

## Features

- Stainless steel enclosures
- Suitable for installation in Zones 0, 1, 2, 21 and 22
- Certified Ex e, Ex ia and Ex tb
- 21 enclosure size options
- Various terminal and cable gland configurations
- Wide range of accessories available

## Variant options



## Function

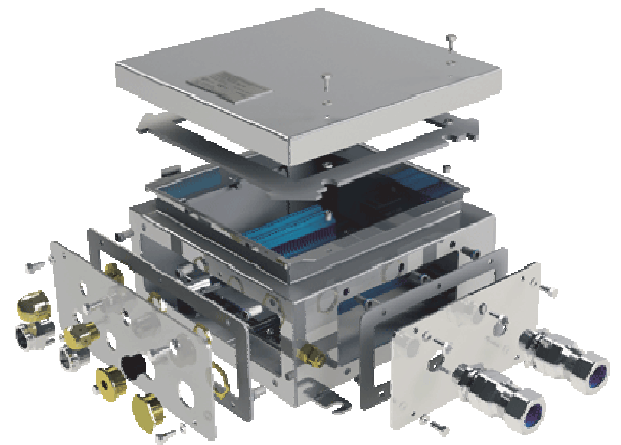
The FXLS series is a range of terminal boxes which can be equipped with various types and quantities of terminals and cable glands.

The enclosures are manufactured from electropolished 316L stainless steel as standard to provide excellent tarnish and corrosion resistance. This surface finish is ideally suited to meet hygienic requirements valid in pharmaceutical and food processing plants.

All FXLS enclosures feature a return flange sealing method which prevents accumulated dirt, dust and moisture from entering the enclosure when the hinged lid is opened.

Durable materials allows the terminal box to be used in ambient temperatures between -50 °C and +120 °C.

For terminal and cable gland configuration options please see overleaf. Further configurations can be confirmed by your local Pepperl+Fuchs office.



## Variants examples



**Technical data****Electrical specifications**

Operating voltage	690 V AC (1100 V AC max. on request, depending on size & certification)
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Operating current	109 A (350 A max. on request, depending on size & certification)
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**Mechanical specification**

Enclosure cover	fully detachable, concealed hinges
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Cover fixing	see dimensions data table
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Protection degree	IP66 (FXLS11**, FXLS11**D: IP54)
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Cable entry	cable glands as per specification, see cable entries table
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Cable gland capacity	see cable entries table
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**Terminal assembly**

Number of terminals	see terminal configurations table
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**Material**

Enclosure	1.5 mm AISI 316L (1.4404) stainless steel
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Finish	electropolished
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Seal	one piece closed cell neoprene, optional silicone
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Mass	see dimensions data table
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Grounding	M10 brass internal / external earth stud through enclosure body
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**Ambient conditions**

Ambient temperature	-40 ... 40 °C, optional -50 ... 120 °C
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**Data for application in connection with Ex-areas**

EC-Type Examination Certificate	SIRA 99 ATEX 3199
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Group, category, type of protection, temperature class	<p>⊕ II 2 GD</p> <p>Ex e IIC T6 Gb, Ex tb IIIC T80 °C Db ( Ta ... +40 °C )</p> <p>Ex e IIC T5 Gb, Ex tb IIIC T95 °C Db ( Ta ... +55 °C )</p> <p>Ex e IIC T4 Gb, Ex tb IIIC T130 °C Db ( Ta ... +85 °C )</p> <p>Ex e IIC T3 Gb, Ex tb IIIC T160 °C Db ( Ta ... +120 °C )</p>
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	<p>⊕ II 1 G, II 2 D</p> <p>Ex ia IIC T6 Ga, Ex tb IIIC T80 °C Db ( Ta ... +40 °C )</p> <p>Ex ia IIC T5 Ga, Ex tb IIIC T95 °C Db ( Ta ... +55 °C )</p> <p>Ex ia IIC T4 Ga, Ex tb IIIC T130 °C Db ( Ta ... +85 °C )</p> <p>Ex ia IIC T3 Ga, Ex tb IIIC T160 °C Db ( Ta ... +120 °C )</p>
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**International approvals**

IECEx approval	IECEx SIR 06.0074
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GOST-R approval	GOST-R B01008
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CCOE approval	A/P/HQ/MH/104/2293(P265961)
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**Conformity**

Protection degree	EN 60529
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**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 <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .
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Ordering information	Terminal Boxes will be delivered completely configured and assembled ready for use. For configuration details please contact Customer Service.
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**Accessories**

Optional accessories	see accessories table
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## Terminal Configurations - Standard Terminals

