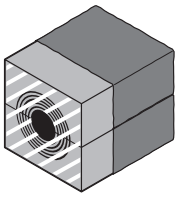
Roxtec

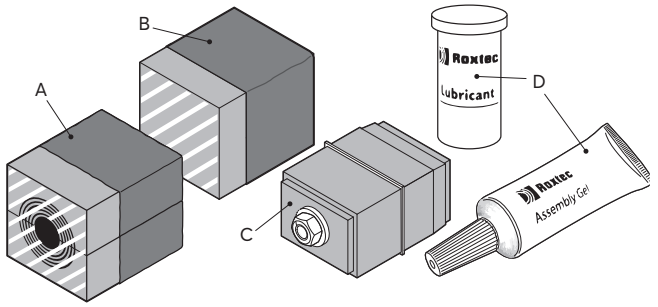
Installation instructions
Roxtec CM ES systems



Safety information

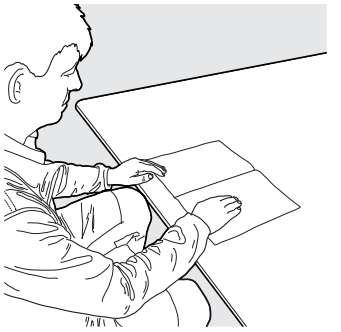
Roxtec recommends that all installations are performed without facility operation. Follow national regulations and installation codes. Any action affecting the routed service should be performed according to manufacturer recommendations.

Components



A: Roxtec CM ES module
B: Roxtec CM ES solid module
C: Roxtec CM ES compression unit (if applicable)
D: Roxtec Lubricant or Roxtec Assembly Gel

Additional information



Scan QR code or visit roxtec.com for additional information such as drawings, aperture, videos, ratings and certificates.

Tools

- Roxtec installation tools (not included)
- Cable stripper, recommended by the cable manufacturer (not included)
- Continuity tester (not included)
- Spanner (not included)
- Allen key (not included)

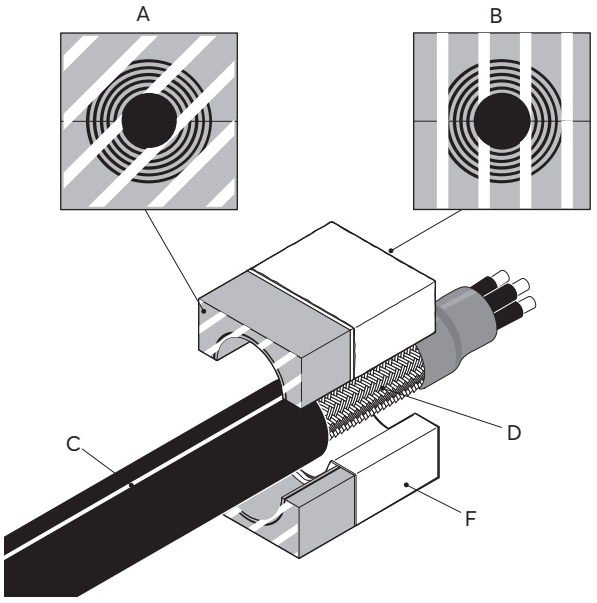
Technical data

Name	External dimensions WxHxD (mm)	For cable/pipe Ø (mm)
CM 15w40 ES	40 x 15 x 40	3.5 – 10.5
CM 20 ES	20 x 20 x 40	4 – 14.5
CM 20w40 ES	40 x 20 x 40	3.5 – 16.5
CM 30w40 ES	40 x 30 x 40	10 – 25
CM 40 10–32 ES	40 x 40 x 40	9.5 – 32.5
CM 40 ES	40 x 40 x 40	21.5 – 34.5
CM 5w40/0 ES	40 x 5 x 40	0
CM 10w40/0 ES	40 x 10 x 40	0
CM 20/0 ES	20 x 20 x 40	0
CM 40/0 ES	40 x 40 x 40	0

