

# Wedge Anchor B

Hot dip galvanized



## Description

The Wedge Anchor B hot dip galvanized, now 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**



## Wedge Anchor B fvz



→ Steel, hot dip galvanized

→ Highly effective resistance

Description	Ref. No.	Drill hole Ø mm	Drill hole depth mm	Setting-depth mm		Fixture thickness t <sub>fix</sub> mm		Anchorage length mm	Thread mm	Packg. content pcs.	Weight per pkg. kg	
				h <sub>1</sub>	h <sub>1,red</sub> <sup>1)</sup>	h <sub>nom</sub>	h <sub>nom,red</sub> <sup>1)</sup>					t <sub>fix</sub>
B 6-5/40 <sup>2)</sup>	01005201	6	-	35	-	30	-	5	40	M6x16	100	1,12
B 6-10-20/67 <sup>2)</sup>	01010201	6	55	45	49	39	10	20	67	M6x30	100	1,62
B 6-25-35/82 <sup>2)</sup>	01015201	6	55	45	49	39	25	35	82	M6x35	100	2,07
B 6-40-50/97 <sup>2)</sup>	01025201	6	55	45	49	39	40	50	97	M6x35	100	2,35
B 8-5/50 <sup>2)</sup>	01105201	8	-	45	-	35	-	5	50	M8x22	100	2,32
B 8-4/60 <sup>2)</sup>	01110201	8	-	55	-	47	-	4	60	M8x25	100	2,74
B 8-10-19/75	01115201	8	65	55	56	47	10	19	75	M8x40	100	3,44
B 8-15-24/80	01120201	8	65	55	56	47	15	24	80	M8x45	100	3,55
B 8-20-29/85	01125201	8	65	55	56	47	20	29	85	M8x50	100	3,84
B 8-30-39/95	01135201	8	65	55	56	47	30	39	95	M8x60	100	4,19
B 8-45-54/110	01145201	8	65	55	56	47	45	54	110	M8x75	100	4,78
B 8-55-64/120	01150201	8	65	55	56	47	55	64	120	M8x85	100	5,09
B 10-10/60 <sup>2)</sup>	01205201	10	-	50	-	40	-	10	60	M10x25	50	2,31
B 10-10-16/85	01210201	10	70	65	62	56	10	16	85	M10x40	50	3,00
B 10-15-21/90	01215201	10	70	65	62	56	15	21	90	M10x45	50	3,06
B 10-20-26/95	01220201	10	70	65	62	56	20	26	95	M10x50	50	3,26
B 10-30-36/105	01225201	10	70	65	62	56	30	36	105	M10x60	50	3,47
B 10-45-51/120	01230201	10	70	65	62	56	45	51	120	M10x75	50	4,00
B 10-50-56/125	01235201	10	70	65	62	56	50	56	125	M10x80	50	4,21
B 10-70-76/145	01240201	10	70	65	62	56	70	76	145	M10x80	50	4,84
B 10-100-106/175	01245201	10	70	65	62	56	100	106	175	M10x80	50	5,70
B 10-140-146/215	01250201	10	70	65	62	56	140	146	215	M10x80	25	3,79

<sup>1)</sup> Reduced anchorage depth. Not part of approval.

<sup>2)</sup> Not part of approval.

