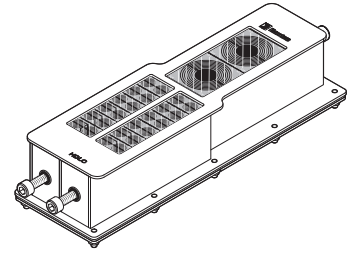


Installation instructions

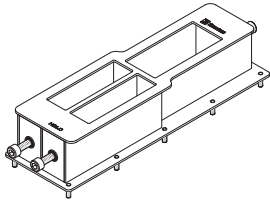
Roxtec HDLC transit with Roxtec RM BG™ B modules



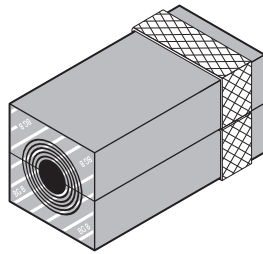
Safety information

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



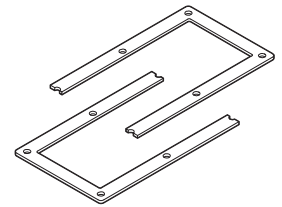
Roxtec HDLC frame



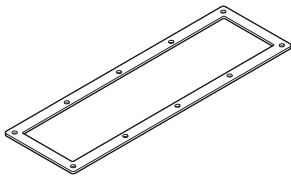
Roxtec RM BG B module



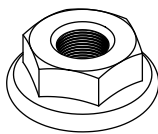
Roxtec Lubricant



Roxtec HDLC counter frame



Roxtec HDLC gasket



Nuts



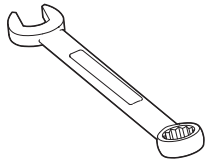
Fasteners for protective bonding conductor

Technical data

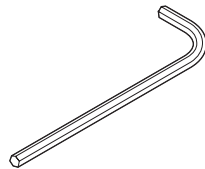
The diameter range of the modules indicates the smallest diameter of the exposed cable armor to the largest diameter of the cable jacket. Modules with core are spare capacity.

Name	External dimensions WxHxD (mm)	For cable/pipe Ø (mm)	Braid cross-section/cable (mm ²)	Approximately equivalent AWG
RM 20 BG B	20 x 20 x 60	4 – 14.5	8	8
RM 20w40 BG B	40 x 20 x 60	3.5 – 16.5	4	11
RM 30 BG B	30 x 30 x 60	10 – 25	13	6
RM 40 10–32 BG B	40 x 40 x 60	9.5 – 32.5	21	4
RM 40 BG B	40 x 40 x 60	21.5 – 34.5	21	4
RM 60 24–54 BG B	60 x 60 x 60	24 – 54	42	1
RM 60 BG B	60 x 60 x 60	28 – 54	42	1
RM 20/0 BG B	20 x 20 x 60	0	–	–
RM 30/0 BG B	30 x 30 x 60	0	–	–
RM 40/0 BG B	40 x 40 x 60	0	–	–
RM 60/0 BG B	60 x 60 x 60	0	–	–

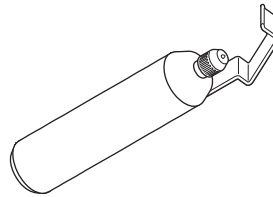
Tools



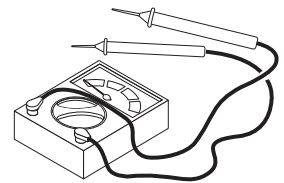
Spanner 10 mm and 17 mm (not included)



Hex key 8 mm (not included)

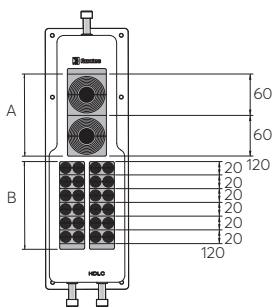


Cable stripper tool (not included)



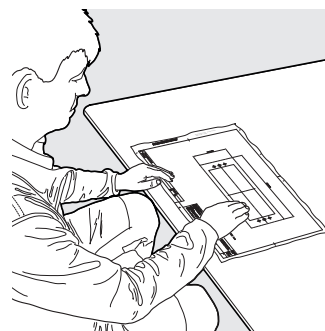
Continuity tester (not included)

Packing space



Example of module configuration: The packing height is 120 mm for all three openings. The combined height of modules for one opening must be equal to the packing height of 120 mm.

