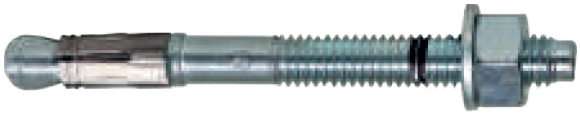
# Quick-fix anchor BAZ plus

## Advantages



BAZ plus, zinc plated

BAZ plus A4, stainless steel A4

- High-performance quick-fix anchor for cracked concrete.
- Very high load values even with small edge and axial distances; usable also in difficult installation situations
- Suitable for usage under seismic action (C2)
- Two different setting depths for the dimensions M10 and M12 for higher application flexibility
- Setting depth marking ring for quick installation
- Length marking on top of the BAZ plus

## Suitable building materials

### Very suitable

- Concrete

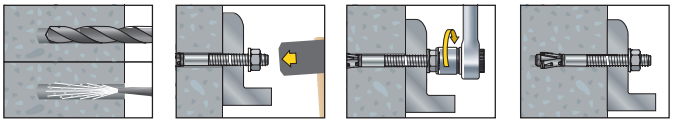
## Approvals and certificates

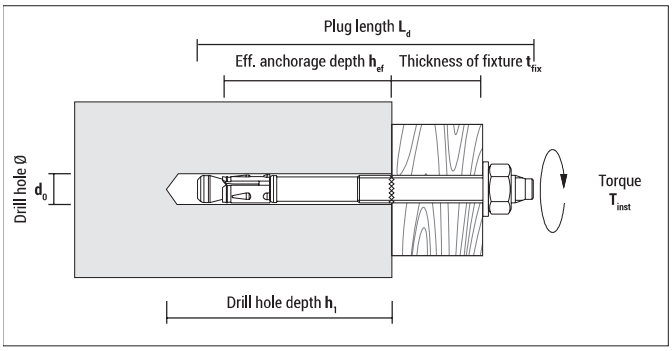
European Technical Assessment
Option 1 for cracked concrete

see assessment

M8 - M16

## Mounting





# Quick-fix anchor BAZ plus

## BAZ 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] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8-75/10 | 9875BAZP | 8 | 60 | 48 | 75 | 10 | M8 | ● | | 50 | 250 |
| 8-95/30 | 9895BAZP | 8 | 60 | 48 | 95 | 30 | M8 | ● | | 50 | 250 |
| 8-115/50 | 98115BAZP | 8 | 60 | 48 | 115 | 50 | M8 | ● | | 40 | 200 |
| 8-150/85 | 98150BAZP | 8 | 60 | 48 | 150 | 85 | M8 | ● | | 40 | 200 |
| 10-72/10 | 91072BAZP | 10 | 55 | 40 | 72 | 10 | M10 | ● | | 40 | 200 |
| 10-92/10 | 91092BAZP | 10 | 55 / 75 | 40 / 60 | 92 | 30 / 10 | M10 | ● | | 40 | 200 |
| 10-102/20 | 910102BAZP | 10 | 55 / 75 | 40 / 60 | 102 | 40 / 20 | M10 | ● | | 25 | 125 |
| 10-112/30 | 910112BAZP | 10 | 55 / 75 | 40 / 60 | 112 | 50 / 30 | M10 | ● | | 25 | 125 |
| 10-132/50 | 910132BAZP | 10 | 55 / 75 | 40 / 60 | 132 | 70 / 50 | M10 | ● | | 25 | 125 |
| 10-162/80 | 910162BAZP | 10 | 55 / 75 | 40 / 60 | 162 | 100 / 80 | M10 | ● | | 25 | 125 |
| 12-88/10 | 91288BAZP | 12 | 70 | 50 | 88 | 10 | M12 | ● | | 20 | 100 |
| 12-103/5 | 912103BAZP | 12 | 70 / 90 | 50 / 70 | 103 | 25 / 5 | M12 | ● | | 20 | 100 |
| 12-118/20 | 912118BAZP | 12 | 70 / 90 | 50 / 70 | 118 | 40 / 20 | M12 | ● | | 20 | 100 |
| 12-128/30 | 912128BAZP | 12 | 70 / 90 | 50 / 70 | 128 | 50 / 30 | M12 | ● | | 20 | 100 |
| 12-148/50 | 912148BAZP | 12 | 70 / 90 | 50 / 70 | 148 | 70 / 50 | M12 | ● | | 20 | 100 |
| 12-163/65 | 912163BAZP | 12 | 70 / 90 | 50 / 70 | 163 | 85 / 65 | M12 | ● | | 20 | 100 |
| 12-178/80 | 912178BAZP | 12 | 70 / 90 | 50 / 70 | 178 | 100 / 80 | M12 | ● | | 20 | 100 |
| 16-123/5 | 916123BAZP | 16 | 110 | 85 | 123 | 5 | M16 | ● | | 10 | 50 |
| 16-138/20 | 916138BAZP | 16 | 110 | 85 | 138 | 20 | M16 | ● | | 10 | 50 |
| 16-168/50 | 916168BAZP | 16 | 110 | 85 | 168 | 50 | M16 | ● | | 10 | 50 |
| 16-178/60 | 916178BAZP | 16 | 110 | 85 | 178 | 60 | M16 | ● | | 10 | 50 |

