Pilot devices
Signal towers, position switches

MOELLER
SERIES

Product range catalog

Control, signal, and detect positions

EATON
Powering Business Worldwide

* At Eaton, we believe that power is a fundamental part of just about everything people do. That's why we're dedicated to helping our customers find new ways to manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. To improve people's lives, the communities where we live and work, and the planet our future generations depend upon. Because this is what really matters. And we're here to make sure it works.

To learn more go to: Eaton.com/whatmatters

EATON

Powering Business Worldwide

We make what matters work.

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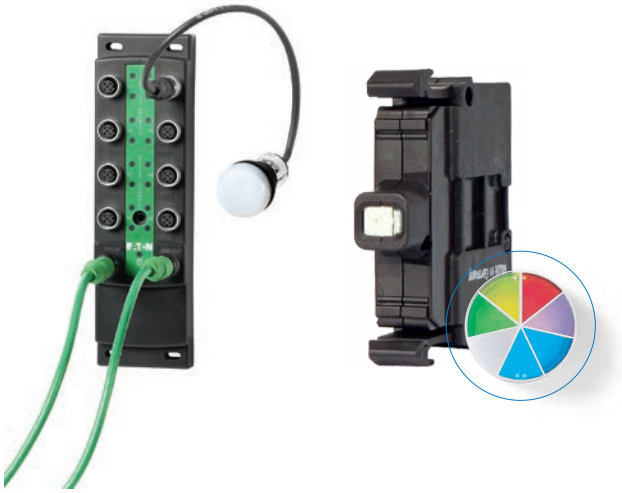
Product highlights

Small emergency-stop button: Small device, big effect!

Our RMQ Small E-Stop small emergency-stop button is an innovative control characterized by a compact design and a novel illumination system. Its innovative 360° illuminated ring ensures improved signaling, maximizing the safety of machinery and systems as a result. In addition, its extensive approvals and certificates, combined with the modular approach behind the entire RMQ portfolio, mean that the button is remarkably versatile and easy to use in an extremely broad range of applications.

Modular system. For all kinds of applications.

The slim enclosures that characterize the RMQ series, also known as our RMQ Flat Enclosures, are the smallest of their kind and are known for taking safety-relevant components and giving them a sleek designer look. In addition, our flush RMQ Flat Rear electromechanical contact elements, which are easy to combine with other components in the RMQ range, provide maximum versatility in countless applications.



Identify machine states quickly with our MCI multicolor light indicator

The RMQ compact solution version of our MCI makes it possible to visually signal various machine states with up to five colors and two different flashing settings. While this would earlier require several devices, a single multicolor LED element can now display all required signals. And all of this in the form of a plug-and-play solution with an integrated cable, plug connector (M12), and enclosure.

Our multicolor M22 LED element provides a level of versatility previously unheard of in the area of conventional indicator lights. More specifically, the MCI can show up to 16 million colors and features various flashing frequencies and dimming capability that make it compatible with an exceptionally wide range of lighting conditions. Finally, the SmartWire-DT master is used to control and configure the multicolor element.

High brightness Small design High flexibility

Our high-performance LED elements can be smoothly integrated into our RMQ system, making it possible, for example, to illuminate indicator lights, illuminated pushbuttons, illuminated selector switch actuators, and illuminated emergency-stop button with a significantly increased degree of brightness. And the LEDs make a compelling case with their enormous brightness and vibrant colors, which enable them to clearly signal machine states that are easy to see even under intense lighting conditions. In fact, machine statuses are considerably easier to identify even when these elements are used outdoors under sunlight.

M22-RJ45-CAT6A bulkhead interface

Our M22-RJ45-CAT6A built-in socket provides reliable and easy access to control cabinet equipment, making it much easier to configure, program, and set the parameters for control cabinets. The socket features an impressive IP65 degree of protection and frequencies of up to 500 MHz, making it suitable for Ethernet applications with speeds of up to 10 Gigabits. The M22-RJ45-CAT6A works seamlessly with the RMQ-Titan portfolio and can be smoothly integrated into an extremely broad range of applications.

Control and operate machinery with flexibility

Visualization and control

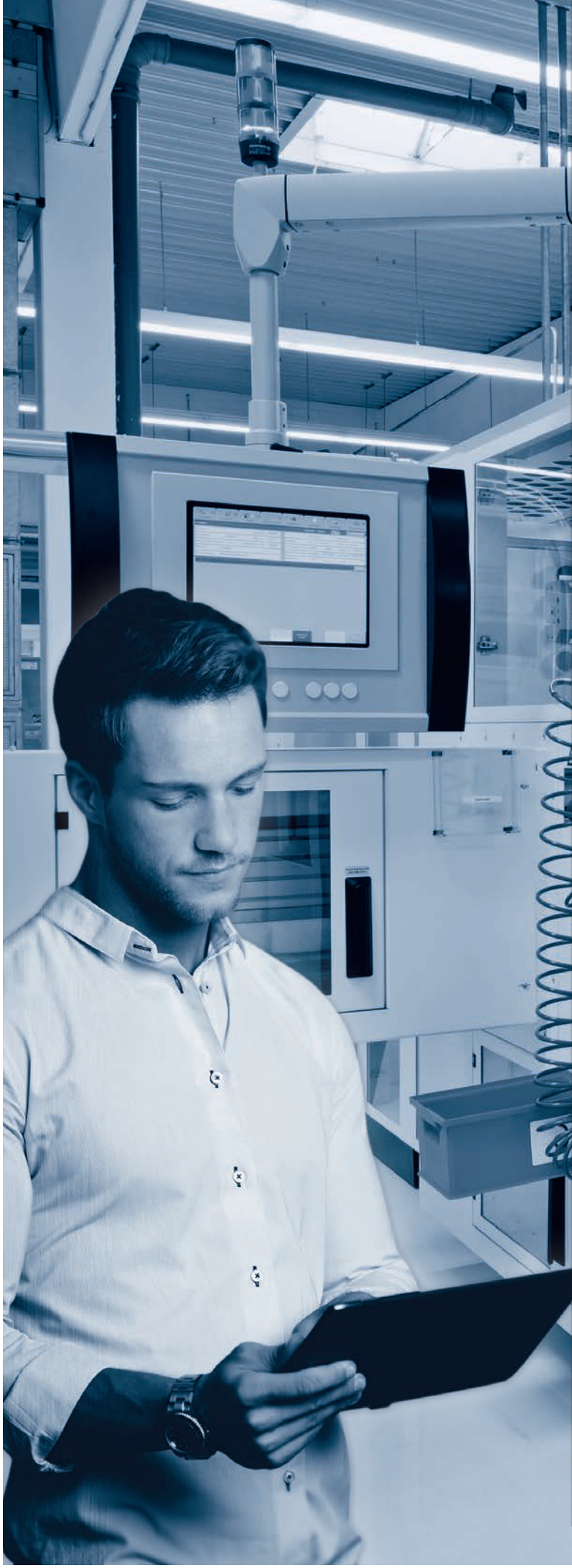
Our new operator control and display elements fit in seamlessly with Eaton's general approach to machine control applications. The touch panels in the XV100 and XV300 series can be used both as HMIs and as HMI PLCs with CODESYS programming. Our new generation of devices also includes our ultra-fast and compact XC300 PLCs, as well as our remote XN300 I/O systems. Moreover, all these devices can be connected through a variety of fieldbuses. Finally, our XP500 industrial PC rounds out the range of products.

Control and signaling – the importance of design keeps growing

In order to meet our customers' need for premium and slim designs, we at Eaton have launched our range of RMQ Flat Design pilot devices. The flat front elements in the RMQ-Titan range of products are not just sophisticated, but also rugged and functional. On top of this, our RMQ AFX mounting module and its ease of installation make secure flush mounting a breeze.

Stylish, heavy-duty, and efficient

Our convenient all-in-one RMQ *compact* solution integrates the required cable, connector, and housing. The high degrees of protection in the front (up to IP69) and at the back (IP65) of these devices make them the perfect choice for applications in which protection from dirt or liquids is required. In addition, direct installation without any additional enclosures is perfectly possible even in machines used for woodworking and machining. All in all, it is a solution characterized by cost-effectiveness all the way from planning, through ordering, to stock-keeping and installation.

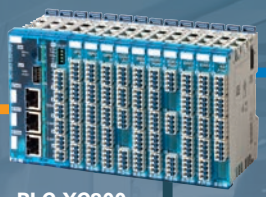


Automation and visualization

HMI XV300

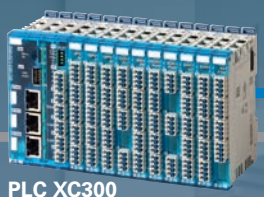
HMI/PLC XV300

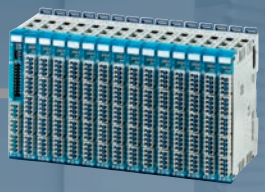
XP500 industrial PC


PLC XC300

XC152 Compact PLC

Remote I/O XN300

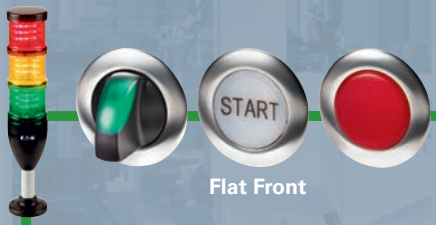

PLC XC300


Remote I/O XN300

Controlling and signalling

Front with high degree of protection up to IP69

Flat Front



Flat Front

RMQ-Titan

RMQ-Titan

Enclosed all around: up to IP69 in the front and IP65 in the back

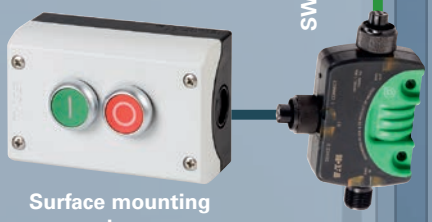
Any I/O

RMQ *compact* solution

RMQ *compact* solution

SWD I/O modules

Signal tower


Surface mounting enclosure

Safety

Safety Technology

easySafety

Emergency-stop pushbutton

Ethernet CAN SWD Wiring topic Modbus TCP/IP

Easy to configure
Endless combinations.

Easy to select, configure, and order. Our Pushbutton Configurator provides a quick and comprehensive overview of all the pilot devices in the RMQ family and the numerous combination options available for the entire portfolio. With its intuitive user interface, the Configurator is the perfect way to find out what the right solutions for your specific needs are.

Easy to select, configure, and order

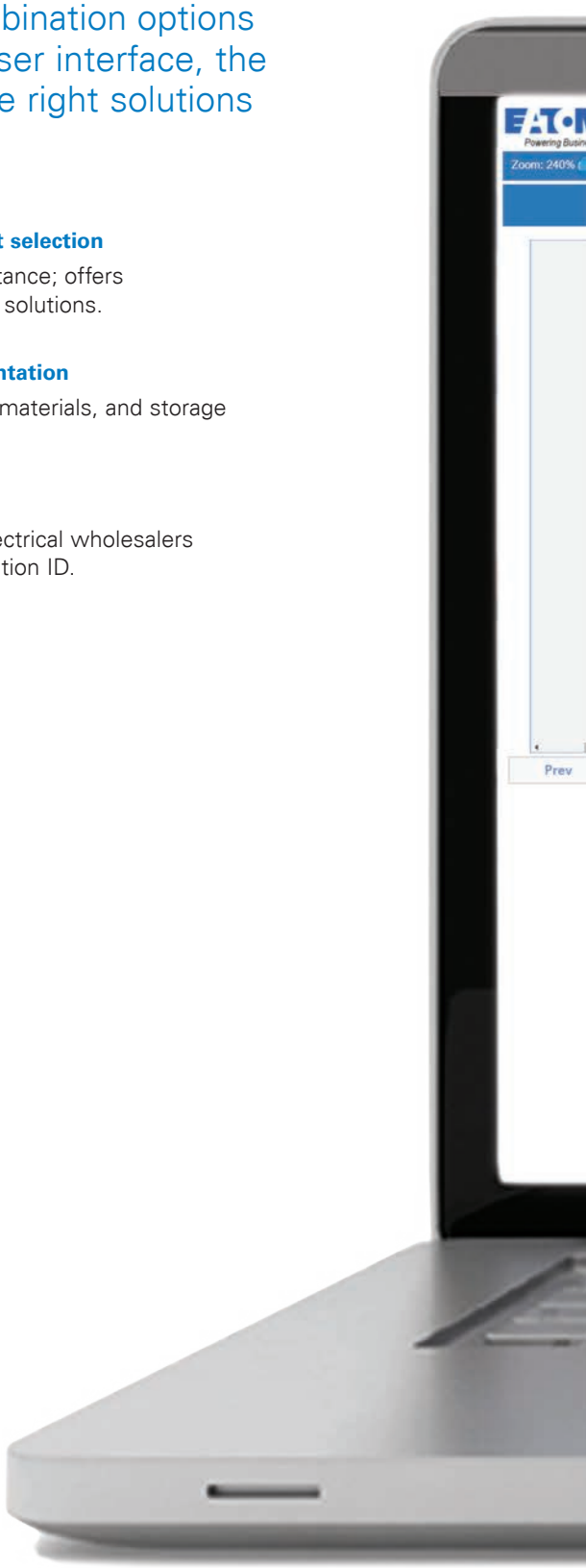
In addition, once all individual components have been selected, the configurator will show the assembled final product. Moreover, the configurator also makes it possible to easily configure complete devices that are put together in a custom-tailored manner. Once you configure your pilot devices, you will be shown a convenient parts list that you can then use to easily order all the components you need.

The configuration ID is used to uniquely identify configurations within this context.

Custom labels

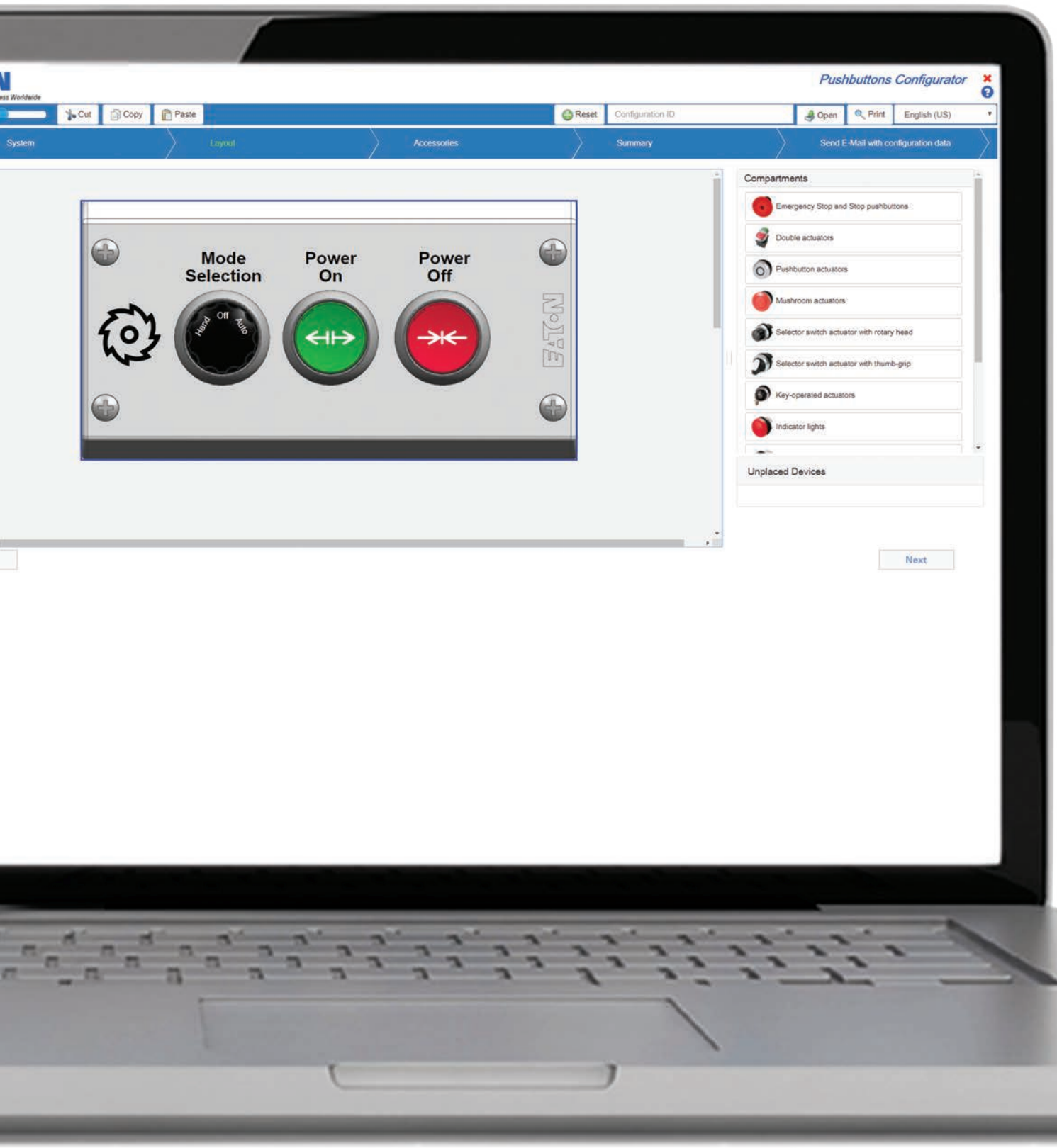
The integrated Label Editor function can be used to order customized inscriptions and specific designs for pilot devices directly in the Pushbutton Configurator, making it possible to customize individual devices as needed.

- **Simple visual product selection**
  With intelligent assistance; offers standard and custom solutions.
- **Easy project documentation**
  With images, bills of materials, and storage on an Eaton server.
- **Unique identification**
  For customers and electrical wholesalers with 16-digit configuration ID.



Give our RMQ Pushbutton Configurator a try:
Eaton.com/config/rmq

Use this code to access our configurator tutorials.



Proven quality. Innovative system. RMQ-Titan

The pilot devices in the RMQ-Titan M22 and M30 series are characterized by enormous versatility, making them the perfect solution for a wide variety of applications and processes. Thanks to their high degree of protection, even in demanding environments.

and using their slim contact elements makes it possible to combine RMQ-Titan devices with minimal mounting depths. In addition, their ergonomic operators combine stylish design with optimum functionality, and operation is convenient and intuitive.

Contact and LED elements are available in two mounting depths for the flush mounting plates for both series. Moreover, the fact that the pilot devices can be connected to the SmartWire-DT communication system makes them ingeniously simple to wire.

- Modular front elements with a broad variety of fronts, bezels, colors, and functions available for selection.
- Contact elements for a large number of applications.
- Compact devices (RMQ compact solution) for use directly on machines.
- Emergency stop buttons designed to ensure functional safety on machines and systems.
- SmartWire-DT for digital device communication within the RMQ family.

For more information on cutting-edge control solutions for the next generation of machines, visit:
www.Eaton.com/rmq

Perfect protection. Versatile use. Emergency-stop pushbutton

Operate, signal, and switch with absolute safety: Our globally proven emergency stop buttons ensure that people, machines, and systems are thoroughly protected. Needless to say, Eaton offers just the right components in this case as well, with the options extending from key-operated models to models with illuminated rings.

- Contact elements for the front or base mounting of single-channel or dual-channel safety circuits.
- Mushroom shape with a diameter of 30 mm or 38 mm and palm shape with a diameter of 45 or 60 mm
- With / without key
- Non-illuminated / illuminated with standard LED or featuring a mechanical position indicator (green/red) at the center of the operator.
- Turn-to-reset / pull-to-reset.
- RMQ emergency stop / controlled stop buttons with a degree of protection of IP67, IP69K feature a tamper-proof design as defined in EN ISO 13850 and meet all applicable European and international safety standards
- Certified by the Employer's Liability Insurance Association.
- Can be used as heavy-duty RMQ compact solution for remote emergency stop operation.

Easy integration. Smart communication. SmartWire-DT.

SmartWire-DT provides the pilot devices in the RMQ family of products with communication capabilities, ensuring greater efficiency in all processes. In addition, Eaton has developed potentiometers and encoders designed to make input and adjustments easier.

- Replaces the control wiring of all components
- Facilitates a common communication platform for all components
- Provides one application software for all variants (wide variety!)
- Enables distributed intelligence in the components
- Operates with standard components
- Reduces the engineering effort and expense by up to 70 percent
- Reduces the wiring, test and commissioning times by up to 85 percent
- Offers an open concept and a business model (partner companies offer their own products)

1

M22

1.0 RMQ-Titan pilot devices

1.1 System overview

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1.2 Product selection

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M30

1.5 System overview

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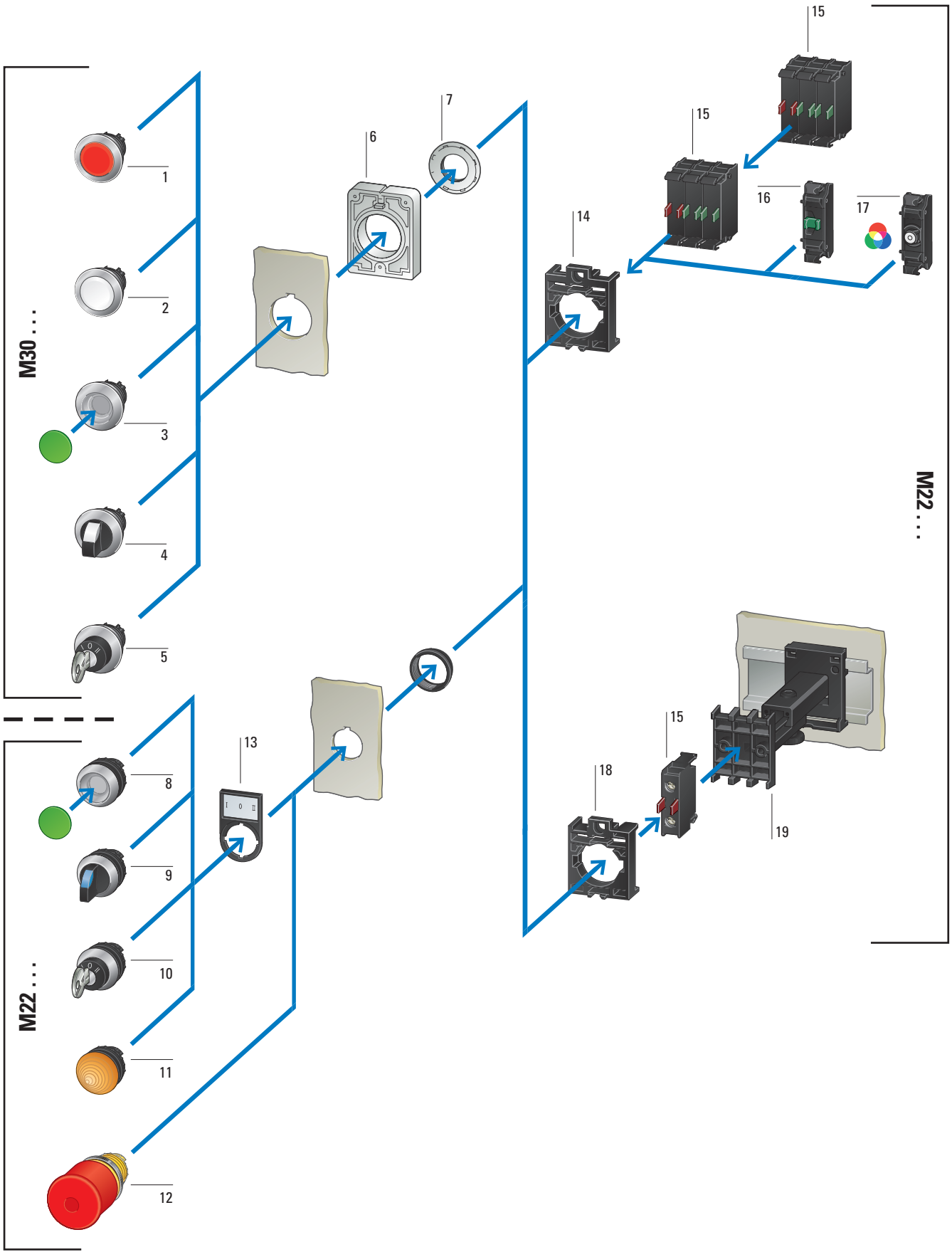
1 System overview



M30 indicator lights 1
Design: flush
Colors: white, green, red, yellow, blue, orange
→ Page 51

M30 pushbuttons 2
Momentary and maintained
Flush
Colors: white, green, red, yellow, blue, black, gray
→ Page 46

M30 illuminated pushbutton actuators 3
Illuminated pushbutton actuators
Colors: white, green, red, yellow, blue, orange
→ Page 52

M30 selector switches 4
2 and 3 positions
With rotary head, thumb-grip
Programmable maintained/ momentary action
Illuminated selector switches with transparent thumb-grip
Colors: white, green, red, yellow, blue
→ Page 47

M30 key-operated buttons 5
For individual lock mechanisms
2 or 3 positions
→ Page 48

RMQ-AFX 6
Anti-rotation tab
Included with the equipment supplied with M30 front elements

Threaded rings 7
→ Page 80

M22 pushbuttons 8
Momentary and maintained
Flush
Colors: white, green, red, yellow, blue, black
Illuminated pushbutton actuators
Colors: white, green, red, yellow, blue, orange
→ Page 29

M22 selector switches 9
2 and 3 positions
With rotary head, thumb-grip
Programmable maintained/ momentary action
Illuminated selector switches with transparent thumb-grip
Colors: white, green, red, yellow, blue
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M22 key-operated buttons 10
For individual lock mechanisms
2 or 3 positions
→ Page 33

M22 indicator lights 11
Design: flush, conical
Colors: white, green, red, yellow, blue, orange
→ Page 37

Controlled stop/emergency switching off buttons 12
Tamper-proof as defined in ISO 13850/EN 418
Can be secured with a sealable shroud
Additional labels, with inscription or blank
→ Page 19

Label mounts 13
For insert labels
Color: black
Insert labels: aluminum color, with inscription or blank, can be engraved
→ Page 65

Mounting adapter 14
For flush mounting
For contact and LED elements
→ Page 55

Contact elements 15
Normally closed contact and normally open contact
Universal contacts suitable for use with electronic devices
Safety function implemented with positive opening as defined in IEC/EN 60947-5-1
Max. 2 levels, each with 3 contact elements
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Flat Rear contact elements 16
Cage Clamp with push-in terminals
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Flat Rear LED elements 17
Cage Clamp with push-in terminals
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For adjusting the depth of rear mounting devices in CI and CI-K enclosures and cabinets
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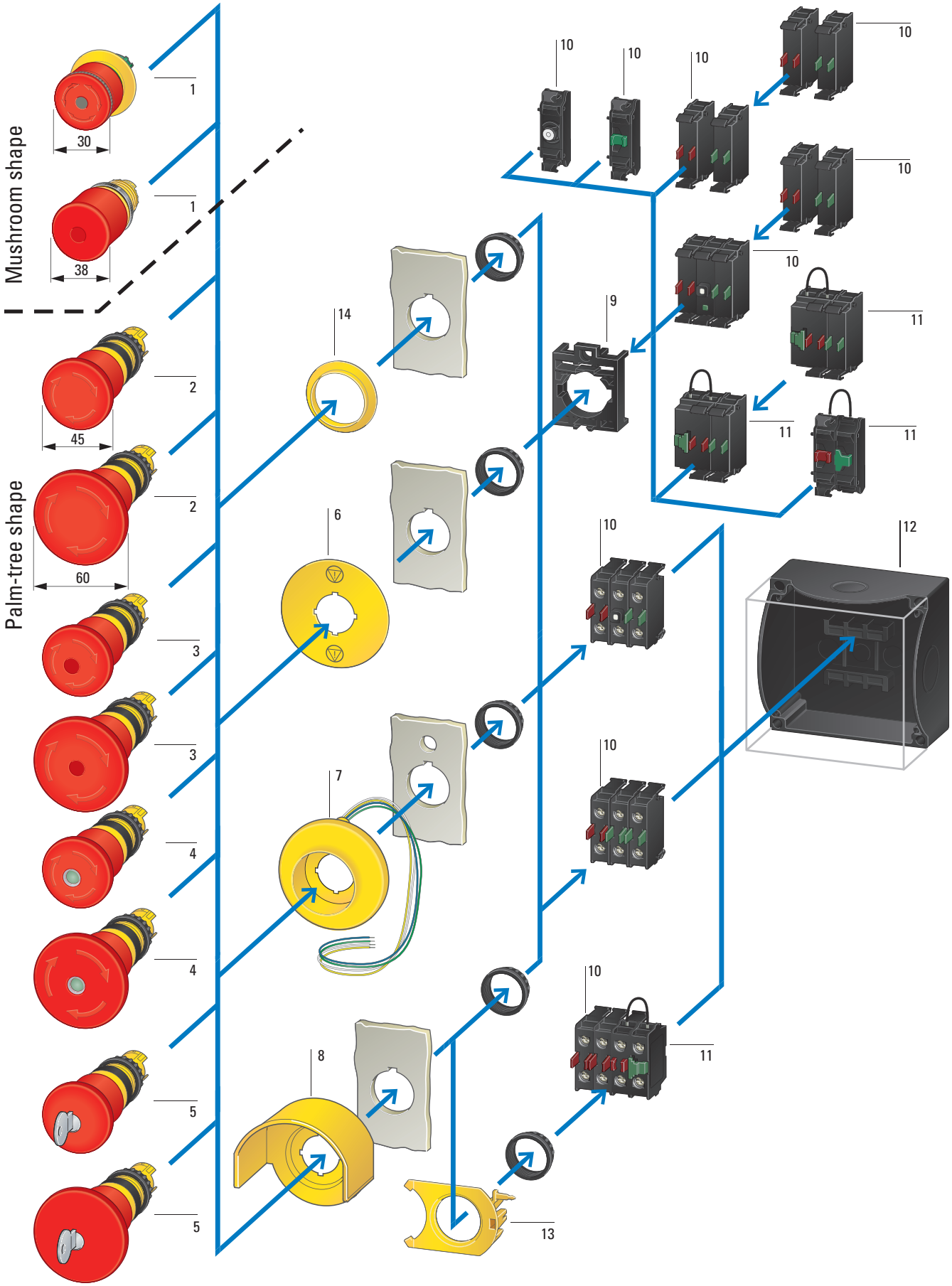

Mushroom shape
Palm-tree shape
30
38
45
60
1
2
3
4
5
6
7
8
9
10
11
12
13
14

Emergency-stop pushbuttons, Emergency-stop pushbuttons (Mushroom-shaped) 1

- 30 mm Diameter
- Non-illuminated/illuminated
- Tamper-proof as defined in ISO 13850/EN 418
- European Machinery Safety Directive 2006/42/EG
- Twist or pull release
- 38 mm Diameter
- Non-illuminated
- Can be illuminated with LED
- With MS1 - MS20 lock mechanism
- With lock mechanism for master key system
- Tamper-proof as defined in ISO 13850/EN 418
- European Machinery Safety Directive 2006/42/EC
- Can be secured with a sealable shroud
- Additional labels, with inscription or blank
- Twist or pull release

→ Page 18

Emergency-stop pushbuttons, Emergency-stop pushbuttons (Palm-tree shape) 2

- Non-illuminated
- 45 mm and 60 mm diameter
- Tamper-proof as defined in ISO 13850/EN 418
- European Machinery Safety Directive 2006/42/EC
- Additional labels, with inscription or blank
- Twist or pull release

→ Page 19

Emergency-stop pushbuttons, Emergency-stop pushbuttons (Palm-tree shape) 3

- Can be illuminated with LED
- 45 mm and 60 mm diameter
- Tamper-proof as defined in ISO 13850/EN 418
- European Machinery Safety Directive 2006/42/EC
- Additional labels, with inscription or blank
- Twist or pull release

→ Page 19

Emergency-stop pushbuttons, Emergency-stop pushbuttons (Palm-tree shape) 4

- With mechanical position indicator
- 45 mm and 60 mm diameter
- Tamper-proof as defined in ISO 13850/EN 418
- European Machinery Safety Directive 2006/42/EC
- Additional labels, with inscription or blank
- Twist release

→ Page 19

Emergency-stop pushbuttons, Emergency-stop pushbuttons (Palm-tree shape) 5

- With MS1 - MS20 lock mechanism
- 45 mm and 60 mm diameter
- Tamper-proof as defined in ISO 13850/EN 418
- European Machinery Safety Directive 2006/42/EC
- Additional labels, with inscription or blank
- Unlock with key

→ Page 19

Emergency stop labels Emergency-Stop labels 6

- Round, square, and rectangular types
- Single-language, multi-language, custom inscription possible

→ Page 21

Illuminated ring 7

- Versions: 24 V AC/DC, 120 V AC, 230 V AC
- Continuous light
- Flashing light with separate driver
- Chaser light with separate driver, 24 V AC/DC
- With three LED rows that can be driven separately

→ Page 20

Guard ring 8

- For preventing unintended actuation
- For 38 mm and 45 mm designs

→ Page 20

Mounting adapters 9

- For flush mounting
- For contact and LED elements when using M22-A...

→ Page 55

Contact elements, indicator lights 10

- Normally closed contact and normally open contact
- Universal contacts suitable for use with electronic devices
- Safety function implemented with positive opening as defined in IEC/EN 60947-5-1
- Max. 2 levels, each with 3 contact elements

→ Page 55

Self-monitoring contact 11

- Front mounting or base mounting
- 1 N/C and 1 N/O in series Versions: 2 N/C 1 N/O; 1 N/C 1 N/O
- For safety standards of up to SIL 3 as defined in EN 62061 or performance level e as defined in ISO 13849-1

→ Page 56

Enclosure 12

- IP67 surface mounting enclosures with up to 6 mounting locations
- IP55 surface mounting enclosures with up to 12 mounting locations
- IP54 flush mounting plates with up to 6 mounting locations
- IP40 shrouds for flush mounting plates

→ Page 75

Signal contact actuator for SMC 13

→ Page 56

Controlled stop/emergency stop legend plates 14

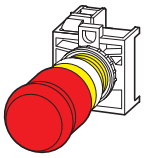
- Requiring little space

→ Page 22

1

Product selection

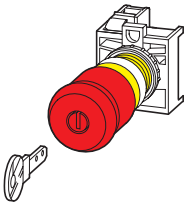
Contact configuration: ⊖ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1 N/O = Normally open contact	N/C = Normally closed contact	Contact sequence	Degree of protection	**Catalog Number** Article no.	Std. pack	Notes



Emergency-stop pushbuttons

Tamper-proof as defined in ISO 13850/EN 418
Pull release
Max. number of contacts: 4 M22-(C)K…
Red mushroom head, yellow base

–	1 N/C		IP66, IP69K	**M22-PV/K01** 216515	5 units	TÜV Rheinland Product Safety · BAUART GEPRÜFT · TYPE APPROVED
1 N/O	1 N/C		IP66, IP69K	**M22-PV/K11** 216516	5 units	
–	2 N/C			**M22-PV-K02** 190929	5 units	



Emergency stop key-release mushroom button

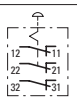
Tamper-proof as defined in ISO 13850/EN 418
With 1 key, MS1 individual lock mechanism, not suitable for master key systems
Key release
Red mushroom head, yellow base

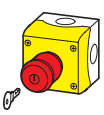
–	1 N/C		IP67, IP69K	**M22-PVS/K01** 216514	5 units	TÜV Rheinland Product Safety · BAUART GEPRÜFT · TYPE APPROVED

Contact configuration: ⊖ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1 N/O = Normally open contact	N/C = Normally closed-contact	Contact sequence	Degree of protection	**Catalog Number** Article no.	Std. pack	

Emergency-stop pushbuttons

Tamper-proof as defined in ISO 13850/EN 418
Pull release

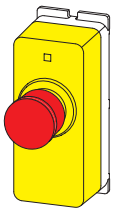
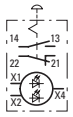
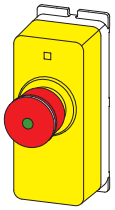
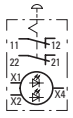
–	2 N/C		IP66, IP69K	**M22-PV/KC02/IY** 216524	1 units	Screw terminals
				M22-PV/CKC02/IY 187798		Spring-cage terminals
–	3 N/C		IP66, IP69K	**M22-PV/KC03/IY** 197629		Screw terminals
1 N/O	1 N/C		IP66, IP69K	**M22-PV/KC11/IY** 216525		Screw terminals
				M22-PV/CKC11/IY 187799		Spring-cage terminals

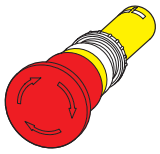
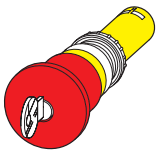
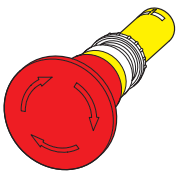
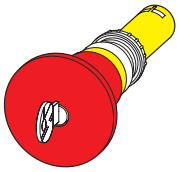


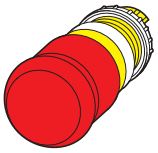
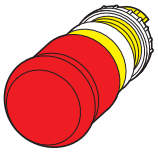
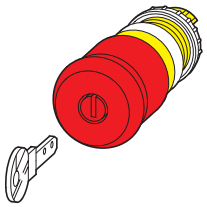
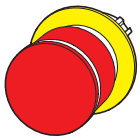
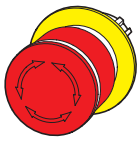
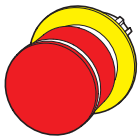
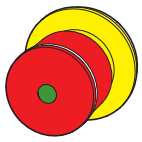
Emergency stop key-release mushroom button

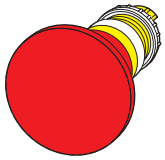
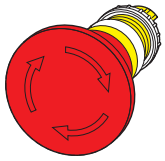
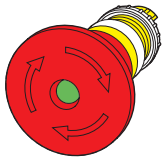
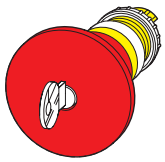
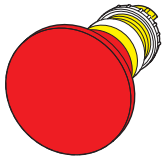
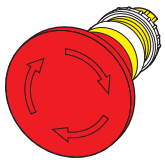
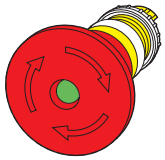
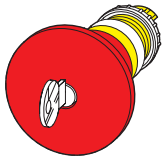
With 1 key
MS1 lock mechanism

1 N/O	1 N/C		IP67, IP69K	**M22-PVS/KC11/IY** 216523	1 units	

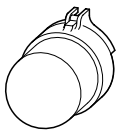
	illumination		Unlocking		Contact configuration		Catalog Number Article no.
	30 mm button diameter						
	Tamper-proof as defined in ISO 13850/EN 418 IP66 and IP69 protection type						
	–		Pull release		1 N/O	1 N/C	**M22-PV30/FK11/FIY1** 199348
	–		Twist release		1 N/O	1 N/C	**M22-PVT30/FK11/FIY1** 199349
	LED element, red/green		Pull release		1 N/O	1 N/C	**M22-PVL30/FK11/RG/FIY1** 199350
	LED element, red/green		Twist release		1 N/O	1 N/C	**M22-PVLT30/FK11/RG/FIY1** 199351
	–		Pull release		–	2 N/C	**M22-PV30/FK02/FIY1** 199352
	–		Twist release		–	2 N/C	**M22-PVT30/FK02/FIY1** 199353
	LED element, red/green		Pull release		–	2 N/C	**M22-PVL30/FK02/RG/FIY1** 199354
	LED element, red/green		Twist release		–	2 N/C	**M22-PVLT30/FK02/RG/FIY1** 199355
	Customized complete units						
	Configuration online via Pushbutton Configurator → www.eaton.com/config/rmq						**M22-COMBINATION** 2010741 — 1 units **RMQ-FLAT-COMBINATION** 2012027

		Mushroom head color	Contact configuration N/O = Normally open contact	 N/C = Normally closed contact	Catalog Number Article no.	Std. pack
	Controlled stop/emergency stop buttons, IP67, IP69K with screw terminal					
Twist release Palm, 45 mm diameter 	Without illumination			2 N/C	**C22-PVT45P-K02** 121611	1 units
	Without illumination		1 N/O	1 N/C	**C22-PVT45P-K11** 121610	
Key release, MS1 Palm, 45 mm diameter 	Without illumination			2 N/C	**C22-PVS45P-MS1-K02** 121619	
	Without illumination		1 N/O	1 N/C	**C22-PVS45P-MS1-K11** 121618	
Twist release Palm, 60 mm diameter 	Without illumination			2 N/C	**C22-PVT60P-K02** 121613	
	Without illumination		1 N/O	1 N/C	**C22-PVT60P-K11** 121612	
Key release, MS1 Palm, 60 mm diameter 	Without illumination			2 N/C	**C22-PVS60P-MS1-K02** 121621	
	Without illumination		1 N/O	1 N/C	**C22-PVS60P-MS1-K11** 121620	
	Notes	Ⓘ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1 With screw terminals				

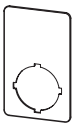
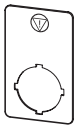
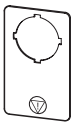
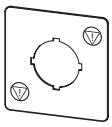
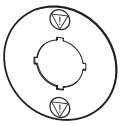
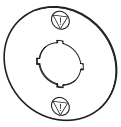
	illumination		Color, mushroom head symbol	Protection Style	**Catalog Number** Article no.	Std. pack
	Controlled stop/emergency switching off buttons, mounting hole diameter 22.5 mm					
Pull release 38 mm button diameter 	Without illumination	Pull release		IP66, IP69K	**M22-PV** 216876	5 units
	Without illumination	Pull release		IP66, IP69K	**M22-PV-GVP** 216877	50 units
	Without illumination	Pull release		IP66, IP69K	**M22-PV-ESS** 178983	5 units
	Can be illuminated with LED element	Pull release		IP66, IP69K	**M22-PVL** 216878	
Twist release 38 mm button diameter 	Without illumination	Twist release		IP67, IP69K	**M22-PVT** 263467	5 units
	Can be illuminated with LED element	Twist release		IP67, IP69K	**M22-PVLT** 263469	
Key release 38 mm button diameter With 1 key 	Without illumination	MS1 individual lock mechanism Not suitable for master key systems		IP67, IP69K	**M22-PVS** 216879	5 units
	Without illumination	MS2 - MS20 individual lock mechanism Not suitable for master key systems *→ 2, …, 20 (i. e.: M22-PVS-MS2, ..., M22-PVS-M20)		IP67, IP69K	**M22-PVS-MS*** 216880	1 units
	Without illumination	Suitable for master key systems To order, use form MZ047002ZU (formerly FO276) → Data sheet in online catalog Delivery will take approx. 4 to 6 weeks For master key systems, please refer to → Page 34		IP67, IP69K	**M22-PVS-SA(*)-*** 104826	
Pull release 30 mm button diameter 	Without illumination	Pull release		IP67, IP69K	**M22-PV30** 197535	5 units
	Can be illuminated with LED element	Pull release		IP67, IP69K	**M22-PVL30** 197537	
Twist release 30 mm button diameter 	Without illumination	Twist release		IP67, IP69K	**M22-PVT30** 197536	5 units
	Can be illuminated with LED element	Twist release		IP67, IP69K	**M22-PVLT30** 197538	
	Mounting hole diameter: 30.5 mm					
Pull release 30 mm button diameter 	Without illumination	Pull release		IP67, IP69K	**M30-PV30** 197543	5 units
	Can be illuminated with LED element	Pull release		IP67, IP69K	**M30-PVL30** 197545	
Twist release 30 mm button diameter 	Without illumination	Twist release		IP67, IP69K	**M30-PVT30** 197544	5 units
	Can be illuminated with LED element	Twist release		IP67, IP69K	**M30-PVLT30** 197546	

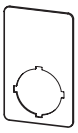
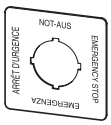
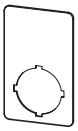
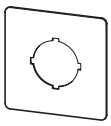
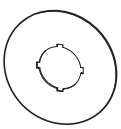
	illumination		Mushroom head color	Catalog Number Article no.	Std. pack
	Controlled stop/emergency stop buttons, IP67, IP69K				
Pull release Palm, 45 mm diameter 	Without illumination			**M22-PV45P** 152862	1 units
				M22-PV45P-GVP 199375	10 units
	Without illumination	With mechanical position indicator Green position indicator → Button not activated Red position indicator → Button activated		**M22-PV45P-MPI** 152863	1 units
				M22-PV45P-MPI-GVP 199376	100 units
	Can be illuminated with LED element			**M22-PVL45P** 152860	1 units
Twist release Palm, 45 mm diameter 	Without illumination	–		**M22-PVT45P** 121462	1 units
				M22-PVT45P-GVP 191975	100 units
	Can be illuminated with LED element	–		**M22-PVLT45P** 121460	1 units
				M22-PVLT45P-GVP 199372	10 units
	Without illumination	With mechanical position indicator Green position indicator → Button not activated Red position indicator → Button activated		**M22-PVT45P-MPI** 121463	1 units
				M22-PVT45P-MPI-GVP 191976	100 units
Key release, palm, 45 mm diameter with 1 key 	Without illumination	MS1 individual lock mechanism Not suitable for master key systems		**M22-PVS45P-MS1** 121468	1 units
				M22-PVS45P-MS1-GVP 199373	10 units
	Without illumination	MS2 - MS20 individual lock mechanisms Not suitable for master key systems *→ 2, …, 20 (d. h.: M22-PVS45P-MS2, ..., M22-PVS45P-MS20)		**M22-PVS45P-MS*** 121470	1 units
	Without illumination	Ronis 455 individual lock mechanism Not suitable for master key systems		**M22-PVS45P-RS** 121466	
	Controlled stop/emergency stop buttons, IP67, IP69K				
Pull release Palm, 60 mm diameter 	Without illumination			**M22-PV60P** 152864	1 units
	Without illumination	With mechanical position indicator Green position indicator → Button not activated Red position indicator → Button activated		**M22-PV60P-MPI** 152865	
	Can be illuminated with LED element			**M22-PVL60P** 152861	
Twist release Palm, 60 mm diameter 	Without illumination	–		**M22-PVT60P** 121464	1 units
				M22-PVT60P-GVP 199374	100 units
	Can be illuminated with LED element	–		**M22-PVLT60P** 121461	1 units
	Without illumination	With mechanical position indicator Green position indicator → Button not activated Red position indicator → Button activated		**M22-PVT60P-MPI** 121465	
Key release, palm 60 mm diameter with 1 key 	Without illumination	MS1 individual lock mechanism Not suitable for master key systems		**M22-PVS60P-MS1** 121469	1 units
	Without illumination	MS2 - MS20 individual lock mechanisms Not suitable for master key systems *→ 2, …, 20 (d. h.: M22-PVS60P-MS2, ..., M22-PVS60P-MS20)		**M22-PVS60P-MS*** 121471	
	Without illumination	Ronis 455 individual lock mechanism Not suitable for master key systems		**M22-PVS60P-RS** 121467	

1

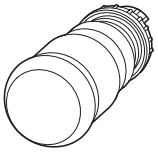
	RAL value	Protection Style	Catalog Number Article no.	Std. pack
Guard ring				
Makes accidental actuation more difficult				
for devices with diameter 38/45/60 mm	RAL 1004	IP65	**M22-XGPV** 231273	1 units
For devices with button diameter 30 mm: M22-PV(L)(T)30	RAL 1004	IP65	**M22-XGPV30** 198596	1 units
sealable shroud				
 For devices with a 38 mm button diameter Transparent with detachment position; can be reused after controlled stop/emergency stop/stop Adjacent holes must be sealed with M22(S)-B blanking plugs in a 30 x 50 grid				
	–	IP65	**M22-PL-PV** 216397	2 units
LED-luminous rings				
Yellow with yellow LEDs → Engineering, Page 85 (circuit diagrams)				
60 mm diameter 24 V AC/DC Three groups, with 4 LEDs each (connected in series), that can be driven separately (e.g., for a chaser light sequence)			**M22-XPV60-Y-24** 121477	1 units
60 mm diameter 120 V AC One group of 8 LEDs (connected in series)			**M22-XPV60-Y-120** 121476	1 units
60 mm diameter 230 V AC One group of 8 LEDs (connected in series)			**M22-XPV60-Y-230** 138280	1 units
Customized complete units				
Configuration online via Pushbutton Configurator → www.eaton.com/config/rmq			**M22-COMBINATION** 2010741 **RMQ-FLAT-COMBINATION** 2012027	1 units

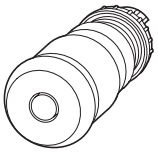
Notes Contact elements→ Page 55

	Inscription	Language	Color	Catalog Number Article no.	Std. pack
	Controller stop legend plates, IP66				
	Black lettering				
33 x 50 mm 	Controlled stop	de		**M22-XZK1-D99** 121089	10 units
	Arresto di emergenza	it		**M22-XZK1-I99** 121370	
	HÄTÄPYSÄYTYS	fi		**M22-XZK1-SF99** 121371	
	WYŁĄCZNIK BEZPIECZEŃSTWA	pl		**M22-XZK1-PL99** 167636	
33 x 50 mm 	Symbol (5638) for CONTROLLED STOP	–		**M22-XZK-ESS** 180470	
50 x 50 mm	4 languages	de, en, fr, it		**M22-XYK11** 121373	
		de, en, it, pl		**M22-XYK15** 167642	
33 x 50 mm 	Symbol (5638) for CONTROLLED STOP	–		**M22-XZK-ESS2** 180474	
Ø 90 mm	4 languages	de, en, fr, it		**M22-XAK11** 121085	
	4 languages	de, en, es, pt		**M22-XAK12** 121086	
	4 languages	de, en, nl, fr		**M22-XAK13** 121087	
		de, en, it, pl		**M22-XAK15** 167640	
	4 languages	en, sv, fi, da		**M22-XAK14** 121088	
		fr, es, en, ru		**M22-XAK16** 177046	
50 x 50 mm 	Symbol (5638) for CONTROLLED STOP	–		**M22-XYK-ESS** 180471	
Ø 60 mm	4 languages	de, en, fr, it		**M22-XBK11** 121372	
		de, en, it, pl		**M22-XBK15** 167638	
Ø 90 mm 	Symbol (5638) for CONTROLLED STOP	–		**M22-XAK-ESS** 180469	
Ø 60 mm 	Symbol (5638) for CONTROLLED STOP	–		**M22-XBK-ESS** 180472	

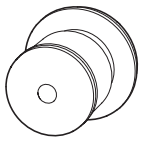
	Inscription	Language	Color	Catalog Number Article no.	Std. pack
	Emergency stop legend plates, IP66				
	Black lettering				
33 x 50 mm 	Emergency-Stop	de		**M22-XZK-D99** 216471	10 units
	Emergency Stop	en		**M22-XZK-GB99** 216472	
	Arrêt d'urgence	fr		**M22-XZK-F99** 216473	
	EMERGENZA	it		**M22-XZK-I99** 216474	
	NOODSTOP	nl		**M22-XZK-NL99** 216475	
	NÖDSTOPP	sv		**M22-XZK-S99** 216476	
	HÄTÄ-SEIS	fi		**M22-XZK-SF99** 216477	
	NØDSTOP	da		**M22-XZK-DK99** 216478	
	WYŁĄCZNIK AWARYJNY	pl		**M22-XZK-PL99** 167637	
50 x 50 mm 	–	de, en, fr, it		**M22-XYK1** 216484	
	–	de, en, it, pl		**M22-XYK5** 167643	
Ø 90 mm	–	de, en, fr, it		**M22-XAK1** 216465	
	–	de, en, es, pt		**M22-XAK2** 216466	
	–	de, en, nl, fr		**M22-XAK3** 216467	
	–	en, sv, fi, da		**M22-XAK4** 216468	
	–	de, en, it, pl		**M22-XAK5** 167641	
Ø 60 mm	4 languages	de, en, fr, it		**M22-XBK1** 216483	
		de, en, it, pl		**M22-XBK5** 167639	
	Controlled stop/emergency stop legend plates				
33 x 50 mm 	With customized Label Editor inscription,[1] → Engineering, Page 84	–		**M22-XZK-*** 216479	10 pieces
	Blank	–		**M22-XZK** 216470	
50 x 50 mm 	With customized Label Editor inscription,[1] → Engineering, Page 84	–		**M22-XYK-*** 231181	
Ø 90 mm 	With customized Label Editor inscription,[1] → Engineering, Page 84	–		**M22-XAK-*** 216469	
	Blank	–		**M22-XAK** 216464	
Ø 60 mm	With customized Label Editor inscription,[1] → Engineering, Page 84	–		**M22-XBK-*** 231762	
	Blank	–		**M22-XBK** 269580	
Ø 40 mm	Blank, for small installation spaces	–		**M22-XAK40-GVP500** 177703	500 units
				M22-XAK40-GVP50 197181	50 units

Notes [1] Label Editor in Pushbutton Configurator → www.eaton.com/config/rmq

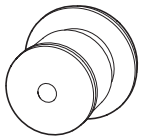




Pull release
30 mm button diameter



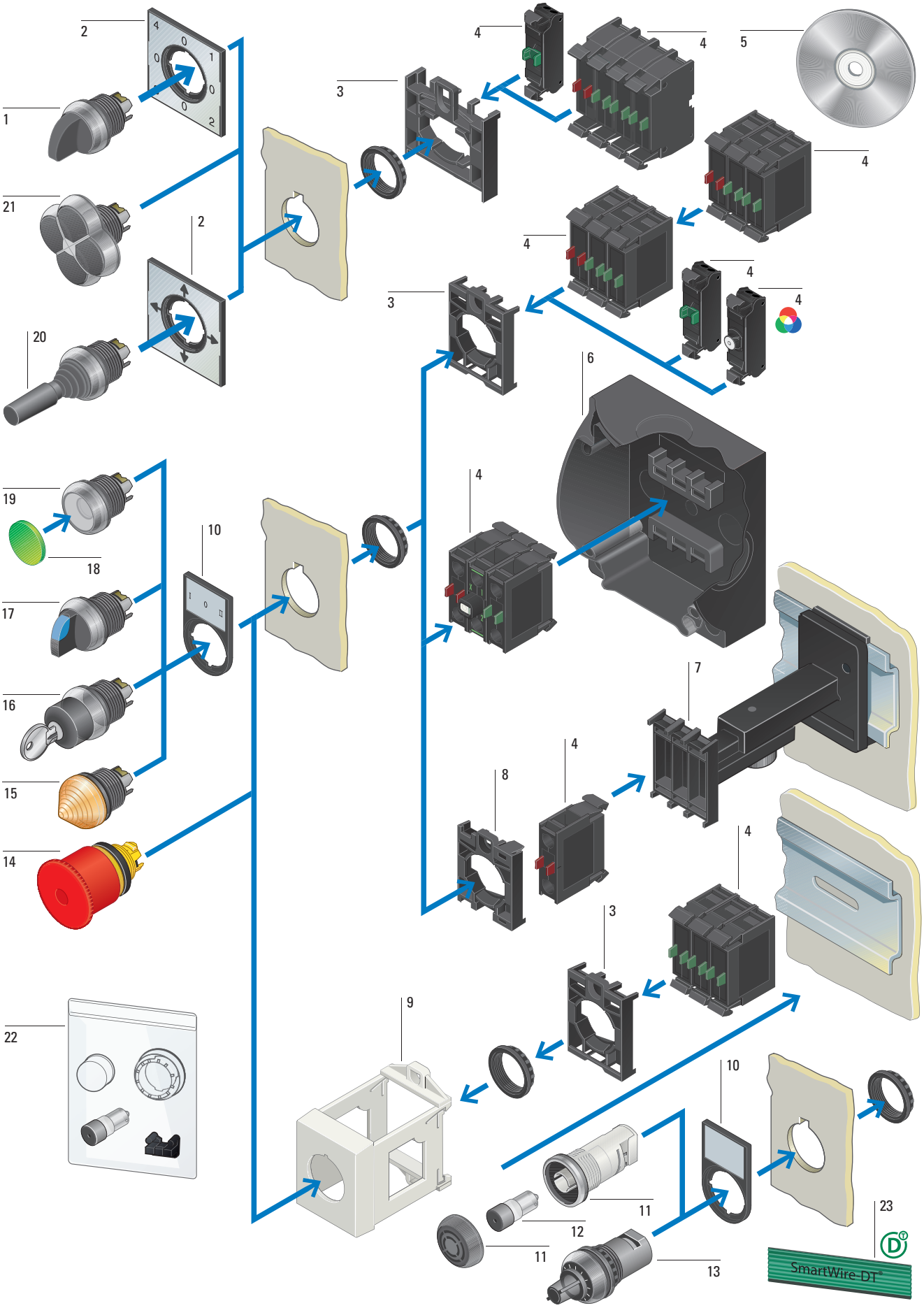
Pull release
30 mm button diameter



	Mushroom head color	Protection Style	**Catalog Number** Article no.	Std. pack
Stop pushbuttons with button diameter 38 mm, mounting hole diameter 22.5 mm				
Non-illuminated, pull release	●	IP66, IP69K	**M22S-PV** 225528	5 units
			M22S-PV-GVP 199370	10 units
Non-illuminated, twist release	◎	IP67, IP69K	**M22S-PVT** 271499	5 units
Non-illuminated, twist release	◎	IP67, IP69K	**M22Y-PVT** 147403	
Illuminated, pull release	●	IP66, IP69K	**M22S-PVL** 230962	
Illuminated, twist release	◎	IP67, IP69K	**M22S-PVLT** 271540	
Guard ring for stop pushbutton for button diameter 38 mm				
–	○	IP65	**M22G-XGPV** 271610	1 units
Stop pushbuttons with button diameter 30 mm, mounting hole diameter 22.5 mm				
Without illumination, pull release	●	IP67, IP69K	**M22S-PV30** 197539	5 units
Can be illuminated with LED element, pull release	●	IP67, IP69K	**M22S-PVL30** 197541	
Mounting hole diameter: 30.5 mm				
Without illumination, pull release	●	IP67, IP69K	**M30S-PV30** 197547	5 units
Can be illuminated with LED element, pull release	●	IP67, IP69K	**M30S-PVL30** 197549	

1

System overview



M22 4-way selector switches 1
4 positions
With rotary head or thumb-grip
0-1-0-2-0-3-0-4 maintained action
→ Page 32

Labels with label mounts 2
Color: aluminum
Labels: with inscription, with custom inscription, blank
→ Page 36

Mounting adapter 3
For flush mounting
For contact and LED elements when using M22-A...
For contact elements when using M22-A4
→ Page 55

(Double) contact elements 4
Normally closed contact and normally open contact
Universal contacts suitable for use with electronic devices
Safety function implemented with positive opening as defined in IEC/EN 60947-5-1
Max. 2 levels, each with 3 contact elements
→ Page 56

LED elements 4
Voltage range:
12 - 30 V AC/DC
85 - 264 V AC
→ Page 58

Labelling with convenience 5
A laser inscription with any text and/or symbol can be added to all button plates, indicator lights, and add-on legend plates from the RMQ-Silver range of products.
www.eaton.de/config/rmq
Keyword: “Pushbutton Configurator → Label Editor function”

Enclosure 6
IP67 surface mounting enclosures with up to 6 mounting locations
IP55 surface mounting enclosures with up to 12 mounting locations
IP54 flush mounting plates with up to 6 mounting locations
IP40 and IP55 shrouds for flush mounting plates
→ Page 75

Telescopic clip 7
4 positions
For adjusting the depth of rear mounting devices in CI and CI-K enclosures and cabinets
→ Page 79

Centering adapter 8
For centering pilot device elements when using a telescopic clip
→ Page 79

IVS top-hat rail adapter 9
For direct mounting on IEC/EN 60175 DIN-rail
→ Page 79

Label mounts 10
For insert labels
Color: black
Insert labels: aluminum color, with inscription or blank, can be engraved
→ Page 65

Acoustic device 11
IP40 degree of protection
Without buzzer
→ Page 39

Buzzer for acoustic device 12
Continuous tone, pulse tone
18 - 30 V DC
→ Page 39

Potentiometer 13
Resistances of 1 kΩ - 1 MΩ
3 individual connections
With screw terminals
→ Page 39

Controlled stop/emergency switching off buttons 14
Tamper-proof as defined in ISO 13850/EN 418
Can be secured with a sealable shroud
Additional labels, with inscription or blank
→ Page 19

Indicator lights 15
Design: flush, conical
Colors: white, green, red, yellow, blue
→ Page 37

Key-operated buttons 16
2 and 3 positions
Programmable momentary/maintained action and key withdraw
Suitable for master key systems
→ Page 33

Changeover switches 17
2 and 3 positions
With rotary head, thumb-grip
Programmable maintained/momentary action
Illuminated selector switches with transparent thumb-grip
Colors: white, green, red, yellow, blue
→ Page 32

Button plates/Button lenses 18
Laser inscription for pushbuttons and mushroom pushbuttons
Button lenses for illuminated pushbutton actuators and indicator lights, flush
With standard texts and symbols or with customized inscriptions
→ Page 68

Pushbuttons 19
Momentary and maintained
Flush and extended
With and without guard ring
Mushroom pushbuttons, double actuator pushbuttons
Colors: white, green, red, yellow, blue, black
Illuminated pushbutton actuators
Colors: white, green, red, yellow, blue
→ Page 29

Joysticks 20
4 positions
→ Page 35

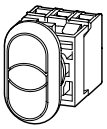
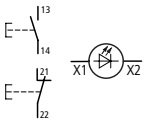
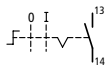
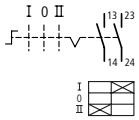
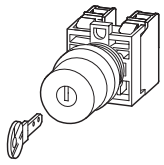
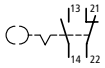
4-way pushbuttons 21
4 positions
Pushbuttons, momentary
→ Page 36

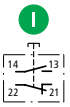
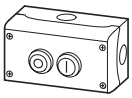
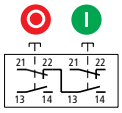
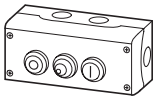
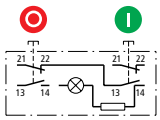
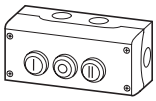
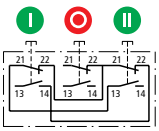
Accessory 22
→ Page 79

SmartWire-DT 23

Product characteristics
- Clip-fit assembly modular system
- Bezel: silver or black
- Mounting hole diameter: 22.3 mm
- Minimum grid dimension: 30 x 40 mm
- Min. degree of protection: IP66
- Up to 6 contacts per mounting location
- For switching differing potentials
- Approved throughout the world

1 Product selection

	Button plate	Contact configuration: ⇒ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1 N/O = Normally open contact	N/C = Normally closed contact	Contact sequence	Degree of protection	Silver bezel **Catalog Number** Article no.	Std. pack
Pushbuttons							
Flush							
		–	1 N/C		IP67, IP69K	**M22-D-R-X0/K01** 216510	5 units
		1 N/O	–		IP67, IP69K	**M22-D-G-X1/K10** 216512	5 units
							
Double actuator pushbutton with LED element, white lens							
85 - 264 V AC							
	I 0	1 N/O	1 N/C		IP66	**M22-DDL-GR-X1/X0/K11/230-W** 216509	5 units
Selector switches							
Black thumb-grip Maintained/momentary action, can be changed with M22-XC-Y configuration adapters → Page 84 Switch positions 0, I, II correspond to the operator's position when viewed from the front. Gold-plated bezel → Page 79							
2 positions Maintained	–	1 N/O	–		IP66	**M22-WRK/K10** 216518	5 units
3 positions Maintained	–	2 N/O	–		IP66	**M22-WRK3/K20** 216520	5 units
							
Key-operated button							
Maintained/momentary action and key withdraw can be changed with M22-XC-... configuration adapters → Page 84 2 positions Maintained MS1 lock mechanism, with 1 key							
–	–	1 N/O	1 N/C		IP66	**M22-WRS/K11** 216517	5 units

	Number of operators	Contact configuration: ⇒ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1		Contact sequence	Color of enclosure top	Degree of protection	Silver bezel **Catalog Number** Article no.	Std. pack
	Qty.	N/O = Normally open contact	N/C = Normally closed contact		RAL value			
	Pushbuttons							
	Flush							
	1	1 N/O	1 N/C		RAL 7035	IP67, IP69K	**M22-D-G-X1/KC11/I** 216522	1 units
	1	1 N/O	1 N/C		RAL 7035	IP67, IP69K	**M22-D-R-X0/KC11/I** 216521	
	Key-operated button							
	Maintained/momentary action and key withdraw can be changed with M22-XC-... configuration adapters ⇒ Page 84 With 1 key 2 positions, maintained MS1 lock mechanism							
	1	1 N/O	1 N/C		RAL 7035	IP66	**M22-WRS/KC11/I** 216526	1 units
	Assembled control station							
Without indicator lights 	2	2 N/O	2 N/C		RAL 7035	IP67, IP69K	**M22-I2-M1** 216529	1 units
With white indicator light, LED element 85 - 264 V AC 	2	2 N/O	2 N/C		RAL 7035	IP67, IP69K	**M22-I3-M2** 216533	1 units
	**Assembled control station**							
	3	3 N/O	3 N/C		RAL 7035	IP67, IP69K	**M22-I3-M1** 216532	1 units
	Customized complete units							
	Configuration online via Pushbutton Configurator ⇒ www.eaton.com/config/rmq						**M22-COMBINATION** 2010741	1 units
							RMQ-FLAT-COMBINATION 2012027	

1

Design	Button plate	Silver bezel **Catalog Number** Article no.	Black bezel **Catalog Number** Article no.	Std. pack
	Double actuator pushbuttons with indicator light, IP66 White lens momentary Gold-plated bezel → Page 79			
Extended pushbuttons and indicator light		**M22-DDL-GR** 216698	**M22S-DDL-GR** 216699	5 units
		M22-DDL-GR-X1/X0 216700	**M22S-DDL-GR-X1/X0** 216701	
		M22-DDL-GR-GB1/GB0 216702	**M22S-DDL-GR-GB1/GB0** 216703	
		M22-DDL-WS 216704	**M22S-DDL-WS** 216705	
		M22-DDL-WS-X1/X0 216706	**M22S-DDL-WS-X1/X0** 216707	
		M22-DDL-WS-GB1/GB0 216708	**M22S-DDL-WS-GB1/GB0** 216709	
		M22-DDL-S-X7/X7 216710	**M22S-DDL-S-X7/X7** 216711	
		M22-DDL-S-X226/X26 105227	–	
		M22-DDL-S-X4/X5 218145	**M22S-DDL-S-X4/X5** 218146	
	With customized Label Editor inscription[1] → Notes	**M22-DDL-*-*-*** 226770	**M22S-DDL-*-*-*** 230350	
Flush pushbuttons and indicator light		**M22-DDLF-GR-X1/X0** 284814	**M22S-DDLF-GR-X1/X0** 284815	5 units
		M22-DDLF-WS-X1/X0 284816	**M22S-DDLF-WS-X1/X0** 284817	
	With customized Label Editor inscription[1] → Notes	**M22-DDLF-*-*-*** 284818	**M22S-DDLF-*-*-*** 284819	
Pushbutton I and indicator light flush, pushbutton 0 extended		**M22-DDLM-GR-X1/X0** 284830	**M22S-DDLM-GR-X1/X0** 284831	5 units
		M22-DDLM-WS-X1/X0 284832	**M22S-DDLM-WS-X1/X0** 284833	
	With customized Label Editor inscription[1] → Notes	**M22-DDLM-*-*-*** 107062		

Notes

[1] Label Editor in Pushbutton Configurator → www.eaton.com/config/rmq

1st wildcard (*) = Button plate color: B = blue, G = green, R = red, S = black, Y = yellow, W = white
BS = Blue top/black base
GR = Green top/red base
GS = Green top/black base
WS = White top/black base

2st wildcard (*) = configuration ID in position (-A1)

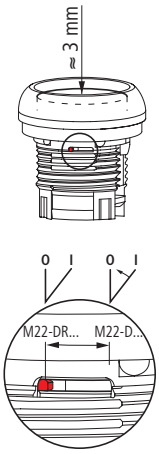
3rd wildcard omitted

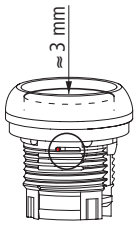
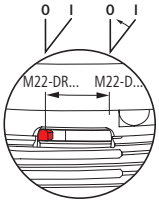
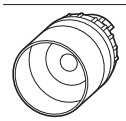
Example: 226770 M22-DDL-GR-220208C06231A7F0-A1

Additional color combinations available upon request → Engineering, Page 84

IP67, IP69K pushbuttons

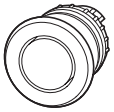
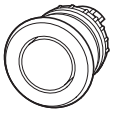
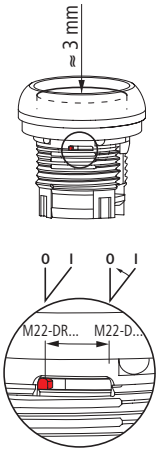
Gold-plated bezel → Page 79

	Button plate	Silver bezel **Catalog Number** Article no.	Std. pack	Black bezel **Catalog Number** Article no.	Std. pack	Notes
Flush, momentary	●	**M22-D-S** 216590	10 units	**M22S-D-S** 216591	10 units	–
	○	**M22-D-W** 216592		**M22S-D-W** 216593		
	●	**M22-D-R** 216594		**M22S-D-R** 216595		
	●	**M22-D-G** 216596		**M22S-D-G** 216597		
	●	**M22-D-Y** 216598		**M22S-D-Y** 216599		
	●	**M22-D-B** 216600		**M22S-D-B** 216601		
	●	**M22-D-GR** 132671		**M22S-D-GR** 132672		
	–	**M22-D-X** 216602		**M22S-D-X** 216604		
	–	**M22-D-X-GVP** 216603	50 units			
	◎	**M22-D-R-X0** 216605	10 units	**M22S-D-R-X0** 216606	10 units	
	⏽	**M22-D-G-X1** 216607		**M22S-D-G-X1** 216608		
	◎	**M22-D-S-X0** 216609		**M22S-D-S-X0** 216610		
	⏽	**M22-D-W-X1** 216611		**M22S-D-W-X1** 216612		
Flush, maintained	●	**M22-DR-S** 216613	5 units	**M22S-DR-S** 216614	5 units	Programmable maintained/momentary pushbutton action 
	○	**M22-DR-W** 216615		**M22S-DR-W** 216616		
	●	**M22-DR-R** 216617		**M22S-DR-R** 216618		
	●	**M22-DR-G** 216619		**M22S-DR-G** 216620		
	●	**M22-DR-Y** 216621		**M22S-DR-Y** 216622		
	●	**M22-DR-B** 216623		**M22S-DR-B** 216624		
	–	**M22-DR-X** 216625		**M22S-DR-X** 216627		
	–	**M22-DR-X-GVP** 216626	50 units			
	◎	**M22-DR-R-X0** 216628	5 units	**M22S-DR-R-X0** 216629	5 units	
	⏽	**M22-DR-G-X1** 216630		**M22S-DR-G-X1** 216631		
	◎	**M22-DR-S-X0** 216632		**M22S-DR-S-X0** 216633		
	⏽	**M22-DR-W-X1** 216634		**M22S-DR-W-X1** 216635		

