



EJB SERIES

FLAMEPROOF ENCLOSURES

en

01 - 2020





DESCRIPTION



The EJB series enclosures are designed for the installation in the industrial plants with potentially hazardous atmosphere classified as Zone 1 and Zone 2 for gases and Zone 21 and Zone 22 for combustible dusts.

The EJB series enclosures are presented with 10 different size options, which allow to house various types of automation, measurement and control components.

Indoor&outdoor installation of the terminal blocks, relay and electrical devices are the typical applications. The Enclosures can be equipped with a window, where a visual inspection is needed.



SPECIFICATIONS

| | | |
|--|--|--|
| EXPLOSION PROTECTION DATA | Conformity | ATEX Directive ATEX2014/34/UE |
| | Certification | ATEX - INERIS 14ATEX0056X IECEX - INE 14.0037X |
| | Marking | I M2 Ex-db I Mb II 2 GD Ex-db IIB+H2 T6/T5/T4 Gb Ex-tb IIIC T85°C/100°C/135°C Db IP66 II 2(1) GD Ex db [ia Ma] IMb Ex-db [ia IIA or IIB or IIC Ga] IIB or IIB+H2, T4/T5/T6 Gb Ex-tb [ia Da] IIIC T135°C, T 100°C, T 85°C Db IP66 |
| Standards | IEC/EN: 60079-0, 60079-1, 60079-11, 60079-31 | |
| TECHNICAL DATA | Ambient Temperature | ATEX -50°C / +60°C IECEX -50°C / +60°C |
| | Material | Copper free Aluminum Alloy (Cu<0.1%) Stainless steel AISI 304 or AISI 316L Structural Steel "S" Series |
| | Window Glass | Tempered Glass |
| | IP Rating | IP66 |
| | Entries Thread | Metric ISO-262, ANSI/ASME B1.20.1 NPT, GK EN 10226-2*, G ISO-228 |
| | Screws | Stainless steel A2 quality |
| | Surface Treatment | RAL 9022 Epoxy Painting (Standard) |
| | Nameplate Label | Aluminium plate (For Aluminum Enclosures) Stainless Steel Plate (For Stainless Steel Enclosures) |
| Accessories and Special Execution: (on request) | Breathing/Drain devices Internal anti-condensation coating painting RAL 2004 Off-shore special coating painting Pushbuttons, pilot lights, mechanical operators Flame Arrestor | |

NOTE

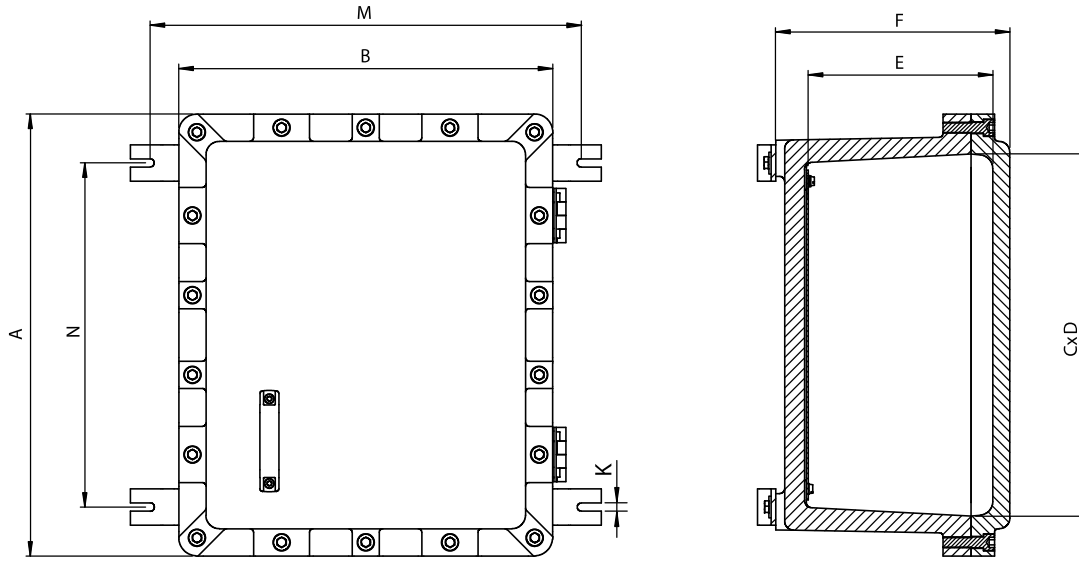
1. Standard type enclosures also include stainless steel hinges, internal & external earthing screw and stainless steel internal plate.