A4 STAINLESS STEEL

## BAZ plus A4, stainless steel A4

| 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] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8-75/10 A4 | 9X875BAZP | 8 | 60 | 48 | 75 | 10 | M8 | ● | | 50 | 250 |
| 8-95/30 A4 | 9X895BAZP | 8 | 60 | 48 | 95 | 30 | M8 | ● | | 50 | 250 |
| 8-115/50 A4 | 9X8115BAZP | 8 | 60 | 48 | 115 | 50 | M8 | ● | | 40 | 200 |
| 8-150/85 A4 | 9X8150BAZP | 8 | 60 | 48 | 150 | 85 | M8 | ● | | 40 | 200 |
| 10-72/10 A4 | 9X1072BAZP | 10 | 55 | 40 | 72 | 10 | M10 | ● | | 40 | 200 |
| 10-92/10 A4 | 9X1092BAZP | 10 | 55 / 75 | 40 / 60 | 92 | 30 / 10 | M10 | ● | | 40 | 200 |
| 10-102/20 A4 | 9X10102BAZP | 10 | 55 / 75 | 40 / 60 | 102 | 40 / 20 | M10 | ● | | 25 | 125 |
| 10-112/30 A4 | 9X10112BAZP | 10 | 55 / 75 | 40 / 60 | 112 | 50 / 30 | M10 | ● | | 25 | 125 |
| 10-132/50 A4 | 9X10132BAZP | 10 | 55 / 75 | 40 / 60 | 132 | 70 / 50 | M10 | ● | | 25 | 125 |
| 10-162/80 A4 | 9X10162BAZP | 10 | 55 / 75 | 40 / 60 | 162 | 100 / 80 | M10 | ● | | 25 | 125 |
| 12-88/10 A4 | 9X1288BAZP | 12 | 70 | 50 | 88 | 10 | M12 | ● | | 20 | 100 |
| 12-103/5 A4 | 9X12103BAZP | 12 | 70 / 90 | 50 / 70 | 103 | 25 / 5 | M12 | ● | | 20 | 100 |
| 12-118/20 A4 | 9X12118BAZP | 12 | 70 / 90 | 50 / 70 | 118 | 40 / 20 | M12 | ● | | 20 | 100 |
| 12-128/30 A4 | 9X12128BAZP | 12 | 70 / 90 | 50 / 70 | 128 | 50 / 30 | M12 | ● | | 20 | 100 |
| 12-148/50 A4 | 9X12148BAZP | 12 | 70 / 90 | 50 / 70 | 148 | 70 / 50 | M12 | ● | | 20 | 100 |
| 12-163/65 A4 | 9X12163BAZP | 12 | 70 / 90 | 50 / 70 | 163 | 85 / 65 | M12 | ● | | 20 | 100 |
| 12-178/80 A4 | 9X12178BAZP | 12 | 70 / 90 | 50 / 70 | 178 | 100 / 80 | M12 | ● | | 20 | 100 |
| 16-123/5 A4 | 9X16123BAZP | 16 | 110 | 85 | 123 | 5 | M16 | ● | | 10 | 50 |
| 16-138/20 A4 | 9X16138BAZP | 16 | 110 | 85 | 138 | 20 | M16 | ● | | 10 | 50 |
| 16-168/50 A4 | 9X16168BAZP | 16 | 110 | 85 | 168 | 50 | M16 | ● | | 10 | 50 |
| 16-178/60 A4 | 9X16178BAZP | 16 | 110 | 85 | 178 | 60 | M16 | ● | | 10 | 50 |

