

LOADS

Superbond Resin Anchor RSB⁷⁾ with internal threaded anchor RG MI (screw property class 8.8)

Highest permissible loads for a single anchor^{1) 6)} in concrete C20/25⁴⁾

For the design the complete approval ETA - 12/0258 has to be considered.

Typ				Cracked concrete				Non-cracked concrete			
	effective anchorage depth	Min. member thickness	Max. torque moment	Permissible tensile load	Permissible shear load	Min. spacing	Min. edge distance	Permissible tensile load	Permissible shear load	Min. spacing	Min. edge distance
	h_{ef} [mm]	h_{min} [mm]	$T_{inst,max}$ [Nm]	$N_{perm}^{3)}$ [kN]	$V_{perm}^{3)}$ [kN]	$s_{min}^{2)}$ [mm]	$c_{min}^{2)}$ [mm]	$N_{perm}^{3)}$ [kN]	$V_{perm}^{3)}$ [kN]	$s_{min}^{2)}$ [mm]	$c_{min}^{2)}$ [mm]
RG M 8 I	90	120	10,0	8,1	8,3	55	55	13,8	8,3	55	55
RG M 10 I	90	125	20,0	10,8	13,3	65	65	20,5	13,3	65	65
RG M 12 I	125	165	40,0	16,8	19,3	75	75	32,4	19,3	75	75
RG M 16 I	160	205	80,0	26,3	30,9	95	95	48,7	30,9	95	95
RG M 20 I	200	260	120,0	41,9	51,4	125	125	68,0	51,4	125	125

¹⁾ The partial safety factors for material resistance as regulated in the approval as well as a partial safety factor for load actions of $\gamma_L = 1,4$ are considered. As an single anchor counts e.g. an anchor with a spacing $s \geq 3 \times h_{ef}$ and an edge distance $c \geq 1,5 \times h_{ef}$.

²⁾ Minimum possible axial spacings resp. edge distance while reducing the permissible load.

³⁾ For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see approval.

⁴⁾ For higher concrete strength classes up to C50/60 higher permissible loads may be possible.

⁶⁾ The given loads are valid for temperatures in the substrate up to +50 °C (resp. short term up to 80 °C). Erection of the drill hole by hammer drilling with best possible drill hole cleaning according approval. The anchor may be installed in dry or wet concrete.

LOADS

Superbond Resin Anchor RSB with internal threaded anchor RG MI A4 (screw property class A4-70)

Highest permissible loads for a single anchor^{1) 6)} in concrete C20/25⁴⁾

For the design the complete approval ETA - 12/0258 has to be considered.

Typ				Cracked concrete				Non-cracked concrete			
	effective anchorage depth	Min. member thickness	Max. torque moment	Permissible tensile load	Permissible shear load	Min. spacing	Min. edge distance	Permissible tensile load	Permissible shear load	Min. spacing	Min. edge distance
	h_{ef} [mm]	h_{min} [mm]	$T_{inst,max}$ [Nm]	$N_{perm}^{3)}$ [kN]	$V_{perm}^{3)}$ [kN]	$s_{min}^{2)}$ [mm]	$c_{min}^{2)}$ [mm]	$N_{perm}^{3)}$ [kN]	$V_{perm}^{3)}$ [kN]	$s_{min}^{2)}$ [mm]	$c_{min}^{2)}$ [mm]
RG M 8 I A4	90	120	10,0	8,1	5,9	55	55	9,9	5,9	55	55
RG M 10 I A4	90	125	20,0	10,8	9,3	65	65	15,7	9,3	65	65
RG M 12 I A4	125	165	40,0	16,8	13,5	75	75	22,5	13,5	75	75
RG M 16 I A4	160	205	80,0	26,3	25,1	95	95	42,0	25,1	95	95
RG M 20 I A4	200	260	120,0	41,9	39,4	125	125	65,7	39,4	125	125

¹⁾ The partial safety factors for material resistance as regulated in the approval as well as a partial safety factor for load actions of $\gamma_L = 1,4$ are considered. As an single anchor counts e.g. an anchor with a spacing $s \geq 3 \times h_{ef}$ and an edge distance $c \geq 1,5 \times h_{ef}$.

²⁾ Minimum possible axial spacings resp. edge distance while reducing the permissible load.

³⁾ For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see approval.

⁴⁾ For higher concrete strength classes up to C50/60 higher permissible loads may be possible.

⁶⁾ The given loads are valid for temperatures in the substrate up to +50 °C (resp. short term up to 80 °C). Erection of the drill hole by hammer drilling with best possible drill hole cleaning according approval. The anchor may be installed in dry or wet concrete.