* Only for ATEX



EJB - WITH BLIND COVER

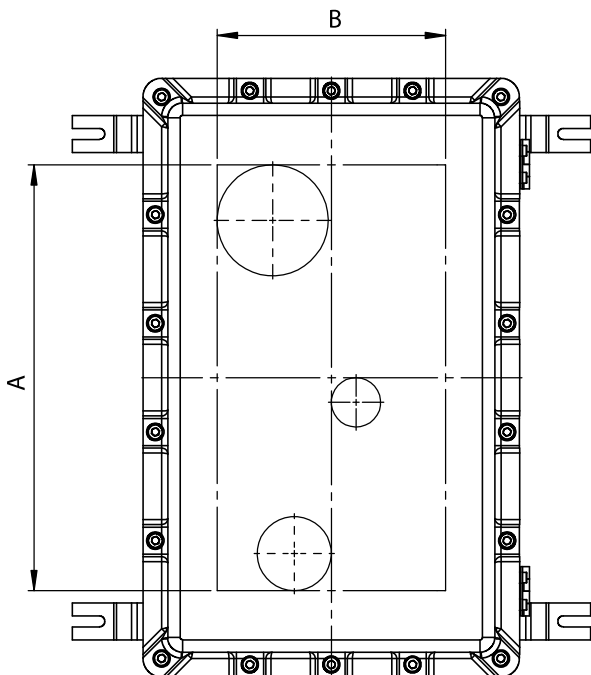
FLAMEPROOF ENCLOSURES



EJB - DATA TABLE

| TYPE | DIMENSIONS [mm] | | | | | | | | | APPROX. WEIGHT (ALUMINUM) [Kg] |
|--------|-----------------|-----|-----|-----|-----|-----|-----|-----|-----------|-----------------------------------|
| | A | B | C | D | E | F | M | N | K (Screw) | |
| EJB-01 | 310 | 250 | 244 | 184 | 153 | 200 | 276 | 235 | M6 | 13 |
| EJB-02 | 425 | 255 | 355 | 185 | 170 | 223 | 276 | 346 | M6 | 20 |
| EJB-03 | 485 | 305 | 413 | 233 | 198 | 249 | 376 | 395 | M8 | 26,5 |
| EJB-04 | 488 | 413 | 400 | 325 | 204 | 259 | 476 | 380 | M8 | 40 |
| EJB-05 | 540 | 475 | 444 | 379 | 212 | 272 | 476 | 410 | M8 | 51,5 |
| EJB-06 | 640 | 370 | 542 | 272 | 220 | 278 | 376 | 515 | M8 | 46,5 |
| EJB-07 | 600 | 510 | 500 | 410 | 225 | 288 | 516 | 470 | M12 | 64 |
| EJB-08 | 810 | 460 | 710 | 360 | 257 | 332 | 516 | 670 | M12 | 90 |
| EJB-09 | 840 | 615 | 724 | 499 | 339 | 413 | 656 | 705 | M12 | 152 |
| EJB-10 | 940 | 650 | 820 | 530 | 345 | 425 | 656 | 808 | M12 | 190 |

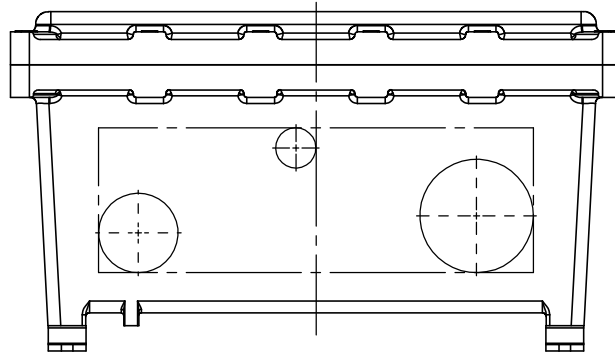
Note: Dimensions can slightly differ due to casting tolerances.



