

Features

- Aluminum and stainless steel enclosures
- Ex de and Ex tb certified
- Integration of electrical components and operating elements in Ex d enclosures as per customer specification
- Customizable configuration of operators, terminals and cable entries as per specification
- Various enclosure size and design variants
- Installation in Zone 1, Zone 2, Zone 21 and Zone 22
- Choice of viewing windows for monitoring instruments

Function

Ex d and Ex e control and distribution panels are combined in an efficient, flanged assembly that provides improved functionality. 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.



Type Code / Model Number

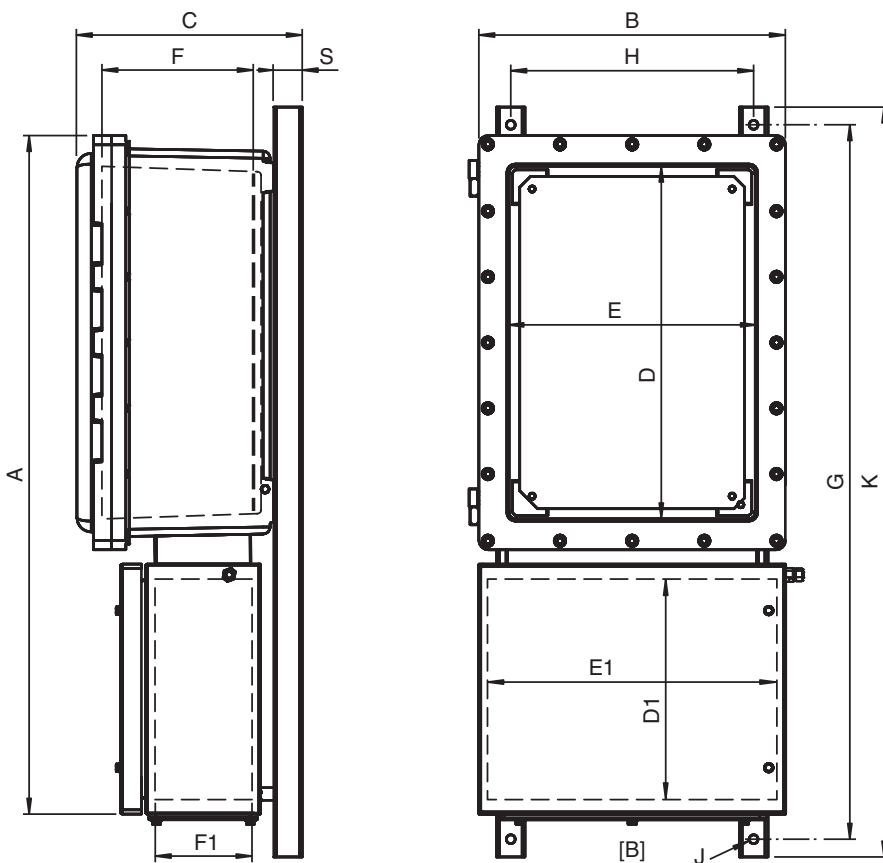
Type										
FP	flanged panel									
	Ex d enclosure type									
	EJB*	EJB type in aluminum, Ex d IIB+H ₂ (* = enclosure size, see selection table)								
	EJBX*	EJB type in stainless steel, Ex d IIB+H ₂ (* = enclosure size, see selection table)								
	GUB	GUB type in aluminum, Ex d IIC								
	GUBX	GUB type in stainless steel, Ex d IIC								
	Ex d enclosure variant									
		standard variant								
	W	variant with viewing window (see individual data sheets)								
		GUB enclosure size (EJB sizes see enclosure type)								
		*	see selection table							
		Ex e enclosure type								
		FS	stainless steel enclosure with return flange							
		Ex e enclosure size								
		*	see selection table							
		Ex e enclosure positioning								
			below Ex d enclosure							
		T	on top of Ex d enclosure							
		L	left of Ex d enclosure							
		Version index								
		*	sequential							
		Production location								
		*	variant-specific							
		Variant number								
			-Yxxxxxx							

