

# JUNCTION BOX (STAINLESS STEEL)

## ● Features

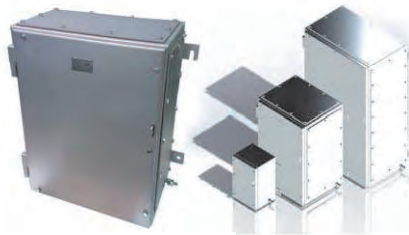
The DJBS range comprises many standard sizes of enclosure manufactured in 316L acid resistant stainless steel to give the maximum environmental protection. Cable entries can be drilled in all sides or through the gland plates if fitted. Entries may also be drilled through the rear face of the enclosure.



## ● Applications

DJBS enclosures are fitted with machined solid block hinges and floating cage nuts that allow screws to locate, which saves on threads stripping and certification becoming invalid.

Available with full width, full height gland plates on 1, 2, 3 or 4 sides.



### Explosion Protection



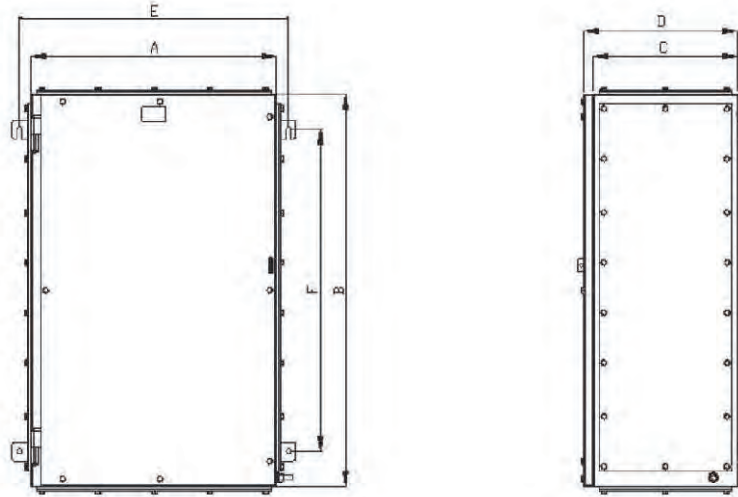
- CENELEC
- IEC
- Zone 1, Zone 2, Zone 21 and Zone 22,
- ATEX & IECEx Class 1, Division 2
- II 2 G Ex 'e' & Ex 'ia' II T6
- II 2 D IP66 T80 °C, T90 °C

## ● Safety Instructions

Application	Industrial and Hazardous areas	
Protection Degree	IP66 / 67	
Certification	ATEX EEx e(Zone 1 & Zone 2)	
Material	Stainless steel 316(1.4404)	
Temperature	-50 °C to 40 °C (T6 T85 °C)	
	-50 °C to 55 °C (T5 T100 °C)	
	-50 °C to 80 °C (T4 T135 °C)	
Approvals	ATEX	CML 15ATEX3058
	IECEX	IECEX CML 15.0026
Standards	EN/IEC: 60079-0, 60079-7, 60079-11, 60079-31	
Ex-Code	Ex e II C T4/T5/T6 Gb	
	Ex ia II C T4/T5/T6 Ga	
	Ex tb II C T85/T100/T135 °C Db	
	II 2 G Ex e II C T4/T5/T6 Gb	
	II 1 G Ex ia II C T4/T5/T6 Ga	
	II 2 D Ex tb III C T85/T100/T135 °C	
Cover gasket	Polyurethane (temp. -51 °C to +90 °C)	
	Silicone (temp. -55 °C to +200 °C)	
Surface treatment	Glass shot blasting & Passivation Standard	
Material thickness	Min. 1.5 mm (depending on the box size)	

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## ● Part No and Dimmensions



PART NO	A	B	C	D	E	F
DJBS-01	155	155	100	119	205	x
DJBS-02	185	275	140	159	235	160
DJBS-03	159	325	140	159.5	285	185
DJBS-04	305	305	200	219.5	355	165
DJBS-05	325	375	200	219.5	375	235
DJBS-06	375	450	200	219.5	425	310
DJBS-07	510	375	200	219.5	425	370
DJBS-08	375	510	300	319.5	425	370
DJBS-09	510	510	200	219.5	560	370
DJBS-10	510	510	300	319.5	560	370
DJBS-11	510	780	200	219.5	560	640
DJBS-12	510	780	300	319.5	560	640
DJBS-13	650	950	300	319.5	700	810
DJBS-14	800	1250	300	319.5	850	1110

## ● Ordering Codes

- \* Earthing is optional (Internal earth bar/bracket).
- \* Drain Plug is optional.
- \* Gland Plate is optional.