	Button plate	Silver bezel **Catalog Number** Article no.	Std. pack	Black bezel **Catalog Number** Article no.	Std. pack	Notes
		IP67, IP69K pushbuttons				
		Gold-plated bezel → Page 79				
Extended, momentary	●	**M22-DH-S** 216636	5 units	**M22S-DH-S** 216637	5 units	–
	○	**M22-DH-W** 216638		**M22S-DH-W** 216639		
	●	**M22-DH-G** 216643		**M22S-DH-G** 216645		
	●	**M22-DH-R** 216641		**M22S-DH-R** 216642		
	●	**M22-DH-Y** 216646		**M22S-DH-Y** 216647		
	●	**M22-DH-B** 216649		**M22S-DH-B** 216650		
	◎	**M22-DH-R-X0** 216655		**M22S-DH-R-X0** 216656		
	I	**M22-DH-G-X1** 216657		**M22S-DH-G-X1** 216658		
	◎	**M22-DH-S-X0** 216659		**M22S-DH-S-X0** 216660		
	I	**M22-DH-W-X1** 216661		**M22S-DH-W-X1** 216662		
Extended, maintained	●	**M22-DRH-S** 216663	5 units	**M22S-DRH-S** 216664	5 units	Programmable maintained/momentary pushbutton action  
	○	**M22-DRH-W** 216665		**M22S-DRH-W** 216666		
	●	**M22-DRH-R** 216667		**M22S-DRH-R** 216668		
	●	**M22-DRH-G** 216669		**M22S-DRH-G** 216670		
	●	**M22-DRH-Y** 216671		**M22S-DRH-Y** 216672		
	●	**M22-DRH-B** 216673		**M22S-DRH-B** 216674		
	◎	**M22-DRH-R-X0** 216675		**M22S-DRH-R-X0** 216676		
	I	**M22-DRH-G-X1** 216677		**M22S-DRH-G-X1** 216678		
	◎	**M22-DRH-S-X0** 216679		**M22S-DRH-S-X0** 216680		
	I	**M22-DRH-W-X1** 216681		**M22S-DRH-W-X1** 216682		
		**Pushbuttons with guard ring, momentary, IP66, IP69K**				
		Gold-plated bezel → Page 79				
	–	**M22-DG-X** 220921	5 units			–

Mushroom pushbuttons, IP67, IP69K

Gold-plated bezel → Page 79

	Button plate	Button color	Silver bezel **Catalog Number** Article no.	Std. pack	Black bezel **Catalog Number** Article no.	Std. pack	Notes
Momentary 	●	●	**M22-DP-S** 216712	5 units	**M22S-DP-S** 216713	5 units	–
	●	●	**M22-DP-R** 216714		**M22S-DP-R** 216715		
	●	●	**M22-DP-G** 216716		**M22S-DP-G** 216717		
	●	●	**M22-DP-Y** 216718		**M22S-DP-Y** 216719		
	◎	●	**M22-DP-R-X0** 216720		**M22S-DP-R-X0** 216721		
	◧	●	**M22-DP-G-X1** 216722		**M22S-DP-G-X1** 216723		
	◎	●	**M22-DP-S-X0** 216724		**M22S-DP-S-X0** 216725		
	◧	●	**M22-DP-W-X1** 216726		**M22S-DP-W-X1** 216727		
	–	●	**M22-DP-S-X** 216728		**M22S-DP-S-X** 216730		
			M22-DP-S-X-GVP 216729	25 units	–		
	–	●	**M22-DP-R-X** 216731	5 units	**M22S-DP-R-X** 216733		
			M22-DP-R-X-GVP 216732	25 units	–		
	–	●	**M22-DP-G-X** 216734	5 units	**M22S-DP-G-X** 216736		
			M22-DP-G-X-GVP 216735	25 units	–		
	–	●	**M22-DP-Y-X** 216737	5 units	**M22S-DP-Y-X** 216739		
			M22-DP-Y-X-GVP 216738	25 units	–		
maintained 	●	●	**M22-DRP-S** 216743	5 units	**M22S-DRP-S** 216744	5 units	Programmable maintained/ momentary pushbutton action 
	●	●	**M22-DRP-R** 216745		**M22S-DRP-R** 216746		
	●	●	**M22-DRP-G** 216747		**M22S-DRP-G** 216748		
	●	●	**M22-DRP-Y** 216749		**M22S-DRP-Y** 216750		
	◎	●	**M22-DRP-R-X0** 216751		**M22S-DRP-R-X0** 216752		
	◧	●	**M22-DRP-G-X1** 216753		**M22S-DRP-G-X1** 216754		
	◎	●	**M22-DRP-S-X0** 216755		**M22S-DRP-S-X0** 216756		
	◧	●	**M22-DRP-W-X1** 216757		**M22S-DRP-W-X1** 216758		
	–	●	**M22-DRP-S-X** 216759		**M22S-DRP-S-X** 216761		
			M22-DRP-S-X-GVP 216760	25 units	–		
	–	●	**M22-DRP-R-X** 216762	5 units	**M22S-DRP-R-X** 216764		
			M22-DRP-R-X-GVP 216763	25 units	–		
	–	●	**M22-DRP-G-X** 216765	5 units	**M22S-DRP-G-X** 216767		
			M22-DRP-G-X-GVP 216766	25 units	–		
	–	●	**M22-DRP-Y-X** 216768	5 units	**M22S-DRP-Y-X** 216770		
			M22-DRP-Y-X-GVP 216769	25 units	–		
Suitable for illumination	white	transparent	**M22-DPL-W** 173704	5 units	–		Momentary, silver bezel

	Function: ▷ = momentary (MO) ⌊ = maintained (MA)	Button plate	Inscription	Function	Silver bezel Catalog Number Article no.	Std. pack	Black bezel Catalog Number Article no.	Std. pack
	Selector switches, IP66							
	Gold-plated bezel → Page 79 Maintained/momentary action can be changed with configuration kit → Page 34							
	2 positions							
With rotary head	▷ 40°		–	–	**M22-W** 216853	5 units	**M22S-W** 216854	5 units
	⌊ 60°		–	–	**M22-WR** 216855		**M22S-WR** 216856	
	⌊ 60°		–	–	**M22-WR-X92** 216857		**M22S-WR-X92** 216858	
	⌊ 60°		AUTO MANUAL	–	**M22-WR-X91** 216859		**M22S-WR-X91** 216860	
	⌊ 60°		* = With customized Label Editor inscription[1]	–	**M22-WR-*** 226836		**M22S-WR-*** 226837	
With thumb-grip	▷ 40°	–	–	–	**M22-WK** 216865	5 units	**M22S-WK** 216866	5 units
	⌊ 60°	–	–	–	**M22-WRK** 216867	10 units	**M22S-WRK** 216869	10 units
	⌊ 60°	–	–	–	**M22-WRK-GVP** 216868	50 units		50 units
With thumb-grip, V configuration	∨ 60°	–	–	–	**M22-WKV** 216874	5 units	**M22S-WKV** 216875	5 units
	3 positions							
	With plunger bridge → Page 84							
With rotary head	40° ⇓ 40°		–	–	**M22-W3** 216861	5 units	**M22S-W3** 216862	5 units
	60° ⇓ 60°		–	–	**M22-WR3** 216863		**M22S-WR3** 216864	
	60° ⇓ 60°		AUTO 0 MAN.	–	**M22-WR3-X94** 226838		**M22S-WR3-X94** 226839	
	60° ⇓ 60°		–	–	**M22-WR3-X7** 284786		–	
	60° ⇓ 60°		* = With customized Label Editor inscription[1]	–	**M22-WR3-*** 226840		**M22S-WR3-*** 226841	
With thumb-grip	40° ⇓ 40°	–	–	–	**M22-WK3** 216870	5 units	**M22S-WK3** 216871	5 units
	60° ⇓ 60°	–	–	–	**M22-WRK3** 216872		**M22S-WRK3** 216873	
					–		**M22S-WRK3-GVP** 199869	50 units
		–	–	–	**M22-WRK3-*[2]** 217436		**M22S-WRK3-*[2]** 217437	5 units
	4 positions							
	Not compatible with configuration adapters Use mounting adapter M22-A4 → Page 55, Legend plates → Page 36							
With rotary head	45°		–		**M22-WR4** 279419	5 units	**M22S-WR4** 279430	5 units
With thumb-grip	45°		–		**M22-WRK4** 279431	5 units	**M22S-WRK4** 279432	5 units

Notes

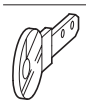
[1] Label Editor in Pushbutton Configurator → www.eaton.com/config/rmq

[2] wildcard* → Function: MAMO (maintained/momentary) ⇓ or MOMA (momentary/maintained) ⇓

Key-operated buttons for individual lock mechanisms, IP66

Gold-plated bezel → Page 79
Not suitable for master key systems
With 1 key
Maintained/momentary action and key withdraw can be changed with configuration adapters → Page 34

	Function:	Key withdrawable at position			Silver bezel **Catalog Number** Article no.	Std. pack	Black bezel **Catalog Number** Article no.	Std. pack
	⊳ = momentary (MO) ⊿ = maintained (MA)							
2 positions								
MS1 lock mechanism	⊳ 40°	–	0	–	**M22-WS** 216881	1 units	**M22S-WS** 216882	1 units
	⊿ 60°	–	0	I	**M22-WRS** 216887	5 units	**M22S-WRS** 216889	5 units
	⊿ 60°	–	0	I	**M22-WRS-GVP** 216888	25 units	–	
	⊿ 50°	–	0	–	**M22-WRS-A1** 229092	5 units	**M22S-WRS-A1** 229093	5 units
MS2 – MS20 lock mechanisms (enter lock mechanism number in the part no.)	⊳ 40°	–	0	–	**M22-WS-MS*[1)]** 216883	1 units	**M22S-WS-MS*[1)]** 216884	1 units
	⊿ 60°	–	0	I	**M22-WRS-MS*[1)]** 216890	1 units	**M22S-WRS-MS*[1)]** 216891	1 units
	⊿ 50°	–	0	–	**M22-WRS-MS*-A1[1)]** 217440	5 units	**M22S-WRS-MS*-A1[1)]** 217441	5 units
3 positions								
With plunger bridge → Engineering, Page 84								
MS1 lock mechanism	40° ⇓ 40°	–	0	–	**M22-WS3** 216894	1 units	**M22S-WS3** 216895	1 units
	60° ⇓ 60°	I	0	II	**M22-WRS3** 216900	5 units	**M22S-WRS3** 216901	5 units
	60° ⇓ 60°	I	0	II	**M22-WRS3-GVP** 216902	25 units	–	
	⇓	Selectable[2)]	–	–	**M22-WRS3-A*[1)4)]** 229094	5 units	**M22S-WRS3-A*[1)4)]** 229095	5 units
MS2 – MS20 lock mechanisms (enter lock mechanism number in the part no.)	Selectable	Selectable[2)]	–	–	**M22-WRS3-MS*-A*[1)2)]** 217442	5 units	**M22S-WRS3-MS*-A*[1)2)]** 217443	5 units
	40° ⇓ 40°	–	0	–	**M22-WS3-MS*[1)]** 216896	1 units	**M22S-WS3-MS*[1)]** 216897	1 units
	60° ⇓ 60°	I	0	II	**M22-WRS3-MS*[1)]** 216903	1 units	**M22S-WRS3-MS*[1)]** 216904	1 units
2 or 3 positions								
MS2 – MS20 lock mechanisms (enter lock mechanism number in the part no.)	Selectable	Selectable	–	–	**M22-WRS*-MS*-*[1)3)]** 262521	1 units	–	



Individual key

Spare key for AUTO – OFF/RESET – MANUAL key-operated switches

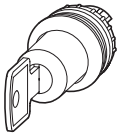
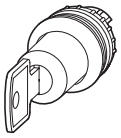
For MS1 lock mechanism					**M22-ES-MS1** 216416	5 units	–	
For MS2 – MS20 lock mechanism					**M22-ES-MS*** 216417	1 units	–	

Notes

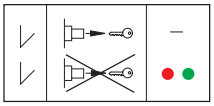
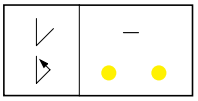
[1)] Delivery: 4 weeks after the order is received by the factory
[2)] Example: M22(S)-WRS3-MS*-A*
MS*: * = MS2 - MS20 (individual lock mechanism number)
A*: * = 1, action: ⇓, withdrawable in switch position 0
* = 2, action: ⇓, withdrawable in contactor state I, 0
* = 3, action: ⇓, withdrawable in contactor state 0, II
* = 4, action: ⇓, withdrawable in switch positions I, 0
* = 5, action: ⇓, withdrawable in switch position 0
* = 6, action: ⇓, withdrawable in switch positions 0, II
* = 7, action: ⇓, withdrawable in switch position 0
* = 10, action: ⇓, withdrawable in switch positions I, II

[3)] Example: M22(S)-WRS*-MS*-*
WRS*: * = 2 or 3 positions (action and key withdraw as M22-WRS or M22-WRS3)
MS*: * = * = MS2 - MS20 (individual lock mechanism number)
-*: * = Customized inscription with Label Editor; replace * with the automatically assigned filename (→ Engineering, Page 84) or "blank" if no inscription is required
[4)] Version A10 cannot be selected.

1

	Function:	Key withdrawable at position	Silver bezel **Catalog Number** Article no.	Std. pack	Black bezel **Catalog Number** Article no.	Std. pack
	= momentary (MO) = maintained (MA)					
Key-operated buttons for master key systems, IP66						
	Gold-plated bezel → Page 79 With 2 keys					
2 positions	40°	0	**M22-WS-SA(*)-*** 216885	5 units	**M22S-WS-SA(*)-*** 216886	5 units
	60°	0	**M22-WRS-SA(*)-*** 216892		**M22S-WRS-SA(*)-*** 216893	
	60°	0 I	**M22-WRS-SA(*)-*-A8** 285537		**M22S-WRS-SA(*)-*-A8** 285538	
3 positions	60° 60°	I 0 II	**M22-WRS3-SA(*)-*-A9** 285539		**M22S-WRS3-SA(*)-*-A9** 285581	
	40° 40°	0	**M22-WS3-SA(*)-*** 216898		**M22S-WS3-SA(*)-*** 216899	
	60° 60°	0	**M22-WRS3-SA(*)-*** 216905		**M22S-WRS3-SA(*)-*** 216906	
	Individual keys for master key systems					
			M22-ES-SA(*)-* 217444	10 units		

Notes Master key systems: Delivery will take 4 to 6 weeks after the order is received at the factory
To order, use form MZ047002ZU (formerly FO276) → Data sheet in online catalog

		Function		**Catalog Number** Article no.	Std. pack
Configuration kit					
Not for key-operated buttons for master key systems					
For converting the key withdraw → Page 84			50°	**M22-XC-R** 216406	10 units
For converting between maintained and momentary action → Page 84			40°	**M22-XC-Y** 216407	10 units

Joysticks, IP65

Gold-plated bezel → Page 79, use M22-A4 adapter
One operating point per operating direction

	Text	Function:	For use with	Silver bezel **Catalog Number** Article no.	Std. pack	Black bezel **Catalog Number** Article no.	Std. pack
2 positions			–	**M22-WJ2H** 289195	1 units	**M22S-WJ2H** 289197	1 units
			–	**M22-WJS2H**[1)] 178570		**M22S-WJS2H**[1)] 178572	
			–	**M22-WRJ2H** 289199		**M22S-WRJ2H** 289241	
			–	**M22-WRJS2H**[1)] 178574		**M22S-WRJS2H**[1)] 178576	
			–	**M22-WJ2V** 289196		**M22S-WJ2V** 289198	
			–	**M22-WJS2V**[1)] 178571		**M22S-WJS2V**[1)] 178573	
			–	**M22-WRJ2V** 289240		**M22S-WRJ2V** 289242	
			–	**M22-WRJS2V**[1)] 178575		**M22S-WRJS2V**[1)] 178577	
4 positions			–	**M22-WRJ4** 279415	5 units	**M22S-WRJ4** 279416	5 units
			–	**M22-WRJS4**[1)] 178566		**M22S-WRJS4**[1)] 178567	
			–	**M22-WJ4** 279417		**M22S-WJ4** 279418	
			–	**M22-WJS4**[1)] 178568		**M22S-WJS4**[1)] 178569	

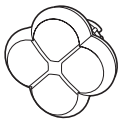
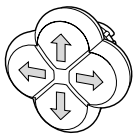
Joysticks with two operating points per operating direction

These joysticks are combined with M22-K10 normal N/O and M22-K10P early-make contacts.

	Text	Function:	For use with	Silver bezel **Catalog Number** Article no.	Std. pack	Black bezel **Catalog Number** Article no.	Std. pack
2 positions			–	**M22-WJ2H-2P** 111508	1 units		
			–	**M22-WJS2H-2P**[1)] 178565			
			–	**M22-WJ2V-2P** 111507			
			–	**M22-WJS2V-2P**[1)] 178564			
4 positions			–	**M22-WJ4-2P** 110836			
			–	**M22-WJS4-2P**[1)] 178563			

Notes [1)] With metal shaft

1

	Text	Function: = momentary (MO) = maintained (MA)	For use with	Silver bezel **Catalog Number** Article no.	Std. pack	Black bezel **Catalog Number** Article no.	Std. pack
	Pushbuttons, IP66, 4-way						
Opposing buttons not mechanically interlocked 	No inscription, black pushbuttons		–	**M22-D4-S** 279411	5 units	**M22S-D4-S** 279412	5 units
	Custom inscription and pushbutton color → Notes		–	**M22-D4-*-*** 279413		**M22S-D4-*-*** 279414	
	White arrows, black pushbuttons		–	**M22-D4-S-X7** 286336		**M22S-D4-S-X7** 286337	
Opposing pushbuttons mechanically interlocked	White arrows, black pushbuttons		–	**M22-DI4-S-X7** 286338		**M22S-DI4-S-X7** 286339	
	Custom inscription and pushbutton color → Notes		–	**M22-DI4-*-*** 286340		**M22S-DI4-*-*** 286341	

Notes

-*-*: * B = Blue, G = Green, R = Red, B = Black, W = White, Y = Yellow
Specify colors clockwise, starting at 12 o'clock

-*-*: * = File name generated by Label editor
Label Editor in Pushbutton Configurator → www.eaton.com/config/rmq

	Inscription	For use with	Silver bezel **Catalog Number** Article no.	Std. pack
	Legend plates			
	Unprinted	Joysticks 4-way selector switches	**M22-XCK** 279433	10 units
	4 direction arrows	Joysticks 4-way selector switches	**M22-XCK1** 279434	
	2 direction arrows, can be turned 90°	2-position joysticks	**M22-XCK3** 290260	
	0-1-0-2-0-3-0-4	4-way selector switches	**M22-XCK2** 279435	
	With custom via Labeleditor	Joysticks 4-way selector switches	**M22-XCK-*** 279436	

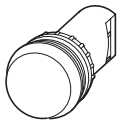
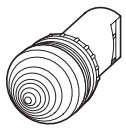
Color		Design	Protection Style	**Catalog Number** Article no.	Std. pack
Indicator lights					
LEDs for indicator lights → Page 58 ff.					
○	white	flush	IP67, IP69K	**M22-L-W** 216771	10 units
●	red	flush	IP67, IP69K	**M22-L-R** 216772	
				M22-L-R-GVP150 173973	150 units
●	green	flush	IP67, IP69K	**M22-L-G** 216773	10 units
●	yellow	flush	IP67, IP69K	**M22-L-Y** 216774	
●	blue	flush	IP67, IP69K	**M22-L-B** 216775	
●	orange	flush	IP67, IP69K	**M22-L-A** 164374	
○	transparent[1]			**M22-L-T** 189595	
–	Without lens[2]	flush	IP67, IP69K	**M22-L-X** 216776	
–	Without lens[2]	flush	IP67, IP69K	**M22-L-X-GVP** 216777	50 units
○	white	Extended, conical	IP67, IP69K	**M22-LH-W** 216778	10 units
●	red	Extended, conical	IP67, IP69K	**M22-LH-R** 216779	
●	green	Extended, conical	IP67, IP69K	**M22-LH-G** 216780	
●	yellow	Extended, conical	IP67, IP69K	**M22-LH-Y** 216781	
●	blue	Extended, conical	IP67, IP69K	**M22-LH-B** 216782	
●	orange	Extended, conical	IP67, IP69K	**M22-LH-A** 164375	
Conical BA9s indicator lights					
Can be installed in M20/M25 knockout in base Without lamp, for BA9s LEDs up to 2.4 W					
●	red	Conical	IP67, IP69K	**L-R** 208689	1 units
●	green	Conical	IP67, IP69K	**L-G** 208690	
●	yellow	Conical	IP67, IP69K	**L-Y** 208691	
○	white	Conical	IP67, IP69K	**L-W** 208692	

Notes

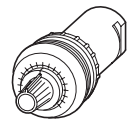
[1] Optimized for multicolor LED

[2] Lenses for indicator lights → Page 70

1

	Color		Design	Protection Style	Catalog Number Article no.	Std. pack
	Compact indicator lights					
	Without lamp for LEDs up to 2.4 W With BA9s lamp socket					
	○	white	flush	IP67, IP69K	**M22-LC-W** 216907	10 units
	●	red	flush	IP67, IP69K	**M22-LC-R** 216908	
	●	green	flush	IP67, IP69K	**M22-LC-G** 216909	
	●	yellow	flush	IP67, IP69K	**M22-LC-Y** 216910	
	●	blue	flush	IP67, IP69K	**M22-LC-B** 216911	
	●	orange	flush	IP67, IP69K	**M22-LC-A** 164376	
	–	Without lens[1)]	flush	IP67, IP69K	**M22-LC-X** 216912	
	○	white	Extended, conical	IP67, IP69K	**M22-LCH-W** 216914	
	●	red	Extended, conical	IP67, IP69K	**M22-LCH-R** 216915	
	●	green	Extended, conical	IP67, IP69K	**M22-LCH-G** 216916	
	●	yellow	Extended, conical	IP67, IP69K	**M22-LCH-Y** 216917	
	●	blue	Extended, conical	IP67, IP69K	**M22-LCH-B** 216918	
	●	orange	Extended, conical	IP67, IP69K	**M22-LCH-A** 164376	

Notes [1)] Lenses for indicator lights → Page 70



Potentiometers, IP66

3 separate screw connections, P_{max} = 0.5 W
Accuracy of resistance value: ±10% (linear)
M22…RH with large knob

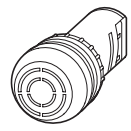
Contact sequence	Resistance R kΩ	Silver bezel Catalog Number Article no.	Std. pack	Black bezel Catalog Number Article no.	Std. pack
	1	**M22-R1K** 229489	1 units	**M22S-R1K** 232231	1 units
	2.2	**M22-R2K2** 171157			
	4.7	**M22-R4K7** 229490		**M22S-R4K7** 232232	
	10	**M22-R10K** 229491		**M22S-R10K** 232233	
	47	**M22-R47K** 229492		**M22S-R47K** 232234	
	100	**M22-R100K** 229493		**M22S-R100K** 232235	
	470	**M22-R470K** 229494		**M22S-R470K** 232236	
without scale/inscription	2.2	**M22-R2K2-BLANK** 198592		**M22S-R2K2-BLANK** 198594	
	10	**M22-R10K-BLANK** 198593		**M22S-R10K-BLANK** 198595	
	10	**M22-R10K-BLANK-RH** 198302		–	
	100	**M22-R100K-BLANK-RH** 198591		–	
	Selectable → Notes[1)]	**M22-R*-*** 263371		**M22S-R*-*** 263372	
	Selectable → Notes[1)]	**M22-R*-*-RH** 288863			

Notes

[1)] The following information must be added to the part no. when ordering:
1st asterisk ≙ Resistance
2nd asterisk ≙ Standard scale/inscription

* – *: * = Available resistance values:
470 = 470 Ω
1K = 1 kΩ
2K2 = 2.2 kΩ
4K7 = 4.7 kΩ
10K = 10 kΩ
22K = 22 kΩ
47K = 47 kΩ
100K = 100 kΩ
470K = 470 kΩ
1M = 1 MΩ

* – *: * = Standard scale/inscription: X1000
No scale/inscription: "blank"



Compact acoustic device, IP40

	Catalog Number Article no.	Std. pack
Black front, without buzzer, with BA9s lamp socket	**M22-AMC** 229015	1 units
incl. buzzer BA9s, continuous tone, 18 - 30 V DC	**M22-AMC-AM** 198271	
incl. buzzer BA9s, pulse tone, 24 V	**M22-AMC-AMP** 198272	

Buzzer for acoustic device

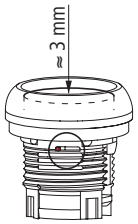
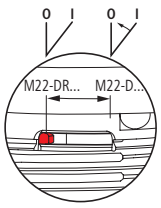
For BA9s socket
83 dB/10 cm,
18 - 30 mA,
Positive pin at X1,
f = 2300 Hz

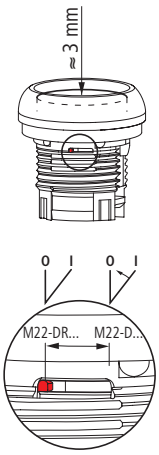
Continuous tone, 18 - 30 V DC	**M22-XAM** 229025	1 units
Pulsed tone, 24 V DC (+10%/–15%)	**M22-XAMP** 229028	

1

Illuminated pushbutton actuators, IP67, IP69K

Gold-plated bezel → Page 79

	Color Button plate	Silver bezel **Catalog Number** Article no.	Black bezel **Catalog Number** Article no.	Std. pack	Notes
Flush momentary	○	**M22-DL-W** 216922	**M22S-DL-W** 216924	10 units	–
	●	**M22-DL-R** 216925	**M22S-DL-R** 216926		
	●	**M22-DL-G** 216927	**M22S-DL-G** 216928		
	●	**M22-DL-Y** 216929	**M22S-DL-Y** 216930		
	●	**M22-DL-B** 216931	**M22S-DL-B** 216932		
	●	**M22-DL-A** 167429	**M22S-DL-A** 167430		
	–	**M22-DL-X** 216933	**M22S-DL-X** 216935		
	–	**M22-DL-X-GVP** 216934	–	50 units	
	○	**M22-DL-R-X0** 216936	**M22S-DL-R-X0** 216937	10 units	
	I	**M22-DL-G-X1** 216938	**M22S-DL-G-X1** 216939		
	○	**M22-DL-W-X0** 216940	**M22S-DL-W-X0** 216941		
	I	**M22-DL-W-X1** 216942	**M22S-DL-W-X1** 216943		
flush maintained	○	**M22-DRL-W** 216944	**M22S-DRL-W** 216945	5 units	Programmable maintained/momentary pushbutton action 
	●	**M22-DRL-R** 216946	**M22S-DRL-R** 216947		
	●	**M22-DRL-G** 216948	**M22S-DRL-G** 216949		
	●	**M22-DRL-Y** 216950	**M22S-DRL-Y** 216951		
	●	**M22-DRL-B** 216952	**M22S-DRL-B** 216953		
	●	**M22-DRL-A** 167431	**M22S-DRL-A** 167432		
	–	**M22-DRL-X** 216954	**M22S-DRL-X** 216956		
	–	**M22-DRL-X-GVP** 216955	–	50 units	
	○	**M22-DRL-R-X0** 216957	**M22S-DRL-R-X0** 216958	5 units	
	I	**M22-DRL-G-X1** 216959	**M22S-DRL-G-X1** 216960		
	○	**M22-DRL-W-X0** 216961	**M22S-DRL-W-X0** 216962		
	I	**M22-DRL-W-X1** 216963	**M22S-DRL-W-X1** 216964		
Extended momentary	○	**M22-DLH-W** 216965	**M22S-DLH-W** 216966	5 units	
	●	**M22-DLH-R** 216967	**M22S-DLH-R** 216968		
	●	**M22-DLH-G** 216969	**M22S-DLH-G** 216970		
	●	**M22-DLH-Y** 216971	**M22S-DLH-Y** 216972		
	●	**M22-DLH-B** 216973	**M22S-DLH-B** 216974		
	●	**M22-DLH-A** 167433	**M22S-DLH-A** 167434		
	○	**M22-DLH-R-X0** 216975	**M22S-DLH-R-X0** 216976		
	I	**M22-DLH-G-X1** 216977	**M22S-DLH-G-X1** 216978		
	○	**M22-DLH-W-X0** 216979	**M22S-DLH-W-X0** 216980		
	I	**M22-DLH-W-X1** 216981	**M22S-DLH-W-X1** 216982		

	Color Button plate	Silver bezel **Catalog Number** Article no.	Black bezel **Catalog Number** Article no.	Std. pack	Notes
	Illuminated pushbutton actuators, IP67, IP69K				
	Gold-plated bezel → Page 79				
Extended maintained 		**M22-DRLH-W** 216788	**M22S-DRLH-W** 216791	5 units	Programmable maintained/momentary pushbutton action 
		M22-DRLH-R 216789	**M22S-DRLH-R** 216792		
		M22-DRLH-G 216796	**M22S-DRLH-G** 216798		
		M22-DRLH-Y 216799	**M22S-DRLH-Y** 216801		
		M22-DRLH-B 216802	**M22S-DRLH-B** 216803		
		M22-DRLH-A 167435	**M22S-DRLH-A** 167436		
		M22-DRLH-R-X0 216804	**M22S-DRLH-R-X0** 216808		
		M22-DRLH-G-X1 216805	**M22S-DRLH-G-X1** 216809		
		M22-DRLH-W-X0 216806	**M22S-DRLH-W-X0** 216810		
		M22-DRLH-W-X1 216807	**M22S-DRLH-W-X1** 216811		
With guard ring momentary 	–	**M22-DGL-X** 230961		5 units	

1

Function:	Color		Silver bezel **Catalog Number** Article no.	Black bezel **Catalog Number** Article no.	Std. pack
⊢ = momentary (MO) ⊢ = maintained (MA)					
Illuminated selector switch actuators, thumb-grip, IP66					
Gold-plated bezel → Page 79 Maintained/momentary action can be changed with M22-XC-Y → Engineering, Page 84					
2 positions					
Momentary	⊢ 40°	○	white	**M22-WLK-W** 216812	**M22S-WLK-W** 216813	5 units
	⊢ 40°	●	red	**M22-WLK-R** 216814	**M22S-WLK-R** 216815	
	⊢ 40°	●	green	**M22-WLK-G** 216816	**M22S-WLK-G** 216817	
	⊢ 40°	●	yellow	**M22-WLK-Y** 216818	**M22S-WLK-Y** 216819	
	⊢ 40°	●	blue	**M22-WLK-B** 216820	**M22S-WLK-B** 216821	
maintained	⌊ 60°	○	white	**M22-WRLK-W** 216823	**M22S-WRLK-W** 216824	5 units
	⌊ 60°	●	red	**M22-WRLK-R** 216825	**M22S-WRLK-R** 216826	
	⌊ 60°	●	green	**M22-WRLK-G** 216827	**M22S-WRLK-G** 216828	
	⌊ 60°	●	yellow	**M22-WRLK-Y** 216829	**M22S-WRLK-Y** 216830	
	⌊ 60°	●	blue	**M22-WRLK-B** 216831	**M22S-WRLK-B** 216832	
3 positions					
Momentary	40° ⟨⊢⟩ 40°	○	white	**M22-WLK3-W** 216833	**M22S-WLK3-W** 216834	5 units
	40° ⟨⊢⟩ 40°	●	red	**M22-WLK3-R** 216835	**M22S-WLK3-R** 216836	
	40° ⟨⊢⟩ 40°	●	green	**M22-WLK3-G** 216837	**M22S-WLK3-G** 216838	
	40° ⟨⊢⟩ 40°	●	yellow	**M22-WLK3-Y** 216839	**M22S-WLK3-Y** 216840	
	40° ⟨⊢⟩ 40°	●	blue	**M22-WLK3-B** 216841	**M22S-WLK3-B** 216842	
Maintained	60° ⟨⌊⟩ 60°	○	white	**M22-WRLK3-W** 216843	**M22S-WRLK3-W** 216844	5 units
	60° ⟨⌊⟩ 60°	●	red	**M22-WRLK3-R** 216845	**M22S-WRLK3-R** 216846	
	60° ⟨⌊⟩ 60°	●	green	**M22-WRLK3-G** 216847	**M22S-WRLK3-G** 216848	
	60° ⟨⌊⟩ 60°	●	yellow	**M22-WRLK3-Y** 216849	**M22S-WRLK3-Y** 216850	
	60° ⟨⌊⟩ 60°	●	blue	**M22-WRLK3-B** 216851	**M22S-WRLK3-B** 216852	
	Selectable	Selectable → Notes		**M22-WRLK3-*/*** 217438	**M22S-WRLK3-*/*** 217439	
	V configuration				
	∨ 60°	○	white	**M22-WLKV-W** 284393	**M22S-WLKV-W** 284398	5 units
	∨ 60°	●	red	**M22-WLKV-R** 284394	**M22S-WLKV-R** 284399	
	∨ 60°	●	green	**M22-WLKV-G** 284395	**M22S-WLKV-G** 284540	
	∨ 60°	●	yellow	**M22-WLKV-Y** 284396	**M22S-WLKV-Y** 284543	
	∨ 60°	●	blue	**M22-WLKV-B** 284397	**M22S-WLKV-B** 284544	

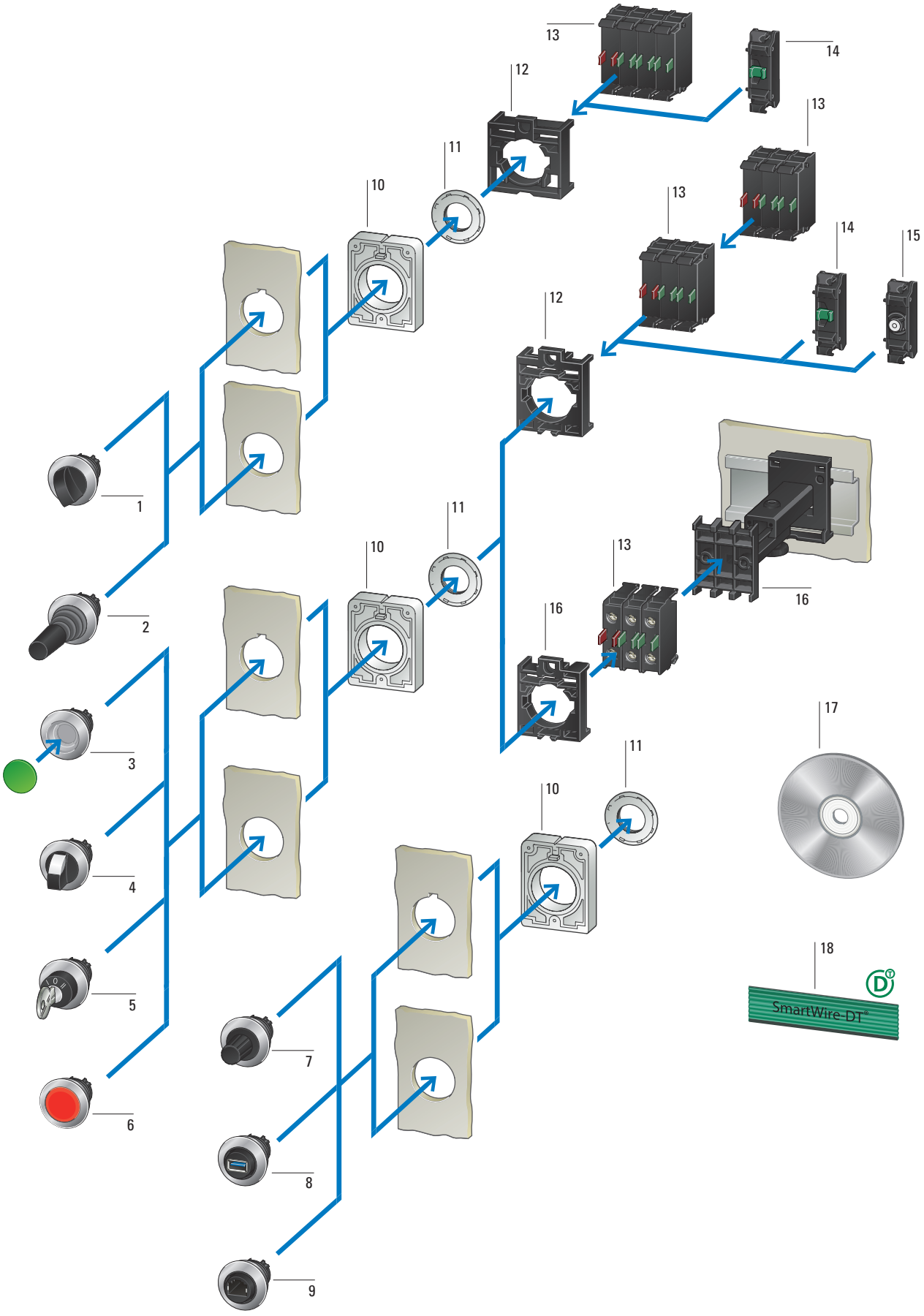
Notes

Example: M22-WRLK3-*/*

1st wildcard * → color: z. B. -W, -R, -G, -Y, -B

2nd wildcard * → Function: MAMO (maintained/momentary) ⟨⌊⟩ or MOMA (momentary/maintained) ⟨⊢⟩

1 System overview



M30 4-way selector switches 1
4 positions
With rotary head or thumb-grip
0-1-0-2-0-3-0-4 maintained action
→ Page 47

M30 joysticks 2
2 or 4 positions
→ Page 51

M30 pushbuttons 3
Momentary and maintained
flush
Colors: white, green, red, yellow, blue, black
Illuminated pushbutton actuators
Colors: white, green, red, yellow, blue, orange
→ Page 46

M30 selector switches 4
2 and 3 positions
With rotary head, thumb-grip
Programmable maintained/ momentary action
Illuminated selector switches with transparent thumb-grip
Colors: white, green, red, yellow, blue
→ Page 47

M30 key-operated buttons 5
For individual lock mechanisms
2 or 3 positions
Programmable momentary/ maintained action and key withdraw
Suitable for master key systems
→ Page 48

M30 indicator lights 6
Colors: white, green, red, yellow, blue, orange
→ Page 51

SmartWire-DT encoders, M30 potentiometers 7
Resistances of 1 kΩ - 1 MΩ
3 individual connections
→ Page 54

M30 panel mount connectors 8
USB 3.0
→ Page 81

M30 panel mount connectors 9
RJ45
→ Page 81

RMQ-AFX 10
Anti-rotation tab
Included with the equipment supplied with M30 front elements

Threaded rings 11
→ Page 80

Mounting adapter 12
For flush mounting
For contact and LED elements
→ Page 55

Contact elements 13
Normally closed contact and normally open contact
Universal contacts suitable for use with electronic devices
Safety function implemented with positive opening as defined in IEC/EN 60947-5-1
Max. 2 levels, each with 3 contact elements
→ Page 55

Flat Rear contact elements 14
Cage Clamp with push-in terminals
→ Page 61

Flat Rear LED elements 15
Cage Clamp with push-in terminals
→ Page 61

telescopic clip 16
For adjusting the depth of rear mounting devices in CI and CI-K enclosures and cabinets
→ Page 79

Labelling with convenience 17
A laser inscription with any text and/ or symbol can be added to all button plates, indicator lights, and add-on legend plates from the RMQ-Silver range of products.
www.eaton.de/config/rmq
Keyword: "Pushbutton Configurator
→ Label Editor function"

SmartWire-DT 18

Product characteristics
- Clip-fit assembly modular system
- Metal bezel, flush
- Mounting hole diameter: 30.5 mm
- Minimum grid dimension: 40 x 50 mm
- Min. degree of protection: IP66
- Up to 6 contacts per mounting location
- For switching differing potentials
- Approved throughout the world

1 Product selection

	Button plate	Metal bezel, titanium design **Catalog Number** Article no.	Metal bezel, stainless steel **Catalog Number** Article no.	Std. pack
	Pushbuttons IP67, IP69K Metal bezel Front dimensions: 36 mm diameter flush			
Momentary		**M30C-FD-S** 182959	**M30I-FD-S** 188084	1 units
		M30C-FD-W 182960	**M30I-FD-W** 188085	
		M30C-FD-R 182918	**M30I-FD-R** 188086	
		M30C-FD-G 182919	**M30I-FD-G** 188087	
		M30C-FD-Y 182920	**M30I-FD-Y** 188088	
		M30C-FD-B 182921	**M30I-FD-B** 188089	
		M30C-FD-GR 182923	**M30I-FD-GR** 188091	
		M30C-FD-S-X0 182961	**M30I-FD-S-X0** 188106	
		M30C-FD-W-X1 182962	**M30I-FD-W-X1** 188055	
		M30C-FD-W-X11 182963	**M30I-FD-W-X11** 188056	
		M30C-FD-R-X0 182939	**M30I-FD-R-X0** 188105	
		M30C-FD-G-X1 182956	**M30I-FD-G-X1** 188100	
		M30C-FD-B-X217 182967	–	
		M30C-FD-GR-X66 182964	–	
Momentary	Without button plate	**M30C-FD-X** 182922	**M30I-FD-X** 188090	1 units
Maintained[1]		**M30C-FDR-S** 182942	**M30I-FDR-S** 188092	1 units
		M30C-FDR-W 182943	**M30I-FDR-W** 188093	
		M30C-FDR-R 182944	**M30I-FDR-R** 188094	
		M30C-FDR-G 182945	**M30I-FDR-G** 188095	
		M30C-FDR-Y 182946	**M30I-FDR-Y** 188096	
		M30C-FDR-B 182947	**M30I-FDR-B** 188097	
		M30C-FDR-S-X0 182937	**M30I-FDR-S-X0** 188103	
		M30C-FDR-W-X1 182938	**M30I-FDR-W-X1** 188104	
		M30C-FDR-R-X0 182936	**M30I-FDR-R-X0** 188102	
		M30C-FDR-G-X1 182931	**M30I-FDR-G-X1** 188101	
Maintained[1]	Without button plate	**M30C-FDR-X** 182948	**M30I-FDR-X** 188098	1 units

Notes [1] Maintained/momentary action can be changed on device

	Function: ▷ = momentary (MO) ⌊ = maintained (MA)	Button plate	Metal bezel, titanium design **Catalog Number** Article no.	Metal bezel, stainless steel **Catalog Number** Article no.	Std. pack	Ordering notes
	Changeover switches					
	IP66 Metal bezel Front dimensions: 36 mm diameter Maintained/momentary action can be changed with M22-XC-Y configuration adapters					
	2 positions					
With rotary head	▷ 40°		**M30C-FW** 187087	**M30I-FW** 188134	1 units	
	⌊ 60°		**M30C-FWR** 187088	**M30I-FWR** 188135		
	⌊ 60°	AUTO HAND 	**M30C-FWR-X91** 187113	**M30I-FWR-X91** 188190		
	⌊ 60°		**M30C-FWR-X92** 187114	**M30I-FWR-X92** 188191		
	⌊ 60°	Customized inscription available	**M30C-FWR-*** 187105	**M30I-FWR-*** 188182		* = With customized Label Editor inscription → Page 84
With thumb-grip	▷ 40°		**M30C-FWK** 187103	**M30I-FWK** 188180	1 units	
	⌊ 60°		**M30C-FWRK** 187109	**M30I-FWRK** 188186		
With thumb-grip	◡ 60°		**M30C-FWKV** 187102	**M30I-FWKV** 188179	1 units	
	3 positions[1]					
With rotary head	40° ◁▷ 40°		**M30C-FW3** 187089	**M30I-FW3** 188136	1 units	
	60° ⌄⌄ 60°		**M30C-FWR3** 187090	**M30I-FWR3** 188137		
	60° ⌄⌄ 60°		**M30C-FWR3-X7** 187107	**M30I-FWR3-X7** 188184		
	60° ⌄⌄ 60°		**M30C-FWR3-X94** 187108	**M30I-FWR3-X94** 188185		
	60° ⌄⌄ 60°	Customized inscription available	**M30C-FWR3-*** 187106	**M30I-FWR3-*** 188183		* = With customized Label Editor inscription → Page 84
With thumb-grip	40° ◁▷ 40°		**M30C-FWK3** 187104	**M30I-FWK3** 188181	1 units	
	60° ⌄⌄ 60°		**M30C-FWRK3** 187110	**M30I-FWRK3** 188187		
	Selectable		**M30C-FWRK3-*** 187111	**M30I-FWRK3-*** 188188		* = MAMO (for 60° ⌄⌄ 40°) or MOMA (for 40° ◁▷ 60°)
	4 positions[2), 3)]					
With rotary head			**M30C-FWR4** 187091	**M30I-FWR4** 188138	1 units	
With thumb-grip			**M30C-FWRK4** 187112	**M30I-FWRK4** 188189	1 units	

Notes

[1] With plunger bridge for middle contact
[2] Not compatible with configuration adapters
[3] Use M22-A4 mounting adapter → Page 79

Label Editor in Pushbutton Configurator → www.eaton.com/config/rmq

1

	Function:	Lock mechanism	Metal bezel, titanium design **Catalog Number** Article no.	Metal bezel, stainless steel **Catalog Number** Article no.	Std. pack
	⊳ = momentary (MO) ⊾ = maintained (MA)				
	Key-operated buttons for individual lock mechanisms				
	IP66 Metal bezel Front dimensions: 36 mm diameter Maintained/momentary action can be changed with M22-XC-Y configuration adapters Key withdraw can be changed with M22-XC-… configuration adapters				
	2 positions				
	⊳ 40°	MS1	**M30C-FWS** 187068	**M30I-FWS** 188169	1 units
	⊾ 60°	MS1	**M30C-FWRS** 187092	**M30I-FWRS** 188139	
	⊾ 50°	MS1	**M30C-FWRS-A1** 187047	**M30I-FWRS-A1** 188149	
	⊾ 60°	MS1	**M30C-FWRS-X95** 187067	**M30I-FWRS-X95** 188168	
	⊳ 40°	Selectable	**M30C-FWS-MS*** 187072	**M30I-FWS-MS*** 188173	
	⊾ 60°	Selectable	**M30C-FWRS-MS*** 187048	**M30I-FWRS-MS*** 188150	
	⊳ 40°	MS2	**M30C-FWS-MS2** 187073	**M30I-FWS-MS2** 188174	
	⊳ 40°	MS3	**M30C-FWS-MS3** 187074	**M30I-FWS-MS3** 188175	
	⊾ 60°	MS3	**M30C-FWRS-MS3** 187053	**M30I-FWRS-MS3** 188155	
	⊾ 60°	MS4	**M30C-FWRS-MS4** 187055	**M30I-FWRS-MS4** 188157	
	⊾ 60°	MS5	**M30C-FWRS-MS5** 187057	**M30I-FWRS-MS5** 188159	
	⊳ 40°	MS5	**M30C-FWS-MS5** 187075	**M30I-FWS-MS5** 188176	
	⊾ 60°	MS6	**M30C-FWRS-MS6** 187059	**M30I-FWRS-MS6** 188161	
	⊾ 60°	MS7	**M30C-FWRS-MS7** 187060	**M30I-FWRS-MS7** 188162	
	⊾ 60°	MS8	**M30C-FWRS-MS8** 187061	**M30I-FWRS-MS8** 188163	
	⊾ 60°	MS10	**M30C-FWRS-MS10** 187051	**M30I-FWRS-MS10** 188153	
	⊾ 50°	Selectable	**M30C-FWRS-MS*-A1** 187049	**M30I-FWRS-MS*-A1** 188151	
	⊾ 50°	MS3	**M30C-FWRS-MS3-A1** 187054	**M30I-FWRS-MS3-A1** 188156	
	⊾ 50°	MS4	**M30C-FWRS-MS4-A1** 187056	**M30I-FWRS-MS4-A1** 188158	
	⊾ 50°	MS5	**M30C-FWRS-MS5-A1** 187058	**M30I-FWRS-MS5-A1** 188160	
	⊾ 50°	MS10	**M30C-FWRS-MS10-A1** 187052	**M30I-FWRS-MS10-A1** 188154	
	⊾ 60°	Selectable	**M30C-FWRS-MS*-A21-*** 187050	**M30I-FWRS-MS*-A21-*** 188152	
	⊾ 60°	Ronis 455	**M30C-FWRS-RS** 187062	**M30I-FWRS-RS** 188164	1 units
	⊾ 60°	Ronis 455	**M30C-FWRS-RS-A1** 187063	**M30I-FWRS-RS-A1** 188165	
	Notes	Label Editor in Pushbutton Configurator → www.eaton.com/config/rmq			

Function:	Lock mechanism	Metal bezel, titanium design **Catalog Number** Article no.	Metal bezel, stainless steel **Catalog Number** Article no.	Std. pack
= momentary (MO) = maintained (MA)				
Key-operated buttons for individual lock mechanisms				
3 positions				
40° 40°	MS1	**M30C-FWS3** 187069	**M30I-FWS3** 188170	1 units
40° 40°	Selectable	**M30C-FWS3-MS*** 187070	**M30I-FWS3-MS*** 188171	
60° 60°	MS1	**M30C-FWRS3** 187094	**M30I-FWRS3** 188141	
60° 60°	Selectable	**M30C-FWRS3-MS*-A*** 187096	**M30I-FWRS3-MS*-A*** 188143	
60° 60°	MS1	**M30C-FWRS3-A*** 187095	**M30I-FWRS3-A*** 188142	
60° 60°	MS2	–	**M30I-FWRS3-MS2** 197888	
60° 60°	MS3	**M30C-FWRS3-MS3** 187097	**M30I-FWRS3-MS3** 188144	
60° 60°	MS4	–	**M30I-FWRS3-MS4** 197889	
60° 60°	MS5	–	**M30I-FWRS3-MS5** 197890	
60° 60°	MS6	–	**M30I-FWRS3-MS6** 197891	
60° 60°	MS7	–	**M30I-FWRS3-MS7** 197892	
60° 60°	MS8	–	**M30I-FWRS3-MS8** 197893	
60° 60°	Ronis 455	**M30C-FWRS3-RS** 187098	**M30I-FWRS3-RS** 188145	1 units
60° 60°	Ronis 455	**M30C-FWRS3-RS-A1** 187099	**M30I-FWRS3-RS-A1** 188146	
2 or 3 positions				
	Selectable	**M30C-FWRS*-MS*-*** 187093	**M30I-FWRS*-MS*-*** 188140	1 units

Notes

MS*: * = MS1, …, MS20; (enter lock mechanism number in the part no.)

A*: * = 1, action: , withdrawable in position 0

* = 2, action: , withdrawable in positions I, 0

* = 3, action: , withdrawable in positions 0, II

* = 4, action: , withdrawable in positions I, 0

* = 5, action: , withdrawable in position 0

* = 6, action: , withdrawable in positions 0, II

* = 7, action: , withdrawable in position 0

* = 10, action: , withdrawable in positions I, II (not for item M30C-FWRS3-A*)

-*:* = Customized inscription with Label Editor; replace * with the automatically assigned filename () or "blank" if no inscription is required

Master key systems: Delivery will take 4 to 6 weeks after the order is received at the factory

To order, use form MZ047002ZU (formerly FO276) → Data sheet in online catalog

FWRS*:2 or 3 positions (action and key withdraw as M30-FWRS or M30-FWRS3)

1

Function:	Lock mechanism	Metal bezel, titanium design **Catalog Number** Article no.	Metal bezel, stainless steel **Catalog Number** Article no.	Std. pack
⊳ = momentary (MO) ⌊ = maintained (MA)				
Key-operated buttons for master key systems				
Metal bezel IP66 Front dimensions: 36 mm diameter To order, use form MZ047002ZU (formerly FO276) → Data sheet in online catalog Delivery will take 4 to 6 weeks after the order is received at the factory				
2 positions				
⊳ 40°		**M30C-FWS-SA(*)-*** 187076	**M30I-FWS-SA(*)-*** 188177	1 units
⌊ 60°		**M30C-FWRS-SA(*)-*** 187064	**M30I-FWRS-SA(*)-*** 188166	
⌊ 60°		**M30C-FWRS-SA(*)-*-A8** 187066	**M30I-FWRS-SA(*)-*-A8** 188167	
3 positions				
40° ⟨⇓⟩ 40°		**M30C-FWS3-SA(*)-*** 187071	**M30I-FWS3-SA(*)-*** 188172	1 units
60° ⇓ 60°		**M30C-FWRS3-SA(*)-*** 187100	**M30I-FWRS3-SA(*)-*** 188147	
60° ⇓ 60°		**M30C-FWRS3-SA(*)-*-A9** 187101	**M30I-FWRS3-SA(*)-*-A9** 188148	

Notes

MS*: * = MS1, …, MS20; (enter lock mechanism number in the part no.)

A*: * = 1, action: ⇓, withdrawable in position 0

* = 2, action: ⇓, withdrawable in positions I, 0

* = 3, action: ⇓, withdrawable in positions 0, II

* = 4, action: ⇓⊳, withdrawable in positions I, 0

* = 5, action: ⇓⊳, withdrawable in position 0

* = 6, action: ⟨⇓⟩, withdrawable in positions 0, II

* = 7, action: ⟨⇓⟩, withdrawable in position 0

* = 10, action: ⇓⌊, withdrawable in positions I, II (not for item M30C-FWRS3-A*)

-*:* = Customized inscription with Label Editor; replace * with the automatically assigned filename () or "blank" if no inscription is required
Master key systems: Delivery will take 4 to 6 weeks after the order is received at the factory
To order, use form MZ047002ZU (formerly FO276) → Data sheet in online catalog

FWRS*:2 or 3 positions (action and key withdraw as M30-FWRS or M30-FWRS3)

Joysticks

With one operating point per operating direction
With metal shaft
IP65
Metal bezel
Front dimensions: 36 mm diameter

	Function: = momentary (MO) = maintained (MA)	Metal bezel, titanium design Catalog Number Article no.	Metal bezel, stainless steel Catalog Number Article no.	Std. pack
2 positions	—	**M30C-FWRJS2H** 187078	**M30I-FWRJS2H** 188082	1 units
2 positions	|	**M30C-FWRJS2V** 187065	**M30I-FWRJS2V** 188083	
4 positions		**M30C-FWJS4** 187077	**M30I-FWJS4** 188178	
2 positions		**M30C-FWJS2H** 197526		
2 positions		**M30C-FWJS2V** 197527		
This joystick is combined with M22-K10 normal N/O and M22-K10P early-make contacts.				
4 positions 2 operating points per operating direction		**M30C-FWJS4-2P** 199143		1 units

Indicator lights

IP67, IP69K
Metal bezel
Front dimensions: 36 mm diameter

	Lens			
	○	**M30C-FL-W** 183287	**M30I-FL-W** 188048	1 units
		M30C-FL-R 183282	**M30I-FL-R** 188043	
		M30C-FL-G 183283	**M30I-FL-G** 188044	
		M30C-FL-Y 183285	**M30I-FL-Y** 188046	
		M30C-FL-B 183284	**M30I-FL-B** 188045	
		M30C-FL-A 183286	**M30I-FL-A** 188047	
* = With customized Label Editor inscription[1)]	○	**M30C-FL-W-*** 183293	**M30I-FL-W-*** 188054	
		M30C-FL-R-* 183288	**M30I-FL-R-*** 188049	
		M30C-FL-G-* 183289	**M30I-FL-G-*** 188050	
		M30C-FL-Y-* 183291	**M30I-FL-Y-*** 188052	
		M30C-FL-B-* 183290	**M30I-FL-B-*** 188051	
		M30C-FL-A-* 183292	**M30I-FL-A-*** 188053	

Notes [1)] Label Editor in Pushbutton Configurator → www.eaton.com/config/rmq

	Button plate	Metal bezel, titanium design **Catalog Number** Article no.	Metal bezel, stainless steel **Catalog Number** Article no.	Std. pack
	Illuminated pushbutton actuators IP67, IP69K Metal bezel Front dimensions: 36 mm diameter Flush			
Momentary	○	**M30C-FDL-W** 182925	**M30I-FDL-W** 188058	1 units
	●	**M30C-FDL-R** 182926	**M30I-FDL-R** 188059	
	●	**M30C-FDL-G** 182927	**M30I-FDL-G** 188060	
	●	**M30C-FDL-Y** 182928	**M30I-FDL-Y** 188061	
	●	**M30C-FDL-B** 182940	**M30I-FDL-B** 188062	
	●	**M30C-FDL-A** 182924	**M30I-FDL-A** 188063	
	○	**M30C-FDL-W-X0** 182929	**M30I-FDL-W-X0** 188034	
	○	**M30C-FDL-W-X1** 182930	**M30I-FDL-W-X1** 188035	
	◇	**M30C-FDL-W-X100** 182966	**M30I-FDL-W-X100** 188041	
	●	**M30C-FDL-R-X0** 182958	**M30I-FDL-R-X0** 188033	
	●	**M30C-FDL-G-X1** 182957	**M30I-FDL-G-X1** 188032	
	▭	**M30C-FDL-G-X32** 182968	**M30I-FDL-G-X32** 188042	
	⏻	**M30C-FDL-Y-X162** 182965	**M30I-FDL-Y-X162** 188040	
Momentary	Without button plate	**M30C-FDL-X** 182941	**M30I-FDL-X** 188064	1 units
Maintained[1]	○	**M30C-FDRL-W** 182950	**M30I-FDRL-W** 188065	1 units
	●	**M30C-FDRL-R** 182951	**M30I-FDRL-R** 188066	
	●	**M30C-FDRL-G** 182952	**M30I-FDRL-G** 188027	
	●	**M30C-FDRL-Y** 182953	**M30I-FDRL-Y** 188028	
	●	**M30C-FDRL-B** 182954	**M30I-FDRL-B** 188029	
	●	**M30C-FDRL-A** 182949	**M30I-FDRL-A** 188030	
	○	**M30C-FDRL-W-X0** 182934	**M30I-FDRL-W-X0** 188038	
	○	**M30C-FDRL-W-X1** 182935	**M30I-FDRL-W-X1** 188039	
	●	**M30C-FDRL-R-X0** 182933	**M30I-FDRL-R-X0** 188037	
	●	**M30C-FDRL-G-X1** 182932	**M30I-FDRL-G-X1** 188036	
Maintained[1]	Without button plate	**M30C-FDRL-X** 182955	**M30I-FDRL-X** 188031	1 units

Notes [1] Maintained/momentary action can be changed on device

Function: = momentary (MO) = maintained (MA)	Thumb-grip	Metal bezel, titanium design **Catalog Number** Article no.	Metal bezel, stainless steel **Catalog Number** Article no.	Std. pack
Illuminated selector switches				
IP66 With thumb-grip Metal bezel Front dimensions: 36 mm diameter Maintained/momentary action can be changed with M22-XC-Y configuration adapters				
2 positions				
40°	○	**M30C-FWLK-W** 187128	**M30I-FWLK-W** 188069	1 units
60°	○	**M30C-FWRLK-W** 187026	**M30I-FWRLK-W** 188080	
40°	red	**M30C-FWLK-R** 187122	**M30I-FWLK-R** 188199	
60°	red	**M30C-FWRLK-R** 187025	**M30I-FWRLK-R** 188079	
40°	green	**M30C-FWLK-G** 187121	**M30I-FWLK-G** 188198	
60°	green	**M30C-FWRLK-G** 187024	**M30I-FWRLK-G** 188078	
40°	yellow	**M30C-FWLK-Y** 187129	**M30I-FWLK-Y** 188070	
60°	yellow	**M30C-FWRLK-Y** 187027	**M30I-FWRLK-Y** 188081	
40°	blue	**M30C-FWLK-B** 187120	**M30I-FWLK-B** 188197	
60°	blue	**M30C-FWRLK-B** 187023	**M30I-FWRLK-B** 188077	
2 positions (V configuration)				
60°	○	**M30C-FWLKV-W** 187126	**M30I-FWLKV-W** 188067	1 units
60°	red	**M30C-FWLKV-R** 187125	**M30I-FWLKV-R** 188202	
60°	green	**M30C-FWLKV-G** 187124	**M30I-FWLKV-G** 188201	
60°	yellow	**M30C-FWLKV-Y** 187127	**M30I-FWLKV-Y** 188068	
60°	blue	**M30C-FWLKV-B** 187123	**M30I-FWLKV-B** 188200	
3 positions				
40° 40°	○	**M30C-FWLK3-W** 187118	**M30I-FWLK3-W** 188195	1 units
60° 60°	○	**M30C-FWRLK3-W** 187134	**M30I-FWRLK3-W** 188075	
40° 40°	red	**M30C-FWLK3-R** 187117	**M30I-FWLK3-R** 188194	
60° 60°	red	**M30C-FWRLK3-R** 187133	**M30I-FWRLK3-R** 188074	
40° 40°	green	**M30C-FWLK3-G** 187116	**M30I-FWLK3-G** 188193	
60° 60°	green	**M30C-FWRLK3-G** 187132	**M30I-FWRLK3-G** 188073	
40° 40°	yellow	**M30C-FWLK3-Y** 187119	**M30I-FWLK3-Y** 188196	
60° 60°	yellow	**M30C-FWRLK3-Y** 187022	**M30I-FWRLK3-Y** 188076	
40° 40°	blue	**M30C-FWLK3-B** 187115	**M30I-FWLK3-B** 188192	
60° 60°	blue	**M30C-FWRLK3-B** 187131	**M30I-FWRLK3-B** 188072	
Selectable	Selectable	**M30C-FWRLK3-*/*[1)]** 187130	**M30I-FWRLK3-*/*** 188071	

Notes: [1)] 1st wildcard * → Color: e.g.. -W, -R, -G, -Y, -B
2nd wildcard * → Function: MAMO (maintained/momentary) or MOMA (momentary/maintained)

1

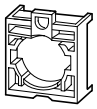
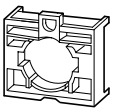
	Resistance R kΩ	Scale/inscription	Contact sequence	Metal bezel, titanium design **Catalog Number** Article no.	Metal bezel, stainless steel **Catalog Number** Article no.	Std. pack
	Potentiometers, IP66 3 individual screw connections Accuracy of resistance value: ±10% (linear) Metal bezel Rated power P = 0.5 W					
	1	Standard scale/inscription		**M30C-FR1K** 187029	**M30I-FR1K** 188108	1 units
	4.7			**M30C-FR4K7** 187030	**M30I-FR4K7** 188109	
	10			**M30C-FR10K** 187035	**M30I-FR10K** 188114	
	47			**M30C-FR47K** 187031	**M30I-FR47K** 188110	
	100			**M30C-FR100K** 187032	**M30I-FR100K** 188111	
	470			**M30C-FR470K** 187033	**M30I-FR470K** 188112	
	2.2			**M30C-FR2K2** 187034	**M30I-FR2K2** 188113	
	22			**M30C-FR22K** 187036	**M30I-FR22K** 188115	
	1000			**M30C-FR1M** 187037	**M30I-FR1M** 188116	
	1	without scale/inscription		**M30C-FR1K-BLANK** 187038	**M30I-FR1K-BLANK** 188117	
	2.2			**M30C-FR2K2-BLANK** 187039	**M30I-FR2K2-BLANK** 188118	
	4.7			**M30C-FR4K7-BLANK** 187040	**M30I-FR4K7-BLANK** 188119	
	10			**M30C-FR10K-BLANK** 187041	**M30I-FR10K-BLANK** 188120	
	22			**M30C-FR22K-BLANK** 187042	**M30I-FR22K-BLANK** 188121	
	47			**M30C-FR47K-BLANK** 187043	**M30I-FR47K-BLANK** 188122	
	100			**M30C-FR100K-BLANK** 187044	**M30I-FR100K-BLANK** 188123	
	470			**M30C-FR470K-BLANK** 187045	**M30I-FR470K-BLANK** 188124	
	1000			**M30C-FR1M-BLANK** 187046	**M30I-FR1M-BLANK** 188125	
	Selectable[1]	Selectable[2]		**M30C-FR*-*** 187081	**M30I-FR*-*** 188128	
	SmartWire-DT potentiometers, IP65 only in conjunction with M22-SWD-R function element					
	–	Silver bezel M22		**M22-R-SWD** 179292	–	1 units
	–	Metal bezel Flat Front		**M30C-FR-SWD** 187080	**M30I-FR-SWD** 188127	1 units
	SmartWire-DT encoders, IP65 With actuation function Only in conjunction with M22-SWD-INC function element					
	–	Silver bezel M22	–	**M22-INC-SWD** 179981	–	1 units
	–	Metal bezel Flat Front	–	**M30C-FINC-SWD** 187079	**M30I-FINC-SWD** 188126	1 units

Notes:

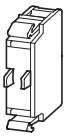
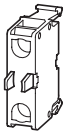
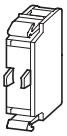
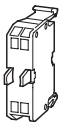
[1] Wildcard: Available resistance values:
470 = 470 Ω, 1K = 1 kΩ, 2K2 = 2.2 kΩ, 4K7 = 4.7 kΩ, 10K = 10 kΩ,
22K = 22 kΩ, 47K = 47 kΩ, 100K = 100 kΩ, 470K = 470 kΩ, 1M = 1 MΩ

[2] Wildcard: Standard scale/inscription: X1000 Without scale/inscription: "-"

Mounting adapter

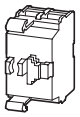
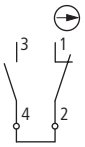
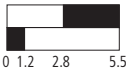
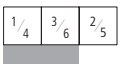
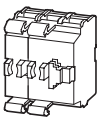
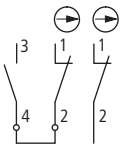
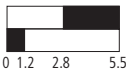
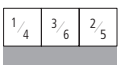
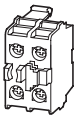
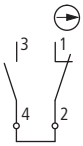
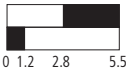
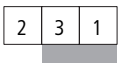
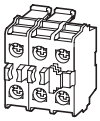
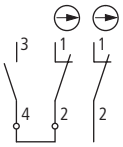
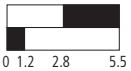
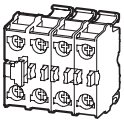
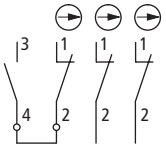
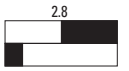
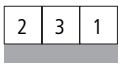
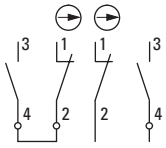
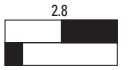
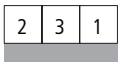
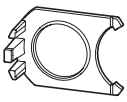
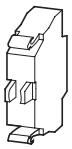
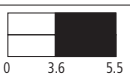
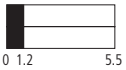
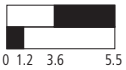
		Configuration	Catalog Number Article no.	Std. pack
	Mounting adapters (front mounting) for 3 contact/LED elements For M22-(C)K... contact elements and M22-(C)LED... LED elements. Sequence numbers on mounting adapter	1/4 3/6 2/5	**M22-A** 216374	50 units
			M22-A-GVP 216375	500 units
	Mounting adapter (front mounting) for four (4(contact elements, can be used with M22-WR4, M22-D4, M22-WJ…, M22-WRJ… For M22-(C)K contact elements	3 2 4 1	**M22-A4** 279437	10 units

Contact elements

	Terminal type	Contact configuration: ⊖ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1	Contact sequence	Contact travel diagram, stroke in connection with front element	Configuration	Catalog Number Article no.	Std. pack
Front mounting 	Screw terminals	1 N/O	3 4	0 2.8 5.5	1/4 3/6 2/5	**M22-K10** 216376	20 units
		1 N/O				**M22-K10-GVP** 216377	500 units
		1 N/O	7 8	0 1.8 5.5		**M22-K10P** 110835	20 units
		1 N/C	1 2	0 1.2 5.5	1/4 3/6 2/5	**M22-K01** 216378	20 units
		1 N/C				**M22-K01-GVP** 216379	500 units
		1 N/C	5 6	0 2.8 5.5		**M22-K01D** 262165	20 units
		1 N/C	1 2	0 1.2 5.5	1/4 3/6 2/5	**M22-K01PV6**[1] 150643	20 units
Base mounting 	Screw terminals	1 N/O	3 4	0 2.8 5.5	2 3 1	**M22-KC10** 216380	20 units
		1 N/O				**M22-KC10-GVP** 216381	200 units
		1 N/C	1 2	0 1.2 5.5	2 3 1	**M22-KC01** 216382	20 units
		1 N/C				**M22-KC01-GVP** 216383	200 units
Front mounting 	Spring-clamp terminals	1 N/O	3 4	0 2.8 5.5	1/4 3/6 2/5	**M22-CK10** 216384	20 units
		1 N/O				**M22-CK10-GVP** 199867	500 units
		1 N/C	1 2	0 1.2 5.5	1/4 3/6 2/5	**M22-CK01** 216385	20 units
		1 N/C				**M22-CK01-GVP** 199866	500 units
		1 N/C	5 6	0 2.8 5.5		**M22-CK01D** 262510	20 units
Base mounting 	Spring-clamp terminals	1 N/O	3 4	0 2.8 5.5	2 3 1	**M22-CKC10** 216386	20 units
		1 N/O				**M22-CKC10-GVP** 199881	100 units
		1 N/C	1 2	0 1.2 5.5	2 3 1	**M22-CKC01** 216387	20 units

Notes [1] Only for M22-PV... if there are more than four contact elements → Exclusively use a maximum of six M22-K01PV6 units.

1

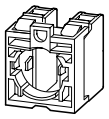
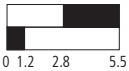
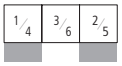
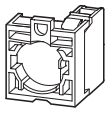
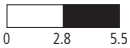
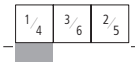
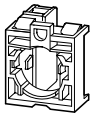
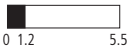
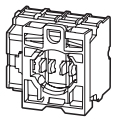
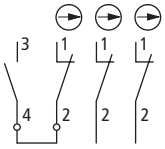
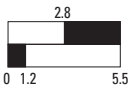
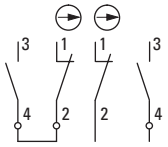
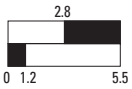
	Terminal type	Contact configuration: ⊖ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1	Contact sequence	Contact travel diagram, stroke in connection with front element	Configuration	Catalog Number Article no.	Std. pack
Self-monitoring contact elements							
N/O is actuated when mounted on the pushbutton.							
Front mounting 	Screw terminals	1 N/O 1 N/C				**M22-K01SMC10** 121472	1 units
		1 N/O 2 N/C				**M22-K02SMC10** 121474	
Base mounting 	Screw terminals	1 N/O 1 N/C				**M22-KC01SMC10** 121473	1 units
		1 N/O 2 N/C				**M22-KC02SMC10** 121720	
		1 N/O 3 N/C				**M22-KC03SMC10**[1] 173028	
		2 N/O 2 N/C				**M22-KC12SMC10**[1] 173029	
Signal contact actuator for SMC 							
For actuating the N/O contact in self-monitoring M22-…03(12)SMC10 contact elements Required for two-channel version with additional signaling (auxiliary) contact							
						M22-XSMC 173030	10 units
Double contact elements 							
Front mounting. When using M22-PV… emergency stop buttons, max. 2 contact elements = 4 N/C / N/O							
	Cage Clamp	2 N/O			–	**M22-CK20** 107898	20 units
						M22-CK20-GVP 199880	100 units
		2 N/C			–	**M22-CK02** 107899	20 units
		1 N/O 1 N/C ⊖			–	**M22-CK11** 107940	

Notes

[1] The N/O is actuated when mounted with M22-XSMC.

