



Control Stations Ex e, Stainless Steel, base-mounted contact modules

SR.CS*

- Stainless Steel enclosure
- Installation in Zone 1, Zone 2, Zone 21 and Zone 22
- Base-mounted contact modules on DIN-rails for easy access
- Ex db eb, Ex ib and Ex tb certified
- Up to 40 operators per control station
- 3 enclosure size options
- Return Flange Sealing provides Drain Channel
- Customizable configuration of operators, cable entry quantities and cable gland types as per specification
- Customizable configuration of ground bolt as per specification
- Option for vertical or horizontal mounting provides high flexibility
- Wide range of labels and accessories available

Control Stations Ex e, Stainless Steel, base-mounted contact modules



Function

The SR series is a flexible range of control stations that are fully customizable.

A comprehensive range of operating elements, contact modules, terminals, entry devices and enclosure accessories are available to ensure each configuration will exactly meet any application requirements. For easy access the contact modules are mounted on DIN-rails at the base of the enclosure.

Enclosures are manufactured from brushed AISI 316L stainless steel and all fixings are manufactured from A4 grade stainless steel as standard to provide excellent tarnish and corrosion resistance.

Your solution can be mounted in portrait or landscape orientation in temperatures ranging from -50°C up to +55 °C. Endless configurations can be confirmed by your local Pepperl+Fuchs office.

Technical Data

Electrical specifications

Operating voltage	400 V AC max.
Operating current	16 A max.
Terminal capacity	2.5 mm ²
Terminal torque	0.8 Nm

Mechanical specifications

Enclosure cover	fully detachable
Cover fixing	stainless steel A4 (V4A) hexagonal head screws , see data table
Cover seal	silicone
Degree of protection	IP66
Cable entry	cable glands as per specification
Material	
Enclosure	1.5 mm AISI 316L, (1.4404) stainless steel
Finish	brushed
Mass	see data table valid for empty enclosure, will increase according to integrated components
Dimensions	see data table
Mounting	screws , optional mounting brackets enclosed
Grounding	M6 internal/external brass nickel-plated grounding bolt M6 internal stainless steel grounding bolt welded to lid M6 internal stainless steel grounding bolt welded to enclosure body

Ambient conditions

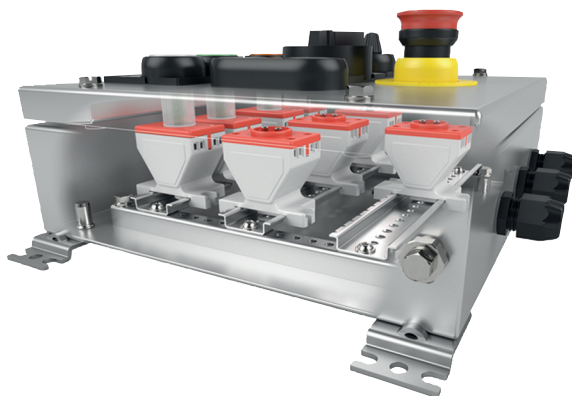
Ambient temperature	-50 ... 55 °C (-58 ... 131 °F) depending on integrated components
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Data for application in connection with hazardous areas

Technical Data

EU-type examination certificate		CML 16 ATEX 3009X
Marking		Ex db eb IIC T* Gb, Ex tb IIIC T** Db or Ex ib IIC T* Gb, Ex tb IIIC T** Db or Ex db eb ib IIC T* Gb, Ex tb IIIC T** Db T6/T80 °C @ Ta +40 °C T5/T95 °C @ Ta +55 °C T4/T130 °C @ Ta +55 °C
International approvals		
IECEX approval		IECEX CML 16.0008X
UKCA approval		CML 21 UKEX 2550X
ECAS approval		22-10-53256/E22-09-052316/NB0002
Conformity		
Degree of protection		EN60529
CE marking		0102
General information		
Ordering information		This device will be delivered completely configured and assembled ready for use. For configuration details please contact Customer Service.
Supplementary information		EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .
Accessories		
Optional accessories		M6 internal/external stainless steel grounding bolt engraved traffolyte tag label engraved AISI 316L stainless steel tag label color in-fill stainless steel tag label
Indicators/operating means		
Control elements		small footprint max. 40 see data table all NC contacts have a direct opening action for emergency stop functions

Assembly



Type Code

1	2	3	4	5	6	7	8	9
SR	***	**	**	**	*	*	*	****
SR	CSE	38	48	09	B	0	S	0001

Example: SR.CSE.38.48.09.B.0-S0001

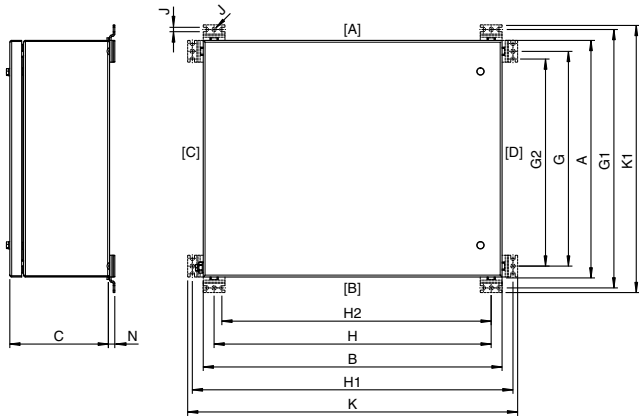
Control Station stainless steel, size 38x48x9 cm, landscape orientation with face B at bottom, standard product

1	Enclosure type
SR	stainless steel
2	Type of solution
CSE	control station (Ex e)
CSI	control station (Ex i)

Type Code

2	Type of solution
CSM	control station, various types of explosion protection, e.g. (Ex e, Ex i) or (Ex e, Ex op pr)
3	Height [cm]
n	see dimensions data table
4	Width [cm]
n	see dimensions data table
5	Depth [cm]
n	see dimensions data table
6	Cable entry face orientation
B	face [B] at bottom
D	face [D] at bottom
7	Gland plates
0	none
8	Variant
S	standard product
C	configured product
CA	configured and adapted product
Y	engineered product
9	Variant number
xxxx	consecutive item number

Dimensions and Enclosure Details



Type	External dimensions [mm]					Mounting [mm]								Mass approx. [kg]	Cover screws		
	A	B	C	K	K1	G	G1	G2	H	H1	H2	J	N		Mx	qty.	Torque [Nm]
SRM.26.26.09	260	260	87	310	310	225	295	212.5	225	295	212.5	7	8.5	5.3	M6	4	3 - 3.5
SRM.31.31.09	310	310	87	360	360	275	345	262.5	275	345	262.5	7	8.5	7.2	M6	4	3 - 3.5
SRM.38.48.09	380	480	87	430	530	345	415	332.5	445	515	432.5	7	8.5	11	M6	6	3 - 3.5

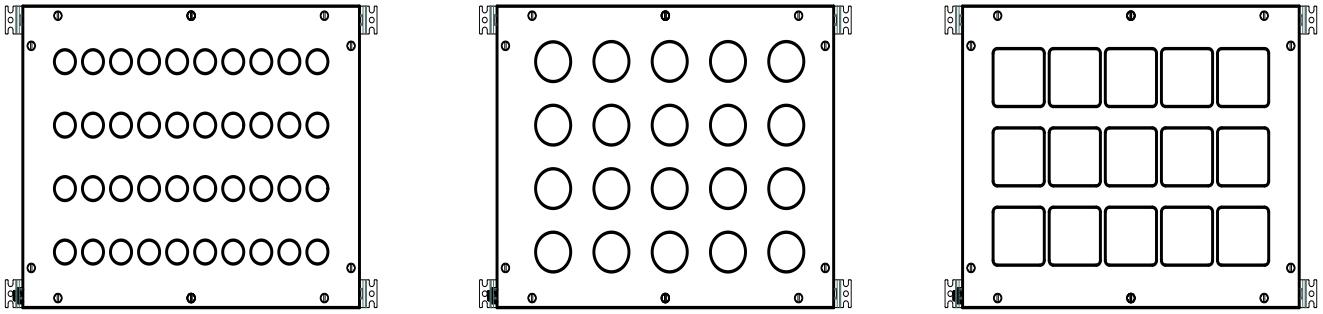
Mass is valid for empty enclosure, it will increase according to enclosure accessories, integrated components and entry devices

Control Elements max. Quantity per Enclosure Type

Type	Control elements quantity max.								
	small footprint			large footprint			viewing windows		
	vertical	horizontal	total	vertical	horizontal	total	vertical	horizontal	total
SRM.26.26.09	3	4	12	2	2	4	2	2	4
SRM.31.31.09	3	5	15	3	3	9	3	3	9
SRM.38.48.09	4	10	40	4	5	20	3	5	15

Quantities are based on horizontal DIN mounting rails, they may vary with vertical DIN mounting rails

Operating Elements Configuration



Example based on SR.CSE.38.48.09.B

Left (small footprint):

