

JBES Series Pre-Drilled 316L Stainless Steel Junction Boxes

Increased Safety

Zones 1 & 2 – 21 & 22
Gas (G) and Dust (D)

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 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.

Certifications and Compliances

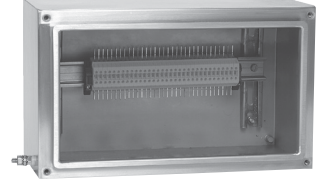
◆ ATEX/IECEX Certification

- **Certification Type JBe**
 - Gas, Zones 1 and 2
 - Conforming to ATEX 94/9/CE: Ⓢ 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: Ⓢ II 2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T80 °C to T95 °C
 - Ambient Temperature: -50 °C to +70 °C
 - 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

JBe10 — Without Terminals



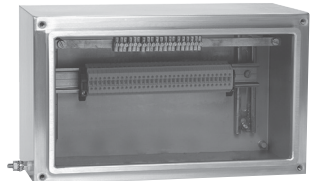
JBe46 — Equipped with Terminals



JBe46 — Equipped with Terminals



JBe46 — Equipped with Terminals



◆ EURASEC Certification

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

◆ Others Certification

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

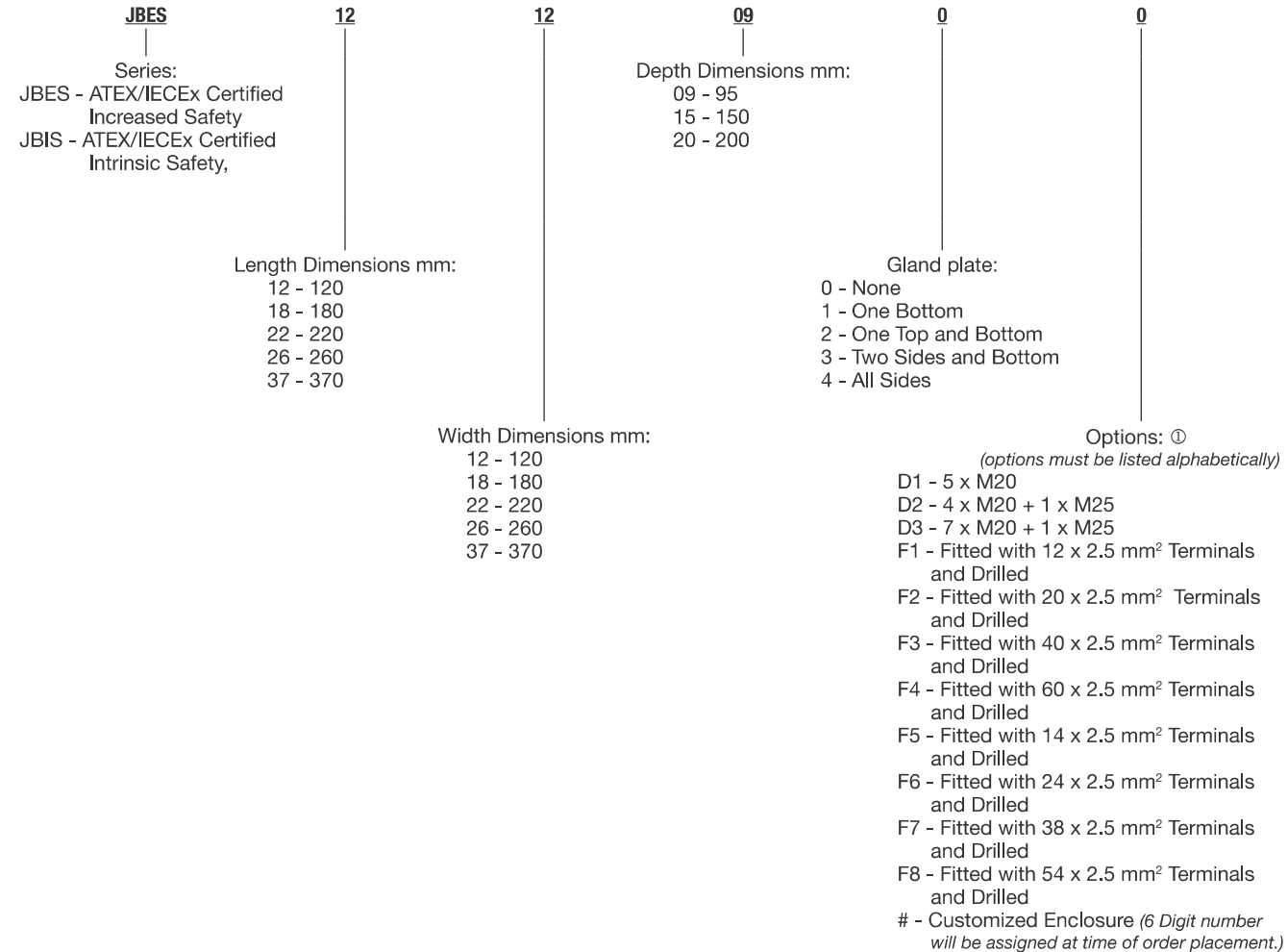
① Inmetro certification available on special request only. Contact your local sales for more information

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



Maximum Rail Arrangement According to Physical Dimensions

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

① For other terminal block configurations, consult our drilling guide available online at our website www.appletonelec.com.

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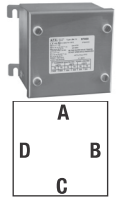
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Type	Dimensions L x W x D mm	Rail Length Capacity mm	Clearance Holes Per Side				Weight kg	Volume dm ³	Catalog Number
			A	B	C	D			

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.

