDH-S-X5 | M22-XDP-S-X5 |
| Blue | ⓪ | M22-XD-B-X6 | M22-XDH-B-X6 | — |
| Black | ⓪ | M22-XD-S-X7 | M22-XDH-S-X7 | M22-XDP-S-X7 |
| Black | ⓪ | M22-XD-S-X8 | M22-XDH-S-X8 | — |
| Black | See ① below | M22-XD-S-X9 | M22-XDH-S-X9 | — |
| Black | See ① below | M22-XD-S-X10 | M22-XDH-S-X10 | — |
| Black | See ① below | M22-XD-S-X11 | M22-XDH-S-X11 | — |
| Black | See ① below | M22-XD-S-X12 | M22-XDH-S-X12 | — |
| Black | See ① below | M22-XD-S-X13 | M22-XDH-S-X13 | — |
| Black | See ① below | M22-XD-S-X14 | M22-XDH-S-X14 | — |
| Black | See ① below | M22-XD-S-X15 | M22-XDH-S-X15 | — |
| Black | See ① below | M22-XD-S-X16 | M22-XDH-S-X16 | — |
| Black | See ① below | M22-XD-S-X17 | M22-XDH-S-X17 | — |

Note

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

1.4

Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons—M22

1

M22-XDLH-W



M22-XDL-G



Button Lenses

| Color | Inscription | Catalog Number Flush | Catalog Number Extended | Color | Inscription | Catalog Number Flush | Catalog Number Extended |
|--------|-------------|----------------------|-------------------------|-------|-------------|----------------------|-------------------------|
| White | — | M22-XDL-W | M22-XDLH-W | Blue | Custom | M22-XDL-B-ETCH | M22-XDLH-B-ETCH |
| Red | — | M22-XDL-R | M22-XDLH-R | Red | STOP | M22-XDL-R-GB0 | M22-XDLH-R-GB0 |
| Green | — | M22-XDL-G | M22-XDLH-G | Green | START | M22-XDL-G-GB1 | M22-XDLH-G-GB1 |
| Yellow | — | M22-XDL-Y | M22-XDLH-Y | Red | OFF | M22-XDL-R-GB5 | M22-XDLH-R-GB5 |
| Blue | — | M22-XDL-B | M22-XDLH-B | Green | ON | M22-XDL-G-GB6 | M22-XDLH-G-GB6 |
| White | Custom | M22-XDL-W-ETCH | M22-XDLH-W-ETCH | Blue | RESET | M22-XDL-B-GB14 | M22-XDLH-B-GB14 |
| Red | Custom | M22-XDL-R-ETCH | M22-XDLH-R-ETCH | Red | Ⓞ | M22-XDL-R-X0 | M22-XDLH-R-X0 |
| Green | Custom | M22-XDL-G-ETCH | M22-XDLH-G-ETCH | Green | Ⓛ | M22-XDL-G-X1 | M22-XDLH-G-X1 |
| Yellow | Custom | M22-XDL-Y-ETCH | M22-XDLH-Y-ETCH | Blue | Ⓟ | M22-XDL-B-X6 | M22-XDLH-B-X6 |

Mounting Adapters

| Description | Catalog Number |
|-------------|----------------|
|-------------|----------------|

M22-A



Contact block mounting adapter

M22-A

M22-A4



Contact block mounting adapter, four-position (for use with four-way pushbuttons, joysticks and four-position selector switches only).

M22-A4

M22-LS



Allows mounting of M22 pushbuttons to LS-Titan limit switch bodies (for the full LS-Titan catalog section, see PG08301004E).

M22-LS

Contact Blocks

M22-K10



M22-FK01



| Mounting Location | Terminal Type | Contact Configuration ① | Package Qty. | Catalog Number | | |
|-------------------|---------------|-------------------------|--------------|----------------|-----|---------------|
| Front | Screw | NO | 1 | M22-K10 | | |
| | | NO | 25 | M22-K10-B25 | | |
| | | NO | 100 | M22-K10-B100 | | |
| | | NO, early-make | 1 | M22-K10P | | |
| | | NC | 1 | M22-K01 | | |
| | | NC | 25 | M22-K01-B25 | | |
| | | NC | 100 | M22-K01-B100 | | |
| | | NC, late-break | 1 | M22-K01D | | |
| | | SMCB, NC | 1 | M22-K01SMC10 | | |
| | | SMCB, 2NC | 1 | M22-K02SMC10 | | |
| | | Base | Spring-cage | NO | 1 | M22-KC10 |
| | | | | NO | 25 | M22-KC10-B25 |
| | | | | NO | 100 | M22-KC10-B100 |
| | | | | NC | 1 | M22-KC01 |
| NC | 25 | | | M22-KC01-B25 | | |
| NC | 100 | | | M22-KC01-B100 | | |
| SMCB, NC | 1 | | | M22-KC01SMC10 | | |
| SMCB, 2NC | 1 | | | M22-KC02SMC10 | | |
| Front | Spring-cage | | | NO | 1 | M22-CK10 |
| | | | | NC | 1 | M22-CK01 |
| | | NC, late-break | 1 | M22-CK01D | | |
| | | 2NO ② | 1 | M22-CK20 | | |
| | | 2NC ② | 1 | M22-CK02 | | |
| | | NO-NC ② | 1 | M22-CK11 | | |
| | | NC | 20 | M22-FK01 ③ | | |
| | | NO | 20 | M22-FK10 ③ | | |
| | | Base | Spring-cage | NO | 1 | M22-CKC10 |
| | | | | NC | 1 | M22-CKC01 |

Notes

① All NC contact blocks are positively driven contact. Ⓞ

② Not stackable.

③ Additional contacts may not be stacked behind M22-F type contact blocks, M22-F can be stacked behind standard M22 contacts only.