Small operating elements with small label holder and 2 pole contact blocks

Small operating elements include all pushbuttons, small switching actuators, LED indicators and potentiometers

Middle (large footprint):

Large switching actuators and all operating elements fitted with 4 pole contact modules, protective lid or padlockable shroud

Right:

Viewing windows with ammeter or voltmeter as well as operating elements with large label holders

Notes:
























The use of label holders depends on operating elements configuration

The position of the grounding bolt can vary depending on configuration

All NC contacts have a direct opening action for emergency stop functions

For further configurations please contact Pepperl+Fuchs

Pushbuttons and Emergency Stops

Pushbuttons Actuator Heads			
Type	Color	Labeling	Image
CFP.PA	red	none	
CFP.PR	red	0	
CFP.PC	red	STOP	
CFP.PD	red	OFF	
CFP.PE	green	none	
CFP.PG	green	I	
CFP.PI	green	II	
CFP.PF	green	START	
CFP.PH	green	ON	
CFP.PY	yellow	none	
CFP.PO	amber	none	
CFP.PW	white	none	
CFP.PB	blue	none	
CFP.PJ	blue	RESET	
CFP.PK	black	none	
CFP.PL	black	0	
CFP.PN	black	I	
CFP.PP	black	II	
CFP.PQ	black	III	
CFP.PT	black	IV	
CFP.PU	black	arrow up	
CFP.PV	black	arrow down	
CFP.PZ*	see individual datasheets		

Actuator Heads - Technical Data

Mechanical specifications

Dimensions	see data table
Mounting	use with base-mounted and lid-mounted contact modules

Degree of protection	IP66
Mass	see data table


Material

Housing	Polyamide (PA)
Finish	inherent color black
Washer gasket	silicone

Ambient conditions

Ambient temperature	-40 ... 55 °C (-40 ... 131 °F)
Service temperature	-40 ... 65 °C (-40 ... 149 °F)

Data for application in connection with hazardous areas

EU-Type Examination Certificate	CML 16 ATEX 3339U
Marking	 II 2 GD Ex e IIC Gb Ex tb IIIC Db

International approvals

IECEx approval	IECEx CML 16.0114U
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Conformity

Degree of protection	EN 60529
CE marking	0102

General information

Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .
Enclosure type	LC*, LR* FXL*.CS, SR.CS* GR.CS*

Pushbuttons and Emergency Stops

Emergency Stops Actuator Heads

Type	Function	Color	Labeling	Operator action	Actuator head diameter	Switching diagram	Image
CFP.E4	mushroom button	red	none	latching, twist to release	40 mm		
CFP.E5	mushroom button	red	none	latching, twist to release	55 mm		
CFP.JR	mushroom button	red	none	latching, key release	39 mm		

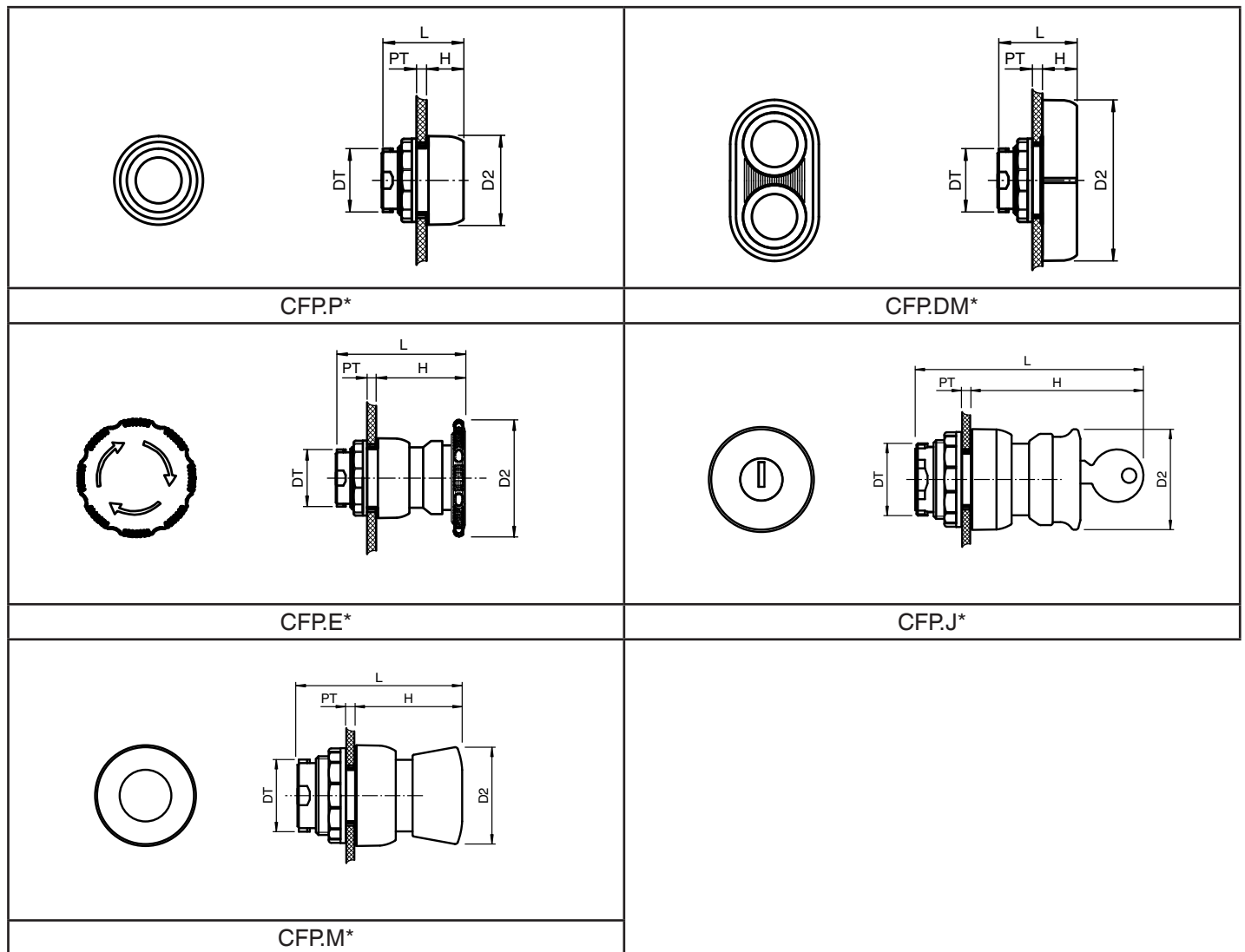
Other Pushbuttons Actuator Heads

Type	Function	Color	Labeling	Operator action	Actuator head diameter	Switching diagram	Image
CFP.DM	pushbutton	red / green	0 - I	spring return	70 mm x 39 mm		
CFP.MK	mushroom button	black	none	spring return	39 mm		
CFP.MR	mushroom button	red	none	spring return	39 mm		
CFP.MG	mushroom button	green	none	spring return	39 mm		





Pushbuttons and Emergency Stops

Pushbuttons and Emergency Stops - Dimensions

Type	Function	Actuator head diameter [mm]	Panel wall thickness [mm]	Diameter thru-hole [mm]	Length outside enclosure [mm]	Total length [mm]	Mass [g]
		D2	PT	DT	H	L	
CFP.P*	pushbutton	39	1 ... 6	30.6	15.5	35.4	25
CFP.DM*	double pushbutton	70 x 39	1 ... 6	30.6	15.5	35.4	38
CFP.E4	emergency stop	40	1 ... 6	30.6	41.8	62.1	52
CFP.E5	emergency stop	55	1 ... 6	30.6	41.8	62.1	58
CFP.JR	key release mushroom button	39	1 ... 6	30.6	49.5	70	65
CFP.M*	mushroom button	37	1 ... 6	30.6	41.2	60.7	46



Pushbuttons and Emergency Stops

Contact Blocks					
Type	Mounting	Number of poles	Contact configuration	Switching diagram see overview	Image
CFP.M	base-mounted	2	1x NO / 1x NC		
CFP.C	base-mounted	2	2x NC		
CFP.O	base-mounted	2	2x NO		

Contact Blocks - Technical Data

Electrical specifications

Operating voltage	250 V max.
Operating current	16 A max.
Terminal capacity	2.5 mm ²
Terminal torque	0.8 Nm
Usage category	AC12: 12 ... 250 V AC - 16 A AC15: 12 ... 250 V AC - 10 A DC13: 12 ... 110 V DC - 1 A DC13: 12 ... 24 V DC - 1 A

Mechanical specifications

Mechanical life	1000000 switching operations
Degree of protection	IP20

Material

Housing	Polyamide (PA)
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Ambient conditions

Service temperature	-40 ... 90 °C (-40 ... 194 °F)
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Data for application in connection with hazardous areas

EU-Type Examination Certificate	CML 16 ATEX 3339U
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Marking	 II 2 G Ex de IIC Gb
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Contact Blocks - Technical Data continued

International approvals

IECEx approval	IECEx CML 16.0114U
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Conformity