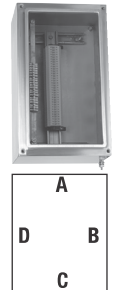


JBBe10	120 x 120 x 95	100	1 x M20	1 x M20	2 x M20	1 x M20	1.0	1.4	JBES1212090D1
JBBe20	120 x 120 x 95	160	–	1 x M20	2 x M20 1 x M25	1 x M20	1.5	2.0	JBES1218090D2
JBBe20	120 x 120 x 95	160	–	2 x M20	3 x M20 1 x M25	2 x M20	1.5	2.0	JBES1218090D3

Type	Dimensions L x W x D mm (in)	Terminals 2.5 mm ²	Insulated Connectors	Clearance Holes Per Side			Weight kg	Volume dm ³	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.



JBBe20	180 x 120 x 95	12 (6 Pairs)	8	3 x M20	1 x M25 1 x M20	3 x M20	2.5	2.0	JBES1812090F1
JBBe36	260 x 220 x 150	20 (10 Pairs)	12	5 x M20	1 x M32 1 x M20	5 x M20	4.0	8.6	JBES2622150F2
JBBe46	370 x 220 x 200	40 (20 Pairs)	22	10 x M20	1 x M40 1 x M20	10 x M20	9.0	16.3	JBES372220F3
JBBe47	370 x 260 x 200	60 (30 pairs)	32	15 x M20	1 x M50 1 x M20	15 x M20	24.25	19.3	JBES3726200F4

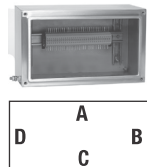
Ex ia IIC Version: Replace Third Digit “E” with “I” (Example: JBES1812090F1 becomes JBIS1812090F1) Fitted with:

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	Terminals 2.5 mm ²	Continuity Shield	Clearance Holes Per Side		Weight kg	Volume dm ³	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.



JBBe36	220 x 260 x 150	14 (7 Pairs)	7	1 x M25	7 x M20	4.0	8.6	JBES2226150F5
JBBe36	220 x 260 x 150	24 (12 pairs)	12	1 x M32	12 x M20	4.0	8.6	JBES2226150F6
JBBe46	220 x 370 x 200	38 (19 pairs)	19	1 x M32	19 x M20	9.0	16.3	JBES2237200F7
JBBe46	220 x 370 x 200	54 (27 pairs)	27	1 x M40	27 x M20	9.0	16.3	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.

JBES Series Pre-Drilled 316L Stainless Steel Junction Box Dimensions

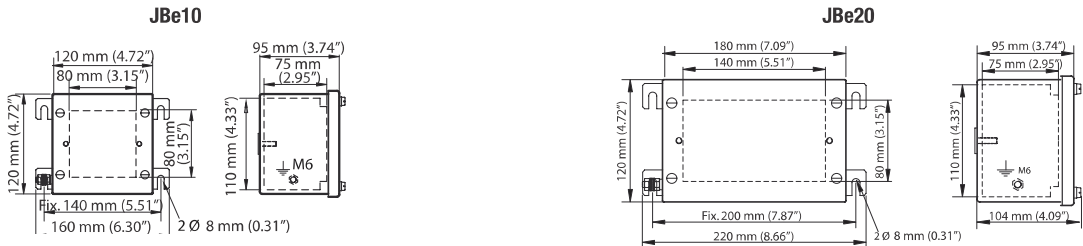
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Enclosures and Junction Boxes

INCREASED SAFETY EX E ZONE 1 RATED ENCLOSURES & JUNCTION BOXES

Dimensions in Millimeters

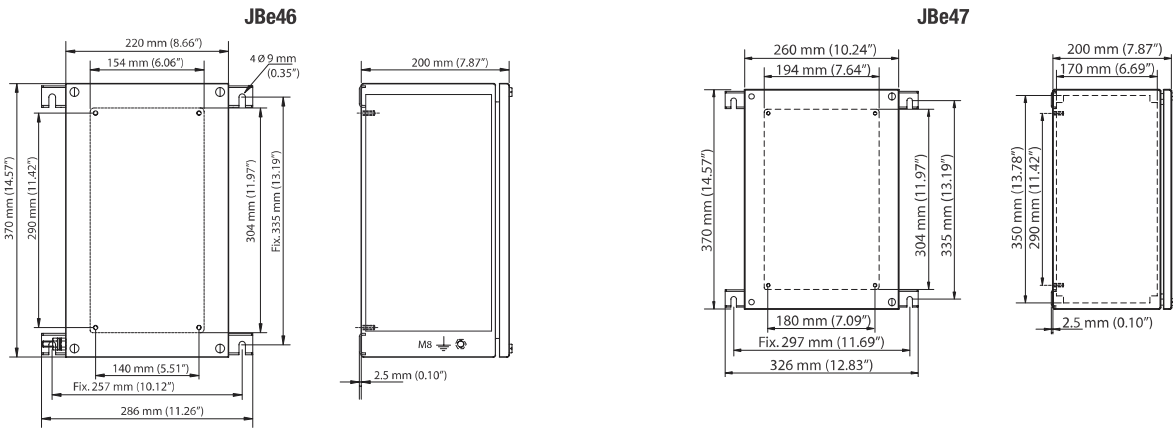
Factory Drilled without Terminal Block (DIN rail supplied)



Factory Drilled and Equipped with Vertical Terminal Block



Factory Drilled and Equipped with Vertical Terminal Block



Factory Drilled and Equipped with Horizontal Terminal Block