Additional information



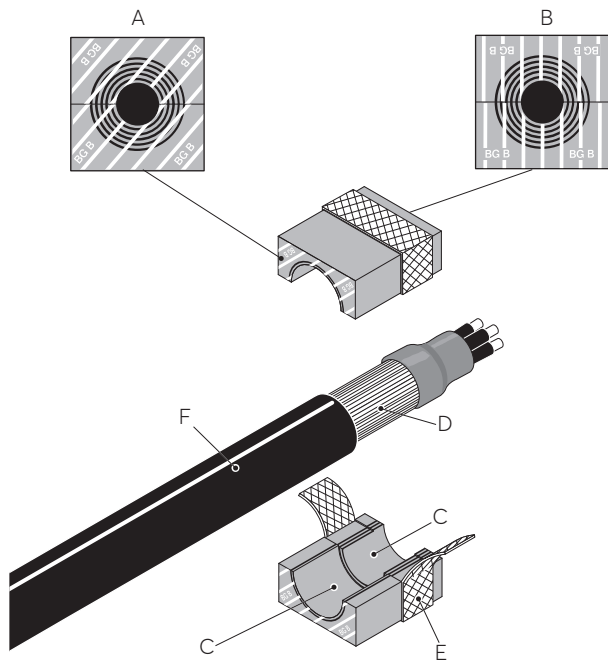
Additional information is available, such as drawings, apertures, videos, ratings and certificates.



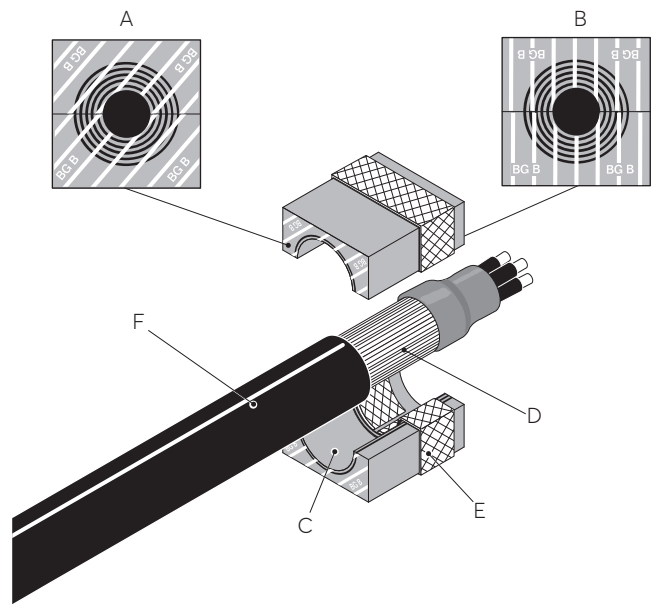
Scan QR code or visit roxtec.com for additional information.

Principle of cable placement in module

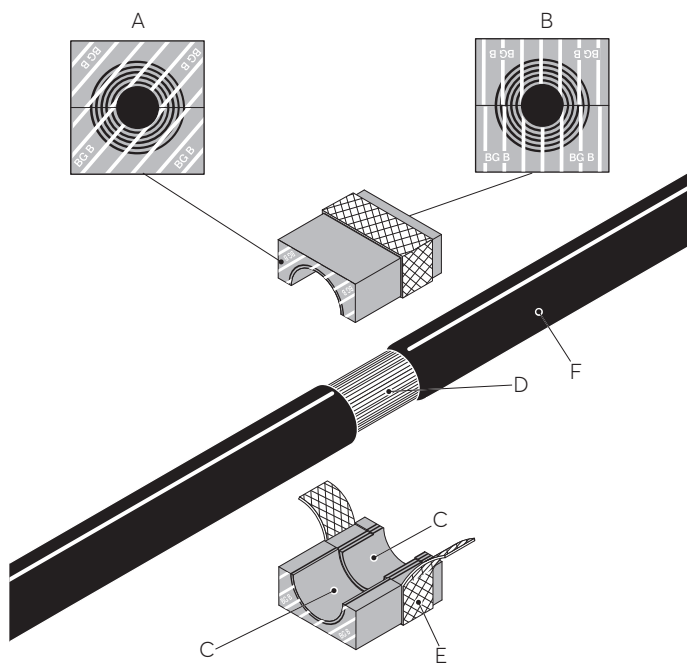
- A. Environmental side
- B. Termination/interior side
- C. Removable layers
- D. Cable armor
- E. Bonding/grounding braid
- F. Cable jacket