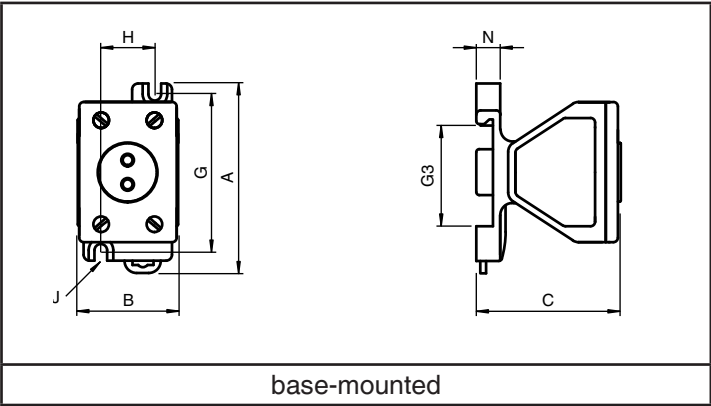
Degree of protection	EN 60529
Usage category	IEC / EN 60947
CE marking	0102

General information






Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .
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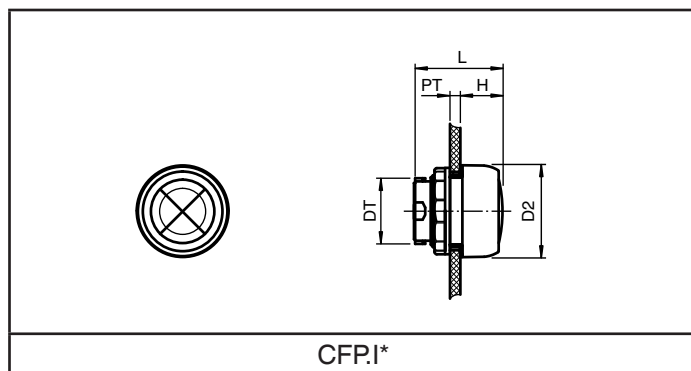
Pushbuttons and Emergency Stops

Contact Blocks - Dimensions										
Mounting	External dimension [mm]			Mounting holes [mm]			Mounting brackets [mm]	DIN mounting rail receptacle [mm]	Mass [g]	Enclosure type
	A	B	C	G	H	Diam. J	N	G3		
base-mounted	63	33.4	50	52	18	4.2	8	35.6	68	LC*, LR* GR.CS* SR.CS*



Illuminated Pushbuttons

Illuminated Pushbuttons Actuator Heads				
Type	Lens color	Operator action	Switching diagram	Image
CFP.IR	red	spring return	E-----	
CFP.IG	green	spring return	E-----	
CFP.IO	amber	spring return	E-----	
CFP.IW	white	spring return	E-----	
CFP.IB	blue	spring return	E-----	



Actuator Heads - Technical Data

Mechanical specifications

Degree of protection	IP66
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Material

Housing	Polyamide (PA)
Finish	inherent color black
Washer gasket	silicone

Ambient conditions

Ambient temperature	-40 ... 55 °C (-40 ... 131 °F)
Service temperature	-40 ... 65 °C (-40 ... 149 °F)

Data for application in connection with hazardous areas

EU-Type Examination Certificate	CML 16 ATEX 3339U
Marking	 II 2 GD Ex e IIC Gb Ex tb IIIC Db

International approvals

IECEx approval	IECEx CML 16.0114U
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Conformity

Degree of protection	EN 60529
CE marking	0102

General information

Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .
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Illuminated Pushbuttons Actuator Heads - Dimensions

Actuator head diameter [mm]	Panel wall thickness [mm]	Diameter thru-hole [mm]	Length outside enclosure [mm]	Total length [mm]	Mass [g]	Mounting	Enclosure type
D2	PT	DT	H	L			
39	1 ... 6	30.6	17.5	36.8	21	use with base-mounted and cover-mounted contact modules	LC*, LR* FXL*.CS GR.CS* SR.CS*

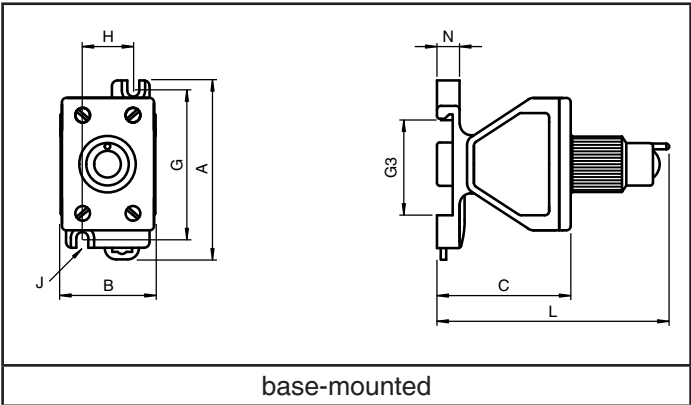
Illuminated Pushbuttons

LED Contact Modules						
Type	Mounting	Operating voltage [V]	Number of poles	Contact configuration	Switching diagram	Image
CFP.IL	base-mounted	10 ... 28 V AC/DC	1	1x NO		
CFP.I	base-mounted	30 ... 250 V AC	1	1x NO		
CFP.II	base-mounted	10 ... 28 V AC/DC Ex ia	1	1x NO		
CFP.JL	base-mounted	10 ... 28 V AC/DC	1	1x NC		
CFP.J	base-mounted	30 ... 250 V AC	1	1x NC		
CFP.JI	base-mounted	10 ... 28 V AC/DC Ex ia	1	1x NC		

Release date: 2022-12-14 Date of issue: 2022-12-14 Filename: t208145_eng.pdf

Illuminated Pushbuttons

LED Contact Modules - Dimensions											
Mounting	External dimension [mm]				Mounting holes [mm]			Mounting brackets [mm]	DIN rail receptacle [mm]	Mass [g]	Enclosure type
	A	B	C	L	G	H	Diam. J	N	G3		
base-mounted	63	33.4	47	82	52	18	4.2	8	35.6	72	LC*, LR* GR.CS* SR.CS*



LED Modules - Technical Data	
Electrical specifications	
Operating voltage	250 V max.
Operating current	10 A max.
Power consumption	1 W max.
Terminal capacity	2.5 mm ²
Terminal torque	0.8 Nm
Usage category	AC15: 10 ... 250 V AC - 10 A DC13: 10 ... 24 V DC - 1 A
Mechanical specifications	
Mechanical life	1000000 switching operations
Degree of protection	IP20
Material	
Housing	Polyamide (PA)
Ambient conditions	
Service temperature	-55 ... 90 °C (-67 ... 194 °F)
Data for application in connection with hazardous areas	
EU-Type Examination Certificate	CML 16 ATEX 3339U
Marking	II 2 G Ex de IIC Gb
Intrinsically safe variants	
Marking	II 1 G Ex ia IIC Ga
Voltage U _i	28 V
Current I _i	93 mA
Power P _i	0.651 W
Internal capacitance C _i	0 µF
Internal inductance L _i	0 mH
International approvals	
IECEX approval	IECEX CML 16.0114U
Conformity	
Degree of protection	EN 60529
Usage category	IEC / EN 60947-3
CE marking	0102

LED Modules - Technical Data	
General information	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .

Release date: 2022-12-14 Date of issue: 2022-12-14 Filename: t208145_eng.pdf

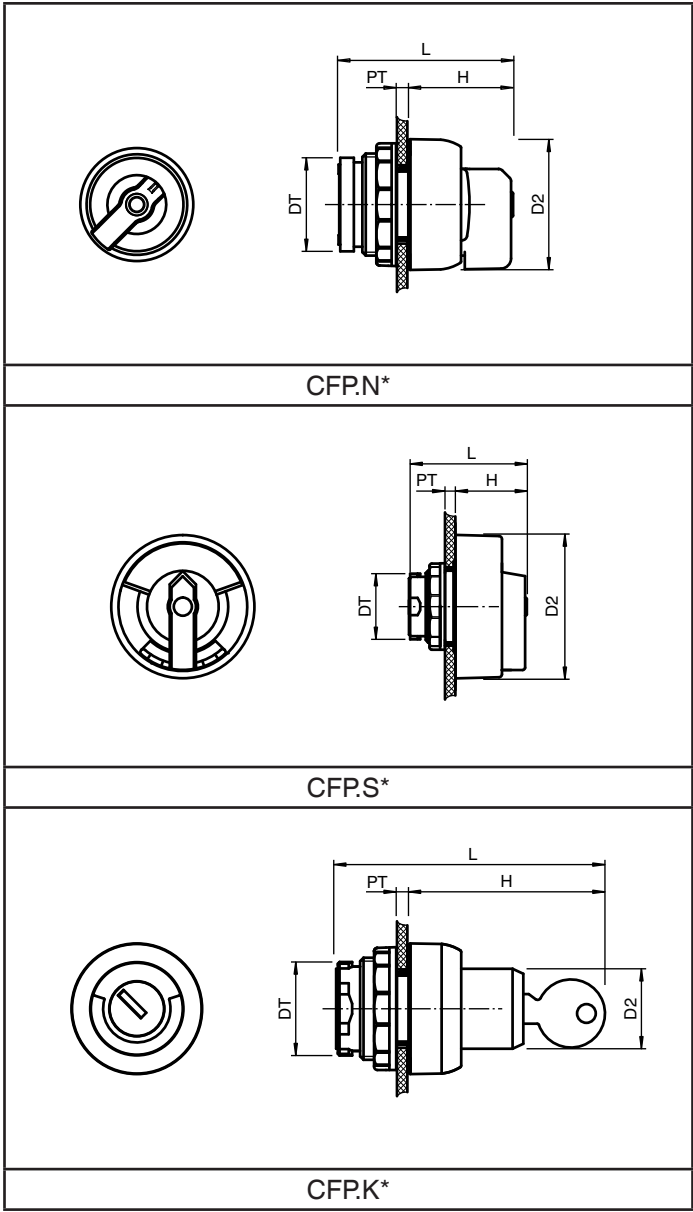
Control Switches Actuator Heads, for use with GR.CS* and SR.CS*

