



Control and Distribution Panels Ex de in Aluminum/Stainless Steel

CPS.*

- Aluminum and stainless steel enclosures
- Ex de and Ex tb certified
- Integration of electrical components and operating elements as per customer specification
- Customizable configuration of operators, terminals and cable entries as per specification
- Ex e enclosure can be positioned on any entry face of the Ex d enclosure
- Various enclosure size and design variants
- Image and drawing are generic for this device type and may deviate from the specific variant
- Installation in Zone 1, Zone 2, Zone 21 and Zone 22
- Choice of viewing windows for monitoring instruments

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Function

The Combined Panel Solution series CPS* consists of Ex d and Ex e control and distribution panels which are joined in an efficient manner using flexible flanges.

Flanges are an approved joining method that allows enclosures to be joined by any of the four connection faces and are available in either AISI 316L stainless steel or diecast aluminum.

There are many advantages of joining Ex d and Ex e enclosures, but some of the key ones are: increasing the solution capacity, faster installation, easier modification and flexible maintenance.

Normal industrial electrical components are installed in the Ex d part of the assembly, while certified Ex e components like LED indicators, pushbuttons, control switches, ammeters, and connection terminals are installed in the Ex e enclosure, which is easy to access. During field installation, cables are easily connected inside the Ex e enclosure with Ex e cable glands and the appropriate terminals. This avoids the need for field-installed Ex d cable glands, or even barrier glands and enables safe operation and easy maintenance of the complete assembly.

For more information about Ex d or Ex e enclosures, please visit pepperl-fuchs.com or contact your local sales team.

Technical Data

Electrical specifications	
Operating voltage	1500 V DC / 1000 V AC max.
Operating current	1600 A max.
Mechanical specifications	
Enclosure range	Details of Ex d enclosure see datasheet EJB* / EJBX* / GUB* / GUBX* Details of Ex e enclosure see datasheet SR.T* / SR.CS / *FXLS*.T* / FXLS*.CS* / GR.T* / GR.CS*
Degree of protection	IP66
Material	
Enclosure	Ex d enclosure: aluminum alloy or AISI 316L stainless steel Ex e enclosure: AISI 316L stainless steel or GRP
Glass	optional thermo-resistant tempered glass
Finish	Ex d enclosure: epoxy coated RAL 7005 (grey) or shot peened Ex e enclosure: brushed or electropolished
Seal	silicone
Mass	see data table valid for empty enclosure, will increase according to integrated components
Dimensions	see data table values might differ slightly due to casting and manufacturing tolerances
Mounting	see data table
Grounding	M10 internal/external brass grounding bolt through enclosure body
Ambient conditions	
Ambient temperature	-50 ... 60 °C (-58 ... 140 °F) depending on integrated components

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Technical Data

Data for application in connection with hazardous areas

EU-type examination certificate		see datasheets of relevant enclosures
Marking		Ⓜ II 2 GD EJB enclosures: Ex db IIB+H ₂ Gb, Ex tb IIIC Db GUB enclosures: Ex db IIC Gb, Ex tb IIIC Db SR.* / FXL.* / GR.* Termination and Control Stations: Ex eb IIC T6, T5, T4 Gb Ex db eb IIC T6, T5, T4 Gb Ex ib IIC T6, T5, T4 Gb Ex db eb ib IIC T6, T5, T4 Gb Ex tb IIIC T80 °C, T95 °C, T130 °C Db
Maximum power dissipation		see datasheets of relevant enclosures
International approvals		
IECEx approval		see datasheets of relevant enclosures
UKCA approval		see datasheets of relevant enclosures
Further approvals		available on request
Conformity		
Degree of protection		EN60529
CE marking		0080 or 0102, see type label
General information		
Ordering information		This solution 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 .

