



# **FBN II**

## Bolt anchor zinc plated

### **Application**

• Fixing for use in non-cracked concrete

#### **Key Features**

- The long thread makes the FBN particularly suitable for stand-off installations.
- The FBN is simple to install due to the need for very few taps and minimal slippage.
- The drive-in pin protects the thread from damage. This saves time during installation and removal.

**Datasheet** 

01 FASTENER SYSTEMS FBN II anchors

Document Reference: DS-FS-FBN-3.18/0

# **FBN II Anchors**

#### **Bolt anchor FBN II**

Highest permissible loads for a single anchor<sup>1)</sup> in concrete C20/25<sup>4)</sup> For the design the complete approval ETA - 07/0211 has to be considered.

					Non- cracked concrete			
Туре	Min. effective anchorage depth hef min [mm]	Max. effective anchorage depth h <sub>ef,m</sub> ax [mm]	Min. member thickness hmi n [mm]	Installation torque Tinst [Nm]	Permissible tensile load Nperm <sup>3)</sup> [kN]	Permissible shear load Vperm³ [kN]	Min. spacing s <sub>mi n</sub> <sup>2)</sup> [mm]	Min. edge distance c <sub>mi n</sub> <sup>2)</sup> [mm]
FBNII 6 <sup>5)</sup>		30	100	4,0	2,9	3,4	40	40
FBN II 8 <sup>5)</sup>	30		100	15,0	2,9	7,1	40	40
		40	100	15,0	6,1	7,6	40	40
FBN II 10	40		100	30,0	6,1	12,0	50	80
		50	100	30,0	8,5	12,0	50	50
FBN II 12	50		100	50,0	8,5	17.9	70	10
		65	120	50,0	12,6	17,9	70	7
FBNII 16	65		120	100,0	12, 6	29,0	90	120
		80	160	100,0	17, 2	31,5	90	90
FBN II 20	80		160	200,0	17, 2	38,3	120	120
		105	200	200,0	25, 9	38,3	120	120

¹¹) The partial safety factors for material resistance as regulated in the approval as well as partial safety factor for load actions of yl = 1.4 are considered. As a single anchor counts e.g. an anchor with a spacing s ≥ 3 x h and an edge distance c ≥ 1,5 x h ef. Accurate data see approval.
²¹) Minimum possible axial spacings resp. edge distance while reducing the permissible load.
³¹ For combinations of tensile loads, shear loads, bending moments as well as reduced edge for distances or spacings (anchor groups) see approval.
⁴¹ For higher concrete strength classes up to C50/60 higher permissible loads may be possible.
⁵¹ The anchorage depths smaller than 40mm are only allowed for multiple use for non-structural applications.



FBN II-A4