Control Switch Actuator Heads								
Type	Function	Dia- meter [mm]	Switching configuration	Switching diagram	Opera- tor action	Labeling	Lock- able	Image
CFP.N6	rotary actuator	39	2 position changeover with left OFF		L - L	0 - I	-	
CFP.N7	rotary actuator	39	2 position changeover		L - L	I - II	-	
CFP.N8	rotary actuator	39	3 position changeover with center OFF		L - L - L	I - 0 - II	-	
CFP.N8S	rotary actuator	39	3 position changeover with center OFF		S - L - S	I - 0 - II	-	
CFP.N9	rotary actuator	39	3 position changeover with left OFF		L - L - L	0 - I - II	-	
CFP.S6	rotary actuator	60	2 position changeover with left OFF		L - L	0 - I	yes	
CFP.S7	rotary actuator	60	2 position changeover		L - L	I - II	-	
CFP.S8	rotary actuator	60	3 position changeover with center OFF		L - L - L	I - 0 - II	yes	
CFP.S8S	rotary actuator	60	3 position changeover with center OFF		S - L - S	I - 0 - II	yes	
CFP.S9	rotary actuator	60	3 position changeover with left OFF		L - L - L	0 - I - II	yes	
CFP.K6	key switch rotary actuator	39	2 position changeover with left OFF		L - L	0 - I	yes	
CFP.K6S	key switch rotary actuator	39	2 position changeover with left OFF		L - S	0 - I	yes	
CFP.K8	key switch rotary actuator	39	3 position changeover with center OFF		L - L - L	I - 0 - II	yes	
CFP.K8S	key switch rotary actuator	39	3 position changeover with center OFF		S - L - S	I - 0 - II	yes	

Operator action: L = latching, S = spring return




Control Switches Actuator Heads

Actuator Heads - Dimensions



Actuator Heads - Technical Data

Mechanical specifications	
Dimensions	see data table
Mounting	use with base-mounted and lid-mounted contact modules
Degree of protection	IP66
Mass	see data table
Material	
Housing	Polyamide (PA)
Finish	inherent color black
Washer gasket	silicone
Ambient conditions	
Ambient temperature	-40 ... 55 °C (-40 ... 131 °F)
Service temperature	-40 ... 65 °C (-40 ... 149 °F)
Data for application in connection with hazardous areas	
EU-Type Examination Certificate	CML 16 ATEX 3339U
Marking	Ex II 2 GD Ex e IIC Gb Ex tb IIIC Db
International approvals	
IECEX approval	IECEX CML 16.0114U
Conformity	
Degree of protection	EN 60529
CE marking	0102
General information	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .

Type	Actuator head diameter [mm]	Panel wall thickness [mm]	Diameter thru-hole [mm]	Length outside enclosure [mm]	Total length [mm]	Mass [g]	Image example
	D2	PT	DT	H	L		
CFP.N*	39	1 ... 6	30.6	30.5	50.5	30	
CFP.S*	60	1 ... 6	30.6	30.5	50.5	46	
CFP.K*	39	1 ... 6	30.6	49.5	70	46	

Control Switches, 2 Pole Contact Blocks, for use with GR.CS* and SR.CS*

Combination of 2 Pole Contact Blocks and Actuator Heads									
Actuator head function	Actuator head diameter [mm]	Switching configuration	Contact block	Contacts	Switching diagram see overview	Operator action	Labeling	Lockable	Actuator type
rotary actuator	39	2 position changeover with left OFF	O	2x NO	(1)	L - L	0 - I	-	N6
rotary actuator	39	2 position changeover	M	1x NO / 1x NC	(2)	L - L	I - II	-	N7
rotary actuator	39	3 position changeover with center OFF	O	2x NO	(4)	L - L - L	I - 0 - II	-	N8
rotary actuator	39	3 position changeover with center OFF	O	2x NO	(4)	S - L - S	I - 0 - II	-	N8S
rotary actuator	39	3 position changeover with left OFF	M	1x NO / 1x NC	(3)	L - L - L	0 - I - II	-	N9
rotary actuator	60	2 position changeover with left OFF	O	2x NO	(1)	L - L	0 - I	yes	S6
rotary actuator	60	2 position changeover	M	1x NO / 1x NC	(2)	L - L	I - II	-	S7
rotary actuator	60	3 position changeover with center OFF	O	2x NO	(4)	L - L - L	I - 0 - II	yes	S8
rotary actuator	60	3 position changeover with center OFF	O	2x NO	(4)	S - L - S	I - 0 - II	yes	S8S
rotary actuator	60	3 position changeover with left OFF	M	1x NO / 1x NC	(3)	L - L - L	0 - I - II	yes	S9
key switch rotary actuator	39	2 position changeover with left OFF	O	2x NO	(1)	L - L	0 - I	yes	K6
key switch rotary actuator	39	2 position changeover with left OFF	O	2x NO	(1)	L - S	0 - I	yes	K6S
key switch rotary actuator	39	3 position changeover with center OFF	O	2x NO	(4)	L - L - L	I - 0 - II	yes	K8
key switch rotary actuator	39	3 position changeover with center OFF	O	2x NO	(4)	S - L - S	I - 0 - II	yes	K8S

Operator action: L = latching, S = spring return

Contact Blocks					
Type	Mounting	Number of poles	Contact configuration	Switching diagram	Image
CFP.M	base-mounted	2	1x NO / 1x NC		
CFP.C	base-mounted	2	2x NC		
CFP.O	base-mounted	2	2x NO		

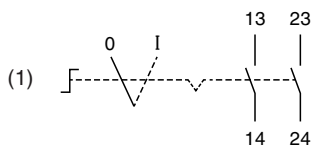
Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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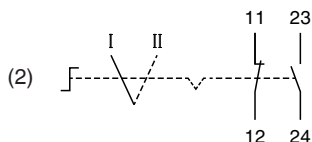
PEPPERL+FUCHS

Control Switches, 2 Pole Contact Blocks, for use with GR.CS* and SR.CS*

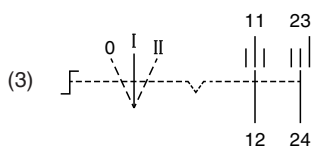
Switching Diagrams



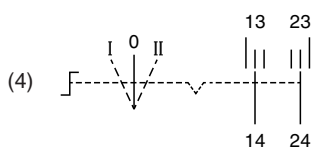
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I	X	X
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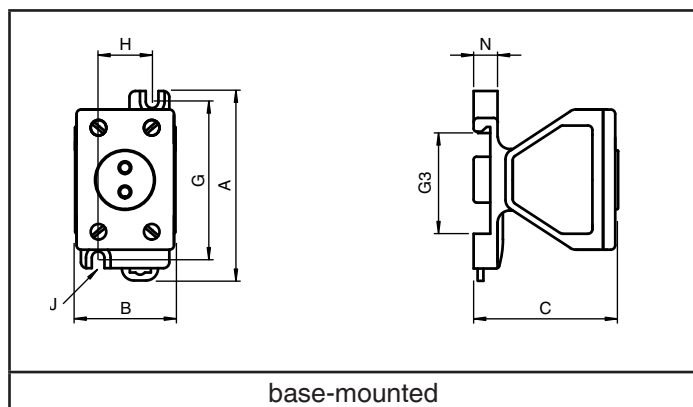
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I	X	
II		X
	12	24



	11	23
0		
I	X	
II		X
	12	24



	13	23
I	X	
0		
II		X
	14	24



Contact Blocks - Technical Data

Electrical specifications

Operating voltage	250 V max.
Operating current	16 A max.
Terminal capacity	2.5 mm ²
Terminal torque	0.8 Nm
Usage category	AC12: 12 ... 250 V AC - 16 A AC15: 12 ... 250 V AC - 10 A DC13: 12 ... 110 V DC - 1 A DC13: 12 ... 24 V DC - 1 A

