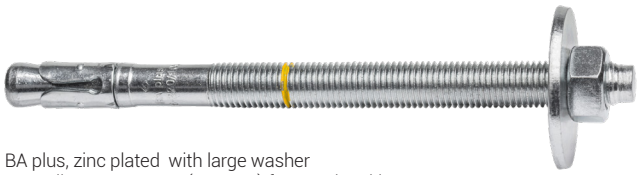
Quick-fix anchor BA plus



Advantages



BA plus, zinc plated



BA plus, zinc plated with large washer
according to ISO 7094 (DIN 440) for woodworking

- Quick-fix anchor with excellent load values in non-cracked concrete
- Wide range for woodworking with large washer according to ISO 7094 (DIN 440)
- Setting depth marking ring for quick installation
- Long thread for all sizes for higher mounting flexibility

Approvals and certificates

ETA Option 7

European Technical Assessment
Option 7 for non-cracked concrete

Suitable building materials

Very suitable

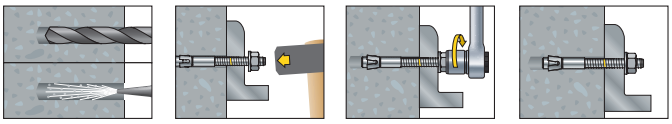


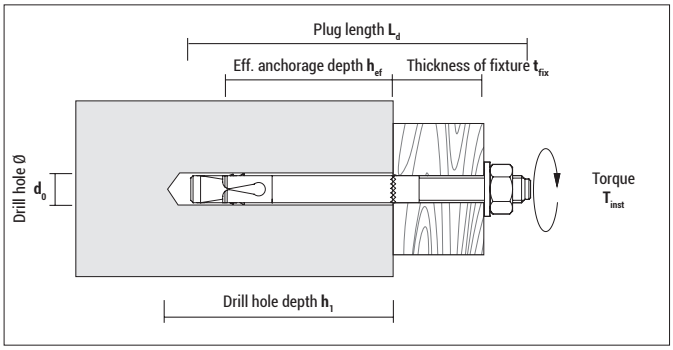
- Concrete

Suitable to a limited extent

- Dense natural stone (up to M8)

Mounting





Quick-fix anchor BA plus



BA plus, zinc plated

Type	Art-No	d_0 [mm]	$h_1 \geq$ [mm]	$h_{ef} \geq$ [mm]	L_d [mm]	$t_{fix} \leq$ [mm]	Thread	ETA	€ / 100 pcs	[pcs]	[pcs]
6-45/5	9645BAP	6	38	25	45	5	M6	–		100	500
6-60/10	9660BAP	6	48	35	60	10	M6	●		100	500
6-80/30	9680BAP	6	48	35	80	30	M6	●		100	500
6-100/50	96100BAP	6	48	35	100	50	M6	●		100	500
8-50/5	9850BAP	8	40	25	50	5	M8	–		100	500
8-60/10	9860BAP	8	45	30	60	10	M8	–		50	250
8-75/10	9875BAP	8	60	45	75	10	M8	●		50	250
8-85/20	9885BAP	8	60	45	85	20	M8	●		50	250
8-95/30	9895BAP	8	60	45	95	30	M8	●		50	250
8-115/50	98115BAP	8	60	45	115	50	M8	●		40	200
8-135/70	98135BAP	8	60	45	135	70	M8	●		40	200
10-60/10	91060BAP	10	42	27	60	10	M10	–		50	250
10-75/10	91075BAP	10	55	40	75	10	M10	–		50	250
10-85/10	91085BAP	10	65	50	85	10	M10	●		40	200
10-92/17	91092BAP	10	65	50	92	17	M10	●		40	200
10-105/30	910105BAP	10	65	50	105	30	M10	●		25	125
10-125/50	910125BAP	10	65	50	125	50	M10	●		25	125
10-145/70	910145BAP	10	65	50	145	70	M10	●		25	125
10-175/100	910175BAP	10	65	50	175	100	M10	●		25	125
12-70/2	91270BAP	12	58	38	70	2	M12	–		40	200
12-110/10	912110BAP	12	90	70	110	10	M12	●		20	100
12-120/20	912120BAP	12	90	70	120	20	M12	●		20	100
12-130/30	912130BAP	12	90	70	130	30	M12	●		20	100
12-150/50	912150BAP	12	90	70	150	50	M12	●		20	100
12-180/80	912180BAP	12	90	70	180	80	M12	●		20	100
16-95/10	91695BAP	16	75	50	95	10	M16	–		15	75
16-135/15	916135BAP	16	110	85	135	15	M16	●		10	50
16-150/30	916150BAP	16	110	85	150	30	M16	●		10	50
16-180/60	916180BAP	16	110	85	180	60	M16	●		10	50
16-200/80	916200BAP	16	110	85	200	80	M16	●		10	50
20-110/10	920110BAP	20	90	60	110	10	M20	–		10	40
20-160/20	920160BAP	20	130	100	160	20	M20	●		10	40
20-215/75	920215BAP	20	130	100	215	75	M20	●		6	24
20-270/130	920270BAP	20	130	100	270	130	M20	●		5	20