Type	DIN rails vertical	Rail length	Terminals per rail	Terminals total	DIN rails horizontal	Rail length	Terminals per rail	Terminals total	Terminal type	Terminal capacity
	qty.	[mm]	qty.	qty.	qty.	[mm]	qty.	qty.	see *1*	[mm <sup>2</sup> ]
FXLS1**	1	115	22	22	1	50	9	9	WDU	2.5
FXLS2**	2	170	32	64	2	165	31	62	WDU	2.5
FXLS2**D	2	170	32	64	2	165	31	62	WDU	2.5
FXLS3**	2	216	41	82	2	213	40	80	WDU	2.5
FXLS3**D	2	216	41	82	2	213	40	80	WDU	2.5
FXLS4**	2	290	55	110	2	167	32	64	WDU	2.5
FXLS4**D	2	290	55	110	2	167	32	64	WDU	2.5
FXLS5**	3	368	70	210	3	289	55	165	WDU	2.5
FXLS5**D	3	368	70	210	3	289	55	165	WDU	2.5
FXLS6**	4	390	75	300	4	387	74	296	WDU	2.5
FXLS6**D	4	390	75	296	4	387	74	296	WDU	2.5
FXLS7**	3	410	78	234	4	257	49	196	WDU	2.5
FXLS7**D	3	410	78	234	4	257	49	196	WDU	2.5
FXLS8**	3	530	101	303	5	357	68	340	WDU	2.5
FXLS8**D	3	530	101	303	5	357	68	340	WDU	2.5
FXLS9**	4	672	129	516	6	415	79	474	WDU	2.5
FXLS9**D	4	672	129	516	6	415	79	474	WDU	2.5
FXLS10**	5	824	158	790	7	517	99	693	WDU	2.5
FXLS10**D	5	824	158	790	7	517	99	693	WDU	2.5
FXLS11**	6	1087	209	1254	9	684	131	1179	WDU	2.5
FXLS11**D	6	1087	209	1254	9	684	131	1179	WDU	2.5

\*1\* for other terminal types and terminal capacities please contact Pepperl+Fuchs

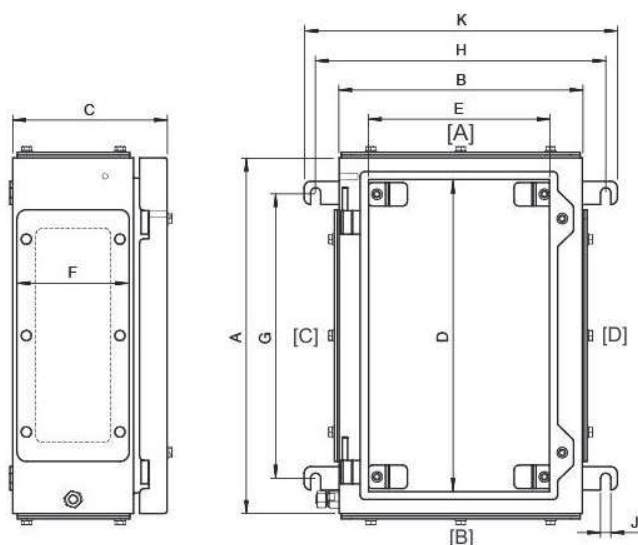
## Cable Entries - maximum quantity per size

Type	Cable entry area at Faces		Cable gland quantity face A/B							Cable gland quantity face C/D						
	A & B [mm]	C & D [mm]	M12	M16	M20	M25	M32	M40	M50	M12	M16	M20	M25	M32	M40	M50
FXLS1**	58 x 108	58 x 108	9	8	5	2	2	1	-	9	8	5	2	2	1	-
FXLS2**	80 x 215	80 x 146	33	23	14	10	4	3	3	21	15	8	6	3	2	2
FXLS2**D	130 x 215	130 x 146	61	37	24	15	8	6	4	39	27	16	9	5	4	2
FXLS3**	80 x 261	80 x 185	39	29	17	12	5	4	3	27	21	11	8	4	3	2
FXLS3**D	130 x 261	130 x 185	72	47	32	18	11	8	5	50	36	20	12	7	6	3
FXLS4**	80 x 215	80 x 229	33	23	14	10	4	3	3	33	24	14	10	5	4	3
FXLS4**D	130 x 215	130 x 229	61	37	24	15	8	6	4	61	40	28	15	9	6	4
FXLS5**	80 x 337	80 x 337	51	38	21	16	7	5	4	51	39	21	16	7	5	4
FXLS5**D	130 x 337	130 x 337	94	62	40	24	14	10	7	94	62	40	24	14	10	7
FXLS6**	80 x 435	80 x 359	66	48	27	20	9	7	6	54	39	23	18	7	6	5
FXLS6**D	130 x 435	130 x 359	121	80	52	30	18	14	9	99	65	44	27	15	12	7
FXLS7**	80 x 305	80 x 379	45	33	20	14	6	5	4	57	42	24	18	8	6	5
FXLS7**D	130 x 305	130 x 379	83	53	36	21	12	10	6	105	70	44	27	15	12	8
FXLS8**	80 x 407	80 x 464	63	45	26	20	8	7	5	69	51	30	22	10	8	6
FXLS8**D	130 x 407	130 x 464	116	73	48	30	17	12	8	128	85	56	33	20	14	9
FXLS9**	80 x 464	80 x 464	69	51	30	22	10	8	6	69	51	30	22	10	8	6
FXLS9**D	130 x 464	130 x 464	128	85	56	33	20	14	9	128	85	56	33	20	14	9
FXLS10**	130 x 564	130 x 700	-	105	70	42	24	18	-	-	130	88	51	30	22	-
FXLS10**D	230 x 564	230 x 700	275	210	119	74	43	30	24	342	260	147	100	55	44	30
FXLS11**	140 x 734	140 x 900	-	165	113	63	39	26	-	-	204	138	75	50	32	-
FXLS11**D	230 x 734	230 x 900	361	270	154	105	57	40	30	437	340	196	132	72	56	38

