Wedge Anchor B

Hot dip galvanized

Description

The Wedge Anchor B hot dip galvanized, with ETA-Approval, Option 7, offers better corrosion resistance together with excellent load bearing capacity close anchor spacing and edge distances. All sizes with stainless steel expansion sleeve.

Applications

Indoor medium to heavy duty applications: metal constructions, channels, brackets, supports, cladding systems, hand rails, cable trays, ducts.

Range of loading: **2,9 kN - 37,2 kN**

Range of concrete quality: **C20/25 - C50/60**

ETA-01/0013

M8 - M20

F30-F120

Wedge Anchor B fvz

- Steel, hot dip galvanized (≥ 40µm, EN ISO 1461)
- Improved corrosion protection

Description	Ref. No.	Drill hole Ø mm	Drill hole-depth mm		Setting-depth mm		Fixture thickness t_{fix} mm		Anchor-length mm	Thread mm	Packg. content pcs.	Weight per pkg. kg
			h_1	$h_{1,red}$ [2]	h_{nom}	$h_{nom,red}$ [2]	t_{fix}	$t_{fix,red}$ [2]	l			
B 6-5/40 fvz [1]	01005201	6	-	35	-	27	-	5	40	M6x16	100	1,06
B 6-10-20/67 fvz [1]	01010201	6	55	45	49	39	10	20	67	M6x30	100	1,57
B 6-25-35/82 fvz [1]	01015201	6	55	45	49	39	25	35	82	M6x35	100	1,90
B 6-40-50/97 fvz [1]	01025201	6	55	45	49	39	40	50	97	M6x35	100	2,09
B 8-5/50 [1] fvz	01105201	8	-	45	-	35	-	5	50	M8x22	100	2,36
B 8-4/60 fvz	01110201	8	-	55	-	47	-	4	60	M8x25	100	2,76
B 8-10-19/75 fvz	01115201	8	65	55	56	47	10	19	75	M8x40	100	3,17
B 8-15-24/80 fvz	01120201	8	65	55	56	47	15	24	80	M8x45	100	3,36
B 8-20-29/85 fvz	01125201	8	65	55	56	47	20	29	85	M8x50	100	3,50
B 8-30-39/95 fvz	01135201	8	65	55	56	47	30	39	95	M8x60	100	3,83
B 8-45-54/110 fvz	01145201	8	65	55	56	47	45	54	110	M8x75	100	4,29
B 8-55-64/120 fvz	01150201	8	65	55	56	47	55	64	120	M8x85	100	4,59
B 10-10/60 fvz [1]	01205201	10	-	50	-	40	-	10	60	M10x25	50	2,32
B 10-10-16/85 fvz	01210201	10	70	65	62	56	10	16	85	M10x40	50	2,90
B 10-15-21/90 fvz	01215201	10	70	65	62	56	15	21	90	M10x45	50	3,01
B 10-20-26/95 fvz	01220201	10	70	65	62	56	20	26	95	M10x50	50	3,15
B 10-30-36/105 fvz	01225201	10	70	65	62	56	30	36	105	M10x60	50	3,35
B 10-45-51/120 fvz	01230201	10	70	65	62	56	45	51	120	M10x75	50	3,77
B 10-50-56/125 fvz	01235201	10	70	65	62	56	50	56	125	M10x80	50	3,93
B 10-70-76/145 fvz	01240201	10	70	65	62	56	70	76	145	M10x80	50	4,50
B 10-100-106/175 fvz	01245201	10	70	65	62	56	100	106	175	M10x80	50	4,93
B 10-140-146/215 fvz	01250201	10	70	65	62	56	140	146	215	M10x80	25	3,10

[1] Not part of approval.

[2] Reduced anchorage depth (observe reduced loads).

