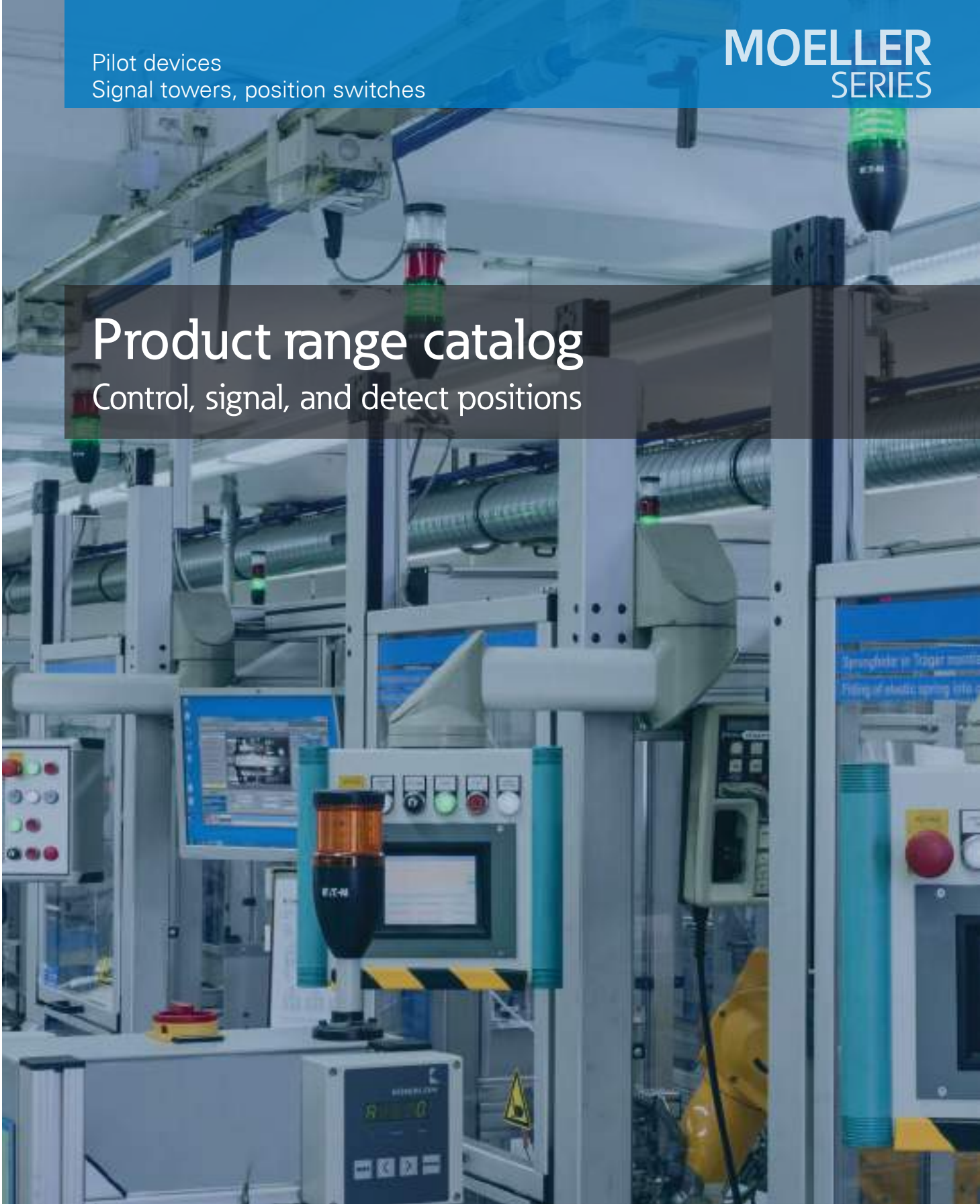


Pilot devices
Signal towers, position switches

MOELLER
SERIES

Product range catalog

Control, signal, and detect positions



EATON

Powering Business Worldwide



We make what matters work.*

* 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](https://www.eaton.com/whatmatters)

EATON

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We make what matters work.

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Product highlights

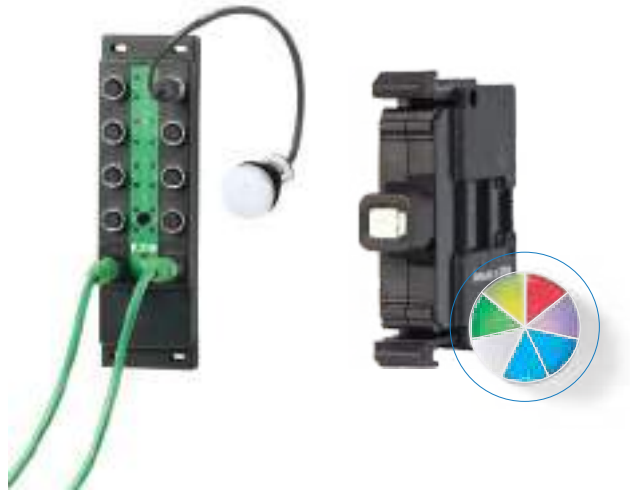


Small emergency-stop button: Small device, big effect!

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

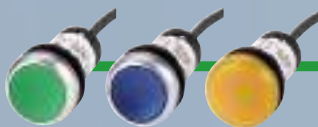


RMQ-Titan

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



RMQ compact solution



RMQ compact solution



Signal tower



Surface mounting enclosure



SWD I/O modules

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**

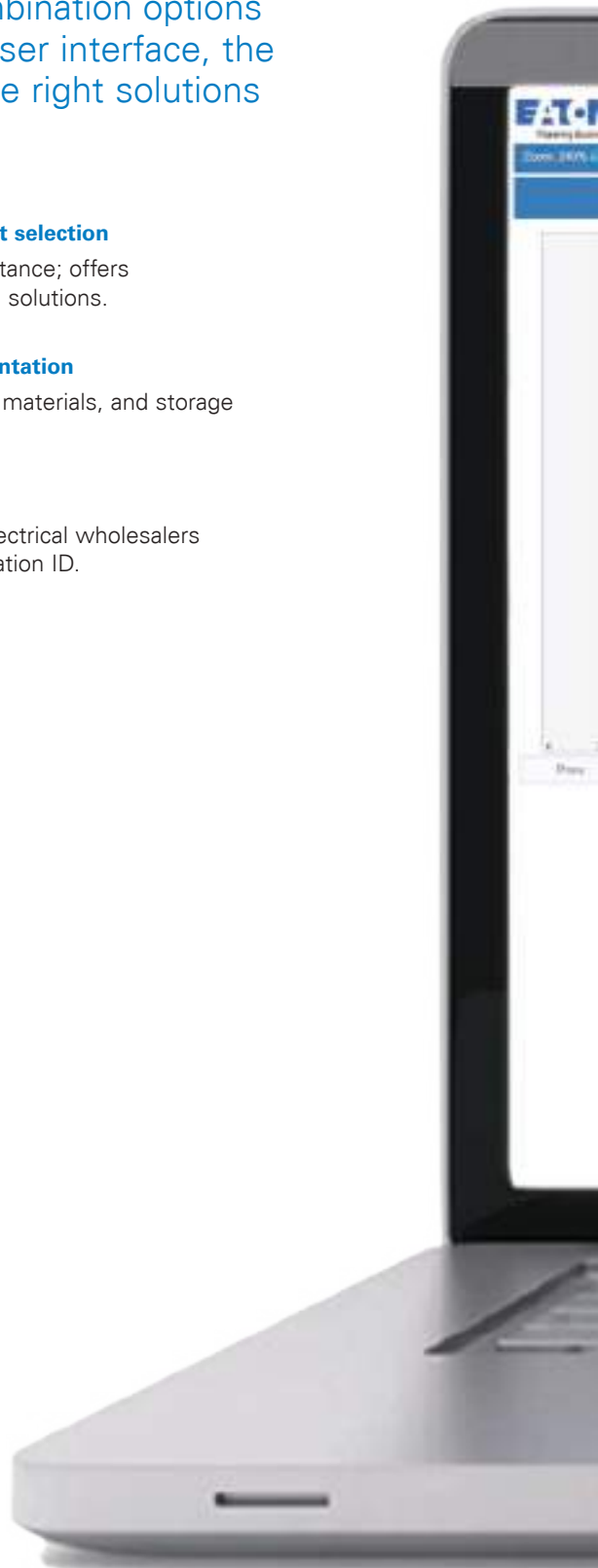
With intelligent assistance; offers standard and custom solutions.

- **Easy project documentation**

With images, bills of materials, and storage on an Eaton server.

- **Unique identification**

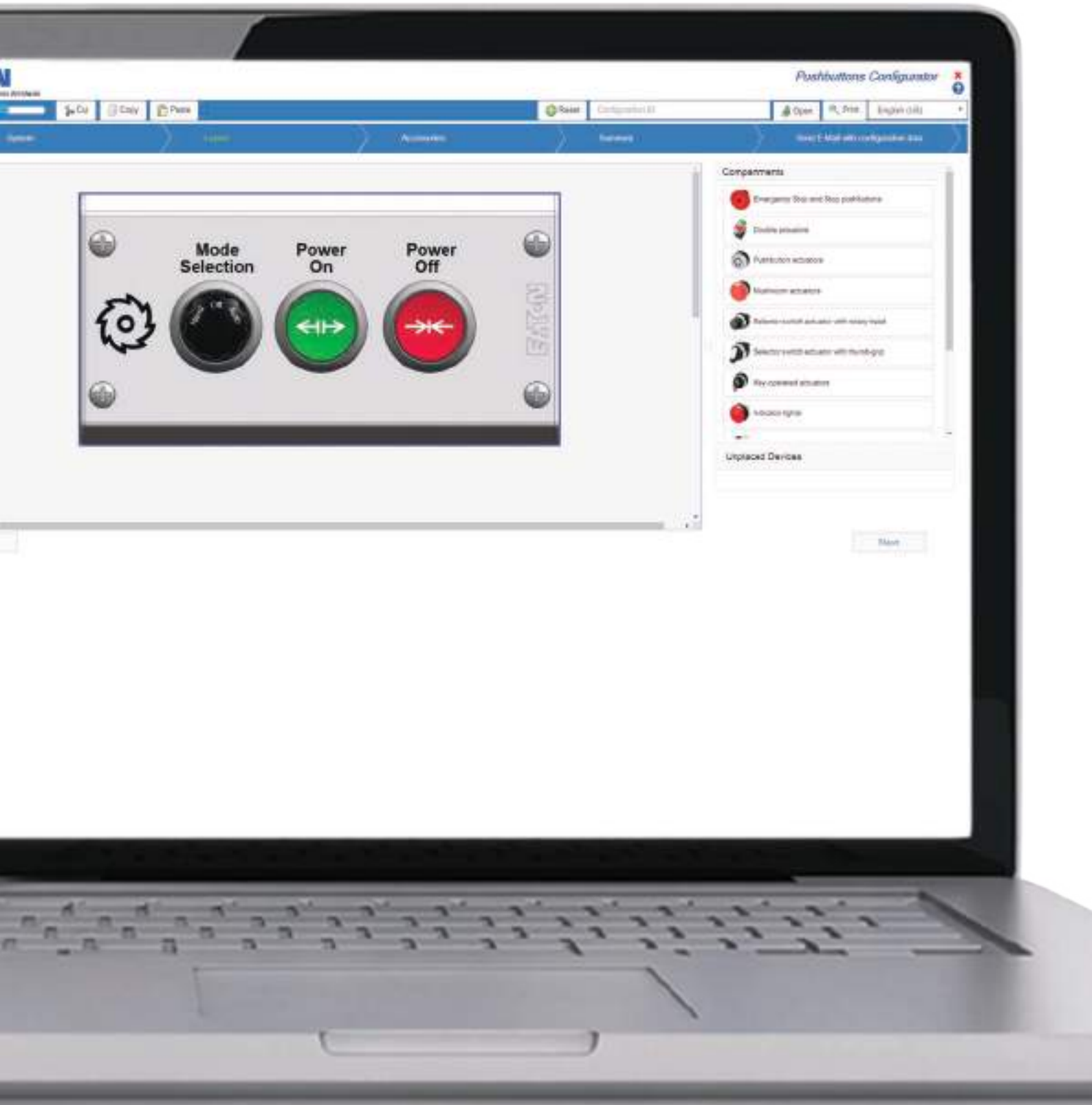
For customers and electrical wholesalers with 16-digit configuration ID.



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)





1.0 RMQ-Titan pilot devices

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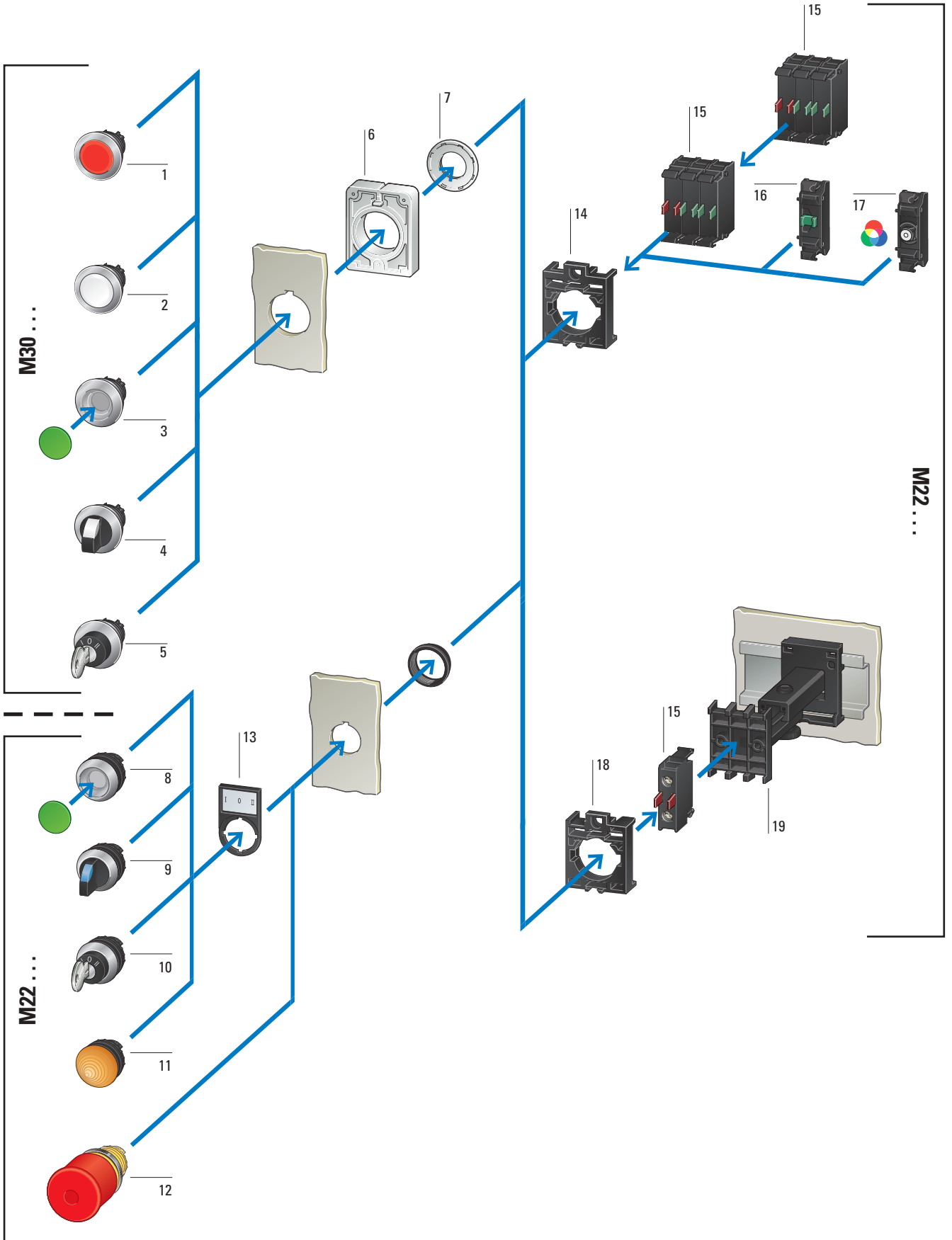
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1

System overview



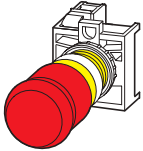
<p>M30 indicator lights 1</p> <hr/> <p>Design: flush</p> <p>Colors: white, green, red, yellow, blue, orange</p> <p>→ Page 51</p> <hr/> <p>M30 pushbuttons 2</p> <hr/> <p>Momentary and maintained</p> <p>Flush</p> <p>Colors: white, green, red, yellow, blue, black, gray</p> <p>→ Page 46</p> <hr/> <p>M30 illuminated pushbutton actuators 3</p> <hr/> <p>Illuminated pushbutton actuators</p> <p>Colors: white, green, red, yellow, blue, orange</p> <p>→ Page 52</p> <hr/> <p>M30 selector switches 4</p> <hr/> <p>2 and 3 positions</p> <p>With rotary head, thumb-grip</p> <p>Programmable maintained/momentary action</p> <p>Illuminated selector switches with transparent thumb-grip</p> <p>Colors: white, green, red, yellow, blue</p> <p>→ Page 47</p> <hr/> <p>M30 key-operated buttons 5</p> <hr/> <p>For individual lock mechanisms</p> <p>2 or 3 positions</p> <p>→ Page 48</p> <hr/> <p>RMQ-AFX 6</p> <hr/> <p>Anti-rotation tab</p> <p>Included with the equipment supplied with M30 front elements</p> <hr/> <p>Threaded rings 7</p> <hr/> <p>→ Page 80</p>	<p>M22 pushbuttons 8</p> <hr/> <p>Momentary and maintained</p> <p>Flush</p> <p>Colors: white, green, red, yellow, blue, black</p> <p>Illuminated pushbutton actuators</p> <p>Colors: white, green, red, yellow, blue, orange</p> <p>→ Page 29</p> <hr/> <p>M22 selector switches 9</p> <hr/> <p>2 and 3 positions</p> <p>With rotary head, thumb-grip</p> <p>Programmable maintained/momentary action</p> <p>Illuminated selector switches with transparent thumb-grip</p> <p>Colors: white, green, red, yellow, blue</p> <p>→ Page 32</p> <hr/> <p>M22 key-operated buttons 10</p> <hr/> <p>For individual lock mechanisms</p> <p>2 or 3 positions</p> <p>→ Page 33</p> <hr/> <p>M22 indicator lights 11</p> <hr/> <p>Design: flush, conical</p> <p>Colors: white, green, red, yellow, blue, orange</p> <p>→ Page 37</p> <hr/> <p>Controlled stop/emergency switching off buttons 12</p> <hr/> <p>Tamper-proof as defined in ISO 13850/EN 418</p> <p>Can be secured with a sealable shroud</p> <p>Additional labels, with inscription or blank</p> <p>→ Page 19</p> <hr/> <p>Label mounts 13</p> <hr/> <p>For insert labels</p> <p>Color: black</p> <p>Insert labels: aluminum color, with inscription or blank, can be engraved</p> <p>→ Page 65</p>	<p>Mounting adapter 14</p> <hr/> <p>For flush mounting</p> <p>For contact and LED elements</p> <p>→ Page 55</p> <hr/> <p>Contact elements 15</p> <hr/> <p>Normally closed contact and normally open contact</p> <p>Universal contacts suitable for use with electronic devices</p> <p>Safety function implemented with positive opening as defined in IEC/EN 60947-5-1</p> <p>Max. 2 levels, each with 3 contact elements</p> <p>→ Page 55</p> <hr/> <p>Flat Rear contact elements 16</p> <hr/> <p>Cage Clamp with push-in terminals</p> <p>→ Page 61</p> <hr/> <p>Flat Rear LED elements 17</p> <hr/> <p>Cage Clamp with push-in terminals</p> <p>→ Page 61</p> <hr/> <p>Centering adapter 18</p> <hr/> <p>For centering pilot device elements when using a telescopic clip</p> <p>→ Page 79</p> <hr/> <p>telescopic clip 19</p> <hr/> <p>For adjusting the depth of rear mounting devices in CI and CI-K enclosures and cabinets</p> <p>→ Page 79</p>
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<p>Emergency-stop pushbuttons, Emergency-stop pushbuttons (Mushroom-shaped) 1</p> <hr/> <p>30 mm Diameter</p> <hr/> <p>Non-illuminated/illuminated</p> <hr/> <p>Tamper-proof as defined in ISO 13850/EN 418</p> <hr/> <p>European Machinery Safety Directive 2006/42/EG</p> <hr/> <p>Twist or pull release</p> <hr/> <p>38 mm Diameter</p> <hr/> <p>Non-illuminated</p> <hr/> <p>Can be illuminated with LED</p> <hr/> <p>With MS1 - MS20 lock mechanism</p> <hr/> <p>With lock mechanism for master key system</p> <hr/> <p>Tamper-proof as defined in ISO 13850/EN 418</p> <hr/> <p>European Machinery Safety Directive 2006/42/EC</p> <hr/> <p>Can be secured with a sealable shroud</p> <hr/> <p>Additional labels, with inscription or blank</p> <hr/> <p>Twist or pull release</p> <hr/> <p>→ Page 18</p>	<p>Emergency-stop pushbuttons, Emergency-stop pushbuttons (Palm-tree shape) 4</p> <hr/> <p>With mechanical position indicator</p> <hr/> <p>45 mm and 60 mm diameter</p> <hr/> <p>Tamper-proof as defined in ISO 13850/EN 418</p> <hr/> <p>European Machinery Safety Directive 2006/42/EC</p> <hr/> <p>Additional labels, with inscription or blank</p> <hr/> <p>Twist release</p> <hr/> <p>→ Page 19</p>	<p>Mounting adapters 9</p> <hr/> <p>For flush mounting</p> <hr/> <p>For contact and LED elements when using M22-A...</p> <hr/> <p>→ Page 55</p>
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<p>Emergency-stop pushbuttons, Emergency-stop pushbuttons (Palm-tree shape) 3</p> <hr/> <p>Can be illuminated with LED</p> <hr/> <p>45 mm and 60 mm diameter</p> <hr/> <p>Tamper-proof as defined in ISO 13850/EN 418</p> <hr/> <p>European Machinery Safety Directive 2006/42/EC</p> <hr/> <p>Additional labels, with inscription or blank</p> <hr/> <p>Twist or pull release</p> <hr/> <p>→ Page 19</p>	<p>Emergency stop labels Emergency-Stop labels 6</p> <hr/> <p>Round, square, and rectangular types</p> <hr/> <p>Single-language, multi-language, custom inscription possible</p> <hr/> <p>→ Page 21</p>	<p>Self-monitoring contact 11</p> <hr/> <p>Front mounting or base mounting</p> <hr/> <p>1 N/C and 1 N/O in series</p> <hr/> <p>Versions: 2 N/C 1 N/O; 1 N/C 1 N/O</p> <hr/> <p>For safety standards of up to SIL 3 as defined in EN 62061 or performance level e as defined in ISO 13849-1</p> <hr/> <p>→ Page 56</p>
<p>Emergency-stop pushbuttons, Emergency-stop pushbuttons (Palm-tree shape) 3</p> <hr/> <p>Can be illuminated with LED</p> <hr/> <p>45 mm and 60 mm diameter</p> <hr/> <p>Tamper-proof as defined in ISO 13850/EN 418</p> <hr/> <p>European Machinery Safety Directive 2006/42/EC</p> <hr/> <p>Additional labels, with inscription or blank</p> <hr/> <p>Twist or pull release</p> <hr/> <p>→ Page 19</p>	<p>Illuminated ring 7</p> <hr/> <p>Versions:</p> <hr/> <p>24 V AC/DC, 120 V AC, 230 V AC</p> <hr/> <p>Continuous light</p> <hr/> <p>Flashing light with separate driver</p> <hr/> <p>Chaser light with separate driver, 24 V AC/DC</p> <hr/> <p>With three LED rows that can be driven separately</p> <hr/> <p>→ Page 20</p>	<p>Enclosure 12</p> <hr/> <p>IP67 surface mounting enclosures with up to 6 mounting locations</p> <hr/> <p>IP55 surface mounting enclosures with up to 12 mounting locations</p> <hr/> <p>IP54 flush mounting plates with up to 6 mounting locations</p> <hr/> <p>IP40 shrouds for flush mounting plates</p> <hr/> <p>→ Page 75</p>
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Product selection

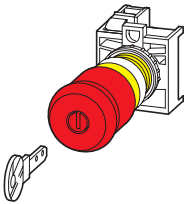
Contact configuration:	Contact sequence	Degree of protection	Catalog Number Article no.	Std. pack	Notes
☉ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1					
N/O = Normally open contact					
N/C = Normally closed contact					



Emergency-stop pushbuttons

Tamper-proof as defined in ISO 13850/EN 418
Pull release
Max. number of contacts: 4 M22-(C)K...

–	1 N/C		IP66, IP69K	M22-PV/K01 216515	5 units	 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	 BAUART GEPRÜFT TYPE APPROVED
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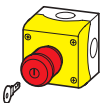
Contact configuration:	Contact sequence	Degree of protection	Catalog Number Article no.	Std. pack
☉ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1				
N/O = Normally open contact				
N/C = Normally closed contact				



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

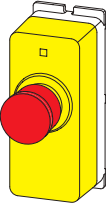






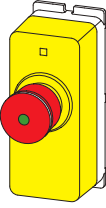








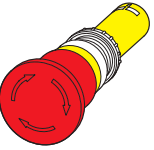


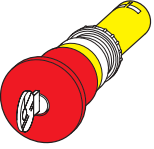


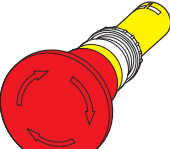


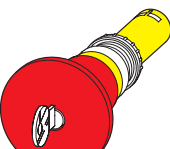


Emergency stop key-release mushroom button

With 1 key
MS1 lock mechanism

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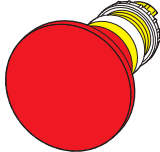



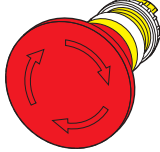


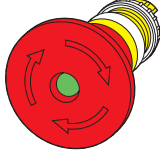

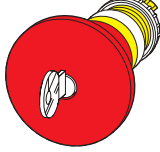



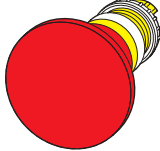



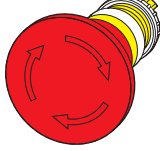


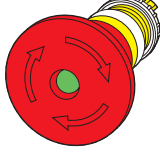

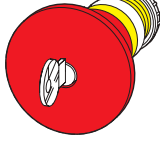



M22 und C22 – Controlled stop/emergency stop complete devices





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 1 units 2010741
			RMQ-FLAT-COMBINATION 2012027

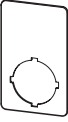
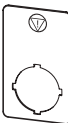
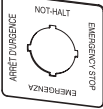


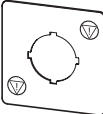

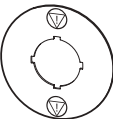
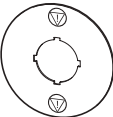
	Mushroom head color	Contact configuration N/O = Normally open contact N/C = Normally closed contact	Catalog Number Article no.	Std. pack
Controlled stop/emergency stop buttons, IP67, IP69K with screw terminal				
Twist release Palm, 45 mm diameter 	Without illumination 	2 N/C	C22-PVT45P-K02 121611	1 units
	Without illumination 	1 N/O	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	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	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	C22-PVS60P-MS1-K11 121620	

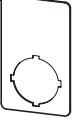
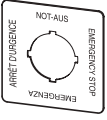


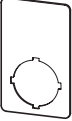
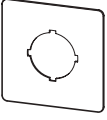
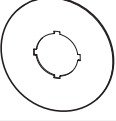


Notes ⊕ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1
With screw terminals

	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 F0276) → 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	

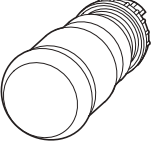
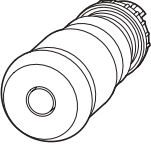

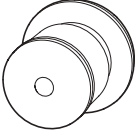
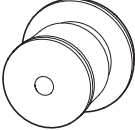
	illumination		Mushroom head color	Catalog Number Article no.	Std. pack	
Controlled stop/emergency stop buttons, IP67, IP69K						
Pull release Palm, 45 mm diameter 	Without illumination			M22-PV45P 152862	1 units	
				M22-PV45P-GVP 199375	10 units	
	Without illumination	With mechanical position indicator 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	
				M22-PV60P-MPI 152865		
	Without illumination	With mechanical position indicator Green position indicator → Button not activated Red position indicator → Button activated				
	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
					M22-PVS60P-MS* 121471	
Without illumination		MS2 - MS20 individual lock mechanisms Not suitable for master key systems * → 2, ..., 20 (d. h.: M22-PVS60P-MS2, ..., M22-PVS60P-MS20)				
	Without illumination	Ronis 455 individual lock mechanism Not suitable for master key systems		M22-PVS60P-RS 121467		

	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	1 units	
			RMQ-FLAT-COMBINATION 2012027		
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	
	NÖDSTOP	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	
	Blank	–	●	M22-XAK 216464	
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

Notes¹⁾ Label Editor in Pushbutton Configurator → www.eaton.com/config/rmq

		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					
Pull release 30 mm button diameter 	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					
Pull release 30 mm button diameter 	Without illumination, pull release	●	IP67, IP69K	M30S-PV30 197547	5 units
	Can be illuminated with LED element, pull release	●	IP67, IP69K	M30S-PVL30 197549	

1.3

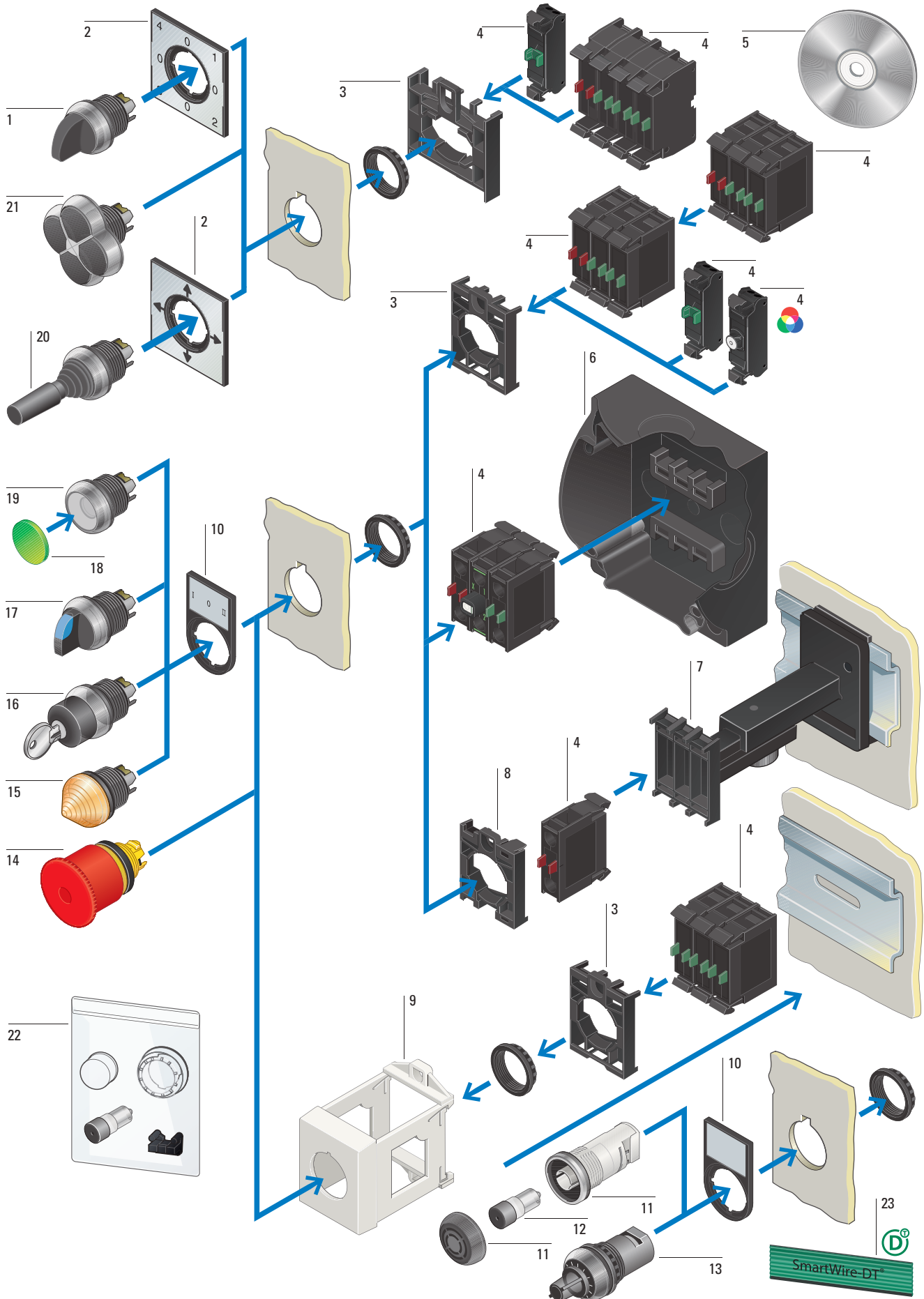
RMQ-Titan pilot devices

M22 – System overview

Moeller series

1






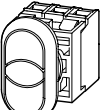

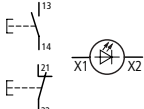


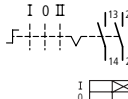
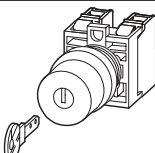

System overview



<p>M22 4-way selector switches 1</p> <p>4 positions With rotary head or thumb-grip 0-1-0-2-0-3-0-4 maintained action → Page 32</p> <hr/> <p>Labels with label mounts 2</p> <p>Color: aluminum Labels: with inscription, with custom inscription, blank → Page 36</p> <hr/> <p>Mounting adapter 3</p> <p>For flush mounting For contact and LED elements when using M22-A... For contact elements when using M22-A4 → Page 55</p> <hr/> <p>(Double) contact elements 4</p> <p>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</p> <hr/> <p>LED elements 4</p> <p>Voltage range: 12 - 30 V AC/DC 85 - 264 V AC → Page 58</p> <hr/> <p>Labelling with convenience 5</p> <p>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"</p> <hr/> <p>Enclosure 6</p> <p>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</p> <hr/> <p>Telescopic clip 7</p> <p>4 positions For adjusting the depth of rear mounting devices in CI and CI-K enclosures and cabinets → Page 79</p>	<p>Centering adapter 8</p> <p>For centering pilot device elements when using a telescopic clip → Page 79</p> <hr/> <p>IVS top-hat rail adapter 9</p> <p>For direct mounting on IEC/EN 60175 DIN-rail → Page 79</p> <hr/> <p>Label mounts 10</p> <p>For insert labels Color: black Insert labels: aluminum color, with inscription or blank, can be engraved → Page 65</p> <hr/> <p>Acoustic device 11</p> <p>IP40 degree of protection Without buzzer → Page 39</p> <hr/> <p>Buzzer for acoustic device 12</p> <p>Continuous tone, pulse tone 18 - 30 V DC → Page 39</p> <hr/> <p>Potentiometer 13</p> <p>Resistances of 1 kΩ - 1 MΩ 3 individual connections With screw terminals → Page 39</p> <hr/> <p>Controlled stop/emergency switching off buttons 14</p> <p>Tamper-proof as defined in ISO 13850/EN 418 Can be secured with a sealable shroud Additional labels, with inscription or blank → Page 19</p> <hr/> <p>Indicator lights 15</p> <p>Design: flush, conical Colors: white, green, red, yellow, blue → Page 37</p> <hr/> <p>Key-operated buttons 16</p> <p>2 and 3 positions Programmable momentary/ maintained action and key withdraw Suitable for master key systems → Page 33</p> <hr/> <p>Changeover switches 17</p> <p>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</p>	<p>Button plates/Button lenses 18</p> <p>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</p> <hr/> <p>Pushbuttons 19</p> <p>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</p> <hr/> <p>Joysticks 20</p> <p>4 positions → Page 35</p> <hr/> <p>4-way pushbuttons 21</p> <p>4 positions Pushbuttons, momentary → Page 36</p> <hr/> <p>Accessory 22</p> <p>→ Page 79</p> <hr/> <p>SmartWire-DT 23</p> <hr/> <p>Product characteristics</p> <ul style="list-style-type: none"> • 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
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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							
		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

Silver bezel

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	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
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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

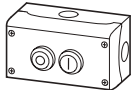
With 1 key
2 positions, maintained
MS1 lock mechanism

1	1 N/O	1 N/C		●	RAL 7035	IP66	M22-WRS/KC11/I 216526	1 units
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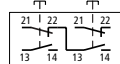


Assembled control station

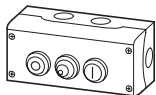
Without indicator lights



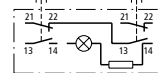
2	2 N/O	2 N/C		●	RAL 7035	IP67, IP69K	M22-I2-M1 216529	1 units
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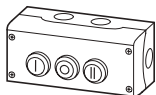
With white indicator light, LED element
85 - 264 V AC



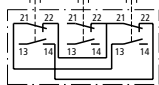
2	2 N/O	2 N/C		●	RAL 7035	IP67, IP69K	M22-I3-M2 216533	1 units
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Assembled control station



3	3 N/O	3 N/C		●	RAL 7035	IP67, IP69K	M22-I3-M1 216532	1 units
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Customized complete units

Configuration online via Pushbutton Configurator
→ www.eaton.com/config/rmq

M22-COMBINATION 2010741	1 units
RMQ-FLAT-COMBINATION 2012027	

Design	Button plate	Silver bezel Catalog Number Article no.	Black bezel Catalog Number Article no.	Std. pack
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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

2nd 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

Button plate	Silver bezel		Black bezel		Notes	
	Catalog Number Article no.	Std. pack	Catalog Number Article no.	Std. pack		
IP67, IP69K pushbuttons						
Gold-plated bezel → Page 79						
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
		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
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IP67, IP69K pushbuttons

Gold-plated bezel → Page 79

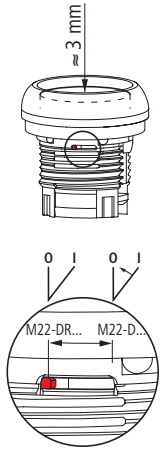
Extended, momentary



	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		
	M22-DH-G-X1 216657		M22S-DH-G-X1 216658		
	M22-DH-S-X0 216659		M22S-DH-S-X0 216660		
	M22-DH-W-X1 216661		M22S-DH-W-X1 216662		

Extended, maintained



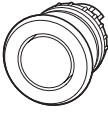

	M22-DRH-S 216663	5 units	M22S-DRH-S 216664	5 units	Programmable maintained/momentary pushbutton action 
	M22-DRH-W 216665		M22S-DRH-W 216666		
	M22-DRH-R 216667		M22S-DRH-R 216668		
	M22-DRH-G 216669		M22S-DRH-G 216670		
	M22-DRH-Y 216671		M22S-DRH-Y 216672		
	M22-DRH-B 216673		M22S-DRH-B 216674		
	M22-DRH-R-X0 216675		M22S-DRH-R-X0 216676		
	M22-DRH-G-X1 216677		M22S-DRH-G-X1 216678		
	M22-DRH-S-X0 216679		M22S-DRH-S-X0 216680		
	M22-DRH-W-X1 216681		M22S-DRH-W-X1 216682		

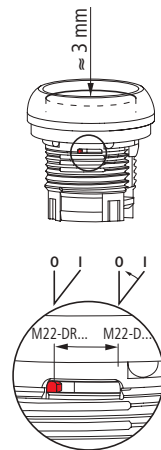
Pushbuttons with guard ring, momentary, IP66, IP69K

Gold-plated bezel → Page 79



–	M22-DG-X 220921	5 units	–	–	–
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Button plate	Button color	Silver bezel Catalog Number Article no.	Std. pack	Black bezel Catalog Number Article no.	Std. pack	Notes	
Mushroom pushbuttons, IP67, IP69K							
Gold-plated bezel → Page 79							
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:	Button plate	Inscription	Function	Silver bezel	Std. pack	Black bezel	Std. pack
▷ = momentary (MO)				Catalog Number		Catalog Number	
┘ = maintained (MA)				Article no.		Article no.	