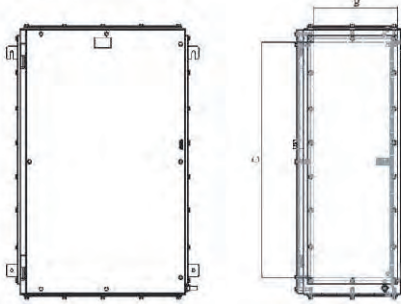
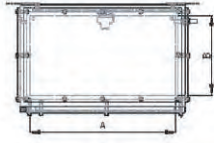
Model Name	Gland Plate	Mounting Plate	Security (Locking Device)	Ground stud	Breather Drain
DJBS-01 to DJBS-14	0: None	N: None	N: None	∅ 6mm	N: None
	1: One bottom	M: Mounting Plate	S: Security	∅ 8mm	Y: Yes
	3: Two side and bottom			∅ 10mm	
	4: All sides				

DJBS 3 3 N S 8 Y

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## ● Connection

\* Cable and Wire entries



The clearance holes for plain entries shall have a diameter not more than 0.7mm greater than the nominal diameter of the entry thread gland or fitting. The inside of the enclosure shall be provided with sufficient room to attach a locknut to the gland or fitting.

\* Maximum number of Cable and Wire Entries

The available area for cable entry hole is calculated as follows.

(Length of gland plate - 30mm) x (Height of gland plate - 30mm)

Minimum necessary area of cable gland thread diameter is given in below table.

SIZE	DJBS-01	DJBS-02	DJBS-03	DJBS-04	DJBS-05
A	x	x	191	261	281
B	x	x	96	156	156
C	x	x	253	216	286

SIZE	DJBS-06	DJBS-07	DJBS-08	DJBS-09	DJBS-10	DJBS-11	DJBS-12	DJBS-13	DJBS-14
A	331	331	331	466	466	466	466	606	756
B	156	156	256	156	256	156	256	256	256
C	361	421	421	421	421	691	691	861	1161

Required Area /ea	Cable Gland Thread Diameter						
	≤12mm	≤16mm	≤ 20mm	≤ 25mm	≤ 32mm	≤ 40mm	≤50mm
	290mm <sup>2</sup>	520mm <sup>2</sup>	820mm <sup>2</sup>	1270mm <sup>2</sup>	2080mm <sup>2</sup>	3250mm <sup>2</sup>	5050mm <sup>2</sup>

## ● Calculation example

- Cable gland plate : 326 x 196
- Desired cable entries : M20(12ea), M40(5ea)
- Available area = 296 x 166 = 49,136
- Required area = (820 x 12) + (3250 x 5) = 26,090
- We can install the 17 cable entries and have extra area, 23,046mm<sup>2</sup>
- Caution : Unused hole should be blanked with certified blanking element.



### Max Power Dissipation(W)

Part No	T6	T5	T4
	Ta + 40 °C	Ta + 55 °C	Ta + 80 °C
DJBS-01	6.69W	6.69W	6.69W
DJBS-02	9.57W	9.57W	9.57W
DJBS-03	11.45W	11.45W	11.45W
DJBS-04	17.88W	17.88W	17.88W
DJBS-05	25.13W	25.13W	25.13W
DJBS-06	26.29W	26.29W	26.29W
DJBS-07	26.92W	26.92W	26.92W
DJBS-08	27.19W	27.19W	27.19W
DJBS-09	27.51W	27.51W	27.51W
DJBS-10	28.39W	28.39W	28.39W
DJBS-11	32.71W	32.71W	32.71W
DJBS-12	34.99W	34.99W	34.99W
DJBS-13	52.4W	52.4W	52.4W
DJBS-14	62.86W	62.86W	62.86W

Theoretical values are calculated based upon typical configurations. Maximum power must not be exceeded in any given terminal box. Maximum current per terminal must be calculated using the Maximum Heat Dissipation.

For some applications it may be necessary to have a variety of terminal sizes. The following tables and examples demonstrate how this is achieved.

The power heat dissipation determines the maximum number of terminals permissible for any size of terminal box, based on a 100% load.

\* Cable ambient

Warning "Select cable for 40 °C above ambient"

### Name Plate

1. Fixing Method - Welding
2. Letter Color - Black
3. Material - Stainless steel