



Control Units Ex e, Stainless Steel

LRS*. *

- Stainless Steel enclosure
- Installation in Zone 1, Zone 2, Zone 21 and Zone 22
- Ex db eb, Ex ib and Ex tb certified
- Up to 4 operators per enclosure
- Customizable configuration of operators, contact modules and cable entries as per specification
- Wide range of labels and accessories available
- 4 enclosure size options
- Degree of protection IP66
- Installation in portrait, landscape on request

Control Units Ex e, Stainless Steel



Function

The versatile control units of the LRS series are available pre-configured off-the-shelf or flexibly customized with a great variety of operating elements, cable glands and accessories. The comprehensive range of control functions allow the configuration of each control unit to exactly meet any application requirements and ensure optimal space efficiency. The enclosures are manufactured from brushed AISI 316L stainless steel to provide excellent tarnish and corrosion resistance. Durable materials and components of high quality, such as stainless steel A4 (V4A) fixings allow the control units to be used in harsh ambient conditions.

Technical Data

Electrical specifications

Operating voltage	250 V max.
Operating current	13 A max.
Terminal capacity	2.5 mm ²
Terminal torque	0.8 Nm
Function	see data table

Mechanical specifications

Enclosure range	SR
Enclosure cover	fully detachable
Cover fixing	stainless steel A4 (V4A) hexagonal head screws
Screws	M6
Number	4
Tightening torque	3 Nm - 3.5 Nm
Degree of protection	IP66
Cable entry	cable glands as per specification
Number of cable entries	see data table
Defined entry area	face A and face B
Material	
Enclosure	1.5 mm AISI 316L, (1.4404) stainless steel
Finish	brushed
Seal	one piece closed cell silicone
Mass	see data table
Dimensions	see data table
Tightening torque	
Nut torque at enclosure (SW1)	see datasheets of cable glands
Mounting	see data table

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Technical Data

Grounding	M6 internal/external brass nickel-plated grounding bolt
Ambient conditions	
Ambient temperature	-40 ... 55 °C (-40 ... 131 °F) -50 °C (-58 °F) on request
Data for application in connection with hazardous areas	
EU-type examination certificate	CML 16 ATEX 3009X
Marking	Ⓜ II 2 GD Ex db eb ib mb IIC T* Gb Ex tb IIIC T** °C Db T4/T130 °C @ Ta +55 °C T6/T80 °C @ Ta +40 °C on request
International approvals	
IECEx approval	IECEx CML 16.0008X
Conformity	
Degree of protection	EN 60529
Usage category	IEC / EN 60947
CE marking	0080 or 0102, see type label
General information	
Ordering information	For standard configured units please see pdf data sheet. 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	engraved traffolyte tag label engraved AISI 316L stainless steel tag label color in-fill stainless steel tag label M6 internal/external stainless steel grounding bolt
Indicators/operating means	
Control elements	small footprint max. 4 see data table all NC contacts have a direct opening action for emergency stop functions

Type Code

1	2	3	4	5	6	7	8	9	10					
LR	*	*	.	*	.	****	.	****	.	****	.	*	.	*
LR	S	2	.	D	.	PGMX	.	E4MX	.	.	.	B	.	1

Example: LRS2.D.PGMX.E4MX.B.1

Control Unit, stainless steel enclosure for two control functions, portrait orientation. Upper function: pushbutton green, base-mounted contact block with 1x NO / 1x NC contacts. Lower function: twist-to-release mushroom button, red, base-mounted contact block with 1x NO / 1x NC contacts. Cable entry configuration: bottom face cable gland M20 polyamide. Type of protection Ex db eb and Ex tb.

1	Series
LR	control unit
2	Material
S	stainless steel AISI 316L, brushed finish
3	Enclosure variant
1 ... 4	enclosure size, see dimensions data table
4	Enclosure orientation
B	landscape
D	portrait
5	Function 1
xxxx	see operating elements type code
6	Function 2
xxxx	see operating elements type code
7	Function 3
xxxx	see operating elements type code
8	Function 4

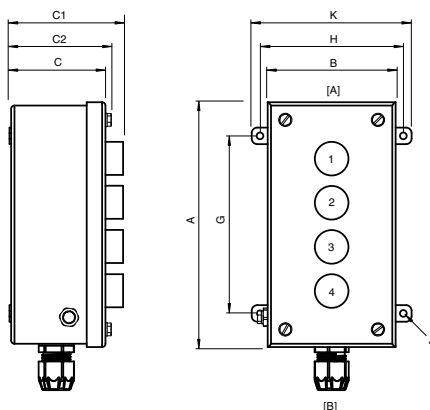
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8	
Function 4	
xxxx	see operating elements type code

9	
Entry configuration / cable glands	
A ... I	standard entry configurations, see cable entries table
X	no entries
Z	customized entries

10	
Type of explosion protection	
1	Ex db eb, Ex tb
3	Ex ib, Ex tb
5	mixed protection, e.g.: Ex db ib tb

Dimensions and Enclosure Details



Enclosure type	Operating elements size and quantity	External dimensions [mm]						Mounting [mm]			Mass approx. [kg]
		A	B	C	C1	C2	K	G	H	J	
LRS2.*	2x small	142	116	87	137	92	145	81	130	6.1	1
LRS3.*	3x small	182	116	87	137	92	145	121	130	6.1	1.3

Type Code	Cable entries Face A			Cable entries Face B					
	M20 qty.	M20 type	M20 clamping range	M20 qty.	M20 type	M20 clamping range	M25 qty.	M25 type	M25 clamping range
.C.	-	-	-	-	-	-	1	CG.PEDS.M25.*	10 ... 18 mm

