

Loads

Concrete screw FBS 4 and 5 zp

Recommended loads of a single anchor in normal concrete of strength class C20/25 until C50/60¹⁾.

Type			FBS 4		FBS 5	
Borehole diameter	d_0	[mm]	4	4	5	5
Screw-in depth	h_{nom}	[mm]	30	35	35	45
Non-cracked concrete \geq C20/25						
Recommended tension loads	N_{rec}	[kN]	0.9	1.0	1.3	2.2
Recommended shear loads	V_{rec}	[kN]	1.9	1.9	2.4	2.8
Cracked concrete \geq C20/25²⁾						
Recommended tension loads	N_{rec}	[kN]	0.2	0.2	1.0	1.5
Recommended shear loads	V_{rec}	[kN]	1.9	1.9	2.4	2.8
Installation Parameters						
Minimum concrete member thickness	h_{min}	[mm]	80	80	80	80
Minimum spacing / for an edge distance of	s_{min} / c	[mm]	25 / 25	35 / 55	35 / 55	35 / 65
Minimum edge distance / for a spacing of	c_{min} / s	[mm]	25 / 25	35 / 55	35 / 55	35 / 65
Maximum installation torque	$T_{\text{inst,max}}$	[Nm]	4	4	15	15
Maximum torque for impact screwdriver	$T_{\text{imp,max}}$	[Nm]	65	65	65	65

¹⁾ Valid for zinc-plated concrete screws (zp) in uncracked or cracked concrete of classes C20/25 to C50/60. Avoid hitting reinforcements when drilling.

²⁾ Valid for multiple fixings of non-load-bearing redundant systems in concrete. The partial safety factors for resistances and a partial safety factor for action of $\gamma_{\text{F}} = 1.4$, as specified in the values, are taken into account.