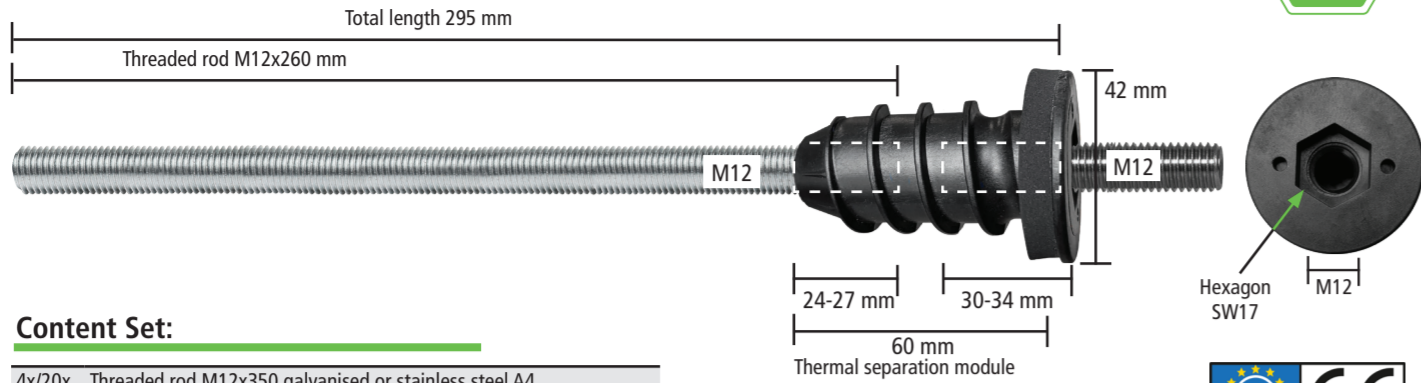




Installation instruction RECA dimos anchor UNI-RT 12

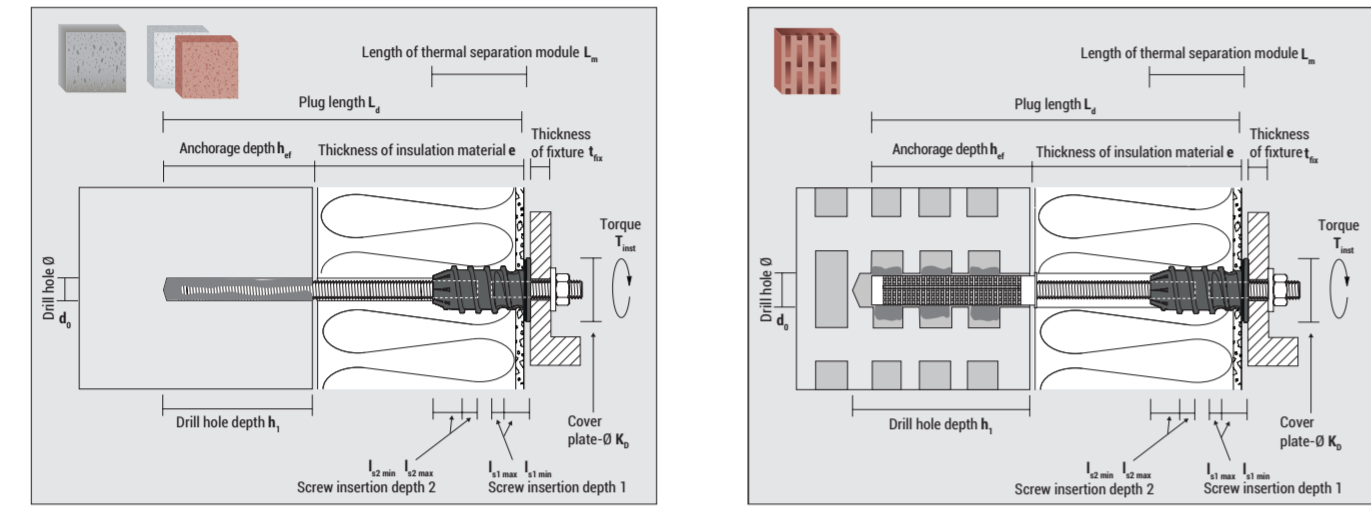


Content Set:

- 4x/20x Threaded rod M12x350 galvanised or stainless steel A4
- 4x/20x Thermal separation module 60 mm with EPDM sealing ring
- 4x/20x Threaded stud M12x70 mm, DIN 913, stainless steel A4
- 4x/20x Washer M12 DIN 125, stainless steel A4
- 4x/20x Hexagon nut M12 DIN 934, stainless steel A4
- 4x/20x Plastic sleeve SH 20x130 (only needed for perforated brick)
- 1x/4x Mixing nozzle extension VM-XL, 200 mm
- 1x Bit hexagon socket, size 6
- 0x Injection mortar VMU plus, VMU plus polar or VM-EA are required for the installation (see page 2)*



Installation parameters:



		Installation in concrete	Installation in aerated concrete/solid brick	Installation in perforated brick
Anchor length	L_a [mm]	295 ¹⁾	295 ¹⁾	295 ¹⁾
Thickness of insulation material (incl. plaster)	e [mm]	60 - max. 220	60 - max. 190	60 - max. 160
Length of thermal separation module (to lower edge of cover plate)	L_{th} [mm]	60	60	60
Diameter cover plate	K_p [mm]	42	42	42
Threaded rod		M12x260 ¹⁾	M12x260 ¹⁾	M12x260 ¹⁾
Insertion depth of M12 threaded stud	$l_{1,2,3,4,5}$ [mm]	24-27	24-27	24-27
Drill hole diameter	d [mm]	14	14	20
Drill hole depth	h [mm]	$80 + e$	$110 + e$	$140 + e$
Anchorage depth	h_a [mm]	70	100	130
Plastic sleeve SH		-	-	20-130
Connecting thread		M12 ²⁾	M12 ²⁾	M12 ²⁾
Insertion depth of M12 threaded stud	$l_{1,2,3,4,5}$ [mm]	30-34	30-34	30-34
Thickness of fixture	t_s [mm]	24 ³⁾	24 ³⁾	24 ³⁾
Ø of clearance hole in fixture	d_s [mm]	14	14	14
Torque	T_{inst} [Nm]	19 ⁴⁾	19 ⁴⁾	19 ⁴⁾

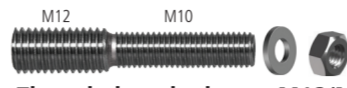
¹⁾ Threaded rod M12 has to be cut as needed. For further technical values, see ETA-assessment/ETA-approval of the injection system used.
²⁾ When using the threaded stud with length $L=70$ mm, completely screwed in. Otherwise, a longer threaded stud or a longer metric screw can be used.
³⁾ Alternative, if a M10 connecting thread is needed: Threaded stud adapter M12/M10, length 70 mm, stainless steel A4, Art-No. 0911 210 070.
⁴⁾ The torque applies to the thermal separation module. Note any different max. installation torque in the ETA approval of used injection system has to be observed.

Accessories:



Two-hole nut driver, DIN 3116C for adjusting RECA dimos anchor UNI-RT 12/16

Type	Art-No	Length L [mm]	Width B [mm]	Sheet thickness t_s [mm]	Suitable for	[pcs]
Two-hole nut driver	0911 250 000	155	25	3	dimos anchor UNI-RT 12/16	1



Threaded stud adapter M12/M10, stainless steel A4 incl. M10 nut and washer

Type	Art-No	Length L [mm]	Suitable for	[pcs]
Threaded stud adapter	0911 210 070	70	dimos anchor UNI-RT 12/16	4



Injection system VMU plus

Type	Art-No.	Content [ml]	Shelf life [Months]	[ETAs]	[pcs]
Tubular film cartridge	0911 003 300	300	12	●	1/12
Coaxial cartridge	0911 003 330	330	18	●	1/12
Coaxial cartridge	0911 003 420	420	18	●	1/12



Injection system VMU plus Polar

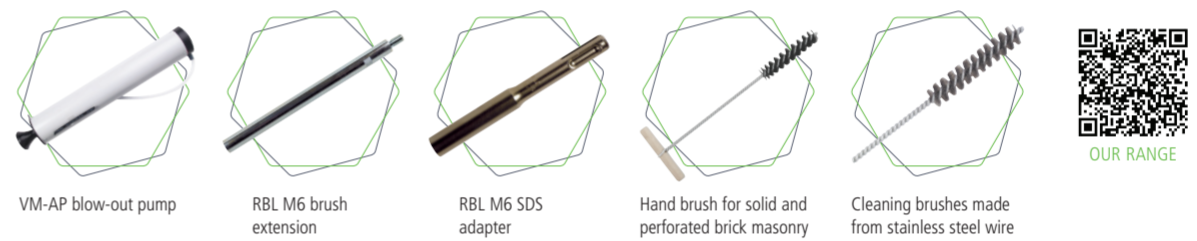
Type	Art-No.	Content [ml]	Shelf life [Months]	[ETAs]	[pcs]
Tubular film cartridge	0911 004 300	300	12	●	1/12
Coaxial cartridge	0911 004 330	330	18	●	1/12
Coaxial cartridge	0911 004 420	420	18	●	1/12