M22-LED-W



M22-FLED-_-



Light Units

| Terminal Type | Mounting Location | LED Color | Light Unit Voltage | Catalog Number | | |
|---------------|-------------------|--|--------------------|---------------------------|---------------|---------------|
| Screw | Front | White | 12–30 Vac/Vdc | M22-LED-W | | |
| | | Red | | M22-LED-R | | |
| | | Green | | M22-LED-G | | |
| | | Blue | | M22-LED-B | | |
| | Base | Front | White | 85–264 Vac | M22-LED230-W | |
| | | | Red | | M22-LED230-R | |
| | | | Green | | M22-LED230-G | |
| | | | Blue | | M22-LED230-B | |
| | | Base | Front | White | 207–264 Vac | M22-LED230H-W |
| | | | | Red | | M22-LED230H-R |
| | | | | Green | | M22-LED230H-G |
| | | | | Blue | | M22-LED230H-B |
| | | Base | Front | White | 12–30 Vac/Vdc | M22-LEDC-W |
| | | | | Red | | M22-LEDC-R |
| | | | | Green | | M22-LEDC-G |
| | | | | Blue | | M22-LEDC-B |
| | Base | | Front | White | 85–264 Vac | M22-LEDC230-W |
| | | | | Red | | M22-LEDC230-R |
| | | | | Green | | M22-LEDC230-G |
| | | | | Blue | | M22-LEDC230-B |
| Spring-cage | Front | White | 12–30 Vac/Vdc | M22-CLED-W | | |
| | | Red | | M22-CLED-R | | |
| | | Green | | M22-CLED-G | | |
| | | Blue | | M22-CLED-B | | |
| | Base | Front | White | 85–264 Vac | M22-CLED230-W | |
| | | | Red | | M22-CLED230-R | |
| | | | Green | | M22-CLED230-G | |
| | | | Blue | | M22-CLED230-B | |
| | | Base | Front | White | 12–30 Vac/Vdc | M22-CLEDC-W |
| | | | | Red | | M22-CLEDC-R |
| | | | | Green | | M22-CLEDC-G |
| | | | | Blue | | M22-CLEDC-B |
| Front | Base | White | 85–264 Vac | M22-CLEDC230-W | | |
| | | Red | | M22-CLEDC230-R | | |
| | | Green | | M22-CLEDC230-G | | |
| | | Blue | | M22-CLEDC230-B | | |
| | Front | Base | White | 12–30 Vac/Vdc | M22-FLED-W | |
| | | | Red | | M22-FLED-R | |
| | | | Green | | M22-FLED-G | |
| | | | Blue | | M22-FLED-B | |
| Front | Base | Red/Green/Yellow | 24 Vdc | M22-FLED-RG ^① | | |
| | | Red, Green, Blue, Yellow, White, Violet, Turquoise | | M22-FLED-RGB ^① | | |

M22-XLED60



LED Resistor and Test Elements

| Terminal Type | Mounting Location | Element Type | Voltage | Catalog Number |
|---------------|-------------------|------------------------|----------------|----------------|
| Screw | Front | Resistor ^{②③} | 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.

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Multi-Color LED Input Guide

| Catalog Number | | Terminal Color | | | |
|---------------------|-----------|----------------|----------|----------|-----------|
| | | X1 +R | X2 +G | X3 +B | X4 GND |
| M22-FLED-RG | Red | ■ | — | — | ■ |
| | Green | — | ■ | — | ■ |
| | Yellow | ■ | ■ | — | ■ |
| M22-FLED-RGB | Red | ■ | — | — | ■ |
| | Green | — | ■ | — | ■ |
| | Yellow | ■ | ■ | — | ■ |
| | White | ■ | ■ | ■ | ■ |
| | Blue | — | — | ■ | ■ |
| | Violet | ■ | — | ■ | ■ |
| | Turquoise | — | ■ | ■ | ■ |

Legend Plate Holders and Inserts, Pushbuttons and Double Pushbuttons ^①

| | Description | Inscription | Catalog Number |
|---|--|--------------------|----------------------------------|
|  | Legend plate holder, without legend plate insert, for pushbuttons | — | M22S-ST-X |
| | Legend plate holder, without legend plate insert, for double pushbuttons | — | M22S-STDD-X |
|  | 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 O AUTO | M22-XST-D12 |
| | | 1 | M22-XST-X52 |
| | 2 | M22-XST-X53 | |
| | O I | M22-XST-X88 | |
| | O - I | M22-XST-X89 | |
| | I O II | M22-XST-X93 | |

Notes

^① 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-STX.
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 # __ .

Legend Plates, Complete ^①

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

Notes

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

^② When ordering, specify inscription per catalog number suffix from the Symbols Library (see **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 #_.

1.4

Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons—M22

1

Surface Mounting Enclosures ^①

M22-IY1-PG



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

M22-IY-PG



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

M22-EY1



Flush Mounting Plates, Aluminum

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

M22-H1



Shrouds, Plastic

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

Selector Switch Accessories

M22-XW



| Description | Catalog Number |
|-----------------------------|----------------|
| Plunger bridge ^② | M22-XW |

M22-XWS



| | |
|-----------|----------------|
| Key cover | M22-XWS |
|-----------|----------------|

M22-XC-R



| | |
|-----------------------------------|-----------------|
| Key withdraw adapter ^③ | M22-XC-R |
|-----------------------------------|-----------------|

M22-XC-Y



| | |
|----------------|-----------------|
| Coding adapter | M22-XC-Y |
|----------------|-----------------|

M22-XGWK








| | |
|------------|-----------------|
| Guard ring | M22-XGWK |
|------------|-----------------|


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.