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Standard Variants

Type	Function	Color	Labeling	Operator action	Number of poles	Contact configuration	Switching configuration	Electrical specification	Switching diagram	Image example
LRS1.B. PGMX.*	pushbutton	green (4)	I	spring return	2	1x NO / 1x NC	-	(1)		
LRS1.B. DMMX.*	double pushbutton	red / green (5)	0 - I	spring return	2	1x NO / 1x NC	-	(1)		
LRS1.B. E4MX.*	mushroom button 40 mm	red	-	latching, twist to release	2	1x NO / 1x NC	-	(1)		
LRS1.B. E4MZAR.*	mushroom button, with plastic lid	red	-	latching, twist to release	2	1x NO / 1x NC	-	(1)		
LRS1.B. E4MZPR.*	mushroom button, with plastic shroud, padlockable	red	-	latching, twist to release	2	1x NO / 1x NC	-	(1)		
LRS1.B. JRMX.*	mushroom button, lockable	red	-	latching, key release	2	1x NO / 1x NC	-	(1)		
LRS1.B. S1OX.*	control switch, large, with shroud, padlockable in '0'	black	0 - I	engage - engage	2	2x NO	2 position changeover with left OFF	(1)		
LRS2.D. PGMX. PRMX.*	pushbutton	green (4)	I	spring return	2	1x NO / 1x NC	-	(1)		
	pushbutton	red (4)	0	spring return	2	1x NO / 1x NC	-	(1)		
LRS2.D. PGMX. E4MX.*	pushbutton	green (4)	I	spring return	2	1x NO / 1x NC	-	(1)		
	mushroom button	red	-	latching, twist to release	2	1x NO / 1x NC	-	(1)		

Standard Variants

Type	Function	Color	Labeling	Operator action	Number of poles	Contact configuration	Switching configuration	Electrical specification	Switching diagram	Image example
LRS2.D. DMMX. E4MX.*	double pushbutton	red / green (5)	I	spring return	2	1x NO / 1x NC	-	(1)		
	mushroom button	red	-	latching, twist to release	2	1x NO / 1x NC	-	(1)		
LRS3.D. PGMX. PRMX. E4MX.*	pushbutton	green (5)	I	spring return	2	1x NO / 1x NC	-	(1)		
	pushbutton	red (5)	0	spring return	2	1x NO / 1x NC	-	(1)		
	mushroom button	red	-	latching, twist to release	2	1x NO / 1x NC	-	(1)		
LRS3.D. LRLX. DMMX. E4MX.*	LED indicator	red	-	-	-	-	-	(3)		
	double pushbutton	red / green (5)	0 - I	spring return	2	1x NO / 1x NC	-	(2)		
	mushroom button	red	-	latching, twist to release	2	1x NO / 1x NC	-	(2)		

Standard Variants

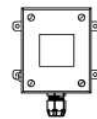
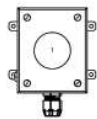
Type	Function	Color	Labeling	Operator action	Number of poles	Contact configuration	Switching configuration	Electrical specification	Switching diagram	Image example

Reference in standard variants	Usage category	Rated operating voltage	Rated operating current
(2)	AC12 - 12 ... 250 V AC - 6 A AC15 - 12 ... 250 V AC - 6 A DC13 - 12 ... 110 V DC - 1 A	-	-
Labeling			

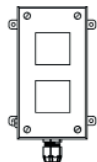
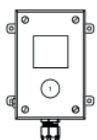
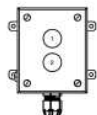
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Configurations - Types of Operating Elements see Overleaf

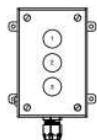
Configurations with 1 function



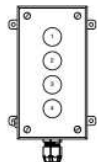
Configurations with 2 functions



Configurations with 3 functions




Configurations with 4 functions




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Pushbuttons and Emergency Stops

Pushbuttons Actuator Heads			
Type	Color	Labeling	Image
			
CFP.PR	red	0	
			
CFP.PD	red	OFF	
			
CFP.PG	green	I	
			
CFP.PF	green	START	
			
CFP.PY	yellow	none	
			
CFP.PW	white	none	
			
CFP.PJ	blue	RESET	
			
CFP.PL	black	0	
			
CFP.PP	black	II	
			
CFP.PT	black	IV	
			
CFP.PV	black	arrow down	
			

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
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.E5	mushroom button	red	none	latching, twist to release	55 mm		
							