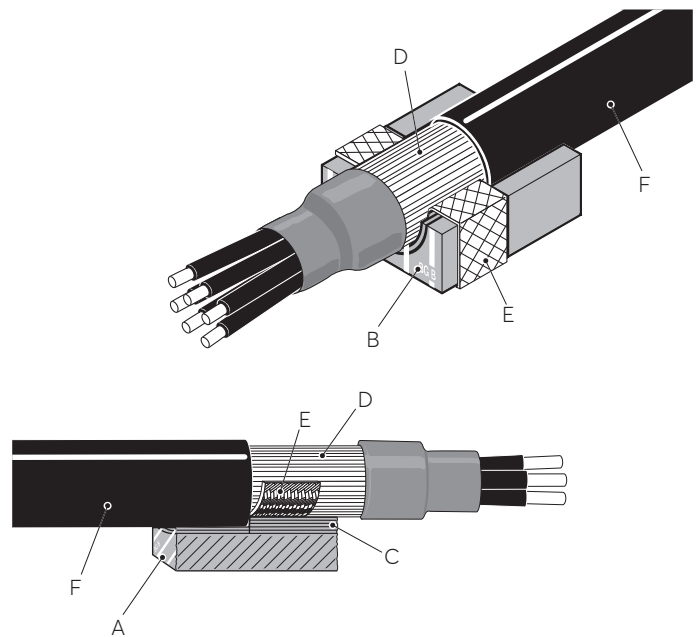
Cable with terminated armor.



The braid is folded in.

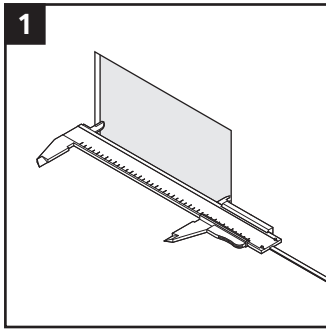


Cable with pass-through armor.

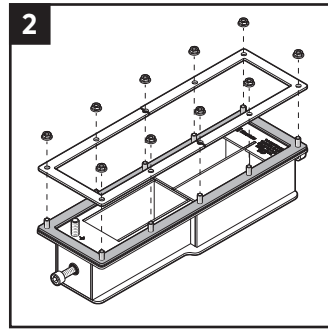


Cable placement in the module half. The cable jacket edge shall be in contact with the edge of the removable layers.

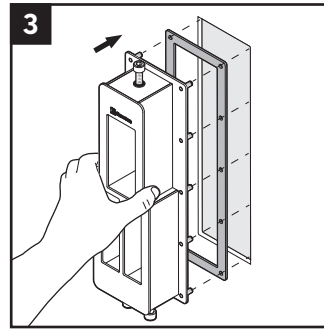
Installation



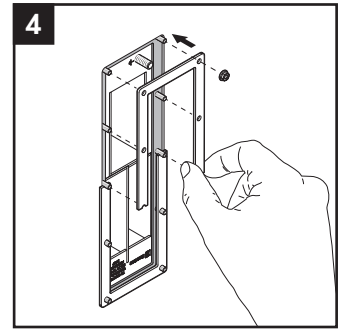
1 Make or verify an aperture.



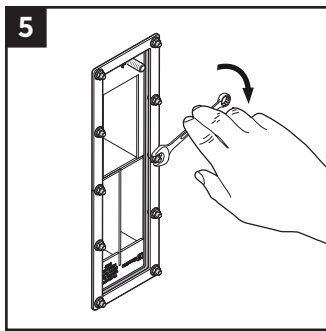
2 Remove all nuts and the two parts of the counter frame.



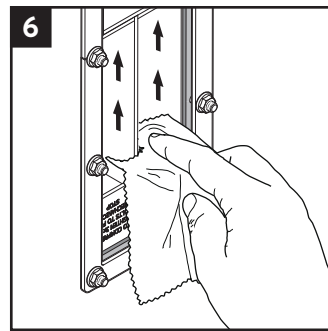
3 Insert the frame from the outside of the cabinet. Ensure that the gasket is placed between the frame and the cabinet.



