

# JUNCTION BOXES

## Hazardous Locations, Weatherproof

### JB10 & JB11 Ranges



## Introduction

These GRP terminal boxes have been designed for use in hazardous locations and hostile environments.

The robust design, coupled with corrosion-free glass reinforced polyester and high ingress protection, ensure a long life, low maintenance product.

**European and other worldwide approvals are available, refer to main section of catalog**

- ★ UL listed for USA and Canada:
  - Class I, Div 2, Groups A-D
  - Class I, Zone 1, AExe IIC T4 & T5.
- ★ ATEX approved.
- ★ NEMA 4x & 6, IP66 & IP67.
- ★ \*Certified temperature  $-67^{\circ}\text{F}$  to  $+131^{\circ}\text{F}$   
 $-55^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$ .
- ★ Glass reinforced polyester.
- ★ Lightweight.
- ★ Robust.
- ★ Corrosion free.
- ★ Retained stainless steel cover screws.
- ★ Optional gland continuity plate.
- ★ Mixed rail mounted terminals.
- ★ \*Depending on version.

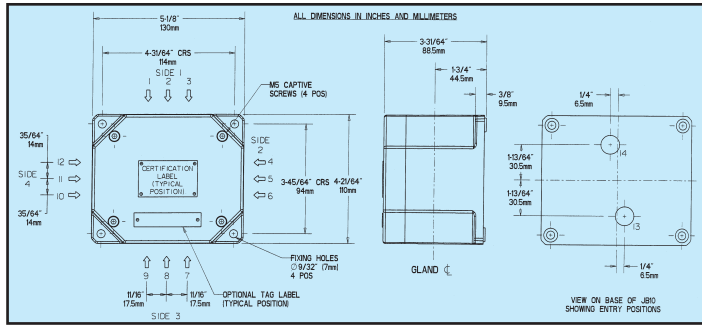
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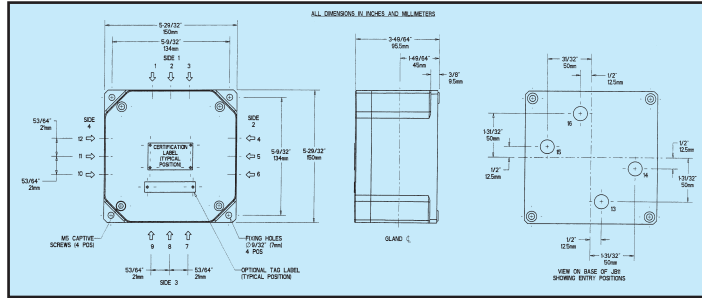
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6DSUS16/E



JB10



JB11

JB10 GLAND DETAILS

| GLAND ENTRIES | Maximum No. of Gland Entries Sides 1 & 3 | Maximum No. of Gland Entries Sides 2 & 4 |                          | Maximum No. of Gland Entries (Base) |
|---------------|--|--|--------------------------|-------------------------------------|
|               | With or Without Earth Continuity         | With Earth Continuity                    | Without Earth Continuity | With or Without Earth Continuity    |
| 1/2" NPT      | 2  | 1  | 2                        | 2                                   |
| 3/4" NPT      | 1  | 1  | 1                        | N/A                                 |

JB11 GLAND DETAILS

| GLAND ENTRIES | Maximum No. of Gland Entries per Side With or Without Earth Continuity | Maximum No. of Gland Entries (Base) With or Without Earth Continuity |
|---------------|--|--|
| 1/2" NPT      | 2  | 4  |
| 3/4" NPT      | 2  | N/A  |

## Specification

### Certification:

UL listed for USA and Canada:  
 – Class I, Div 2, Groups A-D and  
 – Class I, Zone 1, AExe IIC T4 & T5.  
 UL Listing No. E237592.

### ATEX approved:

BASEEFA EExe II T4, 5 & 6.  
 BS501 Parts 1, 6 & 8.  
 Certificate No. Baseefa 03ATEX0171X.  
 Cenelec EN50014, EN50019 & EN50028.

