

Wedge Anchor BZ3 dynamic

Steel, zinc plated



Wedge Anchor
BZ3 dynamic

Range of Loading: 0,9 kN – 7,2 kN
Range of concrete quality: C20/25–C50/60

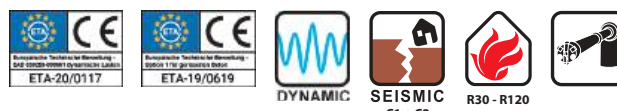
Description

The Wedge Anchor BZ3 dynamic is the first mechanical expansion anchor with ETA for fatigue cyclic loading. It can be used in through-setting and pre-setting installation. The red color marking makes it easy to visually check the required anchorage depth. To fill the annular gap between the attachment and the Wedge Anchor BZ3 dynamic, the mortar is injected through the hole in the filling washer using a reducing adapter on the static mixer.

The quick and easy installation of the Wedge Anchor BZ3 dynamic significantly improves the economic efficiency and makes it the ideal anchor for the fastening of light to medium fatigue cyclic loads.

Advantages

- European Technical Assessment in cracked and uncracked concrete under fatigue loading
- Approved also for use under seismic loading, performance categories C1 and C2 and under fire exposure (R30-R120)
- Quick and easy installation, immediately statically loadable
- Coloured marking of the minimum anchorage depth



- Through-setting and pre-setting installation for flexible application
- When using the hollow drill bit SB, the subsequent cleaning of the borehole can be omitted and the development of drilling dust is avoided
- Very low anchorage depths and minimum component thicknesses
- Small spacings and edge distances
- Economical alternative to injection- and undercutting systems

Applications

Fastening of light to medium fatigue cyclic loads in cracked and uncracked concrete: crane systems, industrial robots, elevator guides, conveyor systems, etc.

Wedge Anchor BZ3 dynamic



- Steel, zinc plated
- Approved for loads with fatigue cyclic loading
- There are 5 mixer tips per 25-pack and 2 mixer tips per 10-pack in each assembly package

Description	Ref. No.	Fixture thickness		Anchorage depth	Drill hole-Ø	Depth of drill hole	Bohrlochtiefe durch Anbauteil	Anchor length	Thread	Pkg. content	Weight per pkg.	Amount of adhesive per anchor ¹⁾
		t _{fix,min} mm	t _{fix,max} mm	h _{ef} mm	d ₀ mm	h ₁ ≥ mm	h _a mm	l mm	mm	pcs.	kg	ml
BZ3 dyn M10x100/5-10	18210001	5	10	60	10	71	81	100	M10x26	25	2,07	2,7
BZ3 dyn M10x120/10-30	18220001	10	30	60	10	71	101	120	M10x31	25	2,33	3,8
BZ3 dyn M10x140/30-50	18230001	30	50	60	10	71	121	140	M10x51	25	2,64	4,9
BZ3 dyn M12x115/6-10	18310001	6	10	70	12	83	93	115	M12x31	25	3,17	2,9
BZ3 dyn M12x135/10-30	18320001	10	30	70	12	83	113	135	M12x35	25	3,73	4,3
BZ3 dyn M12x155/30-50	18330001	30	50	70	12	83	133	155	M12x55	25	4,01	5,7
BZ3 dyn M16x155/8-25	18520001	8	25	85	16	102	127	155	M16x37	10	2,77	4,7
BZ3 dyn M16x180/25-50	18530001	25	50	85	16	102	152	180	M16x54	10	3,17	7,2

¹⁾Injection Cartridge VMH for annular gap filling see page 124

Wedge Anchor-Setting Tool BSW



- Setting Tool for Wedge Anchor M6 – M16
- With SDS plus connection

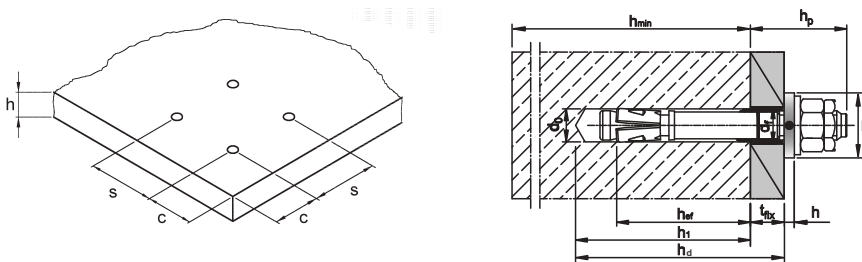
Description	Ref. No.	Suitable for Wedge Anchor	Length mm	Package content pcs.	Weight per pkg. kg
BSW M6-M16	43990101	BZ3/BZ plus/B M6 – M16	140	1	0,13



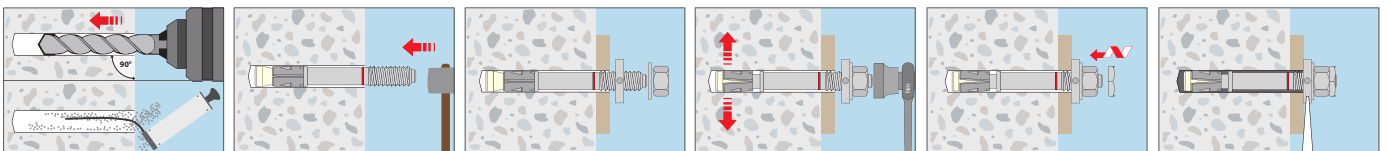
Extract from Permissible Service Conditions of European Technical Assessment ETA-20/0117 for use under fatigue cyclic loading in cracked and uncracked concrete

Approved loads according to EN 1992-4 for single anchors without the influence of spacing and edge distances. The total safety factor (γ_M and γ_F) is included. Load capacities under fire exposure see page 198.

Loads and performance data	Wedge Anchor BZ3 dynamic	M10	M12	M16
Single fixing				
cracked and uncracked concrete				
Approved loads, tension	$\geq C20/25$ appr. N [kN]	3,4	4,6	7,2
Approved loads, shear	$\geq C20/25$ appr. V [kN]	1,9	3,0	5,6
Multiple use (per anchor)				
cracked and uncracked concrete				
Approved loads, tension	$\geq C20/25$ appr. N [kN]	1,7	2,3	3,6
Approved loads, shear	$\geq C20/25$ appr. V [kN]	0,9	1,5	2,8
Spacing and edge distance				
Effective anchorage depth	h_{ef} [mm]	60	70	85
Minimum thickness of concrete slab	h_{min} [mm]	90	105	127,5
Minimum spacing	s_{min} [mm]	40	50	65
Minimum edge distance	c_{min} [mm]	45	55	65
Installation parameters				
Drill hole diameter	d_o [mm]	10	12	16
Diameter of clearance hole in the fixture	$d_f \leq$ [mm]	12	14	18
Drill hole depth	$h_1 \geq$ [mm]	71	83	102
Installation torque	T_{inst} [Nm]	40	60	110
Width across nut	SW [mm]	17	19	24
Outer diameter x thickness of filling washer	D x h [mm]	26x5	28x5	34x5
Overstand	h_p [mm]	21,5 + t_{fix}	25,5 + t_{fix}	29,5 + t_{fix}



Pre-setting installation



Through-setting installation