Configuration of mounting adapter with sequence numbers as defined in EN 50013

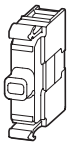
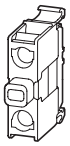
x = Sequence number on mounting adapter
y = Function number on contact element

	Terminal type	Contact configuration: ⊖ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1	Contact sequence	Contact travel diagram, stroke in connection with front element	Configuration	Catalog Number Article no.	Std. pack
	Complete modules						
	Combination of contact element with screw terminals and mounting adapter, front mounting						
	Screw terminals	1 N/O 1 N/C ⊖				**M22-AK11** 216505	5 units
						M22-AK11-GVP500 173974	500 units
		1 N/O				**M22-AK10** 216504	5 units
						M22-AK10-GVP500 171881	500 units
		1 N/C				**M22-AK01** 216503	5 units
						M22-AK01-GVP500 171882	500 units
	Combination of contact element and self-monitoring contact element M22-K01SMC10 with screw terminals, M22-A mounting adapter, and M22-XSMC signal contact actuator. The N/O in the self-monitoring contact element is actuated when mounted with M22-XSMC.						
		1 N/O 3 N/C ⊖			–	**M22-AK03SMC10** 173026	1 units
		2 N/O 2 N/C ⊖			–	**M22-AK12SMC10** 173027	1 units

Notes Configuration of mounting adapter with sequence numbers as defined in EN 50013

x = Sequence number on mounting adapter
y = Function number on contact element

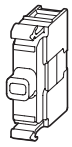
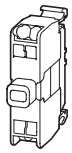
1

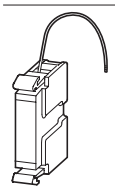
	Rated operating voltage U_e V	Rated operational current I_e mA	Power consumption P W	Color	Catalog Number Article no.	Std. pack
LED elements with screw terminals						
→ Page 85						
Front mounting 	12 - 30 V AC/DC	8 - 15	0.26 at 24 V	○	**M22-LED-W** 216557	20 units
				●	**M22-LED-R** 216558	
				●	**M22-LED-G** 216559	
				●	**M22-LED-B** 218057	
	85 - 264 V AC, 50/60 Hz	5 - 15	0.33 at 230 V	○	**M22-LED230-W** 216563	20 units
				●	**M22-LED230-R** 216564	
				●	**M22-LED230-G** 216565	
				●	**M22-LED230-B** 218059	
	85 - 264 V AC, 50/60 Hz	5 - 15	0.33 at 230 V	○	**M22-LED230TA-W**[1] 182905	20 units
				●	**M22-LED230TA-R**[1] 182906	
				●	**M22-LED230TA-G**[1] 182907	
				●	**M22-LED230TA-B**[1] 182908	
	207 - 264 V AC, 50/60 Hz	12 - 15	0.33 at 230 V	–	**M22-LED230H-***[2] 106521	20 units
Base mounting 	12 - 30 V AC/DC	8 - 15	0.26 at 24 V	○	**M22-LEDC-W** 216560	20 units
				●	**M22-LEDC-R** 216561	
				●	**M22-LEDC-G** 216562	
				●	**M22-LEDC-B** 218058	
	85 - 264 V AC, 50/60 Hz	5 - 15	0.33 at 230 V	○	**M22-LEDC230-W** 216566	20 units
				●	**M22-LEDC230-R** 216567	
				●	**M22-LEDC230-G** 216568	
				●	**M22-LEDC230-B** 218060	
	207 - 264 V AC, 50/60 Hz	12 - 15	0.33 at 230 V	–	**M22-LEDC230H-***[2] 106522	20 units

Notes

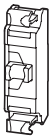
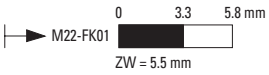
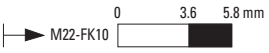
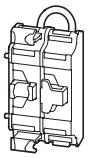
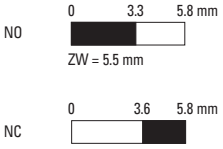
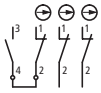
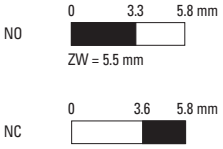
[1] With interference signal protection
[2] Replace * with color:
W = White, R = Red, G = Green, B = Blue

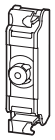
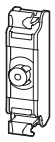
For pushbuttons, indicator lights, illuminated pushbutton actuators, and illuminated selector switches, the following applies:
M22...-R only in combination with M22-LED...-R
M22...-G only in combination with M22-LED...-G
M22...-W only in combination with M22-LED...-W
M22...-Y only in combination with M22-LED...-W
M22…-B in combination with M22-LED…-W or M22-LED…-B

	Rated operating voltage U_e V	Rated operational current I_e mA	Power consumption P W	Color	Catalog Number Article no.	Std. pack
LED elements with Cage Clamp						
→ Page 85 Cage Clamp is a registered trademark of Wago Kontakttechnik GmbH, Minden, Germany						
Front mounting 	12 - 30 V AC/DC	8 - 15	0.26 at 24 V	○	**M22-CLED-W** 216569	20 units
					M22-CLED-W-GVP 199868	300 units
				●	**M22-CLED-R** 216570	20 units
				●	**M22-CLED-G** 216571	
				●	**M22-CLED-B** 218061	
	85 - 264 V AC, 50/60 Hz	5 - 15	0.33 at 230 V	○	**M22-CLED230-W** 216575	20 units
				●	**M22-CLED230-R** 216576	
				●	**M22-CLED230-G** 216577	
				●	**M22-CLED230-B** 218063	
Base mounting 	12 - 30 V AC/DC	8 - 15	0.26 at 24 V	○	**M22-CLEDC-W** 216572	20 units
				●	**M22-CLEDC-R** 216573	
				●	**M22-CLEDC-G** 216574	
				●	**M22-CLEDC-B** 218062	
	85 - 264 V AC, 50/60 Hz	5 - 15	0.33 at 230 V	○	**M22-CLEDC230-W** 216578	20 units
				●	**M22-CLEDC230-R** 216579	
				●	**M22-CLEDC230-G** 216580	
				●	**M22-CLEDC230-B** 218064	
Notes	For pushbuttons, indicator lights, illuminated pushbutton actuators, and illuminated selector switches, the following applies: M22...-R only in combination with M22-LED...-R M22...-G only in combination with M22-LED...-G M22...-W only in combination with M22-LED...-W M22...-Y only in combination with M22-LED...-W M22…-B in combination with M22-LED…-W or M22-LED…-B					

			Catalog Number Article no.	Std. pack
	**LED series elements with screw terminals**			
	Front and base mounting → Page 85			
	LED resistor element For connecting 12 - 30 V LED elements	42 - 60 V AC/DC	**M22-XLED60** 231078	10 units
		220 V AC/DC	**M22-XLED220**[1] 271541	
	LED test element For decoupled function test (lamp test)	12 - 240 V AC/DC	**M22-XLED-T** 231079	
		85 - 264 V AC	**M22-XLED230-T** 231080	
	Notes	[1] Maximum ambient temperature: –25°C to +55°C The LED's brightness will be reduced.		

1

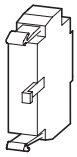
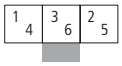
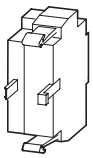
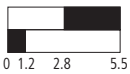
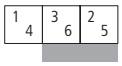
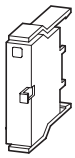
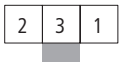
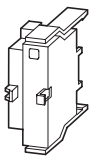
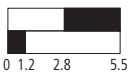
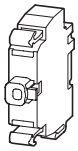
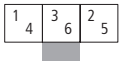
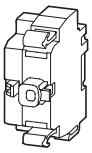
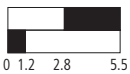
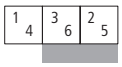
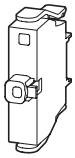
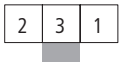
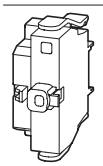
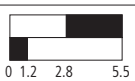
	Terminal type	Contact configuration: ⊖ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1	Contact sequence	Contact travel diagram, stroke in connection with front element	Catalog Number Article no.	Std. pack
Front mounting 						
Contact elements (Flat Rear with Cage Clamp, push-in)						
→ Page 85 Cage Clamp is a registered trademark of Wago Kontakttechnik GmbH, Minden, Germany						
	Cage Clamp, push-in	1 N/C			**M22-FK01** 180791	20 units
		1 N/O			**M22-FK10** 180792	
Front mounting 						
Self-monitoring contact element (Flat Rear with Cage Clamp, push-in)						
N/O is actuated when mounted on the pushbutton.						
	Cage Clamp, push-in	1 N/C			**M22-FK01SMC10** 180793	1 units
Complete assembly (Flat Rear with Cage Clamp, push-in)						
Combination of contact element and self-monitoring contact element M22-FK01SMC10, M22-A mounting adapter, and M22-XSMC signal contact actuator. The N/O in the self-monitoring contact element is actuated when mounted with M22-XSMC.						
	Cage Clamp, push-in	3 N/C			**M22-AFK03SMC10** 180794	1 units

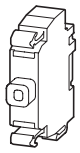
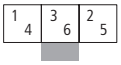
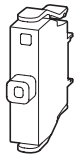
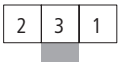
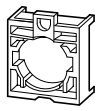
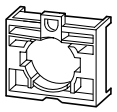
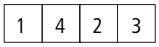
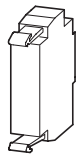
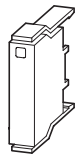
	Rated operating voltage	Rated Current	Power consumption	Color	**Catalog Number** Article no.	Std. pack
	U_e	I_e	P			
	V	mA	W			
Front mounting	**LED elements (Flat Rear with Cage Clamp, push-in)**					
						
	12 - 30 V AC/DC, 50/60 Hz (standard: 24 V AC/DC)	8 - 15	0.26 at 24 V	○	**M22-FLED-W** 180795	20 units
	12 - 30 V AC/DC, 50/60 Hz (standard: 24 V AC/DC)	8 - 15	0.26 at 24 V	●	**M22-FLED-B** 180796	
	12 - 30 V AC/DC, 50/60 Hz (standard: 24 V AC/DC)	8 - 15	0.26 at 24 V	●	**M22-FLED-G** 180797	
	12 - 30 V AC/DC, 50/60 Hz (standard: 24 V AC/DC)	8 - 15	0.26 at 24 V	●	**M22-FLED-R** 180798	
	24 V DC	10 - 15	0.36 at 24 V	● ●	**M22-FLED-RG**[1] 180799	
	24 V DC	8 - 15	0.36 at 24 V	●	**M22-FLED-RGB**[1] 180800	
Front mounting	**High Performance LED elements (Flat Rear with Cage Clamp, push-in, especially bright)**					
	Clear signaling even under intense lighting conditions.					
	18 - 30 V DC	10 - 23	0.43	○	**M22-FLED-W-HP** 197141	20 units
	18 - 30 V DC	10 - 23	0.43	●	**M22-FLED-B-HP** 197145	
	18 - 30 V DC	10 - 23	0.43	●	**M22-FLED-G-HP** 197143	
	18 - 30 V DC	10 - 23	0.43	●	**M22-FLED-R-HP** 197142	

Notes

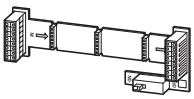
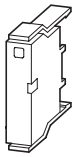
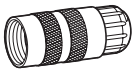
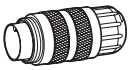
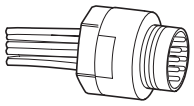
[1]

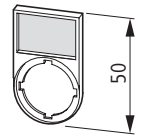
		Terminal color			
		X1	X2	X3	X4
		+R	+G	+B	GND
M22-FLED-RG	red	x			x
	green		x		x
	yellow	x	x		x
M22-FLED-RGB	red	x			x
	green		x		x
	yellow	x	x		x
	white	x	x	x	x
	blue			x	x
	violet	x		x	x
	turquoise		x	x	x

	Number of contacts	Contact sequence	Contact travel diagram, stroke in connection with front element	Configuration	LED color	**Catalog Number** Article no.	Std. pack
Function elements							
Front mounting 	1				No LED	**M22-SWD-K11** 115964	20 units
	2				No LED	**M22-SWD-K22** 115965	10 units
Base mounting 	1				No LED	**M22-SWD-KC11** 115995	20 units
	2				No LED	**M22-SWD-KC22** 115996	10 units
Front mounting 	1				○	**M22-SWD-K11LED-W** 115972	20 units
					●	**M22-SWD-K11LED-B** 115973	
					●	**M22-SWD-K11LED-G** 115974	
					●	**M22-SWD-K11LED-R** 115975	
	2				○	**M22-SWD-K22LED-W** 115978	10 units
					●	**M22-SWD-K22LED-B** 115979	
					●	**M22-SWD-K22LED-G** 115980	
					●	**M22-SWD-K22LED-R** 115981	
Base mounting 	1				○	**M22-SWD-K11LEDC-W** 116003	20 units
					●	**M22-SWD-K11LEDC-B** 116004	
					●	**M22-SWD-K11LEDC-G** 116005	
					●	**M22-SWD-K11LEDC-R** 116006	
	2				○	**M22-SWD-K22LEDC-W** 116009	10 units
					●	**M22-SWD-K22LEDC-B** 116010	
					●	**M22-SWD-K22LEDC-G** 116011	
					●	**M22-SWD-K22LEDC-R** 116012	

		Configuration	LED color	Catalog Number Article no.	Std. pack
	LED elements				
Front mounting 			○	**M22-SWD-LED-W** 115966	20 units
			●	**M22-SWD-LED-B** 115967	
			●	**M22-SWD-LED-G** 115968	
			●	**M22-SWD-LED-R** 115969	
	Function element, LED-RGB front LED element, for combination with RMQ-Titan operating elements M22-...			**M22-SWD-LED-RGB** 197576	20 units
Base mounting 			○	**M22-SWD-LEDC-W** 115997	20 units
			●	**M22-SWD-LEDC-B** 115998	
			●	**M22-SWD-LEDC-G** 115999	
			●	**M22-SWD-LEDC-R** 116000	
	Function element, LED-RGB base LED element, for combination with RMQ-Titan operating elements M22-...			**M22-SWD-LEDC-RGB** 198598	20 units
	Mounting adapter				
Front mounting 	For 1 M22-SWD-K… function element or M22-SWD-LED… LED element In addition, 1 or 2 M22-K.. contact elements possible Sequence number on mounting adapter		–	**M22-A** 216374	50 units
	For 2 M22-SWD-K22… function elements For use with M22-WR4, M22-WRJ4, M22-D4 in conjunction with M22-(SWD)-K		–	**M22-SWD-A4** 116016	10 units
	IP20 universal modules				
Front mounting 	For SmartWire-DT modules that have been configured as part of the SmartWire-DT system but have not yet been installed on the SWD ribbon cable			**M22-SWD-NOP** 147637	20 units
Base fixing 	For SmartWire-DT modules that have been configured as part of the SmartWire-DT system but have not yet been installed on the M22-SWD-I… printed circuit board			**M22-SWD-NOPC** 147638	20 units
	Function element, SWD potentiometer, front mounting only in conjunction with M22-R-SWD front element			**M22-SWD-R** 179293	1 units
	M22-SWD potentiometer complete, front mounting Potentiometer, mounting adaptor, SmartWire-DT function element			**M22-R-SWD-R** 179294	1 units
	Function element, SWD encoder, front mounting only in conjunction with M22-INC-SWD front element			**M22-SWD-INC** 179982	1 units
	M22-SWD encoder complete, front mount Encoder, mounting adaptor, SmartWire-DT function element			**M22-INC-SWD-INC** 179983	1 units

1

		Catalog Number Article no.	Std. pack
	**Printed circuit boards** PCBs for M22-I.. surface mounting enclosure for housing M22-SWD...K base mounting function elements Integrated, connectable SmartWire-DT bus termination resistor		
	Number of mounting locations: 1	**M22-SWD-I1-LP01** 115990	1 units
	Number of mounting locations: 2	**M22-SWD-I2-LP01** 115991	
	Number of mounting locations: 3	**M22-SWD-I3-LP01** 115992	
	Number of mounting locations: 4	**M22-SWD-I4-LP01** 115993	
	Number of mounting locations: 6	**M22-SWD-I6-LP01** 115994	
	**Link** Used to link open mounting locations on device plugs or M22-SWD-I PCB		
	Link for unused mounting locations on M22-SWD-I...LP (base mounting)	**M22-SWD-SEL8-10** 116698	5 units
	Connectors for SmartWire-DT round cables		
	8-pole socket, flat	**SWD4-SF8-67** 116033	1 units
	8-pole plug connector, flat	**SWD4-SM8-67** 116034	
	Housing bushing sockets For installation in surface mounting enclosure M22-I... 8-pin socket/plug, IP67, for connection to SWD4-S(M,F)-67... 8 prefabricated cables for connection to M22-SWD-I... PCB		
	8-pole plug connector, M20	**SWD4-SM8-20** 116032	1 units



Legend holders, complete

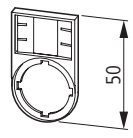
IP66
30 × 50 mm, round, black (RAL 9005)

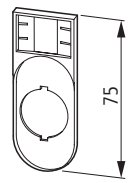
Inscription	Catalog Number Article no.	Std. pack	Inscription	Catalog Number Article no.	Std. pack
- 0 I	**M22S-ST-X88** 216485	10 units	FAULT	**M22S-ST-GB8** 216498	10 units
0 - I	**M22S-ST-X89** 218147		DÉFAUT	**M22S-ST-F67** 256795	
I 0 II	**M22S-ST-X93** 216486		BETRIEB	**M22S-ST-D7** 216488	
1	**M22S-ST-X52** 256797		RUN	**M22S-ST-GB7** 216497	
2	**M22S-ST-X53** 256798		EN SERVICE	**M22S-ST-F7** 256793	
STOP	**M22S-ST-GB0** 216494		HAND AUTO	**M22S-ST-D11** 216492	
START	**M22S-ST-GB1** 216495		MAN. AUTO	**M22S-ST-GB11** 216500	
OFF	**M22S-ST-D5** 218299		AUS EIN	**M22S-ST-D10** 216490	
OFF	**M22S-ST-GB5** 218300		OFF ON	**M22S-ST-GB10** 216499	
ARRÊT	**M22S-ST-F0** 256791		ARRÊT MARCHE	**M22S-ST-F10** 256794	
EIN	**M22S-ST-D6** 216487		HAND 0 AUTO	**M22S-ST-D12** 216493	
ON	**M22S-ST-GB6** 216496		MAN. 0 AUTO	**M22S-ST-GB12** 216501	
MARCHE	**M22S-ST-F1** 256792		SOUS TENSION	**M22S-ST-F68** 256796	
STÖRUNG	**M22S-ST-D8** 216489				

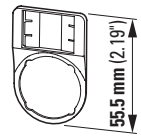
Legend holders without label

IP66
Round, black (RAL 9005)

Inscription	Color	Catalog Number Article no.	Std. pack	Notes
30 x 50 mm	●	**M22S-ST-X** 216392	25 units	Cannot be used for M22(S)-PV…
30 x 50 mm	●	**M22S-ST-X-GVP** 216393	500 units	
For double actuator pushbuttons 30 x 75 mm	●	**M22S-STDD-X** 216394	10 units	–
For M30... Front elements		**M30S-FST-X** 197110	25 units	







Insert labels for label mounts

18 x 27 mm

	Aluminum color, no inscription	–	**M22-XST** 216480	100 units	–
	Aluminum color, no inscription	–	**M22-XST-GVP** 216481	500 units	–
	* = With customized Label Editor inscription[1)]	–	**M22-XST-*** 216482	1 units	

Notes [1)] Label Editor in Pushbutton Configurator → www.eaton.com/config/rmq

Button plates for pushbutton actuators

≦ 5 characters: letter height of 5 mm, > 5 characters: letter height of 3 mm

Inscription or explanation	For use with	Color, symbol	Design: flush **Catalog Number** Article no.	Design: raised **Catalog Number** Article no.	Std. pack
–	M22(S)-D-X M22(S)-DR-X M22-DG-X M30C-FD-X M30C-FDR-X C22-D-X… C30C-FD-X…	●	**M22-XD-S** 216421	**M22-XDH-S** 216428	10 units
			–	**M22-XD-S-GVP150** 173972	150 units
–		○	**M22-XD-W** 216422	**M22-XDH-W** 216429	10 units
–		●	**M22-XD-R** 216423	**M22-XDH-R** 216430	
–		●	**M22-XD-G** 216424	**M22-XDH-G** 216431	
			–	**M22-XD-G-GVP150** 173978	150 units
–		●	**M22-XD-Y** 216425	**M22-XDH-Y** 216432	10 units
–		●	**M22-XD-B** 216426	**M22-XDH-B** 216433	
–		●	**M22-XD-GR** 132670	–	
With customized Label Editor inscription → Notes		–	**M22-XD-*-*** 216427	**M22-XDH-*-*** 216434	
To		●	**M22-XD-S-D2** 218184	**M22-XDH-S-D2** 218229	
On		●	**M22-XD-S-D3** 218185	**M22-XDH-S-D3** 218230	
From		●	**M22-XD-S-D4** 218186	**M22-XDH-S-D4** 218231	
Off		●	**M22-XD-R-D5** 218187	**M22-XDH-R-D5** 218232	
On		●	**M22-XD-S-D6** 218188	**M22-XDH-S-D6** 218233	
Unlock		●	**M22-XD-B-D14** 218189	–	
Next		●	**M22-XD-S-D15** 218190	–	
Backwards		●	**M22-XD-S-D16** 218191	–	
Raise		●	**M22-XD-S-D17** 218192	**M22-XDH-S-D17** 218237	
Lower		●	**M22-XD-S-D18** 218193	–	
STOP		●	**M22-XD-R-GB0** 218194	**M22-XDH-R-GB0** 218239	
STOP		●	**M22-XD-S-GB0** 218195	**M22-XDH-S-GB0** 218240	
START		●	**M22-XD-G-GB1** 218196	**M22-XDH-G-GB1** 218241	
START		○	**M22-XD-W-GB1** 218197	–	
CLOSE		●	**M22-XD-S-GB2** 218198	–	
UP		●	**M22-XD-S-GB3** 218199	**M22-XDH-S-GB3** 218244	
DOWN		●	**M22-XD-S-GB4** 218200	**M22-XDH-S-GB4** 218245	
TEST		●	**M22-XD-S-GB9** 218201	–	
OFF		●	**M22-XD-R-GB5** 218202	–	
ON		●	**M22-XD-S-GB6** 218203	–	

Notes

When ordering, replace the asterisks in part no. M22-XD(H)-*-* as follows:
1st wildcard ≙ Color: -R, -G, -B, -W, -Y, -S, -U (U = gray)
2nd wildcard ≙ file name specified by Labeleditor/configuration ID
Label Editor in Pushbutton Configurator → www.eaton.com/config/rmq

Inscription or explanation	For use with	Color, symbol	Design: flush **Catalog Number** Article no.	Design: raised **Catalog Number** Article no.	Std. pack
Button plates for pushbutton actuators					
≦ 5 characters: letter height of 5 mm > 5 characters: letter height of 3 mm					
RESET	M22(S)-D-X M22(S)-DR-X M22-DG-X M30C-FD-X M30C-FDR-X C22-D-X… C30C-FD-X…		**M22-XD-B-GB14** 218204	**M22-XDH-B-GB14** 218249	10 units
FORWARD			**M22-XD-S-GB15** 218205	**M22-XDH-S-GB15** 218250	
REVERSE			**M22-XD-S-GB16** 218206	**M22-XDH-S-GB16** 218251	
RAISE			**M22-XD-S-GB17** 218208	**M22-XDH-S-GB17** 218252	
LOWER			**M22-XD-S-GB18** 218209	**M22-XDH-S-GB18** 218253	
Stop			**M22-XD-R-X0** 218153	**M22-XDH-R-X0** 218155	
Stop			**M22-XD-S-X0** 218154	**M22-XDH-S-X0** 218156	
Start			**M22-XD-G-X1** 218165	**M22-XDH-G-X1** 218210	
Start			**M22-XD-S-X1** 218166	**M22-XDH-S-X1** 218211	
Start			**M22-XD-W-X1** 218167	**M22-XDH-W-X1** 218212	
Start			**M22-XD-G-X2** 218168	**M22-XDH-G-X2** 218213	
Start			**M22-XD-S-X2** 218169	**M22-XDH-S-X2** 218214	
Increase			**M22-XD-S-X4** 218170	**M22-XDH-S-X4** 218215	
			M22-XD-S-X4-GVP150 173971	–	150 units
Decrease			**M22-XD-S-X5** 218171	**M22-XDH-S-X5** 218216	10 units
			M22-XD-S-X5-GVP150 173976	–	150 units
Reset			**M22-XD-B-X6** 218172	**M22-XDH-B-X6** 218217	10 units
Direction of movement			**M22-XD-S-X7** 218173	**M22-XDH-S-X7** 218218	
			M22-XD-S-X7-GVP150 173975	–	150 units
Direction of movement			**M22-XD-S-X8** 218174	**M22-XDH-S-X8** 218219	10 units
Manual			**M22-XD-S-X9** 218175	**M22-XDH-S-X9** 218220	
Automatic			**M22-XD-S-X10** 218176	**M22-XDH-S-X10** 218221	
Inch			**M22-XD-S-X11** 218177	**M22-XDH-S-X11** 218222	
Unlock			**M22-XD-S-X12** 218178	**M22-XDH-S-X12** 218223	
unclamp			**M22-XD-S-X13** 218179	**M22-XDH-S-X13** 218224	
Clamp			**M22-XD-S-X14** 218180	**M22-XDH-S-X14** 218225	
Release			**M22-XD-S-X15** 218181	**M22-XDH-S-X15** 218226	
Liquid			**M22-XD-S-X16** 218182	**M22-XDH-S-X16** 218227	
Klaxon			**M22-XD-S-X17** 218183	**M22-XDH-S-X17** 218228	
			M22-XD-S-X17-GVP150 173977	–	150 units

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Inscription or explanation	For use with	Color	Catalog Number Article no.	Std. pack
Button plates for Mushroom-headed pushbuttons				
≦ 5 characters: letter height of 5 mm > 5 characters: letter height of 3 mm				
–	M22(S)-D(R)P-…	●	**M22-XDP-S** 216435	10 units
–		○	**M22-XDP-W** 216436	
–		●	**M22-XDP-R** 216437	
–		●	**M22-XDP-G** 216438	
–		●	**M22-XDP-Y** 216439	
With customized Label Editor inscription → Notes		–	**M22-XDP-*-*** 216440	
To		●	**M22-XDP-S-D2** 218272	
On		●	**M22-XDP-S-D3** 218273	
From		●	**M22-XDP-S-D4** 218274	
Off		●	**M22-XDP-R-D5** 218275	
On		●	**M22-XDP-S-D6** 218276	
Next		●	**M22-XDP-S-D15** 218277	
Backwards		●	**M22-XDP-S-D16** 218278	
Raise		●	**M22-XDP-S-D17** 218279	
Lower		●	**M22-XDP-S-D18** 218280	
STOP		●	**M22-XDP-R-GB0** 218281	
STOP		●	**M22-XDP-S-GB0** 218282	
START		●	**M22-XDP-G-GB1** 218283	
START		○	**M22-XDP-W-GB1** 218284	
CLOSE		●	**M22-XDP-S-GB2** 218285	
UP		●	**M22-XDP-S-GB3** 218286	
DOWN		●	**M22-XDP-S-GB4** 218287	
OFF		●	**M22-XDP-R-GB5** 218289	
REVERSE		●	**M22-XDP-S-GB16** 218292	

Notes The following information must be added to the part no. when ordering:
1st wildcard ≙ Color: -R, -G, -B, -W, -Y, -S, -U (U = gray)
2nd wildcard * ≙ file name specified by Labeleditor/configuration ID
Label Editor in Pushbutton Configurator → www.eaton.com/config/rmq

Inscription or explanation	For use with	Color, symbol	**Catalog Number** Article no.	Std. pack
Button plates for Mushroom-headed pushbuttons				
≦ 5 characters: letter height of 5 mm > 5 characters: letter height of 3 mm				
RAISE	M22(S)-D(R)P-…		**M22-XDP-S-GB17** 218293	10 units
Stop			**M22-XDP-R-X0** 218157	
Stop			**M22-XDP-S-X0** 218158	
Start			**M22-XDP-G-X1** 218254	
Start			**M22-XDP-S-X1** 218255	
Start			**M22-XDP-W-X1** 218256	
Start			**M22-XDP-G-X2** 218257	
Start			**M22-XDP-S-X2** 218258	
Increase			**M22-XDP-S-X4** 218259	
Decrease			**M22-XDP-S-X5** 218260	
Direction of movement			**M22-XDP-S-X7** 218261	
Direction of movement			**M22-XDP-S-X8** 218262	
Manual			**M22-XDP-S-X9** 218263	
Automatic			**M22-XDP-S-X10** 218264	
Inch			**M22-XDP-S-X11** 218265	
Unlock			**M22-XDP-S-X12** 218266	
unclamp			**M22-XDP-S-X13** 218267	
Clamp			**M22-XDP-S-X14** 218268	
Release			**M22-XDP-S-X15** 218269	
Liquid			**M22-XDP-S-X16** 218270	
Klaxon			**M22-XDP-S-X17** 218271	

1

Inscription or explanation	For use with	Color	Design: flush **Catalog Number** Article no.	Std. pack	Design: raised **Catalog Number** Article no.	Std. pack
Lenses for indicator lights						
≦ 5 characters: letter height of 5 mm > 5 characters: letter height of 3 mm						
–	M22-L-X M22-LC-X	○	**M22-XL-W** 216453	10 units	**M22-XLH-W** 216459	10 units
–		●	**M22-XL-R** 216454		**M22-XLH-R** 216460	
–		●	**M22-XL-G** 216455		**M22-XLH-G** 216461	
–		●	**M22-XL-Y** 216456		**M22-XLH-Y** 216462	
–		●	**M22-XL-B** 216457		**M22-XLH-B** 216463	
–		●	**M22-XL-A** 118740		**M22-XLH-A** 118741	
With customized Label Editor inscription → Notes		–	**M22-XL-*-*** 216458			
To		●	**M22-XL-W-D2** 218403			
On		●	**M22-XL-W-D3** 218404			
From		●	**M22-XL-W-D4** 218405			
Off		●	**M22-XL-R-D5** 218406			
On		●	**M22-XL-W-D6** 218407			
Next		●	**M22-XL-W-D15** 218408			
Backwards		●	**M22-XL-W-D16** 218409			
Raise		●	**M22-XL-W-D17** 218410			
Lower		●	**M22-XL-W-D18** 218411			
STOP		●	**M22-XL-R-GB0** 218412			
STOP		●	**M22-XL-W-GB0** 218413			
START		●	**M22-XL-G-GB1** 218414			
START		●	**M22-XL-W-GB1** 218415			
UP		●	**M22-XL-W-GB3** 218417			
DOWN		●	**M22-XL-W-GB4** 218418			
TEST		●	**M22-XL-W-GB9** 218419			
OFF		●	**M22-XL-R-GB5** 218420			
ON		●	**M22-XL-W-GB6** 218421			
FORWARD		●	**M22-XL-W-GB15** 218422			

Notes The following information must be added to the part no. when ordering:
1st wildcard ≙ color: -R, -G, -B, -W, -Y, -A
2nd wildcard ≙ file name specified by Labeleditor/configuration ID
Label Editor in Pushbutton Configurator → www.eaton.com/config/rmq

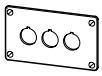
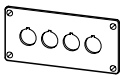
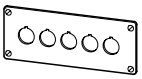
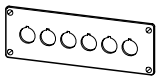
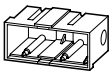
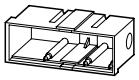
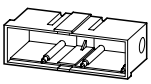
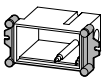
Inscription or explanation	For use with	Color, symbol	**Catalog Number** Article no.	Std. pack
Lenses for indicator lights				
≦ 5 characters: letter height of 5 mm > 5 characters: letter height of 3 mm				
REVERSE	M22-L-X M22-LC-X		**M22-XL-W-GB16** 218423	10 units
RAISE			**M22-XL-W-GB17** 218424	
LOWER			**M22-XL-W-GB18** 218425	
Stop			**M22-XL-R-X0** 218163	
Stop			**M22-XL-W-X0** 218164	
Start			**M22-XL-G-X1** 218384	
Start			**M22-XL-W-X1** 218385	
Start			**M22-XL-G-X2** 218386	
Start			**M22-XL-W-X2** 218387	
Increase			**M22-XL-W-X4** 218388	
Decrease			**M22-XL-W-X5** 218389	
Direction of movement			**M22-XL-W-X7** 218390	
Direction of movement			**M22-XL-W-X8** 218391	
Manual			**M22-XL-W-X9** 218392	
Automatic			**M22-XL-W-X10** 218393	
Inch			**M22-XL-W-X11** 218394	
Unlock			**M22-XL-W-X12** 218395	
unclamp			**M22-XL-W-X13** 218396	
Clamp			**M22-XL-W-X14** 218399	
Release			**M22-XL-W-X15** 218400	
Liquid			**M22-XL-W-X16** 218401	
Klaxon			**M22-XL-W-X17** 218402	

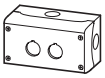
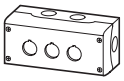
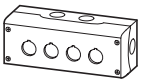
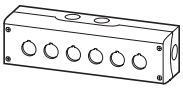
Inscription or explanation	For use with	Color	Design: flush **Catalog Number** Article no.	Std. pack	Design: raised **Catalog Number** Article no.	Std. pack
Button lenses for illuminated pushbutton actuators						
≦ 5 characters: letter height of 5 mm > 5 characters: letter height of 3 mm						
–	M22(S)-DL-X M22(S)-DRL-X M30C-FDL-X M30C-FDRL-X		**M22-XDL-W** 216441	10 units	**M22-XDLH-W** 216447	10 units
–			**M22-XDL-R** 216442		**M22-XDLH-R** 216448	
–			**M22-XDL-G** 216443		**M22-XDLH-G** 216449	
–			**M22-XDL-Y** 216444		**M22-XDLH-Y** 216450	
–			**M22-XDL-B** 216445		**M22-XDLH-B** 216451	
–			**M22-XDL-A** 167437		**M22-XDLH-A** 167438	
With customized Label Editor inscription → Notes		–	**M22-XDL-*-*** 216446		**M22-XDLH-*-*** 216452	
To			**M22-XDL-W-D2** 218316		**M22-XDLH-W-D2** 218359	
On			**M22-XDL-W-D3** 218317		**M22-XDLH-W-D3** 218360	
From			**M22-XDL-W-D4** 218318		–	
Off			**M22-XDL-R-D5** 218319		**M22-XDLH-R-D5** 218362	
On			**M22-XDL-W-D6** 218320		–	
Unlock			**M22-XDL-B-D14** 218321		–	
Next			**M22-XDL-W-D15** 218322		**M22-XDLH-W-D15** 218365	
Backwards			**M22-XDL-W-D16** 218323		**M22-XDLH-W-D16** 218366	
Raise			**M22-XDL-W-D17** 218324		–	
Lower			**M22-XDL-W-D18** 218325		–	
STOP			**M22-XDL-R-GB0** 218326		**M22-XDLH-R-GB0** 218369	
STOP			**M22-XDL-W-GB0** 218327		–	
START			**M22-XDL-G-GB1** 218328		**M22-XDLH-G-GB1** 218371	
START			**M22-XDL-W-GB1** 218329		**M22-XDLH-W-GB1** 218372	
CLOSE			**M22-XDL-W-GB2** 218330		–	
UP			**M22-XDL-W-GB3** 218331		**M22-XDLH-W-GB3** 218374	
DOWN			**M22-XDL-W-GB4** 218332		**M22-XDLH-W-GB4** 218375	
TEST			**M22-XDL-W-GB9** 218333		**M22-XDLH-W-GB9** 218376	
OFF			**M22-XDL-R-GB5** 218334		**M22-XDLH-R-GB5** 218377	
ON			**M22-XDL-W-GB6** 218335		**M22-XDLH-W-GB6** 218378	

Notes

The following information must be added to the part no. when ordering:
1st wildcard * ≙ Color: e.g. -R, -G, -B, -W, -Y, -A
2nd wildcard * ≙ file name specified by Labeleditor/configuration ID
Label Editor in Pushbutton Configurator → www.eaton.com/config/rmq

Inscription or explanation	For use with	Color, symbol	Design: flush **Catalog Number** Article no.	Std. pack	Design: raised **Catalog Number** Article no.	Std. pack
Button lenses for illuminated pushbutton actuators						
≦ 5 characters: letter height of 5 mm > 5 characters: letter height of 3 mm						
RESET	M22(S)-DL-X M22(S)-DRL-X M30C-FDL-X M30C-FDRL-X		**M22-XDL-B-GB14** 218336	10 units	**M22-XDLH-B-GB14** 218379	10 units
FORWARD			**M22-XDL-W-GB15** 218337		–	
REVERSE			**M22-XDL-W-GB16** 218338		**M22-XDLH-W-GB16** 218381	
RAISE			**M22-XDL-W-GB17** 218339		–	
LOWER			**M22-XDL-W-GB18** 218340		**M22-XDLH-W-GB18** 218383	
Stop			**M22-XDL-R-X0** 218159		**M22-XDLH-R-X0** 218161	
Stop			**M22-XDL-W-X0** 218160		**M22-XDLH-W-X0** 218162	
Start			**M22-XDL-G-X1** 218295		**M22-XDLH-G-X1** 218341	
Start			**M22-XDL-W-X1** 218296		**M22-XDLH-W-X1** 218342	
Start			**M22-XDL-G-X2** 218297		**M22-XDLH-G-X2** 218343	
Start			**M22-XDL-W-X2** 218301		**M22-XDLH-W-X2** 218344	
Increase			**M22-XDL-W-X4** 218302		**M22-XDLH-W-X4** 218345	
Decrease			**M22-XDL-W-X5** 218303		**M22-XDLH-W-X5** 218346	
Reset			**M22-XDL-B-X6** 218304		**M22-XDLH-B-X6** 218347	
Direction of movement			**M22-XDL-W-X7** 218305		**M22-XDLH-W-X7** 218348	
Direction of movement			**M22-XDL-W-X8** 218306		**M22-XDLH-W-X8** 218349	
Manual			**M22-XDL-W-X9** 218307		**M22-XDLH-W-X9** 218350	
Automatic			**M22-XDL-W-X10** 218308		**M22-XDLH-W-X10** 218351	
Inch			**M22-XDL-W-X11** 218309		**M22-XDLH-W-X11** 218352	
Unlock			**M22-XDL-W-X12** 218310		**M22-XDLH-W-X12** 218353	
unclamp			**M22-XDL-W-X13** 218311		–	
Clamp			**M22-XDL-W-X14** 218312		**M22-XDLH-W-X14** 218355	
Release			**M22-XDL-W-X15** 218313		**M22-XDLH-W-X15** 218356	
Liquid			**M22-XDL-W-X16** 218314		**M22-XDLH-W-X16** 218357	
Klaxon			**M22-XDL-W-X17** 218315		**M22-XDLH-W-X17** 218358	

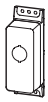
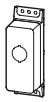
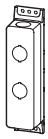
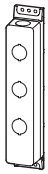
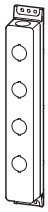
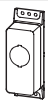
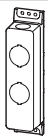
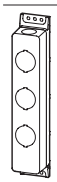
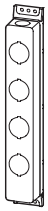
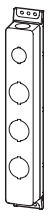
		Degree of protection	Mounting locations Qty.	Color	RAL value	Cable entry knockouts Number of M20 knockouts	**Catalog Number** Article no.	Std. pack
Flush mounting plates								
No add-on legend plates possible when using a vertical layout Degree of protection only in conjunction with a suitable enclosure and correct mounting.								
Aluminum with yellow paint finish for emergency stop button		IP65	1		RAL 1004	–	**M22-EY1** 216542	5 units
Aluminum Bright dip anodized, including M22-XE...			1		RAL 7035	–	**M22-E1** 216541	
			2			–	**M22-E2** 216543	
			3			–	**M22-E3** 216544	
			4			–	**M22-E4** 216545	1 units
			5			–	**M22-E5** 216546	
		IP40	6			–	**M22-E6** 216547	
Shrouds								
Light gray plastic Degree of protection only in combination with M22-E… flush mounting plates								
		IP55	1		RAL 7035	3	**M22-H1** 216548	1 units
			2			4	**M22-H2** 216549	
			3			4	**M22-H3** 216550	
		IP40	4			4	**M22-H4** 216551	
			5			5	**M22-H5** 216552	
			6			6	**M22-H6** 216553	
Set of plaster keys								
Comprising two plaster keys that can be used as mounting aids For shroud plasterboard mounting								
		–	–	–	–	–	**M22-UPE** 216554	1 units

	Mounting locations	Enclosure material	Cable entries	Protection Style	Color	RAL value	Color Enclosure base	Catalog Number Article no.	With customized inscription[3] Catalog Number Article no.	Std. pack
Surface mounting enclosure										
With stainless steel screws										
	1	Plastic	At bottom: 2 x M16 At top: 1 x M20 On the sides: 2 x M20/ M25 (one on each side)	IP67, IP69K		RAL 7035	Anthracite	**M22-I1** 216535	**M22-I1-*** 197631	1 units
						RAL 1004	Anthracite	**M22-IY1** 216536	**M22-IY1-*** 197632	
						RAL 1004	Anthracite	**M22-IY1-XPV60**[1] 167798	**M22-IY1-XPV60-*** 197630	
		Stainless steel			–	–	–	**M22-I1M/SS**[2] 118455	–	
		Metal				RAL 1004	–	**M22-I1MGE-SAL** 118456	–	
		Metal			–	–		**M22-I1M-SAL** 118457	–	
	2	Plastic	At bottom: 2 x M20 At top: 1 x M20 On the sides: 2 x M20/ M25 (one on each side)	IP67, IP69K		RAL 7035	Anthracite	**M22-I2** 216537	**M22-I2-*** 197633	
		Stainless steel			–	–	–	**M22-I2M/SS**[2] 118458	–	
		Metal			–	–	–	**M22-I2M-SAL** 118459	–	
	3	Plastic	At bottom: 2 x M20 At top: 2 x M20 On the sides: 2 x M20/ M25 (one on each side)	IP67, IP69K		RAL 7035	Anthracite	**M22-I3** 216538	**M22-I3-*** 197634	
		Stainless steel			–	–		**M22-I3M/SS**[2] 118460	–	
		Metal			–	–	–	**M22-I3M-SAL** 118461	–	
	4	Plastic	At bottom: 2 x M20 At top: 2 x M20 On the sides: 2 x M20/ M25 (one on each side)	IP67, IP69K		RAL 7035	Anthracite	**M22-I4** 216539	**M22-I4-*** 197635	
	6	Plastic	At bottom: 2 x M20 At top: 2 x M20 On the sides: 2 x M20/ M25 (one on each side)	IP66		RAL 7035	Anthracite	**M22-I6** 216540	**M22-I6-*** 197636	

Notes

[1] With additional cable entry in the front for M22-XPV60… illuminated ring
[2] With mounting tabs on the sides
[3] Label Editor in Pushbutton Configurator → www.eaton.com/config/rmq

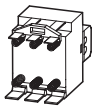
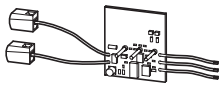
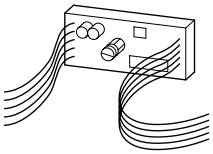
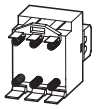
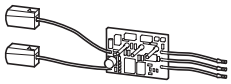
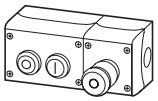
1

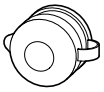
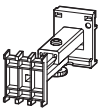
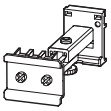
	Mounting locations	Cable entries	Protection Style	Color Cover	RAL value	Catalog Number Article no.	With customized inscription[1] Catalog Number Article no.	Std. pack
Flat surface mounting enclosure								
Insulating material, with high-grade steel screws, lower section color: anthracite								
	1x22.5	1xM20, 1xM20 base	IP66, IP67, IP69		RAL 7035	**M22-FI1** 197230	**M22-FI1-*** 197637	1 units
	1x22.5	1xM20, 1xM20 base	IP66, IP67, IP69		RAL 1004	**M22-FIY1** 197231	**M22-FIY1-*** 197638	1 units
	2x22.5	2xM20, 1xM20 base	IP66, IP67, IP69		RAL 7035	**M22-FI2** 197232	**M22-FI2-*** 197639	1 units
	3x22.5	2xM20, 1xM20 base	IP66, IP67, IP69		RAL 7035	**M22-FI3** 197233	**M22-FI3-*** 197640	1 units
	4x22.5	2xM20, 1xM20 base	IP66, IP67, IP69		RAL 7035	**M22-FI4** 197234	**M22-FI4-*** 197641	1 units
	1x30.5	1xM20, 1xM20 base	IP66, IP67, IP69		RAL 7035	**M30-FI1** 197235	**M30-FI1-*** 197642	1 units
	2x30.5	2xM20, 1xM20 base	IP66, IP67, IP69		RAL 7035	**M30-FI2** 197236	**M30-FI2-*** 198599	1 units
	3x30.5	2xM20, 1xM20 base	IP66, IP67, IP69		RAL 7035	**M30-FI3** 197237	**M30-FI3-*** 197644	1 units
	4x30.5	2xM20, 1xM20 base	IP66, IP67, IP69		RAL 7035	**M30-FI4** 197238	**M30-FI4-*** 197645	1 units
	1x22.5 3x30.5	2xM20, 1xM20 base	IP66, IP67, IP69		RAL 7035	**M30-FI4-PV** 197239	**M30-FI4-PV-*** 197646	1 units

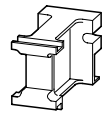
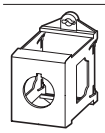
Notes [1] Label Editor in Pushbutton Configurator → www.eaton.com/config/rmq

Mounting locations	Cable entry knockouts		Color	RAL value	Protection Style	**Catalog Number** Article no.	Std. pack
	Base	Pages					
Qty.	Number of M… entries	Number of M… entries					
Surface mounting enclosure							
Including mounting plate for base mounting Anthracite enclosure base							
12	2 x 32/25	2 x 20 4 x 32/25		RAL 7035	IP55	**M22-I12** 222688	1 units
M20 connecting screw							
For connecting any M22-I... surface mounting enclosures Installed through M20 cable entry on the side							
–	–	–	–	–	IP67	**M22-XI** 229162	25 units
M20 metric cable glands as defined in EN 50262							
With lock nut and integrated strain relief Polyamide, halogen-free External diameter of cable: 6 - 13 mm							
–	–	–	–	–	IP68, IP69K	**V-M20** 206910	20 units
Replacement fastening set for flat surface mounting enclosure							
–	–	–	–	–		**M30-FI-XB** 197317	1 units

1

		Description	Catalog Number Article no.	Std. pack
	AS-Interface connection for RMQ-Titan			
	For front mounting (RMQ-Titan)	AS-Interface slave Adapter element for RMQ-Titan AS-Interface information: 2 input bits, 1 output bit Module enclosure for snap-fitting on the following contact and LED elements: Inputs for 2 contact elements: M22-K01 (N/C), M22-K10 (N/O) Output for 1 LED element: M22-LED-... Including AS-Interface connector as insulation piercing terminal	**M22-ASI** 231269	1 units
	For base mounting (RMQ-Titan)	Adapter element for RMQ-Titan AS-Interface information: 2 input bits, 1 output bit Inputs for 2 contacts Output for 1 LED element: M22-LED-...	**M22-ASI-C** 231271	1 units
	For surface mounting enclosures (RMQ-Titan)	External connections: 4 inputs/4 outputs (for RMQ contact and lamp socket elements.) RMQ-Titan surface mounting enclosures: M22-I3, M22-I4, M22-I6	**RMQ-M1C-ASI** 032314	1 units
	Emergency stop interfaces for AS-Interface for safety monitor			
For front mounting 		AS-Interface slave Adapter element for RMQ-Titan AS-Interface information: 1 dual-channel input, 1 output Module enclosure for snap-fitting on the following contact and LED elements: Inputs for 2 contact elements: M22-K01 (N/C) Output for 1 LED element: M22-LED-... Including AS-Interface connector as insulation piercing terminal	**M22-ASI-S** 231270	1 units
For base mounting 		AS-Interface slave Adapter element for RMQ-Titan or FAK AS-Interface information: 1 dual-channel input, 1 output for the following RMQ-Titan contact and LED elements: Inputs for 2 contact elements: M22-K01 or M22-K01 (N/C) Output for 1 LED element: M22-LED-...	**M22-ASI-CS** 231272	1 units
	AS-Interface complete device			
		M22-I2 and M22-I2Y surface mounting enclosures M22-PVL emergency stop button and ON/OFF pushbutton; ON illuminated 1 M22-AS-Interface-CS and 1 M22-AS-Interface-C 1 M12A connector Address for M22-PVL → 0; ON/OFF 1 A	**M22-I1/2-M1-ASI** 107405	1 units

	For use with		Color	Catalog Number Article no.	Std. pack
	Blanking plugs				
	Round design, IP67, IP69K For sealing spare mounting locations				
	M22		●	**M22-B** 216388	50 units
	M22		●	**M22-B-GVP** 216389	250 units
	M22		●	**M22S-B** 216390	50 units
	M22		●	**M22S-B-GVP** 216391	250 units
	M30	Metal bezel, titanium design	●	**M30C-FB** 187028	1 units
		Metal bezel, stainless steel		**M30I-FB** Y7-188107	
	Pushbutton diaphragms for IP67, IP69K, silicone				
	Transparent diaphragms for harsh environmental conditions and use in the food industry.Do not use with legend holder M22S-ST, as the degree of protection will not be guaranteed				
	M22(S)-D(R)-… M22(S)-DL-… M22(S)-DRL-…		–	**M22-T-D** 216395	10 units
	M22(S)-DDL…		–	**M22-T-DD** 216396	10 units
	**Protective diaphragm, silicone**				
	Prevents the ingress of dirt and dust into the key opening.				
	M22-WS...		–	**M22-XWS** 231275	5 units
	telescopic clip				
	For adjusting the depth of rear mounting devices in CI enclosures and cabinets with mounting depths of 115 to 155 mm. Continuously adjustable; screw and snap fitting (IEC/EN 60715 DIN-rail); maximum of 10 M22-TC units permissible per enclosure, of which 5 must have pushbuttons with maintained action, Do not use in conjunction with emergency stop buttons.				
	3 contact/LED elements, base mounting configuration, including centering adapter				
	–		–	**M22-TC** 216398	10 units
	With IEC/EN 60715 DIN-rail, width of 44 mm For mounting EASY, FAZ, PKZ, DIL, etc. weighing ≦ 0.3 kg				
	easy500, easy700, easy800, MFD-CP8, EC4P Continuously adjustable over scales of 75 - 115 mm		–	**M22-TA** 226161	1 units

	For use with	Catalog Number Article no.	Std. pack
	**Extension**		
	Telescopic clip for a mounting depth of up to 205 mm	**M22-TCV** 225527	5 units
	**IVS top-hat rail adapter**		
	IEC/EN 60715 DIN-rail for front mounting	**M22-IVS** 216400	1 units
	Plunger bridge set for 4-way pushbuttons		
		M22-XW4 116461	5 sets
	Plunger bridge		
	For actuating the middle contact element of the M22-W…3 non-illuminated 3-position selector switch → Page 84	**M22-XW** 216405	10 units

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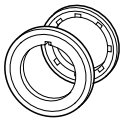
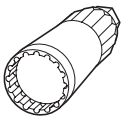
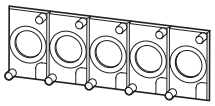
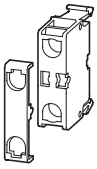
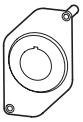
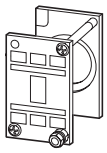
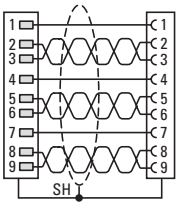
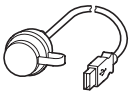
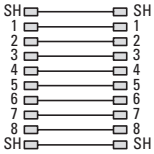
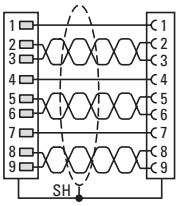
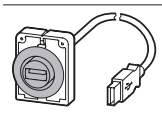
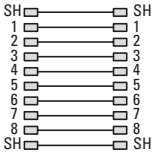
	For use with	Catalog Number Article no.	Std. pack
	Guard ring		
	To protect against accidental actuation, IP66 For pushbuttons and selector switches (add-on legend plates cannot be used)	**M22-XGWK** 231274	5 units
	Threaded rings		
	M22 x 1.5 mm		
	6.0 mm thick	**M22-GR** 216401	50 units
	4.8 mm thick	**M22-GR7** 288852	50 units
	6.0 mm thick	**M22-GR-GVP** 216404	500 units
	**30/22.3 mm set of adapter rings**		
	Black, consisting of adapter ring and fixing nut, IP67, IP69K For installing 22.3 mm diameter devices in 30.5 mm diameter holes The degree of protection is determined by the front element	**M22S-R30** 216408	10 units
	yellow	**M22Y-R30** 191699	
	**Mounting ring tool**		
	For threaded ring; can be used with cordless screwdriver.	**M22-MS** 216402	5 units
	**Fixing plate**		
	M22-H… on M22-E… flush mounting plate for 5 mounting locations	**M22-XE5** 218945	1 units
	**Dust cover**		
	For M22-K-… contacts (front mounting)	**M22-XKDP** 100647	50 units
	Dust cover and mechanical mount		
	For M22... 5 x M20 knockouts		
	Max. 3 contacts	**M22-ADC** 106523	1 units
	Max. 4 contacts	**M22-ADC4** 106524	
	Mechanical mount	**M22-XADC** 107918	
	Gasket		
	For add-on legend plates used on uneven surfaces	**M22-XZD** 134826	50 units
	**Safety fixing set**		
	For safety relevant operations: Emergency switching off, stop, start, hand-auto, etc. safe stop also under extreme conditions due to impact shock and vibration Insulated enclosure to avoid accidental electrical shock Safe contact monitoring due to mechanical form Grid dimension 35 x 60 mm Up to 3 functional elements with front or base fixing as well as screw or Cage Clamp termination	**M22-XE** 254849	1 units

	Version	Lifespan at t_a = +25°C $t_{average}$ (AC) h	Color	Catalog Number Article no.	Std. pack
	BA9s single-chip LEDs for compact indicator lights				
	For AC and DC (positive pole connected to X1), protected against polarity reversal, integral suppressor circuit up to 1500 V				
	12 - 30 V AC/DC / 15 mA	100000	○	**A22-LED-W** 261362	10 units
	12 - 30 V AC/DC / 15 mA	100000	●	**A22-LED-R** 261364	
	12 - 30 V AC/DC / 15 mA	100000	●	**A22-LED-G** 261363	
	12 - 30 V AC/DC / 15 mA	100000	●	**A22-LED-Y** 261365	

		Cable length m	Terminal diagram / Contact assignment	Silver bezel Catalog Number Article no.	Black bezel Catalog Number Article no.	Std. pack
	M22 USB and RJ45 panel mount connectors					
	Front mounting IP65 (with closed cover), IP20 (with plug connected)					
	USB 3.0 socket, Type A	–		**M22-USB** 147539	**M22S-USB** 147541	1 units
	Prefabricated cable with permanently connected USB 3.0 Type A plug	0.6		**M22-USB-SA** 107412	**M22S-USB-SA** 147535	1 units
		1.5		**M22-USB-SA-150** 147543	–	
	RJ45 socket, 8/8, Cat 5e	–		**M22-RJ45-SA** 107413	**M22S-RJ45-SA** 147537	1 units
	RJ45 socket, 8/8, Cat 6 A			**M22-RJ45-CAT6A** 400122	–	
	M30C USB and RJ45 panel mount connectors (Flat Front)					
	Front mounting IP20 (with plug connected)			Metal bezel		
	With permanently connected USB 3.0 Type A plug	–		**M30C-FUSB** 187082		1 units
	Prefabricated cable with permanently connected USB 3.0 Type A plug	0.3		**M30C-FUSB-30** 187083		1 units
		0.6		**M30C-FUSB-60** 187084		
		1.5		**M30C-FUSB-150** 187085		
	RJ45 socket, 8/8, Cat 5e	–		**M30C-FRJ45** 187086		1 units

1

For use with	Color	Catalog Number Article no.	Std. pack	Notes
Pushbuttons				
For enclosed overload relays Mounting hole diameter: 22.3 mm				
ZW7... ZB12 ZB32 ZB65 ZB150	●	**M22-DZ-B** 254833	10 units	Blue button plate
	●	**M22-DZ-B-GB14** 254834		Blue button plate Inscription: RESET
	–	**M22-DZ-X** 254835		Without button plate, add button plate

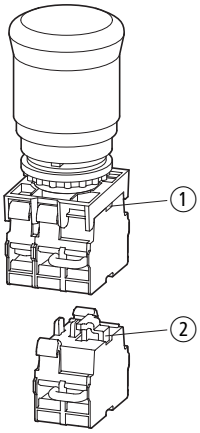
Bulb extractor				
For M22-LC(H)… compact indicator light				
A22-LED…	–	**M22-LG** 216403	5 units	

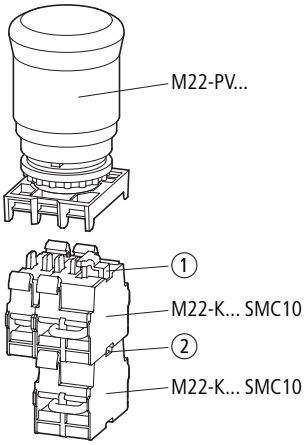
Customized complete units				
Configuration online via Pushbutton Configurator → www.eaton.com/config/rmq				
–	–	**M22-COMBINATION** 2010741	1 units	
–	–	**RMQ-FLAT-COMBINATION** 2012027	1 units	

Anti-rotation tab for M30... as replacement				
		M30-AFX 191232	1 units	

Engineering

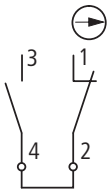
M22...SMC10



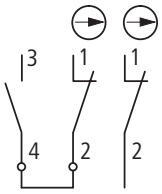


① The self-monitoring contact mechanically monitors the connection on the M22-PV…
② The self-monitoring contact mechanically monitors the connection on the M22-K…SMC10 safety contact above it; but not the connection on the M22-PV…

M22-K01SMC10
M22-KC01SMC10



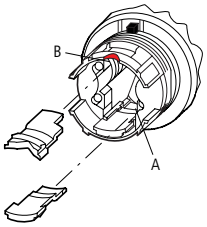
M22-K02SMC10
M22-KC02SMC10



When the self-monitoring contact is mounted correctly, the N/O contact is closed.
The emergency stop/controlled stop circuit will be activated by means of an N/C and N/O connected in series if:
- The emergency stop/controlled stop button is pressed OR
- The self-monitoring contact is mechanically separated from the pushbutton

1

Changing between maintained/momentary action and changing the key withdraw on selector switches with 3 positions



0 I II	I A	0	II B
60° ⇓ 60°	– ✔	✔	– ✔
50° ⇓ 50°	✔ ×	✔	✔ ×
60° ⇓ 50°	– ✔	✔	✔ ×
50° ⇓ 60°	✔ ×	✔	– ✔
40° ⇕ 40°	✔ ×	✔	✔ ×
60° ⇓ 40°	– ✔	✔	✔ ×
50° ⇓ 40°	✔ ×	✔	✔ ×
40° ⇕ 60°	✔ ×	✔	– ✔
40° ⇕ 50°	✔ ×	✔	✔ ×

✓ = Key is withdrawable
x = Key is not withdrawable

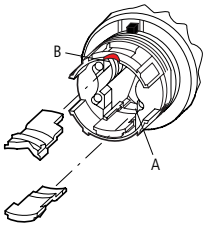
Configuration adapters

2x M22-XC-Y → Page 34

1x M22-XC-R → Page 34

1x

Changing between maintained/momentary action and changing the key withdraw on selector switches with 2 positions



0 I	0	I B
⇓ 60°	✔	– ✔
⇓ 50°	✔	✔ ×
⇕ 40°	✔	✔ ×

✓ = Key is withdrawable
x = Key is not withdrawable

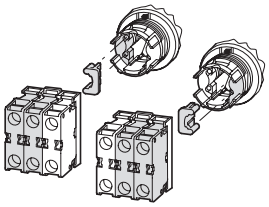
Configuration adapters

2x M22-XC-Y → Page 34

1x M22-XC-R → Page 34

1x

Plunger bridge for the middle contact on M22(S)-W…3-… 3-position selector switches



Customized inscription for devices using the Label Editor function in the Pushbutton Configurator

Label your device individually in just a few steps:

- Open the Pushbutton Configurator by visiting: www.eaton.com/config/rmq
- System tab: select series, select parameters
- Layout tab: select and configure items
- Create individual labeling using the Labeleditor function with text and/or graphics Standard graphics can be selected from the library or your own graphics can be uploaded.
- Summary tab: Call up an individual configuration ID with one click and optionally have it sent by email for your own documentation.

For a quotation or order, please contact your local dealer or your local Eaton representative.

