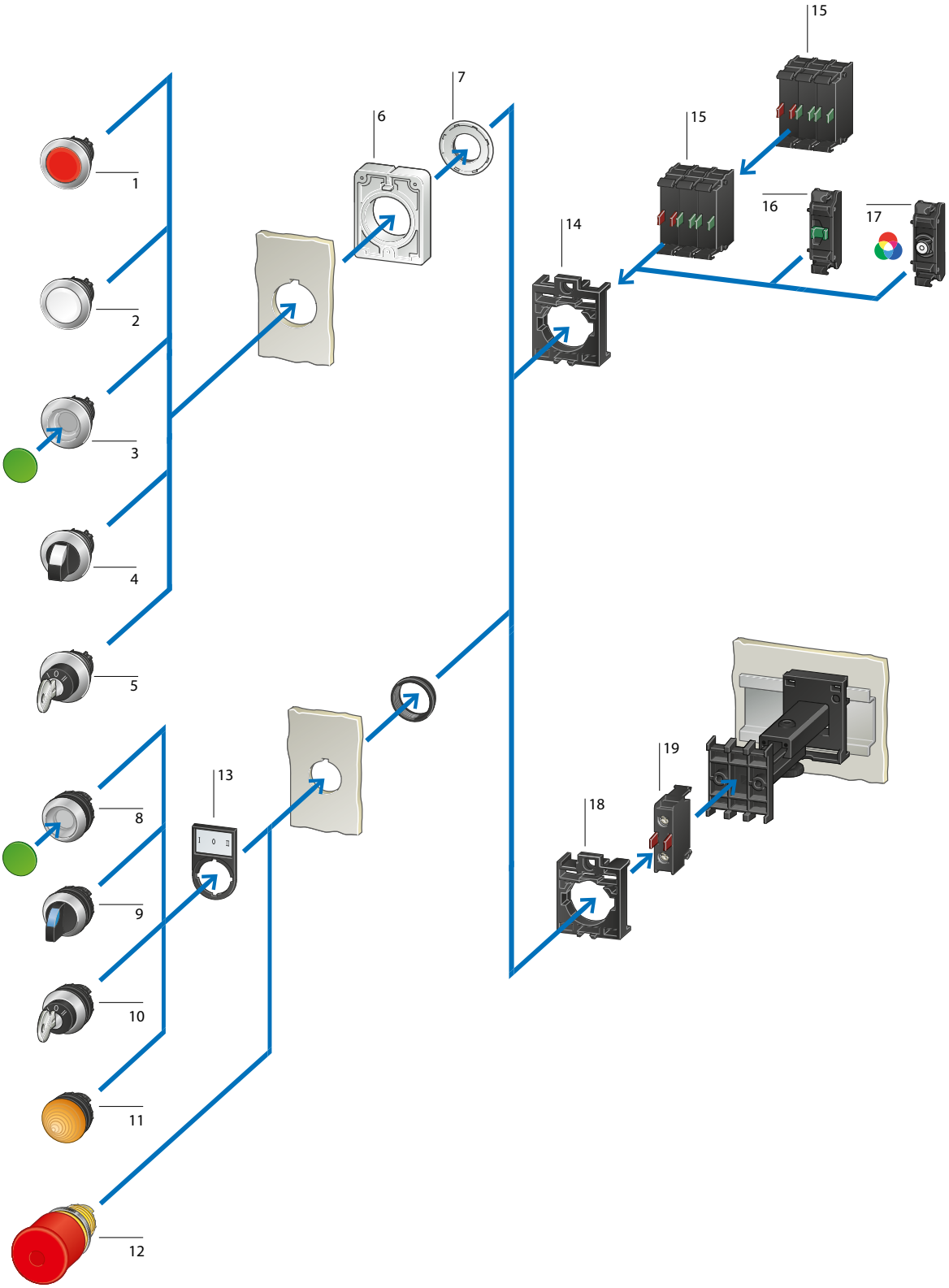
Pilot devices

Selection aid
Command and indication
Build it in.



Powering Business Worldwide



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

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
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
Mounting position				Any	Any		Any	Any
Mechanical shock resistance to IEC 60068-2-27			g	30	50	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	$<5 \times 10^{-6}$ (e.g. one failure every 5×10^6 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

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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



Button plate	Double actuator pushbuttons
I 0	**M22-DDL-GR-X1/X0** 110-4515
I 0	**M22-DDL-WS-C1/X0** 110-4518
Start STOP	**M22-DDL-GR-GB1/GB0** 110-4517
Start STOP	**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

Additional versions on request

Indicator lights



RMQ-Titan



RMQ Flat Front Design

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

Emergency stops





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

Additional versions on request

Accessory devices







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

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



Mounting locations/color	Surface mounting enclosures
1	**M22-IY1** 399-3826
1	**M22-I1** 399-3810
2	**M22-I2** 399-3832
3	**M22-I3** 399-3848
4	**M22-I4** 399-3854
6	**M22-I6** 399-3860

Additional versions on request

Joysticks



RMQ-Titan



RMQ Flat Front Design

Function	22.5 mm	30.5 mm
4 positions, momentary	**M22-WJS4** Available on request	**M30C-FWJS4** Available on request
4 positions maintained	**M22-WRJS4** Available on request	
2 positions, momentary, horizontal	**M22-WJS2H** Available on request	
2 positions, maintained, horizontal	**M22-WRJS2H** Available on request	**M30C-FWRJS2H** Available on request
2 positions, momentary, vertical	**M22-WJS2V** Available on request	

Potentiometer/Encoder/USB/RJ45



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RMQ Flat Front Design



RMQ Flat Front Design



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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