FP.	EJB20A	W3		.FS	08B	T	.V1	.ITA	-Y123456
Example: Ex d enclosure type EJB in aluminum, size 20A, with rectangular window size 3, combined with Ex e enclosure in stainless steel, size 08B, positioned on top of Ex d enclosure, version 1, produced in Italy									

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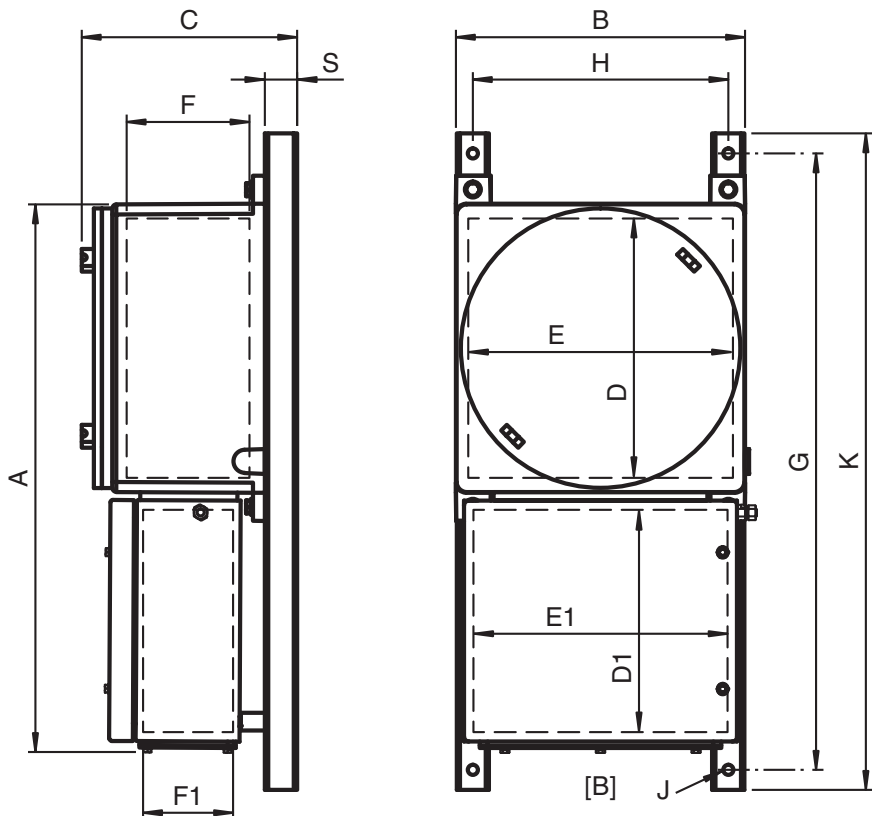
Technical Data	
Electrical specifications	
Operating voltage	1000 V DC / 1500 V AC max.
Operating current	1600 A max.
Mechanical specifications	
Enclosure range	details of Ex e enclosure see datasheet Control Stations FXLS*
Dimensions	see data table values might differ slightly due to casting and manufacturing tolerances
Enclosure cover	see data table
Cover fixing	
Screws	see data table
Cover seal	none, O-ring for IP66/67
Degree of protection	IP66 (IP66/67 with O-ring)
Mounting	see data table
Grounding	M10 internal/external brass grounding bolt through enclosure body
Mass	see data table valid for empty enclosure, will increase according to integrated components
Material	
Enclosure	Aluminum alloy AISI 316L, (1.4404) stainless steel
Finish	epoxy coated RAL 7005 (grey) or shot peened
O-Ring	silicone
Flamepath grease	Greasil MS4 or NEVER SEEZ Marine Grade, GUB petroleum jelly
Glass	thermo-resistant tempered glass
Ambient conditions	
Ambient temperature	-50 ... 60 °C (-58 ... 140 °F) depending on integrated components
Data for application in connection with hazardous areas	
EU-Type Examination Certificate	see data table
Maximum power dissipation	see data table maximum power dissipation at T4/+40 °C enclosure without window
International approvals	
IECEX approval	see data table
Further approvals	available on request
Conformity	
Degree of protection	EN60529
CE marking	0080 or 0102, see type label
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 .

