

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)

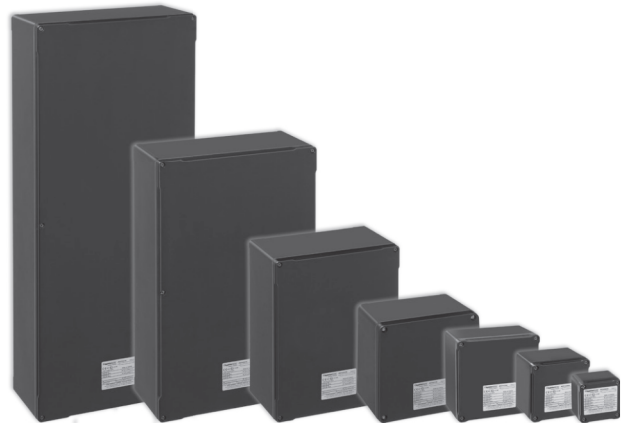
Options

- 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: Ⓜ IIG
 - Conforming to IECEx : EPL Gb
 - Type of Protection: Ex eb IIC, Ex eb ia IIC, Ex eb ib IIC, Ex ib 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, 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

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◆EURASEC Certification

— EURASEC N° TC RU C-FR.ГБ05.В.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*.

Enclosures and Junction Boxes

INCREASED SAFETY EX E ZONE 1 RATED JUNCTION BOXES

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

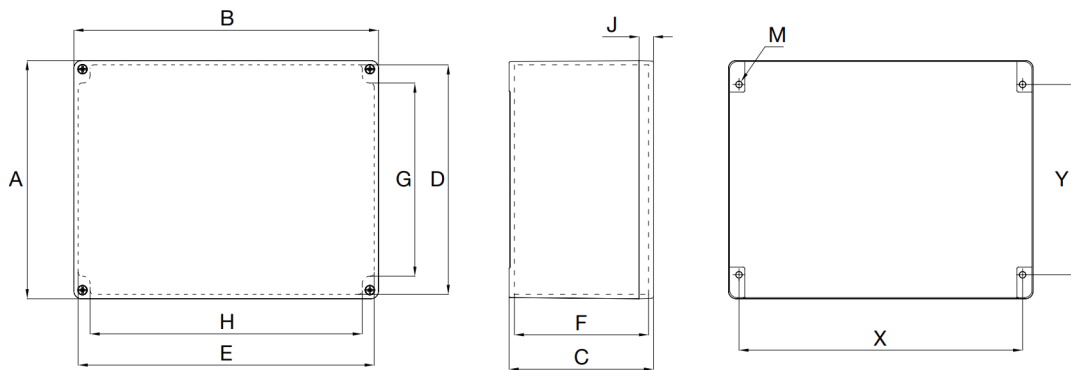
<p>JBE</p> <p>Series: JBE - ATEX/IECEX Certified Junction Box</p>	<p>P</p> <p>Material: P - Polyester</p>	<p>08</p> <p>Dimensions Height: 08 - 85 mm 12 - 120 mm 17 - 170 mm 20 - 200 mm 21 - 215 mm 23 - 230 mm 25 - 250 mm 32 - 320 mm 50 - 500 mm 75 - 750 mm</p>	<p>08</p> <p>Dimensions Width: 08 - 85 mm 12 - 120 mm 17 - 170 mm 20 - 200 mm 21 - 215 mm 25 - 250 mm 32 - 320 mm 50 - 500 mm 75 - 750 mm</p>	<p>06</p> <p>Dimensions Depth: 06 - 61 mm 07 - 66 mm 09 - 91 mm 09S - 91 mm 11 - 116 mm 15 - 150 mm 23 - 230 mm</p>	<p>0</p> <p>Gland Plates <i>(for location see chart below):</i> 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</p>	<p>G</p> <p>Options: <i>(Options must be listed alphabetically)</i> 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</p>
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① Inmetro certification available on special request only. Contact your local sales for more information

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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.