Type Code

1	2	3	4	5	6	7	8
CPS	*	*	*	*	*	***	*
CPS	EJB	10B	P	CS	SR	31.31.22	TBM

Example: CPS.EJB10B.P.CS-SR.31.31.22.TBM

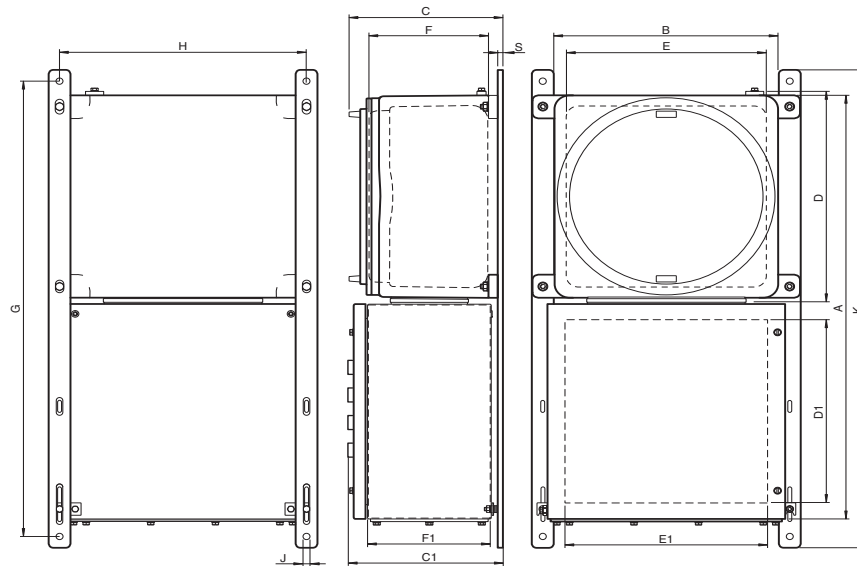
Combined Panel Solutions

enclosure Ex d: EJB aluminum, size 10B, portrait orientation, control station

enclosure Ex e: SR stainless steel, size 310 x 310 x 220 mm, terminal box with mixed protection methods

1	Series
CPS	combined panel solutions
2	Ex d enclosure type and material
EJB	enclosure Ex d IIB+H ₂ in aluminum
EJBX	enclosure Ex d IIB+H ₂ in stainless steel
GUB	enclosure Ex d IIC in aluminum
GUBX	enclosure Ex d IIC in stainless steel
3	Ex d enclosure size
*	see datasheets of enclosure types
4	Ex d enclosure orientation
	square enclosure
L	landscape
P	portrait
5	Ex d solution type
*	see datasheets of enclosure types
6	Ex e enclosure type and material
SR	enclosure Ex e in stainless steel, brushed finish
GR	enclosure Ex e in glass fiber reinforced polyester, black
FXL	enclosure Ex e in stainless steel, electropolished finish
7	Ex e enclosure size
*	see datasheets of enclosure types
8	Ex e solution type
*	see datasheets of enclosure types

Dimensions and Enclosure Details GUB*



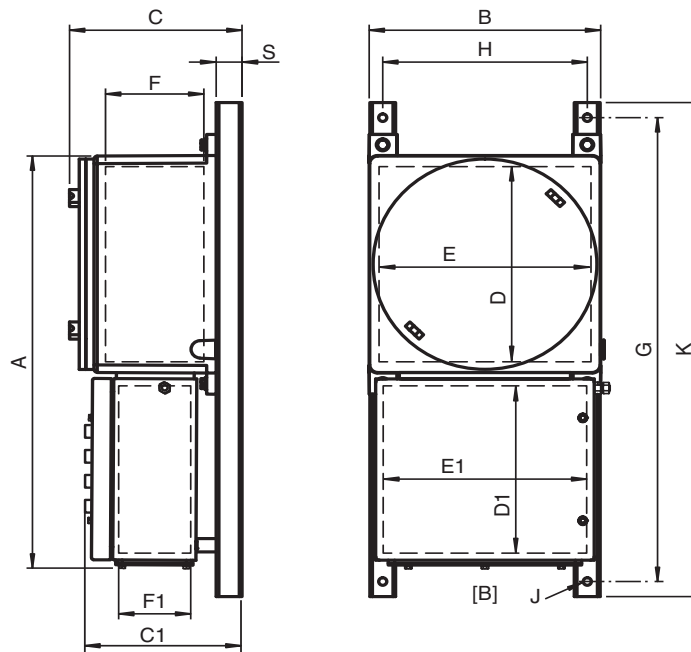
Type	External dimensions [mm]					Internal dimensions Ex d enclosure [mm]			Internal dimensions Ex e enclosure [mm]			Mounting [mm]				Mass approx. [kg]
	A	B	C	C1	K	D	E	F	D1	E1	F1	G	H	J	S	
CPS.GUB1H.*-SR.26.26.16.*	483	260	197	255	480	170	170	150	206	206	143	178	228	10	10	14
CPS.GUB3L.*-GR.36.36.17.*	730	430	246	304	845	325	325	183	343	343	144	805	395	11	8	30
CPS.GUB3L.*-SR.38.38.22.*	757	430	246	304	845	325	325	183	326	326	203	805	395	11	8	37
CPS.GUB4.*-FXL.35.43.22.*	808	448	310	368	958	410	410	215	303	369	195	958	410	12.5	40	62
CPS.GUB5.*-FXL.40.56.23.*	973	555	436	494	1128	514	514	266	353	494	205	1078	500	12.5	40	114

