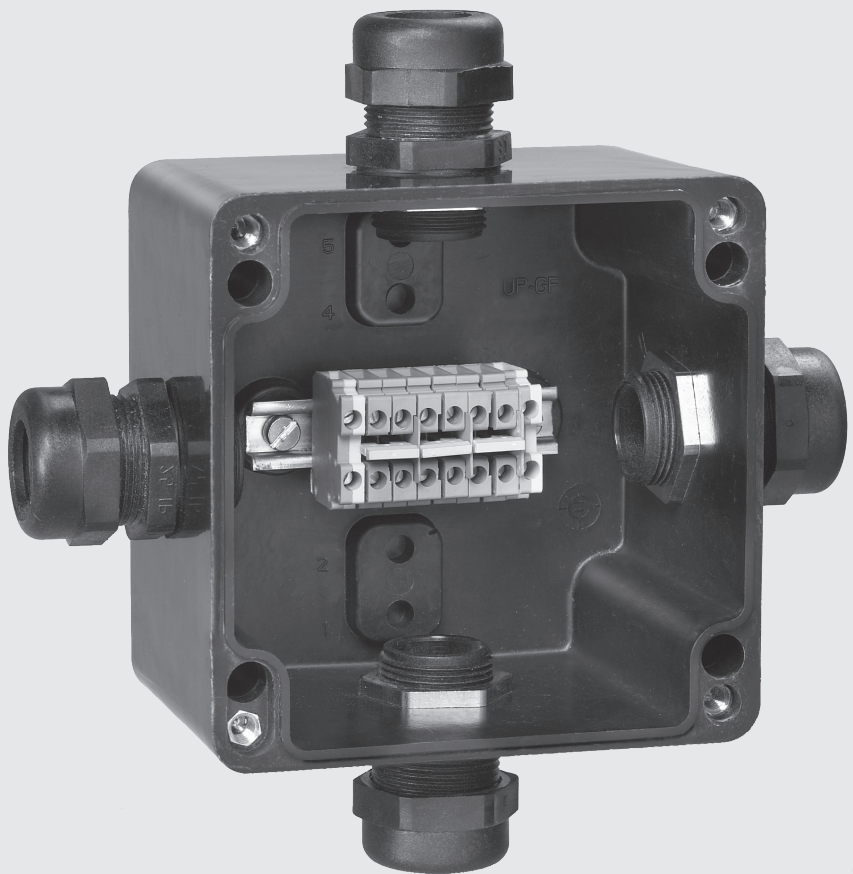


ENCLOSURES and JUNCTION BOXES

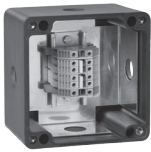
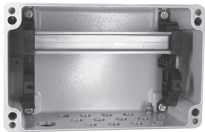
Appleton's ATX line of junction boxes and enclosures is available in a wide range of sizes and materials. They are high-impact and low temperature-resistant for use anywhere in the world for virtually any application.

Our junction boxes are available in a wide variety of sizes and materials for multiple applications: lighting, power, instrumentation and more. For even more flexibility, ATX junction boxes can come complete with terminals, can be pre-drilled, or drilled and fitted with terminals on site. For more information about drilling or terminal equipment, please visit our website.

Increased Safety and Flameproof enclosures are available in a range of materials: fiberglass reinforced polyester (FRP), aluminum, cast iron, welded steel and stainless steel. Enclosures are available for a variety of applications and can accommodate breakers, meters, relays, variable speed drives and more.



Enclosures and Junction Boxes

Description	Page		
Increased Safety Ex e Zone 1 Rated Junction Boxes			
JBEL Series Polycarbonate Junction Boxes	217		
JBEP Series Undrilled and Predrilled, Empty Fiberglass Reinforced Polyester Junction Boxes	221		
JBEP Series Fiberglass Reinforced Polyester Terminal Junction Boxes for Instrumentation Applications	232		
JBEP Series Fiberglass Reinforced Polyester Terminal Junction Boxes for Electrical and Power Applications	239		
Increased Safety Ex e Zone 1 Rated Enclosures & Junction Boxes			
JBEA Series Pre-Drilled Aluminum Junction Box	267		
JBEA and ECEA Series Aluminum Enclosures	274		
JBES Series Pre-Drilled 316L Stainless Steel Junction Boxes	279		
JBES and ECES Series 316L Stainless Steel Enclosures	283		
Flameproof Ex d Zone 1 Rated Junction Boxes			
JBDR Series Pre-Drilled Round Junction Boxes	294		
JBD Series Pre-Drilled Terminal Junction Boxes	297		
JBDA and JBDF – ECDA, ECDF and ACSEW Series Customized Enclosures	299		
ECDX Series Customized Welded Steel/Stainless Steel Enclosures	305		
AJBEW Cast Junction Boxes	308		
			

JBEL Series Polycarbonate Junction Boxes

Increased Safety

Furnished complete with Terminals.

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

Applications

- Small 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
 - Other commercial facilities

Features

- Pillar type terminal block for easy connection.
- Available in two sizes:
 - 4 mm²
 - 10 mm²
- Unarmored or armored versions with earth continuity brass device.
- Operating temperature: -40 °C to +55 °C

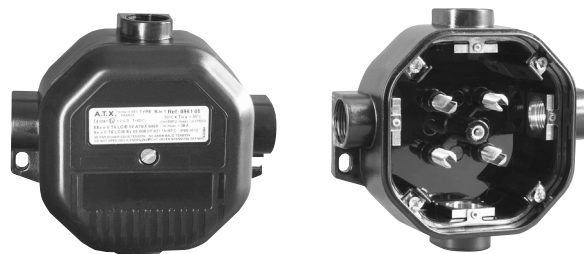
Standard Materials

- Enclosure: static and impact resistant polycarbonate
- Cover gasket: polyurethane
- Hardware: stainless steel

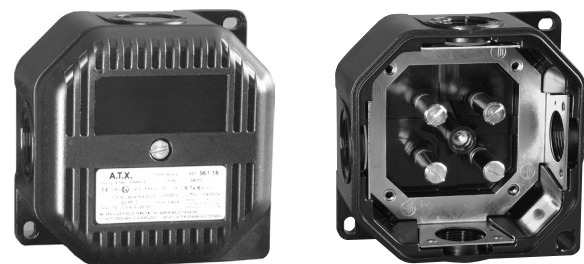
Certifications and Compliances

◆ ATEX Certification

- **Certification Type BJe1**
 - Gas, Zones 1 and 2:
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 G
 - Type of Protection: Ex e II
 - Temperature class: T6
 - Dust, Zones 21 and 22:
 - Conforming to ATEX 94/9/CE: Ⓔ II2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T75 °C
 - CE Declaration of Conformity: 50226
 - ATEX Certificate: LCIE 02 ATEX 6069
 - Ambient Temperature: -40 °C to +55 °C
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK10
- **Certification Type BJe2**
 - Gas, Zones 1 and 2:
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 G
 - Type of Protection: Ex e II
 - Temperature class: T6
 - Dust, Zones 21 and 22:
 - Conforming to ATEX 94/9/CE: Ⓔ II2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T80 °C
 - CE Declaration of Conformity: 50209
 - ATEX Certificate: LCIE 99 ATEX 6003
 - Ambient Temperature: -40 °C to +55 °C
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK10



For Unarmored Cable



For Armored Cable

◆ EURASEC Certification

- **Certification Type: BJe1**
 - EURASEC N° TC RU C-FR.Г505.B.00911
- **Certification Type: BJe2**
 - EURASEC N° TC RU C-FR.Г505.B.00911

◆ Others Certification

- **Certification Type: BJe1**
 - INMETRO Certificate: BVC 11.0479 ①
- **Certification Type: BJe2**
 - INMETRO Certificate: BVC 11.0402-X ①

Related Products

- Cable glands for use with armored and unarmored cable are available, see *Fittings: Cable Glands*.

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

JBEL Series Polycarbonate Junction Boxes

Increased Safety

Furnished complete with Terminals.

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

Equipment	Rating (Amps)	Weight kg	Volume dm ³	Catalog Number
For Unarmored Cables 2.5/4 mm² 660 V — Certification Type BJe1 Supplied with 4 connection terminals. Maximum capacity per terminal: 4 x 2.5 mm ² or 2 x 4 mm ² + 2 x 2.5 mm ² and 4 interconnected earth terminals. Maximum capacity per earth terminal: 1 x 4 mm ²				
 4 x PG16 entries with knock-out caps ① 4 x Integrated cable glands for unarmored cable; 8 to 16 mm diameter <i>Important: Cables must be secured to structure close to box entries</i>	28 A/2.5 mm ² 38 A/4 mm ²	0.4	1.7	JBEL1N4P16G
For Armored Cables 2.5/4 mm² 660 V — Certification Type BJe1 Supplied with 4 connection terminals. Maximum capacity per terminal: 4 x 2.5 mm ² or 2 x 4 mm ² + 2 x 2.5 mm ² and 4 interconnected earth terminals. Maximum capacity per earth terminal: 1 x 4 mm ²				
 4 x M20 entries with earth brass continuity device 2 x blanking plugs	28 A/2.5 mm ² 38 A/4 mm ²	0.4	1.7	JBEL1A4M20
For Unarmored Cables 6/10 mm² 690 V — Certification Type BJe2 Supplied with 4 connection terminals. Maximum capacity per terminal: 4 x 6 mm ² or 3 x 10 mm ² + 4 mm ² and 4 interconnected earth terminals. Maximum capacity per earth terminal: 1 x 10 mm ²				
 3 x M20 entries 3 x cable glands for unarmored cable; 6.5 to 14.5 mm diameter		0.7	4.5	JBEL2N3M20G
4 x M20 entries 4 x cable glands for unarmored cable; 6.5 to 14.5 mm diameter	42 A/10 mm ² 30 A/6 mm ²	0.7	4.5	JBEL2N4M20G
3 x M25 entries 3 x cable glands for unarmored cable; 8 to 18.5 mm diameter	18 A/4 mm ²	0.7	4.5	JBEL2N3M25G
4 x M25 entries 4 x cable glands for unarmored cable; 8 to 18.5 mm diameter		0.7	4.5	JBEL2N4M25G
For Armored Cables 6/10 mm² 690 V — Certification Type BJe2 Supplied with 4 connection terminals. Maximum capacity per terminal: 4 x 6 mm ² or 3 x 10 mm ² + 4 mm ² and 4 interconnected earth terminals. Maximum capacity per earth terminal: 1 x 10 mm ²				
 4 x M20 entries with earth brass continuity device. 2 x M20 blanking plugs		0.7	4.5	JBEL2A4M20
4 x M25 entries with earth brass continuity device. 2 x M25 blanking plugs	42 A/10 mm ² 30 A/6 mm ²	0.7	4.5	JBEL2A4M25
2 x M25 + 2 x M20 entries with earth brass continuity device. 1 x M25 + 1 x M20 blanking plugs	18 A/4 mm ²	0.7	4.5	JBEL2A4M05
3 x M25 + 1 x M20 entries with earth brass continuity device. 1 x M25 + 1 x M20 blanking plugs		0.7	4.5	JBEL2A4M06

① Knock-out caps can be used as plugs.

Shaded catalog numbers are normally stocked items. All other items are made to order.

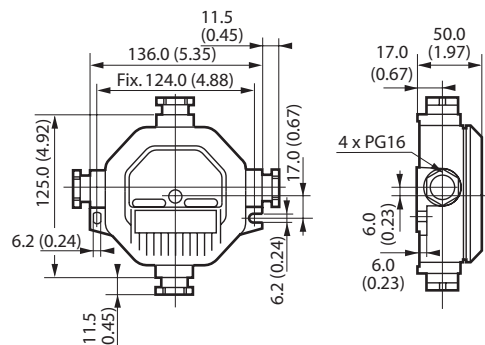
JBEL Series Polycarbonate Junction Boxes

Increased Safety

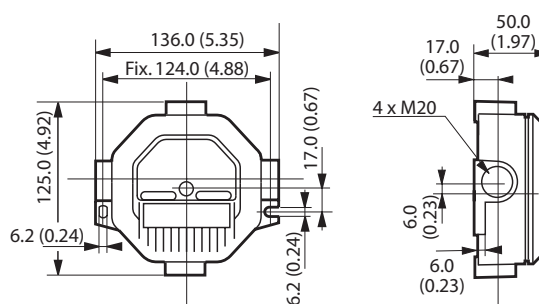
Furnished complete with Terminals.

Dimensions in Millimeters

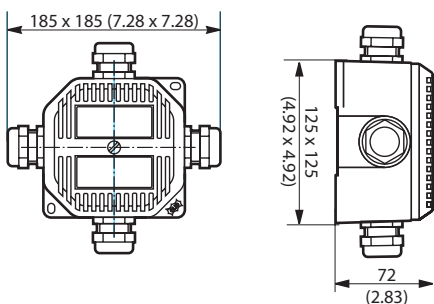
BJe1 with Cable Glands for Unarmored Cables



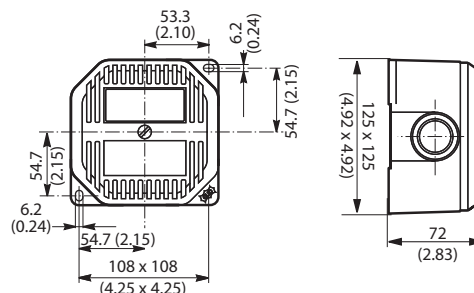
BJe1 without Cable Glands for Armored Cables



BJe2 with Cable Glands for Unarmored Cables



BJe2 without Cable Glands for Armored Cables



INCREASED SAFETY EX E ZONE 1 RATED JUNCTION BOXES

Enclosures and Junction Boxes

JBEP Series Undrilled and Predrilled, Empty Fiberglass Reinforced Polyester Junction Boxes

Increased Safety. For Field Drilling and Customization

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

Applications

- Designed for Zones 1 or 2 areas, where flammable gases or vapors are present either continuously, often or accidentally such as:
 - Petroleum
 - Chemical
 - Refineries
 - Other industrial process facilities
- Ideal for indoor/outdoor use with wet or corrosive atmospheres.
- Designed for use in Zones 21 or 22 areas where flammables dusts (conductive and non conductive) are present either continuously, often or accidentally such as:
 - Food processing
 - Dairy
 - Brewing
 - Other industrial process facilities
- Designed for Zone 0 and Zone 20 Intrinsically Safe applications when used with rated terminals.

Features

- Available in a wide range of sizes:
 - For armored, unarmored or armored lead sheathed cable
 - For use with Mantle Clamping (Pillar Terminals) for use as instrumentation, electrical or power terminals
 - For use with a variety of connection and earth terminals
- Optional external hinged enclosures:
 - Reversible door opening 120°.
 - Door with double bar lock.
 - Key locking facility.
- Refer to the technical guide to determine permitted and sizes of terminals and cables entries for self arrangement.

Standard materials

- Enclosures: Static resistant carbon filled fiberglass reinforced polyester (FRP)
- Hardware: stainless steel
- Gasket for sizes 85 x 85, 120 x 120: silicone
- Gasket for other sizes: EPDM (ethylene propylene diene monomer rubber)

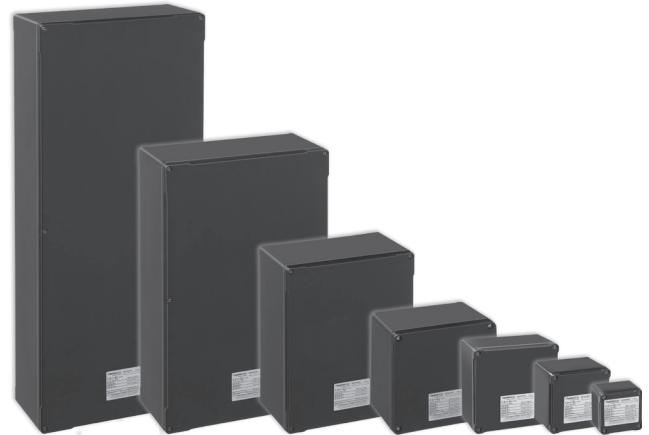
Options

- External hinges are available on the following sizes:
 - 500 x 320 x 150 mm
 - 500 x 320 x 230 mm
 - 750 x 320 x 150 mm
 - 750 x 320 x 230 mm
- Silicone gasket available for sizes 170 x 170 and 200 x 215
- Removable glands plates
- Nameplates
- Mounting pan
- Terminal rail
- Inside pocket for document
- Consult factory for custom drilling and assembly requirements.

Certifications and Compliances

◆ ATEX/IECEx Certification

- Type : JBEP**
 - Gas, Zones 1 and 2:
 - Conforming to ATEX 94/9/EC: Ⓔ II G
 - Conforming to IECEx : EPL Gb
 - Type of Protection: Ex eb IIC, Ex eb ia IIC, Ex eb ib IIC, Ex ib IIC



Enclosures and Junction Boxes

- Temperature class:
 - T6 for $T_a \leq +40\text{ °C}$, T5 for $T_a \leq +60\text{ °C}$
 - T3 for $T_a \leq +90\text{ °C}$ for sizes 85 x 85, 120 x 120
- Dust, Zones 21 and 22:
 - Conforming to ATEX: Ⓔ IID
 - Conforming to IECEx: EPL Db
 - Type of Protection: Ex tb IIIC
 - Surface Temperature :
 - T60 °C for $T_a \leq +40\text{ °C}$, T90 °C for $T_a \leq +60\text{ °C}$
 - T110 °C for $T_a \leq +90\text{ °C}$ for sizes 85 x 85, 120 x 120
- Gas, Zone 0:
 - Conforming to ATEX 94/9/EC: Ⓔ II 1G
 - Conforming to IECEx : EPL Ga
 - Type of Protection: Ex ia IIC
 - Temperature class:
 - T6 for $T_a \leq +40\text{ °C}$, T5 for $T_a \leq +60\text{ °C}$
 - T3 for $T_a \leq +90\text{ °C}$ for sizes 85 x 85, 120 x 120
- Dust, Zone 20:
 - Conforming to ATEX: Ⓔ II 1D
 - Conforming to IECEx: EPL Da
 - Type of Protection: Ex ia IIIC
 - Surface Temperature :
 - T60 °C for $T_a \leq +40\text{ °C}$, T90 °C for $T_a \leq +60\text{ °C}$
 - T110 °C for $T_a \leq +90\text{ °C}$ for sizes 85 x 85, 120 x 120
- Ambient Temperatures :
 - 55 °C $\leq T_a \leq +60\text{ °C}$ (EPDM gasket)
 - 55 °C $\leq T_a \leq +90\text{ °C}$ (silicone gasket)
- ATEX Certificate : LCIE 12 ATEX 3037X
- EC Declaration of Conformity : 50291
- IECEx Certificate : IECEx LCIE 13.0003X
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance: IK10

INCREASED SAFETY EX E ZONE 1 RATED JUNCTION BOXES

JBEP Series Undrilled and Predrilled, Empty Fiberglass Reinforced Polyester Junction Boxes

Increased Safety. For Field Drilling and Customization

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

◆EURASEC Certification

— EURASEC N° TC RU C-FR.1505.B.00911

◆Others Certification

— INMETRO Certificate: BVC 13.3238 - X ①

Related Products

- Cable glands for use with armored and unarmored cable are available, see *Fittings: Cable Glands*.

Catalog Numbering Guide - JBEP Undrilled and Predrilled, Empty Junction Boxes

JBE	P	08	08	06	0	G
Series: JBE - ATEX/IECEX Certified Junction Box	Material: P - Polyester	Dimensions Height: 08 - 85 mm 12 - 120 mm 17 - 170 mm 20 - 200 mm 21 - 215 mm 23 - 230 mm 25 - 250 mm 32 - 320 mm 50 - 500 mm 75 - 750 mm	Dimensions Width: 08 - 85 mm 12 - 120 mm 17 - 170 mm 20 - 200 mm 21 - 215 mm 25 - 250 mm 32 - 320 mm 50 - 500 mm 75 - 750 mm	Dimensions Depth: 06 - 61 mm 07 - 66 mm 09 - 91 mm 09S - 91 mm 11 - 116 mm 15 - 150 mm 23 - 230 mm	Gland Plates (for location see chart below): 0 - No Gland Plate 1 - Bottom, Plastic 2 - Top and Bottom, Plastic 3 - Bottom and Sides, Plastic 4 - All Sides Plastic, 5 - Bottom, Brass 6 - Top and Bottom, Brass 7 - Bottom and Sides, Brass 8 - All Sides, Brass	Options: (Options must be listed alphabetically) A - Earth continuity Brass Plate G - Cable Glands M - Mounting Pan H - Hinges for sizes : 500 or 750 x 320 x 150 or 230 HR - Horizontal DIN-Rail VR - Vertical DIN-Rail # - Customized at Factory

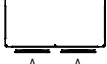
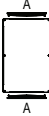
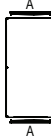
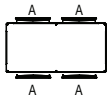
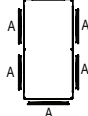
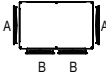
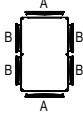
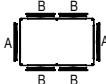
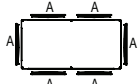
① Inmetro certification available on special request only. Contact your local sales for more information

JBEP Series Undrilled and Predrilled, Empty Fiberglass Reinforced Polyester Junction Boxes

Increased Safety. For Field Drilling and Customization

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

Gland Plate Location Chart ①

Height x Width x Depth Dimensions in Millimeters					
250 x 320 x 150	500 x 320 x 150 500 x 320 x 230	750 x 320 x 150 750 x 320 x 230	320 x 500 x 150 320 x 500 x 230	320 x 750 x 150 320 x 750 x 230	
Bottom					
					
Top and Bottom					
					
Bottom and Sides					
N/A					
All Sides					
N/A					

Spare Removable Gland Plate — Supplied with Gasket and Hardware

	Description	Size	Weight – kg	Volume – dm ³	Size – mm	Catalog Number
	Plastic	A	0.5	0.8	127 X 268	JBEPGPPA
	Plastic	B	0.51	0.6	127 X 203	JBEPGPPB
	Brass	A	1.5	0.8	127 X 268	JBEPGPBA
	Brass	B	1.30	0.6	127 X 203	JBEPGPBB

① A = 127 x 268
B = 127 x 203

JBEP Series Undrilled, Empty Fiberglass Reinforced Polyester Junction Boxes

Increased Safety. For Field Drilling and Customization

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

Ex eb IIC Polyester Enclosures

For use with Ex certified terminals only (not supplied). DIN-Rail not supplied.

For DIN Rail dimensions, see DIN Rail Sizes chart on following page.

	Dimension – H x W x D – mm	Enclosure Weight – kg	Enclosure Volume – dm ³	Shipping Carton Volume – dm ³	Catalog Number ①
	85 x 85 x 60	0.38	0.43	1.35	JBEP0808060 ②
	120 x 120 x 91	0.75	1.31	1.98	JBEP121209S0
	170 x 170 x 91	1.32	2.63	4.04	JBEP1717090
	200 x 215 x 95	2.06	4.09	9.54	JBEP2021100
	200 x 215 x 150	2.67	6.45	9.54	JBEP2021150
	250 x 320 x 150	3.90	12.00	19.35	JBEP2532150
	500 x 320 x 150	6.39	24.00	71.63	JBEP5032150
	750 x 320 x 150	8.69	36.00	46.41	JBEP7532150
	320 x 250 x 150	3.90	12.00	19.35	JBEP3225150
	320 x 500 x 150	6.39	24.00	71.63	JBEP3250150
	320 x 750 x 150	8.69	36.00	46.41	JBEP3275150
	500 x 320 x 230	8.02	36.80	71.63	JBEP5032230
	750 x 320 x 230	11.54	55.20	82.13	JBEP7532230
	320 x 500 x 230	8.02	36.80	71.63	JBEP3250230
	320 x 750 x 230	11.54	55.20	82.13	JBEP3275230

① To order enclosure fitted with removable gland plate as standard, replace last digit of the catalog number 0 with 1 to 8; example: JBEP3275238.

② Due to the small size of the JBEP0808060, the optional Laminated Plastic Nameplate for Engraving is not recommended for this enclosure.

The 85 x 85 x 60 mm dimensions do not allow for mounting space beyond the factory adhered product label.

Shaded catalog numbers are normally stocked items. All other items are made to order.

JBEP Series Predrilled, Empty Fiberglass Reinforced Polyester Junction Boxes

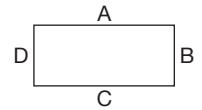
Increased Safety. For Field Drilling and Customization

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



Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes Equipped with One horizontal Symmetrical Zinc Plated Rail, Yellow Laminated Plastic Label with Black Lettering, Internal earth terminal, and Earth Continuity Device.

*For use with Ex terminals only (not supplied).
Cable glands and plugs ordered separately.*



Enclosure Type	Rail Length Capacity (mm)	Entry Layout	Clearance Holes Per Side				Weight kg	Volume dm ³	Dimensions H x W x D – mm	Catalog Number
			A	B	C	D				
JBEP080806	41		—	1 x M20	1 x M20	1 x M20	0.42	0.44	85 x 85 x 60	JBEP080806003 ①
JBEP080806	41		1 x M20	1 x M20	1 x M20	1 x M20	0.42	0.44	85 x 85 x 60	JBEP080806004 ①
JBEP121209S	73		—	1 x M20	1 x M20	1 x M20	0.85	1.31	120 x 120 x 91	JBEP121209003
JBEP121209S	73		1 x M20	1 x M20	1 x M20	1 x M20	0.85	1.31	120 x 120 x 91	JBEP121209004
JBEP171709	122		1 x M20	1 x M20	1 x M20	1 x M20	1.54	2.65	170 x 170 x 91	JBEP171709004
JBEP171709	122		—	2 x M20	2 x M20	2 x M20	1.54	2.65	170 x 170 x 91	JBEP171709006
JBEP171709	122		1 x M25	1 x M25	1 x M25	1 x M25	1.54	2.65	170 x 170 x 91	JBEP171709014
JBEP171709	122		—	2 x M25	2 x M25	2 x M25	1.54	2.65	170 x 170 x 91	JBEP171709016

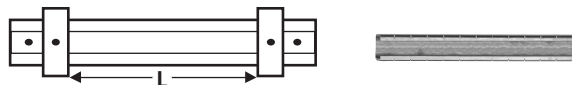
① Due to the small size of the JBEP0808060, the optional Laminated Plastic Nameplate for Engraving is not recommended for this enclosure.
The 85 x 85 x 60 mm dimensions do not allow for mounting space beyond the factory adhered product label.

JBEP Series Undrilled and Predrilled, Empty Fiberglass Reinforced Polyester Junction Boxes Horizontal Din Rail

Increased Safety. For Field Drilling and Customization

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

Rail size for JBEP080806 15 x 5.5 mm. All other rail sizes are 35 x 15 mm or 35 x 7.5 mm.
Terminal block WDU used for all sizes.