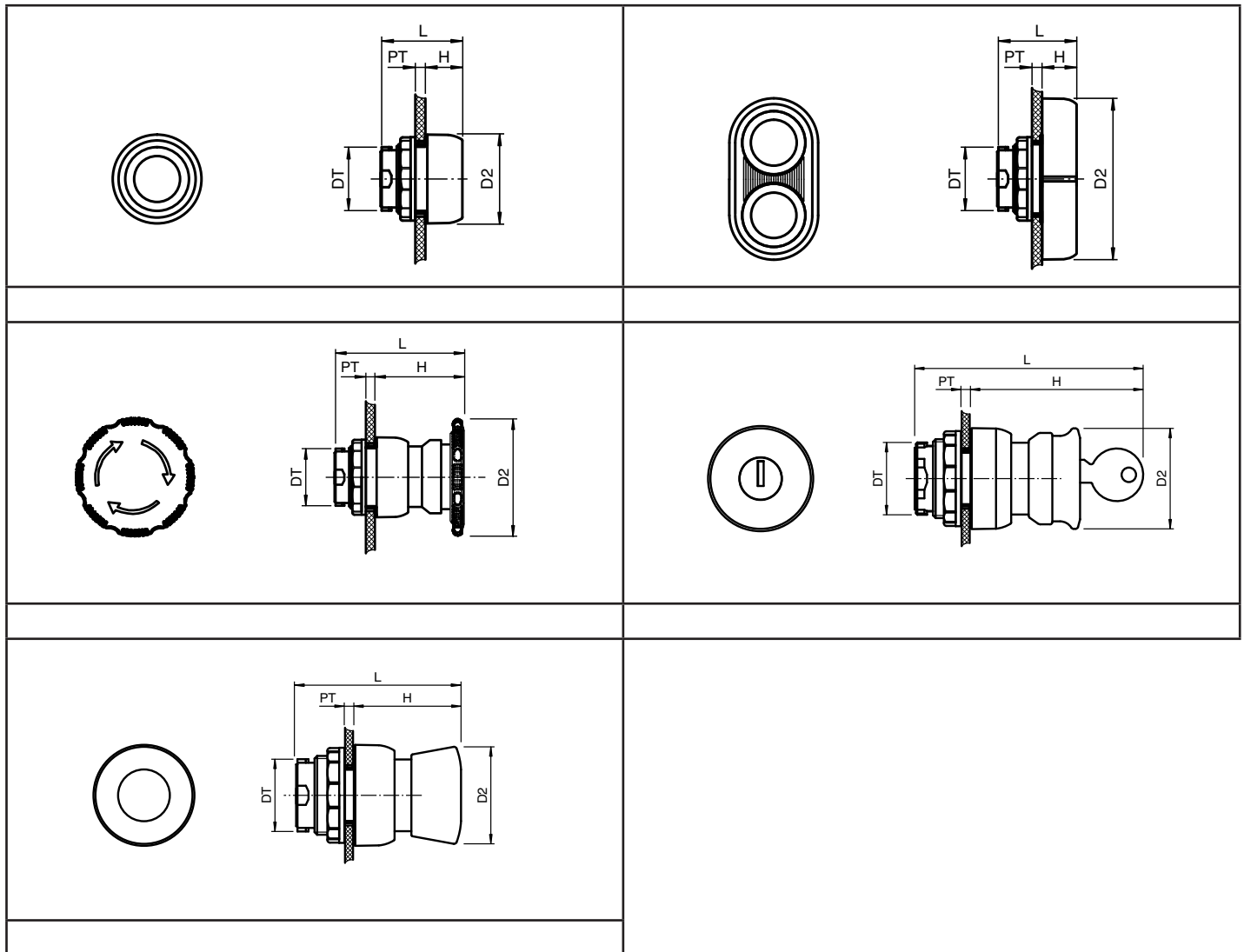
Other Pushbuttons Actuator Heads

Type	Function	Color	Labeling	Operator action	Actuator head diameter	Switching diagram	Image
							
CFP.MK	mushroom button	black	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.DM*	double pushbutton	70 x 39	1 ... 6	30.6	15.5	35.4	38
CFP.E5	emergency stop	55	1 ... 6	30.6	41.8	62.1	58
CFP.M*	mushroom button	37	1 ... 6	30.6	41.2	60.7	46



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Pushbuttons and Emergency Stops

Contact Blocks

Type	Mounting	Number of poles	Contact configuration	Switching diagram see overview	Image
CFPC	base-mounted	2	2x NC		
					
					

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

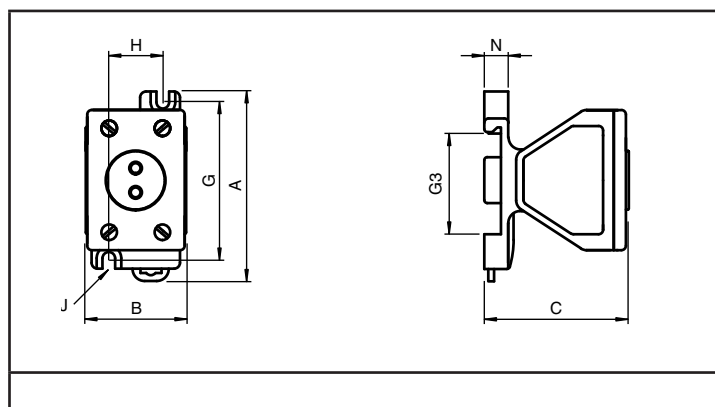
General information

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		

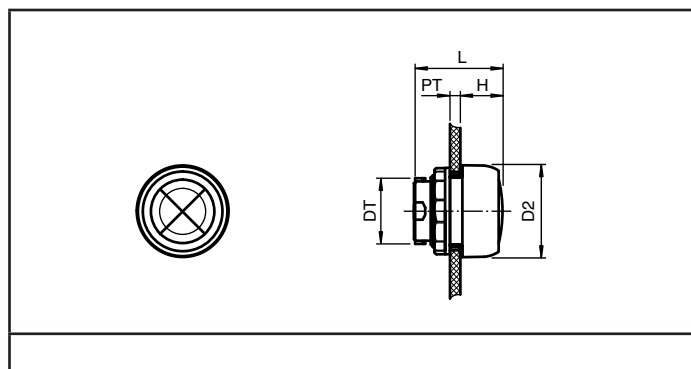


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Illuminated Pushbuttons

Illuminated Pushbuttons Actuator Heads

Type	Lens color	Operator action	Switching diagram	Image
			E-----	
CFP.IG	green	spring return	E-----	
			E-----	
CFP.IW	white	spring return	E-----	
			E-----	



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 .