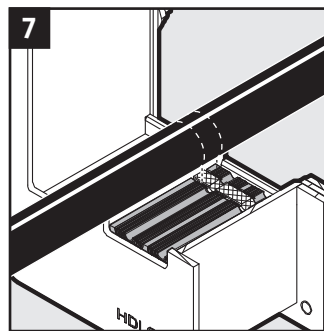
4 Attach the two parts of the counter frame and the nuts from the inside of the cabinet.



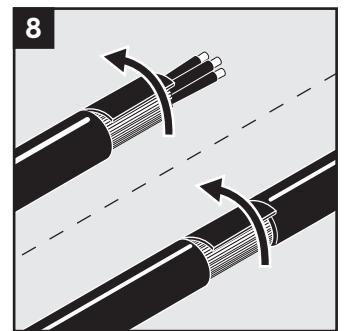
5 Tighten the nuts crosswise in small steps. Recommended torque 4 Nm. Do not overtighten.



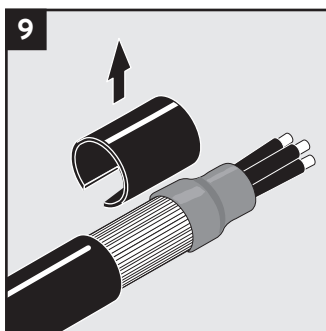
6 Clean the frame.



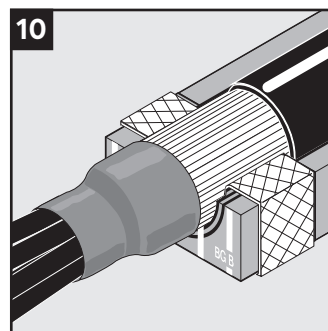
7 Mark where the outer jacket is to be removed to fit the module braid.



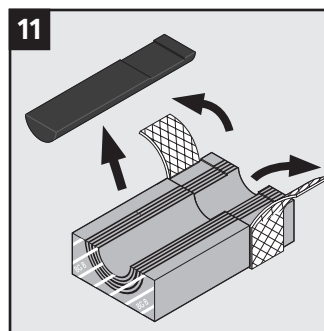
8 Remove the outer jacket and any plastic foil. The cable armor shall be clean and conductive.



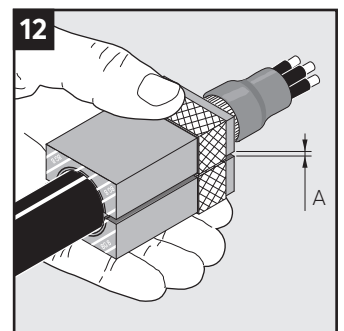
9 Secure the end of the cable armor. Suggestions for cable preparations are available on www.roxtec.com.



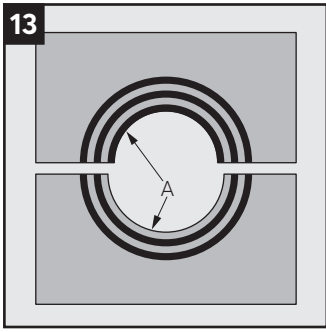
10 Correct placement of a cable in a RM BG B module. The cable armor shall be visible outside the module.



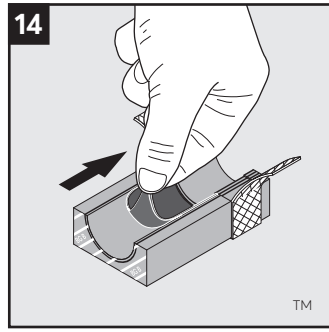
11 Remove the core and fold out the braid. Also see the section "Modules with multiple openings".



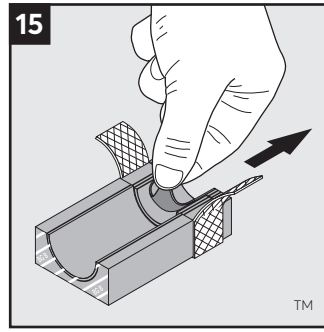
12 Achieve a gap of 0.1-1.0 mm (A) between the module halves by peeling off layers. The cable armor shall be in contact with the braid.



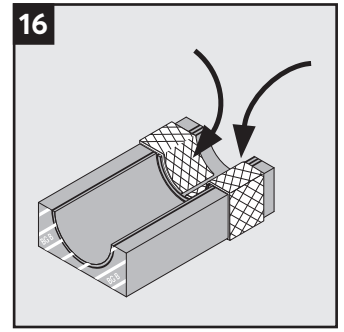
The number of layers may not differ (A) by more than one between the corresponding module halves.