Dimensions



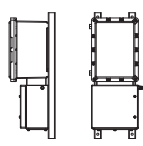
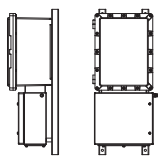
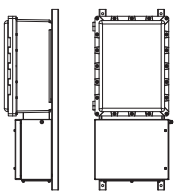
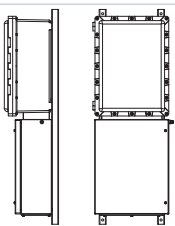
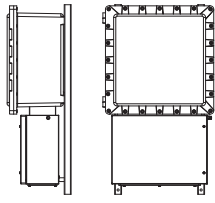
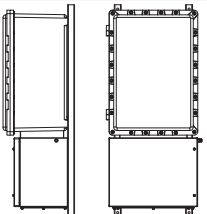
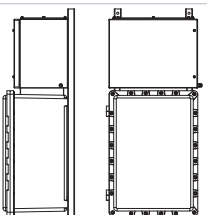
Legend	
A	Height
B	Width
C	Depth
D	Internal height
E	Internal width
F	Internal depth to surface mounting plate
D1	Internal height Ex e enclosure
E1	Internal width Ex e enclosure
F1	Internal depth Ex e enclosure
G	Mounting holes distance, vertical
H	Mounting holes distance, horizontal
J	Mounting holes diameter
K	Maximum external dimension with mounting frame
S	Depth mounting frame
[B]	Cable entry face, Ex e enclosure

Dimension values see data table. Image and drawing are generic for this device type and may deviate from the specific variant.

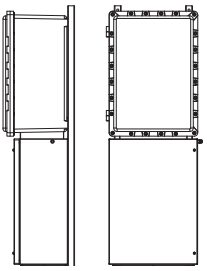
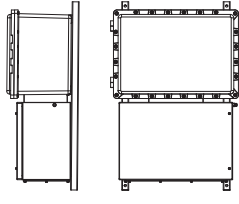
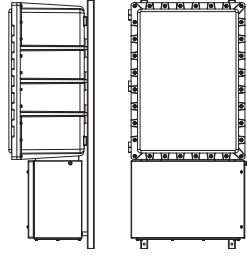
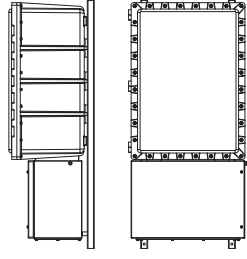
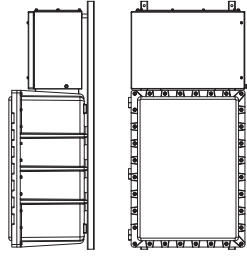
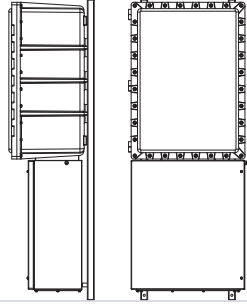
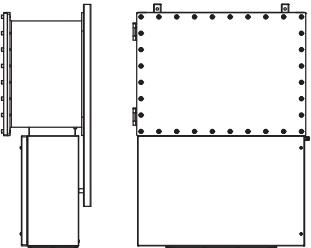