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
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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
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With thumb-grip



45°			–		M22-WRK4 279431	5 units	M22S-WRK4 279432	5 units
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Notes

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

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

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 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

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*-A1¹⁾ 217440	5 units	M22S-WRS-MS*-A1¹⁾ 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*¹⁴⁾ 229094	5 units	M22S-WRS3-A*¹⁴⁾ 229095	5 units
MS2 – MS20 lock mechanisms (enter lock mechanism number in the part no.)	Selectable	Selectable ²⁾	–	–	M22-WRS3-MS*-A*¹²⁾ 217442	5 units	M22S-WRS3-MS*-A*¹²⁾ 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*-*¹³⁾ 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

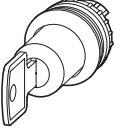
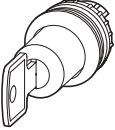
⁴⁾ Version A10 cannot be selected.

Function:	Key withdrawable at position	Silver bezel Catalog Number Article no.	Std. pack	Black bezel Catalog Number Article no.	Std. pack
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↳ = momentary (MO)
 ↓ = maintained (MA)

Key-operated buttons for master key systems, IP66


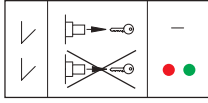


Gold-plated bezel → Page 79
 With 2 keys

2 positions	Function	Key withdrawable at position	Silver bezel Catalog Number Article no.	Std. pack	Black bezel Catalog Number Article no.	Std. pack
	↳ 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		
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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 F0276) → 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

Text	Function:	For use with	Silver bezel Catalog Number Article no.	Std. pack	Black bezel Catalog Number Article no.	Std. pack
	↘					
	↙					

↘ = momentary (MO)
↙ = maintained (MA)



Joysticks, IP65

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

2 positions	↔	–	M22-WJ2H 289195	1 units	M22S-WJ2H 289197	1 units
	↔	–	M22-WJS2H¹⁾ 178570		M22S-WJS2H¹⁾ 178572	
	—	–	M22-WRJ2H 289199		M22S-WRJ2H 289241	
	—	–	M22-WRJS2H¹⁾ 178574		M22S-WRJS2H¹⁾ 178576	
	↕	–	M22-WJ2V 289196		M22S-WJ2V 289198	
	↕	–	M22-WJS2V¹⁾ 178571		M22S-WJS2V¹⁾ 178573	
		–	M22-WRJ2V 289240		M22S-WRJ2V 289242	
		–	M22-WRJS2V¹⁾ 178575		M22S-WRJS2V¹⁾ 178577	
4 positions	+	–	M22-WRJ4 279415	5 units	M22S-WRJ4 279416	5 units
	+	–	M22-WRJS4¹⁾ 178566		M22S-WRJS4¹⁾ 178567	
	↔↕	–	M22-WJ4 279417		M22S-WJ4 279418	
	↔↕	–	M22-WJS4¹⁾ 178568		M22S-WJS4¹⁾ 178569	



Joysticks with two operating points per operating direction




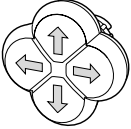




These joysticks are combined with M22-K10 normal N/O and M22-K10P early-make contacts.

2 positions	↔↔	–	M22-WJ2H-2P 111508	1 units		
	↔↔	–	M22-WJS2H-2P¹⁾ 178565			
	↕↕	–	M22-WJ2V-2P 111507			
	↕↕	–	M22-WJS2V-2P¹⁾ 178564			
4 positions	↔↕↔↕	–	M22-WJ4-2P 110836			
	↔↕↔↕	–	M22-WJS4-2P¹⁾ 178563			

Notes ¹⁾ With metal shaft

Text	Function:	For use with	Silver bezel	Std. pack	Black bezel	Std. pack
			Catalog Number Article no.		Catalog Number Article no.	
	▷ = momentary (MO) ▽ = maintained (MA)					

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-D14-S-X7 286338		M22S-D14-S-X7 286339	
Custom inscription and pushbutton color → Notes		–	M22-D14-*.* 286340		M22S-D14-*.* 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			
	Joysticks 4-way selector switches	M22-XCK 279433	10 units
	Joysticks 4-way selector switches	M22-XCK1 279434	
	2-position joysticks	M22-XCK3 290260	
	4-way selector switches	M22-XCK2 279435	
	Joysticks 4-way selector switches	M22-XCK-* 279436	

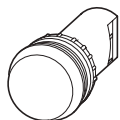
	Color		Design	Protection Style	Catalog Number Article no.	Std. pack
Indicator lights						
LEDs for indicator lights → Page 58 ff.						
		white	flush	IP67, IP69K	M22-L-W 216771	10 units
		red	flush	IP67, IP69K	M22-L-R 216772	
					M22-L-R-GVP150 173973	150 units
		green	flush	IP67, IP69K	M22-L-G 216773	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

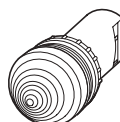
Color	Design	Protection Style	Catalog Number Article no.	Std. pack
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Compact indicator lights

Without lamp
for LEDs up to 2.4 W
With BA9s lamp socket



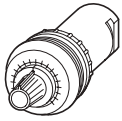
	white	flush	IP67, IP69K	M22-LC-W 216907	10 units
	red	flush	IP67, IP69K	M22-LC-R 216908	
	green	flush	IP67, IP69K	M22-LC-G 216909	
	yellow	flush	IP67, IP69K	M22-LC-Y 216910	
	blue	flush	IP67, IP69K	M22-LC-B 216911	
	orange	flush	IP67, IP69K	M22-LC-A 164376	
–	Without lens ¹⁾	flush	IP67, IP69K	M22-LC-X 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

Contact sequence	Resistance R kΩ	Silver bezel	Std. pack	Black bezel	Std. pack
		Catalog Number Article no.		Catalog Number Article no.	



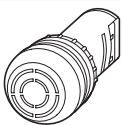
Potentiometers, IP66

3 separate screw connections, $P_{max} = 0.5\text{ W}$
Accuracy of resistance value: $\pm 10\%$ (linear)
M22...RH with large knob

	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 Δ Resistance
2nd asterisk Δ 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

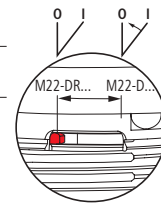
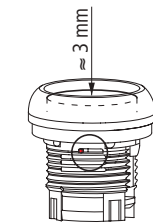
For BA9s socket
83 dB/10 cm,
18 - 30 mA,
Positive pin at X1,
f = 2300 Hz



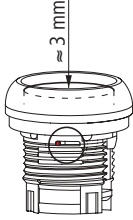
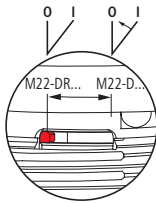










Continuous tone, 18 - 30 V DC	M22-XAM 229025	1 units
Pulsed tone, 24 V DC (+10%/–15%)	M22-XAMP 229028	

M22 – Illuminated pushbuttons

1

Color	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						
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		
		M22-DL-G-X1 216938	M22S-DL-G-X1 216939			
		M22-DL-W-X0 216940	M22S-DL-W-X0 216941			
		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		
		M22-DRL-G-X1 216959	M22S-DRL-G-X1 216960			
		M22-DRL-W-X0 216961	M22S-DRL-W-X0 216962			
		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			
		M22-DLH-G-X1 216977	M22S-DLH-G-X1 216978			
		M22-DLH-W-X0 216979	M22S-DLH-W-X0 216980			
		M22-DLH-W-X1 216981	M22S-DLH-W-X1 216982			



Color	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		

M22 – Illuminated selector switches

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) ∨

1.5

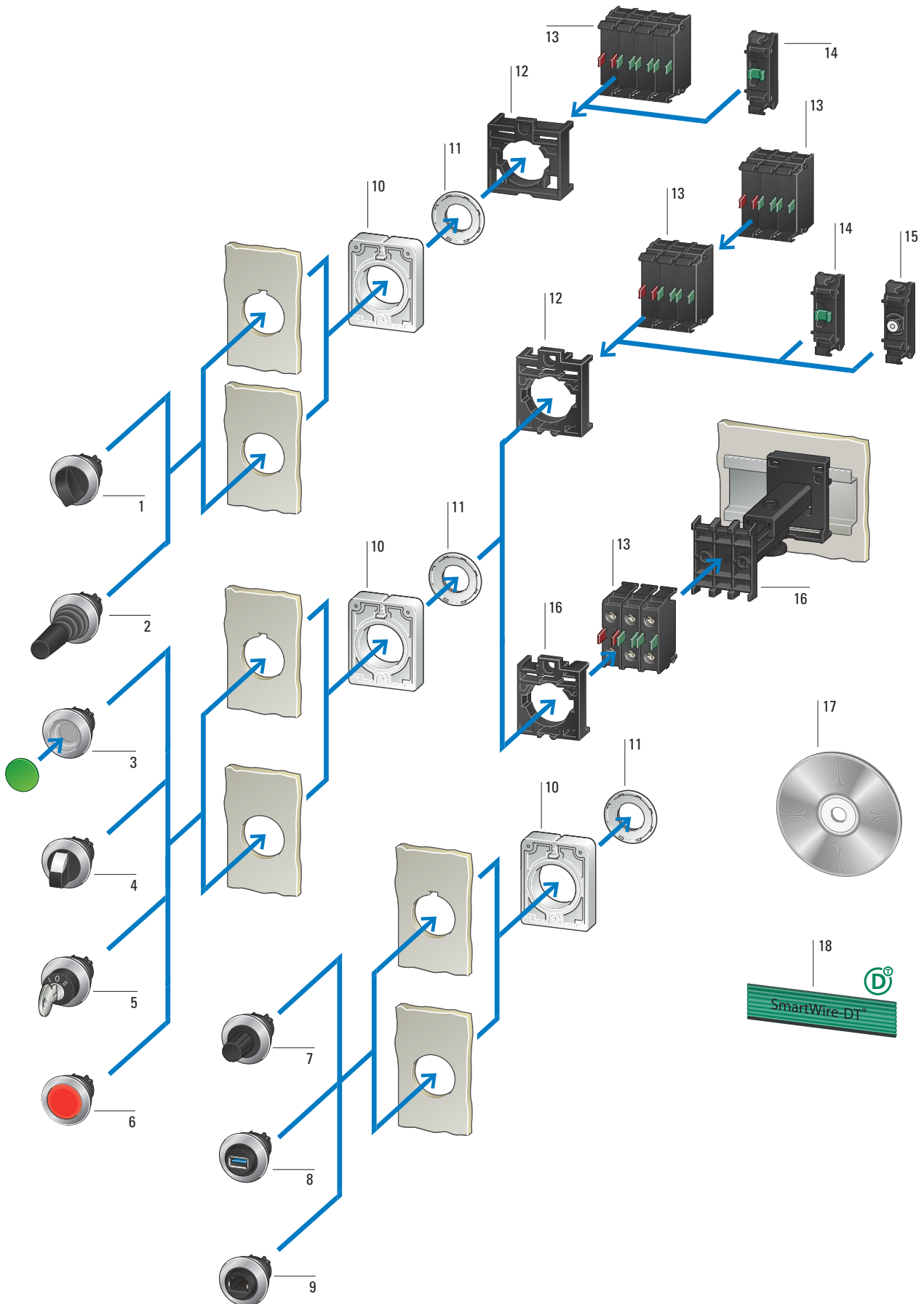
RMQ-Titan pilot devices

M30 – Flat Front – System overview

Moeller series





























1

System overview



<p>M30 4-way selector switches 1</p> <p>4 positions With rotary head or thumb-grip 0-1-0-2-0-3-0-4 maintained action → Page 47</p> <hr/> <p>M30 joysticks 2</p> <p>2 or 4 positions → Page 51</p> <hr/> <p>M30 pushbuttons 3</p> <p>Momentary and maintained flush Colors: white, green, red, yellow, blue, black Illuminated pushbutton actuators Colors: white, green, red, yellow, blue, orange → Page 46</p> <hr/> <p>M30 selector switches 4</p> <p>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</p> <hr/> <p>M30 key-operated buttons 5</p> <p>For individual lock mechanisms 2 or 3 positions Programmable momentary/maintained action and key withdraw Suitable for master key systems → Page 48</p> <hr/> <p>M30 indicator lights 6</p> <p>Colors: white, green, red, yellow, blue, orange → Page 51</p> <hr/> <p>SmartWire-DT encoders, M30 potentiometers 7</p> <p>Resistances of 1 kΩ - 1 MΩ 3 individual connections → Page 54</p>	<p>M30 panel mount connectors 8</p> <p>USB 3.0 → Page 81</p> <hr/> <p>M30 panel mount connectors 9</p> <p>RJ45 → Page 81</p> <hr/> <p>RMQ-AFX 10</p> <p>Anti-rotation tab Included with the equipment supplied with M30 front elements</p> <hr/> <p>Threaded rings 11</p> <p>→ Page 80</p> <hr/> <p>Mounting adapter 12</p> <p>For flush mounting For contact and LED elements → Page 55</p> <hr/> <p>Contact elements 13</p> <p>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</p> <hr/> <p>Flat Rear contact elements 14</p> <p>Cage Clamp with push-in terminals → Page 61</p> <hr/> <p>Flat Rear LED elements 15</p> <p>Cage Clamp with push-in terminals → Page 61</p>	<p>telescopic clip 16</p> <p>For adjusting the depth of rear mounting devices in CI and CI-K enclosures and cabinets → Page 79</p> <hr/> <p>Labelling with convenience 17</p> <p>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"</p> <hr/> <p>SmartWire-DT 18</p> <hr/> <p>Product characteristics</p> <ul style="list-style-type: none"> • 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
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Product selection

Button plate		Metal bezel, titanium design	Metal bezel, stainless steel	Std. pack
		Catalog Number Article no.	Catalog Number Article no.	
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
Maintained¹⁾ 		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	
Maintained¹⁾ 	Without button plate	M30C-FDR-X 182948	M30I-FDR-X 188098	1 units

Notes








¹⁾ Maintained/momentary action can be changed on device

Function:	Button plate	Metal bezel, titanium design	Metal bezel, stainless steel	Std. pack	Ordering notes
▷ = momentary (MO)		Catalog Number Article no.	Catalog Number Article no.		
└ = maintained (MA)					







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	Button plate	M30C-FW 187087	M30I-FW 188134	1 units
	▷ 40° 			
	└ 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	Button plate	M30C-FWK 187103	M30I-FWK 188180	1 units
	▷ 40°			
	└ 60°	M30C-FWRK 187109	M30I-FWRK 188186	
With thumb-grip	Button plate	M30C-FWKV 187102	M30I-FWKV 188179	1 units
	✓ 60°			

3 positions¹⁾

With rotary head	Button plate	M30C-FW3 187089	M30I-FW3 188136	1 units
	40° ◁▷ 40° 			
	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	Button plate	M30C-FWK3 187104	M30I-FWK3 188181	1 units
	40° ◁▷ 40°			
	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	Button plate	M30C-FWR4 187091	M30I-FWR4 188138	1 units
				
With thumb-grip	Button plate	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

M30 – Key-operated buttons (Flat Front)

1

Function:	Lock mechanism	Metal bezel, titanium design Catalog Number Article no.	Metal bezel, stainless steel Catalog Number Article no.	Std. pack
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▷ = 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	Metal bezel, stainless steel	Std. pack
		Catalog Number	Catalog Number	
		Article no.	Article no.	

↳ = 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
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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 F0276) → Data sheet in online catalog

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

Function:	Lock mechanism	Metal bezel, titanium design Catalog Number Article no.	Metal bezel, stainless steel Catalog Number Article no.	Std. pack
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- ↳ = 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 F0276)
→ 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 F0276) → Data sheet in online catalog

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

Function:	Metal bezel, titanium design	Metal bezel, stainless steel	
> = momentary (MO) < = maintained (MA)	Catalog Number Article no.	Catalog Number Article no.	Std. pack



Joysticks

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

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
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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	
Maintained¹⁾ 		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	
	Maintained¹⁾ 	Without button plate	M30C-FDRL-X 182955	

Notes¹⁾ Maintained/momentary action can be changed on device

Function:	Thumb-grip	Metal bezel, titanium design Catalog Number Article no.	Metal bezel, stainless steel Catalog Number Article no.	Std. pack
↳ = momentary (MO)				
└ = maintained (MA)				

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°	●	M30C-FWLK-R 187122	M30I-FWLK-R 188199	
└ 60°	●	M30C-FWRLK-R 187025	M30I-FWRLK-R 188079	
↳ 40°	●	M30C-FWLK-G 187121	M30I-FWLK-G 188198	
└ 60°	●	M30C-FWRLK-G 187024	M30I-FWRLK-G 188078	
↳ 40°	●	M30C-FWLK-Y 187129	M30I-FWLK-Y 188070	
└ 60°	●	M30C-FWRLK-Y 187027	M30I-FWRLK-Y 188081	
↳ 40°	●	M30C-FWLK-B 187120	M30I-FWLK-B 188197	
└ 60°	●	M30C-FWRLK-B 187023	M30I-FWRLK-B 188077	



2 positions (V configuration)

∨ 60°	○	M30C-FWLKV-W 187126	M30I-FWLKV-W 188067	1 units
∨ 60°	●	M30C-FWLKV-R 187125	M30I-FWLKV-R 188202	
∨ 60°	●	M30C-FWLKV-G 187124	M30I-FWLKV-G 188201	
∨ 60°	●	M30C-FWLKV-Y 187127	M30I-FWLKV-Y 188068	
∨ 60°	●	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°	●	M30C-FWLK3-R 187117	M30I-FWLK3-R 188194	
60° ↙↘ 60°	●	M30C-FWRLK3-R 187133	M30I-FWRLK3-R 188074	
40° ↙↘ 40°	●	M30C-FWLK3-G 187116	M30I-FWLK3-G 188193	
60° ↙↘ 60°	●	M30C-FWRLK3-G 187132	M30I-FWRLK3-G 188073	
40° ↙↘ 40°	●	M30C-FWLK3-Y 187119	M30I-FWLK3-Y 188196	
60° ↙↘ 60°	●	M30C-FWRLK3-Y 187022	M30I-FWRLK3-Y 188076	
40° ↙↘ 40°	●	M30C-FWLK3-B 187115	M30I-FWLK3-B 188192	
60° ↙↘ 60°	●	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) ↙↘

Resistance	Scale/inscription	Contact sequence	Metal bezel, titanium design Catalog Number Article no.	Metal bezel, stainless steel Catalog Number Article no.	Std. pack
R					
kΩ					



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
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–	Metal bezel Flat Front		M30C-FR-SWD 187080	M30I-FR-SWD 188127	1 units
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SmartWire-DT encoders, IP65

With actuation function
Only in conjunction with M22-SWD-INC function element




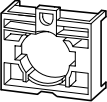
–	Silver bezel M22	–	M22-INC-SWD 179981	–	1 units
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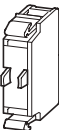

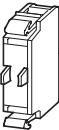
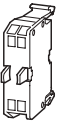


–	Metal bezel Flat Front	–	M30C-FINC-SWD 187079	M30I-FINC-SWD 188126	1 units
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Notes:

- 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: "-"

		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	<table border="1"><tr><td>1/4</td><td>3/6</td><td>2/5</td></tr></table>	1/4	3/6	2/5	M22-A 216374	50 units	
	1/4	3/6	2/5					
		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	<table border="1"><tr><td>3</td><td>2</td><td>4</td><td>1</td></tr></table>	3	2	4	1	M22-A4 279437	10 units
3	2	4	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				
Contact elements										
Front mounting 	Screw terminals	1 N/O			<table border="1"><tr><td>1/4</td><td>3/6</td><td>2/5</td></tr></table>	1/4	3/6	2/5	M22-K10 216376	20 units
		1/4	3/6	2/5						
	1 N/O				M22-K10-GVP 216377	500 units				
	1 N/O					M22-K10P 110835	20 units			
	1 N/C				<table border="1"><tr><td>1/4</td><td>3/6</td><td>2/5</td></tr></table>	1/4	3/6	2/5	M22-K01 216378	20 units
	1/4	3/6	2/5							
	1 N/C					M22-K01-GVP 216379	500 units			
1 N/C					M22-K01D 262165	20 units				
1 N/C				<table border="1"><tr><td>1/4</td><td>3/6</td><td>2/5</td></tr></table>	1/4	3/6	2/5	M22-K01PV6¹⁾ 150643	20 units	
1/4	3/6	2/5								
Base mounting 	Screw terminals	1 N/O			<table border="1"><tr><td>2</td><td>3</td><td>1</td></tr></table>	2	3	1	M22-KC10 216380	20 units
		2	3	1						
	1 N/O				M22-KC10-GVP 216381	200 units				
	1 N/C				<table border="1"><tr><td>2</td><td>3</td><td>1</td></tr></table>	2	3	1	M22-KC01 216382	20 units
2	3	1								
1 N/C					M22-KC01-GVP 216383	200 units				
Front mounting 	Spring-clamp terminals	1 N/O			<table border="1"><tr><td>1/4</td><td>3/6</td><td>2/5</td></tr></table>	1/4	3/6	2/5	M22-CK10 216384	20 units
		1/4	3/6	2/5						
	1 N/O				M22-CK10-GVP 199867	500 units				
	1 N/C				<table border="1"><tr><td>1/4</td><td>3/6</td><td>2/5</td></tr></table>	1/4	3/6	2/5	M22-CK01 216385	20 units
1/4	3/6	2/5								
1 N/C					M22-CK01-GVP 199866	500 units				
1 N/C					M22-CK01D 262510	20 units				
Base mounting 	Spring-clamp terminals	1 N/O			<table border="1"><tr><td>2</td><td>3</td><td>1</td></tr></table>	2	3	1	M22-CKC10 216386	20 units
		2	3	1						
	1 N/O				M22-CKC10-GVP 199881	100 units				
1 N/C				<table border="1"><tr><td>2</td><td>3</td><td>1</td></tr></table>	2	3	1	M22-CKC01 216387	20 units	
2	3	1								

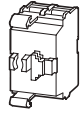
Notes ¹⁾ Only for M22-PV... if there are more than four contact elements → Exclusively use a maximum of six M22-K01PV6 units.

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
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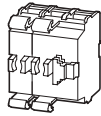
Self-monitoring contact elements

N/O is actuated when mounted on the pushbutton.

Front mounting

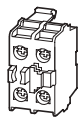


Screw terminals	1 N/O 1 N/C				M22-K01SMC10 121472	1 units
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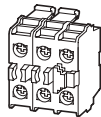


	1 N/O 2 N/C				M22-K02SMC10 121474	
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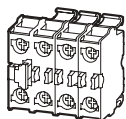
Base mounting



Screw terminals	1 N/O 1 N/C				M22-KC01SMC10 121473	1 units
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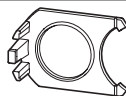
	1 N/O 2 N/C				M22-KC02SMC10 121720	
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	1 N/O 3 N/C				M22-KC03SMC10¹⁾ 173028	
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	2 N/O 2 N/C				M22-KC12SMC10¹⁾ 173029	
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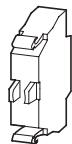
Signal contact actuator for SMC



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
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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

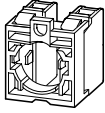


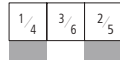
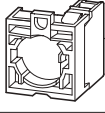



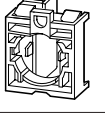

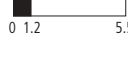



x = Sequence number on mounting adapter
y = Function number on contact element

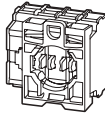
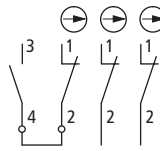
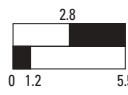

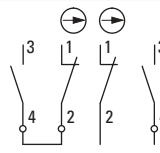
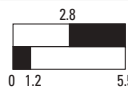
Terminal type	Contact configuration: ⊕ = Safety function implemented with positive opening as defined in IEC/EN 60947-5-1	Contact sequence	Contact travel diagram, stroke in connection with front element	Configuration	Catalog Number Article no.	Std. pack
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Complete 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
					M22-AK12SMC10 173027	1 units
	2 N/O 2 N/C ⊕			-	M22-AK03SMC10 173026	1 units
					M22-AK12SMC10 173027	1 units

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



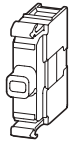
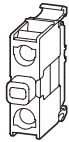
x = Sequence number on mounting adapter
y = Function number on contact element

Rated operating voltage	Rated operational current	Power consumption	Color	Catalog Number	Std. pack
U_e	I_e	P		Article no.	
V	mA	W			

LED elements with screw terminals

→ Page 85



Rated operating voltage	Rated operational current	Power consumption	Color	Catalog Number	Std. pack	
U_e	I_e	P		Article no.		
V	mA	W				
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-W¹⁾ 182905	20 units	
				●		M22-LED230TA-R¹⁾ 182906
				●		M22-LED230TA-G¹⁾ 182907
				●		M22-LED230TA-B¹⁾ 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	

Notes¹⁾ With interference signal protection²⁾ 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

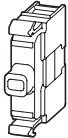
Rated operating voltage	Rated operational current	Power consumption	Color	Catalog Number	Std. pack
U_e	I_e	P		Article no.	
V	mA	W			

LED elements with Cage Clamp

→ Page 85
 Cage Clamp is a registered trademark
 of Wago Kontakttechnik GmbH, Minden, Germany

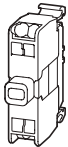


Front mounting



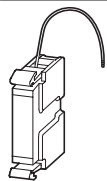
12 - 30 V AC/DC	8 - 15	0.26 at 24 V	○	M22-CLED-W	20 units	
				216569		
				M22-CLED-W-GVP	300 units	
				199868		
				●	M22-CLED-R	20 units
				216570		
85 - 264 V AC, 50/60 Hz	5 - 15	0.33 at 230 V	○	M22-CLED-G		
				216571		
				●	M22-CLED-B	
				218061		
				○	M22-CLED230-W	20 units
				216575		
85 - 264 V AC, 50/60 Hz	5 - 15	0.33 at 230 V	●	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	20 units	
				216572		
				●	M22-CLEDC-R	
				216573		
				●	M22-CLEDC-G	
				216574		
85 - 264 V AC, 50/60 Hz	5 - 15	0.33 at 230 V	○	M22-CLEDC-B		
				218062		
				○	M22-CLEDC230-W	20 units
				216578		
				●	M22-CLEDC230-R	
				216579		
85 - 264 V AC, 50/60 Hz	5 - 15	0.33 at 230 V	●	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	Std. pack
	Article no.	

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	10 units
	220 V AC/DC	M22-XLED220¹⁾	
LED test element For decoupled function test (lamp test)	12 - 240 V AC/DC	M22-XLED-T	
	85 - 264 V AC	M22-XLED230-T	
		231079	
		231080	

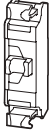
Notes ¹⁾ Maximum ambient temperature: -25°C to +55°C
 The LED's brightness will be reduced.

Contact element (Flat Rear)

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
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Front mounting



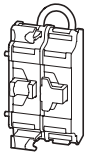
Contact elements (Flat Rear with Cage Clamp, push-in)

→ 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
			ZW = 5.5 mm		
	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
			ZW = 5.5 mm		
			ZW = 5.5 mm		

Complete assembly (Flat Rear with Cage Clamp, push-in)

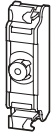
Combination of contact element and self-monitoring contact element M22-FK01SMC10, M22-A mounting adapter, and M22-XSMC signal contact actuator.

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
			ZW = 5.5 mm		
			ZW = 5.5 mm		

Rated operating voltage	Rated Current	Power consumption	Color	Catalog Number Article no.	Std. pack
U_e V	I_e mA	P W			

Front mounting

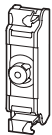


LED elements (Flat Rear with Cage Clamp, push-in)



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-RG¹⁾ 180799	
24 V DC	8 - 15	0.36 at 24 V	● ● ●	M22-FLED-RGB¹⁾ 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

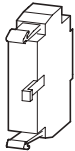

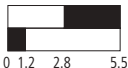
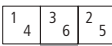
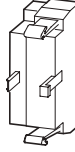

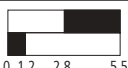

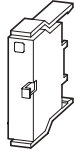

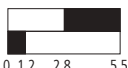
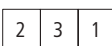
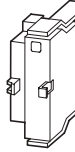

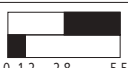
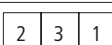
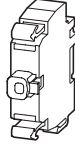







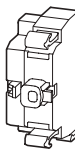


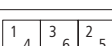




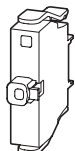


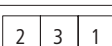




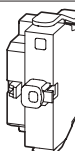


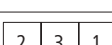




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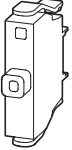
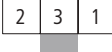





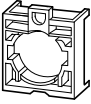

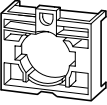
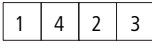
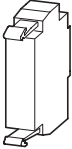
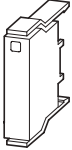
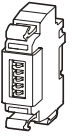

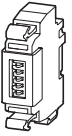

RMQ-Titan pilot devices

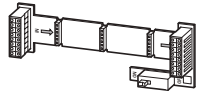
Moeller series

SmartWire-DT function elements

1

	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		 0 1.2 2.8 5.5		No LED	M22-SWD-K11 115964	20 units
		2		 0 1.2 2.8 5.5		No LED	M22-SWD-K22 115965
Base mounting 		1		 0 1.2 2.8 5.5		No LED	M22-SWD-KC11 115995
		2		 0 1.2 2.8 5.5		No LED	M22-SWD-KC22 115996
Front mounting 		1		 0 1.2 2.8 5.5			M22-SWD-K11LED-W 115972
						M22-SWD-K11LED-B 115973	
						M22-SWD-K11LED-G 115974	
						M22-SWD-K11LED-R 115975	
	2		 0 1.2 2.8 5.5			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		 0 1.2 2.8 5.5			M22-SWD-K11LEDC-W 116003	20 units
						M22-SWD-K11LEDC-B 116004	
						M22-SWD-K11LEDC-G 116005	
						M22-SWD-K11LEDC-R 116006	
	2		 0 1.2 2.8 5.5			M22-SWD-K22LEDC-W 116009	10 units
						M22-SWD-K22LEDC-B 116010	
						M22-SWD-K22LEDC-G 116011	
						M22-SWD-K22LEDC-R 116012	

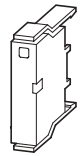
	Configuration	LED color	Catalog Number Article no.	Std. pack
LED elements				
Front mounting 			M22-SWD-LED-W 115966	20 units
			M22-SWD-LED-B 115967	
			M22-SWD-LED-G 115968	
			M22-SWD-LED-R 115969	
			M22-SWD-LED-RGB 197576	20 units
Function element, LED-RGB front LED element, for combination with RMQ-Titan operating elements M22-...				
Base mounting 			M22-SWD-LEDC-W 115997	20 units
			M22-SWD-LEDC-B 115998	
			M22-SWD-LEDC-G 115999	
			M22-SWD-LEDC-R 116000	
			M22-SWD-LEDC-RGB 198598	20 units
Function element, LED-RGB base LED element, for combination with RMQ-Titan operating elements M22-...				
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



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

	Catalog Number Article no.	Std. pack
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	



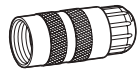
Link

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
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Connectors for SmartWire-DT round cables



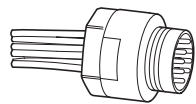
8-pole socket, flat	SWD4-SF8-67 116033	1 units
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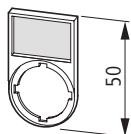
8-pole plug connector, flat	SWD4-SM8-67 116034	
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Housing bushing sockets

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

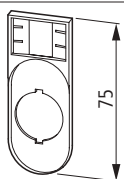
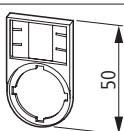


8-pole plug connector, M20	SWD4-SM8-20 116032	1 units
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Inscription	Catalog Number Article no.	Std. pack	Inscription	Catalog Number Article no.	Std. pack
Legend holders, complete					
IP66 30 x 50 mm, round, black (RAL 9005)					
- 0 I	M22S-ST-X88 216485	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				

Inscription	Color	Catalog Number Article no.	Std. pack	Notes
Legend holders without label				
IP66 Round, black (RAL 9005)				
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

Inscription or explanation	For use with	Color, symbol	Design: flush	Design: raised	Std. pack
			Catalog Number Article no.	Catalog Number Article no.	
Button plates for pushbutton actuators					
≤ 5 characters: letter height of 5 mm, > 5 characters: letter height of 3 mm					
–	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 Δ Color: -R, -G, -B, -W, -Y, -S, -U (U = gray)
 2nd wildcard Δ 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	Design: raised	Std. pack
			Catalog Number Article no.	Catalog Number Article no.	
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-XD-B-GB14 218204	M22-XDH-B-GB14 218249	10 units
FORWARD	M22-DG-X M30C-FD-X		M22-XD-S-GB15 218205	M22-XDH-S-GB15 218250	
REVERSE	M30C-FDR-X C22-D-X... C30C-FD-X...		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

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	

Inscription or explanation	For use with	Color	Design: flush		Design: raised	
			Catalog Number Article no.	Std. pack	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 Δ color: -R, -G, -B, -W, -Y, -A
 2nd wildcard Δ 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	



























1.6

RMQ-Titan pilot devices

Moeller series


























Button lenses for illuminated pushbutton actuators







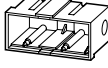
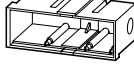

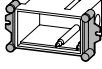
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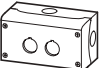
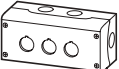
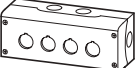
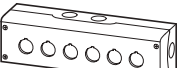
Inscription or explanation	For use with	Color	Design: flush		Design: raised	
			Catalog Number Article no.	Std. pack	Catalog Number Article no.	Std. pack
Button lenses for illuminated pushbutton actuators						
≤ 5 characters: letter height of 5 mm > 5 characters: letter height of 3 mm						
–	M22(S)-DL-X 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

Button lenses for illuminated pushbutton actuators

Inscription or explanation	For use with	Color, symbol	Design: flush		Design: raised	
			Catalog Number Article no.	Std. pack	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		M22-XDL-B-GB14 218336	10 units	M22-XDLH-B-GB14 218379	10 units
FORWARD	M30C-FDL-X M30C-FDRL-X		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	Catalog Number Article no.	With customized inscription ³⁾	Std. pack			
								Catalog Number Article no.				
Surface mounting enclosure												
With stainless steel screws												
	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-XPV60¹⁾ 167798	M22-IY1-XPV60-* 197630
	Stainless steel			–	–	–	M22-I1M/SS²⁾ 118455	–				
	Metal			●	RAL 1004	–	M22-I1MGE-SAL 118456	–				
	Metal			–	–	–	M22-I1M-SAL 118457	–				
	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				
							–	–	–	M22-I2M/SS²⁾ 118458	–	
							–	–	–	M22-I2M-SAL 118459	–	
	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				
							–	–	–	M22-I3M/SS²⁾ 118460	–	
							–	–	–	M22-I3M-SAL 118461	–	
	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				
	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

1.6





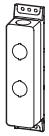

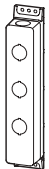

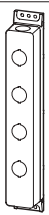



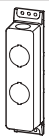

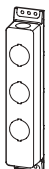

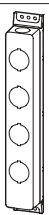

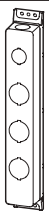

RMQ-Titan pilot devices

Surface mounting enclosure

Moeller series

1

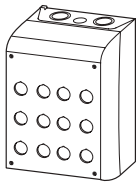
With customized inscription¹⁾

Mounting locations	Cable entries	Protection Style	Color Cover	RAL value	Catalog Number Article no.	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
Qty.	Base Number of M... entries	Pages Number of M... entries				



Surface mounting enclosure

Including mounting plate for base mounting
Anthracite enclosure base

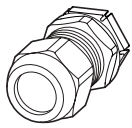
12	2 x 32/25	2 x 20 4 x 32/25	●	RAL 7035	IP55	M22-I12 222688	1 units
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M20 connecting screw

For connecting any M22-I... surface mounting enclosures
Installed through M20 cable entry on the side

-	-	-	-	-	IP67	M22-XI 229162	25 units
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M20 metric cable glands as defined in EN 50262

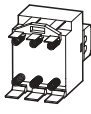
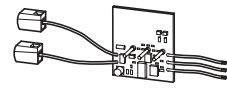
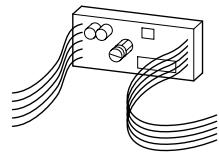
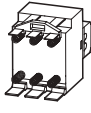
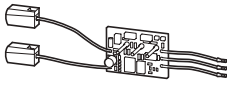
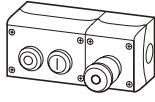
With lock nut and integrated strain relief
Polyamide, halogen-free
External diameter of cable: 6 - 13 mm

-	-	-	-	-	IP68, IP69K	V-M20 206910	20 units
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Replacement fastening set for flat surface mounting enclosure

-	-	-	-	-		M30-FI-XB 197317	1 units
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	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




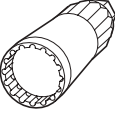
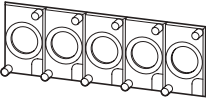
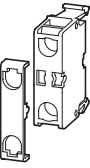



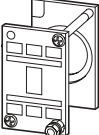
1.6

RMQ-Titan pilot devices

Moeller series

Accessory

1

	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 $t_a = +25^\circ\text{C}$ $t_{\text{average}} \text{ (AC)}$ h	Color	Catalog Number Article no.	Std. pack
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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	Terminal diagram / Contact assignment	Silver bezel Catalog Number Article no.	Black bezel Catalog Number Article no.	Std. pack
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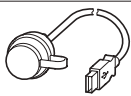
m

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
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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	–	



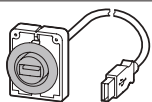
RJ45 socket, 8/8, Cat 5e	–		M22-RJ45-SA 107413	M22S-RJ45-SA 147537	1 units
RJ45 socket, 8/8, Cat 6 A	–		M22-RJ45-CAT6A 400122	–	

M30C USB and RJ45 panel mount connectors (Flat Front)

Front mounting
IP20 (with plug connected)



With permanently connected USB 3.0 Type A plug	–		M30C-FUSB 187082		1 units
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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
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For use with	Color	Catalog Number Article no.	Std. pack	Notes
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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	
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Customized complete units

Configuration online via Pushbutton Configurator → www.eaton.com/config/rmq

–	–	M22-COMBINATION 2010741	1 units	
–	–	RMQ-FLAT-COMBINATION 2012027	1 units	

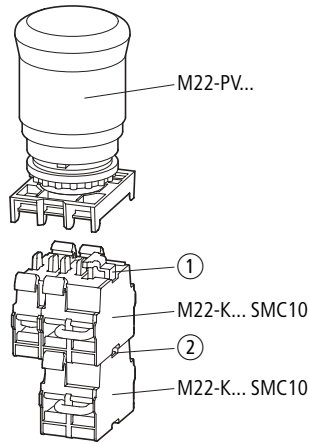
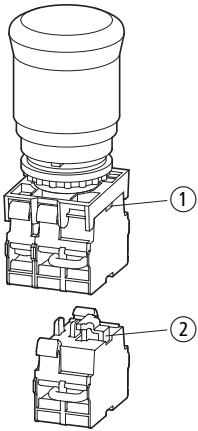


Anti-rotation tab for M30... as replacement

		M30-AFX 191232	1 units	
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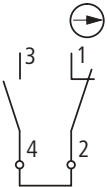
Engineering

M22...SMC10

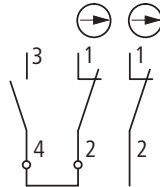


- ① The self-monitoring contact mechanically monitors the connection on the M22-PV...
- ② The self-monitoring contact mechanically monitors the connection on the M22-K...SMC10 safety contact above it; but not the connection on the M22-PV...