# Quick-fix anchor BAZ plus

## Installation parameters

| BAZ plus Size | | M8 | | M10 | | M12 | | M16 | |
|---|---|---|---|---|---|---|---|---|---|
| BAZ plus Type | | BAZ plus zinc plated | BAZ plus stainless steel A4 | BAZ plus zinc plated | BAZ plus stainless steel A4 | BAZ plus zinc plated | BAZ plus stainless steel A4 | BAZ plus zinc plated | BAZ plus stainless steel A4 |
| Torque | $T_{inst}$ [Nm] | 15 | 20 | 30 | 45 | 60 | | 110 | |
| Width across flats | SW [mm] | 13 | | 17 | | 19 | | 24 | |
| Ø of clearance hole in fixture | $d_f$ [mm] | 9 | | 12 | | 14 | | 18 | |
| Washer outer Ø x thickness | [mm] | 17 x 1,6 | | 21 x 2,0 | | 24 x 2,5 | | 30 x 3,0 | |

## Spacing and edge distance

| BAZ plus Size | | M8 | M10 | | M12 | | M16 |
|---|---|---|---|---|---|---|---|
| Effective anchorage depth | $h_{ef}$ [mm] | 48 | 40 | 60 | 50 | 70 | 85 |
| Minimum edge distance | $C_{min}$ [mm] | 40 | 50 | 50 | 60 | 55 | 65 |
| | for S ≥ [mm] | 55 | 190 | 100 | 215 | 110 | 150 |
| Minimum spacing | $S_{min}$ [mm] | 35 | 50 | 40 | 55 | 60 | 65 |
| | for C ≥ [mm] | 50 | 95 | 60 | 110 | 70 | 95 |
| Characteristic edge distance | $C_{cr}$ [mm] | 72 | 60 | 90 | 75 | 105 | 127 |
| Characteristic spacing | $S_{cr}$ [mm] | 144 | 120 | 180 | 150 | 210 | 254 |
| Min. thickness of structural part | $h_{min}$ [mm] | 100 | 100 | 120 | 100 | 140 | 170 |
| Reduced min. thickness of structural part[1)] | $h_{min-red}$ [mm] | 80 | – | 100 | – | – | – |

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.

[1)] Reduced min. thickness of structural part only in non-cracked concrete.

## Permissible loads

| BAZ plus Size | | M8 | M10 | | M12 | | M16 |
|---|---|---|---|---|---|---|---|
| Effective anchorage depth | $h_{ef}$ [mm] | 48 | 40 | 60 | 50 | 70 | 85 |
| **Permissible tension load [1), 2)] for single anchor without influence of spacing and edge distance in cracked concrete C20/25 [3)]** | | | | | | | |
| BAZ plus zinc plated | $N_{per}$ [kN] | 4,0 | 4,1 | 5,7 | 5,8 | 7,6 | 11,4 |
| BAZ plus stainless steel A4 | $N_{per}$ [kN] | 4,0 | 4,1 | 5,7 | 5,8 | 7,6 | 11,4 |
| **Permissible tension load [1), 2)] for single anchor without influence of spacing and edge distance in non-cracked concrete C20/25 [3)]** | | | | | | | |
| BAZ plus zinc plated | $N_{per}$ [kN] | 5,2 | 5,7 | 9,0 | 8,3 | 11,9 | 17,1 |
| BAZ plus stainless steel A4 | $N_{per}$ [kN] | 5,2 | 5,7 | 9,0 | 8,3 | 11,9 | 17,1 |
| **Permissible shear load [1), 2)] for single anchor without influence of spacing and edge distance in cracked concrete C20/25 [3)]** | | | | | | | |
| BAZ plus zinc plated | $V_{per}$ [kN] | 7,2 | 11,7 | 11,7 | 17,1 | 17,1 | 30,9 |
| BAZ plus stainless steel A4 | $V_{per}$ [kN] | 9,0 | 11,7 | 11,7 | 17,2 | 19,7 | 36,4 |
| **Permissible shear load [1), 2)] for single anchor without influence of spacing and edge distance in non-cracked concrete C20/25 [3)]** | | | | | | | |
| BAZ plus zinc plated | $V_{per}$ [kN] | 7,2 | 11,7 | 11,7 | 17,1 | 17,1 | 30,9 |
| BAZ plus stainless steel A4 | $V_{per}$ [kN] | 9,0 | 11,7 | 11,7 | 19,7 | 19,7 | 39,2 |
| **Permissible bending moment [1), 2)]** | | | | | | | |
| BAZ plus zinc plated | $M_{per}$ [Nm] | 15,0 | 29,1 | | 51,4 | | 125,6 |
| BAZ plus stainless steel A4 | $M_{per}$ [Nm] | 14,3 | 29,1 | | 51,4 | | 122,7 |