EJB W - DRILLING TABLE (MAXIMUM NUMBER OF ENTRIES ON THE COVER)

| TYPE | 1/2" | 3/4" | 1" | DRILLING AREA (AxB) |
|----------------------|---------|---------|---------|------------------------|
| | M20x1,5 | M25x1,5 | M32x1,5 | |
| EJB-01 | 20 | 12 | 8 | 200 x 140 |
| EJB-02 | 32 | 18 | 12 | 300 x 140 |
| EJB-03 | 45 | 28 | 15 | 350 x 180 |
| EJB-04 | 62 | 36 | 22 | 330 x 270 |
| EJB-05 | 76 | 46 | 28 | 360 x 300 |
| EJB-06 | 68 | 43 | 27 | 480 x 210 |
| EJB-07 | 88 | 54 | 30 | 410 x 320 |
| EJB-08 | 92 | 60 | 38 | 600 x 250 |
| EJB-09 | 122 | 86 | 50 | 600 x 380 |
| EJB-10 | 136 | 100 | 62 | 700 x 420 |
| Minimum interax [mm] | 40 | 50 | 64 | - |

Note: Inche values are intended to use for ANSI/ASME B1.20.1 NPT, G ISO-228 and GK EN 10226-2 threads.



| EJB - DRILLING TABLE (MAXIMUM NUMBER OF ENTRIES FOR SHORT SIDE) | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| TYPE | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" |
| | M20x1,5 | M25x1,5 | M32x1,5 | M40x1,5 | M50x1,5 | M63x1,5 | M75x1,5 | M90x1,5 |
| EJB-01 | 8 | 5 | 3 | 2 | 1 | 1 | 1 | 1 |
| EJB-02 | 8 | 6 | 4 | 2 | 1 | 1 | 1 | 1 |
| EJB-03 | 15 | 9 | 6 | 4 | 2 | 1 | 1 | 1 |
| EJB-04 | 24 | 15 | 9 | 6 | 4 | 2 | 2 | 1 |
| EJB-05 | 30 | 18 | 11 | 8 | 5 | 3 | 2 | 2 |
| EJB-06 | 20 | 12 | 8 | 6 | 4 | 2 | 1 | 1 |
| EJB-07 | 32 | 21 | 12 | 8 | 5 | 3 | 2 | 2 |
| EJB-08 | 28 | 18 | 12 | 6 | 6 | 3 | 2 | 2 |
| EJB-09 | 60 | 40 | 24 | 15 | 12 | 6 | 5 | 3 |
| EJB-10 | 63 | 43 | 26 | 15 | 9 | 6 | 5 | 3 |
| Minimum interax for drilling [mm] | 40 | 50 | 64 | 80 | 100 | 125 | 150 | 180 |

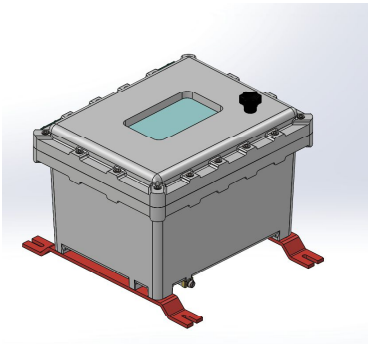
| EJB - DRILLING TABLE (MAXIMUM NUMBER OF ENTRIES FOR LONG SIDE) | | | | | | | | |
|--|---------|---------|---------|---------|---------|---------|---------|---------|
| TYPE | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" |
| | M20x1,5 | M25x1,5 | M32x1,5 | M40x1,5 | M50x1,5 | M63x1,5 | M75x1,5 | M90x1,5 |
| EJB-01 | 14 | 8 | 5 | 3 | 2 | 1 | 1 | 1 |
| EJB-02 | 17 | 12 | 10 | 5 | 3 | 3 | 2 | 2 |
| EJB-03 | 30 | 20 | 11 | 8 | 5 | 3 | 2 | 2 |
| EJB-04 | 32 | 21 | 12 | 8 | 5 | 3 | 2 | 2 |
| EJB-05 | 36 | 21 | 12 | 10 | 6 | 3 | 3 | 2 |
| EJB-06 | 44 | 27 | 20 | 12 | 9 | 4 | 3 | 3 |
| EJB-07 | 42 | 24 | 15 | 10 | 7 | 4 | 3 | 2 |
| EJB-08 | 60 | 36 | 29 | 16 | 12 | 7 | 5 | 4 |
| EJB-09 | 96 | 60 | 38 | 24 | 17 | 10 | 8 | 5 |
| EJB-10 | 105 | 70 | 42 | 27 | 15 | 12 | 8 | 5 |
| Minimum interax for drilling [mm] | 40 | 50 | 64 | 80 | 100 | 125 | 150 | 180 |

Note: 1. Inche values are intended to use for ANSI/ASME B1.20.1 NPT, G ISO-228 and GK EN 10226-2 threads.

