Sleeve anchor UHS

Load table

Permissible loads of a single anchor[1] in normal concrete of strength class C20/25

For the design the complete current assessment ETA-17/0288 has to be considered.

Type	Material / surface[2]	Effective anchoragedepth	Minimummember thickness	Installationtorque	Cracked concrete				Non-cracked concrete			
					Permissible Tension (N_{perm}), Shear loads (V_{perm}), minimum spacing (s_{min}) and edge distances (c_{min})				Permissible Tension (N_{perm}), Shear loads (V_{perm}), minimum spacing (s_{min}) and edge distances (c_{min})			
		h_{ef}	h_{min}	T_{inst}	N_{perm}[3]	V_{perm}[3]	s_{min}[3]	c_{min}[3]	N_{perm}[3]	V_{perm}[3]	s_{min}[3]	c_{min}[3]
		[mm]	[mm]	[Nm]	[kN]	[kN]	[mm]	[mm]	[kN]	[kN]	[mm]	[mm]
UHS 10 S	zp	40	80	10	3.6	4.1	50	50	5.9	5.9	50	50
	R	40	80	15	3.6	4.1	50	50	5.9	5.9	50	50
UHS 12 S	zp	60	120	22.5	5.7	15.2	60	60	10.9	18.9	70	70
	R	60	120	25	5.7	15.2	60	60	9.5	17.7	70	70
UHS 15 S	zp	70	140	40	7.6	19.2	70	70	13.7	27.4	80	80
	R	70	140	40	7.6	19.2	70	70	13.7	27.4	80	80
UHS 10 SK	zp	40	80	10	3.6	4.1	50	50	5.9	5.9	50	50
UHS 12 SK	zp	60	120	22.5	5.7	15.2	60	60	10.9	18.9	70	70
	R	60	120	22.5	5.7	15.2	60	60	10.9	18.9	70	70
UHS 15 SK	zp	70	140	40	7.6	19.2	70	70	13.7	27.4	80	80
	R	70	140	40	7.6	19.2	70	70	13.7	27.4	80	80
UHS 18 SK	zp	80	160	80	11.7	23.5	80	80	16.8	33.5	90	90
UHS 12 / M 6 I	zp	60	125	15	4.3	2.9	60	60	4.7	2.9	70	70
	R	60	125	15	4.3	3.2	60	60	5.4	3.2	70	70
UHS 12 / M 8 I	zp	60	125	15	4.3	5.1	60	60	8.6	5.1	70	70
	R	60	125	15	4.3	5.9	60	60	8.6	5.9	70	70
UHS 15 / M10 I	zp	70	150	25	5.7	8.6	70	70	13.8	8.6	80	80
	R	70	150	25	5.7	9.1	70	70	14.1	9.1	80	80
UHS 15 / M12 I	zp	70	150	25	5.7	12	70	70	14.1	12	80	80
	R	70	150	25	5.7	13.7	70	70	14.1	13.7	80	80
UHS 10 B	zp	40	80	10	3.6	4.1	50	50	5.9	5.9	50	50
UHS 12 B	zp	60	120	17.5	5.7	15.2	60	60	10.9	15.5	70	70
UHS 15 B	zp	70	140	38	7.6	19.2	70	70	13.7	24.5	80	80
UHS 18 B	zp	80	160	80	11.7	23.5	80	80	16.8	33.5	90	90
UHS 24 B	zp	100	200	120	16.4	32.8	100	100	23.4	46.9	125	125
UHS 28 B	zp	125	250	180	22.9	45.8	125	150	32.7	65.5	150	150

[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 zp; for damp interior stainless steel R and exterior conditions, e.g. material 1.4362, 1.4401.

[3] In the case of combinations of tensile and shear loads, bending moments and reduced edge and axial spacings (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 to use our anchor design software DesignFiX.