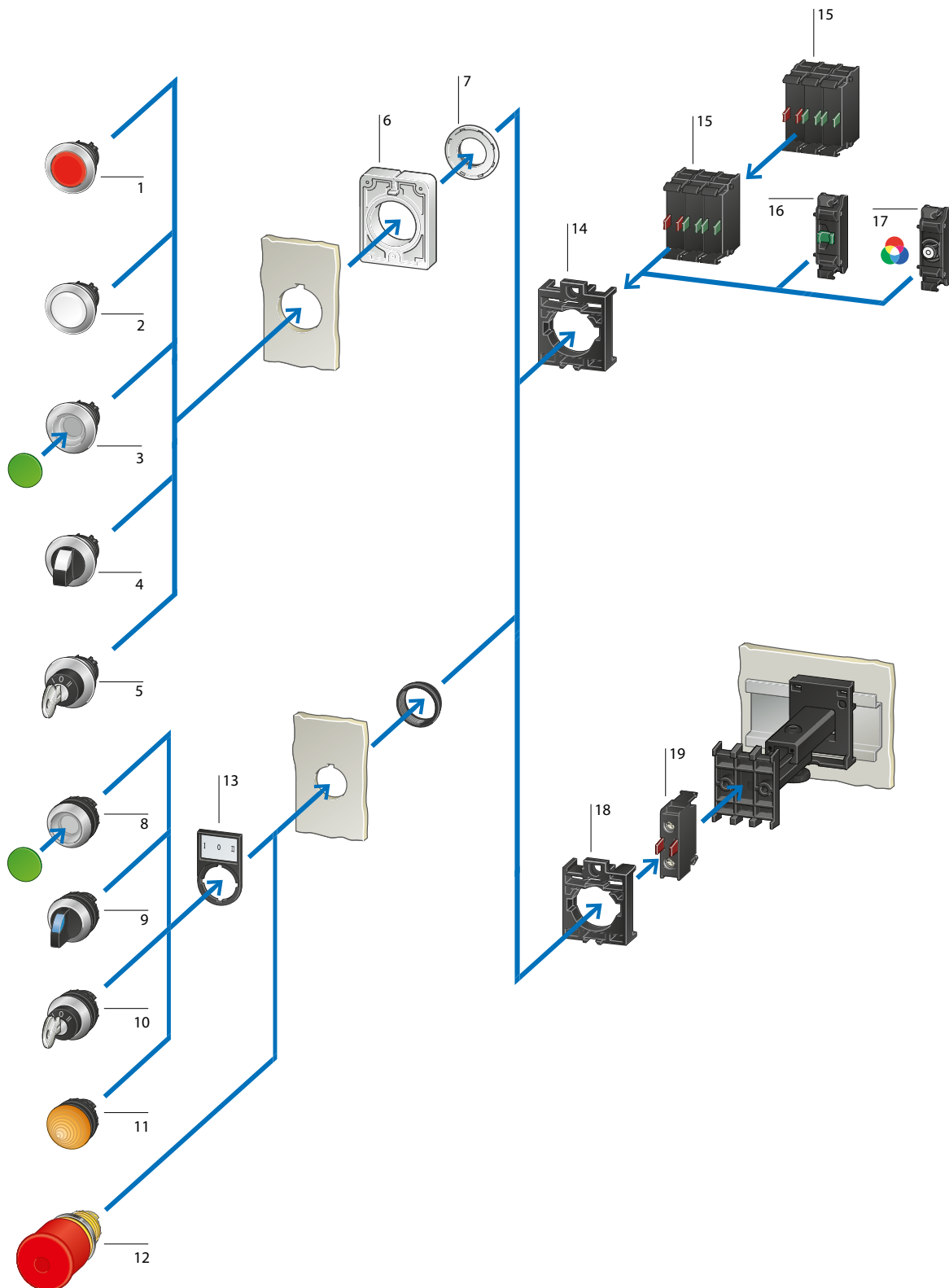


Selection aid Command and indication Build it in.



