### 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.

# Roxtec

Installation instructions Roxtec RM PE systems

## Components





Roxtec RM PE module

Roxtec RM PE solid module

## **Roxtec RM PE modules**

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measures in millimeters (mm)

Module size	For cable outer diameter min-max	
RM 15 PE	3-11	
RM 15w40 PE	3.5-10.5	
RM 20 PE	4-14.5	
RM 20w40 PE	3.5–16.5	
RM 30 PE	10-25	
RM 30H90 PE	10-25	
RM 40 10-32 PE	9.5-32.5	
RM 40 PE	21.5-34.5	
RM 40H80 PE	21.5-34.5	
RM 60 24-54 PE	24-54	
RM 60 PE	28-54	
RM 80 PE	48-71	
RM 90 PE	48-71	
RM 120 PE	67.5-99	

## **Roxtec RM PE solid modules**

#### Module size

RM 10/0 PE
RM 15/0 PE
RM 20/0 PE
RM 30/0 PE
RM 40/0 PE
RM 60/0 PE
RM 30H90/0 PE
RM 40H80/0 PE
RM 10w120/0 PE
RM 5w120/0 PE

#### Note:

The 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.

## Roxtec RM PE module



A: Environmental side B: Conductive tape C: Cable jacket D: Cable shield



- A: Environmental side B: Conductive tape C: Cable jacket D: Cable shield
- E: Plastic film F: Removable layers

Tools







Cable stripper tool (not included)



Continuity tester (not included)

13 mm spanner (not included)

## Installation



The frame must be clean and conductive.



The frame must have electrical contact with the potential equalization bar.



Hold the cable in its final position and mark where the cable jacket is to be removed using the guide.



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



Correct placement of a cable in a RM PE module.



Identify the frame size and corresponding packing height.

S	Н	w	h
1	101	60	60
2	101	120	60
3	160	60	120
4	160	120	120
5	218	60	180
6	218	120	180
7	278	60	240
8	278	120	240

S: Frame size

H: Frame height

w: Frame width

h: Packing height



Lift the conductive tape.



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



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



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



Adapt the layers that shall be in contact with the cable jacket.



Adapt the layers that shall be in contact with 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 core.



Lubricate the sealing surfaces of the solid modules.



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



Lubricate the inside surfaces of the frame. Lubricate the area that will be in contact with the tape sparsely.



Lubricate the corners carefully.



Place modules, according to your

packing plan.

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Place cables in the module halves.



Place corresponding module half on top.



Insert a stayplate on top of every finished row of modules. The stayplate shall be clean and conductive.



The use of a pre-compression tool on every second module row is recommended.



Ensure that the modules (B) are secured within the stayplate (A) edges.



Before inserting the final row of modules, insert two stayplates.



Separate the two stayplates and insert the final row of modules between the stayplates.



Place the upper stayplate on top of the modules.



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



Turn the screws of the wedge counter clock-wise to full stop before inserting it.



Lubricate both short sides of the wedge.



Insert the wedge so the stop flange (A) is in contact with the frame (B).



Tighten the screws alternately until full mechanical stop. Max 20 Nm.



25 mm (A) of the screws shall be exposed.



Attach the wedge clip to the wedge screws to complete the installation.



Installation completed.



Optional: Verify earth continuity from each cable shield to earth. Use a suitable instrument.

## **Disassembly and reinstallation**



Remove the wedge clip from the wedge.



Loosen the screws alternately to full stop. Do not exceed 20 Nm.



Insert a flat tool (A) between the wedge (B) and the stayplate (C) to remove the wedge.



Remove modules and stayplates.



Keep the rows sorted until it is time to reinstall the transit.



If a module needs to be replaced, all modules in that row must be replaced.



The inside surfaces of the exposed packing space shall be clean and conductive.



Lubricate the inside surfaces.



Lubricate all corners carefully. Continue the reinstallation.

## Note

- Integrated environmental sealing system for potential equalization applications. For use with shielded/armored 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.
- If the conductive tape is damaged, the module must be replaced.
- Roxtec installation tools are available.
- 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 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.

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