M22-K01SMC10
M22-KC01SMC10



M22-K02SMC10
M22-KC02SMC10



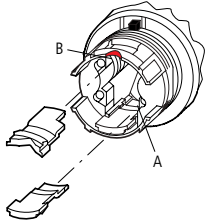
When the self-monitoring contact is mounted correctly, the N/O contact is closed.

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		O	II	
	A	B		A	B
60° ↓ 60°	-	✓	✓	-	✓
50° ↓ 50°	✓	x	✓	✓	x
60° ↓ 50°	-	x	✓	✓	x
50° ↓ 60°	✓	x	✓	-	✓
40° < 40°	✓	x	✓	✓	x
60° ↓ 40°	-	✓	✓	✓	x
50° ↓ 40°	✓	x	✓	✓	x
40° < 60°	✓	x	✓	-	✓
40° < 50°	✓	x	✓	✓	x

✓ = Key is withdrawable
x = Key is not withdrawable

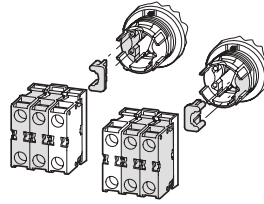
Configuration adapters

2x M22-XC-Y → Page 34

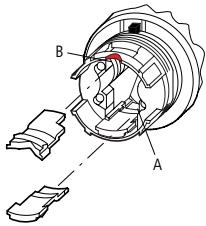
1x M22-XC-R → Page 34

1x

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



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



0 ↓	O	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

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.

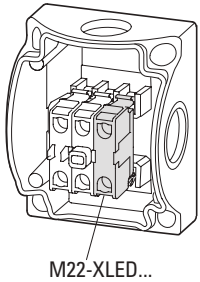
Ordering examples:

- 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

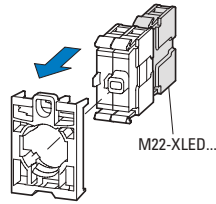
LED series resistor elements

M22-XLED

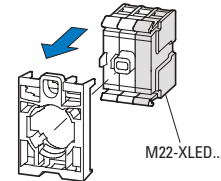
Surface mounting enclosure



Flush mounting at the rear



Flush mounting at the side



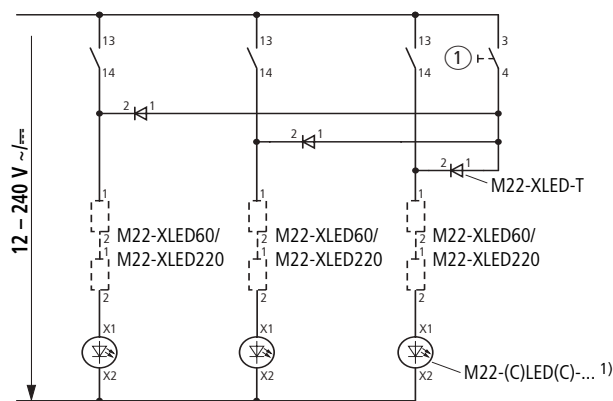
LED resistor element

M22-XLED60/M22-XLED220

$U_e \sim/\equiv$ $12 - 30 V \sim/\equiv$	M22-XLED60	1 x	2 x	3 x	4 x	5 x	6 x	7 x
	$U_e [AC/DC] \leq$	60 V	90 V	120 V	150 V	180 V	210 V	240 V
	M22-XLED220	1 x						
	$U_e [AC/DC] \leq$	220 V						

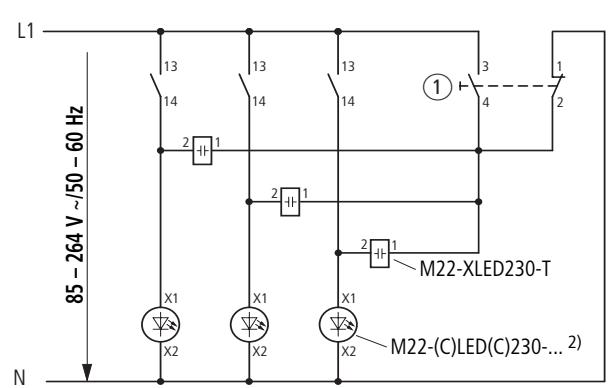
LED test element

M22-XLED-T



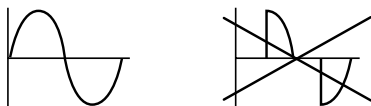
- ① Test button
- ¹⁾ Only for 12 - 30 V elements

M22-XLED230-T



$U_e \sim$ $85 - 264 V \sim,$ $50 - 60 Hz$	M22-XLED230-T	1 x	2 x
	$U_e \leq$	400 V~	500 V~

- ① Test button
- ²⁾ Only for 85 - 264 V elements



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	–25 - +70
Mounting position				Any	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	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	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 tools²⁾ Use WAGO Variocrimp 4 crimping tool; please enquire for others

	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...	A 600, Q 300,	10 A - 600 V AC	2 x 14 ... 18 AWG
M22-CK...	> 300 V AC same polarity	1 A - 250 V DC	2 x 12 ... 22 AWG
RMQ-Titan LED elements			
M22-LED...			2 x 14 ... 18 AWG
M22-CLED...			2 x 12 ... 22 AWG
M22-LC(H)			2 x 16 ... 20 AWG
M22-AMC			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
Free fall, packaged (IEC/EN 60068-2-32)		m	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

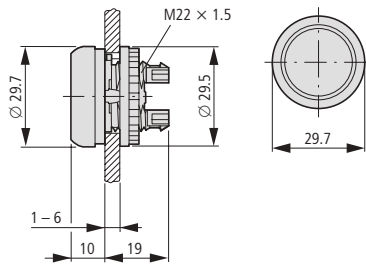
M22-SWD-LEDC-...	M22-SWD-K11LED-...	M22-SWD-K11LEDC-...	M22-SWD-K22	M22-SWD-KC22	M22-SWD-K22LED-...	M22-SWD-K22LEDC-...
IEC/EN 61131-2 EN 50178	IEC/EN 61131-2 EN 50178	IEC/EN 61131-2 EN 50178	IEC/EN 61131-2 EN 50178	IEC/EN 61131-2 EN 50178	IEC/EN 61131-2 EN 50178	IEC/EN 61131-2 EN 50178
10 x 45 x 42	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						
Must be prevented with suitable measures						
-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 x 10 ⁶	1 x 10 ⁶	1 x 10 ⁶	1 x 10 ⁶	1 x 10 ⁶	1 x 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

Dimensions

Actuating and indicator elements



RMQ-Titan pushbuttons

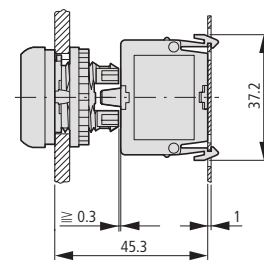
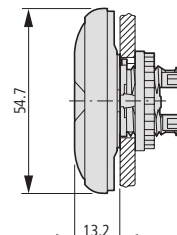
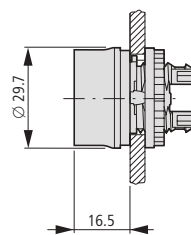
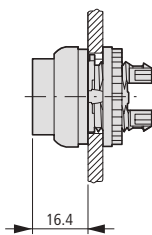
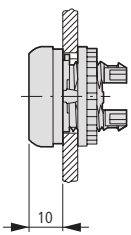
M22...-D...

M22...-DH...

M22-DG(L)...

M22...-DD...

M22-D pushbuttons with base mounting



RMQ-Titan selector switches

M22-W...

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

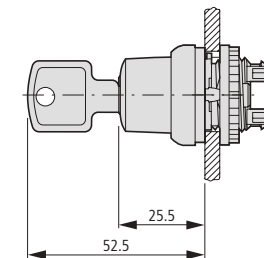
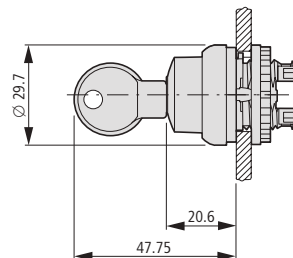
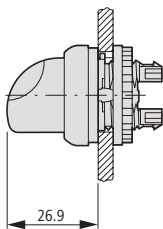
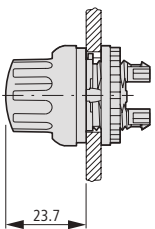
RMQ-Titan key-operated buttons

Individual lock mechanism

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

Master key systems

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



RMQ-Titan indicator lights

M22-LH-...

M22-L...

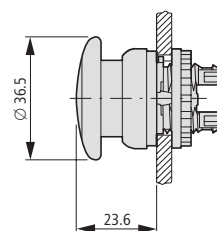
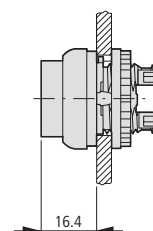
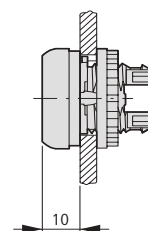
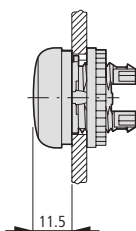
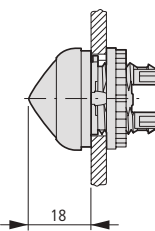
RMQ-Titan illuminated pushbutton actuators

M22...-DL-...

M22...-DLH...

RMQ-Titan mushroom pushbuttons

M22...-DP-...



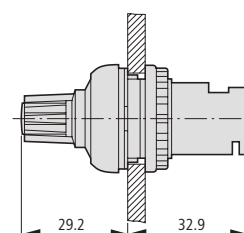
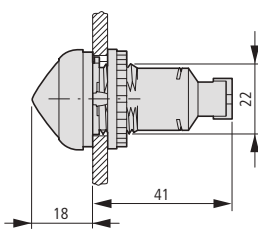
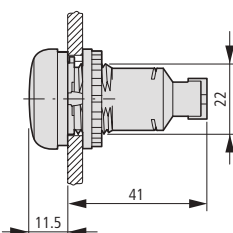
Compact indicator lights Compact acoustic devices

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

M22-LCH-...

Potentiometer

M22...-R...K



Controlled stop/emergency switching off buttons

Mushroom-shaped

M22-PV...

M22S-PV...

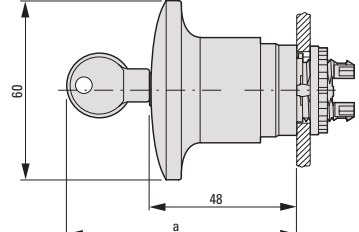
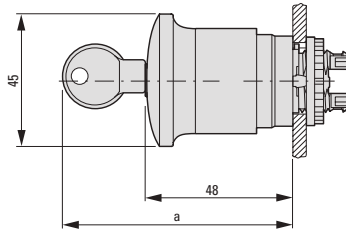
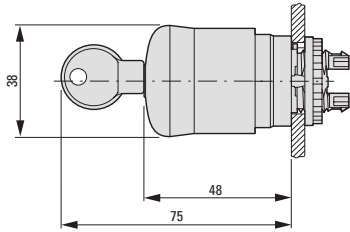
M22-PVL...

M22-PVS...

Palm-tree shape

M22-PV...45...

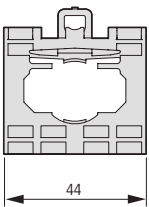
M22-PV...60...



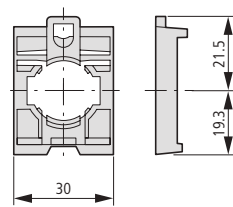
Front mounting (design: flush mounting)

Mounting adapter

M22-A4

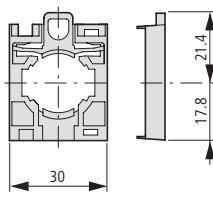


M22-A

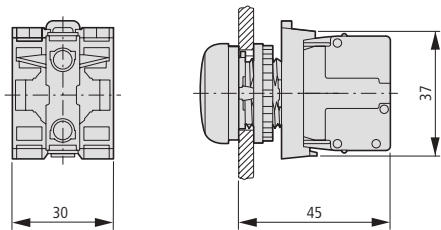


Centering adapter

M22-ZA

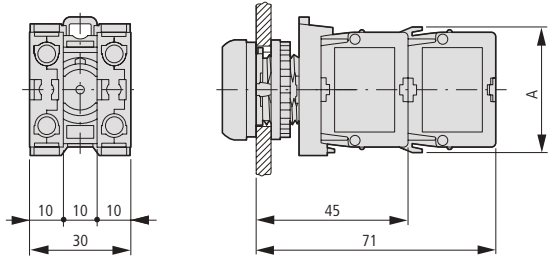


RMQ-Titan indicator lights

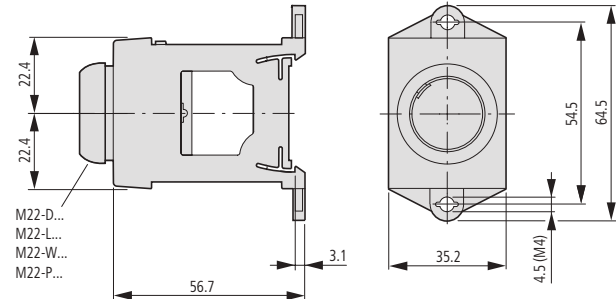


Buttons with M22-(C)K...

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

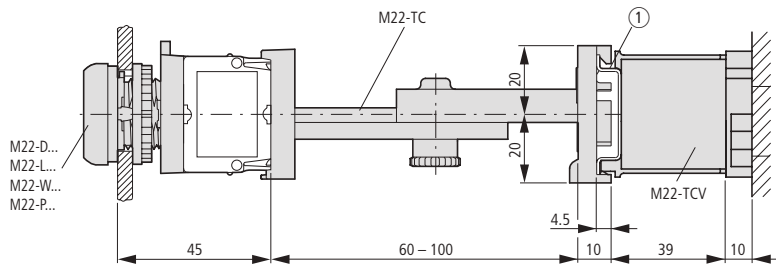


IVS top-hat rail adapter



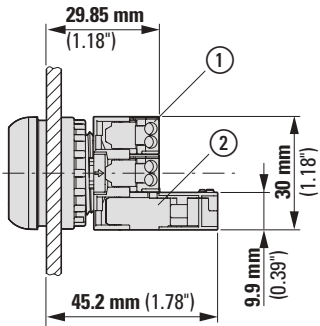
	1 x M22-K...	2 x M22-K...	1 x M22-CK...	2 x M22-CK...
A	37.2	37.2	39	39

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



Pushbuttons with Flat Rear contact element ①

Pushbuttons with standard contact element ②



① Top-hat rail to IEC/EN 60715

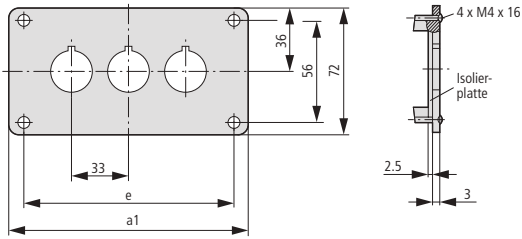
① M22-FK10(01)
② M22-(C)K...

1

Front mounting (design: flush mounting)

RMQ-Titan mounting plates

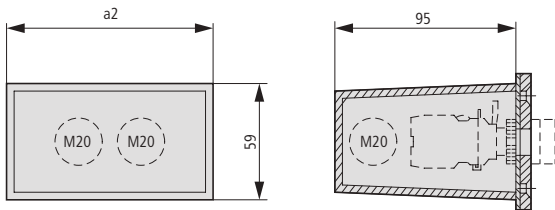
M22-E...



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

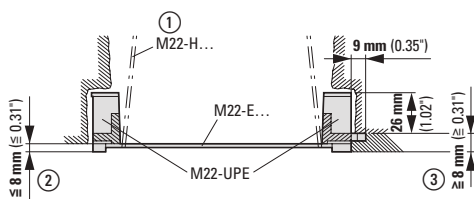
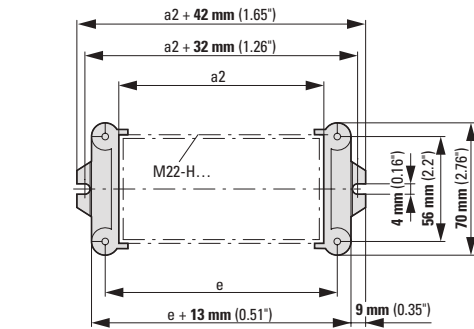
M22-H...



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

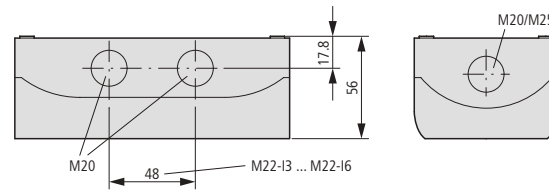
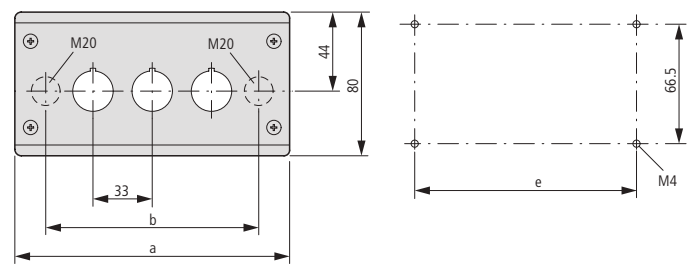


- ① Box for closing off when plastering
- ② Plaster thickness less than 8 mm
- ③ Plaster thickness more than 8 mm

Base mounting (design: surface mounting)

RMQ-Titan surface mounting enclosures

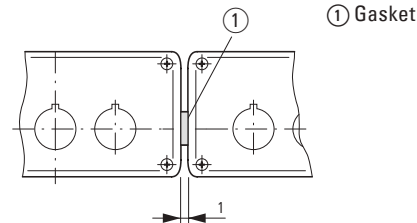
M22-I...



Catalog Number	Mounting locations	a	b	e	Cable entries		
M22-(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

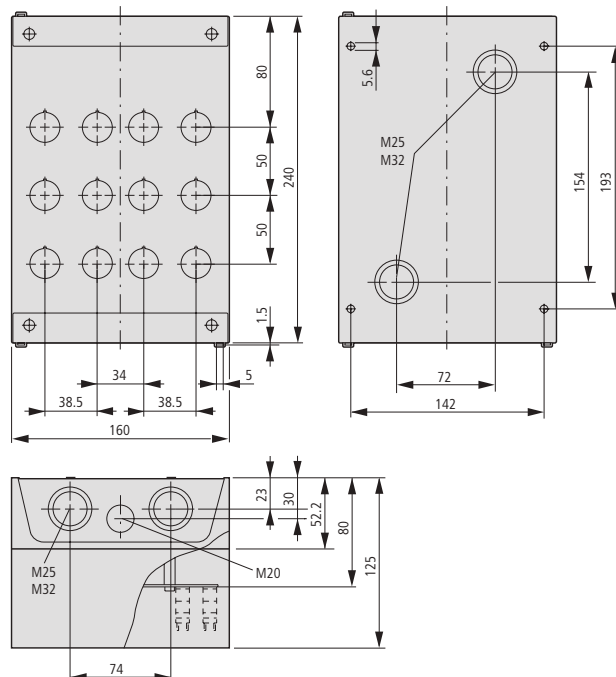
Combination of surface mounting enclosures

M22-XI



Surface mounting enclosure for 12 mounting locations

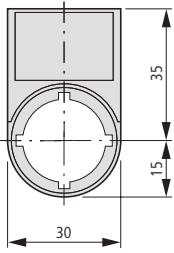
M22-I12



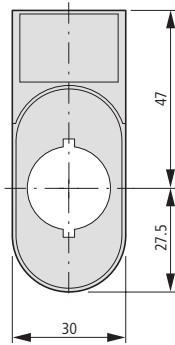
Legend holders

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

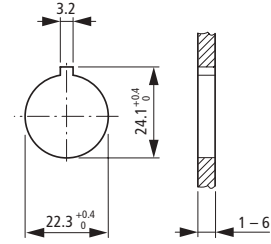
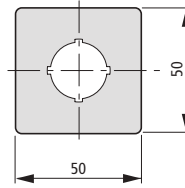
M22S-ST...



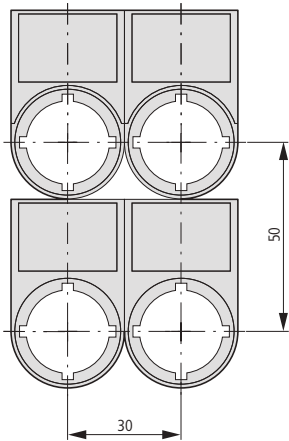
M22S-STDD-X



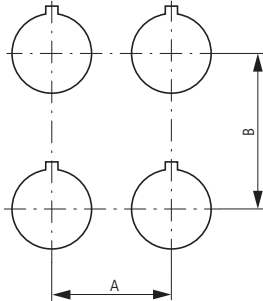
M22-XCK



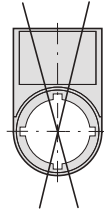
Grid dimension to IEC/EN 60947



Grid dimensions for various Combinations

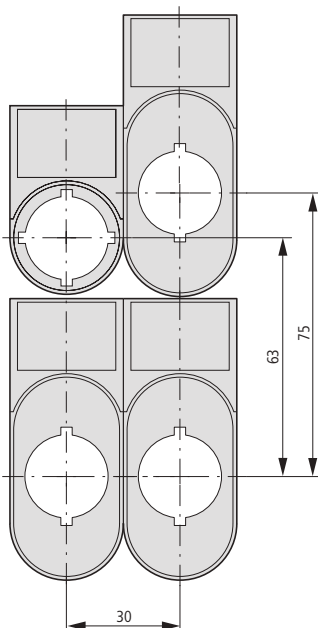


Pushbutton diaphragm cannot be combined with label mount

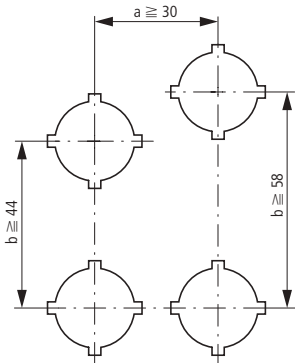


Catalog Number	A ≧ mm	B ≧ mm
M22(N/O)-... (IEC/EN 60947)	30	50
RMQ-Titan min.	30	40
M22-D... + M22-T-D	33	40
M22-D(R)P...	38	40
M22-PV...	45	45
M22-PV...45	55	55
M22-PV...60	70	70
M22-PV(L) + M22-PL-PV	48	56
M22-PV(L)(N/O...) + M22-D...	33	40
M22-DDL...	30	55
M22-DDL... + M22-T-DD	33	58
M22-ST...	30	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...

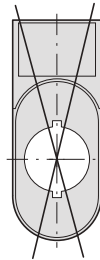


Grid dimensions for M22-DDL



M22-T-DD pushbutton diaphragm

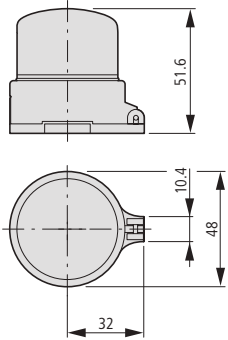
Pushbutton diaphragm cannot be combined with label mount



1

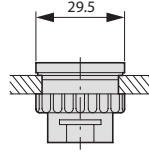
Emergency stop sealable shroud

M22-PL-PV



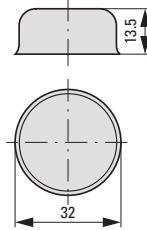
Blanking plug

M22...B-...

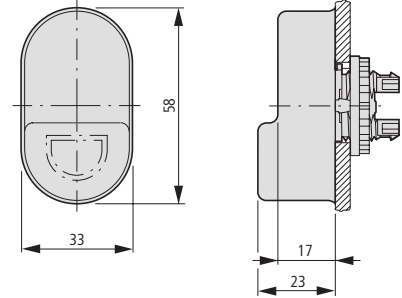


Pushbutton diaphragms

M22-T-D

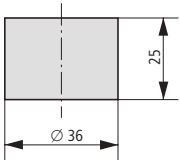


M22-T-D

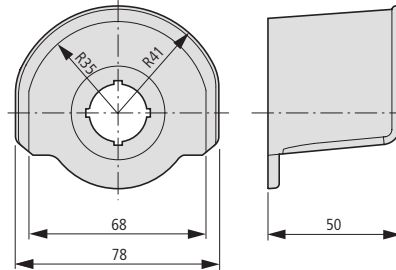


Guard ring

M22-XGWK

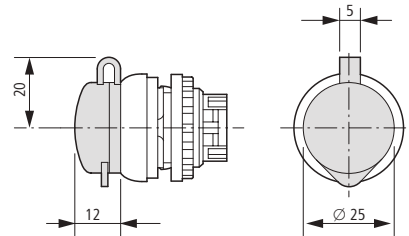


M22-XGPV



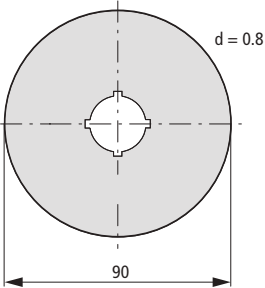
Protective diaphragm

M22-XWS

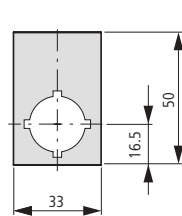


Emergency stop labels

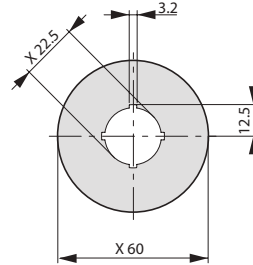
M22-XAK...



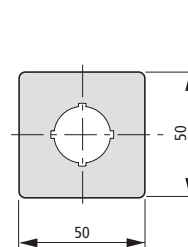
M22-XZK...



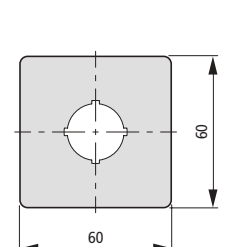
M22-XBK-...



M22-XYK-...

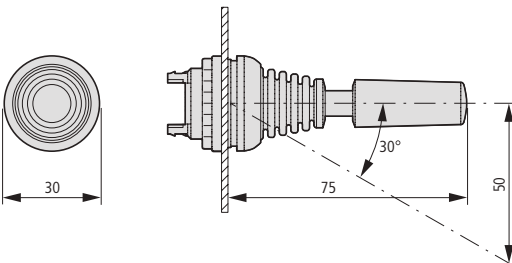


M22-XCK...



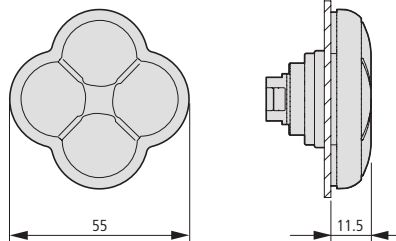
Joysticks

M22...-W...J...



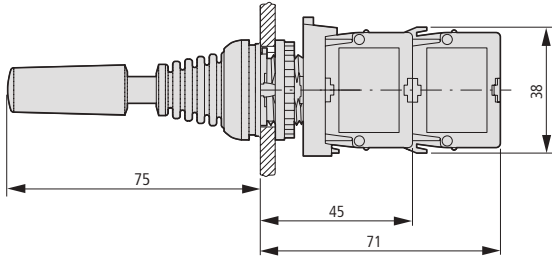
4-way pushbuttons

M22-D...4-...



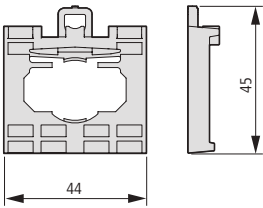
Joysticks

M22-WJ..., M22-WRJ...

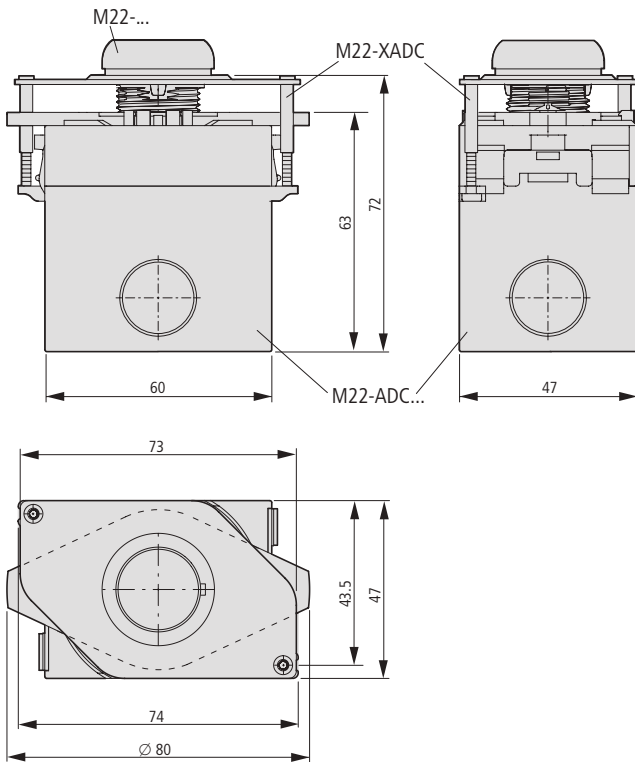


Mounting adapter

M22-A4



Dust covers

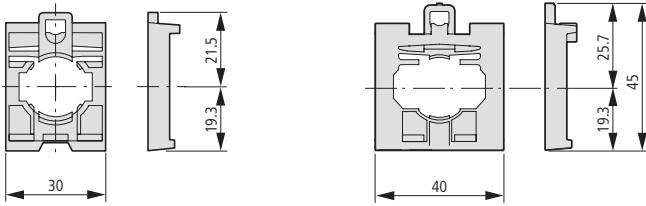


1

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

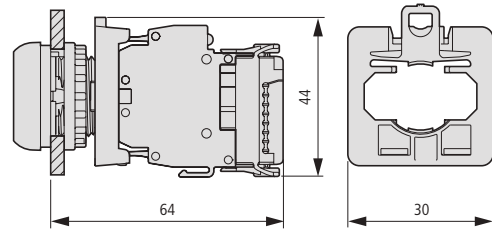
M22-A

M22-SWD-A4



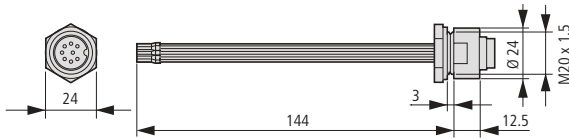
Function elements

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



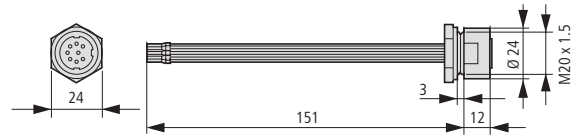
Housing bushing plug

SWD4-SM8-20



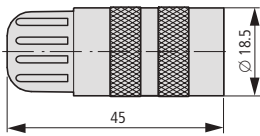
Housing bushing socket

SWD4-SF8-20

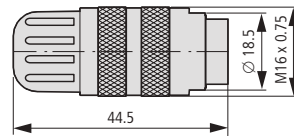


Plug connector for SmartWire-DT round cable, straight

SWD4-SF8-67

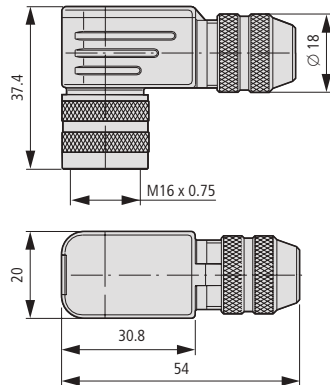


SWD4-SM8-67

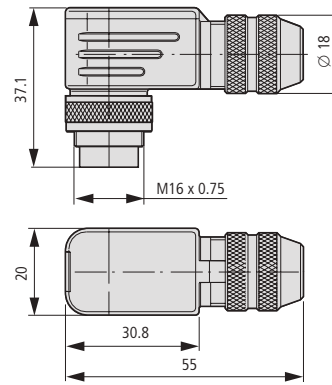


Plug connector for SmartWire-DT round cable, right angle

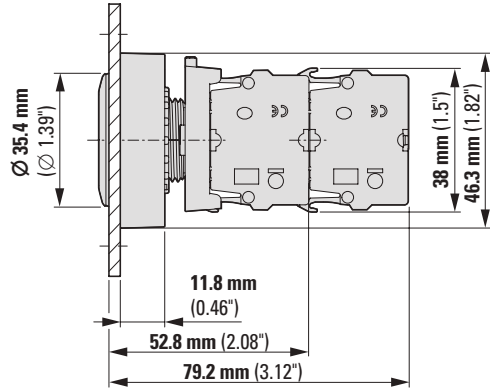
SWD4-SF8-67W



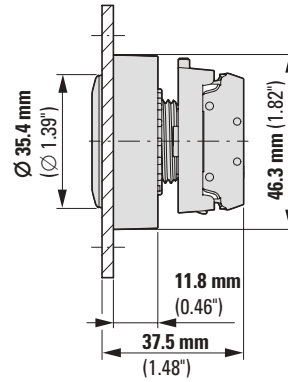
SWD4-SM8-67W



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

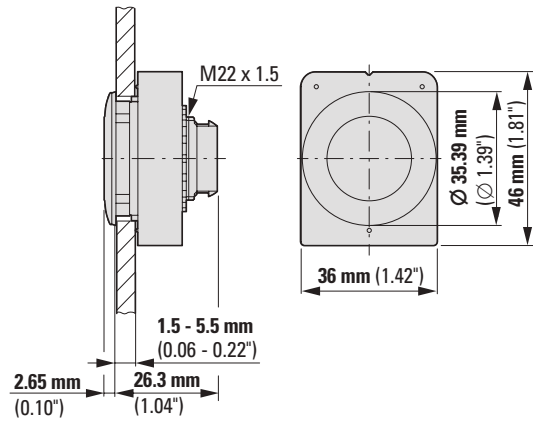


M30.... with M22-FK... Flat Rear contact elements



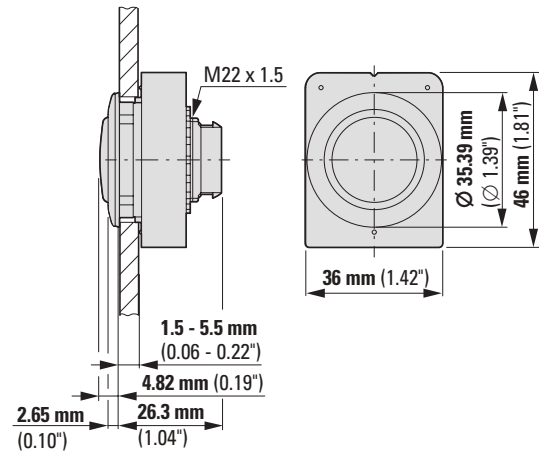
Pushbuttons, blanking plug

M30C-FD...
M30C-FB



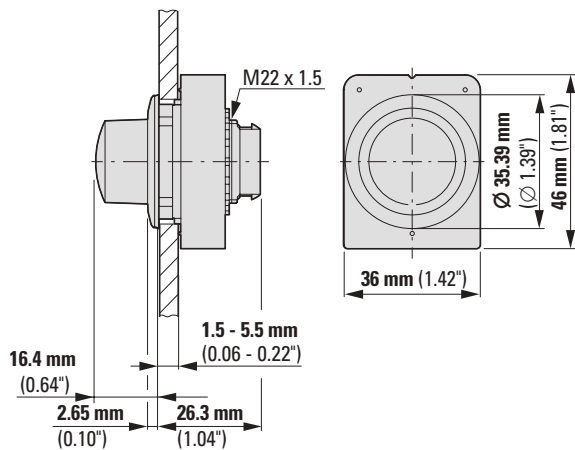
Indicator lights

M30C-FL...