2. This table is applicable for -50°C and -20°C .

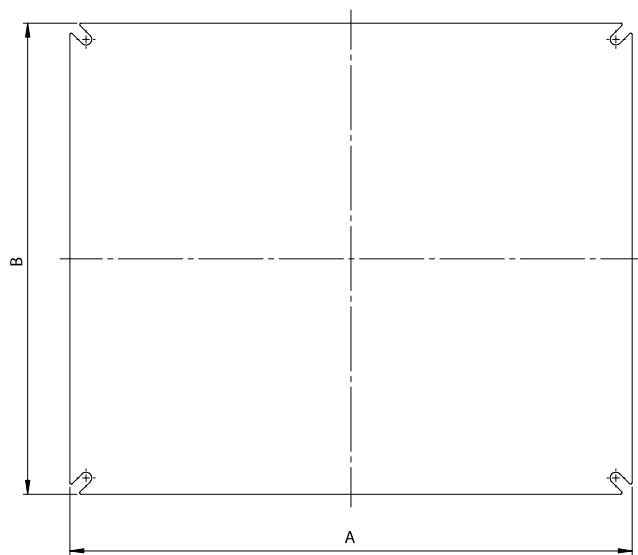
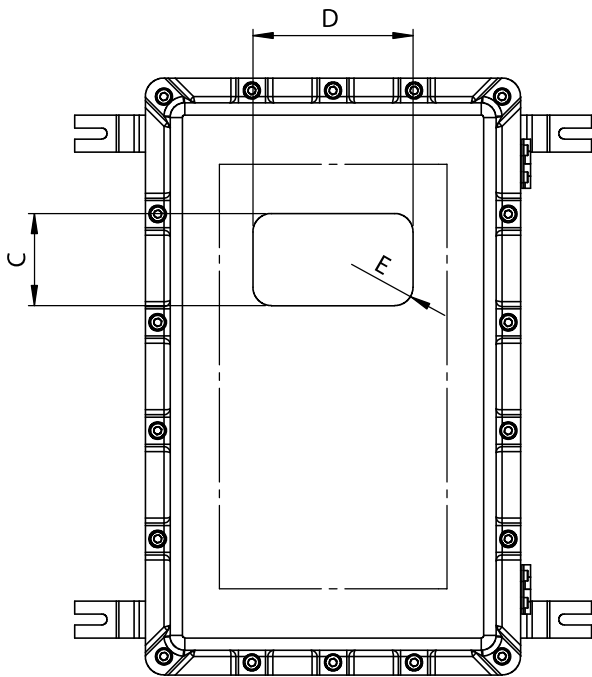


DESCRIPTION



The EJB W series enclosures are designed for the installation in the industrial plants with potentially hazardous atmosphere classified as Zone 1 and Zone 2 for gases and Zone 21 and Zone 22 for combustible dusts.

The EJB W series enclosures are used for electrical & electronic equipments, where a visual inspection is needed.



Materials

- Stainless steel
- Stainless steel AISI 304/316L (on request)

EJB W - WINDOW OPENING

| TYPE | C [mm] | D [mm] | E [mm] |
|------|--------|--------|--------|
| F1 | 40 | 70 | R10 |
| F2 | 50 | 200 | X |
| F3 | 100 | 250 | X |
| F4 | 75 | 130 | X |
| F5 | 175 | 385 | X |
| FS | - | - | - |

Note: Please contact technical office to learn applicable windows' size for each enclosure type.

EJB INTERNAL MOUNTING PLATE - DATA TABLE

| TYPE | DIMENSIONS [mm] | |
|--------|-----------------|-----|
| | A | B |
| EJB 01 | 225 | 165 |
| EJB 02 | 335 | 165 |
| EJB 03 | 380 | 200 |
| EJB 04 | 364 | 289 |
| EJB 05 | 400 | 335 |
| EJB 06 | 516 | 246 |
| EJB 07 | 468 | 378 |
| EJB 08 | 656 | 306 |
| EJB 09 | 670 | 445 |
| EJB 10 | 760 | 465 |

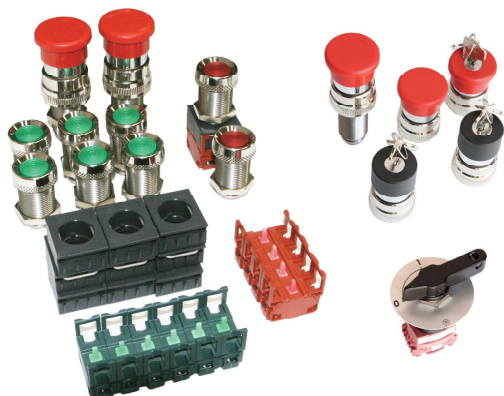
*Note: 1. Thickness of the plate is 2 mm.
2. Earthing point can be changed according to client's request.*



DESCRIPTION

The Ex-protection series operators are suitable for the use with Ex-d enclosures which can be installed in the industrial plants with potentially hazardous atmosphere classied as Zone 1 and Zone 2 for gases and Zone 21 and Zone 22 for combustible dusts.