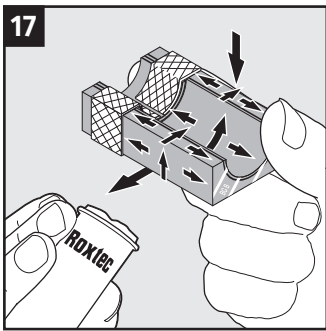
Adapt the layers that are in contact with the cable jacket.



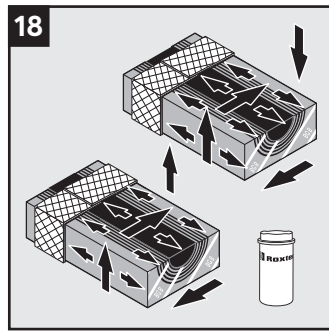
Adapt the layers that are in contact with the cable armor.



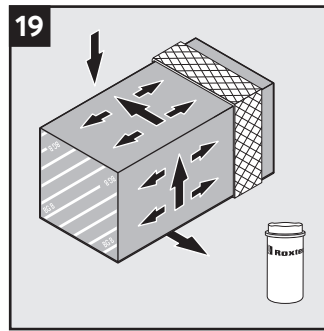
Fold the braid tightly inside the module half.



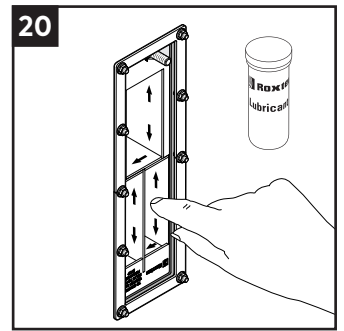
Lubricate the sealing surfaces of all modules. Avoid excess lubricant on the braid.



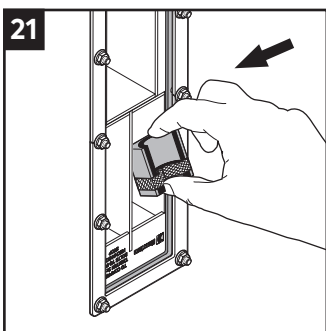
Lubricate the sealing surfaces of the spare modules. Do not remove the core.



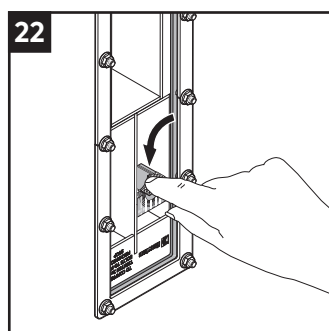
Lubricate the sealing surfaces of the solid modules.



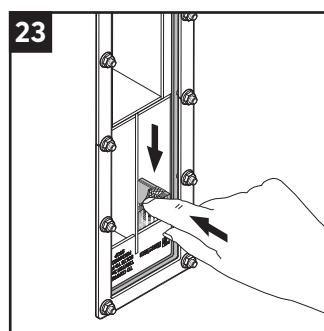
Lubricate the inside surfaces of the frame, especially into the corners. Lubricate the area that will be in contact with the braid sparsely.



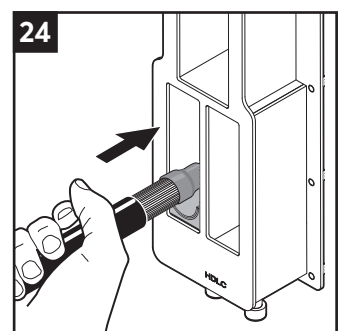
Insert the modules at an angle from the backside of the transit according to your packing plan.



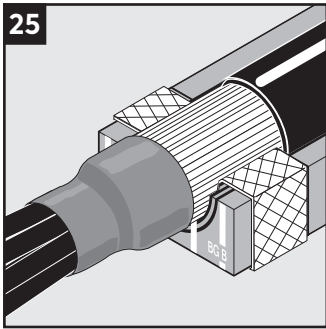
Turn the modules in line with the frame. Ensure that the environmental side of the module is facing outwards of the enclosure.



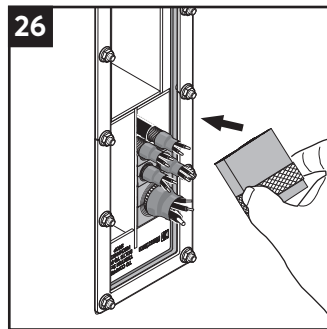
Push the modules in place. Ensure that the module rests against the stopping edge at the front.



