

Junction Boxes & Enclosures

JBES Series: Pre-drilled 316L Stainless Steel Junction Boxes – Increased Safety



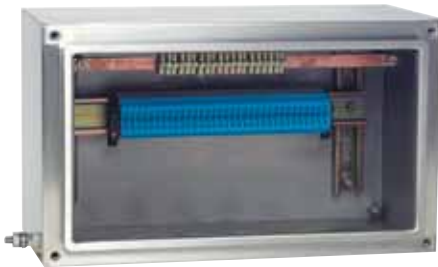
JBBe10
Without Terminals



JBBe46
Equipped with Terminals



JBBe46
Equipped with Terminals



JBBe46
Equipped with Terminals

Compliance Data:

ATEX - IEC:

Zone 1 & 2 – 21 & 22	ATEX	II 2 GD	IEC	CE
Ex e II; Ex ia IIC; Ex ib IIC	T6 to T5	Ex tD A21	T80°C to T95°C	IP66 – IK10

Operating Temperatures:

-50°C to +70°C



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Zone 1 & 2 – 21 & 22

II 2 GD

ATEX / IEC

IP66 – IK10

Applications:

- Terminal junction boxes designed to facilitate electrical connections in hazardous areas.
- Designed for use in Zone 1 or 2 areas, where flammable gases or vapors are present either continuously or intermittently.
- Ideal for use in wet or corrosive atmospheres.
- Petroleum, chemical, refineries and other industrial process facilities.
- Designed for use in Zone 21 or 22 areas, where flammable dusts are present either continuously or intermittently
- Food processing, dairy, brewing, pharmaceutical industry, silos and other facilities.

Features:

- Austenitic stainless steel contains at least 10.5% Chrome (Cr). Chrome is a protective layer that shields the material from humidity.
- 316L stainless steel contains molybdenum (Mo), which provides excellent corrosion resistance especially against chlorides.

- Smooth, continuously welded seams.
- 316L stainless steel captive screws.
- Hinges supplied on all boxes from 370 mm x 260 mm sizes.
- Poured-in-place polyurethane door gasket.
- Earth crossing terminal.
- Factory drilled and equipped.

Standard Material:

- 316L chrome plated molybdenum stainless steel enclosure with natural burnished finish.
- 316L stainless steel hardware.

Options:

- For use with other equipment than Ex terminal blocks, see section ECES series enclosures and controls.

Catalog Number Logic:

JBES	XX	XX	XX	XX	X
Series	Dimensions	Dimensions	Dimensions		Options:
ATEX / IEC Certified:	Length (mm):	Width (mm):	Depth (mm):		Options have to be listed alphabetically
E = Increased Safety	12 = 120	12 = 120	09 = 95		D1 = 5 x M20
I = Intrinsic Safety	18 = 180	18 = 180	15 = 150		D2 = 4 x M20 + 1 x M25
	22 = 220	22 = 220	20 = 200		D3 = 7 x M20 + 1 x M25
	26 = 260	26 = 260			F1 = Fitted with 12 x 2.5 mm ² Terminals and Drilled
	37 = 370	37 = 370			F2 = Fitted with 20 x 2.5 mm ² Terminals and Drilled
					F3 = Fitted with 40 x 2.5 mm ² Terminals and Drilled
					F4 = Fitted with 60 x 2.5 mm ² Terminals and Drilled
					F5 = Fitted with 14 x 2.5 mm ² Terminals and Drilled
					F6 = Fitted with 24 x 2.5 mm ² Terminals and Drilled
					F7 = Fitted with 38 x 2.5 mm ² Terminals and Drilled
					F8 = Fitted with 54 x 2.5 mm ² Terminals and Drilled
					# = Customized Enclosure
				Gland Plates:	
				0 = None	
				1 = One Bottom	
				2 = One Top and Bottom	
				3 = Two Sides and Bottom	
				4 = All Sides	

#: 6 Digit number will be assigned at time of order placement.

Ordering Information:

Factory Drilled Ex e II 316L Stainless Steel Junction Boxes Fitted with:

One horizontal symmetrical zinc plated rail.

For use only with Ex terminals (not supplied).

M6 external earth crossing terminal.

Cable glands and plugs to be ordered separately.



Type	Dimensions L x W x D (mm)	Rail Length Capacity (mm)	Clearance Holes per side				Weight (kg)	Volume (dm ³)	Catalog Number	Old Catalog Number
			A	B	C	D				
JBBe10	120 x 120 x 95	100	1 x M20	1 x M20	2 x M20	1 x M20	1	1.4	JBES 121209 0 D1	–
JBBe20	120 x 180 x 95	160	–	1 x M20	2 x M20 1 x M25	1 x M20	1.5	2	JBES 121809 0 D2	–
JBBe20	120 x 180 x 95	160	–	2 x M20	3 x M20 1 x M25	2 x M20	1.5	2	JBES 121809 0 D3	–

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Zone 1 & 2 – 21 & 22

Ex II 2 GD

ATEX / IEC

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Ordering Information Continued:

Factory Drilled and Equipped with Terminals Ex e II 316L
Stainless Steel Instrumentation Junction Boxes Fitted with:

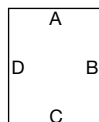
Vertical beige Exe terminal block.

