LOADS

ZYKON hammerset anchor FZEA II (screw quality 5.8)

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			
Type	**Effective anchorage depth h_{ef} [mm]**	**Min. member thickness h_{min} [mm]**	**Installation torque T_{inst} [Nm]**	**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]**	**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]**
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 $\gamma_L = 1,4$ 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.

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			
Type	**Effective anchorage depth h_{ef} [mm]**	**Min. member thickness h_{min} [mm]**	**Installation torque T_{inst} [Nm]**	**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]**	**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]**
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

[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.

LOADS

ZYKON hammerset anchor FZEA II C (screw quality: material 1.4529, strength 700 N/mm²)
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			
Type	**Effective anchorage depth** h_{ef} [mm]	**Min. member thickness** h_{min} [mm]	**Installation torque** T_{inst} [Nm]	**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]	**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]
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

[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.