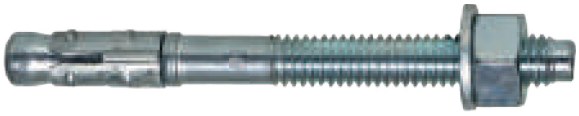
[1)] For further information please refer to the ETA assessment

[2)] Load figures include the resistances' partial safety factors as per ETA assessments and a partial safety factor on the action of $\gamma_F$ = 1,4.
Load figures apply for a rebar spacing S ≥ 15 cm or alternatively for a rebar spacing S ≥ 10 cm in combination with a rebar diameter of ds ≤ 10 mm..

[3)] For higher concrete strengths up to C50/60 the values increase by max. 58%.

# Quick-fix anchor BAZ

## Advantages



BAZ, zinc plated

BAZ A4, stainless steel A4

BAZ HD, hot-dip galvanized

BAZ HCR, stainless steel, high corrosion resistant

- Quick-fix anchor with good load values for cracked and non-cracked concrete and suitable for use under seismic action (C1)
- High load values even with small edge and axial distances; reliable also in difficult installation situations
- Large assortment in several materials

## Suitable building materials

### Very suitable

- Concrete

### Suitable to a limited extent

- Dense natural stone (up to M8)

## Approvals and certificates

ETA CE — European Technical Assessment Option 1 for cracked concrete

Option 1

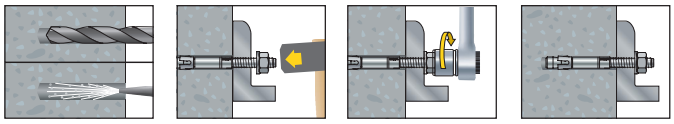
R 120 — see assessment

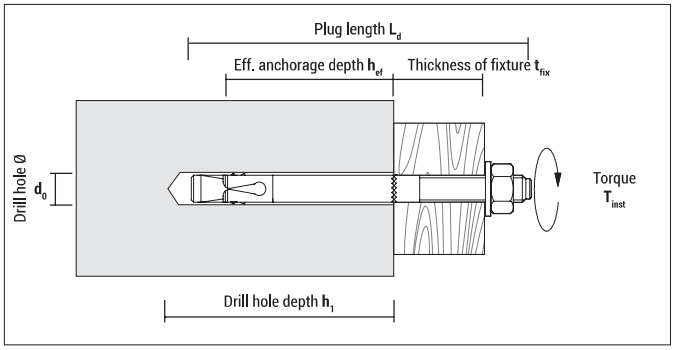
M8 - M16

FIXING seismic C1

A4 STAINLESS STEEL

## Mounting





## Quick-fix anchor BAZ

### BAZ, 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] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6-40/2 | 9640BAZ | 6 | 35 | 25 | 40 | 2 | M6 | – | | 150 | 750 |
| 6-65/15 | 9665BAZ | 6 | 45 | 35 | 65 | 15 | M6 | – | | 100 | 500 |
| 8-52/2 | 9852BAZ | 8 | 45 | 30 | 52 | 2 | M8 | – | | 100 | 500 |
| 8-72/10 | 9872BAZ | 8 | 60 | 45 | 72 | 10 | M8 | ● | | 50 | 250 |
| 8-92/30 | 9892BAZ | 8 | 60 | 45 | 92 | 30 | M8 | ● | | 50 | 250 |
| 8-112/50 | 98112BAZ | 8 | 60 | 45 | 112 | 50 | M8 | ● | | 40 | 200 |
| 8-147/85 | 98147BAZ | 8 | 60 | 45 | 147 | 85 | M8 | ● | | 40 | 200 |
| 10-92/10 | 91092BAZ | 10 | 75 | 60 | 92 | 10 | M10 | ● | | 40 | 200 |
| 10-102/20 | 910102BAZ | 10 | 75 | 60 | 102 | 20 | M10 | ● | | 25 | 125 |
| 10-112/30 | 910112BAZ | 10 | 75 | 60 | 112 | 30 | M10 | ● | | 25 | 125 |
| 10-132/50 | 910132BAZ | 10 | 75 | 60 | 132 | 50 | M10 | ● | | 25 | 125 |
| 10-162/80 | 910162BAZ | 10 | 75 | 60 | 162 | 80 | M10 | ● | | 25 | 125 |
| 12-103/5 | 912103BAZ | 12 | 90 | 70 | 103 | 5 | M12 | ● | | 20 | 100 |
| 12-118/20 | 912118BAZ | 12 | 90 | 70 | 118 | 20 | M12 | ● | | 20 | 100 |
| 12-128/30 | 912128BAZ | 12 | 90 | 70 | 128 | 30 | M12 | ● | | 20 | 100 |
| 12-148/50 | 912148BAZ | 12 | 90 | 70 | 148 | 50 | M12 | ● | | 20 | 100 |
| 12-163/65 | 912163BAZ | 12 | 90 | 70 | 163 | 65 | M12 | ● | | 20 | 100 |
| 12-178/80 | 912178BAZ | 12 | 90 | 70 | 178 | 80 | M12 | ● | | 20 | 100 |
| 16-123/5 | 916123BAZ | 16 | 110 | 85 | 123 | 5 | M16 | ● | | 10 | 50 |
| 16-138/20 | 916138BAZ | 16 | 110 | 85 | 138 | 20 | M16 | ● | | 10 | 50 |
| 16-178/60 | 916178BAZ | 16 | 110 | 85 | 178 | 60 | M16 | ● | | 10 | 50 |

