

Wedge Anchor B

Hot dip galvanized



Description

The Wedge Anchor B hot dip galvanized, with European Technical Assessment Option 7, offers all the advantages of the zinc plated version with a better corrosion protection. All sizes covered by the Assessment are assembled with a stainless steel expansion clip. Please see also page 26.

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



Wedge Anchor B fvz



→ Steel, hot dip galvanized ($\geq 40\mu\text{m}$, EN ISO 1461)

→ Improved corrosion protection

Description	Ref. No.	Standard anchorage depth				Reduced anchorage depth				Anchor length	Thread	Pkg. content	Weight per pkg.
		Fixture thickness t _{fix} mm	Drill hole Ø x depth mm	Setting depth h _{nom} mm	Anchorage depth h _{ef} mm	Fixture thickness t _{fix,red} mm	Drill hole Ø x depth mm	Setting depth h _{nom,red} mm	Anchorage depth h _{ef,red} mm				
B 6-5/40 fvz ¹⁾	01005201	-	-	-	-	5	6x35	27	18	40	M6x16	100	1,06
B 6-10-20/67 fvz ¹⁾	01010201	10	6x55	49	40	20	6x45	39	30	67	M6x30	100	1,57
B 6-25-35/82 fvz ¹⁾	01015201	25	6x55	49	40	35	6x45	39	30	82	M6x35	100	1,90
B 6-40-50/97 fvz ¹⁾	01025201	40	6x55	49	40	50	6x45	39	30	97	M6x35	100	2,09
B 8-5/50 fvz ¹⁾	01105201	-	-	-	-	5	8x45	35	35	50	M8x22	100	2,36
B 8-4/60 fvz	01110201	-	-	-	-	4	8x55	47	35	60	M8x25	100	2,76
B 8-10-19/75 fvz	01115201	10	8x65	56	44	19	8x55	47	35	75	M8x40	100	3,17
B 8-15-24/80 fvz	01120201	15	8x65	56	44	24	8x55	47	35	80	M8x45	100	3,36
B 8-20-29/85 fvz	01125201	20	8x65	56	44	29	8x55	47	35	85	M8x50	100	3,50
B 8-30-39/95 fvz	01135201	30	8x65	56	44	39	8x55	47	35	95	M8x60	100	3,83
B 8-45-54/110 fvz	01145201	45	8x65	56	44	54	8x55	47	35	110	M8x75	100	4,29
B 8-55-64/120 fvz	01150201	55	8x65	56	44	64	8x55	47	35	120	M8x85	100	4,59
B 10-10/60 fvz ¹⁾	01205201	-	-	-	-	10	10x50	40	24	60	M10x25	50	2,32
B 10-10-16/85 fvz	01210201	10	10x70	62	48	16	10x65	56	42	85	M10x40	50	2,90
B 10-15-21/90 fvz	01215201	15	10x70	62	48	21	10x65	56	42	90	M10x45	50	3,01
B 10-20-26/95 fvz	01220201	20	10x70	62	48	26	10x65	56	42	95	M10x50	50	3,15
B 10-30-36/105 fvz	01225201	30	10x70	62	48	36	10x65	56	42	105	M10x60	50	3,35
B 10-45-51/120 fvz	01230201	45	10x70	62	48	51	10x65	56	42	120	M10x75	50	3,77
B 10-50-56/125 fvz	01235201	50	10x70	62	48	56	10x65	56	42	125	M10x80	50	3,93
B 10-70-76/145 fvz	01240201	70	10x70	62	48	76	10x65	56	42	145	M10x80	50	4,50
B 10-100-106/175 fvz	01245201	100	10x70	62	48	106	10x65	56	42	175	M10x80	50	4,93
B 10-140-146/215 fvz	01250201	140	10x70	62	48	146	10x65	56	42	215	M10x80	25	3,10
B 12-5/75 fvz ¹⁾	01305201	-	-	-	-	5	12x65	55	25	75	M12x30	25	1,99
B 12-13/95 fvz	01310201	-	-	-	-	13	12x75	67	50	95	M12x50	25	2,38
B 12-15-30/110 fvz	01315201	15	12x90	82	65	30	12x75	67	50	110	M12x65	25	2,66
B 12-20-35/115 fvz	01320201	20	12x90	82	65	35	12x75	67	50	115	M12x70	25	2,71
B 12-30-45/125 fvz	01325201	30	12x90	82	65	45	12x75	67	50	125	M12x80	25	2,92
B 12-50-65/145 fvz	01330201	50	12x90	82	65	65	12x75	67	50	145	M12x100	25	3,25
B 12-65-80/160 fvz	01335201	65	12x90	82	65	80	12x75	67	50	160	M12x100	25	3,54
B 12-85-100/180 fvz	01340201	85	12x90	82	65	100	12x75	67	50	180	M12x100	25	3,85
B 12-105-120/200 fvz	01345201	105	12x90	82	65	120	12x75	67	50	200	M12x100	25	4,28
B 16-13/115 fvz	01510201	-	-	-	-	13	16x95	84	38	115	M16x60	20	3,96
B 16-10-28/130 fvz	01512201	10	16x110	102	82	28	16x95	84	64	130	M16x70	20	4,41
B 16-30-48/150 fvz	01515201	30	16x110	102	82	48	16x95	84	64	150	M16x90	20	4,92
B 20-5-27/150 fvz	01605201	5	20x130	121	100	27	20x110	99	78	150	M20x70	10	3,84
B 20-35-57/180 fvz	01610201	35	20x130	121	100	57	20x110	99	78	180	M20x70	10	4,44
B 20-60-82/205 fvz	01612201	60	20x130	121	100	82	20x110	99	78	205	M20x70	10	5,00
B 20-95-117/240 fvz	01615201	95	20x130	121	100	117	20x110	99	78	240	M20x70	10	6,26