Enclosure Catalog Number		Horizontal Terminal Rail			Number of Terminals of the same pitch per rail — Nominal cross section (mm²)/pitch (mm)										Earthing Bar
		Overall Length	L	Max. Qty	2.5 / 5.1	4 / 6.1	6 / 7.9	10 / 9.9	16 / 11.9	35 / 16	50 / 18.5	70 / 20.5	95/120 / 27		
JBEP0808060		70	41	1	6	4	4	0	0	0	0	0	0	N/A	
JBEP121209S0		94	73	1	14	12	0	0	0	0	0	0	0	N/A	
JBEP1717090		150	122	1	24	20	15	12	9	0	0	0	0	90	
JBEP2021100		190	165	1	32	27	20	16	13	9	0	0	0	195	
JBEP2021150		199	165	1	32	27	20	16	13	9	0	0	0	155	
JBEP2532150		296	245	2	96	80	34	27	22	16	0	0	0	230	
JBEP3225150		223	199	2	78	66	50	40	32	12	10	9	0	160	
JBEP3250150		476	450	2	176	146	114	90	74	27	23	21	0	470	
JBEP3250230		476	450	2	176	146	114	90	74	27	23	21	0	470	
JBEP3275150		728	700	2	274	228	176	140	116	43	37	33	0	720	
JBEP3275230		728	700	2	274	228	176	140	116	43	37	33	0	720	
JBEP5032150		296	270	4	198	168	100	79	66	32	14	12	9	230	
JBEP5032230		296	270	4	198	168	100	79	66	32	14	12	9	230	
JBEP7532150		296	270	6	318	264	168	133	88	46	28	24	9	230	
JBEP7532230		296	270	6	318	264	168	133	88	46	28	24	9	230	

INCREASED SAFETY EX E ZONE 1 RATED JUNCTION BOXES

Enclosures and Junction Boxes

JBEP Series Undrilled and Predrilled, Empty Fiberglass Reinforced Polyester Junction Boxes Vertical Din Rail

Increased Safety. For Field Drilling and Customization

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

Rail size for JBEP080806 15 x 5.5 mm. All other rail sizes are 35 x 15 mm or 35 x 7.5 mm.
Terminal block WDU used for all sizes.



Enclosure Catalog Number	Vertical Terminal Rail	Length			Max. Qty	Number of Terminals of the same pitch per rail — Nominal cross section (mm²) and pitch (mm)												Earthing Bar
		Length	L			2.5 / 5.1	4 / 6.1	6 / 7.9	10 / 9.9	16 / 11.9	35 / 16	50 / 18.5	70 / 20.5	95/120 / 27				
JBEP0808060	I	70	41	1		6	4	4	0	0	0	0	0	0				N/A
JBEP121209S0	I	94	73	1		14	12	0	0	0	0	0	0	0				N/A
JBEP1717090	I	150	122	1		24	20	15	12	9	0	0	0	0				128
JBEP2021100	I	178	149	1		29	24	18	15	11	8	0	0	0				155
JBEP2021150	I	178	149	1		29	24	18	15	11	8	0	0	0				195
JBEP2532150	II	223	199	2		78	66	50	40	32	12	10	9	0				160
JBEP3225150	II	296	245	2		96	80	34	27	22	16	0	0	0				230
JBEP3250150	III	296	270	4		198	168	100	79	64	32	14	12	9				230
JBEP3250230	III	296	270	4		198	168	100	79	64	32	14	12	9				230
JBEP3275150	IIII	296	270	6		318	264	168	133	88	46	28	24	9				230
JBEP3275230	IIII	296	270	6		318	264	168	133	88	46	28	24	9				230
JBEP5032150	IIII	476	450	2		176	146	114	90	74	27	23	21	0				470
JBEP5032230	IIII	476	450	2		176	146	114	90	74	27	23	21	0				470
JBEP7532150	IIII	728	700	2		274	228	176	140	116	43	37	33	9				720
JBEP7532230	IIII	728	700	2		274	228	176	140	116	43	37	33	9				720

Enclosures and Junction Boxes

INCREASED SAFETY EX E ZONE 1 RATED JUNCTION BOXES

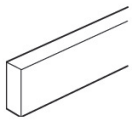
JBEP Series Undrilled and Predrilled, Empty Fiberglass Reinforced Polyester Junction Boxes

Increased Safety. Factory Drilled and Equipped

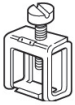
Zones 1 & 2 – 21 & 22
Gas (G) and Dust (D)

Solid Copper Bar — Available in 1 Meter Length Pieces

Enclosure Catalog Number	Horizontal Bar Length – mm	Vertical Bar Length – mm	Catalog Number
For 10 x 3 mm length is 1 meter			CB1M
JBEP1717090	128	90	
JBEP2021100	195	97	
JBEP2021150	195	97	
JBEP2532150	300	230	
JBEP3225150	230	300	
JBEP3250150	480	305	
JBEP3250230	480	305	
JBEP3275150	730	300	
JBEP3275230	730	300	
JBEP5032150	305	480	
JBEP5032230	305	480	
JBEP7532150	300	730	
JBEP7532230	300	730	



Cable Clamp for Copper Bar — Pack of 10 — 10 x 3 mm

	Flexible	Solid	Catalog Number
	0.5 to 4 mm ²	6 mm ²	CC6MM
	2.5 to 16 mm ²	16 mm ²	CC16MM
	16 to 35 mm ²	50 mm ²	CC50MM

Spacer for Copper Bar — Supplied with Mounting Inserts

Description	Height – mm	Catalog Number
 Insulated	50	JBEP CBI
Non-Insulated	50	JBEP CBNI

Mounting Pan — Solid Galvanized Steel — Supplied with Screws

Enclosure Catalog Number	Dimensions – mm Height x Width x Thickness	Catalog Number
JBEP0808060	46 x 75 x 1	JBEP0407
JBEP121209S0	100 x 80 x 1	JBEP1008
JBEP1717090	152 x 150 x 1	JBEP1515
JBEP2021100, JBEP2021150	185 x 170 x 1.5	JBEP1518
JBEP3225150, JBEP2532150	260 x 230 x 2	JBEP2623
JBEP3250150, JBEP3250230, JBEP5032150, JBEP5032230	480 x 260 x 2	JBEP4826
JBEP3275150, JBEP3275230, JBEP7532150, JBEP7532230	730 x 260 x 2	JBEP7326



INCREASED SAFETY EX E ZONE 1 RATED JUNCTION BOXES

Enclosures and Junction Boxes

JBEP Series Undrilled and Predrilled, Empty Fiberglass Reinforced Polyester Junction Boxes

Increased Safety. Factory Drilled and Equipped

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

Earth Continuity Brass Plate — Thickness: 3.00 mm

Enclosure Catalog Number	Side – mm	Catalog Number	Bottom – mm	Catalog Number
JBEP121209S0	58 x 44	JBEP02S	72 x 44	JBEP02B
JBEP1717090	105 x 65	JBEP05S	127 x 65	JBEP05B
JBEP2021100	105 x 65	JBEP06S	150 x 65	JBEP06B
JBEP2021150	105 x 105	JBEP07S	150 x 105	JBEP07B
JBEP2532150	150 x 116	JBEP08S	250 x 116	JBEP08B
JBEP3225150	250 x 116	JBEP10S	150 x 116	JBEP10B
JBEP3250150	250 x 116	JBEP11S	180 x 116	JBEP11B
JBEP3250230	250 x 196	JBEP16S	180 x 196	JBEP16B
JBEP3275150	250 x 116	JBEP12S	305 x 116	JBEP12B
JBEP3275230	250 x 196	JBEP17S	305 x 196	JBEP17B
JBEP5032150	180 x 116	JBEP09S	250 x 116	JBEP09B
JBEP5032230	180 x 196	JBEP13S	250 x 196	JBEP13B
JBEP7532150	305 x 116	JBEP14S	250 x 116	JBEP14B
JBEP7532230	305 x 196	JBEP15S	250 x 196	JBEP15B



Mounting Screws — Self Tapping — Used for Mounting DIN Rails and Mounting Pan — Pack of 50

Description	Catalog Number
 Sheet metal screw with a drill point and a Phillips pan head	JBEPMS8

Enclosures and Junction Boxes

INCREASED SAFETY EX E ZONE 1 RATED JUNCTION BOXES

JBEP Series Undrilled and Predrilled, Empty Fiberglass Reinforced Polyester Junction Boxes

Increased Safety. Factory Drilled and Equipped

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

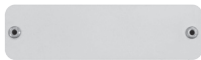
Self Adhesive Pocket for Drawings — Set of 5, A4 Size

	External Dimension – mm	Internal Dimensions – mm	Catalog Number
	260 x 165	230 x 130 x 18	JBEPSAP

Set of 5 — Self adhesive plastic protective sleeve, Size A4.

JBEPSAPS

Laminated Plastic Nameplate for Engraving ②

	Description	Size – mm	Catalog Number
	White color with black lettering, two (2) mounting rivets included	65 x 18	NPW
	Yellow color with black lettering, two (2) mounting rivets included	65 x 18	NPY

Feed-Thru Earth/Ground Terminal

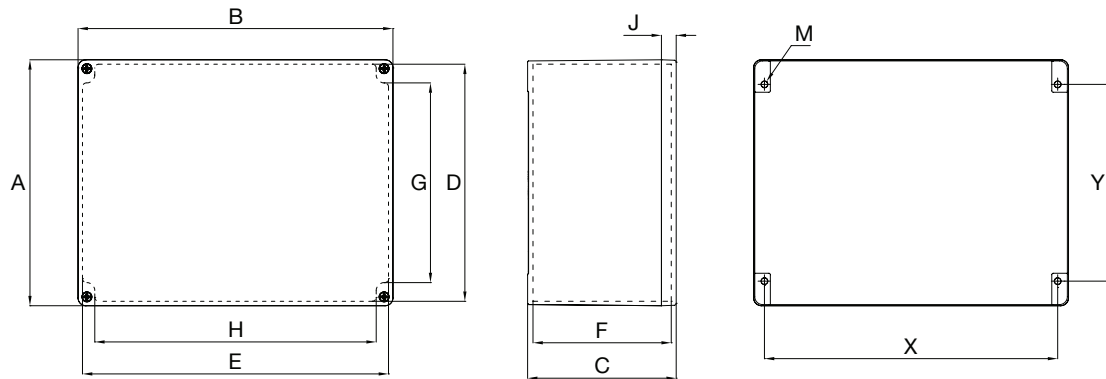
	Description	Size	Catalog Number
	Stainless steel, complete with gasket washer, lock washers, nuts for internal and external cable connections	M8	JBEPET
	Set of 10 — Press fit, brass expansion insert	M5	JBPEPEXI

② Due to the size of JBEP0808060, optional Laminated Plastic Nameplate for Engraving is not recommended for this enclosure.
The 85 x 85 x 60 mm dimensions do not allow for mounting space beyond the factory adhered product label.

JBEP Series Undrilled and Predrilled, Empty Fiberglass Reinforced Polyester Junction Boxes

Increased Safety. For Field Drilling and Customization

Dimensions in Millimeters ①



Enclosure Catalog Number	External Dimension			Internal Dimensions					Cover J	Body Thickness	Wall Fixing		
	A	B	C	D	E	F	G	H			X	Y	M ②
JBEP0808060	85	85	61	76.7	76.7	47	41	51	15	3.5	69	49	M4
JBEP1212070	120	120	66	109.5	109.5	50.7	63	85	15	4.5	103	83	M5
JBEP1212090	120	120	91	109.5	109.5	75	63	85	40	4.5	103	83	M5
JBEP121209S0	120	120	91	108.6	108.6	75	63	85	15	4.5	103	83	M5
JBEP1717090	170	170	91	158.5	158.5	72	112.5	137	15	4.5	153	131	M5
JBEP1712090	170	120	91	159.5	109.5	75	107.3	87	40	4.5	103	131	M5
JBEP2021100	200	215	95	185.8	200.8	76	116	159	20	6.1	189	146	M6
JBEP2021150	200	215	145	185.8	200.8	122.5	114.8	159	20	6.1	189	146	M6
JBEP2532150	250	320	150	241	311	133.5	171	267	15	4.5	200	298	M6
JBEP3225150	320	250	150	311	241	133.5	267	171	15	4.5	298	200	M6
JBEP3250150	320	500	150	311	491	133.5	267	421	15	4.5	298	447	M6
JBEP3250230	320	500	230	311	491	213.5	267	421	15	4.5	298	447	M6
JBEP3275150	320	750	150	311	741	133.5	267	671	15	4.5	298	698	M6
JBEP3275230	320	750	230	311	741	213.5	267	671	15	4.5	298	698	M6
JBEP5032150	500	320	150	491	311	133.5	421	267	15	4.5	447	298	M6
JBEP5032230	500	320	230	491	311	213.5	421	267	15	4.5	447	298	M6
JBEP7532150	750	320	150	741	311	133.5	671	267	15	4.5	298	698	M6
JBEP7532230	750	320	230	741	311	213.5	671	267	15	4.5	698	298	M6

① Wall fixing screw diameter 5 mm . Wall fixing screw hole 6 mm.

② Screw to be used for mounting box.

JBEP Series Fiberglass Reinforced Polyester Terminal Junction Boxes for Instrumentation Applications

Increased Safety. Factory Drilled and Equipped

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

Applications

- Instrumentation junction boxes are used to run process or remote information to control room.
- For use in intrinsic safety or non intrinsic safety systems.
- Designed for Zones 1 or 2 areas, where flammable gases or vapors are present either continuously, often or accidentally such as:
 - Petroleum
 - Chemical
 - Refineries
 - Other industrial process facilities
- Ideal for indoor/outdoor use with wet or corrosive atmospheres.
- Designed for use in Zones 21 or 22 areas where flammables dusts (conductive and non conductive) are present either continuously, often or accidentally such as:
 - Food processing
 - Dairy
 - Brewing
 - Other industrial process facilities
- Designed for Zone 0 and Zone 20 Intrinsically Safe applications when used with rated terminals .

Features

- Available in a wide range of sizes:
 - For armored, unarmored or armored lead sheathed cable
 - For use with a variety of connection and earth terminals
- Optional external hinged enclosures:
 - Reversible door opening 120°.
 - Door with double bar lock.
 - Key locking facility.
- Terminal blocks on DIN rail.

Standard materials

- Enclosures: Static resistant carbon filled fiberglass reinforced polyester (FRP)
- Hardware: stainless steel
- Gasket for other sizes: EPDM (ethylene propylene diene monomer rubber)

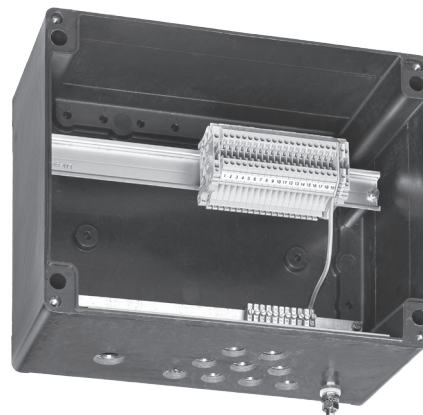
Options

- External hinges are available on the following sizes:
 - 500 x 320 x 150 mm
 - 500 x 320 x 230 mm
 - 750 x 320 x 150 mm
 - 750 x 320 x 230 mm
- Removable glands plates
- Nameplates
- Mounting pan
- Inside pocket for document
- Consult factory for custom drilling, assembly requirements and other ambient temperatures.

Certifications and Compliances ②

◆ATEX/IECEx Certification

- Type : JBEP
 - Gas, Zones 1 and 2:
 - Conforming to ATEX 94/9/EC: Ⓢ II 2G
 - Conforming to IECEx : EPL Gb
 - Type of Protection: Ex eb IIC, Ex eb ia IIC, Ex eb ib IIC,
 - Temperature class: T6 for $T_a \leq +40^\circ\text{C}$ and T5 for $T_a \leq +60^\circ\text{C}$



Cable Glands are available as an Option.

- Dust, Zones 21 and 22:
 - Conforming to ATEX: Ⓢ II 2D
 - Conforming to IECEx: EPL Db
 - Type of Protection: Ex tb IIC
 - Surface Temperature:
 - T60 °C for $T_a \leq +40^\circ\text{C}$, T90 °C for $T_a \leq +60^\circ\text{C}$
- Gas, Zone 0:
 - Conforming to ATEX 94/9/EC: Ⓢ II 1G
 - Conforming to IECEx : EPL Ga
 - Type of Protection: Ex ia IIC
 - Temperature class: T6 for $T_a \leq +40^\circ\text{C}$ and T5 for $T_a \leq +60^\circ\text{C}$
- Dust, Zone 20:
 - Conforming to ATEX: Ⓢ II 1D
 - Conforming to IECEx: EPL Da
 - Type of Protection: Ex ta IIC
 - Surface Temperature:
 - T60 °C for $T_a \leq +40^\circ\text{C}$, T90 °C for $T_a \leq +60^\circ\text{C}$
- Ambient Temperatures : $-55^\circ\text{C} \leq T_a \leq +60^\circ\text{C}$
- ATEX Certificate : LCIE 12 ATEX 3037X
- EC Declaration of Conformity : 50291
- IECEx Certificate : IECEx LCIE 13.0003X
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance: IK10

◆EURASEC Certification

- EURASEC N° TC RU C-FR.1605.B.00911

◆Others Certification

- INMETRO Certificate: BVC 13.3238 - X ①

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

② The ambient temperature for complete assembly is equal to the lowest ambient temperature of the components used.

JBEP Series Fiberglass Reinforced Polyester Terminal Junction Boxes for Instrumentation Applications

Increased Safety. Factory Drilled and Equipped

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

◆Components ambient temperature

- Type : Bve (plastic close up plug)
— Ambient Temperatures : -40 °C to +55 °C
- Type : 757 (nickel plated close up plug)
— Ambient Temperatures : -60 °C to +100 °C
- Type : EEXe (plastic cable gland)
— Ambient Temperatures : -20 °C to +55 °C
- Type : E1FX, E2FX, E1FW, E2FW, T3, A2F (metal cable gland)
— Ambient Temperatures : -60 °C to +130 °C
- Type : PX, PX2K (metal cable gland)
— Ambient Temperatures : -60 °C to +100 °C
- Type : DBE (drain/breather)
— Ambient Temperatures : -50 °C to +85 °C
- Type : WDU, WFF (terminal)
— Ambient Temperatures : -50 °C to +120 °C
- Type : SAK, AKZ (terminal)
— Ambient Temperatures : -50 °C to +100 °C

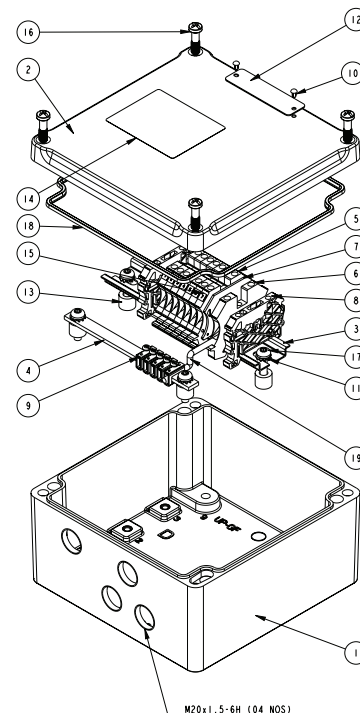
The ambient temperature for complete assembly is equal to the lowest ambient temperature of the components used.

Related Products

- For a complete offering of cable glands for use with armored and unarmored cable, see *Fittings: Cable Glands*.

Illustrated Features — Sample of JBEP171709NI01

Description	
1	Body Of Polyester Box 170 x 170 x 90
2	Cover Of Polyester Box 170 x 170 x 91
3	DIN Rail
4	Copper Bar 10 x 3
5	Terminal Block - ATEX/IECEx: WDU 2.5; NBR IEC: Ex e
6	Terminal Block - ATEX/IECEx: WPE 2.5; NBR IEC: Ground
7	Plate - ATEX/IECEx: WAP 2.5/10; NBR IEC: Plate
8	End Bracket
9	Cable Clamp 2.5 mm ² - Capacity
10	Stainless Steel Rivet 2.5 x 5
11	Serrated Washer 5
12	Label Gravoply - Yellow
13	Nylons Spacer Lg. 10 Mm
14	Label 54 x 68
15	Terminal Marker
16	Screw M6 x 20 x 10
17	Screw M5 x 20
18	Gasket For Polyester Box 170 x 170 x 91
19	G/Y Cable 2.5 mm ²



JBEP Series Fiberglass Reinforced Polyester Terminal Junction Boxes for Instrumentation Applications

Increased Safety. Factory Drilled and Equipped

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

The Catalog Numbering Guide is a reference tool to explain the make-up of the catalog number. It is not to be used to create a custom product for ordering.

Catalog Numbering Guide - JBEP Polyester Junction Boxes for Instrumentation Applications

JBE	P	17	17	09	A	I	01	D
Series: JBE - ATEX/IECEX Certified Junction Box	Material: P - Polyester	Dimensions Height : 17 - 170 mm 20 - 200 mm 21 - 215 mm 25 - 250 mm 32 - 320 mm 50 - 500 mm 75 - 750 mm	Dimensions Width: 17 - 170 mm 21 - 215 mm 25 - 250 mm 32 - 320 mm 50 - 500 mm 75 - 750 mm	Dimensions Depth: 09 - 91 mm 15 - 150 mm 23 - 230 mm	Cable Type: A - Armored N - Non-Armored L - Armored Lead Sheathed	Options: I - Instrumentation	Suffix: 01 to 99 Assigned at Factory	Options: D - Drain

Enclosures and Junction Boxes

INCREASED SAFETY EX E ZONE 1 RATED JUNCTION BOXES

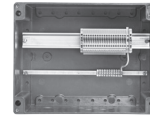
JBEP Series Fiberglass Reinforced Polyester Terminal Junction Boxes for Instrumentation Applications

Increased Safety. Factory Drilled and Equipped

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

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes Equipped with Terminals for Instrumentation Applications with Unarmored Cables

Fitted with: Horizontal beige terminal block. Copper bar with cable clamps or continuity shields.
Yellow laminated plastic label with black lettering. M16 to M32 threaded entries. M40 to M50 clearance holes. Cable glands and plugs ordered separately.



Unarmored Cables

For Cable U1000 R02V	Terminal Block 0.5/2.5 mm ² Qty.	Earth Terminal 0.5/2.5 mm ² Qty.	Copper Bar 10 x 3 mm Qty.	Cable Clamp 0.5/2.5 mm ² Qty.	Multi-Cable Cable Entry Qty. 1	Single Cable Entries M20 Qty.	Catalog Number ①
07G1.5	7	1	1	5	M20	3	JBEP171709NI01
12G1.5	12	1	1	8	M25	6	JBEP202115NI02
19G1.5	19	1	1	11	M25	9	JBEP253215NI03
24G1.5	24	1	1	14	M32	12	JBEP253215NI04
27G1.5	27	1	1	15	M32	13	JBEP253215NI05
37G1.5	37	1	1	20	M32	18	JBEP253215NI06
07G2.5	7	1	1	5	M20	3	JBEP171709NI07
12G2.5	12	1	1	8	M25	6	JBEP202115NI08
19G2.5	19	1	1	11	M32	9	JBEP253215NI09
24G2.5	24	1	1	14	M32	12	JBEP253215NI10
27G2.5	27	1	1	15	M32	13	JBEP253215NI11
37G2.5	37	1	1	20	M40	18	JBEP253215NI12
For Cable EGSF	Terminal Block 0.5/2.5 mm ² Qty.	Continuity Shield Qty.			Multi-Cable Cable Entry Qty. 1	Single Cable Entries M16 Qty.	Catalog Number ①
07IP05	14	7			M20	7	JBEP202115NI21
07IT05	21	7			M20	7	JBEP202115NI22
12IP05	24	12			M25	12	JBEP253215NI23
12IT05	36	12			M25	12	JBEP253215NI24
19IP05	38	19			M32	19	JBEP253215NI25
27IP05	54	27			M32	27	JBEP325015NI26
07IP09	14	7			M25	7	JBEP202115NI27
07IT09	21	7			M25	7	JBEP202115NI28
12IP09	24	12			M32	12	JBEP253215NI29
12IT09	36	12			M32	12	JBEP253215NI30
19IP09	38	19			M32	19	JBEP253215NI31
27IP09	54	27			M40	27	JBEP325015NI32
For Cable EISF	Terminal Block 0.5/2.5 mm ² Qty.	Continuity Shield Qty.			Multi-Cable Cable Entry Qty. 1	Single Cable Entries M16 Qty.	Catalog Number ①
07IP05	15	8			M25	7	JBEP202115NI41
07IT05	22	8			M32	7	JBEP202115NI42
12IP05	25	13			M32	12	JBEP253215NI43
12IT05	37	13			M32	12	JBEP253215NI44
19IP05	39	20			M40	19	JBEP253215NI45
27IP05	55	28			M40	27	JBEP325015NI46
07IP09	15	8			M32	7	JBEP202115NI47
07IT09	22	8			M32	7	JBEP202115NI48
12IP09	25	13			M40	12	JBEP253215NI49
12IT09	37	13			M40	12	JBEP253215NI50
19IP09	39	20			M50	19	JBEP253215NI51
27IP09	55	28			M50	27	JBEP325015NI52

① For JBEP terminal junction box with a drain, add suffix **D** to the end of the catalog number; example: JBEP171709NI01D.

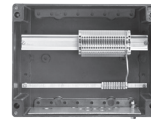
JBEP Series Fiberglass Reinforced Polyester Terminal Junction Boxes for Instrumentation Applications

Increased Safety. Factory Drilled and Equipped

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

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes Equipped with Terminals for Instrumentation Applications with Armored Cables

Fitted with: Horizontal beige terminal block. Copper bar with cable clamps or continuity shields. Yellow laminated plastic label with black lettering. Earth continuity brass plate. M8 external earth crossing terminal. M20 to M32 threaded entries. M40 to M50 clearance holes. Cable glands and plugs ordered separately.



Armored Cables

For Cable U1000 RVFV	Terminal Block 0.5/2.5 mm ² Qty.	Earth Terminal 0.5/2.5 mm ² Qty.	Copper Bar 10 x 3 mm Qty.	Cable Clamp 0.5/2.5 mm ² Qty.	Multi-Cable Cable Entry Qty. 1	Single Cable Entries M20 Qty.	Catalog Number ①
07G1.5	7	1	1	5	M20	3	JBEP171709AI01
12G1.5	12	1	1	8	M20	6	JBEP202115AI02
19G1.5	19	1	1	11	M25	9	JBEP253215AI03
24G1.5	24	1	1	14	M25	12	JBEP253215AI04
27G1.5	27	1	1	15	M25	13	JBEP253215AI05
37G1.5	37	1	1	20	M32	18	JBEP253215AI06
07G2.5	7	1	1	5	M20	3	JBEP171709AI07
12G2.5	12	1	1	8	M25	6	JBEP202115AI08
19G2.5	19	1	1	11	M25	9	JBEP253215AI09
24G2.5	24	1	1	14	M32	12	JBEP253215AI10
27G2.5	27	1	1	15	M32	13	JBEP253215AI11
37G2.5	37	1	1	20	M32	18	JBEP253215AI12
For Cable EGFA	Terminal Block 0.5/2.5 mm ² Qty.	Continuity Shield Qty.			Multi-Cable Cable Entry Qty. 1	Single Cable Entries M20 Qty.	Catalog Number ①
07IP05	14	7			M20	7	JBEP202115AI21
07IT05	21	7			M20	7	JBEP202115AI22
12IP05	24	12			M25	12	JBEP253215AI23
12IT05	36	12			M25	12	JBEP253215AI24
19IP05	38	19			M25	19	JBEP253215AI25
27IP05	54	27			M32	27	JBEP325015AI26
07IP09	14	7			M25	7	JBEP202115AI27
07IT09	21	7			M25	7	JBEP202115AI28
12IP09	24	12			M25	12	JBEP253215AI29
12IT09	36	12			M32	12	JBEP253215AI30
19IP09	38	19			M32	19	JBEP253215AI31
27IP09	54	27			M40	27	JBEP325015AI32
For Cable EIFA	Terminal Block 0.5/2.5 mm ² Qty.	Continuity Shield Qty.			Multi-Cable Cable Entry Qty. 1	Single Cable Entries M20 Qty.	Catalog Number ①
07IP05	15	8			M25	7	JBEP202115AI41
07IT05	22	8			M25	7	JBEP202115AI42
12IP05	25	13			M32	12	JBEP253215AI43
12IT05	37	13			M32	12	JBEP253215AI44
19IP05	39	20			M32	19	JBEP253215AI45
27IP05	55	28			M40	27	JBEP325015AI46
07IP09	15	8			M32	7	JBEP202115AI47
07IT09	22	8			M32	7	JBEP202115AI48
12IP09	25	13			M40	12	JBEP253215AI49
12IT09	37	13			M40	12	JBEP253215AI50
19IP09	39	20			M40	19	JBEP253215AI51
27IP09	55	28			M50	27	JBEP325015AI52

① For JBEP terminal junction box with a drain, add suffix **D** to the end of the catalog number; example: JBEP171709NI01D.