Ordering examples:

- Label M22-XST for label mount M22S-ST-X with custom inscription
  basic part: 216482 M22-XST-*
  * = configuration ID with position from the Pushbutton Configurator e. g.
  Configuration ID is 2202041400C0007E0 ==> the position is e.g. B -A1
  Please order: 1 x M22-XST-2202041400C0007E0-A1

- Button plate in green with custom inscription
  basic part: 216434 M22-XDH-*-*
  1. * = Color (here “G” for green)
  2. * = Configuration ID with position from the Pushbutton Configurator
  Please order e.g.: 1 x M22-XD-G-220204140029738E0-A1

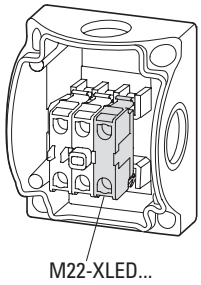
- Double actuator pushbutton with green / red button plate and custom inscription
  basic part: 226770 M22-DDL-*-*-*
  1. * = Color (here “GR” for green / red)
  2. * = Configuration ID with position from the Pushbutton Configurator
  Please order e.g.: 1 x 226770
  M22-DDL-GR-220208C06231A7F0-A1
  3. * is omitted

- Key-operated button, 3 positions, individual lock mechanism no.. MS1, customized inscription
  basic part: 262521 M22-WRS*-MS*-*
  1. * = quantity of positions
  2. * = number of the individual lock
  3. * = Configuration ID with position from the Pushbutton Configurator
  Please order e.g.: 1 x 262521
  M22-WRS3-MS1-220208C067F7ADF0-A1

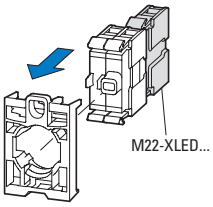
LED series resistor elements

M22-XLED

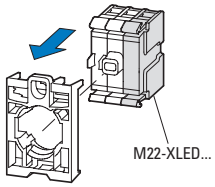
Surface mounting enclosure



Flush mounting at the rear

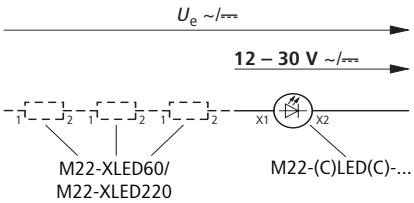


Flush mounting at the side



LED resistor element

M22-XLED60/M22-XLED220

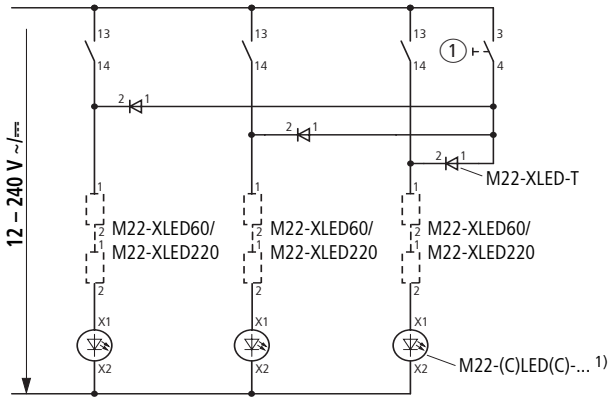


M22-XLED60	1 x	2 x	3 x	4 x	5 x	6 x	7 x
U_e [AC/DC] ≦	60 V	90 V	120 V	150 V	180 V	210 V	240 V

M22-XLED220	1 x
U_e [AC/DC] ≦	220 V

LED test element

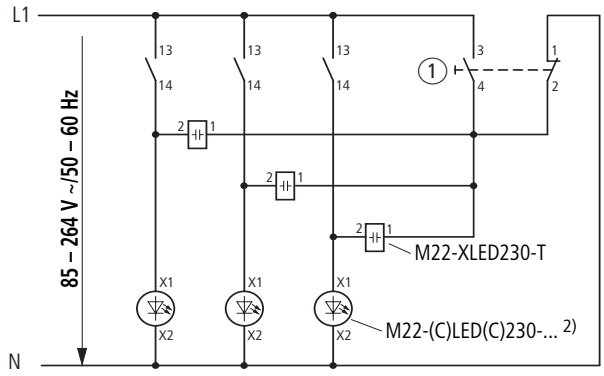
M22-XLED-T

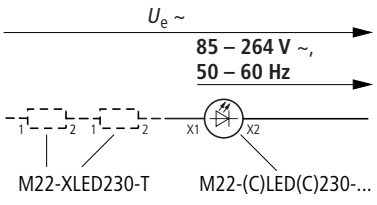


① Test button

1) Only for 12 - 30 V elements

M22-XLED230-T

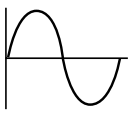


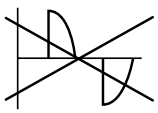


M22-XLED230-T	1 ×	2 ×
U_e ≦	400 V~	500 V~

① Test button

2) Only for 85 - 264 V elements





1

Technical specifications

				Contact elements		Double contact elements	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)				IP20	IP20	IP20	IP20	IP20
Climatic proofing				Damp heat, constant as per IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30				
Ambient air temperature, open			°C	–25 - +70	–25 - +70	–25 - +70	–25 - +70	–25 - +70
Mounting position				Any	Any		Any	Any
Mechanical shock resistance as defined in IEC 60068-2-27 Shock duration: 11 ms, half sine shock			g	30	50	30	30	50
Terminal capacities								
Solid			mm^2	1 x (0.75 - 2.5) 2 x (0.5 - 1.5)	2 x 1 (0.2 - 1.5) 2 x 1 (0.75 - 1.5)[1]	1 x (0.5 - 1.5)	2 x (0.75 - 2.5)	1 x 1 (0.2 - 1.5) 1 x 1 (0.75 -1.5)[1]
Stranded			mm^2	1 x (0.5 - 2.5)	–	1 x (0.5 - 1.5)	2 x (0.5 - 2.5)	1 x 1 (0.2 - 1.5)
Flexible with ferrule			mm^2	2 x (0.5 - 1.5)	2 x 1 (0.25 - 1)[2]	1 x (0.5 - 1)	2 x (0.5 - 1.5)	1 x 1 (0.25 - 1)[2]
Contacts								
Rated impulse withstand voltage		U_{imp}	V AC	6000	4000		6000	4000
Rated insulation voltage		U_i	V	500	250		500	250
Overvoltage category/pollution degree				III/3	III/3		III/3	III/3
Control circuit reliability								
At 24 V DC/5 mA		H_F	Failure rate	< 10^{-7} (i.e., one failure every 10^7 operations)	–	–	–	–
At 5 V DC/1 mA		H_F	Failure rate	< 5 x 10^{-6} (i.e., one failure every 5 x 10^6 operations)	–	–	–	–
Max. short-circuit protective device								
fuseless			Catalog Number	PKZM0–10/FAZ-B6/1	FAZ-B4	–	–	–
Fuse		gG/gL	A	10	4	–	–	–
Switching capacity								
Rated 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	–	6	–	–
	230 V	I_e	A	6	1.5	6	–	–
	400 V	I_e	A	4	–	–	–	–
	500 V	I_e	A	2	–	–	–	–
DC-13	24 V	I_e	A	3	1.5	3	–	–
	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	0.6	–	–
	220 V	I_e	A	0.3	0.2	0.3	–	–
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; please enquire for others

(Illuminated) pushbuttons, mushroom pushbuttons		Double actuator	(Illuminated) Changeover switches	Joysticks	Key-operated buttons	Indicator lights Acoustic device Potentiometer	Controlled stop / emergency stop
momentary	maintained						
IEC/EN 60947-5-1		IEC/EN 60947-5-1	IEC/EN 60947-5-1	IEC/EN 60947-5-1	IEC/EN 60947-5-1	IEC/EN 60947-5-1	IEC/EN 60947-5-5
5	1	0.2	0.1	0.1	0.1	–	0.1
≦ 3600	≦ 1800	≦ 3600	≦ 2000	≦ 2000	≦ 100	–	≦ 600
5	5	5	–	5	–	–	50
–	–	–	0.3	–	0.5	–	–
IP67, IP69K	IP67, IP69K	IP66	IP66	IP65	IP66	Indicator lights: IP67, IP69K Acoustic devices: IP40 Potentiometers: IP66	IP67, IP69K
Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30							
–25 - +70	–25 - +70	–25 - +70	–25 - +70	–25 - +70	–25 - +70	–25 - +70	–25 - +70
Any	Any	Any	Any	Any	Any	Any	Any
M22: 30 M30: 15	M22: 30 M30: 15	30	M22: 30 M30: 15	M22: 30 M30: 15	M22: 30 M30: 15	M22: 30 M30: –	50
–	–	–	–	–	–	0.5 - 1.5	–
–	–	–	–	–	–	0.5 - 1.5	–
–	–	–	–	–	–	–	–
–	–	–	–	–	–	4000	–
–	–	–	–	–	–	250	–
–	–	–	–	–	–	Overvoltage category/pollution degree III/3	–
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
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1

		AS-Interface connection for RMQ-Titan	Adapter element for RMQ-Titan	
		RMQ-M1C-ASI	M22-ASI	M22-ASI-C
General				
Standards		EN 50081-1 EN 50082-1	IEC/EN 60947, DIN EN 50 295	IEC/EN 60947, DIN EN 50 295
Radio interference suppression		EN 55011, EN 55022	EN 55011, EN 55022	EN 55011, EN 55022
Limit value class		A	–	–
Protection Style		IP20	IP20	IP00
Climatic proofing		Damp heat, constant, to IEC 60068-2-78;Damp heat, cyclic, to IEC 60068-2-30		
Ambient temperature open	°C	25 - 55	25 - 55	25 - 55
Mechanical shock resistance for a shock duration of 11 ms	g	> 30	> 30	> 30
Vibrations as per IEC 60068-2-27 (amplitude: 1 mm)	Hz	10 - 55	–	–
Dimensions W x H x D	mm	92 x 46 x 30	–	–
Weight	kg	0.1	–	–
Mounting		RMQ-Titan front mounting	RMQ-Titan front mounting	RMQ-Titan base mounting
Mounting position		Any	Any	Any
Power Supply				
Rated operating voltage as per AS-Interface specifications	V DC	26.5 - 31.6	26.5 - 31.6	26.5 - 31.6
Terminal type		–	Yellow plug-in terminal as insulation piercing terminal	2 cables on PCB
Power supply		Completely from the AS-Interface cable	Completely from the AS-Interface cable	Completely from the AS-Interface cable
Addressing		Via AS-Interface cable connection	Via AS-Interface cable connection	Via AS-Interface cable connection
Total AS-Interface current draw	mA	–	≦ 40	≦ 40
AS-Interface		Protected against polarity reversal	Protected against polarity reversal	Protected against polarity reversal
Rated operational current at full load	mA	120	–	–
Rated operational current when idle (no I, O set)	mA	Normally 30	–	–
LED status indicators		AS-Interface voltage: green LED	AS-Interface POWER line: green LED on element rear AS-Interface ERROR, AS-Interface master failure: red LED on element rear	AS-Interface POWER line: green LED on PCB AS-Interface ERROR, AS-Interface master failure: red LED on PCB
Input points				
Inputs; short-circuit proof	Qty.	4 (1 internal + 3 external)	2 (normally 22 V/5 mA)	2 (normally 22 V/5 mA)
Voltage levels	V DC	24 - 30	–	–
Operating current per input	mA	Normally 3.5	–	–
Switching level, HIGH signal	V	≧ 15	–	–
LOW signal	mA	–	–	–
Length of connecting cables	cm	≦ 200	–	–
Outputs				
Outputs, short-circuit proof	Qty.	4 (1 internal + 3 external)	1 (normally 19 V/8 mA)	1 (normally 19 V/8 mA)
Voltage levels	V DC	24 V DC (+10/–15%)	–	–
Max. current carrying capacity				
All outputs		–	–	–
Σ 3 external outputs		60	–	–
Length of connecting cables	cm	≦ 200	–	–
Profile		S-7.0	S-3.A.E	S-3.A.E
Specification		2.0	2.1	2.1
Addresses	Qty.	31	62	62

		M22-ASI-S	M22-ASI-CS
Emergency stop connections			
AS-Interface cable connection		Yellow plug-in terminal as insulation piercing terminal	2 cables on PCB
Power supply		Completely from the AS-Interface, cable, 26.5 - 31.6 V DC	Completely from the AS-Interface, cable, 26.5 - 31.6 V DC
Mounting		RMQ-Titan front mounting	RMQ-Titan base mounting
Addressing		Via AS-Interface cable	Via AS-Interface cable
Max. total current	mA	45	45
Ambient temperature	°C	–25 - +55	–25 - +55
Mechanical shock resistance		30 g/11 ms as defined in IEC 60068-2-27	30 g/11 ms as defined in IEC 60068-2-27
Protection Style		IP20	IP00
Climatic proofing		Damp heat, constant as defined in IEC 60068-2-78 Damp heat, cyclic as defined in IEC 60068-2-30	Damp heat, constant as defined in IEC 60068-2-78 Damp heat, cyclic as defined in IEC 60068-2-30
Mounting position		Any	Any
Standards		EN 50178 EN 50295	EN 50178 EN 50295
Input points		Dual-channel input (22 V/5 mA) (modulated with code sequence) (2 RMQ-Titan M22-K01 N/C contact elements)	Dual-channel input (22 V/5 mA) (modulated with code sequence) (2 RMQ-Titan M22-K01 N/C contact elements)
Outputs		1 output, normally 19 V/ 8 mA, short-circuit proof	1 output, normally 19 V/ 8 mA, short-circuit proof
Status indicators			
AS-Interface POWER cable		Green LED on rear	Green LED on rear
AS-Interface ERROR, AS-Interface master failure		Red LED on rear	Red LED on rear
Profile		S-7.B.E	S-7.B.E

UL File No. 29184	Pilot duty	General Use	Terminal capacities
Rating data for approved types to UL/CSA			
RMQ16 contact elements			
E 10	C 300, Q 300		Cu cable Min. AWG 18, Max. AWG 14
E 01	C 300, R 300		
RMQ-Titan contact elements			
M22-K... M22-CK...	A 600, Q 300, > 300 V AC same polarity	10 A - 600 V AC 1 A - 250 V DC	2 x 14 … 18 AWG 2 x 12 … 22 AWG
RMQ-Titan LED elements			
M22-LED... M22-CLED...			2 x 14 … 18 AWG 2 x 12 … 22 AWG
M22-LC(H) M22-AMC			2 x 16 … 20 AWG 2 x 16 … 20 AWG

		UL 508 requirements UL 4X	NEMA recommendation NEMA 13
RMQ-Titan degrees of protection			
All front elements	M22(S)-...	✓	✓
Add-on legend plates	M22S-ST...	✓	✓
Emergency-Stop labels	M22-XAK... M22-XZK... M22-XBK... M22-XYK...	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓
Foot and palm switch	FAK-...	✓	✓

			M22-SWD-K11	M22-SWD-KC11	M22-SWD-LED-…
General					
Standards			IEC/EN 61131-2 EN 50178		
Dimensions W x H x D		mm	12 x 42 x 39	12 x 45 x 37	10 x 42 x 45
Weight		g	10	10	10
Mounting position			Any		
Ambient mechanical conditions					
Degree of protection (IEC/EN 60529)			IP20	IP20	IP20
Vibrations (IEC/EN 61131-2:2008)					
Constant amplitude of 3.5 mm		Hz	5 - 8.4	5 - 8.4	5 - 8.4
Constant acceleration 1 g		Hz	8.4 - 150	8.4 - 150	8.4 - 150
Mechanical shock resistance (IEC/EN 60068-2-27), half sine shock: 15 g/11 ms		Impact resistances	9	9	9
Drop to IEC/EN 60068-2-31	Drop height	mm	50	50	50
Free fall, packaged (IEC/EN 60068-2-32)		m	0.3	0.3	0.3
Electromagnetic compatibility (EMC)					
Overvoltage category			Not Applicable		
Pollution degree			2	2	2
Electrostatic discharge (IEC/EN 61131-2:2008)					
Air discharge (Level 3)		kV	8	8	8
Contact discharge (Level 2)		kV	4	4	4
Electromagnetic fields (IEC/EN 61131-2:2008)					
80 - 1000 MHz		V/m	10	10	10
1.4 - 2 GHz		V/m	3	3	3
2 - 2.7 GHz		V/m	1	1	1
Radio interference suppression (SmartWire-DT)			EN 55011 Class A		
Burst (IEC/EN 61131-2:2008, Level 3)					
Supply cables		kV	2	2	2
SmartWire-DT cables		kV	1	1	1
Radiated RFI (IEC/EN 61131-2:2008, Level 3)		V	10	10	10
Ambient climatic conditions					
Operating ambient temperature (IEC 60068-2)		°C	–30 - +55	–30 - +55	–30 - +55
Condensation			Must be prevented with suitable measures		
Storage		°C	–40 - 80	–40 - 80	–40 - 80
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%	9 - 95	9 - 95	9 - 95
SmartWire-DT network					
Module type			SmartWire-DT module (slave)		
Baud rate setting			Automatic		
SmartWire-DT status LED			green		
Porting			Plug, 8-pole		
Plug connector			SWD4-8SF2-5	M22-SWD-I…LP	SWD4-8SF2-5
Number of insertion cycles			50	50	50
Function element					
Contacts			1 changeover contacts	1 changeover contacts	–
Lifespan mechanical/electrical	c (contacts)		1 x 10^6	1 x 10^6	–
LED indicator			no	no	Yes
Diagnostics			Yes	Yes	no
Mounting			Front mounting	Base mounting	Front mounting

M22-SWD-LEDC-…	M22-SWD-K11LED-…	M22-SWD-K11LEDC-…	M22-SWD-K22	M22-SWD-KC22	M22-SWD-K22LED-…	M22-SWD-K22LEDC-…
IEC/EN 61131-2 EN 50178	IEC/EN 61131-2 EN 50178	IEC/EN 61131-2 EN 50178	IEC/EN 61131-2 EN 50178	IEC/EN 61131-2 EN 50178	IEC/EN 61131-2 EN 50178	IEC/EN 61131-2 EN 50178
10 x 45 x 42	12 x 42 x 45	12 x 45 x 42	17 x 42 x 39	17 x 45 x 37	17 x 42 x 45	17 x 45 x 42
10	10	10	14	14	14	14
Any						
IP20	IP20	IP20	IP20	IP20	IP20	IP20
5 - 8.4	5 - 8.4	5 - 8.4	5 - 8.4	5 - 8.4	5 - 8.4	5 - 8.4
8.4 - 150	8.4 - 150	8.4 - 150	8.4 - 150	8.4 - 150	8.4 - 150	8.4 - 150
9	9	9	9	9	9	9
50	50	50	50	50	50	50
0.3	0.3	0.3	0.3	0.3	0.3	0.3
Not Applicable						
2	2	2	2	2	2	2
8	8	8	8	8	8	8
4	4	4	4	4	4	4
10	10	10	10	10	10	10
3	3	3	3	3	3	3
1	1	1	1	1	1	1
EN 55011 Class A						
2	2	2	2	2	2	2
1	1	1	1	1	1	1
10	10	10	10	10	10	10
–30 - +55	–30 - +55	–30 - +55	–30 - +55	–30 - +55	–30 - +55	–30 - +55
Must be prevented with suitable measures						
–40 - 80	–40 - 80	–40 - 80	–40 - 80	–40 - 80	–40 - 80	–40 - 80
9 - 95	9 - 95	9 - 95	5 - 95	5 - 95	5 - 95	5 - 95
SmartWire-DT module (slave)						
Automatic						
green						
Plug, 8-pole						
M22-SWD-I…LP	SWD4-8SF2-5	M22-SWD-I…LP	SWD4-8SF2-5	M22-SWD-I…LP	SWD4-8SF2-5	M22-SWD-I…LP
50	50	50	50	50	50	50
–	1 changeover contacts	1 changeover contacts	2 changeover contacts	2 changeover contacts	2 changeover contacts	2 changeover contacts
–	1×10^6	1×10^6	1×10^6	1×10^6	1×10^6	1×10^6
Yes	Yes	Yes	no	no	Yes	Yes
no	Yes	Yes	Yes	Yes	Yes	Yes
Base mounting	Front mounting	Base mounting	Front mounting	Base mounting	Front mounting	Base mounting

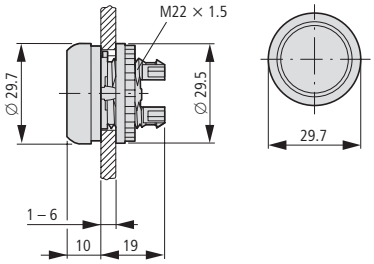
			SWD4-RC8-10	SWD4-8SF2-5	SWD4-8SFF2-5
General					
Standards			IEC/EN 61131-2 EN 50178		
Dimensions W x H x D		mm	48.5 x 34.5 x 10	15 x 36.5 x 17.5	48.5 x 34.5 x 10
Weight		g	10	5.5	4.5
Mounting position			Any	Any	Any
Ambient mechanical conditions					
Degree of protection (IEC/EN 60529)			IP20	IP20	IP20
Vibrations (IEC/EN 61131-2:2008)					
Constant amplitude of 3.5 mm		Hz	5 - 8.4	5 - 8.4	5 - 8.4
Constant acceleration 1 g		Hz	8.4 - 150	8.4 - 150	8.4 - 150
Mechanical shock resistance (IEC/EN 60068-2-27), half sine shock: 15 g/11 ms		Impact resistances	9	9	9
Drop to IEC/EN 60068-2-31	Drop height	mm	50	–	–
Free fall, packaged (IEC/EN 60068-2-32)		m	0.3	–	–
Electromagnetic compatibility (EMC)					
Overvoltage category			II	–	–
Pollution degree			2	–	–
Electrostatic discharge (IEC/EN 61131-2:2008)					
Air discharge (Level 3)		kV	8	–	8
Contact discharge (Level 2)		kV	4	–	4
Electromagnetic fields (IEC/EN 61131-2:2008)					
80 - 1000 MHz		V/m	10	–	–
1.4 - 2 GHz		V/m	3	–	–
2 - 2.7 GHz		V/m	1	–	–
Radio interference suppression (SmartWire-DT)			EN 55011 Class A	–	–
Burst (IEC/EN 61131-2:2008, Level 3)					
SmartWire-DT cables		kV	1	–	–
Radiated RFI (IEC/EN 61131-2:2008, Level 3)		V	10	–	–
Ambient climatic conditions					
Operating ambient temperature (IEC 60068-2)		°C	–25 - +55	–25 - +55	–25 - +55
Condensation			Must be prevented with suitable measures		
Storage		°C	–40 - 70	–40 - 70	–40 - 70
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%	5 - 95	5 - 95	5 - 95
Connection options					
SWD In			Plug, 8-pole	Plug connector	Plug, 8-pole
Number of insertion cycles			≥ 200	1	≥ 200
SWD Out			–	Socket, 8-pole	Plug, 8-pole
Number of insertion cycles			–	≥ 200	≥ 200

SWD4-SF8-20	SWD4-SM8-20	SWD4-8FRF-10	SWD4-SFL8-20	SWD4-SML8-20
IEC/EN 61131-2 EN 50178				
24 x 26 x 162	24 x 26 x 170	35 x 90 x 35	35 x 83 x 40	35 x 83 x 46
20	22.5	42	50	50
Any	Any	Any	Any	Any
IP67	IP67	IP20	IP67	IP67
		5 - 8.4	5 - 8.4	5 - 8.4
		8.4 - 150	8.4 - 150	8.4 - 150
–	–	9	9	9
–	–	–	–	–
–	–	–	–	–
–	–	–	–	–
–	–	–	–	–
–	–	8	8	8
–	–	4	4	4
–	–	–	10	10
–	–	–	3	3
–	–	–	1	1
–	–	–	–	–
–	–	–	–	–
–	–	–	10	10
–25 - +55	–25 - +55	–25 - +55	–25 - +55	–25 - +55
Must be prevented with suitable measures				
–40 - 70	–40 - 70	–40 - 70	–40 - 70	–40 - 70
5 - 95	5 - 95	5 - 95	5 - 95	5 - 95
–	Plug, 8-pole	Plug, 8-pole	Plug, 8-pole	Plug, 8-pole
–	≥ 500	≥ 200	≥ 200	≥ 500
Socket, 8-pole	–	Push in terminals	Socket, 8-pole	Plug, 8-pole
≥ 500	–	–	≥ 500	≥ 200

1

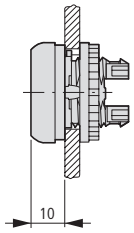
Dimensions

Actuating and indicator elements

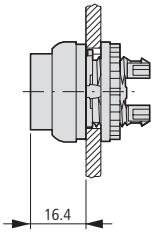


RMQ-Titan pushbuttons

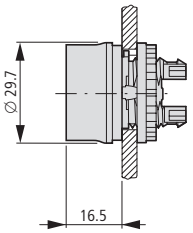
M22...-D-...



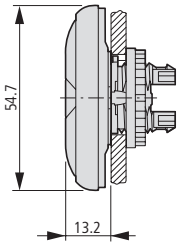
M22...-DH...



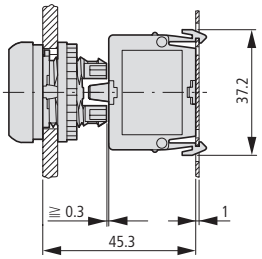
M22-DG(L)...



M22...-DD...

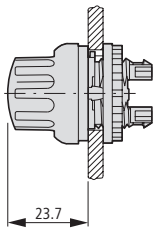


M22-D pushbuttons with base mounting

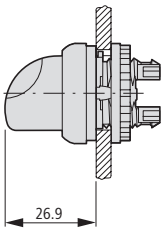


RMQ-Titan selector switches

M22-W...



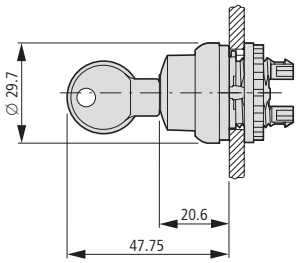
M22...-W(K)L...



RMQ-Titan key-operated buttons

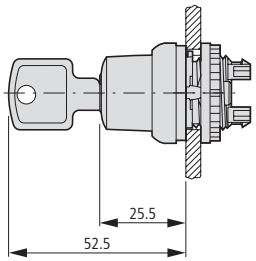
Individual lock mechanism

M22...-W(R)S...



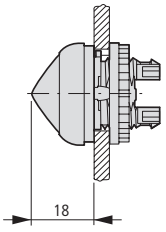
Master key systems

M22...-W...S-SA...

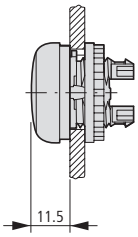


RMQ-Titan indicator lights

M22-LH-...

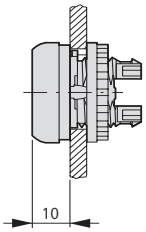


M22-L...

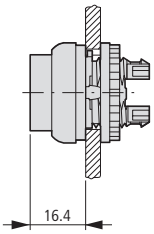


RMQ-Titan illuminated pushbutton actuators

M22...-DL-...

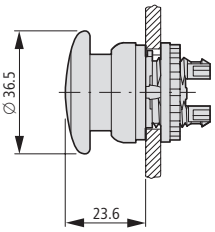


M22...-DLH...



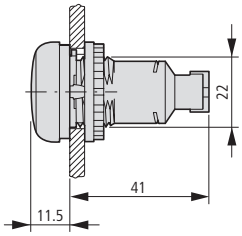
RMQ-Titan mushroom pushbuttons

M22...-DP-...

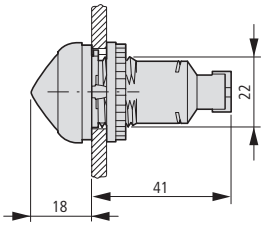


Compact indicator lights
Compact acoustic devices

M22-LC-...
M22-AM...

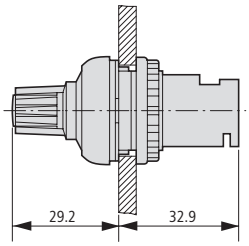


M22-LCH-...



Potentiometer

M22...-R...K



Controlled stop/emergency switching off buttons

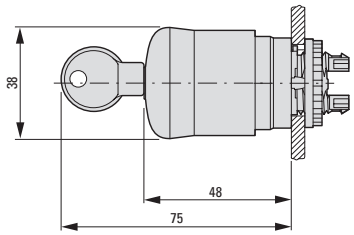
Mushroom-shaped

M22-PV...

M22S-PV...

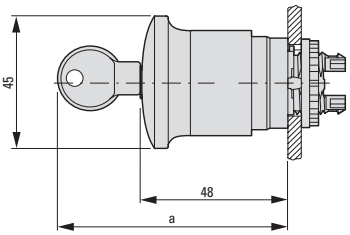
M22-PVL...

M22-PVS...

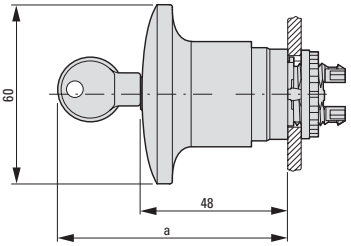


Palm-tree shape

M22-PV...45...



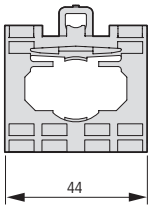
M22-PV...60...

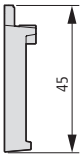


Front mounting (design: flush mounting)

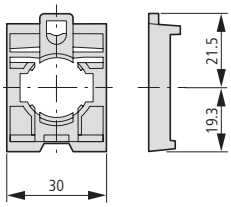
Mounting adapter

M22-A4



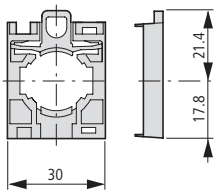


M22-A

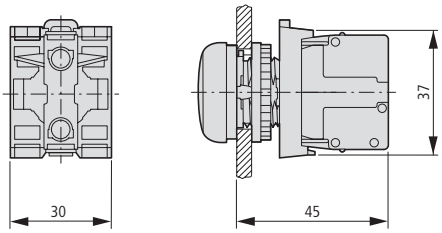


Centering adapter

M22-ZA

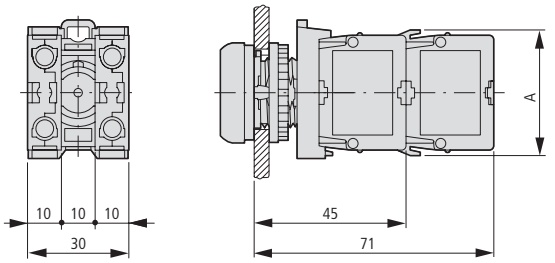


RMQ-Titan indicator lights



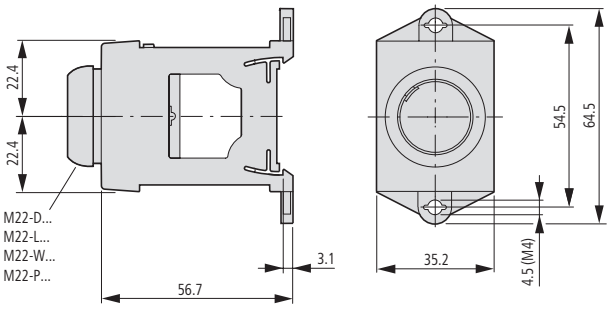
Buttons with M22-(C)K...

Buttons with M22-(C) LED... + M22-XLED...

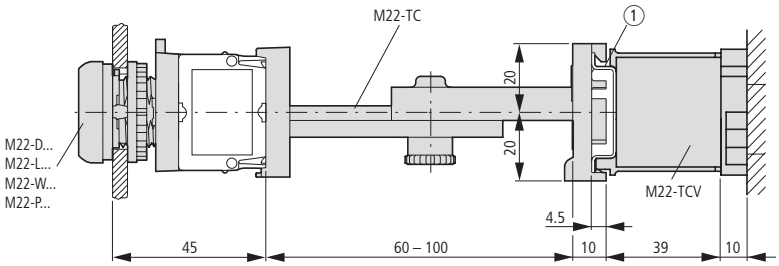


	1 x M22-K...	2 x M22-K...	1 x M22-CK...	2 x M22-CK...
A	37.2	37.2	39	39

IVS top-hat rail adapter



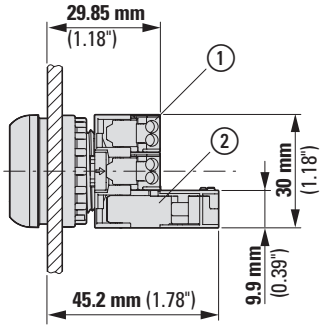
Pushbuttons, indicator lights with M22-TC telescopic clip and M22-TCV extension



① Top-hat rail to IEC/EN 60715

Pushbuttons with Flat Rear contact element ①

Pushbuttons with standard contact element ②



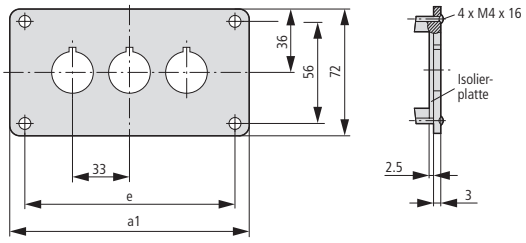
① M22-FK10(01)
② M22-(C)K...

1

Front mounting (design: flush mounting)

RMQ-Titan mounting plates

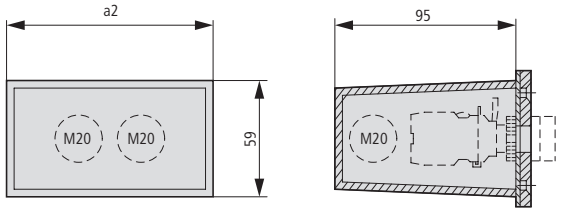
M22-E...



Catalog Number	a1	e
M22-E(Y)1	72	56
M22-E2	105	89
M22-E3	138	122
M22-E4	171	155
M22-E5	204	188
M22-E6	237	221

Shrouds

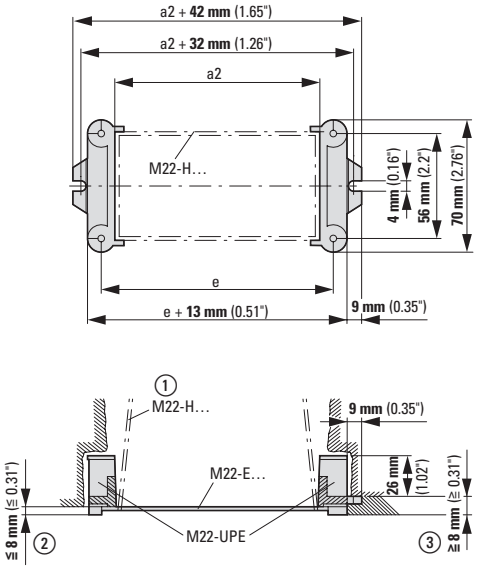
M22-H...



Catalog Number	a2	Cable entries	Design
M22-H1	42	3 × M20	One-piece
M22-H2	75	4 × M20	
M22-H3	108	4 × M20	
M22-H4	141	4 × M20	Split
M22-H5	174	5 × M20	
M22-HE6	207	6 × M20	

Shroud with plaster keys

M22-UPE

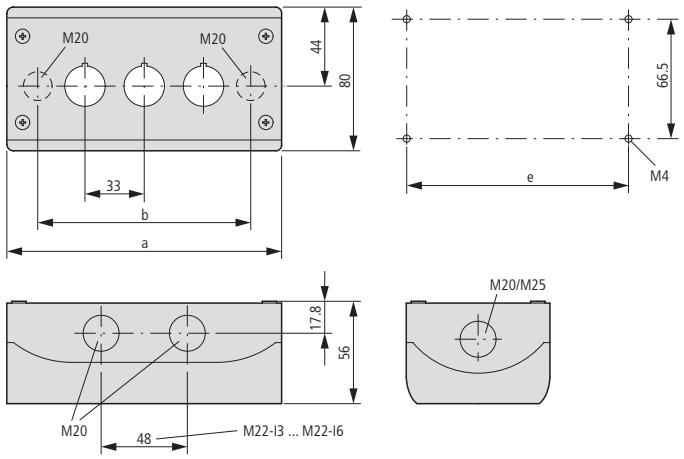


① Box for closing off when plastering
② Plaster thickness less than 8 mm
③ Plaster thickness more than 8 mm

Base mounting (design: surface mounting)

RMQ-Titan surface mounting enclosures

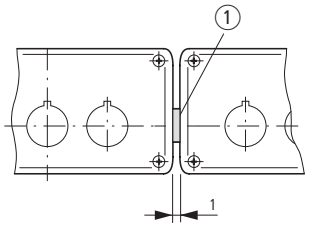
M22-I...



Catalog Number	Mounting locations	a	b	e	Cable entries		
M22-I(Y)1	1	72	42.6	58.5	2 × M16	3 × M20	2 × M25
M22-I2	2	120	85.6	106.5	2 × M20	3 × M20	2 × M25
M22-I3	3	153	118.6	139.5	2 × M20	2 × M25	4 × M20
M22-I4	4	186	151.6	172.5	2 × M20	2 × M25	4 × M20
M22-I6	6	252	217.6	238.5	2 × M20	2 × M25	4 × M20

Combination of surface mounting enclosures

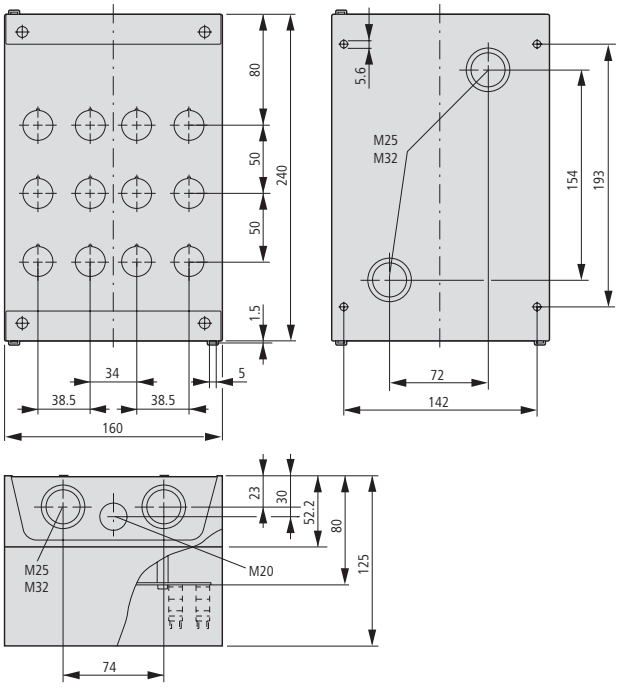
M22-XI



① Gasket

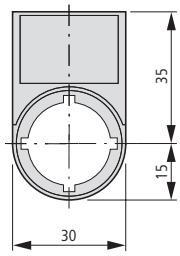
Surface mounting enclosure for 12 mounting locations

M22-I12

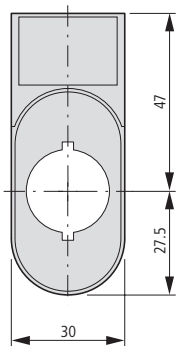


Legend holders

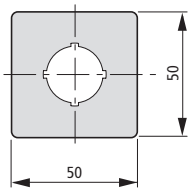
M22S-ST...



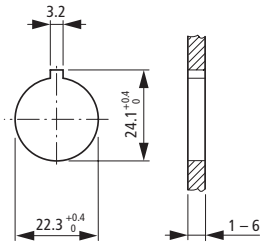
M22S-STDD-X



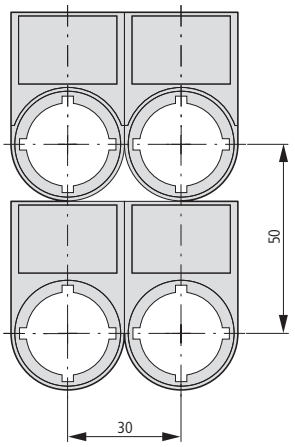
M22-XCK



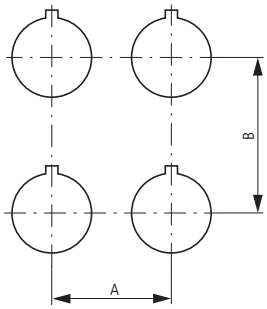
Mounting hole with key slot for M22..., C22...



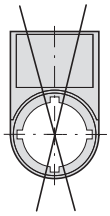
Grid dimension to IEC/EN 60947



Grid dimensions for various Combinations

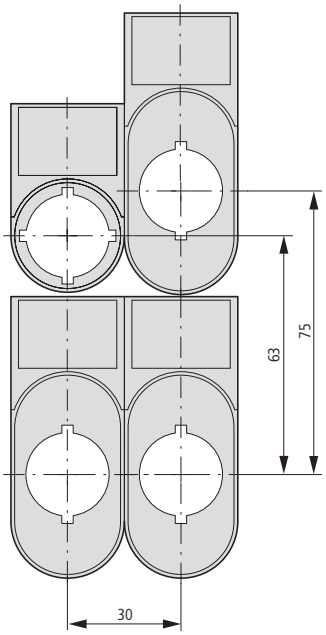


Pushbutton diaphragm cannot be combined with label mount

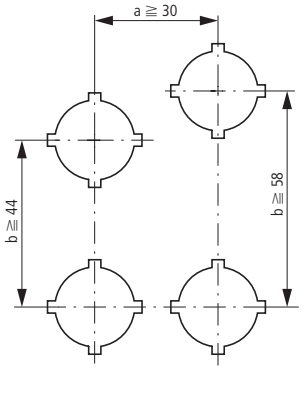


Catalog Number	A ≧	B ≧
	mm	mm
M22(N/O)-...(IEC/EN 60947)	30	50
RMQ-Titan min.	30	40
M22-D... + M22-T-D	33	40
M22-D(R)P...	38	40
M22-PV...	45	45
M22-PV...45	55	55
M22-PV...60	70	70
M22-PV(L) + M22-PL-PV	48	56
M22-PV(L)(N/O...) + M22-D...	33	40
M22-DDL...	30	55
M22-DDL... + M22-T-DD	33	58
M22-ST...	30	50
M22-STDD...	30	75
M22-CK...	30	45
M22-CLED...	30	45
M22-XAK...	90	90
M22-XZK...	33	52
M22-XBK...	60	60
M22-XYK...	50	50
M22-D4	60	60
M22-WR...4	50	50
M22-W...J4	100	100

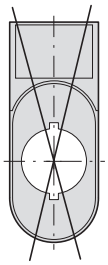
Grid dimensions for M22-DD...



Grid dimensions for M22-DDL



M22-T-DD pushbutton diaphragm
Pushbutton diaphragm cannot be combined with label mount



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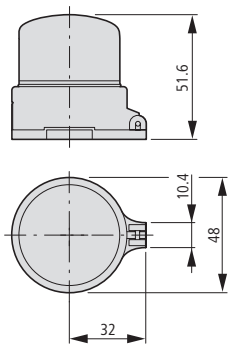
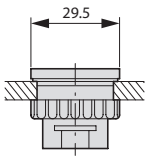
Emergency stop sealable shroud

M22-PL-PV



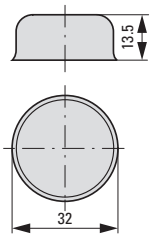
Blanking plug

M22...B-...

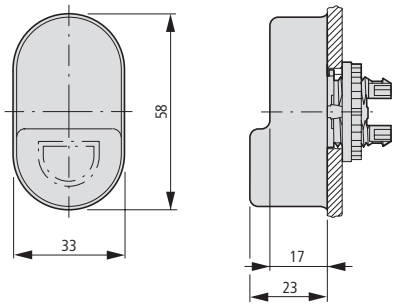


Pushbutton diaphragms

M22-T-D

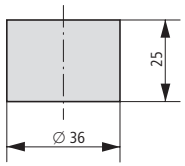


M22-T-D

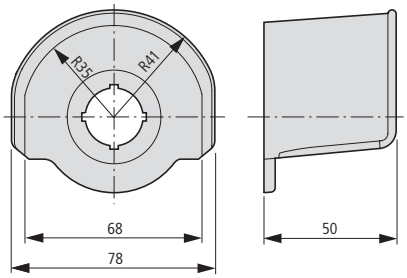


Guard ring

M22-XGWK

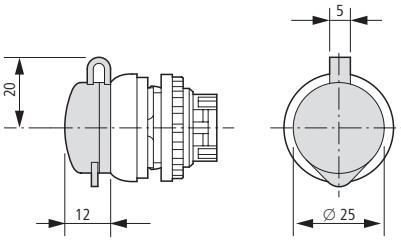


M22-XGPV



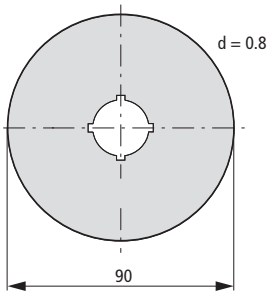
Protective diaphragm

M22-XWS

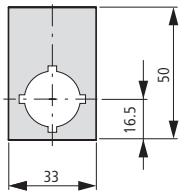


Emergency stop labels

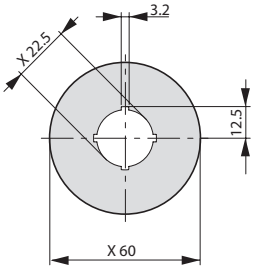
M22-XAK...



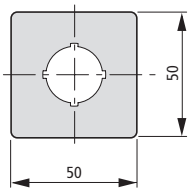
M22-XZK...



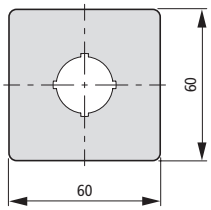
M22-XBK-...



M22-XYK-...

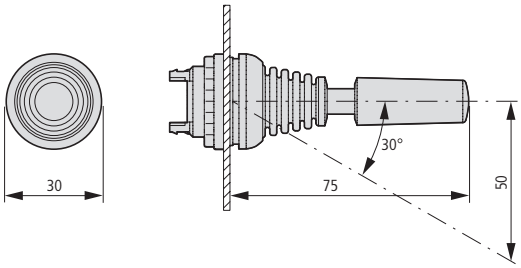


M22-XCK...



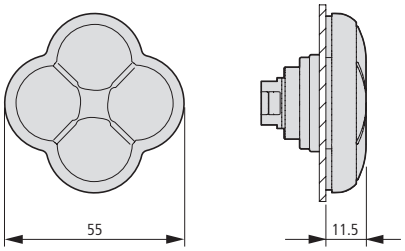
Joysticks

M22…-W...J...



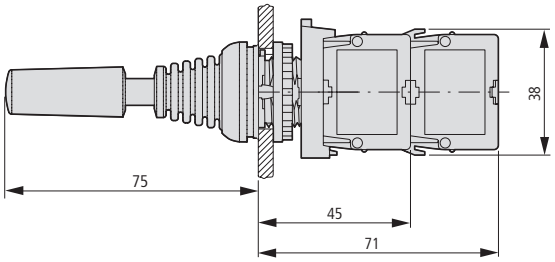
4-way pushbuttons

M22-D...4-...



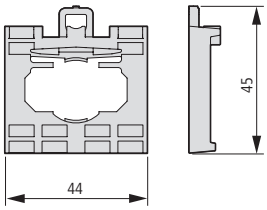
Joysticks

M22-WJ…, M22-WRJ…

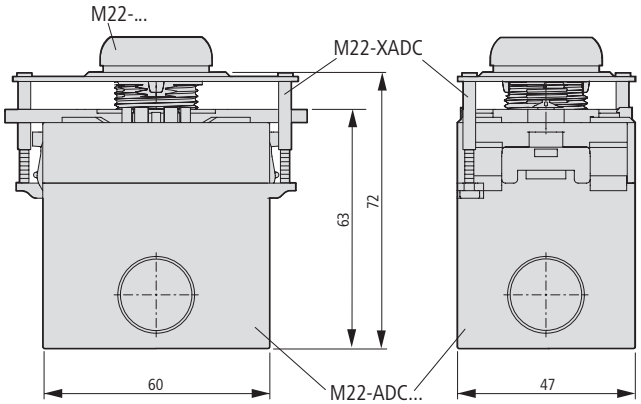


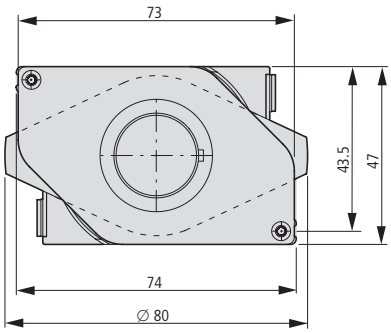
Mounting adapter

M22-A4



Dust covers





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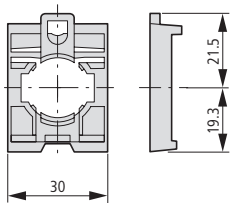
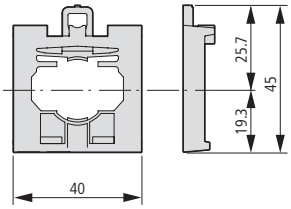
Mounting adapters (front mounting) for 3 contact/LED elements

M22-A

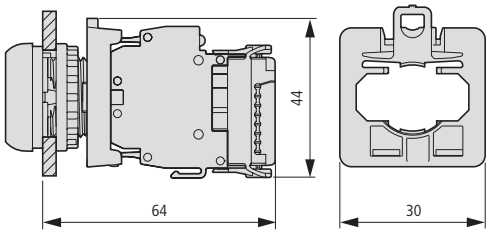


M22-SWD-A4



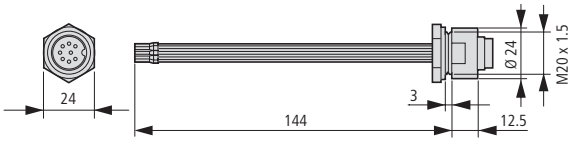
Function elements

M22-SWD-K...
M22-SWD-LED...



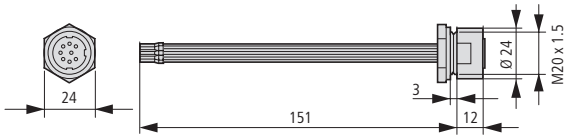
Housing bushing plug

SWD4-SM8-20



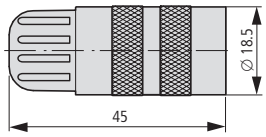
Housing bushing socket

SWD4-SF8-20

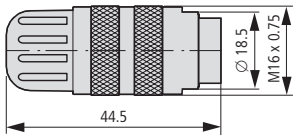


Plug connector for SmartWire-DT round cable, straight

SWD4-SF8-67

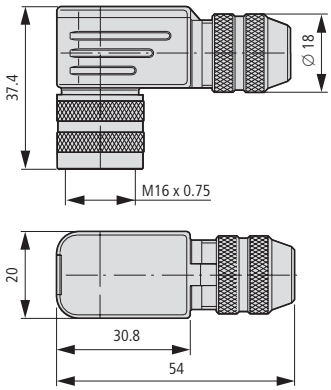


SWD4-SM8-67

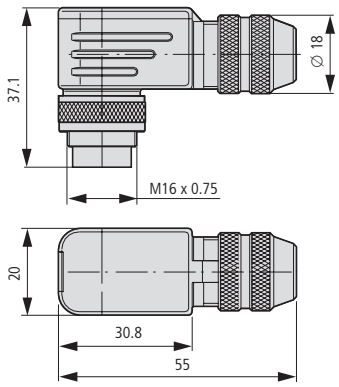


Plug connector for SmartWire-DT round cable, right angle

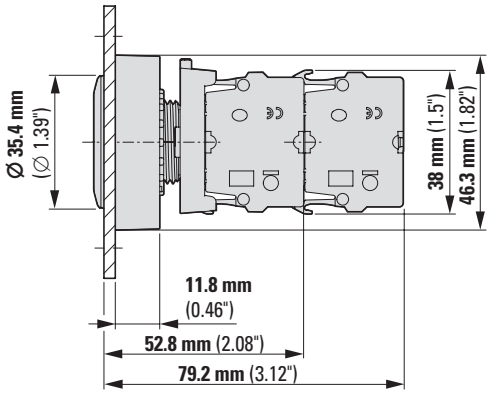
SWD4-SF8-67W



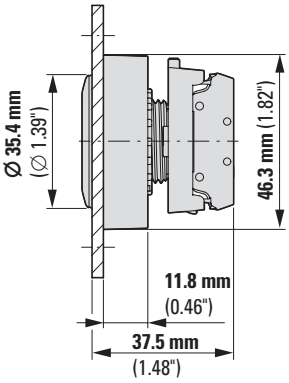
SWD4-SM8-67W



M30.... with 2 M22-K... standard contact elements

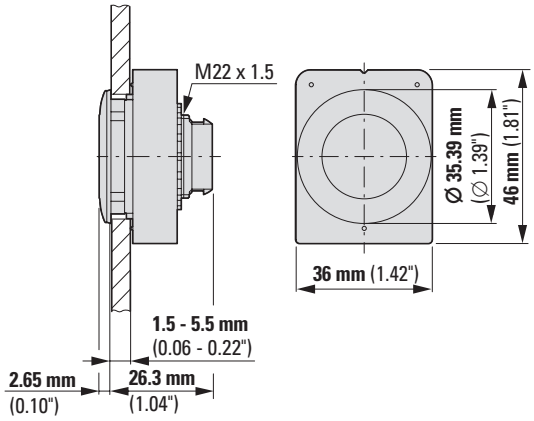


M30.... with M22-FK... Flat Rear contact elements



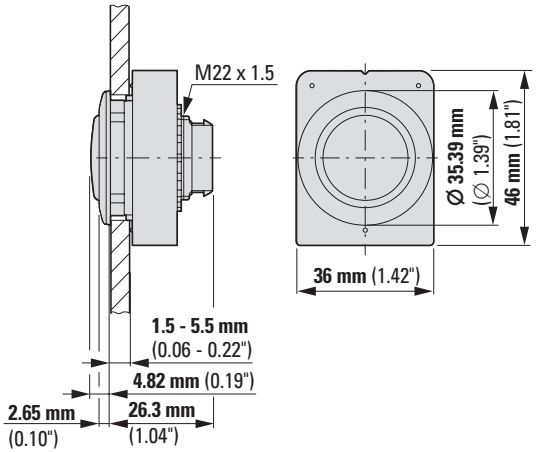
Pushbuttons, blanking plug

M30C-FD...
M30C-FB



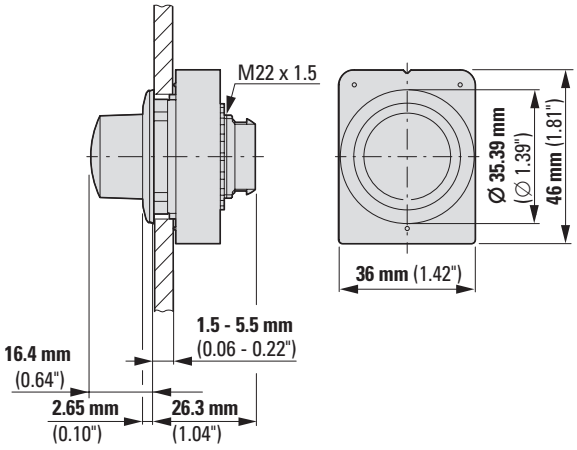
Indicator lights

M30C-FL...



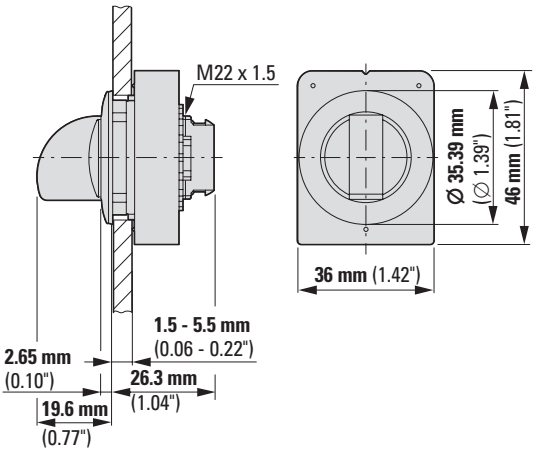
Changeover switches

With rotary head
M30C-FW...



(Illuminated) selector switches

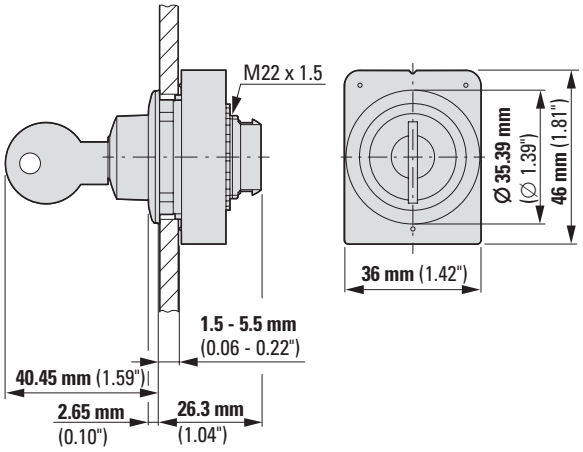
With thumb-grip, 4-way
M30C-FW(L)K(V)-...



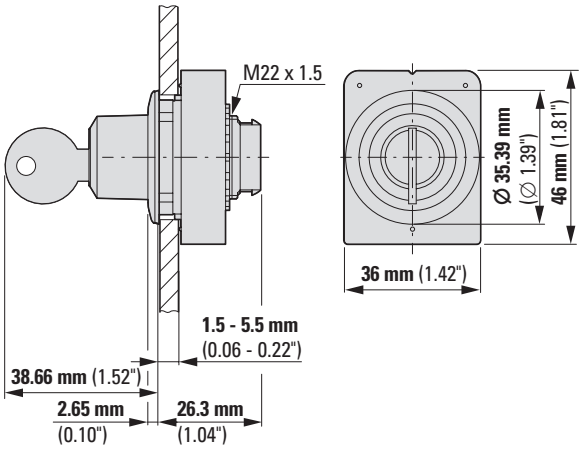
1

Key-operated buttons

M30C-FW(R)S(3)-MS...

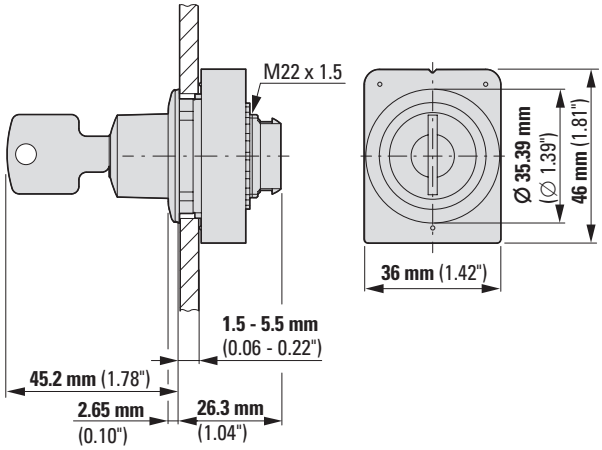


M30C-FW(R)S(3)-RS...



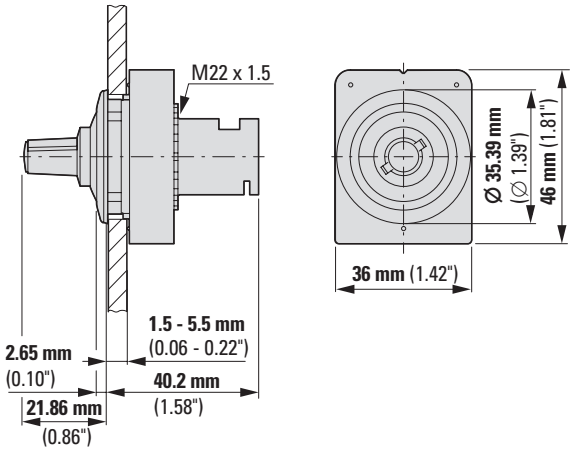
Key-operated buttons

M30C-FW(R)S(3)-SA...



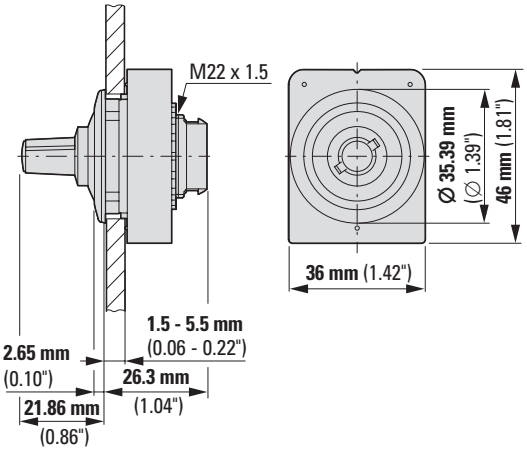
Potentiometer

M30C-FR...



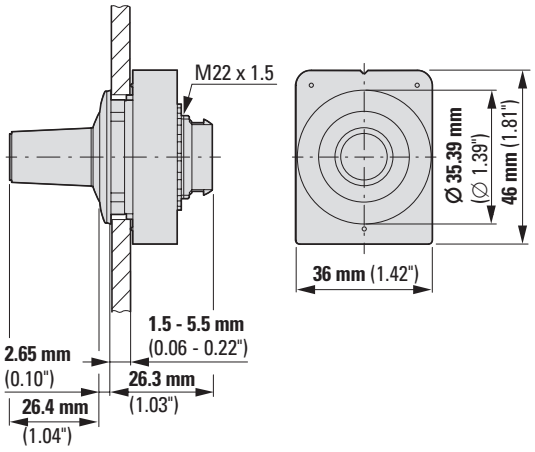
Potentiometers, SmartWire-DT

M30C-FR-SWD



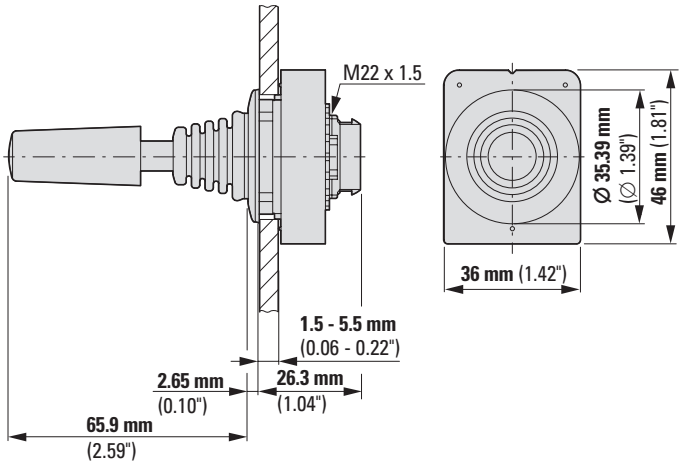
Encoders, SmartWire-DT

M30C-FINC-SWD

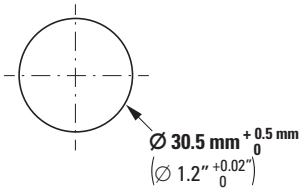


Joysticks

M30C-FW(R)JS...

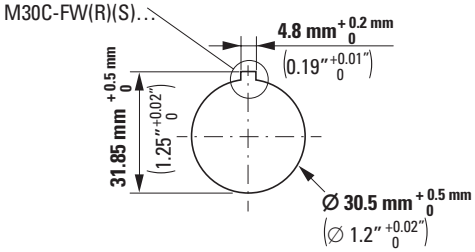


Mounting hole without key slot

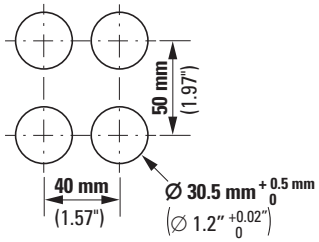


Mounting hole with key slot

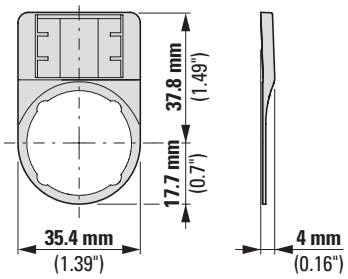
M30C-FW(R)(L)K…
M30C-FW(R)(S)…



Grid dimensions for various combinations

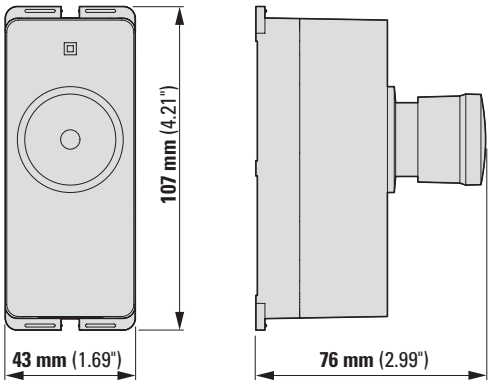


Legend holders M30S-FST-X



Complete device emergency stop 30 mm diameter in a flat surface mounting enclosure

M22-PV.30/FK.../FIY1



Compact solutions. Heavy-duty components. RMQ compact solution.

Our convenient all-in-one RMQ compact solution integrates the required cable, connector, and housing and has them assembled in a non-detachable manner. The high degrees of protection in the front (up to IP69K) and at the back (IP65) of these devices make them the perfect choice for applications in which protection from dirt or liquids is required.

Easy plug-and-play installation is made possible by the devices' compact design. In addition, each compact device requires only one single article no., considerably simplifying all the processes extending from selection, through ordering and stockkeeping, all the way to installation.

The special housing provides protection against dust, water, cleaning products, and fine foreign particles, making these devices perfect for direct installation, e.g., in woodworking machines or other machine tools known for heavy exposure to dusts and liquids as a result of their challenging process environments. The front elements such as pushbuttons, illuminated pushbutton actuators, indicator lights, and controlled stop buttons can all be cleaned with pressure washers and steam jet devices making them ideal for environments with stringent leak tightness and hygiene requirements.

For more information, visit:
www.Eaton.com/rmqcompact

C20
C30

2.0 RMQ compact solution

2.1 System overview

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2.2 Product selection

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C30 – Indicator lights 119
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2.5 Technical specifications

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2.6 Dimensions

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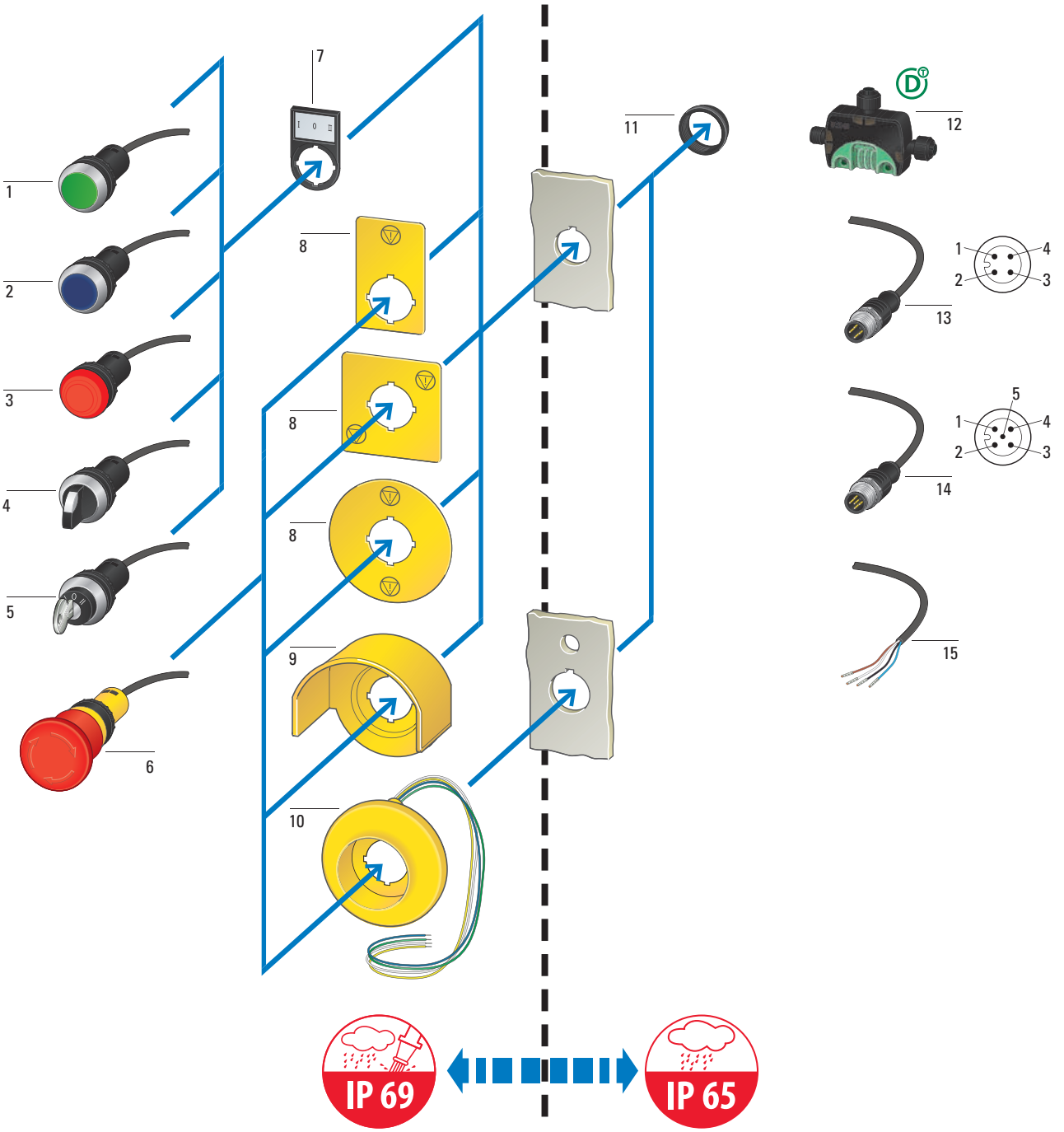
C30 – Dimensions 125

System overview



C22 pushbuttons	1
Momentary and maintained
Flush
Colors: white, green, red, black
With cable (0.2/0.5/1/3.5 m) and plug (M12A, 4 pole) or unterminated cable end (4 pole)
→ Page 110

C22 illuminated pushbutton actuators	2
Momentary and maintained
Flush
Colors: white, green, red, blue, yellow
With cable (0.2/0.5/1/3.5 m) and plug (M12A, 4 pole) or unterminated cable end (4 pole)
24 V AC/DC
→ Page 115

C22 indicator lights	3
Flush
Colors: white, green, red, blue, yellow, multi-color
With cable (0.2/0.5/1/3.5 m) and plug (M12A, 4 pole) or unterminated cable end (4/5 pole)
24 V AC/DC
→ Page 114

C22 selector switches	4
Momentary and maintained
Flush
With thumb-grip
2 or 3 positions
With cable (0.2/1/3.5 m) and plug (M12A, 4 pole) or unterminated cable end (4 pole)
→ Page 112

C22 key-operated buttons	5
Momentary and maintained
Flush
2 or 3 positions
With cable (0.2/1/3.5 m) and plug (M12A, 4 pole) or unterminated cable end (4 pole)
→ Page 113

C22 controlled stop/emergency-stop buttons	6
Flush
38 mm and 45 mm diameter
Mushroom or palm
Twist or pull release
Tamper-proof as defined in ISO 13850/EN 418
European Machinery Safety Directive 2006/42/EC
With cable (0.2/1/3.5 m) and plug (M12A, 5 pole) or unterminated cable end (4 pole)
→ Page 108

Label mounts	7
For insert labels
Color: black
Insert labels: aluminum color, with inscription or blank, suitable for engraving
→ Page 65

Controlled STOP legend plates, IP66	8
Color: yellow, with black lettering
Round, rectangular, or square
With controlled stop inscription or controlled stop symbol
→ Page 21

Guard ring	9
For preventing unintended actuation
For 38 mm and 45 mm designs
→ Page 20

Illuminated ring	10
Versions:
24 V AC/DC, 120 V AC, 230 V AC
Continuous light
Flashing light with separate driver
Chaser light with separate driver, 24 V AC/DC
With three LED rows that can be driven separately
→ Page 20

Threaded rings	11
→ Page 80

SmartWire-DT I/O module	12
For connecting digital input/output signals to SmartWire-DT
IP67

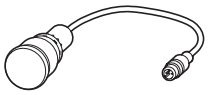
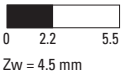
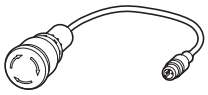
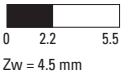
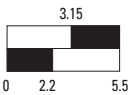
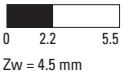
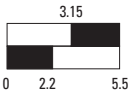
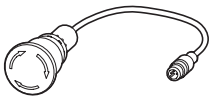
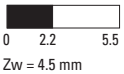
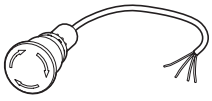
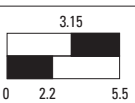
Cable with M12A plug, 4 pole	13

Cable with M12A plug, 5 pole	14

Cable end open	15

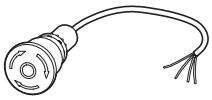
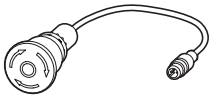
Product selection

2

	Connection type	Cable Length m	Mushroom head	Contact configuration[1] N/C = Normally closed contact	N/O = Normally open contact	Contact sequence	Contact diagram[2]	Catalog Number Article no.	Std. pack
Controlled stop/emergency switching off buttons									
	Non-illuminated Tamper-proof according to ISO 13850, EN 418 IP66, IP67, IP69K (at front) IP65 (at rear) Yellow base								
Mushroom-shaped pull-to-release function 38 mm diameter 	Cable (black) with M12A plug, 5 pole	0.2		2 N/C				**C22-PV-K02-P10** 185184	1 unit
Mushroom-shaped turn-to-release function 38 mm diameter 								**C22-PVT-K02-P10** 191005	1 unit
Mushroom-shaped pull-to-release function 38 mm diameter	Cable (black) with unterminated end, 4 pole	1 3.5		2 N/C				**C22-PV-K02-P62** 185169 **C22-PV-K02-P65** 185170	1 unit
		1 3.5		1 N/C	1 N/O			**C22-PV-K11-P62** 185174 **C22-PV-K11-P65** 185175	
Mushroom-shaped turn-to-release function 38 mm diameter	Cable (black) with unterminated end, 4 pole	1 3.5		2 N/C				**C22-PVT-K02-P62** 185176 **C22-PVT-K02-P65** 185177	1 unit
		1 3.5		1 N/C	1 N/O			**C22-PVT-K11-P62** 185181 **C22-PVT-K11-P65** 185182	
Palm-tree shape turn-to-release function 45 mm diameter 	Cable (black) with M12A plug, 5 pole	0.2		2 N/C				**C22-PVT45P-K02-P10** 185183	1 unit
Palm-tree shape turn-to-release function 45 mm diameter 	Cable (black) with unterminated end, 4 pole	1 3.5		2 N/C				**C22-PVT45P-K02-P62** 185155 **C22-PVT45P-K02-P65** 185156	1 unit
		1 3.5		1 N/C	1 N/O			**C22-PVT45P-K11-P62** 185160 **C22-PVT45P-K11-P65** 185161	

Notes

[1] ⊖ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1
[2] Contact sequence ■ = Contact closed □ = Contact open
[3] Green switch position indicator → Button not activated

	Connection type	Cable Length m	Mushroom head	Contact configuration[1] N/C = Normally closed contact	Contact configuration[1] N/O = Normally open contact	Contact sequence	Contact diagram[2]	Catalog Number Article no.	Std. pack
Controlled stop/emergency switching off buttons									
	Non-illuminated Tamper-proof according to ISO 13850, EN 418 IP66, IP67, IP69K (at front) IP65 (at rear) Yellow base								
Palm-tree shape turn-to-release function 45 mm diameter With mechanical position indicator[3] 	Cable (black) with unterminated end, 4 pole	1		2 N/C		BN WH / BK BU	0 2.2 5.5 Zw = 4.5 mm	**C22-PVT45P-MPI-K02-P62** 185162	1 unit
		3.5						**C22-PVT45P-MPI-K02-P65** 185163	
		1		1 N/C	1 N/O	BN WH / BK BU	3.15 0 2.2 5.5 Zw = 4.5 mm	**C22-PVT45P-MPI-K11-P62** 185167	
		3.5						**C22-PVT45P-MPI-K11-P65** 185168	
Palm-tree shape turn-to-release function 45 mm diameter With mechanical position indicator[3] 	Cable (black) with M12A	0.2		2 N/C		L1 L2 / 4 3	0 2.2 5.5 Zw = 4.5 mm	**C22-PVT45P-MPI-K02-P1** 182972	1 unit
Mushroom-shaped pull-to-release function 38 mm diameter	Cable (black) with M12A plug, 4 pole	0.2		2 N/C		L1 L2 / 4 3	0 2.2 5.5 Zw = 4.5 mm	**C22-PV-K02-P1** 182975	1 unit
Mushroom-shaped pull-to-release function 38 mm diameter	Cable (black) with M12A plug, 4 pole	0.2		1 N/C	1 N/O	L1 L2 / 4 3	3.15 0 2.2 5.5 Zw = 4.5 mm	**C22-PV-K11-P1** 185171	1 unit

Notes

[1] ⊖ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1
[2] Contact sequence ■ = Contact closed □ = Contact open
[3] Green switch position indicator → Button not activated

2

Cable (black) with M12A plug, 4 pole

Cable Length m	Button plate	Contact configuration[1] N/O = Normally open contact	N/C = Normally closed contact	Contact sequence[2]	Contact diagram	Momentary **Catalog Number** Article no.	Maintained **Catalog Number** Article no.	Std. pack
Pushbuttons								
Silver bezel IP66, IP67, IP69K (at front), IP65 (at rear) Flush								
0.2			1 N/C	1 4	0 2.2 5.5 Zw = 4.5 mm	**C22-D-R-K01-P1** 185675	**C22-DR-R-K01-P1** 185684	1 unit
						C22-D-S-K01-P1 185676	**C22-DR-S-K01-P1** 185685	
	Without button plate					**C22-D-X-K01-P1** 185678	**C22-DR-X-K01-P1** 185687	
		1 N/O		1 4	0 3.15 5.5	**C22-D-G-K10-P1** 185674	**C22-DR-G-K10-P1** 185683	
						C22-D-W-K10-P1 185677	**C22-DR-W-K10-P1** 185686	
	Without button plate					**C22-D-X-K10-P1** 185680	**C22-DR-X-K10-P1** 185689	
0.5			1 N/C	1 4	0 2.2 5.5 Zw = 4.5 mm	**C22-D-R-K01-P3** 181633	**C22-DR-R-K01-P3** 181611	1 unit
						C22-D-S-K01-P3 181634	**C22-DR-S-K01-P3** 181612	
	Without button plate					**C22-D-X-K01-P3** 181605	**C22-DR-X-K01-P3** 181614	
		1 N/O		1 4	0 3.15 5.5	**C22-D-G-K10-P3** 181632	**C22-DR-G-K10-P3** 181610	
						C22-D-W-K10-P3 181635	**C22-DR-W-K10-P3** 181613	
	Without button plate					**C22-D-X-K10-P3** 181607	**C22-DR-X-K10-P3** 181616	
1			1 N/C	1 4	0 2.2 5.5 Zw = 4.5 mm	**C22-D-R-K01-P5** 181043	**C22-DR-R-K01-P5** 181081	1 unit
						C22-D-S-K01-P5 181045	**C22-DR-S-K01-P5** 181083	
	Without button plate					**C22-D-X-K01-P5** 181049	**C22-DR-X-K01-P5** 181087	
		1 N/O		1 4	0 3.15 5.5	**C22-D-G-K10-P5** 181041	**C22-DR-G-K10-P5** 181079	
						C22-D-W-K10-P5 181047	**C22-DR-W-K10-P5** 181085	
	Without button plate					**C22-D-X-K10-P5** 181051	**C22-DR-X-K10-P5** 181089	

