LOADS

ZYKON hammerset anchor FZEA II (screw quality 5.8)

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

For the design the complete approval ETA - 06/0271 has to be considered.

				Cracked concrete				Non-cracked concrete				
Туре	Effective	Min. member		Permissible tensile load	Permissible	Min. spacing		Permissible tensile load		Min.	Min. edge	
	anchorage depth	thickness	torque	tensile ioau	Siledi Ivau	Spacing	edge distance	tensile ioau	Siledi Iodu	spacing	distance	
	h _{ef}	h _{min}	T _{inst}	N _{perm} 3)	V _{perm} 3)	s _{min} 2)	c _{min²⁾}	N _{perm} 3)	V _{perm} 3)	s _{min} 2)	c _{min²⁾}	
	[mm]	[mm]	[Nm]	[kN]	[kN]	[mm]	[mm]	[kN]	[kN]	[mm]	[mm]	
FZEA II 10 x 40 M8	40	80	10,0	1,6	4,7	40	40	3,6	4,7	40	40	
FZEA II 12 x 40 M10	40	80	15,0	3,0	5,6	45	45	3,6	7,8	45	45	
FZEA II 14 x 40 M12	40	80	20,0	3,6	5,6	50	50	3,6	7,9	50	50	

¹⁾ The partial safety factors for material resistance as regulated in the approval as well as a partial safety factor for load actions of γ_L = 1,4 are considered. As an single anchor counts e.g. an anchor with a spacing s \geq 3 x h_{ef} and an edge distance c \geq 1,5 x h_{ef}. Accurate data see approval.

2) Minimum possible axial spacings resp. edge distance while reducing the permissible load.

 $^{4)}$ For higher concrete strength classes up to C50/60 higher permissible loads may be possible.

LOADS

ZYKON hammerset anchor FZEA II A4 (screw quality A4-70)

Highest permissible loads for a single anchor $^{1)}$ in concrete C20/25 $^{4)}$

For the design the complete approval ETA - 06/0271 has to be considered.

					Cracked	concrete		Non-cracked concrete			
Туре	Effective	Min.	Installation	Permissible	Permissible	Min.	Min.	Permissible	Permissible	Min.	Min.
	anchorage	member	torque	tensile load	shear load	spacing	edge	tensile load	shear load	spacing	edge
	depth	thickness					distance				distance
	h _{ef}	h _{min}	T _{inst}	N _{perm} 3)	V _{perm} 3)	s _{min} 2)	c _{min²⁾}	N _{perm} 3)	V _{perm} 3)	s _{min} 2)	c _{min²⁾}
	[mm]	[mm]	[Nm]	[kN]	[kN]	[mm]	[mm]	[kN]	[kN]	[mm]	[mm]
FZEA II 10 x 40 M8 A4	40	80	15,0	1,6	5,6	40	40	3,6	5,7	40	40
FZEA II 12 x 40 M10 A4	40	80	20,0	3,0	5,6	45	45	3,6	7,9	45	45
FZEA II 14 x 40 M12 A4	40	80	40,0	3,6	5,6	50	50	3,6	7,9	50	50

The partial safety factors for material resistance as regulated in the approval as well as a partial safety factor for load actions of γ_L = 1,4 are considered. As an single anchor counts e.g. an anchor with a spacing $s \geq 3$ x h_{ef} and an edge distance $c \geq 1,5$ x h_{ef}. Accurate data see approval.

3) For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see approval.

 $^{\rm 4)}$ For higher concrete strength classes up to C50/60 higher permissible loads may be possible.

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.

LOADS

ZYKON hammerset anchor FZEA II C (screw quality: material 1.4529, strength 700 N/mm²)

Highest permissible loads for a single anchor¹⁾ in concrete C20/25⁴⁾ For the design the complete approval ETA - 06/0271 has to be considered.

				Cracked concrete				Non-cracked concrete				
Туре	Effective	Min.			Permissible	Min.		Permissible		Min.	Min.	
	anchorage depth	member thickness	torque	tensile load	shear load	spacing	edge distance	tensile load	snear Ioau	spacing	edge distance	
	h _{ef}	h _{min}	T _{inst}	N _{perm} 3)	V _{perm} ³)	s _{min} 2)	c _{min²⁾}	N _{perm} 3)	V _{perm} 3)	s _{min} 2)	c _{min} 2)	
	[mm]	[mm]	[Nm]	[kN]	[kN]	[mm]	[mm]	[kN]	[kN]	[mm]	[mm]	
FZEA II 10 x 40 M8 C	40	80	15,0	1,6	5,6	40	40	3,6	5,7	40	40	
FZEA II 12 x 40 M10 C	40	80	20,0	3,0	5,6	45	45	3,6	7,9	45	45	
FZEA II 14 x 40 M12 C	40	80	40,0	3,6	5,6	50	50	3,6	7,9	50	50	

The partial safety factors for material resistance as regulated in the approval as well as a partial safety factor for load actions of γ_1 = 1,4 are considered. As an single anchor counts e.g. an anchor with a spacing $s \ge 3 \times h_{of}$ and an edge distance $c \ge 1.5 \times h_{of}$. Accurate data see approval.

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.

Minimum possible axial spacings resp. edge distance while reducing the permissible load.