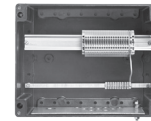
Shaded catalog numbers are normally stocked items. All other items are made to order.

JBEP Series Fiberglass Reinforced Polyester Terminal Junction Boxes for Instrumentation Applications

Increased Safety. Factory Drilled and Equipped

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

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes Equipped with Terminals for Instrumentation Applications with Lead Sheath Armored Cables
Fitted with: Horizontal beige terminal block. Copper bar with cable clamps or continuity shields. Yellow laminated plastic label with black lettering. Earth continuity brass plate. M8 external earth crossing terminal. M20 to M32 threaded entries. M40 to M50 clearance holes. Cable glands and plugs ordered separately.



Armored Cables
With lead sheath

For Cable U1000 RGPFV	Terminal Block 0.5/2.5 mm ² Qty.	Earth Terminal 0.5/2.5 mm ² Qty.	Copper Bar 10 x 3 mm Qty.	Cable Clamp 0.5/2.5 mm ² Qty.	Multi-Cable Cable Entry Qty. 1	Single Cable Entries M20 Qty.	Catalog Number ①
07G1.5	7	1	1	5	M20	3	JBEP171709LI01
12G1.5	12	1	1	8	M25	6	JBEP202115LI02
19G1.5	19	1	1	11	M25	9	JBEP253215LI03
24G1.5	24	1	1	14	M32	12	JBEP253215LI04
27G1.5	27	1	1	15	M32	13	JBEP253215LI05
37G1.5	37	1	1	20	M32	18	JBEP253215LI06
07G2.5	7	1	1	5	M20	3	JBEP171709LI07
12G2.5	12	1	1	8	M25	6	JBEP202115LI08
19G2.5	19	1	1	11	M32	9	JBEP253215LI09
24G2.5	24	1	1	14	M32	12	JBEP253215LI10
27G2.5	27	1	1	15	M32	13	JBEP253215LI11
37G2.5	37	1	1	20	M40	18	JBEP253215LI12
For Cable EGPF	Terminal Block 0.5/2.5 mm ² Qty.	Continuity Shield Qty.			Multi-Cable Cable Entry Qty. 1	Single Cable Entries M20 Qty.	Catalog Number ①
07IP05	14	7			M20	7	JBEP202115LI21
07IT05	21	7			M20	7	JBEP202115LI22
12IP05	24	12			M25	12	JBEP253215LI23
12IT05	36	12			M25	12	JBEP253215LI24
19IP05	38	19			M25	19	JBEP253215LI25
27IP05	54	27			M32	27	JBEP325015LI26
07IP09	14	7			M25	7	JBEP202115LI27
07IT09	21	7			M25	7	JBEP202115LI28
12IP09	24	12			M32	12	JBEP253215LI29
12IT09	36	12			M32	12	JBEP253215LI30
19IP09	38	19			M40	19	JBEP253215LI31
27IP09	54	27			M40	27	JBEP325015LI32
For Cable EIPF	Terminal Block 0.5/2.5 mm ² Qty.	Continuity Shield Qty.			Multi-Cable Cable Entry Qty. 1	Single Cable Entries M20 Qty.	Catalog Number ①
07IP05	15	8			M25	7	JBEP202115LI41
07IT05	22	8			M32	7	JBEP202115LI42
12IP05	25	13			M32	12	JBEP253215LI43
12IT05	37	13			M32	12	JBEP253215LI44
19IP05	39	20			M40	19	JBEP253215LI45
27IP05	55	28			M50	27	JBEP325015LI46
07IP09	15	8			M32	7	JBEP202115LI47
07IT09	22	8			M32	7	JBEP202115LI48
12IP09	25	13			M40	12	JBEP253215LI49
12IT09	37	13			M40	12	JBEP253215LI50
19IP09	39	20			M50	19	JBEP253215LI51
27IP09	55	28			M50	27	JBEP325015LI52

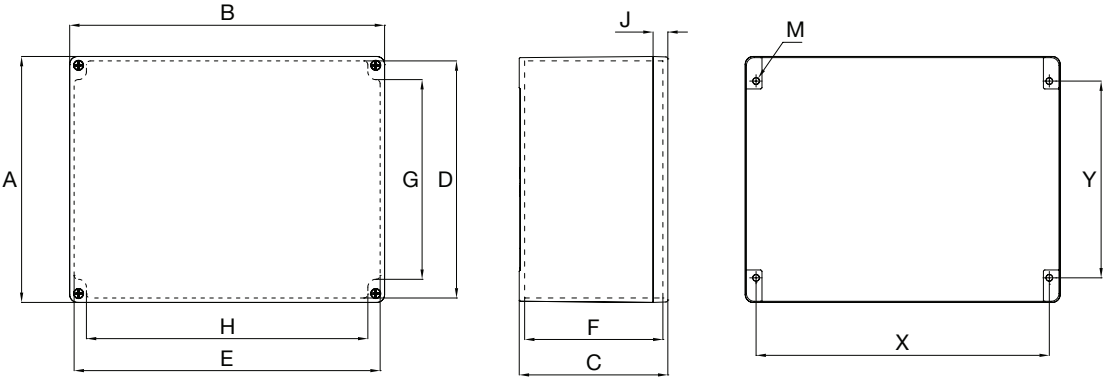
① For JBEP terminal junction box with a drain, add suffix **D** to the end of the catalog number; example: JBEP171709NI01D.

JBEP Series Fiberglass Reinforced Polyester Terminal Junction Boxes for Instrumentation Applications

Increased Safety. Factory Drilled and Equipped

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

Dimensions in Millimeters ①



Enclosure Catalog Number	External Dimension			Internal Dimensions					Cover J	Body Thickness	Wall Fixing		
	A	B	C	D	E	F	G	H			X	Y	M ②
JBEP1717090	170	170	91	158.5	158.5	72	112.5	137	15	4.5	153	131	M5
JBEP2021150	200	215	145	185.8	200.8	122.5	114.8	159	20	6.1	189	146	M6
JBEP2532150	250	320	150	241	311	133.5	171	267	15	5	200	298	M6
JBEP3250150	320	500	150	311	491	133.5	267	421	15	5	298	447	M6

① Wall fixing screw diameter 5 mm . Wall fixing screw hole 6 mm .
② Screw to be used for mounting box.

JBEP Series Fiberglass Reinforced Polyester Terminal Junction Boxes for Electrical and Power Applications

Increased Safety. Factory Drilled and Equipped

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

Applications

- Electrical junction boxes are used to distribute power to lighting and to other Power and control circuits.
- Power junction boxes are used to connect cables together to supply main lighting circuits, motors, service receptacles and other equipment.
- Designed for Zones 1 or 2 areas, where flammable gases or vapors are present either continuously, often or accidentally such as:
 - Petroleum
 - Chemical
 - Refineries
 - Other industrial process facilities
- Ideal for indoor/outdoor use with wet or corrosive atmospheres.
- Designed for use in Zones 21 or 22 areas where flammables dusts (conductive and non conductive) are present either continuously, often or accidentally such as:
 - Food processing
 - Dairy
 - Brewing
 - Other industrial process facilities

Features

- Available in multiple terminal configurations.
- Supplied with terminals Size 2.5 mm² through 240 mm².
- Optional external hinged enclosures:
 - Reversible door opening 120°.
 - Door with double bar lock.
 - Key locking facility.

Standard materials

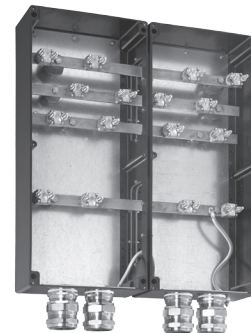
- Enclosures: Static resistant carbon filled fiberglass reinforced polyester (FRP)
- Hardware: stainless steel
- Gasket for sizes 85 x 85, 120 x 120: silicone
- Gasket for other sizes: EPDM (ethylene propylene diene monomer rubber)

Options

- External hinges are available on the following sizes:
 - 500 x 320 x 150 mm
 - 500 x 320 x 230 mm
 - 750 x 320 x 150 mm
 - 750 x 320 x 230 mm
- Removable glands plates
- Nameplates
- Mounting pan
- Inside pocket for document
- Consult factory for custom drilling, assembly requirements and other ambient temperatures.



Un-Armored Cable Glands are Supplied as Standard.
Armored Cable Glands are available as an Option.



Sample of 2 x JBEP753215

Certifications and compliances ①

◆ATEX/IECEx Certification

- **Type : JBEP**
 - Gas, Zones 1 and 2:
 - Conforming to ATEX 94/9/EC: Ⓜ II 2G
 - Conforming to IECEx : EPL Gb
 - Type of Protection: Ex eb IIC
 - Temperature class:
T6 for Ta ≤ +40 °C , T5 for Ta ≤ +60 °C
 - Dust Zones 21 and 22:
 - Conforming to ATEX: Ⓜ II 2D
 - Conforming to IECEx: EPL Db
 - Type of Protection: Ex tb IIIC
 - Surface Temperature :
T60 °C for Ta ≤ +40 °C , T90 °C for Ta ≤ +60 °C
 - Ambient Temperatures : -55 °C ≤ Ta ≤ +60 °C
 - ATEX Certificate : LCIE 12 ATEX 3037X
 - EC Declaration of Conformity : 50291
 - IECEx Certificate : IECEx LCIE 13.0003X
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance: IK10

① The ambient temperature for complete assembly is equal to the lowest ambient temperature of the components used.

JBEP Series Fiberglass Reinforced Polyester Terminal Junction Boxes for Electrical and Power Applications

Increased Safety. Factory Drilled and Equipped

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

Enclosures and Junction Boxes

INCREASED SAFETY EX E ZONE 1 RATED JUNCTION BOXES

◆ Components ambient temperature

- Type : Bve (plastic close up plug)
 - Ambient Temperatures : -40 °C to +55 °C
- Type : 757 (nickel plated close up plug)
 - Ambient Temperatures : -60 °C to +100 °C
- Type : EEXe (plastic cable gland)
 - Ambient Temperatures : -20 °C to +55 °C
- Type : E1FX, E2FX, E1FW, E2FW, T3, A2F (metal cable gland)
 - Ambient Temperatures : -60 °C to +130 °C
- Type : PX, PX2K (metal cable gland)
 - Ambient Temperatures : -60 °C to +100 °C
- Type : DBE (drain/breather)
 - Ambient Temperatures : -50 °C to +85 °C
- Type : WDU, WFF (terminal)
 - Ambient Temperatures : -50 °C to +120 °C
- Type : SAK, AKZ (terminal)
 - Ambient Temperatures : -50 °C to +100 °C

◆ EURASEC Certification

- Type : JBEP
 - EURASEC N° TC RU C-FR.1505.B.00911

◆ Others Certification

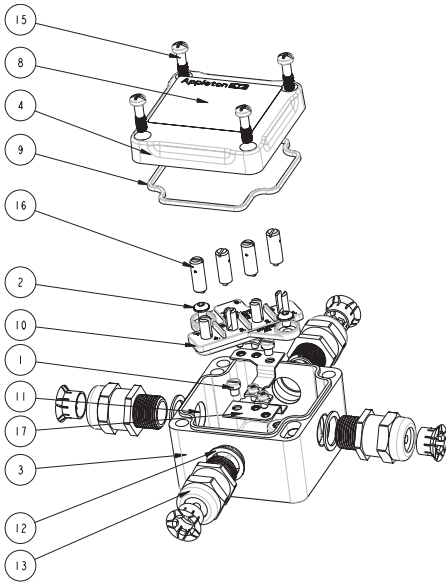
- Type : JBEP
 - INMETRO Certificate: BVC 13.3238-X ①

Related Products

- For a complete offering of cable glands for use with armored and unarmored cable, see *Fittings: Cable Glands*.

Illustrated Features — Sample of JBEP080806NE04T

Description	
1	Screw M5 X 6
2	JBEP0808060 - Base Holes: 3 x Ø 20.5
3	Cover Of Polyester Box Type (85 x 85 x 60)
4	Hood Terminals Compact Set
8	Nameplate
9	Gasket Box Type 85 x 85 x 60
10	Pan Head Screw M4 X 7
11	Entry Thread Seal M20
12	Nickel-Plated Brass Locknuts M20 X 1.5
13	EEx e M20 Cable Gland
15	Screw M6 X 20 X 10
16	Hood Term Cover
17	Earth Plate



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

JBEP Series Fiberglass Reinforced Polyester Terminal Junction Boxes for Electrical and Power Applications

Increased Safety. Factory Drilled and Equipped

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

The Catalog Numbering Guide is a reference tool to explain the make-up of the catalog number. It is not to be used to create a custom product for ordering.

Catalog Numbering Guide - JBEP Polyester Junction Boxes for Electrical and Power Applications

JBE	P	08	08	06	A	E	01	T
Series: JBE - ATEX/IECEX Certified Junction Box	Material: P - Polyester	Dimensions Height: 08 - 85 mm 12 - 120 mm 17 - 170 mm 20 - 200 mm 25 - 250 mm 32 - 320 mm 50 - 500 mm 75 - 750 mm	Dimensions Width: 08 - 85 mm 12 - 120 mm 17 - 170 mm 21 - 215 mm 25 - 250 mm 32 - 320 mm 50 - 500 mm 75 - 750 mm	Dimensions Depth: 06 - 60 mm 09 - 91 mm 09S - 91 mm 10 - 95 mm 15 - 150 mm 23 - 230 mm	Cable Type: A - Armored N - Non-Armored	Options: <i>(Options must be listed alphabetically)</i> E - Electrical: 2.5 mm ² x 10 mm ² P - Power: 16 mm ² to 240 mm ²	Suffix: 01 to 99 Assigned at Factory	Other Suffix: T - Mantle Clamping (Pillar Terminals)

Enclosures and Junction Boxes

INCREASED SAFETY EX E ZONE 1 RATED JUNCTION BOXES

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 4 x 2.5 mm² or 2 x 4 mm² + 2 x 2.5 mm²; 4 x 6 mm² or 3 x 10 mm² + 4 mm²

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



JBEP080806NE04T

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes

Equipped with 4 Live Mantle Clamping (Pillar Terminals) and 1 Earth Terminal Per Way

Maximum capacity per terminal:

- 4 x 2.5 mm² or 2 x 4 mm² + 2 x 2.5 mm², 550 Volts

Maximum capacity per earth terminal:

- 1 x 4 mm²

Rating (Amps):

- 28 Amps for 2.5 mm², 38 Amps for 4 mm²

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Catalog Number
JBEP080806	3 x M20 with earth continuity sheet		0.42	0.44	85 x 85 x 61	JBEP080806AE03T
JBEP080806	3 x M20 with three cable glands for unarmored cable – diameter 6.5 to 14.5 mm		0.45	0.44	85 x 85 x 61	JBEP080806NE03T
JBEP080806	4 x M20 with earth continuity sheet		0.43	0.44	85 x 85 x 61	JBEP080806AE04T
JBEP080806	4 x M20 with four cable glands for unarmored cable – diameter 6.5 to 14.5 mm		0.48	0.44	85 x 85 x 61	JBEP080806NE04T

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes

Equipped with 5 Live Mantle Clamping (Pillar Terminals) and 1 Earth Terminal Per Way

Maximum capacity per terminal:

- 4 x 6 mm² or 3 x 10 mm² + 4 mm², 690 Volts

Maximum capacity per earth terminal:

- 1 x 10 mm²

Rating (Amps):

- 28 Amps for 2.5 mm², 38 Amps for 4 mm², 42 Amps for 10 mm²

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Catalog Number
JBEP121209S	3 x M20 with earth continuity sheet		0.85	1.31	120 x 120 x 91	JBEP121209AE03T
JBEP121209S	3 x M25 with three cable glands for unarmored cable – diameter 8 to 17 mm ②		0.9	1.31	120 x 120 x 91	JBEP121209NE13T
JBEP121209S	4 x M20 with earth continuity sheet		0.88	1.31	120 x 120 x 91	JBEP121209AE04T
JBEP121209S	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm ②		0.95	1.31	120 x 120 x 91	JBEP121209NE14T

Shaded catalog numbers are normally stocked items. All other items are made to order.

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 4 x 6 mm²

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

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes Equipped with 8 Live Mantle Clamping (Pillar Terminals) and 1 Earth Terminal Per Way

Maximum capacity per terminal:

- 4 x 6 mm² or 3 x 10 mm² + 4 mm², 690 Volts

Maximum capacity per earth terminal:

- 1 x 10 mm²

Rating (Amps):

- 28 Amps for 2.5 mm², 38 Amps for 4 mm², 42 Amps for 10 mm²

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Catalog Number
JBEP171709	4 x M20 with earth continuity sheet		1.63	2.63	170 x 170 x 91	JBEP171709AE04T
JBEP171709	4 x M20 with three cable glands for unarmored cable – diameter 6.5 to 14.5 mm		1.55	2.63	170 x 170 x 91	JBEP171709NE04T
JBEP171709	6 x M20 with earth continuity sheet		1.55	2.63	170 x 170 x 91	JBEP171709AE06T
JBEP171709	6 x M20 with three cable glands for unarmored cable – diameter 6.5 to 14.5 mm		1.65	2.63	170 x 170 x 91	JBEP171709NE06T
JBEP171709	4 x M25 with earth continuity sheet		1.62	2.63	170 x 170 x 91	JBEP171709AE14T
JBEP171709	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		1.60	2.63	170 x 170 x 91	JBEP171709NE14T
JBEP171709	6 x M25 with earth continuity sheet		1.55	2.63	170 x 170 x 91	JBEP171709AE16T
JBEP171709	6 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		1.65	2.63	170 x 170 x 91	JBEP171709NE16T

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 2 x 4 mm²

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



JBEP080806AE05

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with 4 Screw Terminals and 2 Earth Terminals

- 2 x 4 mm² terminals (MBK3), Rating 24 Amps, 275 Volts
MBK3/E-Z and MSLKG2.5

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
Configuration: P + N (1PE + 2L + 2N + 1PE)						
JBEP080806	3 x M20 with earth continuity device		0.40	0.44	85 x 85 x 61	JBEP080806AE03
JBEP080806	3 x M20 with four cable glands for unarmored cable – diameter 6.5 to 14.5 mm		0.42	0.44	85 x 85 x 61	JBEP080806NE03
JBEP080806	4 x M20 with earth continuity device		0.40	0.44	85 x 85 x 61	JBEP080806AE05
JBEP080806	4 x M20 with four cable glands for unarmored cable – diameter 6.5 to 14.5 mm		0.45	0.44	85 x 85 x 61	JBEP080806NE05

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with 4 Screw Terminals and 2 Earth Terminals

- 2 x 4 mm² terminals (MBK3)
MBK3/E-Z and MSLKG2.5

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Catalog Number
Configuration: P + N (1PE + 1 + 2 + 3 + 4 + 1PE)						
JBEP080806	2 x M20 with earth continuity device, rated Ex eb IIC		0.40	0.44	85 x 85 x 60	JBEP080806AE22
JBEP080806	2 x M20 with earth continuity device, rated Ex ia IIC		0.45	0.44	85 x 85 x 60	JBEP080806AE23

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with 6 Screw Terminals and 2 Earth Terminals

- 2 x 4 mm² terminals (MBK3), Rating 24 Amps, 275 Volts
MBK3/E-Z and MSLKG2.5

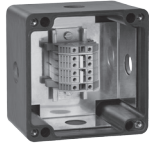
Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Catalog Number
Configuration: P + N (1PE + 1 + 2 + 3 + 4 + 5 + 6 + 1PE)						
JBEP080806	4 x M20 with earth continuity device, rated Ex eb IIC		0.40	0.44	85 x 85 x 60	JBEP080806AE24
JBEP080806	4 x M20 with earth continuity device, rated Ex ia IIC		0.45	0.44	85 x 85 x 60	JBEP080806AE25

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 2 x 4 mm²; 2 x 6 mm²

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



JBEP121209AE05

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with 4 Screw Terminals and 2 Earth Terminals

- 2 x 4 mm² terminals (WDU4N), Rating 27 Amps, 275 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
Configuration: P + N (1PE + 2L + 2N + 1PE)						
JBEP121209S	4 x M20 with earth continuity device		0.89	1.31	120 x 120 x 91	JBEP121209AE07
JBEP121209S	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		0.93	1.31	120 x 120 x 91	JBEP121209NE08

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with 4 Screw Terminals and 2 Earth Terminals

- 2 x 6 mm² terminals (WDU6), Rating 36 Amps, 550 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
Configuration: P + N (1PE + 2L + 2N + 1PE)						
JBEP121209S	4 x M20 with earth continuity device		1.00	1.31	120 x 120 x 91	JBEP121209AE45
JBEP121209S	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		1.00	1.31	120 x 120 x 91	JBEP121209NE46
JBEP121209S	4 x M20 with earth continuity device		0.96	1.31	120 x 120 x 91	JBEP121209AE47
JBEP121209S	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		1.00	1.31	120 x 120 x 91	JBEP121209NE48

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 2 x 4 mm²

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



JBEP121209NE26

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with 6 Screw Terminals and 2 Earth Terminals

- 2 x 4 mm² terminals (MBK3/E-Z and MSLKG2.5), Rating 24 Amps, 275 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
						PE L1 L2 L3 PE
Configuration: TP (1PE + 2L1 + 2L2 + 2L3 + 1PE)						
JBEP121209	4 x M20 with earth continuity device		0.88	1.31	120 x 120 x 91	JBEP121209AE25
JBEP121209	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		0.87	1.31	120 x 120 x 91	JBEP121209NE26
JBEP121209	4 x M20 with earth continuity device		0.84	1.31	120 x 120 x 91	JBEP121209AE27
JBEP121209	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		0.88	1.31	120 x 120 x 91	JBEP121209NE28

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with 12 Screw Terminals and Earth Terminals

- 4 mm² terminals (WDU4), Rating 22 Amps, 690 Volts

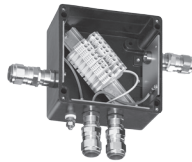
Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
						PE L1 L2 L3 N PE
Configuration: TP + N (1PE + 3L1 + 3L2 + 3L3 + 3N + 1PE)						
JBEP171709	4 x M25 with earth continuity device		1.54	2.63	170 x 170 x 91	JBEP171709AE46
JBEP171709	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		1.54	2.63	170 x 170 x 91	JBEP171709NE46
						PE L1 L2 L3 N PE
Configuration: TP + N (1PE + 3L1 + 3L2 + 3L3 + 3N + 2PE)						
JBEP171709	6 x M20 with earth continuity device		1.54	2.63	170 x 170 x 91	JBEP171709AE47
JBEP171709	6 x M20 with four cable glands for unarmored cable – diameter 6.5 to 14.5 mm		1.54	2.63	170 x 170 x 91	JBEP171709NE47
JBEP171709	6 x M25 with earth continuity device		1.54	2.63	170 x 170 x 91	JBEP171709AE48
JBEP171709	6 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		1.54	2.63	170 x 170 x 91	JBEP171709NE48

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 6 mm²

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



JBEP171709AE06

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals and Earth Terminals

- 6 mm² terminals (WDU6) and earth terminals (WPE6), Rating 32 Amps, 550 Volts

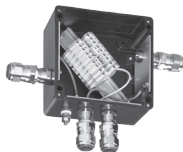
Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
						PE L N PE
Configuration: P + N (1PE + 2L + 2N + 1PE)						
JBEP171709	3 x M20 with earth continuity device		1.54	2.63	170 x 170 x 91	JBEP171709AE01
JBEP171709	3 x M25 with three cable glands for unarmored cable – diameter 8 to 17 mm		1.54	2.63	170 x 170 x 91	JBEP171709NE01
JBEP171709	4 x M20 with earth continuity device		1.54	2.63	170 x 170 x 91	JBEP171709AE02
JBEP171709	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		1.54	2.63	170 x 170 x 91	JBEP171709NE02
JBEP171709	4 x M20 with earth continuity device		1.54	2.63	170 x 170 x 91	JBEP171709AE03
JBEP171709	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		1.54	2.63	170 x 170 x 91	JBEP171709NE03
						PE L N PE
Configuration: P + N (1PE + 3L + 3N + 2PE)						
JBEP171709	6 x M20 with earth continuity device		1.54	2.63	170 x 170 x 91	JBEP171709AE04
JBEP171709	6 x M25 with six cable glands for unarmored cable – diameter 8 to 17 mm		1.54	2.63	170 x 170 x 91	JBEP171709NE04
						PE L1 L2 L3 PE
Configuration: TP (1PE + 2L1 + 2L2 + 2L3 + 1PE)						
JBEP171709	3 x M20 with earth continuity device		1.54	2.63	170 x 170 x 91	JBEP171709AE05
JBEP171709	3 x M25 with three cable glands for unarmored cable – diameter 8 to 17 mm		1.54	2.63	170 x 170 x 91	JBEP171709NE05
JBEP171709	4 x M20 with earth continuity device		1.54	2.63	170 x 170 x 91	JBEP171709AE06
JBEP171709	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		1.54	2.63	170 x 170 x 91	JBEP171709NE06
JBEP171709	4 x M20 with earth continuity device		1.54	2.63	170 x 170 x 91	JBEP171709AE07
JBEP171709	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		1.54	2.63	170 x 170 x 91	JBEP171709NE07

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 6 mm²

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



JBEP171709AE06

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals and Earth Terminals

- 6 mm² terminals (WDU6) and earth terminals (WPE6), Rating 32 Amps, 550 Volts

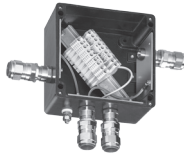
Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
Configuration: TP (2PE + 3L1 + 3L2 + 3L3 + 1PE)						
JBEP171709	6 x M20 with earth continuity device		1.54	2.63	170 x 170 x 91	JBEP171709AE08
JBEP171709	6 x M25 with six cable glands for unarmored cable – diameter 8 to 17 mm		1.54	2.63	170 x 170 x 91	JBEP171709NE08
Configuration: TP + N (2PE + 2L1 + 2L2 + 2L3 + 2N + 1PE)						
JBEP171709	3 x M20 with earth continuity device		1.54	2.63	170 x 170 x 91	JBEP171709AE09
JBEP171709	3 x M25 with three cable glands for unarmored cable – diameter 8 to 17 mm		1.54	2.63	170 x 170 x 91	JBEP171709NE09
JBEP171709	4 x M20 with earth continuity device		1.54	2.63	170 x 170 x 91	JBEP171709AE10
JBEP171709	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		1.54	2.63	170 x 170 x 91	JBEP171709NE10
JBEP171709	4 x M20 with earth continuity device		1.54	2.63	170 x 170 x 91	JBEP171709AE11
JBEP171709	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		1.54	2.63	170 x 170 x 91	JBEP171709NE11
Configuration: TP + N (2PE + 3L1 + 3L2 + 3L3 + 3N + 1PE)						
JBEP202110	6 x M20 with earth continuity device		2.04	4.09	200 x 215 x 95	JBEP202110AE12
JBEP202110	6 x M25 with six cable glands for unarmored cable – diameter 8 to 17 mm		2.04	4.09	200 x 215 x 95	JBEP202110NE12

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 10 mm²

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



JBEP171709AE06

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals and Earth Terminals

- 10 mm² terminals (VDU10) and earth terminals (WPE10), Rating 50 Amps, 550 Volts