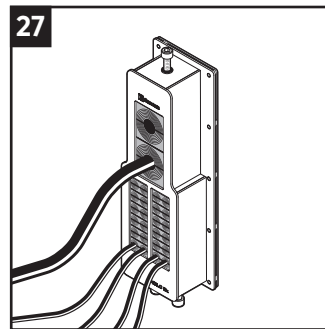
Insert the cables through the frame.



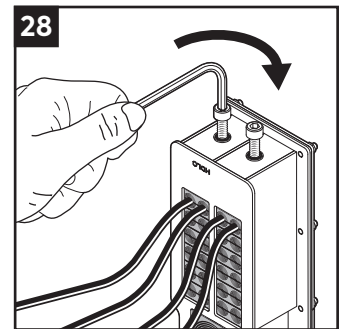
25 When placing cables in modules, the cable armor shall be visible outside the module at the termination side.



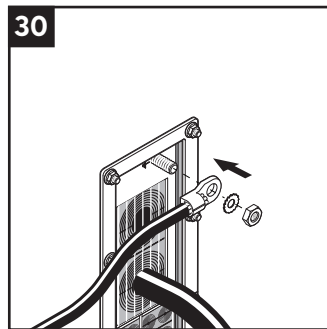
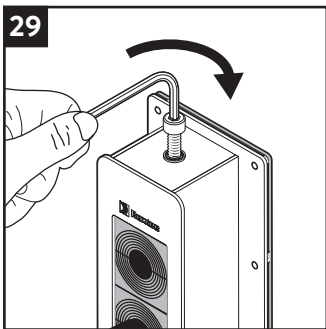
26 Continue to fill up the transit according to your packing plan.



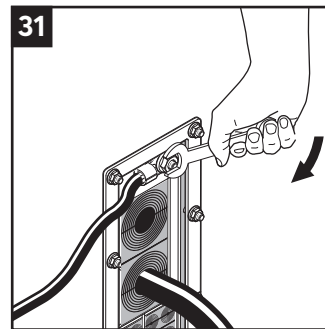
27 Ensure that the combined height of modules equals the packing height of 120 mm.



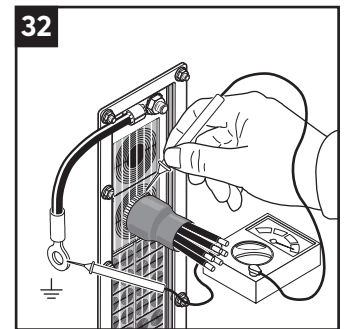
28 Tighten the 3 screws of the compression units until full mechanical stop. Do not exceed 20 Nm (15 ft.lb.).



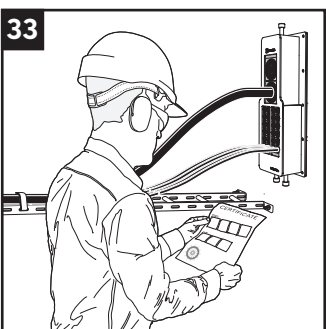
30 Attach the protective bonding conductor to the frame.



31 Tighten the nut firmly.



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

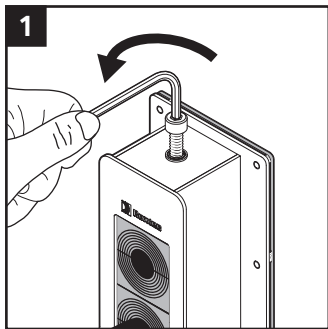


33 Check additional documentation, if applicable.

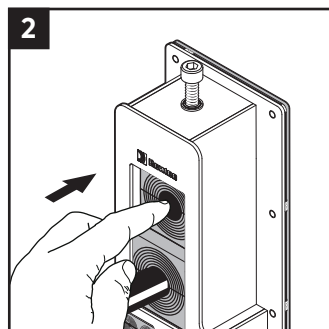
After installation inspection

- Are the wedge screws tightened to full mechanical stop?
- Is there visible protruding lubricant?
- Is the combined height of modules correct according to the frame packing height?
- Are all modules placed correctly and fully inserted after compression?

