



TECHNICAL DATA SHEET

# CHEMOFAST BA PRO

WEDGE ANCHOR





## 1. General

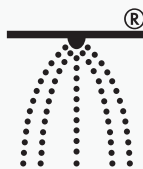
### Product description



Due to its high performance as well as its easy and quick installation, the wedge anchor BA PRO with European Technical Assessment can be used for a wide variety of applications. The long thread length and two approved anchoring depths allow the BA PRO wedge anchor greater flexibility of use. The option for reduced anchoring depth saves time during drilling and reduces the installation effort. Using a dustless drill bit also eliminates the need for blowing out the drilled hole.



The wedge anchors BA PRO M8 - M24 are also approved for use under seismic loading C1 and C2.



The stainless steel versions (A4) ensure a higher corrosion resistance and are better suitable for applications under more aggressive climate conditions.



### Properties and benefits

- Approved for use in cracked and non-cracked concrete (Option 1)
- Approved for seismic loads, performance categories C1 and C2
- Approved for use under fire exposure. Fire resistance ratings R30–R120
- Suitable for use in compression resistant natural stone (without approval)
- Specially designed plastic coated conical bolt for optimum performance
- Two effective anchorage depths for greater flexibility (M8 to M16, maximum anchor length 210 mm)
- Anchoring with shorter effective anchorage depth reduces drilling and installation time.
- Anchoring with the standard effective anchorage depth is suitable for the highest load limits
- Suitable for surface, through, and stand-off fastening
- Suitable for sprinkler system installations complying with VdS requirements



### Applications samples

Medium to heavy duty anchoring in cracked and non-cracked concrete: Steel beams, base plates, channels, tracks, wood structures, stadium seatings, facades.



## ICCONS Available Stock - Installation and packaging data

Wedge Anchor BA PRO, Stainless steel A4

Part Number	Description	Standard anchorage depth				Reduced anchorage depth				Anchor length	Thread	Box Qty.
		max. Fixture thickness t <sub>fix</sub> mm	Drill hole Ø x depth mm	Setting depth h <sub>nom</sub> mm	Anchorage depth h <sub>ef</sub> mm	max. Fixture thickness t <sub>fix,red</sub> mm	Drill hole Ø x depth mm	Setting depth h <sub>nom,red</sub> mm	Anchorage depth h <sub>ef,red</sub> mm			
BAPRO10100SS (CF1000177)	10-20-40/100 A4	20	10x75	68	60	40	10x55	48	40	100	M10x52	50
BAPRO12110SS (CF1000055)	12-15-35/110 A4	15	12x90	80	70	35	12x70	60	50	110	M12x51	25
BAPRO12145SS (CF1000056)	12-50-70/145 A4	50	12x90	80	70	70	12x70	60	50	145	M12x86	25
BAPRO16145SS (CF1000058)	16-25-45/145 A4	25	16x110	97	85	45	16x90	77	65	145	M16x66	20