Injection system VM-EA

Type	Art-No.	Content [ml]	Shelf life [Months]	[ETAs]	[pcs]
Tubular film cartridge	0911 005 300	300	12	●	1/12
Coaxial cartridge	0911 005 330	330	18	●	1/12
Coaxial cartridge	0911 005 420	420	18	●	1/12

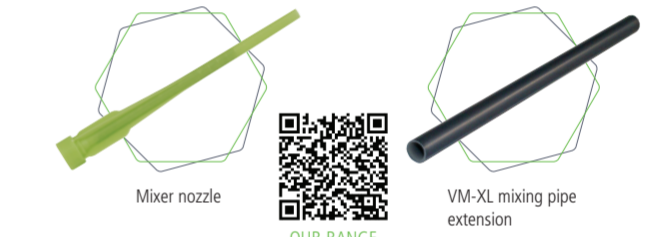
Drill hole cleaning



Application guns



Borehole filling



Mounting in concrete/solid brick:

- 1. Drill a hole:** Observe the drilling method of the approval/assessment of the injection mortar. Concrete/solid brick: hammer drilling; aerated concrete: Rotary drilling - without impact
- 2. Clean the drill hole:** The drill hole must be cleaned properly; see approval/assessment of the injection system: 4x blow - 4x brush - 4x blow
- 3. Cut the RECA dimos anchor UNI-RT 12 to length:** The pre-assembled threaded rod M12 is already completely screwed into the thermal separation module. Correct length L_{th} from the tip of the threaded rod to the lower edge of the cover plate of the thermal separation module (see table):

Correct length L_{th} = Anchorage depth h_a + insulation thickness e	Anchoring in concrete	Anchoring in aerated concrete/solid brick
$L_{th} = h_a + e$	$L_{th} = 70 \text{ mm} + e$	$L_{th} = 100 \text{ mm} + e$

 After determining the correct length, cut the threaded rod M12 to length with a metal saw.
- 4. Note:** If the plaster is very thick and hard, use a Ø 26 mm drill bit or „ream“ the hole in the plaster to approx. 26 mm with the drill.
- 5. Attach the mixing nozzle extension VM-X to the mixing nozzle VM-XL.** Squeeze out the injection mortar until the mortar has a uniform grey mixing colour - discard the pre-run of at least 3 pumps (approx. 10 cm) for coaxial cartridges or at least 6 pumps for 300ml tubular film cartridges.
- 6. Fill the drill hole with injection mortar (start from the bottom of drill hole):**

Drill hole depth h [mm]	300 ml / 330 ml Cartridge sizes	420 ml Cartridge sizes
Concrete: 80	5-6	4-5
Solid brick/aerated concrete: 110	6-7	5-6

 Important: Follow the installation instructions and processing time of the injection mortar used in accordance with the approval/assessment.
- 7. Insert the hexagon bit (included in the set) into the M12 threaded stud and screw in the RECA dimos anchor UNI-RT 12 using a cordless screwdriver until the seal is pressed firmly against the plaster.** A standard cordless screwdriver is sufficient for this. Note: The thermal separation module drills itself through the insulation. The foamed EPDM sealing ring ensures optimum sealing and can prevent driving rain from entering the insulation. For details on impermeability to driving rain see ETA and/or point 10.
- 8. Observe the curing time of the injection system, see cartridge label of the injection mortar.**
- 9. Afterwards, the attachment can be mounted (max. torque $T_{inst} = 25$ Nm).** Note: Observe an eventually varying installation torque in the ETA approval of the used injection system. Note: The screw insertion depth of the M12 threaded stud in the RECA dimos anchor UNI-RT 12 is min. 30 mm, max. 34 mm. This means that it may be unscrewed by max. 4 mm - this corresponds to approx. 2 turns. ¹⁾ $a \leq 3,5$ mm
- 10. If the wall is uneven, the RECA dimos anchor UNI-RT 12 can be readjusted.** The unevenness can, for example, be lined with polyamide washers according to DIN 9021 with a diameter of 37x13x3 mm (Art.-No. 0421 012). The thermal separation module may be unscrewed by a maximum of 3 mm using the two-hole nut driver (Art. No. 0911 250 000). A resulting gap should be sealed with a suitable sealant (e.g. 578). A cover/sealing of the anchorage point is required when:
 - the deflection under shear stress is greater than 3 mm
 - the anchor is not perpendicular to the plaster surface
 - the grain size or roughness of the plaster is greater than 3 mm
 - the drill hole diameter in the plaster is larger than 26 mm
 With thick plaster or hard insulating material, the drill hole must be drilled out to a depth (length of the thermal break module) of 26 mm.