Mechanical specifications

Mechanical life	1000000 switching operations
Degree of protection	IP20

Material

Housing	Polyamide (PA)
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Ambient conditions

Service temperature	-40 ... 90 °C (-40 ... 194 °F)
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Data for application in connection with hazardous areas

EU-Type Examination Certificate	CML 16 ATEX 3339U
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Marking	II 2 G Ex de IIC Gb
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International approvals

IECEx approval	IECEx CML 16.0114U
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Conformity

Degree of protection	EN 60529
Usage category	IEC / EN 60947
CE marking	0102

General information

Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .
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Contact Blocks - Dimensions

Mounting	External dimension [mm]			Mounting holes [mm]			Mounting brackets [mm]	DIN mounting rail receptacle [mm]	Mass [g]	Enclosure type
	A	B	C	G	H	Diam. J	N	G3		
base-mounted	63	33.4	50	52	18	4.2	8	35.6	68	GR.CS* SR.CS*

Control Switches, 4 Pole Contact Blocks, for use with GR.CS* and SR.CS*

Combination of 4 Pole Contact Blocks and Actuator Heads

Actuator head function	Actuator head diameter [mm]	Switching configuration	Contact block	Contacts	Switching diagram see overview	Operator action	Labeling	Lockable	Actuator type
rotary actuator	60	2 position changeover with left OFF	03	4x NO	(5)	L - L	0 - I	yes	S6
rotary actuator	60	2 position changeover	01	2x NO / 2x NC	(6)	L - L	I - II	-	S7
rotary actuator	60	3 position changeover with center OFF	03	4x NO	(7)	L - L - L	I - 0 - II	yes	S8
rotary actuator	60	3 position changeover with center OFF	03	4x NO	(7)	S - L - S	I - 0 - II	yes	S8S

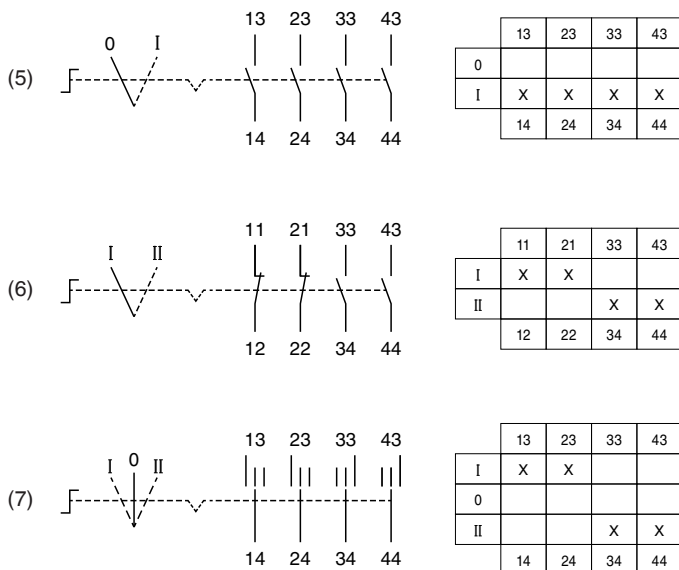
Operator action: L = latching, S = spring return

Contact Blocks

Type	Mounting	Number of poles	Contact configuration	Switching diagram	Image
CFP.01	base-mounted	4	2x NO / 2x NC		
CFP.02	base-mounted	4	4x NC		
CFP.03	base-mounted	4	4x NO		
CFP.04	base-mounted	4	1x NO / 3x NC		
CFP.05	base-mounted	4	3x NO / 1x NC		

Control Switches, 4 Pole Contact Blocks, for use with GR.CS* and SR.CS*

Switching Diagrams



Contact Blocks - Technical Data

Electrical specifications

Operating voltage	250 V max.
Operating current	16 A max.
Terminal capacity	2.5 mm ²
Terminal torque	0.8 Nm
Usage category	AC12: 12 ... 250 V AC - 16 A AC15: 12 ... 250 V AC - 10 A DC13: 12 ... 110 V DC - 1 A DC13: 12 ... 24 V DC - 1 A

Mechanical specifications

Mechanical life	1000000 switching operations
Degree of protection	IP20

Material

Housing	Polyamide (PA)
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Ambient conditions

Service temperature	-40 ... 90 °C (-40 ... 194 °F)
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Data for application in connection with hazardous areas

EU-Type Examination Certificate	CML 16 ATEX 3339U
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Marking	Ex II 2 G Ex de IIC Gb
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International approvals

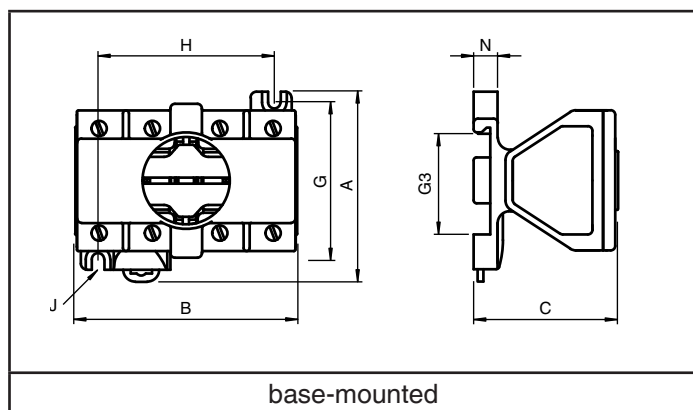
IECEx approval	IECEx CML 16.0114U
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Conformity

Degree of protection	EN 60529
Usage category	IEC / EN 60947
CE marking	0102

General information

Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .
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Contact Blocks - Dimensions

Mounting	External dimension [mm]			Mounting holes [mm]			Mounting brackets [mm]	DIN mounting rail receptacle [mm]	Mass [g]	Enclosure type
	A	B	C	G	H	Diam. J	N	G3		
base-mounted	63	74	58.6	52	58	4.2	8	35.6	165	GR.CS* SR.CS*

Control Switches, 4 Pole Rotary Switching Blocks, for use with GR.CS* and SR.CS*

Combination of 4 Pole Rotary Switching Blocks and Actuator Heads							
Switching configuration	Switching block	Contacts	Switching diagram see overview	Operator action	Labeling	Lockable	Actuator type
2 position changeover, left OFF	10	4x NO	(10)	L - L	0 - I	yes	T6
2 position changeover	11	2x NO / 2x NC	(11)	L - L	I - II	-	T7
2 position changeover	17	3x NO / 1x NC	(17)	L - L	I - II	-	T7
2 position changeover	18	1x NO / 3x NC	(18)	L - L	I - II	-	T7
3 position changeover, center OFF	12	4x NO	(12)	L - L - L	I - 0 - II	yes	T8
3 position changeover, center OFF	14	4x NO	(14)	L - L - L	I - 0 - II	yes	T8
3 position changeover, center OFF, both sides spring return	13	4x NO	(13)	S - L - S	I - 0 - II	yes	T8
3 position changeover	22	4x NO	(22)	L - L - L	I - 0 - II	-	T8
3 position changeover	23	4x NO	(23)	L - L - L	0 - I - II	-	T0
3 position changeover, right spring return	19	2x NO / 2x NC	(19)	L - L - S	0 - I - II	-	T0
3 position changeover, right spring return	16	3x NO / 1x NC	(16)	L - L - S	0 - I - II	-	T0
4 position changeover	15	3x NO / 1x NC	(15)	L - L - L - L	I - II - III - IV	-	T9
4 position changeover, right spring return	20	4x NO	(20)	L - L - L - S	I - II - III - IV	-	T9
4 position changeover	21	4x NO	(21)	L - L - L - L	I - II - III - IV	-	T9

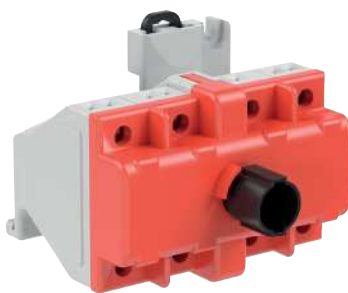
Operator action: L = latching, S = spring return

Control Switches, 4 Pole Rotary Switching Blocks, for use with GR.CS* and SR.CS*

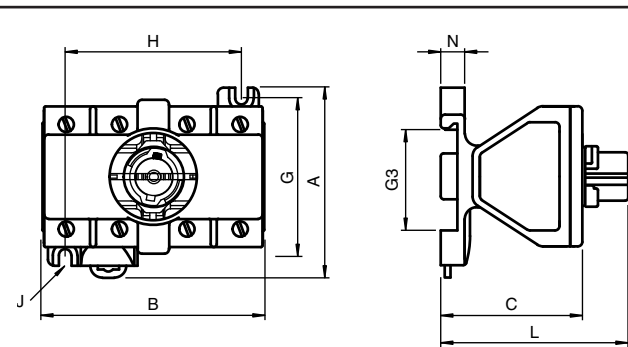
Dimensions



actuator head



rotary switching block, base-mounted



dimensions

Switching Blocks - Technical Data

Electrical specifications

Operating voltage	250 V max.
Operating current	16 A max.
Terminal capacity	2.5 mm ²
Terminal torque	0.8 Nm
Usage category	AC12: 12 ... 250 V AC - 16 A AC15: 12 ... 250 V AC - 10 A DC13: 12 ... 110 V DC - 1 A DC13: 12 ... 24 V DC - 1 A