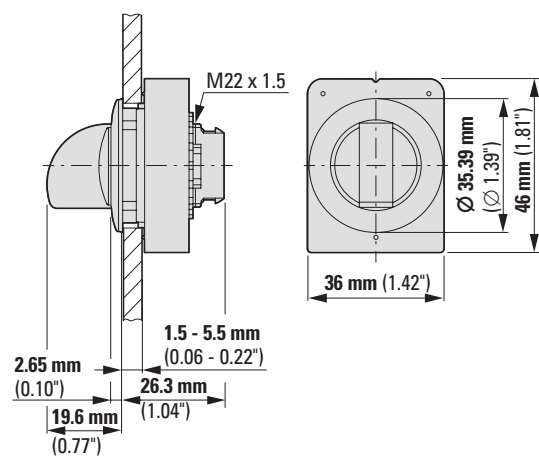
Changeover switches

With rotary head
M30C-FW...



(Illuminated) selector switches

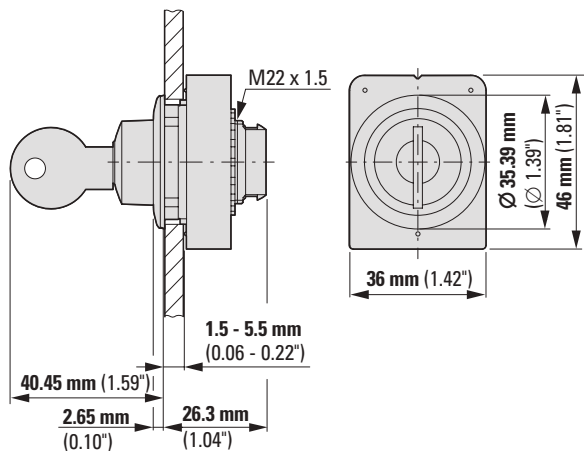
With thumb-grip, 4-way
M30C-FW(L)(K)(V)-...



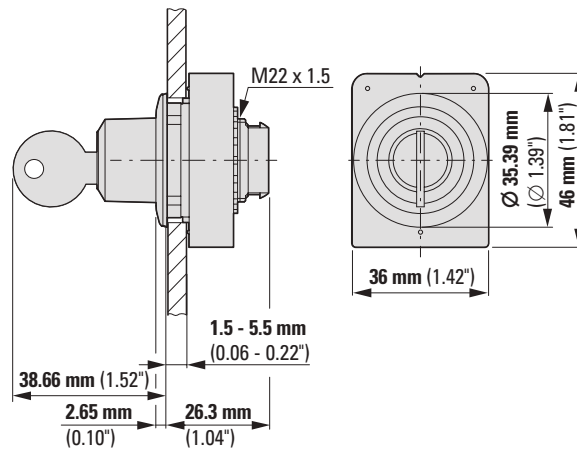
1

Key-operated buttons

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

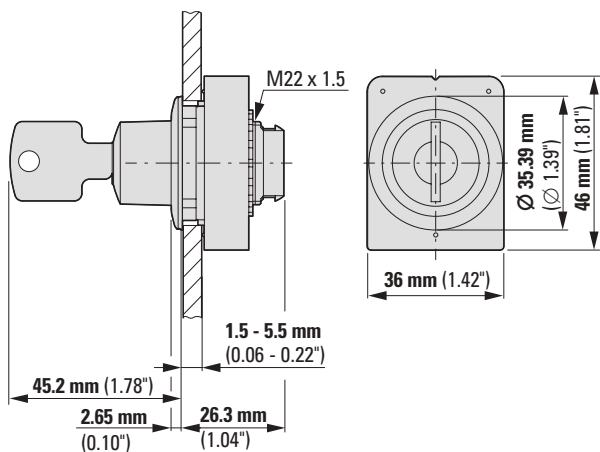


M30C-FW(R)S(3)-RS...



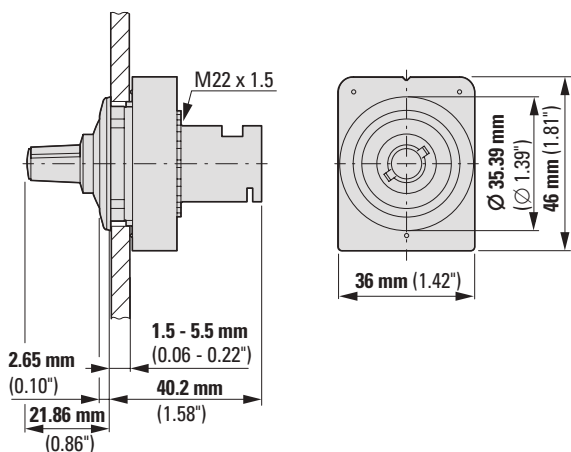
Key-operated buttons

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



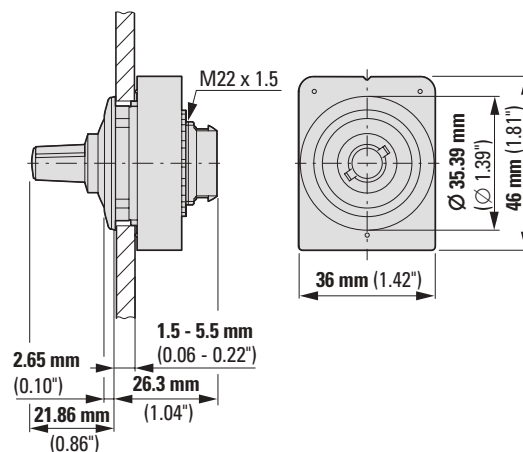
Potentiometer

M30C-FR...



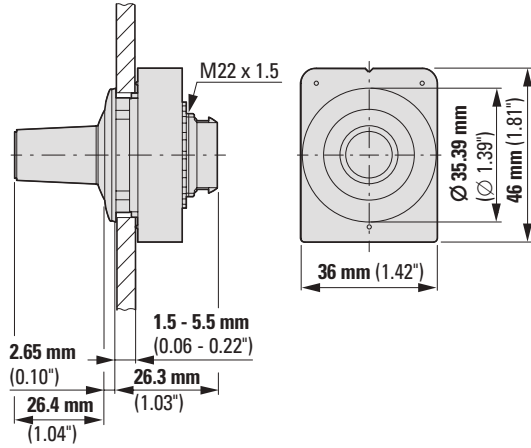
Potentiometers, SmartWire-DT

M30C-FR-SWD



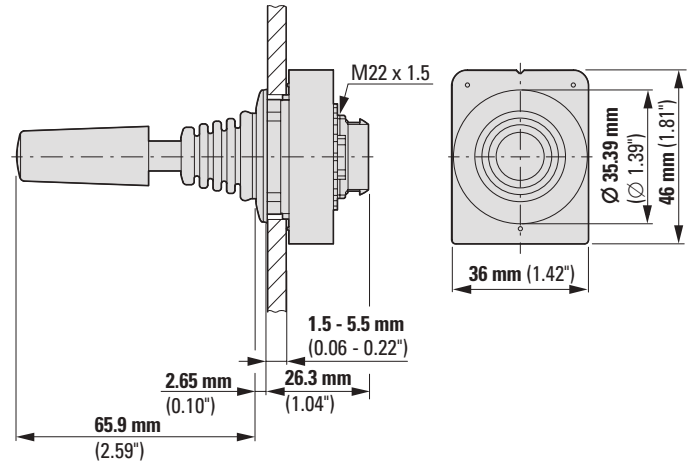
Encoders, SmartWire-DT

M30C-FINC-SWD

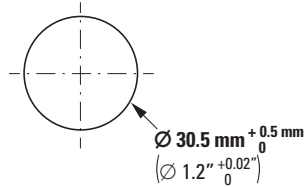


Joysticks

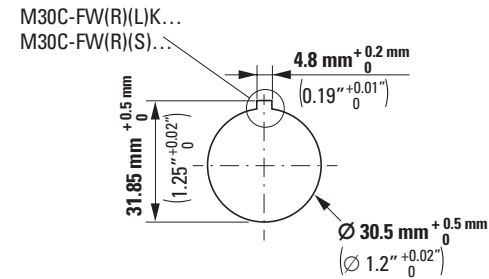
M30C-FW(R)JS...



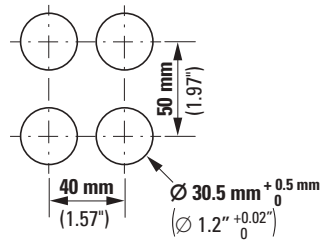
Mounting hole without key slot



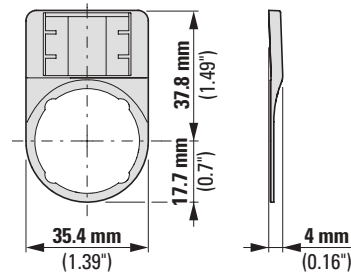
Mounting hole with key slot



Grid dimensions for various combinations

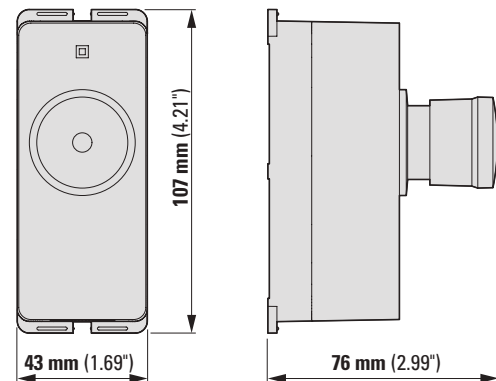


Legend holders M30S-FST-X



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

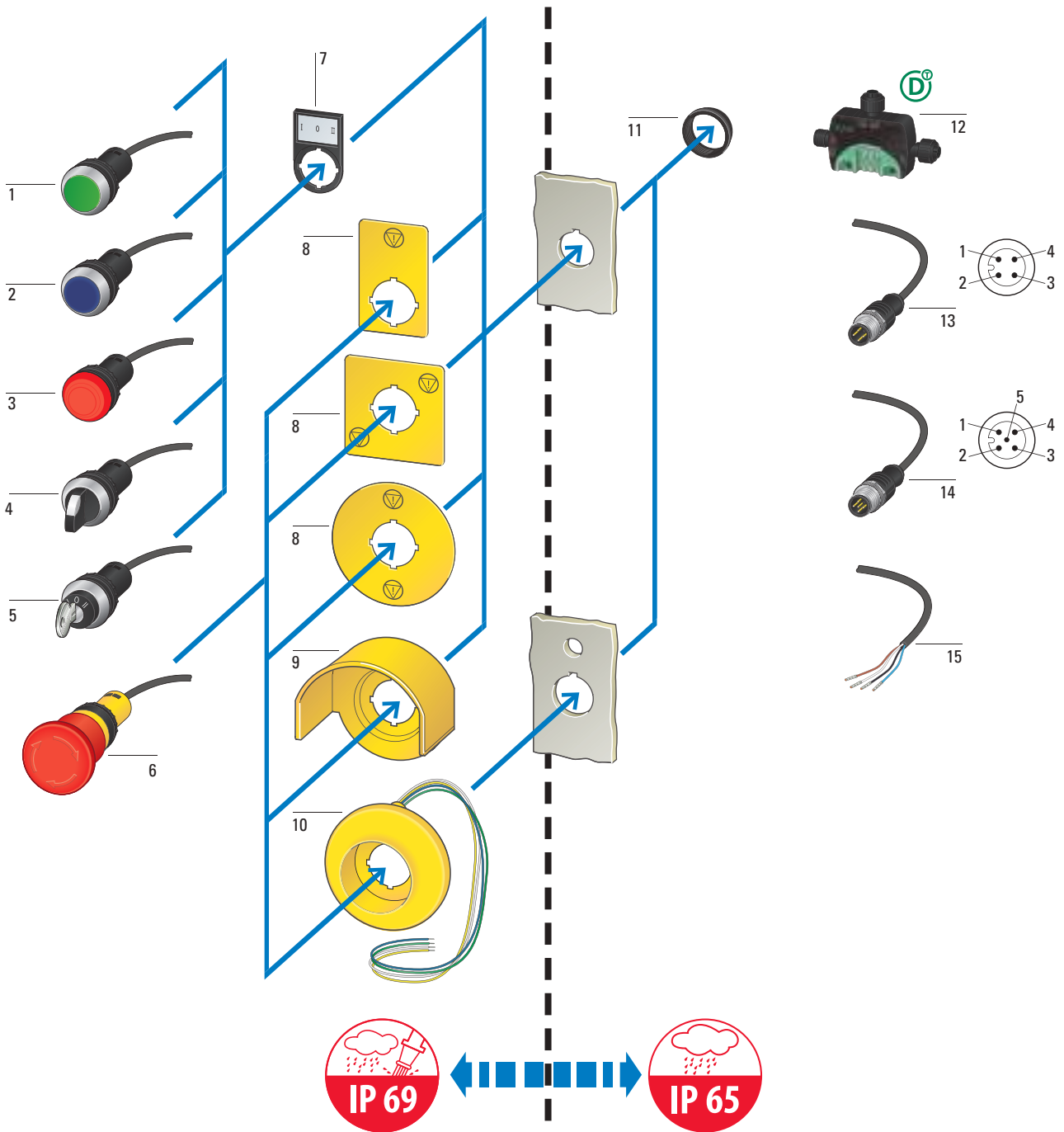
C20
C30



2.0 RMQ compact solution	
2.1 System overview	
C22 – System overview	106
2.2 Product selection	
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System overview

2



<p>C22 pushbuttons 1</p> <hr/> <p>Momentary and maintained</p> <hr/> <p>Flush</p> <hr/> <p>Colors: white, green, red, black</p> <hr/> <p>With cable (0.2/0.5/1/3.5 m) and plug (M12A, 4 pole) or unterminated cable end (4 pole)</p> <hr/> <p>→ Page 110</p> <hr/> <p>C22 illuminated pushbutton actuators 2</p> <hr/> <p>Momentary and maintained</p> <hr/> <p>Flush</p> <hr/> <p>Colors: white, green, red, blue, yellow</p> <hr/> <p>With cable (0.2/0.5/1/3.5 m) and plug (M12A, 4 pole) or unterminated cable end (4 pole)</p> <hr/> <p>24 V AC/DC</p> <hr/> <p>→ Page 115</p> <hr/> <p>C22 indicator lights 3</p> <hr/> <p>Flush</p> <hr/> <p>Colors: white, green, red, blue, yellow, multi-color</p> <hr/> <p>With cable (0.2/0.5/1/3.5 m) and plug (M12A, 4 pole) or unterminated cable end (4/5 pole)</p> <hr/> <p>24 V AC/DC</p> <hr/> <p>→ Page 114</p> <hr/> <p>C22 selector switches 4</p> <hr/> <p>Momentary and maintained</p> <hr/> <p>Flush</p> <hr/> <p>With thumb-grip</p> <hr/> <p>2 or 3 positions</p> <hr/> <p>With cable (0.2/1/3.5 m) and plug (M12A, 4 pole) or unterminated cable end (4 pole)</p> <hr/> <p>→ Page 112</p>	<p>C22 key-operated buttons 5</p> <hr/> <p>Momentary and maintained</p> <hr/> <p>Flush</p> <hr/> <p>2 or 3 positions</p> <hr/> <p>With cable (0.2/1/3.5 m) and plug (M12A, 4 pole) or unterminated cable end (4 pole)</p> <hr/> <p>→ Page 113</p> <hr/> <p>C22 controlled stop/emergency-stop buttons 6</p> <hr/> <p>Flush</p> <hr/> <p>38 mm and 45 mm diameter</p> <hr/> <p>Mushroom or palm</p> <hr/> <p>Twist or pull release</p> <hr/> <p>Tamper-proof as defined in ISO 13850/EN 418</p> <hr/> <p>European Machinery Safety Directive 2006/42/EC</p> <hr/> <p>With cable (0.2/1/3.5 m) and plug (M12A, 5 pole) or unterminated cable end (4 pole)</p> <hr/> <p>→ Page 108</p> <hr/> <p>Label mounts 7</p> <hr/> <p>For insert labels</p> <hr/> <p>Color: black</p> <hr/> <p>Insert labels: aluminum color, with inscription or blank, suitable for engraving</p> <hr/> <p>→ Page 65</p> <hr/> <p>Controlled STOP legend plates, IP66 8</p> <hr/> <p>Color: yellow, with black lettering</p> <hr/> <p>Round, rectangular, or square</p> <hr/> <p>With controlled stop inscription or controlled stop symbol</p> <hr/> <p>→ Page 21</p> <hr/> <p>Guard ring 9</p> <hr/> <p>For preventing unintended actuation</p> <hr/> <p>For 38 mm and 45 mm designs</p> <hr/> <p>→ Page 20</p>	<p>Illuminated ring 10</p> <hr/> <p>Versions:</p> <hr/> <p>24 V AC/DC, 120 V AC, 230 V AC</p> <hr/> <p>Continuous light</p> <hr/> <p>Flashing light with separate driver</p> <hr/> <p>Chaser light with separate driver, 24 V AC/DC</p> <hr/> <p>With three LED rows that can be driven separately</p> <hr/> <p>→ Page 20</p> <hr/> <p>Threaded rings 11</p> <hr/> <p>→ Page 80</p> <hr/> <p>SmartWire-DT I/O module 12</p> <hr/> <p>For connecting digital input/output signals to SmartWire-DT</p> <hr/> <p>IP67</p> <hr/> <p>Cable with M12A plug, 4 pole 13</p> <hr/> <p>Cable with M12A plug, 5 pole 14</p> <hr/> <p>Cable end open 15</p>
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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
					Zw = 4.5 mm		
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	1 unit
						C22-PV-K02-P65 185170	
					Zw = 4.5 mm		
			1 N/C	1 N/O		C22-PV-K11-P62 185174	
						C22-PV-K11-P65 185175	
					Zw = 4.5 mm		
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	1 unit
						C22-PVT-K02-P65 185177	
					Zw = 4.5 mm		
			1 N/C	1 N/O		C22-PVT-K11-P62 185181	
						C22-PVT-K11-P65 185182	
					Zw = 4.5 mm		
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
					Zw = 4.5 mm		
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	1 unit
						C22-PVT45P-K02-P65 185156	
					Zw = 4.5 mm		
			1 N/C	1 N/O		C22-PVT45P-K11-P62 185160	
						C22-PVT45P-K11-P65 185161	
					Zw = 4.5 mm		

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

C22 – Controlled stop/emergency-stop buttons

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
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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 indicator³⁾ 	Cable (black) with unterminated end, 4 pole	1 3.5	2 N/C		  <p>Zw = 4.5 mm</p>	C22-PVT45P-MPI-K02-P62 185162 C22-PVT45P-MPI-K02-P65 185163	1 unit
		1 3.5	1 N/C 1 N/O		  <p>Zw = 4.5 mm</p>	C22-PVT45P-MPI-K11-P62 185167 C22-PVT45P-MPI-K11-P65 185168	
Palm-tree shape turn-to-release function 45 mm diameter With mechanical position indicator³⁾ 	Cable (black) with M12A	0.2	2 N/C		  <p>Zw = 4.5 mm</p>	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		  <p>Zw = 4.5 mm</p>	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		  <p>Zw = 4.5 mm</p>	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

C22 – Pushbuttons

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
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Cable (black) with M12A plug, 4 pole



Pushbuttons							
0.2	Silver bezel IP66, IP67, IP69K (at front), IP65 (at rear) Flush	1 N/C		 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		 Zw = 4.5 mm	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	Silver bezel IP66, IP67, IP69K (at front), IP65 (at rear) Flush	1 N/C		 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		 Zw = 4.5 mm	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	Silver bezel IP66, IP67, IP69K (at front), IP65 (at rear) Flush	1 N/C		 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		 Zw = 4.5 mm	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 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				

Cable (black) with unterminated end, 4 pole



Pushbuttons									
1	Silver bezel IP66, IP67, IP69K (at front), IP65 (at rear) Flush	1 N/C	BN BK			C22-D-R-K01-P62 185671	C22-DR-R-K01-P62 185608	1 unit	
									C22-D-S-K01-P62 185672
	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			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			C22-D-X-K11-P62 185605	C22-DR-X-K11-P62 185614	
	Without button plate	1 N/O	BN BK			C22-D-G-K10-P62 185670	C22-DR-G-K10-P62 185607		
	Without button plate					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			C22-D-X-K20-P62 185606	C22-DR-X-K20-P62 185615		
	3.5	Silver bezel IP66, IP67, IP69K (at front), IP65 (at rear) Flush	1 N/C	BN BK			C22-D-R-K01-P65 185617	C22-DR-R-K01-P65 185626	1 unit
		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			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			C22-D-X-K11-P65 185623	C22-DR-X-K11-P65 185632	
Without button plate		1 N/O	BN BK			C22-D-G-K10-P65 185616	C22-DR-G-K10-P65 185625		
Without button plate						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			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

C22 – Selector switches

2

Function:	Contact configuration ¹⁾	Contact sequence	Contact diagram ²⁾	Cable Length	Cable Length	Std. pack
				Catalog Number	Catalog Number	
				Article no.	Article no.	

▷ = momentary (MO) N/O = Normally open contact
 ◁ = maintained (MA) N/C = Normally closed contact

Changeover switches

Silver bezel
 With thumb-grip
 IP66 (at front), IP65 (at rear)

2 positions
 Cable (black) with M12A plug, 4 pole



▷ 40°	1 N/O			0.2 m	1 m	1 unit
◁ 60°				C22-WK-K10-P1 186098	C22-WK-K10-P5 186114	
▷ 40°				C22-WRK-K10-P1 186103	C22-WRK-K10-P5 186119	

2 positions
 Cable (black) with unterminated end, 4 pole



▷ 40°	1 N/C			1 m	3.5 m	1 unit
◁ 60°				C22-WK-K01-P62 186161	C22-WK-K01-P65 186177	
▷ 40°	2 N/C			C22-WRK-K01-P62 186166	C22-WRK-K01-P65 186182	
▷ 40°	1 N/O	1 N/C		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	1 N/C		C22-WK-K11-P62 186159	C22-WK-K11-P65 186175	
◁ 60°				C22-WRK-K11-P62 186164	C22-WRK-K11-P65 186180	
▷ 40°	1 N/O			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			C22-WK-K20-P62 186160	C22-WK-K20-P65 186176	
◁ 60°				C22-WRK-K20-P62 186165	C22-WRK-K20-P65 186181	

3 positions
 Cable (black) with M12A plug, 4 pole



40° ◁▷ 40°	2 N/O			0.2 m	1 m	1 unit
60° ◁▷ 60°				C22-WK3-K20-P1 186106	C22-WK3-K20-P5 186122	
▷ 40°				C22-WRK3-K20-P1 186109	C22-WRK3-K20-P5 186125	

3 positions
 Cable (black) with unterminated end, 4 pole



40° ◁▷ 40°	2 N/C			1 m	3.5 m	1 unit
60° ◁▷ 60°				C22-WK3-K02-P62 186168	C22-WK3-K02-P65 186184	
▷ 40°	1 N/O	1 N/C		C22-WRK3-K02-P62 186171	C22-WRK3-K02-P65 186187	
40° ◁▷ 40°	1 N/O	1 N/C		C22-WK3-K11-P62 186169	C22-WK3-K11-P65 186185	
60° ◁▷ 60°				C22-WRK3-K11-P62 186172	C22-WRK3-K11-P65 186188	
▷ 40°	2 N/O			C22-WK3-K20-P62 186170	C22-WK3-K20-P65 186186	
◁ 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 with-drawable at position	Contact configuration ¹⁾	Contact sequence	Contact diagram	Cable Length Catalog Number Article no.	Cable Length Catalog Number Article no.	Std. pack
▷ = momentary (MO)		N/O N/C					
┘ = maintained (MA)							

Key-operated buttons

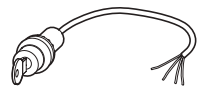
Silver bezel
MS1 lock mechanism
Not suitable for master key systems
With 1 key
IP66 (at front), IP65 (at rear)

**2 positions
Cable (black) with M12A
plug, 4 pole**



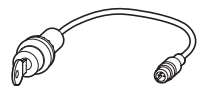
Function:	Key with-drawable at position	Contact configuration ¹⁾	Contact sequence	Contact diagram	Cable Length Catalog Number Article no.	Cable Length Catalog Number Article no.	Std. pack
▷ 40°	0	1 N/O			0.2 m C22-WS-MS1-K10-P1 186194	1 m C22-WS-MS1-K10-P5 186210	1 unit
┘ 60°	I 0				C22-WRS-MS1-K10-P1 186199	C22-WRS-MS1-K10-P5 186215	

**2 positions
Cable (black) with
unterminated end, 4 pole**



Function:	Key with-drawable at position	Contact configuration ¹⁾	Contact sequence	Contact diagram	Cable Length Catalog Number Article no.	Cable Length Catalog Number Article no.	Std. pack
▷ 40°	0	1 N/C			1 m C22-WS-MS1-K01-P62 186257	3.5 m 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			1 m C22-WS-MS1-K02-P62 186254	3.5 m 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			1 m C22-WS-MS1-K11-P62 186255	3.5 m 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			1 m C22-WS-MS1-K10-P62 186258	3.5 m 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			1 m C22-WS-MS1-K20-P62 186256	3.5 m C22-WS-MS1-K20-P65 186272	
┘ 60°	I 0				C22-WRS-MS1-K20-P62 186261	C22-WRS-MS1-K20-P65 186277	

**3 positions
Cable (black) with M12A
plug, 4 pole**



Function:	Key with-drawable at position	Contact configuration ¹⁾	Contact sequence	Contact diagram	Cable Length Catalog Number Article no.	Cable Length Catalog Number Article no.	Std. pack
40° ↙ 40°	0	2 N/O			0.2 m C22-WS3-MS1-K20-P1 186202	1 m 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	

**3 positions
Cable (black) with
unterminated end, 4 pole**



Function:	Key with-drawable at position	Contact configuration ¹⁾	Contact sequence	Contact diagram	Cable Length Catalog Number Article no.	Cable Length Catalog Number Article no.	Std. pack
40° ↙ 40°	0	2 N/C			1 m C22-WS3-MS1-K02-P62 186264	3.5 m 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			1 m C22-WS3-MS1-K11-P62 186265	3.5 m 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			1 m C22-WS3-MS1-K20-P62 186266	3.5 m 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

C22 – Indicator lights

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



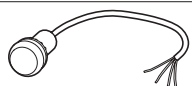
C22-L-RGY-24-P1
197569

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



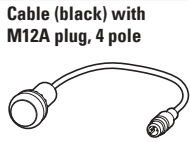
C22-L-RGBYW-24-P72
197569

C22 – Illuminated pushbutton actuators, accessories

Cable Length m	Button plate	LED	Contact configuration ¹⁾		Contact sequence	Contact diagram ²⁾	Momentary Catalog Number Article no.	Maintained Catalog Number Article no.	Std. pack
			N/O = Normally open contact	N/C = Normally closed contact					

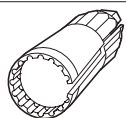
Illuminated pushbutton actuators

Silver bezel
LED rated operating voltage: 24 V AC/DC
IP66, IP67, IP69K (at front), IP65 (at rear)
Flush



0.2	● ●	● ●	1 N/C			C22-DL-R-K10-24-P1 185555	C22-DRL-R-K10-24-P1 185559	1 unit
	● ●	● ●	1 N/O			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	
0.5	● ●	● ●	1 N/C			C22-DL-R-K10-24-P3 181626	C22-DRL-R-K10-24-P3 181630	
	● ●	● ●	1 N/O			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	
1	● ●	● ●	1 N/C			C22-DL-R-K10-24-P5 181303	C22-DRL-R-K10-24-P5 181368	
	● ●	● ●	1 N/O			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	
1	● ●	● ●	1 N/C			C22-DL-R-K10-24-P62 185587	C22-DRL-R-K10-24-P62 185591	1 unit
	● ●	● ●	1 N/O			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	
3.5	● ●	● ●	1 N/C			C22-DL-R-K10-24-P65 185595	C22-DRL-R-K10-24-P65 185599	
	● ●	● ●	1 N/O			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



Mounting ring tool

For threaded ring; can be used with cordless screwdriver.

Catalog Number
Article no.

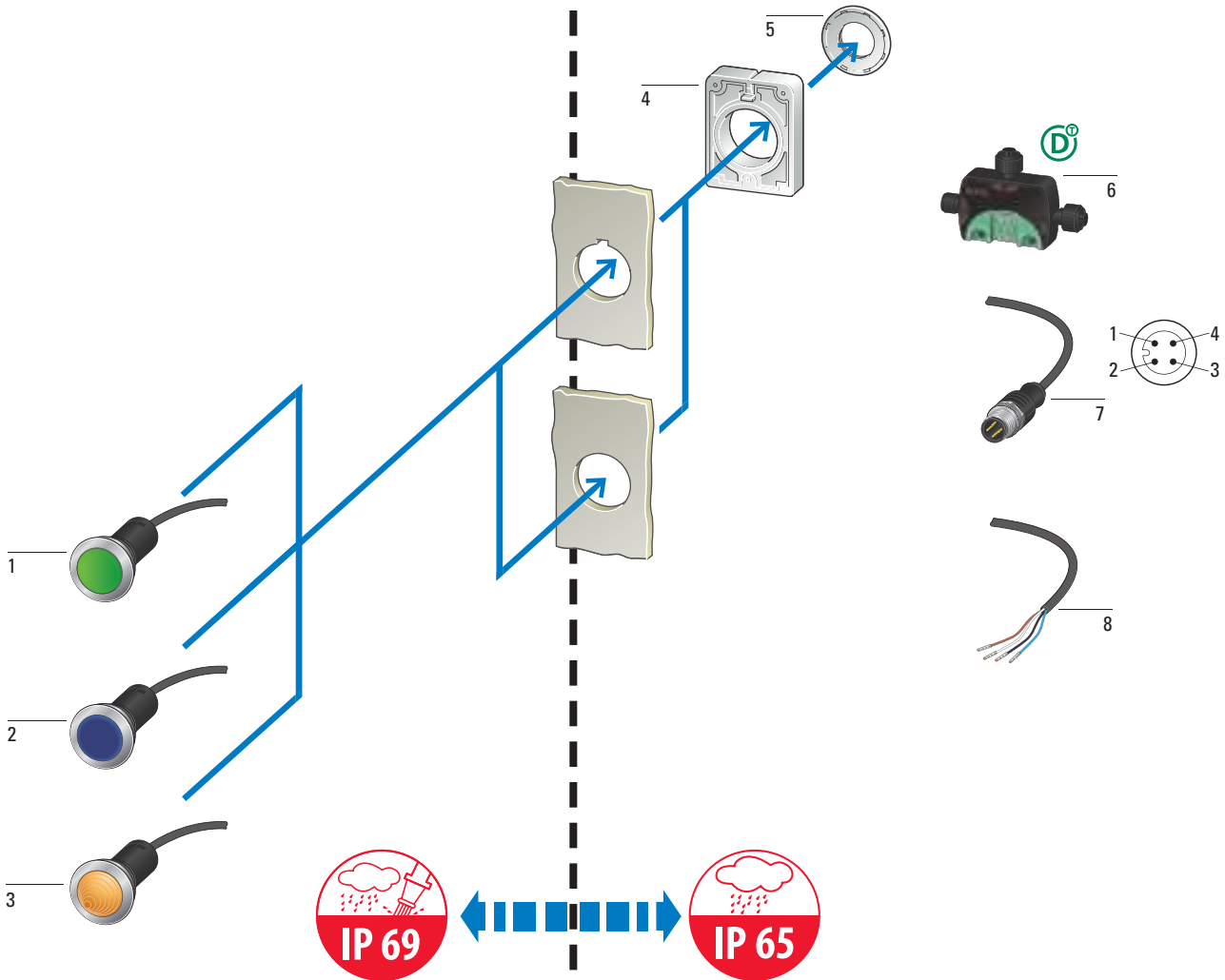
C22-MS
179955

Std. pack

1 unit

System overview

2



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

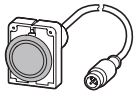
Product selection









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		1 N/C		 Zw = 4.5 mm	C30C-FD-R-K01-P5 185987	C30C-FDR-R-K01-P5 185996	1 unit
					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	
		1 N/O			C30C-FD-G-K10-P5 185988	C30C-FDR-G-K10-P5 185997	
					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

Cable Length m	Button plate	Contact configuration ¹⁾		Contact sequence ²⁾	Contact diagram	Momentary	Maintained	Std. pack
		N/O = Normally open contact	N/C = Normally closed contact			Catalog Number Article no.	Catalog Number Article no.	