Notes

[1] ⊖ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1
[2] Contact sequence: ■ = Contact closed □ = Contact open

Cable (black) with unterminated end, 4 pole

Pushbuttons

Silver bezel
IP66, IP67, IP69K (at front), IP65 (at rear)
Flush

Cable Length m	Button plate	Contact configuration[1] N/O = Normally open contact	Contact configuration[1] N/C = Normally closed contact	Contact sequence[2]	Contact diagram	Momentary **Catalog Number** Article no.	Maintained **Catalog Number** Article no.	Std. pack
1			1 N/C	BN BK	0 2.2 5.5 Zw = 4.5 mm	**C22-D-R-K01-P62** 185671	**C22-DR-R-K01-P62** 185608	1 unit
						C22-D-S-K01-P62 185672	**C22-DR-S-K01-P62** 185609	
	Without button plate					**C22-D-X-K01-P62** 185602	**C22-DR-X-K01-P62** 185611	
	Without button plate		2 N/C	BN WH BK BU	0 2.2 5.5 Zw = 4.5 mm	**C22-D-X-K02-P62** 185603	**C22-DR-X-K02-P62** 185612	
	Without button plate	1 N/O	1 N/C	BN WH BK BU	3.15 0 2.2 5.5 Zw = 4.5 mm	**C22-D-X-K11-P62** 185605	**C22-DR-X-K11-P62** 185614	
		1 N/O		BN BK	0 3.15 5.5	**C22-D-G-K10-P62** 185670	**C22-DR-G-K10-P62** 185607	
						C22-D-W-K10-P62 185673	**C22-DR-W-K10-P62** 185610	
	Without button plate					**C22-D-X-K10-P62** 185604	**C22-DR-X-K10-P62** 185613	
	Without button plate	2 N/O		BN WH BK BU	0 3.15 5.5	**C22-D-X-K20-P62** 185606	**C22-DR-X-K20-P62** 185615	
3.5			1 N/C	BN BK	0 2.2 5.5 Zw = 4.5 mm	**C22-D-R-K01-P65** 185617	**C22-DR-R-K01-P65** 185626	1 unit
						C22-D-S-K01-P65 185618	**C22-DR-S-K01-P65** 185627	
	Without button plate					**C22-D-X-K01-P65** 185620	**C22-DR-X-K01-P65** 185629	
	Without button plate		2 N/C	BN WH BK BU	0 2.2 5.5 Zw = 4.5 mm	**C22-D-X-K02-P65** 185621	**C22-DR-X-K02-P65** 185630	
	Without button plate	1 N/O	1 N/C	BN WH BK BU	3.15 0 2.2 5.5 Zw = 4.5 mm	**C22-D-X-K11-P65** 185623	**C22-DR-X-K11-P65** 185632	
		1 N/O		BN BK	0 3.15 5.5	**C22-D-G-K10-P65** 185616	**C22-DR-G-K10-P65** 185625	
						C22-D-W-K10-P65 185619	**C22-DR-W-K10-P65** 185628	
	Without button plate					**C22-D-X-K10-P65** 185622	**C22-DR-X-K10-P65** 185631	
	Without button plate	2 N/O		BN WH BK BU	0 3.15 5.5	**C22-D-X-K20-P65** 185624	**C22-DR-X-K20-P65** 185633	

Notes

[1] ⊖ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1
[2] Contact sequence: ■ = Contact closed □ = Contact open

2

Function:	Contact configuration[1]		Contact sequence	Contact diagram[2]	Cable Length **Catalog Number** Article no.	Cable Length **Catalog Number** Article no.	Std. pack
= momentary (MO) = maintained (MA)	N/O = Normally open contact	N/C = Normally closed contact					
Changeover switches							
Silver bezel With thumb-grip IP66 (at front), IP65 (at rear)							
					0.2 m	1 m	
2 positions **Cable (black) with M12A plug, 4 pole**	40°	1 N/O	1 4	0 3.15 5.5	**C22-WK-K10-P1** 186098	**C22-WK-K10-P5** 186114	1 unit
	60°				**C22-WRK-K10-P1** 186103	**C22-WRK-K10-P5** 186119	
					1 m	3.5 m	
2 positions **Cable (black) with unterminated end, 4 pole**	40°	1 N/C	BN BK	0 2.2 5.5 Zw = 4.5 mm	**C22-WK-K01-P62** 186161	**C22-WK-K01-P65** 186177	1 unit
	60°				**C22-WRK-K01-P62** 186166	**C22-WRK-K01-P65** 186182	
	40°	2 N/C	BN WH BK BU	0 2.2 5.5 Zw = 4.5 mm	**C22-WK-K02-P62** 186158	**C22-WK-K02-P65** 186174	
	60°				**C22-WRK-K02-P62** 186163	**C22-WRK-K02-P65** 186179	
	40°	1 N/O	BN WH BK BU	3.15 0 2.2 5.5 Zw = 4.5 mm	**C22-WK-K11-P62** 186159	**C22-WK-K11-P65** 186175	
	60°	1 N/C			**C22-WRK-K11-P62** 186164	**C22-WRK-K11-P65** 186180	
	40°	1 N/O	BN BK	0 3.15 5.5	**C22-WK-K10-P62** 186162	**C22-WK-K10-P65** 186178	
	60°				**C22-WRK-K10-P62** 186167	**C22-WRK-K10-P65** 186183	
	40°	2 N/O	BN WH BK BU	0 3.15 5.5	**C22-WK-K20-P62** 186160	**C22-WK-K20-P65** 186176	
	60°				**C22-WRK-K20-P62** 186165	**C22-WRK-K20-P65** 186181	
					0.2 m	1 m	
3 positions **Cable (black) with M12A plug, 4 pole**	40° 40°	2 N/O	1 1 4 2	0 3.15 5.5	**C22-WK3-K20-P1** 186106	**C22-WK3-K20-P5** 186122	1 unit
	60° 60°				**C22-WRK3-K20-P1** 186109	**C22-WRK3-K20-P5** 186125	
					1 m	3.5 m	
3 positions **Cable (black) with unterminated end, 4 pole**	40° 40°	2 N/C	BN WH BK BU	0 2.2 5.5 Zw = 4.5 mm	**C22-WK3-K02-P62** 186168	**C22-WK3-K02-P65** 186184	1 unit
	60° 60°				**C22-WRK3-K02-P62** 186171	**C22-WRK3-K02-P65** 186187	
	40° 40°	1 N/O	BN WH BK BU	3.15 0 2.2 5.5 Zw = 4.5 mm	**C22-WK3-K11-P62** 186169	**C22-WK3-K11-P65** 186185	
	60° 60°	1 N/C			**C22-WRK3-K11-P62** 186172	**C22-WRK3-K11-P65** 186188	
	40° 40°	2 N/O	BN WH BK BU	0 3.15 5.5	**C22-WK3-K20-P62** 186170	**C22-WK3-K20-P65** 186186	
	60° 60°				**C22-WRK3-K20-P62** 186173	**C22-WRK3-K20-P65** 186189	

Notes

[1] ⊖ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1
[2] Contact sequence: ■ = Contact closed □ = Contact open

Function:	Key withdrawable at position	Contact configuration[1] N/O	N/C	Contact sequence	Contact diagram	Cable Length **Catalog Number** Article no.	Cable Length **Catalog Number** Article no.	Std. pack
▷ = momentary (MO)								
⌞ = maintained (MA)								
Key-operated buttons								
Silver bezel MS1 lock mechanism Not suitable for master key systems With 1 key IP66 (at front), IP65 (at rear)								
						0.2 m	1 m	
2 positions Cable (black) with M12A plug, 4 pole								
▷ 40°	0	1 N/O		1 4	0 3.15 5.5	**C22-WS-MS1-K10-P1** 186194	**C22-WS-MS1-K10-P5** 186210	1 unit
⌞ 60°	I 0					**C22-WRS-MS1-K10-P1** 186199	**C22-WRS-MS1-K10-P5** 186215	
						1 m	3.5 m	
2 positions Cable (black) with unterminated end, 4 pole								
▷ 40°	0		1 N/C	BN BK	0 2.2 5.5 Zw = 4.5 mm	**C22-WS-MS1-K01-P62** 186257	**C22-WS-MS1-K01-P65** 186273	1 unit
⌞ 60°	I 0					**C22-WRS-MS1-K01-P62** 186262	**C22-WRS-MS1-K01-P65** 186278	
▷ 40°	0		2 N/C	BN WH BK BU	0 2.2 5.5 Zw = 4.5 mm	**C22-WS-MS1-K02-P62** 186254	**C22-WS-MS1-K02-P65** 186270	
⌞ 60°	I 0					**C22-WRS-MS1-K02-P62** 186259	**C22-WRS-MS1-K02-P65** 186275	
▷ 40°	0	1 N/O	1 N/C	BN WH BK BU	3.15 0 2.2 5.5 Zw = 4.5 mm	**C22-WS-MS1-K11-P62** 186255	**C22-WS-MS1-K11-P65** 186271	
⌞ 60°	I 0					**C22-WRS-MS1-K11-P62** 186260	**C22-WRS-MS1-K11-P65** 186276	
▷ 40°	0	1 N/O		BN BK	0 3.15 5.5	**C22-WS-MS1-K10-P62** 186258	**C22-WS-MS1-K10-P65** 186274	
⌞ 60°	I 0					**C22-WRS-MS1-K10-P62** 186263	**C22-WRS-MS1-K10-P65** 186279	
▷ 40°	0	2 N/O		BN WH BK BU	0 3.15 5.5	**C22-WS-MS1-K20-P62** 186256	**C22-WS-MS1-K20-P65** 186272	
⌞ 60°	I 0					**C22-WRS-MS1-K20-P62** 186261	**C22-WRS-MS1-K20-P65** 186277	
						0.2 m	1 m	
3 positions Cable (black) with M12A plug, 4 pole								
40° ◁▷ 40°	0	2 N/O		1 1 4 2	0 3.15 5.5	**C22-WS3-MS1-K20-P1** 186202	**C22-WS3-MS1-K20-P5** 186218	1 unit
60° ▽ 60°	I 0 II					**C22-WRS3-MS1-K20-P1** 186205	**C22-WRS3-MS1-K20-P5** 186221	
						1 m	3.5 m	
3 positions Cable (black) with unterminated end, 4 pole								
40° ◁▷ 40°	0		2 N/C	BN WH BK BU	0 2.2 5.5 Zw = 4.5 mm	**C22-WS3-MS1-K02-P62** 186264	**C22-WS3-MS1-K02-P65** 186280	1 unit
60° ▽ 60°	I 0 II					**C22-WRS3-MS1-K02-P62** 186267	**C22-WRS3-MS1-K02-P65** 186283	
40° ◁▷ 40°	0	1 N/O	1 N/C	BN WH BK BU	3.15 0 2.2 5.5 Zw = 4.5 mm	**C22-WS3-MS1-K11-P62** 186265	**C22-WS3-MS1-K11-P65** 186281	
60° ▽ 60°	I 0 II					**C22-WRS3-MS1-K11-P62** 186268	**C22-WRS3-MS1-K11-P65** 186284	
40° ◁▷ 40°	0	2 N/O		BN WH BK BU	0 3.15 5.5	**C22-WS3-MS1-K20-P62** 186266	**C22-WS3-MS1-K20-P65** 186282	
60° ▽ 60°	I 0 II					**C22-WRS3-MS1-K20-P62** 186269	**C22-WRS3-MS1-K20-P65** 186285	

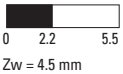
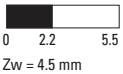
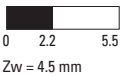
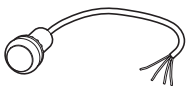
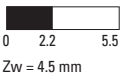
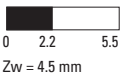
Notes

[1] ⊖ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1

[2] Contact sequence ■ = Contact closed □ = Contact open

2

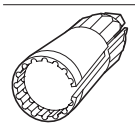
	Connection type	Cable Length m	Lens	LED	Contact sequence	Catalog Number Article no.	Std. pack
	Indicator lights						
	Flush LED rated operating voltage: 24 V AC/DC IP66, IP67, IP69K (at front), IP65 (at rear)						
	Cable (black) with M12A plug, 4 pole	0.2				**C22-L-B-24-P1** 185119	1 unit
						C22-L-G-24-P1 185120	
						C22-L-R-24-P1 185121	
						C22-L-W-24-P1 185122	
						C22-L-Y-24-P1 185123	
		0.5				**C22-L-B-24-P3** 181619	
						C22-L-G-24-P3 181620	
						C22-L-R-24-P3 181621	
						C22-L-W-24-P3 181622	
						C22-L-Y-24-P3 181623	
		1				**C22-L-B-24-P5** 181137	
						C22-L-G-24-P5 181139	
						C22-L-R-24-P5 181141	
						C22-L-W-24-P5 181059	
						C22-L-Y-24-P5 181061	
Multicolored variant	Cable (black) with M12A plug, 4 pole	0.2	Transparent			**C22-L-RGY-24-P1** 197569	1 unit
			Transparent			**C22-L-BWR-24-P1** 197656	
	Cable (black) with unterminated end, 4 pole	1				**C22-L-B-24-P62** 185139	1 unit
						C22-L-G-24-P62 185140	
						C22-L-R-24-P62 185141	
						C22-L-W-24-P62 185142	
						C22-L-Y-24-P62 185143	
		3.5				**C22-L-B-24-P65** 185144	
						C22-L-G-24-P65 185145	
						C22-L-R-24-P65 185146	
						C22-L-W-24-P65 185147	
						C22-L-Y-24-P65 185148	
Multicolored variant	Cable (black) with unterminated end, 5 pole	1	Transparent			**C22-L-RGBYW-24-P72** 197569	

	Cable Length m	Button plate	LED	Contact configuration[1] N/O = Normally open contact	N/C = Normally closed contact	Contact sequence	Contact diagram[2]	Momentary **Catalog Number** Article no.	Maintained **Catalog Number** Article no.	Std. pack
Illuminated pushbutton actuators										
Silver bezel LED rated operating voltage: 24 V AC/DC IP66, IP67, IP69K (at front), IP65 (at rear) Flush										
Cable (black) with M12A plug, 4 pole	0.2	●	●		1 N/C		 0 2.2 5.5 Zw = 4.5 mm	**C22-DL-R-K01-24-P1** 185555	**C22-DRL-R-K01-24-P1** 185559	1 unit
		●	●	1 N/O			0 3.15 5.5	**C22-DL-B-K10-24-P1** 185553	**C22-DRL-B-K10-24-P1** 185557	
		●	●					**C22-DL-G-K10-24-P1** 185554	**C22-DRL-G-K10-24-P1** 185558	
		○	○					**C22-DL-W-K10-24-P1** 185556	**C22-DRL-W-K10-24-P1** 185560	
	0.5	●	●		1 N/C		 0 2.2 5.5 Zw = 4.5 mm	**C22-DL-R-K01-24-P3** 181626	**C22-DRL-R-K01-24-P3** 181630	
		●	●	1 N/O			0 3.15 5.5	**C22-DL-B-K10-24-P3** 181624	**C22-DRL-B-K10-24-P3** 181628	
		●	●					**C22-DL-G-K10-24-P3** 181625	**C22-DRL-G-K10-24-P3** 181629	
		○	○					**C22-DL-W-K10-24-P3** 181627	**C22-DRL-W-K10-24-P3** 181631	
	1	●	●		1 N/C		 0 2.2 5.5 Zw = 4.5 mm	**C22-DL-R-K01-24-P5** 181303	**C22-DRL-R-K01-24-P5** 181368	
		●	●	1 N/O			0 3.15 5.5	**C22-DL-B-K10-24-P5** 181298	**C22-DRL-B-K10-24-P5** 181364	
		●	●					**C22-DL-G-K10-24-P5** 181300	**C22-DRL-G-K10-24-P5** 181366	
		○	○					**C22-DL-W-K10–24-P5** 181307	**C22-DRL-W-K10-24-P5** 181370	
Cable (black) with unterminated end, 4 pole 	1	●	●		1 N/C		 0 2.2 5.5 Zw = 4.5 mm	**C22-DL-R-K01-24-P62** 185587	**C22-DRL-R-K01-24-P62** 185591	1 unit
		●	●	1 N/O			0 3.15 5.5	**C22-DL-B-K10-24-P62** 185585	**C22-DRL-B-K10-24-P62** 185589	
		●	●					**C22-DL-G-K10-24-P62** 185586	**C22-DRL-G-K10-24-P62** 185590	
		○	○					**C22-DL-W-K10-24-P62** 185588	**C22-DRL-W-K10-24-P62** 185592	
	3.5	●	●		1 N/C		 0 2.2 5.5 Zw = 4.5 mm	**C22-DL-R-K01-24-P65** 185595	**C22-DRL-R-K01-24-P65** 185599	
		●	●	1 N/O			0 3.15 5.5	**C22-DL-B-K10-24-P65** 185593	**C22-DRL-B-K10-24-P65** 185597	
		●	●					**C22-DL-G-K10-24-P65** 185594	**C22-DRL-G-K10-24-P65** 185598	
		○	○					**C22-DL-W-K10-24-P65** 185596	**C22-DRL-W-K10-24-P65** 185600	

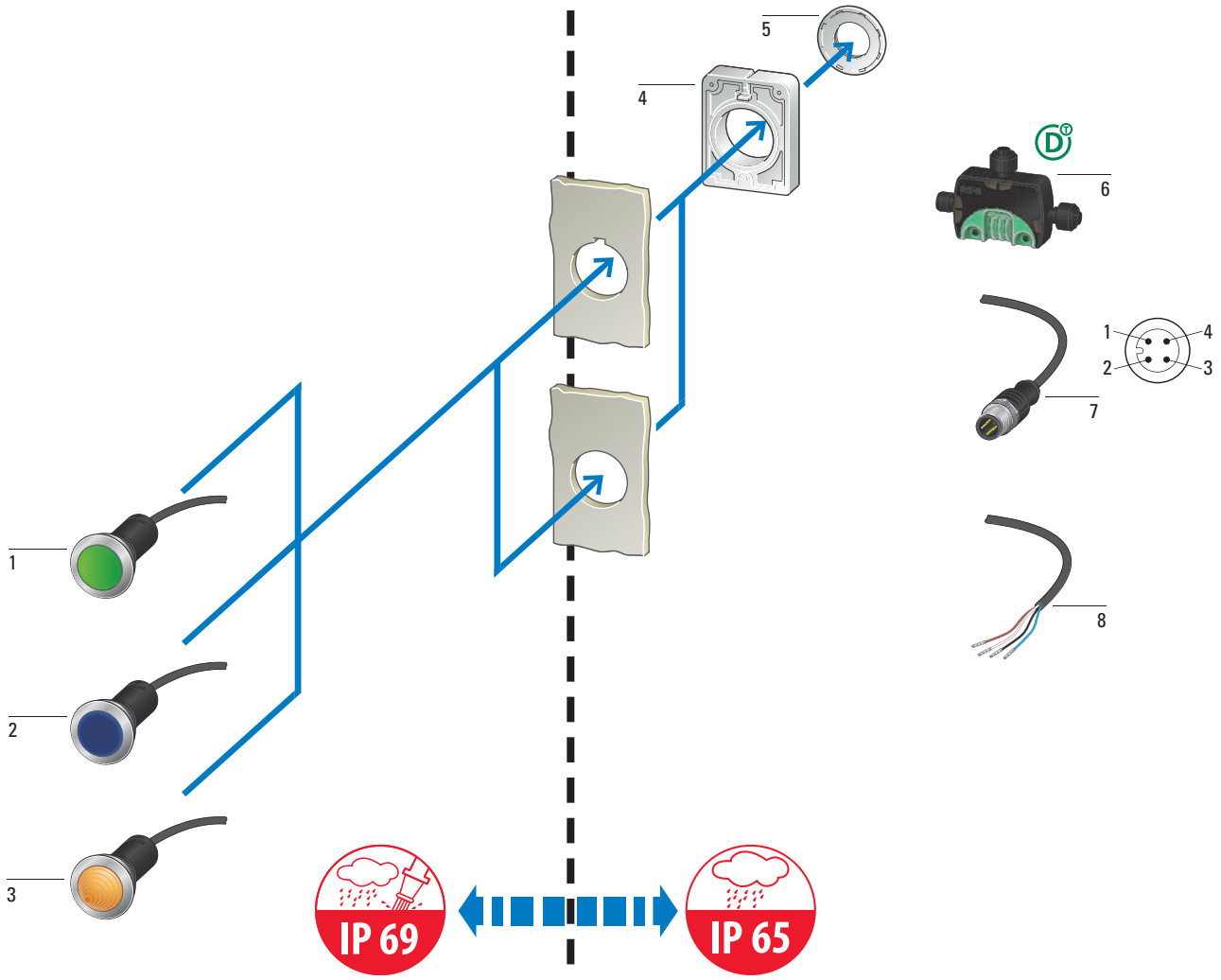
Notes

[1] ⊖ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1

[2] Contact sequence: ■ = Contact closed □ = Contact open

		Catalog Number Article no.	Std. pack
	**Mounting ring tool**		
	For threaded ring; can be used with cordless screwdriver.	**C22-MS** 179955	1 unit

System overview



C30 pushbuttons 1
Momentary and maintained
Flush
Colors: white, green, red, black
With cable (1.5 or 3 m) and plug (M12A, 4 pole) or unterminated cable end (4 pole)
→ Page 117

C30 illuminated pushbutton actuators 2
Momentary and maintained
Flush
Colors: white, green, red, blue
With cable (1.5 or 3 m) and plug (M12A, 4 pole) or unterminated cable end (4 pole)
24 V AC/DC
→ Page 120

C30 indicator lights 3
Flush
Colors: white, green, red, blue, yellow
With cable (1.5 or 3 m) and plug (M12A, 4 pole) or unterminated cable end (4 pole)
24 V AC/DC
→ Page 119

RMQ-AFX anti-rotation tab 4
Included with C30 compact devices

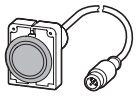
Threaded rings 5
→ Page 80

SmartWire-DT I/O module 6
For connecting digital input/output signals to SmartWire-DT
IP67

Cable with M12A plug, 4 pole 7

Cable end open, 4 pole 8

Product selection

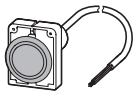
	Cable Length	Button plate	Contact configuration[1]		Contact sequence[2]	Contact diagram	Momentary **Catalog Number** Article no.	Maintained **Catalog Number** Article no.	Std. pack
	m		N/O = Normally open contact	N/C = Normally closed contact					
Pushbuttons									
30 mm Flat Front Metal bezel IP66, IP67, IP69K (at front), IP65 (at rear) Flush									
Cable (black) with M12A plug, 4 pole 	1	red	1 N/C		1 4	0 2.2 5.5 Zw = 4.5 mm	**C30C-FD-R-K01-P5** 185987	**C30C-FDR-R-K01-P5** 185996	1 unit
		black					**C30C-FD-S-K01-P5** 185985	**C30C-FDR-S-K01-P5** 185994	
		Without button plate					**C30C-FD-X-K01-P5** 185989	**C30C-FDR-X-K01-P5** 185998	
		green		1 N/O	1 4	0 3.15 5.5	**C30C-FD-G-K10-P5** 185988	**C30C-FDR-G-K10-P5** 185997	
		white					**C30C-FD-W-K10-P5** 185986	**C30C-FDR-W-K10-P5** 185995	
		Without button plate					**C30C-FD-X-K10-P5** 185990	**C30C-FDR-X-K10-P5** 185999	

Notes

[1] ⊖ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1

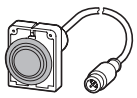
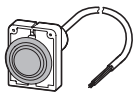
[2] Contact sequence: ■ = Contact closed □ = Contact open

2

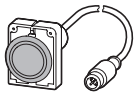
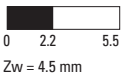
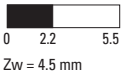
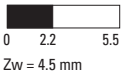
Cable Length m	Button plate	Contact configuration[1] N/O = Normally open contact	N/C = Normally closed contact	Contact sequence[2]	Contact diagram	Momentary **Catalog Number** Article no.	Maintained **Catalog Number** Article no.	Std. pack
Pushbuttons								
Cable (black) with unterminated end, 4 pole  1		1 N/C		BN BK	0 2.2 5.5 Zw = 4.5 mm	**C30C-FD-R-K01-P62** 186049	**C30C-FDR-R-K01-P62** 186058	1 unit
						C30C-FD-S-K01-P62 186047	**C30C-FDR-S-K01-P62** 186056	
	Without button plate					**C30C-FD-X-K01-P62** 186051	**C30C-FDR-X-K01-P62** 186060	
	Without button plate	2 N/C		BN WH BK BU	0 2.2 5.5 Zw = 4.5 mm	**C30C-FD-X-K02-P62** 186055	**C30C-FDR-X-K02-P62** 186064	
	Without button plate	1 N/C	1 N/O	BN WH BK BU	3.15 0 2.2 5.5 Zw = 4.5 mm	**C30C-FD-X-K11-P62** 186053	**C30C-FDR-X-K11-P62** 186062	
			1 N/O	BN BK	0 3.15 5.5	**C30C-FD-G-K10-P62** 186050	**C30C-FDR-G-K10-P62** 186059	
						C30C-FD-W-K10-P62 186048	**C30C-FDR-W-K10-P62** 186057	
	Without button plate					**C30C-FD-X-K10-P62** 186052	**C30C-FDR-X-K10-P62** 186061	
	Without button plate		2 N/O	BN WH BK BU	0 3.15 5.5	**C30C-FD-X-K20-P62** 186054	**C30C-FDR-X-K20-P62** 186063	
3.5		1 N/C		BN BK	0 2.2 5.5 Zw = 4.5 mm	**C30C-FD-R-K01-P65** 185960	**C30C-FDR-R-K01-P65** 185969	
						C30C-FD-S-K01-P65 185958	**C30C-FDR-S-K01-P65** 185967	
	Without button plate					**C30C-FD-X-K01-P65** 185962	**C30C-FDR-X-K01-P65** 185971	
	Without button plate	2 N/C		BN WH BK BU	0 2.2 5.5 Zw = 4.5 mm	**C30C-FD-X-K02-P65** 185966	**C30C-FDR-X-K02-P65** 185975	
	Without button plate	1 N/C	1 N/O	BN WH BK BU	3.15 0 2.2 5.5 Zw = 4.5 mm	**C30C-FD-X-K11-P65** 185964	**C30C-FDR-X-K11-P65** 185973	
			1 N/O	BN BK	0 3.15 5.5	**C30C-FD-G-K10-P65** 185961	**C30C-FDR-G-K10-P65** 185970	
						C30C-FD-W-K10-P65 185959	**C30C-FDR-W-K10-P65** 185968	
	Without button plate					**C30C-FD-X-K10-P65** 185963	**C30C-FDR-X-K10-P65** 185972	
	Without button plate		2 N/O	BN WH BK BU	0 3.15 5.5	**C30C-FD-X-K20-P65** 185965	**C30C-FDR-X-K20-P65** 185974	

Notes

[1] ⊖ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1
[2] Contact sequence: ■ = Contact closed □ = Contact open

	Connection type	Cable Length m	Lens	LED	Contact sequence	Catalog Number Article no.	Std. pack
	Indicator lights						
	30 mm Flat Front Metal bezel LED rated operating voltage: 24 V AC/DC IP66, IP67, IP69K (at front), IP65 (at rear)						
	Cable (black) with M12A plug, 4 pole	1				**C30C-FL-B-24-P5** 186013	1 unit
						C30C-FL-G-24-P5 186012	
						C30C-FL-R-24-P5 186011	
						C30C-FL-W-24-P5 186015	
						C30C-FL-Y-24-P5 186014	
	Cable (black) with unterminated end, 4 pole	1				**C30C-FL-B-24-P62** 185955	1 unit
						C30C-FL-G-24-P62 185954	
						C30C-FL-R-24-P62 185953	
						C30C-FL-W-24-P62 185957	
						C30C-FL-Y-24-P62 185956	
		3.5				**C30C-FL-B-24-P65** 186070	
						C30C-FL-G-24-P65 186069	
						C30C-FL-R-24-P65 185984	
						C30C-FL-W-24-P65 186072	
						C30C-FL-Y-24-P65 186071	

2

Cable Length m	Button plate	LED	Contact configuration[1] N/O = Normally open contact	N/C = Normally closed contact	Contact sequence	Contact diagram[2]	Momentary **Catalog Number** Article no.	Maintained **Catalog Number** Article no.	Std. pack
Illuminated pushbutton actuators									
30 mm Flat Front Metal bezel LED rated operating voltage: 24 V AC/DC IP66, IP67, IP69K (at front), IP65 (at rear) Flush									
Cable (black) with M12A plug, 4 pole 	1			1 N/C		 0 2.2 5.5 Zw = 4.5 mm	**C30C-FDL-R-K01-24-P5** 186004	**C30C-FDRL-R-K01-24-P5** 186008	1 unit
			1 N/O			0 3.15 5.5	**C30C-FDL-B-K10-24-P5** 186006	**C30C-FDRL-B-K10-24-P5** 186010	
							C30C-FDL-G-K10-24-P5 186005	**C30C-FDRL-G-K10-24-P5** 186009	
							C30C-FDL-W-K10-24-P5 186003	**C30C-FDRL-W-K10-24-P5** 186007	
Cable (black) with unterminated end, 4 pole	1			1 N/C		 0 2.2 5.5 Zw = 4.5 mm	**C30C-FDL-R-K01-24-P62** 186066	**C30C-FDRL-R-K01-24-P62** 185950	1 unit
			1 N/O			0 3.15 5.5	**C30C-FDL-B-K10-24-P62** 186068	**C30C-FDRL-B-K10-24-P62** 185952	
							C30C-FDL-G-K10-24-P62 186067	**C30C-FDRL-G-K10-24-P62** 185951	
							C30C-FDL-W-K10-24-P62 186065	**C30C-FDRL-W-K10-24-P62** 185949	
	3.5			1 N/C		 0 2.2 5.5 Zw = 4.5 mm	**C30C-FDL-R-K01-24-P65** 185977	**C30C-FDRL-R-K01-24-P65** 185981	
			1 N/O			0 3.15 5.5	**C30C-FDL-B-K10-24-P65** 185979	**C30C-FDRL-B-K10-24-P65** 185983	
							C30C-FDL-G-K10-24-P65 185978	**C30C-FDRL-G-K10-24-P65** 185982	
							C30C-FDL-W-K10-24-P65 185976	**C30C-FDRL-W-K10-24-P65** 185980	

Notes
[1] ⊖ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1
[2] Contact sequence: ■ = Contact closed □ = Contact open

	Catalog Number Article no.	Std. pack
Mounting ring tool		
For threaded ring; can be used with cordless screwdriver.	**C22-MS** 179955	1 unit

Technical specifications

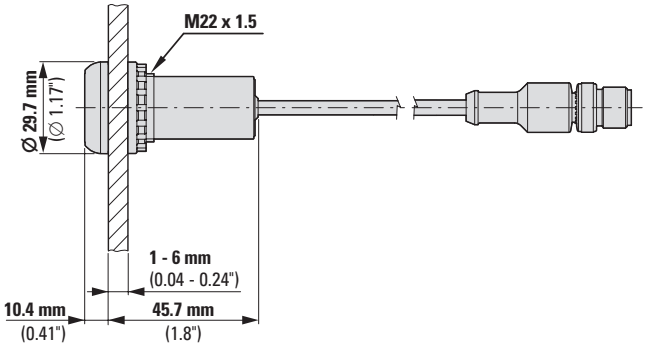
			Controlled stop/ emergency switching off buttons	(Illuminated) pushbuttons Momentary/ maintained	Changeover switches	Key-operated buttons	Indicator lights
General							
Standards			IEC/EN 60947-5-5 VDE 0660	IEC/EN 60947-5-1 VDE 0660	IEC/EN 60947-5-1 VDE 0660	IEC/EN 60947-5-1 VDE 0660	IEC/EN 60947-5-1 VDE 0660
Lifespan, mechanical	c (contacts)	x 10^6	0.05	5/1	1	0.1	–
Operating frequency	Operations/h		300	3600	2000	100	–
Operating force		N	50	5	–	–	–
Operating torque		Nm	–	–	0.3	0.5	–
Plug tightening torque		Nm	M12 = 1	M12 = 1	M12 = 1	M12 = 1	M12 = 1
Threaded ring tightening torque		Nm	2	2	2	2	2
Climatic proofing							
Damp heat, constant			As defined in IEC 60068-2-78	As defined in IEC 60068-2-78	As defined in IEC 60068-2-78	As defined in IEC 60068-2-78	As defined in IEC 60068-2-78
Damp heat, cyclic			As defined in IEC 60068-2-30	As defined in IEC 60068-2-30	As defined in IEC 60068-2-30	As defined in IEC 60068-2-30	As defined in IEC 60068-2-30
Protection Style			IP66, IP67, IP69K (at front) IP65 (at rear)	IP66, IP67, IP69K (at front) IP65 (at rear)	IP66 (at front) IP65 (at rear)	IP66 (at front) IP65 (at rear)	IP66, IP67, IP69K (at front) IP65 (at rear)
Ambient temperature							
Open		°C	–25 - +70	–25 - +70	–25 - +70	–25 - +70	–25 - +70
Storage		°C	–30 - +80	–30 - +80	–30 - +80	–30 - +80	–30 - +80
Mounting position			Any	Any	Any	Any	Any
Mechanical shock resistance for a shock duration of 11 ms		g	> 30	> 30	> 30	> 30	> 30
Contacts							
Rated impulse withstand voltage	U_{imp}	V AC	M12A/unterminated: 4000	M12A/unterminated: 4000	M12A/unterminated: 4000	M12A/unterminated: 4000	M12A/unterminated: 4000
Rated insulation voltage	U_i	V	M12A/unterminated: 250	M12A/unterminated: 250	M12A/unterminated: 250	M12A/unterminated: 250	M12A/unterminated: 250
Overvoltage category/ pollution degree			Overvoltage category/pollution degree III/3	Overvoltage category/pollution degree III/3	Overvoltage category/pollution degree III/3	Overvoltage category/pollution degree III/3	Overvoltage category/pollution degree III/3
Control circuit reliability at 17 V DC/7 mA	HF						
N/O (statistically determined)			1 failure per 17 x 10^6 operations	1 failure per 17 x 10^6 operations	1 failure per 17 x 10^6 operations	1 failure per 17 x 10^6 operations	–
N/C (statistically determined)			1 failure per 0.9 x 10^6 operations	1 failure per 0.9 x 10^6 operations	1 failure per 0.9 x 10^6 operations	1 failure per 0.9 x 10^6 operations	–
Fuse	gG/gL	A	4	4	4	4	4
Conditional short-circuit current	I_q	kA	1	1	1	1	1
Switching capacity							
Rated Current	I_e	A					
AC-15: 24 V	I_e	A	4	4	4	4	–
DC-13: 24 V	I_e	A	3	3	3	3	–
Cable characteristics							
Design			M12A/ unterminated	M12A/ unterminated	M12A/ unterminated	M12A/ unterminated	M12A/ unterminated
Material			PUR	PUR	PUR	PUR	PUR
Diameter	∅	mm	4.7	4.7	4.7	4.7	4.7
Actuator travel and actuation force as per DIN EN 60947-5-1, K.5.4.1							
Positive opening sequence		mm	4.65	4.65	4.65	4.65	–
Maximum travel		mm	5.11	5.7	5.7	5.7	–
Minimum force for positive opening		N	K01 = 15/K11 = 20/ K02 = 34	K01 = 15/K11 = 20/ K02 = 30	K01 = 15/K11 = 20/ K02 = 35	K01 = 15/K11 = 20/ K02 = 36	–

Dimensions

2

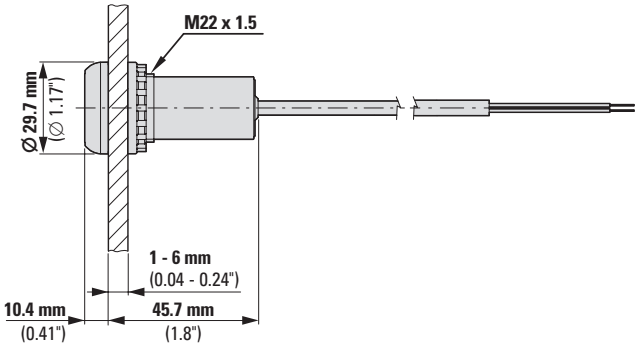
Pushbuttons, M12A

C22-D...-P1/-P3/-P5



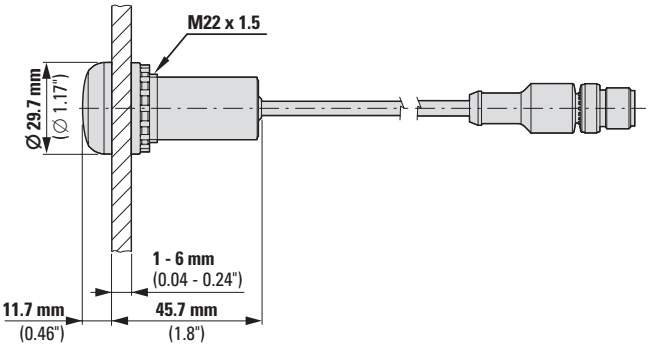
Pushbuttons, unterminated cable end

C22-D...-P/-P62/-P65



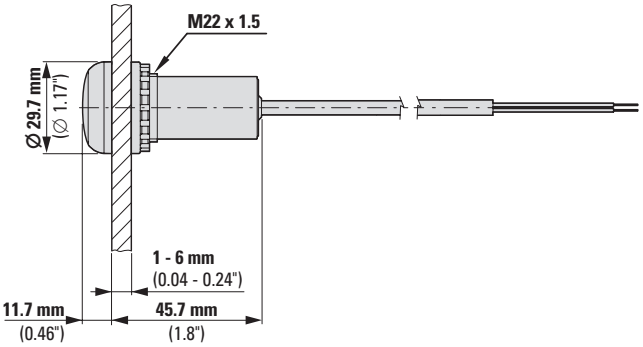
Indicator lights, M12A

C22-L-...-P1/-P3/-P5



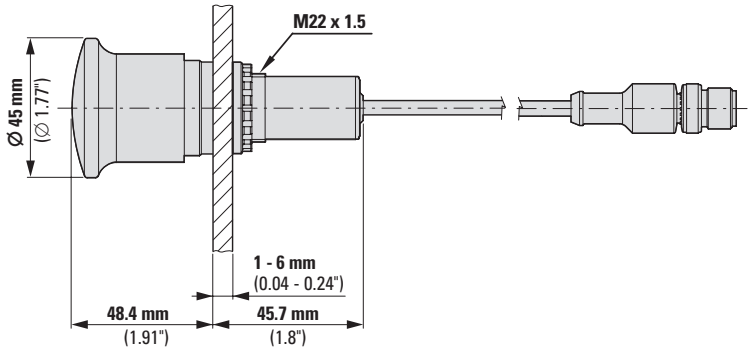
Indicator lights, unterminated cable end

C22-L-...-P62/-P65



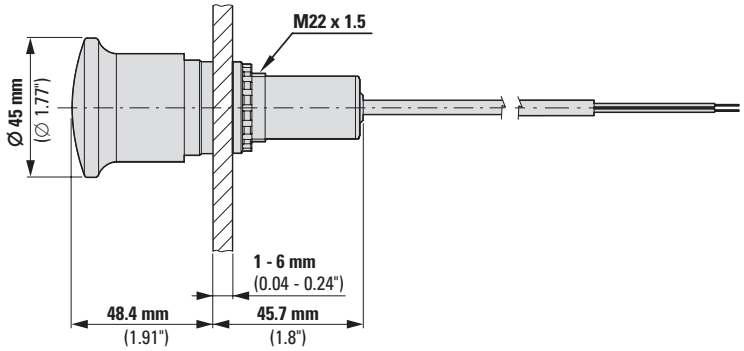
Emergency switching off, M12A

C22-PVT...-P10



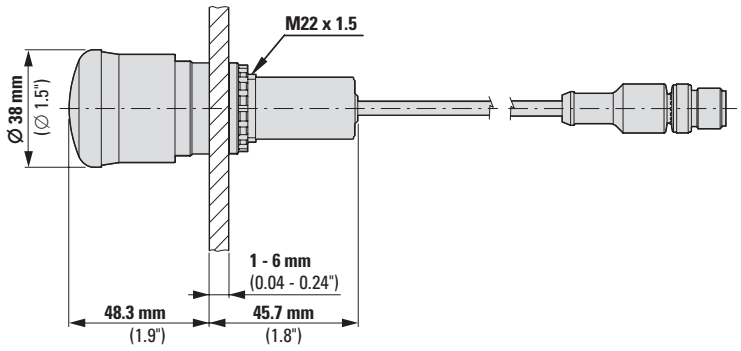
Emergency switching off, unterminated cable end

C22-PVT...-P62/-P65



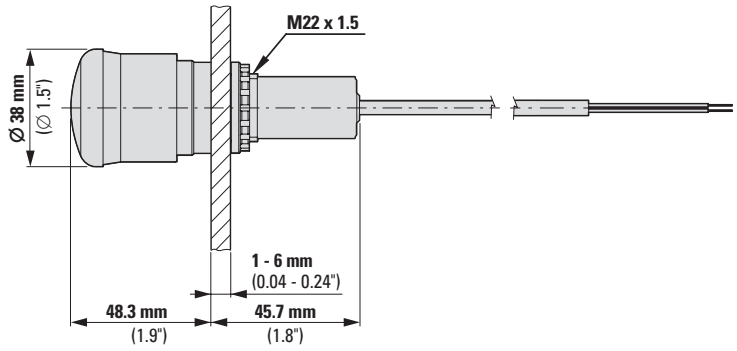
Emergency switching off, M12A

C22-PV-...-P10



Emergency switching off, unterminated cable end

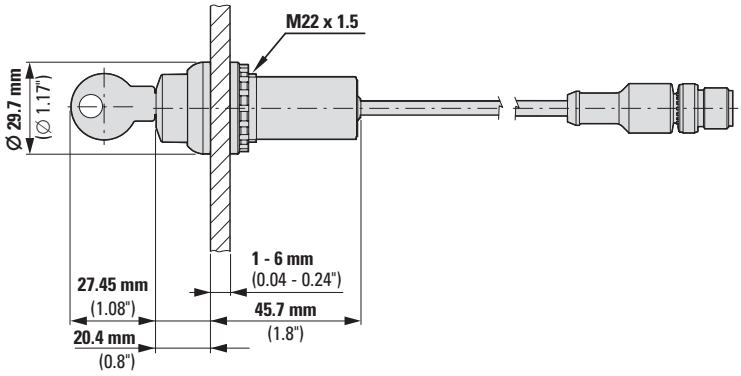
C22-PV-...-P62/-P65



2

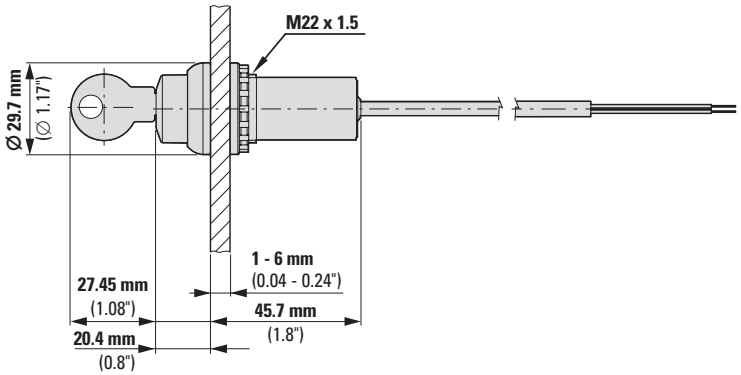
Key-operated buttons, M12A

C22- W(R)S(3)-MS1-...-P1/-P5



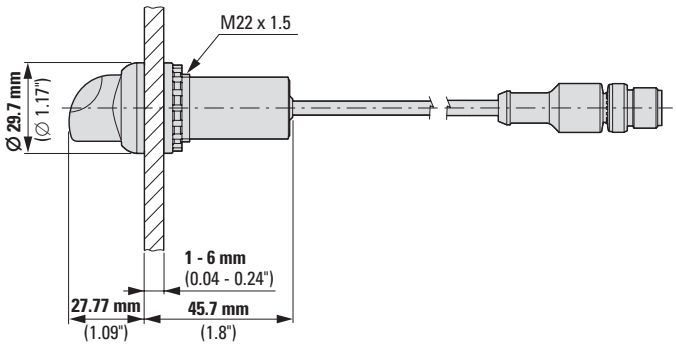
Key-operated buttons, unterminated cable end

C22-W(R)S(3)-MS1-...-P62/-P65



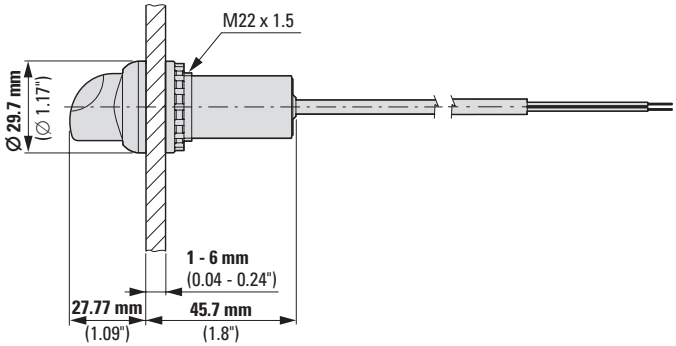
Selector switches, M12A

C22-W(R)K(3)-...-P1/-P5



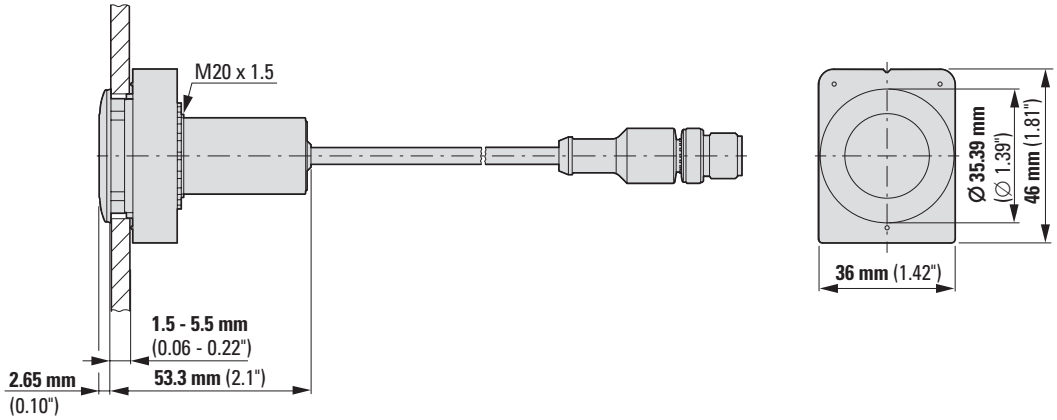
Selector switches, unterminated cable end

C22-W(R)K(3)-...-P62/-P65



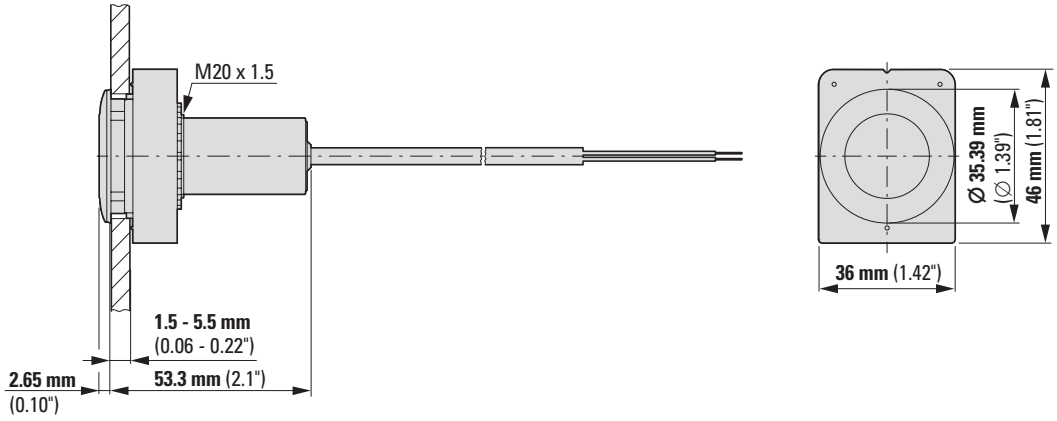
Pushbuttons, M12A

C30C-FD(R)(L)-...-P5



Pushbuttons, unterminated cable end

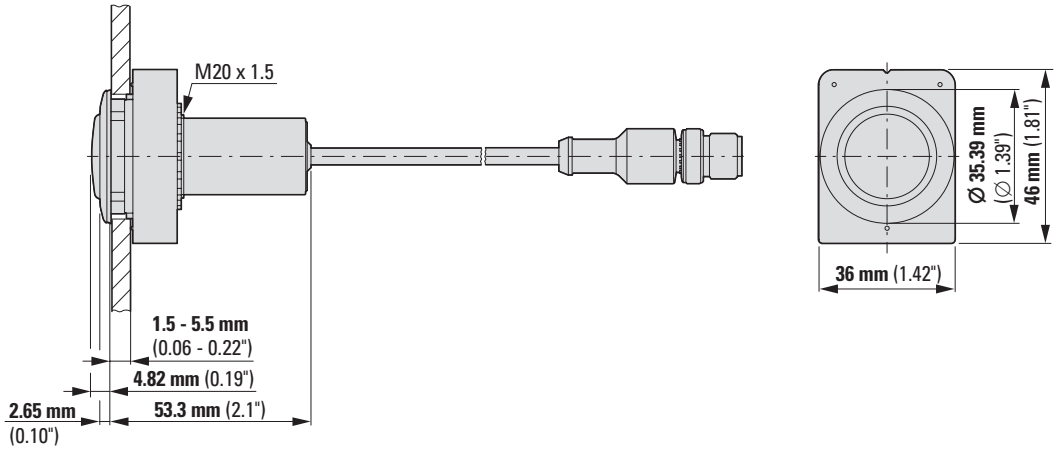
C30C-FD(R)(L)-...-P62/-65



2

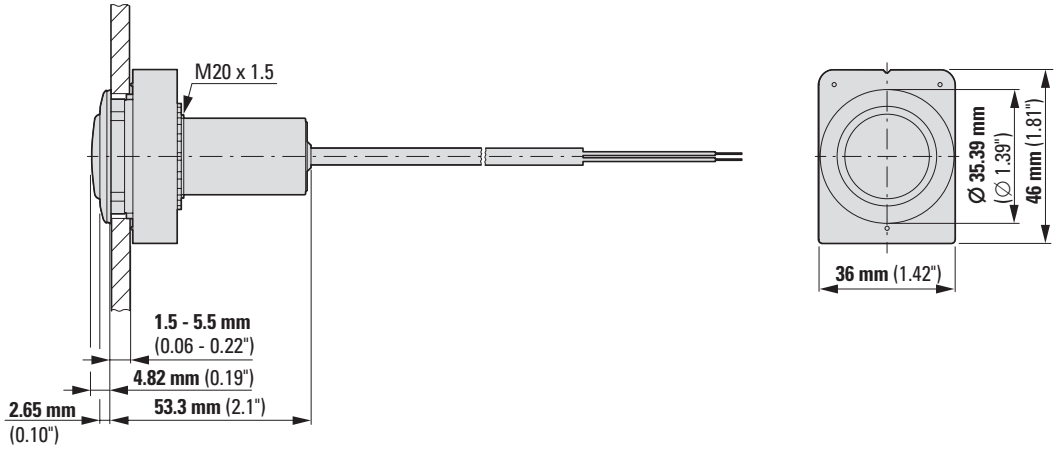
Indicator lights, M12A

C30C-FL-...-P5



Indicator light, unterminated cable end

C30C-FL-...-24-P62/-P65



Robust and safe. Extremely high protection. FAK foot and palm switches

The rugged FAK foot and palm switches are equipped with a large actuator for quick and intuitive operation. In addition, their design is also tamper-proof. The FAK switches can be operated by hand, fist or foot. This allows operators to react quickly and safely in any situation to protect people, machines and systems.

The high mechanical shock resistance and the extremely high degree of protection (IP67, IP69K) make the FAK switches ideal for use in adverse environmental conditions.

FAK foot and palm switches with a red actuation surface on a yellow background are approved for use as emergency stop buttons. They perfectly match the characteristics required in DIN EN 60204, Safety of machinery – Electrical equipment of machines, and meet all relevant requirements. Moreover, the devices are tamper-proof (see IEC 60947-5-5) and feature positive-opening contacts (see IEC 60947-5-1).

- Developed, tested and constructed according to the IEC, EN or even the UL/CSA safety standards.
- Tamper-proof according to EN ISO 13850
- TÜV and/or BG (BG – Institute for Occupational Safety and Health/Germany)
- Large operating temperature range
- Extremely shock and vibration resistant

For more information, visit:
www.Eaton.com/FAK

FAK

3.0 FAK foot and palm switch

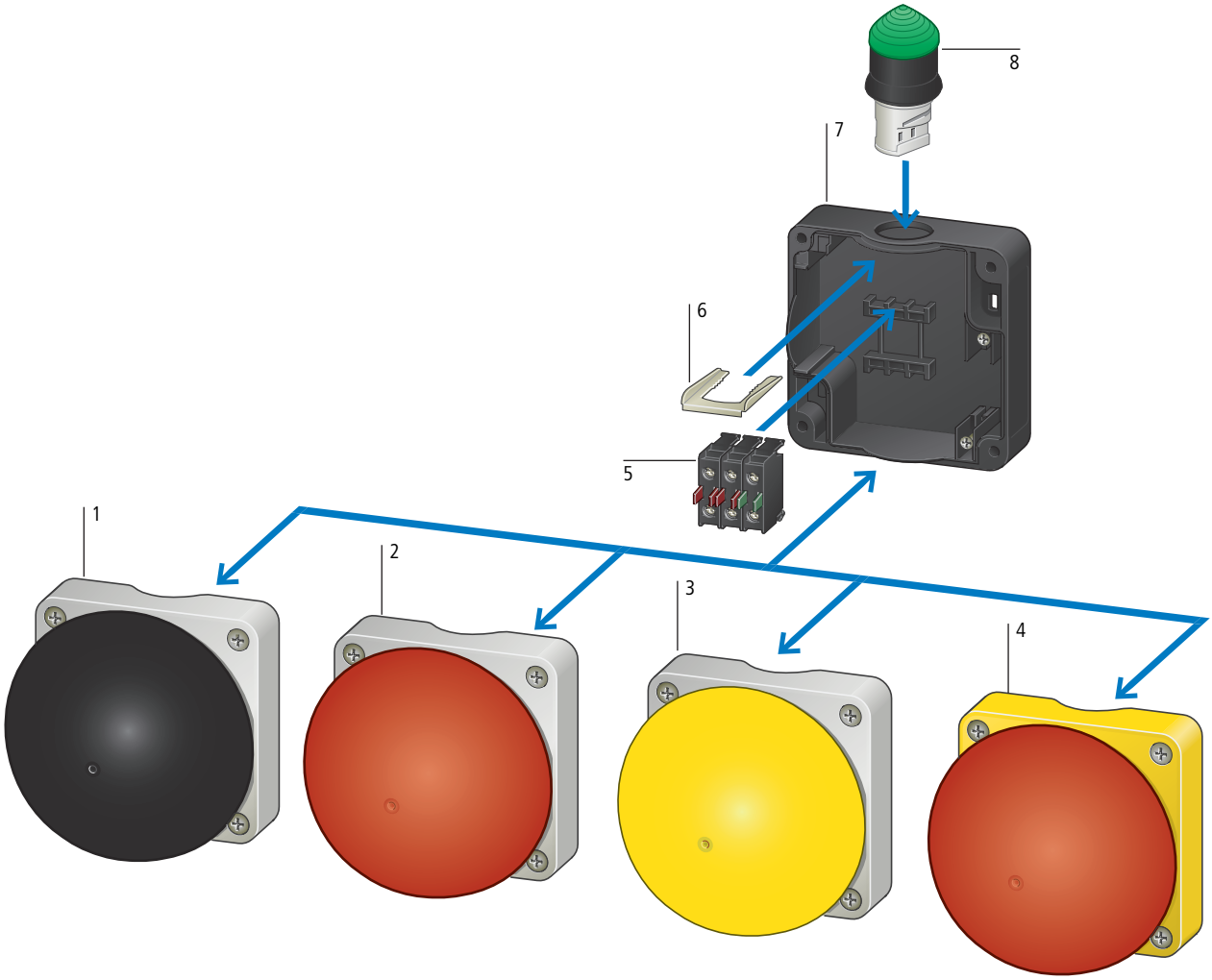
3.0 System overview 129

3.1 Product selection 130

Complete units, individual components 130

3.2 Technical data, dimensions 131

System overview



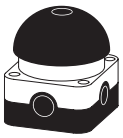
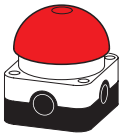
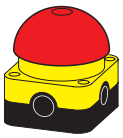
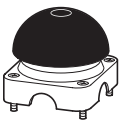
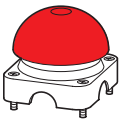
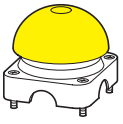
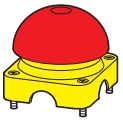
Operator only with button	1, 2, 3, 4
Various color combinations	
Yellow/red for Emergency stop or emergency switching off applications	
European Machinery Safety Directive 2006/42/EC	
For foot or hand operation	
→ Page 130	

Contact elements	5
Base fixing	
→ Page 48	

Indicator lights	6, 8
Conical	
BA9s base	
→ Page 33	

Enclosure base	7
Prepared for contact elements	
Base fixing (not for ...SMC... contacts)	
→ Page 130	

Product selection

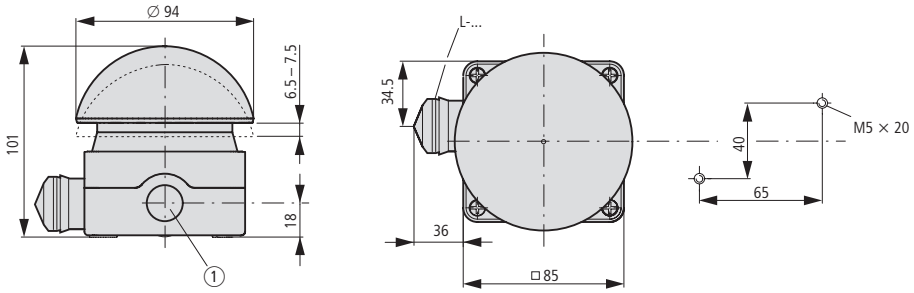
		Contact configuration: ⊖ = Safety function by positive opening according to IEC/EN 60947-5-1 N/O = normally open contact	N/C = normally closed contact	Contact sequence	Part no. Article no.	Std. pack
	Foot and palm switches FAK, IP67, IP69K					
momentary 		1 N/O	1 N/C ⊖		**FAK-S/KC11/I** 229749	1 off
momentary 		1 N/O	1 N/C ⊖		**FAK-R/KC11/I** 229746	1 off
maintained 	Pull to release Emergency-stop button tamper-proof to ISO 13850/EN 418	–	1 N/C ⊖		**FAK-R/V/KC01/IY** 229747	1 off
		1 N/O	1 N/C ⊖		**FAK-R/V/KC11/IY** 229748	
		–	2 N/C ⊖		**FAK-R/V/KC02/IY** 256790	
	Customized complete units An order consists of: enclosure base, enclosure top, contact elements for base fixing (→ Page 48)					
					FAK-COMBINATION 2010763	1 off
	Enclosure base For max. 3 contact elements					
					FAK-IU 229753	1 off
	Enclosure top					
momentary 				–	**FAK-S** 095540	1 off
momentary 				–	**FAK-R** 071810	
momentary 				–	**FAK-Y** 229754	
maintained 				–	**FAK-R/V/Y** 229755	

Technical data

			FAK foot and palm switch	
			momentary	maintained
General				
Standards			IEC/EN 60947, VDE 0660	IEC/EN 60947, VDE 0660
Lifespan, mechanical	Operations	x 10^6	1	0.1
Operating frequency	Operations/h		≦ 3600	≦ 600
Operating force		N	20 - 40	40 - 60
Degree of protection, IEC/EN 60529			IP67, IP69K	IP67, IP69K
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30	
Ambient air temperature				
Open		°C	–25 - +40	–25 - +40
Mounting position			any	any
Mechanical shock resistance to IEC 60068-2-27 Shock duration 11 ms, half-sinusoidal		g	> 15	> 15

Dimensions

FAK...



① 3 x M20 (Pg 13.5) lateral
1 x M16 in the base

Fast and unmistakable. Clear & flexible signaling. SL4/SL7 signal towers.

SL4 and SL7 signal towers are used to continuously signal operating states for machines, systems, and processes. Their scope of application is extremely wide-ranging, going from production, through logistics, all the way to supermarkets. This is in no small part thanks to the fact that the fast and clear signaling they provide ensures smooth and safe operation in any environment.

The light and acoustic modules in the series can be configured flexibly both in terms of volume and of the specific visual signals they emit. This versatility is only further enhanced by the signal towers' high-performance LEDs, which ensure that visual signals are recognized even under adverse light conditions. Moreover, a high IP66 degree of protection makes it possible to use the signal towers in demanding environments, such as outdoors.

With a diameter of 40 mm / 70 mm, SL4 and SL7 signal towers feature extremely compact dimensions designed to save space. In addition, only a few steps are required in order to quickly and easily install and remove them, which can prove to be a tremendous advantage when packing and transporting control panels or machines.

Connecting the signal towers to a SmartWire-DT communication system or AS-Interface cuts down on wiring time and reduces the number of digital outputs required from your PLC. This, combined with the fact that data from the switchgear connected with SmartWire-DT will be processed in your PLC, ensures that operating states such as impending overloads will be detected and signaled with the signal towers immediately. The result? A marked increase in your systems' availability.

For more information, visit:
www.Eaton.com/SL

SL4/SL7

4.0 Signal towers

4.1 System overview

SL4 – System overview 134

4.2 Product selection

SL4 – Complete devices, light modules 136
SL4 – Light modules 137
SL4 – Light modules, acoustic module 139
SL4 – Base modules 140
SL4 – Base modules, accessories 141

4.3 System overview

SL7 – System overview 142

4.4 Product selection

SL7 – Complete devices, light modules 144
SL7 – Light modules 145
SL7 – Acoustic modules 148
SL7 – Base modules 149
SL7 – Base modules, accessories 150

4.5 Technical specifications

SL4 – Technical data 151
SL7 – Technical data 153

4.6 Dimensions

SL4 – Dimensions 155
SL7 – Dimensions 159

SL7 base modules with AS-i communication and rapid mounting and wiring system

SL7-FMS-ASI base modules combine the advantages of AS-Interface networks and rapid mounting and wiring systems in a single product. This not only makes operating the signal towers much more efficient, but also significantly reduces the amount of time it takes to install them while making transportation considerably easier.

Fast Mounting system FMS

A modular base module consisting of an upper and lower section means that only one electrical connection is required. Even during transportation, the lower section can remain on the machine so that it does not have to be connected again afterwards.

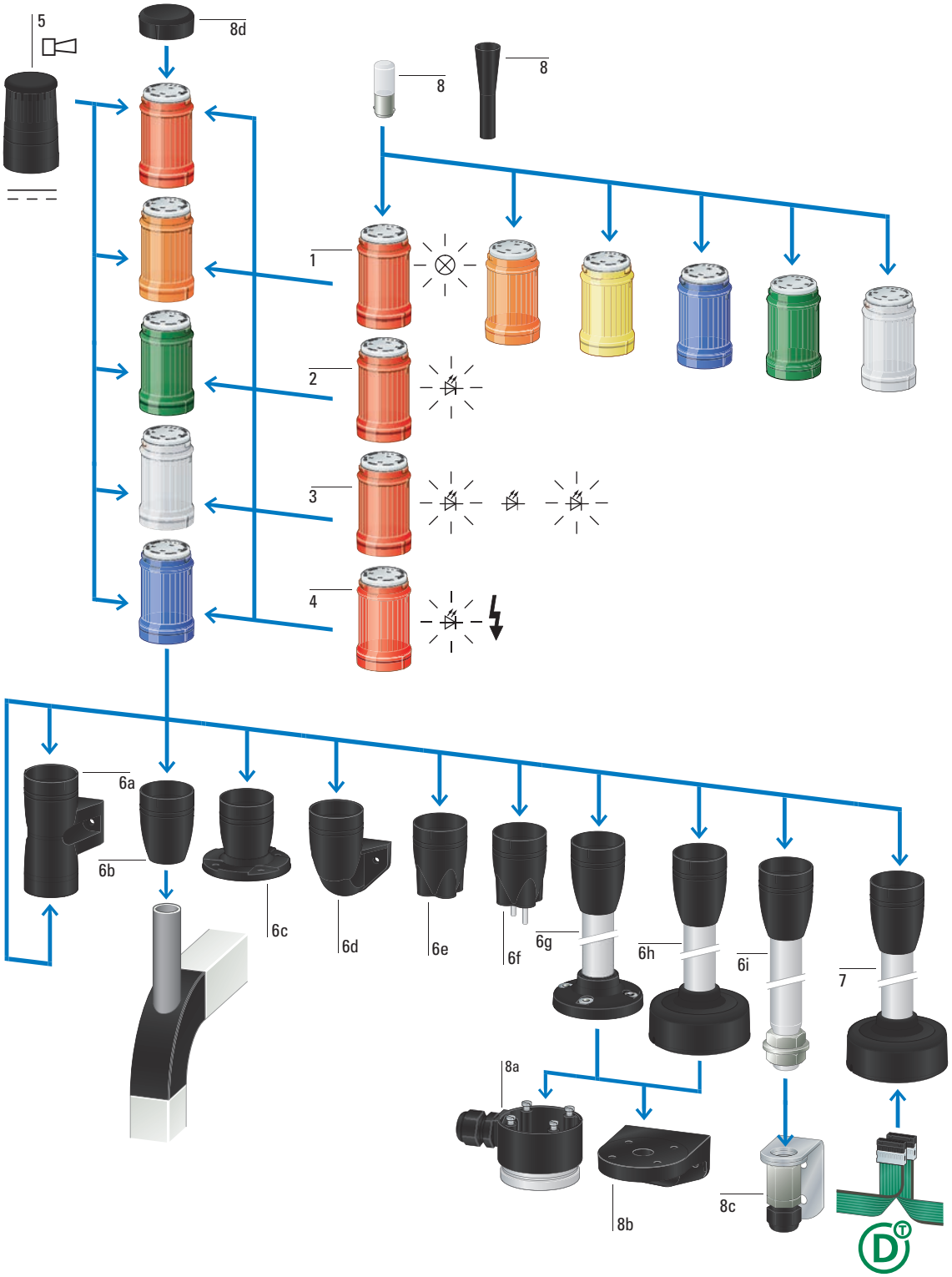
The actual signal tower can then be mounted within seconds with the bayonet fitting, making installation and removal up to 50% faster.

AS-Interface

By combining control data and power in a single cable, the system reduces installation costs and complexity by up to 40%. Moreover, the SL7 AS-i base modules can optionally be used with an additional power supply unit if necessary for the application at hand. Finally, in order to make it possible to integrate SL7 devices into all common AS-Interface applications, the SL7-FMS-ASI product portfolio supports all current AS-i versions.