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Selection Table Ex d IIB+H₂

Type	Ex d enclosure material	External dimensions [mm]					Mounting [mm]			Sketch
		A	B	C	K	S	G	H	J	
FPEJB8B.FS02B	Aluminum alloy	657	290	272	738	40	688	200	12.5	
FPEJBX8B.FS02B	Stainless steel	638	268	270.5	738	40	688	250	12.5	
FPEJB10B.FS04B	Aluminum alloy	774	358	300	847.5	40	797.5	250	12.5	
FPEJBX10B.FS04B	Stainless steel	764	340	303.5	847.5	40	797.5	320	12.5	
FPEJB15A.FS05B	Aluminum alloy	981.5	452	320	1070	40	1020	340	12.5	
FPEJBX15A.FS05B	Stainless steel	963	430	303.5	1070	40	1020	430	12.5	
FPEJB15A.FS05C	Aluminum alloy	1181.5	452	320	1270	40	1220	340	12.5	
FPEJBX15A.FS05C	Stainless steel	1135	430	303.5	1270	40	1220	430	12.5	
FPEJB17Q.FS07.5B	Aluminum alloy	1035.5	630	400	1103	40	1053	483	12.5	
FPEJBX17Q.FS07.5B	Stainless steel	1015	594	356.5	1103	40	1053	583	12.5	
FPEJB18B.FS06B	Aluminum alloy	1174	538	440	1233	40	1183	415	12.5	
FPEJBX18B.FS06B	Stainless steel	1150	524	406.5	1243.5	40	1193.5	505	12.5	
FPEJB18B.FS06BT	Aluminum alloy	1174	538	440	1233	40	1183	415	12.5	

Selection Table Ex d IIB+H₂



Type	Ex d enclosure material	External dimensions [mm]					Mounting [mm]			Sketch
		A	B	C	K	S	G	H	J	
FPEJB18B.FS06C	Aluminum alloy	1504	538	440	1563	40	1513	415	12.5	
FPEJB18BL.FS08B	Aluminum alloy	1018.5	751	440	1117	40	1067	509	12.5	
FPEJB20A.FS08B	Aluminum alloy	1393	687	531	1439	40	1389	510	12.5	
FPEJBX20A.FS08B	Stainless steel	1387	672	475.5	1454.5	40	1404.5	630	12.5	
FPEJB20A.FS08BT	Aluminum alloy	1393	687	531	1439	40	1389	510	12.5	
FPEJB20A.FS08C	Aluminum alloy	1693	687	531	1739	40	1689	510	12.5	
FPEJB20AL.FS09B	Aluminum alloy	1305	937	531	1376.5	40	1326.5	668	12.5	

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Selection Table Ex d IIC

Type	Ex d enclosure material	External dimensions [mm]					Mounting [mm]			Sketch
		A	B	C	K	S	G	H	J	
FP.GUB1H.FS01B	Aluminum alloy	440	220	214	580	40	530	178	12.5	
FP.GUBX1H.FS01B	Stainless steel	441	201	225	580	40	530	178	12.5	
FP.GUB3L.FS04B	Aluminum alloy	668	358	253	817.5	40	767.5	318	12.5	
FP.GUBX3L.FS04B	Stainless steel	657	347	258	811	40	761	318	12.5	
FP.GUB4.FS05B	Aluminum alloy	807.5	447.5	310	958	40	908	410	12.5	
FP.GUBX4.FS05B	Stainless steel	814	454	322	959.5	40	909.5	410	12.5	
FP.GUB5.FS07	Aluminum alloy	961	555	401	1128	40	1078	500	12.5	
FP.GUBX5.FS07	Stainless steel	950	555	380	1120.5	40	1070.5	495	12.5	