Pushbuttons





Cable (black) with unterminated end, 4 pole



1	 	1 N/C			 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			 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		 0 2.2 5.5 3.15 Zw = 4.5 mm	C30C-FD-X-K11-P62 186053		C30C-FDR-X-K11-P62 186062
	 		1 N/O			 0 3.15 5.5	C30C-FD-G-K10-P62 186050		C30C-FDR-G-K10-P62 186059
3.5	 	1 N/C			 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			 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		 0 2.2 5.5 3.15 Zw = 4.5 mm	C30C-FD-X-K11-P65 185964	C30C-FDR-X-K11-P65 185973	
	 		1 N/O			 0 3.15 5.5	C30C-FD-G-K10-P65 185961	C30C-FDR-G-K10-P65 185970	
Without button plate						C30C-FD-W-K10-P65 185959	C30C-FDR-W-K10-P65 185968		
						C30C-FD-X-K10-P65 185963	C30C-FDR-X-K10-P65 185972		
			2 N/O			 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)						
	1	Blue	Blue		C30C-FL-B-24-P5 186013	1 unit
		Green	Green		C30C-FL-G-24-P5 186012	
		Red	Red		C30C-FL-R-24-P5 186011	
		White	White		C30C-FL-W-24-P5 186015	
		Yellow	White		C30C-FL-Y-24-P5 186014	
	1	Blue	Blue		C30C-FL-B-24-P62 185955	1 unit
		Green	Green		C30C-FL-G-24-P62 185954	
		Red	Red		C30C-FL-R-24-P62 185953	
		White	White		C30C-FL-W-24-P62 185957	
		Yellow	White		C30C-FL-Y-24-P62 185956	
	3.5	Blue	Blue	C30C-FL-B-24-P65 186070		
		Green	Green	C30C-FL-G-24-P65 186069		
		Red	Red	C30C-FL-R-24-P65 185984		
		White	White	C30C-FL-W-24-P65 186072		
		Yellow	White	C30C-FL-Y-24-P65 186071		

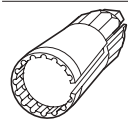
Cable Length	Button plate	LED	Contact configuration ¹⁾	Contact sequence	Contact diameter ²⁾	Momentary Catalog Number Article no.	Maintained Catalog Number Article no.	Std. pack
m			N/O = Normally open contact N/C = Normally closed contact					

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		 Zw = 4.5 mm	C30C-FDL-R-K10-24-P5 186004	C30C-FDRL-R-K10-24-P5 186008	1 unit
		 	1 N/O			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		 Zw = 4.5 mm	C30C-FDL-R-K10-24-P62 186066	C30C-FDRL-R-K10-24-P62 185950	1 unit
		 	1 N/O			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		 Zw = 4.5 mm	C30C-FDL-R-K10-24-P65 185977	C30C-FDRL-R-K10-24-P65 185981	
		 	1 N/O			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

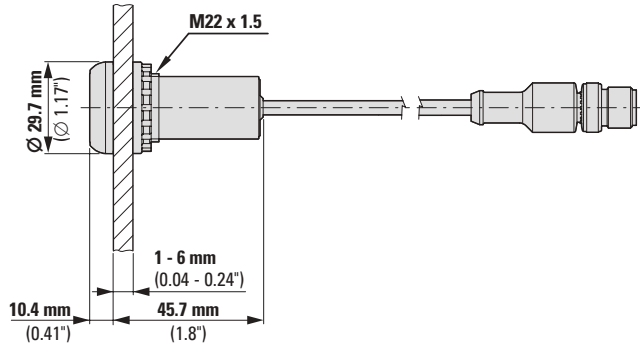
			Controlled stop/ emergency switching off buttons	(Illuminated) pushbuttons Momentary/ maintained	Changeover switches	Key-operated buttons	Indicator lights
General							
Standards			IEC/EN 60947-5-5 VDE 0660	IEC/EN 60947-5-1 VDE 0660	IEC/EN 60947-5-1 VDE 0660	IEC/EN 60947-5-1 VDE 0660	IEC/EN 60947-5-1 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

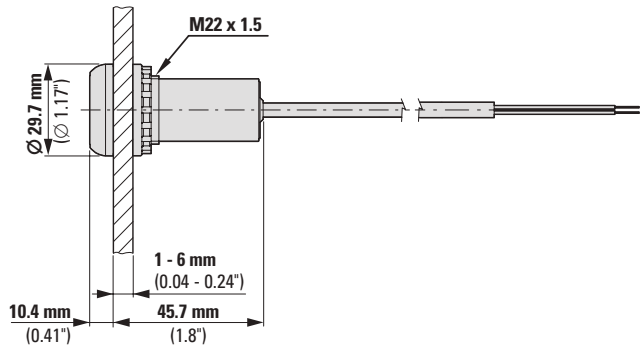
Pushbuttons, M12A

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



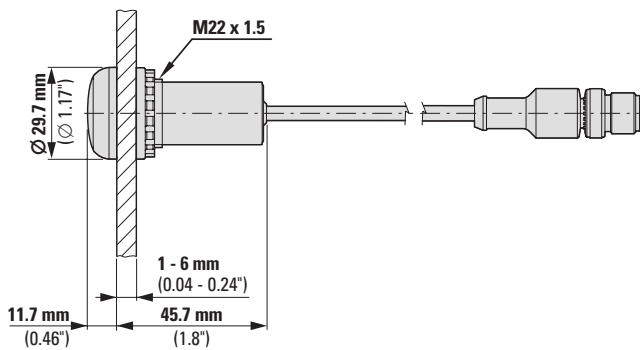
Pushbuttons, unterminated cable end

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



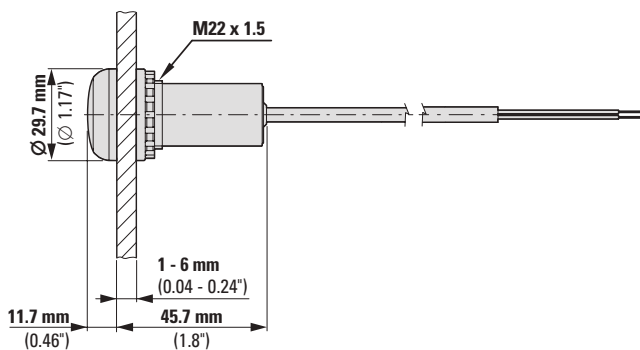
Indicator lights, M12A

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



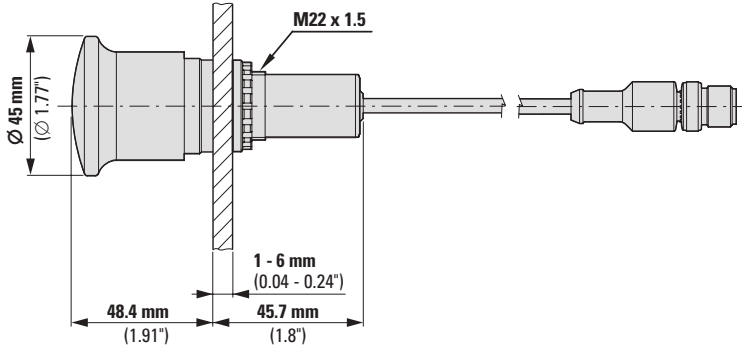
Indicator lights, unterminated cable end

C22-L...-P62/-P65



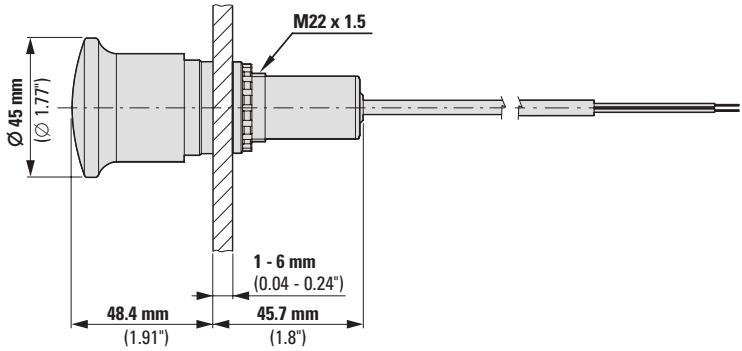
Emergency switching off, M12A

C22-PVT...-P10



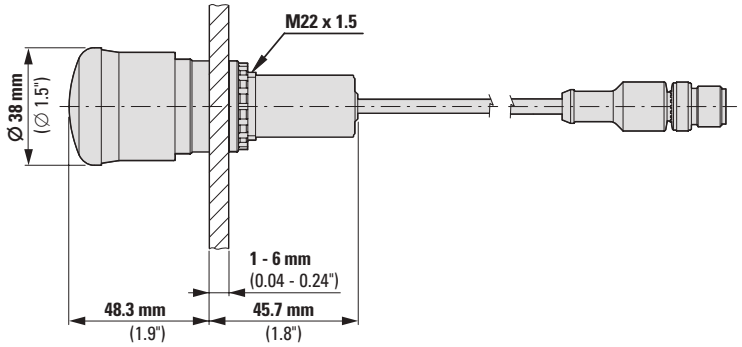
Emergency switching off, unterminated cable end

C22-PVT...-P62/-P65



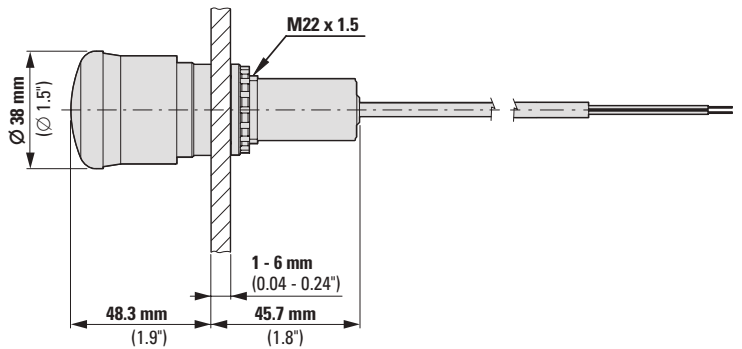
Emergency switching off, M12A

C22-PV...-P10



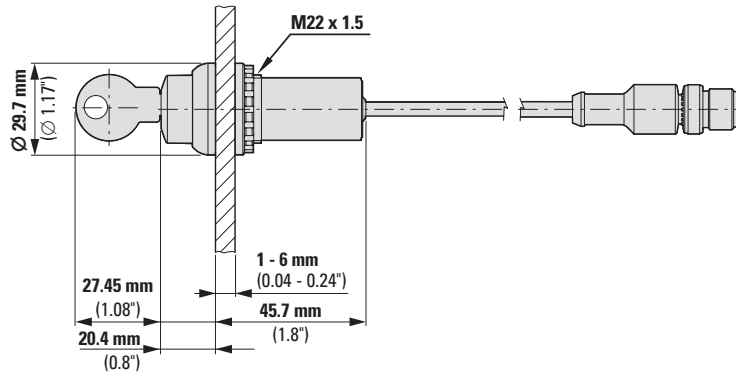
Emergency switching off, unterminated cable end

C22-PV...-P62/-P65



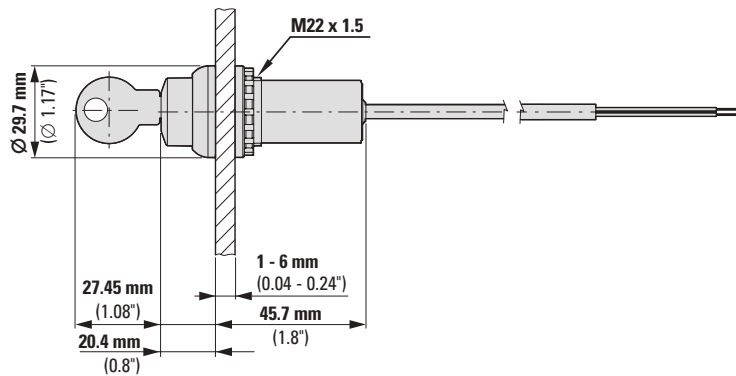
Key-operated buttons, M12A

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



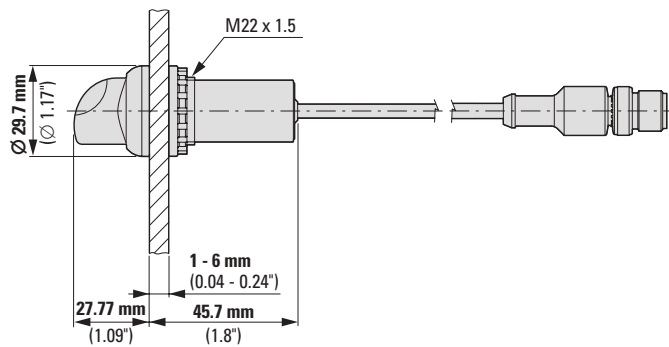
Key-operated buttons, unterminated cable end

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



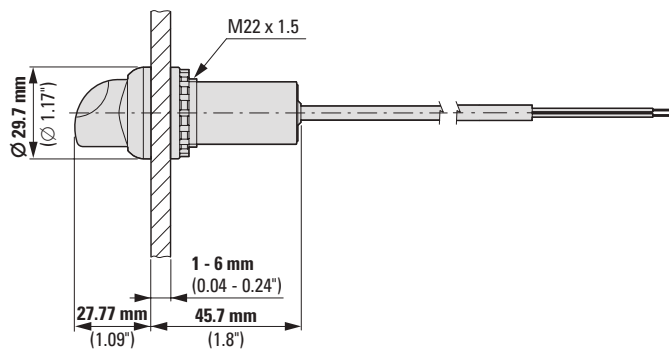
Selector switches, M12A

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



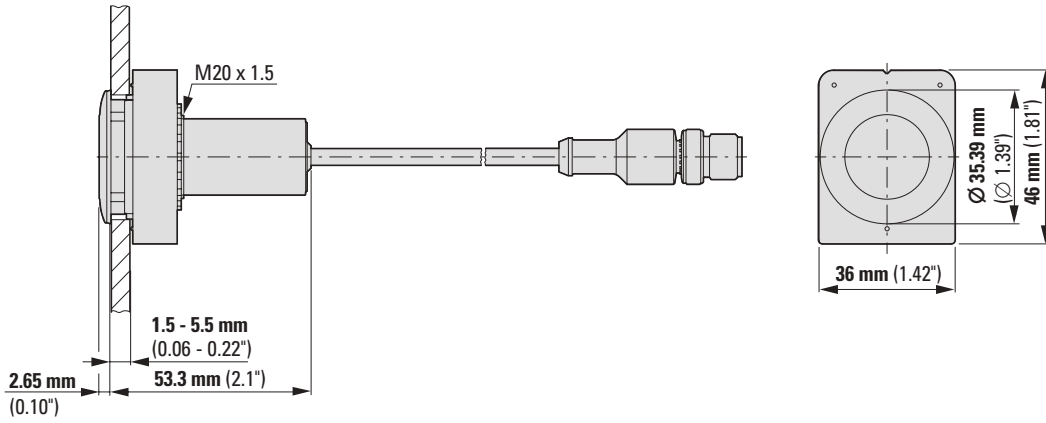
Selector switches, unterminated cable end

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



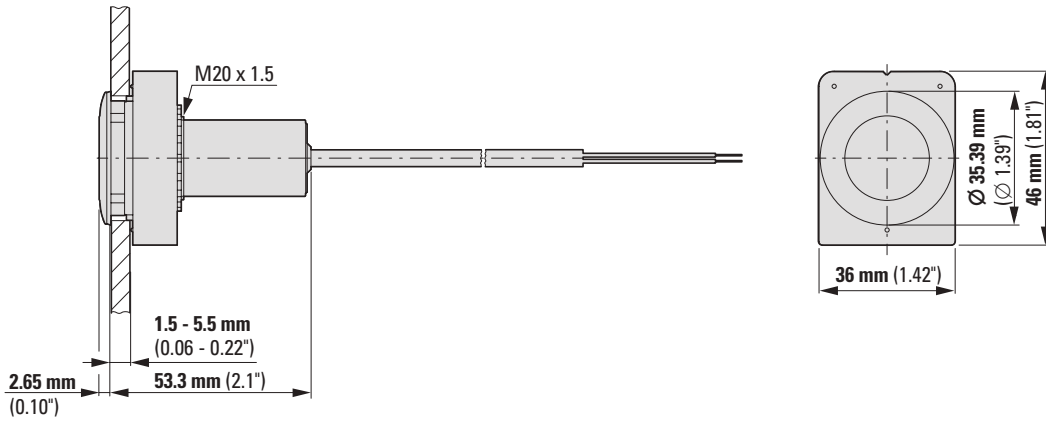
Pushbuttons, M12A

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



Pushbuttons, unterminated cable end

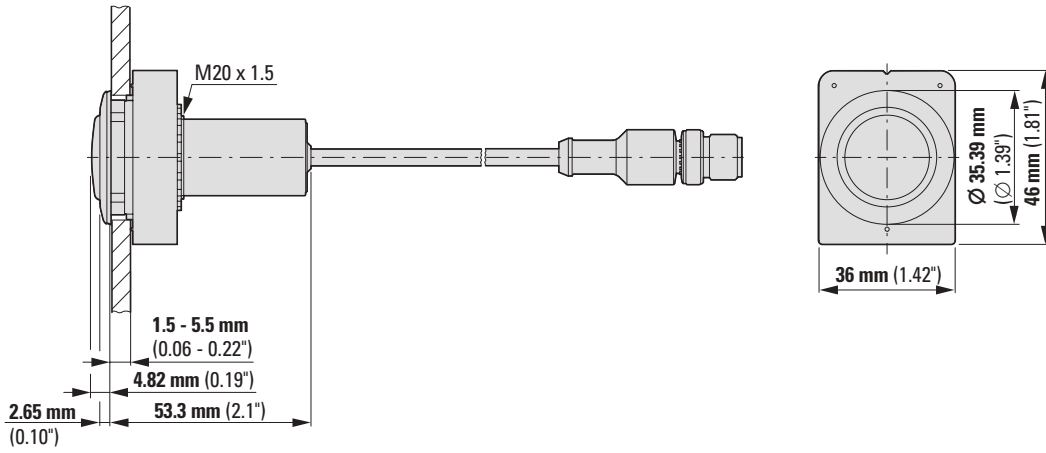
C30C-FD(R)(L)-...-P62/-65



2

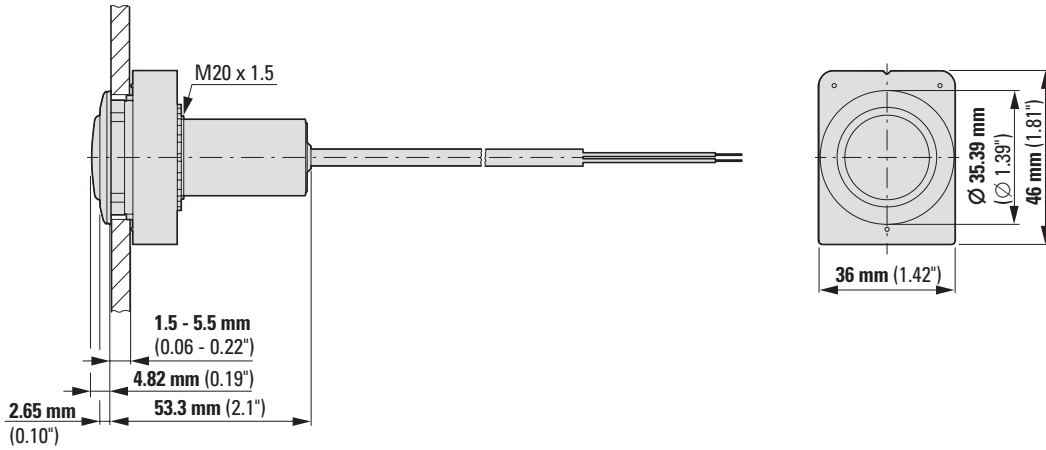
Indicator lights, M12A

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

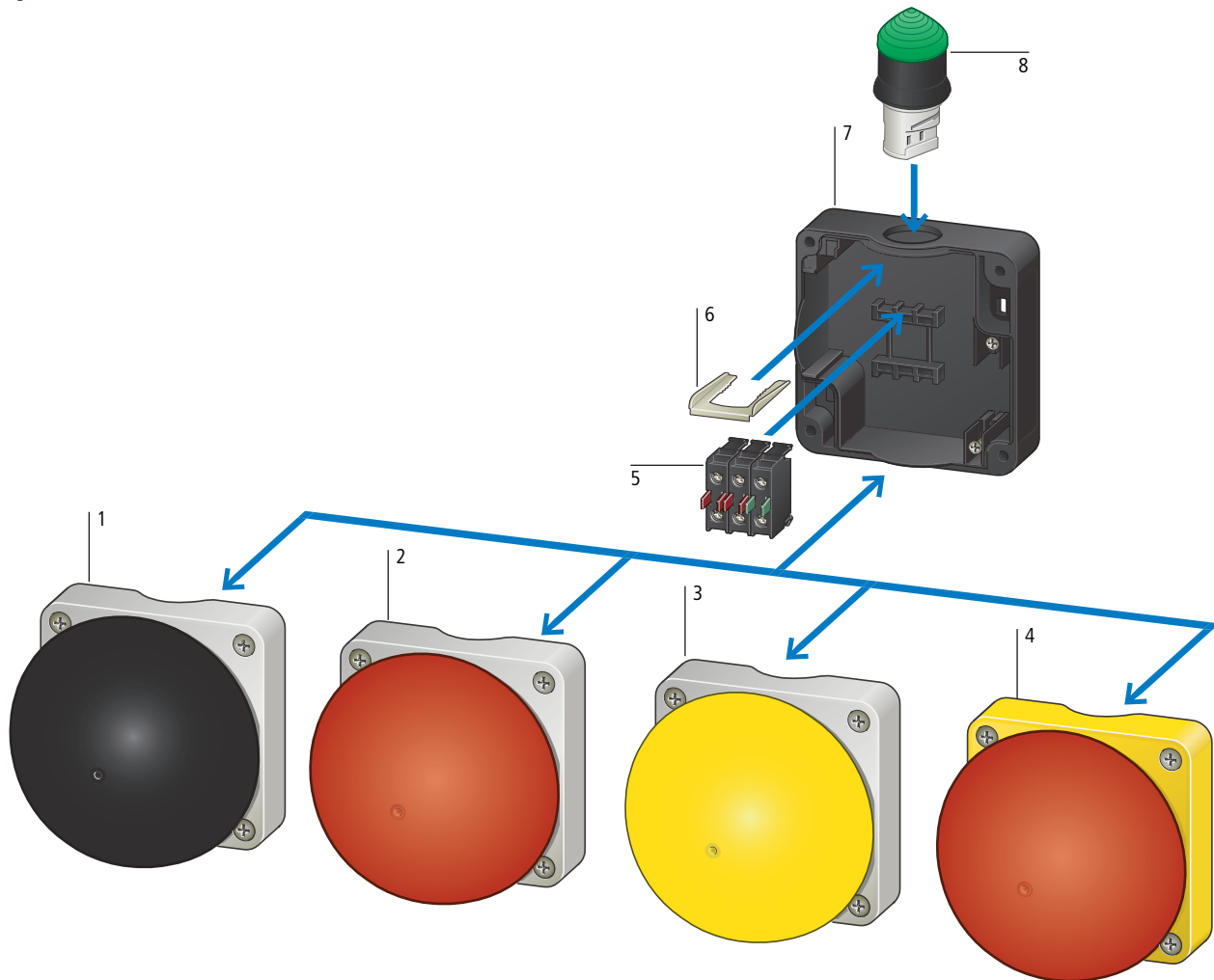
3.1 Product selection 130

 Complete units, individual components 130

3.2 Technical data, dimensions 131

3

System overview



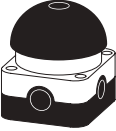

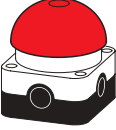

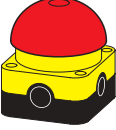





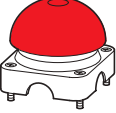
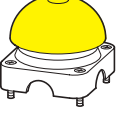
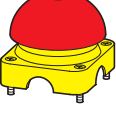
Operator only with button	1, 2,
Various color combinations	3, 4
Yellow/red for Emergency stop or emergency switching off applications	
European Machinery Safety Directive 2006/42/EC	
For foot or hand operation	
→ Page 130	

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

3

		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		–	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	

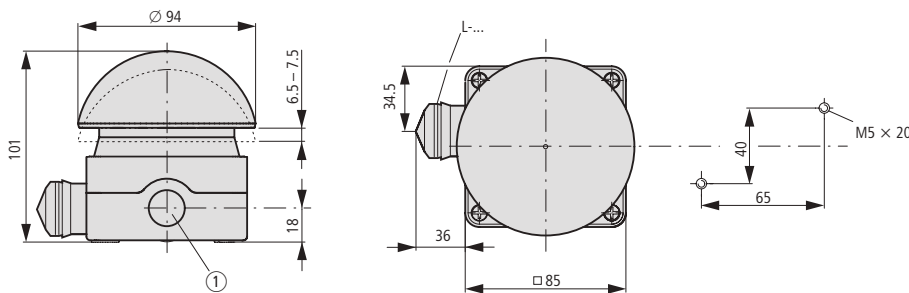
Technical data

		FAK foot and palm switch	
		momentary	maintained
General			
Standards		IEC/EN 60947, VDE 0660	
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	
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	
Mechanical shock resistance to IEC 60068-2-27 Shock duration 11 ms, half-sinusoidal		g	> 15

3

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

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 SL4 – Light modules, acoustic module 139
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 SL4 – Base modules, accessories 141

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SL7 – System overview 142

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SL7 – Complete devices, light modules 144
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4.5 Technical specifications

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 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.

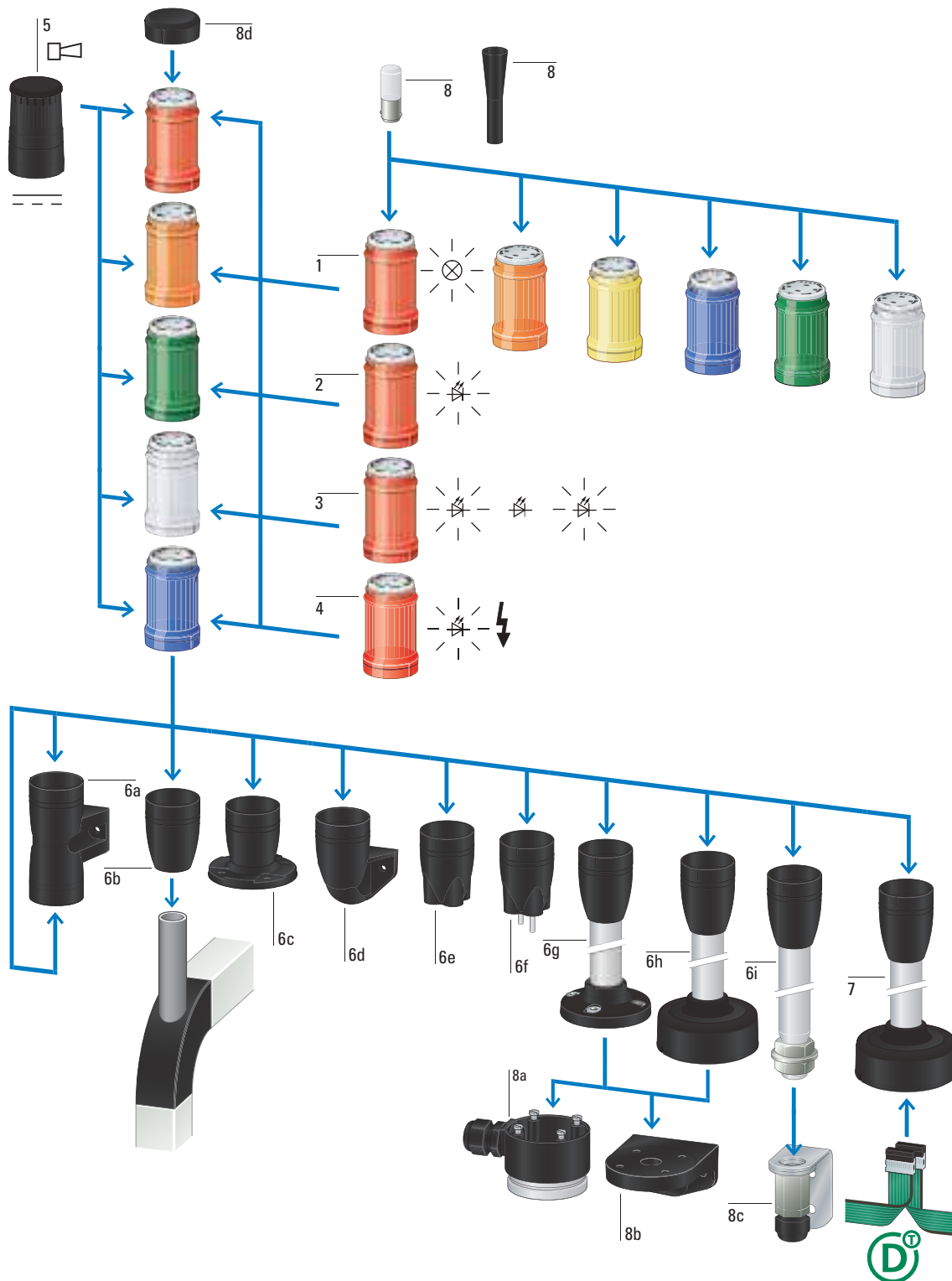
AS-Interface

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.



System overview


4







<p>Module for filament lamp, continuous light 1</p> <hr/> <p>Without light element (filament lamp with BA15d socket)</p> <hr/> <p>Easy mounting with bayonet mount</p> <hr/> <p>Modules can be arranged in any order</p> <hr/> <p>Max. 2 x 5 modules that can be actuated individually (two with base module SL7-CB-D only)</p> <hr/> <p>IP66 degree of protection</p> <hr/> <p>Operating mode: 100% DF (duty factor)</p> <hr/> <p>→ Page 139</p>	<p>Acoustic module 5</p> <hr/> <p>Continuous tone or pulsed tone - adjustable with internal dip switches</p> <hr/> <p>Sound pressure 80 dB, frequency 4000 Hz</p> <hr/> <p>Easy mounting with bayonet mount</p> <hr/> <p>Set up as topmost module</p> <hr/> <p>Max. 2 x 1 module that can be actuated individually (two with base module SL7-CB-D only)</p> <hr/> <p>IP66 degree of protection</p> <hr/> <p>Permanently integrated cover plate</p> <hr/> <p>Operating mode: 100% DF (duty factor)</p> <hr/> <p>→ Page 139</p>	<p>Base module with base adapter for slipping onto place (rapid mounting and wiring system) 6h</p> <hr/> <p>Aluminum tube 100 mm, 250 mm or 400 mm</p> <hr/> <p>→ Page 140</p>
<p>Module with LED, continuous light 2</p> <hr/> <p>Easy mounting with bayonet mount</p> <hr/> <p>Modules can be arranged in any order</p> <hr/> <p>Max. 2 x 5 modules that can be actuated individually (two with base module SL7-CB-D only)</p> <hr/> <p>IP66 degree of protection</p> <hr/> <p>Operating mode: 100% DF (duty factor)</p> <hr/> <p>→ Page 136</p>	<p>Base module for mounting on both sides 6a</p> <hr/> <p>Easy mounting with bayonet mount</p> <hr/> <p>IP66 degree of protection</p> <hr/> <p>With cover plate</p> <hr/> <p>With Push in terminals</p> <hr/> <p>→ Page 141</p>	<p>Base module with aluminum tube and screw fixing 6i</p> <hr/> <p>Aluminum tube 100 mm, 250 mm or 400 mm</p> <hr/> <p>→ Page 140</p>
<p>Module with LED, flashing light 3</p> <hr/> <p>Easy mounting with bayonet mount</p> <hr/> <p>Modules can be arranged in any order</p> <hr/> <p>Max. 2 x 5 modules that can be actuated individually (two with base module SL7-CB-D only)</p> <hr/> <p>IP66 degree of protection</p> <hr/> <p>Operating mode: 100% DF (duty factor)</p> <hr/> <p>Flashing frequency 2 Hz</p> <hr/> <p>→ Page 137</p>	<p>Base module can hold tubes 6b</p> <hr/> <p>→ Page 140</p>	<p>Base module with base adapter for slipping onto place (rapid mounting and wiring system) and SmartWire-DT connection 7</p> <hr/> <p>Aluminum tube 100 mm</p> <hr/> <p>→ Page 140</p>
<p>Module with LED, strobe light 4</p> <hr/> <p>with a fixed flashing frequency 1.4 Hz</p> <hr/> <p>with LED for effective signaling effect with various flashing sequences (flashing frequency 1 - 2.6 Hz)</p> <hr/> <p>Easy mounting with bayonet mount</p> <hr/> <p>Modules can be arranged in any order</p> <hr/> <p>Max. 2 x 5 modules that can be actuated individually (two with base module SL7-CB-D only)</p> <hr/> <p>IP66 degree of protection</p> <hr/> <p>Operating mode: 100% DF (duty factor)</p> <hr/> <p>→ Page 138</p>	<p>Base module with external fixing holes 6c</p> <hr/> <p>→ Page 140</p>	<p>Magnetic base including M20 cable gland 8a</p> <hr/> <p>For vertical mounting</p> <hr/> <p>→ Page 141</p>
	<p>Base module one-sided with bracket 6d</p> <hr/> <p>→ Page 141</p>	<p>Mounting bracket 8b</p> <hr/> <p>For vertical mounting</p> <hr/> <p>→ Page 141</p>
	<p>Base module with internal (on the inside) fixing holes 6e</p> <hr/> <p>→ Page 140</p>	<p>Accessory 8c</p> <hr/> <p>Tool for replacing filament lamp</p> <hr/> <p>Filament lamp</p> <hr/> <p>→ Page 141</p>
	<p>Base module with built-in (pre-assembled) fixing screws 6f</p> <hr/> <p>→ Page 140</p>	<p>Accessory 8d</p> <hr/> <p>Cover</p> <hr/> <p>→ Page 141</p>
	<p>Base module with aluminum tube and plastic foot 6g</p> <hr/> <p>Aluminum tube 100 mm, 250 mm or 400 mm</p> <hr/> <p>→ Page 141</p>	

Product selection

4

	Rated operational voltage U_e V	Number of modules	Color	Function	Catalog Number Article no.	Std. pack	
	Complete devices						
	24 V AC/DC	2			SL4-100-L-RG-24LED 171295	1 unit	
3			SL4-100-L-RYG-24LED 171296				
	Module with LED						
	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
 <p>Beacon IP66 2 Hz</p>	Module with LED				
	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
 <p>Module for filament lamp Continuous light IP66 Without lamp Filament lamp max. 4 W Filament lamp → Page 141</p>	< 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
 <p>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</p>	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	

	Rated operating voltage U_e V	Rated operational current I_e mA	Color	Function	Type of tone	Catalog Number Article no.	Std. pack
 <p>Customized complete unit Order please enquire</p>	-	-	-	-	-	SL4-COMBINATION 2011956	1 unit

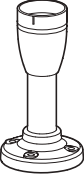
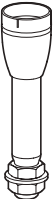




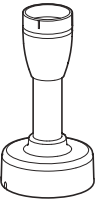
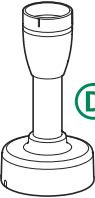
4.2



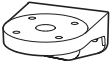


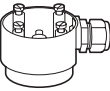


Signal towers

SL4 – Base modules

Moeller series

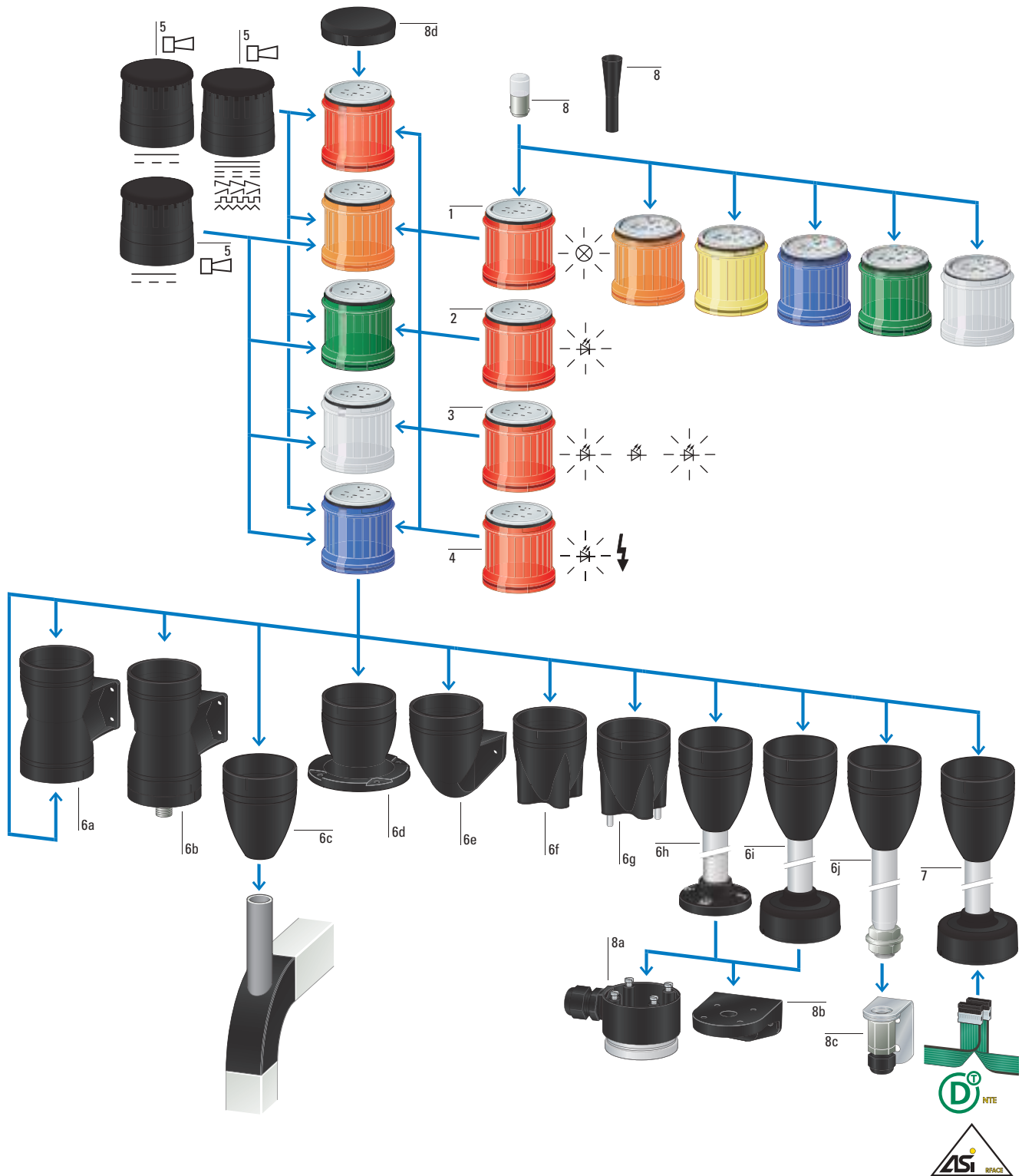
4

	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-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		