Emergency Stop Operator Accessories

| | Description | Voltage | Catalog Number |
|--|-------------------|------------|------------------------|
|  | Yellow guard ring | — | M22-XGPV |
|  | Gray guard ring | — | M22G-XGPV |
|  | Rectangular guard | — | M22-MGTA |
|  | Sealing shroud | — | M22-PL-PV |
|  | Illuminated ring | 24 Vac/Vdc | M22-XPV60-Y-24 |
| | | 120 Vac | M22-XPV60-Y-120 |
| | | 230 Vac | M22-XPV60-Y-230 |

Blanking Plugs

| | Color | Catalog Number |
|---|-------|----------------|
|  | Gray | M22-B |
| | Black | M22S-B |

Notching Tool


Punching tool used to produce the cutout for the anti-rotation tab as defined in IEC/EN 60947-5-1.

| Description | Unit | Article Number | Catalog Number |
|---|------|----------------|----------------|
| St 37 sheet steel: Max. 3 mm thickness | 1 | 028144 | M22-NT |
| Stainless steel: Max. 1.5 mm thickness | | | |


Mounting Accessories

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

Protective Diaphragm

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

Dust Covers

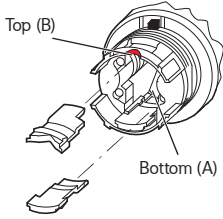
| | Description | Catalog Number |
|---|---|-----------------|
|  | Contact block dust cover | M22-XKDP |
| | Operator dust cover, max three contact blocks | M22-ADC |
| | Operator dust cover, max four contact blocks | M22-ADC4 |

Kits

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

1

Coding Adapter Guide Selector Switches



Two-Position Selector Switch

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

Three-Position Selector Switch

| Top (B) | Bottom (A) | Catalog Number | Function Left | Right |
|---------|------------|--------------------|---------------|------------|
| | | 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 Key Withdraw | Right 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 |
|---------|------------|----------------|---------------|--------------|---------------------|----------------|--------------|
| | | 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 |
| | | M22(S)-WRS3-A4 | Maintained | Yes | Yes | Momentary | No |
| | | M22(S)-WRS3-A5 | Maintained | No | Yes | Momentary | No |
| | | M22(S)-WRS3-A6 | Momentary | No | Yes | Maintained | Yes |
| | | 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, Buzzers and Potentiometers | Emergency-Stop Operators | Selector Switches | Key-Operated Operators | Double Pushbuttons |
|---|--------------|---|--|---|--|--|--|--|
| General | | | | | | | | |
| Standards | | IEC/EN 60947 VDE 0660 UL #E29184 | IEC/EN 60947 VDE 0660 UL #E29184 | IEC/EN 60947 VDE 0660 UL #E29184 | IEC/EN 60947 VDE 0660 UL #340491 | IEC/EN 60947 VDE 0660 UL #E29184 | IEC/EN 60947 VDE 0660 UL #E29184 | IEC/EN 60947 VDE 0660 UL #E29184 |
| Lifespan, mechanical | Operations | x 10 ⁶ | >5 | >1 | — | >0.1 | >0.1 | >0.1 |
| Operating frequency | Operations/h | | ≥3600 | ≥1800 | — | ≥600 | ≥2000 | ≥100 |
| Actuating force | n | | ≥5 | ≥5 | — | ≥50 | — | ≥5 |
| Operating torque (screw terminals) | Nm | | — | — | — | — | ≥0.3 | ≥0.5 |
| Protection Type | | | | | | | | |
| IP | | IP67, IP69K | IP67, IP69K | Indicating lights: IP67, 69K Buzzers: IP40 Potentiometers: IP66 | IP67, IP69K | IP66 | IP66 | IP66 |
| UL type | | 4X, 13 | 4X, 13 | Indicating lights: 4X/13 Buzzers: 12 Potentiometers: 4X/13 | 4X, 13 | 4X, 13 | 4X, 13 | 4X, 13 |
| Climatic proofing | | Damp heat, constant, according to IEC 60068-2-78 Damp heat, cyclical to IEC 60068-2-30 | | | | | | |
| Ambient temperature, operating | | °F (°C) | –13 to 158 (–25 to 70) | –13 to 158 (–25 to 70) | –13 to 158 (–25 to 70) | –13 to 158 (–25 to 70) | –13 to 158 (–25 to 70) | –13 to 158 (–25 to 70) |
| 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 | >50 | >30 | >30 |
| Terminal Capacities | | | | | | | | |
| Solid | | AWG | — | — | 20-16 | — | — | — |
| | | mm ² | — | — | 0.5–1.5 | — | — | — |
| Stranded | | AWG | — | — | 20-16 | — | — | — |
| | | mm ² | — | — | 0.5–1.5 | — | — | — |
| Contacts | | | | | | | | |
| Rated impulse withstand voltage | | U _{imp} | Vac | — | 4000 | — | — | — |
| Rated insulation voltage | | U _i | V | — | 2500 | — | — | — |
| Overvoltage category/pollution degree | | | — | — | III/3 | — | — | — |

1.4

Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons—M22

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Contact Blocks and Light Units