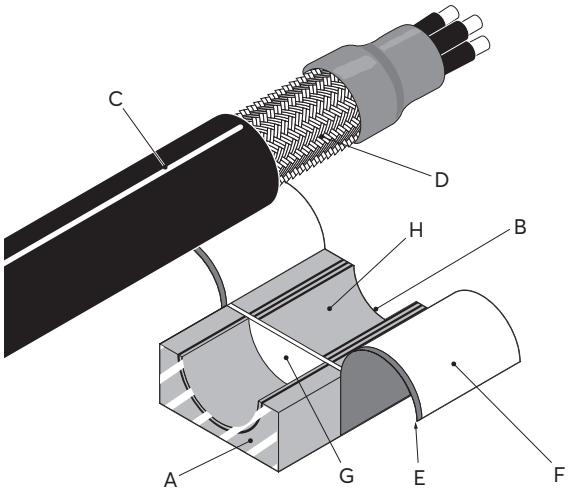
The diameter range of the modules indicates the smallest diameter of the exposed cable shield to the largest diameter of the cable jacket. Modules with core can be used as spare parts.

Cable placement in module

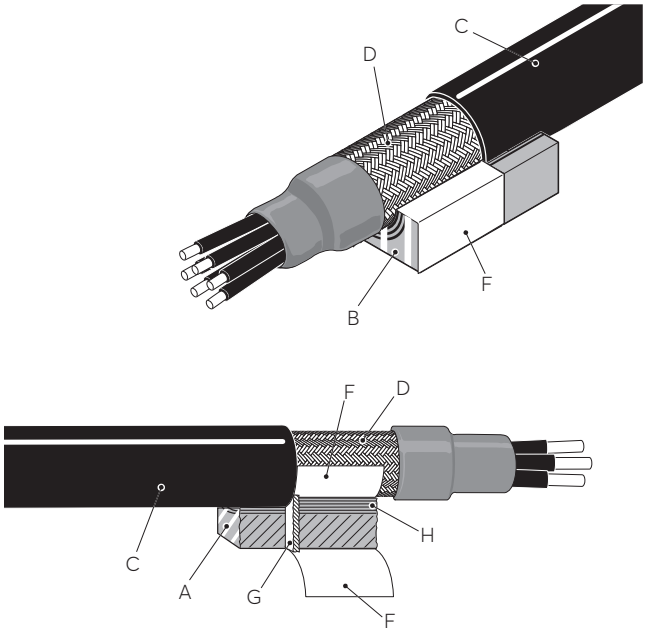
A: Environmental side
B: Termination/interior side
C: Cable jacket
D: Cable shield
E: Plastic film
F: Conductive tape
G: Conductive barrier
H: Removable layers



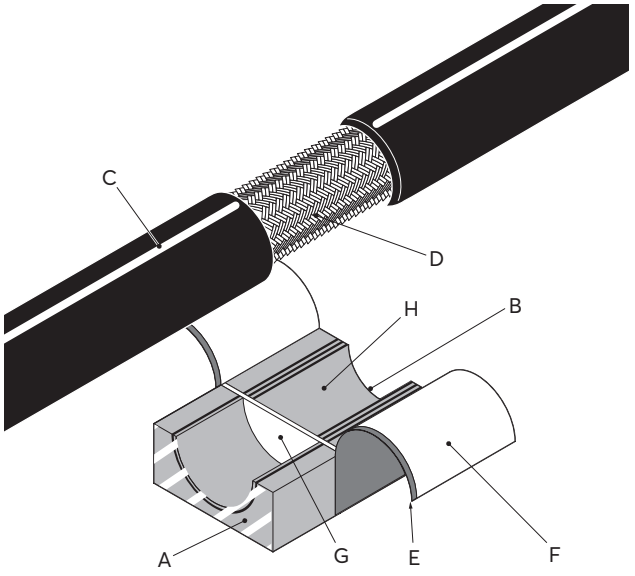
The tape is folded in.



The tape is folded out.

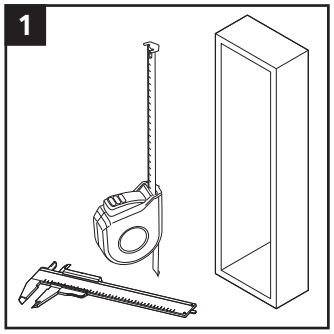


Cable placement in the module half. The cable jacket edge shall be in contact with the edge of the removable layers.