System overview

























4























<p>Module for filament lamp, continuous light 1</p> <p>Without light element (filament lamp with BA15d socket)</p> <p>Easy mounting with bayonet mount</p> <p>Modules can be arranged in any order</p> <p>Max. 2 x 5 modules that can be actuated individually (two with base module SL7-CB-D only)</p> <p>IP66 degree of protection</p> <p>Operating mode: 100% DF (duty factor)</p> <p>→ Page 147</p>	<p>acoustic module 5</p> <p>Easy mounting with bayonet mount</p> <p>Set up as topmost module</p> <p>Max. 2 x 1 module that can be actuated individually (two with base module SL7-CB-D only)</p> <p>IP66 degree of protection</p> <p>Permanently integrated cover plate</p> <p>Operating mode: 100% DF (duty factor)</p> <p>Sound pressure 80 dB, frequency 4000 Hz</p> <p>→ Page 148</p>	<p>Base module with built-in (pre-assembled) fixing screws 6g</p> <p>→ Page 149</p>
<p>Module with LED, continuous light 2</p> <p>Easy mounting with bayonet mount</p> <p>Modules can be arranged in any order</p> <p>Max. 2 x 5 modules that can be actuated individually (two with base module SL7-CB-D only)</p> <p>IP66 degree of protection</p> <p>Operating mode: 100% DF (duty factor)</p> <p>→ Page 147</p>	<p>acoustic module 5a</p> <p>Continuous tone or pulsed tone – adjustable with internal dip switches</p> <p>Frequency: 2800 Hz</p> <p>→ Page 148</p>	<p>Base module with aluminum tube and plastic foot 6h</p> <p>Aluminum tube 100 mm, 250 mm or 400 mm</p> <p>→ Page 149</p>
<p>Module with LED, flashing light 3</p> <p>Easy mounting with bayonet mount</p> <p>Modules can be arranged in any order</p> <p>Max. 2 x 5 modules that can be actuated individually (two with base module SL7-CB-D only)</p> <p>IP66 degree of protection</p> <p>Operating mode: 100% DF (duty factor)</p> <p>→ Page 147</p>	<p>acoustic module 5b</p> <p>Multi-tone (8 tones) - adjustable with internal dip switch</p> <p>Frequency 500 - 2700 Hz</p> <p>→ Page 148</p>	<p>Base module with base adapter for slipping onto place (rapid mounting and wiring system) 6i</p> <p>Aluminum tube 100 mm, 250 mm or 400 mm</p> <p>→ Page 149</p>
<p>Module with LED, strobe light 4</p> <p>with a fixed flashing frequency 1.4 Hz with LED for effective signaling effect with various flashing sequences (flashing frequency 1 - 2.6 Hz)</p> <p>Easy mounting with bayonet mount</p> <p>Modules can be arranged in any order</p> <p>Max. 2 x 5 modules that can be actuated individually (two with base module SL7-CB-D only)</p> <p>IP66 degree of protection</p> <p>Operating mode: 100% DF (duty factor)</p> <p>→ Page 146</p>	<p>acoustic module 5b</p> <p>Continuous tone or pulsed tone – can be actuated externally; takes up 2 inputs (2 modules)</p> <p>Frequency: 2800 Hz</p> <p>→ Page 148</p>	<p>Base module with aluminum tube and screw fixing 6j</p> <p>Aluminum tube 100 mm, 250 mm or 400 mm</p> <p>→ Page 149</p>
	<p>Base module for mounting on both sides 6a</p> <p>Easy mounting with bayonet mount</p> <p>IP66 degree of protection</p> <p>With cover plate</p> <p>With Push in terminals</p> <p>→ Page 150</p>	<p>Base module with base adapter for slipping onto place (rapid mounting and wiring system) and SmartWire-DT connection or AS-Interface 7</p> <p>Aluminum tube 100 mm</p> <p>→ Page 149</p>
	<p>Base module for vertical mounting on one sides 6b</p> <p>Plug-in connection M22</p> <p>→ Page 150</p>	<p>accessory 8</p>
	<p>Base module can hold tubes 6c</p> <p>→ Page 149</p>	<p>Magnetic base including M20 cable gland 8a</p> <p>For vertical mounting</p> <p>→ Page 141</p>
	<p>Base module with external fixing holes 6d</p> <p>→ Page 149</p>	<p>Mounting bracket 8b</p> <p>For vertical mounting</p> <p>→ Page 141</p>
	<p>Base module one-sided with bracket 6e</p> <p>→ Page 150</p>	<p>Accessory 8c</p> <p>Tool for replacing filament lamp</p> <p>Filament lamp</p> <p>→ Page 141</p>
	<p>Base module with internal (on the inside) fixing holes 6f</p> <p>→ Page 149</p>	<p>Accessory 8d</p> <p>Cover</p> <p>→ Page 150</p>

Product selection

4

	Rated operating voltage U_e V	Number of modules	Color	Function	Catalog Number Article no.	Std. pack	
	Complete devices						
	24 V AC/DC	2			SL7-100-L-RG-24LED 171424	1 unit	
		3			SL7-100-L-RYG-24LED 171425		
	Module with LED						
	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
 <p>Module with LED Beacon IP66 2 Hz</p>	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		

4.4

Signal towers































SL7 – Light modules

Moeller series










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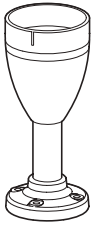
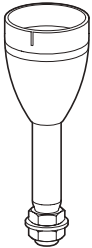



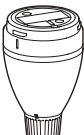
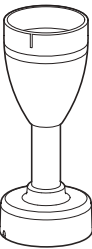





	Rated operating voltage U_e V	Color	Function	Catalog Number Article no.	Std. pack
Module with LED					
Strobe light IP66 1.4 Hz	24 V AC/DC			SL7-FL24-B 171402	1 unit
				SL7-FL24-G 171403	
				SL7-FL24-R 171404	
				SL7-FL24-W 171405	
				SL7-FL24-Y 171406	
				SL7-FL24-A 171407	
	110/120 V AC		SL7-FL120-B 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					
 <p>Continuous light IP66 High-performance LED for maximum signaling effect High Performance LED</p>	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	
<p>Strobe light IP66 High-performance LED for maximum signaling effect High Performance LED 1.4 Hz</p>	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	
<p>Multistrobe light IP66 High-performance LED for maximum signaling effect High Performance LED 1 - 2.6 Hz</p>	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					
 <p>Continuous light IP66 Without lamp Filament lamp max. 7 W filament lamp → Page 150</p>	< 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	

SL7 – Acoustic modules

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						
 <p>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</p>						
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	
 <p>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</p>						
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	
 <p>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</p>						
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					
	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	
	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	
	–	black		SL7-CB-IMH 171447	
	–			SL7-CB-IMS 171448	
	–			SL7-CB-EMH 171449	
	–			SL7-CB-TM 179987	
	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	
  	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	


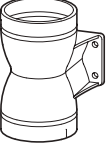

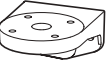
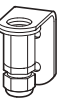

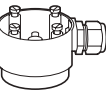


4.4

Signal towers

Moeller series

SL7 – Base modules, accessories

4

	Color	For use with	Catalog Number Article no.	Std. pack		
Base modules						
	black	SL7-L-... SL7-BL-... SL7-FL-... SL7-AP-...	SL7-CB-FW 171450	1 unit		
for vertical mounting, with cover, max. 5 modules						
	black	SL7-L-... SL7-BL-... SL7-FL-... SL7-AP-...	SL7-CB-D 171451	1 unit		
for vertical mounting on both sides, with cover, max. 2 x 5 modules						
	black	SL7-L-... SL7-BL-... SL7-FL-... SL7-AP-...	SL7-CB-D-M12A4 177351	1 unit		
for vertical mounting on one side, with cover max. 1 x 3 modules						
Mounting bracket						
	–	SL4-PIB-... SL7-CB-...	SL7/4-FW 171446	1 unit		
for vertical mounting, insulated material						
Including mounting bracket M20 cable gland						
	–	SL4-PIB-T-... SL7-CB-T-...	SL7/4-FW-T 171455	1 unit		
for vertical mounting, metal						
Tool for replacing filament lamp						
	–	SL7-L-...	SL7/4-BET 171294	1 unit		
–						
Magnetic base including M20 cable gland						
	–	SL4-PIB-100(250)(400) SL7-CB-100(250)(400)	SL7/4-MMS 172954	1 unit		
for vertical mounting, insulated material						
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	
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			
		mm ²	0.2 - 1.5
Solid/flexible			
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						
	A	0.022 - 0.033	0.028 - 0.036	0.035 - 0.065	0.048 - 0.068	-
24 V AC/DC						
110/120 V AC	A	0.030	0.030	0.10	-	-
230/240 V 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

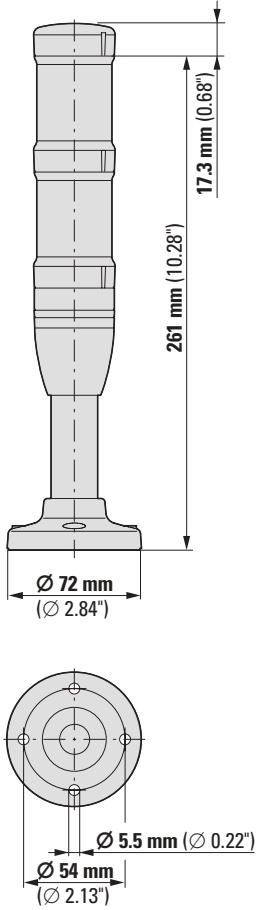
	SL7-AP...	SL7-AP...-E	SL7-AP...-M
Acoustic modules			
Type of tone	Continuous or pulsed tone	Continuous or pulsed tone	Continuous or pulsed tone 8 types of sound
Types of sound	2 versions, table of sound types	2 versions, table of sound types	8 versions, table of sound types
Sound setting	Built-in, 1 pole DIP	Can be externally actuated	Built-in, 3 pole DIP
Sound pressure	dB	100	100
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	0.115
110/120 V AC	A	0.041	0.045
230/240V AC	A	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

	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

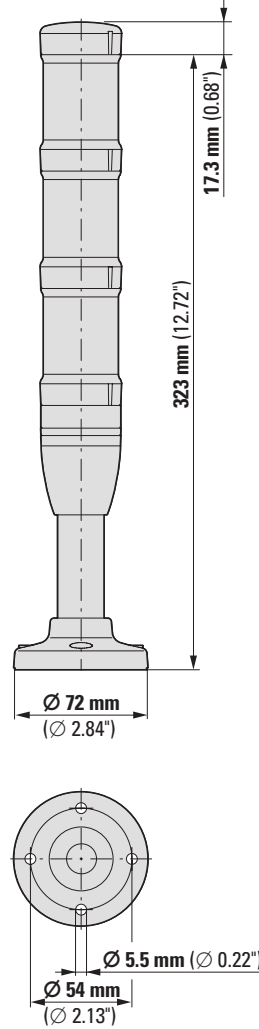
Dimensions

Complete devices

SL4-100-L-RG-24LED



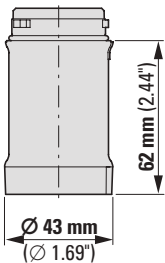
SL4-100-L-RYG-24LED



4

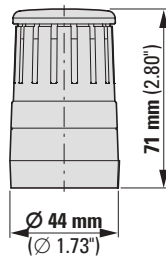
Light modules

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



Acoustic modules

SL4-AP...



4.6

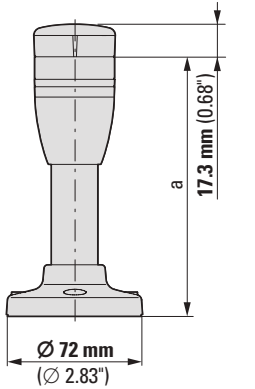
Signal towers

SL4 – Dimensions

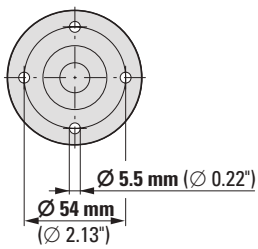
Moeller series

Base modules

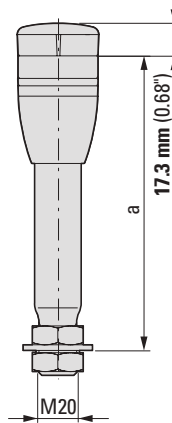
SL4-PIB-...



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)

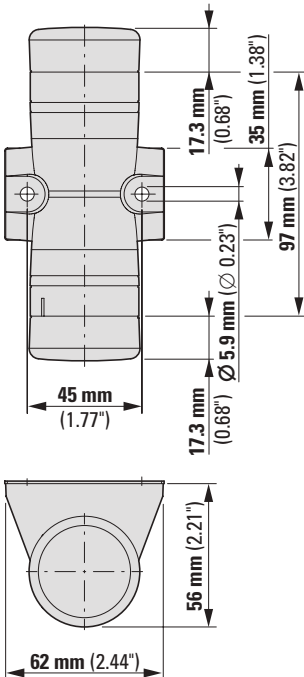


SL4-PIB-T-...

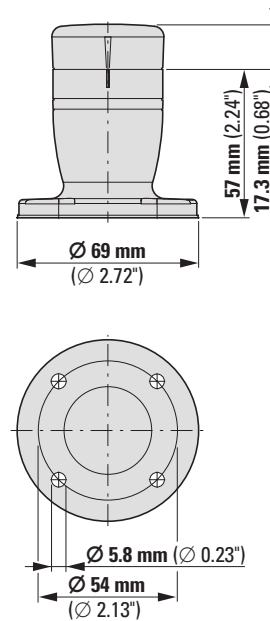


Catalog Number	a mm (inch)
SL4-PIB-T-100	150 (5.90)
SL4-PIB-T-250	300 (11.81)
SL4-PIB-T-400	450 (17.72)
SL4-PIB-T-800	850 (33.46)

SL4-PIB-D

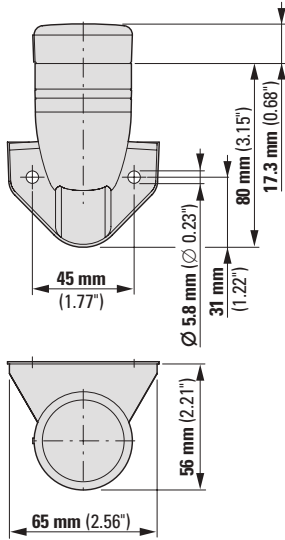


SL4-PIB-EMH

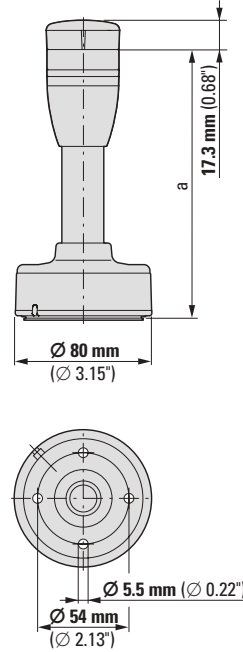


Base modules

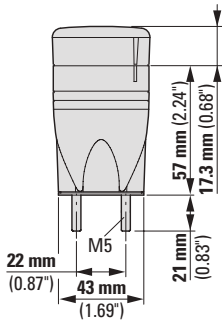
SL4-PIB-FW



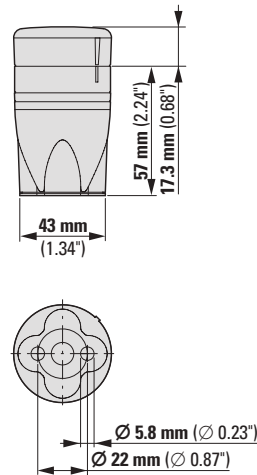
SL4-PIB-IMH



SL4-PIB-IMS

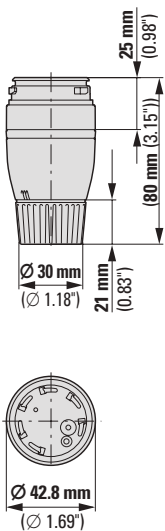


SL4-FMS-...



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



4.6

Signal towers

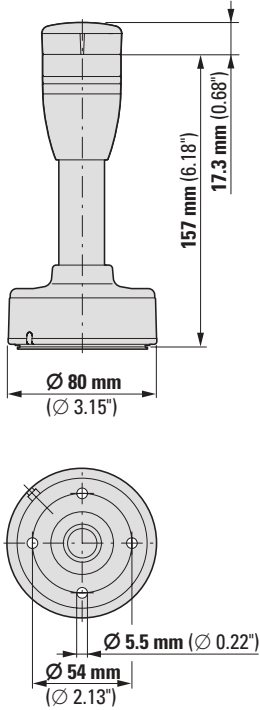
SL4 – Dimensions

Moeller series

Base module for connecting to SmartWire-DT®

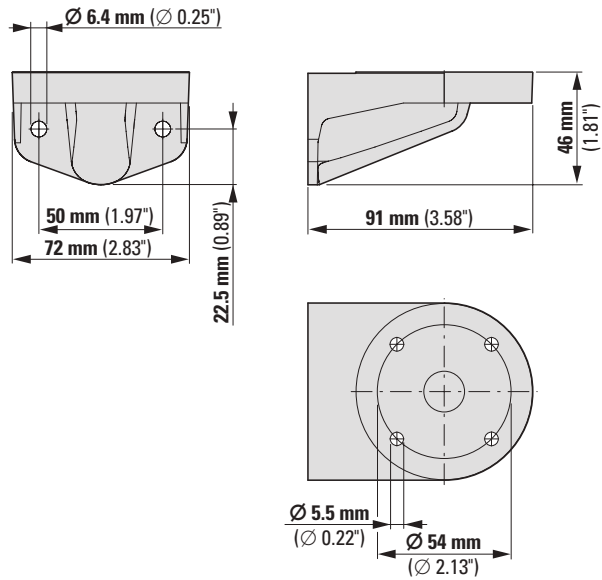
SL4-SWD

4

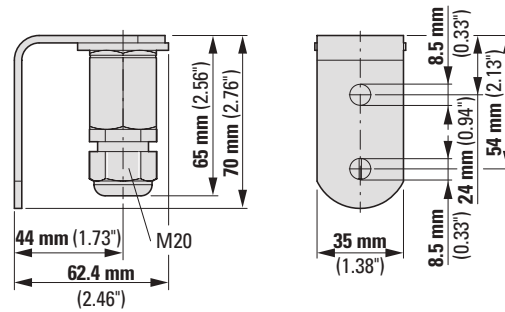


Mounting bracket

SL7/4-FW

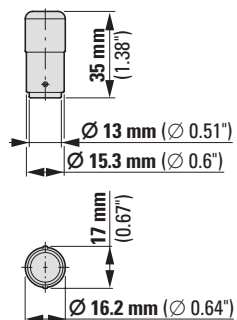


SL7/4-FW-T



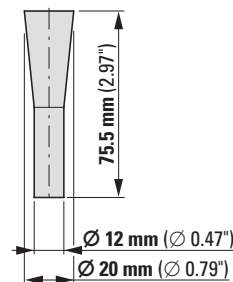
filament lamp

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



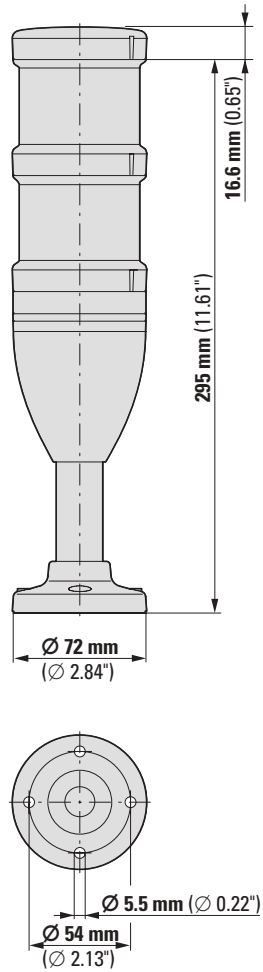
Tool for replacing filament lamp

SL7/4-BET

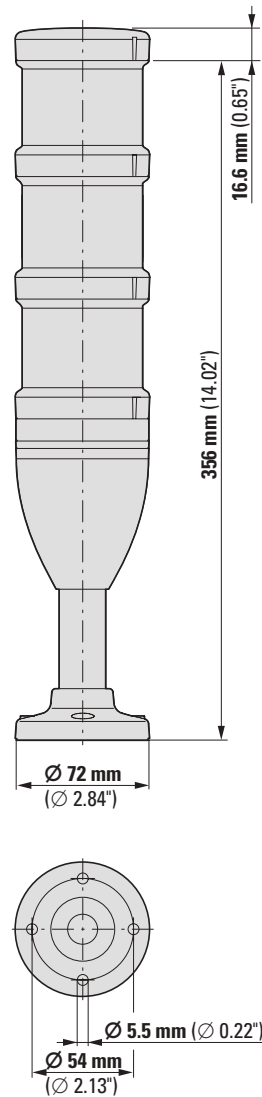


Complete devices

SL7-100-L-RG-24LED



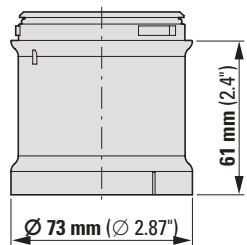
SL7-100-L-RYG-24LED



4

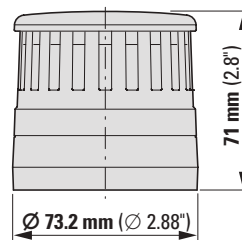
Light modules

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



Acoustic modules

SL7-AP...



4.6

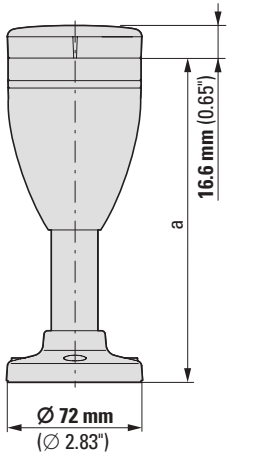
Signal towers

SL7 – Dimensions

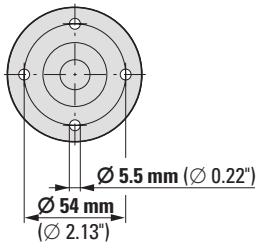
Moeller series

Base modules

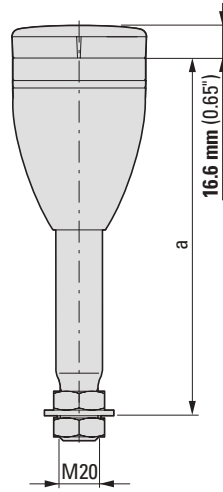
SL7-CB-...



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)

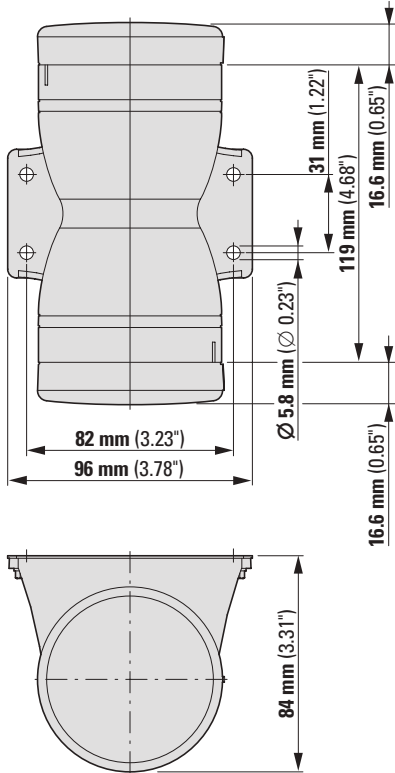


SL7-CB-T-...

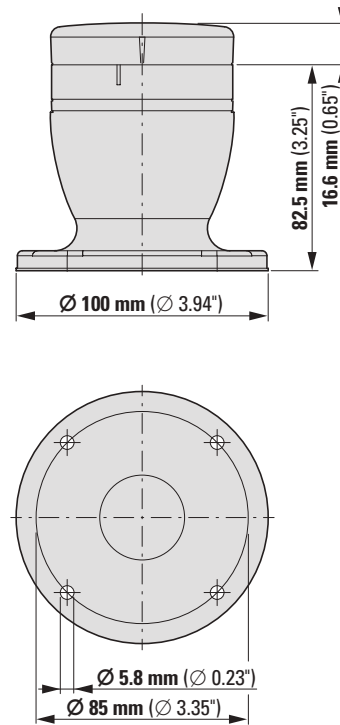


Catalog Number	a mm (inch)
SL7-CB-T-100	190 (7.48)
SL7-CB-T-250	340 (13.38)
SL7-CB-T-400	490 (19.29)
SL7-CB-T-800	890 (35.04)

SL7-CB-D

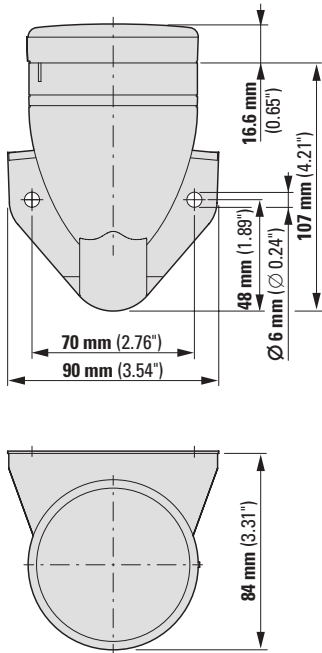


SL7-CB-EMH

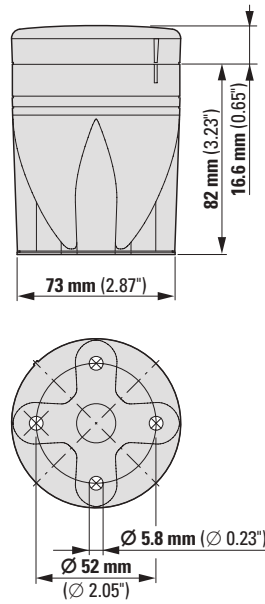


Base modules

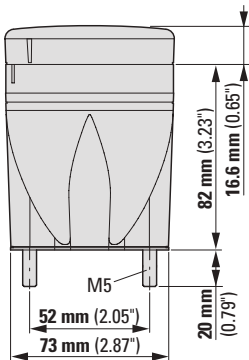
SL7-CB-FW



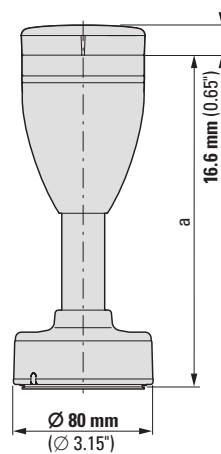
SL7-CB-IMH



SL7-CB-IMS

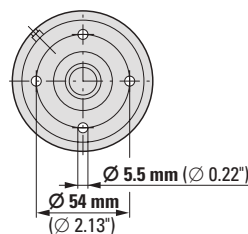
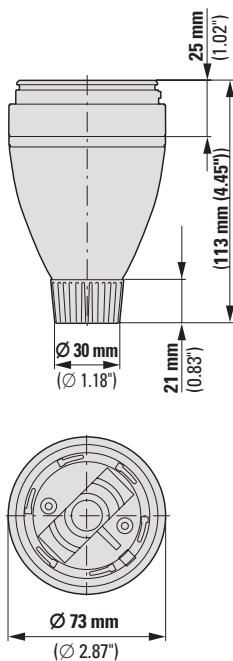


SL7-FMS-...



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)

SL7-CB-TM



4.6

Signal towers

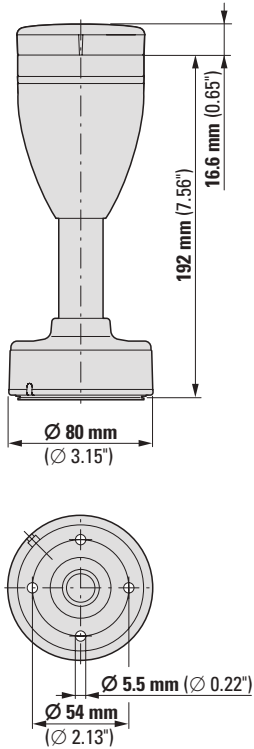
SL7 – Dimensions

Moeller series

4

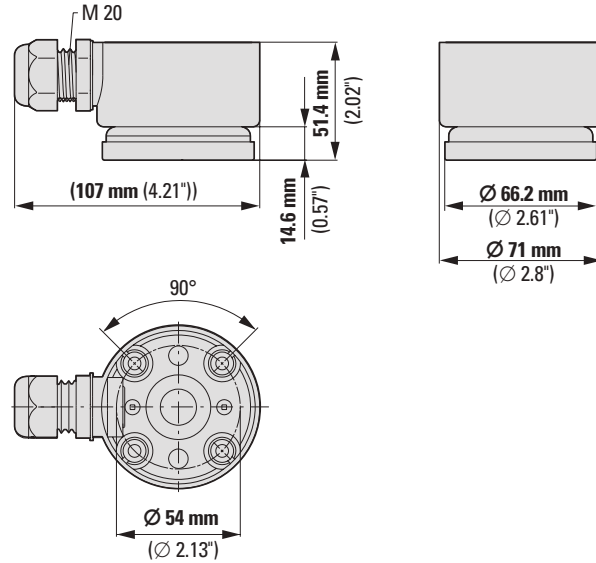
Base module for connecting to SmartWire-DT®/AS-Interface

SL7-SWD/ASI



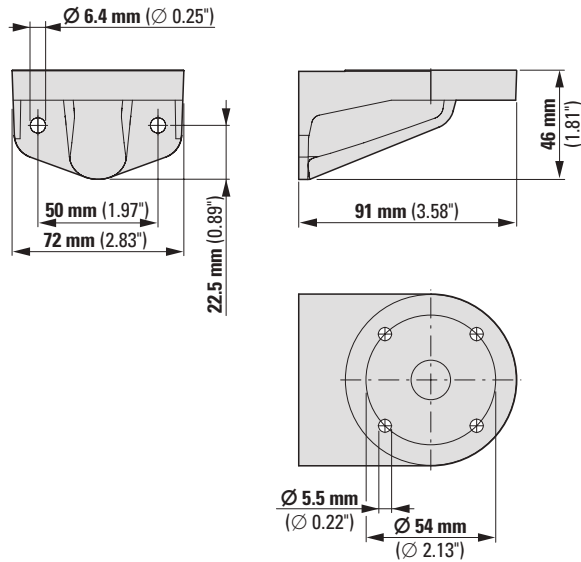
Magnetic base including M20 cable gland

SL7/4-MMS

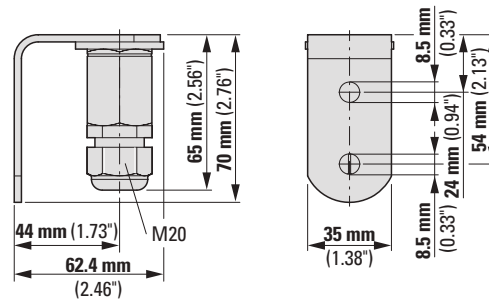


Mounting bracket

SL7/4-FW

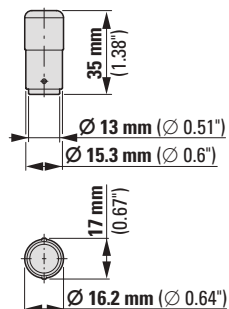


SL7/4-FW-T



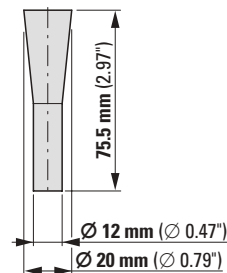
filament lamp

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

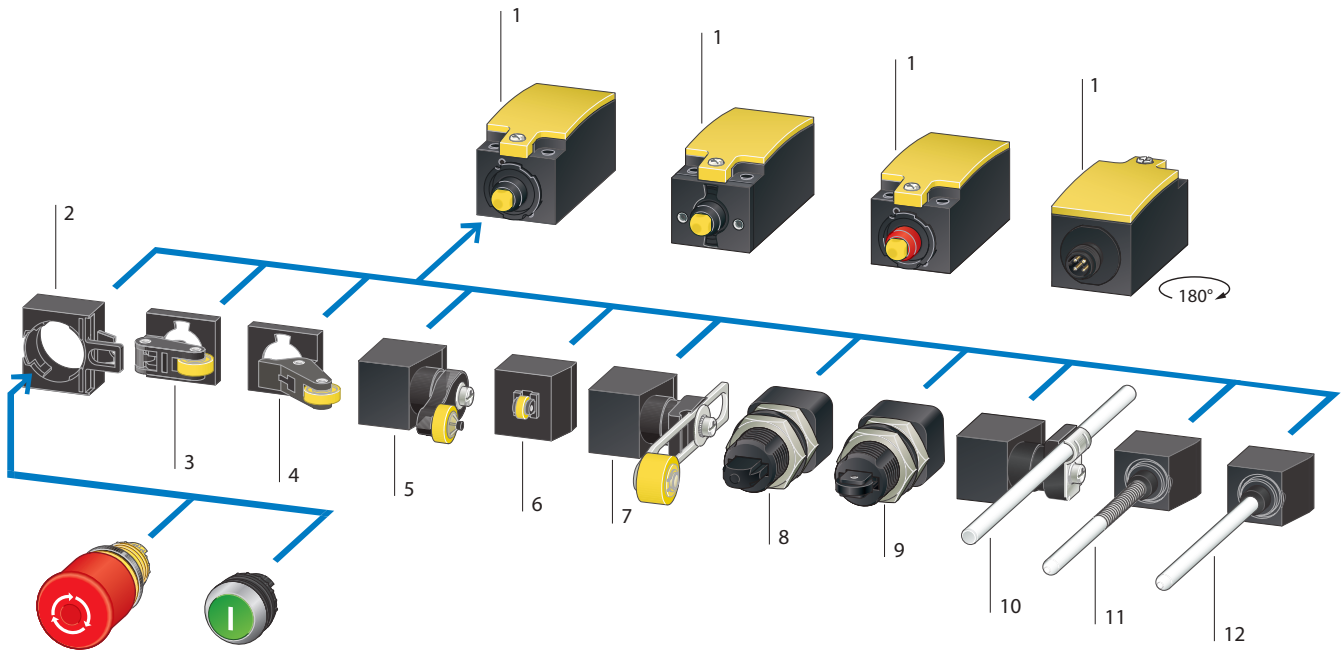
- Non-contacting: long lifespan, easy installation, high tolerance for doors and hinged flaps that do not close precisely, low maintenance
- High IP67, IP69 degree of protection: easy to clean, rugged, and reliable
- Symmetrical enclosure: easy mounting, low inventory levels
- 2 or 3 switching contacts: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

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

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System overview

5



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

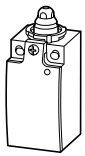
Ordering

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

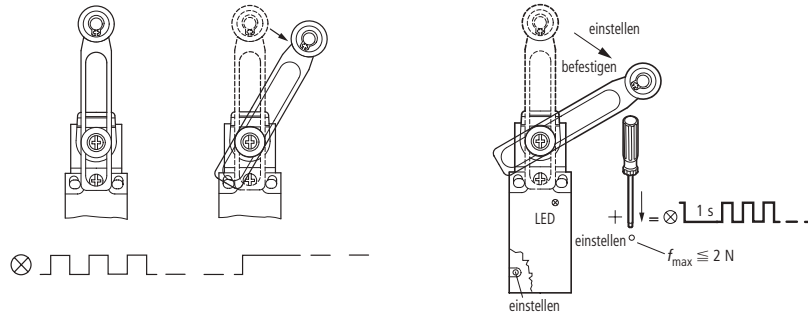
IP66, IP67 operating point electronically adjustable

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⁾

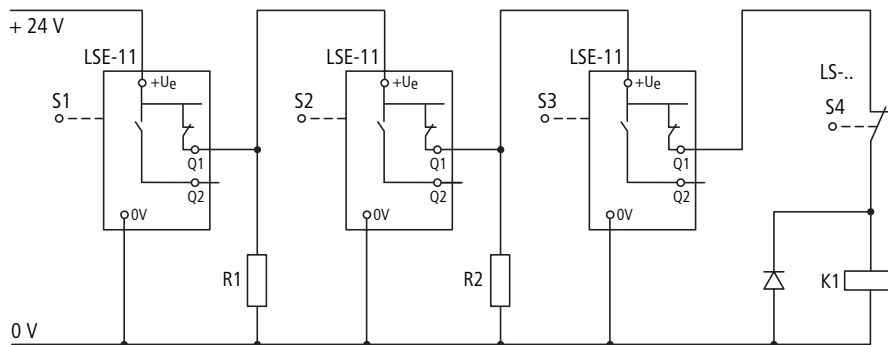
Notes **LSE-11 and LSE-02: Individual operating point adjustment:**



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

Position switches LS-Titan

Contact configuration

Contact sequence

Contact travel
 = Contact closed
 = contact open

Color
 Enclosure covers

Enclosure material

Connection type

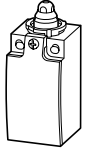
Catalog Number
 Article no.