4

System overview



Module for filament lamp, continuous light 1

Without light element (filament lamp with BA15d socket)

Easy mounting with bayonet mount

Modules can be arranged in any order

Max. 2 x 5 modules that can be actuated individually (two with base module SL7-CB-D only)

IP66 degree of protection

Operating mode: 100% DF (duty factor)

→ Page 139

Module with LED, continuous light 2

Easy mounting with bayonet mount

Modules can be arranged in any order

Max. 2 x 5 modules that can be actuated individually (two with base module SL7-CB-D only)

IP66 degree of protection

Operating mode: 100% DF (duty factor)

→ Page 136

Module with LED, flashing light 3

Easy mounting with bayonet mount

Modules can be arranged in any order

Max. 2 x 5 modules that can be actuated individually (two with base module SL7-CB-D only)

IP66 degree of protection

Operating mode: 100% DF (duty factor)

Flashing frequency 2 Hz

→ Page 137

Module with LED, strobe light 4

with a fixed flashing frequency 1.4 Hz

with LED for effective signaling effect with various flashing sequences (flashing frequency 1 - 2.6 Hz)

Easy mounting with bayonet mount

Modules can be arranged in any order

Max. 2 x 5 modules that can be actuated individually (two with base module SL7-CB-D only)

IP66 degree of protection

Operating mode: 100% DF (duty factor)

→ Page 138

Acoustic module 5

Continuous tone or pulsed tone - adjustable with internal dip switches

Sound pressure 80 dB, frequency 4000 Hz

Easy mounting with bayonet mount

Set up as topmost module

Max. 2 x 1 module that can be actuated individually (two with base module SL7-CB-D only)

IP66 degree of protection

Permanently integrated cover plate

Operating mode: 100% DF (duty factor)

→ Page 139

Base module for mounting on both sides 6a

Easy mounting with bayonet mount

IP66 degree of protection

With cover plate

With Push in terminals

→ Page 141

Base module can hold tubes 6b

→ Page 140

Base module with external fixing holes 6c

→ Page 140

Base module one-sided with bracket 6d

→ Page 141

Base module with internal (on the inside) fixing holes 6e

→ Page 140

Base module with built-in (pre-assembled) fixing screws 6f

→ Page 140

Base module with aluminum tube and plastic foot 6g

Aluminum tube 100 mm, 250 mm or 400 mm

→ Page 141

Base module with base adapter for slipping onto place (rapid mounting and wiring system) 6h

Aluminum tube 100 mm, 250 mm or 400 mm

→ Page 140

Base module with aluminum tube and screw fixing 6i

Aluminum tube 100 mm, 250 mm or 400 mm

→ Page 140

Base module with base adapter for slipping onto place (rapid mounting and wiring system) and SmartWire-DT connection 7

Aluminum tube 100 mm

→ Page 140

Magnetic base including M20 cable gland 8a

For vertical mounting

→ Page 141

Mounting bracket 8b

For vertical mounting

→ Page 141

Accessory 8c

Tool for replacing filament lamp

Filament lamp

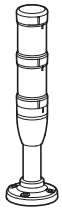
→ Page 141

Accessory 8d

Cover

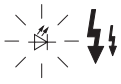
→ Page 141

Product selection

	Rated operational voltage U_e V	Number of modules	Color	Function	Catalog Number Article no.	Std. pack
	**Complete devices**					
Continuous light LED IP66 Base module with foot and 100 mm spacer	24 V AC/DC	2			**SL4-100-L-RG-24LED** 171295	1 unit
		3			**SL4-100-L-RYG-24LED** 171296	
	Module with LED					
Continuous light IP66	24 V AC/DC				**SL4-L24-B** 171313	1 unit
					SL4-L24-G 171314	
					SL4-L24-R 171315	
					SL4-L24-W 171316	
					SL4-L24-Y 171317	
					SL4-L24-A 171318	
	110/120 V AC				**SL4-L120-B** 171319	
					SL4-L120-G 171320	
					SL4-L120-R 171321	
					SL4-L120-W 171322	
					SL4-L120-Y 171323	
					SL4-L120-A 171324	
	230/240 V AC				**SL4-L230-B** 171325	
					SL4-L230-G 171326	
					SL4-L230-R 171327	
					SL4-L230-W 171328	
					SL4-L230-Y 171329	
					SL4-L230-A 171330	

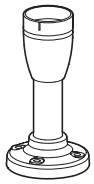
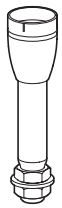
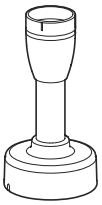
	Rated operating voltage U_e V	Color	Function	Catalog Number Article no.	Std. pack
Module with LED					
Beacon IP66 2 Hz	24 V AC/DC			**SL4-BL24-B** 171337	1 unit
				SL4-BL24-G 171338	
				SL4-BL24-R 171339	
				SL4-BL24-W 171340	
				SL4-BL24-Y 171341	
				SL4-BL24-A 171342	
	110/120 V AC			**SL4-BL120-B** 171343	
				SL4-BL120-G 171344	
				SL4-BL120-R 171345	
				SL4-BL120-W 171346	
				SL4-BL120-Y 171347	
				SL4-BL120-A 171348	
	230/240 V AC			**SL4-BL230-B** 171349	
				SL4-BL230-G 171350	
				SL4-BL230-R 171351	
				SL4-BL230-W 171352	
				SL4-BL230-Y 171353	
				SL4-BL230-A 171354	

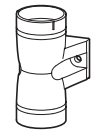
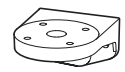
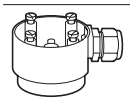
4

		Rated operating voltage U_e V	Color	Function	Catalog Number Article no.	Std. pack
	Module with LED					
	Strobe light IP66 1.4 Hz	24 V AC/DC			**SL4-FL24-B** 171355	1 unit
					SL4-FL24-G 171356	
					SL4-FL24-R 171357	
					SL4-FL24-W 171358	
					SL4-FL24-Y 171359	
					SL4-FL24-A 171360	
		110/120 V AC			**SL4-FL120-B** 171361	
					SL4-FL120-G 171362	
					SL4-FL120-R 171363	
					SL4-FL120-W 171364	
					SL4-FL120-Y 171365	
					SL4-FL120-A 171366	
		230/240 V AC			**SL4-FL230-B** 171367	
					SL4-FL230-G 171368	
					SL4-FL230-R 171369	
					SL4-FL230-W 171370	
					SL4-FL230-Y 171371	
					SL4-FL230-A 171372	
	Multistrobe light IP66 LED for effective signaling effect With various strobe sequences 1 - 2.6 Hz	24 V AC/DC			**SL4-FL24-B-M** 171373	1 unit
					SL4-FL24-G-M 171374	
					SL4-FL24-R-M 171375	
					SL4-FL24-W-M 171376	
					SL4-FL24-Y-M 171377	
					SL4-FL24-A-M 171378	

	Rated operating voltage U_e V	Color	Function		Catalog Number Article no.	Std. pack
Module for filament lamp						
Continuous light IP66 Without lamp Filament lamp max. 4 W Filament lamp → Page 141	< 250 V AC/DC				**SL4-L-B** 171331	1 unit
					SL4-L-G 171332	
					SL4-L-R 171333	
					SL4-L-W 171334	
					SL4-L-Y 171335	
					SL4-L-A 171336	

	Rated operating voltage U_e V	Rated operational current I_e mA	Color	Function	Type of tone	Catalog Number Article no.	Std. pack
Acoustic modules							
Continuous tone or pulsed tone, adjustable with internal dip switches. sound pressure 80 db, adjustable with internal potentiometer f = 4000 Hz Place only at the highest position on a pillar IP66							
24 V AC/DC	Max. 39					**SL4-AP24** 171379	1 unit
110/120 V AC	Max. 21					**SL4-AP120** 171380	
230/240 V AC	Max. 21					**SL4-AP230** 171381	
Customized complete unit							
Order please enquire							
–	–	–	–	–		**SL4-COMBINATION** 2011956	1 unit

		Tube length	Color	For use with	Catalog Number Article no.	Std. pack
	Base modules for horizontal mounting including cover max. 5 modules					
	Base with aluminum tube and plastic foot Push in terminals	100 mm	black Aluminum color tube	SL4-L-... SL4-BL-... SL4-FL-... SL4-AP-...	**SL4-PIB-100** 171297	1 unit
		250 mm			**SL4-PIB-250** 171298	
		400 mm			**SL4-PIB-400** 171299	
		800 mm			**SL4-PIB-800** 177313	
	Base with aluminum tube and banjo bolt Push in terminals	100 mm			**SL4-PIB-T-100** 171305	
		250 mm			**SL4-PIB-T-250** 171306	
		400 mm			**SL4-PIB-T-400** 171307	
		800 mm			**SL4-PIB-T-800** 178461	
	Base with external fixing holes Push in terminals	–	black		**SL4-PIB-EMH** 171302	
	Base with internal (on the inside) fixing holes Push in terminals	–			**SL4-PIB-IMH** 171300	
	Base with built-in (pre-assembled) fixing screws Push in terminals	–			**SL4-PIB-IMS** 171301	
	Base: Can hold tubes with a diameter of 25 mm (±0.5) for wall thickness 2 - 3.4 mm	–			**SL4-PIB-TM** 179986	
	Base with base adapter for slipping onto place (rapid mounting and wiring system) Screw terminals	100 mm	black Aluminum color tube		**SL4-FMS-100** 171308	
		250 mm			**SL4-FMS-250** 171309	
		400 mm			**SL4-FMS-400** 171310	
		800 mm			**SL4-FMS-800** 178463	
	Base with base adapter for slipping onto place (rapid mounting and wiring system) Blade terminal SWD4-8MF2 max. 0.3 A per module External power supply connectable (24 V DC) Parameterizable with SWD-Assist (planning and ordering help)	100 mm			**SL4-SWD** 171311	

		Color	For use with	Catalog Number Article no.	Std. pack
	Base modules				
	for vertical mounting including cover				
	One-sided base with bracket Push in terminals max. 5 modules	black	SL4-L-... SL4-BL-... SL4-FL-... SL4-AP-...	**SL4-PIB-FW** 171303	1 unit
	for vertical mounting on both sides including cover				
	Base with external fixing holes Push in terminals max. 2 x 5 modules	black	SL4-L-... SL4-BL-... SL4-FL-... SL4-AP-...	**SL4-PIB-D** 171304	1 unit
	**Mounting bracket**				
	for vertical mounting, insulated material				
	–	–	SL4-PIB... SL7-CB...	**SL7/4-FW** 171446	1 unit
	Including mounting bracket M20 cable gland				
	for vertical mounting, metal				
	–	–	SL4-PIB-T... SL7-CB-T...	**SL7/4-FW-T** 171455	1 unit
	Tool for replacing filament lamp				
	–	–	SL4-L... SL7-L...	**SL7/4-BET** 171294	1 unit
	**Magnetic base including M20 cable gland**				
	for vertical mounting, insulated material				
	–		SL4-PIB-100(250)(400) SL7-CB-100(250)(400)	**SL7/4-MMS** 172954	1 unit

	Life point	Rated operating voltage U_e	Performance	For use with	Catalog Number Article no.	Std. pack
	Filament lamp					
	Ba15d socket					
	> 3000 h	12 V	4 W	SL4-L-...	**SL4-L12** 171382	1 unit
		24 V			**SL4-L24** 171383	
		120 V			**SL4-L120** 171384	
		230 V			**SL4-L230** 171385	

	For use with	Catalog Number Article no.	Std. pack
Cover			
	SL4-L-...	**SL4-COV** 192369	1 unit

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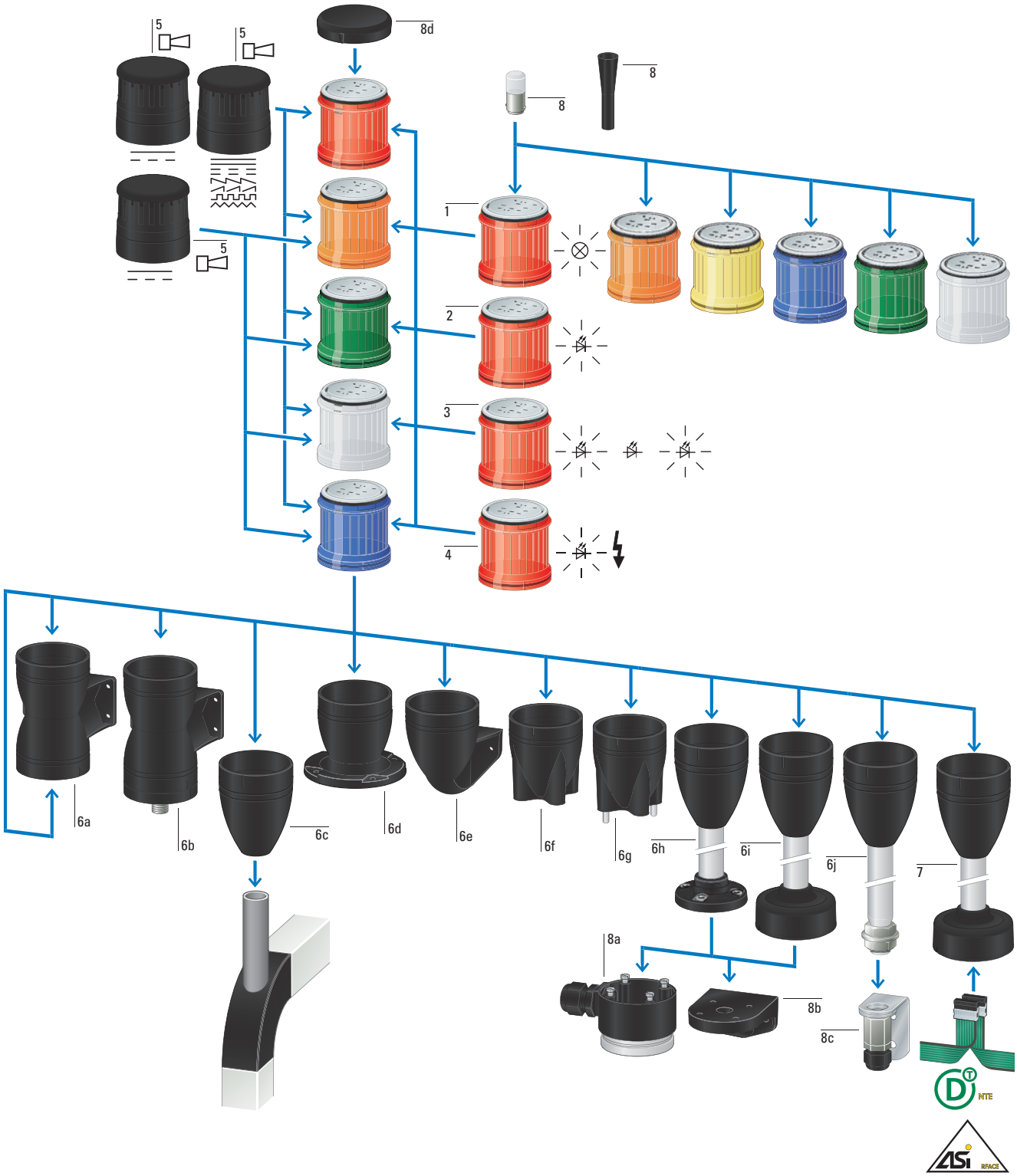
System overview



Module for filament lamp, continuous light 1
Without light element (filament lamp with BA15d socket)
Easy mounting with bayonet mount
Modules can be arranged in any order
Max. 2 x 5 modules that can be actuated individually (two with base module SL7-CB-D only)
IP66 degree of protection
Operating mode: 100% DF (duty factor)
→ Page 147

Module with LED, continuous light 2
Easy mounting with bayonet mount
Modules can be arranged in any order
Max. 2 x 5 modules that can be actuated individually (two with base module SL7-CB-D only)
IP66 degree of protection
Operating mode: 100% DF (duty factor)
→ Page 147

Module with LED, flashing light 3
Easy mounting with bayonet mount
Modules can be arranged in any order
Max. 2 x 5 modules that can be actuated individually (two with base module SL7-CB-D only)
IP66 degree of protection
Operating mode: 100% DF (duty factor)
Flashing frequency 2 Hz
→ Page 145

Module with LED, strobe light 4
with a fixed flashing frequency 1.4 Hz
with LED for effective signaling effect with various flashing sequences (flashing frequency 1 - 2.6 Hz)
Easy mounting with bayonet mount
Modules can be arranged in any order
Max. 2 x 5 modules that can be actuated individually (two with base module SL7-CB-D only)
IP66 degree of protection
Operating mode: 100% DF (duty factor)
→ Page 146

acoustic module 5
Easy mounting with bayonet mount
Set up as topmost module
Max. 2 x 1 module that can be actuated individually (two with base module SL7-CB-D only)
IP66 degree of protection
Permanently integrated cover plate
Operating mode: 100% DF (duty factor)
Sound pressure 80 dB, frequency 4000 Hz
→ Page 148

acoustic module 5a
Continuous tone or pulsed tone – adjustable with internal dip switches
Frequency: 2800 Hz
→ Page 148

acoustic module 5b
Multi-tone (8 tones) - adjustable with internal dip switch
Frequency 500 - 2700 Hz
→ Page 148

acoustic module 5b
Continuous tone or pulsed tone – can be actuated externally; takes up 2 inputs (2 modules)
Frequency: 2800 Hz
→ Page 148

Base module for mounting on both sides 6a
Easy mounting with bayonet mount
IP66 degree of protection
With cover plate
With Push in terminals
→ Page 150

Base module for vertical mounting on one sides 6b
Plug-in connection M22
→ Page 150

Base module can hold tubes 6c
→ Page 149

Base module with external fixing holes 6d
→ Page 149

Base module one-sided with bracket 6e
→ Page 150

Base module with internal (on the inside) fixing holes 6f
→ Page 149

Base module with built-in (pre-assembled) fixing screws 6g
→ Page 149

Base module with aluminum tube and plastic foot 6h
Aluminum tube 100 mm, 250 mm or 400 mm
→ Page 149

Base module with base adapter for slipping onto place (rapid mounting and wiring system) 6i
Aluminum tube 100 mm, 250 mm or 400 mm
→ Page 149

Base module with aluminum tube and screw fixing 6j
Aluminum tube 100 mm, 250 mm or 400 mm
→ Page 149

Base module with base adapter for slipping onto place (rapid mounting and wiring system) and SmartWire-DT connection or AS-Interface 7
Aluminum tube 100 mm
→ Page 149

accessory 8

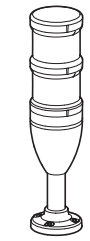
Magnetic base including M20 cable gland 8a
For vertical mounting
→ Page 141

Mounting bracket 8b
For vertical mounting
→ Page 141

Accessory 8c
Tool for replacing filament lamp
Filament lamp
→ Page 141

Accessory 8d
Cover
→ Page 150

Product selection



Complete devices

Rated operating voltage U_e V	Number of modules	Color	Function	Catalog Number Article no.	Std. pack
Continuous light LED IP66 Base module with foot and 100 mm spacer					
24 V AC/DC	2			**SL7-100-L-RG-24LED** 171424	1 unit
	3			**SL7-100-L-RYG-24LED** 171425	

Module with LED

Rated operating voltage U_e V	Color	Function	Catalog Number Article no.	Std. pack
Continuous light IP66				
24 V AC/DC			**SL7-L24-B** 171461	1 unit
			SL7-L24-G 171462	
			SL7-L24-R 171463	
			SL7-L24-W 171464	
			SL7-L24-Y 171465	
			SL7-L24-A 171466	
110/120 V AC			**SL7-L120-B** 171467	
			SL7-L120-G 171468	
			SL7-L120-R 171469	
			SL7-L120-W 171470	
			SL7-L120-Y 171471	
			SL7-L120-A 171472	
230/240 V AC			**SL7-L230-B** 171473	
			SL7-L230-G 171474	
			SL7-L230-R 171475	
			SL7-L230-W 171476	
			SL7-L230-Y 171477	
			SL7-L230-A 171426	

	Rated operating voltage U_e V	Color	Function	Catalog Number Article no.	Std. pack
Module with LED					
Beacon IP66 2 Hz	24 V AC/DC			**SL7-BL24-B** 171439	1 unit
				SL7-BL24-G 171440	
				SL7-BL24-R 171441	
				SL7-BL24-W 171442	
				SL7-BL24-Y 171388	
				SL7-BL24-A 171389	
	110/120 V AC			**SL7-BL120-B** 171390	
				SL7-BL120-G 171391	
				SL7-BL120-R 171392	
				SL7-BL120-W 171393	
				SL7-BL120-Y 171394	
				SL7-BL120-A 171395	
	230/240 V AC			**SL7-BL230-B** 171396	
				SL7-BL230-G 171397	
				SL7-BL230-R 171398	
				SL7-BL230-W 171399	
				SL7-BL230-Y 171400	
				SL7-BL230-A 171401	

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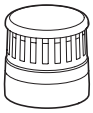
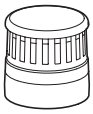
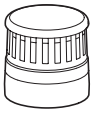
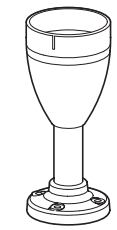
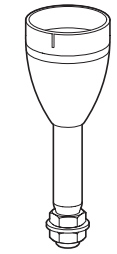
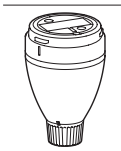
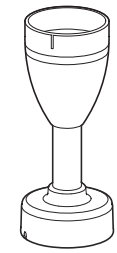
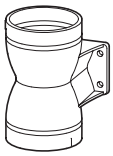
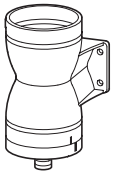
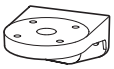
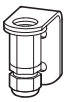
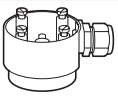
	Rated operating voltage U_e V	Color	Function	Catalog Number Article no.	Std. pack
Module with LED					
Strobe light IP66 1.4 Hz	24 V AC/DC			**SL7-FL24-B** 171402	1 unit
				SL7-FL24-G 171403	
				SL7-FL24-R 171404	
				SL7-FL24-W 171405	
				SL7-FL24-Y 171406	
				SL7-FL24-A 171407	
	110/120 V AC			**SL7-FL120-B** 171408	
				SL7-FL120-G 171409	
				SL7-FL120-R 171410	
				SL7-FL120-W 171411	
				SL7-FL120-Y 171412	
				SL7-FL120-A 171413	
	230/240 V AC			**SL7-FL230-B** 171414	
				SL7-FL230-G 171415	
				SL7-FL230-R 171416	
				SL7-FL230-W 171417	
				SL7-FL230-Y 171418	
				SL7-FL230-A 171419	

	Rated operating voltage U_e V	Color	Function	Catalog Number Article no.	Std. pack
Module with high power LED					
Continuous light IP66 High-performance LED for maximum signaling effect High Performance LED	24 V AC/DC			**SL7-L24-B-HP** 171427	1 unit
				SL7-L24-G-HP 171428	
				SL7-L24-R-HP 171429	
				SL7-L24-W-HP 171430	
				SL7-L24-Y-HP 171431	
				SL7-L24-A-HP 171432	
Strobe light IP66 High-performance LED for maximum signaling effect High Performance LED 1.4 Hz	24 V AC/DC			**SL7-FL24-B-HP** 171420	
				SL7-FL24-G-HP 171421	
				SL7-FL24-R-HP 171422	
				SL7-FL24-W-HP 171423	
				SL7-FL24-Y-HP 171273	
				SL7-FL24-A-HP 171274	
Multistrobe light IP66 High-performance LED for maximum signaling effect High Performance LED 1 - 2.6 Hz	24 V AC/DC			**SL7-FL24-B-HPM** 171275	
				SL7-FL24-G-HPM 171276	
				SL7-FL24-R-HPM 171277	
				SL7-FL24-W-HPM 171278	
				SL7-FL24-Y-HPM 171279	
				SL7-FL24-A-HPM 171280	
Module for filament lamp					
Continuous light IP66 Without lamp Filament lamp max. 7 W filament lamp → Page 150	< 250 V AC/DC			**SL7-L-B** 171433	1 unit
				SL7-L-G 171434	
				SL7-L-R 171435	
				SL7-L-W 171436	
				SL7-L-Y 171437	
				SL7-L-A 171438	

	Rated operating voltage U_e V	Rated operational current I_e mA	Color	Function	Type of tone	**Catalog Number** Article no.	Std. pack
	Acoustic modules						
	Continuous tone or pulsed tone, adjustable with internal dip switches. sound pressure 100 db, adjustable with internal potentiometer f = 2800 Hz Place only at the highest position on a pillar IP66						
	24 V AC/DC	Max. 92	■			**SL7-AP24** 171281	1 unit
	110/120 V AC	Max. 41	■			**SL7-AP120** 171282	
	230/240 V AC	Max. 43	■			**SL7-AP230** 171283	
	Continuous tone or pulsed tone, external actuation. Assigned two inputs (2 modules). sound pressure 100 db, adjustable with internal potentiometer f = 2800 Hz Place only at the highest position on a pillar IP66						
	24 V AC/DC	Max. 92	■			**SL7-AP24-E** 171284	1 unit
	110/120 V AC	Max. 41	■			**SL7-AP120-E** 171285	
	230/240 V AC	Max. 43	■			**SL7-AP230-E** 171286	
	Multi-tone; 8 tones, adjustable with internal dip switch. sound pressure 100 db, adjustable with internal potentiometer f = 500 - 2700 Hz Place only at the highest position on a pillar IP66						
	24 V AC/DC	Max. 115	■			**SL7-AP24-M** 171287	1 unit
	110/120 V AC	Max. 45	■			**SL7-AP120-M** 171288	
	230/240 V AC	Max. 43	■			**SL7-AP230-M** 171289	
	Customized complete unit						
	Order please enquire						
	–	–	–	–	–	**SL7-COMBINATION** 2011955	1 unit

		Tube length	Color	For use with	Catalog Number Article no.	Std. pack
	Base modules for horizontal mounting including cover max. 5 modules					
	Base with aluminum tube and plastic foot Spring-cage terminals	100 mm	black Aluminum color tube	SL7-L-... SL7-BL-... SL7-FL-... SL7-AP-...	**SL7-CB-100** 171443	1 unit
		250 mm			**SL7-CB-250** 171444	
		400 mm			**SL7-CB-400** 171445	
		800 mm			**SL7-CB-800** 177312	
	Base with aluminum tube and screw fixing Spring-cage terminals	100 mm			**SL7-CB-T-100** 171452	
		250 mm			**SL7-CB-T-250** 171453	
		400 mm			**SL7-CB-T-400** 171454	
		800 mm			**SL7-CB-T-800** 178460	
	Base with internal (on the inside) fixing holes Spring-cage terminals	–	black		**SL7-CB-IMH** 171447	
	Base with built-in (pre-assembled) fixing screws Spring-cage terminals	–			**SL7-CB-IMS** 171448	
	Base with external fixing holes Spring-cage terminals	–			**SL7-CB-EMH** 171449	
	Base: Can hold tubes with a diameter of 25 mm (±0.5) Spring-cage terminals	–			**SL7-CB-TM** 179987	
	Base with base adapter for slipping onto place (rapid mounting and wiring system) Screw terminals	100 mm	black Aluminum color tube		**SL7-FMS-100** 171456	
		250 mm			**SL7-FMS-250** 171457	
		400 mm			**SL7-FMS-400** 171458	
		800 mm			**SL7-FMS-800** 178462	
	Base with base adapter for slipping onto place (rapid mounting and wiring system) Blade terminal SWD4-8MF2 max. 0.3 A per module External power supply connectable (24 V DC). Parameterizable with SWD-Assist (planning and ordering help) Parameterizable with AS-Interface Screw terminal (see more → Page 153)	100 mm			**SL7-SWD** 171459	
					SL7-FMS-ASI-V20 197318	
					SL7-FMS-ASI-V20E 197319	
					SL7-FMS-ASI-V21 197320	
					SL7-FMS-ASI-V21E 197321	
					SL7-FMS-ASI-V30 197322	
					SL7-FMS-ASI-V30E 197323	

		Color	For use with	Catalog Number Article no.	Std. pack
	Base modules				
	for vertical mounting, with cover, max. 5 modules				
	One-sided base with bracket Spring-cage terminals	black	SL7-L-... SL7-BL-... SL7-FL-... SL7-AP-...	**SL7-CB-FW** 171450	1 unit
	for vertical mounting on both sides, with cover, max. 2 x 5 modules				
	Base with external fixing holes Spring-cage terminals	black	SL7-L-... SL7-BL-... SL7-FL-... SL7-AP-...	**SL7-CB-D** 171451	1 unit
	for vertical mounting on one side, with cover max. 1 x 3 modules				
	Base with M12 connection	black	SL7-L-... SL7-BL-... SL7-FL-... SL7-AP-...	**SL7-CB-D-M12A4** 177351	1 unit
	**Mounting bracket**				
	for vertical mounting, insulated material				
	–	–	SL4-PIB... SL7-CB...	**SL7/4-FW** 171446	1 unit
	**Including mounting bracket M20 cable gland**				
	for vertical mounting, metal				
	–	–	SL4-PIB-T... SL7-CB-T...	**SL7/4-FW-T** 171455	1 unit
	Tool for replacing filament lamp				
	–	–	SL7-L...	**SL7/4-BET** 171294	1 unit
	**Magnetic base including M20 cable gland**				
	for vertical mounting, insulated material				
	–		SL4-PIB-100(250)(400) SL7-CB-100(250)(400)	**SL7/4-MMS** 172954	1 unit

	Life point	Rated operating voltage U_e	Performance	For use with	Catalog Number Article no.	Std. pack
	Filament lamp					
	Ba15d socket					
	> 3000 h	12 V	5 W	SL7-L-...	**SL7-L12** 171290	1 unit
		24 V	6.5 W		**SL7-L24** 171291	
		120 V	7 W		**SL7-L120** 171292	
		230 V	6.5 W		**SL7-L230** 171293	

	For use with	Catalog Number Article no.	Std. pack
Cover			
	SL7-L...	**SL7-COV** 192368	1 unit

Technical specifications

			SL4-...
General			
Standards			IEC/EN 60947-5-1, UL508
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60069-2-30
Mounting position			Any
Mechanical shock resistance		g	> 15 According to IEC 60068-2-27 Shock duration 11 ms Half sinus
IEC degree of protection			IP66 IEC/EN 60529
Degree of protection UL			Type 4, 4X, 13
Material			Enclosure: Polycarbonate (PC), black Cap: Polycarbonate (PC)
Color of lamp hood			Blue, green, red, clear, yellow, orange, amber
Ambient temperature		°C	–30 - +60
Number of signal elements			Max. 5 with standard base Max. 10 with base for mounting on both sides
Terminal capacities			
Solid/flexible		mm^2	0.2 - 1.5
Solid/flexible, with ferrule		mm^2	0.25 - 1.5
Flexible with ferrule with plastic collar		mm^2	0.25 - 0.75
			AWG 24 - AWG 16
Contacts			
Rated surge voltage invariability	U_{imp}	V AC	4000
Rated insulation voltage	U_i	V	250
Overvoltage category/pollution degree			Overvoltage category/pollution degree III/3

		SL4-L...-...	SL4-BL...-...	SL4-FL...-...	SL4-FL24-...-M	SL4-L...
Light modules						
Type of light		Continuous light	Beacon	Strobe light	Multistrobe light	Continuous light
Lamp		LED				Filament lamp max. 4 W
Lamp holder		–	–	–	–	Ba15d
Flashing/strobe frequency		–	2 Hz	1.4 Hz	1 - 2.6 Hz	–
Transmission angle		360°				
Leakage current	A	< 0.003				
Current/power consumption						
24 V AC/DC	A	0.022 - 0.033	0.028 - 0.036	0.035 - 0.065	0.048 - 0.068	–
110/120 V AC	A	0.030	0.030	0.10	–	–
230/240V AC	A	0.030	0.030	0.10	–	–
Power consumption		–	–	–	–	Max. 4 W with the specified voltages
Voltage levels		24 V AC/DC ±10% 110/120 V AC ±10% 230/240 V AC ±10%			24 V AC/DC ±10%	up to 250 V AC/DC
Life point	h	> 100000				
Weight	g	45				

		SL4-AP...
Acoustic modules		
Type of tone		Continuous or pulsed tone
Types of sound		2 versions, table of sound types
Sound setting		Built-in, 1 pole DIP
Sound pressure	dB	80
Sound pressure level adjustment		–
Sound_pressure_can_be_lowered_to_a_minimum_of		–
Transmission angle		360°
Current/power consumption		
24 V AC/DC	A	0.039
110/120 V AC	A	0.021
230/240V AC	A	0.021
Voltage levels		24 V AC/DC ±10% 110/120 V AC ±10% 230/240 V AC ±10%
Weight	g	43

	Type of tone	Frequency Hz	Plot	Repeat rate	Special application	Max. volume dB
Table of sound types						
SL4-AP...	Continuous tone	approx. 4000	———	–	–	80
	Pulse tone	approx. 4000	— — —	approx. 2 Hz	–	80

			SL7-...
General			
Standards			IEC/EN 60947-5-1, UL508
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60069-2-30
Mounting position			Any
Mechanical shock resistance		g	> 15 According to IEC 60068-2-27 Shock duration 11 ms Half sinus
IEC degree of protection			IP66 IEC/EN 60529
Degree of protection UL			Type 4, 4X, 13
Material			Enclosure: Polycarbonate (PC), black Cap: Polycarbonate (PC)
Color of lamp hood			Blue, green, red, clear, yellow, orange, amber
Ambient temperature		°C	–30 - +60
Number of signal elements			Max. 5 with standard base Max. 10 with base for mounting on both sides
Terminal capacities			
Solid/flexible		mm^2	0.13 - 2.5
Flexible with ferrule with plastic collar		mm^2	0.25 - 1.5
			AWG 24 - AWG 14
Contacts			
Rated surge voltage invariability	U_{imp}	V AC	4000
Rated insulation voltage	U_i	V	250
Overvoltage category/pollution degree			Overvoltage category/pollution degree III/3

		SL7-L-...-...	SL7-BL-...-...	SL7-FL-...-...	SL7-L24-...-HP	SL7-FL24-...-HP	SL7-FL24-...-HPM	SL7-L-...
Light modules								
Type of light		Continuous light	Beacon	Strobe light	Continuous light	Strobe light	Multistrobe light	Continuous light
Lamp		LED			High Performance LED			Filament lamp max. 7 W
Lamp holder		–	–	–	–	–	–	Ba15d
Flashing/strobe frequency		–	2 Hz	1.4 Hz	–	1.4 Hz	1 - 2.6 Hz	–
Transmission angle		360°						
Leakage current	A	< 0.003						
Current/power consumption								
24 V AC/DC	A	0.049 - 0.054	0.058	0.130 - 0.135	0.170 - 0.200	0.260 - 0.265	0.260 - 0.265	–
110/120 V AC	A	0.028 - 0.031	0.028 - 0.030	0.010	–	–	–	–
230/240V AC	A	0.027 - 0.028	0.030 - 0.031	0.010	–	–	–	–
Power consumption		–	–	–	–	–	–	Max. 7 W with the specified voltages
Voltage levels		24 V AC/DC ±10% 110/120 V AC ±10% 230/240 V AC ±10%			18 - 30 V DC/18 - 26 V AC			up to 250 V AC/DC
Life point	h	> 100000			> 50000			> 3000
Weight	g	80						

AS-i version	Number of addresses	Number of modules	Internal power supply	External power supply	Current consumption via AS-i	**Catalog Number** Article no.
AS-Interface variants						
V2.0	31	4	✓	–	max. 210 mA	**SL7-FMS-ASI-V20** 197318
V2.0	31	4	–	✓	max. 20 mA	**SL7-FMS-ASI-V20E** 197319
V2.1	62	3	✓	–	max. 210 mA	**SL7-FMS-ASI-V21** 197320
V2.1	62	3	–	✓	max. 20 mA	**SL7-FMS-ASI-V21E** 197321
V3.0	62	4	✓	–	max. 210 mA	**SL7-FMS-ASI-V30** 197322
V3.0	62	4	–	✓	max. 20 mA	**SL7-FMS-ASI-V30E** 197323

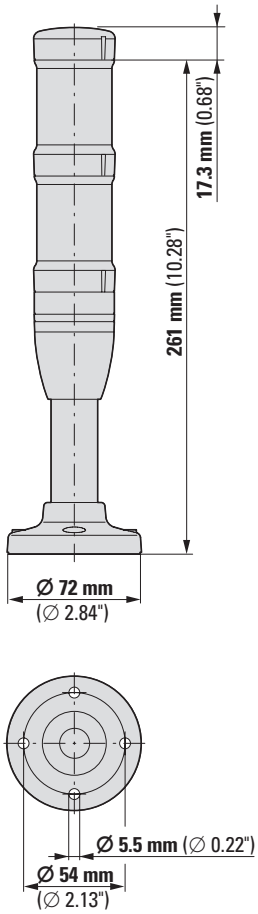
		SL7-AP...	SL7-AP...-E	SL7-AP...-M
Acoustic modules				
Type of tone		Continuous or pulsed tone	Continuous or pulsed tone	Continuous or pulsed tone 8 types of sound
Types of sound		2 versions, table of sound types	2 versions, table of sound types	8 versions, table of sound types
Sound setting		Built-in, 1 pole DIP	Can be externally actuated	Built-in, 3 pole DIP
Sound pressure	dB	100	100	100
Sound pressure level adjustment		Built-in, potentiometer	Built-in, potentiometer	Built-in, potentiometer
Sound_pressure_can_be_low-ered_to_a_minimum_of		88 dB	88 dB	88 dB
Transmission angle		360°	360°	360°
Current/power consumption				
24 V AC/DC	A	0.092	0.092	0.115
110/120 V AC	A	0.041	0.041	0.045
230/240V AC	A	0.043	0.043	0.043
Voltage levels		24 V AC/DC ±10% 110/120 V AC ±10% 230/240 V AC ±10%	24 V AC/DC ±10% 110/120 V AC ±10% 230/240 V AC ±10%	24 V AC/DC ±10% 110/120 V AC ±10% 230/240 V AC ±10%
Weight	g	102	102	102

	Type of tone	Frequency Hz	Plot	Repeat rate	Special application	Max. volume dB
Table of sound types						
SL7-AP..	Continuous tone	approx. 2800		–	–	100
	Pulse tone	approx. 2800		approx. 2 Hz	–	100
SL7-AP...-E	Continuous tone	approx. 2800		–	–	100
	Pulse tone	approx. 2800		approx. 2 Hz	–	100
SL7-AP...-M	Continuous tone	2700		–	–	100
	Continuous tone	1350		–	–	100
	Pulse tone	2700		250 ms on, 250 ms off	–	100
	Pulse tone	1350		250 ms on, 250 ms off	–	100
	Falling	1200 - 500		1 Hz	Evacuation, Germany, DIN 3304-3	98
	Rising	500 - 1200		Rising 3 s, 0.5 s off	Netherlands NEN 2575:2000	98
	Alternating	800 - 1000		2 Hz		94
	Rising/falling	500 - 1500		10 Hz		94

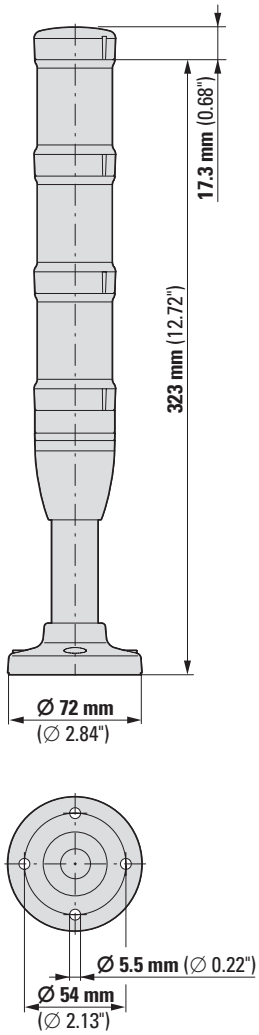
Dimensions

Complete devices

SL4-100-L-RG-24LED

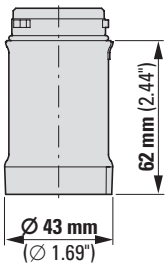


SL4-100-L-RYG-24LED



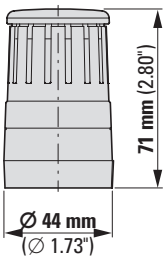
Light modules

SL4-(B)(F)L ...



Acoustic modules

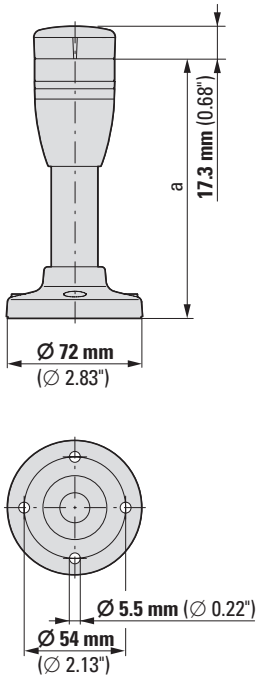
SL4-AP...



4

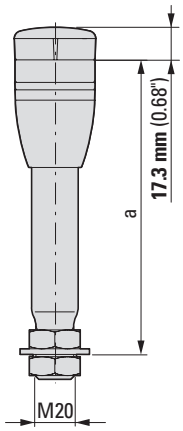
Base modules

SL4-PIB-...



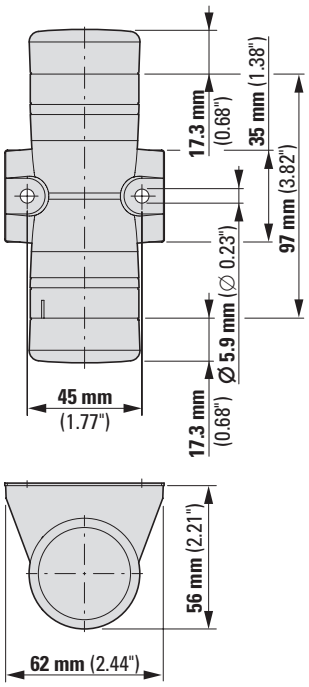
Catalog Number	a mm (inch)
SL4-PIB-100	136 (3.53)
SL4-PIB-250	286 (11.26)
SL4-PIB-400	436 (17.16)
SL4-PIB-800	836 (32.91)

SL4-PIB-T-...

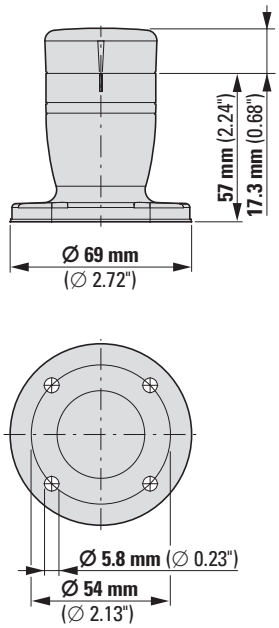


Catalog Number	a mm (inch)
SL4-PIB-T-100	150 (5.90)
SL4-PIB-T-250	300 (11.81)
SL4-PIB-T-400	450 (17.72)
SL4-PIB-T-800	850 (33.46)

SL4-PIB-D

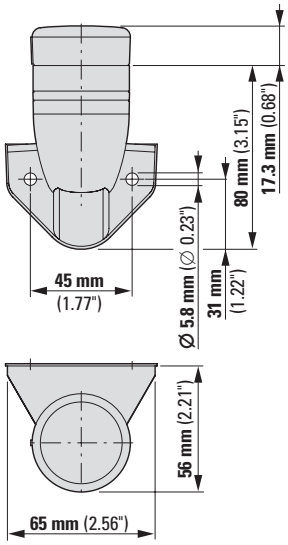


SL4-PIB-EMH

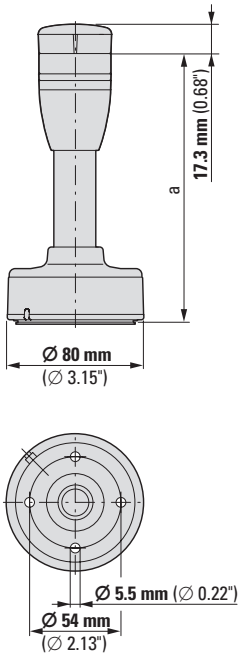


Base modules

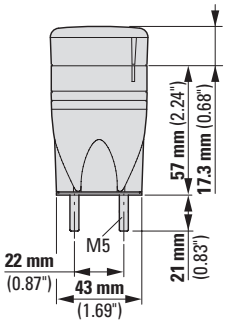
SL4-PIB-FW



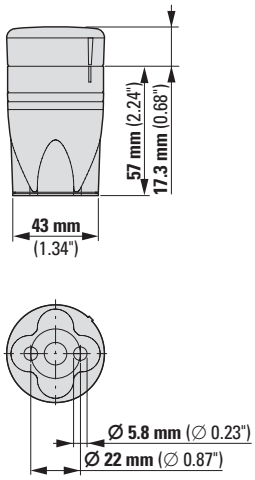
SL4-PIB-IMH



SL4-PIB-IMS

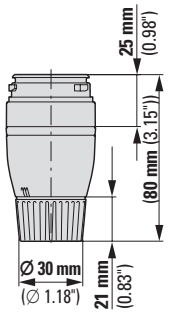


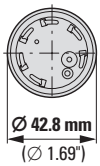
SL4-FMS-...



Catalog Number	a mm (inch)
SL4-FMS-100	157 (6.18)
SL4-FMS-250	307 (12.09)
SL4-FMS-400	457 (17.99)
SL4-FMS-800	857 (33.74)

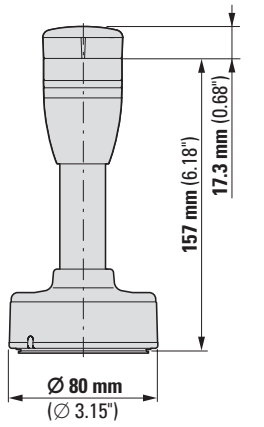
SL4-PIB-TM

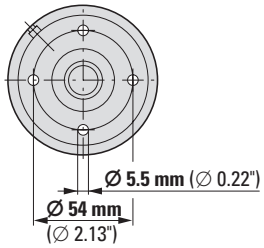




Base module for connecting to SmartWire-DT®

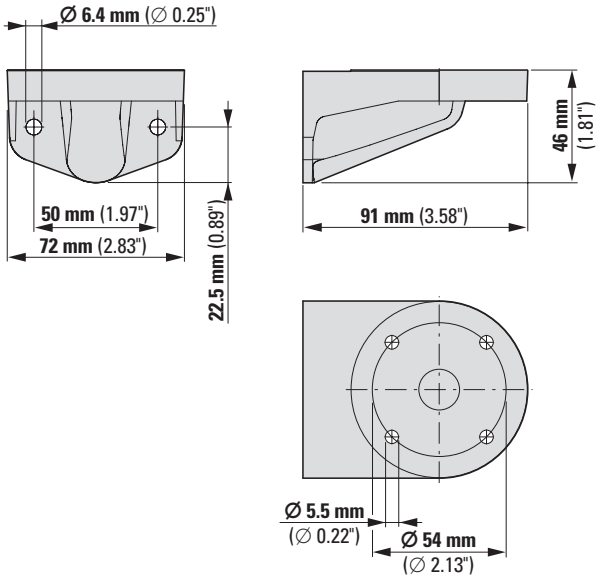
SL4-SWD



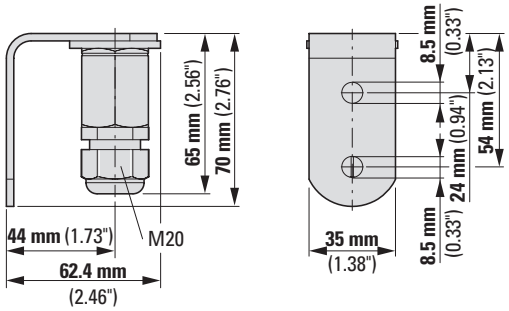


Mounting bracket

SL7/4-FW

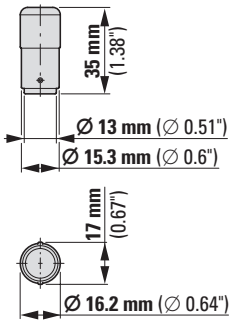


SL7/4-FW-T



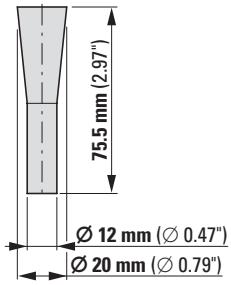
filament lamp

SL4-L12(24)(120)(230)



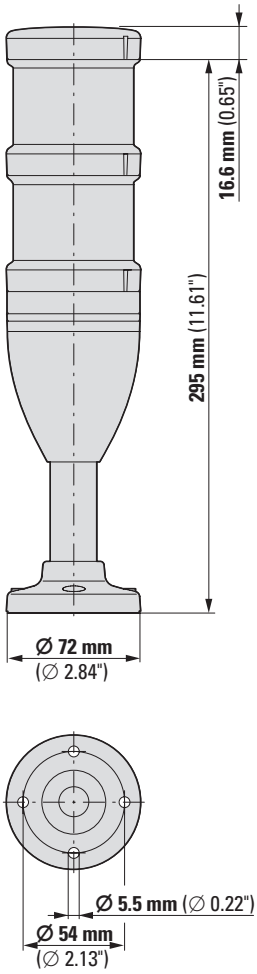
Tool for replacing filament lamp

SL7/4-BET

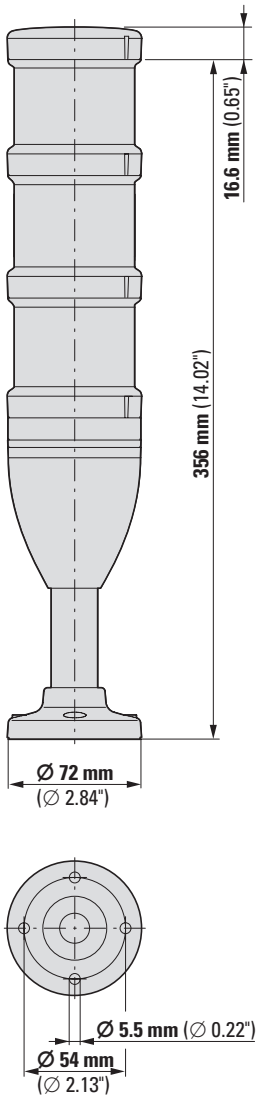


Complete devices

SL7-100-L-RG-24LED

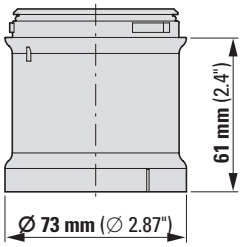


SL7-100-L-RYG-24LED



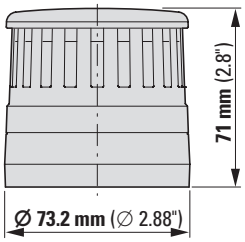
Light modules

SL7-(B)(F)L ...



Acoustic modules

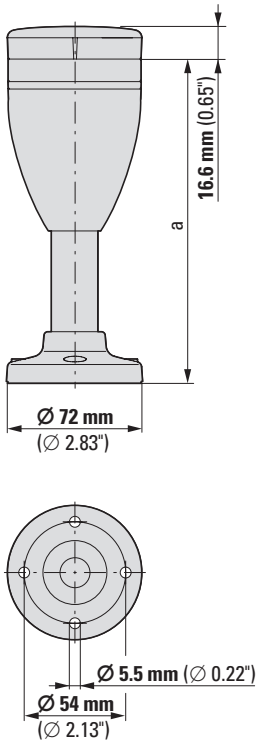
SL7-AP...



4

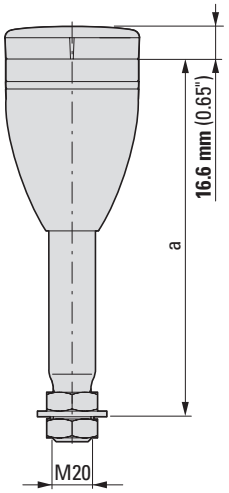
Base modules

SL7-CB-...



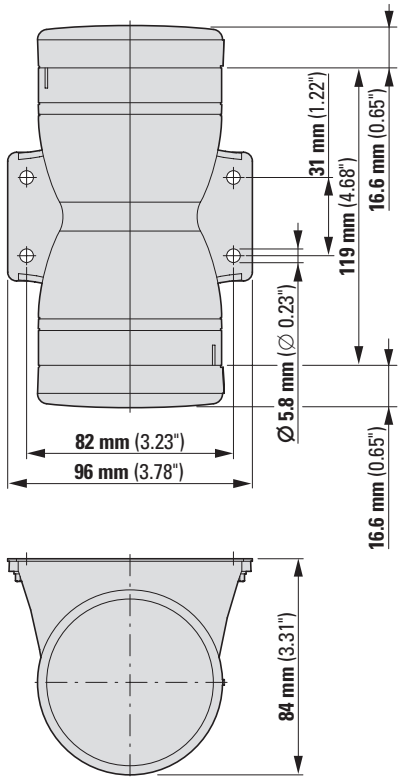
Catalog Number	a mm (inch)
SL7-CB-100	171 (6.73)
SL7-CB-250	321 (12.64)
SL7-CB-400	471 (18.54)
SL7-CB-800	871 (34.29)

SL7-CB-T-...

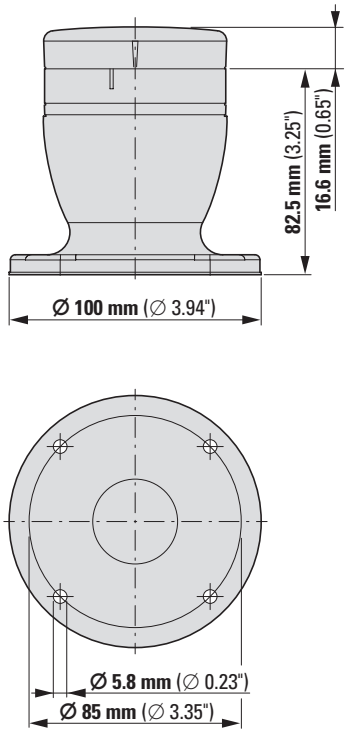


Catalog Number	a mm (inch)
SL7-CB-T-100	190 (7.48)
SL7-CB-T-250	340 (13.38)
SL7-CB-T-400	490 (19.29)
SL7-CB-T-800	890 (35.04)

SL7-CB-D

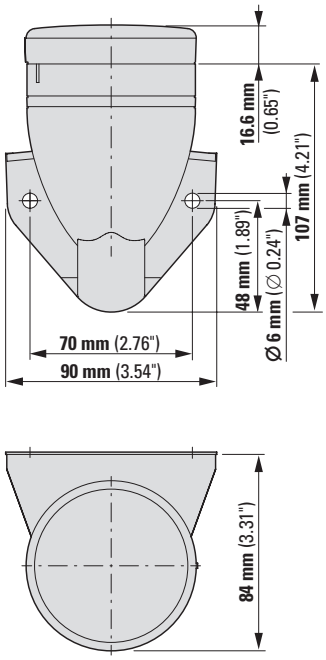


SL7-CB-EMH

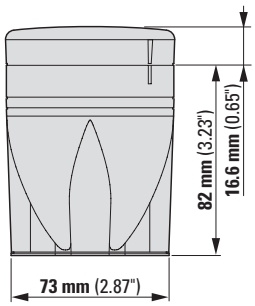


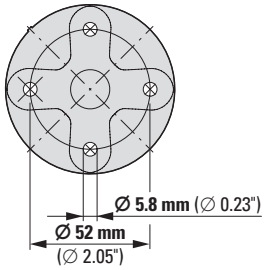
Base modules

SL7-CB-FW

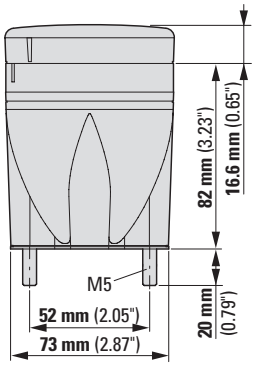


SL7-CB-IMH

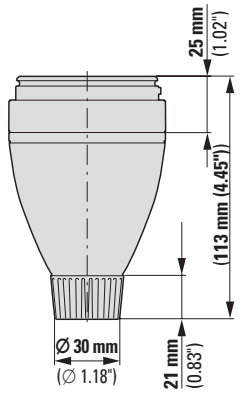


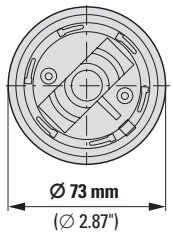


SL7-CB-IMS

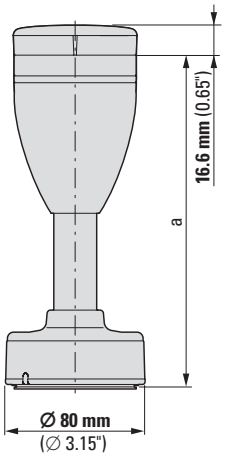


SL7-CB-TM

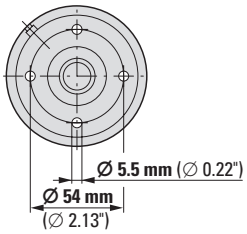




SL7-FMS-...



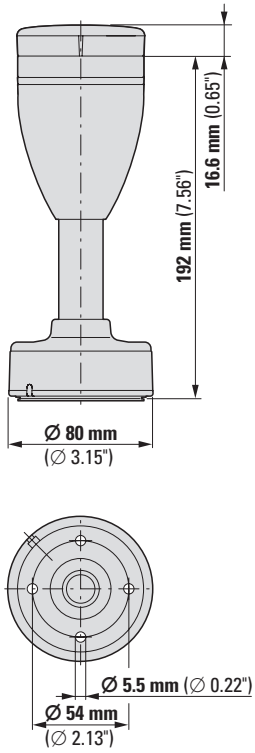
Catalog Number	a mm (inch)
SL7-FMS-100	192 (7.55)
SL7-FMS-250	342 (13.46)
SL7-FMS-400	492 (19.37)
SL7-FMS-800	892 (35.12)



4

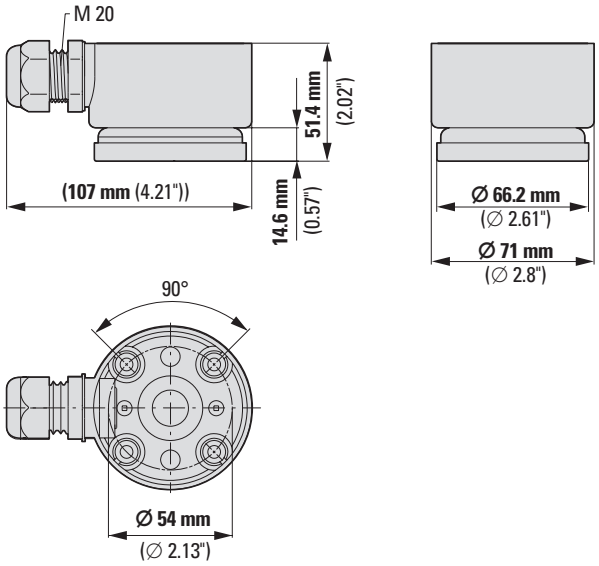
Base module for connecting to SmartWire-DT®/AS-Interface

SL7-SWD/ASI



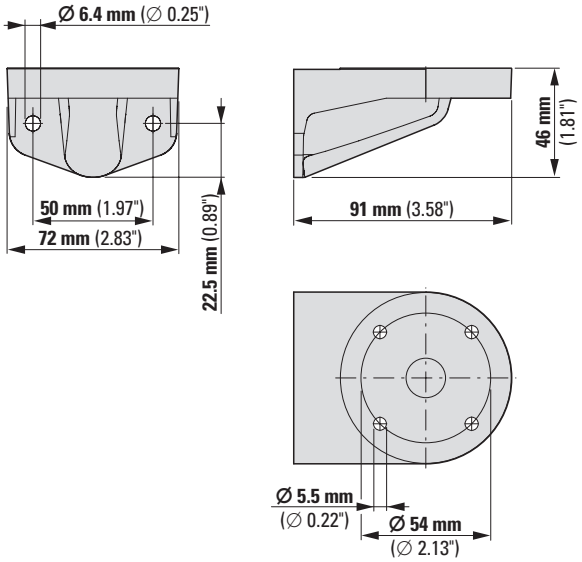
Magnetic base including M20 cable gland

SL7/4-MMS

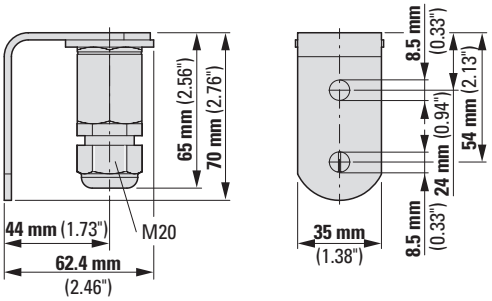


Mounting bracket

SL7/4-FW

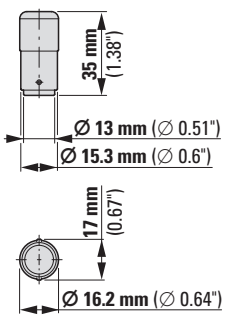


SL7/4-FW-T



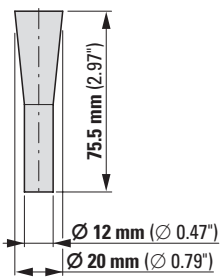
filament lamp

SL7-L12(24)(120)(230)



Tool for replacing filament lamp

SL7/4-BET



Detect positions reliably and accurately: mechanically, optically, capacitively and inductively.

Wherever exact positioning is required, safety/position switches with positively opening contacts are used. They are equipped with Cage Clamp or screw terminals and are available with metal and insulated enclosures. Their large connection area ensures that they can be wired quickly. Easy to fit and flexible operating heads are a further feature. Safety position switches protect both persons and processes. They are used to ensure that protective doors are safely locked and ensure a safe shutdown.

A variety of sensors makes it possible to use inductive, capacitive, or photoelectric object detection as necessary. These sensors are available in AC and DC versions, as well as in various cubic and tubular designs that make it easy to adapt to any type of location.

LSE-Titan

- Variable, adjustable switching point
- Precisely defined and reproducible
- Quick and bounce-free PNP-switching outputs facilitate high operating frequency
- Certified by the TÜV Rheinland

RS Titan

- Non-contacting: long lifespan, easy installation, high tolerance for doors and hinged flaps that do not close precisely, low maintenance
- High IP67, IP69 degree of protection: easy to clean, rugged, and reliable
- Symmetrical enclosure: easy mounting, low inventory levels
- 2 or 3 switching contacts: suitable for many applications
- Potential-free contacts: easy connection

For more information, visit:
www.Eaton.com/sensors

5.0 Position switches/sensors

5.1 LS, LSM position switches

LS, LSM-- System overview 166
Safety position switches LS-Titan – Ordering 167
Position switches LS-Titan – Ordering 168
Operating heads – Ordering 178
Accessories – Ordering 179

5.2 Position switches LS...ZB(Z)

LS...ZB(Z) – System overview 180
Position switches LS...ZB(Z) – Description 181
Safety position switches LS...ZBZ – Ordering 183
Safety position switches LS...ZB – Ordering 185
Safety position switches RS-Titan – Ordering 186
Contact travel diagrams – Engineering 187
Complete devices LS, LSM, LSE11, LSE02 – Technical data 190
Safety position switches LS-...-ZB, LS-...-ZBZ – Technical data 192
(Safety) position switches – Dimensions 193

5.3 Inductive sensors E52 Cube series

E52 Cube series – Ordering, engineering 198
E52 Cube series – Technical data 199

5.4 Inductive sensors E55 Limit Switch Style series

E55 Limit Switch Style series – Description 200
E55 Limit Switch Style series – Ordering 201
E55 Limit Switch Style series – Technical data 203
E55 Limit Switch Style series – Engineering, dimensions 204

5.5 Inductive sensors E56 Pancake series

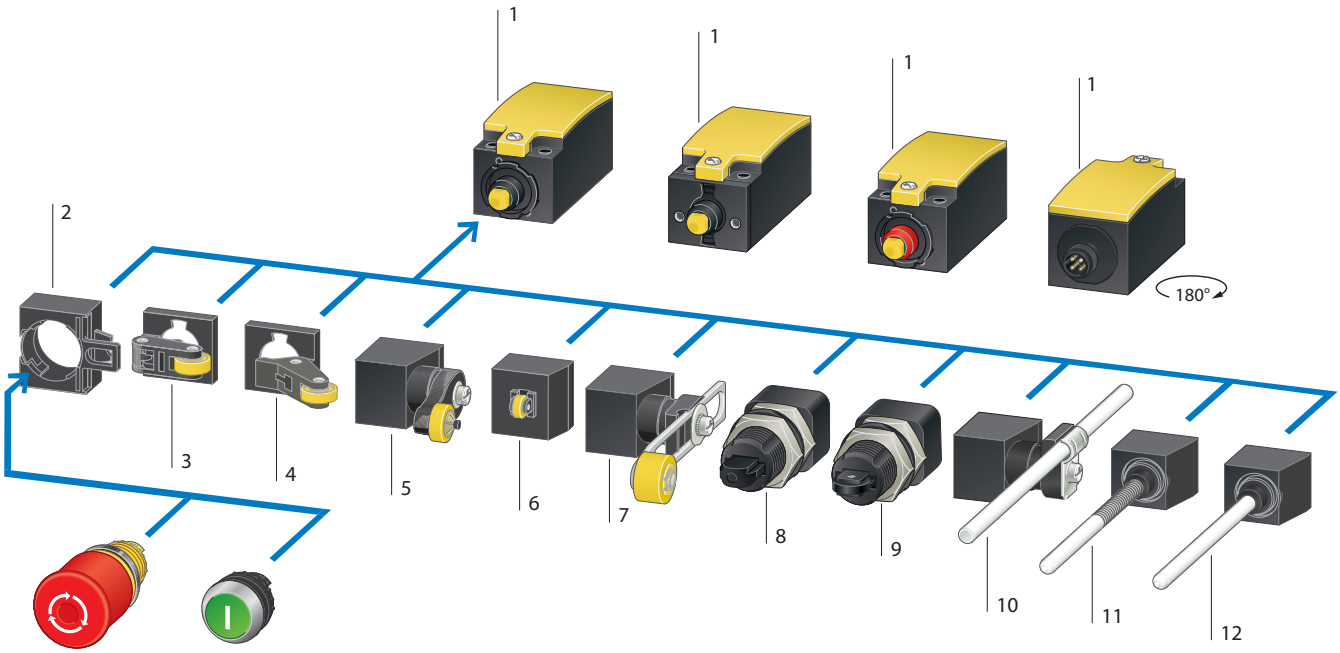
E56 Pancake series – Description 206
E56 Pancake series – Ordering, engineering 207
E56 Pancake series – Technical data 208

5.6 Inductive sensors E57 Global series, other sensors

E57 Global series – Description 210
E57 Global series – Ordering 211
E57 Global series – Technical data 212
Other inductive and capacitive sensors 213

5

System overview



Base devices

Basic device	1
According to EN 50047	
With screw-on cover	
Contact configuration: 1N/O/1NC, 2N/O, 2NC	
Cage Clamp, screw terminal	
As snap-action or standard-action switch	
As electronic snap-action switch,(individually adjustable)	
→ Page 167	

Operating heads
Can be rotated by 90°

Mounting adapter	2
Actuation through front element RMQ-Titan®	
Roller lever	3
For single conductor run actuation with higher operating speed	
Angled roller lever	4
For actuation along the unit axis	
Swing handle	5
For actuation from the side, for pendulum movements	
→ Page 178	

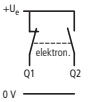
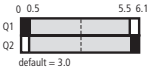
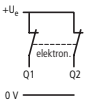
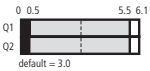
Operating heads
Can be rotated by 90°

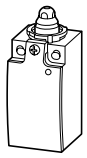
Roller plunger	6
Adjustable roller lever	7
Rounded plunger, center fixing	8
For mounting in enclosure wall or mounting plate drilling M18 x 1	
Roller plunger, center fixing	9
For mounting in enclosure wall or mounting plate drilling M18 x 1	
Actuating rod	10
Spring-rod actuator	11
Not to be used as a safety position switch.	
Use only in conjunction with snap-action contact.	
Actuating rod	12
→ Page 178	

LS, LSM product features

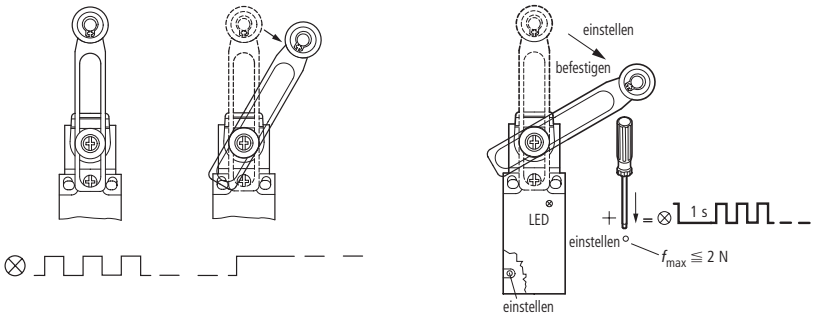
- Modular system
- IP65 and IP66 protection type (except LSM)
- Personnel protection
- Positive operation
- ⊖ Safety function with positively opening contacts to IEC/EN 60947-5-1 up to Category 4 to EN 954-1
- Suitable for use with electronic devices to IEC/EN 61131-2
- Devices for world markets

Ordering

Contact configuration	Contact sequence	Contact travel ■ = Contact closed □ = Contact open	Color Enclosure covers	**Catalog Number** Article no.	Std. pack	
⊖ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1						
N/O = Normally open contact	N/C = Normally closed contact					
Basic device, expandable						
IP66, IP67 operating point electronically adjustable						
Basic device Visible status display, comparable with positive opening function Partly short-circuit proof, restart after reset						
1 N/O	1 N/C			**LSE-11** 266121	2 units	1)
–	2 N/C			**LSE-02** 266122	2 units	1)

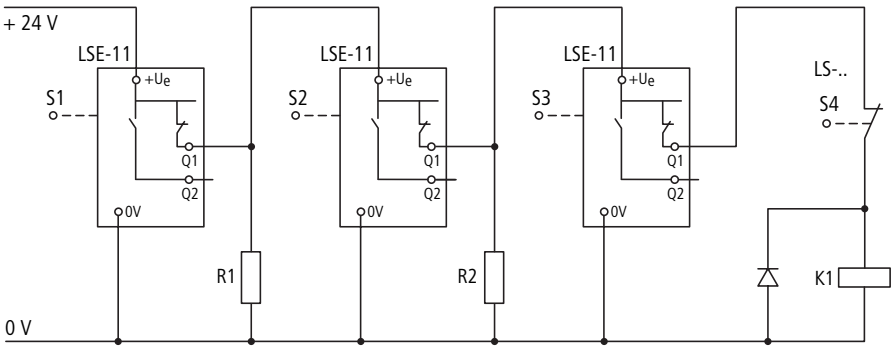


Notes **LSE-11 and LSE-02: Individual operating point adjustment:**



The following applies for LSE-11 and LSE-02: ensure that the power supply operates correctly when setting the operating point.

Circuit example for series connection:
LSE-11 and LSE-02 can be used in safety-oriented circuits.