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			

Illuminated Pushbuttons

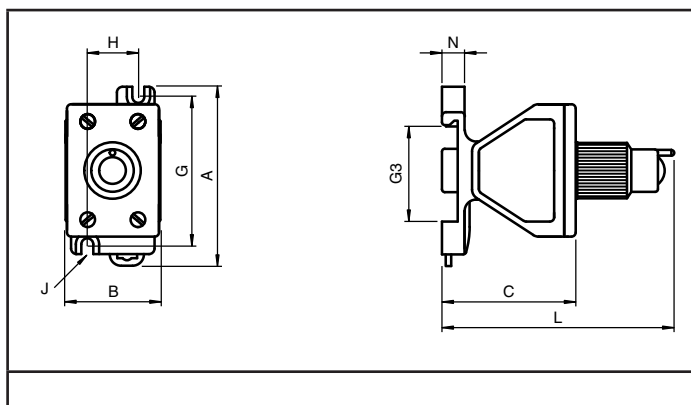
LED Contact Modules

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

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		



LED Modules - Technical Data

LED Modules - Technical Data	
Electrical specifications	
Operating current	10 A max.
Terminal capacity	2.5 mm ²
Usage category	AC15: 10 ... 250 V AC - 10 A DC13: 10 ... 24 V DC - 1 A
Mechanical life	1000000 switching operations
Material	
Ambient conditions	
Data for application in connection with hazardous areas	
Marking	Ex II 2 G Ex de IIC Gb
Marking	Ex II 1 G Ex ia IIC Ga
Current I _i	93 mA
Internal capacitance C _i	0 μF
International approvals	
Conformity	
Usage category	IEC / EN 60947-3





























LED Modules - Technical Data

General information

Supplementary information

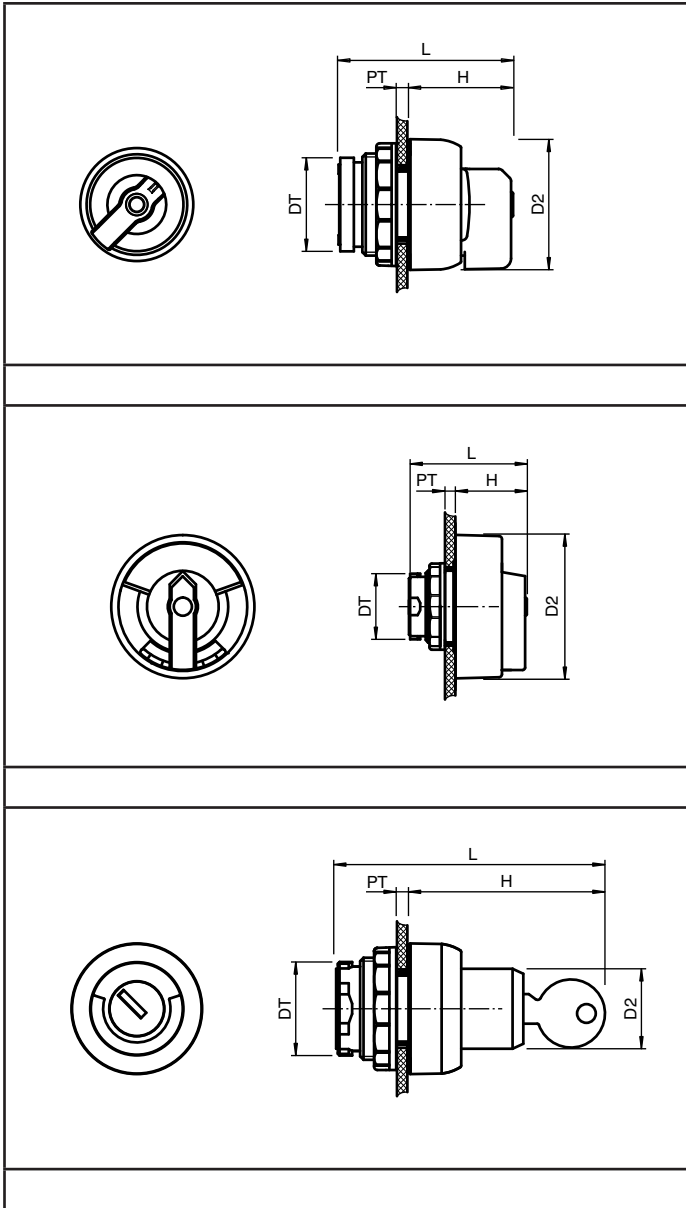
EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com.

Control Switches Actuator Heads, for use with LCP*, LCS* and LR*

Control Switch Actuator Heads								
Type	Function	Diameter [mm]	Switching configuration	Switching diagram	Operator action	Labeling	Lockable	Image
								
CFP.N2	rotary actuator	39	2 position changeover		L - L	I - II	-	
								
CFP.N3S	rotary actuator	39	3 position changeover with center OFF		S - L - S	I - 0 - II	-	
								
CFP.S1	rotary actuator	60	2 position changeover with left OFF		L - L	0 - I	yes	
								
CFP.S3	rotary actuator	60	3 position changeover with center OFF		L - L - L	I - 0 - II	yes	
								
CFP.S5	rotary actuator	60	3 position changeover with left OFF		L - L - L	0 - I - II	yes	
								
CFP.K1S	key switch rotary actuator	39	2 position changeover with left OFF		L - S	0 - I	yes	
								
CFP.K3S	key switch rotary actuator	39	3 position changeover with center OFF		S - L - S	I - 0 - II	yes	

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	⚠ 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 .

CFPS*	60	1 ... 6	30.6	30.5	50.5	46	
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Release date: 2022-05-15 Date of issue: 2022-05-15 Filename: 12020049_eng.pdf

Control Switches, 2 Pole Contact Blocks, for use with LCP*, LCS* and LR*

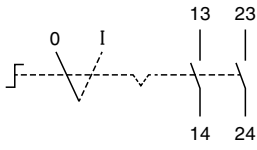
Combination of 2 Pole Contact Blocks and Actuator Heads									
Actuator head function	Actuator head diameter [mm]	Switching configuration	Contact block	Contacts	Switching diagram see overview	Operator action	Labeling	Lockable	Actuator type
rotary actuator	39	2 position changeover	M	1x NO / 1x NC	(2)	L - L	I - II	-	N2
rotary actuator	39	3 position changeover with center OFF	O	2x NO	(4)	S - L - S	I - 0 - II	-	N3S
rotary actuator	60	2 position changeover with left OFF	O	2x NO	(1)	L - L	0 - I	yes	S1
rotary actuator	60	3 position changeover with center OFF	O	2x NO	(4)	L - L - L	I - 0 - II	yes	S3
rotary actuator	60	3 position changeover with left OFF	M	1x NO / 1x NC	(3)	L - L - L	0 - I - II	yes	S5
key switch rotary actuator	39	2 position changeover with left OFF	O	2x NO	(1)	L - S	0 - I	yes	K1S
key switch rotary actuator	39	3 position changeover with center OFF	O	2x NO	(4)	S - L - S	I - 0 - II	yes	K3S