Description	Ref. No.	Drill hole Ø mm	Drill hole-depth mm		Setting-depth mm		Fixture thickness t_{fix} mm		Anchor-length mm	Thread mm	Packg. content pcs.	Weight per pkg. kg
			h_1	$h_{1,red}$ [2]	h_{nom}	$h_{nom,red}$ [2]	t_{fix}	$t_{fix,red}$ [2]	l			
B 12-5/75 fvz [1]	01305201	12	-	65	-	55	-	5	75	M12x30	25	1,99
B 12-13/95 fvz	01310201	12	-	75	-	67	-	13	95	M12x50	25	2,38
B 12-15-30/110 fvz	01315201	12	90	75	82	67	15	30	110	M12x65	25	2,66
B 12-20-35/115 fvz	01320201	12	90	75	82	67	20	35	115	M12x70	25	2,71
B 12-30-45/125 fvz	01325201	12	90	75	82	67	30	45	125	M12x80	25	2,92
B 12-50-65/145 fvz	01330201	12	90	75	82	67	50	65	145	M12x100	25	3,25
B 12-65-80/160 fvz	01335201	12	90	75	82	67	65	80	160	M12x100	25	3,54
B 12-85-100/180 fvz	01340201	12	90	75	82	67	85	100	180	M12x100	25	3,85
B 12-105-120/200	01345201	12	90	75	82	67	105	120	200	M12x100	25	4,28
B 16-13/115 fvz	01510201	16	-	95	-	84	-	13	115	M16x60	20	3,96
B 16-10-28/130 fvz	01512201	16	110	95	102	84	10	28	130	M16x70	20	4,41
B 16-30-48/150 fvz	01515201	16	110	95	102	84	30	48	150	M16x90	20	4,92
B 20-5-27/150 fvz	01605201	20	130	110	121	99	5	27	150	M20x70	10	3,84
B 20-35-57/180 fvz	01610201	20	130	110	121	99	35	57	180	M20x70	10	4,44
B 20-60-82/205 fvz	01612201	20	130	110	121	99	60	82	205	M20x70	10	5,00
B 20-95-117/240 fvz	01615201	20	130	110	121	99	95	117	240	M20x70	10	6,26

[1] Not part of approval.

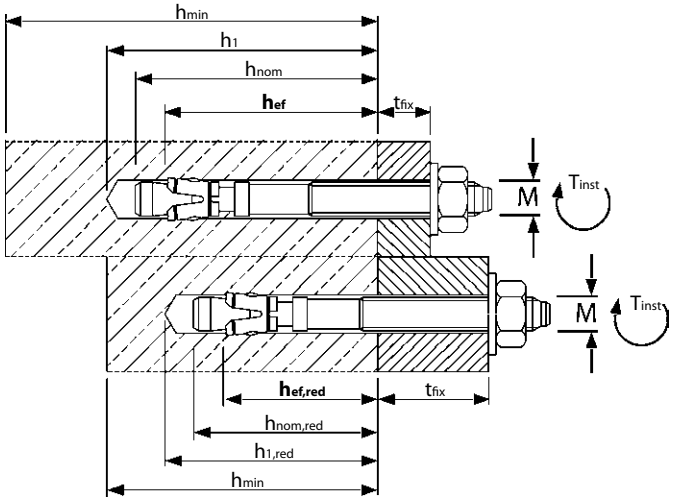
[2] Reduced anchorage depth (observe reduced loads).

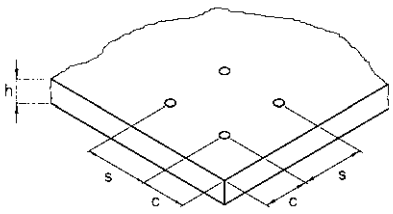
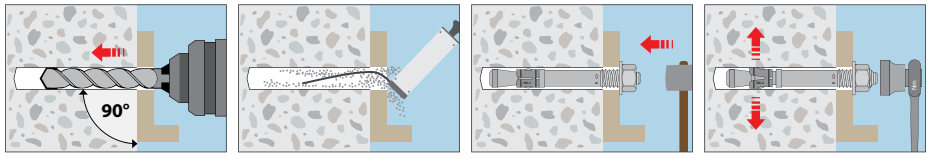
Extract from Permissible Service Conditions of ETA-01/0013

Approved loads for single anchor without influence of spacing and edge distance.
Total safety factor as per ETAG 001 included (γ_M and γ_F).

