

ZYKON internally-threaded anchor FZA-I

Permissible loads of a single anchor¹⁾ in normal concrete of strength class C20/25.
For the design the complete current assessment ETA-98/0004 has to be considered.

Type	Material/ surface ²⁾	Screw material	Effective anchor- age depth	Mini- mum member thick- ness	Instal- lation torque	Cracked concrete				Non-cracked concrete							
						Permissible tension (N_{perm}) and shear loads (V_{perm}); minimum spacing (s_{min}) and edge distances (c_{min}) with reduced loads								Permissible tension (N_{perm}) and shear loads (V_{perm}); minimum spacing (s_{min}) and edge distances (c_{min}) with reduced loads			
						N_{perm} ³⁾ [kN]	V_{perm} ³⁾ [kN]	s_{min} ³⁾ [mm]	c_{min} ³⁾ [mm]	N_{perm} ³⁾ [kN]	V_{perm} ³⁾ [kN]	s_{min} ³⁾ [mm]	c_{min} ³⁾ [mm]				
FZA 12 x 40 M6 I	gvz	8.8	40	100	8.5	2.4	4.1	40	35	4.8	4.1	40	35				
	R	A4-70	40	100	8.5	2.4	3.2	40	35	4.8	3.2	40	35				
FZA 12 x 50 M6 I	R	A4-70	50	110	8.5	4.3	3.2	50	45	5.4	3.2	50	45				
FZA 14 x 60 M8 I	gvz	8.8	60	130	15	5.7	5.4	60	55	9.3	5.4	60	55				
	R	A4-70	60	130	15	5.7	4.3	60	55	7.1	4.3	60	55				
FZA 18 x 80 M10 I	gvz	8.8	80	160	30	9.6	5.6	80	70	9.6	5.6	80	70				
	R	A4-70	80	160	30	9.0	5.4	80	70	9.0	5.4	80	70				
FZA 22 x 100 M12 I	gvz	8.8	100	200	60	16.4	13.2	100	100	22.5	13.2	100	100				
	R	A4-70	100	200	60	16.4	12.7	100	100	21.1	12.7	100	100				
FZA 22 x 125 M12 I	gvz	8.8	125	250	60	19.0	13.2	125	125	22.5	13.2	125	125				
	R	A4-70	125	250	60	19.0	12.7	125	125	21.1	12.7	125	125				

¹⁾ Design according to EN 1992-4:2018 (for static resp. quasi-static loads). The partial safety factors for material resistance as regulated in the ETA 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 $s \geq 3 \times h_{ef}$ and an edge distance $c \geq 1.5 \times h_{ef}$. Accurate data see ETA.

²⁾ Further steel grades, versions and technical data see ETA, e.g. for dry internal conditions, galvanised steel (gvz); for damp interiors and for outdoor use, stainless steel (R).

³⁾ In the case of combinations of tension and shear loads, bending moments with reduced or minimum spacing and edge distances (anchor groups), the design must be carried out in accordance with the provisions of the complete ETA and the provisions of the EN 1992-4:2018. We recommend using our anchor design software C-FIX.