### BAZ A4, stainless steel A4

A4 STAINLESS STEEL

| 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] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6-40/2 A4 | 9X640BAZ | 6 | 35 | 25 | 40 | 2 | M6 | – | | 150 | 750 |
| 6-65/15 A4 | 9X665BAZ | 6 | 45 | 35 | 65 | 15 | M6 | – | | 100 | 500 |
| 8-52/2 A4 | 9X852BAZ | 8 | 45 | 30 | 52 | 2 | M8 | – | | 100 | 500 |
| 8-72/10 A4 | 9X872BAZ | 8 | 60 | 45 | 72 | 10 | M8 | ● | | 50 | 250 |
| 8-92/30 A4 | 9X892BAZ | 8 | 60 | 45 | 92 | 30 | M8 | ● | | 50 | 250 |
| 8-112/50 A4 | 9X8112BAZ | 8 | 60 | 45 | 112 | 50 | M8 | ● | | 40 | 200 |
| 10-60/10 A4 | 9X1060BAZ | 10 | 38 | 23 | 60 | 10 | M10 | – | | 50 | 250 |
| 10-92/10 A4 | 9X1092BAZ | 10 | 75 | 60 | 92 | 10 | M10 | ● | | 40 | 200 |
| 10-102/20 A4 | 9X10102BAZ | 10 | 75 | 60 | 102 | 20 | M10 | ● | | 25 | 125 |
| 10-112/30 A4 | 9X10112BAZ | 10 | 75 | 60 | 112 | 30 | M10 | ● | | 25 | 125 |
| 10-132/50 A4 | 9X10132BAZ | 10 | 75 | 60 | 132 | 50 | M10 | ● | | 25 | 125 |
| 12-103/5 A4 | 9X12103BAZ | 12 | 90 | 70 | 103 | 5 | M12 | ● | | 20 | 100 |
| 12-118/20 A4 | 9X12118BAZ | 12 | 90 | 70 | 118 | 20 | M12 | ● | | 20 | 100 |
| 12-128/30 A4 | 9X12128BAZ | 12 | 90 | 70 | 128 | 30 | M12 | ● | | 20 | 100 |
| 12-148/50 A4 | 9X12148BAZ | 12 | 90 | 70 | 148 | 50 | M12 | ● | | 20 | 100 |
| 12-163/65 A4 | 9X12163BAZ | 12 | 90 | 70 | 163 | 65 | M12 | ● | | 20 | 100 |
| 16-123/5 A4 | 9X16123BAZ | 16 | 110 | 85 | 123 | 5 | M16 | ● | | 10 | 50 |
| 16-138/20 A4 | 9X16138BAZ | 16 | 110 | 85 | 138 | 20 | M16 | ● | | 10 | 50 |
| 16-168/50 A4 | 9X16168BAZ | 16 | 110 | 85 | 168 | 50 | M16 | ● | | 10 | 50 |


### Blister BAZ, 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] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8-72/10 | 5874BAZ2 | 8 | 60 | 45 | 72 | 10 | M8 | ● | | 2 | 10 |
| 10-92/10 | 51095BAZ2 | 10 | 75 | 60 | 92 | 10 | M10 | ● | | 2 | 10 |
| 12-118/20 | 512115BAZ2 | 12 | 90 | 70 | 118 | 20 | M12 | ● | | 2 | 10 |