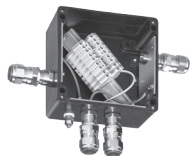
Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
Configuration: P + N (1PE + 2L + 2N + 1PE)						
JBEP171709	3 x M20 with earth continuity device		2.04	2.63	170 x 170 x 91	JBEP171709AE51
JBEP171709	3 x M25 with three cable glands for unarmored cable – diameter 8 to 17 mm		2.04	2.63	170 x 170 x 91	JBEP171709NE51
JBEP171709	4 x M20 with earth continuity device		2.04	2.63	170 x 170 x 91	JBEP171709AE52
JBEP171709	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		2.04	2.63	170 x 170 x 91	JBEP171709NE52
JBEP171709	4 x M20 with earth continuity device		2.04	2.63	170 x 170 x 91	JBEP171709AE53
JBEP171709	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		2.04	2.63	170 x 170 x 91	JBEP171709NE53

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 10 mm²

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



JBEP171709AE06

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals and Earth Terminals

- 10 mm² terminals (WDU10) and earth terminals (WPE10), Rating 47 Amps, 550 Volts

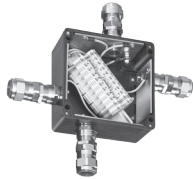
Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
Configuration: P + N (2PE + 3L + 3N + 1PE)						
JBEP171709	6 x M20 with earth continuity device		2.04	2.63	170 x 170 x 91	JBEP171709AE54
JBEP171709	6 x M25 with six cable glands for unarmored cable – diameter 8 to 17 mm		2.04	2.63	170 x 170 x 91	JBEP171709NE54
Configuration: TP (1PE + 2L1 + 2L2 + 2L3 + 1PE)						
JBEP171709	3 x M25 with earth continuity device		2.04	2.63	170 x 170 x 91	JBEP171709AE55
JBEP171709	3 x M25 with three cable glands for unarmored cable – diameter 8 to 17 mm		2.04	2.63	170 x 170 x 91	JBEP171709NE55
JBEP171709	4 x M25 with earth continuity device		2.04	2.63	170 x 170 x 91	JBEP171709AE56
JBEP171709	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		2.04	2.63	170 x 170 x 91	JBEP171709NE56
JBEP171709	4 x M25 with earth continuity device		2.04	2.63	170 x 170 x 91	JBEP171709AE57
JBEP171709	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		2.04	2.63	170 x 170 x 91	JBEP171709NE57

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 10 mm²

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



JBEP171709AE61

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals and Earth Terminals

- 10 mm² terminals (WDU10) and earth terminals (WPE10), Rating 37 Amps, 550 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
					PE L1 L2 L3 PE	
Configuration: TP (2PE + 3L1 + 3L2 + 3L3 + 1PE)						
JBEP171709	6 x M25 with earth continuity device		1.60	2.63	170 x 170 x 91	JBEP171709AE58
JBEP171709	6 x M25 with six cable glands for unarmored cable – diameter 8 to 17 mm		1.60	2.63	170 x 170 x 91	JBEP171709NE58

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals and Earth Terminals

- 10 mm² terminals (WDU10) and earth terminals (WPE10), Rating 40 Amps, 550 Volts

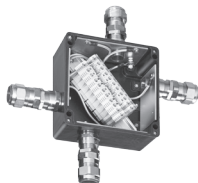
Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
					PE L1 L2 L3 N PE	
Configuration: TP + N (2PE + 2L1 + 2L2 + 2L3 + 2N + 1PE)						
JBEP171709	3 x M25 with earth continuity device		1.60	2.63	170 x 170 x 91	JBEP171709AE59
JBEP171709	3 x M32 with three cable glands for unarmored cable – diameter 10 to 25 mm		1.60	2.63	170 x 170 x 91	JBEP171709NE59
JBEP171709	4 x M25 with earth continuity device		1.60	2.63	170 x 170 x 91	JBEP171709AE60
JBEP171709	4 x M32 with four cable glands for unarmored cable – diameter 10 to 25 mm		1.60	2.63	170 x 170 x 91	JBEP171709NE60
JBEP171709	4 x M25 with earth continuity device		1.60	2.63	170 x 170 x 91	JBEP171709AE61
JBEP171709	4 x M32 with four cable glands for unarmored cable – diameter 10 to 25 mm		1.60	2.63	170 x 170 x 91	JBEP171709NE61

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 10 mm²

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



JBEP171709AE61

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals and Earth Terminals

- 10 mm² terminals (VDU10) and earth terminals (WPE10), Rating 40 Amps, 550 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm³	Dimensions mm	Terminal Jumped Catalog Number			
				PE	L1	L2	L3	N	PE
Configuration: TP + N (2PE + 3L1 + 3L2 + 3L3 + 3N + 1PE)									
JBEP202110	6 x M25 with earth continuity device		2.10	4.09	200 x 215 x 95	JBEP202110AE62			
JBEP202110	6 x M32 with six cable glands for unarmored cable – diameter 10 to 25 mm		2.10	4.09	200 x 215 x 95	JBEP202110NE62			

Enclosures and Junction Boxes

INCREASED SAFETY EX E ZONE 1 RATED JUNCTION BOXES

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 16 mm²

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



JBEP202115AP06

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Terminals and M8 Earth Stud

- 16 mm² terminals (WDU16) and earth terminals (WPE16), Rating 60 Amps, 690 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
Configuration: P + N (1PE + 2L + 2N + 2PE)						
JBEP202115	3 x M25 with earth continuity device 1 x M8 Earth Stud		4.00	6.45	200 x 215 x 145	JBEP202115AP01
JBEP202115	3 x M25 with three cable glands for unarmored cable – diameter 8 to 17 mm		4.00	6.45	200 x 215 x 145	JBEP202115NP01
JBEP202115	4 x M25 with earth continuity device 1 x M8 Earth Stud		4.00	6.45	200 x 215 x 145	JBEP202115AP02
JBEP202115	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		4.00	6.45	200 x 215 x 145	JBEP202115NP02
JBEP202115	4 x M25 with earth continuity device 1 x M8 Earth Stud		4.00	6.45	200 x 215 x 145	JBEP202115AP03
JBEP202115	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		4.00	6.45	200 x 215 x 145	JBEP202115NP03
JBEP202115	4 x M25 with earth continuity device 1 x M8 Earth Stud		4.00	6.45	200 x 215 x 145	JBEP202115AP04
JBEP202115	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		4.00	6.45	200 x 215 x 145	JBEP202115NP04

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Terminals and M8 Earth Stud

- 16 mm² terminals (WDU16) and earth terminals (WPE16), Rating 55 Amps, 690 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
Configuration: P + N (2PE + 3L + 3N + 2PE)						
JBEP202115	6 x M25 with earth continuity device 1 x M8 Earth Stud		4.00	6.45	200 x 215 x 145	JBEP202115AP05
JBEP202115	6 x M25 with six cable glands for unarmored cable – diameter 8 to 17 mm		4.00	6.45	200 x 215 x 145	JBEP202115NP05
JBEP202115	6 x M25 with earth continuity device 1 x M8 Earth Stud		4.00	6.45	200 x 215 x 145	JBEP202115AP06
JBEP202115	6 x M25 with six cable glands for unarmored cable – diameter 8 to 17 mm		4.00	6.45	200 x 215 x 145	JBEP202115NP06

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 16 mm²

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



JBEP202115AP06

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Terminals and M8 Earth Stud

- 16 mm² terminals (WDU16) and earth terminals (WPE16), Rating 55 Amps, 690 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
						PE L1 L2 L3 PE
Configuration: TP (1PE + 2L1 + 2L2 + 2L3 + 2PE)						
JBEP202115	3 x M25 with earth continuity device 1 x M8 Earth Stud		4.00	6.45	200 x 215 x 145	JBEP202115AP07
JBEP202115	3 x M25 with three cable glands for unarmored cable – diameter 8 to 17 mm		4.00	6.45	200 x 215 x 145	JBEP202115NP07
JBEP202115	4 x M25 with earth continuity device 1 x M8 Earth Stud		4.00	6.45	200 x 215 x 145	JBEP202115AP08
JBEP202115	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		4.00	6.45	200 x 215 x 145	JBEP202115NP08
JBEP202115	4 x M25 with earth continuity device 1 x M8 Earth Stud		4.00	6.45	200 x 215 x 145	JBEP202115AP09
JBEP202115	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		4.00	6.45	200 x 215 x 145	JBEP202115NP09
JBEP202115	4 x M25 with earth continuity device 1 x M8 Earth Stud		4.00	6.45	200 x 215 x 145	JBEP202115AP10
JBEP202115	4 x M25 with four cable glands for unarmored cable – diameter 8 to 17 mm		4.00	6.45	200 x 215 x 145	JBEP202115NP10

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Terminals and M8 Earth Stud

- 16 mm² terminals (WDU16) and earth terminals (WPE16), Rating 43 Amps, 690 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
						PE L1 L2 L3 PE
Configuration: TP (2PE + 3L1 + 3L2 + 3L3 + 2PE)						
JBEP202115	6 x M25 with earth continuity device 1 x M8 Earth Stud		4.00	6.45	200 x 215 x 145	JBEP202115AP11
JBEP202115	6 x M25 with six cable glands for unarmored cable – diameter 8 to 17 mm		4.00	6.45	200 x 215 x 145	JBEP202115NP11
JBEP202115	6 x M25 with earth continuity device 1 x M8 Earth Stud		4.00	6.45	200 x 215 x 145	JBEP202115AP12
JBEP202115	6 x M25 with six cable glands for unarmored cable – diameter 8 to 17 mm		4.00	6.45	200 x 215 x 145	JBEP202115NP12

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 16 mm²

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



JBEP202115AP06

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Terminals and M8 Earth Stud

- 16 mm² terminals (WDU16) and earth terminals (WPE16), Rating 45 Amps, 690 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm³	Dimensions mm	Terminal Jumped Catalog Number
					PE L1 L2 L3 N PE	
Configuration: TP + N (2PE + 2L1 + 2L2 + 2L3 + 2N + PE)						
JBEP202115	3 x M25 with earth continuity device 1 x M8 Earth Stud		4.00	6.45	200 x 215 x 145	JBEP202115AP13
JBEP202115	3 x M32 with three cable glands for unarmored cable – diameter 10 to 25 mm		4.00	6.45	200 x 215 x 145	JBEP202115NP13
JBEP202115	4 x M25 with earth continuity device 1 x M8 Earth Stud		4.00	6.45	200 x 215 x 145	JBEP202115AP14
JBEP202115	4 x M32 with four cable glands for unarmored cable – diameter 10 to 25 mm		4.00	6.45	200 x 215 x 145	JBEP202115NP14
JBEP202115	4 x M25 with earth continuity device 1 x M8 Earth Stud		4.00	6.45	200 x 215 x 145	JBEP202115AP15
JBEP202115	4 x M32 with four cable glands for unarmored cable – diameter 10 to 25 mm		4.00	6.45	200 x 215 x 145	JBEP202115NP15
JBEP202115	4 x M25 with earth continuity device 1 x M8 Earth Stud		4.00	6.45	200 x 215 x 145	JBEP202115AP16
JBEP202115	4 x M32 with four cable glands for unarmored cable – diameter 10 to 25 mm		4.00	6.45	200 x 215 x 145	JBEP202115NP16

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Terminals and M8 Earth Stud

- 16 mm² terminals (WDU16) and earth terminals (WPE16), Rating 40 Amps, 690 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm³	Dimensions mm	Terminal Jumped Catalog Number			
				PE	L1	L2	L3	N	PE
Configuration: TP + N (2PE + 3L1 + 3L2 + 3L3 + 3N + 2PE)									
JBEP253215	6 x M25 with earth continuity device 1 x M8 Earth Stud		8.20	12.00	250 x 320 x 150	JBEP253215AP17			
JBEP253215	6 x M32 with six cable glands for unarmored cable – diameter 10 to 25 mm		8.20	12.00	250 x 320 x 150	JBEP253215NP17			
JBEP253215	6 x M25 with earth continuity device 1 x M8 Earth Stud		8.20	12.00	250 x 320 x 150	JBEP253215AP18			
JBEP253215	6 x M32 with six cable glands for unarmored cable – diameter 10 to 25 mm		8.20	12.00	250 x 320 x 150	JBEP253215NP18			

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 25/35 mm²

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



JBEP253215NP02

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Terminals and M8 Earth Stud

- 25 mm² terminals (WDU35) and earth terminals (WPE35), Rating 80 Amps, 690 Volts
- 35 mm² terminals (WDU35) and earth terminals (WPE35), Rating 98 Amps, 690 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
Configuration: TP (1PE + 2L1 + 2L2 + 2L3 + 2PE)						
JBEP253215	4 x M32 with earth continuity device 1 x M8 Earth Stud		8.20	12.00	250 x 320 x 151	JBEP253215AP01
JBEP253215	4 x M32 with four cable glands for unarmored cable – diameter 10 to 25 mm		8.20	12.00	250 x 320 x 151	JBEP253215NP01

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Terminals and M8 Earth Stud

- 25 mm² terminals (WDU35) and earth terminals (WPE35), Rating 70 Amps, 690 Volts
- 35 mm² terminals (WDU35) and earth terminals (WPE35), Rating 80 Amps, 690 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
Configuration: TP (2PE + 3L1 + 3L2 + 3L3 + 2PE)						
JBEP253215	6 x M32 with earth continuity device 1 x M8 Earth Stud		8.20	12.00	250 x 320 x 151	JBEP253215AP02
JBEP253215	6 x M32 with six cable glands for unarmored cable – diameter 10 to 25 mm		8.20	12.00	250 x 320 x 151	JBEP253215NP02

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 25/35 mm²

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



JBEP253215NP02

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Terminals and M8 Earth Stud

- 25 mm² terminals (WDU35) and earth terminals (WPE35), Rating 75 Amps, 690 Volts
- 35 mm² terminals (WDU35) and earth terminals (WPE35), Rating 85 Amps, 690 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
Configuration: TP + N (2PE + 2L1 + 2L2 + 2L3 + 2N + PE)						
JBEP253215	4 x M32 with earth continuity device 1 x M8 Earth Stud		8.20	12.00	250 x 320 x 150	JBEP253215AP03
JBEP253215	4 x M32 with four cable glands for unarmored cable – diameter 10 to 25 mm		8.20	12.00	250 x 320 x 150	JBEP253215NP03

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Terminals and M8 Earth Stud

- 25 mm² terminals (WDU35) and earth terminals (WPE35), Rating 58 Amps, 690 Volts
- 35 mm² terminals (WDU35) and earth terminals (WPE35), Rating 68 Amps, 690 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
Configuration: TP + N (2PE + 3L1 + 3L2 + 3L3 + 3N + 2PE)						
JBEP253215	6 x M32 with earth continuity device 1 x M8 Earth Stud		8.20	12.00	250 x 320 x 150	JBEP253215AP04
JBEP253215	6 x M40 with six cable glands for unarmored cable – diameter 24 to 34 mm		8.20	12.00	250 x 320 x 150	JBEP253215NP04

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 10 mm² to 50 mm²

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



JBEP503215AP24

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Terminals and M8 Earth Stud

- 10 mm² to 50 mm² terminals (WDU50N) and earth terminals (WPE35), Rating 125 Amps, 550 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
Configuration: TP (1PE + 2L1 + 2L2 + 2L3 + 2PE)						
JBEP503215	4 x M40 with earth continuity device 1 x M8 Earth Stud		8.50	24.00	500 x 320 x 150	JBEP503215AP01
JBEP503215	4 x M40 with four cable glands for unarmored cable – diameter 24 to 34 mm		8.50	24.00	500 x 320 x 150	JBEP503215NP01

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Terminals and M8 Earth Stud

- 10 mm² to 50 mm² terminals (WDU50N) and earth terminals (WPE35), Rating 125 Amps, 550 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
Configuration: TP (2PE + 3L1 + 3L2 + 3L3 + 2PE)						
JBEP503215	6 x M40 with earth continuity device 1 x M8 Earth Stud		8.50	24.00	500 x 320 x 150	JBEP503215AP02
JBEP503215	6 x M40 with six cable glands for unarmored cable – diameter 24 to 34 mm		8.50	24.00	500 x 320 x 150	JBEP503215NP02

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 10 mm² to 50 mm²

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



JBEP503215AP24

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Terminals and M8 Earth Stud

- 10 mm² to 50 mm² terminals (WDU50N) and earth terminals (WPE35), Rating 125 Amps, 550 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
					PE L1 L2 L3 N PE	
Configuration: TP + N (2PE + 2L1 + 2L2 + 2L3 + 2N + PE)						
JBEP503215	4 x M40 with earth continuity device 1 x M8 Earth Stud		8.50	24.00	500 x 320 x 150	JBEP503215AP03
JBEP503215	4 x M40 with four cable glands for unarmored cable – diameter 24 to 34 mm		8.50	24.00	500 x 320 x 150	JBEP503215NP03

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Terminals and M8 Earth Stud

- 10 mm² to 50 mm² terminals (WDU50N) and earth terminals (WPE35), Rating 100 Amps, 550 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
					PE L1 L2 L3 N PE	
Configuration: TP + N (2PE + 3L1 + 3L2 + 3L3 + 3N + 2PE)						
JBEP503215	6 x M40 with earth continuity device 1 x M8 Earth Stud		9.30	24.00	500 x 320 x 150	JBEP503215AP04
JBEP503223	6 x M50 with six cable glands for unarmored cable – diameter 28 to 42 mm		10.30	36.80	500 x 320 x 230	JBEP503223NP04

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 10 mm² to 70 mm²

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



JBEP503215AP24

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Terminals and M8 Earth Stud

- 10 mm² to 70 mm² terminals (WDU70N) and earth terminals (WPE35), Rating 160 Amps, 550 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
Configuration: TP (1PE + 2L1 + 2L2 + 2L3 + 2PE)						
JBEP503215	4 x M40 with earth continuity device 1 x M8 Earth Stud		9.30	24.00	500 x 320 x 150	JBEP503215AP21
JBEP503215	4 x M40 with four cable glands for unarmored cable – diameter 24 to 34 mm		9.30	24.00	500 x 320 x 150	JBEP503215NP21

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Terminals and M8 Earth Stud

- 10 mm² to 70 mm² terminals (WDU70N) and earth terminals (WPE35), Rating 140 Amps, 550 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
Configuration: TP (2PE + 3L1 + 3L2 + 3L3 + 2PE)						
JBEP503215	6 x M40 with earth continuity device 1 x M8 Earth Stud		9.30	24.00	500 x 320 x 150	JBEP503215AP22
JBEP503215	6 x M40 with six cable glands for unarmored cable – diameter 24 to 34 mm		9.30	24.00	500 x 320 x 150	JBEP503215NP22

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 10 mm² to 70 mm²

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



JBEP503215AP24

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Terminals and M8 Earth Stud

- 10 mm² to 70 mm² terminals (WDU70N) and earth terminals (WPE35), Rating 150 Amps, 550 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
					PE L1 L2 L3 N PE	
Configuration: TP + N (2PE + 2L1 + 2L2 + 2L3 + 2N + PE)						
JBEP503215	4 x M40 with earth continuity device 1 x M8 Earth Stud		9.30	24.00	500 x 320 x 150	JBEP503215AP23
JBEP503215	4 x M40 with four cable glands for unarmored cable – diameter 24 to 34 mm		9.30	24.00	500 x 320 x 150	JBEP503215NP23

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Terminals and M8 Earth Stud

- 10 mm² to 70 mm² terminals (WDU70N) and earth terminals (WPE35), Rating 125 Amps, 550 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
					PE L1 L2 L3 N PE	
Configuration: TP + N (2PE + 3L1 + 3L2 + 3L3 + 3N + 2PE)						
JBEP503215	6 x M40 with earth continuity device 1 x M8 Earth Stud		9.30	24.00	500 x 320 x 150	JBEP503215AP24
JBEP503223	6 x M50 with six cable glands for unarmored cable – diameter 28 to 42 mm		10.30	36.80	500 x 320 x 230	JBEP503223NP24

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 120 mm²

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

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Screw Terminals, Earth Bar and M10 Earth Stud

- 10 mm² to 120 mm² terminals (WDU95N/120N) and earth copper bar, Rating 200 Amps, 690 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Terminal Jumped Catalog Number
----------------	-----------	--------------	-----------	------------------------	---------------	--------------------------------

Configuration: TP (2L1 + 2L2 + 2L3 + 1PE)						
JBEP753223	4 x M50 with earth continuity device 1 x M10 Earth Stud		10.80	55.20	750 x 320 x 230	JBEP753223AP01
JBEP753215	4 x M50 with four cable glands for unarmored cable – diameter 28 to 42 mm		9.75	36.00	750 x 320 x 150	JBEP753215NP01

Configuration: TP (3L1 + 3L2 + 3L3 + 1PE)						
JBEP753223	6 x M50 with earth continuity device 1 x M10 Earth Stud		10.80	55.20	750 x 320 x 230	JBEP753223AP02
JBEP753223	6 x M50 with six cable glands for unarmored cable – diameter 28 to 42 mm		10.80	55.20	750 x 320 x 230	JBEP753223NP02

Configuration: TP + N (2L1 + 2L2 + 2L3 + 2N + 1PE)						
JBEP753223	4 x M50 with earth continuity device 1 x M10 Earth Stud		10.80	55.20	750 x 320 x 230	JBEP753223AP03
JBEP753215	4 x M50 with four cable glands for unarmored cable – diameter 28 to 42 mm		9.75	36.00	750 x 320 x 150	JBEP753215NP03

JBEP Series FRP Terminal Junction Boxes for Electrical/Power Applications

Increased Safety. Factory Drilled and Equipped

Maximum Capacity Per Terminal: 240 mm²

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



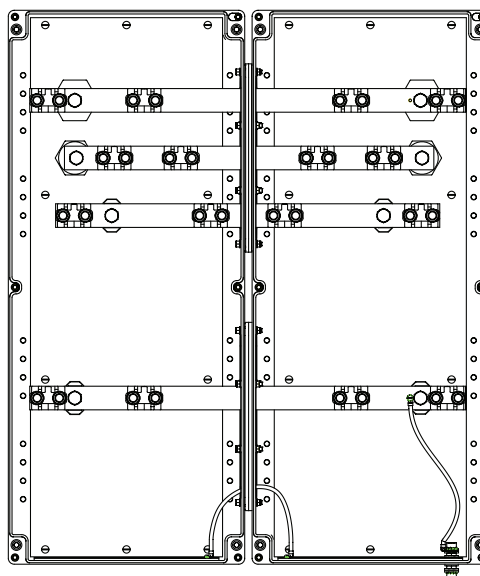
JBEP753215AP72

Ex eb IIC Factory Drilled JBEP Polyester Junction Boxes - Equipped with Clamping Terminals and M10 Earth Stud

- 35/240 mm² clamping terminals on a bus bar and earth terminal (Earth Bus), Rating 400 Amps, 1100 Volts

Enclosure Type	Equipment	Entry Layout	Weight kg	Volume dm ³	Dimensions mm	Standard Bus Bar Catalog Number
Configuration: (L1 + L2 + L3 + PE All Copper Bars)						
2 x JBEP753215	3 x M50 with earth continuity device, 3 Clamping terminals per bar 1 x M10 Earth Stud		40.50	73.13	750 x 650 x 150	JBEP753215AP61
2 x JBEP753215	4 x M50 with earth continuity device, 4 Clamping terminals per bar 1 x M10 Earth Stud		40.50	73.13	750 x 650 x 150	JBEP753215AP62
2 x JBEP753215	3 x M63 with earth continuity device, 3 Clamping terminals per bar 1 x M10 Earth Stud		40.50	73.13	750 x 650 x 150	JBEP753215AP71
2 x JBEP753215	4 x M63 with earth continuity device, 4 Clamping terminals per bar 1 x M10 Earth Stud		40.50	73.13	750 x 650 x 150	JBEP753215AP72

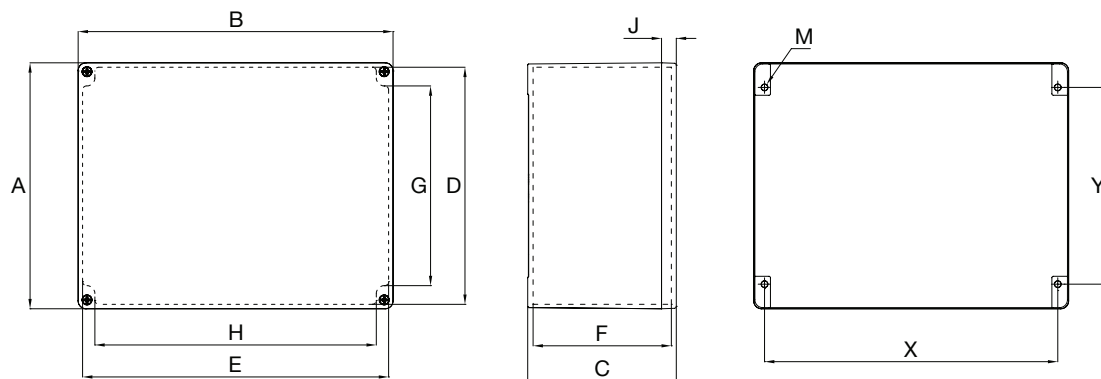
Example of Two JBEP753215 Enclosures Coupled



JBEP Series Fiberglass Reinforced Polyester Terminal Junction Boxes for Electrical and Power Applications

Increased Safety. Factory Drilled and Equipped

Dimensions in Millimeters ①



Enclosure Catalog Number	External Dimension			Internal Dimensions					Cover J	Body Thickness	Wall Fixing		
	A	B	C	D	E	F	G	H			X	Y	M ②
JBEP0808060	85	85	61	76.7	76.7	47	41	51	15	3.5	69	49	M4
JBEP1212090	120	120	91	109.5	109.5	75	63	85	40	4.5	103	83	M5
JBEP121209S0	120	120	91	108.6	108.6	75	63	85	15	4.5	103	83	M5
JBEP1717090	170	170	91	158.5	158.5	72	112.5	137	15	4.5	153	131	M5
JBEP2021100	200	215	95	185.8	200.8	76	116	159	20	6.1	189	146	M6
JBEP2021150	200	215	145	185.8	200.8	122.5	114.8	159	20	6.1	189	146	M6
JBEP2532150	250	320	150	241	311	133.5	171	267	15	5	200	298	M6
JBEP3225150	320	250	150	311	241	133.5	267	171	15	5	298	200	M6
JBEP3250150	320	500	150	311	491	133.5	267	421	15	5	298	447	M6
JBEP3250230	320	500	230	311	491	213.5	267	421	15	5	298	447	M6
JBEP3275150	320	750	150	311	741	133.5	267	671	15	5	298	698	M6
JBEP3275230	320	750	230	311	741	213.5	267	671	15	5	298	698	M6

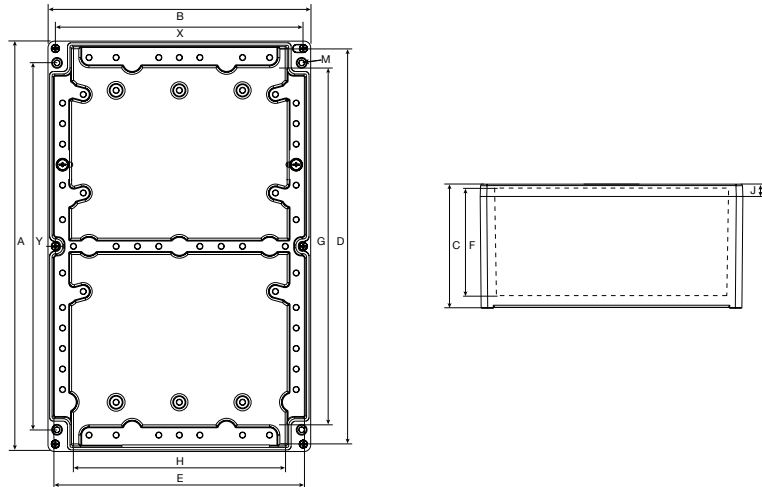
① Wall fixing screw diameter 5 mm. Wall fixing screw hole 6 mm.