S1 is connected to 24 V DC
S2, S3 each switch with a delay of 0.7 s
R1, R2 e. g. series resistor element M22-XLED60 (2820 Ω/0.5 W)

1) Operating heads → Page 178

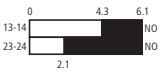
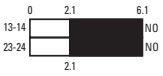
5

Contact configuration		Contact sequence	Contact travel ■ = Contact closed □ = contact open	Color Enclosure covers	Enclosure material	Connection type	**Catalog Number** Article no.	Std. pack	
⊖ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1									
N/O = Normally open contact	N/C = Normally closed contact								
Basic device, expandable									
Rounded plunger, IP66, IP67									
–	2 N/C	11 21 / 12 22	0 3.0 6.1 11-12 NC 21-22 NC 3.0 Zw = 4.5 mm	●	Plastic	Cage-Clamp	**LS-02** 266107	10 units	1) 2)
–	2 N/C			●	Plastic	Cage-Clamp	**LS-02-SW** 272009	10 units	1) 2)
–	2 N/C			●	Plastic	Screw terminal	**LS-S02** 106729	10 units	2)
–	2 N/C			●	Plastic	Screw terminal	**LS-S02-SW** 106782	10 units	2)
–	2 N/C			●	Metal	Cage-Clamp	**LSM-02** 266142	2 units	1) 2)
–	2 N/C		0 2.0 6.1 11-12 NC 21-22 NC 4.0 Zw (11-12) = 3.3 mm Zw (21-22) = 5.3 mm	●	Insulated material EN 50047 Form B	Cage-Clamp	**LS-02A** 116702	10 units	1) 2)
–	2 N/C			●	Insulated material EN 50047 Form B	Screw terminal	**LS-S02A** 116703	10 units	2)
1 N/O	1 N/C	13 21 / 14 22	0 4.3 6.1 13-14 NO 21-22 NC 3.0 Zw = 4.5 mm	●	Plastic	Cage-Clamp	**LS-11** 266109	10 units	1) 2)
1 N/O	1 N/C			●	Plastic	Cage-Clamp	**LS-11-SW** 272006	10 units	1) 2)
1 N/O	1 N/C			●	Plastic	Screw terminal	**LS-S11** 106783	10 units	2)
1 N/O	1 N/C			●	Plastic	Screw terminal	**LS-S11-SW** 106807	10 units	2)
1 N/O	1 N/C			●	Metal EN 50047 Form B	Cage-Clamp	**LSM-11** 266144	2 units	1) 2)
1 N/O	1 N/C		0 3.0 6.1 13-14 NO 21-22 NC 1.0 Zw = 2,3 mm	●	Insulated material EN 50047 Form B	Cage-Clamp	**LS-11A** 116704	10 units	1) 2)
1 N/O	1 N/C			●	Insulated material EN 50047 Form B	Screw terminal	**LS-S11A** 116705	10 units	2)
1 N/O	1 N/C	27 15 / 28 16	0 3.0 6.1 15-16 NC 27-28 NO 2.1 Zw = 4.5 mm	●	Plastic	Cage-Clamp	**LS-11D** 266114	10 units	1) 2)
1 N/O	1 N/C			●	Plastic	Cage-Clamp	**LS-11D-SW** 272007	10 units	1) 2)
1 N/O	1 N/C			●	Plastic	Screw terminal	**LS-S11D** 106791	10 units	2)
1 N/O	1 N/C			●	Plastic	Screw terminal	**LS-S11D-SW** 106797	10 units	2)
1 N/O	1 N/C			●	Metal	Cage-Clamp	**LSM-11D** 266149	2 units	1) 2)
1 N/O	1 N/C	15 27 / 16 28	0 4.0 6.1 15-16 NC 27-28 NO 2.1 ZW = 5.5 mm	●	Plastic	Cage-Clamp	**LS-11DA** 292361	10 units	1) 2)
1 N/O	1 N/C			●	Plastic	Screw terminal	**LS-S11DA** 106795	1 units	2)
1 N/O	1 N/C			●	Metal	Cage-Clamp	**LSM-11DA** 292363	1 units	1) 2)
1 N/O	1 N/C	13 21 / 14 22	0 3.0 6.1 21-22 → 13-14 21-22 ← 13-14 1.6 Zw = 5.5 mm	●	Plastic EN 50047 Form B	Cage-Clamp	**LS-11S** 266105	10 units	1) 2)
1 N/O	1 N/C			●	Plastic EN 50047 Form B	Cage-Clamp	**LS-11S-SW** 272020	10 units	1) 2)
1 N/O	1 N/C			●	Plastic EN 50047 Form B	Screw terminal	**LS-S11S** 106798	10 units	2)
1 N/O	1 N/C			●	Plastic EN 50047 Form B	Screw terminal	**LS-S11S-SW** 106806	10 units	2)
1 N/O	1 N/C			●	Metal EN 50047 Form B	Cage-Clamp	**LSM-11S** 266140	2 units	1) 2)

Notes

1) Cage-Clamp is a registered trademark of Wago Kontakttechnik, 32432 Minden, Germany.
Accessories for the Cage-Clamp terminals from Wago:
power comb, gray, Wago Article No. 264-402

2) Operating heads → Page 178

Contact configuration		Contact sequence	Contact travel ■ = Contact closed □ = contact open	Color Enclosure covers	Enclosure material	Connection type	**Catalog Number** Article no.	Std. pack	
⊖ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1									
N/O = Normally open contact	N/C = Normally closed contact								
Basic device, expandable									
Rounded plunger, IP66, IP67									
2 N/O	–				Plastic	Cage-Clamp	**LS-20** 266120	10 units	1) 2)
2 N/O	–				Plastic	Cage-Clamp	**LS-20-SW** 272008	10 units	1) 2)
2 N/O	–				Plastic	Screw terminal	**LS-S20** 106808	1 units	2)
2 N/O	–				Plastic	Screw terminal	**LS-S20-SW** 106812	10 units	2)
2 N/O	–				Metal	Cage-Clamp	**LSM-20** 266155	2 units	1) 2)
2 N/O	–				Plastic	Cage-Clamp	**LS-20A** 292362	1 units	1) 2)
2 N/O	–				Plastic	Screw terminal	**LS-S20A** 106810	10 units	2)
2 N/O	–				Metal	Cage-Clamp	**LSM-20A** 100051	2 units	1) 2)
2 N/O	–				Insulated material EN 50047 Form B	Cage-Clamp	**LS-20B** 116706	10 units	1) 2)
2 N/O	–				Insulated material EN 50047 Form B	Screw terminal	**LS-S20B** 116707	10 units	2)

Notes

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Accessories for the Cage-Clamp terminals from Wago:
power comb, gray, Wago Article No. 264-402

2) Operating heads → Page 178

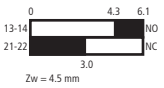
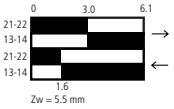
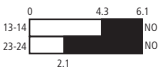
5

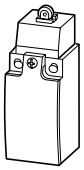
Contact configuration		Contact sequence	Contact travel ■ = Contact closed □ = Contact open	Color Enclosure covers	Enclosure material	Connection type	**Catalog Number** Article no.	Std. pack	
⊖ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1									
N/O = Normally open contact	N/C = Normally closed contact								
Complete devices									
Rounded plunger, IP66, IP67 (Front mount)									
–	2 N/C	11 21 / 12 22	0 3.0 6.1 11-12 NC 21-22 NC 3.0 Zw = 4.5 mm		Plastic	Cage-Clamp	**LS-02/F** 292365	1 units	1) 2)
–	2 N/C				Plastic	Screw terminal	**LS-S02/F** 106780	1 units	2)
–	2 N/C				Metal	Cage-Clamp	**LSM-02/F** 292371	1 units	1) 2)
1 N/O	1 N/C	13 21 / 14 22	0 4.3 6.1 13-14 NO 21-22 NC 3.0 Zw = 4.5 mm		Plastic	Cage-Clamp	**LS-11/F** 290176	1 units	1) 2)
1 N/O	1 N/C				Plastic	Screw terminal	**LS-S11/F** 106784	1 units	2)
1 N/O	1 N/C				Metal	Cage-Clamp	**LSM-11/F** 292372	1 units	1) 2)
1 N/O	1 N/C	27 15 / 28 16	0 3.0 6.1 15-16 NC 27-28 NO 2.1 Zw = 4.5 mm		Plastic	Screw terminal	**LS-S11D/F** 106792	1 units	2)
1 N/O	1 N/C				Plastic	Cage-Clamp	**LS-11D/F** 292366	1 units	1) 2)
1 N/O	1 N/C				Metal	Cage-Clamp	**LSM-11D/F** 292373	1 units	1) 2)
1 N/O	1 N/C	27 15 / 28 16	0 4.0 6.1 15-16 NC 27-28 NO 2.1 ZW = 5.5 mm		Plastic	Cage-Clamp	**LS-11DA/F** 292369	1 units	1) 2)
1 N/O	1 N/C				Plastic	Screw terminal	**LS-S11DA/F** 106796	1 units	2)
1 N/O	1 N/C				Metal	Cage-Clamp	**LSM-11DA/F** 292376	1 units	1) 2)
1 N/O	1 N/C	13 21 / 14 22	0 3.0 6.1 21-22 13-14 → 21-22 13-14 ← 1.6 Zw = 5.5 mm		Plastic	Cage-Clamp	**LS-11S/F** 292367	1 units	1) 2)
1 N/O	1 N/C				Plastic	Screw terminal	**LS-S11S/F** 106799	1 units	2)
1 N/O	1 N/C				Metal	Cage-Clamp	**LSM-11S/F** 292374	1 units	1) 2)
2 N/O	–		0 4.3 6.1 13-14 NO 23-24 NO 2.1		Plastic	Cage-Clamp	**LS-20/F** 292368	1 units	1)
2 N/O	–				Plastic	Screw terminal	**LS-S20/F** 106809	1 units	
2 N/O	–				Metal	Cage-Clamp	**LSM-20/F** 292375	1 units	1)
2 N/O	–		0 2.1 6.1 13-14 NO 23-24 NO 2.1		Plastic	Cage-Clamp	**LS-20A/F** 292370	1 units	1)
2 N/O	–				Plastic	Screw terminal	**LS-S20A/F** 106811	1 units	
2 N/O	–				Metal	Cage-Clamp	**LSM-20A/F** 292377	1 units	1)

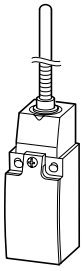
Notes

1) Cage-Clamp is a registered trademark of Wago Kontakttechnik, 32432 Minden, Germany.
Accessories for the Cage-Clamp terminals from Wago:
power comb, gray, Wago Article No. 264-402

2) The operating head can be rotated at 90° intervals to adapt to the specified approach direction.

Contact configuration		Contact sequence	Contact travel ■ = Contact closed □ = Contact open	Color Enclosure covers	Enclosure material	Connection type	**Catalog Number** Article no.	Std. pack	
⊖ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1 N/O = Normally open contact	N/C = Normally closed contact								
Complete devices									
Roller plungers, IP66, IP67									
1 N/O	1 N/C				Plastic EN 50047 Form C	Cage-Clamp	**LS-11/P** 266112	2 units	1) 2)
1 N/O	1 N/C				Plastic EN 50047 Form C	Screw terminal	**LS-S11/P** 106788	2 units	2)
1 N/O	1 N/C				Metal EN 50047 Form C	Cage-Clamp	**LSM-11/P** 266147	2 units	1) 2)
1 N/O	1 N/C				Plastic EN 50047 Form C	Cage-Clamp	**LS-11S/P** 266118	2 units	1) 2)
1 N/O	1 N/C				Plastic EN 50047 Form C	Screw terminal	**LS-S11S/P** 106801	2 units	2)
1 N/O	1 N/C				Metal EN 50047 Form C	Cage-Clamp	**LSM-11S/P** 266153	2 units	1) 2)
Spring-rod actuator IP66, IP67 Do not use spring-rod actuator as a safety position switch; admissible only with snap-action contact.									
1 N/O	1 N/C				Plastic	Cage-Clamp	**LS-11S/S** 266104	2 units	1) 2)
1 N/O	1 N/C				Plastic	Screw terminal	**LS-S11S/S** 106805	2 units	2)
1 N/O	1 N/C				Metal	Cage-Clamp	**LSM-11S/S** 266139	2 units	1) 2)





Notes

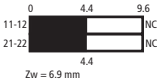
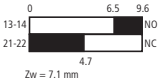
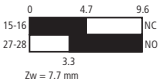
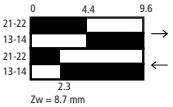
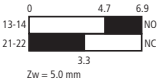
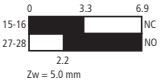
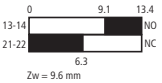
[1] Cage-Clamp is a registered trademark of Wago Kontakttechnik, 32432 Minden, Germany.
Accessories for the Cage-Clamp terminals from Wago:
power comb, gray, Wago Article No. 264-402

[2] The operating head can be rotated at 90° intervals to adapt to the specified approach direction.

5

Complete devices

Roller lever IP66, IP67

	Contact configuration		Contact sequence	Contact travel ■ = Contact closed □ = contact open	Enclosure cover color	Enclosure material	Connection type	**Catalog Number** Article no.	Std. pack	
	⊖ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1 N/O = Normally open contact N/C = Normally closed contact									
long	–	2 N/C				Plastic	Cage-Clamp	**LS-02/L** 266108	2 units	1) 2)
	–	2 N/C				Plastic	Screw terminal	**LS-S02/L** 106781	2 units	2)
	–	2 N/C				Metal	Cage-Clamp	**LSM-02/L** 266143	2 units	1) 2)
	1 N/O	1 N/C				Plastic EN 50047 Form E	Cage-Clamp	**LS-11/L** 266110	2 units	1) 2)
	1 N/O	1 N/C				Plastic EN 50047 Form E	Screw terminal	**LS-S11/L** 106785	2 units	2)
	1 N/O	1 N/C				Metal EN 50047 Form E	Cage-Clamp	**LSM-11/L** 266145	2 units	1) 2)
	1 N/O	1 N/C				Plastic	Cage-Clamp	**LS-11D/L** 266115	2 units	1) 2)
	1 N/O	1 N/C				Plastic	Screw terminal	**LS-S11D/L** 106793	2 units	2)
	1 N/O	1 N/C				Metal	Cage-Clamp	**LSM-11D/L** 266150	2 units	1) 2)
	1 N/O	1 N/C				Plastic EN 50047 Form E	Cage-Clamp	**LS-11S/L** 266116	2 units	1) 2)
	1 N/O	1 N/C				Plastic EN 50047 Form E	Screw terminal	**LS-S11S/L** 106800	2 units	2)
	1 N/O	1 N/C				Metal EN 50047 Form E	Cage-Clamp	**LSM-11S/L** 266151	2 units	1) 2)
short	1 N/O	1 N/C				Plastic	Cage-Clamp	**LS-11/LS** 290173	2 units	1) 2)
	1 N/O	1 N/C				Plastic	Screw terminal	**LS-S11/LS** 106787	1 units	2)
	1 N/O	1 N/C				Plastic	Cage-Clamp	**LS-11D/LS** 290174	1 units	1) 2)
	1 N/O	1 N/C				Plastic	Screw terminal	**LS-S11D/LS** 106794	1 units	2)
Large	1 N/O	1 N/C				Plastic	Cage-Clamp	**LS-11/LB** 290175	1 units	1) 2)
	1 N/O	1 N/C				Plastic	Screw terminal	**LS-S11/LB** 106786	1 units	2)

Notes

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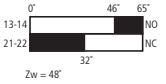
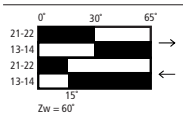
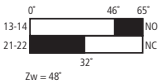
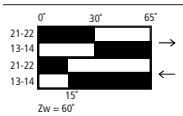
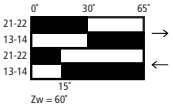
Accessories for the Cage-Clamp terminals from Wago:
power comb, gray, Wago Article No. 264-402

2) The operating head can be rotated at 90° intervals to adapt to the specified approach direction.

Contact configuration		Contact sequence	Contact travel ■ = Contact closed □ = contact open	Color Enclosure covers	Enclosure material	Connection type	**Catalog Number** Article no.	Std. pack	
⊖ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1									
N/O = Normally open contact	N/C = Normally closed contact								
Complete devices									
Swing handle, IP66, IP67									
1 N/O	1 N/C				Plastic EN 50047 Form A	Cage-Clamp	**LS-11/RL** 266111	2 units	1) 2)
1 N/O	1 N/C				Metal EN 50047 Form A	Cage-Clamp	**LSM-11/RL** 266146	2 units	1) 2)
1 N/O	1 N/C				Plastic EN 50047 Form A	Screw terminal	**LS-S11/RL** 106789	2 units	2)
1 N/O	1 N/C				Plastic EN 50047 Form A	Cage-Clamp	**LS-11S/RL** 266117	2 units	1) 2)
1 N/O	1 N/C				Plastic EN 50047 Form A	Screw terminal	**LS-S11S/RL** 106802	2 units	2)
1 N/O	1 N/C				Metal EN 50047 Form A	Cage-Clamp	**LSM-11S/RL** 266152	2 units	1) 2)
Adjustable roller levers, IP66, IP67									
1 N/O	1 N/C				Plastic	Cage-Clamp	**LS-11/RLA** 266113	2 units	1) 2)
1 N/O	1 N/C				Plastic	Screw terminal	**LS-S11/RLA** 106790	2 units	2)
1 N/O	1 N/C				Metal	Cage-Clamp	**LSM-11/RLA** 266148	2 units	1) 2)
1 N/O	1 N/C				Plastic	Cage-Clamp	**LS-11S/RLA** 266119	2 units	1) 2)
1 N/O	1 N/C				Plastic	Screw terminal	**LS-S11S/RLA** 106803	2 units	2)
1 N/O	1 N/C				Metal	Cage-Clamp	**LSM-11S/RLA** 266154	2 units	1) 2)
IP66, IP67 actuating rod									
1 N/O	1 N/C				Plastic	Cage-Clamp	**LS-11S/RR** 266106	4 units	1) 2)
1 N/O	1 N/C				Plastic	Screw terminal	**LS-S11S/RR** 106804	4 units	2)
1 N/O	1 N/C				Metal	Cage-Clamp	**LSM-11S/RR** 266141	4 units	1) 2)
Customized complete unit IP66, IP67									
(*) user-definable customer ID or stock no.: up to 10 characters									
					Plastic	–	**LS-COMBINATION** 2010791	1 units	1) 2)

Notes

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Accessories for the Cage-Clamp terminals from Wago:
power comb, gray, Wago Article No. 264-402

2) The operating head can be rotated at 90° intervals to adapt to the specified approach direction.

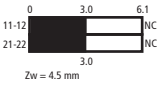
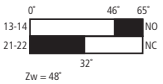
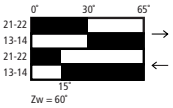
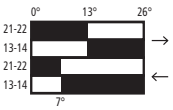
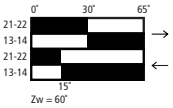
5

Contact configuration		Contact sequence	Contact travel ■ = Contact closed □ = contact open	Color Enclosure covers	Enclosure material	Connection type	**Catalog Number** Article no.	Std. pack	
⊖ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1									
N/O = Normally open contact	N/C = Normally closed contact								
Plastic									
–40 - +70, IP65									
Basic device, expandable									
–	2 N/C	11 21 / 12 22	0 3.0 6.1; 11-12 NC; 21-22 NC; 3.0; Zw = 4.5 mm	●	Plastic	Cage-Clamp	**LS-02-CC** 176880	10 units	1) 2)
–	2 N/C			●	Plastic	Screw terminal	**LS-S02-CC** 176890	10 units	2)
–	2 N/C		0 2.0 6.1; 11-12 NC; 21-22 NC; 4.0; Zw (11-12) = 3.3 mm; Zw (21-22) = 5.3 mm	●	Insulated material EN 50047 Form B	Cage-Clamp	**LS-02A-CC** 176886	10 units	1) 2)
–	2 N/C			●	Insulated material EN 50047 Form B	Screw terminal	**LS-S02A-CC** 176895	10 units	2)
1 N/O	1 N/C	13 21 / 14 22	0 4.3 6.1; 13-14 NO; 21-22 NC; 3.0; Zw = 4.5 mm	●	Plastic	Cage-Clamp	**LS-11-CC** 176879	10 units	1) 2)
1 N/O	1 N/C			●	Plastic	Screw terminal	**LS-S11-CC** 176889	10 units	2)
1 N/O	1 N/C		0 3.0 6.1; 13-14 NO; 21-22 NC; 1.0; Zw = 2,3 mm	●	Insulated material EN 50047 Form B	Cage-Clamp	**LS-11A-CC** 176887	10 units	1) 2)
1 N/O	1 N/C			●	Insulated material EN 50047 Form B	Screw terminal	**LS-S11A-CC** 176896	10 units	2)
1 N/O	1 N/C	27 15 / 28 16	0 3.0 6.1; 15-16 NC; 27-28 NO; 2.1; Zw = 4.5 mm	●	Plastic	Cage-Clamp	**LS-11D-CC** 176882	10 units	1) 2)
1 N/O	1 N/C			●	Plastic	Screw terminal	**LS-S11D-CC** 176891	10 units	2)
1 N/O	1 N/C	15 27 / 16 28	0 4.0 6.1; 15-16 NC; 27-28 NO; 2.1; ZW = 5.5 mm	●	Plastic	Cage-Clamp	**LS-11DA-CC** 176884	10 units	1) 2)
1 N/O	1 N/C			●	Plastic	Screw terminal	**LS-S11DA-CC** 176893	1 units	2)
1 N/O	1 N/C	13 21 / 14 22	0 3.0 6.1; 21-22 13-14 →; 21-22 13-14 ←; 1.6; Zw = 5.5 mm	●	Plastic EN 50047 Form B	Cage-Clamp	**LS-11S-CC** 176881	10 units	1) 2)
1 N/O	1 N/C			●	Plastic EN 50047 Form B	Screw terminal	**LS-S11S-CC** 144118	10 units	2)
2 N/O	–	13 23 / 14 24	0 4.3 6.1; 13-14 NO; 23-24 NO; 2.1	●	Plastic	Cage-Clamp	**LS-20-CC** 176883	10 units	1) 2)
2 N/O	–			●	Plastic	Screw terminal	**LS-S20-CC** 176892	1 units	2)
2 N/O	–		0 2.1 6.1; 13-14 NO; 23-24 NO; 2.1	●	Plastic	Cage-Clamp	**LS-20A-CC** 176885	1 units	1) 2)
2 N/O	–			●	Plastic	Screw terminal	**LS-S20A-CC** 176894	10 units	2)
2 N/O	–		0 1.3 6.1; 13-14 NO; 23-24 NO	●	Insulated material EN 50047 Form B	Cage-Clamp	**LS-20B-CC** 176888	10 units	1) 2)
2 N/O	–			●	Insulated material EN 50047 Form B	Screw terminal	**LS-S20B-CC** 176897	10 units	2)

Notes

1) Cage-Clamp is a registered trademark of Wago Kontakttechnik, 32432 Minden, Germany.
Accessories for the Cage-Clamp terminals from Wago:
power comb, gray, Wago Article No. 264-402

2) Operating heads → Page 178

Contact configuration		Contact sequence	Contact travel ■ = Contact closed □ = contact open	Color Enclosure covers	Enclosure material	Connection type	**Catalog Number** Article no.	Std. pack	
⊖ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1									
N/O = Normally open contact	N/C = Normally closed contact								
Plastic									
–40 - +70, IP65									
Swing handle									
	2 N/C				Plastic EN 50047 Form A	Cage clamp	**LS-02-CC/RL** 156509	2 units	1) 2)
	2 N/C				Plastic EN 50047 Form A	Screw terminal	**LS-S02-CC/RL** 167677	1 units	1) 2)
1 N/O	1 N/C				Plastic EN 50047 Form A	Cage-Clamp	**LS-11-CC/RL** 120608	2 units	1) 2)
1 N/O	1 N/C				Plastic EN 50047 Form A	Cage-Clamp	**LS-11S-CC/RL** 179674	2 units	1) 2)
Spring-rod actuator Do not use spring-rod actuator as a safety position switch; admissible only with snap-action contact.									
1 N/O	1 N/C				Plastic	Cage-Clamp	**LS-11S-CC/S** 179677	2 units	1) 2)
Actuating rod									
1 N/O	1 N/C				Plastic	Cage-Clamp	**LS-11S-CC/RR** 179675	4 units	1) 2)

Notes

1) Cage-Clamp is a registered trademark of Wago Kontakttechnik, 32432 Minden, Germany.
Accessories for the Cage-Clamp terminals from Wago:
power comb, gray, Wago Article No. 264-402

2) Operating heads → Page 178

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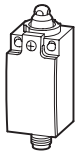
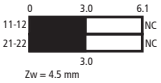
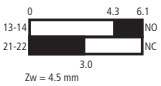
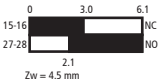
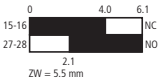
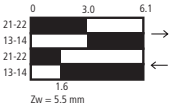
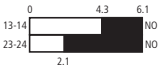
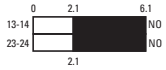
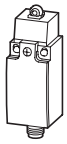
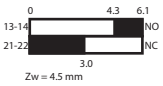
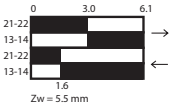
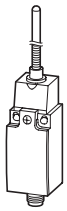
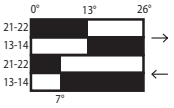
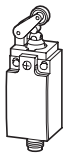
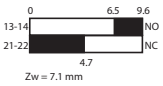
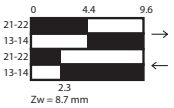
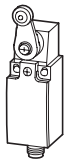
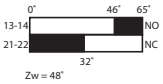
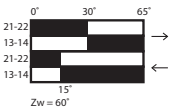
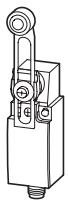
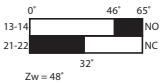
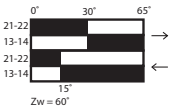
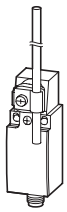
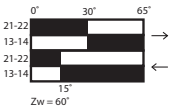


Contact configuration ⊖ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1 N/O = Normally open contact N/C = Normally closed contact		Snap-action contact	Contact travel ■ = Contact closed □ = contact open Contact diagram	**Cage-Clamp**[1] **Catalog Number** Article no.	Std. pack
Basic device, expandable					
with integrated M12 plug, IP66					
Rounded plunger					
–	2 N/C	–		**LS-02-M12A** 178128	1 units
1 N/O	1 N/C	–		**LS-11-M12A** 178129	1 units
1 N/O	1 N/C	–		**LS-11D-M12A** 178130	1 units
1 N/O	1 N/C	–		**LS-11DA-M12A** 178131	1 units
1 N/O	1 N/C	–		**LS-11S-M12A** 178132	1 units
2 N/O	–	–		**LS-20-M12A** 178133	10 units
2 N/O	–	–		**LS-20A-M12A** 178134	1 units
2 N/O	–	–		**LS-20B-M12A** 178135	1 units

Notes

[1] Cage-Clamp is a registered trademark of Wago Kontakttechnik, 32432 Minden, Germany.
Accessories for the Cage-Clamp terminals from Wago:
power comb, gray, Wago Article No. 264-402

	Contact configuration ⊖ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1 N/O = Normally open contact N/C = Normally closed contact		Snap-action contact	Contact travel ■ = Contact closed □ = contact open Contact diagram	**Cage-Clamp**[1] **Catalog Number** Article no.	Std. pack
	Complete devices					
	with integrated M12 plug, IP66					
	Roller plunger					
	1 N/O	1 N/C	–		**LS-11/P-M12A** 178137	2 units
	1 N/O	1 N/C	Yes		**LS-11S/P-M12A** 178141	2 units
	Spring-rod actuator Not to be used as a safety position switch					
	1 N/O	1 N/C	Yes		**LS-11S/S-M12A** 178145	2 units
	Roller lever					
	1 N/O	1 N/C			**LS-11/L-M12A** 178136	1 units
	1 N/O	1 N/C	Yes		**LS-11S/L-M12A** 178140	1 units
	Swing handle					
	1 N/O	1 N/C			**LS-11/RL-M12A** 178138	1 units
	1 N/O	1 N/C	Yes		**LS-11S/RL-M12A** 178142	1 units
	adjustable roller lever					
	1 N/O	1 N/C			**LS-11/RLA-M12A** 178139	2 units
	1 N/O	1 N/C	Yes		**LS-11S/RLA-M12A** 178143	2 units
	Actuating rod					
	1 N/O	1 N/C	Yes		**LS-11S/RR-M12A** 178144	4 units

Notes

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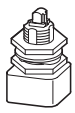
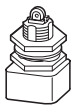
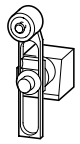
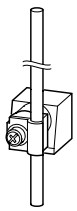
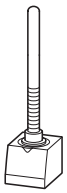
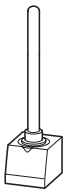
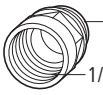
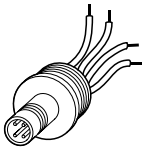
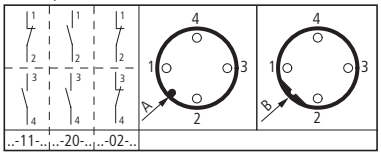
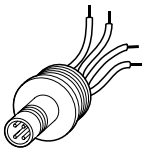
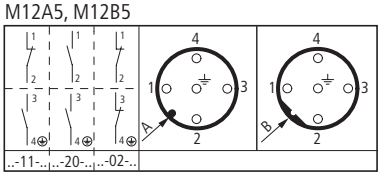
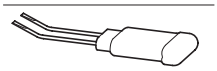
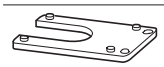
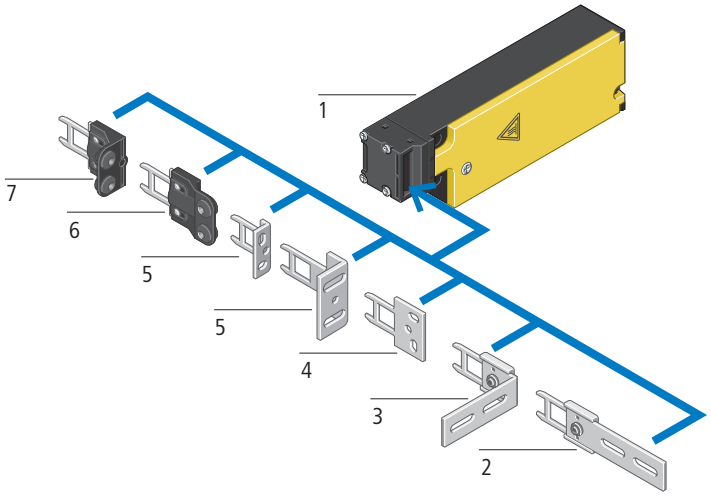
Accessories for the Cage-Clamp terminals from Wago:
power comb, gray, Wago Article No. 264-402

	Plastic		Metal		
	Catalog Number Article no.	Std. pack	**Catalog Number** Article no.	Std. pack	**Notes**
 **Rounded plunger, centre fixing**					
For mounting in enclosure wall or mounting plate drilling M18 x 1	**LS-XZS** 114024	1 units			The operating head can be rotated at 90° intervals to adapt to the specified approach direction.
 **Roller plunger, centre fixing**					
For mounting in enclosure wall or mounting plate drilling M18 x 1	**LS-XZRS** 114025	1 units			
Roller plunger					
–	**LS-XP** 266125	10 units	**LSM-XP** 266158	10 units	
Roller lever					
Large	**LS-XLB** 290178	5 units			
Short	**LS-XLS** 290177	1 units			
Long	**LS-XL** 266123	10 units	**LSM-XL** 266156	10 units	
Angled roller lever					
–	**LS-XLA** 266124	10 units	**LSM-XLA** 266157	10 units	
Swing handle					
–	**LS-XRL** 266126	5 units	**LSM-XRL** 266159	5 units	
 **adjustable roller lever**					
D = 18 mm	**LS-XRLA** 266127	4 units	**LSM-XRLA** 266160	4 units	
D = 30 mm	**LS-XRLA30** 266128	5 units			
D = 40 mm (rubber)	**LS-XRLA40R** 266130	5 units			
D = 40 mm	**LS-XRLA40** 266129	5 units			
 **Actuating rod**					
Plastic rod	**LS-XRR** 266131	4 units	**LSM-XRR** 266161	4 units	
Metal rod	**LS-XRRM** 266132	4 units	**LSM-XRRM** 266162	4 units	
 **Spring-rod actuator**					
Not to be used as a safety position switch. Use only in conjunction with snap-action contact.	**LS-XS** 266133	5 units	**LSM-XS** 266163	5 units	
 **Actuating rod**					
–	**LS-XOR** 290190	1 units			
Mounting adapter					
Actuation through front element RMQ-Titan®	**M22-LS** 266137	10/1 units			

	Description		Catalog Number Article no.	Std. pack	Notes
	Screw terminal M20 in ½"				
	Screw connector for American pipe thread Metal		**V1/2"/M20-NA** 225269	10 units	The screw connection is for earthing; no total insulation For thread length up to 9 mm
	Screw connector for American pipe thread Molding material		**V1/2"/M20** 225270	10 units	For thread length up to 9 mm
	M20 diaphragm bolt, IP65				
	With integral push-through diaphragm External diameter of cable up to 13 mm IP65 with cable inserted		**EMS20** 225271	25 units	–
	M20 screw closure				
	(Self-sealing grommet) For tightening/loosening using a standard spanner for sealing grommet plugs		**LS-X20** 266134	25 units	–
	Plug connector M12x1, IP66 Molding material I_{th} = 4 A Fuse: 6 A gG/gL				
	4 pole U_e = 250 V	For use with			
	LS	"A" coded Standard to IEC/EN 60947-5-2	**M12A** 266135	10 units	M12A, M12B 
	LS	"B"-coded 	**M12B** 266136	10 units	
	5 pole U_e = 125 V				
	LSM	"A" coded Standard to IEC/EN 60947-5-2	**M12A5** 272202	10 units	M12A5, M12B5 
	LSM	"B"-coded 	**M12B5** 272203	10 units	
	**cage Clamp twin N/C contact**				
	–	For opening two terminals simultaneously	**LS-XTW** 290179	1 units	–
	**Adapter plate, thickness 2.5 mm**				
	For additional fixing with sideways operation, together with locating plate FS-AT (order separately)		**LS-XAP** 114026	1 units	
	locating plate				
	For fixing with side motion		**FS-AT** 019610	20 units	–

System overview

LS-...ZBZ



Basic device 1
Spring or magnet-powered interlock
For increased personnel and process protection
Tamper-proof
Multiple coded actuators
Contact configuration: 1 N/O/1 NC or 2 NC
→ Page 183

Flat flexible actuator 2
For doors that do not close precisely
→ Page 184

Angled flexible actuator 3
For doors that do not close precisely
→ Page 184

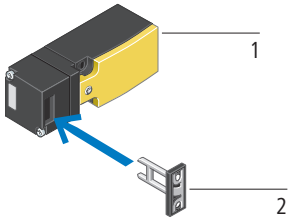
Flat actuator 4
For sliding doors
→ Page 184

Angled actuator 5
For swing doors
→ Page 184

Flat compensating actuator 6
For increased tolerance compensation in the direction of door closure
→ Page 184

Angled compensating actuator 7
For increased tolerance compensation in the direction of door closure
→ Page 184

LS-...ZB

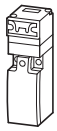


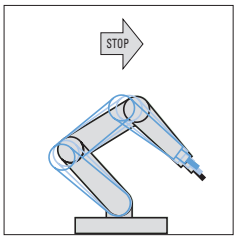
Complete device 1
For personnel protection
Contact configuration: 1 N/C, 1 N/O / 1 N/O or 2 N/C
5 directions of operation possible
→ Page 185

Actuator 2
Multiple coding protection against tampering

LS-...ZB

"Personnel protection" by monitoring of the protective mechanism

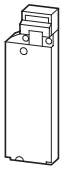


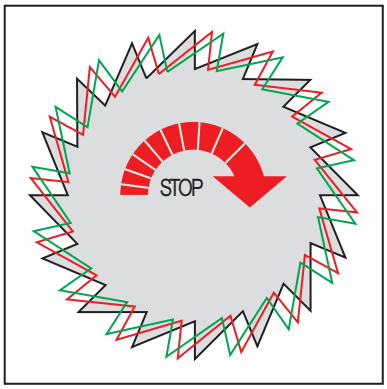


Door open
LS...-ZB disconnects power
No danger

LS/ZBZ

"Increased personnel protection" by monitoring and interlocking the protective mechanism

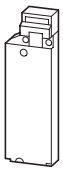


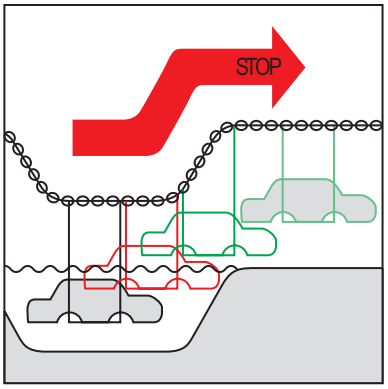


Stop Command
Waiting time
Machine is stopped
Protective mechanism open
No danger

LS/ZBZ

"Increased personnel protection" by monitoring and interlocking the protective mechanism



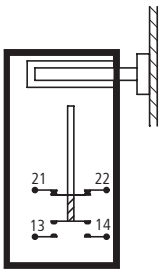


Stop Command
Waiting time
Process sequence halted
Protective mechanism open
Product OK

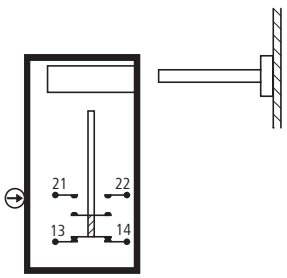
LS-...ZB

→ Personnel protection

Closed



Open



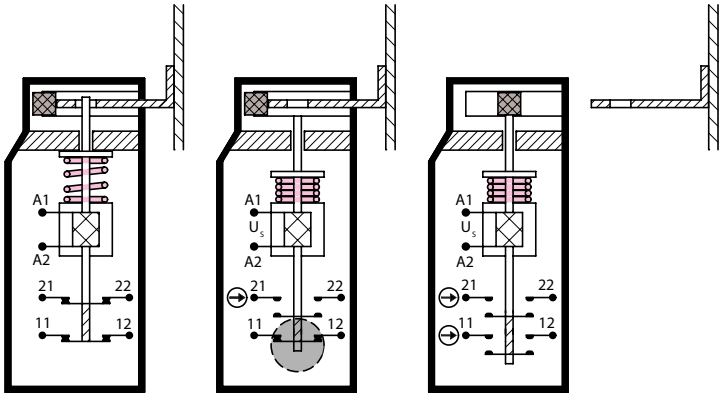
Door open	→ Enabling contact (21-22) opening positively
Door open	→ Enabling contact safely open; tamperproof against simple tools
Close door	→ Triple coded actuator closes the enabling contact

Switch must never be used as a mechanical stop!

LS-S02-...FT-ZBZ, spring-powered interlock (closed-circuit current principle)

→ Enhanced personnel protection with separate signal for door position

shuttered Released Open



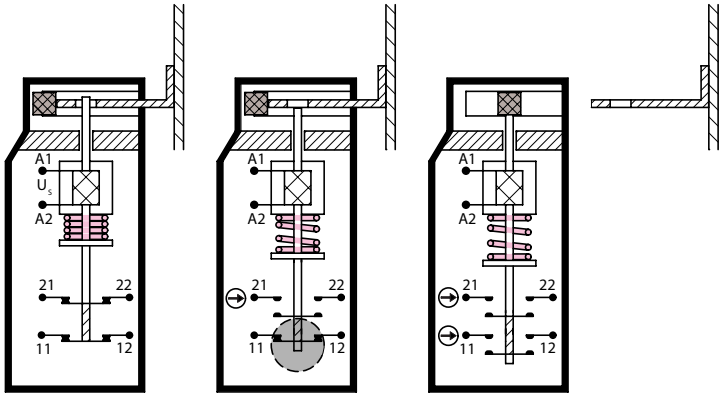
Door closed and interlocked	→	De-energized: even with mains failure or wire breakage: door interlocked = safe state Enabling contact (21-22)
To unlock door	→	Applies voltage to coil (A1, A2) e.g. via zero-speed monitor, enabling contact (21-22) opens
Door open	→	Both contacts blocked in the open position, even with tampering with simple tools
Close door	→	Triple-coded actuator cancels enabling contact inhibit; door position contact (11-12) closes
Lock door	→	Disconnect coil voltage: 1st actuator interlocked 2nd enabling contact closed → Enable only when door locked

Switch must never be used as a mechanical stop!

LS-S02-...MT-ZBZ, magnet-powered interlock (operating current principle)

→ Process protection + personnel protection with separate indication of the door position

shuttered Released Open



Door closed and interlocked	→	Energized: Enables immediate access in the event of mains failure and wire breakage. Both contacts closed
To unlock door	→	Applies voltage to coil (A1, A2) e.g. via zero-speed monitor, enabling contact (21-22) opens
Door open	→	Only possible once it is released, door position contact (11-12) opens
Close door	→	Triple-coded actuator cancels enabling contact inhibit; door position contact (11-12) closes
Lock door	→	Disconnect coil voltage: 1st actuator interlocked 2nd enabling contact closed → Enable only when door locked

Switch must never be used as a mechanical stop!

Contact configuration ⊖ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1 N/O = Normally open contact	N/C = Normally closed contact	Contact sequence	Rated control voltage for magnetic system U_s V	**Catalog Number** Article no.	Std. pack
Basic device with spring-powered interlock (closed-circuit principle) IP65					
With interlock monitoring and auxiliary release mechanism Monitoring of door position: continuous					
1 N/O	1 N/C	13 A1 A2 21 / 14 22	24 V DC	**LS-S11-24DFT-ZBZ/X** 106829	1 units
–	2 N/C	11 A1 A2 21 / 12 22	24 V DC	**LS-S02-24DFT-ZBZ/X** 106823	
1 N/O	1 N/C	13 A1 A2 21 / 14 22	120 V 50/60 Hz	**LS-S11-120AFT-ZBZ/X** 106825	
–	2 N/C	11 A1 A2 21 / 12 22	120 V 50/60 Hz	**LS-S02-120AFT-ZBZ/X** 106778	
1 N/O	1 N/C	13 A1 A2 21 / 14 22	230 V 50/60 Hz	**LS-S11-230AFT-ZBZ/X** 106827	
–	2 N/C	11 A1 A2 21 / 12 22	230 V 50/60 Hz	**LS-S02-230AFT-ZBZ/X** 106821	
Basic devices with magnet-powered interlock (open-circuit principle) IP65[1]					
With interlock monitoring Monitoring of door position: continuous					
1 N/O	1 N/C	13 A1 A2 21 / 14 22	24 V DC	**LS-S11-24DMT-ZBZ/X** 106830	1 units
–	2 N/C	11 A1 A2 21 / 12 22	24 V DC	**LS-S02-24DMT-ZBZ/X** 106824	
1 N/O	1 N/C	13 A1 A2 21 / 14 22	120 V 50/60 Hz	**LS-S11-120AMT-ZBZ/X** 106826	
–	2 N/C	11 A1 A2 21 / 12 22	120 V 50/60 Hz	**LS-S02-120AMT-ZBZ/X** 106820	
1 N/O	1 N/C	13 A1 A2 21 / 14 22	230 V 50/60 Hz	**LS-S11-230AMT-ZBZ/X** 106828	
–	2 N/C	11 A1 A2 21 / 12 22	230 V 50/60 Hz	**LS-S02-230AMT-ZBZ/X** 106822	

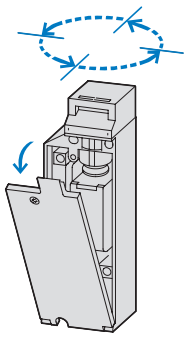
Notes

Electric circuitry with DIL contactors and ESR5 safety relay
→ Safety manual TB02000-009, Article no. 119906

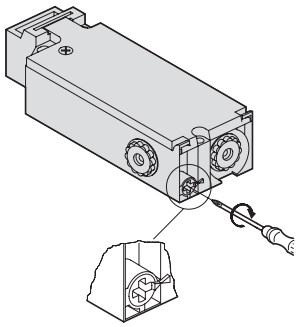
With the actuator inserted, the N/O contact is open and the N/C contact is closed.

Switch must never be used as a mechanical stop!

The operating head can be rotated manually in 90° steps to suit the specified level of actuation.



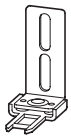
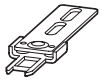
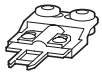
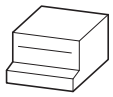
In the event of a loss of voltage, (e.g. during commissioning), the spring-powered LS-..-...FT-ZBZ can be released with a screwdriver.
The auxiliary release mechanism must be sealed!
→ Instructional leaflet AWA 1310-2354



For degree of protection IP65, use V-M20 cable glands with connecting thread of max. 9 mm length

V-M20 cable gland → see Online catalog

[1] Time control of the release operation possible using ESR5-NV30-30

			Catalog Number Article no.	Std. pack	Notes
	Actuators For combination with LS-...ZBZ/X basic devices Stainless steel				
	Flat actuator For sliding doors		**LS-XG-ZBZ** 106833	10 units	–
	Angled actuator For swing doors above 250 mm width	short	**LS-XW-ZBZ** 106839	10 units	From width: 350 mm
		long	**LS-XWA-ZBZ** 106838	10 units	From width: 550 mm
	Angled, flexible actuator For doors that do not close precisely		**LS-XF-ZBZ** 106832	10 units	–
	Flat, flexible compensating actuator For doors that do not close precisely		**LS-XFG-ZBZ** 106831	10 units	–
	Flat compensating actuator With increased tolerance in closing direction for door that does not close precisely.		**LS-XNG-ZBZ** 106834	1 units	–
	Angled compensating actuator With increased tolerance in closing direction for door that does not close precisely.		**LS-XNW-ZBZ** 106835	10 units	–
	Accessory				
	Dust protection cap Prevents ingress of foreign matter into the device head		**LS-XSK-ZBZ** 106837	10 units	–

Contact configuration ⊖ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1 N/O = Normally open contact N/C = Normally closed contact		Contact sequence	Contact travel ■ = Contact closed □ = Contact open	Approval mark	Connection type	**Catalog Number** Article no.	Std. pack
Safety position switches LS...ZB							
IP65, plastic							
–	2 N/C				Cage-Clamp	**LS-02-ZB**[1)] 106817	2 units
–	2 N/C				Screw terminal	**LS-S02-ZB**[1)] 106874	
1 N/O	1 N/C				Cage-Clamp	**LS-11-ZB**[1)] 106819	
1 N/O	1 N/C				Screw terminal	**LS-S11-ZB**[1)] 106876	
1 N/O	1 N/C				Cage-Clamp	**LS-11S-ZB**[1)] 106870	
1 N/O	1 N/C				Screw terminal	**LS-S11S-ZB**[1)] 106877	
Safety position switch LS...ZB							
–40 - +70°C, IP65, plastic							
–	2 N/C				Cage-Clamp	**LS-02-CC-ZB** 177186	2 units
–	2 N/C				Screw terminal	**LS-S02-CC-ZB** 177189	
1 N/O	1 N/C				Cage-Clamp	**LS-11-CC-ZB** 177188	
1 N/O	1 N/C				Screw terminal	**LS-S11-CC-ZB** 177191	
1 N/O	1 N/C				Cage-Clamp	**LS-11S-CC-ZB** 177187	
1 N/O	1 N/C				Screw terminal	**LS-S11S-CC-ZB** 177190	

Notes

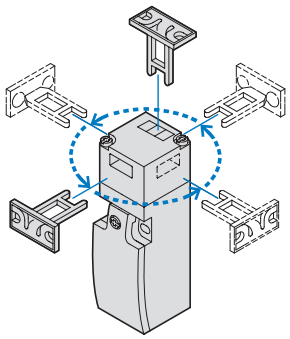
Electric circuitry with DIL contactors and ESR5 safety relays
→ Safety manual TB02000-009, order no. 119906

Switch must never be used as a mechanical stop!

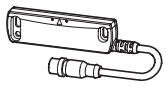
For degree of protection IP65, use V-M20 cable glands with connecting thread of max. 9 mm length
Cable gland V-M20 → Page 77

With the actuator inserted, the N/O contact is open and the N/C contact is closed.

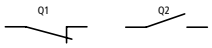
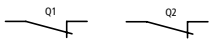
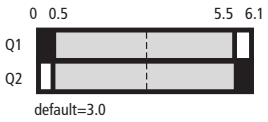
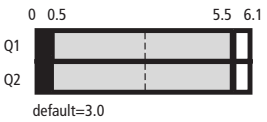
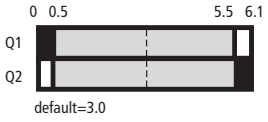
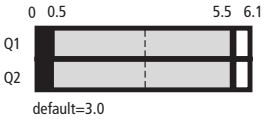
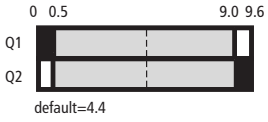
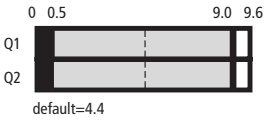
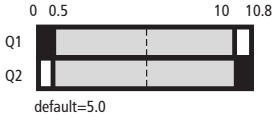
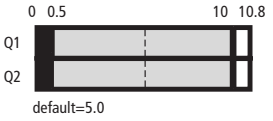
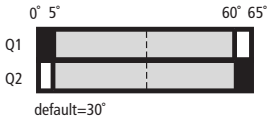
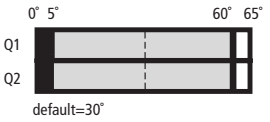
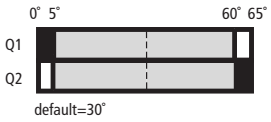
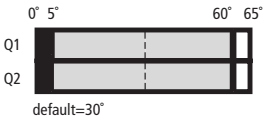
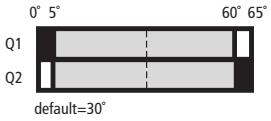
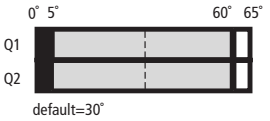
1)



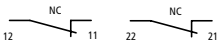
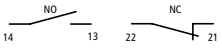
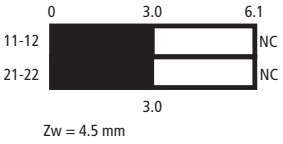
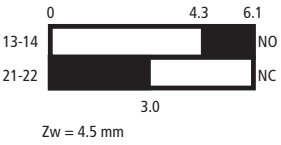
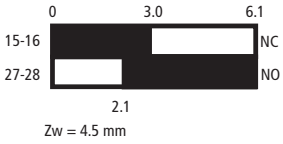
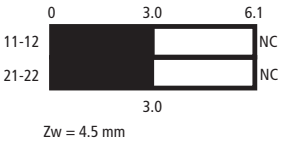
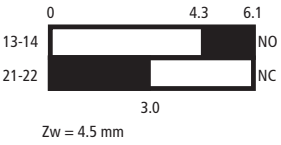
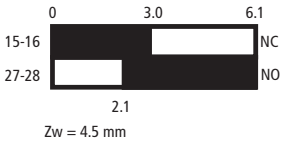
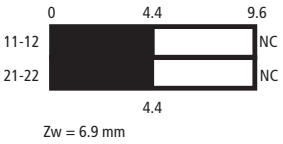
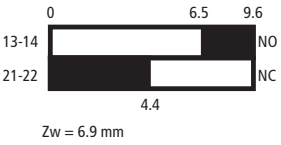
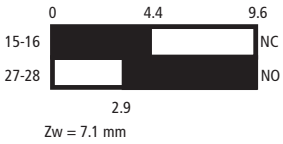
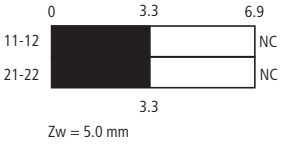
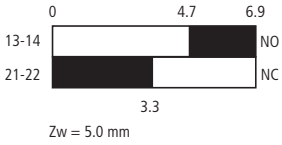
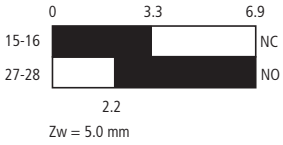
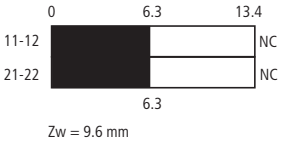
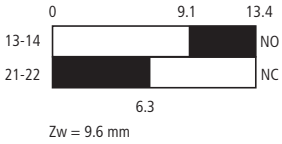
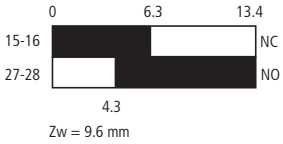
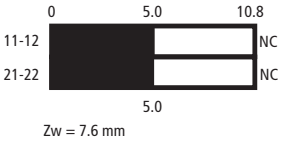
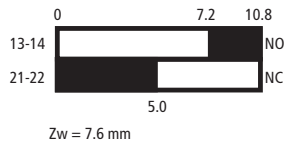
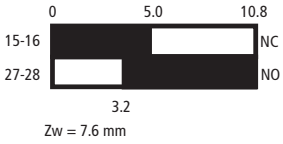
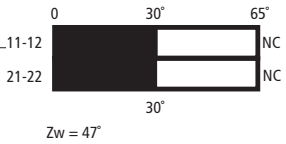
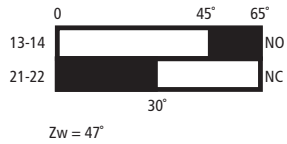
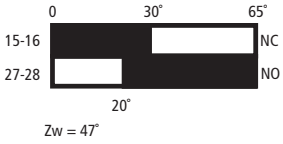
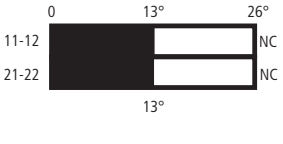
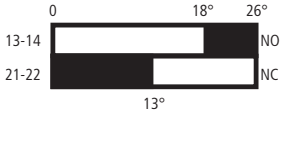
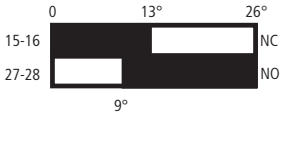
2) Actuator can be repositioned for horizontal or vertical mounting. The operating heads can be turned manually in 90° steps to suit the specified level of actuation.

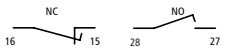
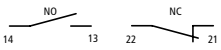
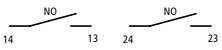
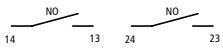
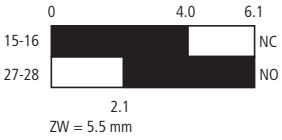
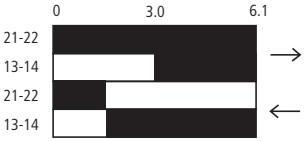
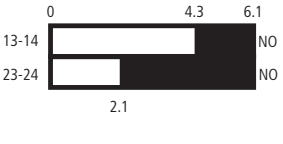
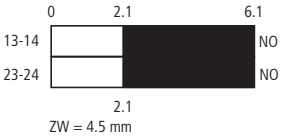
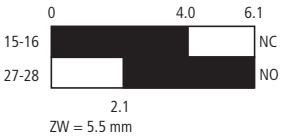
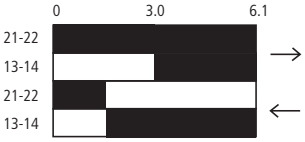
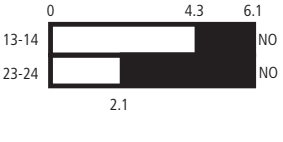
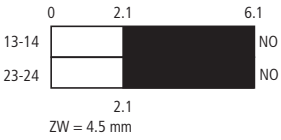
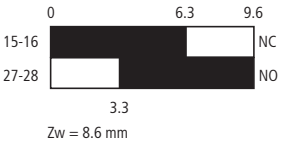
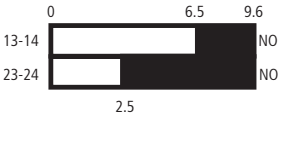
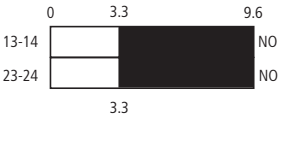
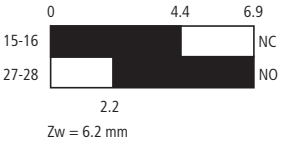
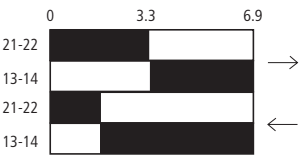
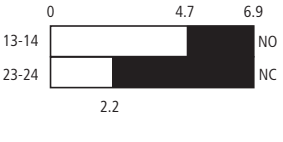
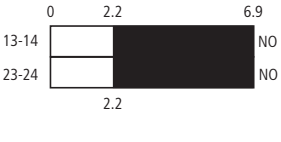
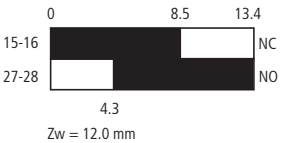
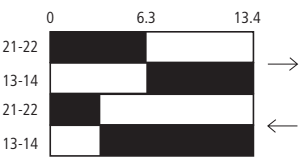
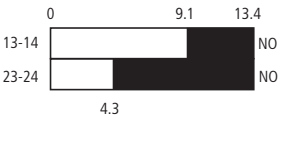
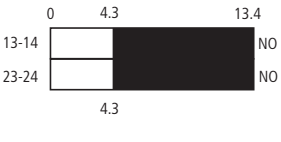
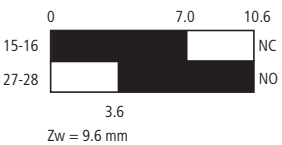
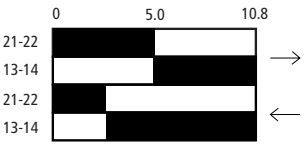
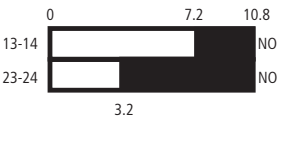
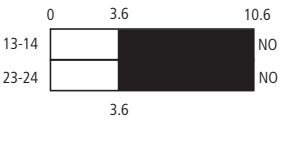
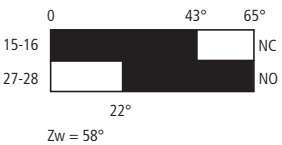
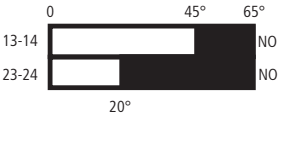
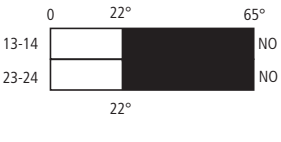
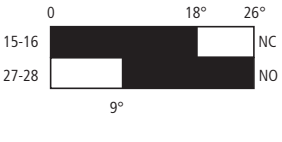
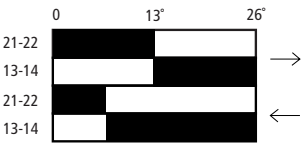
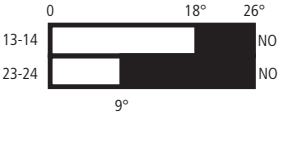
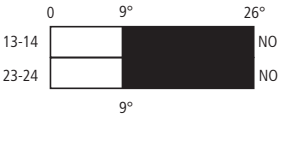
	Contact configuration N/O = Normally open contact	Contact configuration N/C = Normally closed contact	Catalog Number Article no.	Catalog Number Article no.	Std. pack
Non-contacting safety switch					
	IP67, IP69 Reed contacts				
			3 m connection cable	**Plug-in connection M12 x 1**	
	–	2 N/C	**RS2-02-C3** 177286	**RS2-02-Q4** 177289	1 units
	1 N/O	1 N/C	**RS2-11-C3** 177287	**RS2-11-Q4** 177290	
	1 N/O	2 N/C	**RS2-12-C3** 177288	**RS2-12-Q6** 177291	
	–	2 N/C	**RS2R-02-C3** 177292	**RS2R-02-Q4** 177295	
	1 N/O	1 N/C	**RS2R-11-C3** 177293	**RS2R-11-Q4** 177296	
	1 N/O	2 N/C	**RS2R-12-C3** 177294	**RS2R-12-Q6** 177297	
			10 m connection cable		
	–	2 N/C	**RS2-02-C10** 177300		1 units
	1 N/O	1 N/C	**RS2-11-C10** 177301		
	1 N/O	2 N/C	**RS2-12-C10** 177302		
	–	2 N/C	**RS2R-02-C10** 177303		
	1 N/O	1 N/C	**RS2R-11-C10** 177304		
	1 N/O	2 N/C	**RS2R-12-C10** 177305		
			150 mm connection cable with plug-in connection M12 x 1		
		2 N/C	**RS4-02-Q4** 177298		1 units
	1 N/O	2 N/C	**RS4-12-Q6** 177299		

Engineering

	LSE-11	LSE-02
		
Base devices		
		
Operating heads		
Roller plunger		
LS-XP LSM-XP LS-XOR		
Roller lever		
LS-XL LSM-XL LS-XLS LS-XLB		
Angled roller lever		
LS-XLA LSM-XLA		
Swing handle		
LS-XRL LSM-XRL		
Adjustable roller lever		
LS-XRLA LSM-XRLA LS-XRLA30 LS-XRLA40 LS-XRLA40R		
Actuating rod		
LS-XRR LSM-XRR LS-XRRM LSM-XRRM		
Spring-rod actuator		
LS-XS LSM-XS		

Note: LS-(S)02A,
LS-(S)11A → Page 168
LS-(S)20B → Page 169

	LS-02 LS-S02 LSM-02	LS-11 LS-S11 LSM-11	LS-11D LS-S11D LSM-11D
			
Base devices			
	 Zw = 4.5 mm	 Zw = 4.5 mm	 Zw = 4.5 mm
Operating heads			
Roller plunger LS-XP LSM-XP	 Zw = 4.5 mm	 Zw = 4.5 mm	 Zw = 4.5 mm
Roller lever LS-XL, LSM-XL	 Zw = 6.9 mm	 Zw = 6.9 mm	 Zw = 7.1 mm
Roller lever, short LS-XLS	 Zw = 5.0 mm	 Zw = 5.0 mm	 Zw = 5.0 mm
Roller lever, large LS-XLB	 Zw = 9.6 mm	 Zw = 9.6 mm	 Zw = 9.6 mm
Angled roller lever LS-XLA, LSM-XLA	 Zw = 7.6 mm	 Zw = 7.6 mm	 Zw = 7.6 mm
Swing handle LS-XRL, LSM-XRL Adjustable roller lever LS-XRLA, LSM-XRLA, LS-XRLA30, LS-XRLA40, LS-XRLA40R Actuating rod LS-XRR, LSM-XRR, LS-XRRM, LSM-XRRM	 Zw = 47°	 Zw = 47°	 Zw = 47°
Spring-rod actuator LS-XS, LSM-XS			

LS-11DA LS-S11DA LSM-11DA	LS-11S LS-S11S LSM-11S	LS-20 LS-S20 LSM-20	LS-20A LS-S20A LSM-20A
			
 ZW = 5.5 mm	 Zw = 5.5 mm		 ZW = 4.5 mm
 ZW = 5.5 mm	 Zw = 5.5 mm		 ZW = 4.5 mm
 Zw = 8.6 mm	 Zw = 8.7 mm		
 Zw = 6.2 mm	 Zw = 6.2 mm		
 Zw = 12.0 mm	 Zw = 12.0 mm		
 Zw = 9.6 mm	 Zw = 9.7 mm		
 Zw = 58°	 Zw = 60°		
			

5

Technical specifications

				Complete devices IP66, IP67	
				LS, LSM	LSE11 LSE02
General					
Standards				IEC/EN 60947	IEC/EN 60947 EN 61000-4
Climatic proofing				Damp heat, constant to IEC 60068-2-78, Damp heat, constant, to IEC 60068-2-30	
Ambient temperature			°C	–25 - +70	–25 - +70
Mounting position				Any	Any
Protection Style				IP66, IP67	IP66, IP67
Terminal capacity of screw terminal and Cage Clamp					
Solid			mm^2	1 x (0.5 - 2.5)	1 x (0.5 - 2.5)
Flexible with ferrules to DIN 46228			mm^2	1 x (0.5 - 1.5)	1 x (0.5 - 1.5)
Power Supply					
Device Voltage Rating		U_e	V DC	–	12 - 30
Rated Current					
12 V		I_e	mA	–	15
24 V		I	mA	–	18
30 V		I	mA	–	19
Contacts/Switching capacity					
Rated impulse withstand voltage		U_{imp}	V AC	4000	–
Rated insulation voltage		U_i	V	400	–
Overvoltage category/pollution degree				Overvoltage category/pollution degree III/3	Overvoltage category/pollution degree III/3
Rated Current					
AC-15	24 V	I_e	A	6	–
	230 V/240 V	I_e	A	6	–
	400 V/415 V	I_e	A	4	–
DC-13	24 V	I_e	A	3	0.2
	110 V	I_e	A	0.8	–
	220 V	I_e	A	0.3	–
Analog output Q1					
Output voltage (max. 10 mA)			V DC	–	–
Output current			mA	–	–
Fault scenario			V	–	–
Resolution			Steps	–	–
Step tolerance			Steps	–	–
Shunt resistor, resistive load			Ω	–	–
Digital diagnostics output Q2 (pulse-switching PNP)					
Response threshold			V	–	–
			mA	–	–
Fault scenario			V	–	–
Control circuit reliability					
At 24 V DC/5 mA		HF	Fault probability	$< 10^{-7}$, < 1 failure in 10^7 operations	–
At 5 V DC/1 mA		HF	Fault probability	$< 10^{-6} <$ 1 failure in 5 x 10^6 operations	–
Mains frequency			Hz	Max. 400	–
Short-circuit rating to IEC/EN 60947-5-1					
Max. fuse			A gG/gL	6	–
Repeat accuracy			mm	±0.02	±0.02
UL-File No. E29184					
Rating data for approved types to UL/CSA					
Pilot duty					
AC operated				A300	–
DC operated				Q300 (1 A, 250 V DC)	Q300 (0.2 A, 24 V DC)
UL-approved protection types				NEMA 4, 12, 13	NEMA 4, 12, 13

			IP66, IP67 complete devices	
			LS, LSM	LSE11 LSE02
Mechanical data				
Life point				
Slow-action switch	c (contacts)	x 10^6	8	–
Snap-action contact	c (contacts)	x 10^6	8	3 (electronic)
Contact temperature of roller head		°C	≦ 100	≦ 100
Mechanical shock resistance (half-sinusoidal shock, 20 ms)				
Slow-action switch		g	25	–
Snap-action contact		g	–	–
Basic device		g	–	30
Operating frequency	Operations/h		≦ 6000	≦ 3000
Operating point			–	0.5 - 5.5 mm, freely adjustable
Hysteresis		mm	–	0.4
Resolution		mm	–	0.04
drive				
Mechanical				
Actuating force at beginning/end of stroke				
Base devices		N	1.0/8.0	3.5/8.0
LS(M)-XP		N	1.0/8.0	1.0/8.0
LS(M)-XL		N	1.0/8.0	1.0/8.0
LS(M)-XLA		N	1.0/8.0	1.0/8.0
Actuating torque of rotary drives		Nm	0.2	0.2
Max. operating speed with DIN cam				
Basic device for angle of actuation	α = 0°/30°	m/s	1/0.5	1/0.5
LS(M)-XRL for angle of actuation	α = 0°	m/s	1.5	1.5
LS(M)-XRLA for angle of actuation	α = 30°, L = 125 mm	m/s	1.5	1.5
LS(M)-XRR for	L = 130 mm	m/s	1.5	1.5
LS(M)-XL for angle of actuation	α = 30°/45°	m/s	1	1
LS(M)-XLA for angle of actuation	α = 30°/45°	m/s	1	1
LS(M)-XP for angle of actuation	α = 0°/30°	m/s	1/1	1/1
Electromagnetic compatibility (EMC)				
Electrostatic discharge (ESD), to IEC EN 61000-4-2				
Air discharge		kV	–	8
Contact discharge		kV	–	4
Electromagnetic fields (RFI), to IEC EN 61000-4-2		V/m	–	10
Burst, to IEC/EN 61000-4-4				
Supply cables		kV	–	2
Signal cables		kV	–	2
High-energy pulses (surge) (IEC/EN 61000-4-5)		kV	–	0.5
Radiated RFI, to IEC/EN 61000-4-6		V	–	10

Notes Accessories for the Cage-Clamp terminals from Wago: power comb, gray, Wago Article No. 264-402

			Plug connector	
			M12A(B)	M12A(B)
General				
Pole			4	5
Protection Style			IP66	IP66
Lifespan, mechanical	c (contacts)		> 500	> 500
Characteristics				
Rated operating voltage	U_e	V AC	250	125
Rated Current	I_e	A	1	1
Overvoltage category/pollution degree			II/3	II/3

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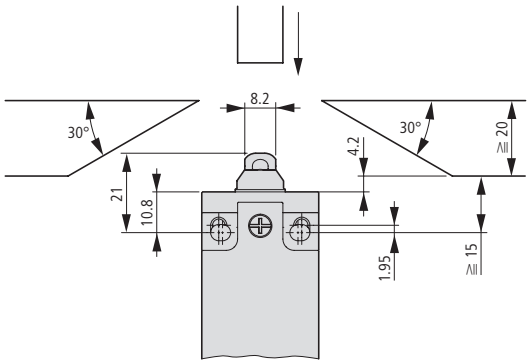
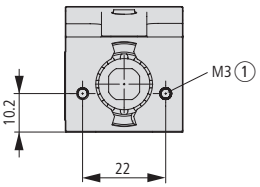
				Safety position switch LS-...ZBZ	LS-...ZB
General					
Standards				IEC/EN 60947	IEC/EN 60947
Climatic proofing				Damp heat, constant to IEC 60068-2-78, Damp heat, constant, to IEC 60068-2-30	
Ambient temperature			°C	–25 - +40	–25 - +70
Mounting position				Any	Any
Protection Style				IP65	IP65
Terminal capacities					
Solid			mm^2	1 x (0.75 - 2.5) 2 x (0.75 - 1.5)	1 x (0.5 - 1.5) 2 x (0.5 - 1.5)
Flexible with ferrules to DIN 46228			mm^2	1 x (0.5 - 1.5) 2 x (0.5 - 1.5)	1 x (0.5 - 1.5) 2 x (0.5 - 1.5)
Terminal Screw				PH1	PH1
Terminal screw tightening torque			Nm	0.9	0.4
Contacts/Switching capacity					
Rated impulse withstand voltage		U_{imp}	V AC	4000	6000
Rated insulation voltage		U_i	V	400	500
Overvoltage category/pollution degree				Overvoltage category/pollution degree III/3	Overvoltage category/pollution degree III/3
Rated Current					
AC-15	24 V	I_e	A	6	6
	230 V/240 V	I_e	A	6	6
	400 V/415 V	I_e	A	4	4
DC-13	24 V	I_e	A	3	3
	110 V	I_e	A	0.8	0.8
	220 V	I_e	A	0.3	0.3
Mains frequency			Hz	Max. 400	Max. 400
Short-circuit rating to IEC/EN 60947-5-1					
max. fuse			A gG/gL	6	6
Repeat accuracy			mm	±0.02	±0.02
Mechanical data					
Life point					
Slow-action switch		c (contacts)	x 10^6	1	10
Snap-action contact		c (contacts)	x 10^6	–	–
Mechanical shock resistance (half-sinusoidal shock, 20 ms)					
Slow-action switch			g	10	25
Snap-action contact			g	–	2
Operating frequency		Operations/h		≦ 800	≦ 1800
drive					
Mechanical					
Actuating force at beginning/end of stroke					
ZB/ZBZ (plug-in/pull-out)			N	25/15	10/5
Mechanical holding force acc. to GS-ET-19 (04/2004)					
XG, XW, XNG			N	1700	–
XWA, XFG, XF			N	1600	–
XNW			N	1200	–
Electro-mechanical					
For magnet					
Power consumption					
At 120 V AC			VA	8	–
At 230 V AC			VA	11	–
At 24 V DC			W	8	–
Voltage tolerance			x U_s	0.85 - 1.1	
Magnet duty factor			% ED	100	–
UL-File No. E29184					
Rating data for approved types to UL/CSA					
General Use					
AC operated			V	300	–
AC operated			A	10	–
Pilot duty					
AC operated				A300	A300
DC operated				Q300	Q300 (1 A, 250 V DC)
UL-approved protection types				NEMA 4, 12, 13	NEMA 12, 13

Dimensions

Basic devices, non expandable (Front mount)

