

INSTALLATION PARAMETERS AND CAPACITIES

S-KAH		FIXING DETAILS										PERMISSIBLE LOADS ¹⁾ IN CONCRETE C20/25			
		ANCHOR AND FIXTURE DETAILS						INSTALLATION DATA				CRACKED CONCRETE		UNCRACKED CONCRETE ²⁾	
												Option 1 - Design Method A			
		Size	L	d _f	f	SW	t _{fix}	d ₀	h ₁	h _{nom}	h _{ef}	T _{inst}	N _{Sk}	V _{Sk}	N _{Sk}
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Nm	kN	kN	kN	kN	
6 / 15 ⁴⁾	M6	65	7	28	10	15	6	50	40	35	7	-	-	1,8	1,8
8 / 10	M8	72	9	32	13	10	8	60	50	45	20	2,0	5,2	3,6	5,2
8 / 30	M8	92	9	52	13	30	8	60	50	45	20	2,0	5,2	3,6	5,2
8 / 50	M8	112	9	72	13	50	8	60	50	45	20	2,0	5,2	3,6	5,2
10 / 10	M10	92	12	47	17	10	10	75	68	60	35	3,6	8,1	6,3	8,1
10 / 20	M10	102	12	57	17	20	10	75	68	60	35	3,6	8,1	6,3	8,1
10 / 30	M10	112	12	67	17	30	10	75	68	60	35	3,6	8,1	6,3	8,1
10 / 50	M10	132	12	87	17	50	10	75	68	60	35	3,6	8,1	6,3	8,1
12 / 5	M12	103	14	53	19	5	12	90	81	70	70	4,8	11,9	7,9	11,9
12 / 20	M12	118	14	68	19	20	12	90	81	70	70	4,8	11,9	7,9	11,9
12 / 30	M12	128	14	78	19	30	12	90	81	70	70	4,8	11,9	7,9	11,9
12 / 50	M12	148	14	98	19	50	12	90	81	70	70	4,8	11,9	7,9	11,9
12 / 65	M12	163	14	113	19	65	12	90	81	70	70	4,8	11,9	7,9	11,9
16 / 5	M16	123	18	65	24	5	16	110	96	85	120	9,5	22,4	16,7	22,4
16 / 20	M16	138	18	80	24	20	16	110	96	85	120	9,5	22,4	16,7	22,4
16 / 50	M16	168	18	110	24	50	16	110	96	85	120	9,5	22,4	16,7	22,4
20 / 20 ⁴⁾	M20	170	22	55	30	20	20	130	120	110	240	-	-	13,9	13,9
20 / 70 ⁴⁾	M20	220	22	55	30	70	20	130	120	110	240	-	-	13,9	13,9
6 x 40 ⁴⁾	M6	40	7	18	10	2	6	35	30	25	7	-	-	1,4	1,4
8 x 50 ⁴⁾	M8	52	9	23	13	2	8	45	40	30	18	-	-	1,6	1,6
10 x 60 ⁴⁾	M10	62	12	26	17	3	10	50	40	30	30	-	-	2,1	2,1

1) Load figures include the resistances' partial safety factors as per approvals and a partial safety factor on the action of $\gamma_{F=1.4}$. Load figures apply for a rebar spacing $s \geq 15$ cm or alternatively for a rebar spacing $s \geq 10$ cm in combination with a rebar diameter of $d_s \leq 10$ mm.

2) Concrete is considered uncracked when the value of tension within the concrete is $\sigma_L + \sigma_R \leq 0$. In the absence of detailed verification $\sigma_R = 3$ N/mm² can be assumed (σ_L equals the tension within the concrete as a result of external loads, forces on anchor included; σ_L equals the tension coming from shrinkage or creep of the concrete, as well as displacements of supports or temperature variations).

3) Shear load figures apply for an anchor without influence of a concrete edge. For shear loads close to an edge ($c \leq 10 \times h_{ef}$), concrete edge failure has to be checked as per ETAG, Annex C, Design Method A.

4) Not part of ETA approvals. Figures are manufacturer's recommendations.