Installation instructions
Roxtec CF 8 BG™ B and CF 32 BG™ B kits

Safety information
Roxtec recommends that all installations are performed without facility operation. Follow national regulations and installation codes. Any action affecting the routed service should be performed according to manufacturer recommendations.

Components

- Roxtec CF 8 BG™ with earth terminal
- Roxtec CF 32 BG™ with earth terminal
- Compression unit
- CM BG™ B modules in different sizes depending on kit
- CM BG™ B solid module
- Roxtec Lubricant

A. Multidiameter™ – adapts to cables of different sizes through removable layers
B. Module braid
C. Environmental side
D. Termination/interior side
E. Conductors
F. Cable armor
G. Cable outer jacket
Roxtec CM BG™ B modules
The range of the modules indicates the smallest diameter of the exposed cable armor to the largest diameter of the cable jacket. Modules with core can be used as spare parts. Center cores must always be present in unused modules.

<table>
<thead>
<tr>
<th>Module size</th>
<th>For cable outer diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
</tr>
<tr>
<td>CM 10w40/0 BG B</td>
<td>0</td>
</tr>
<tr>
<td>CM 20 BG B</td>
<td>4</td>
</tr>
<tr>
<td>CM 20w40 BG B</td>
<td>3.5</td>
</tr>
<tr>
<td>CM 30w40 BG B</td>
<td>10.0</td>
</tr>
<tr>
<td>CM 40 10-32 BG B</td>
<td>9.5</td>
</tr>
<tr>
<td>CM 40 BG B</td>
<td>21.5</td>
</tr>
</tbody>
</table>

Tools

Spanner 13 mm (not included)
Pre-compression tool (not included)
Earth continuity tester (not included)
Cable stripper tool. Recommended by the cable manufacturer. (not included)

Allen key
5 mm (not included)

Aperture
Measures in millimeters (mm).

<table>
<thead>
<tr>
<th>Frame size</th>
<th>Height (H)</th>
<th>Width (W)</th>
<th>Max. radius (R)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CF 8 BG</td>
<td>61±1</td>
<td>127±1</td>
<td>3</td>
</tr>
<tr>
<td>CF 32 BG</td>
<td>110±1</td>
<td>216±1</td>
<td>3</td>
</tr>
</tbody>
</table>
Insert the frame from the outside of the opening.

Insert the counter frame from the inside of the opening.

Use an allen key to fasten the frame by tightening the nuts crosswise in small steps to 3 Nm. Start with the short sides. Fasten the earth terminal with a spanner.

Install the external protective bonding conductor and secure with the hex nut. Recommended tightening torque 3 Nm. Use a spanner as counterhold.

Clean the empty frame from dirt, etc. to secure good electrical conductivity.

Mark where the outer jacket is to be removed to fit the module braid.

Remove the outer jacket and any plastic foil. The cable armor shall be clean and conductive.


Correct placement of a cable in a CM BG-B module. The cable armor shall be visible outside the module.

Remove the core and fold out the braid on modules that are to hold cables.

Achieve a 0.1-1.0 mm (A) gap between the two halves when held against the cable.

The number of layers may not differ (A) by more than one between the corresponding module halves.
12. Adapt the layers that are in contact with the cable jacket on both module halves.

13. Adapt the layers that are in contact with the cable armor on both module halves.

14. Fold the braid tightly inside the module.

15. Lubricate the sealing surfaces of all modules with Roxtec Lubricant. Avoid excess lubricant on the braid.

16. Lubricate the sealing surfaces of the spare modules. Do not remove the core.

17. Lubricate the sealing surfaces of the solid modules.

18. Lubricate the inside surfaces of the frame all around, especially into the corners. Lubricate the area that will be in contact with the braid sparingly.

19. Route the cables.

20. Insert the module halves around the cables from the inside of the opening. Make sure that the braid is in contact with the armor of the cable and orientated towards the inside of the cabinet.

21. Use a Roxtec pre-compression tool to make space for the compression unit if required.

22. Turn the screw of the compression unit counter-clockwise.

23. Lubricate the compression unit on all sides with Roxtec Lubricant.
Insert the compression unit from the inside of the opening until stop.

Tighten the compression unit to seal the transit. Recommended torque 8-12 Nm.

Visible excess lubricant is a sign of good compression.

Verify earth continuity from each cable armor to earth. Use a suitable instrument.

**Disassembly**

1. Untighten the nut.

2. Remove the compression unit and modules required.

3. Make sure that the inside surfaces of the exposed packing space are free from dirt or dust.

4. Lubricate the inside surfaces all around with Roxtec Lubricant, especially into the corners. Continue the reinstallation.
Roxtec CM BG™ B modules

Braid conductor properties

<table>
<thead>
<tr>
<th>Module size</th>
<th>Total braid cross-section mm²</th>
<th>Approximately equivalent AWG</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM 20 BG B</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>CM 20w40 BG B</td>
<td>4*</td>
<td>11</td>
</tr>
<tr>
<td>CM 30w40 BG B</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>CM 40 10-32 BG B</td>
<td>21</td>
<td>4</td>
</tr>
<tr>
<td>CM 40 BG B</td>
<td>21</td>
<td>4</td>
</tr>
</tbody>
</table>

* Per cable

Note

- Integrated environmental sealing system for bonding and grounding applications. For use with armored cables.
- For optimum reliability, wait 24 hours or longer after installation before exposing the cables to strain or pressure.
- To simplify installation in frames with more than one opening, fill all openings before tightening the compression units.
- Cables shall pass straight through the frame.
- To be used with: Roxtec CM BG B components.
- The final complete bonding/grounding installation has to comply with applicable codes and regulations.
- Approvals or certificates may include amendments or limitations related to this application.
- The latest version of this and related documents can be found at roxtec.com.

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(b) Installation shall be carried out in accordance with Roxtec installation instructions in effect from time to time.

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