② Screw to be used for mounting box.

JBEP Series Fiberglass Reinforced Polyester Terminal Junction Boxes for Electrical and Power Applications

Increased Safety. Factory Drilled and Equipped

Dimensions in Millimeters ①



Enclosure Catalog Number	External Dimension			Internal Dimensions					Cover J	Body Thickness	Wall Fixing		
	A	B	C	D	E	F	G	H			X	Y	M ②
JBEP5032150	500	320	150	491	311	133.5	421	267	15	5	447	298	M6
JBEP5032230	500	320	230	491	311	213.5	421	267	15	5	447	298	M6
JBEP7532150	750	320	150	741	311	133.5	671	267	15	5	298	698	M6
JBEP7532230	750	320	230	741	311	213.5	671	267	15	5	698	298	M6

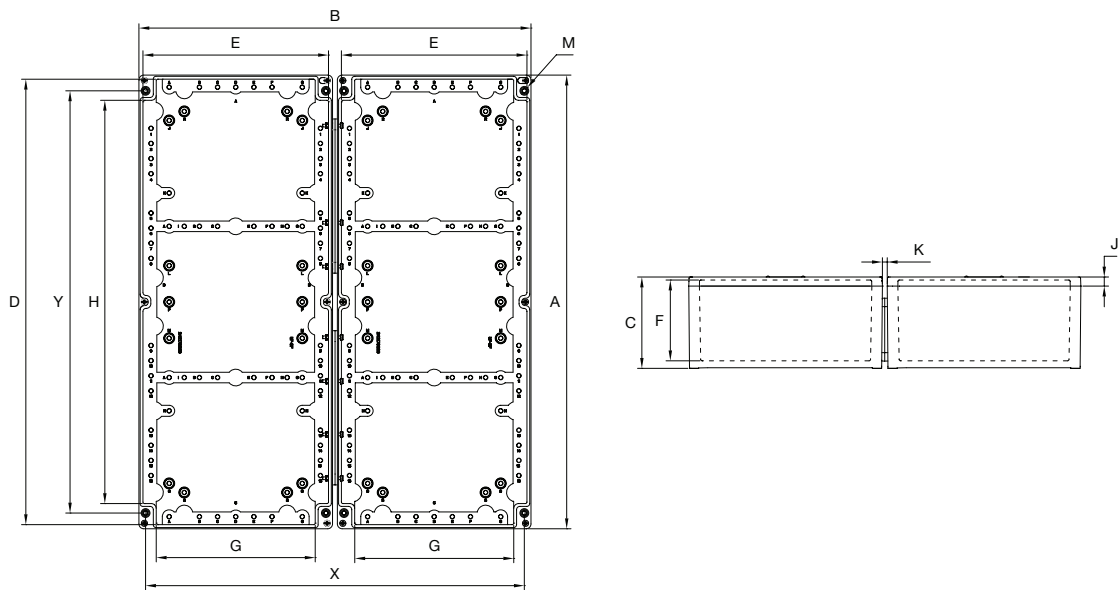
① Wall fixing screw diameter 5 mm. Wall fixing screw hole 6 mm.

② Screw to be used for mounting box.

JBEP Series Fiberglass Reinforced Polyester Terminal Junction Boxes for Electrical and Power Applications

Increased Safety. Factory Drilled and Equipped

Dimensions in Millimeters ①



Enclosure Catalog Number	External Dimension			Internal Dimensions						Cover	Body	Wall Fixing		
	A	B	C	D	E (x2)	F	G (x2)	H	K	J	Thickness	X	Y	M ②
2 X JBEP7532150	750	648	150	741	311	133.5	267	671	8	15	5	626	698	M6

① Wall fixing screw diameter 5 mm. Wall fixing screw hole 6 mm.
② Screw to be used for mounting box.

JBEA Series Pre-Drilled Aluminum Junction Box

Increased Safety

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

Applications

- Terminal junction boxes 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 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, silos and other facilities.

Features

- For use only with Ex certified terminal blocks.
- Stainless steel hardware.
- Yellow laminated plastic label with black lettering.
- Factory drilled and equipped.

Standard Materials

- Enclosure: gray painted grade marine aluminum alloy
- Hardware: stainless steel

Options

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

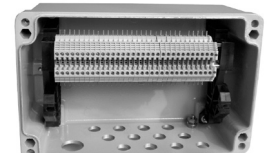
Certifications and Compliances

◆ ATEX or IECEx Certification

- **Certification Type PCe**
 - Gas, Zones 1 and 2:
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 G
 - Type of Protection: Ex e II, Ex eia IIC, Ex eib IIC
 - Temperature class: T6
 - Dust, Zones 21 and 22:
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T80 °C



Without Terminals



Equipped with Terminals

- Ambient Temperature: -55 °C to +60 °C
- CE Declaration of Conformity: 50221
- ATEX Certificate: LCIE 00 ATEX 6047
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK10

• Certification Type CAe

- Gas, Zones 1 and 2:
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 G
 - Type of Protection: Ex e II, Ex eia IIC, Ex eib IIC
 - Temperature class: T6 for Ta ≤ +40 °C , T5 for ≤ +55 °C
- 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 T96 °C
- Ambient Temperature: -40 °C to +55 °C
- CE Declaration of Conformity: 50325
- ATEX Certificate: LCIE 02 ATEX 6248X
- IECEx Certificate: IECEx LCI 04.0016X
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK10

◆ EURASEC Certification

- EURASEC N° TC RU C-FR.Г505.B.00911

Catalog Numbering Guide — JBEA Series Aluminum Junction Box

JBEA	E	A	12	11	09	D1
JB Series ATEX or ATEX/IECEx Certified Junction Box		Material: A - Aluminum		Width Dimensions mm: 11 - 110 20 - 205 38 - 380		Options: <i>(options must be listed alphabetically)</i> As per Drilling Detail Table D1 - 5 x M20 D2 - 4 x M20 + 1 x M25 D3 - 7 x M20 + 1 x M25 D5 - 7 x M20 + 1 x M25 D6 - 12 x M20 + 1 x M32 D7 - 19 x M20 + 1 x M32 D8 - 27 x M20 + 1 x M40 P-- - Unarmored Cable A-- - Armored Cable L-- - Lead Sheath Armored Cable E - Earth Continuity Brass Plate # - Customized Enclosure (<i>Digit number will be assigned at time of order placement</i>)
	Method of Protection: E - Increased Safety I - Intrinsic Safety		Length Dimensions mm: 12 - 120 17 - 170) 21 - 215		Depth Dimensions mm: 09 - 91 13 - 130 19 - 190	

JBEA Series Pre-Drilled Aluminum Junction Box

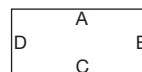
Increased Safety

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

Factory Drilled Ex e II Aluminum Junction Boxes

Fitted with:

- One Yellow laminated plastic label with black lettering.
- One horizontal symmetrical zinc plated rail. For use with Ex terminals only (not supplied).
- One Internal earth terminal.
- One M5 external earth screw.
- Cable glands and plugs ordered separately.

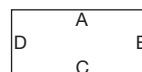


Type	Dimensions L x W x D mm	Rail Length Maximum mm	Threaded Holes Per Side				Weight kg	Volume dm ³	Catalog Number
			A	B	C	D			
PCe1	120 x 110 x 95	62	1 x M20	1 x M20	2 x M20	1 x M20	1.0	2.2	JBEA121109D1
PCe2	170 x 110 x 95	112	—	1 x M20	2 x M20 1 x M25	1 x M20	1.3	2.7	JBEA171109D2
PCe3	230 x 110 x 95	172	—	2 x M20	3 x M20 1 x M25	2 x M20	1.6	5.2	JBEA231109D3

Factory Drilled Exe II Aluminum Junction Boxes for Instrumentation Applications

Fitted with:

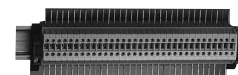
- One Yellow laminated plastic label with black lettering.
- Set of two insulated side supports (096115).
- One horizontal symmetrical zinc plated rail. For use with Ex terminals only (not supplied).
- One M8 external earth crossing terminal.
- Cable glands and plugs ordered separately.
- Also available for use with copper bar 12 x 2 mm or 12 x 4 mm.



Type	Dimensions L x W x D mm	Cable	Rail Length Maximum mm	Threaded Holes Side C		Weight kg	Volume dm ³	Catalog Number
CAe1	215 x 205 x 130	7 Pairs	221/105	1 x M25	7 x M20	4	13	JBEA212013D5
CAe2	320 x 205 x 130	12 Pairs	403/206	1 x M32	12 x M20	5	23	JBEA322013D6
CAe3	425 x 205 x 130	19 Pairs	590/310	1 x M32	19 x M20	6	33	JBEA422013D7
CAe5	480 x 380 x 190	27 Pairs	599/315	1 x M40	27 x M20	11	53	JBEA483819D8

Factory Assembled Ex Terminal Block for Junction Boxes Shown Above

Screwed/Screwed Terminal Block Fitted with Continuity Shield.



For Junction Boxes	Cable	Terminals 0.5/2.5 mm ² Qty.	Continuity Shield Qty.	Weight kg	Volume dm ³	Catalog Number
215 x 205 x 130	7 Pairs	14	7	0.3	0.5	096039
320 x 205 x 130	12 Pairs	24	12	0.4	1.1	096041
425 x 205 x 130	19 Pairs	38	19	0.5	1.3	096043
480 x 380 x 190	27 Pairs	54	27	0.6	1.7	096044

JBEA Series Pre-Drilled Aluminum Junction Box

Increased Safety

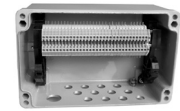
Zones 1 & 2 – 21 & 22
Gas (G) and Dust (D)

Factory Drilled and Equipped with Terminals Ex e II Aluminum Junction Boxes for Instrumentation Applications with Unarmored Cables

Fitted with: Horizontal beige terminal block. Copper bar with cable clamps or continuity shields. Yellow laminated plastic label with black lettering. M16 to M50 threaded entries. Cable glands and plugs ordered separately.



Unarmored cables



Type	Terminal Block 0.5/2.5 mm ² Qty.	Earth Terminal 0.5/2.5 mm ² Qty.	Copper Bar 10 x 3 mm Qty.	Cable Clamp 0.5/2.5 mm ² Qty.	Multi-cable Cable Entry Qty. 1	Single Cable Entries Qty.	Catalog Number
Cable U1000 RO2V — Single Cable Entries M20							
CAe1 07G1.5	7	1	1	5	M20	3	JBEA212013P01
CAe1 12G1.5	12	1	1	8	M25	6	JBEA212013P02
CAe2 19G1.5	19	1	1	11	M25	9	JBEA322013P03
CAe2 24G1.5	24	1	1	14	M32	12	JBEA322013P04
CAe2 27G1.5	27	1	1	15	M32	13	JBEA322013P05
CAe3 37G1.5	37	1	1	20	M32	18	JBEA422013P06
CAe1 07G2.5	7	1	1	5	M20	3	JBEA212013P07
CAe1 12G2.5	12	1	1	8	M25	6	JBEA212013P08
CAe2 19G2.5	19	1	1	11	M32	9	JBEA322013P09
CAe2 24G2.5	24	1	1	14	M32	12	JBEA322013P10
CAe2 27G2.5	27	1	1	15	M32	13	JBEA322013P11
CAe3 37G2.5	37	1	1	20	M40	18	JBEA422013P12
Type	Terminal Block 0.5/2.5 mm ² Qty.	Continuity Shield Qty.			Multi-cable Cable Entry Qty. 1	Single Cable Entries Qty.	Catalog Number
Cable EGSF — Single Cable Entries M16							
CAe1 07IP05	14	7			M20	7	JBEA212013P21
CAe1 07IT05	21	7			M20	7	JBEA212013P22
CAe2 12IP05	24	12			M25	12	JBEA322013P23
CAe2 12IT05	36	12			M25	12	JBEA322013P24
CAe3 19IP05	38	19			M32	19	JBEA422013P25
CAe5 27IP05	54	27			M32	27	JBEA483819P26
CAe1 07IP09	14	7			M25	7	JBEA212013P27
CAe1 07IT09	21	7			M25	7	JBEA212013P28
CAe2 12IP09	24	12			M32	12	JBEA322013P29
CAe2 12IT09	36	12			M32	12	JBEA322013P30
CAe3 19IP09	38	19			M32	19	JBEA422013P31
CAe5 27IP09	54	27			M40	27	JBEA483819P32
Cable EISF — Single Cable Entries M16							
CAe1 07IP05	15	8			M25	7	JBEA212013P41
CAe1 07IT05	22	8			M32	7	JBEA212013P42
CAe2 12IP05	25	13			M32	12	JBEA322013P43
CAe2 12IT05	37	13			M32	12	JBEA322013P44
CAe3 19IP05	39	20			M40	19	JBEA422013P45
CAe5 27IP05	55	28			M40	27	JBEA483819P46
CAe1 07IP09	15	8			M32	7	JBEA212013P47
CAe1 07IT09	22	8			M32	7	JBEA212013P48
CAe2 12IP09	25	13			M40	12	JBEA322013P49
CAe2 12IT09	37	13			M40	12	JBEA322013P50
CAe3 19IP09	29	20			M50	19	JBEA422013P51
CAe5 27IP09	55	28			M50	27	JBEA483819P52

Enclosures and Junction Boxes

INCREASED SAFETY EX E ZONE 1 RATED ENCLOSURES & JUNCTION BOXES

JBEA Series Pre-Drilled Aluminum Junction Box

Increased Safety

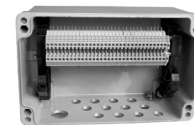
Zones 1 & 2 – 21 & 22
Gas (G) and Dust (D)

Factory Drilled and Equipped with Terminals Ex e II Aluminum Junction Boxes for Instrumentation Applications with Armored Cables

Fitted with: Horizontal beige terminal block. Copper bar with cable clamps or continuity shields. Yellow laminated plastic label with black lettering. Earth continuity brass plate. M8 external earth crossing terminal. M20 to M50 threaded entries. Cable glands and plugs ordered separately.



Armored cables



Type		Terminal Block 0.5/2.5 mm ² Qty.	Earth Terminal 0.5/2.5 mm ² Qty.	Copper Bar 10 x 3 mm Qty.	Cable Clamp 0.5/2.5 mm ² Qty.	Multi-cable Cable Entry Qty. 1	Single Cable Entries Qty.	Catalog Number
Cable U1000 RVFV — Single Cable Entries M20								
CAe1	07G1.5	7	1	1	5	M20	3	JBEA212013A01
CAe1	12G1.5	12	1	1	8	M20	6	JBEA212013A02
CAe2	19G1.5	19	1	1	11	M25	9	JBEA322013A03
CAe2	24G1.5	24	1	1	14	M25	12	JBEA322013A04
CAe2	27G1.5	27	1	1	15	M25	13	JBEA322013A05
CAe3	37G1.5	37	1	1	20	M32	18	JBEA422013A06
CAe1	07G2.5	7	1	1	5	M20	3	JBEA212013A07
CAe1	12G2.5	12	1	1	8	M25	6	JBEA212013A08
CAe2	19G2.5	19	1	1	11	M25	9	JBEA322013A09
CAe2	24G2.5	24	1	1	14	M32	12	JBEA322013A10
CAe2	27G2.5	27	1	1	15	M32	13	JBEA322013A11
CAe3	37G2.5	37	1	1	20	M32	18	JBEA422013A12
Type		Terminal Block 0.5/2.5 mm ² Qty.	Continuity Shield Qty.			Multi-cable Cable Entry Qty. 1	Single Cable Entries Qty.	Catalog Number
Cable EGFA — Single Cable Entries M20								
CAe1	07IP05	14	7			M20	7	JBEA212013A21
CAe1	07IT05	21	7			M20	7	JBEA212013A22
CAe2	12IP05	24	12			M25	12	JBEA322013A23
CAe2	12IT05	36	12			M25	12	JBEA322013A24
CAe3	19IP05	38	19			M25	19	JBEA422013A25
CAe5	27IP05	54	27			M32	27	JBEA483819A26
CAe1	07IP09	14	7			M25	7	JBEA212013A27
CAe1	07IT09	21	7			M25	7	JBEA212013A28
CAe2	12IP09	24	12			M25	12	JBEA322013A29
CAe2	12IT09	36	12			M32	12	JBEA322013A30
CAe3	19IP09	38	19			M32	19	JBEA422013A31
CAe5	27IP09	54	27			M40	27	JBEA483819A32
Cable EIFA — Single Cable Entries M20								
CAe1	07IP05	15	8			M25	7	JBEA212013A41
CAe1	07IT05	22	8			M25	7	JBEA212013A42
CAe2	12IP05	25	13			M32	12	JBEA322013A43
CAe2	12IT05	37	13			M32	12	JBEA322013A44
CAe3	19IP05	39	20			M32	19	JBEA422013A45
CAe5	27IP05	55	28			M40	27	JBEA483819A46
CAe1	07IP09	15	8			M32	7	JBEA212013A47
CAe1	07IT09	22	8			M32	7	JBEA212013A48
CAe2	12IP09	25	13			M40	12	JBEA322013A49
CAe2	12IT09	37	13			M40	12	JBEA322013A50
CAe3	19IP09	39	20			M40	19	JBEA422013A51
CAe5	27IP09	55	28			M50	27	JBEA483819A52

JBEA Series Pre-Drilled Aluminum Junction Box

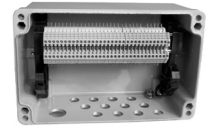
Increased Safety

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

Factory Drilled and Equipped with Terminals Ex e II Aluminum Junction Boxes for Instrumentation Applications with Lead Sheath Armored Cables

Fitted with: Horizontal beige terminal block. Copper bar with cable clamps or continuity shields. Yellow laminated plastic label with black lettering. Earth continuity brass plate. M8 external earth crossing terminal. M20 to M50 threaded entries. Cable glands and plugs ordered separately.

Armored cables
with lead sheath



Type		Terminal Block 0.5/2.5 mm ² Qty.	Earth Terminal 0.5/2.5 mm ² Qty.	Copper Bar 10 x 3 mm Qty.	Cable Clamp 0.5/2.5 mm ² Qty.	Multi-cable Cable Entry Qty. 1	Single Cable Entries Qty.	Catalog Number
U1000 RGPV — Single Cable Entries M20								
CAe1	07 x 1.5	7	1	1	5	M20	3	JBEA212013L01
CAe1	12 x 1.5	12	1	1	8	M25	6	JBEA212013L02
CAe2	19 x 1.5	19	1	1	11	M25	9	JBEA322013L03
CAe2	24 x 1.5	24	1	1	14	M32	12	JBEA322013L04
CAe2	27 x 1.5	27	1	1	15	M32	13	JBEA322013L05
CAe3	37 x 1.5	37	1	1	20	M32	18	JBEA422013L06
CAe1	07 x 2.5	7	1	1	5	M20	3	JBEA212013L07
CAe1	12 x 2.5	12	1	1	8	M25	6	JBEA212013L08
CAe2	19 x 2.5	19	1	1	11	M32	9	JBEA322013L09
CAe2	24 x 2.5	24	1	1	14	M32	12	JBEA322013L10
CAe2	27 x 2.5	27	1	1	15	M32	13	JBEA322013L11
CAe3	37 x 2.5	37	1	1	20	M40	18	JBEA422013L12
Type		Terminal Block 0.5/2.5 mm ² Qty.	Continuity Shield Qty.			Multi-cable Cable Entry Qty. 1	Single Cable Entries Qty.	Catalog Number
Cable EGPF — Single Cable Entries M20								
CAe1	07IP05	14	7			M20	7	JBEA212013L21
CAe1	07IT05	21	7			M20	7	JBEA212013L22
CAe2	12IP05	24	12			M25	12	JBEA322013L23
CAe2	12IT05	36	12			M25	12	JBEA322013L24
CAe3	19IP05	38	19			M25	19	JBEA422013L25
CAe5	27IP05	54	27			M32	27	JBEA483819L26
CAe1	07IP09	14	7			M25	7	JBEA212013L27
CAe1	07IT09	21	7			M25	7	JBEA212013L28
CAe2	12IP09	24	12			M32	12	JBEA322013L29
CAe2	12IT09	36	12			M32	12	JBEA322013L30
CAe3	19IP09	38	19			M40	19	JBEA422013L31
CAe5	27IP09	54	27			M40	27	JBEA483819L32
Cable EIPF — Single Cable Entries M20								
CAe1	07IP05	15	8			M25	7	JBEA212013L41
CAe1	07IT05	22	8			M32	7	JBEA212013L42
CAe2	12IP05	25	13			M32	12	JBEA322013L43
CAe2	12IT05	37	13			M32	12	JBEA322013L44
CAe3	19IP05	39	20			M40	19	JBEA422013L45
CAe5	27IP05	55	28			M50	27	JBEA483819L46
CAe1	07IP09	15	8			M32	7	JBEA212013L47
CAe1	07IT09	22	8			M32	7	JBEA212013L48
CAe2	12IP09	25	13			M40	12	JBEA322013L49
CAe2	12IT09	37	13			M40	12	JBEA322013L50
CAe3	19IP09	39	20			M50	19	JBEA422013L51
CAe5	27IP09	55	28			M50	27	JBEA483819L52

JBEA Series Pre-Drilled Aluminum Junction Box

Increased Safety

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

Defining maximum terminal block quantity according to power dissipation:

- Junction boxes used for instrumentation applications have very low current levels. Therefore there is no risk of overheating whatever the number of terminals inside the box.
- For applications other than instrumentation, the following tables allow you to define your junction box depending on the number of terminals and the maximum authorized current being carried.

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

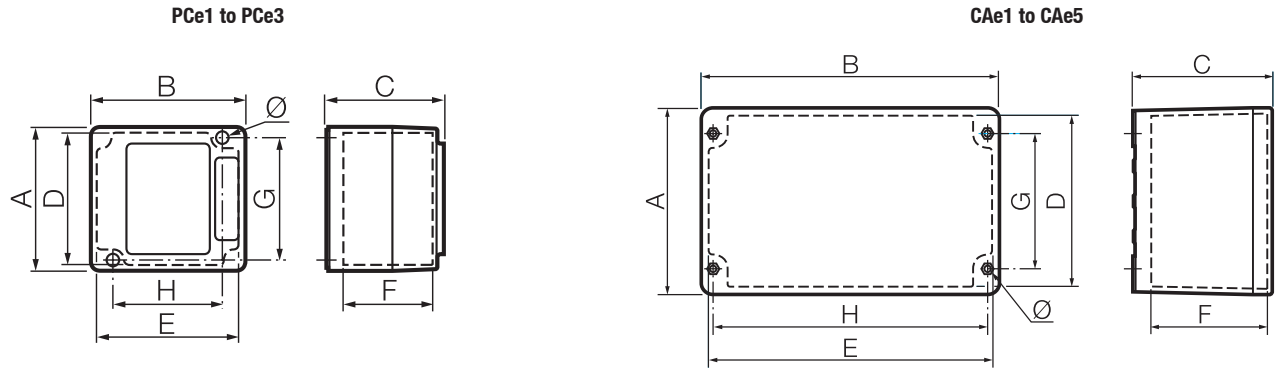
T Rating: T6		PCe1 120 x 110 x 95 mm	Type PCe2 170 x 110 x 95 mm	PCe3 230 x 110 x 95 mm
2.5 mm ²	Quantity	12	22	33
	I Maximum	15 A	13 A	12 A
4 mm ²	Quantity	10	18	28
	I Maximum	20 A	19 A	16 A
6 mm ²	Quantity	7	14	21
	I Maximum	32 A	27 A	24 A
10 mm ²	Quantity	4	6	8
	I Maximum	50 A	50 A	50 A

T Rating: T6 @ Ta 40 °C T5 @ Ta 55° C		CAe1 215 x 205 x 130 mm	Type CAe2 320 x 205 x 130 mm	CAe3 425 x 205 x 130 mm	CAe5 480 x 380 x 190 mm
2.5 mm ²	Quantity	20	21	23	38
	I Maximum	16 A	16 A	16 A	16 A
4 mm ²	Quantity	19	20	23	38
	I Maximum	20 A	20 A	20 A	20 A
6 mm ²	Quantity	12	13	14	23
	I Maximum	32 A	32 A	32 A	32 A
10 mm ²	Quantity	10	11	18	30
	I Maximum	40 A	40 A	32 A	32 A
16 mm ²	Quantity	8	10	13	22
	I Maximum	28 A	27 A	25 A	26 A
25 mm ²	Quantity	8	8	10	20
	I Maximum	67 A	73 A	69 A	60 A
35 mm ²	Quantity	8	8	10	12
	I Maximum	79 A	86 A	80 A	100 A

JBEA Series Pre-Drilled Aluminum Junction Box Dimensions

Increased Safety

Dimensions in Millimeters



Type	External Dimensions			Internal Dimensions			Fixings			
	A	B	C	D	E	F	G	H	Thick	Ø
PCe1	110	120	95	100	110	70	94	84	20	5
PCe2	110	170	95	100	160	70	94	134	20	5
PCe3	110	230	95	100	220	70	94	194	20	5
CAe1	205	215	130	190	200	105	146	186	10	7
CAe2	205	320	130	190	305	105	146	290	10	7
CAe3	205	425	130	190	410	105	146	398	10	7
CAe5	480	380	190	378	279	132	385	285	13	7

Enclosures and Junction Boxes

INCREASED SAFETY EX E ZONE 1 RATED ENCLOSURES & JUNCTION BOXES

JBEA and ECEA Series Aluminum Enclosures

Increased Safety

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

Applications

- 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 and other commercial facilities.
- JBEA Series:
 - Terminal junction boxes for electrical low voltage and instrumentation connections in hazardous areas.
 - Refer to technical data to define permitted number of terminal blocks and cable entries on selected junction boxes.
- ECEA Series:
 - Enclosure for distribution and control applications can be customized at our workshop to house a large range of components; i.e. control units, switches, breakers, transformers, meters, etc.

Features

- Operating temperature:
 - PCe type: -55 °C to +60 °C
 - CAe type: -40 °C to +55 °C
- Rail mounting.
- Refer to technical data to define permitted number and size of terminals and cable entries.

Standard Materials

- Enclosure: gray painted grade marine aluminum alloy
- Hardware: stainless steel

Options

- Nameplates.
- Consult your local sales representative for:
 - Enclosures custom drilled and assembled at our factory.
 - Empty enclosure with Ex “U” component marking for re-certification by notified body for CAe type.

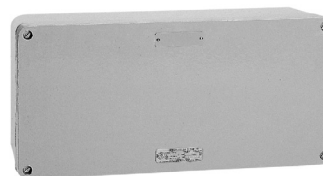
Certifications and Compliances

◆ ATEX or IECEx Certification

- Certification Type PCe**
 - 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, Ex de IIC
 - Temperature class: T6 for Ta ≤ +40 °C, T5 for Ta ≤ +60 °C
 - 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: -55 °C to +60 °C
 - CE Declaration of Conformity: 50221
 - ATEX Certificate: LCIE 00 ATEX 6047
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK10



PCe Type



CAe Type

• Certification Type CAe

- 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, Ex de IIC
 - Temperature class T6 to T2
- 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 T290 °C
- CE Declaration of Conformity: 50325
- ATEX Certificate: LCIE 02 ATEX 6248X
- IECEx Certificate: IECEx LCI 04.0016X
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK10

• Certification Type CAe U

- Gas, Zones 1 and 2:
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 G
 - Type of Protection: Ex e II
- Dust, Zones 21 and 22:
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 D
 - Type of Protection: Ex td A21
- Ambient Temperature: -40 °C to +55 °C
- CE Declaration of Conformity: 5C241
- ATEX Certificate: LCIE 09 ATEX 3036 U
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK10

◆ EURASEC Certification

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

JBEA and ECEA Series Aluminum Enclosures

Increased Safety

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

Catalog Numbering Guide — JBEA Series Aluminum Junction Box

JBEA	E	A	12	11	09	D1
JB Series ATEX/IECEX Certified Junction Box	Method of Protection: E - Increased Safety I - Intrinsic Safety	Material: A - Aluminum	Length Dimensions mm : 12 - 120 17 - 170 21 - 215	Width Dimensions mm: 11 - 110 20 - 205 38 - 380	Depth Dimensions mm: 09 - 91 13 - 130 19 - 190	Options: (options must be listed alphabetically) U - Component Certification "U" # - Customized Enclosure (Digit number will be assigned at time of order placement)

JBEA Series: Ex e II Aluminum Junction Boxes

For use with Ex certified terminals only (not supplied).
Mounting rails supplied.
Yellow laminated plastic label with black lettering.