Loads and performance data	Wedge Anchor B		M 6[1]		M 8		M 10		M 12		M 16		M 20	
Effective anchorage depth	$h_{ef,}$	[mm]	**40**	**-**	**44**	**-**	**48**	**-**	**65**	**-**	**82**	**-**	**100**	**-**
Reduced anchorage depth	$h_{ef,red}$	[mm]	**-**	**30[2]**	**-**	**35[2]**	**-**	**42**	**-**	**50**	**-**	**64**	**-**	**78**
			non-cracked concrete											
Mean ultimate loads, tension	C25/30	N_{um} [kN]	12	9,6	18,7	12,3	23,6	19,2	34,5	26,1	51,4	43,6	70,0	53,6
Mean ultimate loads, shear	C25/30	V_{um} [kN]	7,3	7,3	19,3	19,3	28,1	28,1	41,3	41,3	73,0	73,0	103,6	103,6
			non-cracked concrete											
Approved loads, tension	C20/25	appr. N [kN]	4,1	2,9	5,7	5,0	7,6	6,5	12,6	8,5	17,8	12,3	24,0	16,5
	C25/30	appr. N [kN]	4,1	3,1	6,3	5,5	8,4	7,2	13,8	9,3	19,6	13,5	26,4	18,2
	C30/37	appr. N [kN]	4,1	3,5	7,0	6,1	9,3	8,0	15,3	10,4	21,7	15,0	29,3	20,2
	C40/50	appr. N [kN]	4,1	4,0	7,3	7,0	10,7	9,2	16,7	12,0	25,1	17,3	33,8	23,3
	C50/60	appr. N [kN]	4,1	4,1	7,3	7,3	11,8	10,1	16,7	13,2	27,6	19,0	37,2	25,6
Approved loads, shear	C20/25	appr. V [kN]	2,9	2,9	6,3	5,0	8,0	6,5	14,3	8,5	23,6	23,6	37,1	33,1
	≥ C25/30	appr. V [kN]	2,9	2,9	6,3	5,5	8,8	7,2	14,3	9,3	23,6	23,6	37,1	36,4
Approved bending moments		appr. M [Nm]	5,1	5,1	13,1	13,1	25,7	25,7	44,6	44,6	99,9	99,9	195,0	195,0
Spacing and edge distance														
Effective anchorage depth		h_{ef} [mm]	40	30	44	35	48	42	65	50	82	64	100	78
Characteristic spacing		$s_{cr,N}$ [mm]	120	90	132	105	144	126	195	150	246	192	300	234
Characteristic edge distance		$c_{cr,N}$ [mm]	60	45	66	52,5	72	63	97,5	75	123	96	150	117
			non-cracked concrete											
Minimum spacing		s_{min} [mm]	35	35	40	40	55	55	75	100	90	100	105	140
Minimum edge distance		c_{min} [mm]	40	40	45	45	65	65	90	100	105	100	125	140
Minimum thickness of concrete slab		h_{min} [mm]	100	80	100	80	100	100	130	100	170	130	200	160
Installation parameters														
Drill hole diameter		d_o [mm]	6	6	8	8	10	10	12	12	16	16	20	20
Diameter of clearance hole in the fixture		d_f [mm]	7	7	9	9	12	12	14	14	18	18	22	22
Depth of drill hole		h_1 [mm]	55	45	65	55	70	65	90	75	110	95	130	110
Installation torque		T_{inst} [Nm]	8	8	15	15	30	30	40	40	90	90	120	120
Width across nut		SW [mm]	10	10	13	13	17	17	19	19	24	24	30	30

[1] Not part of approval.
[2] Application limited to statically indeterminated systems.
For anchor designing, an easy to operate CD-ROM is available on request or can be downloaded at www.mkt.de.





Installation