

Bolt anchor IFA

Load table

Recommended loads of a single anchor¹⁾ in normal concrete of strengt class C20/25.

Type	Material / surface ³⁾	Effective anchor- agedepth	Minimummember thickness	Drill hole diameter	Drill hole diame- ter in fixture ²⁾	Installationtorque	Recommended tension (N_{rec}), Shear loads (V_{rec}), minimum spacing (s_{min}) and edge distances (c_{min})			
		h_{ef} [mm]	h_{min} [mm]	d_0 [mm]	d_f [mm]	T_{inst} [Nm]	N_{rec} ³⁾ [kN]	V_{rec} ³⁾ [kN]	s_{min} ³⁾ [mm]	c_{min} ³⁾ [mm]
IFA 6	zp	25	100	6	8	4	1.3	1.3	80	40
	zp	30	100	6	8	4	2.1	1.7	100	50
IFA 8	zp/shrd	25	100	8	10	10	1.4	1.4	80	40
	zp/shrd	35	100	8	10	10	2.8	2.8	90	45
IFA 10	zp/shrd	25	100	10	13	25	1.8	1.8	90	45
	zp/shrd	35	100	10	13	25	2.8	2.8	120	60
	zp/shrd	45	100	10	13	25	3.8	3.8	150	75
IFA 12	zp/shrd	35	100	12	15	40	3.2	3.2	120	60
	zp/shrd	45	100	12	15	40	4.4	4.4	150	75
	zp/shrd	55	110	12	15	40	5.8	5.8	180	90
IFA 16	shrd	45	100	16	19	100	4.4	4.4	150	75
	zp	50	100	16	19	100	4.4	4.4	150	75
	shrd	60	120	16	19	100	6.2	6.2	200	100
	zp	65	130	16	19	100	6.2	6.2	200	100
	shrd	75	150	16	19	100	8.5	8.5	240	120
	zp	80	160	16	19	100	8.5	8.5	240	120
IFA 20	shrd	70	150	20	23	200	8.0	-	210	105
	zp/shrd	75	150	20	23	200	9.7	9.7	240	120
	zp/shrd	95	190	20	23	200	13.5	13.5	300	150
IFA 24	zp	95	190	24	28	260	15.0	-	300	150
	zp	120	240	24	28	260	16.0	-	360	180

¹⁾ The partial safety factors for material resistance as well as a partial safety factor for load actions of $\gamma_L = 1.4$ are considered. As a single anchor counts e.g. an anchor with a spacing $s \geq 3 \times h$ and an edge distance $c \geq 1.5 \times h_{ef}$

²⁾ For push-throught installation.

³⁾ As recommended loades are given in the table, combinations of tensile and shear loads, bending moments and reduced edge and axial spacings (anchor groups) can not be carried out.