| Description | | | Contact Blocks | LED Light Units |
|---|-----------------|-------------------|---|--|
| General | | | | |
| Standards | | | IEC/EN 60947 VDE 0660 UL #E29184 | IEC/EN 60947 VDE 0660 UL #E29184 |
| Lifespan, mechanical | Operations | $\times 10^6$ | >5 | — |
| Operating frequency | Operations/h | | ≥ 3600 | — |
| Actuating force | n | | ≥ 5 | — |
| Operating torque (screw terminals) | Nm | | ≤ 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 | °F (°C) | | –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 |
| | mm ² | | 0.75–2.5 | 0.75–2.5 |
| Stranded | AWG | | 20–14 | 20–14 |
| | mm ² | | 0.5–2.5 | 0.5–2.5 |
| Contacts | | | | |
| Rated impulse withstand voltage | U_{imp} | Vac | 6000 | 6000 |
| Rated insulation voltage | U_i | V | 500 | 500 |
| Overvoltage category/ pollution degree | | | III/3 | III/3 |
| NEMA contact ratings | | | A600, Q300 | — |
| Current draw | | | — | 5–15 mA |
| Control Circuit Reliability | | | | |
| at 24 Vdc/5 mA | H_f | Fault probability | $<10^{-7}$, <1 fault in 10^7 operations | — |
| at 5 Vdc/1 mA | H_f | Fault probability | $<5 \times 10^{-6}$, <1 fault in 5×10^6 operations | — |
| Max. Short-Circuit Protective Device | | | | |
| Fuse | gG/gL | A | 10 | — |
| Switching Capacity | | | | |
| Rated Operational Current | | | | |
| AC-15 | | | | |
| 115V | I_e | A | 6 | — |
| 230V | I_e | A | 6 | — |
| 400V | I_e | A | 4 | — |
| 500V | I_e | A | 2 | — |
| DC-13 | | | | |
| 24V | I_e | A | 3 | — |
| 42V | I_e | A | 1.7 | — |
| 60V | I_e | A | 1.2 | — |
| 110V | I_e | A | 0.6 | — |
| 220V | I_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 | | | | |
| 12V/2.8A | Operations | $\times 10^6$ | 1.2 | — |

Contact Element Note: >200 Vac/60 Hz: –25/55°C

Palm Switches

| Description | | | Momentary | Maintained | FAK-R-V-KC11-I |
|--|--------------|-------------------|--|--------------------------|--------------------------|
| General | | | | | |
| Standards | | | IEC/EN 60947 VDE 0660 | IEC/EN 60947 VDE 0660 | IEC/EN 60947 VDE 0660 |
| Lifespan, mechanical | Operations | x 10 ⁶ | >1 | >0.1 | >0.1 |
| Operating frequency | Operations/h | | ≥3600 | ≥600 | ≥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 | °F (°C) | | –73 to 104 (–25 to 40) | –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 | | | EN 55011, EN 55022 | EN 55011, EN 55022 |
| Limit value class | | | — | — |
| Protection type | | | IP20 | IP00 |
| Climatic proofing | | | Damp heat, constant, to IEC 60068-2-78, cyclical, to IEC 60068-2-30 | |
| Ambient temperature, operating | °F (°C) | | –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 | | ≥40 | ≥40 |
| AS-interface | | | — | — |
| Rated operational current at full load | mA | | — | — |
| Rated operational current when idle (no I, O set) | mA | | — | — |
| Status LEDs | | | POWER AS-interface cable: green LED on the rear side of the element ERROR AS-interface, AS-interface master failure: red 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 board |

1.4

Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons—M22

1

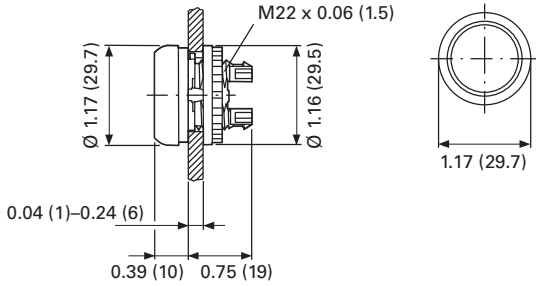
ASi-S Adapter Modules

| 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 | | — | — |
| Σ 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 | °F (°C) | –13 to 131 (–25 to 55) | –13 to 131 (–25 to 55) |
| Shock resistance | | 30g/11 ms as per IEC 60068-2-27 | 30g/11 ms as per IEC 60068-2-27 |
| Protection type | | IP20 | IP00 |
| 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 | | EN 50178 EN 50 295 | EN 50178 EN 50 295 |
| Inputs | | Two-channel input (22V/5 mA) (moduled by code sequence) (two break contact sets M22-K01) | Two-channel input (22V/5 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

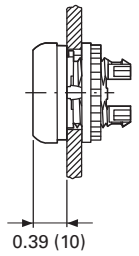
Approximate Dimensions in Inches (mm)

Operators and Indicating Lights

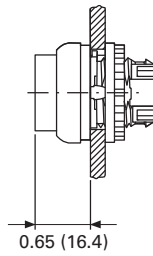


Pushbuttons

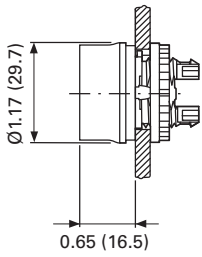
M22...-D-



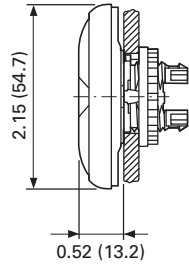
M22...-DH-



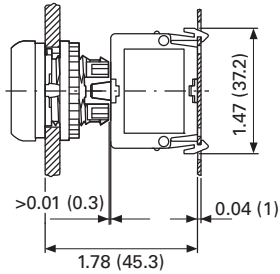
M22-DG(L)-



M22...-DD-

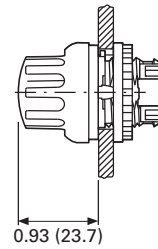


M22-D, Base Mounted

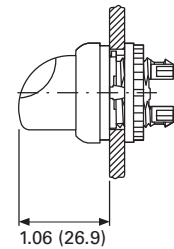


Selector Switches Operators

M22...-W-

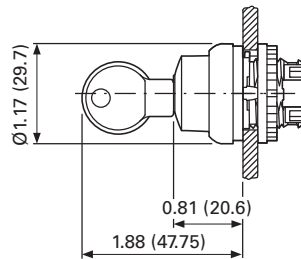


M22...-WL-



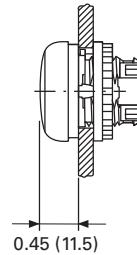
Key-Operated Selector Switches

M22...-W(R)S-



Indicating Light

M22-L



1.4

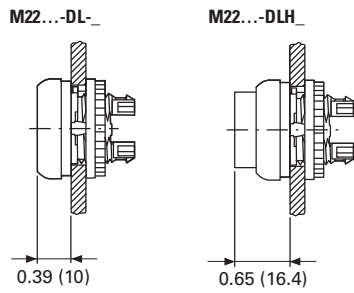
Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons—M22