## Sizes available on request (lead times apply) - Installation and packaging data

Wedge Anchor BA PRO, Stainless steel A4

Part Number	Description	Standard anchorage depth				Reduced anchorage depth				Anchor length	Thread	Box Qty.
		max. Fixture thickness t <sub>fix</sub> mm	Drill hole Ø x depth mm	Setting depth h <sub>nom</sub> mm	Anchorage depth h <sub>ef</sub> mm	max. Fixture thickness t <sub>fix,red</sub> mm	Drill hole Ø x depth mm	Setting depth h <sub>nom,red</sub> mm	Anchorage depth h <sub>ef,red</sub> mm			
BAPRO08060SS	8-6/60 s A4	-	-	-	-	6	8x49	41	35	60	M8x16	100
BAPRO08065SS	8-11/65 s A4	-	-	-	-	11	8x49	41	35	65	M8x22	100
BAPRO08075SS	8-10-21/75 A4	10	8x60	52	46	21	8x49	41	35	75	M8x32	100
BAPRO08080SS	8-15-26/80 A4	15	8x60	52	46	26	8x49	41	35	80	M8x37	100
BAPRO08095SS	8-30-41/95 A4	30	8x60	52	46	41	8x49	41	35	95	M8x52	100
BAPRO08115SS	8-50-61/115 A4	50	8x60	52	46	61	8x49	41	35	115	M8x72	100
BAPRO08165SS	8-100-111/165 A4	100	8x60	52	46	111	8x49	41	35	165	M8x122	50
BAPRO10070SS	10-10/70 s A4	-	-	-	-	10	10x55	48	40	70	M10x22	50
BAPRO10080SS	10-20/80 s A4	-	-	-	-	20	10x55	48	40	80	M10x32	50
BAPRO10090SS	10-10-30/90 A4	10	10x75	68	60	30	10x55	48	40	90	M10x42	50
BAPRO10095SS	10-15-35/95 A4	15	10x75	68	60	35	10x55	48	40	95	M10x47	50
BAPRO10110SS	10-30-50/110 A4	30	10x75	68	60	50	10x55	48	40	110	M10x62	50
BAPRO10130SS	10-50-70/130 A4	50	10x75	68	60	70	10x55	48	40	130	M10x82	50
BAPRO10155SS	10-75-95/155 A4	75	10x75	68	60	95	10x55	48	40	155	M10x107	50
BAPRO10180SS	10-100-120/180 A4	100	10x75	68	60	120	10x55	48	40	180	M10x132	50
BAPRO10230SS	10-150/230 A4	150	10x75	68	60	-	-	-	-	230	M10x80	25
BAPRO12085SS	12-10/85 s A4	-	-	-	-	10	12x70	60	50	85	M12x26	25
BAPRO12095SS	12-20/95 s A4	-	-	-	-	20	12x70	60	50	95	M12x36	25
BAPRO12105SS	12-10-30/105 A4	10	12x90	80	70	30	12x70	60	50	105	M12x46	25
BAPRO12115SS	12-20-40/115 A4	20	12x90	80	70	40	12x70	60	50	115	M12x56	25
BAPRO12125SS	12-30-50/125 A4	30	12x90	80	70	50	12x70	60	50	125	M12x66	25
BAPRO12160SS	12-65-85/160 A4	65	12x90	80	70	85	12x70	60	50	160	M12x101	25
BAPRO12180SS	12-85-105/180 A4	85	12x90	80	70	105	12x70	60	50	180	M12x121	25
BAPRO12200SS	12-105-125/200 A4	105	12x90	80	70	125	12x70	60	50	200	M12x135	25
BAPRO12220SS	12-125/220 A4	125	12x90	80	70	-	-	-	-	220	M12x80	25
BAPRO12255SS	12-160/255 A4	160	12x90	80	70	-	-	-	-	255	M12x80	20
BAPRO12285SS	12-190/285 A4	190	12x90	80	70	-	-	-	-	285	M12x80	20
BAPRO12325SS	12-230/325 A4	230	12x90	80	70	-	-	-	-	325	M12x80	20
BAPRO16115SS	16-15/115 s A4	-	-	-	-	15	16x90	77	65	115	M16x36	20
BAPRO16125SS	16-5-25/125 A4	5	16x110	97	85	25	16x90	77	65	125	M16x46	20
BAPRO16135SS	16-15-35/135 a4	15	16x110	97	85	35	16x90	77	65	135	M16x56	20
BAPRO16170SS	16-50-70/170 a4	50	16x110	97	85	70	16x90	77	65	170	M16x91	20
BAPRO16200SS	16-80-100/200 a4	80	16x110	97	85	100	16x90	77	65	200	M16x121	10
BAPRO16220SS	16-100/220 a4	100	16x110	97	85	-	-	-	-	220	M16x80	10
BAPRO16280SS	16-160/280 a4	160	16x110	97	85	-	-	-	-	280	M16x80	10
BAPRO20165SS	20-30/165 a4	30	20x125	114	100	-	-	-	-	165	M20x50	10
BAPRO20195SS	20-60/195 a4	60	20x125	114	100	-	-	-	-	195	M20x70	10
BAPRO20235SS	20-100/235 a4	100	20x125	114	100	-	-	-	-	235	M20x80	5
BAPRO20265SS	20-130/265 a4	130	20x125	114	100	-	-	-	-	265	M20x80	5
BAPRO20285SS	20-150/285 a4	150	20x125	114	100	-	-	-	-	285	M20x80	5
BAPRO24200SS	24-30/200 a4	30	24x155	140	125	-	-	-	-	200	M24x58	10
BAPRO24230SS	24-60/230 a4	60	24x155	140	125	-	-	-	-	230	M24x88	5
BAPRO24245SS	24-75/245 a4	75	24x155	140	125	-	-	-	-	245	M24x103	5