Mounting in masonry (perforated brick)

- 1. Drill a hole:** Observe the drilling method of the approval/assessment of the injection mortar. Perforated bricks: Rotary drilling - without impact
- 2. Clean the drill hole:** The drill hole must be cleaned properly; see approval/assessment of the injection system: 2x blow - 2x brush - 2x blow
- 3. Cut the RECA dimos anchor UNI-RT 12 to length:** The pre-assembled threaded rod M12 is already completely screwed into the thermal separation module. Correct length L_{th} from the tip of the threaded rod to the lower edge of the cover plate of the thermal separation module: **Anchorage depth in plastic sleeve (125 mm) + insulation thickness e (incl. plaster)** After determining the correct length, cut the threaded rod M12 to length with a metal saw.
- 4. Enlarge the opening in the plaster for the collar of the plastic sleeve to 26 mm.** To do this: Screw the thermal separation module only approx. 2 thread turns through the plaster using a cordless screwdriver and the bit included in the set. Then screw it out again. Note: If the plaster is very thick and hard, use a Ø 26 mm drill bit or „ream“ the hole in the plaster to approx. 26 mm with the drill.
- 5. Push the plastic sleeve into the drill hole with the help of a folding ruler or similar.** Then remove the folding ruler with the drill hole. Note: This is an ideal way to ensure that the sleeve SH 20x130 is correctly inserted in the drill hole.
- 6. Attach the mixing nozzle extension VM-XL to the mixing nozzle VM-X.** Squeeze out the injection mortar until the mortar has a uniform grey mixing colour - discard the pre-run of at least 3 pumps (approx. 10 cm) for coaxial cartridges or at least 6 pumps for 300ml tubular film cartridges.
- 7. Fill the plastic sleeve completely with injection mortar (start from the bottom/back of the sleeve):**

300 ml / 330 ml Cartridge sizes	420 ml Cartridge sizes
13 pumps = 38 mm Scale shares	13 pumps = 24 mm Scale shares

 Important: Follow the installation instructions and processing time of the injection mortar. The necessary information is on the label, for further information see approval/assessment.
- 8. Insert the hexagon bit (included in the set) into the M12 threaded stud and screw in the RECA dimos anchor UNI-RT 12 using a cordless screwdriver until the sealing ring is pressed firmly against the plaster.** A standard cordless screwdriver is sufficient for this. Note: The thermal separation module drills itself through the insulation. The foamed EPDM sealing ring ensures optimum sealing and can prevent driving rain from entering the insulation. For details on impermeability to driving rain see ETA and/or point 11.
- 9. Observe the curing time of the injection mortar (see label)!**
- 10. Afterwards, the attachment can be mounted (max. torque $T_{inst} = 19$ Nm).** Note: Observe an eventually varying installation torque in the ETA approval of the used injection system. Note: The screw insertion depth of the M12 threaded stud in the RECA dimos anchor UNI-RT 12 is min. 30 mm, max. 34 mm. This means that it may be unscrewed by max. 4 mm - this corresponds to approx. 2 turns. ¹⁾ $a \leq 3,5$ mm
- 11. If the wall is uneven, the RECA dimos anchor UNI-RT 12 can be readjusted.** The unevenness can, for example, be lined with polyamide washers according to DIN 9021 with a diameter of 37x13x3 mm (Art.-No. 0421 012). The thermal separation module may be unscrewed by a maximum of 3 mm using the two-hole nut driver (Art. No. 0911 250 000). A resulting gap should be sealed with a suitable sealant (e.g. 578). A cover/sealing of the anchorage point is required when:
 - the deflection under shear stress is greater than 3 mm
 - the anchor is not perpendicular to the plaster surface
 - the grain size or roughness of the plaster is greater than 3 mm
 - the drill hole diameter in the plaster is larger than 26 mm
 With thick plaster or hard insulating material, the drill hole must be drilled out to a depth (length of the thermal break module) of 26 mm.