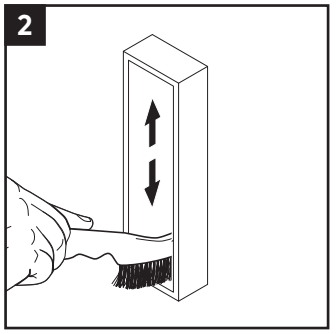


Cable with pass-through shield.

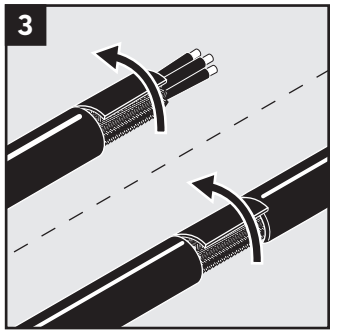
Installation



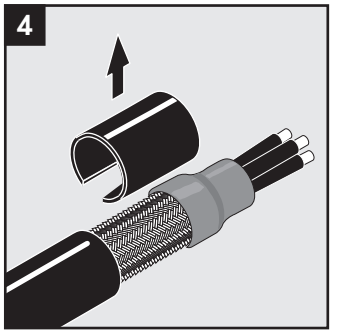
Consider your packing space.



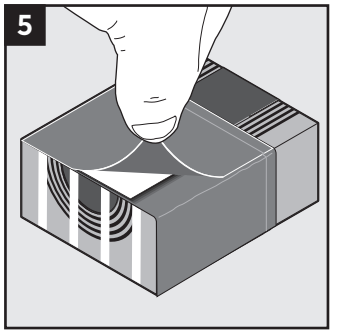
Clean the aperture.



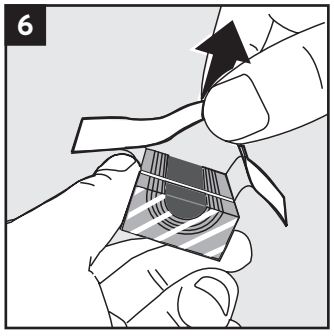
Remove the outer jacket and any plastic foil. The cable shield shall be clean and conductive.



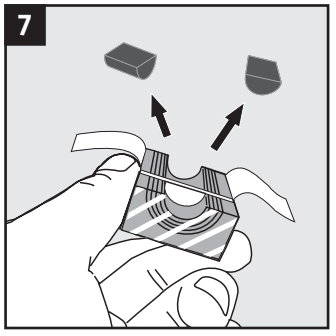
Secure the end of the cable shield.



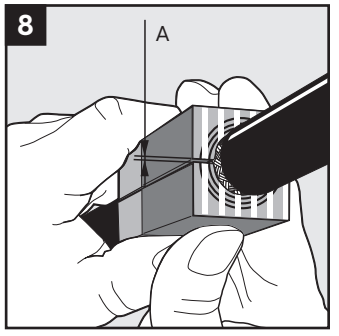
Lift the conductive tape and plastic film. Also see section for modules with multiple openings.



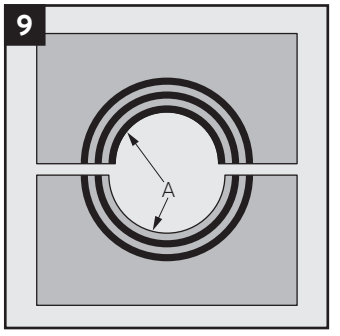
Remove the protection paper from all modules and fold out the conductive tape.



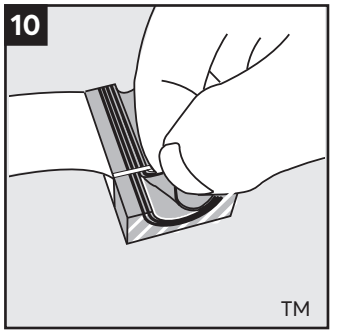
Remove the cores on all modules except spares.