Description	Ref. No.	Drill hole Ø mm	Drill hole depth mm	Setting-depth mm		Fixture thickness t <sub>fix</sub> mm		Anchorage length mm	Thread mm	Packg. content pcs.	Weight per pkg. kg	
				h <sub>1</sub>	h <sub>1,red</sub> <sup>1)</sup>	h <sub>nom</sub>	h <sub>nom,red</sub> <sup>1)</sup>					t <sub>fix</sub>
B 12-5/75 <sup>2)</sup>	01305201	12	-	65	-	55	-	5	75	M12x30	25	2,10
B 12-13/95 <sup>2)</sup>	01310201	12	-	75	-	67	-	13	95	M12x50	25	2,50
B 12-15-30/110	01315201	12	90	75	82	67	15	30	110	M12x65	25	2,62
B 12-20-35/115	01320201	12	90	75	82	67	20	35	115	M12x70	25	2,84
B 12-30-45/125	01325201	12	90	75	82	67	30	45	125	M12x80	25	3,11
B 12-50-65/145	01330201	12	90	75	82	67	50	65	145	M12x100	25	3,48
B 12-65-80/160	01335201	12	90	75	82	67	65	80	160	M12x100	25	3,82
B 12-85-100/180	01340201	12	90	75	82	67	85	100	180	M12x100	25	4,21
B 12-105-120/200	01345201	12	90	75	82	67	105	120	200	M12x100	25	4,64
B 16-13/115 <sup>2)</sup>	01510201	16	-	95	-	84	-	13	115	M16x60	20	4,14
B 16-10-28/130	01512201	16	110	95	102	84	10	28	130	M16x40	20	4,50
B 16-30-48/150	01515201	16	110	95	102	84	30	48	150	M16x90	20	5,04
B 20-5-27/150	01605201	20	130	110	121	99	5	27	150	M20x70	10	4,06
B 20-35-57/180	01610201	20	130	110	121	99	35	57	180	M20x70	10	4,96
B 20-60-82/205	01612201	20	130	110	121	99	60	82	205	M20x70	10	5,55
B 20-95-117/240	01615201	20	130	110	121	99	95	117	240	M20x70	10	6,50

<sup>1)</sup> Reduced anchorage depth. Not part of approval.

<sup>2)</sup> Not part of approval.



**Extract from Permissible Service Conditions of ETA-01/0013**

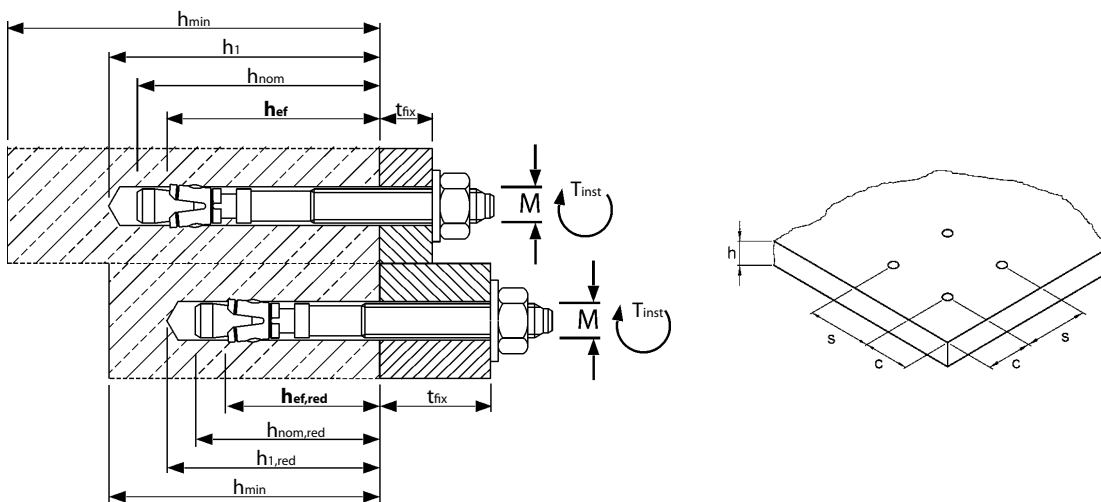
Approved loads for single anchor without influence of spacing and edge distance.

Total safety factor as per ETAG 001 included ( $\gamma_M$  and  $\gamma_r$ ). Loads for reduced anchorage depth  $h_{ef,red}$  are not part of approval.

Loads and performance data	Wedge Anchor B		M 6 <sup>1)</sup>		M 8		M 10		M 12		M 16		M 20	
	$h_{ef}$	[mm]	40	-	44	-	48	-	65	-	82	-	100	-
Effective anchorage depth	$h_{ef}$	[mm]	40	-	44	-	48	-	65	-	82	-	100	-
Reduced anchorage depth	$h_{ef,red}$	[mm]	-	30 <sup>2)</sup>	-	35 <sup>1,2)</sup>	-	42 <sup>1)</sup>	-	50 <sup>1)</sup>	-	64 <sup>1)</sup>	-	78 <sup>1)</sup>
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
	$\geq$ 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
<b>Spacing and edge distance</b>														
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
<b>Installation parameters</b>														
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

<sup>1)</sup> Not part of approval.

<sup>2)</sup> Application limited to statically indetermined systems.



**Installation**

