

ATX™ JBES Series Pre-Drilled 316L Stainless Steel Junction Boxes

Increased Safety

ATEX/IECEX:
Zone 1 and 2 – 21 and 22
Ex II 2 GD
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 such as:
 - Petroleum
 - Chemical
 - Refineries
 - Other industrial process facilities
- Ideal for wet or corrosive atmospheres.
- Designed for use in Zone 21 or 22 areas, where flammable dusts are present either continuously or intermittently, such as:
 - Food processing
 - Dairy
 - Brewing
 - Pharmaceutical industry
 - Silos and other facilities

Features

- Smooth, continuously welded seams.
- Hinges supplied on all boxes from 370 mm x 260 mm (14.57" x 10.24") sizes.
- Poured-in-place polyurethane door gasket.
- Earth crossing terminal.
- Factory drilled and equipped.

Standard Material

- Enclosure: 316L chrome plated molybdenum stainless steel with natural burnished finish
- Hardware: 316L stainless steel

Options

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

ATEX/IECEX Certifications and Compliances

- Certification Type JBe
 - Gas, Zones 1 and 2
 - Conforming to ATEX 94/9/CE: Ex II 2 G
 - Type of Protection: Ex e II, Ex ia IIC, Ex ib IIC,
 - Temperature Class: T6 to T5
 - Dust, Zones 21 and 22
 - Conforming to ATEX 94/9/CE: Ex II 2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T80 °C to T95 °C (T176 °F to T203 °F)
 - Ambient Temperature: -50 °C to +70 °C (-58 °F to +158 °F)
 - CE Declaration of Conformity: 50232
 - ATEX Certificate: LCIE 02 ATEX 6118X
 - IECEx Certificate: IECEx LCI 11.0008X
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK10

EURASEC Certification

- Certification Type JBe
 - EURASEC N° TC RU C-FR.Г505.B.00911

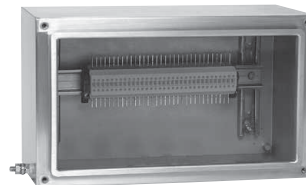
Other Certification

- Certification Type JBe
 - INMETRO Certificate: BVC 11.0418-X ①

JBe10 — Without Terminals



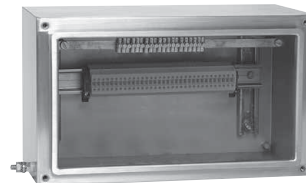
JBe46 — Equipped with Terminals



JBe46 — Equipped with Terminals



JBe46 — Equipped with Terminals



Appleton®

ENCLOSURES AND JUNCTION BOXES: ATEX/IECEX INCREASED SAFETY JUNCTION BOXES

① INMETRO certification available on special request only. Contact your local sales representative for more information.

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Catalog Numbering Guide - JBES Pre-Drilled Stainless Steel Junction Boxes

JBES	12	12	09	0	0
Series: JBES - ATEX/IECEX Certified Increased Safety JBIS - ATEX/IECEX Certified Intrinsic Safety,	Length Dimensions mm (in): 12 - 120 (4.72) 18 - 180 (7.09) 22 - 220 (8.66) 26 - 260 (10.24) 37 - 370 (14.57)	Width Dimensions mm (in): 12 - 120 (4.72) 18 - 180 (7.09) 22 - 220 (8.66) 26 - 260 (10.24) 37 - 370 (14.57)	Depth Dimensions mm (in): 09 - 95 (3.74) 15 - 150 (5.91) 20 - 200 (7.87)	Gland plate: 0 - None 1 - One Bottom 2 - One Top and Bottom 3 - Two Sides and Bottom 4 - All Sides	Options: ① (options must be listed alphabetically) D1 - 5 x M20 D2 - 4 x M20 + 1 x M25 D3 - 7 x M20 + 1 x M25 F1 - Fitted with 12 x 2.5 mm ² (0.019 x 0.004 in ²) Terminals and Drilled F2 - Fitted with 20 x 2.5 mm ² (0.031 x 0.004 in ²) Terminals and Drilled F3 - Fitted with 40 x 2.5 mm ² (0.062 x 0.004 in ²) Terminals and Drilled F4 - Fitted with 60 x 2.5 mm ² (0.093 x 0.004 in ²) Terminals and Drilled F5 - Fitted with 14 x 2.5 mm ² (0.022 x 0.004 in ²) Terminals and Drilled F6 - Fitted with 24 x 2.5 mm ² (0.037 x 0.004 in ²) Terminals and Drilled F7 - Fitted with 38 x 2.5 mm ² (0.057 x 0.004 in ²) Terminals and Drilled F8 - Fitted with 54 x 2.5 mm ² (0.084 x 0.004 in ²) Terminals and Drilled # - Customized Enclosure (6 Digit number will be assigned at time of order placement.)