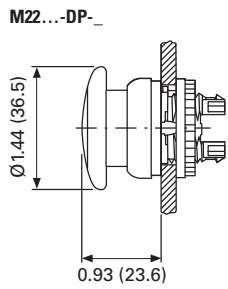
1

Approximate Dimensions in Inches (mm)

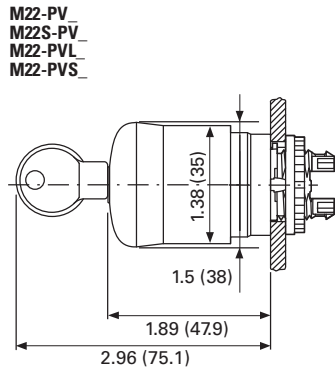
Illuminated Pushbuttons



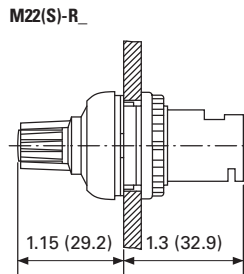
Mushroom Head Pushbutton



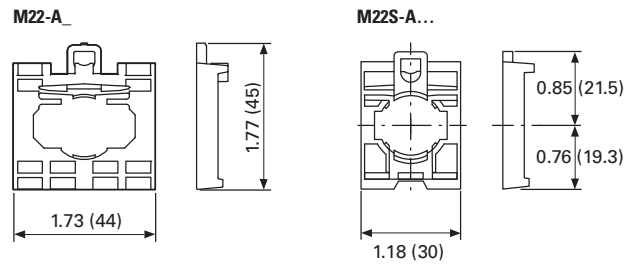
Emergency-Stop Operators



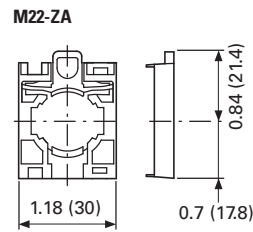
Potentiometer



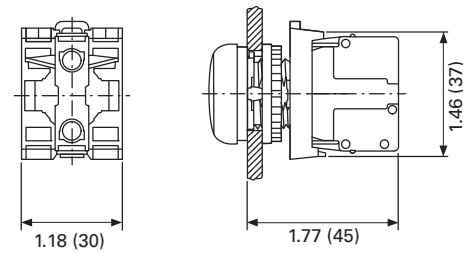
Contact Block Mounting Adapter



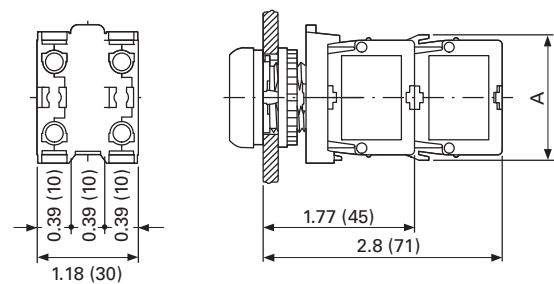
Front Mounted Centering Adapter



Front Mounted Indicating Light



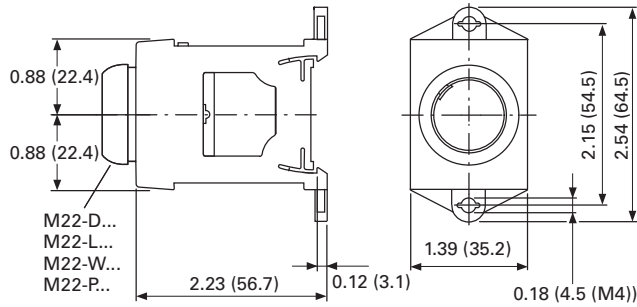
Pushbutton, Complete Devices



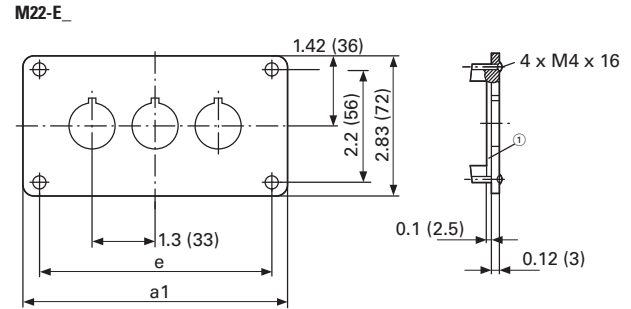
| | 1 x M22-K_ | 2 x M22-K_ | 1 x M22-CK_ | 2 x M22-CK_ |
|----------|-------------|-------------|-------------|-------------|
| A | 1.46 (37.2) | 1.46 (37.2) | 1.54 (39.0) | 1.54 (39.0) |

Approximate Dimensions in Inches (mm)