ECEA Series: Aluminum Enclosure for Distribution and Control Applications

Designed to house a large range of components; i.e. control units, switches, breakers, transformers, meters, etc.
Must be customized at our workshop with the following Catalog Number:
Replace JB with EC, and add last digits and "#" for customized boxes. Example: ECEA 212013 #



Type	Dimensions L x W x D mm	Rail Length Maximum Width mm	Weight kg	Volume dm ³	Catalog Number	
					JBEA Series	ECEA Series
PCe1	120 x 110 x 95	94	1.0	2.2	JBEA121109	ECEA121109#
PCe2	170 x 110 x 95	144	1.3	2.7	JBEA171109	ECEA171109#
PCe3	230 x 110 x 95	204	1.6	5.2	JBEA231109	ECEA231109#
CAe1	215 x 205 x 130	191	4.0	13	JBEA212013	ECEA212013#
CAe2	320 x 205 x 130	293	5.0	23	JBEA322013	ECEA322013#
CAe3	425 x 205 x 130	400	6.0	33	JBEA422013	ECEA422013#
CAe5	480 x 380 x 190	335	11.0	53	JBEA483819	ECEA483819#

JBEA and ECEA Series Aluminum Enclosures

Increased Safety

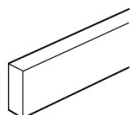
Zones 1 & 2 – 21 & 22
Gas (G) and Dust (D)

Accessories



Zinc Plated Symmetrical Steel Rail
For direct fixing. Set of two 60 mm height
spacers supplied.

Enclosure Type	Rail Length mm	Catalog Number	Pack
CAe1	191	JBEPDR215	1
CAe2	293	JBEPDR320	1
CAe3	400	JBEPDR425	1



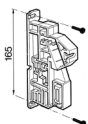
Copper Bar – 12 x 4 mm
Copper bar not perforated for cable clamps.

Bar Length mm	Catalog Number	Pack
160	097270	1
200	097271	1
310	097272	1
500	097273	1
690	097274	1



Cable Clamp for Copper Bar – 12 x 4 mm
1.5 mm² to 4 mm² capacity.
6 mm² to 16 mm² capacity.

097203	1
097204	1



Insulated Side Support – Set of Two
For mounting symmetrical, asymmetrical rails and copper bar
12 x 2 mm or 12 x 4 mm.
See dimensional data page for more details.

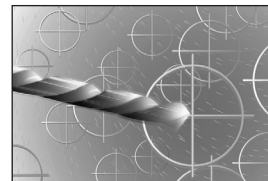
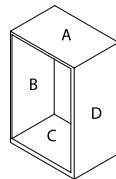
096115	1
--------	---

JBEA Series for Junction Box Application Only.

The size of the junction box needed to meet your requirements can be selected based on the table shown below.
We also offer you the possibility to drill and equip, please consult our drilling guide available online at: www.appletonelec.com

1. Define maximum cable entries according to number of modules available per side.

Cable Entry Metric Thread	Number of Modules
M20	1
M25	1
M32	1
M40	2
M50	3



Type	Length	Dimensions mm			Number of Modules		Allowable Max. Size	Terminal Dim. H — mm
		Width	Depth		A/C	B/B		
PCe1	120	110	95		2	2	M25	110
PCe2	170	110	95		2	3	M32	110
PCe3	230	110	95		2	4	M32	110
CAe1	215	205	130		11	8	M50	205
CAe2	320	205	130		18	8	M50	205
CAe3	425	205	130		26	8	M50	205
CAe5	575	380	190		34	25	M50	380

2. Maximum Rail Arrangement According to Physical Dimensions — Maximum Quantity of Horizontal Rails

Type	Terminal Capacity mm ²						
	2.5	4	6	10	16	35	50
PCe1/2/3	1	1	1	1	0	0	0
CAe1/2/3	1	1	1	1	1	1	0
CAe5	3	3	2	2	2	1	1

JBEA and ECEA Series Aluminum Enclosures

Increased Safety

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

3. Defining maximum terminal block quantity according to power dissipation:

- Junction boxes used for instrumentation applications have very low current levels, therefore there is no risk of overheating whatever the number of terminals inside the box.
- For applications other than instrumentation, the following tables allow you to define your junction box depending on the number of terminals and the maximum authorized current being carried with feed-through terminals.
- For single feed terminals using cross connection, please consult your local representative for a calculation.

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

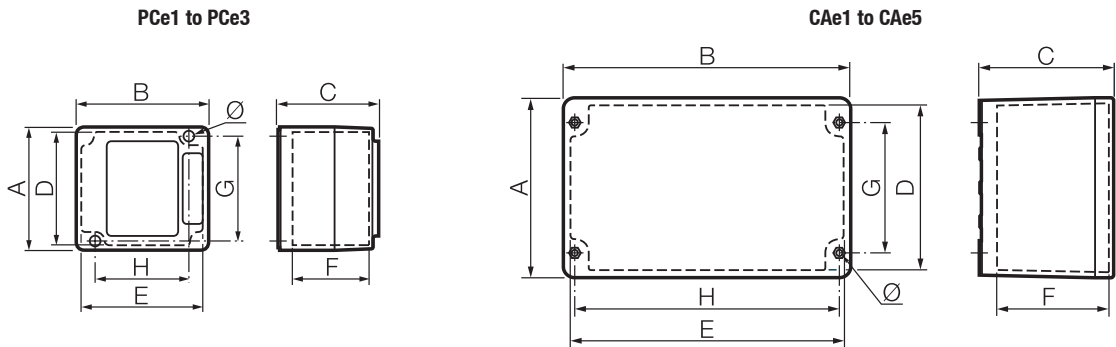
T Rating: T6		Type		
		CSPe1 120 x 120 x 91 mm	CSPe2 120 x 170 x 91 mm	CSPe3 120 x 230 x 91 mm
2.5 mm ²	Quantity	12	22	33
	I Maximum	15 A	13 A	12 A
4 mm ²	Quantity	10	18	28
	I Maximum	20 A	19 A	16 A
6 mm ²	Quantity	7	14	21
	I Maximum	32 A	27 A	24 A
10 mm ²	Quantity	4	6	8
	I Maximum	50 A	50 A	50 A

T Rating: T6 @ Ta +40 °C T5 @ Ta +55° C		Type			
		CAe1 200 x 215 x 150 mm	CAe2 200 x 320 x 150 mm	CAe3 200 x 425 x 150 mm	CAe4 200 x 575 x 150 mm
2.5 mm ²	Quantity	20	21	23	38
	I Maximum	16 A	16 A	16 A	16 A
4 mm ²	Quantity	19	20	23	38
	I Maximum	20 A	20 A	20 A	20 A
6 mm ²	Quantity	12	13	14	23
	I Maximum	32 A	32 A	32 A	32 A
10 mm ²	Quantity	10	11	18	30
	I Maximum	40 A	40 A	32 A	32 A
16 mm ²	Quantity	8	10	13	22
	I Maximum	28 A	27 A	25 A	26 A
25 mm ²	Quantity	8	8	10	20
	I Maximum	67 A	73 A	69 A	60 A
35 mm ²	Quantity	8	8	10	12
	I Maximum	79 A	86 A	80 A	100 A

JBEA and ECEA Series Aluminum Enclosure Dimensions

Increased Safety

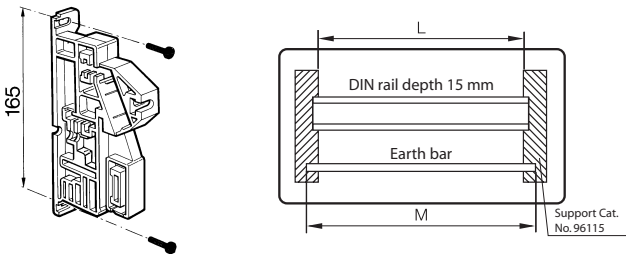
Dimensions in Millimeters



Type	External			Internal			Fixings			
	A	B	C	D	E	F	G	H	Thick	Ø
PCe1	110	120	95	100	110	70	94	84	20	5.0
PCe2	110	170	95	100	160	70	94	134	20	5.0
PCe3	110	230	95	100	220	70	94	194	20	5.0
CAe1	205	215	130	190	200	105	146	186	10	6.5
CAe2	205	320	130	190	305	105	146	290	10	6.5
CAe3	205	425	130	190	410	105	146	398	10	6.5
CAe5	480	380	190	378	279	132	385	285	13	7.0

Insulated Side Support (Rail Holder) 096115

Type	Equipment Capacity	
	L	M
CAe1	105	129
CAe2	206	234
CAe3	310	339
CAe5	315	345



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

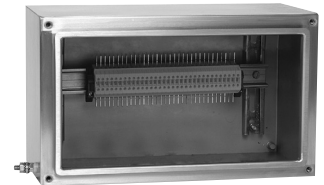
◆ ATEX/IECEx Certification

- **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



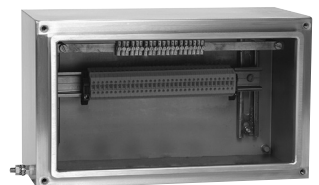
JBe46 — Equipped with Terminals



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

JBES Series Pre-Drilled 316L Stainless Steel Junction Boxes

Increased Safety

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

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: 12 - 120 18 - 180 22 - 220 26 - 260 37 - 370	Width Dimensions mm: 12 - 120 18 - 180 22 - 220 26 - 260 37 - 370	Depth Dimensions mm: 09 - 95 15 - 150 20 - 200	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 Terminals and Drilled 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 (6 Digit number will be assigned at time of order placement.)

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.

JBES Series Pre-Drilled 316L Stainless Steel Junction Boxes

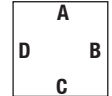
Increased Safety

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

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.

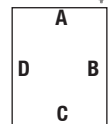


JBe10	120 x 120 x 95	100	1 x M20	1 x M20	2 x M20	1 x M20	1.0	1.4	JBES1212090D1
JBe20	120 x 120 x 95	160	–	1 x M20	2 x M20 1 x M25	1 x M20	1.5	2.0	JBES1218090D2
JBe20	120 x 120 x 95	160	–	2 x M20	3 x M20 1 x M25	2 x M20	1.5	2.0	JBES1218090D3

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.



JBe20	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
JBe36	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
JBe46	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
JBe47	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.

JBe36	220 x 260 x 150	14 (7 Pairs)	7	1 x M25	7 x M20	4.0	8.6	JBES2226150F5
JBe36	220 x 260 x 150	24 (12 pairs)	12	1 x M32	12 x M20	4.0	8.6	JBES2226150F6
JBe46	220 x 370 x 200	38 (19 pairs)	19	1 x M32	19 x M20	9.0	16.3	JBES2237200F7
JBe46	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.

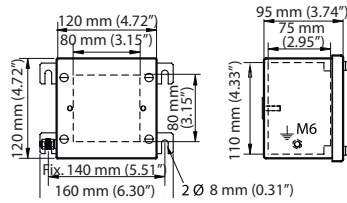
JBES Series Pre-Drilled 316L Stainless Steel Junction Box Dimensions

Increased Safety

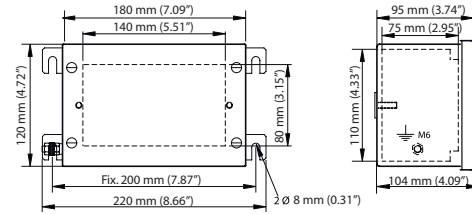
Dimensions in Millimeters

Factory Drilled without Terminal Block (DIN rail supplied)

JBBe10

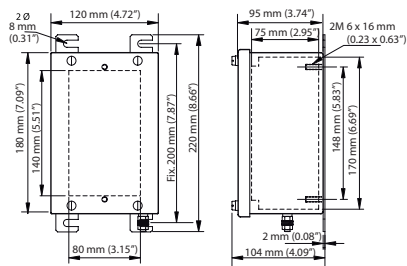


JBBe20

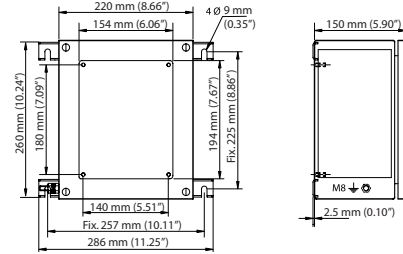


Factory Drilled and Equipped with Vertical Terminal Block

JBBe20

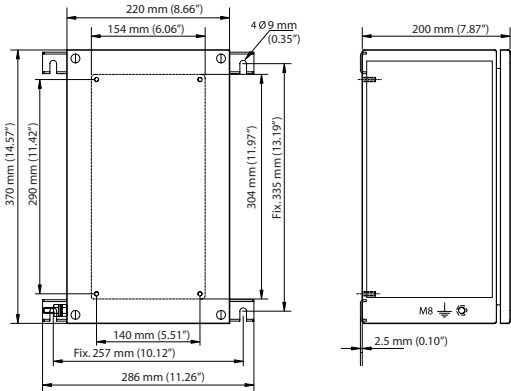


JBBe36

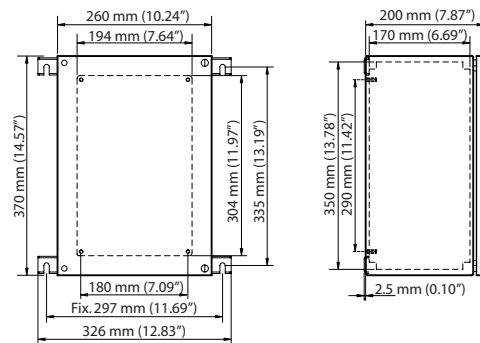


Factory Drilled and Equipped with Vertical Terminal Block

JBBe46

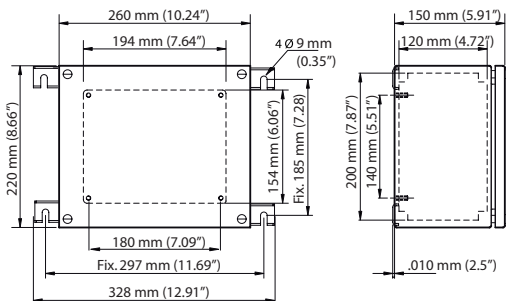


JBBe47

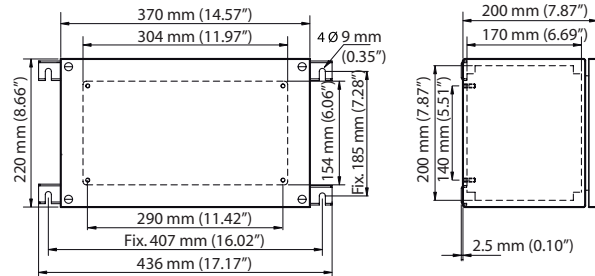


Factory Drilled and Equipped with Horizontal Terminal Block

JBBe36



JBBe46



JBES and ECES Series 316L Stainless Steel Enclosures

Increased Safety

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

Applications

- 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 such as:
 - Petroleum
 - Chemical
 - Refineries
 - Other industrial process facilities
- 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
 - Other commercial facilities
- JBES Series
 - Terminal junction box for electrical low voltage and instrumentation connections for use in hazardous areas.
 - Refer to technical data to define permitted number of terminal blocks and cable entries on selected junction boxes.
- ECES Series
 - Enclosure for distribution and control applications must be customized at our workshop to house a large range of components such as control units, switches, breakers, transformers, meters, etc.

Features

- Smooth, continuously welded seams.
- Available in a wide range of sizes.
- Operating temperature:
 - JBES Series: -50 °C to +70 °C
 - ECES Series: -50 °C to +55 °C
- Can be supplied with 1, 2, 3 or even 4 neoprene sealed gland plates for ease of cable installation.
- Hinges standard on all sizes above 370.0 mm x 260.0 mm.
- Poured-in-place polyurethane door gasket.
- Feed-thru earth grounding stud.
- Reversible door, opens 210 degrees, from any location top; bottom, left or right, by means of removable hinges that can be installed in any position.
- Reversible anti-vibration mounting brackets can be mounted on the top, bottom or side positions.
- Optional removable padlocking device.

Standard Materials

- Enclosure: 316L chrome plated stainless steel
- Hardware: 316L stainless steel

Standard Finishes

- Natural brushed finish

Accessories

- Mounting pan
- Rail mounting
- Padlocking device
- Door locking bracket for easy access
- Inside pocket
- Refer to technical data to define permitted number of terminals and cable entries acceptance

Options

- Removable gland plates.
- Nameplate.

JBES Series



ECES Series



Closed



Open

- Factory drilled and assembled, contact your local representative for information.
- Medium voltage application (11 kV max.), contact your local representative for information.
- Intrinsic safety version (JBIS) available with the use of intrinsic terminals.

Certifications and Compliances

◆ ATEX or 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, Ex de IIC, Ex demb IIC
 - Temperature class: T6 to T4
 - 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 T130 °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
- Certification Type JBe U**
 - Gas, Zones 1 and 2:
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 G
 - Type of Protection: Ex e II
 - Dust, Zones 21 and 22:
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 D
 - Type of Protection: Ex tD A21
 - Ambient Temperature: -40 °C to +70 °C.
 - CE Declaration of Conformity: 5C240
 - ATEX Certificate: LCIE 09 ATEX 3025U
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK10

JBES and ECES Series 316L Stainless Steel Enclosures

Increased Safety

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

◆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

Illustrated Features



Optional removable locking device.
Part Number 097209



Reversible antivibration mounting brackets, can be mounted in top, side or bottom positions.



M8 feed-thru earth/ground terminal.



Polyurethane poured in place door gasket and stainless steel captive screws.



Reversible door. Opens to 210°, top, bottom, left or right, by moving the location of the hinges



Optional removable gland plate.

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

JBES and ECES Series 316L Stainless Steel Enclosures

Increased Safety

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

Catalog Numbering Guide — JBES and ECES 316L Stainless Steel Enclosures ①

JB	E	S	12	12	09	0	M
Series: EC - ATEX/IECEX Certified Enclosure and Controls JB - ATEX/IECEX Certified Junction Box	Protection Method: E - Increased Safety I - Intrinsic Safety	Material: S - Stainless Steel	Length Dimensions mm: 12 - 120 18 - 180 22 - 220 26 - 260 37 - 370 56 - 560 75 - 750 11 - 1130	Width Dimensions mm : 12 - 120 18 - 180 22 - 220 26 - 260 37 - 370 56 - 560 75 - 750	Depth Dimensions mm: 09 - 91 15 - 150 20 - 200 30 - 300	Gland plate: 0 - None 1 - One Bottom 2 - One Top and Bottom 3 - Two Sides and Bottom 4 - All Sides	Options: <i>(options must be listed alphabetically)</i> M - Mounting Pan U - Component Certification "U" # - Customized Enclosure (6 Digit number will be assigned at time of order placement.)

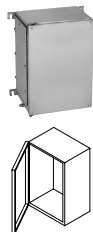
JBES and ECES Series 316L Stainless Steel Enclosures

Increased Safety

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

JBES Series

Type	Dimensions L x W x D mm	Hinged Door ②	Vertical Orientation Rail Length mm	Horizontal Orientation Rail Length mm	Weight kg	Volume dm³	Catalog Number
Ex e II 316L Stainless Steel Junction Boxes without Gland Plate							
<i>For use only with Ex terminals (not supplied). External earth crossing terminal. (M6 for JBe10/20/30 and M8 for other boxes). Mounting pan and rails to be ordered separately.</i>							
JBe10	120 x 120 x 95	N	–	100	1.0	1.4	JBES1212090_
JBe20	120 x 180 x 95	N	–	160	1.5	2.0	JBES1218090_
JBe30	180 x 180 x 95	N	–	160	1.8	3.0	JBES1818090_
JBe36	220 x 260 x 150	R	170	210	5.0	8.6	JBES2226150_
JBe36	260 x 220 x 150	R	210	170	5.0	8.6	JBES2622150_
JBe46	220 x 370 x 200 ①	R	170	320	8.5	16.3	JBES2237200_
JBe47	260 x 370 x 200 ①	Y	210	320	9.0	19.3	JBES2637200_
JBe46	370 x 220 x 200 ①	R	320	170	8.5	16.6	JBES3722200_
JBe47	370 x 260 x 200 ①	Y	320	210	9.0	19.3	JBES3726200_
JBe55	370 x 370 x 200 ①	Y	320	320	13.0	27.4	JBES3737200_
JBe65	370 x 560 x 200 ①	Y	320	510	19.0	41.5	JBES3756200_
JBe75	370 x 750 x 200 ①	Y	320	700	24.0	55.5	JBES3775200_
JBe65	560 x 370 x 200 ①	Y	510	320	19.0	41.5	JBES5637200_
JBe77	560 x 560 x 200 ①	Y	510	510	28.0	62.8	JBES5656200_
JBe79	560 x 750 x 200 ①	Y	510	700	33.0	84.0	JBES5675200_
JBe75	750 x 370 x 200 ①	Y	700	320	24.0	55.5	JBES7537200_
JBe79	750 x 560 x 200 ①	Y	700	510	33.0	84.0	JBES7556200_
JBe86	1130 x 750 x 300	Y	1080	700	50.0	235.0	JBES1175300_



① 200 mm depth enclosure available with 300 mm depth – replace digit 2 with 3 – Example: JBES3737304.

② N: Not Available, R: On request or separate accessories, Y: Supplied.

JBES and ECES Series 316L Stainless Steel Enclosures

Increased Safety

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

JBES Series

Type	Dimensions L x W x D mm	Hinged Door ②	One Gland Plate Catalog Number	Two Gland Plates Catalog Number	Three Gland Plate Catalog Number	Four Gland Plates Catalog Number
Ex e II 316L Stainless Steel Terminal Junction Boxes with Gland Plates 3 mm Thick						
For use only with Ex terminals (not supplied). M8 External earth crossing terminal. Mounting pan and rails to be ordered separately.						
 One Gland Plate	JBe36	220 x 260 x 150	R	JBES2226151_	JBES2226152_	JBES2226153_ JBES2226154_
	JBe36	220 x 260 x 150	R	JBES2622151_	JBES2622152_	JBES2622153_ JBES2622154_
	JBe46	220 x 370 x 200①	R	JBES2237201_	JBES2237202_	JBES2237203_ JBES2237204_
	JBe47	260 x 370 x 200①	Y	JBES2637201_	JBES2637202_	JBES2637203_ JBES2637204_
 Two Gland Plate	JBe46	370 x 220 x 200①	R	JBES3722201_	JBES3722202_	JBES3722203_ JBES3722204_
	JBe47	370 x 260 x 200①	Y	JBES3726201_	JBES3726202_	JBES3726203_ JBES3726204_
	JBe55	370 x 370 x 200①	Y	JBES3737201_	JBES3737202_	JBES3737203_ JBES3737204_
	JBe65	370 x 560 x 200①	Y	JBES3756201_	JBES3756202_	JBES3756203_ JBES3756204_
 Gland Plate Three	JBe75	370 x 750 x 200①	Y	JBES3775201_	JBES3775202_	JBES3775203_ JBES3775204_
	JBe65	560 x 370 x 200①	Y	JBES5637201_	JBES5637202_	JBES5637203_ JBES5637204_
	JBe77	560 x 560 x 200①	Y	JBES5656201_	JBES5656202_	JBES5656203_ JBES5656204_
	JBe79	560 x 750 x 200①	Y	JBES5675201_	JBES5675202_	JBES5675203_ JBES5675204_
 Four Gland Plate	JBe75	750 x 370 x 200①	Y	JBES7537201_	JBES7537202_	JBES7537203_ JBES7537204_
	JBe79	750 x 560 x 200①	Y	JBES7556201_	JBES7556202_	JBES7556203_ JBES7556204_
	JBe86	1130 x 750 x 300	Y	JBES1175301_	JBES1175302_	JBES1175303_ JBES1175304_

① 200 mm depth enclosure available with 300 mm depth – replace digit 2 with 3 – Example: JBES3737304.

② N: Not Available, R: On request or separate accessories, Y: Supplied.

JBES and ECES Series 316L Stainless Steel Enclosure Accessories

Increased Safety

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

Mounting Accessories

Enclosure Length mm	Rail Length mm	Catalog Number	
		 Symmetrical Depth = 15 mm Catalog Number	 Asymmetrical Catalog Number

Zinc Plated Steel Rail

For fixing onto uprights with clip nut supplied.



Symmetrical



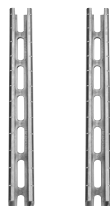
Asymmetrical

120	100	097246	—
180	160	097247	—
220	170	097240	097250
260	210	097241	097251
370	320	097242	097252
560	510	097243	097253
750	700	097244	097254
1130	1080	097245	097255

Enclosure Length mm	Bar Length mm	Catalog Number
------------------------	------------------	----------------

Zinc Plated Steel Uprights

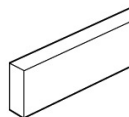
Set of two.



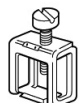
220	160	097230
260	200	097231
370	310	097232
560	500	097233
750	690	097234
1130	1070	097235

Copper Bar – 12 x 4 mm

Copper bar not perforated for cable clamps.