Contact Blocks

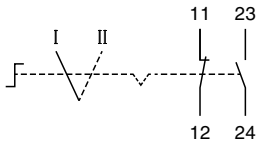
Type	Mounting	Number of poles	Contact configuration	Switching diagram	Image
CFPC	base-mounted	2	2x NC		

Control Switches, 2 Pole Contact Blocks, for use with LCP*, LCS* and LR*

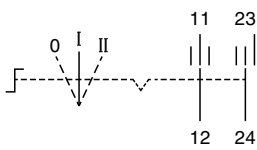
Switching Diagrams



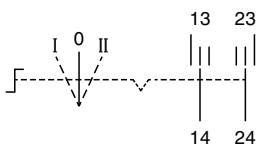
	13	23
0		
I	X	X
	14	24



	11	23
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

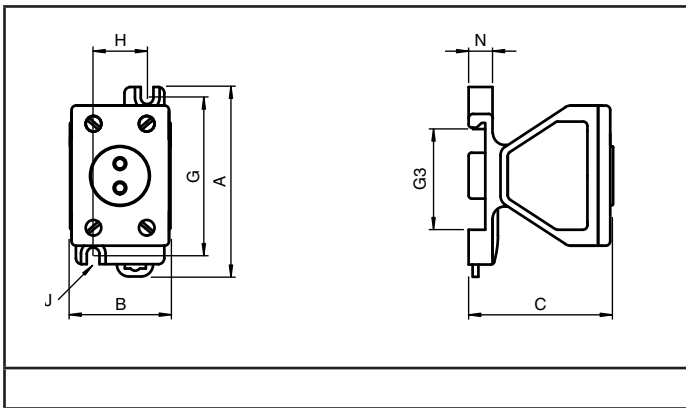
IECEx approval	IECEx CML 16.0114U
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Conformity

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		

Release date: 2022-05-15 Date of issue: 2022-05-15 Filename: 1202049_eng.pdf

Control Switches, 4 Pole Contact Blocks, for use with LCP*, LCS* and LR*

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	01	2x NO / 2x NC	(6)	L - L	I - II	-	S2
rotary actuator	60	3 position changeover with center OFF	03	4x NO	(7)	S - L - S	I - 0 - II	yes	S3S

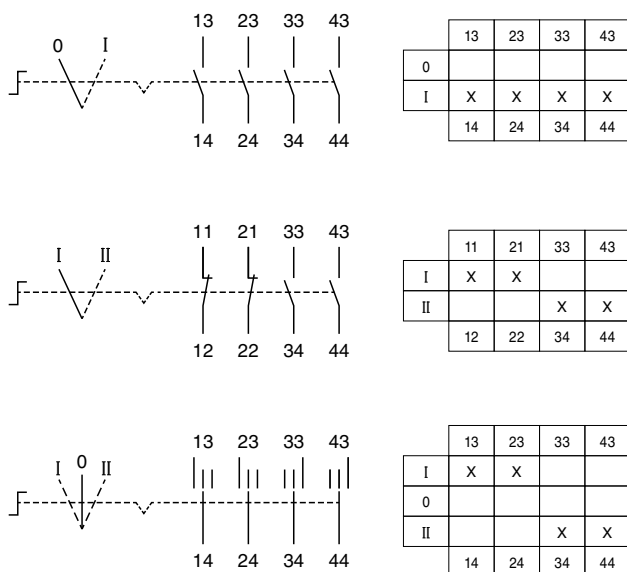
Contact Blocks

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

Release date: 2022-05-15 Date of issue: 2022-05-15 Filename: 1202049_eng.pdf

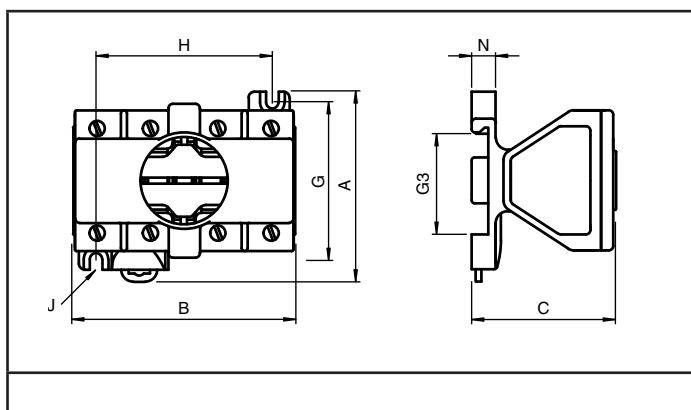
Control Switches, 4 Pole Contact Blocks, for use with LCP*, LCS* and LR*

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)
Ambient conditions	
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	II 2 G Ex de IIC Gb
International approvals	
IECEx approval	IECEx CML 16.0114U
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 .