### Performance Data Based on European Technical Assessment ETA-19/0853

Capacities for single anchor without influence of spacing and edge distance.

Total safety factor as per EAD 330232-01-0601 and AS 5216:2021

Stainless steel A4

Loads and performance data		Wedge Anchor BA PRO A4		M8		M10		M12		M16		M20		M24	
Standard anchorage depth		hef	[mm]	46	-	60	-	70	-	85	-	100	125		
Reduced anchorage depth		hef,red	[mm]	-	35	-	40	-	50	-	65	-	-	-	-
Seismic Design Capacities (Tension)	C20/25	C1/C2	[kN]	3.3/1.5	-	6.0/2.4	-	10.7/6.8	-	15.3/9.2	-	19.5/16.3	-	-	-
Seismic Design Capacities (Shear)	C20/25	C1/C2	[kN]	7.4/5.4	-	16.0/11.2	-	21.6/13.0	-	35.2/28.6	-	46.8/39.4	-	-	-
<i>Cracked Concrete</i>															
Design Capacities (Tension)	C20/25	N <sub>Rd</sub>	[kN]	3.3	3.3	6.0	5.0	10.6	8.5	16.6	12.6	23.9	26.6		
	C25/30	N <sub>Rd</sub>	[kN]	3.6	3.6	6.5	5.4	11.6	9.2	18.2	13.7	26.3	29.2		
	C30/37	N <sub>Rd</sub>	[kN]	4.0	4.0	7.2	6.0	13.0	10.3	20.3	15.2	29.2	32.4		
	C40/50	N <sub>Rd</sub>	[kN]	4.7	4.7	8.5	7.1	15.1	12.0	23.5	17.7	33.8	37.6		
	C50/60	N <sub>Rd</sub>	[kN]	5.1	5.1	9.2	7.7	16.5	13.1	25.7	19.4	37.2	41.3		
<i>Non-Cracked Concrete</i>															
Design Capacities (Tension)	C20/25	N <sub>Rd</sub>	[kN]	7.9	5.0	10.6	6.0	16.6	11.9	23.3	17.6	33.6	47.0		
	C25/30	N <sub>Rd</sub>	[kN]	8.8	5.4	11.6	6.5	18.2	13.0	25.6	19.3	36.8	51.5		
	C30/37	N <sub>Rd</sub>	[kN]	9.8	6.0	13.0	7.2	20.3	14.4	28.4	21.4	41.0	57.2		
	C40/50	N <sub>Rd</sub>	[kN]	10.6	7.1	15.1	8.5	23.5	16.8	33.0	24.9	47.6	66.5		
	C50/60	N <sub>Rd</sub>	[kN]	10.6	7.7	16.5	9.2	25.7	18.4	36.1	27.3	52.2	72.9		
<i>Cracked / Non-Cracked concrete</i>															
Design Capacities (Shear)	C20/25	V <sub>Rd</sub>	[kN]	10.3	10.3	15.9	14.5/15.9	23.9	20.3/23.9	43.9	30.2/42.2	61.4	93.9/98.8		
	≥C25/30	V <sub>Rd</sub>	[kN]	10.3	10.3	15.9	15.9	23.9	22.2/23.9	43.9	33.0/43.9	61.4	98.8		
<i>Spacing and edge distance</i>															
Effective anchorage depth		hef	[mm]	46	35	60	40	70	50	85	65	100	125		
Characteristic spacing		s <sub>cr,N</sub>	[mm]	138	105	180	120	210	150	255	195	300	375		
Characteristic edge distance		c <sub>cr,N</sub>	[mm]	69	52.5	90	60	105	75	127.5	97.5	150	187.5		