220	160	097270
260	200	097271
370	310	097272
560	500	097273
750	690	097274
1130	1070	097275



Cable Clamp for Copper Bar – 12 x 4 mm

1.5 mm² to 4 mm² Capacity

6 mm² to 16 mm² Capacity

097203

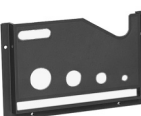
097204

JBES and ECES Series 316L Stainless Steel Enclosure Accessories

Increased Safety

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

Mounting Accessories - Continued:

	Enclosure Dimensions mm		Mounting Pan Dimensions mm	Catalog Number
	Height	Width		
	Mounting Pan – Zinc Plated Steel			
	120	120	100 x 100	097277
	120	180	100 x 160	097278
	180	180	160 x 160	097279
	220	260	160 x 200	097280
	220	370	160 x 310	097281
	260	370	200 x 310	097282
	370	370	310 x 310	097283
	370	560	310 x 500	097284
	370	750	310 x 690	097285
	560	560	500 x 500	097286
	560	750	500 x 690	097287
	1130	750	690 x 1070	097288
	Spacers for Mounting at Back of Box			
	Set of two insulated pillars for copper bar 12 x 4 mm.			
	Height = 100 mm			097206
	Height = 50 mm			097207
	Conversion Kit — Door to Cover			
	Must be used to remove hinges.			097202
	Spare Hinges			
	Set of Two			097201
	Spare Mounting Brackets — Set of Two			
	One left and one right.			097200
	Self Adhesive Pocket for Drawings			
	External dimensions: 260 x 165 mm Internal dimensions: 230 x 130 x 18 mm			097263
	External dimensions: 340 x 235 mm Internal dimensions: 310 x 200 x 18 mm			097264
	Additional Door Padlocking Device			
	Padlock not supplied.			097209
Locking Bracket				
Locks door in open position during wiring			097265	

Enclosures and Junction Boxes

INCREASED SAFETY EX E ZONE 1 RATED ENCLOSURES & JUNCTION BOXES

JBES and ECES Series 316L Stainless Steel Enclosure Accessories

Increased Safety

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

Mounting Accessories - Continued:

Dimensions mm				Gland Plate/Coupling Flange	Catalog Number
Enclosure Width	Height	Dimensions mm			
Spare Gland Plate					
220	150	B/D	170 x 120	JBESGP221B	
260	150	A/C	250 x 120	JBESGP261A	
260	200	A/C	250 x 170	JBESGP262A	
260	200	B/D	210 x 170	JBESGP262B	
370	200	A/C	360 x 170	JBESGP372A	
370	200	B/D	320 x 170	JBESGP372B	
560	200	A/C	550 x 170	JBESGP562A	
560	200	B/D	510 x 170	JBESGP562B	
750	200	A/C	740 x 170	JBESGP752A	
750	200	B/D	700 x 170	JBESGP752B	
260	300	A/C	250 x 270	JBESGP263A	
370	300	A/C	360 x 270	JBESGP373A	
370	300	B/D	320 x 270	JBESGP373B	
560	300	A/C	550 x 270	JBESGP563A	
560	300	B/D	510 x 270	JBESGP563B	
750	300	A/C	740 x 270	JBESGP753A	
750	300	B/D	700 x 270	JBESGP753B	
Coupling Flange					
260	200	A/C	250 x 120	JBESCF262A	
370	200	A/C	360 x 170	JBESCF372A	
370	200	B/D	320 x 170	JBESCF372B	
560	200	A/C	550 x 170	JBESCF562A	
560	200	B/D	510 x 170	JBESCF562B	
750	200	A/C	740 x 170	JBESCF752A	
750	200	B/D	700 x 170	JBESCF752B	
370	300	A/C	360 x 270	JBESCF373A	
370	300	B/D	320 x 270	JBESCF373B	
560	300	A/C	550 x 270	JBESCF563A	
560	300	B/D	510 x 270	JBESCF563B	
750	300	A/C	740 x 270	JBESCF753A	
750	300	B/D	700 x 270	JBESCF753B	

Enclosures and Junction Boxes

INCREASED SAFETY EX E ZONE 1 RATED ENCLOSURES & JUNCTION BOXES

JBES and ECES Series 316L Stainless Steel Enclosures

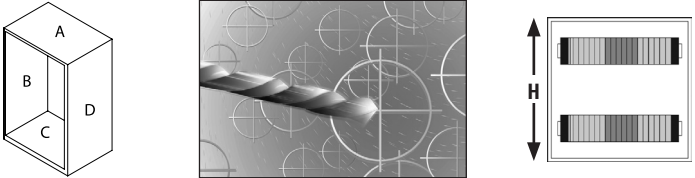
Increased Safety

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

JBES Series for Terminal Junction Box Application Only.

Use the table shown below to select the proper size junction box based upon your requirements.
Custom drilled and equipped boxes can be configured using our drilling guide available online at www.appletonelec.com.

1. Define maximum cable entries according to number of modules available per side.

Cable Entry Metric Thread	Number of Modules							
M20	1							
M25	1							
M32	1							
M40	2							
M50	3							
Type	Dimensions mm			Number of Modules		Number of Modules ①		Terminal Dim.
	Height	Width	Depth	A/C	B/D	A'/C'	B'/D'	H — mm
JBe10	120	120	95	5	5	—	—	220
JBe20	120	180	95	9	5	—	—	220
JBe30	180	180	95	9	9	—	—	220
JBe36	220	260	150	11	7	9	5	220
JBe36	260	220	150	7	11	5	9	260
JBe46	220	370	200	31	16	19	7	260
JBe46	370	220	200	16	31	7	9	370
JBe47	370	260	200	20	31	14	20	370
JBe47	260	370	200	31	20	19	10	260
JBe55	370	370	200	31	31	19	18	370
JBe65	560	370	200	31	49	19	31	560
JBe65	370	560	200	49	31	34	18	370
JBe75	750	370	200	31	66	19	47	750
JBe75	370	750	200	66	31	49	18	370
JBe77	560	560	200	49	49	34	31	560
JBe79	750	560	200	49	66	34	45	750
JBe79	560	750	200	66	49	49	31	560
JBe86	1130	750	300	102	—	82	—	1130

2. Maximum rail arrangement according to physical dimensions.

Terminal Capacity mm ²	Maximum Quantity of Horizontal Rails Per Type of terminal							
	2.5	4	6	10	16	35	50	70
JBe10/20/30/36	1	1	1	1	1	1	0	0
JBe36/46/47	2	2	2	1	1	1	0	0
JBe46/47/55/65/75	3	3	2	2	2	2	1	1
JBe65/77/79	5	5	4	4	4	3	2	2
JBe75/79	7	7	6	6	5	4	3	2
JBe86	10	10	9	9	8	6	4	4

① Enclosure with gland plate.

JBES and ECES Series 316L Stainless Steel Enclosures

Increased Safety

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

3. Defining maximum terminal block quantity according to power dissipation:

- Junction boxes used for instrumentation applications carry very low current levels. Therefore there is no risk of overheating whatever the number of terminals inside the box.
- For applications other than instrumentation, the following tables allow you to define your junction box depending on the number of terminals and the maximum authorized current being carried with feed-through terminals.
- For single feed terminals using cross connection, consult factory for calculation.

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

T Rating: T6 @ Ta +55° C		Type		
		JBBe10 120 x 120 x 95 mm	JBBe20 120 x 180 x 95 mm	JBBe30 180 x 180 x 95 mm
2.5 mm ²	Quantity	10	21	21
	I Maximum	16 A	16 A	16 A
4 mm ²	Quantity	8	17	16
	I Maximum	25 A	25 A	25 A
6 mm ²	Quantity	6	13	13
	I Maximum	32 A	32 A	32 A
10 mm ²	Quantity	5	10	9
	I Maximum	50 A	50 A	50 A

T Rating: T6 @ Ta +55° C		Type			
		JBBe36 220 x 260 x 150 mm	JBBe46 220 x 370 x 200 mm	JBBe47 260 x 370 x 200 mm	JBBe55 370 x 370 x 200 mm
2.5 mm ²	Quantity	33	50	70	110
	I Maximum	16 A	14 A	12 A	10 A
4 mm ²	Quantity	21	38	62	80
	I Maximum	25 A	20 A	16 A	15 A
6 mm ²	Quantity	19	22	23	26
	I Maximum	32 A	32 A	32 A	32 A
10 mm ²	Quantity	12	14	15	20
	I Maximum	50 A	50 A	50 A	45 A
16 mm ²	Quantity	8	10	17	20
	I Maximum	63 A	63 A	50 A	50 A
25 mm ²	Quantity	12	14	16	20
	I Maximum	80 A	80 A	76 A	76 A
35 mm ²	Quantity	9	11	12	16
	I Maximum	100 A	100 A	100 A	93 A

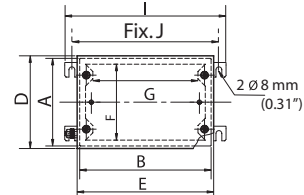
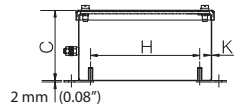
T Rating: T6 @ Ta +40 °C T6 @ Ta +55° C		Type			
		JBBe65 560 x 370 x 200 mm	JBBe75 750 x 370 x 200 mm	JBBe77 560 x 560 x 200 mm	JBBe79 560 x 750 x 200 mm
35 mm ²	Quantity	15	16	18	—
	I Maximum	100 A	99 A	100 A	—
50 mm ²	Quantity	12	16	—	—
	I Maximum	125 A	108 A	—	—
70 mm ²	Quantity	12	16	16	16
	I Maximum	150 A	135 A	144 A	150 A
95 mm ²	Quantity	9	12	12	16
	I Maximum	200 A	178 A	190 A	173 A
120 mm ²	Quantity	—	6	—	12
	I Maximum	—	250 A	—	225 A
150 mm ²	Quantity	—	9	—	12
	I Maximum	—	250 A	—	250 A

JBES and ECES Series 316L Stainless Steel Enclosure Dimensions

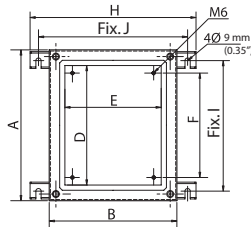
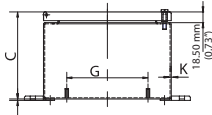
Increased Safety

Dimensions in Millimeters

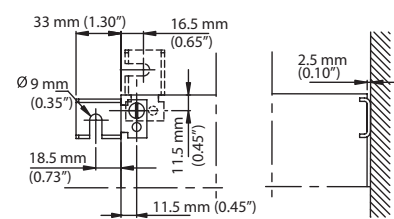
Box 95 Depth



Box 200 or 300 Depth



Mounting Bracket



L x W x D mm	A	B	C	D	E	F	G	H	I	J	K
Box Depth 95											
120 x 120 x 95	120	120	95	127	127	104	84	88	160	140	1.5
120 x 180 x 95	120	180	95	127	187	104	144	148	220	200	1.5
180 x 180 x 95	180	180	95	187	187	164	144	148	220	200	1.5
Box Depth 200											
220 x 370 x 200	220	370	200	166	316	140	290	436	185	407	1.5
370 x 260 x 200	370	260	200	316	206	290	180	326	335	297	1.5
370 x 370 x 200	370	370	200	316	316	290	290	436	335	407	2
560 x 370 x 200	560	370	200	506	316	480	290	436	525	407	2
750 x 370 x 200	750	370	200	695	316	670	290	436	715	407	2
560 x 560 x 200	560	560	200	506	506	480	480	626	525	597	2
750 x 560 x 200	750	560	200	696	506	670	480	626	715	597	2
Box Depth 300											
370 x 370 x 300	370	370	300	316	316	290	290	436	335	407	2
560 x 370 x 300	560	370	300	506	316	480	290	436	525	407	2
750 x 370 x 300	750	370	300	695	316	670	290	436	715	407	2
560 x 560 x 300	560	560	300	506	506	480	480	626	525	597	2
750 x 560 x 300	750	560	300	696	506	670	480	626	715	597	2
1130 x 750 x 300	1130	750	300	1076	506	1050	670	816	1095	787	2

JBDR Series Pre-Drilled Round Junction Boxes

Flameproof

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

Applications

- Small 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 such as:
 - Petroleum refineries
 - Chemical refineries
 - Other industrial process facilities
- Designed for use in Zone 21 or 22 areas, where flammable dusts are present either continuously or intermittently such as:
 - Food processing
 - Dairy
 - Brewing
 - Silos
 - Other facilities

Features

- IK10 (20 Joules) high impact resistant box.
- Pillar type terminal block (4 x terminals) for easy connection.
- Terminal capacity: 4 x 4 mm² or 2 x 6 mm².
- Internal Earth: ground plate with 4 x M4 screws for connection to 4 mm diameter lugs.
- External Earth: M5 screw.
- Back plate supplied.
- Operating temperature -40 °C to +55 °C.
- Housing: gray painted marine grade aluminum
- Hardware: stainless steel

Certifications and Compliances

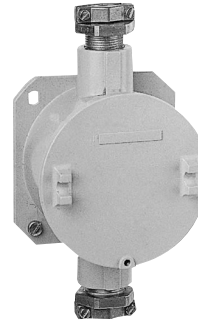
◆ ATEX Certification

- **Certification Type BR1d**
 - Gas, Zones 1 and 2:
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 G
 - Type of Protection: Ex d IIC
 - Temperature class: T6 to T4
 - Dust, Zones 21 and 22:
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T95 °C.
 - Ambient Temperature: -40 °C to +55 °C.
 - CE Declaration of Conformity: 50230
 - ATEX Certificate: LCIE 02 ATEX 6056
 - Index of Protection according EN/IEC 60529: IP66
 - Internal Volume: ≤ 2dm³ (2 liters)
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK10

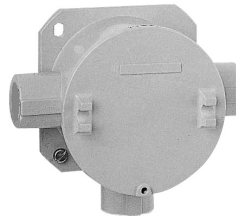
◆ EURASEC Certification

- **Certification Type BR1d**
 - EURASEC N° TC RU C-FR.Г505.B.00911

2 Entry Version with Cable Glands



3 Entry Version



4 Entry Version

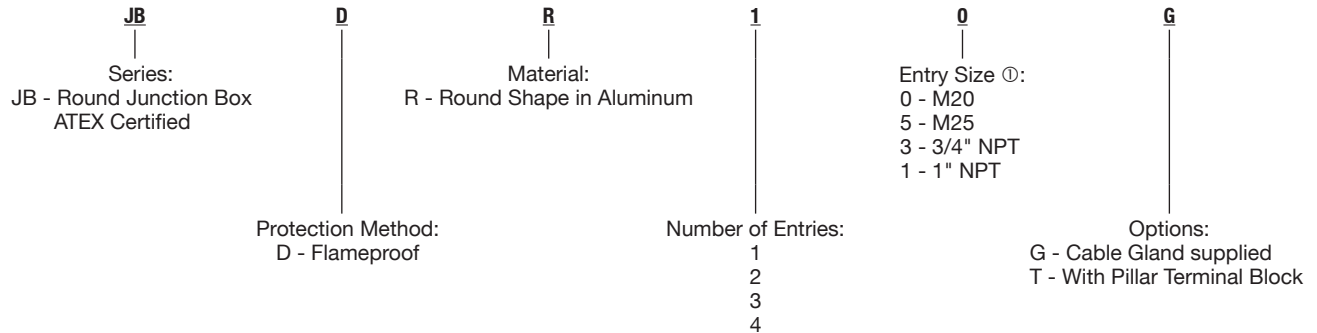


JBDR Series Pre-Drilled Round Junction Boxes

Flameproof

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

Catalog Numbering Guide — JBDR Series Pre-Drilled Round Junction Boxes



	Equipment	Weight kg	Volume dm ³	Catalog Number
 2 Entry	Threaded Entries with M25 Integrated Cable Gland: For unarmored cable: – sealed Ø: 9 to 15 mm (093496)			
	2 x M25 entries (feed through) 2 integrated cable glands supplied	0.8	2	JBDR25G
	3 x M25 entries (in a “T”) 3 integrated cable glands supplied	0.8	2	JBDR35G
	4 x M25 entries (in a cross) 4 integrated cable glands supplied	0.9	2	JBDR45G
 3 Entry	Threaded Entries for M20 Cable Gland – Not Supplied			
	2 x M20 entries (feed through)	0.7	2	JBDR20
	3 x M20 entries (in a “T”)	0.7	2	JBDR30
	4 x M20 entries (in a cross)	0.8	2	JBDR40
 4 Entry	Threaded Entries for NPT 3/4" Cable Gland – Not Supplied			
	2 x 3/4" NPT entries (feed through)	0.7	2	JBDR23
	3 x 3/4" NPT entries (in a “T”)	0.7	2	JBDR33
	4 x 3/4" NPT entries (in a cross)	0.8	2	JBDR43
	Threaded Entries for NPT 1" Cable Gland – Not Supplied			
	4 x 1" NPT entries (in a cross)	0.8	2	JBDR41

Accessories

Description	Weight kg	Volume dm ³	Catalog Number
Pillar Terminal Block			
4 terminals 4 x 4 mm ² or 2 x 6 mm ² cables	0.1	0.4	TBP44
M25 Integrated Cable Gland			
for unarmored cables — dia. 9 to 15 mm	0.6	0.9	093496

① For other entry size, use adaptor.

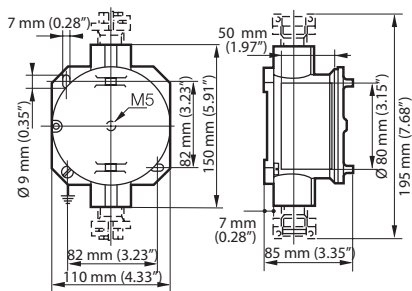
Shaded catalog numbers are normally stocked items. All other items are made to order.

JBDR Series Pre-Drilled Round Junction Box Dimensions

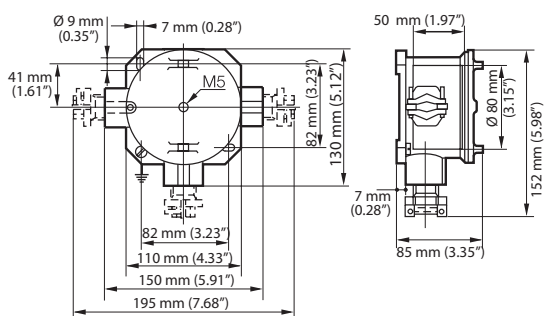
Flameproof

Dimensions in Millimeters

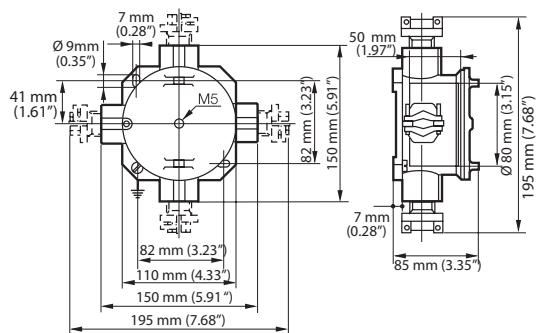
2 Entry Version



3 Entry Version



4 Entry Version



JBD Series Pre-drilled Terminal Junction Boxes

Flameproof

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

Applications

- Terminal junction boxes to facilitate electrical connections in hazardous areas.
- Ideal for use in wet or corrosive atmospheres.
- Designed for use in Zone 1 or 2 areas, where flammable gases or vapors are present either continuously or intermittently, such as:
 - Petroleum plants
 - Chemical plants
 - Refineries
 - Other industrial process facilities
- Designed for use in Zone 21 or 22 areas where flammable dusts are present either continuously or intermittently, such as:
 - Food processing
 - Dairy
 - Brewing
 - Silos

Features

- Flanged flameproof joint for square enclosures.
- Screwed flameproof joint for round enclosure.
- External earth crossing terminal.
- Supplied with one symmetrical zinc plated rail.
- Terminal block not supplied.
- Yellow laminated plastic nameplate with black lettering.
- Pre-drilled entries.
- Operating temperature -40 °C to +55 °C.

Standard Materials

- Enclosure housing: gray painted cast iron and marine grade aluminum alloy
- Hardware: stainless steel

Certifications and Compliances

◆ ATEX or IECEx Certification

- **Certification Type CF2/A/B/C**
 - Gas, Zones 1 and 2:
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 G
 - Type of Protection: Ex d IIB
 - Temperature class: T6 for $T_a \leq +40\text{ °C}$, T5 for $T_a \leq +55\text{ °C}$
 - Dust, Zones 21 and 22:
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 D
 - Type of Protection: Ex td A21
 - Surface Temperature: T95 °C
 - CE Declaration of Conformity: 50254
 - ATEX Certificate: LCIE 03 ATEX 6061X
- **Certification Type CF1F**
 - Gas, Zones 1 and 2:
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 G
 - Type of Protection: Ex d IIC
 - Temperature class: T6 for $T_a \leq +40\text{ °C}$, T5 for $T_a \leq +55\text{ °C}$
 - Dust, Zones 21 and 22:
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 D
 - Type of Protection: Ex td A21
 - Surface Temperature: T95 °C
 - CE Declaration of Conformity: 50257
 - ATEX Certificate: LCIE 03 ATEX 6044X
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK10
 - Internal Volume: > 2dm³ (2 liters)

JBDAB – Aluminum Version



JBDFC – Cast Iron Version



JBDFB – Cast Iron Version



• Certification Type CF20B

- Gas, Zones 1 and 2:
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 G
 - ATEX/IEC Protection: Ex d IIB
 - Temperature class: T6
- Dust, Zones 21 and 22:
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 D
 - Type of Protection: Ex td A21
 - Surface Temperature: T80 °C
- Ambient Temperature: -40 °C to +55 °C
- CE Declaration of Conformity: 50229
- ATEX Certificate: LCIE 02 ATEX 6057X
- IECEx Certificate: IECEx LCI 08.0023X
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK10
- Internal Volume: > 2dm³ (2 liters)

◆ EURASEC Certification

- **Certification Type CF2/A/B/C**
 - EURASEC N° TC RU C-FR.1605.B.00911
- **Certification Type CF1F**
 - EURASEC N° TC RU C-FR.1605.B.00911

Options

- For use with equipment other than terminal blocks, please consult your local sales representative.

JBD Series Pre-drilled Terminal Junction Boxes

Flameproof

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

Enclosures and Junction Boxes

FLAMEPROOF EX D ZONE 1 RATED JUNCTION BOXES

Type	Dimensions mm	Threaded Entry Per Side A B C D				Rail Length Capacity mm	Weight kg	Volume dm³	Catalog Number	Pack
		A	B	C	D					
Ex d IIB Enclosure in Cast Iron										
CF2C	130 x 130 x 90	1 x M20	1 x M20	2 x M20	1 x M20	64	4	3	JBDFB131309D1	1
CF2A	205 x 145 x 127	2 x M20	1 x M20	3 x M20	1 x M20	120	9.4	3	JBDFB201413D2	1
CF2B	270 x 190 x 120	—	2 x M20 1 x M25	3 x M20	2 x M20	162	12.6	7	JBDFB271912D3	1
Ex d IIB Enclosure in Aluminum										
CF20B	370 x 270 x 208	—	3 x M20	5 x M20 1 x M32	3 x M20	260	12.8	24	JBDAB372720D4	1
Ex d IIC Enclosure in Cast Iron										
CF1F	167 x 167 x 126	1 x M32	1 x M32	1 x M32	1 x M32	100	6.7	13	JBDFC161612D5	1
CF1F	167 x 167 x 126	1 x 1"NPT	1 x 1"NPT	1 x 1"NPT	1 x 1"NPT	100	6.7	13	JBDFC161612D6	1

Cast Iron Version Dimensions in Millimeters

CF2C CF1F CF2A/CF2B										
Type	External			Internal			Fixings			
	A	B	C	D	E	F	G	H	K	Ø
CF2C	130	130	90	90	90	65	86	86	10	7
CF2A	202	144	127	155	95	65	156	98	12	7
CF2B	267	187	120	200	120	78	202	122	12	7

Aluminum Version Dimensions in Millimeters

Type	External			Internal			Fixings			
	A	B	C	D	E	F	G	H	K	Ø
CF20B	370	270	208	300	175	159	250	245	15	11

JBDA and JBDF – ECDA and ECDF Series Customized Enclosures

Flameproof

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

Applications

- Designed for use in Zones 1, 2, 21 and 22 in the oil and gas industry such as:
 - Petroleum
 - Chemical
 - Refineries
 - Other industrial process facilities
- Junction box applications:
 - JBD series enclosures may be customized to house terminal blocks.
- Enclosure and control applications:
 - ECD series enclosures may be customized to house a large range of components such as:
 - Control units
 - Breakers
 - Starters
 - Relays
 - Meters
 - Etc.

Features

- Enclosures are available in a wide range of sizes.
- Precision machined flameproof joint between body and cover.
- Wall thickness suitable for all sizes of cable entries.
- External fixing lugs.
- Internal mounting pan.
- Square and round windows available in a wide range of sizes.
- Machining and drilling must be completed in our workshops.
- Power dissipated calculation including cables must be completed according to each size of certified enclosure.

Standard Materials

- Enclosures: gray painted cast iron or marine grade aluminum alloy
- Hardware: stainless steel

Options

- Indirect cable entries available through Ex e connection enclosure.
- Factory assembled and wired.
- Empty enclosure with Ex "U" component marking for re-certification by notified body (CF10B to CF70B).

Certifications and Compliances

◆ ATEX or ATEX/IECEx Certification

- Certification Type CF2/A/B/C**
 - Gas, Zones 1 and 2
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 G
 - Type of Protection: Ex d IIB
 - Temperature class: T6 to T2
 - Dust, Zones 21 and 22
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T95 °C to T290 °C
 - Ambient Temperature: -40 °C to +55 °C
 - CE Declaration of Conformity: 50254
 - ATEX Certificate: LCIE 03 ATEX 6061X
 - Internal Volume: ≤ 2dm³ (2 liters)
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK10

JBDA



ECDF



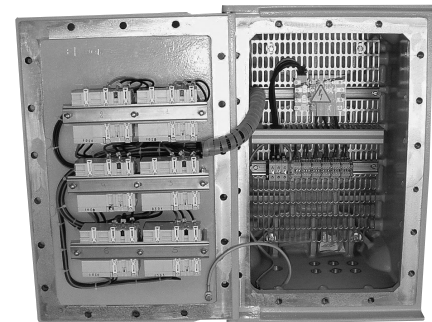
ECDA



JBDF



Customized Enclosures



- Certification Type CF10B to CF70B, CF10C to CF70C**
 - Gas, Zones 1 and 2
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 G
 - Type of Protection CF10B to CF70B: Ex d IIB
 - Type of Protection CF10C to CF70C: Ex d IIC
 - Temperature class: T6 to T4
 - 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 T130 °C
 - Ambient Temperature
 - CF30B, CF70B, CF70C: -20 °C to +55 °C
 - CF10B, CF20B, CF40B, CF50B, CF10C, CF30C, CF50C: -40 °C to +55 °C
 - CF60B: -50 °C to +55 °C
 - CE Declaration of Conformity: 50229
 - ATEX Certificate: LCIE 02 ATEX 6057X
 - IECEx Certificate: IECEx LCI 08.0023X
 - Internal Volume: > 2dm³ (2 liters)
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK10

Enclosures and Junction Boxes

FLAMEPROOF EX D ZONE 1 RATED JUNCTION BOXES

JBDA and JBDF – ECDA and ECDF Series Customized Enclosures

Flameproof

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

• Certification Type CF1A/B/D/E

- Gas: Zones 1 and 2
- Conforming to ATEX 94/9/CE: Ⓢ II 2 G
- Type of Protection: Ex d IIC
- Temperature class: T6 to T2
- Dust: Zones 21 and 22
- Conforming to ATEX 94/9/CE: Ⓢ II 2 D
- Type of Protection: Ex tD A21
- Surface Temperature: T95 °C to T290 °C
- Ambient Temperature: -40 °C to +55 °C
- CE Declaration of Conformity: 50257
- ATEX Certificate: LCIE 03 ATEX 6044X
- IEC Certificate: LCIE Ex 03.003X
- Internal Volume CF1A/B/D/E: > 2dm³ (2 liters)
- Internal Volume CF1E: ≤ 2dm³ (2 liters)
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK10

• Certification Type CF10BU to CF70BU

- Gas: Zones 1 and 2
- Conforming to ATEX 94/9/CE: Ⓢ II 2 G
- Type of Protection: Ex d IIB
- Dust: Zones 21 and 22
- Conforming to ATEX 94/9/CE: Ⓢ II 2 D
- Type of Protection: Ex tD A21
- Ambient Temperature
- CF30BU, CF60BU, CF70BU:
-20 °C to +55 °C,
- CF10BU, CF20BU, CF40BU, CF50BU:
-40 °C to +55 °C
- CE Declaration of Conformity: 5C238
- ATEX Certificate: LCIE 07 ATEX 0005U
- Internal Volume: > 2dm³ (2 liters)
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK10

