Loads

Permissible loads of a single anchor[1] in normal concrete of strength class C20/25.
For the design the complete current general construction technique permit Z-21.2-2092 has to be considered.

Type	Material/ surface[2]	Nominal anchorage depth	Cracked concrete					Non-cracked concrete				
			Minimum member thickness	Permissible tension (N_{perm}) and shear loads (V_{perm}); minimum spacing (s_{min}) and edge distances (c_{min}) with reduced loads				Minimum member thickness	Permissible tension (N_{perm}) and shear loads (V_{perm}); minimum spacing (s_{min}) and edge distances (c_{min}) with reduced loads			
		h_{nom}	h_{min}	N_{perm} [3]	V_{perm} [3]	s_{min} [3]	c_{min} [3]	h_{min}	N_{perm} [3]	V_{perm} [3]	s_{min} [3]	c_{min} [3]
		[mm]	[mm]	[kN]	[kN]	[mm]	[mm]	[mm]	[kN]	[kN]	[mm]	[mm]
SXRL 10	gvz	70	100	1.5	3.6	50	50	110	2.6	6.0	80	80
	R	70	100	1.5	3.6	50	50	110	2.6	6.0	80	80

[1] Design according to EN 1992-4:2018 (for static resp. quasi-static loads). The partial safety factors for material resistance 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 $c \geq 1.5 \times hef$. Accurate data see approval.

[2] Further steel grades, versions and technical data see current general construction technique permit.

[3] In the case of combinations of tensile 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 approval and the provisions of the EN 1992-4:2018. The given loads are valid for temperature range II. We recommend using our anchor design software C-FIX.