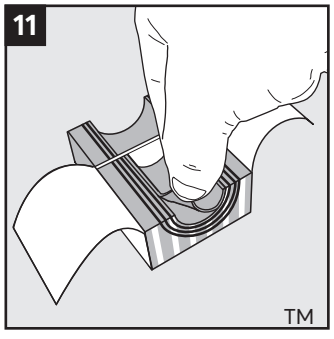
Achieve a gap of 0.1-1.0 mm (A) between the module halves by peeling off layers.



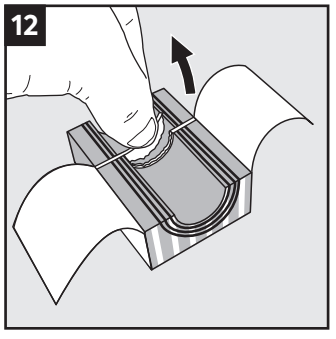
The number of layers may not differ (A) by more than one between the corresponding module halves.



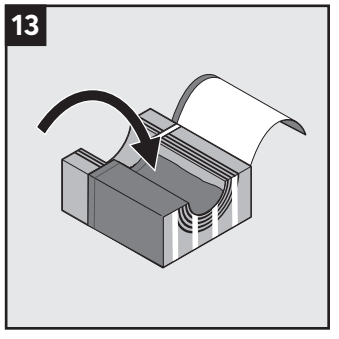
Adapt the layers that are in contact with the cable jacket.



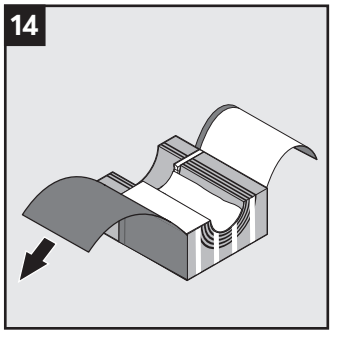
Adapt the layers that are in contact with the cable shield.



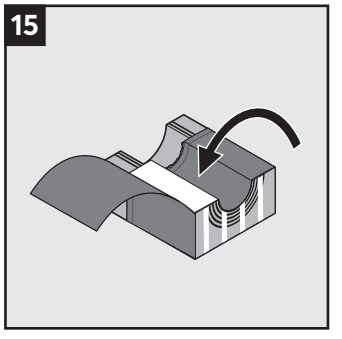
Adapt the conductive barrier to the cable shield.



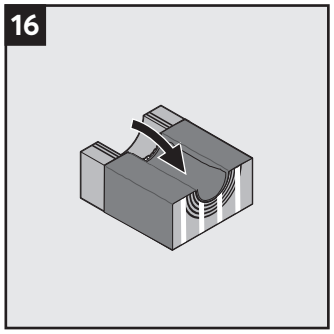
Fold the conductive tape tightly inside the module half from one side.



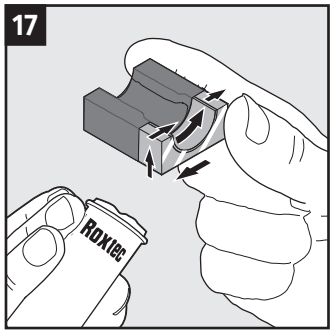
Separate the plastic film from the conductive tape and fold it to the side.



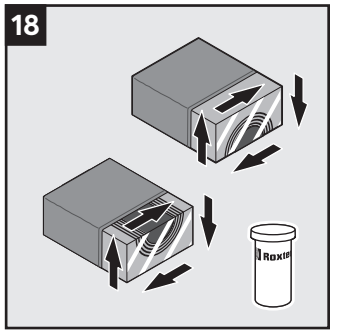
Fold the conductive tape on the other side tightly inside the module half.



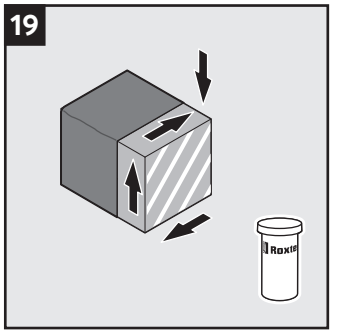
Fold the plastic film back inside the module half.