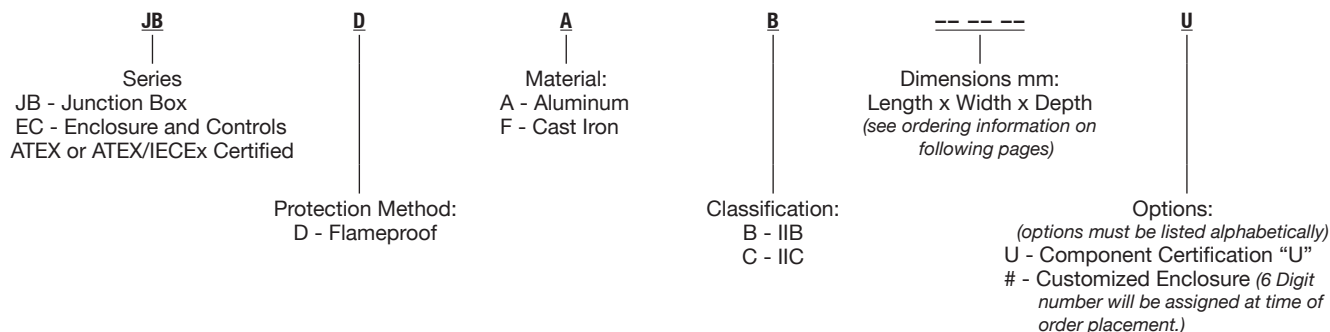
• Certification Type JBEW

- Gas: Zones 1 and 2
- Conforming to ATEX 94/9/CE: Ⓢ II 2 G
- Type of Protection: Ex d IIB + H₂
- Temperature class: T6 to T4
- 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 T130 °C
- Ambient Temperature: -40 °C to +55 °C
- CE Declaration of Conformity: 50279
- ATEX Certificate: LCIE 07 ATEX 6069X
- Internal Volume: > 2dm³ (2 liters)
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK10

◆ EURASEC Certification

- **Certification Type CF2/A/B/C**
– EURASEC N° TC RU C-FR.Г505.B.00911
- **Certification Type CF10B to CF70B, CF10C to CF70C**
– EURASEC N° TC RU C-FR.Г505.B.00911
- **Certification Type CF1A/B/D/E**
– EURASEC N° TC RU C-FR.Г505.B.00911

Catalog Numbering Guide – JBDA and JBDF – ECDA and ECDF Series Customized Enclosures



JBDA and JBDF – ECDA and ECDF Series Customized Enclosures

Flameproof

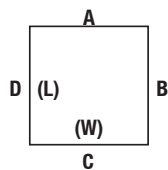
Zones 1 & 2 – 21 & 22
Gas (G) and Dust (D)

Catalog Number ①							
Type	Dimensions mm L x W x D	Hinged Door	Weight kg	Volume dm³	JBD Series	ECD Series	
Ex d IIB Enclosure in Cast Iron with Flanged Flameproof Joint							
	CF2C	130 x 130 x 90	–	4	3	JBDFB131309	ECDFB131309
	CF2A	205 x 145 x 127	–	9.4	3	JBDFB201413	ECDFB201413
	CF2B	270 x 190 x 120	–	12.6	7	JBDFB271912	ECDFB271912
Ex d IIB Enclosure in Cast Aluminum with Flanged Flameproof Joint							
	CF10B	260 x 270 x 208	–	9	17	JBDAB262720	ECDAB262720
	CF20B	370 x 270 x 208	–	13	24	JBDAB372720	ECDAB372720
	CF30B	340 x 320 x 230	Yes	29	68	JBDAB343223	ECDAB343223
	CF40B	455 x 320 x 347	Yes	50	126	JBDAB453234	ECDAB453234
	CF50B	455 x 440 x 347	Yes	65	240	JBDAB454434	ECDAB454434
	CF60B	680 x 440 x 413	Yes	106	378	JBDAB684441	ECDAB684441
	CF70B	680 x 640 x 413	Yes	130	382	JBDAB686441	ECDAB686441
Ex d IIC Enclosure in Cast Aluminum with Spigot Flameproof Joint							
	CF1E	140 x 162 x 100	–	1.5	2.2	JBDAC141610	ECDAC141610
	CF1B	210 x 230 x 125	–	4.8	5.5	JBDAC212312	ECDAC212312
	CF1A	295 x 265 x 195	–	10	9.6	JBDAC292619	ECDAC292619
	CF1D	360 x 335 x 200	–	10	14.6	JBDAC363320	ECDAC363320
Ex d IIC Enclosure in Cast Aluminum with Screwed Flameproof Joint							
	CF10C	230 x 215 x 238	–	12	16	JBDAC232124	ECDAC232124
	CF30C	320 x 340 x 234	–	28	68	JBDAC323423	ECDAC323423
	CF50C	440 x 455 x 345	–	64	245	JBDAC444534	ECDAC444534
Ex d IIC Enclosure in Cast Iron with Screwed Flameproof Joint							
	CF70C	680 x 640 x 450	Yes	310	382	JBDFC686445	ECDFC686445

① Options: Component Certification "U" and/or Customized Enclosure # add digits as per examples: JBDAB2627203 #, JBDAB2627203U #.

JBDA and JBDF – ECDA and ECDF Series Customized Enclosure Dimensions

Flameproof



Type	Dimensions mm L x W x D	Maximum Quantity of Threaded Entries Per Side				Max. Size ①	Rail Length Capacity for Terminal Block mm	
		A M20	B M20	C M20	D M20		(L)	(W)
Ex d IIB Enclosure in Cast Iron								
CF2C	130 x 130 x 90	1	2	1	2	M25	–	64
CF2A	205 x 145 x 127	1	3	1	1	M32	–	120
CF2B	270 x 190 x 120	2	4	2	4	M50	–	162
Ex d IIB Enclosure in Cast Aluminum								
CF10B	260 x 270 x 208	8	6	8	6	M75	155	148
CF20B	370 x 270 x 208	6	12	6	12	M75	260	148
CF30B	340 x 320 x 230	8	8	8	8	M75	260	218
CF40B	455 x 320 x 347	16	28	16	28	M75	330	200
CF50B	455 x 440 x 347	26	26	26	26	M75	295	330
CF60B	680 x 440 x 413	26	51	26	51	M100	540	300
CF70B	680 x 640 x 413	38	42	38	42	M100	530	530
Ex d IIC Enclosure in Cast Iron								
CF1E	140 x 162 x 100	1	2	1	2	M32	–	99
CF1B	210 x 230 x 125	1	3	2	3	M32	–	155
CF1A	295 x 265 x 195	6	6	5	6	M63	190	190
CF1D	360 x 335 x 200	16	17	15	17	M63	180	250
Ex d IIC Enclosure in Cast Aluminum								
CF10C	230 x 215 x 238	5	5	5	5	M75	120	105
CF30C	320 x 340 x 234	8	8	8	8	M75	260	215
CF50C	440 x 455 x 345	26	26	26	26	M75	295	330

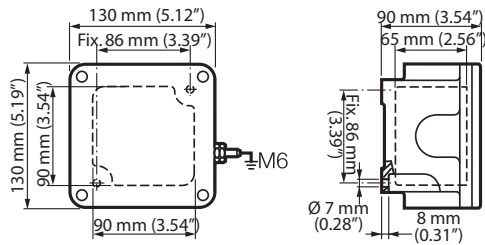
① Consult your local sales representative for quantity.

JBDA and JBDF – ECDA and ECDF Series Customized Enclosure Dimensions

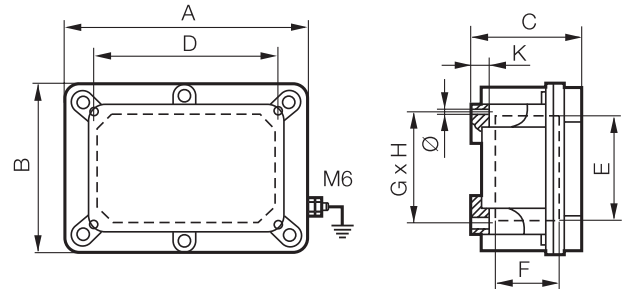
Flameproof

Dimension in Millimeters

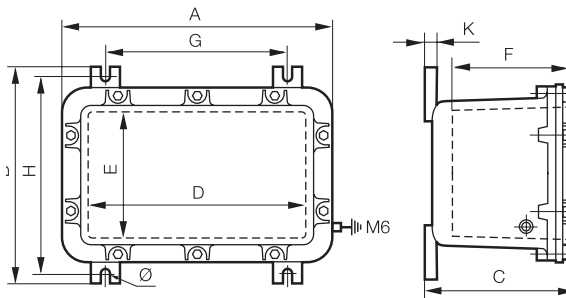
JBDF and ECDF: CF2C Type



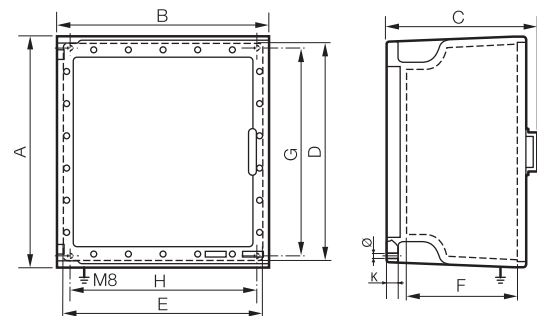
JBDF and ECDF: CF2A and CF2B Type



JBDA and ECDA: CF10B and CF20B Type



JBDA and ECDA: CF30B and CF70B Type



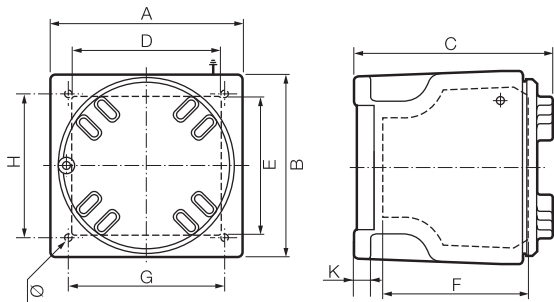
Type	A	B	C	D	E	F	G	H	K	Ø
JBDF and ECDF: CF2A and CF2B Type										
CF2A	202	144	96	156	154	65.5	98	156	10	7
CF2B	267	187	115	202	200	81	122	202	12	7
JBDA and ECDA: CF10B and CF20B Type										
CF10B	259	270	207	190	175	161	140	245	15	11
CF20B	369	270	207	300	175	161	250	245	15	11
JBDA and ECDA: CF30B and CF70B Type										
CF30B	340	320	238	285	265	161	298	278	20	9
CF40B	455	320	377	395	265	253	391	256	25	11
CF50B	455	440	380	400	376	253	391	376	25	11
CF60B	680	440	445	610	376	292	616	376	25	14
CF70B	680	640	445	610	576	292	616	576	25	14

JBDA and JBDF – ECDA and ECDF Series Customized Enclosure Dimensions

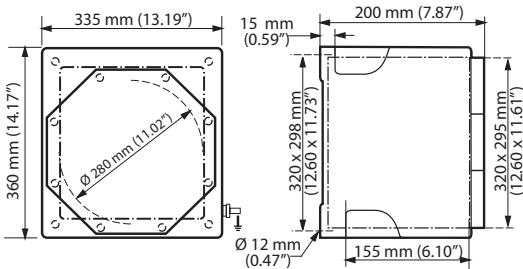
Flameproof

Dimension in Millimeters

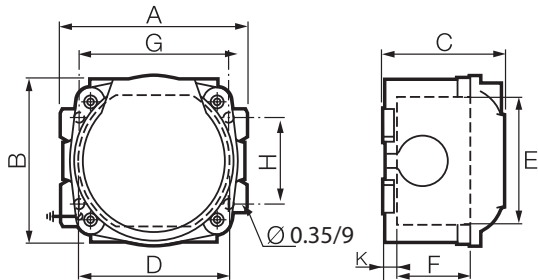
JBDA and ECDA CF10C to CF50C
JBDF and ECDF: CF70C Type



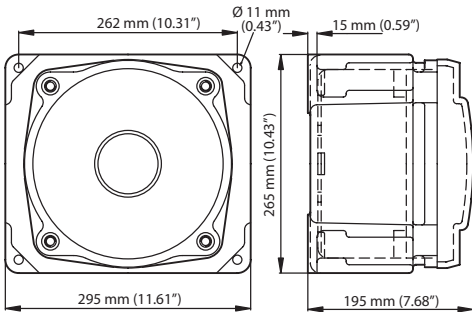
JBDA and ECDA: CF1D Type



JBDA and ECDA: CF1B and CF1E Type



JBDA and ECDA: CF1A Type



Type	A	B	C	D	E	F	G	H	K	Ø
JBDA and ECDA CF10C to CF50C JBDF and ECDF: CF70C Type										
CF10C	230	215	238	180	165	175	188	173	20	9
CF30C	320	340	234	271	290	154	278	298	20	9
CF50C	440	455	345	386	401	241	376	391	25	11
CF70C	680	640	450	616	576	290	616	576	25	14
JBDA and ECDA: CF1B and CF1E Type										
CF1B	230	210	125	175	175	90	210	100	15	9
CF1E	140	162	121	120	120	80	120	120	12	9

ECDX Series Customized Welded Steel Enclosures

Flameproof

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

Applications

- Designed for use in Zones 1, 2, 21 and 22 in the oil and gas industry; i.e. petroleum, chemical, refineries, and other industrial process facilities.
- Enclosures may be customized to house terminal blocks, and a large range of components; i.e. control units, breakers, starters, relays, meters, etc.

Features

- Enclosures are available in a wide range of sizes.
- Precision machined flameproof joint between body and cover.
- Hinged door.
- External fixing lugs.
- Internal mounting pan.
- Square and round windows available in a wide range of sizes.
- Machining and drilling must be done at our factory.
- Power dissipated calculation including cables must be completed according to each size of certified enclosure.

Standard Materials

- Gray painted mechanically welded steel enclosure
- Stainless steel hardware

Options

- Indirect cable entries available through Ex e connection enclosure.
- Factory assembled and wired.
- Switch rack assembly.
- Empty enclosure with Ex “U” component marking for recertification by notified body (CMS3-4-5-6-7-40-43-44U).

Certifications and Compliances

◆ ATEX/IECEx or ATEX Certification

- Certification Type CMS**
 - Gas, Zones 1 and 2
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 G
 - Type of Protection: Ex d IIB
 - Temperature class: T6 to T4
 - Dust, Zones 21 and 22
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 D
 - Type of Protection: Ex tD
 - Surface Temperature: T80 °C to T130 °C
 - Ambient Temperature: -20 °C to +55 °C
 - CE Declaration of Conformity: 50236
 - ATEX Certificate: LCIE 02 ATEX 6247X

Catalog Numbering Guide — ECDX Customized Enclosures



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

ECDX Series



Example of Customized Enclosure



- IECEx Certificate: IECEx LCI 080024X
- Internal Volume: > 2 dm³ (2 liters)
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK10
- **Certification Type CMS 3U-4U-5U-6U-7U-40U-43U**
 - Gas, Zones 1 and 2
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 G
 - Type of Protection: Ex d IIB
 - Dust, Zones 21 and 22
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 D
 - Type of Protection: Ex tD
 - Ambient Temperature: -20 °C to +55 °C
 - CE Declaration of Conformity: 5C235
 - ATEX Certificate: LCIE 07 ATEX 0008U
 - Internal Volume: > 2 dm³ (2 liters)
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK10

◆ EURASEC Certification

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

◆ Others Certification

- **Certification Type CMS**
 - INMETRO Certificate: BVC 11.0641-X ①

ECDX Series Customized Welded Steel Enclosures

Flameproof

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

Type	Dimensions — L x W x D mm	Weight kg	Volume dm ³	Catalog Number
Ex d IIB Enclosure in Welded Steel ①				
CMS3	300 x 270 x 180	92	234	ECDXB302718
CMS4	415 x 260 x 285	152	234	ECDXB412628
CMS5	415 x 385 x 285	180	369	ECDXB413828
CMS6	635 x 375 x 345	336	647	ECDXB633734
CMS7	635 x 575 x 345	384	647	ECDXB635734
CMS47	700 x 500 x 295	268	698	ECDXB705029
CMS43	700 x 600 x 295	298	698	ECDXB706029
CMS46	700 x 700 x 295	318	698	ECDXB707029
CMS44	800 x 500 x 295	298	698	ECDXB805029
CMS40	800 x 600 x 295	318	698	ECDXB806029
CMS42	800 x 700 x 295	308	698	ECDXB807029
CMS45	900 x 500 x 295	348	698	ECDXB905029
CMS41	900 x 600 x 295	348	698	ECDXB906029
CMS57	1000 x 550 x 295	395	1144	ECDXB105529
CMS52	1000 x 630 x 295	430	1144	ECDXB106329
CMS55	1000 x 700 x 295	452	1144	ECDXB107029
CMS53	1200 x 550 x 295	445	1144	ECDXB125529
CMS50	1200 x 630 x 295	485	1144	ECDXB126329
CMS54	1200 x 700 x 295	515	1144	ECDXB127029
CMS56	1400 x 550 x 295	495	1144	ECDXB145529
CMS51	1400 x 630 x 295	540	1144	ECDXB146329
Ex d IIB Enclosure in 316L Stainless Steel ②				
CMS3	300 x 270 x 180	92	234	ECDXB302718S
CMS4	415 x 260 x 285	152	234	ECDXB412628S
CMS5	415 x 385 x 285	180	369	ECDXB413828S
CMS6	635 x 375 x 345	336	647	ECDXB633734S
CMS7	635 x 575 x 345	384	647	ECDXB635734S
CMS47	700 x 500 x 295	268	698	ECDXB705029S
CMS43	700 x 600 x 295	298	698	ECDXB706029S
CMS46	700 x 700 x 295	318	698	ECDXB707029S
CMS44	800 x 500 x 295	298	698	ECDXB805029S
CMS40	800 x 600 x 295	318	698	ECDXB806029S
CMS42	800 x 700 x 295	308	698	ECDXB807029S
CMS45	900 x 500 x 295	348	698	ECDXB905029S
CMS41	900 x 600 x 295	348	698	ECDXB906029S
CMS57	1000 x 550 x 295	395	1144	ECDXB105529S
CMS52	1000 x 630 x 295	430	1144	ECDXB106329S
CMS55	1000 x 700 x 295	452	1144	ECDXB107029S
CMS53	1200 x 550 x 295	445	1144	ECDXB125529S
CMS50	1200 x 630 x 295	485	1144	ECDXB126329S
CMS54	1200 x 700 x 295	515	1144	ECDXB127029S
CMS56	1400 x 550 x 295	495	1144	ECDXB145529S
CMS51	1400 x 630 x 295	540	1144	ECDXB146329S

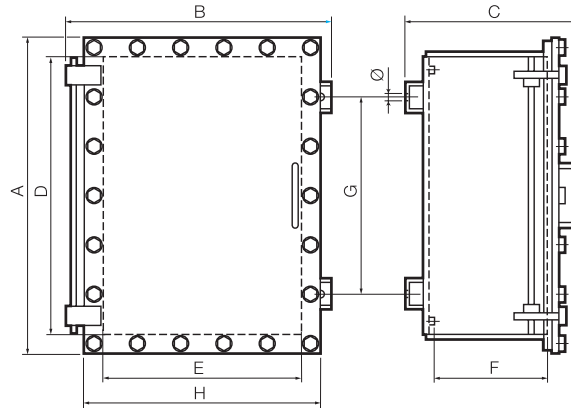
① For component certification and/or customized enclosure add digits as per examples: ECDXB302718# or ECDXB302718U#.

② For component certification and/or customized enclosure add digits as per example: ECDXB302718S# or ECDXB302718SU#.

ECDX Series Customized Welded Steel Enclosures

Flameproof

Dimensions in Millimeters



Type	External			Internal			Fixings Lug Thick			
	A	B	C	D	E	F	G	H	mm	Ø
CMS3	388	440	318	300	270	180	200	370	7	16
CMS4	503	429	418	415	260	280	315	360	7	16
CMS5	503	554	418	415	385	280	315	485	7	16
CMS6	723	554	478	635	375	340	455	475	7	16
CMS7	723	745	478	635	575	340	470	675	7	16
CMS47	796	650	445	700	500	295	500	600	7	18
CMS43	796	750	445	700	600	295	500	700	7	18
CMS46	796	850	445	700	700	295	500	800	7	18
CMS44	896	650	445	800	500	295	600	600	7	18
CMS40	896	750	445	800	600	295	600	700	7	18
CMS42	896	850	445	800	700	295	600	800	7	18
CMS45	996	650	445	900	500	295	600	600	7	18
CMS41	996	750	445	900	600	295	600	700	7	18
CMS57	1125	730	452	1000	550	295	700	660	7	22
CMS52	1125	810	452	1000	630	295	700	740	7	22
CMS55	1125	880	452	1000	700	295	700	810	7	22
CMS53	1325	730	452	1200	550	295	900	660	7	22
CMS50	1325	810	452	1200	630	295	900	740	7	22
CMS54	1325	880	452	1200	700	295	900	810	7	22
CMS56	1525	730	452	1400	550	295	1100	660	7	22
CMS51	1525	810	452	1400	630	295	1100	740	7	22

AJBEW Cast Junction Boxes

Explosionproof, Dust-Ignitionproof

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

Application

- Explosionproof junction boxes are used where hazardous materials are handled or stored. These enclosures may be used for:
 - Terminals
 - Splicing wires
 - Pull boxes
 - Bus boxes

Features

- Precision machined flame path between box and cover.
- Bolt on stainless steel slotted mounting feet for horizontal or vertical mounting.
- Flexible hinge mounting either left or right side is standard on all boxes 12 x 12 x 06 and larger.
- External flange maximizes internal space.
- Wall thickness suitable for minimum of five full threads.
- Provision for mounting pan.
- Wide range of drilled and tapped outlets.
- Ground lug package and installation instructions for termination of ground wires enclosed.
- O-ring gasket insures watertight integrity.

Standard Materials

- Bodies and covers: sand cast copperfree (4/10 of 1% max.) aluminum
- Cover bolts: stainless steel
- O-ring: neoprene
- Hinges: stainless steel
- Mounting pan: galvanized steel

Standard Finishes

- Bodies and covers: shot blast finish standard

Options

- Custom drilling and tapping.
- ATEX U component certification add suffix -XU.

Certifications and Compliances

◆ATEX/IECEx Certification

- **Certification Type JBEW**
 - Gas, Zones 1 and 2
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 G
 - Type of Protection: Ex d IIB+H2 Gb
 - Dust, Zones 21 and 22
 - Conforming to ATEX 94/9/CE: Ⓔ II 2 D
 - Type of Protection: Ex t Db
 - Ambient Temperature: -40 °C to +55 °C
 - CE Declaration of Conformity: 5C239
 - ATEX Certificate: LCIE 07 ATEX 6069X
 - IECEx Certificate: IECEx LCI 07.0018X
 - Internal Volume: > 2 dm³ (2 liters)
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK10

◆EURASEC Certification

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



AJBEW Cast Junction Boxes

Explosionproof, Dust-Ignitionproof

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

Dimensions in Millimeters													
Catalog Number	Overall Dimensions			Mounting Dimensions				Inside Dimensions				Ship Weight kg	
	F	E	G	A	AA	B	BB	W	H	Db	Dc		K
AJBEW101006X	376.2	376.2	231.9	165.1	273.8	330.2	114.3	260.4	260.4	146.1	38.1	85.9	20.00
AJBEW101408X	368.3	469.9	244.6	N/A	330.2	N/A	270	254.0	355.6	196.9	19.1	112.8	27.2
AJBEW141408X	492.3	492.3	293.6	247.7	450.9	450.9	247.7	374.7	374.7	196.9	35.1	101.6	47.6
AJBEW161812X	543.1	593.9	382.5	304.8	482.6	533.4	355.6	412.8	463.6	301.8	9.7	177.8	68.0
AJBEW181808X	593.9	593.9	303.3	330.2	552.5	552.5	330.2	463.6	463.6	196.9	38.1	114.3	89.8
AJBEW182410X	608.1	762.0	360.2	409.7	552.5	704.9	466.9	463.6	614.4	247.7	38.1	146.1	106.6
AJBEW183610X	596.9	1060.5	363.5	279.4	552.5	1003.3	736.6	463.6	927.1	247.7	38.1	139.7	122.5
AJBEW242408X	746.3	746.3	312.7	466.9	711.2	711.2	466.9	622.3	622.3	196.9	38.1	127.0	102.1
AJBEW243610X	781.1	1092.2	382.5	463.6	711.2	1016.0	736.6	616.0	920.8	247.7	41.4	152.4	204.1
AJBEW303808X	914.4	1117.6	349.3	N/A	889.0	N/A	736.6	762.0	965.2	196.9	50.8	155.7	272.2

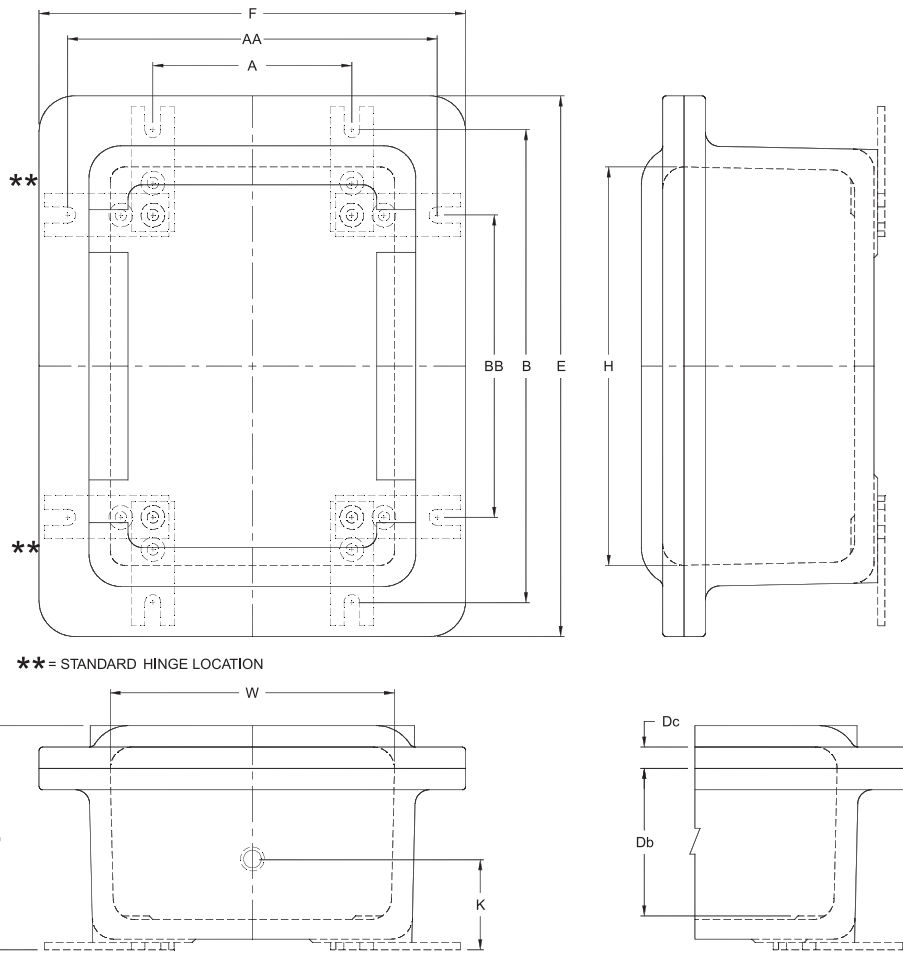
Mounting Pans

Mounting Pan Catalog Number	Junction Box Catalog Number	Overall Dimensions in Millimeters	
		W	H
AZ-10104/6	AJBEW101006X	190.5	190.5
AZ-10146/8	AJBEW101408X	228.6	330.2
AZ-14146/8	AJBEW141408X	311.2	311.2
AZ-161812	AJBEW161812X	381.0	406.4
AZ-18186/8	AJBEW181808X	406.4	406.4
AZ-18248/10	AJBEW182410 X	406.4	558.8
AZ-18368/10	AJBEW183610X	431.8	882.7
AZ-24248/10	AJBEW242408X	558.8	558.8
AZ-24368/10	AJBEW243610X	558.8	863.6
AZ-30388	AJBEW303808X	711.2	914.4

AJBEW Cast Junction Box Dimensions and Drilling and Tapping Guidelines

Explosionproof, Dust-Ignitionproof

Dimensions — See Catalog Number Tables



Enclosures and Junction Boxes

FLAMEPROOF EX D ZONE 1 RATED JUNCTION BOXES

Notes