RMQ-Titan pilot devices



- | | | | |
|---|------------------------------|----------------------------|--------------------------------|
| 1) M30 indicator lights | 6) RMQ-AFX | 11) M22 indicator lights | 16) Flat Rear contact elements |
| 2) M30 pushbuttons | 7) Threaded ring | 12) Emergency stop buttons | 17) Flat Rear LED elements |
| 3) M30 illuminated pushbutton actuators | 8) M22 pushbuttons | 13) Label mounts | 18) Centering adapter |
| 4) M30 selector switches | 9) M22 selector switches | 14) Mounting adapter | 19) Telescopic clip |
| 5) M30 key-operated buttons | 10) M22 key-operated buttons | 15) Contact elements | |

| RMQ-Titan Technical data | | | | Contact elements | | Double contact element | LED elements | |
|---|---|-------------------|---|---|------------------|------------------------|---|-------------|
| | | | | M22-(C)K... | M22-FK... | M22-CK20/02/11 | M22(C)-LED.... | M22-FLED... |
| General | | | | | | | | |
| Standards | | | IEC/EN 60947-5-1 | | IEC/EN 60947-5-1 | IEC/EN 60947-5-1 | | |
| Lifespan, mechanical | Operations | x 10 ⁶ | 5 | 1 | – | – | – | – |
| Operating frequency | Operations/h | | ≤3600 | ≤3600 | ≤3600 | – | – | – |
| Operating force | | N | 5 | 4.5 | 10 | – | – | – |
| Operating torque (screw terminals) | | Nm | 0.8 | – | – | 0.8 | – | – |
| Degree of protection IEC/EN 60529 | | | IP 20 | IP 20 | IP 20 | IP 20 | IP 20 | IP 20 |
| Climatic proofing | Damp heat as defined in IEC 60 068-2-3 Damp heat, cyclic as defined in IEC 60 068-2-30 | | | | | | | |
| Ambient air temperature, open | | °C | –25/+70 | –25/+70 | –25/+70 | –25/+70 | –25/+70 | –25/+70 |
| Mounting position | | | Any | Any | | Any | Any | Any |
| Mechanical shock resistance to IEC 60068-2-27 | | g | 30 | 50 | 30 | 30 | 30 | 50 |
| Wire gauges | | | | | | | | |
| Solid | | mm ² | 0.75-2.5 | 2x1 (0.2-1.5) 2x1 (0.75-1.5) ¹⁾ | 0.5-1.5 | 0.75-2.5 | 1x1 (0.2-1.5) 1x1 (0.75-1.5) ¹⁾ | |
| Stranded | | mm ² | 0.5-2.5 | – | 0.5-1.5 | 0.5-2.5 | 1x1 (0.2-1.5) | |
| Flexible with ferrule | | mm ² | 0.5-1.5 | 2x1 (0.25-1) ²⁾ | 0.5-1.5 | – | 1x1 (0.25-1) ²⁾ | |
| Contacts | | | | | | | | |
| Rated impulse with stand voltage | U _{imp} | V AC | 6000 | 4000 | | 6000 | 4000 | |
| Rated insulation voltage | U _i | V | 500 | 250 | | 500 | 250 | |
| Overvoltage category/degree of pollution | | | III/3 | III/3 | | III/3 | III/3 | |
| Control circuit reliability | | | | | | | | |
| at 24 V DC/5 mA | H _F | Fault probability | <10 ⁻⁷ (e.g. one failure every 10 ⁷ operations) | – | | | | |
| at 5 V DC/1 mA | H _F | Fault probability | <5 x 10 ⁻⁶ (e.g. one failure every 5 x 10 ⁶ operations) | – | | | | |
| Max. short-circuit protective device | | | | | | | | |
| Fuseless | | Type | PKZM0-10/ FAZ-B6/1 | FAZ-B4 | | | | |
| Fuse | gG/gL | A | 10 | 4 | | | | |
| Switching capacity | | | | | | | | |
| Rated operational current | | | | | | | | |
| AC-15 | 24 V | I _e | A | – | 4 | | | |
| | 60 V | I _e | A | – | 4 | | | |
| | 100 V | I _e | A | – | 2 | | | |
| | 115 V | I _e | A | 6 | – | | | |
| | 230 V | I _e | A | 6 | 1.5 | | | |
| | 400 V | I _e | A | 4 | – | | | |
| | 500 V | I _e | A | 2 | – | | | |
| DC-13 | 24 V | I _e | A | 3 | 1.5 | | | |
| | 42 V | I _e | A | 1.7 | – | | | |
| | 60 V | I _e | A | 1.2 | 0.8 | | | |
| | 110 V | I _e | A | 0.6 (M22-CK....0.8) | 0.4 | | | |
| | 220 V | I _e | A | 0.3 | 0.2 | | | |
| Lifespan, electrical | | | | | | | | |
| AC-15 | 230 V/0.5 A | Operations | x 10 ⁶ | 1.6 | – | | | |
| | 230 V/1.0 A | Operations | x 10 ⁶ | 1 | – | | | |
| | 230 V/3.0 A | Operations | x 10 ⁶ | 0.7 | – | | | |
| DC-13 | 12 V/2.8 A | Operations | x 10 ⁶ | 1.2 | – | | | |