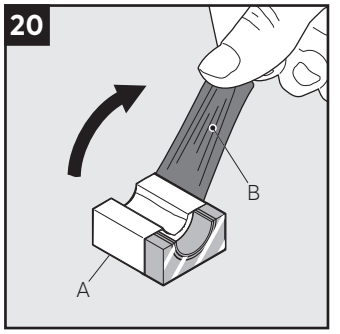
Lubricate the sealing surfaces of all modules. Do not lubricate the plastic film.



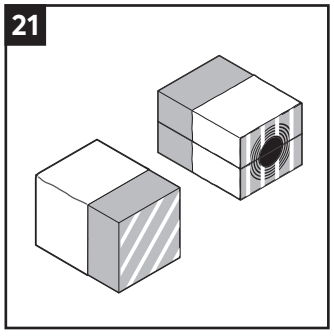
Lubricate the sealing surfaces of the spare modules. Do not remove the cores.



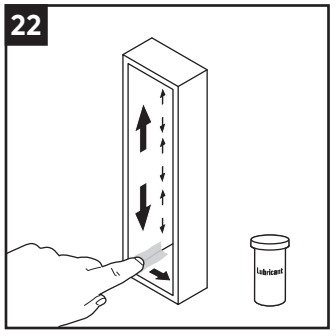
Lubricate the sealing surfaces of the solid modules.



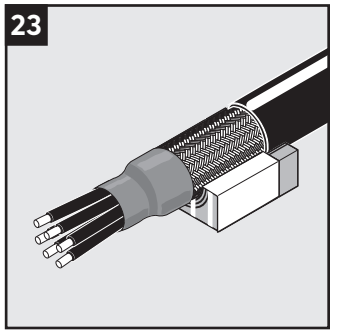
Remove the plastic film (B) on all modules. Keep the conductive tape (A) clean.



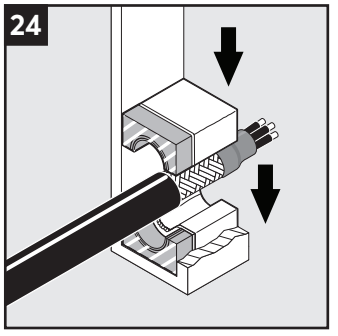
Plastic must be removed also on solid and spare modules.



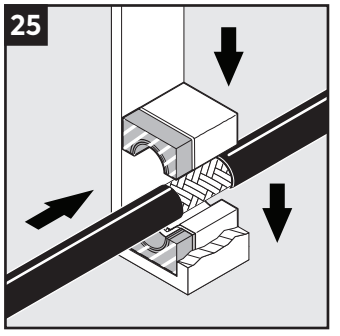
Lubricate the inside surfaces of the frame and especially its corners. Lubricate the area that will be in contact with the module tape sparsely.



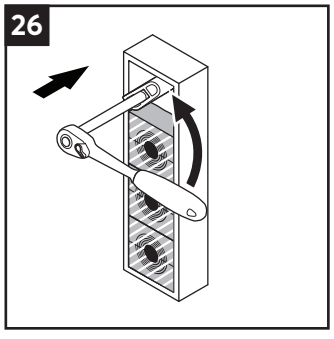
When placing cables in modules, the cable shield shall be visible outside the module at the termination side.



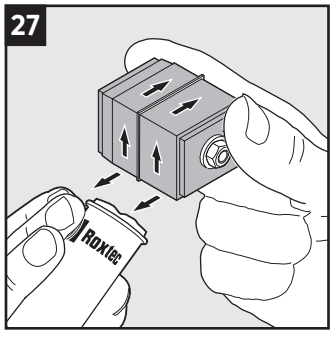
Place cables, according to your packing plan, in the module halves. Place corresponding module half on top.



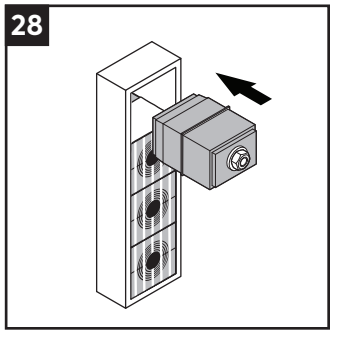
For pass-through cables, cable shield shall be visible on the termination side.



