

**TECHNICAL DATA SHEET**

**BETA Acciaio CE** percussion anchor with internal cone

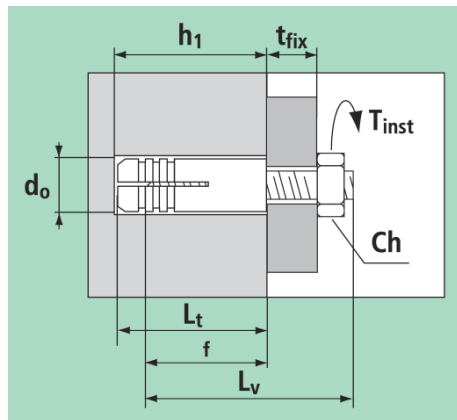


**Certificates**

Certification according to EAD 330747-00-0601 (fomer ETAG 001 part 6) for redundant non-structural fixing in non-cracked and cracked concrete; Fire Resistance 120 min  
Certification according to EAD 330232-00-0601 (fomer ETAG 001) for non-cracked concrete (Option 7)

**Base material**

certified use	specific use
non-cracked concrete	precast hollow core slabs
cracked concrete	natural stone
	solid masonry



- $d_0$  = anchor diameter = hole diameter
- $L_t$  = anchor length
- $t_{fix}$  = fixable thickness
- $f$  = thread length
- $h_1$  = minimum hole depth
- $h_{nom}$  = overall embedment depth
- $h_{ef}$  = effective anchorage depth
- $d_f$  = hole diameter in fixture
- $T_{inst}$  = tightening torque
- $L_v$  = screw length
- $L_s$  = screwing depth

$$h_{nom} = h_{ef} = L_t$$

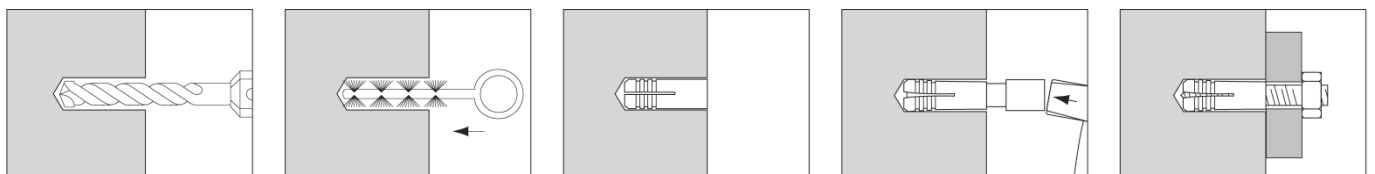
$$L_v = L_s + t_{fix}$$

art.	descr.	$d_0$ mm	$L_t$ mm	$f$ mm	$h_1$ mm	$d_v$ mm	$d_f$ mm	$L_s$ mm	$T_{inst}$ Nm
<b>TTBCE06</b> <sup>1</sup>	BCE06	8	25	11	28	M6	7	6÷11	4
<b>TTBCE08</b>	BCE06	10	30	13	33	M8	9	8÷13	8
<b>TTBCE10</b>	BCE06	12	40	17	43	M10	12	10÷17	15
<b>TTBCE12</b>	BCE06	15	50	21	54	M12	14	12÷21	35
<b>TTBCE16</b> <sup>2</sup>	BCE06	20	65	30	70	M16	18	16÷30	60

<sup>1</sup> certified only for redundant non-structural fixing

<sup>2</sup> certified only for non-cracked concrete (Option 7)

**Installation**



Use TK striker pin

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**Materials**

material	coating
cold-formed steel	white zinc plating $\geq 5 \mu\text{m}$ ISO 4042

- Use for redundant non-structural fixing in non-cracked and cracked concrete

**Setting parameters**

size		M6	M8	M10	M12
minimum thickness of base material	$h_{\min}$ mm	80	80	80	100
minimum spacing	$s_{\min}$ mm	200	200	200	200
minimum edge distance	$c_{\min}$ mm	150	150	150	150

**Strength data**

Valid for a single anchor, isolated and far from the edges, on a thick concrete member of class C20/25 and with sparse reinforcement.

**Characteristic resistance**

size		M6	M8	M10	M12
all load directions	$F_{Rk}$ kN	1,5	2,0	3,0	4,0

**Design resistance**

size		M6	M8	M10	M12
all load directions	$F_{Rd}$ kN	0,7	1,0	1,4	1,9

**Recommended load**

size		M6	M8	M10	M12
all load directions	$F_{rec}$ kN	0,5	0,7	1,0	1,4

1 kN  $\approx$  100 kg

steel failure

Characteristic resistances  $F_{Rk}$  derive from values certified in European Technical Assessment. Design resistances  $F_{Rd}$  include partial safety factors on resistances. Recommended loads  $F_{rec}$  include the further safety factor 1.4.

For the design of anchors in groups refer to Declaration of Performance DPGE1035 and use design method B outlined in EN 1992-4. For the design of anchors under fire exposure refer to ETA or to Declaration of Performance and Technical Report TR 020 issued by EOTA.

- Use for fixing on non-cracked concrete (Option 7)

**Setting parameters**

size		M8	M10	M12	M16
minimum thickness of base material	$h_{\min}$ mm	100	100	100	130
minimum spacing	$s_{\min}$ mm	41	54	68	88
minimum edge distance	$c_{\min}$ mm	41	54	68	88

**Strength data**

Valid for a single anchor, isolated and far from the edges, on a thick concrete member of class C20/25 and with sparse reinforcement. All load directions

**Characteristic resistance**

size		M8	M10	M12	M16
tension	$N_{Rk}$ kN	8,3	12,8	17,9	26,5
shear	$V_{Rk}$ kN	8,3	12,8	17,9	39,3

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**Design resistance**

size		M8	M10	M12	M16
tension	N <sub>Rd</sub> kN	4,6	7,1	8,5	14,7
shear	V <sub>Rd</sub> kN	5,5	8,5	11,9	31,4

**Recommended load**

size		M8	M10	M12	M16
tension	N <sub>rec</sub> kN	3,3	5,1	6,1	9,9
shear	V <sub>ec</sub> kN	4,0	6,1	8,5	22,5

1 kN ≈ 100 kg

steel failure, class 5.8

Characteristic resistances N<sub>Rk</sub> and V<sub>Rk</sub> derive from parameters certified in European Technical Assessment. Design resistances N<sub>Rd</sub> and V<sub>Rd</sub> include partial safety factors on strengths. Recommended loads N<sub>rec</sub> and V<sub>rec</sub> include the further 1.4 safety factor.

For the design of fixing with reduced spacing, near the edge or on concrete with increased resistance, reduced thickness or dense reinforcement refer to ETA or to Declaration of Performance DPGE1035 and use the design method outlined in EN 1992-4 or in EOTA's *Technical Report 055*. One can also calculate and verify the fixings by means of *G&B Calculation Program* available on the website [www.gebfissaggi.com](http://www.gebfissaggi.com).