Maximum Rail Arrangement According to Physical Dimensions

Type	Protection	Terminal Size mm ² (in ²)	Quantity	Max. Amps
JBe10	T6 @ Ta = +55° C (+131 °F)	2.5 (0.004)	10	16A
		4.0 (0.006)	8	25A
		6.0 (0.009)	6	32A
JBe20	T6 @ Ta = +55° C (+131 °F)	2.5 (0.004)	21	16A
		4.0 (0.006)	18	25A
		6.0 (0.009)	13	32A

① For other terminal block configurations, contact your local sales representative.

ATX™ JBES Series Pre-Drilled 316L Stainless Steel Junction Boxes

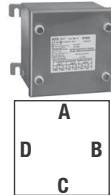
Increased Safety

ATEX/IECEX:
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II 2 GD
IP66 – IK10

Type	Dimensions L x W x D mm (in)	Rail Length Capacity mm (in)	Clearance Holes Per Side				Weight kg (lb)	Volume dm³ (in³)	Catalog Number
			A	B	C	D			

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.

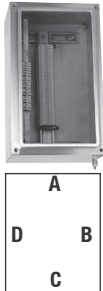


JBe10	120 x 120 x 95 (4.72 x 4.72 x 3.74)	100 (3.94)	1 x M20	1 x M20	2 x M20	1 x M20	1.0 (2.20)	1.4 (85.43)	JBES1212090D1
JBe20	120 x 120 x 95 (4.72 x 4.72 x 3.74)	160 (6.30)	–	1 x M20	2 x M20 1 x M25	1 x M20	1.5 (3.31)	2.0 (122.05)	JBES1218090D2
JBe20	120 x 120 x 95 (4.72 x 4.72 x 3.74)	160 (6.30)	–	2 x M20	3 x M20 1 x M25	2 x M20	1.5 (3.31)	2.0 (122.05)	JBES1218090D3

Type	Dimensions L x W x D mm (in)	Terminals 2.5 mm² (0.0039 in²)	Insulated Connectors	Clearance Holes Per Side			Weight kg (lb)	Volume dm³ (in³)	Catalog Number
				B	C	D			

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.



JBe20	180 x 120 x 95 (7.09 x 4.72 x 3.74)	12 (6 Pairs)	8	3 x M20	1 x M25 1 x M20	3 x M20	2.5 (5.51)	2.0 (122.05)	JBES1812090F1
JBe36	260 x 220 x 150 (10.24 x 8.66 x 5.91)	20 (10 Pairs)	12	5 x M20	1 x M32 1 x M20	5 x M20	4.0 (8.82)	8.6 (524.80)	JBES2622150F2
JBe46	370 x 220 x 200 (14.57 x 8.66 x 7.87)	40 (20 Pairs)	22	10 x M20	1 x M40 1 x M20	10 x M20	9.0 (19.84)	16.3 (994.69)	JBES372220F3
JBe47	370 x 260 x 200 (14.57 x 10.24 x 7.87)	60 (30 pairs)	32	15 x M20	1 x M50 1 x M20	15 x M20	24.25 (11.0)	19.3 (1177.76)	JBES3726200F4

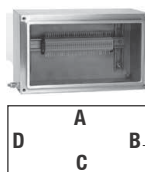
Ex ia IIC Version: Replace Third Digit "E" with "I" (Example: JBES1812090F1 becomes JBIS1812090F1) Fitted with:

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.

Type	Dimensions L x W x D mm (in)	Terminals 2.5 mm² (0.0039 in²)	Continuity Shield	Clearance Holes Per Side		Weight kg (lb)	Volume dm³ (in³)	Catalog Number
				C				

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.