<i>Minimum spacing and edge distance for standard thickness of concrete member</i>															
<i>cracked concrete</i>															
Standard thickness of concrete slab		h <sub>min,1</sub>	[mm]	100	-	120	-	140	-	160	-	200	250		
Minimum spacing	for edge distance c	S <sub>min</sub>	[mm]	40	70	50	75	60	100	60	100	95	125	125	
		C <sub>min</sub>	[mm]	40	-	55	-	60	-	60	-	95	125	125	
Minimum edge distance	for spacing s	S <sub>min</sub>	[mm]	40	80	50	90	60	140	60	180	200	250	125	
		C <sub>min</sub>	[mm]	40	-	55	-	60	-	60	-	95	125	125	
<i>non-cracked concrete</i>															
Minimum spacing	for edge distance c	S <sub>min</sub>	[mm]	40	80	50	75	60	120	65	120	90	180	125	
		C <sub>min</sub>	[mm]	50	-	60	-	75	-	80	-	130	125	125	
Minimum edge distance	for spacing s	S <sub>min</sub>	[mm]	40	100	50	120	60	150	65	150	240	125	125	
		C <sub>min</sub>	[mm]	40	-	50	-	60	-	60	-	90	125	125	
<i>Minimum spacing and edge distance for minimum thickness of concrete member</i>															
<i>cracked concrete</i>															
Minimum thickness of concrete slab		h <sub>min,2</sub>	[mm]	80	80	100	80	120	100	140	140	-	-		
Minimum spacing	for edge distance c	S <sub>min</sub>	[mm]	40	70	50	60	45	90	50	100	60	70	65	-
		C <sub>min</sub>	[mm]	40	40	50	60	90	65	60	65	80	100	170	-
Minimum edge distance	for spacing s	S <sub>min</sub>	[mm]	40	80	50	115	65	180	60	250	180	250	-	
		C <sub>min</sub>	[mm]	40	-	50	-	65	-	60	-	80	100	250	-
<i>non-cracked concrete</i>															
Minimum spacing	for edge distance c	S <sub>min</sub>	[mm]	40	50	60	140	50	100	60	120	80	180	65	-
		C <sub>min</sub>	[mm]	50	40	90	140	65	75	100	90	170	170	-	
Minimum edge distance	for spacing s	S <sub>min</sub>	[mm]	40	100	50	180	60	150	65	185	200	65	-	
		C <sub>min</sub>	[mm]	40	-	50	-	60	-	60	-	90	125	125	
<i>Installation parameters</i>															
Drill hole diameter		d <sub>o</sub>	[mm]	8	8	10	10	12	12	16	16	20	24		
Diameter of clearance hole in the fixture		d <sub>f</sub>	[mm]	9	9	12	12	14	14	18	18	22	26		
Depth of drill hole		h <sub>1</sub>	[mm]	60	49	75	55	90	70	110	90	125	155		
Installation torque		T <sub>inst</sub>	[Nm]	20	20	35	35	50	50	110	110	200	290		
Width across nut		SW	[mm]	13	13	17	17	19	19	24	24	30	36		