Cable gland standard type: polyamide Ex e cable glands

For other types of cable glands and combinations of different gland sizes please contact Pepperl+Fuchs

## Dimensions



## Legend

- A – Maximum external dimension
- B – Maximum external dimension
- C – Maximum external dimension
- D – Internal dimension
- E – Internal dimension
- F – Internal depth
- G – Fixing holes center
- H – Fixing holes center
- J – Fixing holes diameter
- K – Maximum external dimension with bracket
- [A] – Entry face
- [B] – Entry face
- [C] – Entry face
- [D] – Entry face

For details see Dimensions Data Table

## Dimensions Data Table

Type	Dimensions [mm]				Dimensions internal [mm]				Fixation [mm]			Weight approx.	Cover fixing screws
	A	B	C	K	D	E	F	G	H	Diam. J	[kg]	Stainless steel	
FXLS1**	229	152	145	227	182.5	85.5	109	154	202	11	3	M6	
FXLS2**	260	260	165	335	213	193	129	185	310	11	3.8	M6	
FXLS2**D	260	260	215	335	213	193	130	185	310	11	4.2	M6	
FXLS3**	306	306	165	381	259	239	129	231	356	11	5.7	M6	
FXLS3**D	306	306	215	381	259	239	179	231	356	11	6.3	M6	
FXLS4**	380	260	165	335	333	193	129	305	310	11	6	M6	
FXLS4**D	380	260	215	335	333	193	179	305	310	11	6.6	M6	
FXLS5**	458	382	165	457	411	315	129	383	432	11	8.7	M6	
FXLS5**D	458	382	215	457	411	315	179	383	432	11	9.6	M6	
FXLS6**	480	480	165	555	433	413	129	405	530	11	11	M6	
FXLS6**D	480	480	215	555	433	413	179	405	530	11	12	M6	
FXLS7**	500	350	165	425	453	283	129	425	400	11	8.7	M6	
FXLS7**D	500	350	215	425	453	283	179	425	400	11	9.6	M6	
FXLS8**	620	450	165	525	573	383	129	545	500	11	12	M6	
FXLS8**D	620	450	215	525	573	383	179	545	500	11	14	M6	
FXLS9**	762	508	165	583	715	442	129	687	558	11	16	M6	
FXLS9**D	762	508	215	583	715	442	179	687	558	11	18	M6	
FXLS10**	914	610	215	685	867	543	179	839	660	11	23	M6	
FXLS10**D	914	610	315	685	867	543	279	839	660	11	25	M6	
FXLS11**	1177	777	225	852	1130	710	189	1102	827	11	35	M6	
FXLS11**D	1177	777	315	852	1130	710	279	1102	827	11	38	M6	

Weight shows empty enclosure, it will increase according to terminal and cable gland installations

**Type code / model number**

**Enclosure type**

FXL metal enclosure with return flange

:	<b>Material</b>					
:	<b>S</b>	stainless steel				
:	:	<b>Enclosure size</b>				
:	:	<b>1 ... 11</b>	see dimensions data table			
:	:	:	<b>Type of explosion protection</b>			
:	:	:	<b>1</b>	Ex e, Ex tb		
:	:	:	<b>3</b>	Ex ia, Ex tb		
:	:	:	:	<b>Gland plate at face(s)</b>		
:	:	:	<b>0</b>	none		
:	:	:	<b>1</b>	face B		
:	:	:	<b>2</b>	faces A & B		
:	:	:	<b>3</b>	faces B, C & D		
:	:	:	<b>4</b>	faces A, B, C & D		
:	:	:	:	<b>Enclosure depth</b>		
:	:	:	:		standard depth, see dimensions data table	
:	:	:	<b>D</b>	increased depth		
:	:	:	:	<b>Type of solution</b>		
:	:	:	<b>T</b>	terminal box		
:	:	:	:	<b>Item number</b>		
:	:	:	:		Yxxxxxx	

FXL	S					.T	-Yxxxxxx
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**Optional accessories**

M10 stainless steel grounding stud assembly

M6 stainless steel internal earth stud welded to enclosure lid

M6 stainless steel internal earth stud welded to bottom gland plate

1.5 mm thick stainless steel mounting plate

A5 polycarbonate document wallet

A4 polycarbonate document wallet

Engraved traffolyte tag label

Engraved stainless steel tag label

Color in-fill stainless steel tag label

Quarter turn key locks

Release date 2014-02-26 T-164622

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