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

Contact configuration	Contact sequence	Contact travel	Color	Enclosure material	Connection type	Catalog Number	Std. pack
– 2 N/C			Yellow	Plastic	Cage-Clamp	LS-02 266107	10 units ¹⁾²⁾
– 2 N/C			Black	Plastic	Cage-Clamp	LS-02-SW 272009	10 units ¹⁾²⁾
– 2 N/C			Yellow	Plastic	Screw terminal	LS-S02 106729	10 units ²⁾
– 2 N/C			Black	Plastic	Screw terminal	LS-S02-SW 106782	10 units ²⁾
– 2 N/C			Yellow	Metal	Cage-Clamp	LSM-02 266142	2 units ¹⁾²⁾
– 2 N/C			Yellow	Insulated material EN 50047 Form B	Cage-Clamp	LS-02A 116702	10 units ¹⁾²⁾
– 2 N/C			Yellow	Insulated material EN 50047 Form B	Screw terminal	LS-S02A 116703	10 units ²⁾
1 N/O 1 N/C			Yellow	Plastic	Cage-Clamp	LS-11 266109	10 units ¹⁾²⁾
1 N/O 1 N/C			Black	Plastic	Cage-Clamp	LS-11-SW 272006	10 units ¹⁾²⁾
1 N/O 1 N/C			Yellow	Plastic	Screw terminal	LS-S11 106783	10 units ²⁾
1 N/O 1 N/C			Black	Plastic	Screw terminal	LS-S11-SW 106807	10 units ²⁾
1 N/O 1 N/C			Yellow	Metal EN 50047 Form B	Cage-Clamp	LSM-11 266144	2 units ¹⁾²⁾
1 N/O 1 N/C			Yellow	Insulated material EN 50047 Form B	Cage-Clamp	LS-11A 116704	10 units ¹⁾²⁾
1 N/O 1 N/C			Yellow	Insulated material EN 50047 Form B	Screw terminal	LS-S11A 116705	10 units ²⁾
1 N/O 1 N/C			Yellow	Plastic	Cage-Clamp	LS-11D 266114	10 units ¹⁾²⁾
1 N/O 1 N/C			Black	Plastic	Cage-Clamp	LS-11D-SW 272007	10 units ¹⁾²⁾
1 N/O 1 N/C			Yellow	Plastic	Screw terminal	LS-S11D 106791	10 units ²⁾
1 N/O 1 N/C			Black	Plastic	Screw terminal	LS-S11D-SW 106797	10 units ²⁾
1 N/O 1 N/C			Yellow	Metal	Cage-Clamp	LSM-11D 266149	2 units ¹⁾²⁾
1 N/O 1 N/C			Yellow	Plastic	Cage-Clamp	LS-11DA 292361	10 units ¹⁾²⁾
1 N/O 1 N/C			Yellow	Plastic	Screw terminal	LS-S11DA 106795	1 units ²⁾
1 N/O 1 N/C			Yellow	Metal	Cage-Clamp	LSM-11DA 292363	1 units ¹⁾²⁾
1 N/O 1 N/C			Yellow	Plastic EN 50047 Form B	Cage-Clamp	LS-11S 266105	10 units ¹⁾²⁾
1 N/O 1 N/C			Black	Plastic EN 50047 Form B	Cage-Clamp	LS-11S-SW 272020	10 units ¹⁾²⁾
1 N/O 1 N/C			Yellow	Plastic EN 50047 Form B	Screw terminal	LS-S11S 106798	10 units ²⁾
1 N/O 1 N/C			Black	Plastic EN 50047 Form B	Screw terminal	LS-S11S-SW 106806	10 units ²⁾
1 N/O 1 N/C			Yellow	Metal EN 50047 Form B	Cage-Clamp	LSM-11S 266140	2 units ¹⁾²⁾

Notes

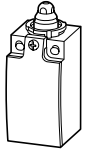
¹⁾ Cage-Clamp is a registered trademark of Wago Kontakttechnik, 32432 Minden, Germany. Accessories for the Cage-Clamp terminals from Wago: power comb, gray, Wago Article No. 264-402
²⁾ Operating heads → Page 178

Contact configuration	Contact sequence	Contact travel ■ = Contact closed □ = contact open	Color Enclosure covers	Enclosure material	Connection type	Catalog Number Article no.	Std. pack
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⇒ 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
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

Position switches LS-Titan

Contact configuration	Contact sequence	Contact travel ■ = Contact closed □ = Contact open	Color Enclosure covers	Enclosure material	Connection type	Catalog Number Article no.	Std. pack
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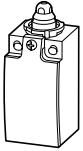
⇒ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1

N/O = Normally open contact
N/C = Normally closed contact

5

Complete devices

Rounded plunger, IP66, IP67 (Front mount)



–	2 N/C			Yellow	Plastic	Cage-Clamp	LS-02/F 292365	1 units ¹⁾²⁾
–	2 N/C			Yellow	Plastic	Screw terminal	LS-S02/F 106780	1 units ²⁾
–	2 N/C			Yellow	Metal	Cage-Clamp	LSM-02/F 292371	1 units ¹⁾²⁾
1 N/O	1 N/C			Yellow	Plastic	Cage-Clamp	LS-11/F 290176	1 units ¹⁾²⁾
1 N/O	1 N/C			Yellow	Plastic	Screw terminal	LS-S11/F 106784	1 units ²⁾
1 N/O	1 N/C			Yellow	Metal	Cage-Clamp	LSM-11/F 292372	1 units ¹⁾²⁾
1 N/O	1 N/C			Yellow	Plastic	Screw terminal	LS-S11D/F 106792	1 units ²⁾
1 N/O	1 N/C			Yellow	Plastic	Cage-Clamp	LS-11D/F 292366	1 units ¹⁾²⁾
1 N/O	1 N/C			Yellow	Metal	Cage-Clamp	LSM-11D/F 292373	1 units ¹⁾²⁾
1 N/O	1 N/C			Yellow	Plastic	Cage-Clamp	LS-11DA/F 292369	1 units ¹⁾²⁾
1 N/O	1 N/C			Yellow	Plastic	Screw terminal	LS-S11DA/F 106796	1 units ²⁾
1 N/O	1 N/C			Yellow	Metal	Cage-Clamp	LSM-11DA/F 292376	1 units ¹⁾²⁾
1 N/O	1 N/C			Yellow	Plastic	Cage-Clamp	LS-11S/F 292367	1 units ¹⁾²⁾
1 N/O	1 N/C			Yellow	Plastic	Screw terminal	LS-S11S/F 106799	1 units ²⁾
1 N/O	1 N/C			Yellow	Metal	Cage-Clamp	LSM-11S/F 292374	1 units ¹⁾²⁾
2 N/O	–			Yellow	Plastic	Cage-Clamp	LS-20/F 292368	1 units ¹⁾
2 N/O	–			Yellow	Plastic	Screw terminal	LS-S20/F 106809	1 units
2 N/O	–			Yellow	Metal	Cage-Clamp	LSM-20/F 292375	1 units ¹⁾
2 N/O	–			Yellow	Plastic	Cage-Clamp	LS-20A/F 292370	1 units ¹⁾
2 N/O	–			Yellow	Plastic	Screw terminal	LS-S20A/F 106811	1 units
2 N/O	–			Yellow	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

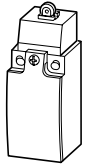
²⁾ The operating head can be rotated at 90° intervals to adapt to the specified approach direction.

Contact configuration	Contact sequence	Contact travel ■ = Contact closed □ = Contact open	Color Enclosure covers	Enclosure material	Connection type	Catalog Number Article no.	Std. pack
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⇒ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1

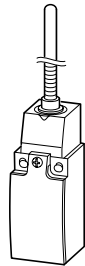
N/O = Normally open contact
N/C = Normally closed contact

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.

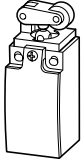
Position switches LS-Titan

Contact configuration	Contact sequence	Contact travel ■ = Contact closed □ = contact open	Enclosure cover color	Enclosure material	Connection type	Catalog Number Article no.	Std. pack
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⊕ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1

N/O = Normally open contact
N/C = Normally closed contact

5



Complete devices

Roller lever IP66, IP67

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	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	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	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

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

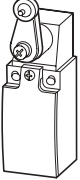

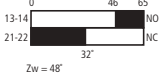

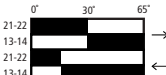
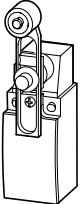

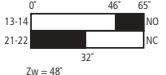

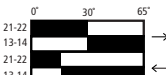
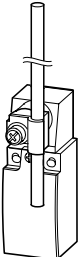

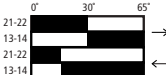
²⁾ The operating head can be rotated at 90° intervals to adapt to the specified approach direction.

Contact configuration	Contact sequence	Contact travel ■ = Contact closed □ = contact open	Color Enclosure covers	Enclosure material	Connection type	Catalog Number Article no.	Std. pack
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⇒ 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

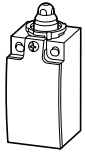
					Plastic	–	LS-COMBINATION 2010791	1 units ¹⁾²⁾
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Notes
¹⁾ Cage-Clamp is a registered trademark of Wago Kontakttechnik, 32432 Minden, Germany. Accessories for the Cage-Clamp terminals from Wago: power comb, gray, Wago Article No. 264-402
²⁾ The operating head can be rotated at 90° intervals to adapt to the specified approach direction.

Position switch

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			●	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			●	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			●	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			●	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			●	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			●	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			●	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	–			●	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	–			●	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	–			●	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 Color Enclosure material Connection type Catalog Number Article no. Std. pack

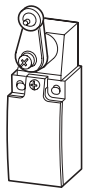
= Contact closed
 = contact open

⇒ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1

N/O = Normally open contact N/C = Normally closed contact

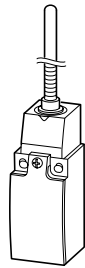
Plastic

-40 - +70, IP65



Swing handle

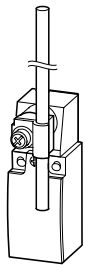
2 N/C				Plastic EN 50047 Form A	Cage clamp	LS-02-CC/RL 156509	2 units ¹⁾²⁾	
2 N/C		$Z_w = 4.5 \text{ mm}$		Plastic EN 50047 Form A	Screw terminal	LS-S02-CC/RL 167677	1 units ¹⁾²⁾	
1 N/O	1 N/C				Plastic EN 50047 Form A	Cage-Clamp	LS-11-CC/RL 120608	2 units ¹⁾²⁾
1 N/O	1 N/C			Plastic EN 50047 Form A	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⁾
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Actuating rod

1 N/O	1 N/C				Plastic	Cage-Clamp	LS-11S-CC/RR 179675	4 units ¹⁾²⁾
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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

Position switch

Contact configuration

Snap-action contact

Contact travel

■ = Contact closed

□ = contact open

Contact diagram

Cage-Clamp¹⁾

Catalog Number
Article no.

Std.
pack

⊕ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1

N/O =

N/C =

Normally open contact

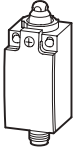
Normally closed contact

Basic device, expandable

with integrated M12 plug, IP66

Rounded plunger

5



Contact configuration	Snap-action contact	Contact travel	Cage-Clamp ¹⁾	Std. pack
–	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

Snap-action contact

Contact travel

Cage-Clamp¹⁾

Std. pack

☉ Safety function implemented with positive opening as defined in IEC/EN 60947-5-1

■ = Contact closed
□ = contact open
Contact diagram

Catalog Number
Article no.

N/O =

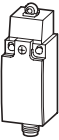
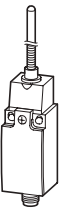
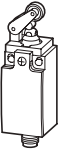
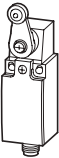
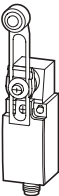
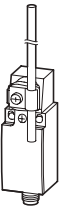
N/C =

Normally open contact

Normally closed contact

Complete devices

with integrated M12 plug, IP66


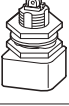




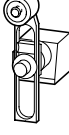
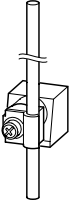
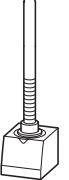
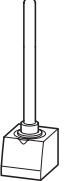

Actuator	Contact configuration	Snap-action contact	Contact travel	Cage-Clamp ¹⁾	Std. pack
	1 N/O	1 N/C	—	—	2 units
	1 N/O	1 N/C	Yes	—	2 units
	1 N/O	1 N/C	Yes	—	2 units
	1 N/O	1 N/C	Yes	—	2 units
	1 N/O	1 N/C	—	—	1 units
	1 N/O	1 N/C	Yes	—	1 units
	1 N/O	1 N/C	—	—	1 units
	1 N/O	1 N/C	Yes	—	1 units
	1 N/O	1 N/C	—	—	2 units
	1 N/O	1 N/C	Yes	—	2 units
	1 N/O	1 N/C	Yes	—	4 units





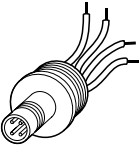

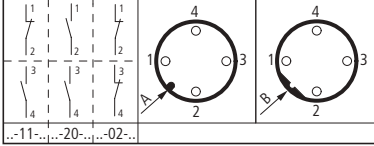

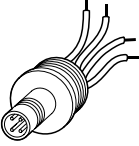

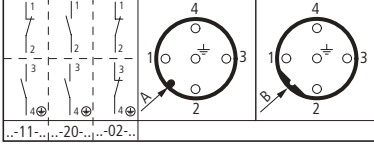

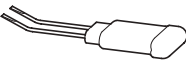


Notes

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

Operating heads

5

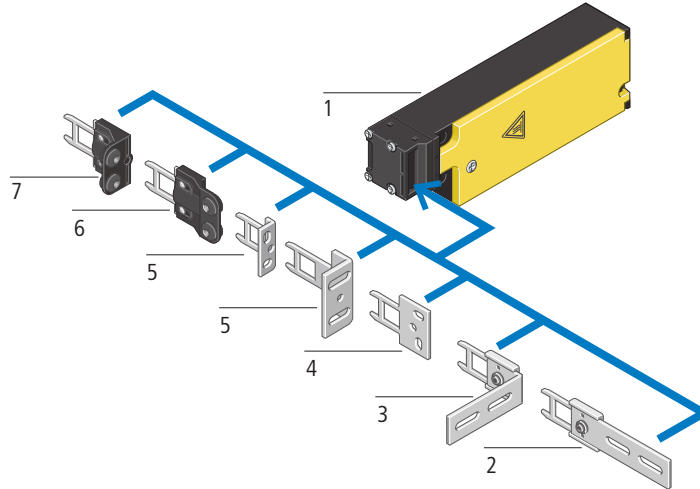
	Plastic Catalog Number Article no.	Std. pack	Metal Catalog Number Article no.	Std. pack	Notes
	Rounded plunger, centre fixing				
For mounting in enclosure wall or mounting plate drilling M18 x 1	LS-XZS 114024	1 units			The operating head can be rotated at 90° intervals to adapt to the specified approach 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	Std. pack	Notes	
		Article no.			
Screw terminal M20 in 1/2"					
	M20 1/2"	V1/2"/M20-NA 225269	10 units	The screw connection is for earthing; no total insulation For thread length up to 9 mm	
	M20 1/2"	V1/2"/M20 225270	10 units	For thread length up to 9 mm	
M20 diaphragm bolt, IP65					
		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 _n = 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

5

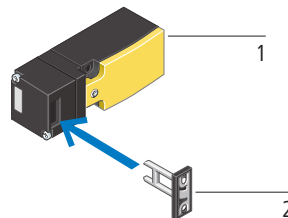


Basic device	1
Spring or magnet-powered interlock	
For increased personnel and process protection	
Tamper-proof	
Multiple coded actuators	
Contact configuration: 1 N/O/1 NC or 2 NC	
→ Page 183	
Flat flexible actuator	2
For doors that do not close precisely	
→ Page 184	

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

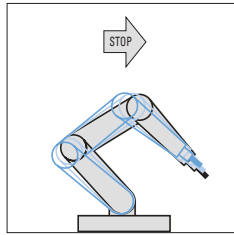
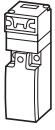


Complete device	1
For personnel protection	
Contact configuration: 1 N/C, 1 N/O / 1 N/O or 2 N/C	
5 directions of operation possible	
→ Page 185	

Actuator	2
Multiple coding protection against tampering	

LS...ZB

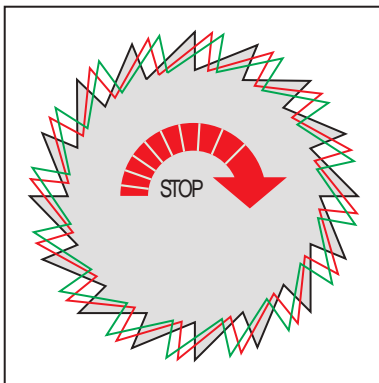
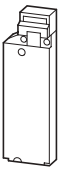
“Personnel protection” by monitoring of the protective mechanism



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

LS/ZBZ

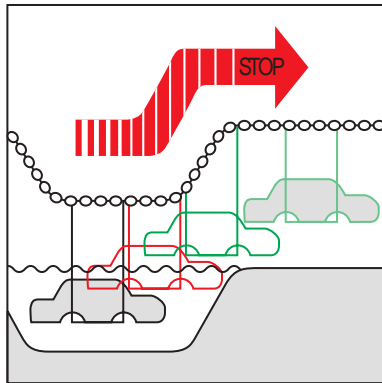
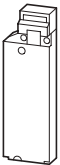
“Increased personnel protection” by monitoring and interlocking the protective mechanism



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

LS/ZBZ

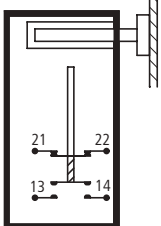
“Increased personnel protection” by monitoring and interlocking the protective mechanism



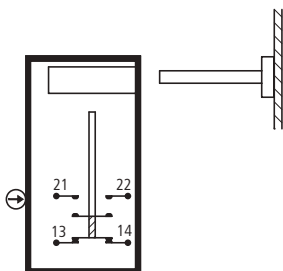
Stop Command
Waiting time
Process sequence halted
Protective mechanism open
Product OK

LS...ZB

Closed



Open



→ Personnel protection

Door open

→ Enabling contact (21-22) opening positively

Door open

→ Enabling contact safely open; tamperproof against simple tools

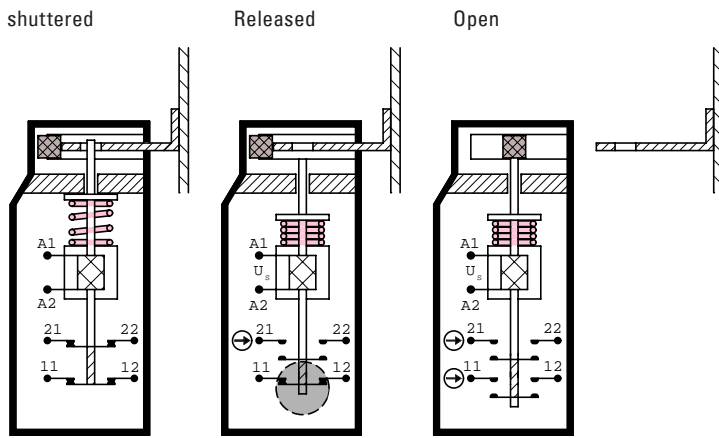
Close door

→ 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)

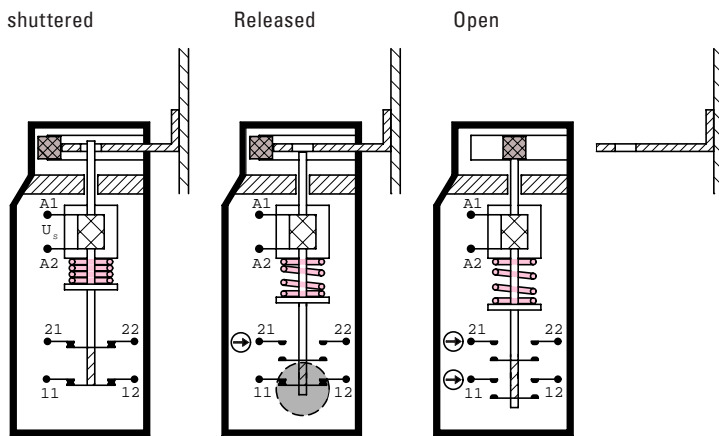


- Enhanced personnel protection with separate signal for door position
- Door closed and interlocked → De-energized: even with mains failure or wire breakage: door interlocked = safe state
Enabling contact (21-22)
- To unlock door → Applies voltage to coil (A1, A2) e.g. via zero-speed monitor, enabling 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
- 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

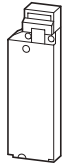
Switch must never be used as a mechanical stop!



Contact configuration	Contact sequence	Rated control voltage for magnetic system U_s	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		V		

Basic device with spring-powered interlock (closed-circuit principle) IP65

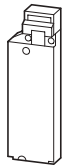
With interlock monitoring and auxiliary release mechanism
Monitoring of door position: continuous



1 N/O	1 N/C		24 V DC	LS-S11-24DFT-ZBZ/X 106829	1 units
–	2 N/C		24 V DC	LS-S02-24DFT-ZBZ/X 106823	
1 N/O	1 N/C		120 V 50/60 Hz	LS-S11-120AFT-ZBZ/X 106825	
–	2 N/C		120 V 50/60 Hz	LS-S02-120AFT-ZBZ/X 106778	
1 N/O	1 N/C		230 V 50/60 Hz	LS-S11-230AFT-ZBZ/X 106827	
–	2 N/C		230 V 50/60 Hz	LS-S02-230AFT-ZBZ/X 106821	

Basic devices with magnet-powered interlock (open-circuit principle) IP65¹⁾

With interlock monitoring
Monitoring of door position: continuous



1 N/O	1 N/C		24 V DC	LS-S11-24DMT-ZBZ/X 106830	1 units
–	2 N/C		24 V DC	LS-S02-24DMT-ZBZ/X 106824	
1 N/O	1 N/C		120 V 50/60 Hz	LS-S11-120AMT-ZBZ/X 106826	
–	2 N/C		120 V 50/60 Hz	LS-S02-120AMT-ZBZ/X 106820	
1 N/O	1 N/C		230 V 50/60 Hz	LS-S11-230AMT-ZBZ/X 106828	
–	2 N/C		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!



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

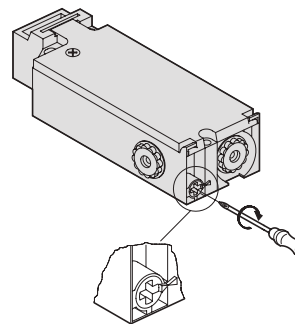
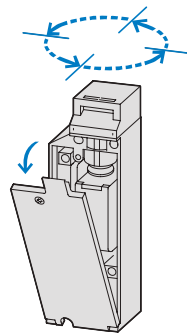
The operating head can be rotated manually in 90° steps to suit the specified level of actuation.

In the event of a loss of voltage, (e.g. during commissioning), the spring-powered LS-...-FT-ZBZ can be released with a screwdriver.



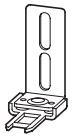




The auxiliary release mechanism must be sealed!
→ Instructional leaflet AWA 1310-2354

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



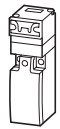
Description

			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	Contact sequence	Contact travel ■ = Contact closed □ = Contact open	Approval mark	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						

Safety position switches LS...ZB

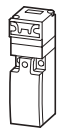
IP65, plastic



–	2 N/C			Cage-Clamp	LS-02-ZB¹⁾ 106817	2 units
–	2 N/C			Screw terminal	LS-S02-ZB¹⁾ 106874	
1 N/O	1 N/C			Cage-Clamp	LS-11-ZB¹⁾ 106819	
1 N/O	1 N/C			Screw terminal	LS-S11-ZB¹⁾ 106876	
1 N/O	1 N/C			Cage-Clamp	LS-11S-ZB¹⁾ 106870	
1 N/O	1 N/C			Screw terminal	LS-S11S-ZB¹⁾ 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

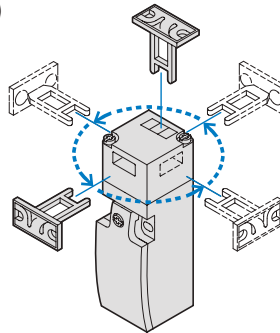
Switch must never be used as a mechanical stop!



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.




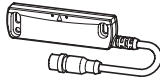
Safety position switches RS-Titan

Contact configuration		Catalog Number	Catalog Number	Std. pack
N/O = Normally open contact	N/C = Normally closed contact	Article no.	Article no.	

Non-contacting safety switch

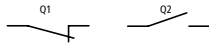
IP67, IP69
Reed contacts

5

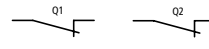
			3 m connection cable	Plug-in connection M12 x 1	
	–	2 N/C	RS2-02-C3 177286	RS2-02-Q4 177289	1 units
	1 N/O	1 N/C	RS2-11-C3 177287	RS2-11-Q4 177290	
	1 N/O	2 N/C	RS2-12-C3 177288	RS2-12-Q6 177291	
	–	2 N/C	RS2R-02-C3 177292	RS2R-02-Q4 177295	
	1 N/O	1 N/C	RS2R-11-C3 177293	RS2R-11-Q4 177296	
	1 N/O	2 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

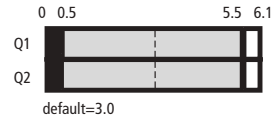
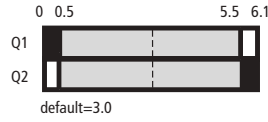
LSE-11



LSE-02



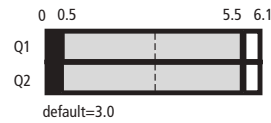
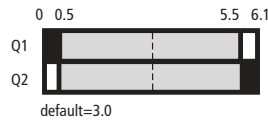
Base devices



Operating heads

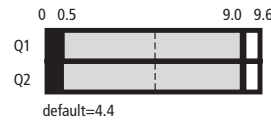
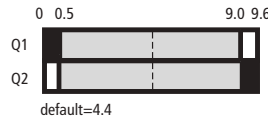
Roller plunger

- LS-XP
- LSM-XP
- LS-XOR



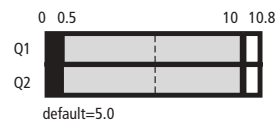
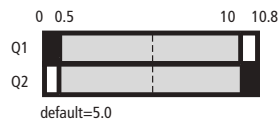
Roller lever

- LS-XL
- LSM-XL
- LS-XLS
- LS-XLB



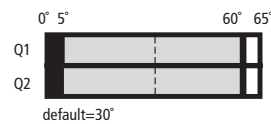
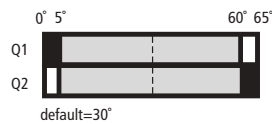
Angled roller lever

- LS-XLA
- LSM-XLA



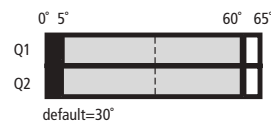
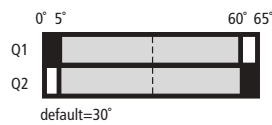
Swing handle

- LS-XRL
- LSM-XRL



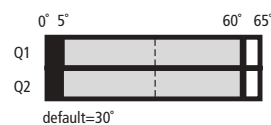
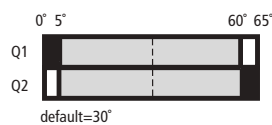
Adjustable roller lever

- LS-XRLA
- LSM-XRLA
- LS-XRLA30
- LS-XRLA40
- LS-XRLA40R



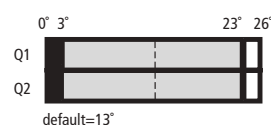
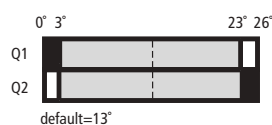
Actuating rod

- LS-XRR
- LSM-XRR
- LS-XRRM
- LSM-XRRM



Spring-rod actuator

- LS-XS
- LSM-XS

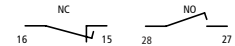
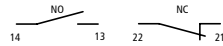
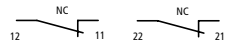


Note: LS-(S)02A,
LS-(S)11A → Page 168
LS-(S)20B → Page 169

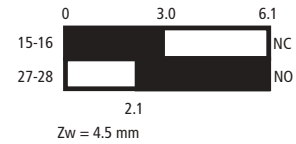
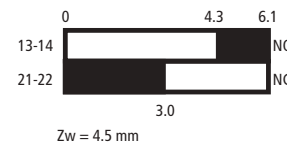
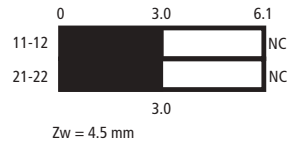
LS-02
LS-S02
LSM-02

LS-11
LS-S11
LSM-11

LS-11D
LS-S11D
LSM-11D

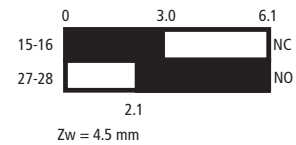
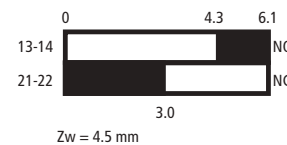
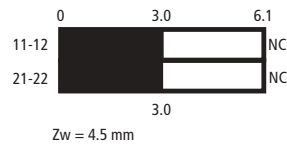


Base devices

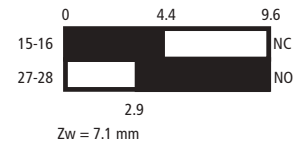
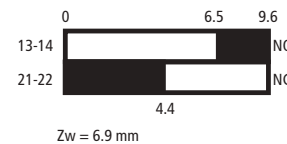
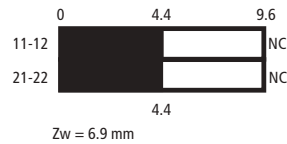


Operating heads

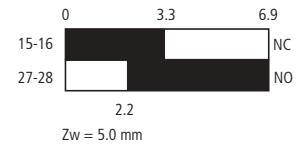
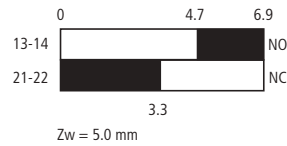
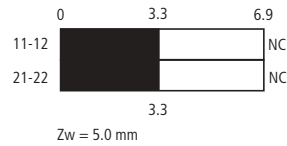
Roller plunger
LS-XP
LSM-XP



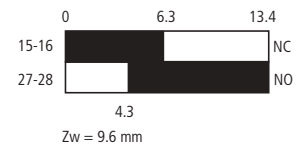
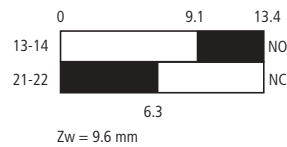
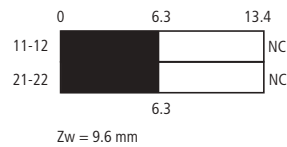
Roller lever
LS-XL, LSM-XL



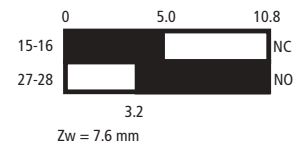
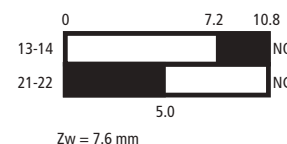
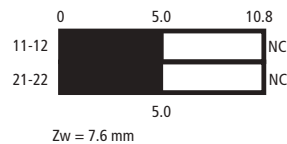
Roller lever, short
LS-XLS



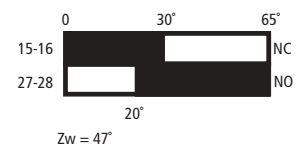
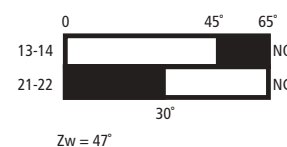
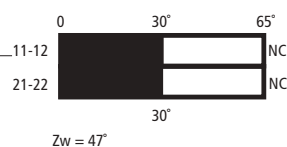
Roller lever, large
LS-XLB



Angled roller lever
LS-XLA, LSM-XLA



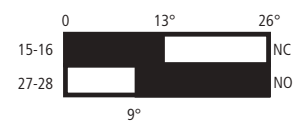
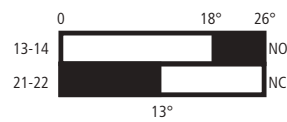
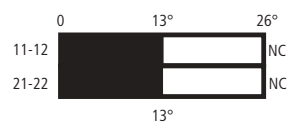
Swing handle
LS-XRL, LSM-XRL



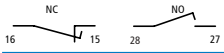
Adjustable roller lever
LS-XRLA, LSM-XRLA,
LS-XRLA30, LS-XRLA40,
LS-XRLA40R

Actuating rod
LS-XRR, LSM-XRR,
LS-XRRM, LSM-XRRM

Spring-rod actuator
LS-XS, LSM-XS



LS-11DA
LS-S11DA
LSM-11DA



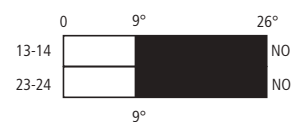
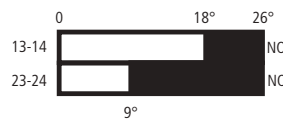
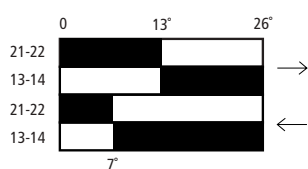
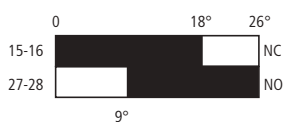
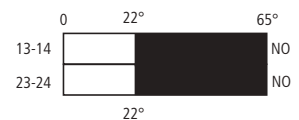
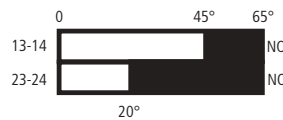
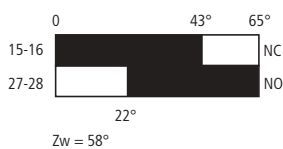
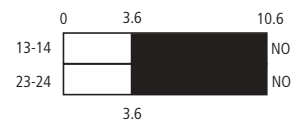
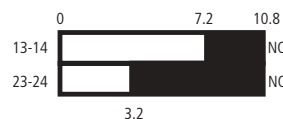
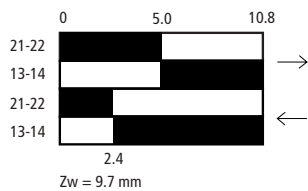
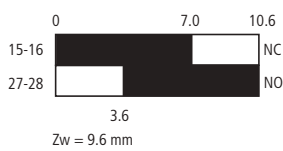
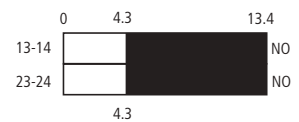
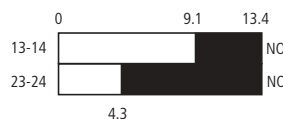
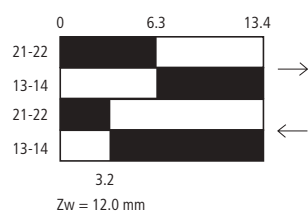
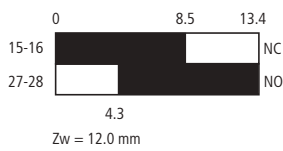
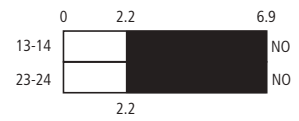
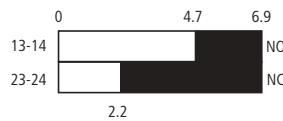
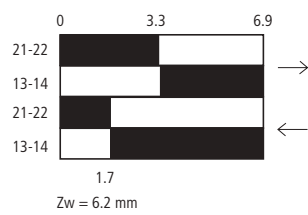
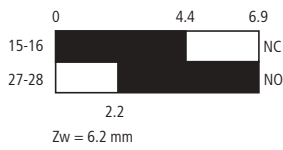
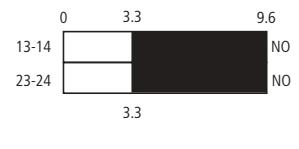
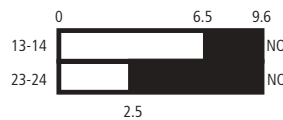
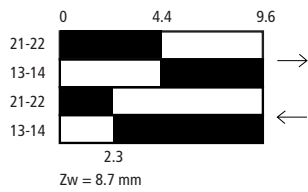
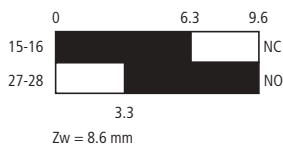
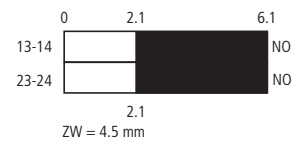
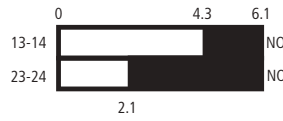
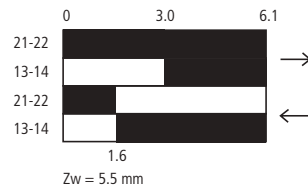
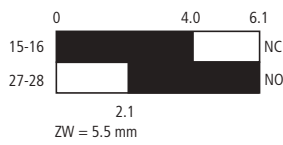
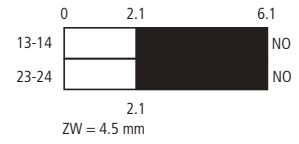
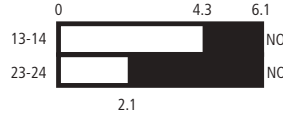
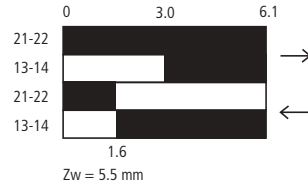
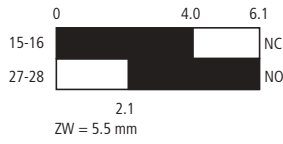
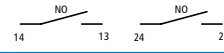
LS-11S
LS-S11S
LSM-11S



LS-20
LS-S20
LSM-20



LS-20A
LS-S20A
LSM-20A



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		Any	
Protection Style		IP66, IP67		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		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	
		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)		Q300 (0.2 A, 24 V DC)	
UL-approved protection types		NEMA 4, 12, 13		NEMA 4, 12, 13		NEMA 4, 12, 13	

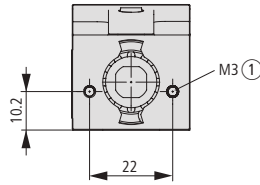
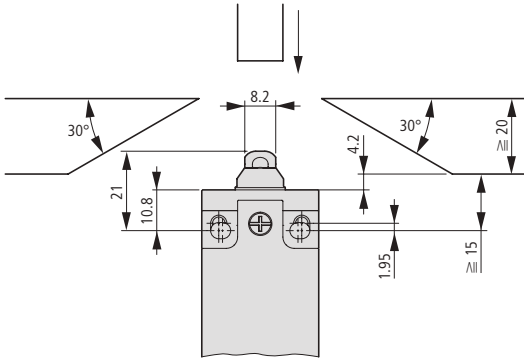
		IP66, IP67 complete devices		
		LS, LSM		LSE11 LSE02
Mechanical data				
Life point				
Slow-action switch	c (contacts)	x 10 ⁶	8	–
Snap-action contact	c (contacts)	x 10 ⁶	8	3 (electronic)
Contact temperature of roller head		°C	≤ 100	≤ 100
Mechanical shock resistance (half-sinusoidal shock, 20 ms)				
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	$\alpha = 0^\circ/30^\circ$	m/s	1/0.5	1/0.5
LS(M)-XRL for angle of actuation	$\alpha = 0^\circ$	m/s	1.5	1.5
LS(M)-XRLA for angle of actuation	$\alpha = 30^\circ, L = 125 \text{ mm}$	m/s	1.5	1.5
LS(M)-XRR for	$L = 130 \text{ mm}$	m/s	1.5	1.5
LS(M)-XL for angle of actuation	$\alpha = 30^\circ/45^\circ$	m/s	1	1
LS(M)-XLA for angle of actuation	$\alpha = 30^\circ/45^\circ$	m/s	1	1
LS(M)-XP for angle of actuation	$\alpha = 0^\circ/30^\circ$	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
Rated Current		I _e	A	1
Overvoltage category/pollution degree			II/3	II/3

				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	
	230 V/240 V	I_e	A	6	
	400 V/415 V	I_e	A	4	
DC-13	24 V	I_e	A	3	
	110 V	I_e	A	0.8	
	220 V	I_e	A	0.3	
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	
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	
Snap-action contact			g	–	
Operating frequency	Operations/h		≤ 800		≤ 1800
drive					
Mechanical					
Actuating force at beginning/end of stroke					
ZB/ZBZ (plug-in/pull-out)			N	25/15	
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)

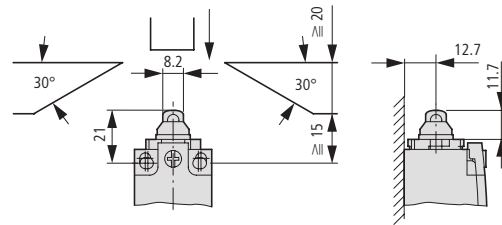
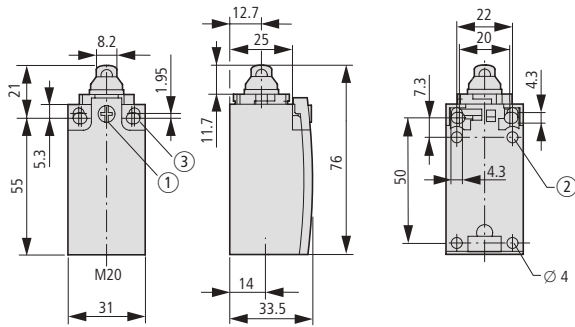
LS(M)-.../F



① Screw-in depth max. 12 mm

Basic devices, expandable,

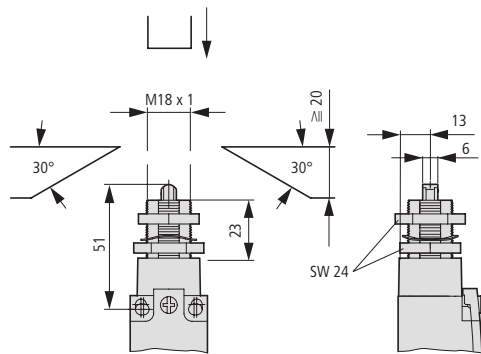
LS-..., LSM-..., LSE-...