Notes

- ¹⁾ Can be plugged without tools
²⁾ Use WAGO Variocrimp 4 crimping tool
Additional versions on request

Links to Pushbutton Configurator:

www.eaton.eu/config/rmq
www.eaton.de/config/rmq

Selection aid Note:

Eaton Part numbers appear in **BOLD**

RS Article numbers are shown underneath the corresponding Eaton part number

Example:

Eaton Part number >M22-D-S

RS Article numbers >847-5143

Pushbuttons



RMQ-Titan



RMQ Flat Front Design

| Button plate | Pushbuttons momentary | Pushbuttons maintained | Pushbuttons momentary | Pushbuttons maintained |
|--|-------------------------------|--------------------------------|--|--|
| | M22-D-S 847-5143 | M22-DR-S 141-7698 | M30C-FD-S 136-5513 | M30C-FDR-S 136-5528 |
| | M22-D-W 110-4504 | M22-DR-W 110-4504 | M30C-FD-W 136-5515 | M30C-FDR-W 136-5529 |
| | M22-D-R 847-5118 | M22-DR-R 847-5118 | M30C-FD-R 136-5511 | M30C-FDR-R 136-5527 |
| | M22-D-G 847-5055 | M22-DR-G 110-4512 | M30C-FD-G 136-5509 | M30C-FDR-G 136-5526 |
| | M22-D-Y 110-4505 | M22-DR-Y 110-4505 | M30C-FD-Y 136-5508 | M30C-FDR-Y Available on request |
| | M22-D-B 847-5049 | M22-DR-B 847-5112 | M30C-FD-B 136-5507 | M30C-FDR-B Available on request |
| | M22-D-R-X0 110-4508 | M22-DR-R-X0 110-4508 | M30C-FD-R-X0 136-5512 | M30C-FDR-R-X0 Available on request |
| | M22-D-G-X1 110-4509 | M22-DR-G-X1 110-4509 | M30C-FD-G-X1 136-5510 | M30C-FDR-G-X1 Available on request |
| | M22-D-S-X0 110-4510 | M22-DR-S-X0 110-4510 | M30C-FD-S-X0 136-5514 | M30C-FDR-S-X0 Available on request |
| | M22-D-W-X1 110-4511 | M22-DR-W-X1 110-4511 | M30C-FD-W-X1 136-5517 | M30C-FDR-W-X1 Available on request |
| None | M22-D-X 847-5146 | M22-DR-X 110-4514 | M30C-FD-X Available on request | M30C-FDR-X Available on request |
| without lens M22-DG-X with protective ring | M22-DG-X 446-5316 | | | |