Insulated copper bar with connectors.

White laminated plastic tag with black lettering.

M8 external earth crossing terminal.

Cable glands and plugs to be ordered separately.



Type	Dimensions L x W x D (mm)	Rail Length Capacity (mm)	Insulated Connectors	Clearance Holes per Side B C D	Weight (kg)	Volume (dm ³)	Catalog Number	Old Catalog Number
JB20	180 x 120 x 95	12 (6 Pairs)	8	3 x M20 1 x M25 3 x M20 1 x M20	2.5	2	JBES 1812090 F1	097160
JB36	260 x 220 x 150	20 (10 Pairs)	12	5 x M20 1 x M32 5 x M20 1 x M20	4	8.6	JBES 2622150 F2	097161
JB46	370 x 220 x 200	40 (20 Pairs)	22	10 x M20 1 x M40 10 x M20 1 x M20	9	16.3	JBES 372220 F3	097162
JB47	370 x 260 x 200	60 (30 pairs)	32	15 x M20 1 x M50 15 x M20 1 x M20	11	19.3	JBES 3726200 F4	097163

Ex ia IIC Version: Replace Third Digit “E” with “I”

(Example: JBES1812090F1 becomes JBIS1812090F1)

Fitted with:

Vertical blue terminal block.

Insulated copper bar with connectors.

Blue laminated plastic tag with white lettering.

M8 external earth crossing terminal.

Cable glands and plugs to be ordered separately.



Factory Drilled and Equipped with Terminals Ex e II 316L

Stainless Steel Instrumentation Junction Boxes Fitted with:

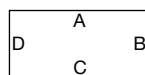
Horizontal beige Exe terminal block.

Continuity shield.

White laminated plastic tag with black lettering.

M8 External earth crossing terminal.

Cable glands and plugs to be ordered separately.



Type	Dimensions L x W x D (mm)	Terminals 2.5mm ²	Continuity Shield	Clearance Holes Side C	Weight (Kkg)	Volume (dm ³)	Catalog Number	Old Catalog Number
JB36	220 x 260 x 150	14 (7 Pairs)	7	1 x M25 7 x M20	4	8.6	JBES 2226150 F5	097140
JB36	220 x 260 x 150	24 (12 pairs)	12	1 x M32 12 x M20	4	8.6	JBES 2226150 F6	097141
JB46	220 x 370 x 200	38 (19 pairs)	19	1 x M32 19 x M20	9	16.3	JBES 2237200 F7	097142
JB46	220 x 370 x 200	54 (27 pairs)	27	1 x M40 27 x M20	9	16.3	JBES 2237200 F8	097143

Ex ia IIC Version: Replace Third Digit “E” with “I” Fitted with:

(Example: JBES2226150F5 becomes JBIS2226150F5)

Horizontal blue terminal block.

Continuity shield.

Blue laminated plastic tag with white lettering.

M8 external earth crossing terminal.

Cable glands and plugs to be ordered separately.



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Zone 1 & 2 – 21 & 22

Ex II 2 GD

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IP66 – IK10

Technical Data:

Maximum rail arrangement according to physical dimensions.

Type	Protection	Terminal Size	Quantity	Max. Amps
JBe10	T6 @ Ta = +55°C	2.5 mm ²	10	16A
		4 mm ²	8	25A
		6 mm ²	6	32A
JBe20	T6 @ Ta = +55°C	2.5 mm ²	21	16A
		4 mm ²	18	25A
		6 mm ²	13	32A

For other terminal block configurations, consult our guide G0002 available online at our website: www.egsatx.com

Compliances:

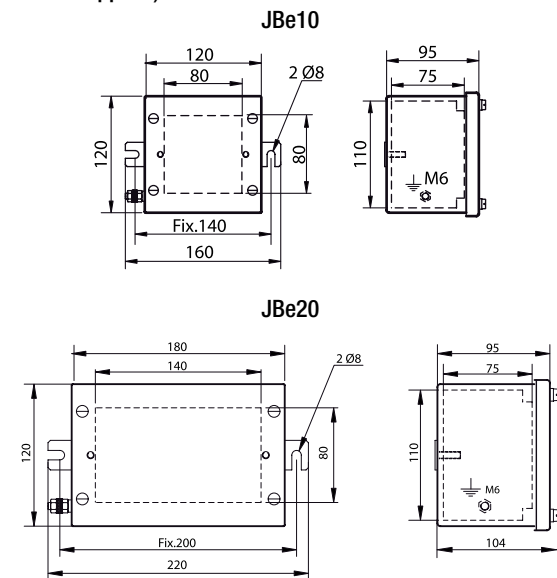
Hazardous Area	Gas	Dust
Certification Type	JBe	
Zones	1–2	21–22
Conforming to ATEX 94/9/CE	CE 0081 Ex II 2 G	CE 0081 Ex II 2 D
Symbol of Protection ATEX	Ex e II Ex ia IIC Ex ib IIC	Ex tD A21
Symbol of Protection IEC		
T Rating	T6 to T5	NA
Surface Temperature	NA	T80°C to T95°C
Ambient Temperature	-50°C to +70°C	
CE Declaration of Conformity	50232	
ATEX Certificate	LCIE 02 ATEX 6118X	
IEC Certificate	LCIE Ex 02.010X	
Other Certifications	GOST	
Index of Protection (solid and liquid)	IP66	
Impact resistance (shock)	IK10	

Standards:

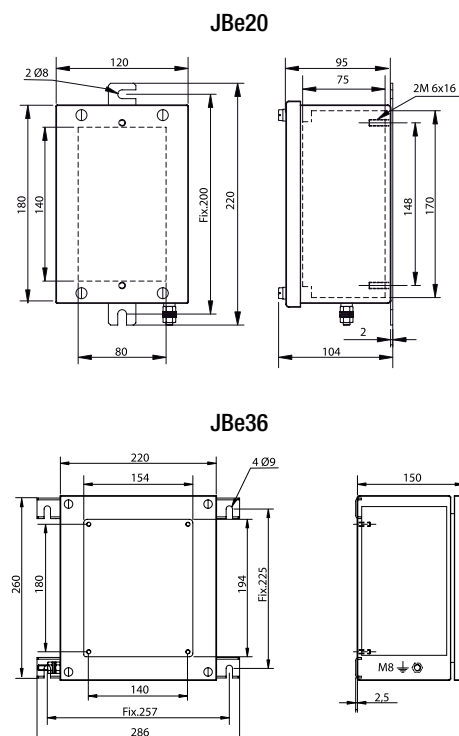
Ex Standards	EN / IEC 60079-0; 60079-7; 60079-11; 61241-0; 61241-1; 61241-11
Product Standards	–
EMC Standards	–
Other Standards	EN / IEC 60529 (IP); 62262 (IK)

Dimensions (mm):

Factory Drilled without Terminal Block (DIN rail supplied)



Factory Drilled and Equipped with Vertical Terminal Block



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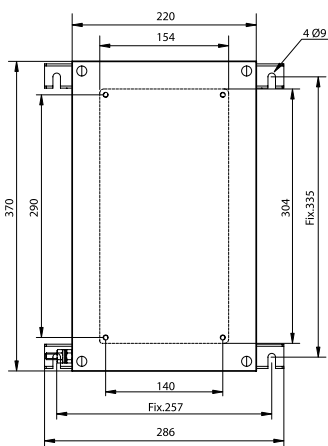
ATEX / IEC

IP66 – IK10

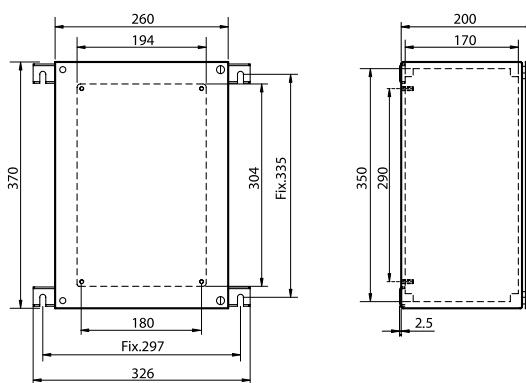
Dimensions (mm) – Continued:

Factory Drilled and Equipped with
Vertical Terminal Block

JB46

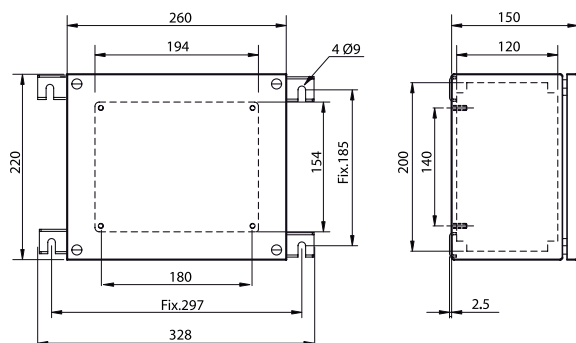


JB47



Factory Drilled and Equipped with
Horizontal Terminal Block

JB36



JB46