- ① Tightening torque Cover screw: 0.8 Nm ± 0.2 Nm
 - ② only with LS (insulated version)
 - ③ Fixing screw 2 x M4 ≥ 30
- $M_A = 1.5 \text{ Nm}$

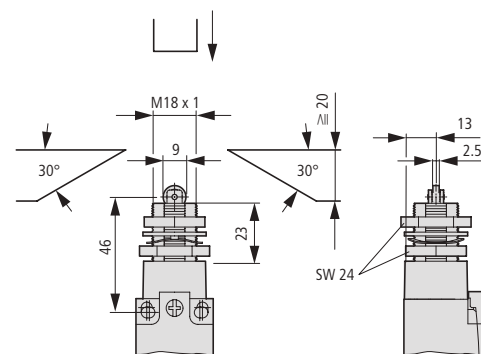
Rounded plunger, centre fixing

LS-XZS



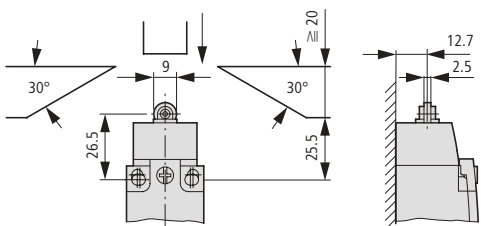
Roller plunger, centre fixing

LS-XZRS



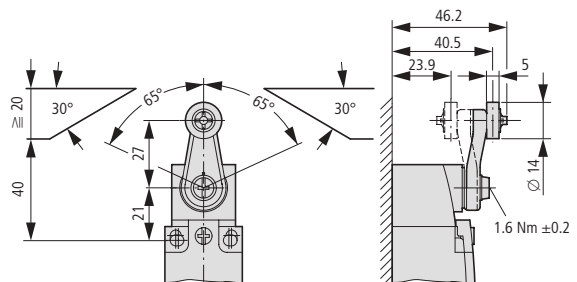
Roller plunger

LS(M)-.../P



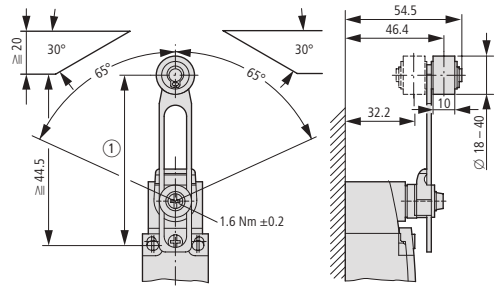
Swing handle

LS(M)-.../RL



Adjustable roller lever

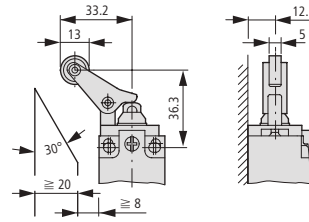
LS(M)-.../RLA



① Setting range of 54.5 to 97

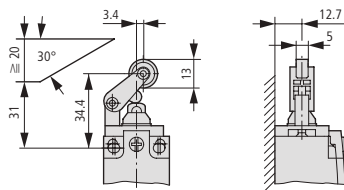
Angled roller lever

LS(M)-XLA



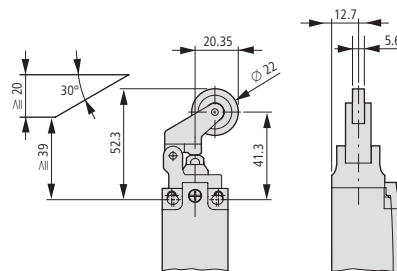
Roller lever

LS(M)-.../L



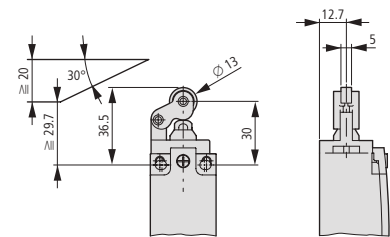
Roller lever

LS(M)-.../LB



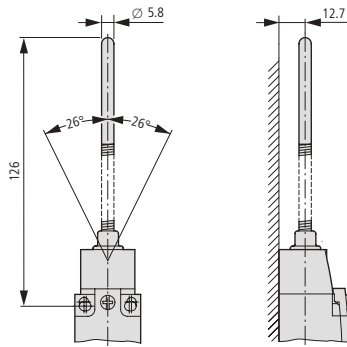
Roller lever

LS(M)-.../LS



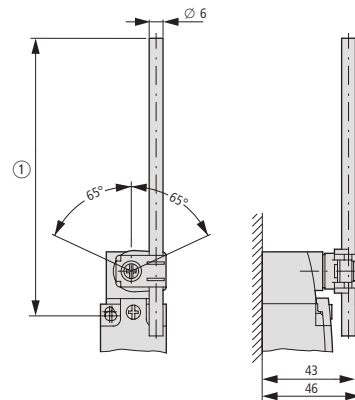
Spring-rod actuator

LS(M)-.../S



Actuating rod

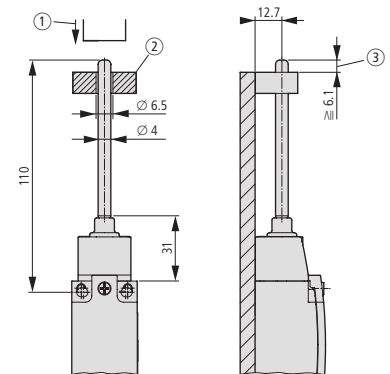
LS(M)-.../RR



① LS.../RR ≤ 150
LS.../RRM ≤ 210

Actuating rod

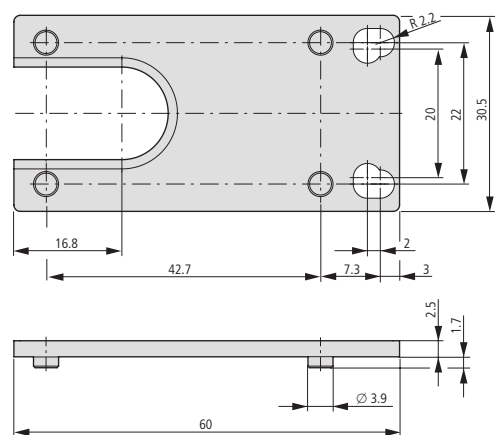
LS(M)-.../OR



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

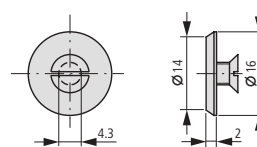
Adaptor plate

LS-XAP

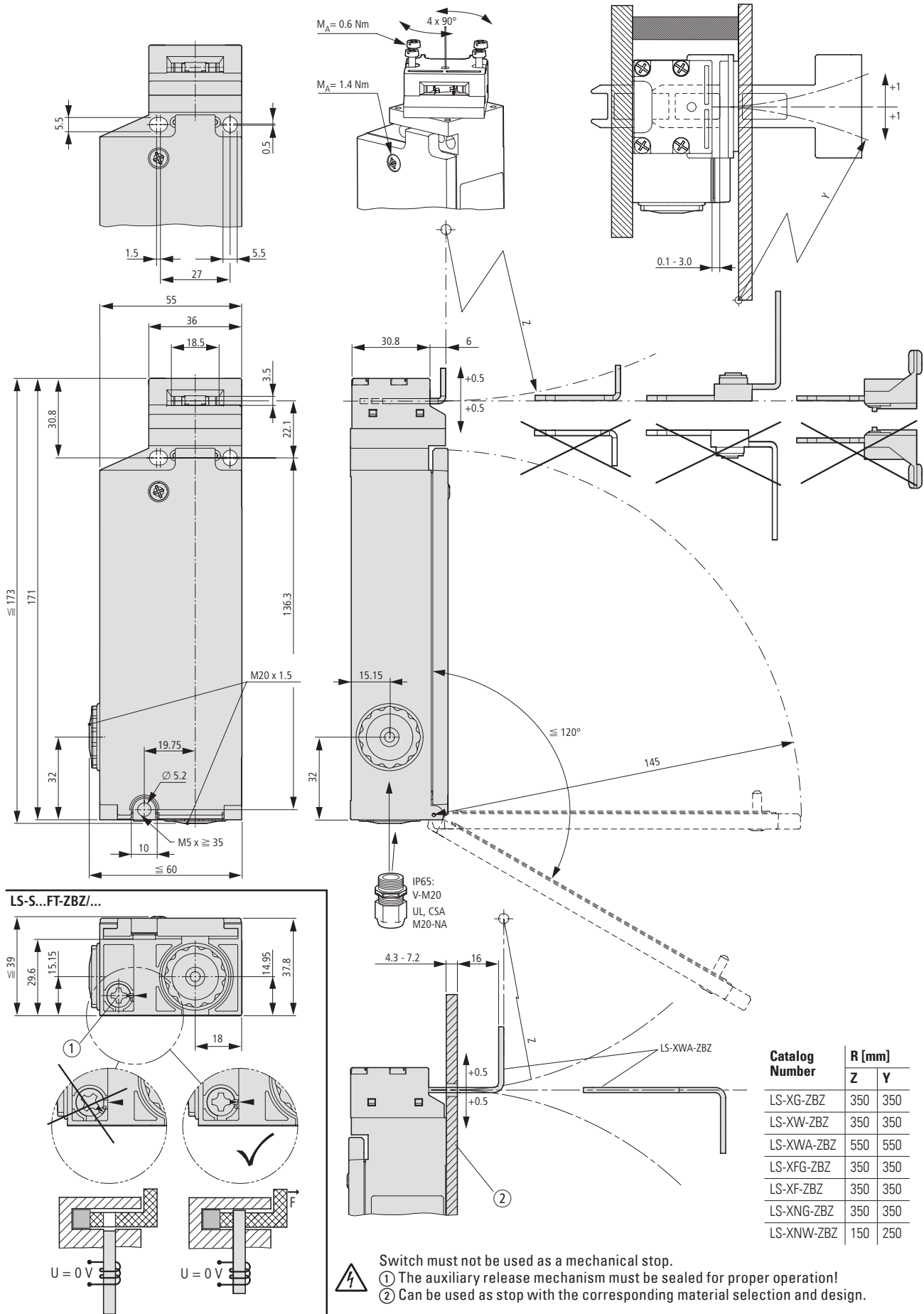


Locating plate

FS-AT

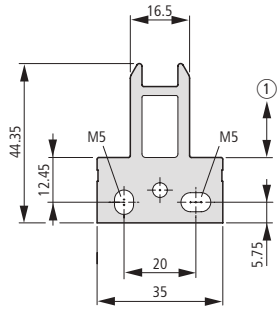


Safety position switch LS...ZBZ

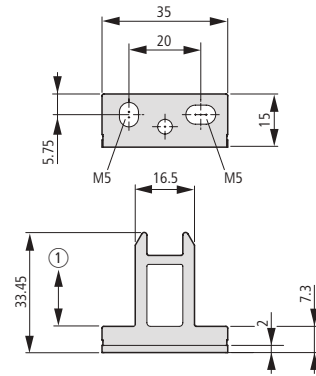


Actuating element

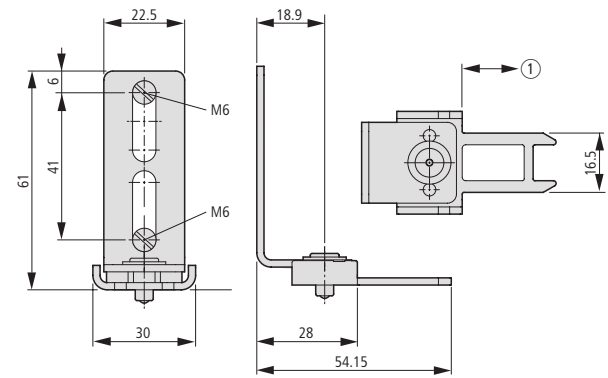
LS-XG-ZBZ



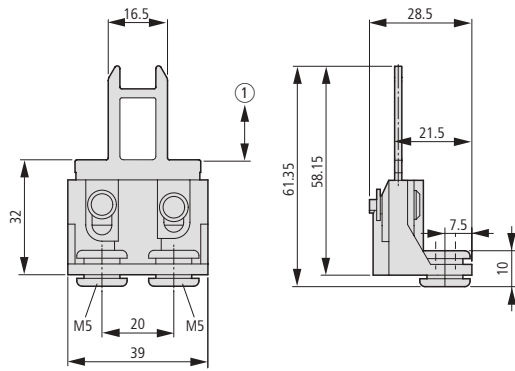
LS-XW-ZBZ



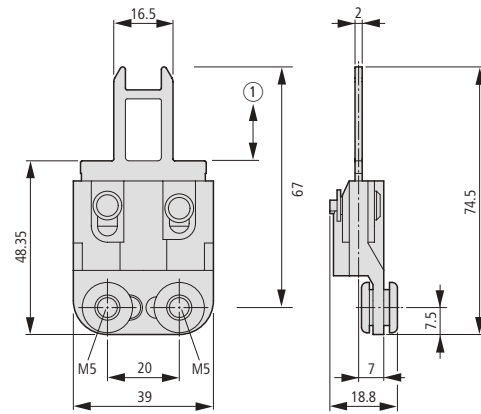
LS-XF-ZBZ



LS-XNW-ZBZ



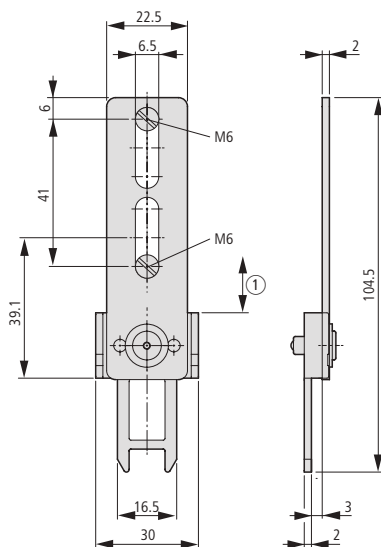
LS-XNG-ZBZ



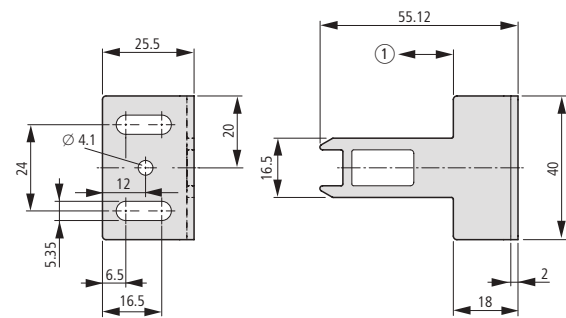
Fixing only allowed with M5 fixing screw and washer according to DIN EN ISO 7093.

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

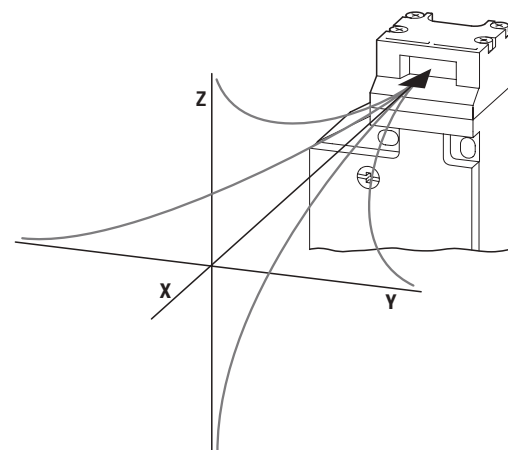
LS-XFG-ZBZ



LS-XWA-ZBZ



pin with a 4 mm pin after mounting

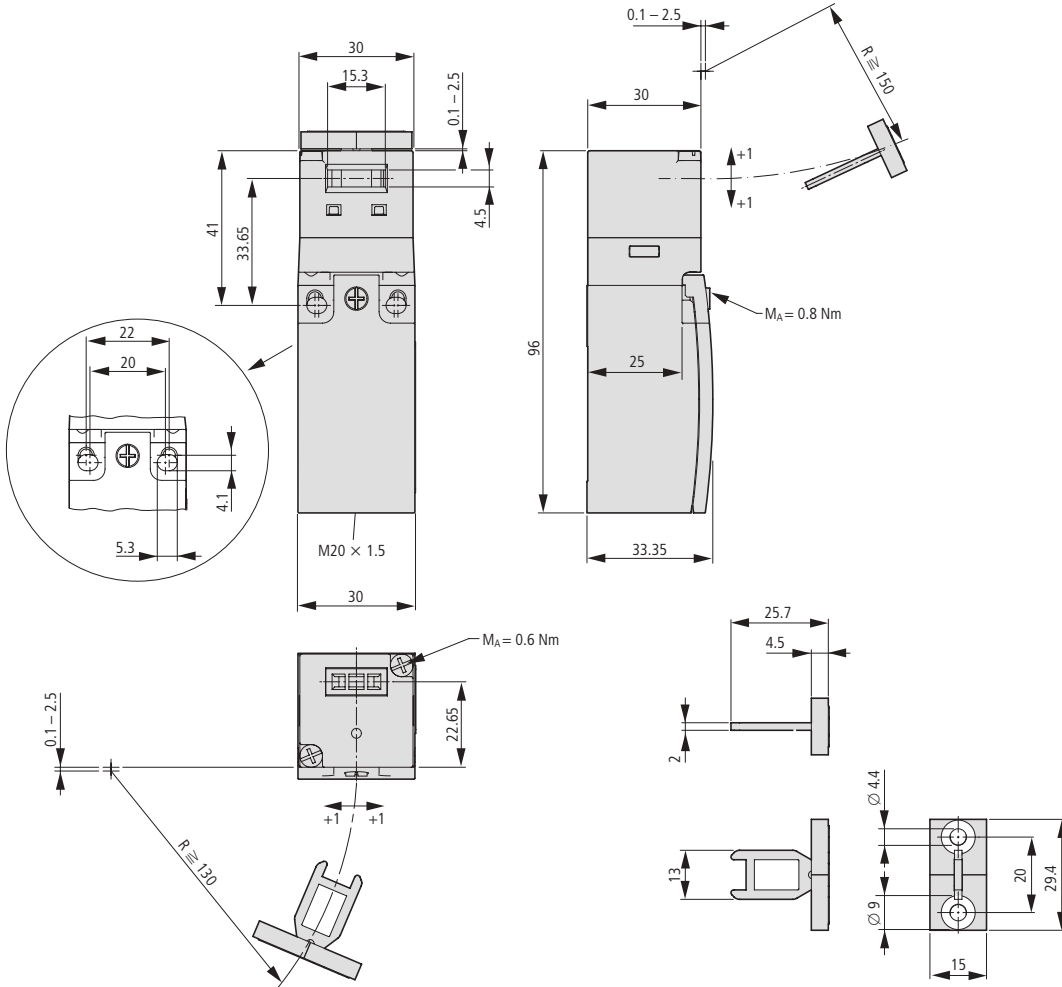


Catalog Number	R [mm]		
	F [N]	Z	Y
LS-XG-ZBZ	1700	350	350
LS-XW-ZBZ	1700	350	350
LS-XWA-ZBZ	1600	550	550
LS-XFG-ZBZ	1600	350	350
LS-XF-ZBZ	1600	350	350
LS-XNG-ZBZ	1700	350	350
LS-XNW-ZBZ	1200	150	250

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
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5



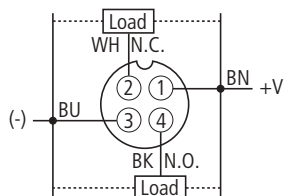
E52 series

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 (-).

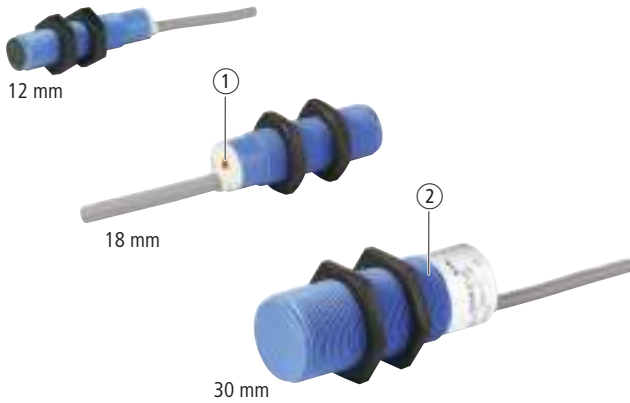
Technical specifications

		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.

5

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



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






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
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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	20 - 250 V AC	5	flush	–	1 N/O	E55CAL18A2 135822	1 unit
					–	1 N/C	E55CBL18A2 135839	
			8	non-flush	–	1 N/O	E55CAL18A2E 135823	
					–	1 N/C	E55CBL18A2E 135840	
	M30 x 1.5	20 - 250 V AC	10	flush	–	1 N/O	E55CAL30A2 135828	1 unit
					–	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
			5	flush	PNP	1 N/C	E55CBL12T111E 135838			
					NPN	1 N/O	E55CAL18T110 135824			
						1 N/O	E55CAL18T111 135826			
						1 N/C	E55CBL18T110 135841			
					8	non-flush	NPN		1 N/O	E55CAL18T110E 135825
									1 N/O	E55CAL18T111E 135827
1 N/C	E55CBL18T110E 135842									
PNP	1 N/C	E55CBL18T111E 135843								

5.4

Position switches/sensors

E55 Limit Switch Style series

Moeller series

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
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E55 series

Plastic

5

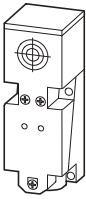


Plastic

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				

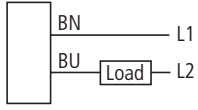
		E55C...L18T	E55C...L30T	E55BLT...
		E55C...L18T...E	E55C...L30T...E	E55BLT...E
General				
Standards		IEC/EN 60947-5-2		
Ambient temperature	°C	-25 - +70	-25 - +70	-25 - +70
Protection Style		IP66	IP66	IP67
Mechanical shock resistance	g	30 Shock duration 11 ms		
Characteristics				
Repetition accuracy 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		Screw terminal
Material		Plastic	Plastic	Plastic

Notes

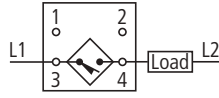
Further technical data can be found in the Online Catalog at www.eaton.com

Engineering

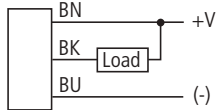
E55CAL...AZ, E55CBL...A2
E55CAL...A2E, E55CBL...A2E



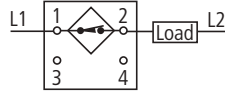
E55BL...



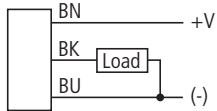
E55CAL...110, E55CBL...110
E55CAL...110E, E55CBL...110E



E55BL...



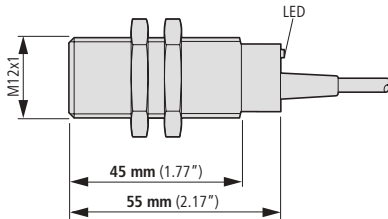
E55CAL...111, E55CBL...111E
E55CAL...111, E55CBL...111E



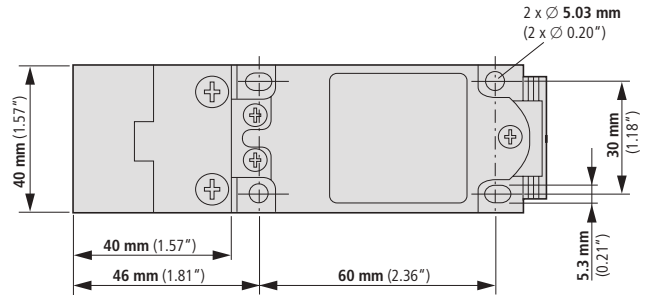
Note:
Switches are supplied configured as N/O.
Can be built-in changed over to N/C.

Dimensions

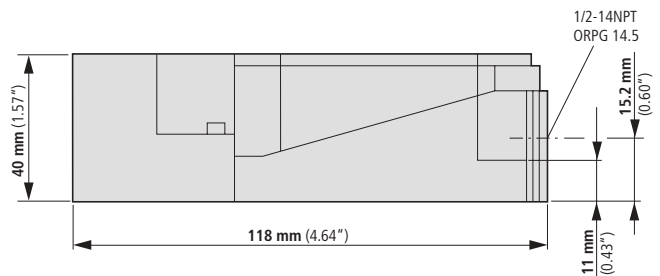
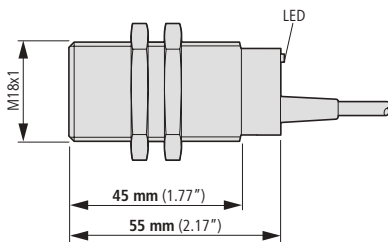
E55CAL12...
E55CBL12...



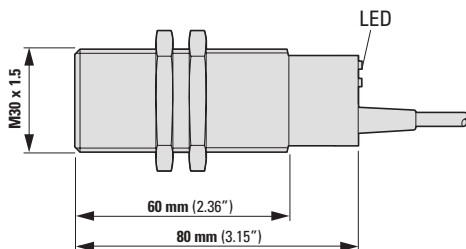
E55BL...



E55CAL18...
E55CBL18...



E55CAL30...
E55CBL30...



Description

5



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



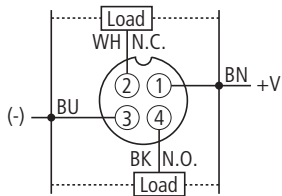
Ordering

Conne- ction	Design (outer dimensions) mm	Rated operational voltage U_e	Rated switch- ing distance S_n mm	Type of mounting	Switching type	Connection options	Contact con- figuration 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	1 N/C / 1 N/O M12 x 1	E56ADL40SAD01 136234	1 units
		79 x 79 x 39		40	non-flush	NPN PNP		E56ADL40UAD01 136235	
		109 x 110 x 41		70	non-flush	NPN PNP	1 N/C / 1 N/O	E56DL70UAD01 136236	
		171.5 x 171.5 x 67.4		100	non-flush	NPN PNP	1 N/C / 1 N/O	E56CDL100UAD01 136237	

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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

5



- 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 have 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

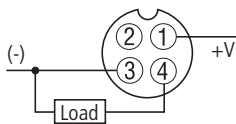
Design (outer dimensions)	Rated switching distance S_n mm	Installation type	Contacts N/C = Normally closed contact N/O = Normally open contact	Protection Style	Catalog Number Article no.	Std. pack		
E57 Global series								
LED for output status 3-conductor, Plug-in connection M12 x 1, Rated operating voltage U_o : 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

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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
	...GU...	°C	-25 - +70	-25 - +70
	...GB...	°C	-25 - +70	-
	...GE...	°C	0 - 60	0 - 60
Protection Style			IP67	IP67
Mechanical shock resistance		g	30	30
			Shock duration 11 ms	
Characteristics				
Repetition accuracy of S_n		%	1	1
Temperature drift of S_n		%	10	10
Switching hysteresis of S_n		%	15	15
Rated operating voltage		U _e	10 - 30 V DC	10 - 30 V DC
Residual ripple of U _e		%	10	10
Operating current in the switched state at 24 V DC				
	...GS...	I _b	mA	10
	...GU...	I _b	mA	20
	...GE...	I _b	mA	10
Rated Current		I _e	mA	< 100
Voltage drop at I _e		U _d	V	1.5
Switching Frequency				
	flush		Hz	2000
	non-flush		Hz	2000
Residual current due to the load in locked state at 230 V AC or 24 V DC		I _r	mA	0.01
Switching state display		LED		red
Protections				Short circuit protection Protection against polarity reversal Protection against wire breakage
Connection				3-wire
Design (outer dimensions)		mm		M8 x 1
Material				Stainless steel

Design	Rated switching distance S _n mm	Installation type	Connection	Contacts	Catalog Number Article no.	Std. pack
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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	

Design	Rated switching distance S_n mm	Installation type	Connection	Contacts	Catalog Number Article no.	Std. pack
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E57G General Purpose Series

3-wire
 Rated operational voltage: 10 - 30 V DC
 Switching type: PNP
 Stainless steel

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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
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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	

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Design	Rated switching distance S_n mm	Installation type	Connection	Contacts	Catalog Number Article no.	Std. pack
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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	

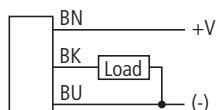


M30x1.5	10	flush	2 m connection cable	NO	E57PS-30SPN10-C2 197857	1 units
	10	flush	M12 Plug-in connection	NO	E57PS-30SPN10-Q 197858	
	10	flush	2 m connection cable	NC	E57PS-30SPC10-C2 197855	
	10	flush	M12 Plug-in connection	NC	E57PS-30SPC10-Q 197856	
	15	non-flush	2 m connection cable	NO	E57PS-30UPN15-C2 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	

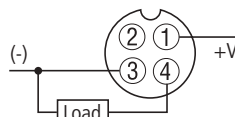
Engineering

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	Protection Style	Catalog Number Article no.	Std. pack
mm	mm		N/C = Normally closed contact	N/O = Normally open contact		

E57 miniature series (inductive)

3-conductor, 2 m connection cable,
Rated operating voltage U_g : 10 - 30 V DC
Switching type: PNP
Stainless steel

	M5 x 1	0.8	flush	–	1 N/O	IP67	E57EAL5T111SP 136241	1 units
	Ø 4	0.8	flush	–			E57EAL4T111SP 136239	1 units
	Ø 6.5	1	flush	–			E57EAL6T111SP 136245	1 units
	Ø 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

Design (outer dimensions)	Rated switching distance	Installation type	Connection options	Description	Catalog Number Article no.	Std. pack	
mm	S_n mm						
E59 AccuProx							
3-wire/4-wire Rated operating voltage U_p : 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		Protection Style	Catalog Number Article no.	Std. pack
			N/C = Normally closed contact	N/O = Normally open contact			
mm	mm						



iProx Series (inductive)

3-conductor, Plug-in connection M12 x 1,
Rated operating voltage U_g : 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
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Programming software

For use with iProx

–	–	–	–	–	–	E59SW1 136230	1 units
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E53 Serie (capacitive)

4-wire
Plug-in connection M12 x 1
Rated operating voltage: U_g = 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 Ø	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



	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_o : 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 photo-electric sensor	Detector (for combination with source) beam: straight	24000		12102AQD07 135577		
		Source (for combination with detector) beam: straight	24000		–	11102AQD07 135665	

E58 Harsh Duty series

4-wire,
Rated operating voltage U_o : 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		



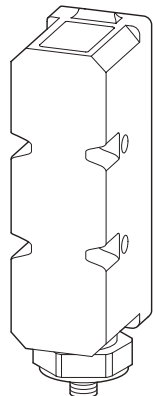
M30 x 1.5	diffuse reflective sensor	with background suppression (Perfect Prox)	280		dark switching	E58-30DPS280-HDP 135681	1 units
			280		light switching	E58-30DPS280-HLP 135683	
	Retroflective sensing sensor	for combination with reflector	18000	dark switching	E58-30RS18-HDP 135689		
			18000	light switching	E58-30RS18-HLP 135691		



M30 x 1.5	thru-beam photo-electric 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_o : 18 - 30 V DC
Switching type: NPN, PNP
Plug-in connection M12 x 1
IP67 degree of protection



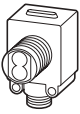

Cuboid (166 x 59 x 43)	diffuse reflective sensor	with background suppression (Perfect Prox)	1000	Infrared	light switching	E67-LRDP100-HLD 100548	1 units
		with background suppression (Perfect Prox)	1000		dark switching	E67-LRDP100-HDD 100547	

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
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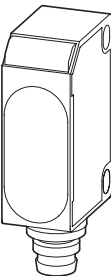
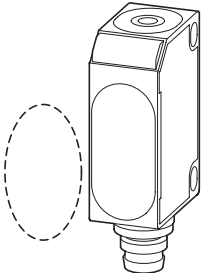
E65 SM series

4-wire,
Rated operating voltage U_g : 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	

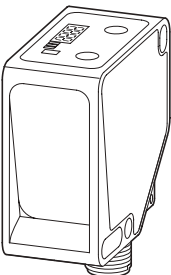
E71 NanoView series

4-wire,
Rated operating voltage U_g : 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
		Retroreflective 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	Retroreflective sensing sensor	polarized light	2500	visible red		E71-PRP-M8 100526	1 units

E76 IntelliView series

8-wire,
Rated operating voltage U_g : 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
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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		CSDR4A4CY2210 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

Automation Highlights

Discover the highlights from our automation portfolio and see how we are tackling the challenges of today's machine control and visualization.

easyE4 control relays

Our easyE4 control relay provides a strong alternative to PLC systems and is the perfect way to efficiently design and quickly implement versatile solutions for a wide variety of control tasks in buildings and machine-building scenarios. In addition to various communication options with the integrated Ethernet port, easy communication modules can be used to connect to Modbus RTU and SmartWire-DT. Finally, easySoft programming software offers an ideal programming environment for any user.



Modular PLCs XC100, XC200 and XC300

XC programmable logic controllers are compact, powerful, and versatile PLCs that enable machine and equipment builders to implement streamlined state-of-the-art automation solutions in combination with modular XN300 I/O expansions and XV touch panels. Moreover, the PLCs and gateways can be easily and flexibly complemented with the I/O slice modules in our XN300 system. Ethernet ports with individual network adapters for connecting to various networks, paired with standard CAN and RS-485 interfaces, expand the functionality of these devices, turning them into universal control and communication points for networked systems.

You can find more information on the product pages at:
www.Eaton.com/automation

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.



XP500 industrial PC

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.

Remote I/O system XN300

Eaton's ultra-compact, slice-card-based XN300 modular I/O system features plug-in connection system and can be combined with HMI PLC products in order to create the ideal system solution for your applications. The XN300 I/O system can be flexibly used as local I/O directly with XC300 PLCs or as distributed I/O on CAN or EtherCAT networks. In addition, a modern design with a convenient installation concept not only makes handling easier, but also makes it possible to pre-assemble an I/O station. Moreover, the plug-in terminal system makes commissioning easier and rounds off the system's characteristics, making it the perfect solution for the needs of machine building applications meant for mass production.



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- Improving product installation and configuration processes
- Optimizing your design processes
- Reducing total costs
- Integrated one-stop solutions from Eaton

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Assembly Solutions

In order to save necessary time when installing combinations, VAS offers plug and play solutions. Our Value-Added Services Team can pre-assemble products and install them on DIN rails, mounting plates, and even third-party systems. In addition, we can pre-wire items with conventional cables or innovatively with SmartWire-DT.

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To find the right contact person:



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