Mass is valid for empty enclosure, it will increase according to integrated components and cable glands

Values might differ slightly due to manufacturing tolerances

C1 is the maximum dimension with control element and varies depending on the control element

Dimensions and Enclosure Details GUBX*



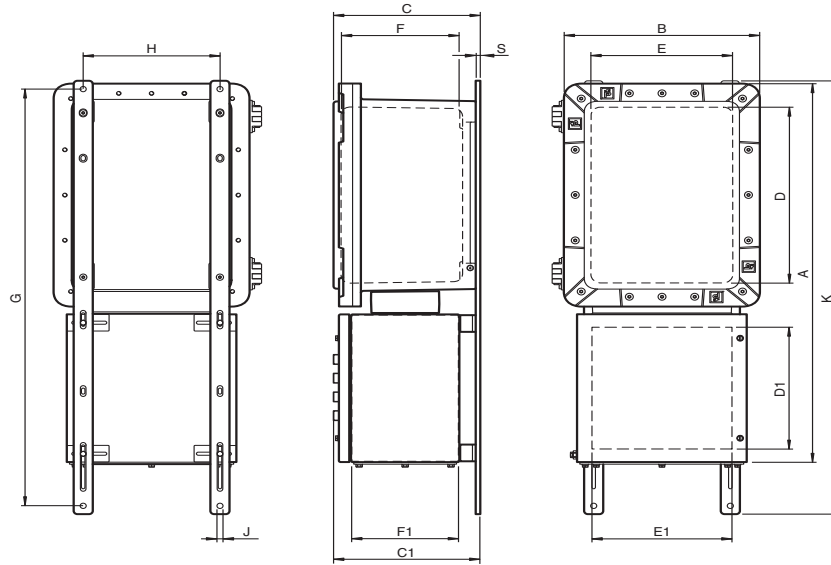
Type	External dimensions [mm]					Internal dimensions Ex d enclosure [mm]			Internal dimensions Ex e enclosure [mm]			Mounting [mm]				Mass approx. [kg]
	A	B	C	C1	K	D	E	F	D1	E1	F1	G	H	J	S	
CPS.GUBX1H.*-FXL.23.20.15.*	441	201	225	283	580	173	173	150	183	139	125	530	178	12.5	40	35
CPS.GUBX3L.*-FXL.30.34.17.*	657	347	258	316	811	325	325	185	253	279	145	761	318	12.5	40	105
CPS.GUBX4.*-FXL.35.43.22.*	814	454	322	380	959.5	410	410	228	303	369	195	909.5	410	12.5	40	168
CPS.GUBX5.*-FXL.40.56.23.*	950	555	380	438	1120.5	510	510	288	353	494	205	1070.5	495	12.5	40	241

Mass is valid for empty enclosure, it will increase according to integrated components and cable glands

Values might differ slightly due to manufacturing tolerances

C1 is the maximum dimension with control element and varies depending on the control element

Dimensions and Enclosure Details EJB*



Type	External dimensions [mm]					Internal dimensions Ex d enclosure [mm]			Internal dimensions Ex e enclosure [mm]			Mounting [mm]				Mass approx. [kg]
	A	B	C	C1	K	D	E	F	D1	E1	F1	G	H	J	S	
CPS.EJB8B.P.*-FXL.25.27.17.*	665	290	272	330	738	300	200	186	203	209	146	688	200	12.5	40	30
CPS.EJB10B.P.*-SR.31.31.22.*	798	358	268	326	910	370	260	215	256	256	203	875	250	11	8	43
CPS.EJB10B.L.*-SR.31.31.22.*	688	468	268	326	910	260	370	215	256	256	203	875	345	11	8	43
CPS.EJB10B.P.*-SR.38.38.22.*	868	380	268	326	910	370	260	215	326	326	203	875	250	11	8	45
CPS.EJB10B.L.*-SR.38.38.22.*	758	468	268	326	910	260	370	215	326	326	203	875	345	11	8	45
CPS.EJB10B.P.*-GR.18.36.17.*	657	360	268	326	910	370	260	215	163	343	144	875	250	11	8	37
CPS.EJB10B.L.*-GR.18.36.17.*	547	468	268	326	910	260	370	215	163	343	144	875	345	11	8	37
CPS.EJB10B.P.*-GR.36.36.17.*	840	360	268	326	910	370	260	215	343	343	144	875	250	11	8	39
CPS.EJB10B.L.*-SR.36.36.17.*	770	468	268	326	910	260	370	215	343	343	144	875	345	11	8	39
CPS.EJB15A.P.*-SR.48.48.22.*	1102	480	292	350	1165	500	350	219	426	426	203	1125	340	13	12	78
CPS.EJB15A.L.*-SR.48.48.22.*	952	602	292	350	1165	350	500	219	426	426	203	1125	460	13	12	78
CPS.EJB18B.P.*-SR.48.48.22.*	1253	538	415	473	1435	640	427	318	426	426	203	1394	415	13	15	133
CPS.EJB18B.L.*-SR.48.48.22.*	1310	751	415	473	1435	427	640	318	426	426	203	1394	501	13	15	133
CPS.EJB18B.P.*-SR.60.60.26.*	1373	600	415	473	1435	640	427	318	546	546	203	1394	415	13	15	141
CPS.EJB18B.L.*-SR.60.60.26.*	1160	751	415	473	1435	427	640	318	546	546	203	1394	501	13	15	141
CPS.EJB20A.P.*-SR.60.60.26.*	1547	687	511	569	1595	805	555	393	546	546	203	1545	510	17	20	250
CPS.EJB20A.P.*-FXL.45.66.32.*	1401	687	531	589	2000	805	555	393	403	599	295	1389	510	12.5	40	229
CPS.EJB20A.P.*-FXL.60.91.32.*	1305	937	531	589	1376.5	555	805	393	553	849	295	1326.5	668	12.5	40	241