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		

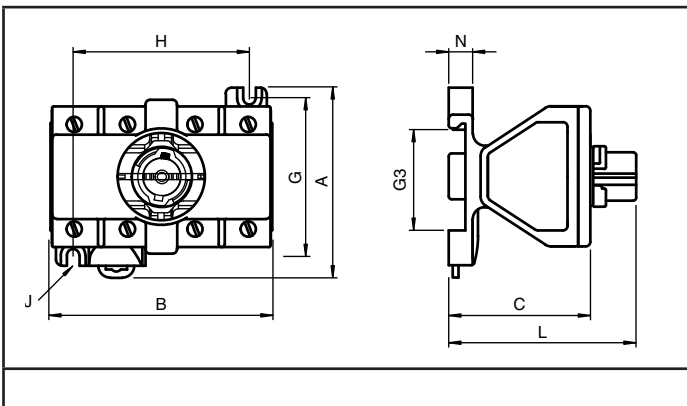
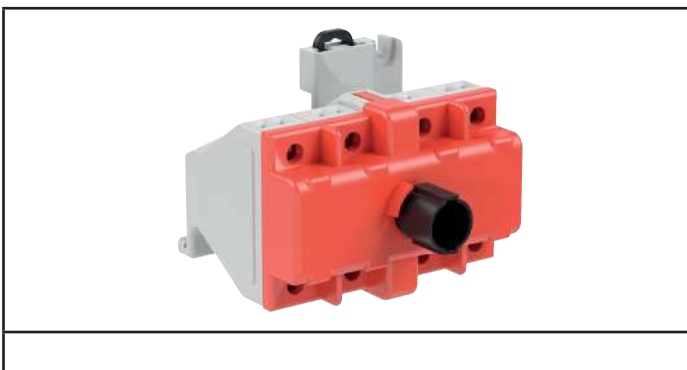
Release date: 2022-05-15 Date of issue: 2022-05-15 Filename: 1202049_eng.pdf

Control Switches, 4 Pole Rotary Switching Blocks, for use with LCP*, LCS* and LR*

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	11	2x NO / 2x NC	(11)	L - L	I - II	-	T2
2 position changeover	18	1x NO / 3x NC	(18)	L - L	I - II	-	T2
3 position changeover, center OFF	14	4x NO	(14)	L - L - L	I - 0 - II	yes	T3
3 position changeover	22	4x NO	(22)	L - L - L	I - 0 - II	-	T3
3 position changeover, right spring return	19	2x NO / 2x NC	(19)	L - L - S	0 - I - II	-	T5
4 position changeover	15	3x NO / 1x NC	(15)	L - L - L - L	I - II - III - IV	-	T4
4 position changeover	21	4x NO	(21)	L - L - L - L	I - II - III - IV	-	T4

Control Switches, 4 Pole Rotary Switching Blocks, for use with LCP*, LCS* and LR*

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	⚠ 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

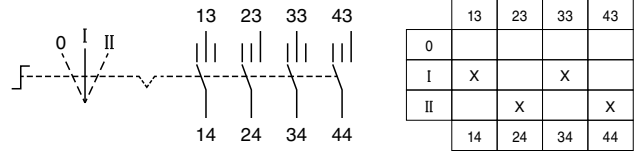
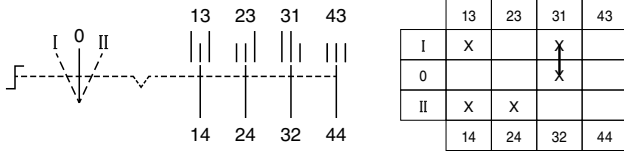
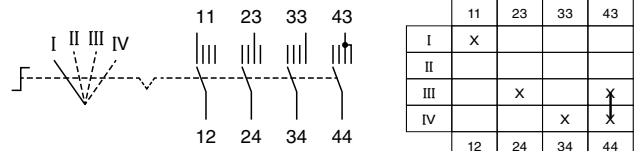
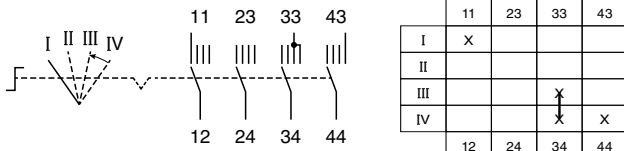
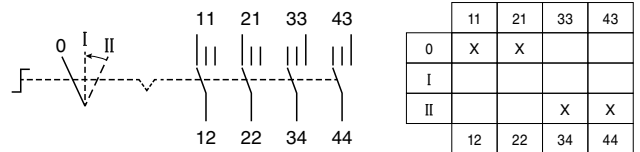
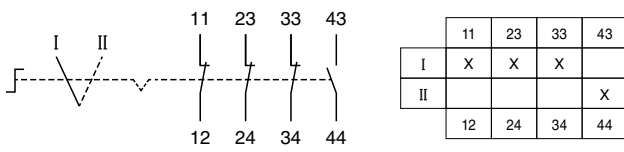
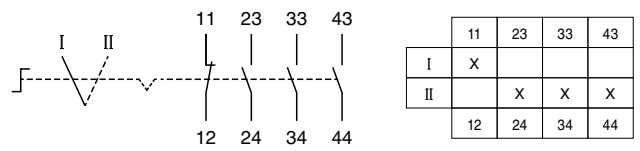
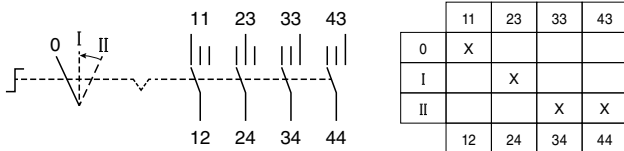
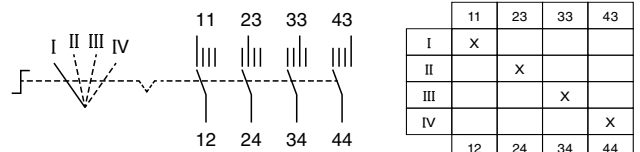
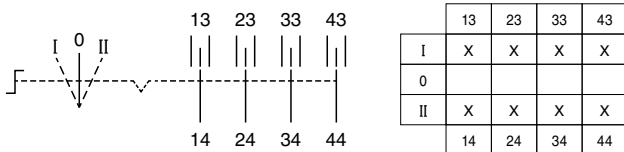
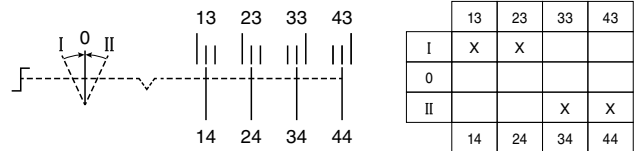
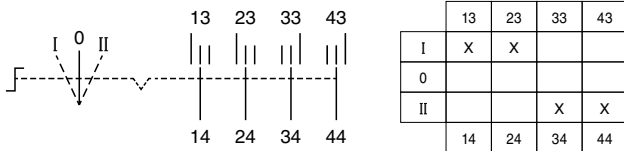
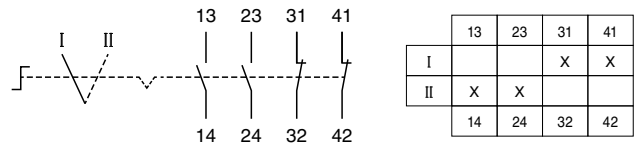
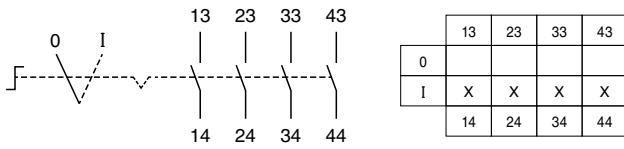
General information

