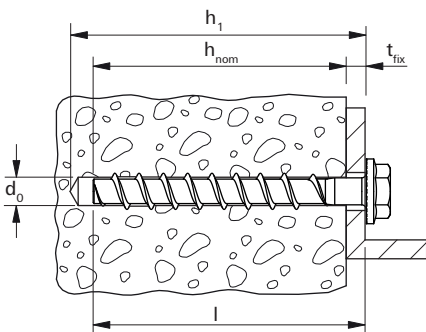
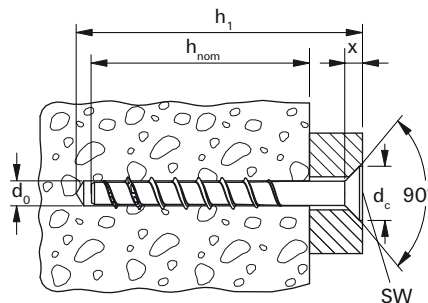


INSTALLATION DATA - CONCRETE C20/25 - C50/60

Type US



Type SK



	X [mm]	dc [mm]
ULTRACUT FBS II 8	6	20
ULTRACUT FBS II 10	7	23

ULTRACUT FBS II Concrete screw			8	10	12	14
Drill hole diameter	d0	[mm]	8	10	12	14
Nominal screw-in depth	hnom1	[mm]	50	55	60	65
	hnom2	[mm]	-	65	75	85
	hnom3	[mm]	65	85	100	115
Drill hole depth (push-through installation)	h1 ≥	[mm]	l + 10	l + 10	l + 10	l + 15
Clearance hole diameter	df		10,6 - 12	12,8 - 14	14,8 - 16	16,9 - 18
Max. torque for installation with impact screw driver in concrete	Timp, max		600	650	650	650
Max. torque for manual installation in concrete	Tmax		65	100	150	250
Width across flat	SW		13	15	17	21
Drive	Torx		T40 (SK u. US)	T50 (SK)	-	-

INSTALLATION DATA - MASONRY

ULTRACUT FBS II Concrete screw					
Building material	Compressive strength class [N/mm ²]	Size	[mm]	8	10
		hnom	[mm]	65	85
Solid clay brick (EN771-1)	≥ 12	Tinst	[Nm]	5	10
Solid sand-lime brick (EN771-2)	≥ 12	Tinst	[Nm]	15	15
Aerated concrete (EN771-4)	≥ 6	Tinst	[Nm]	5	10

INSTALLATION DATA - TEMPORARY FIXING

Drill hole diameter d_0 / screw diameter	[mm]	8		10			12			14		
Nominal anchoring depth [h_{nom}]	[mm]	50	65	55	65	85	60	75	100	65	85	115
Permissible Loads $N_{perm}^{3)}$ for cracked and non-cracked concrete												
Concrete strength $f_{ck,cube} \geq 10N/mm^2$	[kN]	1,9	3,6	2,2	2,9	5,8	2,8	4,0	7,6	2,3	3,6	8,9
Concrete strength $f_{ck,cube} \geq 15N/mm^2$	[kN]	2,3	4,4	2,7	3,5	7,1	3,4	4,9	9,3	2,8	4,4	10,8
Concrete strength $f_{ck,cube} \geq 20N/mm^2$	[kN]	2,6	5,1	3,1	4,1	8,1	3,9	5,6	10,8	3,2	5,0	12,6
Concrete strength $f_{ck,cube} \geq 25N/mm^2$	[kN]	2,9	5,6	3,5	4,5	9,1	4,4	6,1	12,0	3,6	5,6	14,0
Minimum concrete member thickness	[mm]	100	150	105	130	205	120	150	240	115	150	255
Minimum spacing ²⁾	[mm]	200	300	310	260	410	240	300	180	230	300	510
Minimum edge distance in load direction ²⁾	[mm]	65	100	70	85	135	80	100	160	75	100	170
Minimum edge distance rectangular to load direction ²⁾	[mm]	100	150	105	130	205	120	150	240	115	150	255
Torque moment with impact screw driver	$T_{imp, max}$	400	400	400	400	650	400	400	650	400	400	650
Torque moment with standard torque wrench	T_{max}	45	65	65	65	100	75	75	150	75	75	150

¹⁾ The partial safety factor for load actions of $\gamma_L = 1,4$ is considered.

²⁾ Minimum spacing and edge distance for single anchors.

³⁾ Valid for tensile load, shear load and oblique load under any angle. Exception: perpendicular to the axis of tilt-up brace acting forces.

⁴⁾ E.g. tilt-up braces, fall protections and scaffoldings.