All operators have two different lengths regarding to enclosure wall thickness. Supply fully with contact block. Possibility of having special contact configurations.



SPECIFICATIONS

EXPLOSION PROTECTION DATA

Conformity Certification

ATEX Directive ATEX2014/34/EU

ATEX - INERIS 14ATEX9013U

IECEX - INE 14.0032U

Marking

I M2

Ex-db I Mb

II 2 GD

Ex-db IIC Gb

Ex-tb IIIC Db IP66

Standards

IEC/EN: 60079-0, 60079-1, 60079-11, 60079-31

Ambient Temperature

ATEX -60°C / +60°C

IECEX -60°C / +60°C

IP Rating

IP66

Connection

Screw clamp terminals

- Installation should be carried out by approved and qualified staff only.

NOTE



PUSHBUTTON



SELECTOR SWITCHES



PILOT LIGHT



ILLUMINATED PUSH BUTTON



EMERGENCY STOPS

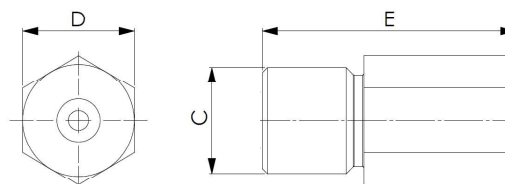
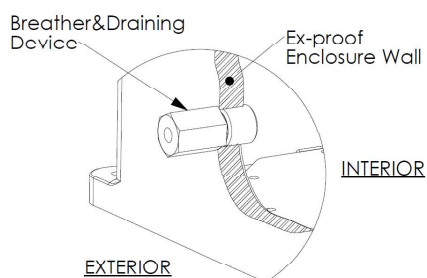


DESCRIPTION

Breathing&draining devices which permits an exchange between the atmosphere within an enclosure and the surrounding atmosphere or permits liquids to flow out from an enclosure and which maintains the integrity of the type of protection.

It is suitable for the installation in the industrial plants with potentially hazardous atmosphere classified as Zone 1 and Zone 2 for gases and Zone 21 and Zone 22 for combustible dusts.

INSTALLATION SCHEME



SPECIFICATIONS

| | | |
|----------------------|----------------------------|--|
| EXPLOSION PROTECTION | Conformity | ATEX Directive ATEX2014/34/UE |
| | Certification | ATEX - INERIS 12ATEX9013U IECEX - INE 12.0002U |
| | Marking | II 2 GD Ex-db IIC T6/T5/T4 Gb Ex-eb IIC Gb Ex-tb IIIC T85°C/100°C/135°C Db IP66 |
| TECHNICAL DATA | Ambient Temperature | ATEX -60°C / +65°C IECEX -60°C / +65°C |
| | Material | Stainless steel AISI 304 or AISI 316L Brass CW614N-MS Hastelloy Inconel |
| | IP Rating | IP66 |
| | Sealing: | O-Ring made in Silicone (Optional) |

| CATALOG NO. | C | D | E |
|--------------------|----------|----|----|
| VS-61090-1 | 1/4" NPT | 17 | 50 |
| VS-61090-4 | 1/2" NPT | 22 | 50 |
| VS-61090-5 | 1/2" ISO | 22 | 50 |
| VS-61090-9 | 1/2" NPT | 22 | 50 |
| VS-61090-10 | 1/2" ISO | 22 | 50 |
| VS-61090-11 | 1/8" NPT | 17 | 50 |
| VS-61090-14 | M25 | 27 | 62 |
| VS-61090-15 | 3/4" NPT | 27 | 62 |
| VS-61090-17 | M20 | 22 | 50 |

ORDER EXAMPLE:
VS-61090-17 B (material brass)

| Material Table | CODE | MATERIAL |
|----------------|------|------------------------|
| | A | AISI Series 316L Steel |
| | C | AISI Series 304 Steel |
| | B | Brass |
| | H | Hastelloy |
| | I | Inconel |

APPLICATION NOTE

1. Permissible maximum enclosure volume is 68 lt for IIC and 150 lt for IIB+H2.



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