

LOADS

Express anchor EXA

Highest permissible loads for a single anchor¹⁾ in concrete C20/25⁴⁾

For the design the complete approval ETA - 05/0185 has to be considered.

Type	Effective anchorage depth h_{ef} [mm]	Minimum member thickness h_{min} [mm]	Installation torque T_{inst} [Nm]	Non-cracked concrete			
				Permissible tensile load $N_{perm}^{3)}$ [kN]	Permissible shear load $V_{perm}^{3)}$ [kN]	Min. spacing $s_{min}^{2)}$ [mm]	Min. edge distance $c_{min}^{2)}$ [mm]
EXA M8	47	100	14,0	4,1	6,2	45	40
EXA M10	49	100	30,0	6,3	8,2	50	65
EXA M12	67	135	60,0	9,9	11,0	75	90
EXA M16	85	170	80,0	16,7	27,8	85	90
EXA M20	103	205	140,0	24,8	40,9	105	100

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 $c \geq 1,5 \times h_{ef}$. Accurate data see approval.

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.

LOADS

Express anchor EXA-K

Highest recommended loads¹⁾ for a single anchor in concrete C20/25.

Type	Non-cracked concrete				
	Effective anchorage depth	Min. member thickness	Installation torque	Recommended tensile load	Recommended shear load
	h_{ef} [mm]	h_{min} [mm]	T_{inst} [Nm]	$N_{rec}^{3)}$ [kN]	$V_{rec}^{3)}$ [kN]
EXA M6 K	24	70	5,0	1,5	1,6
EXA M8 K	28	90	15,0	2,1	2,8
EXA M10 K	30	100	25,0	3,0	4,0

¹⁾ Required safety factors are considered.

³⁾ For combinations of tensile loads and shear loads the given loads have to be reduced.

LOADS

Express anchor EXA-IG

Highest recommended loads¹⁾ for a single anchor in concrete C20/25.

Type	Non-cracked concrete				
	Effective anchorage depth	Min. member thickness	Installation torque	Recommended tensile load	Recommended shear load
	h_{ef} [mm]	h_{min} [mm]	T_{inst} [Nm]	$N_{rec}^{3)}$ [kN]	$V_{rec}^{3)}$ [kN]
EXA-IG M6	45	100	8,0	3,4	1,5
EXA-IG M8	45	110	15,0	4,0	2,6
EXA-IG M10	45	120	25,0	7,4	3,9
EXA-IG M12	75	150	50,0	12,3	6,3

¹⁾ Required safety factors are considered.

³⁾ For combinations of tensile loads and shear loads the given loads have to be reduced.

LOADS

Express anchor EXA-IG A4

Highest recommended loads¹⁾ for a single anchor in concrete C20/25.

Type	Non-cracked concrete				
	Effective anchorage depth	Min. member thickness	Installation torque	Recommended tensile load	Recommended shear load
	h_{ef} [mm]	h_{min} [mm]	T_{inst} [Nm]	$N_{rec}^{3)}$ [kN]	$V_{rec}^{3)}$ [kN]
EXA-IG M6 A4	45	100	8,0	2,7	1,5
EXA-IG M8 A4	45	110	15,0	4,0	2,6
EXA-IG M10 A4	45	120	25,0	6,6	3,9
EXA-IG M12 A4	75	150	50,0	12,3	6,3

¹⁾ Required safety factors are considered.

³⁾ For combinations of tensile loads and shear loads the given loads have to be reduced.