Data for application in connection with hazardous areas

Type	Operating voltage [V max.]	Operating current [A max.]	EU-Type Examination Certificate	Marking	IECEx approval	EAC approval
FP.EJB*	1000 V DC 1500 V AC	1600	INERIS 14 ATEX 0022X CML 16 ATEX 3009X	 II 2 GD Ex db IIB+H ₂ T* Gb Ex tb IIIC T** °C Db T6/T85 °C @ Ta +60 °C T5/T90 °C @ Ta +60 °C T4/T120 °C @ Ta +60 °C T3/T140 °C @ Ta +60 °C with window Ex e enclosure: Ex de ib IIC T6, T5, T4 Gb	IECEx INE 14.0029X IECEx CML 16.0008X	TC RU C-IT. AA87.B.00156
FP.GUB*	1000 V DC 1500 V AC	1600	INERIS 14 ATEX 0035X CML 16 ATEX 3009X	 II 2 GD Ex db IIC T* Gb Ex tb IIIC T** °C Db T6/T85 °C @ Ta +60 °C T5/T90 °C @ Ta +60 °C T4/T120 °C @ Ta +60 °C T3/T140 °C @ Ta +60 °C with window Ex e enclosure: Ex de ib IIC T6, T5, T4 Gb	IECEx INE 14.0042X IECEx CML 16.0008X	TC RU C-IT. AA87.B.00156

Internal Dimensions and Enclosure Details

Type	Ex d enclosure material	Ex d enclosure internal dimensions [mm]			Ex e enclosure internal dimensions [mm]			Mass approx. [kg]	Max. power dissipation at T4/+40 °C Ex d enclosure [W]
		D	E	F	D1	E1	F1		
FP.EJB8B.FS02B	Aluminum alloy	300	200	186	203	209	145	30	236
FP.EJBX8B.FS02B	Stainless steel	300	200	195	203	209	145	47	236
FP.EJB10B.FS04B	Aluminum alloy	370	260	215	253	279	145	40	356
FP.EJBX10B.FS04B	Stainless steel	370	260	225	253	279	145	80	353
FP.EJB15A.FS05B	Aluminum alloy	500	350	219	303	369	195	72	540
FP.EJBX15A.FS05B	Stainless steel	500	350	220	303	369	195	115	540
FP.EJB15A.FS05C	Aluminum alloy	500	350	219	503	369	195	77	540
FP.EJBX15A.FS05C	Stainless steel	500	350	220	503	369	195	121	540
FP.EJB17Q.FS07.5B	Aluminum alloy	500	500	278	353	494	205	110	593
FP.EJBX17Q.FS07.5B	Stainless steel	500	500	270	353	494	205	168	593
FP.EJB18B.FS06B	Aluminum alloy	640	427	318	353	454	295	127	864
FP.EJBX18B.FS06B	Stainless steel	640	430	320	353	454	295	194	864
FP.EJB18B.FS06BT	Aluminum alloy	640	427	318	353	454	295	127	864
FP.EJB18B.FS06C	Aluminum alloy	640	427	318	683	454	295	163	864
FP.EJB18BL.FS08B	Aluminum alloy	427	640	318	403	599	295	131	864
FP.EJB20A.FS08B	Aluminum alloy	805	555	393	403	599	295	229	1616
FP.EJBX20A.FS08B	Stainless steel	800	550	380	403	599	295	354	1616
FP.EJB20A.FS08BT	Aluminum alloy	805	555	393	403	599	295	229	1616
FP.EJB20A.FS08C	Aluminum alloy	805	555	393	800	550	380	240	1616
FP.EJB20AL.FS09B	Aluminum alloy	555	805	393	553	849	295	241	1616
FP.GUB1H.FS01B	Aluminum alloy	170	170	150	183	139	125	16	143
FP.GUBX1H.FS01B	Stainless steel	173	173	150	183	139	125	35	143
FP.GUB3L.FS04B	Aluminum alloy	325	325	183	253	279	145	34	293
FP.GUBX3L.FS04B	Stainless steel	325	325	185	253	279	145	105	293
FP.GUB4.FS05B	Aluminum alloy	410	410	215	303	369	195	62	466
FP.GUBX4.FS05B	Stainless steel	410	410	228	303	369	195	168	466
FP.GUB5.FS07	Aluminum alloy	513	513	269	353	494	205	86	749
FP.GUBX5.FS07	Stainless steel	510	510	288	353	494	205	241	749

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