LS(M)-…/F

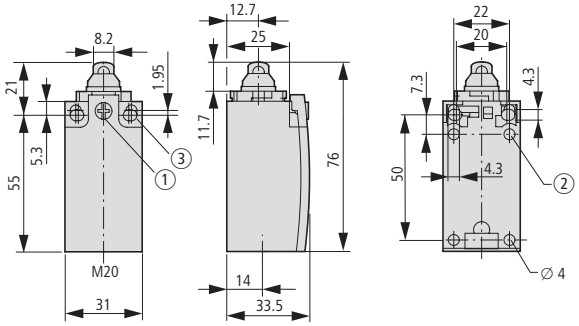


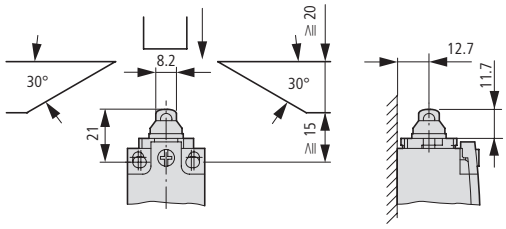


① Screw-in depth max. 12 mm

Basic devices, expandable,

LS-…, LSM-…, LSE-…

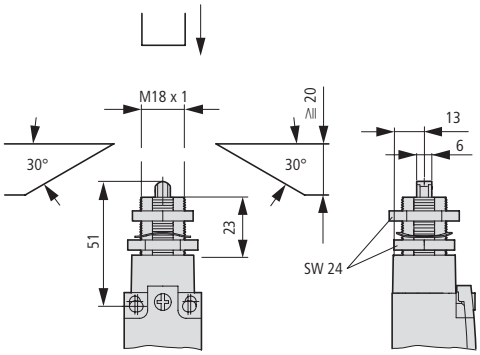




① Tightening torque Cover screw: 0.8 Nm ±0.2 Nm
② only with LS (insulated version)
③ Fixing screw 2 x M4 ≧ 30
M_A = 1.5 Nm

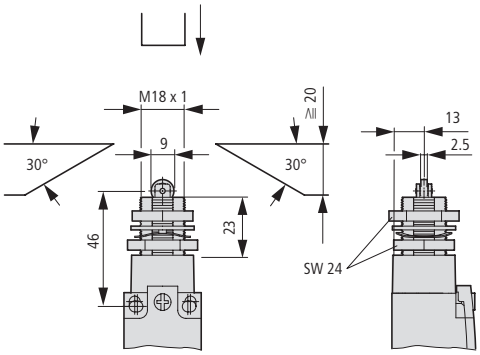
Rounded plunger, centre fixing

LS-XZS



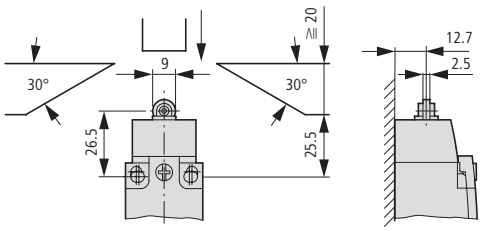
Roller plunger, centre fixing

LS-XZRS



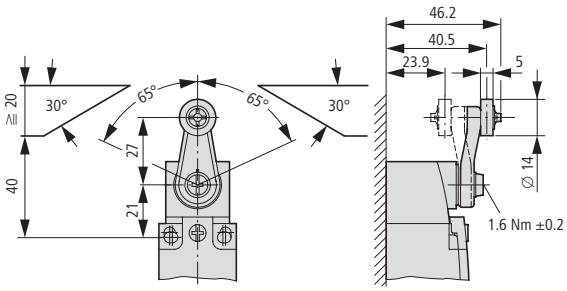
Roller plunger

LS(M)-…/P



Swing handle

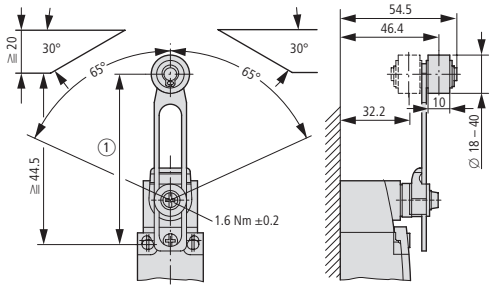
LS(M)-…/RL



5

Adjustable roller lever

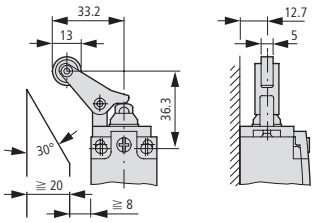
LS(M)-.../RLA



① Setting range of 54.5 to 97

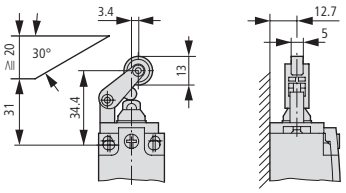
Angled roller lever

LS(M)-XLA



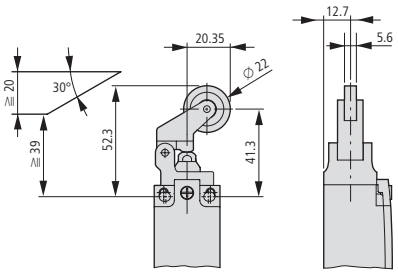
Roller lever

LS(M)-.../L



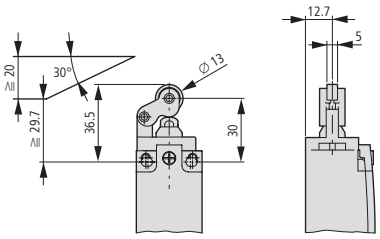
Roller lever

LS(M)-.../LB



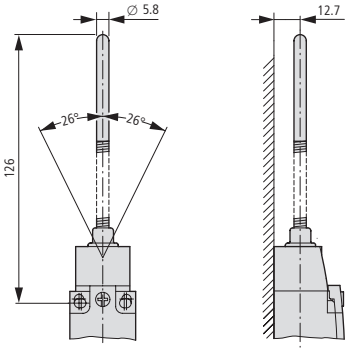
Roller lever

LS(M)-.../LS



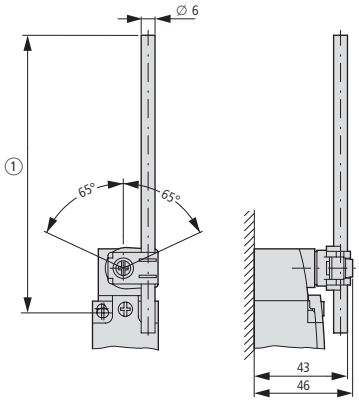
Spring-rod actuator

LS(M)-.../S



Actuating rod

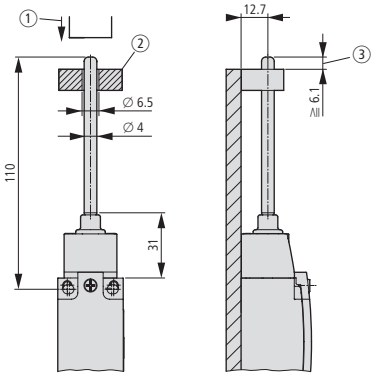
LS(M)-.../RR



① LS.../RR ≦ 150
LS.../RRM ≦ 210

Actuating rod

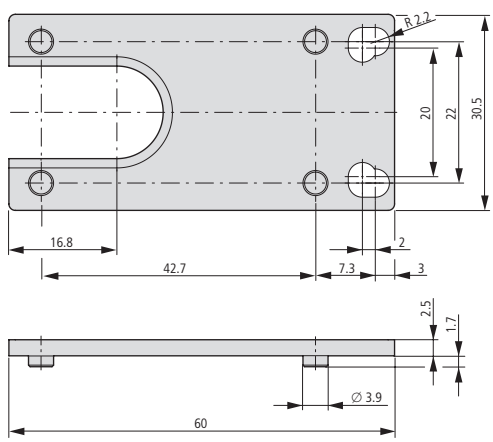
LS(M)-.../OR



① Approach direction, vertical
② Guide is done by customer, not included
③ Max. push-through

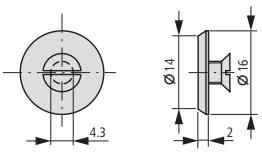
Adaptor plate

LS-XAP

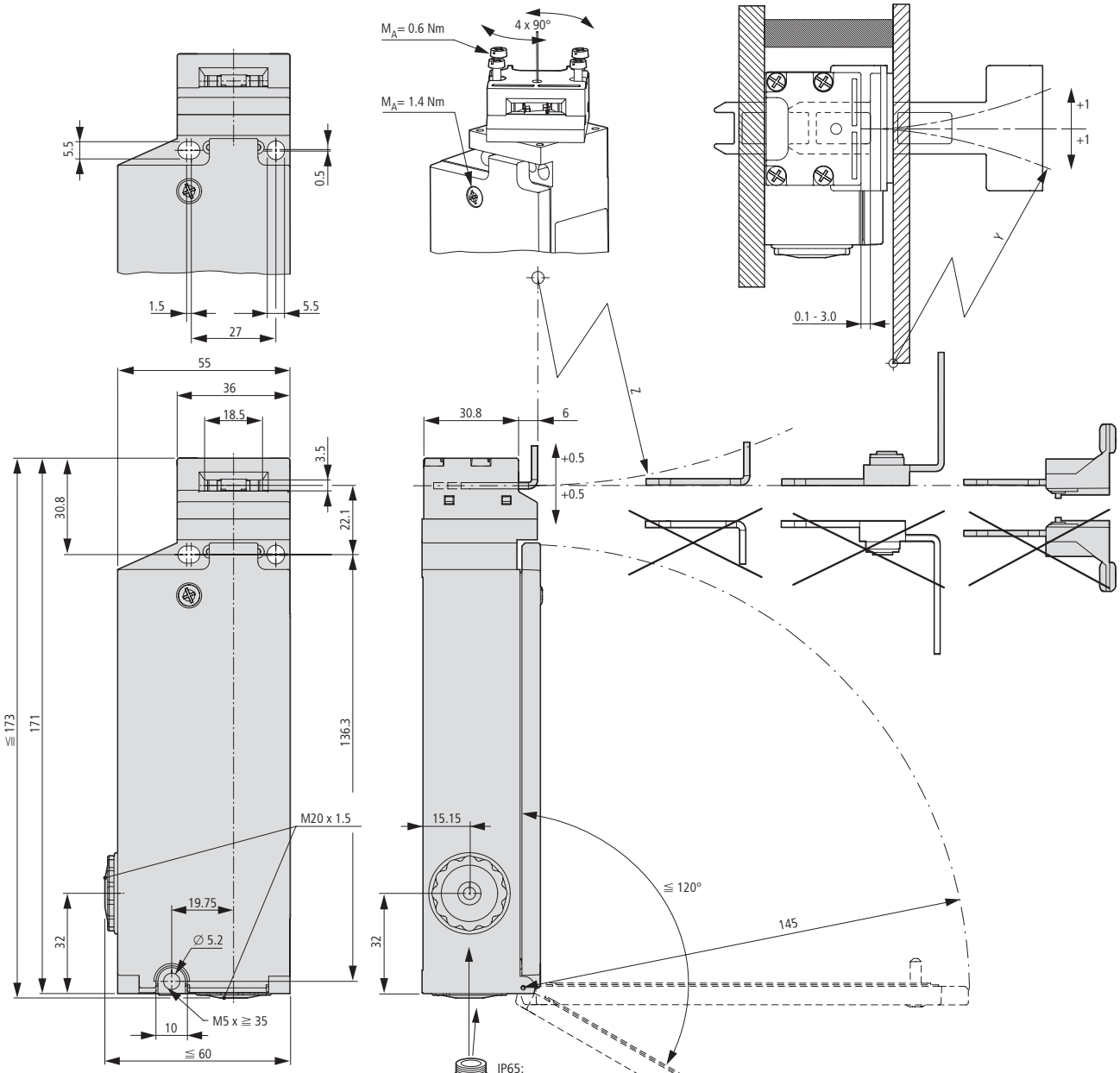


Locating plate

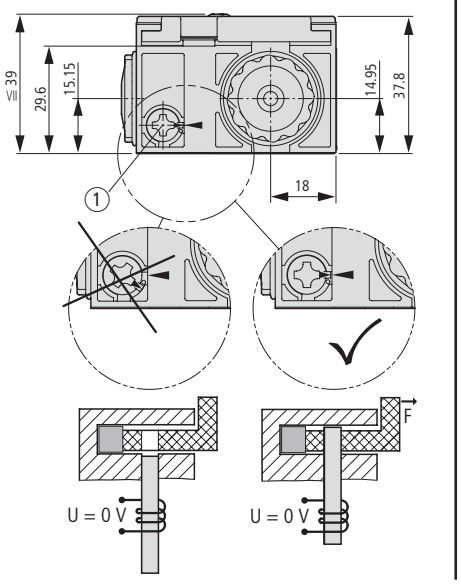
FS-AT



Safety position switch LS...ZBZ



LS-S...FT-ZBZ/...



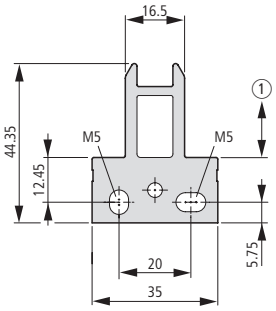
Catalog Number	R [mm]	
	Z	Y
LS-XG-ZBZ	350	350
LS-XW-ZBZ	350	350
LS-XWA-ZBZ	550	550
LS-XFG-ZBZ	350	350
LS-XF-ZBZ	350	350
LS-XNG-ZBZ	350	350
LS-XNW-ZBZ	150	250

Switch must not be used as a mechanical stop.
① The auxiliary release mechanism must be sealed for proper operation!
② Can be used as stop with the corresponding material selection and design.

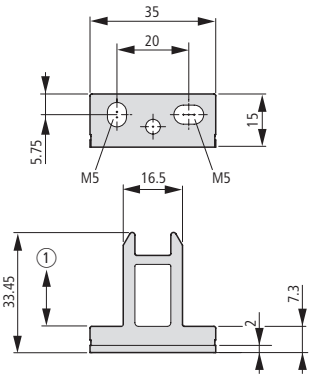
5

Actuating element

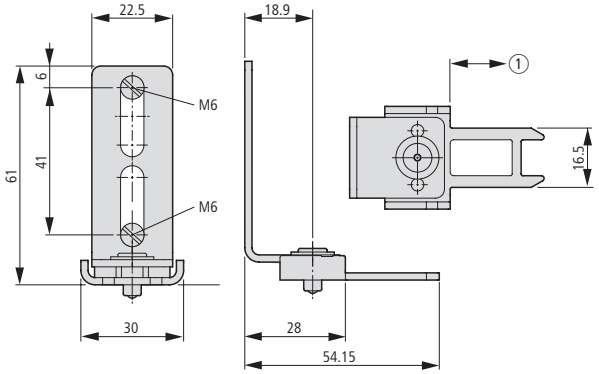
LS-XG-ZBZ



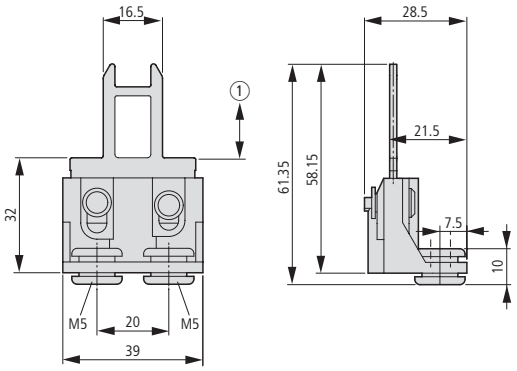
LS-XW-ZBZ



LS-XF-ZBZ

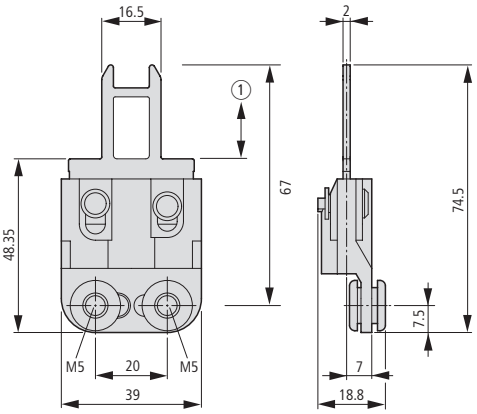


LS-XNW-ZBZ



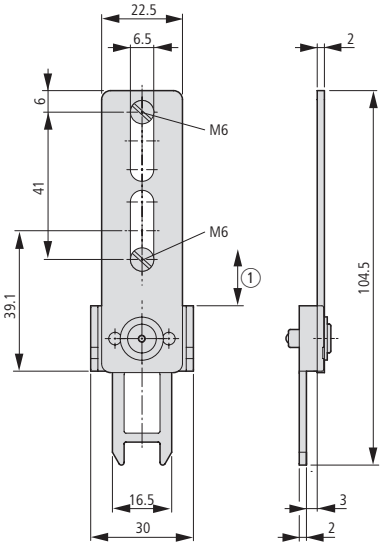
Fixing only allowed with M5 fixing screw and washer according to DIN EN ISO 7093.

LS-XNG-ZBZ



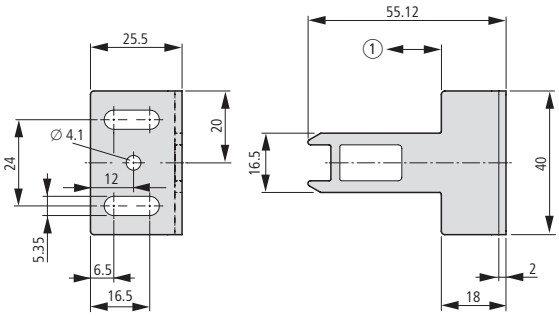
Fixing only allowed with M5 fixing screw and washer according to DIN EN ISO 7093

LS-XFG-ZBZ

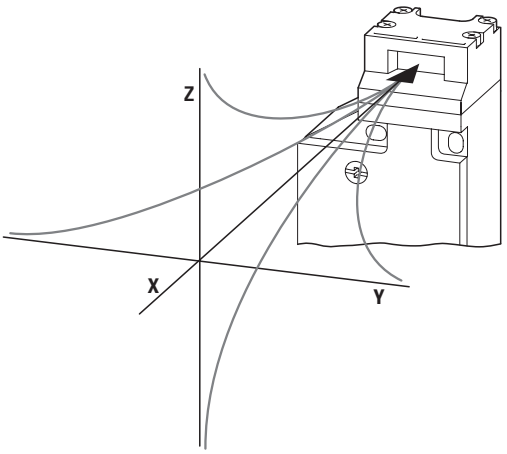


Catalog Number	R [mm]		
	F [N]	Z	Y
LS-XG-ZBZ	1700	350	350
LS-XW-ZBZ	1700	350	350
LS-XWA-ZBZ	1600	550	550
LS-XFG-ZBZ	1600	350	350
LS-XF-ZBZ	1600	350	350
LS-XNG-ZBZ	1700	350	350
LS-XNW-ZBZ	1200	150	250

LS-XWA-ZBZ



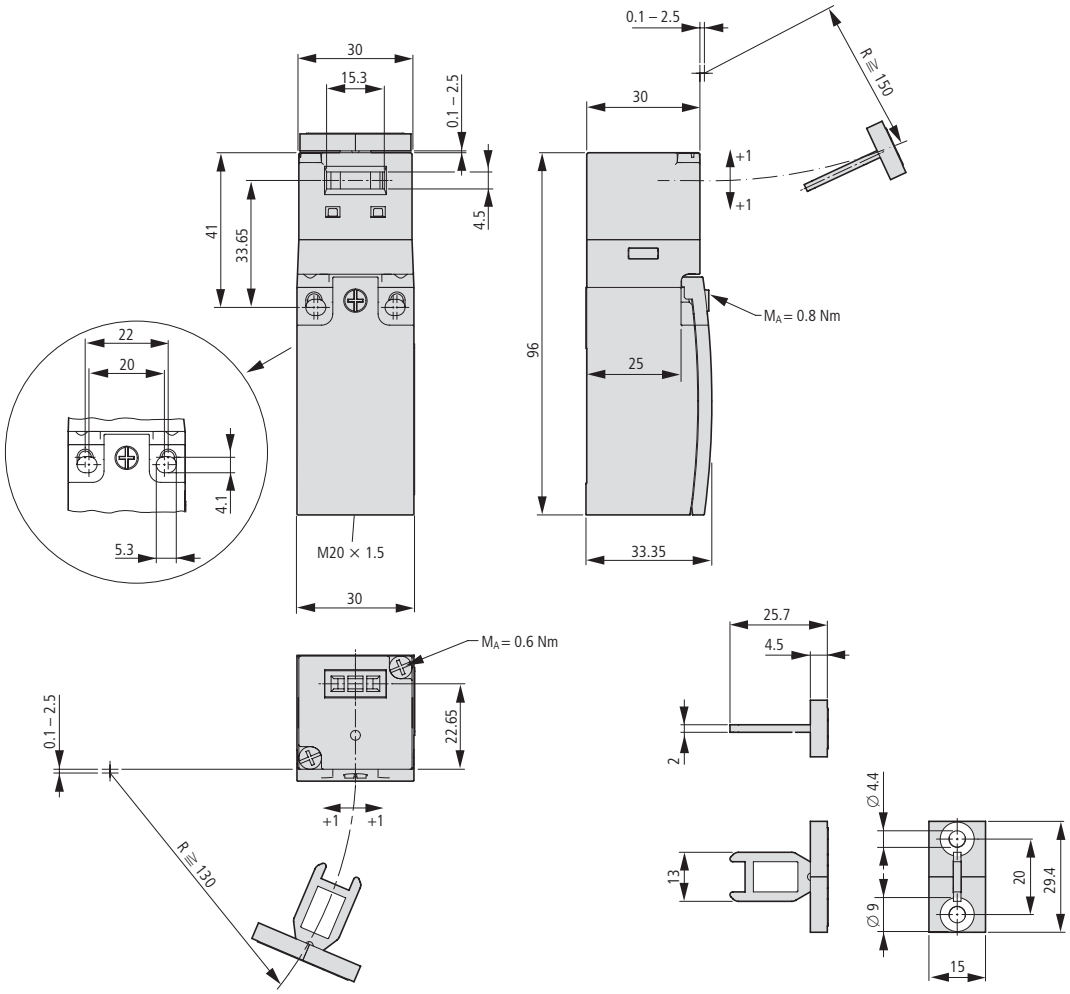
pin with a 4 mm pin after mounting



① Distance to device head = 0.1 - 3.0 mm

Safety position switch

LS...-ZB



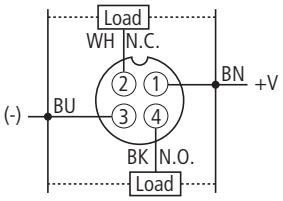
Switch must not be used as a mechanical stop.

Ordering

Rated operational voltage U_e	Rated switching distance S_n mm	Installation type	Switching type	Connection options	Contact configuration N/C = Normally closed contact N/O = Normally open contact	Material	**Catalog Number** Article no.	Std. pack
E52 series 4-wire 40 x 40 x 40 mm								
10 - 48 V DC	15	flush	NPN PNP	Plug-in connection M12 x 1	1 N/C / 1 N/O	Zinc/Insulated material	**E52Q-DL15SAD01** 135804	1 units
	15	non-flush					**E52Q-DL15UAD01** 135805	
	20	flush					**E52Q-DL20SAD01** 135806	
	20	non-flush					**E52Q-DL20UAD01** 135807	
	25	non-flush					**E52Q-DL25UAD01** 135808	
	30	non-flush					**E52Q-DL30UAD01** 135809	
	35	non-flush					**E52Q-DL35UAD01** 135810	
	40	non-flush					**E52Q-DL40UAD01** 135811	

Engineering

E52...



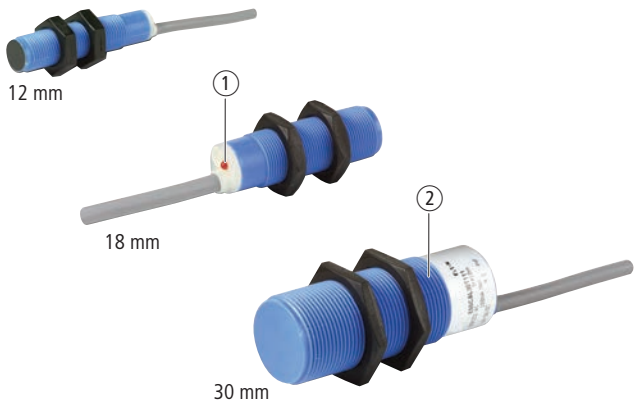
Through autoconfiguration connectable to both +V or (-).

Technical specifications

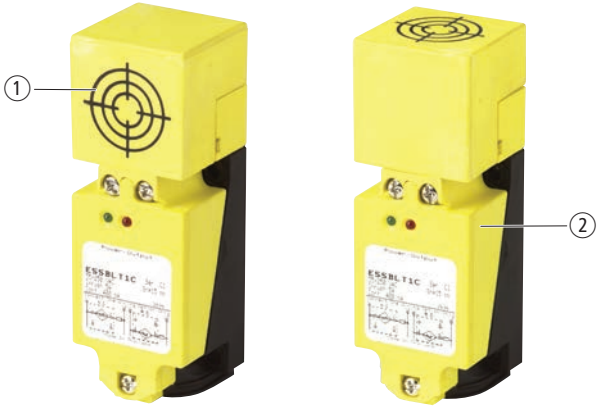
			E52 series
General			
Standards			IEC/EN 60947-5-2
Ambient temperature		°C	–40 - +70
Protection Style			IP67
Mechanical shock resistance		g	30 Shock duration 11 ms
Characteristics			
Repetition accuracy of S_n		%	2
Temperature drift of S_n		%	10
Switching hysteresis of S_n		%	15
Rated operating voltage		U_e	10 - 48 V DC
Operating current in the switched state at 24 V DC	I_b	mA	25
Rated Current	I_e	mA	300
Voltage drop at I_e	U_d	V	2.5
Switching Frequency		Hz	100
Residual current due to the load in locked state at 230 V AC or 24 V DC	I_r	mA	0.15
Switching state display		LED	red
Operating voltage display		LED	green
Protections			Short circuit protection Protection against polarity reversal Protection against wire breakage
Connection			4-wire
Design (outer dimensions)		mm	40 x 40 x 40
Connection options			Plug-in connection M12 x 1
Material			Zinc/insulated material
User Interface			Zinc alloy

Notes Further technical data can be found in the online catalog at https://www.eaton.com/gb/en-gb/catalog/industrial-control--drives--automation---sensors/e52-inductive-proximity-sensors.html

Description



① LED for output status.
② Corrosion-resistant PBT Housing



① Sensor head fitted for lateral detection. Can be rotated 90°.
② Non-metal housing is corrosion-resistant.

Short Description

Cylinder design
Tubular Inductive Proximity Sensors by Eaton's electrical business are constructed of corrosion-resistant PBT insulated material. They are ideally suited for wash down applications such as those found in food processing plants. They are available in 12 mm, 18 mm and 30 mm diameters. Screened sensors can be embedded in metallic surfaces.

Product characteristics

Cylinder design
- Versions for 2-conductor AC voltage or 3-conductor DC voltage.
- Threaded tubular housings in three diameters allow easy integration into new and existing applications.
- Nonmetallic construction offers excellent resistance to corrosion
- All models feature an output signal indicator light.

Approvals

CE

Short Description

Rectangular design
These sensors from Eaton's electrical business feature PBT resin housings for high resistance to corrosion. The housing is sized to offer a direct replacement for standard limit switches. The unique sensing head is factory assembled for top sensing, but can be easily converted in the field to any one of four side sensing positions. Models are available with sensing ranges from 15 mm to 40 mm. The sensors can be wired for N/O or N/C operation.

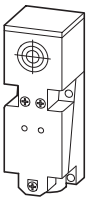
Product characteristics

Rectangular design
- Nonmetallic housing offers excellent resistance to corrosion.
- Same form factor and design as standard limit switch for easy retrofit.
- Sensor head features five sensing positions (top and all four sides) that can be easily changed in the field.
- Long sensing ranges up to 40 mm.

Approvals

CE

	Design (outer dimensions) mm	Rated operating voltage U_e	Rated switching distance S_n mm	Type of mounting	Switching type	Contact configuration N/C = Normally closed contact N/O = Normally open contact P = N/C / N/O programmable	**Catalog Number** Article no.	Std. pack
	E55 series							
	2 m connection cable Plastic							
	2-wire							
	M12 x 1	20 - 250 V AC	2	flush	–	1 N/O	**E55CAL12A2** 135816	1 unit
					–	1 N/C	**E55CBL12A2** 135834	
			4	non-flush	–	1 N/O	**E55CAL12A2E** 135817	
					–	1 N/C	**E55CBL12A2E** 135835	
	M18 x 1		5	flush	–	1 N/O	**E55CAL18A2** 135822	
					–	1 N/C	**E55CBL18A2** 135839	
			8	non-flush	–	1 N/O	**E55CAL18A2E** 135823	
					–	1 N/C	**E55CBL18A2E** 135840	
	M30 x 1.5		10	flush	–	1 N/O	**E55CAL30A2** 135828	
					–	1 N/C	**E55CBL30A2** 135844	
			15	non-flush	–	1 N/O	**E55CAL30A2E** 135829	
					–	1 N/C	**E55CBL30A2E** 135845	
	3-wire							
	M12 x 1	10 - 30 V DC	2	flush	NPN	1 N/O	**E55CAL12T110** 135818	1 units
					PNP	1 N/O	**E55CAL12T111** 135820	
					PNP	1 N/C	**E55CBL12T111** 135837	
			4	non-flush	NPN	1 N/O	**E55CAL12T110E** 135819	
					PNP	1 N/O	**E55CAL12T111E** 135821	
					NPN	1 N/C	**E55CBL12T110E** 135836	
					PNP	1 N/C	**E55CBL12T111E** 135838	
	M18 x 1		5	flush	NPN	1 N/O	**E55CAL18T110** 135824	
					PNP	1 N/O	**E55CAL18T111** 135826	
					NPN	1 N/C	**E55CBL18T110** 135841	
			8	non-flush	NPN	1 N/O	**E55CAL18T110E** 135825	
					PNP	1 N/O	**E55CAL18T111E** 135827	
					NPN	1 N/C	**E55CBL18T110E** 135842	
					PNP	1 N/C	**E55CBL18T111E** 135843	

Design (outer dimensions) mm	Rated operating voltage U_e	Rated switching distance S_n mm	Type of mounting	Switching type	Contact configuration N/C = Normally closed contact N/O = Normally open contact P = N/C / N/O programmable	**Catalog Number** Article no.	Std. pack
E55 series							
Plastic							
3-wire 2 m connection cable							
M30 x 1.5	10 - 30 V DC	10	flush	NPN	1 N/O	**E55CAL30T110** 135830	1 units
				PNP	1 N/O	**E55CAL30T111** 135832	
				NPN	1 N/C	**E55CBL30T110** 135846	
				PNP	1 N/C	**E55CBL30T111** 135848	
		15	non-flush	NPN	1 N/O	**E55CAL30T110E** 135831	
				PNP	1 N/O	**E55CAL30T111E** 135833	
				NPN	1 N/C	**E55CBL30T110E** 135847	
				PNP	1 N/C	**E55CBL30T111E** 135849	
 **2-wire Screw terminal**							
40 x 40 x 118	35 - 250 V AC	15	flush	–	1 P	**E55BLT1C** 135812	1 units
		20	non-flush	–	1 P	**E55BLT1D** 135813	
		30		–	1 P	**E55BLT1E** 135814	
		40		–	1 P	**E55BLT1F** 135815	

Technical specifications

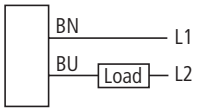
			E55C…L12A	E55C…L18A	E55C…L30A	E55C…L12T E55C…L12T…E
General						
Standards			IEC/EN 60947-5-2			
Ambient temperature		°C	–25 - +70	–25 - +70	–25 - +70	–25 - +70
Protection Style			IP66	IP66	IP66	IP66
Mechanical shock resistance		g	30 Shock duration 11 ms			
Characteristics						
Repetition accuracy of S_n		%	10	10	10	10
Temperature drift of S_n		%	10	10	10	10
Switching hysteresis of S_n		%	20	20	20	20
Rated operating voltage		U_e	20 - 250 V AC	20 - 250 V AC	20 - 250 V AC	10 - 30 V DC
Residual ripple of U_e		%	10	10	10	10
Rated Current	I_e	mA	150	150	150	200
Voltage drop at I_e	U_d	V	10	10	10	8
Switching Frequency		Hz	25	25	25	2000 1000
Switching state display		LED	red	red	red	red
Protections						Short circuit protection Protection against polarity reversal
Connection			2-wire	2-wire	2-wire	3-wire
Design						
Design (outer dimensions)		mm	M12 x 1	M18 x 1	M30 x 1.5	M12 x 1
Connection options			2 m connection cable			
Material			Plastic			

			E55C…L18T E55C…L18T…E	E55C…L30T E55C…L30T…E	E55BLT…
General					
Standards			IEC/EN 60947-5-2		
Ambient temperature		°C	–25 - +70	–25 - +70	–25 - +70
Protection Style			IP66	IP66	IP67
Mechanical shock resistance		g	30 Shock duration 11 ms		
Characteristics					
Repetition accuracy of S_n		%	10	10	10
Temperature drift of S_n		%	10	10	10
Switching hysteresis of S_n		%	20	20	20
Rated operating voltage		U_e	10 - 30 V DC	10 - 30 V DC	35 - 250 V AC
Residual ripple of U_e		%	10	10	10
Rated Current	I_e	mA	200	200	400
Voltage drop at I_e	U_d	V	8	8	8
Switching Frequency		Hz	1000 500	300 150	25
Switching state display		LED	red	red	red
Protections			Short circuit protection Protection against polarity reversal	Short circuit protection Protection against polarity reversal	–
Connection			3-wire	3-wire	2-wire
Design					
Design (outer dimensions)		mm	M18 x 1	M30 x 1.5	40 x 40 x 118
Connection options			2 m connection cable	2 m connection cable	Screw terminal
Material			Plastic	Plastic	Plastic

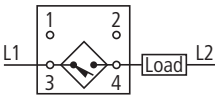
Notes Further technical data can be found in the Online Catalog at www.eaton.com

Engineering

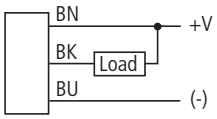
E55CAL...AZ, E55CBL...A2
E55CAL...A2E, E55CBL...A2E



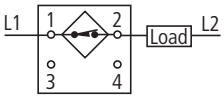
E55BL...



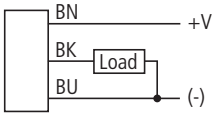
E55CAL...110, E55CBL...110
E55CAL...110E, E55CBL...110E



E55BL...



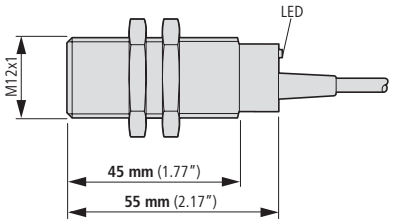
E55CAL...111, E55CBL...111E
E55CAL...111, E55CBL...111E



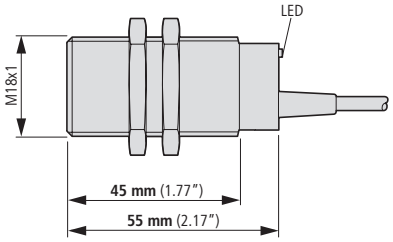
Note:
Switches are supplied configured as N/O.
Can be built-in changed over to N/C.

Dimensions

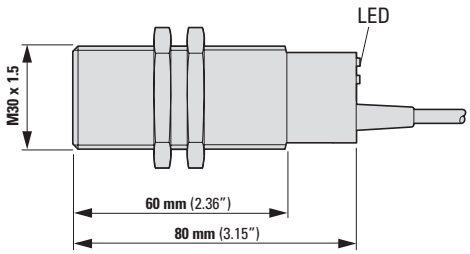
E55CAL12...
E55CBL12...



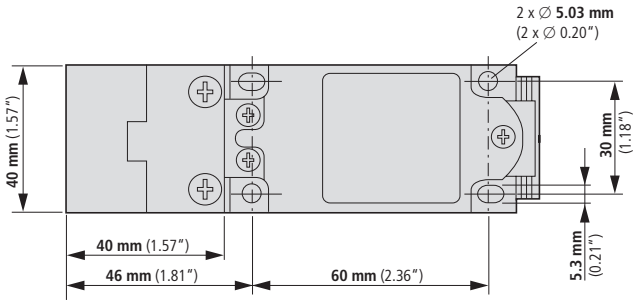
E55CAL18...
E55CBL18...

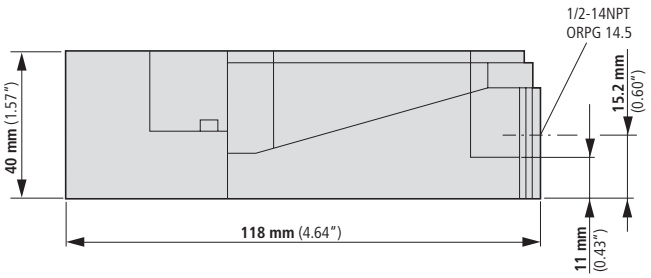


E55CAL30...
E55CBL30...



E55BL...





Description

① LED for current and output status

Short Description

Eaton's E56 sensors are powerful inductive proximity sensors. The E56 Pancake series has a longer range than other types of inductive sensors. They are easy to wire and feature self-configuring complementary outputs, which automatically detect an NPN or PNP connection and configure the sensor accordingly without user interaction. Indicator lights for power and output state simplify troubleshooting compared to sensors with only an output indicator. These convenience features and their high performance make the E56 Pancake sensors ideal for applications in which a rugged design and a long range are required.

Product characteristics

- Large measuring with range up to 100 mm.
- Three sizes for all application scenarios; max. range 50, 70 or 100 mm.
- Complementary outputs (1 × N/C, 1 × N/O) on models with four-wire connection.
- Models with DC voltage four-wire connection feature an automatic configuration function for independent switchover between NPN and PNP.
- Robust design featuring vibration and impact-absorbing potting compound
- Ideal for extreme temperatures or high pressure washdown environments.

Approvals

CE

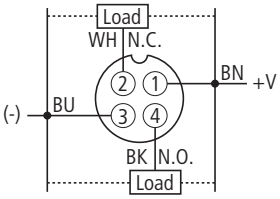
c UL us LISTED

Ordering

	Connection	Design (outer dimensions) mm	Rated operational voltage U_e	Rated switching distance S_n mm	Type of mounting	Switching type	Connection options	Contact configuration NC = Normally closed contact N/O = Normally open contact	**Catalog Number** Article no.	Std. pack
	E56 series									
	Plastic									
	4-wire	79 x 79 x 39	10 - 42 V DC	40	flush	NPN PNP	Plug-in connection M12 x 1	1 N/C / 1 N/O	**E56ADL40SAD01** 136234	1 units
		79 x 79 x 39		40	non-flush	NPN PNP		1 N/C / 1 N/O	**E56ADL40UAD01** 136235	
		109 x 110 x 41		70	non-flush	NPN PNP		1 N/C / 1 N/O	**E56BDL70UAD01** 136236	
		171.5 x 171.5 x 67.4		100	non-flush	NPN PNP		1 N/C / 1 N/O	**E56CDL100UAD01** 136237	

Engineering

E56...



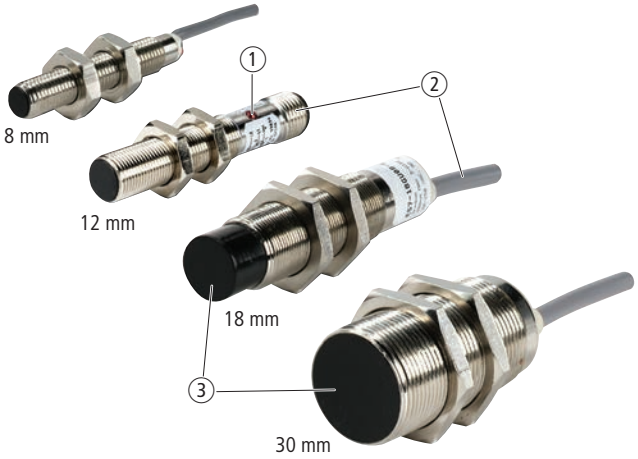
Through autoconfiguration connectable to both +V or (-).

Technical specifications

			E56ADL40S	E56ADL40U	E56BDL70U	E56CDL100U
General						
Standards			IEC/EN 60947-5-2			
Ambient temperature		°C	–25 - +70	–25 - +70	–25 - +70	–25 - +70
Protection Style			IP67	IP67	IP67	IP67
Characteristics						
Repetition accuracy of S_n		%	2	2	2	2
Temperature drift of S_n		%	10	10	10	10
Switching hysteresis of S_n		%	15	15	15	15
Rated operating voltage		U_e	10 - 42 V DC	10 - 42 V DC	10 - 42 V DC	10 - 42 V DC
Operating current in the switched state at 24 V DC	I_b	mA	25	25	25	25
Rated Current	I_e	mA	300	300	300	300
Voltage drop at I_e	U_d	V	2.5	2.5	2.5	2.5
Switching Frequency		Hz	100	100	20	20
Min. load current	I_e	mA	1	1	1	1
Residual current due to the load in locked state at 230 V AC or 24 V DC	I_r	mA	0.15	0.15	0.15	0.15
Switching state display		LED	red	red	red	red
Operating voltage display		LED	green	green	green	green
Protections			Short circuit protection Protection against polarity reversal			
Connection			4-wire	4-wire	4-wire	4-wire
Design						
Design (outer dimensions)		mm	79 x 79 x 39	79 x 79 x 39	109 x 110 x 41	171.5 x 171.5 x 67.4
Connection options			Plug-in connection M12 x 1			
Material			Plastic	Plastic	Plastic	Plastic
User Interface			PPS	PPS	PPS	PPS

Notes Further technical data can be found in the online catalog at
https://www.eaton.com/gb/en-gb/catalog/industrial-control--drives--automation---sensors/e56-pancake-inductive-proximity-sensors.html

Description



① Outputs with function display on all models.
② All models with M12 plug connector or cable (2 m).
③ Versions for flush or non-flush installation available.

Short Description

Eaton's proximity sensors of the Global series haven been developed specially for OEM series production. The sensors feature only the functions required for reliable operation. This means that you do not pay for additional, unnecessary functions but get the performance and features you expect from a sensor. Our DC versions feature a short-circuit protective device and a rating of up to 2000 measuring cycles per second. The outputs of all models are equipped with a function display. The Global series includes models with various diameters from 8 to 30 mm, making it truly versatile in installation. Versions with various ranges are also available. The proximity sensors Global are DC or AC units with 2- or 3-wire, NPN or PNP configuration. Versions for hard-wiring or with M12 plug connector are available. The DC versions have a rated load current of 100 mA, the AC versions of 200 mA.

Product characteristics

- The Global Proximity Line features solid performance and a basic feature set for reliable, cost-effective sensing.
- Available in a variety of sizes to fit in all of your applications: 8 mm, 12 mm, 18 mm und 30 mm diameters.
- The input voltage of the DC versions is 10 - 30 V DC in 2- and 3-wire configuration (PNP and NPN).
- The input voltage of the AC voltage variants is 2-AC 20 - 250 V.
- The operating frequency of the DC versions is 2 kHz.
- Versions for flush or non-flush installation available.
- Connection through cable (2 meters) or M12 plug connector
- The DC versions feature short-circuit protection.

Approvals

CE
cCSAus

Ordering

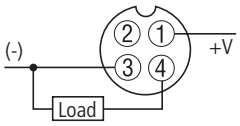
	Design (outer dimensions)	Rated switching distance S_n	Installation type	Contacts N/C = Normally closed contact	Contacts N/O = Normally open contact	Protection Style	**Catalog Number** Article no.	Std. pack
	mm	mm						
	E57 Global series							
	LED for output status 3-conductor, Plug-in connection M12 x 1, Rated operating voltage U_e: 10 - 30 V DC Switching type: PNP Metal							
	M8 x 1	1	flush	–	1 N/O	IP67, IP69	**E57-08GS01-GDB** 135862	1 units
		2	non-flush	–			**E57-08GU02-GDB** 135866	
		3	flush	–			**E57-08GE03-GDB** 135854	
		6	non-flush	–			**E57-08GE06-GDB** 135858	
	M12 x 1	5	flush	–			**E57-12GE05-GDB** 135870	1 units
	M18 x 1	8	non-flush	–			**E57-18GU08-GDB** 135940	1 units

Engineering

Circuit diagram

Plug-in connection M12
DC, 3-wire, PNP

E57...-GDB



Technical specifications

3-wire DC				E57-08...	E57-12...	E57-18...
General						
Standards				IEC/EN 60947-5-2		
Ambient temperature						
	...GS...		°C	–25 - +70	–25 - +70	–25 - +70
	...GU...		°C	–25 - +70	–25 - +70	–25 - +70
	...GB...		°C	–25 - +70	–	–
	...GE...		°C	0 - 60	0 - 60	0 - 60
Protection Style				IP67	IP67	IP67
Mechanical shock resistance			g	30 Shock duration 11 ms		
Characteristics						
Repetition accuracy of S_n			%	1	1	1
Temperature drift of S_n			%	10	10	10
Switching hysteresis of S_n			%	15	15	15
Rated operating voltage			Ue	10 - 30 V DC	10 - 30 V DC	10 - 30 V DC
Residual ripple of U_e			%	10	10	10
Operating current in the switched state at 24 V DC						
	...GS...	I_b	mA	10	10	10
	...GU...	I_b	mA	10	20	20
	...GE...	I_b	mA	10	10	10
Rated Current		I_e	mA	< 100	< 100	< 100
Voltage drop at I_e		U_d	V	1.5	1.5	1.5
Switching Frequency						
	flush		Hz	2000	2000	1000
	non-flush		Hz	2000	1000	500
Residual current due to the load in locked state at 230 V AC or 24 V DC		I_r	mA	0.01	0.01	0.01
Switching state display			LED	red	red	red
Protections				Short circuit protection Protection against polarity reversal Protection against wire breakage		
Connection				3-wire	3-wire	3-wire
Design (outer dimensions)			mm	M8 x 1	M12 x 1	M18 x 1
Material				Stainless steel	Metal	Metal

Design	Rated switching distance S_n mm	Installation type	Connection	Contacts	**Catalog Number** Article no.	Std. pack
E57G General Purpose Series						
3-wire Rated operational voltage: 10 - 30 V DC Switching type: PNP Stainless steel						
M12x1	2	flush	2 m connection cable	NO	**E57G-12SPN2-C2** 197687	1 units
	2	flush	M12 Plug-in connection	NO	**E57G-12SPN2-Q** 197688	
	2	flush	2 m connection cable	NC	**E57G-12SPC2-C2** 197683	
	2	flush	M12 Plug-in connection	NC	**E57G-12SPC2-Q** 197684	
	4	flush	2 m connection cable	NO	**E57G-12SPN4-C2** 197689	
	4	flush	M12 Plug-in connection	NO	**E57G-12SPN4-Q** 197690	
	4	flush	2 m connection cable	NC	**E57G-12SPC4-C2** 197685	
	4	flush	M12 Plug-in connection	NC	**E57G-12SPC4-Q** 197686	
	4	non-flush	2 m connection cable	NO	**E57G-12UPN4-C2** 197703	
	4	non-flush	M12 Plug-in connection	NO	**E57G-12UPN4-Q** 197704	
	4	non-flush	2 m connection cable	NC	**E57G-12UPC4-C2** 197699	
	4	non-flush	M12 Plug-in connection	NC	**E57G-12UPC4-Q** 197700	
	8	non-flush	2 m connection cable	NO	**E57G-12UPN8-C2** 197705	
	8	non-flush	M12 Plug-in connection	NC	**E57G-12UPC8-Q** 197702	
	8	non-flush	M12 Plug-in connection	NO	**E57G-12UPN8-Q** 197706	
	8	non-flush	2 m connection cable	NC	**E57G-12UPC8-C2** 197701	
M18x1	5	flush	2 m connection cable	NO	**E57G-18SPN5-C2** 197719	1 units
	5	flush	M12 Plug-in connection	NO	**E57G-18SPN5-Q** 197720	
	5	flush	2 m connection cable	NC	**E57G-18SPC5-C2** 197715	
	5	flush	M12 Plug-in connection	NC	**E57G-18SPC5-Q** 197716	
	8	flush	2 m connection cable	NO	**E57G-18SPN8-C2** 197721	
	8	flush	M12 Plug-in connection	NO	**E57G-18SPN8-Q** 197722	
	8	flush	2 m connection cable	NC	**E57G-18SPC8-C2** 197717	
	8	flush	M12 Plug-in connection	NC	**E57G-18SPC8-Q** 197718	
	8	non-flush	2 m connection cable	NO	**E57G-18UPN8-C2** 197737	
	8	non-flush	M12 Plug-in connection	NO	**E57G-18UPN8-Q** 197738	
	8	non-flush	2 m connection cable	NC	**E57G-18UPC8-C2** 197733	
	8	non-flush	M12 Plug-in connection	NC	**E57G-18UPC8-Q** 197734	
	12	non-flush	2 m connection cable	NO	**E57G-18UPN12-C2** 197735	
	12	non-flush	M12 Plug-in connection	NO	**E57G-18UPN12-Q** 197736	
	12	non-flush	2 m connection cable	NC	**E57G-18UPC12-C2** 197731	
	12	non-flush	M12 Plug-in connection	NC	**E57G-18UPC12-Q** 197732	

5

Design	Rated switching distance S_n mm	Installation type	Connection	Contacts	**Catalog Number** Article no.	Std. pack
E57G General Purpose Series						
3-wire Rated operational voltage: 10 - 30 V DC Switching type: PNP Stainless steel						
M30x1.5	10	flush	2 m connection cable	NO	**E57G-30SPN10-C2** 197751	1 units
	10	flush	M12 Plug-in connection	NO	**E57G-30SPN10-Q** 197752	
	10	flush	2 m connection cable	NC	**E57G-30SPC10-C2** 197747	
	10	flush	M12 Plug-in connection	NC	**E57G-30SPC10-Q** 197748	
	15	flush	2 m connection cable	NO	**E57G-30SPN15-C2** 197753	
	15	flush	M12 Plug-in connection	NO	**E57G-30SPN15-Q** 197754	
	15	flush	2 m connection cable	NC	**E57G-30SPC15-C2** 197749	
	15	flush	M12 Plug-in connection	NC	**E57G-30SPC15-Q** 197750	
	15	non-flush	2 m connection cable	NO	**E57G-30UPN15-C2** 197767	
	15	non-flush	M12 Plug-in connection	NO	**E57G-30UPN15-Q** 197768	
	15	non-flush	2 m connection cable	NC	**E57G-30UPC15-C2** 197763	
	15	non-flush	M12 Plug-in connection	NC	**E57G-30UPC15-Q** 197764	
	22	non-flush	2 m connection cable	NO	**E57G-30UPN22-C2** 197769	
	22	non-flush	M12 Plug-in connection	NO	**E57G-30UPN22-Q** 197770	
	22	non-flush	2 m connection cable	NC	**E57G-30UPC22-C2** 197765	
	22	non-flush	M12 Plug-in connection	NC	**E57G-30UPC22-Q** 197766	

	Design	Rated switching distance S_n mm	Installation type	Connection	Contacts	**Catalog Number** Article no.	Std. pack
	E57P Performance Series						
	3-wire Rated operational voltage: 10 - 48 V DC Switching type: PNP Stainless steel						
	M12x1	2	flush	2 m connection cable	NO	**E57P-12SPN2-C2** 197777	1 units
		2	flush	M12 Plug-in connection	NO	**E57P-12SPN2-Q** 197778	
		2	flush	2 m connection cable	NC	**E57P-12SPC2-C2** 197775	
		2	flush	M12 Plug-in connection	NC	**E57P-12SPC2-Q** 197776	
		4	non-flush	2 m connection cable	NO	**E57P-12UPN4-C2** 197785	
		4	non-flush	M12 Plug-in connection	NO	**E57P-12UPN4-Q** 197786	
		4	non-flush	2 m connection cable	NC	**E57P-12UPC4-C2** 197783	
		4	non-flush	M12 Plug-in connection	NC	**E57P-12UPC4-Q** 197784	
	M18x1	5	flush	2 m connection cable	NO	**E57P-18SPN5-C2** 197793	1 units
		5	flush	M12 Plug-in connection	NO	**E57P-18SPN5-Q** 197794	
		5	flush	2 m connection cable	NC	**E57P-18SPC5-C2** 197791	
		5	flush	M12 Plug-in connection	NC	**E57P-18SPC5-Q** 197792	
		8	non-flush	2 m connection cable	NO	**E57P-18UPN8-C2** 197801	
		8	non-flush	M12 Plug-in connection	NO	**E57P-18UPN8-Q** 197802	
		8	non-flush	2 m connection cable	NC	**E57P-18UPC8-C2** 197799	
		8	non-flush	M12 Plug-in connection	NC	**E57P-18UPC8-Q** 197800	
	M30x1.5	10	flush	2 m connection cable	NO	**E57P-30SPN10-C2** 197809	1 units
		10	flush	M12 Plug-in connection	NO	**E57P-30SPN10-Q** 197810	
		10	flush	2 m connection cable	NC	**E57P-30SPC10-C2** 197807	
		10	flush	M12 Plug-in connection	NC	**E57P-30SPC10-Q** 197808	
		15	non-flush	2 m connection cable	NO	**E57P-30UPN15-C2** 197817	
		15	non-flush	M12 Plug-in connection	NO	**E57P-30UPN15-Q** 197818	
		15	non-flush	2 m connection cable	NC	**E57P-30UPC15-C2** 197815	
		15	non-flush	M12 Plug-in connection	NC	**E57P-30UPC15-Q** 197816	

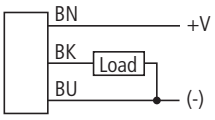
5

	Design	Rated switching distance S_n mm	Installation type	Connection	Contacts	**Catalog Number** Article no.	Std. pack
	E57PS Performance Short Body Series						
	3-wire Rated operational voltage: 10 - 48 V DC Switching type: PNP Stainless steel						
	M12x1	2	flush	2 m connection cable	NO	**E57PS-12SPN2-C2** 197825	1 units
		2	flush	M12 Plug-in connection	NO	**E57PS-12SPN2-Q** 197826	
		2	flush	2 m connection cable	NC	**E57PS-12SPC2-C2** 197823	
		2	flush	M12 Plug-in connection	NC	**E57PS-12SPC2-Q** 197824	
		4	non-flush	2 m connection cable	NO	**E57PS-12UPN4-C2** 197833	
		4	non-flush	M12 Plug-in connection	NO	**E57PS-12UPN4-Q** 197834	
		4	non-flush	2 m connection cable	NC	**E57PS-12UPC4-C2** 197831	
		4	non-flush	M12 Plug-in connection	NC	**E57PS-12UPC4-Q** 197832	
	M18x1	5	flush	2 m connection cable	NO	**E57PS-18SPN5-C2** 197841	1 units
		5	flush	M12 Plug-in connection	NO	**E57PS-18SPN5-Q** 197842	
		5	flush	2 m connection cable	NC	**E57PS-18SPC5-C2** 197839	
		5	flush	M12 Plug-in connection	NC	**E57PS-18SPC5-Q** 197840	
		8	non-flush	2 m connection cable	NO	**E57PS-18UPN8-C2** 197849	
		8	non-flush	M12 Plug-in connection	NO	**E57PS-18UPN8-Q** 197850	
		8	non-flush	2 m connection cable	NC	**E57PS-18UPC8-C2** 197847	
		8	non-flush	M12 Plug-in connection	NC	**E57PS-18UPC8-Q** 197848	
	M30x1.5	10	flush	2 m connection cable	NO	**E57PS-30SPN10-C2** 197857	1 units
		10	flush	M12 Plug-in connection	NO	**E57PS-30SPN10-Q** 197858	
		10	flush	2 m connection cable	NC	**E57PS-30SPC10-C2** 197855	
		10	flush	M12 Plug-in connection	NC	**E57PS-30SPC10-Q** 197856	
		15	non-flush	2 m connection cable	NO	**E57PS-30UPN15-C2** 197865	
		15	non-flush	M12 Plug-in connection	NO	**E57PS-30UPN15-Q** 197866	
		15	non-flush	2 m connection cable	NC	**E57PS-30UPC15-C2** 197863	
		15	non-flush	M12 Plug-in connection	NC	**E57PS-30UPC15-Q** 197864	

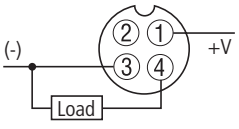
Engineering

DC, 3-wire, PNP

E57G-...-C2
E57P-...-C2
E57PS-...-C2



E57G-...-Q
E57P-...-Q
E57PS-...-Q



	Design (outer dimensions)	Rated switching distance S_n	Installation type	Contacts N/C = Normally closed contact	Contacts N/O = Normally open contact	Protection Style	Catalog Number Article no.	Std. pack
	mm	mm						
	E57 miniature series (inductive)							
	3-conductor, 2 m connection cable, Rated operating voltage U_e: 10 - 30 V DC Switching type: PNP Stainless steel							
	M5 x 1	0.8	flush	–	1 N/O	IP67	**E57EAL5T111SP** 136241	1 units
	∅ 4	0.8	flush	–			**E57EAL4T111SP** 136239	1 units
	∅ 6.5	1	flush	–			**E57EAL6T111SP** 136245	1 units
	∅ 6.5	2	non-flush	–			**E57EAL6T111EP** 136244	
	Notes	Further information, technical data and project planning data can be found in the sensor catalog → http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_1096622.pdf						

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	Design (outer dimensions)	Rated switching distance S_n	Installation type	Connection options	Description	Catalog Number Article no.	Std. pack
	mm	mm					
	E59 AccuProx						
	3-wire/4-wire Rated operating voltage U_e: 15 - 30 V DC Analog Stainless steel						
	M12 x 1	0.5 - 4	flush	Plug-in connection M12 x 1	Current output (0 - 20 mA) and voltage output (0 - 10 V)	**E59-A12A104D01-CV** 166834	1 units
				2 m connection cable		**E59-A12A104C02-CV** 166832	
				Plug-in connection M12 x 1	Current output (4 - 20 mA)	**E59-A12A104D01-C1** 166833	
				2 m connection cable		**E59-A12A104C02-C1** 166831	
		1 - 8	non-flush	Plug-in connection M12 x 1	Current output (0 - 20 mA) and voltage output (0 - 10 V)	**E59-A12C108D01-CV** 166838	
				2 m connection cable		**E59-A12C108C02-CV** 166836	
				Plug-in connection M12 x 1	Current output (4 - 20 mA)	**E59-A12C108D01-C1** 166837	
				2 m connection cable		**E59-A12C108C02-C1** 166835	
	M18 x 1	1 - 7	flush	Plug-in connection M12 x 1	Current output (0 - 20 mA) and voltage output (0 - 10 V)	**E59-A18A107D01-CV** 166806	1 units
				2 m connection cable		**E59-A18A107C02-CV** 166804	
				Plug-in connection M12 x 1	Current output (4 - 20 mA)	**E59-A18A107D01-C1** 166805	
				2 m connection cable		**E59-A18A107C02-C1** 166839	
		1 - 15	non-flush	Plug-in connection M12 x 1	Current output (0 - 20 mA) and voltage output (0 - 10 V)	**E59-A18C115D01-CV** 166994	
				2 m connection cable		**E59-A18C115C02-CV** 166807	
				Plug-in connection M12 x 1	Current output (4 - 20 mA)	**E59-A18C115D01-C1** 166808	
				2 m connection cable		**E59-A18C115C02-C1** 138201	
	M30 x 1.5	1 - 12	flush	Plug-in connection M12 x 1	Current output (0 - 20 mA) and voltage output (0 - 10 V)	**E59-A30A112D01-CV** 166685	1 units
				2 m connection cable		**E59-A30A112C02-CV** 166719	
				Plug-in connection M12 x 1	Current output (4 - 20 mA)	**E59-A30A112D01-C1** 166684	
				2 m connection cable		**E59-A30A112C02-C1** 166809	
		1 - 25	non-flush	Plug-in connection M12 x 1	Current output (0 - 20 mA) and voltage output (0 - 10 V)	**E59-A30C125D01-CV** 166689	
				2 m connection cable		**E59-A30C125C02-CV** 166687	
				Plug-in connection M12 x 1	Current output (4 - 20 mA)	**E59-A30C125D01-C1** 166688	
				2 m connection cable		**E59-A30C125C02-C1** 166686	

Notes Further information, technical data and project planning data can be found in the sensor catalog → http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_1096622.pdf

	Design (outer dimensions)	Rated switching distance S_n	Installation type	Contacts N/C = Normally closed contact	Contacts N/O = Normally open contact	Protection Style	**Catalog Number** Article no.	Std. pack
	mm	mm						
	iProx Series (inductive)							
	3-conductor, Plug-in connection M12 x 1, Rated operating voltage U_e: 6 - 48 V DC Switching type: NPN, PNP Stainless steel							
	M12 x 1	4	flush	–	1 N/O	IP67, IP69	**E59-M12A105D01-D1** 136207	1 units
	M18 x 1	8	flush	–			**E59-M18A108D01-D1** 136215	
	M18 x 1	18	non-flush	–			**E59-M18C116D01-D1** 136219	
	M30 x 1.5	15	flush	–			**E59-M30A115D01-D1** 136223	
	Programming cable							
	For use with iProx							
	–	–	–	–	–	–	**E59RP1** 136229	1 units
	Programming software							
	For use with iProx							
	–	–	–	–	–	–	**E59SW1** 136230	1 units
	E53 Serie (capacitive)							
	4-wire Plug-in connection M12 x 1 Rated operating voltage: U_e= 10 - 48 V DC Switching type: NPN, PNP Zinc/Insulated material							
	M18 x 1	8	flush	1 N/C	–	IP65	**E53KBL18T111SD** 134802	1 units
		8	flush	–	1 N/O		**E53KAL18T111SD** 134768	
		15	non-flush	1 N/C	–		**E53KBL18T111ED** 134801	
		15	non-flush	–	1 N/O		**E53KAL18T111ED** 134767	
	M30 x 1.5	20	flush	1 N/C	–		**E53KBL30T111SD** 134814	1 units
		20	flush	–	1 N/O		**E53KAL30T111SD** 134780	
		25	non-flush	1 N/C	–		**E53KBL30T111ED** 134813	
		25	non-flush	–	1 N/O		**E53KAL30T111ED** 134779	
	34 ∅	25	flush	1 N/C	–		**E53KBL34T111SD** 134824	1 units
		25	flush	–	1 N/O		**E53KAL34T111SD** 134790	
		35	non-flush	1 N/C	–		**E53KBL34T111ED** 134823	
		35	non-flush	–	1 N/O		**E53KAL34T111ED** 134789	

Notes Further information, technical data and project planning data can be found in the sensor catalog → http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_1096622.pdf

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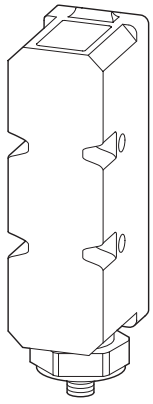
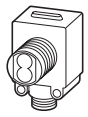
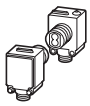
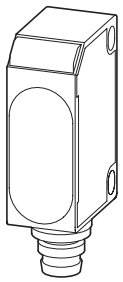
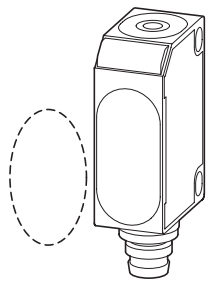
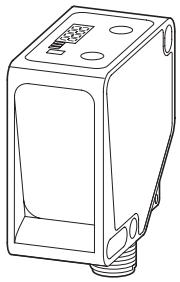
		Function	Description	Rated switching distance S_n mm	Type of light	Switching principle	**Catalog Number** Article no.	Std. pack
	Comet series 4-wire, Rated operating voltage U_e: 10 - 30 V DC Switching type: NPN, PNP Plastic Plug-in connection M12 x 1 IP67 degree of protection							
	M18 x 1	diffuse reflective sensor	Beam: straight with background suppression (Perfect Prox)	50	visible red	light/dark switching adjustable	**13104AQD07** 135605	1 units
			Beam: straight, can be expanded with fiber optic cable → Accessories	200	Infrared		**13106AQD07** 135621	
			Beam: straight with background suppression (Perfect Prox)	225			**13103AQD07** 135597	
			Beam: straight, can be expanded with fiber optic cable → Accessories	610			**13100AQD07** 135581	
		Retroflective sensing sensor	For combination with reflector non-polarized, beam: straight	7600	visible red		**14102AQD07** 135657	
		thru-beam photoelectric sensor	Detector (for combination with source) beam: straight	24000			**12102AQD07** 135577	
			Source (for combination with detector) beam: straight	24000		–	**11102AQD07** 135565	
	E58 Harsh Duty series 4-wire, Rated operating voltage U_e: 10 - 30 V DC Switching type: NPN, PNP Stainless steel Plug-in connection M12 x 1 IP69 degree of protection							
	M18 x 1	diffuse reflective sensor	with background suppression (Perfect Prox)	50	visible red	light switching	**E58-18DP50-HLP** 135673	1 units
				50		dark switching	**E58-18DP50-HDP** 135671	
				100		light switching	**E58-18DP100-HLP** 135667	
				100		dark switching	**E58-18DP100-HDP** 135665	
	M30 x 1.5	diffuse reflective sensor	with background suppression (Perfect Prox)	280		dark switching	**E58-30DPS280-HDP** 135681	1 units
				280		light switching	**E58-30DPS280-HLP** 135683	
		Retroflective sensing sensor	for combination with reflector	18000		dark switching	**E58-30RS18-HDP** 135689	
				18000		light switching	**E58-30RS18-HLP** 135691	
	M30 x 1.5	thru-beam photoelectric sensor	Source (for combination with detector)	250000	visible red	–	**E58-30TS250-HAP** 135697	1 units
			Detector (for combination with source)	250000	–	dark switching	**E58-30TD250-HDP** 135693	
				250000	–	light switching	**E58-30TD250-HLP** 135695	
	**E67 Long Range series** 4-wire, Rated operating voltage U_e: 18 - 30 V DC Switching type: NPN, PNP Plug-in connection M12 x 1 IP67 degree of protection							
	Cuboid (166 x 59 x 43)	diffuse reflective sensor	with background suppression (Perfect Prox)	1000	Infrared	light switching	**E67-LRDP100-HLD** 100548	1 units
			with background suppression (Perfect Prox)	1000		dark switching	**E67-LRDP100-HDD** 100547	

Notes Further information, technical data and project planning data can be found in the sensor catalog → http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_1096622.pdf

		Function	Description	Rated switching distance S_n mm	Type of light	Switching principle	Catalog Number Article no.	Std. pack
	E65 SM series							
	4-wire, Rated operating voltage U_e: 10 - 30 V DC Switching type: NPN, PNP Plastic Plug-in connection M12 x 1 IP68 and IP69 protection type							
	33 x 41 x 37	diffuse reflective sensor	with background suppression (Perfect Prox)	100	–	light switching	**E65-SMPP100-HLD** 135713	1 units
			with background suppression (Perfect Prox)	100	–	dark switching,	**E65-SMPP100-HDD** 135711	
		thru-beam photo-electric sensor	Source (for combination with detector)	15000	–	light switching	**E65-SMTD15-HLD** 135733	1 units
			Detector (for combination with source)	15000	–	dark switching,	**E65-SMTD15-HDD** 135731	
			Source (for combination with detector)	15000	–	–	**E65-SMTS15-HAD** 135735	
	E71 NanoView series							
	4-wire, Rated operating voltage U_e: 10 - 30 V DC Switching type: PNP Plastic Rectangular (20 x 12 x 32) IP66 and IP67 protection type							
	Plug-in connection M8 x 1	Diffuse reflective sensor	Beam: focused, forward viewing	100	visible red	Adjustable bright/dark switching	**E71-FFDP-M8** 100518	1 units
		Retroflective sensing sensor	for combination with reflector, detection of transparent objects	800	visible red		**E71-COP-M8** 100428	
	2 m connection cable	Thru-beam photo-electric sensor	Source (for combination with detector)	1500	Infrared		**E71-NTBS-CA** 100521	
	Plug-in connection M8 x 1	Retroflective sensing sensor	polarized light	2500	visible red		**E71-PRP-M8** 100526	1 units
	E76 IntelliView series							
	8-wire, Rated operating voltage U_e: 10 - 30 V DC Switching type: PNP Plug-in connection M12 x 1 IP67 degree of protection							
	Rectangular (50 x 50 x 25)	diffuse reflective sensor	Color sensing 3 NO PNP outputs	450	Infrared	–	**E76-CLRMKP-M12** 166927	1 units

Notes Further information, technical data and project planning data can be found in the sensor catalog → http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_1096622.pdf

	Design output side	Design input side	Length mm	For use with	Catalog Number Article no.	Std. pack
	Connecting cables					
	Cable end, open	Coupling, straight	2000	DC sensors, 4 pole, 2, 3 or 4-wire connection M12	**CSDS4A4CY2202** 136292	1 units
			5000		**CSDS4A4CY2205** 136294	
			10000		**CSDS4A4CY2210** 136296	
		Coupling, angled	2000		**CSDR4A4CY2202** 136279	1 units
			5000		**CSDR4A4CY2205** 136282	
			10000		**CSDR4A4CY2210** 136284	
	Plug, straight	Coupling, straight	1500		**CSDS4A4CY2201.5-D** 136316	1 units
			3000		**CSDS4A4CY2203-D** 136293	
			5000		**CSDS4A4CY2205-D** 136295	
	Plug, angled		1500		**CSDR4A4CY2201.5-D** 136313	1 units
			3000		**CSDR4A4CY2203-D** 136315	
			5000		**CSDR4A4CY2205-D** 136283	

Notes Further information, technical data and project planning data can be found in the sensor catalog → http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_1096622.pdf

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You can find more information on the product pages at:
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Touch panel XV300

Our XV300 touch panels with capacitive multi-touch technology can be used as HMIs, or optionally with integrated PLC functionalities. These devices not only feature extensive interfaces in order to provide maximum versatility, but also provide extraordinary system performance. Moreover, they can be used with multi-media elements such as videos and web contents. Using XV300 devices is as convenient as using a normal smartphone or tablet.

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Our powerful XP500 industrial PCs are available as an HMI solution for a variety of machine-building and facility-engineering applications, as well as for building automation projects.

By combining powerful technology, intuitive multi-touch interfaces, and a stylish design, these devices provide maximum versatility. In fact, the corresponding portfolio can be used flexibly both in standard and modular systems, and the fully open PC design, high reliability, and use of the Windows 10 operating system ensure that it can be very easily integrated into existing systems.

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