¹⁾Not part of assessment.



Extract from Permissible Service Conditions of European Technical Assessment ETA-01/0013

Approved loads for single anchor without influence of spacing and edge distance.

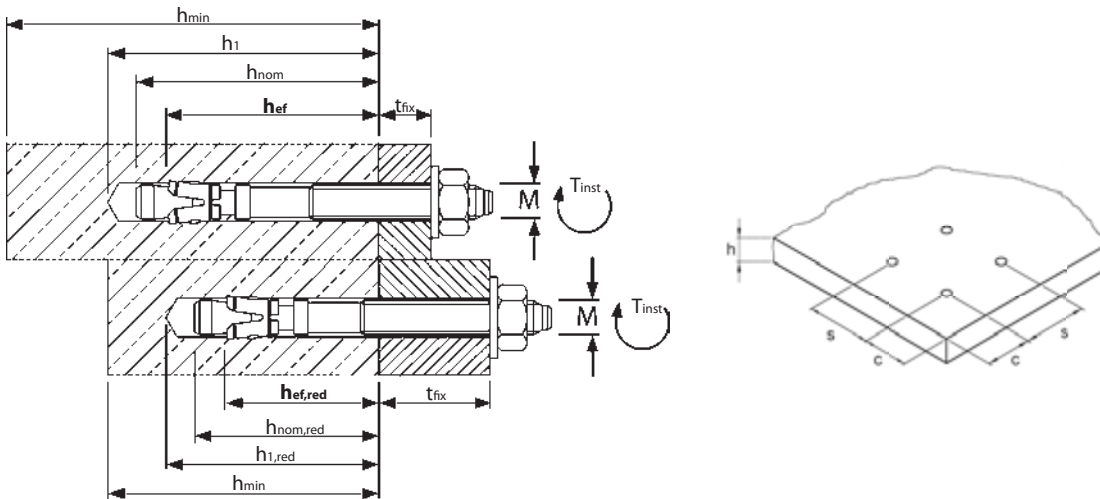
Total safety factor as per ETAG 001 included (γ_M and γ_P). Load capacities under fire exposure see page 162.

Loads and performance data	Wedge Anchor B		M 6 ¹⁾		M 8		M 10		M 12		M 16		M 20	
	hef	[mm]	40	-	44	-	48	-	65	-	82	-	100	-
Standard anchorage depth	hef	[mm]	40	-	44	-	48	-	65	-	82	-	100	-
Reduced anchorage depth	hef, red	[mm]	-	30 ²⁾	-	35 ²⁾	-	42	-	50	-	64	-	78
non-cracked concrete														
Mean ultimate loads, tension	C25/30 Num	[kN]	12,0	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 Vum	[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	17,9	12,3	24,0	16,6
	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	26,3	18,1
	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	25,3	17,4	34,0	23,4
	C50/60 appr. N	[kN]	4,1	4,1	7,3	7,3	11,8	10,1	16,7	13,2	27,7	19,1	37,3	25,7
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	36,3
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	hef	[mm]	40	30 ²⁾	44	35 ²⁾	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 assessment.

²⁾Application limited to statically indetermined systems.

For anchor designing, an easy to operate CD-ROM is available on request or can be downloaded at www.mkt.de.



Installation