### Material:

Glass reinforced polyester (anti-static) stainless steel cover screws.

### Finish:

Self coloured black.

### Weight:

JB10, 2.4 lbs (1.1 Kg.) average.  
 JB 11, 4.0 lbs (1.8 Kg.) average.

### Certified Temperature:

Standard –4°F to +131°F (–20°C to +55°C).  
 Optional –67°F to +131°F (–55°C to +55°C)  
 (MK6/6 only).

### Ingress Protection:

NEMA 4x & 6, IP66 & IP67.

### Gland Continuity:

Via an internal plate.

| Terminal Type/Size | Max No. of Terminals |      | Max Voltage | Max Current | T Rating |
|--------------------|----------------------|------|-------------|-------------|----------|
|                    | JB10                 | JB11 |             |             |          |
| SAK 2.5            | 12                   | 15   | 550         | 15          | T4       |
| SAK 4              | 10                   | 14   | 550         | 21          | T4       |
| SAK 6N             | 8                    | 12   | 550         | 26          | T4       |
| SAK 10             | 5                    | 8    | 550         | 37          | T4       |
| SAK 16             | –                    | 7    | 550         | 47          | T4       |
| MK6/6              | 1                    | 1    | 418         | 26          | T5       |
| BK6                | 1                    | –    | 275         | 21          | T5       |
| UK 2.5 B-Ex        | 11                   | 14   | 418         | 15          | T4       |
| UK 4-Ex            | 9                    | 13   | 418         | 21          | T4       |
| UK 10-Ex           | 7                    | 11   | 418         | 37          | T4       |
| UK 16-Ex           | 5                    | 7    | 418         | 47          | T4       |

All Junction Boxes will be supplied with an internal earth terminal appropriate to the terminals fitted.

If more than one internal earth terminal is required the maximum number of feed-through terminals must be reduced.

Increased quantities of terminals are available, depending upon the number of cable entries. Please contact MEDC with your requirements.

## Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

**For standard products, available ex-stock, contact sales office for details.**

| Terminal Box                         | Certification | Terminals   | External Earth Continuity | Gland | Side Cable Entries | Tag Label | Special | Finish |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
|--------------------------------------|---------------|---|---------------------------|-------|--------------------|-----------|---------|--------|--------|----|--------|----|--------|----|-------|----|-----|----|-------------|----|----------|----|-----------|----|-----------|----|--|------|------|------|---|-------------------------------------|----|--------------------------------------|----|--|------------|------|------|---|-----|---|---|------|------|------|---|----------|----|----------|----|--|-------|------|------|---|-----|---|---|--------|------|------|---|----------------------|----|------------|----|--|--------|------|-----------------|---|
| JB10<br>JB11                         | UL            | <table border="1"> <thead> <tr> <th>Type</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>SAK 2.5</td><td>A*</td></tr> <tr><td>SAK 4</td><td>B*</td></tr> <tr><td>SAK 6N</td><td>C*</td></tr> <tr><td>SAK 10</td><td>D*</td></tr> <tr><td>SAK 16</td><td>E*</td></tr> <tr><td>MK6/6</td><td>J*</td></tr> <tr><td>BK6</td><td>K*</td></tr> <tr><td>UK 2.5 B-Ex</td><td>L*</td></tr> <tr><td>UK 4 -Ex</td><td>M*</td></tr> <tr><td>UK 10 -Ex</td><td>N*</td></tr> <tr><td>UK 16 -EX</td><td>O*</td></tr> </tbody> </table> <p>*Suffix with number of terminals, e.g: B6 = 6 x SAK4<br/>           Please note:<br/>           Mixed combinations of SAK or UK terminals can be supplied, e.g: 3 x SAK 2.5 &amp; 4 x SAK 4.</p> | Type                      | Code  | SAK 2.5            | A*        | SAK 4   | B*     | SAK 6N | C* | SAK 10 | D* | SAK 16 | E* | MK6/6 | J* | BK6 | K* | UK 2.5 B-Ex | L* | UK 4 -Ex | M* | UK 10 -Ex | N* | UK 16 -EX | O* | <table border="1"> <thead> <tr> <th>Type</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>None</td><td>N</td></tr> <tr><td>ES0001 (6mm<sup>2</sup> cable max)</td><td>R*</td></tr> <tr><td>ES0003 (16mm<sup>2</sup> cable max)</td><td>S*</td></tr> </tbody> </table> <p>*Suffix with side, e.g: R1 ES0001 x side 1</p> | Type | Code | None | N | ES0001 (6mm <sup>2</sup> cable max) | R* | ES0003 (16mm <sup>2</sup> cable max) | S* | <table border="1"> <thead> <tr> <th>Continuity</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>None</td><td>N</td></tr> <tr><td>Yes</td><td>E</td></tr> </tbody> </table> <p>*Gland Continuity 'E' must be selected when Ext Earth 'R' or 'S' is required.</p> | Continuity | Code | None | N | Yes | E | <table border="1"> <thead> <tr> <th>Size</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>None</td><td>N</td></tr> <tr><td>1/2" NPT</td><td>*M</td></tr> <tr><td>3/4" NPT</td><td>*O</td></tr> </tbody> </table> <p>*Prefix with cable entry position (see diagram above) e.g. 1M, 2M.</p> | Size | Code | None | N | 1/2" NPT | *M | 3/4" NPT | *O | <table border="1"> <thead> <tr> <th>Label</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>None</td><td>N</td></tr> <tr><td>Yes</td><td>T</td></tr> </tbody> </table> <p>Please specify</p> | Label | Code | None | N | Yes | T | <table border="1"> <thead> <tr> <th>Option</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>None</td><td>N</td></tr> <tr><td>Extra Internal Earth</td><td>*W</td></tr> <tr><td>Base Entry</td><td>*Y</td></tr> </tbody> </table> <p>*Please discuss your requirements with MEDC Application Engineers prior to ordering.</p> | Option | Code | None | N | Extra Internal Earth | *W | Base Entry | *Y | <table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>Natural (Black)</td><td>N</td></tr> </tbody> </table> | Finish | Code | Natural (Black) | N |
| Type                                 | Code          |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| SAK 2.5                              | A*            |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| SAK 4                                | B*            |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| SAK 6N                               | C*            |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| SAK 10                               | D*            |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| SAK 16                               | E*            |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| MK6/6                                | J*            |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| BK6                                  | K*            |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| UK 2.5 B-Ex                          | L*            |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| UK 4 -Ex                             | M*            |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| UK 10 -Ex                            | N*            |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| UK 16 -EX                            | O*            |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| Type                                 | Code          |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| None                                 | N             |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| ES0001 (6mm <sup>2</sup> cable max)  | R*            |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| ES0003 (16mm <sup>2</sup> cable max) | S*            |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| Continuity                           | Code          |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| None                                 | N             |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| Yes                                  | E             |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| Size                                 | Code          |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| None                                 | N             |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| 1/2" NPT                             | *M            |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| 3/4" NPT                             | *O            |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| Label                                | Code          |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| None                                 | N             |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| Yes                                  | T             |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| Option                               | Code          |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| None                                 | N             |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| Extra Internal Earth                 | *W            |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| Base Entry                           | *Y            |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| Finish                               | Code          |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |
| Natural (Black)                      | N             |   |                           |       |                    |           |         |        |        |    |        |    |        |    |       |    |     |    |             |    |          |    |           |    |           |    |  |      |      |      |   |                                     |    |                                      |    |  |            |      |      |   |     |   |   |      |      |      |   |          |    |          |    |  |       |      |      |   |     |   |   |        |      |      |   |                      |    |            |    |  |        |      |                 |   |



All the above specifications, dimensions, weights and tolerances are nominal (typical) and MEDC reserve the right to vary all data without prior notice. No liability is accepted for any consequence of use.