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				
								G3		

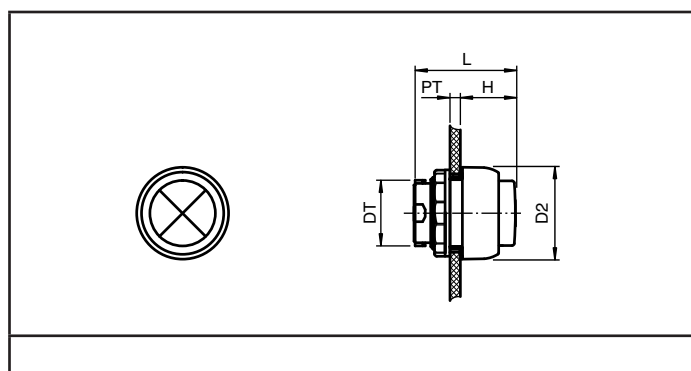
Control Switches, 4 Pole Rotary Switching Blocks, Switching diagrams



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LED Indicators

LED Indicators Lenses		
Type	Lens color	Image
		
CFP.LG	green	
		
CFP.LW	white	
		



LED 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.

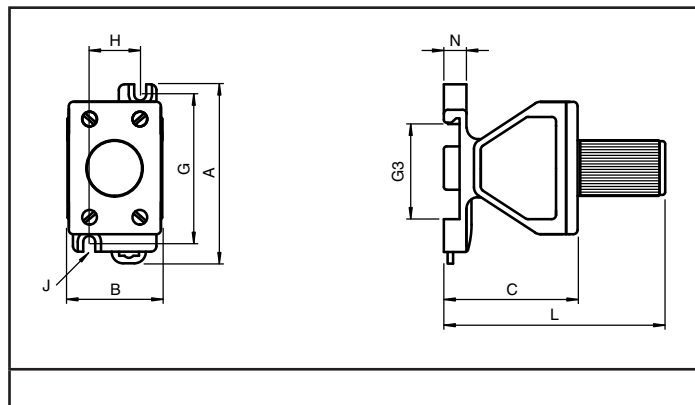
LED Heads - Dimensions

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			

LED Indicators

LED Modules

Type	Mounting	Rated operating voltage [V AC/DC]	Image
CFP.NE	base-mounted	10 ... 28	



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		

Buzzer

Buzzer Modules

Type	Function	Color	Rated operating voltage [V AC/DC]	Image
CFP. BUZRF2	flashing buzzer	red	30 ... 250	
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 mm ²
Terminal torque	0.8 Nm
Sound level	60 dB at 30 cm

Mechanical specifications

Degree of protection	IP66
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Material

Housing	Polyamide (PA)
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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
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Marking	 II 2 GD Ex e ib mb IIC Gb Ex ib tb IIIC Db
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International approvals

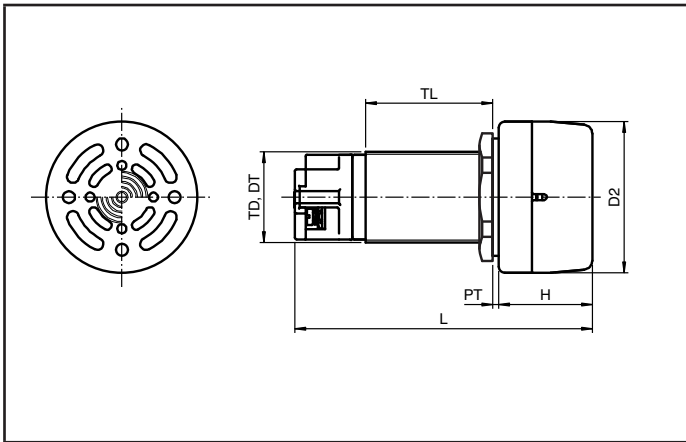
IECEx approval	IECEx CML 16.0114U
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Conformity

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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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			

Ammeters

Ammeter Modules

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

Ammeter Scales

Scales	Type Code		
0 ... 2.5 / 12.5 A	SB	0 ... 200 / 1000 A	SN
0 ... 10 / 50 A	SD	0 ... 300 / 1500 A	SP
0 ... 20 / 100 A	SU	0 ... 500 / 2500 A	SR
0 ... 30 / 150 A	SG	0 ... 1000 / 5000 A	ST
0 ... 50 / 250 A	SI		
0 ... 75 / 375 A	SK		