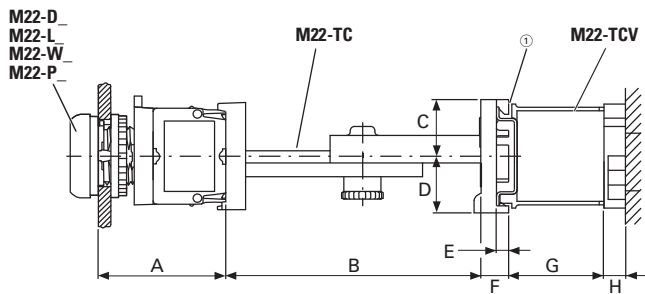
DIN-Rail Mounting Adapter



Front Mounted Mounting Plate



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



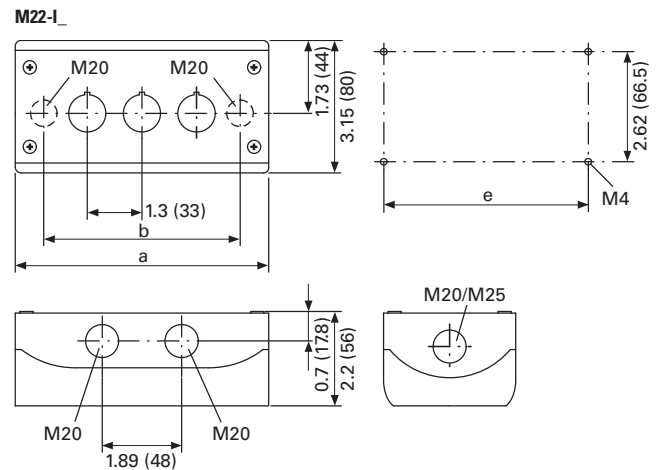
| A | B | C | D | E | F | G | H |
|--------------|-----------------------|--------------|--------------|---------------|--------------|-------------|--------------|
| 1.77 (45) | 2.36–3.94 (60–100) | 0.79 (20) | 0.79 (20) | 0.18 (4.5) | 0.39 (10) | 154 (39) | 0.39 (10) |

① Top-hat rail to IEC/EN 60715.

| Catalog Number | a1 | e |
|----------------|------------|------------|
| M22-E(Y) ① | 2.83 (72) | 2.21 (56) |
| M22-E2 | 4.13 (105) | 3.50 (89) |
| M22-E3 | 5.43 (138) | 4.80 (122) |

| Catalog Number | a1 | e |
|----------------|------------|------------|
| M22-E4 | 6.73 (171) | 6.10 (155) |
| M22-E5 | 8.03 (204) | 7.40 (188) |
| M22-E6 | 9.33 (237) | 8.70 (221) |

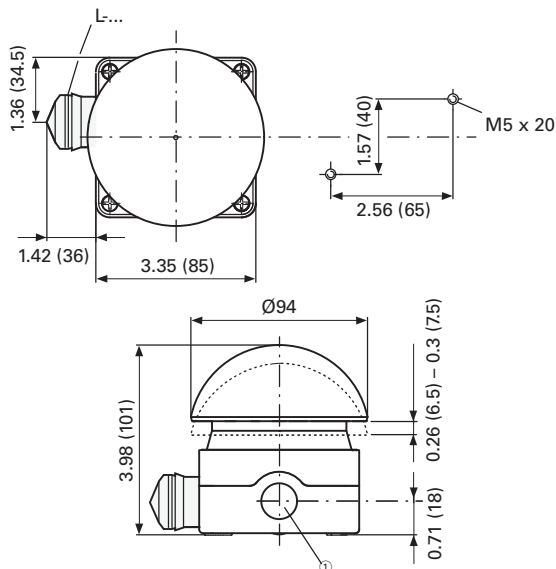
Base Mounted Surface Mounting Enclosure



| Catalog Number | Mounting Locations | a | b | e | Cable Entries |
|----------------|--------------------|-----------------|-----------------|-----------------|-------------------------|
| M22-I(Y)1 | 1 | 2.83 (72.0) | 1.68 (42.6) | 2.30 (58.5) | 2 x M16 3 x M20 2 x M25 |
| M22-I2 | 2 | 4.72 (120.0) | 3.37 (85.6) | 4.19 (106.5) | 2 x M20 3 x M20 2 x M25 |
| M22-I3 | 3 | 6.02 (153.0) | 4.67 (118.6) | 5.49 (139.5) | 2 x M20 2 x M25 4 x M20 |
| M22-I4 | 4 | 7.32 (186.0) | 5.97 (151.6) | 6.79 (172.5) | 2 x M20 2 x M25 4 x M20 |
| M22-I6 | 6 | 9.92 (252.0) | 8.57 (217.6) | 9.39 (238.5) | 2 x M20 2 x M25 4 x M20 |

Palm Switches

FAK



① 3 x M20 lateral, 1 x M16 in bottom.

1.4

Pushbuttons and Indicating Lights

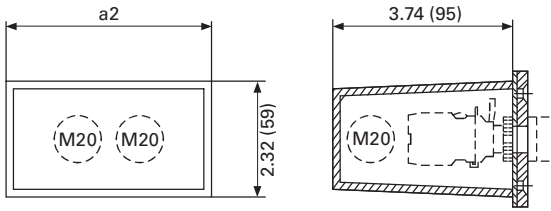
22.5 mm RMQ-Titan Modular Pushbuttons—M22

1

Approximate Dimensions in Inches (mm)

Covers

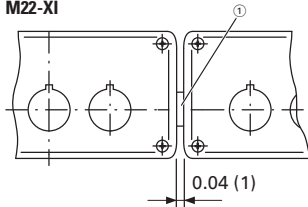
M22-H_



| Catalog Number | a2 | Cable Entry | Style |
|----------------|------------|-------------|-----------|
| M22-H1 | 1.65 (42) | 3 x M20 | One-piece |
| M22-H2 | 2.95 (75) | 4 x M20 | |
| M22-H3 | 4.25 (108) | 4 x M20 | |
| M22-H4 | 5.55 (141) | 4 x M20 | Split |
| M22-H5 | 6.85 (174) | 5 x M20 | |
| M22-HE6 | 8.15 (207) | 6 x M20 | |

Connecting Screw

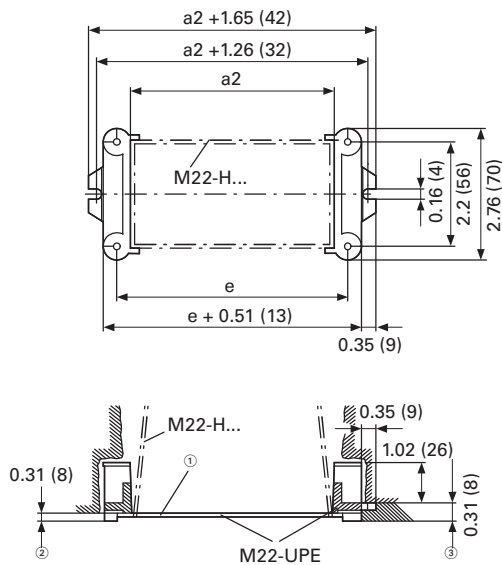
M22-XI



① Gasket.