BA plus with large washer according to ISO 7094 (DIN 440) for woodworking, zinc plated

Type	Art-No	d_0 [mm]	$h_1 \geq$ [mm]	$h_{ef} \geq$ [mm]	L_d [mm]	$t_{fix} \leq$ [mm]	Thread	ETA	€ / 100 pcs	[pcs]	[pcs]
10-215/140	910215BAP	10	65	50	215	140	M10	●		25	100
12-200/100	912200BAP	12	90	70	200	100	M12	●		20	80
12-220/120	912220BAP	12	90	70	220	120	M12	●		20	80
12-240/140	912240BAP	12	90	70	240	140	M12	●		20	80
12-260/160	912260BAP	12	90	70	260	160	M12	●		20	80
12-300/200	912300BAP	12	90	70	300	200	M12	●		15	60
12-320/220	912320BAP	12	90	70	320	220	M12	●		15	60
16-220/100	916220BAP	16	110	85	220	100	M16	●		10	40
16-270/150	916270BAP	16	110	85	270	150	M16	●		10	40
16-320/200	916320BAP	16	110	85	320	200	M16	●		10	40

Quick-fix anchor BA plus





Blister BA plus, zinc plated

Type	Art-No	d_0 [mm]	$h_1 \geq$ [mm]	$h_{ef} \geq$ [mm]	L_d [mm]	$t_{fix} \leq$ [mm]	Thread	ETA	€ / Blister	[pcs]	[Blister]
8-85/20	5885BA2	8	60	45	85	20	M8	●		2	10
10-92/17	51090BA2	10	65	50	92	17	M10	●		2	10
10-125/50	510120BA2	10	65	50	125	50	M10	●		2	10

Installation parameters

BA plus Size		M6	M8	M10	M12	M16	M20
Torque	T_{inst} [Nm]	8	15	30	50	110	180
Width across flats	SW [mm]	10	13	17	19	24	30
Ø of clearance hole in fixture	d_f [mm]	7	9	12	14	18	22
Washer outer Ø x thickness	[mm]	12 x 1,6	16 x 1,6	20 x 2 / 34 x 3	24 x 2,5 / 44 x 4	30 x 3 / 56 x 5	37 x 3

Loads, spacing and edge distance BA plus approved sizes M6 - M20

Type	Permissible loads in concrete [1][2],[3]		Permissible bending moment	Spacing [4]		Edge distance [4]		Min. thickness of structural part
	C 20/25 Tension N_{per} [kN]	C 20/25 Shear V_{per} [kN]	M_{per} [Nm]	S_{cr} [mm]	S_{min} [mm]	C_{cr} [mm]	C_{min} [mm]	h_{min} [mm]
BA plus 6	3,6	3,0	4,7	105	50	53	50	100
BA plus 8	7,3	6,5	13,4	135	50	68	50	100
BA plus 10	7,6	8,5	23,9	150	120	75	90	120
BA plus 12	11,4	9,5	46,8	210	70	105	90	160
BA plus 16	12,7	14,6	95,1	255	100	128	100	200
BA plus 20	19,8	24,0	127,3	300	160	150	150	200

[1] Permissible loads for single anchor without influence of spacing and edge distance.
[2] Load figures include the resistances' partial safety factors as per ETA assessment and a partial safety factor on the action of $\gamma_F = 1,4$.
[3] For higher concrete strengths up to C50/60 the values increase by max. 55%.
[4] If underrun the char. spacing or edge distance (C_{cr} or S_{cr}) the loads must be reduced. h_{min}, S_{min} and C_{min} must be observed.

Recommended loads for the not approved anchor sizes in non-cracked concrete C20/25

Type	N_{rec} [kN]	V_{rec} [kN]	Eff. anchorage depth h_{ef} [mm]
BA plus 6-45/5	1,5	1,5	25
BA plus 8-50/5	1,5	1,5	25
BA plus 8-60/10	2,5	2,5	30
BA plus 10-60/10	1,8	1,8	27
BA plus 10-75/10	2,5	2,5	40
BA plus 12-70/2	2,4	2,4	38
BA plus 16-95/10	4,0	4,0	50
BA plus 20-110/10	6,0	6,0	60

N_{rec}: recommended tension load; V_{rec}: recommended shear load