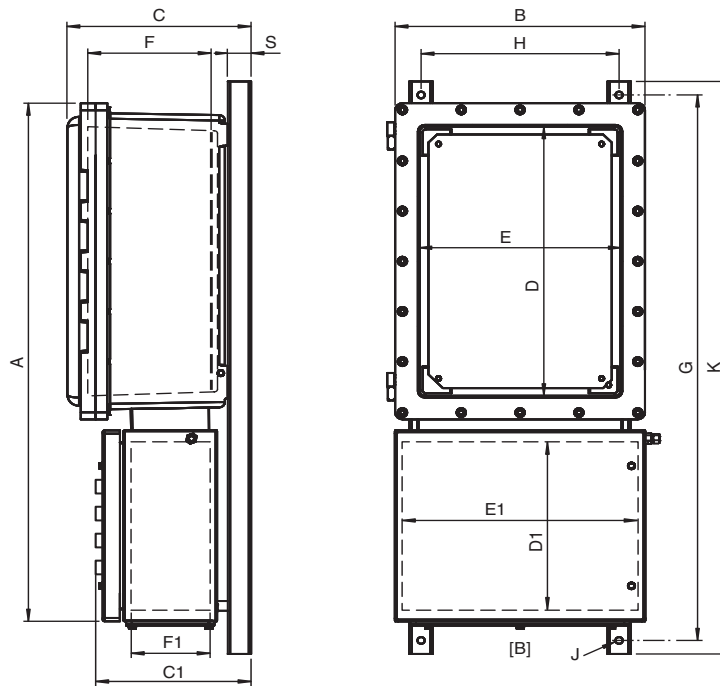
Mass is valid for empty enclosure, it will increase according to integrated components and cable glands

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C1 is the maximum dimension with control element and varies depending on the control element

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Dimensions and Enclosure Details EJBX*



Type	External dimensions [mm]					Internal dimensions Ex d enclosure [mm]			Internal dimensions Ex e enclosure [mm]			Mounting [mm]				Mass approx. [kg]
	A	B	C	C1	K	D	E	F	D1	E1	F1	G	H	J	S	
CPS.EJBX8B.P.*-FXL.25.27.17.*	638	270	289	347	738	300	200	195	203	209	146	688	250	12.5	40	47
CPS.EJBX10B.P.*-FXL.30.34.17.*	764	340	319	377	847.5	370	260	370	253	279	145	797.5	320	12.5	40	80
CPS.EJBX15A.P.*-FXL.35.43.22.*	963	430	316	374	1070	500	350	220	303	369	195	1020	430	12.5	40	115
CPS.EJBX18B.P.*-FXL.40.52.32	1150	524	424	482	1243.5	632	422	320	353	454	295	1193.5	505	12.5	40	194
CPS.EJBX20A.P.*-FXL.45.66.32.*	1387	672	486	544	1454.5	800	670	380	403	599	295	1404.5	630	12.5	40	354

Mass is valid for empty enclosure, it will increase according to integrated components and cable glands

Values might differ slightly due to manufacturing tolerances

C1 is the maximum dimension with control element and varies depending on the control element