JBe36	220 x 260 x 150 (8.66 x 10.24 x 5.91)	14 (7 Pairs)	7	1 x M25	7 x M20	4.0 (8.82)	8.6 (524.80)	JBES2226150F5
JBe36	220 x 260 x 150 (8.66 x 10.24 x 5.91)	24 (12 pairs)	12	1 x M32	12 x M20	4.0 (8.82)	8.6 (524.80)	JBES2226150F6
JBe46	220 x 370 x 200 (8.66 x 14.57 x 7.87)	38 (19 pairs)	19	1 x M32	19 x M20	9.0 (19.84)	16.3 (994.69)	JBES2237200F7
JBe46	220 x 370 x 200 (8.66 x 14.57 x 7.87)	54 (27 pairs)	27	1 x M40	27 x M20	9.0 (19.84)	16.3 (994.69)	JBES2237200F8

Ex ia IIC Version: Replace Third Digit "E" with "I" (Example: JBES2226150F5 becomes JBIS2226150F5) Fitted with:

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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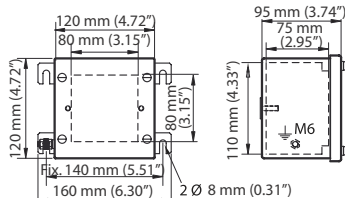
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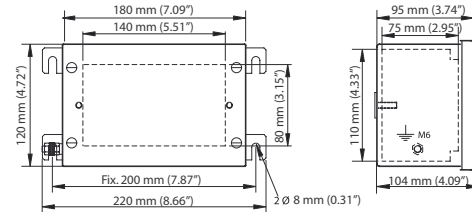
Dimensions in Millimeters (Inches)

Factory Drilled without Terminal Block (DIN rail supplied)

JBBe10

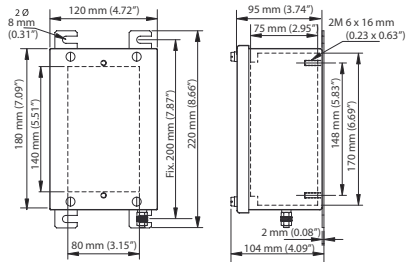


JBBe20

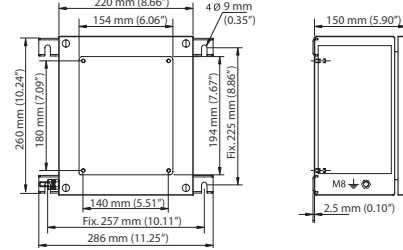


Factory Drilled and Equipped with Vertical Terminal Block

JBBe20

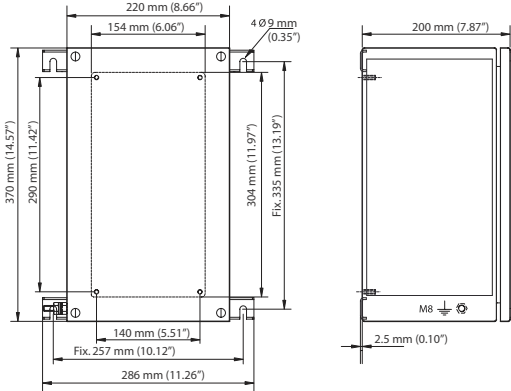


JBBe36

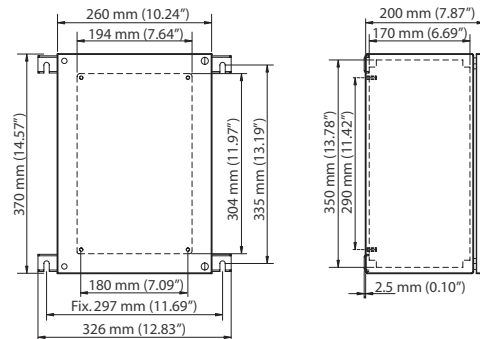


Factory Drilled and Equipped with Vertical Terminal Block

JBBe46

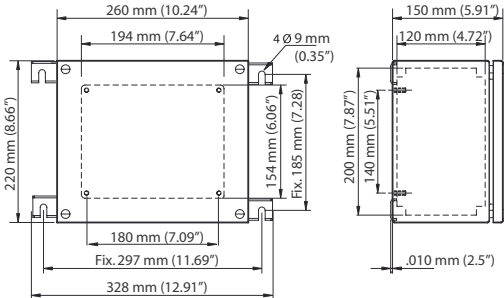


JBBe47



Factory Drilled and Equipped with Horizontal Terminal Block

JBBe36



JBBe46