Shroud with Plaster Keys

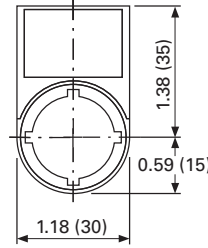
M22-UPE



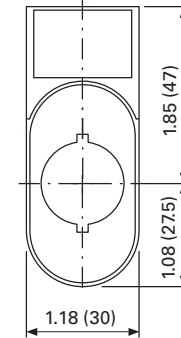
- ② Box for closing off when plastering.
- ③ Plaster thickness less than 8 mm.
- ④ Plaster thickness more than 8 mm.

Legend Plates

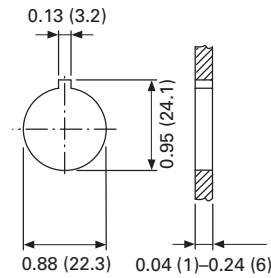
M22S-ST_



M22S-STDD-X

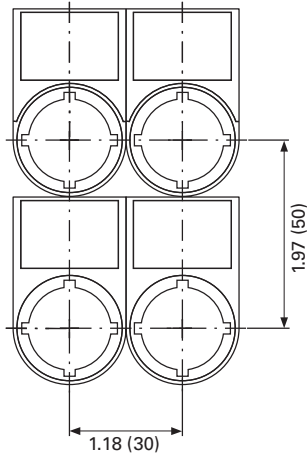


Mounting Hole with Lug Slot

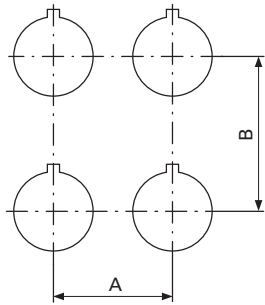


Approximate Dimensions in Inches (mm)

Grid Dimension to IEC/EN 60947

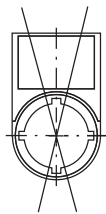


Grid Dimension for Various Combinations



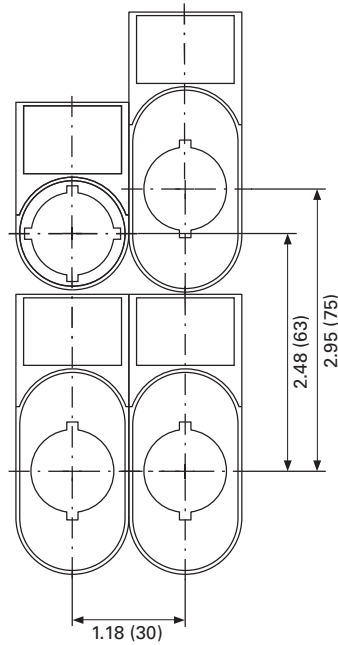
Pushbutton Diaphragm

Pushbutton diaphragm cannot be combined with label mount.

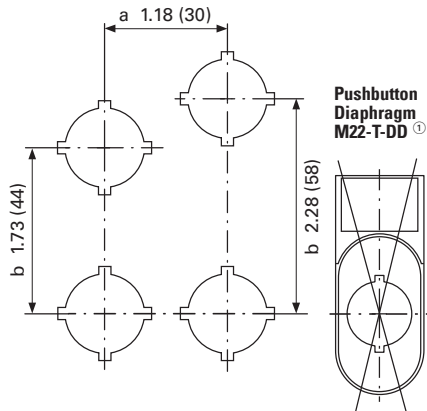


| Catalog Number | A ≥ | B ≥ |
|------------------------|-------------|-------------|
| M22(S)_ (IEC/EN 60947) | 1.18 (30.0) | 1.97 (50.0) |
| RMQ-Titan min. | 1.18 (30.0) | 1.58 (40.0) |
| M22-D_ + M22-T-D | 1.30 (33.0) | 1.58 (40.0) |
| M22-D(R)P_ | 1.50 (38.0) | 1.58 (40.0) |
| M22-PV_ | 1.50 (38.0) | 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_



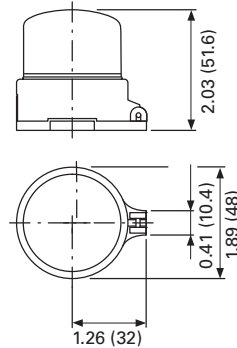
Grid Dimension for M22-DDL_



① Pushbutton diaphragm cannot be combined with label mount.

Emergency Stop Sealing Cover

M22-PL-PV



1.4

Pushbuttons and Indicating Lights

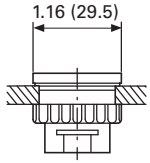
22.5 mm RMQ-Titan Modular Pushbuttons—M22

1

Approximate Dimensions in Inches (mm)