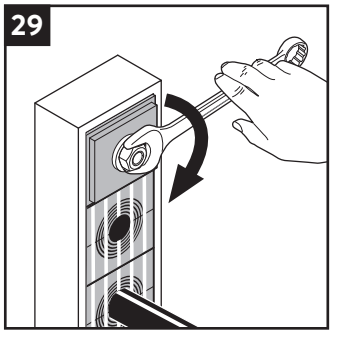
Use a Roxtec pre-compression tool to make space for the compression unit, if required.



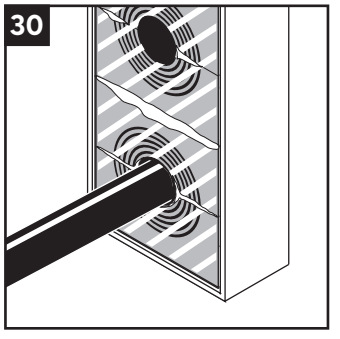
Lubricate the sealing surfaces of the compression unit.



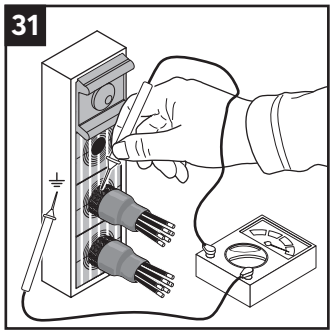
Insert the compression unit until stop, if applicable.



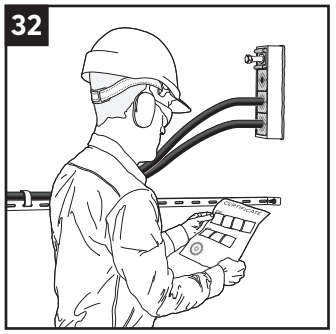
Tighten the nut of the compression unit to full mechanical stop, or recommended torque.



Excess lubricant indicates a tight seal.

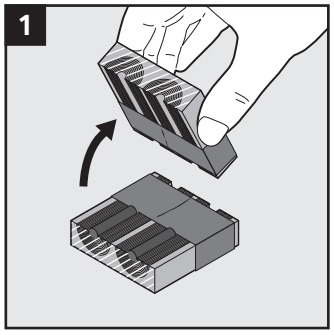


Electrical continuity testing is recommended.

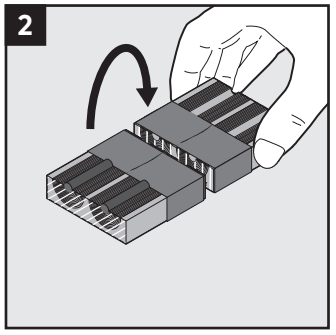


Check additional documentation, if applicable.

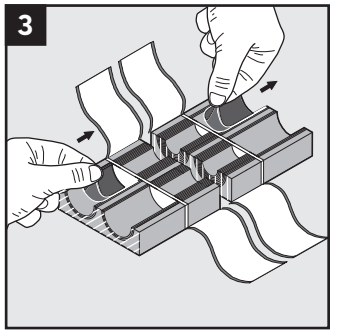
Modules with multiple openings



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



Folding the halves like this will line up corresponding openings.



Adapt one opening at a time by removing layers.

Note

- Integrated environmental sealing system for shielded applications. For use with shielded cables.
- For optimum reliability, wait 24 hours or longer after installation before exposing the cables or pipes to strain or pressure.
- Corrosion preventing primer must be removed to achieve electrical conductivity, where applicable.
- Protection paper and plastic film must be removed on all modules.
- Cables shall go straight through the frame.
- Cable/pipe with a considerable weight needs to be supported to prevent damage or subsidence to the seal.
- If the conductive tape is damaged, the module must be replaced.
- Partially installed openings shall be compressed if left unattended.
- 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.

After installation inspection

- Is there visible protruding lubricant?
- Is the combined height of modules correct according to the frame packing height?

Disclaimer

"The Roxtec cable and pipe entry sealing system ('the Roxtec system') 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 manufacturer'). 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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