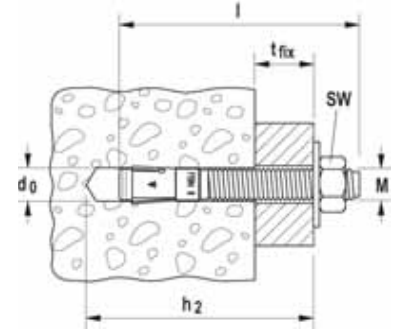


Bolt anchor FBN II GS

TECHNICAL DATA



Bolt anchor **FBN II-GS** with large washer



	steel, zinc-plated, with large washer	Approval	Drill hole diameter	Min. drill hole depth for through fixings	Anchor length	Max. usable length hef,stand/hef,red t _{fix}	Thread	Width across nut	Washer (outer diameter x thickness)	Sales unit
Item	Art.-No.	ETA	d ₀ [mm]	h ₂ [mm]	l [mm]	[mm]	Ø x length [mm]	○ SW [mm]	[mm]	[pcs]
FBN II 12/80 GS	045578	■	12	165	176	80/95	M 12 x 129	19	44 x 4	20
FBN II 12/100 GS	045579	■	12	185	196	100/115	M 12 x 149	19	44 x 4	20
FBN II 12/120 GS	045580	■	12	205	216	120/135	M 12 x 169	19	44 x 4	20
FBN II 12/140 GS	045581	■	12	225	236	140/155	M 12 x 189	19	44 x 4	10
FBN II 12/160 GS	045583	■	12	245	256	160/175	M 12 x 189	19	44 x 4	10
FBN II 12/180 GS	045584	■	12	265	276	180/195	M 12 x 189	19	44 x 4	10
FBN II 12/200 GS	045585	■	12	285	296	200/215	M 12 x 189	19	44 x 4	10
FBN II 12/250 GS	045586	■	12	335	346	250/265	M 12 x 100	19	44 x 4	10
FBN II 16/100 GS	045588	■	16	204	220	100/115	M 16 x 164	24	56 x 5	10
FBN II 16/140 GS	045590	■	16	244	260	140/155	M 16 x 184	24	56 x 5	10
FBN II 16/160 GS	045591	■	16	264	280	160/175	M 16 x 184	24	56 x 5	10
FBN II 16/200 GS	045593	■	16	304	320	200/215	M 16 x 100	24	56 x 5	10
FBN II 16/300 GS	052204	■	16	404	420	300/315	M 16 x 100	24	56 x 5	10

ACCESSORIES



fischer Anchor bolt setting tool **FABS**

Item	Art.-No.	Matching anchor type	Sales unit [pcs]
FABS	077937	FAZ II, FBN II, EXA for diameter from M6 - M12	1

LOADS

Bolt anchor FBN II GS

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

For the design the complete approval ETA - 07/0211 has to be considered.

Type	Min. effective anchorage depth h _{ef,min} [mm]	Max. effective anchorage depth h _{ef,max} [mm]	Min. 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]
FBN II 12 GS	50		100	50,0	8,5	17,9	70	100
		65	120	50,0	12,6	17,9	70	70
FBN II 16 GS	65		120	100,0	12,6	29,0	90	120
		80	160	100,0	17,2	31,5	90	90

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.

⁵⁾ The anchorage depths smaller than 40 mm are only allowed for multiple use for non-structural applications.