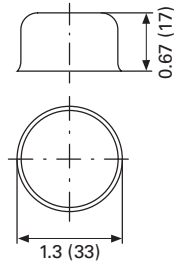
Blanking Plugs

M22...B_

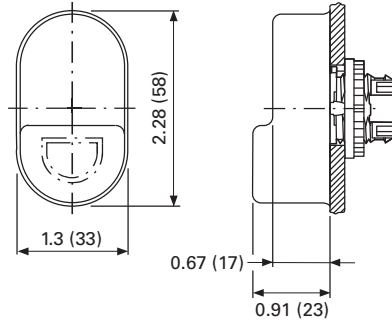


Pushbutton Diaphragm

M22-T-D

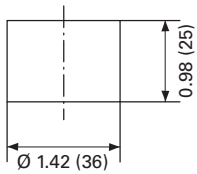


M22-T-D

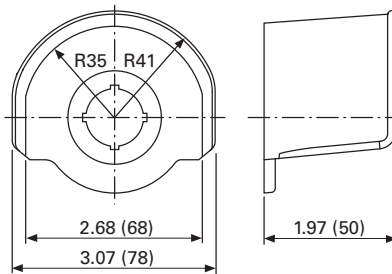


Guard Ring

M22-XGWK

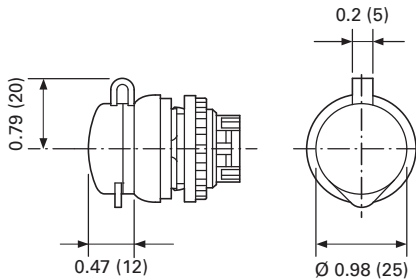


M22-XGPV



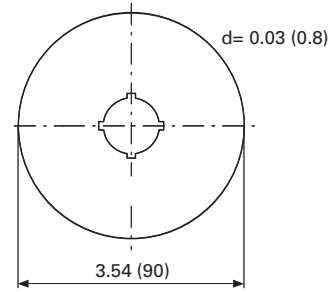
Key Cover

M22-XWS

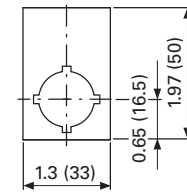


Emergency Stop Legend Plate

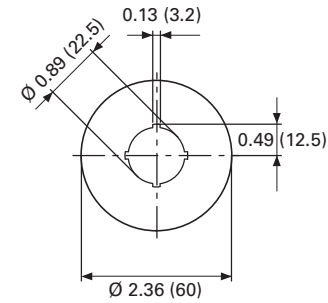
M22-XAK_



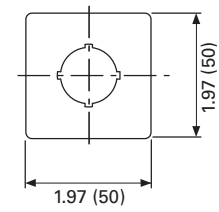
M22-X(Y)ZK_



M22-XBK_

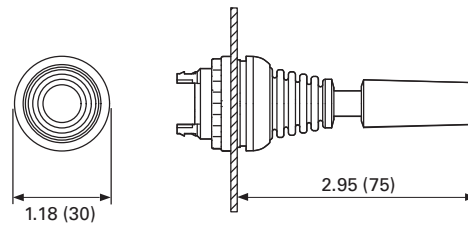


M22-XYK_



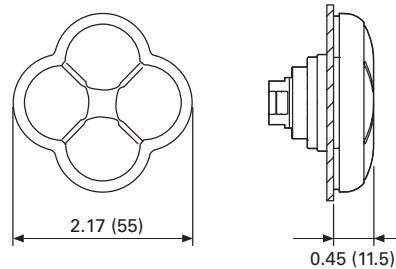
Joystick

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.

1.4

Pushbuttons and Indicating Lights

22.5 mm RMQ-Titan Modular Pushbuttons—M22

1

Letter Height Specifications: ≤ five characters; letter height = 0.197 in (5 mm). > five characters; letter height = 0.118 in (3 mm).

Text—English

| Inscription | Catalog Number Suffix |
|-------------|-----------------------|
| STOP | GB0 |
| START | GB1 |
| CLOSE | GB2 |
| UP | GB3 |
| DOWN | GB4 |
| OFF | GB5 |
| ON | GB6 |
| RUN | GB7 |
| FAULT | GB8 |
| TEST | GB9 |
| OFF ON | GB10 |
| MAN. AUTO | GB11 |
| MAN. 0 AUTO | GB12 |
| RESET | GB14 |
| FORWARD | GB15 |
| REVERSE | GB16 |
| RAISE | GB17 |

| Inscription | Catalog Number Suffix |
|----------------|-----------------------|
| LOWER | GB18 |
| LEFT | GB19 |
| RIGHT | GB20 |
| BRAKE | GB21 |
| HIGH | GB22 |
| LOW | GB23 |
| FAST | GB24 |
| SLOW | GB25 |
| FASTER | GB26 |
| SLOWER | GB27 |
| OPEN | GB32 |
| PROG | GB62 |
| CALL | GB63 |
| OCCUPIED | GB64 |
| BYPASS 0 1 | GB65 |
| BYPASS UP | GB66 |
| EMERGENCY-STOP | GB99 |

Text—German

| Inscription | Catalog Number Suffix |
|-------------|-----------------------|
| Halt | D0 |
| Start | D1 |
| Zu | D2 |
| Auf | D3 |
| Ab | D4 |
| Aus | D5 |
| En | D6 |
| Betrieb | D7 |
| Störung | D8 |
| Prüfung | D9 |
| Aus Ein | D10 |
| HAND AUTO | D11 |
| HAND 0 AUTO | D12 |
| Antrieb | D13 |
| Entsperren | D14 |
| Vorwärts | D15 |
| Rückwärts | D16 |
| Heben | D17 |
| Senken | D18 |
| Links | D19 |
| Rechts | D20 |
| Bremsen | D21 |
| Hoch | D22 |
| Niedrig | D23 |
| Schnell | D24 |

| Inscription | Catalog Number Suffix |
|-------------------------|-----------------------|
| Langsam | D25 |
| HAND | D28 |
| AUTO | D29 |
| Einrichten | D30 |
| Tippen | D31 |
| Öffnen | D32 |
| Steuerspannung | D33 |
| Start Automatik | D34 |
| Lampentest | D35 |
| Phasenkontrolle | D36 |
| Alarm | D37 |
| Alarm - Reset | D38 |
| Sammelstörung | D39 |
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Text Size: 3 mm—Max. eight characters in first line; 10 characters in second line; eight characters in third line.



Text Size: 5 mm—Max. five characters per line.