Mechanical specifications

Mechanical life	1000000 switching operations
Degree of protection	IP20

Material

Housing	Polyamide (PA)
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Ambient conditions

Service temperature	-40 ... 90 °C (-40 ... 194 °F)
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Data for application in connection with hazardous areas

EU-Type Examination Certificate	CML 16 ATEX 3339U
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Marking	Ex II 2 G Ex de IIC Gb
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International approvals

IECEx approval	IECEx CML 16.0114U
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Conformity

Degree of protection	EN 60529
Usage category	IEC / EN 60947
CE marking	0102

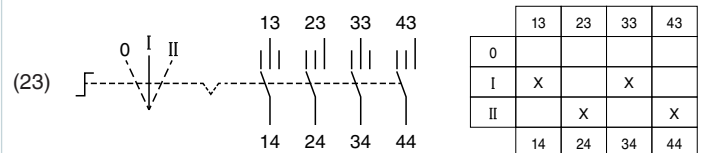
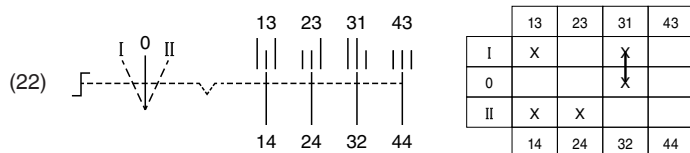
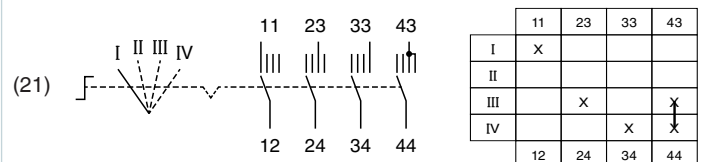
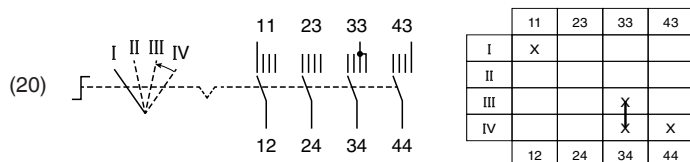
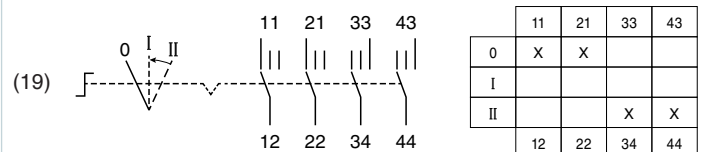
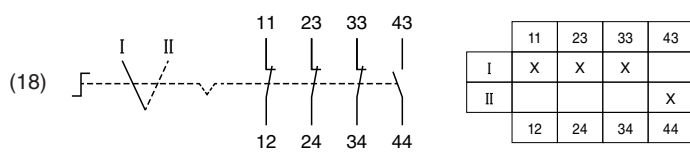
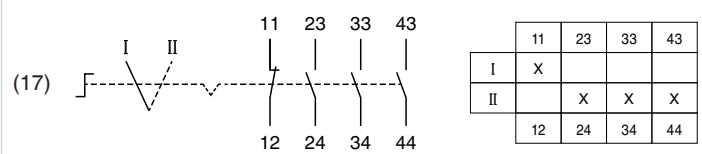
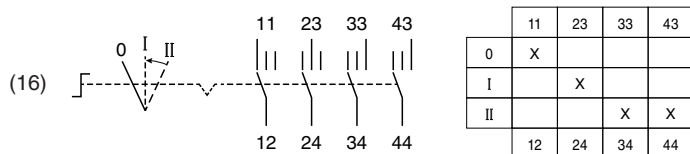
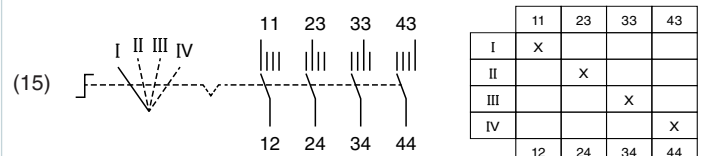
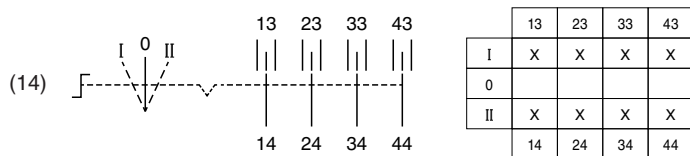
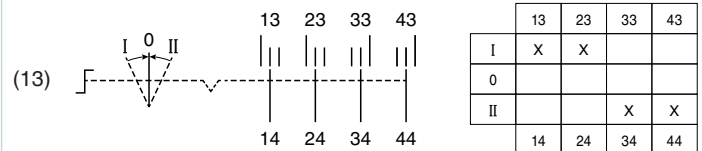
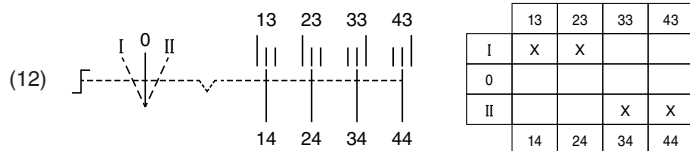
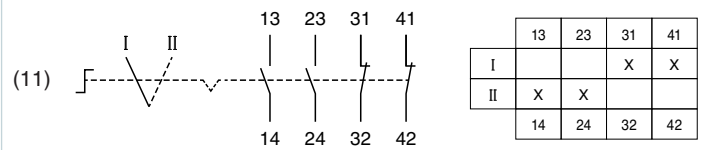
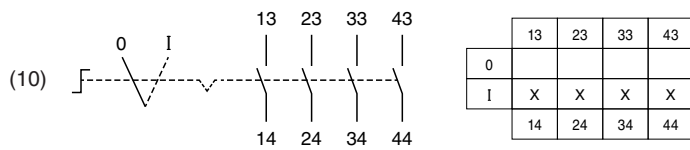
General information

Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .
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Switching Blocks - Dimensions

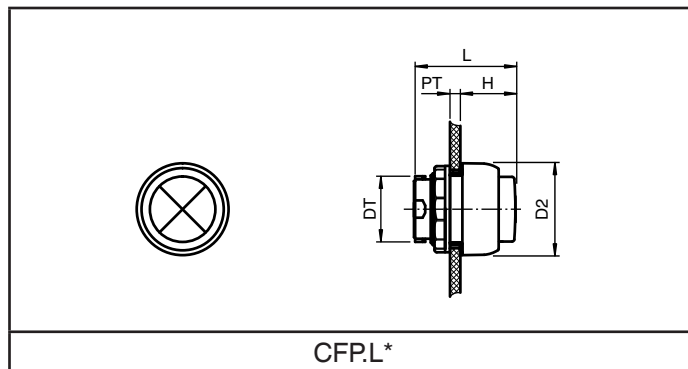
Mounting	External dimension [mm]			Mounting holes [mm]			Mounting brackets [mm]	DIN mounting rail receptacle [mm]	Mass [g]	Enclosure type
	A	B	C	G	H	Diam. J	N	G3		
base-mounted	63	74	72	52	58	4.2	8	35.6	171	GR.CS* SR.CS*

Control Switches, 4 Pole Rotary Switching Blocks, Switching diagrams



LED Indicators

LED Indicators Lenses		
Type	Lens color	Image
CFP.LR	red	
CFP.LG	green	
CFP.LO	amber	
CFP.LW	white	
CFP.LB	blue	



LED Heads - Technical Data

Mechanical specifications

Degree of protection	IP66
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Material

Housing	Polyamide (PA)
Finish	inherent color black
Washer gasket	silicone

Ambient conditions

Ambient temperature	-40 ... 55 °C (-40 ... 131 °F)
Service temperature	-40 ... 65 °C (-40 ... 149 °F)

Data for application in connection with hazardous areas

EU-Type Examination Certificate	CML 16 ATEX 3339U
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Marking	 II 2 GD Ex e IIC Gb Ex tb IIIC Db
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International approvals

IECEX approval	IECEX CML 16.0114U
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Conformity