## Quick-fix anchor BAZ

### BAZ HD, hot-dip galvanized

| 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] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6-40/2 HD | 9HD640BAZ | 6 | 35 | 25 | 40 | 2 | M6 | – | | 150 | 750 |
| 6-65/15 HD | 9HD665BAZ | 6 | 45 | 35 | 65 | 15 | M6 | – | | 100 | 500 |
| 8-52/2 HD | 9HD852BAZ | 8 | 45 | 30 | 52 | 2 | M8 | – | | 100 | 500 |
| 8-72/10 HD | 9HD872BAZ | 8 | 60 | 45 | 72 | 10 | M8 | ● | | 50 | 250 |
| 8-92/30 HD | 9HD892BAZ | 8 | 60 | 45 | 92 | 30 | M8 | ● | | 50 | 250 |
| 8-112/50 HD | 9HD8112BAZ | 8 | 60 | 45 | 112 | 50 | M8 | ● | | 40 | 200 |
| 8-147/85 HD | 9HD8147BAZ | 8 | 60 | 45 | 147 | 85 | M8 | ● | | 40 | 200 |
| 10-60/10 HD | 9HD1060BAZ | 10 | 38 | 23 | 60 | 10 | M10 | – | | 50 | 250 |
| 10-92/10 HD | 9HD1092BAZ | 10 | 75 | 60 | 92 | 10 | M10 | ● | | 40 | 200 |
| 10-102/20 HD | 9HD10102BAZ | 10 | 75 | 60 | 102 | 20 | M10 | ● | | 25 | 125 |
| 10-112/30 HD | 9HD10112BAZ | 10 | 75 | 60 | 112 | 30 | M10 | ● | | 25 | 125 |
| 10-132/50 HD | 9HD10132BAZ | 10 | 75 | 60 | 132 | 50 | M10 | ● | | 25 | 125 |
| 10-162/80 HD | 9HD10162BAZ | 10 | 75 | 60 | 162 | 80 | M10 | ● | | 25 | 125 |
| 12-103/5 HD | 9HD12103BAZ | 12 | 90 | 70 | 103 | 5 | M12 | ● | | 20 | 100 |
| 12-118/20 HD | 9HD12118BAZ | 12 | 90 | 70 | 118 | 20 | M12 | ● | | 20 | 100 |
| 12-128/30 HD | 9HD12128BAZ | 12 | 90 | 70 | 128 | 30 | M12 | ● | | 20 | 100 |
| 12-148/50 HD | 9HD12148BAZ | 12 | 90 | 70 | 148 | 50 | M12 | ● | | 20 | 100 |
| 12-163/65 HD | 9HD12163BAZ | 12 | 90 | 70 | 163 | 65 | M12 | ● | | 20 | 100 |
| 12-178/80 HD | 9HD12178BAZ | 12 | 90 | 70 | 178 | 80 | M12 | ● | | 20 | 100 |
| 16-123/5 HD | 9HD16123BAZ | 16 | 110 | 85 | 123 | 5 | M16 | ● | | 10 | 50 |
| 16-138/20 HD | 9HD16138BAZ | 16 | 110 | 85 | 138 | 20 | M16 | ● | | 10 | 50 |
| 16-168/50 HD | 9HD16168BAZ | 16 | 110 | 85 | 168 | 50 | M16 | ● | | 10 | 50 |
| 16-178/60 HD | 9HD16178BAZ | 16 | 110 | 85 | 178 | 60 | M16 | ● | | 10 | 50 |