Additional versions on request

Illuminated pushbutton actuators



RMQ-Titan



RMQ Flat Front Design

| Button plate | Illuminated pushbutton actuators, momentary | Illuminated pushbutton actuators, maintained | Illuminated pushbutton actuators, momentary | Illuminated pushbutton actuators, maintained |
|--------------|---|--|--|---|
| | M22-DL-W 847-5083 | M22-DRL-W 110-4552 | M30C-FDL-W 136-5525 | M30C-FDRL-W 136-5530 |
| | M22-DL-R 847-5089 | M22-DRL-R 847-5128 | M30C-FDL-R 136-5524 | M30C-FDRL-R 136-5534 |
| | M22-DL-G 847-5086 | M22-DRL-G 110-4553 | M30C-FDL-G 136-5523 | M30C-FDRL-G 136-5531 |
| | M22-DL-Y 847-5095 | M22-DRL-Y 110-4554 | M30C-FDL-Y 136-5522 | M30C-FDRL-Y 136-5533 |
| | M22-DL-B 847-5077 | M22-DRL-B 110-4555 | M30C-FDL-B 136-5521 | M30C-FDRL-B 136-5532 |
| | M22-DL-R-X0 110-4549 | M22-DRL-R-X0 141-7700 | M30C-FDL-R-X0 136-5519 | M30C-FDRL-R-X0 Available on request |
| | M22-DL-G-X1 110-4550 | M22-DRL-G-X1 141-7701 | M30C-FDL-G-X1 136-5518 | M30C-FDRL-G-X1 Available on request |
| | M22-DL-W-X0 141-7699 | M22-DRL-W-X0 141-7702 | M30C-FDL-W-X0 Available on request | M30C-FDRL-W-X0 Available on request |
| | M22-DL-W-X1 110-4551 | M22-DRL-W-X1 141-7703 | M30C-FDL-W-X1 136-5520 | M30C-FDRL-W-X1 Available on request |
| None | M22-DL-X 847-5092 | M22-DRL-X 110-4556 | M30C-FDL-X Available on request | M30C-FDRL-X Available on request |

Additional versions on request

Double actuator pushbuttons



Indicator lights



Button plate

Double actuator pushbuttons

| | |
|--|---------------------------------------|
| | M22-DDL-GR-X1/X0 110-4515 |
| | M22-DDL-WS-C1/X0 110-4518 |
| | M22-DDL-GR-GB1/GB0 110-4517 |
| | M22-DDL-WS-GB1/GB0 110-4519 |
| | M22-DDL-S-X7/X7 110-4520 |
| | M22-DDL-S-X4/X5 110-4557 |
| | M22-DDL-GR 847-5058 |
| | M22-DDL-WS 847-5051 |

Button plate

Indicator lights

Indicator lights

| | | |
|--|----------------------------|------------------------------|
| | M22-L-W 847-5187 | M30C-FL-W 136-5540 |
| | M22-L-R 847-5178 | M30C-FL-R 136-5539 |
| | M22-L-G 847-5174 | M30C-FL-G 136-5538 |
| | M22-L-Y 847-5180 | M30C-FL-Y 136-5537 |
| | M22-L-B 847-5171 | M30C-FL-B 136-5536 |

Additional versions on request

Emergency stops



Accessory devices



Function

38mm

45mm

| | | |
|----------------------------|-----------------------------|-----------------------------------|
| Pull release | M22-PV 847-5184 | |
| Pull release, illuminated | M22-PVL 110-4542 | |
| Turn-release | M22-PVT 847-5196 | M22-PVT45P 743-5030 |
| Twist release, illuminated | M22-PVLT 110-4568 | M22-PVLT45P 743-5021 |
| Twist release, with key | M22-PVS 847-5193 | M22-PVS45P-MS1 743-5028 |

| | |
|-----------------|------------------------------|
| Guard rings | M22-XGPV 620-6169 |
| Sealable shroud | M22-PL-PV 399-3135 |
| Label | M22-XAK11 110-4495 |

Additional versions on request

Selector switches with thumb-grip



Design

Color

2 positions momentary

2 positions maintained

3 positions momentary

3 positions maintained

| | | | | | |
|-----------------------|--|--------------------------------|---------------------------------|---------------------------------|----------------------------------|
| RMQ-Titan | | M22-WLK-W 110-4529 | M22-WRLK-W 847-5364 | M22-WLK3-W 847-5342 | M22-WRLK3-W 110-4536 |
| RMQ Flat Front Design | | M30C-FWLK-W 136-5553 | M30C-FWRLK-W 136-5554 | M30C-FWLK3-W 136-5555 | M30C-FWRLK3-W 136-5556 |