Degree of protection	EN 60529
CE marking	0102

General information


Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .
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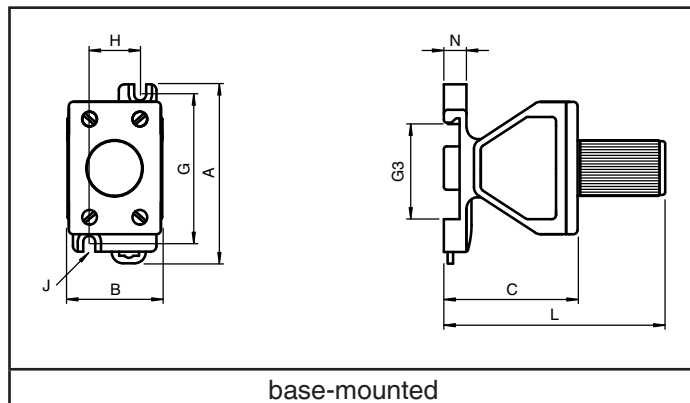
LED Heads - Dimensions

Diameter [mm]	Panel wall thickness [mm]	Diameter thru-hole [mm]	Length outside enclosure [mm]	Total length [mm]	Mass [g]	Mounting	Enclosure type
D2	PT	DT	H	L			
39	1 ... 6	30.6	23.6	43	20	use with base-mounted and cover-mounted LED modules	LC*, LR* FXL*.CS GR.CS* SR.CS*

LED Indicators

LED Modules

Type	Mounting	Rated operating voltage [V AC/DC]	Image
CFP.NI	base-mounted	10 ... 28, Ex ia	
CFP.NE	base-mounted	10 ... 28	
CFP.L	base-mounted	30 ... 250	



LED Modules - Technical Data

Electrical specifications

Operating voltage	250 V max.
Power consumption	2 W max.
Terminal capacity	2.5 mm ²
Terminal torque	0.8 Nm

Mechanical specifications

Degree of protection	IP20
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Material


Housing	Polyamide (PA)
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Ambient conditions


Service temperature	-40 ... 90 °C (-40 ... 194 °F)
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Data for application in connection with hazardous areas

EU-Type Examination Certificate	CML 16 ATEX 3339U
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Marking	 II 2 G Ex de IIC Gb
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Intrinsically safe variants *.NI, *.GI

Marking	 II 1 G Ex ia IIC Ga
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Voltage U _i	28 V
Current I _i	93 mA
Power P _i	0.651 W
Internal capacitance C _i	0 µF
Internal inductance L _i	0 mH

International approvals

IECEX approval	IECEX CML 16.0114U
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Conformity

Degree of protection	EN 60529
CE marking	0102



General information

Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .
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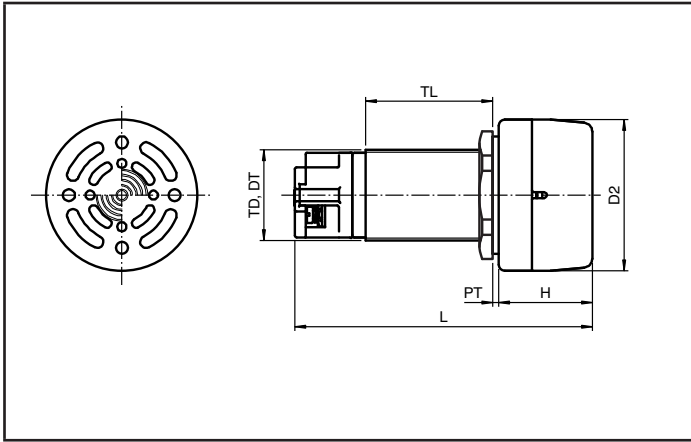
LED Modules - Dimensions

Mounting	External dimension [mm]				Mounting holes [mm]			Mounting brackets [mm]	DIN rail receptacle [mm]	Mass [g]	Enclosure type
	A	B	C	L	G	H	Diam. J	N	G3		
base-mounted	63	33.4	47	84	52	18	4.2	8	35.6	61	LC*, LR* GR.CS* SR.CS*

Buzzer

Buzzer Modules				
Type	Function	Color	Rated operating voltage [V AC/DC]	Image
CFP. BUZRF1	flashing buzzer	red	10 ... 28	
CFP. BUZRF2	flashing buzzer	red	30 ... 250	
CFP. BUZKS1	buzzer	black	10 ... 28	
CFP. BUZKS2	buzzer	black	30 ... 250	


Buzzer - Technical Data	
Electrical specifications	
Operating voltage	250 V max.
Power consumption	1 W max.
Terminal capacity	2.5 mm²
Terminal torque	0.8 Nm
Sound level	60 dB at 30 cm
Mechanical specifications	
Degree of protection	IP66
Material	
Housing	Polyamide (PA)
Ambient conditions	
Ambient temperature	-40 ... 55 °C (-40 ... 131 °F)
Service temperature	-40 ... 90 °C (-40 ... 194 °F)
Data for application in connection with hazardous areas	
EU-Type Examination Certificate	CML 16 ATEX 3339U
Marking	Ex II 2 GD Ex e ib mb IIC Gb Ex ib tb IIIC Db
International approvals	
IECEX approval	IECEX CML 16.0114U
Conformity	
Degree of protection	EN 60529
CE marking	0102
General information	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .



Buzzer - Dimensions									
Actuator head diameter [mm]	Panel wall thickness [mm]	Diameter thru-hole [mm]	Length outside enclosure [mm]	Total length [mm]	Thread size	Thread length [mm]	Mass [g]	Mounting	Enclosure type
D2	PT	DT	H	L	TD	TL			
50	1 ... 35	30.6	31	98.5	M30 x 1.5	42	125	cover-mounted	LC*, LR* GR.CS* SR.CS* FXL*.CS

Ammeters

Ammeter Modules

Type	Rated operating current	Scales see table	Image
CFP.AA	0 ... 1 A	scale per specification	
CFP.AB	0 ... 5 A	scale per specification	
CFP.AC	4 ... 20 mA	scale 4 ... 20 / 40 mA	
CFP.AD	0 ... 20 mA	scale 0 ... 20 / 40 mA	

Ammeter Scales

Scales	Type Code	Scales	Type Code
0 ... 1 / 5 A	SA	0 ... 150 / 750 A	SM
0 ... 2.5 / 12.5 A	SB	0 ... 200 / 1000 A	SN
0 ... 5 / 25 A	SC	0 ... 250 / 1250 A	SO
0 ... 10 / 50 A	SD	0 ... 300 / 1500 A	SP
0 ... 15 / 75 A	SE	0 ... 400 / 2000 A	SQ
0 ... 20 / 100 A	SU	0 ... 500 / 2500 A	SR
0 ... 25 / 125 A	SF	0 ... 600 / 3000 A	SS
0 ... 30 / 150 A	SG	0 ... 1000 / 5000 A	ST
0 ... 40 / 200 A	SH	Scale as per specification	SZ
0 ... 50 / 250 A	SI		
0 ... 60 / 300 A	SJ		
0 ... 75 / 375 A	SK		
0 ... 100 / 500 A	SL		

Ammeter Modules - Technical Data

Electrical specifications

Operating voltage	500 V AC
Operating current	5 A max.
Accuracy class	1.5
Terminal capacity	2.5 mm ²
Terminal torque	0.8 Nm

Mechanical specifications

Degree of protection	IP66
Mounting	Meter window mounting kit


Material

Housing	Polyamide (PA)
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Ambient conditions

Service temperature	-40 ... 95 °C (-40 ... 203 °F)
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Data for application in connection with hazardous areas

EU-Type Examination Certificate	CML 16 ATEX 3339U
Marking	 II 2 G Ex e IIC Gb

International approvals

IECEX approval	IECEX CML 16.0114U
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Conformity

Degree of protection	EN 60529
CE marking	0102

General information

Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .
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Meter Window Mounting Kits

Type	Window including	Enclosure type
CFP.WB	base mounting kit	L*, GR.CS*
CFP.WL	cover mounting kit	FXL*.CS, SR.CS*


Ammeter Modules - Dimensions

External dimension [mm]				Viewing window [mm]		Panel wall thickness [mm]	Mounting holes [mm]			Mass [g]	Enclosure type
A	B	C	L	X	Y	PT	G	H	Diam. J		
70	70	59	75	54	50	1 ... 6	63	63	3.5	186	LC*, LR* FXL*.CS, SR.CS* GR.CS

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

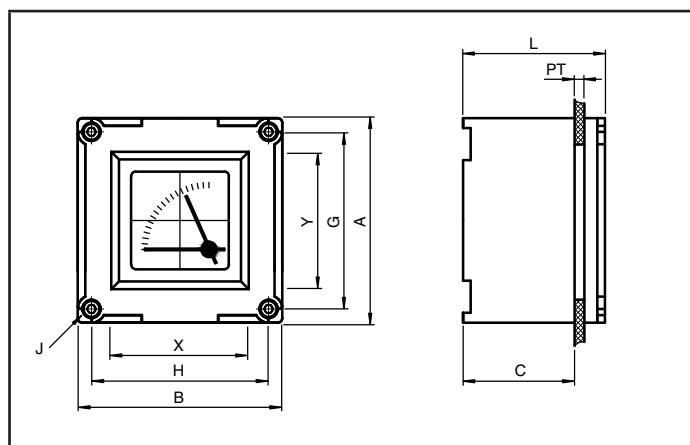
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Voltmeters

Voltmeter Modules		
Type	Rated operating voltage	Image
CFP.V6	0 ... 10 V	
CFP.V1	0 ... 25 V	
CFP.V2	0 ... 40 V	
CFP.V7	0 ... 50 V	
CFP.V8	0 ... 100 V	
CFP.V9	0 ... 120 V	
CFP.V3	0 ... 150 V	
CFP.V4	0 ... 250 V	
CFP.V5	0 ... 500 V	

Voltmeter Scales
included in module


Voltmeter Modules - Technical Data	
Electrical specifications	
Operating voltage	500 V AC
Accuracy class	1.5
Terminal capacity	2.5 mm ²
Terminal torque	0.8 Nm
Mechanical specifications	
Degree of protection	IP66
Mounting	Meter window mounting kit
Material	
Housing	Polyamide (PA)
Ambient conditions	
Service temperature	-40 ... 95 °C (-40 ... 203 °F)
Data for application in connection with hazardous areas	
EU-Type Examination Certificate	CML 16 ATEX 3339U
Marking	Ex II 2 G Ex e IIC Gb
International approvals	
IECEx approval	IECEx CML 16.0114U
Conformity	
Degree of protection	EN 60529
CE marking	0102
General information	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .




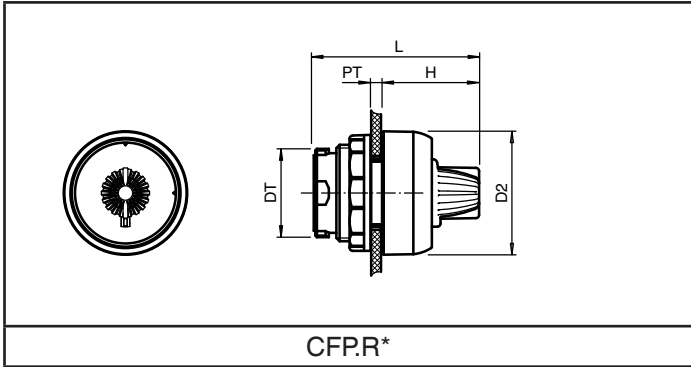
Voltmeter Modules - Dimensions											
External dimension [mm]				Viewing window [mm]		Panel wall thickness [mm]	Mounting holes [mm]			Mass [g]	Enclosure type
A	B	C	L	X	Y	PT	G	H	Diam. J		
70	70	59	75	54	50	1 ... 6	63	63	3.5	186	LC*, LR* FXL*.CS, SR.CS* GR.CS*

Meter Window Mounting Kits		
Type	Window including	Enclosure type
CFP.WB	base mounting kit	L*, GR.CS*
CFP.WL	cover mounting kit	FXL*.CS, SR. CS*

Potentiometers

Potentiometer Actuator Heads			
Type	Enclosure type	Labeling	Image
CFP.R2	GR.CS*	0 ... 10	

Actuator Heads - Technical Data	
Mechanical specifications	
Degree of protection	IP66
Material	
Housing	Polyamide (PA)
Finish	inherent color black
Washer gasket	silicone
Ambient conditions	
Ambient temperature	-40 ... 55 °C (-40 ... 131 °F)
Service temperature	-40 ... 65 °C (-40 ... 149 °F)
Data for application in connection with hazardous areas	
EU-Type Examination Certificate	CML 16 ATEX 3339U
Marking	 II 2 GD Ex e IIC Gb Ex tb IIIC Db
International approvals	
IECEX approval	IECEX CML 16.0114U
Conformity	
Degree of protection	EN 60529
CE marking	0102
General information	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .




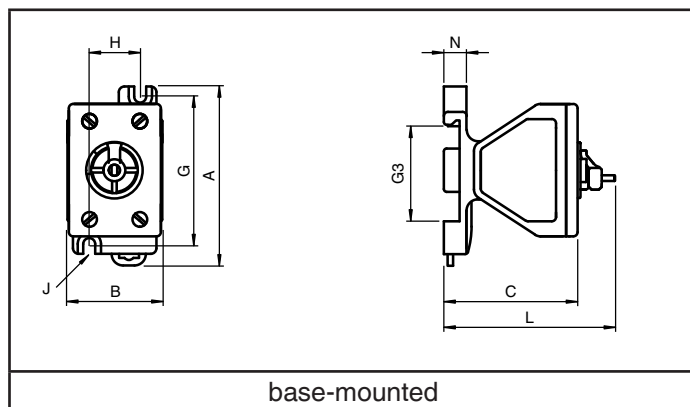
Potentiometer Actuator Heads - Dimensions						
Actuator head diameter [mm]	Panel wall thickness [mm]	Diameter thru-hole [mm]	Length outside enclosure [mm]	Total length [mm]	Mass [g]	Mounting
D2	PT	DT	H	L		
39	1 ... 6	30.6	30.5	50.5	27	use with base-mounted and cover-mounted potentiometer modules

Release date: 2022-12-14 Date of issue: 2022-12-14 Filename: t208145_eng.pdf

Potentiometers

Potentiometer Modules

Type	Mounting	Range [kΩ]	Image
CFP.3	base-mounted	0 ... 0.5	
CFP.1	base-mounted	0 ... 1	
CFP.2	base-mounted	0 ... 2	
CFP.5	base-mounted	0 ... 5	
CFP.0	base-mounted	0 ... 10	



Potentiometer Modules - Technical Data

Electrical specifications

Operating voltage	200 V max.
Power consumption	0.1 W max.
Terminal capacity	2.5 mm ²
Terminal torque	0.8 Nm

Mechanical specifications

Degree of protection	IP20
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Material


Housing	Polyamide (PA)
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Ambient conditions

Service temperature	-55 ... 90 °C (-67 ... 194 °F)
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Data for application in connection with hazardous areas

EU-Type Examination Certificate	CML 16 ATEX 3339U
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Marking	 II 2 G Ex de IIC Gb
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International approvals

IECEx approval	IECEx CML 16.0114U
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Conformity

Degree of protection	EN 60529
CE marking	0575








General information








Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .
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Potentiometer Modules - Dimensions

Mounting	External dimension [mm]				Mounting holes [mm]			Mounting brackets [mm]	DIN rail receptacle [mm]	Mass [g]	Enclosure type
	A	B	C	L	G	H	Diam. J	N	G3		
base-mounted	63	34	50	60	52	18	4.2	8	35.6	69	GR.CS* SR.CS*

Operating Elements Accessories

Accessory		
Type	Description	Image
CFP.BK	Blanking plug	
CFP.ZT	Extra small label holder with printed label as per specification	
CFP.ZS	Small label holder with printed label as per specification	
CFP.ZL	Large label holder with printed label as per specification	
CFP.ZEB	Emergency stop label, yellow, round	
CFP.ZEB.V2	Emergency stop label, yellow, round, engraved NOT HALT EMERGENCY STOP	
CFP.TP	Locknut spanner, plastic	

Accessory		
Type	Description	Image
CFP.ZB CFP.ZBR (1) (8)	Protective flap for small actuators, plastic, padlockable	
CFP.ZJ CFP.ZJR (1) (8)	Protective pushbutton flap with continuous operation, plastic, padlockable	
CFP.ZH (3)	Protective flap for double pushbutton, stainless steel, padlockable	
CFP.ZA CFP.ZAR (4) (8) (9)	Protective flap, plastic	
CFP.ZP CFP.ZPR (5) (8)	Emergency stop shroud, plastic, padlockable, supplied with padlock and 2 keys	
CFP.ZDT (6) (9)	Protective flap, stainless steel	
CFP.ZCT (7)	Protective flap, stainless steel, padlockable	

- (1) CFP.ZB* are designed for use with CFP.P* pushbuttons, CFP.I* illuminated pushbuttons, CFP.N* small switches, CFP.R* potentiometer actuators
- (2) CFP.ZJ* are designed for use with CFP.P* pushbuttons
- (3) CFP.ZH is designed for use with CFP.D* double pushbuttons
- (4) CFP.ZA* are designed for use with CFP.S* large switches, CFP.E* emergency stops
- (5) CFP.ZP* are designed for use with CFP.E4 emergency stop buttons, the shroud can either be used without the bar to avoid accidental operation or with the bar to padlock in the operated position
- (6) CFP.ZDT is designed for use with both CFP.E4 and CFP.E5 emergency stop buttons
- (7) CFP.ZCT is designed for use with both CFP.E4 and CFP.E5 emergency stop buttons. The shroud is used to padlock the emergency stop in the operated position and when not in use, the flap should be left open
- (8) Accessories that have two options, use a R at the end of the typecode for use with rail mounted contact blocks and those without R are used for cover mounted contact blocks only
- (9) Shrouds and flaps potentially prevent free and unimpaired access to an emergency stop button. These products may therefore only be used in applications where their use has been assessed and not found to cause unacceptable risk to health and safety of persons or damage to the protected machinery.