### BAZ HCR, stainless steel, high corrosion resistant

| 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] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8-72/10 HCR | 9HCR872BAZ | 8 | 60 | 45 | 72 | 10 | M8 | ● | | 50 | 250 |
| 10-92/10 HCR | 9HCR1092BAZ | 10 | 75 | 60 | 92 | 10 | M10 | ● | | 40 | 200 |
| 10-112/30 HCR | 9HCR10112BAZ | 10 | 75 | 60 | 112 | 30 | M10 | ● | | 25 | 125 |

No stock item; only available on request


### Single label BAZ, 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 | € / pc | [pcs] |
|---|---|---|---|---|---|---|---|---|---|---|
| 8-72/10 | 1872BAZ | 8 | 60 | 45 | 72 | 10 | M8 | ● | | 50 |
| 8-92/30 | 1892BAZ | 8 | 60 | 45 | 92 | 30 | M8 | ● | | 50 |
| 10-92/10 | 11092BAZ | 10 | 75 | 60 | 92 | 10 | M10 | ● | | 40 |
| 10-112/30 | 110112BAZ | 10 | 75 | 60 | 112 | 30 | M10 | ● | | 25 |
| 12-118/20 | 112118BAZ | 12 | 90 | 70 | 118 | 20 | M12 | ● | | 20 |
| 12-148/50 | 112148BAZ | 12 | 90 | 70 | 148 | 50 | M12 | ● | | 20 |

## Quick-fix anchor BAZ

### Single label BAZ A4, stainless steel A4

| Type | Art-No | $d_0$ [mm] | $h_1 \geq$ [mm] | $h_{ef} \geq$ [mm] | $L_d$ [mm] | $t_{fix} \leq$ [mm] | Thread | ETA | € / pc | [pcs] |
|---|---|---|---|---|---|---|---|---|---|---|
| 8-72/10 A4 | 1X872BAZ | 8 | 60 | 45 | 72 | 10 | M8 | ● | | 50 |
| 8-92/30 A4 | 1X892BAZ | 8 | 60 | 45 | 92 | 30 | M8 | ● | | 50 |
| 10-92/10 A4 | 1X1092BAZ | 10 | 75 | 60 | 92 | 10 | M10 | ● | | 40 |
| 10-112/30 A4 | 1X10112BAZ | 10 | 75 | 60 | 112 | 30 | M10 | ● | | 25 |
| 12-118/20 A4 | 1X12118BAZ | 12 | 90 | 70 | 118 | 20 | M12 | ● | | 20 |