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

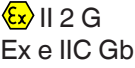
Material

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	

International approvals

IECEx approval	IECEx CML 16.0114U
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Conformity

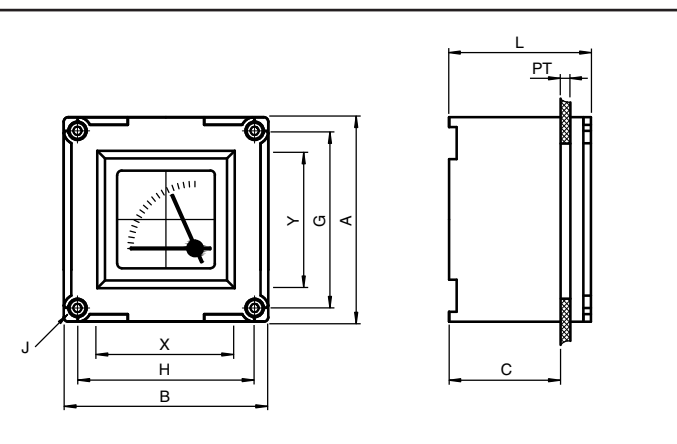
Degree of protection	EN 60529
CE marking	0102

General information

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

Meter Window Mounting Kits

Type	Window including	Enclosure type
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		

Release date: 2022-05-15 Date of issue: 2022-05-15 Filename: 1202049_eng.pdf

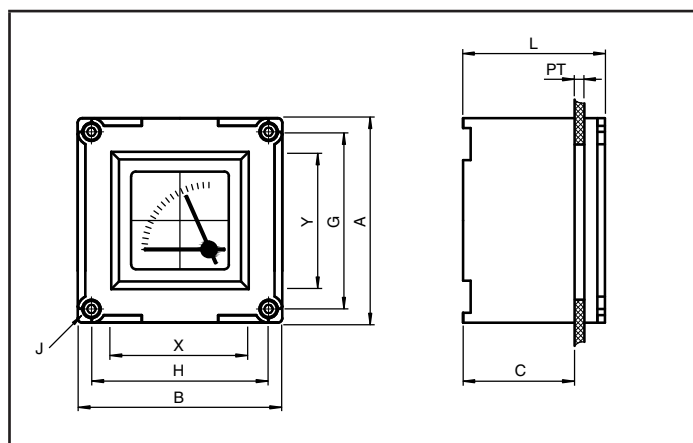
Voltmeters

Voltmeter Modules

Type	Rated operating voltage	Image
CFP.V1	0 ... 25 V	
CFP.V7	0 ... 50 V	
CFP.V9	0 ... 120 V	
CFP.V4	0 ... 250 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)
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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	 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.WL	cover mounting kit	FXL*.CS, SR, CS*

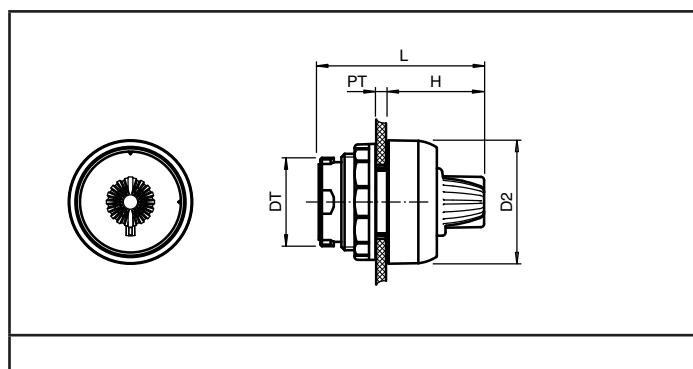
Voltmeter Modules - Dimensions

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		

Potentiometers

Potentiometer Actuator Heads

Type	Enclosure type	Labeling	Image
			



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.

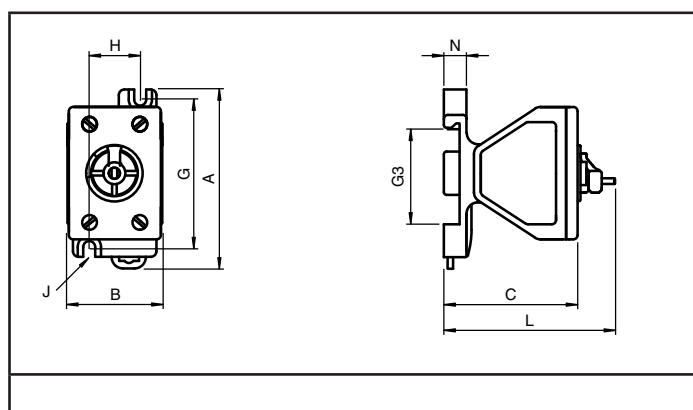
Potentiometer Actuator Heads - Dimensions

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		

Potentiometers

Potentiometer Modules

Type	Mounting	Range [kΩ]	Image
CFP.1	base-mounted	0 ... 1	
CFP.5	base-mounted	0 ... 5	



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

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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				

Operating Elements Accessories

Accessory		
Type	Description	Image
		
CFP.ZT	Extra small label holder with printed label as per specification	
		
CFP.ZL	Large label holder with printed label as per specification	
		
CFP.ZEB.V2	Emergency stop label, yellow, round, engraved NOT HALT EMERGENCY STOP	
		

Accessory		
Type	Description	Image
		
CFP.ZJ CFP.ZJR (1) (8)	Protective pushbutton flap with continuous operation, plastic, padlockable	
		
CFP.ZA CFP.ZAR (4) (8) (9)	Protective flap, plastic	
		
CFP.ZDT (6) (9)	Protective flap, stainless steel	
		