METAL ANCHORS

PFG ANCHORS / SB, SBS

The PFG shield anchor is for medium-heavy and heavy fixings in solid and hard materials like concrete, solid brick (max. M 8) and natural stone. Due to PFG's large expansion, it is also suitable for use in materials of slightly lower and porous quality as found in many old constructions.

ETA 01/0012
European Technical Approval - Option 8 for non cracked concrete

SB Studbolt, zinc plated (ETA M6 - M12)

SBS Studbolt, sherardized (outgoing type)

RANGE AND PACKAGES

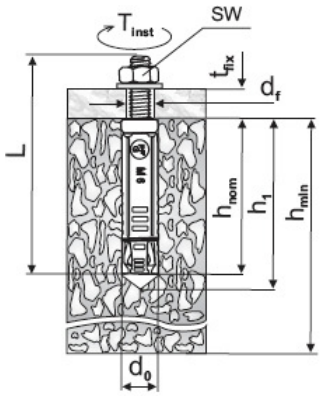
SIZE	CODE		PACKAGES	WEIGHT	SSTL (SB)
	SB	SBS*	BOX/OUTER BOX/PALLET	KG/1000 PCS	
6-15	77001	77051	50 / 500 / 28000	24,8	1356204
6-30	77002	77052	50 / 500 / 28000	27,5	1356205
8-20	77004	77054	50 / 250 / 14000	62,7	1356223
8-30	77005	77055	50 / 250 / 14000	66,3	1356208
8-45	77006	77056	50 / 250 / 14000	69,9	1356209
8-85	77007	77057	25 / 125 / 7000	82,7	1356210
10-10	77009	77059	25 / 125 / 7000	96,2	1356211
10-20	77010	77060	25 / 125 / 7000	101,2	-
10-30	77011	77061	25 / 125 / 7000	106,1	1356212
10-40	77012	77062	25 / 125 / 7000	111,6	1356213
10-50	77013	-	25 / 125 / 7000	117,1	1356214
10-70	77014	77064	25 / 125 / 7000	126,3	1356215
12-20	77016	77066	10 / 100 / 4200	188,0	1356216
12-30	77017	-	10 / 100 / 4200	200,3	1356217
12-50	77018	77068	10 / 50 / 2800	212,6	1356218
12-65	77019	-	10 / 50 / 2800	220,0	1356219
16-25*	77021	77071	10 / 50 / 2100	399,1	1356221
16-45*	77022	77072	10 / 50 / 2100	426,0	1356222

** Do not belong to ETA*

INSTALLATION PARAMETERS

SB(-S[4])	FIXING DETAILS								
	ANCHOR AND FIXTURE DETAILS					INSTALLATION DATA			
	size	L	d_f	SW	t_{fix}	d_0	h_1	h_{nom}	h_{ef}
	mm	mm	mm	mm	mm	mm	mm	mm	mm
6 - 15	M6	62	7	10	15	10	45	40	40
6 - 30	M6	77	7	10	30	10	45	40	40
8 - 20	M8	78	9	13	20	14	55	50	50
8 - 30	M8	88	9	13	30	14	55	50	50
8 - 45	M8	103	9	13	45	14	55	50	50
8 - 85	M8	143	9	13	85	14	55	50	50
10 - 10	M10	84	11	17	10	16	65	60	60
10 - 20	M10	94	11	17	20	16	65	60	60

10 - 30	M10	104	11	17	30	16	65	60	60
10 - 40	M10	114	11	17	40	16	65	60	60
10 - 50	M10	124	11	17	50	16	65	60	60
10 - 70	M10	144	11	17	70	16	65	60	60
12 - 20	M12	115	13	19	20	20	85	80	80
12 - 30	M12	125	13	19	30	20	85	80	80
12 - 50	M12	145	13	19	50	20	85	80	80
12 - 65	M12	160	13	19	65	20	85	80	80
16 - 25 [4]	M16	145	18	24	25	25	105	100	100
16 - 45 [4]	M16	165	18	24	45	25	105	100	100



Size	Nominal size
L	Total length
d_f	Hole in fixture Ø
SW	Nut width cross flats / pit size
t_{fix}	Fixture thickness
d_0	Drill hole diameter
h_1	Minimum hole depth
h_{nom}	Nominal setting depth
h_{ef}	Effective anchorage depth
h_{min}	Min. concrete thickness for approval criteria
T_{inst}	Installation torque

CAPACITIES

TYPE		PERMISSIBLE LOADS [1)2)] IN UNCRACKED C20/25 Option 8 - Design method A	
		TENSION	SHEAR [3)]
	T_{inst}	N_{sk}	V_{sk}
	Nm	kN	kN
6 - 15	10	2,4	1,7
6 - 30	10	2,4	1,7
8 - 20	25	4,3	3,1
8 - 30	25	4,3	3,1
8 - 45	25	4,3	3,1
8 - 85	25	4,3	3,1
10 - 10	50	5,7	5,0
10 - 20	50	5,7	5,0
10 - 30	50	5,7	5,0
10 - 40	50	5,7	5,0
10 - 50	50	5,7	5,0
10 - 70	50	5,7	5,0
12 - 20	85	7,6	7,2
12 - 30	85	7,6	7,2
12 - 50	85	7,6	7,2
12 - 65	85	7,6	7,2
16 - 25 [4]	120	11,9	13,5
16 - 45 [4]	120	11,9	13,5

[1)] Load figures include the resistances' partial safety factors as per approvals and a partial safety factor on the action of γF= 1.4. Load figures apply for a rebar spacing s ≥ 15 cm or alternatively for a rebar spacing s ≥ 10 cm in combination with a rebar diameter of ds ≤ 10 mm. [2)] Concrete is considered uncracked when the value of tension within the concrete is σL + σR ≤ 0. In the absence of detailed verification σR = 3 N/mm² can be assumed (σL equals the tension within the concrete as a result of external loads, forces on anchor included; σR 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 ≤ 10 x hef), 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 recommendation.

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Sitemap