Resin anchor RM capsule

The proven bonded anchor for non-cracked concrete

Rail fixing

APPROVALS

ETA 08/0010

Fire resistance classification R 120
Anchor types see test report

ADVANTAGES

- The pre-portioned resin capsule is especially economical for individual applications and overhead installations.
- The choice between standard and intensive cleaning allows for individual adaptation either to achieve rapid progress or to obtain the maximum load level.
- The wide range of approved steel types allows for use in all corrosion resistant classes and offers the best possible application safety.
- The extensive range of RG M from M8-M30 opens up a wide range of applications and therefore offers great flexibility.
- The larger anchorage depths of the RG M E variants allow for an even greater load level. Thus fewer fixing points are required.

BUILDING MATERIALS

Approved for:

- Concrete C20/25 to C50/60
- Non-cracked

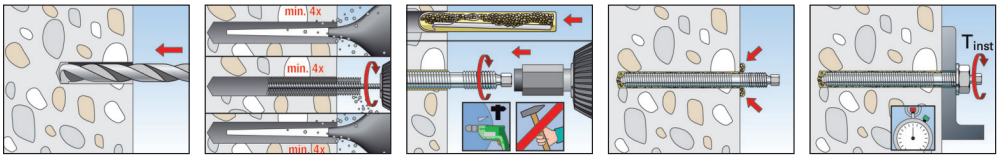
Also suitable for:

- Concrete C12/15, non-cracked
- Natural stone with densestructure

VERSION

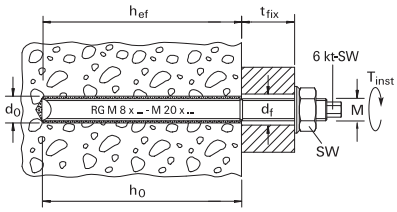
- Zinc-plated steel
- Stainless steel
- High corrosion-resistant steel

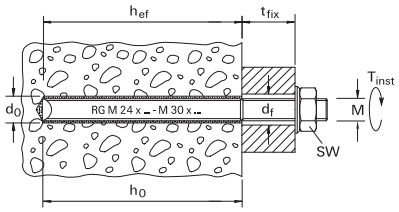
INSTALLATION



TECHNICAL DATA

Resin capsule **R M**





Item	Art-No.	Drill hole diameter do (mm)	Min. drill hole depth h1 (mm)	Effect anchoring depth hef (mm)	Fits	Sales unit (pcs)
R M 8	**050270**	10	80	80	RG M 8	10
R M 10	**050271**	12	90	90	RG M 10	10
R M 12	**050272**	14	110	110	RG M 12	10
R M 12 E	**048501**	14	150	150	RG M 12 E	10
R M 14	**050278**	16	120	120	RG M 14	10
R M 16	**050273**	18	125	125	RG M 16	10
R M 16 E	**079838**	18	190	190	RG M 16 E	10
R M 20	**050274**	25	170	170	RG M 20	10
R M 20 E	**079840**	25	240	240	RG M 20 E	5
R M 22	**512763**	30	190	190	RG M 22	5
R M 24	**050275**	28	210	210	RG M 24	5
R M 24 E	**079842**	28	290	290	RG M 24 E	5
R M 27	**079843**	32	250	250	RG M 27	5
R M 30	**050276**	35	280	280	RG M 30	5

CURING TIME

Temperature at anchoring base	Curing time	
	Dry concrete	Wet concrete
- 5 °C to - 1°C	4 hrs.	8 hrs.
± 0 °C to + 9 °C	45 min.	90 min.
+ 10 °C to + 20 °C	20 min.	40 min.
> + 20 °C	10 min.	20 min.

The anchor may be installed in dry or wet concrete or in flooded holes excepting sea water (premium-cleaning acc. to ETA-approval).
(1) In wet concrete and flooded holes the curing time has to be doubled.

LOADS

Loads for a single anchor in concrete C20/25 [2) 3) 5) 6)]
For the design the complete approval ETA - 08/0061 has to be considered.

Item	Effective anchorage depth hef (mm)	Minimum member thickness hmin (mm)	Installation torque Tinst (Nm)	Min spacing Smin (mm)	Min edge distance Cmin (mm)	Non-cracked Concrete			
						Design tensile load Nd (kN)	Design shear load Vd (kN)	Permissible tensile load Nrec (kN)	Permissible shear load Vrec (kN)
RG M 8	80	110	10.0	40	40	9.0	7.1	6.4	5.1
RG M 10	90	120	20.0	45	45	11.8	12.0	8.4	8.6
RG M 12	110	150	40.0	55	55	17.2	16.8	12.3	12
RG M 16	125	160	60.0	65	65	26.2	31.2	18.7	22.3
RG M 16E	190	250	60.0	95	95	39.8	31.2	28.4	22.3
RG M 20	170	220	120.0	85	85	38.6	48.9	27.6	34.9
RG M 20E	240	300	120.0	120	120	54.5	48.9	38.9	34.9
RG M 24	210	280	150.0	105	105	57.1	71.3	40.8	50.9
RG M 27	250	330	200.0	125	125	76.6	92.0	54.7	65.7
RG M 30	280	370	300.0	140	140	95.3	112.8	68.1	80.6
RG M 8 A4	80	110	10.0	40	40	9.0	8.4	6.4	6
RG M 10 A4	90	120	20.0	45	45	11.8	12.9	8.4	9.2
RG M 12 A4	110	150	40.0	55	55	17.2	19.2	12.3	13.7
RG M 12E A4	150	200	40.0	75	75	23.5	19.2	16.8	13.7
RG M 16 A4	125	160	60.0	65	65	26.2	35.3	18.7	25.2
RG M 16E A4	190	250	60.0	95	95	39.8	35.3	28.4	25.2
RG M 20 A4	170	220	120.0	85	85	38.6	55.2	27.6	39.4
RG M 20E A4	240	300	120.0	120	120	54.5	55.2	38.9	39.4
RG M 24 A4	210	280	150.0	105	105	57.1	69.5	40.8	56.8
RG M 27 A4	250	330	200.0	125	125	76.6	103.2	54.7	73.7
RG M 30 A4	280	370	300.0	140	140	95.3	126.3	68.1	90.2

(1) The loads apply to fischer threaded rods and careful drill hole cleaning, carried out with a brush and blow-out tool and temperature in the substrate in the area of the mortar with short term temperature T ≤ + 80 °C and long term temperature T ≤ + 50 °C.
(2) The partial safety factors for material resistance as regulated in the approval.
(3) Partial safety factor for load γ_L= 1.4 are considered for recommended load capacities.
(4) Minimum possible axial spacings resp. edge distance while reducing the permissible load/ design load.
(5) For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see approval.
(6) For higher concrete strength classes up to C50/60 higher permissible loads may be possible.