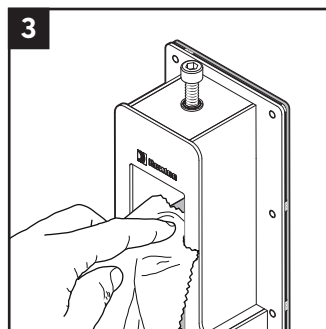
Disassembly and reinstallation



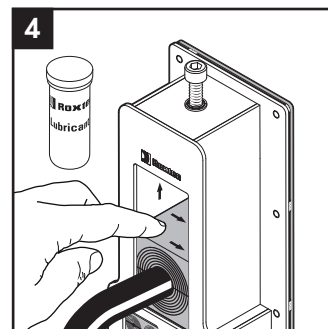
1 Release the compression by loosening the screws.



2 Push out the modules from the environmental side.

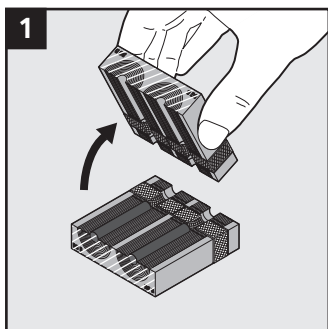


3 Make sure that the inside surfaces of the exposed packing space are free from dirt or dust.

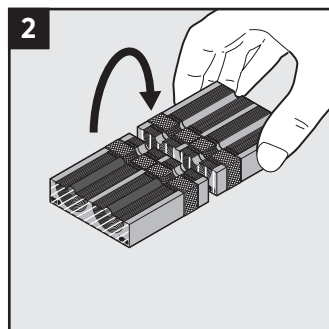


4 Lubricate the inside surfaces all around with Roxtec Lubricant, especially into the corners. Continue the reinstallation.

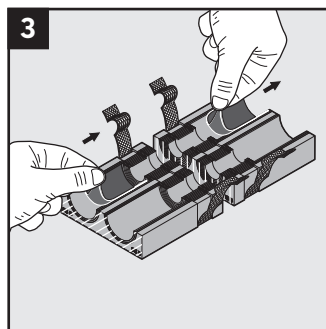
Modules with multiple openings



1 For modules with multiple openings, take extra care when peeling layers.



2 Folding the halves like this will line up corresponding openings.



3 Adapt one opening at a time by removing layers.

Note

- Integrated environmental sealing system for bonding and grounding applications. For use with armored cables.
- For non-armored cables, the cable jacket is not removed. No bonding/grounding functionality will be achieved for the cable.
- The final complete bonding/grounding installation has to comply with applicable codes and regulations.
- To be used with Roxtec RM BG B modules.
- An incorrectly adapted module shall be replaced (layers shall not be reused).
- For optimum reliability, wait 24 hours or longer after installation before exposing the cables or pipes to strain or pressure.
- Cables shall go straight through the frame.
- Cable/pipe with a considerable weight needs to be supported.
- Partially installed openings shall be compressed if left unattended.
- To simplify installation with more than one opening, fill all openings before tightening the wedges.
- Approvals or certificates may include amendments or limitations related to this application.
- The latest version of this and related documents are found at roxtec.com.

Disclaimer

*The Roxtec cable and pipe entry sealing system (the Roxtec system¹) is a modular-based system of sealing products consisting of different components. Each and every one of the components is necessary for the best performance of the Roxtec system. The Roxtec system has been certified to resist a number of different hazards. Any such certification, and the ability of the Roxtec system to resist such hazards, is dependent on all components that are installed as a part of the Roxtec system. Thus, the certification is not valid and does not apply unless all components installed as part of the Roxtec system are manufactured by or under license from Roxtec (authorized manufacturer²). Roxtec gives no performance guarantee with respect to the Roxtec system, unless (I) all components installed as part of the Roxtec system are manufactured by an authorized manufacturer and (II) the purchaser is in compliance with (a), and (b), below.

(a) During storage, the Roxtec system or part thereof, shall be kept indoors in its original packaging at room temperature.

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

The product information provided by Roxtec does not release the purchaser of the Roxtec system, or part thereof, from the obligation to independently

determine the suitability of the products for the intended process, installation and/or use.

Roxtec gives no guarantee for the Roxtec system or any part thereof and assumes no liability for any loss or damage whatsoever, whether direct, indirect, consequential, loss of profit or otherwise, occurred or caused by the Roxtec systems or installations containing components not manufactured by an authorized manufacturer and/or occurred or caused by the use of the Roxtec system in a manner or for an application other than for which the Roxtec system was designed or intended.

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