Additional versions on request

Contact elements



| Category | Function | Front mounting | Base mounting | Slim mounting depth | Adapter |
|-----------------------|----------|-----------------------------|------------------------------|-----------------------------|---------------------------|
| Screw terminals | | M22-K01D 141-7704 | | | Front mounting |
| | | M22-K10 399-3573 | M22-KC10 399-3589 | | M22-A 399-3545 |
| | | M22-K01 399-3551 | M22-KC01 399-3567 | | M22-A4 536-3889 |
| Spring-cage terminals | | M22-CK10 399-3618 | M22-CKC10 399-3624 | M22-FK10 124-5192 | |
| | | M22-CK01 399-3595 | M22-CKC01 399-3602 | M22-FK01 124-5191 | |

Additional versions on request

LED elements



| Front mounting | 12-30 V AC/DC | 85-264 V AC | Slim mounting depth 12-30 V AC/DC |
|----------------|------------------------------|---------------------------------|--------------------------------------|
| | M22-LED-W 399-3630 | M22-LED230-W 399-3731 | M22-FLED-W 124-5193 |
| | M22-LED-R 399-3646 | M22-LED230-R 399-3747 | M22-FLED-R 124-5196 |
| | M22-LED-G 399-3652 | M22-LED230-G 399-3753 | M22-FLED-G 124-5195 |
| | M22-LED-B 399-3674 | M22-LED230-B 399-3769 | M22-FLED-B 124-5194 |
| | | | M22-FLED-RG 124-5197 |
| | | | M22-FLED-RGB 124-5198 |

| Base mounting | 12-30 V AC/DC | 85-264 V AC |
|---------------|-------------------------------|----------------------------------|
| | M22-LEDC-W 399-3680 | M22-LEDC230-W 399-3775 |
| | M22-LEDC-R 399-3696 | M22-LEDC230-R 399-3681 |
| | M22-LEDC-G 399-3703 | M22-LEDC230-G 399-3797 |
| | M22-LEDC-B 399-3719 | M22-LEDC230-B 399-3804 |

Additional versions on request

Surface mounting enclosures



Joysticks



Mounting locations/color

Surface mounting enclosures

Function

22.5 mm

30.5 mm

| | | | | | |
|---|--|----------------------------|-------------------------------------|---|---|
| 1 | | M22-IY1 399-3826 | 4 positions, momentary | M22-WJS4 Available on request | M30C-FWJS4 Available on request |
| 1 | | M22-I1 399-3810 | 4 positions maintained | M22-WRJS4 Available on request | |
| 2 | | M22-I2 399-3832 | 2 positions, momentary, horizontal | M22-WJS2H Available on request | |
| 3 | | M22-I3 399-3848 | 2 positions, maintained, horizontal | M22-WRJS2H Available on request | M30C-FWRJS2H Available on request |
| 4 | | M22-I4 399-3854 | 2 positions, momentary, vertical | M22-WJS2V Available on request | |
| 6 | | M22-I6 399-3860 | | | |

Additional versions on request

Potentiometer/Encoder/USB/RJ45



kOhm

22.5 mm

30.5 mm

22.5 mm

30.5 mm

| | | | | |
|-----|------------------------------|--|--|---|
| 1 | M22-R1K 620-6052 | M30C-FR1K 136-5542 | M22-USB Available on request | M30C-FUSB Available on request |
| 4.7 | M22-R4K7 620-6096 | M30C-FR4K7 136-5543 | M22-RJ45-SA 847-5190 | M30C-FRJ45 Available on request |
| 10 | M22-R10K 620-6074 | M30C-FR10K 136-5541 | | |
| 47 | M22-R47K 620-6080 | M30C-FR47K Available on request | | |
| 100 | M22-R100K 620-6052 | M30C-FR100K Available on request | | |
| 470 | M22-R470K 620-6068 | M30C-FR470K Available on request | | |
| | M22-INC-SWD | M30C-FINC-SWD Available on request | | |
| | M22-INC-SWD-INC | M30C-FINC-SWD-INC Available on request | | |

Additional versions on request