## Installation parameters

| BAZ Size / BAZ Type | | M6* | M8 BAZ BAZ HD | M8 BAZ A4 BAZ HCR | M10 | M12 BAZ BAZ HD | M12 BAZ A4 BAZ HCR | M16 |
|---|---|---|---|---|---|---|---|---|
| Torque | $T_{inst}$ [Nm] | 7 | 20 / 15** | 20 | 35 | 50 | 70 | 120 |
| Width across flats | SW [mm] | 10 | 13 | | 17 | 19 | | 24 |
| Ø of clearance hole in fixture | $d_f$ [mm] | 7 | 9 | | 12 | 14 | | 18 |
| Washer outer Ø x thickness | [mm] | 12 x 1,6 | 17 x 1,6 | | 21 x 2,0 | 24 x 2,5 | | 30 x 3,0 |

* Not part of the assessment

** 20 for BAZ, 15 for BAZ HD

## Spacing and edge distance

| BAZ Size | | M8 | M10 | M12 | M16 |
|---|---|---|---|---|---|
| Effective anchorage depth | $h_{ef}$ [mm] | 45 | 60 | 70 | 85 |
| Minimum edge distance | $C_{min}$ [mm] | 50 | 50 | 55 | 85 |
| | for S ≥ [mm] | 50 | 100 | 145 | 150 |
| Minimum spacing | $S_{min}$ [mm] | 50 | 55 | 60 | 70 |
| | for C ≥ [mm] | 50 | 80 | 90 | 120 |
| Characteristic edge distance | $C_{cr}$ [mm] | 68 | 90 | 105 | 128 |
| Characteristic spacing | $S_{cr}$ [mm] | 135 | 180 | 210 | 255 |
| Min. thickness of structural part | $h_{min}$ [mm] | 100 | 120 | 140 | 170 |

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.

## Loads

| BAZ Size / BAZ Type | | M8 BAZ zinc plated BAZ HD | M8 BAZ A4 BAZ HCR | M10 BAZ zinc plated BAZ HD | M10 BAZ A4 BAZ HCR | M12 BAZ zinc plated BAZ HD | M12 BAZ A4 BAZ HCR | M16 BAZ zinc plated- BAZ HD | M16 BAZ A4 BAZ HCR |
|---|---|---|---|---|---|---|---|---|---|
| **Permissible tension loads for single anchor without influence of spacing and edge distance** [1], [2] | | | | | | | | | |
| In cracked concrete C20/25 [3] | $N_{per}$ [kN] | 2,0 | 2,0 | 3,6 | 3,6 | 4,8 | 4,8 | 9,5 | 9,5 |
| In non-cracked concrete C20/25 [3] | $N_{per}$ [kN] | 3,6 | 3,6 | 6,3 | 6,3 | 7,9 | 7,9 | 16,7 | 16,7 |
| **Permissible shear loads for single anchor without influence of spacing and edge distance** [1], [2] | | | | | | | | | |
| In cracked concrete C20/25 | $V_{per}$ [kN] | 5,2 | 5,2 | 10,3 | 9,7 | 13,1 | 14,3 | 25,1 | 26,9 |
| In non-cracked concrete C20/25 | $V_{per}$ [kN] | 5,7 | 6,3 | 10,3 | 9,7 | 13,1 | 14,3 | 25,1 | 26,9 |
| Permissible bending moment | $M_{per}$ [Nm] | 12,0 | 12,6 | 27,4 | 25,7 | 41,1 | 45,1 | 106,3 | 114,3 |

[1] For further information please refer to the ETA assessment

[2] Load figures include the resistances' partial safety factors as per ETA assessment and a partial safety factor on the action of $\gamma_F = 1,4$.
Load figures apply for a rebar spacing S ≥ 15 cm or alternatively for a rebar spacing S ≥ 10 cm in combination with a rebar diameter of ds ≤ 10 mm..

[3] For higher concrete strengths up to C50/60 the values increase by max. 28%.

## Recommended loads for the not approved anchor sizes M6, M10 in non-cracked concrete C20/25

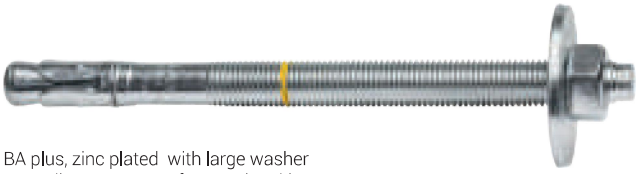
| Type | $N_{rec}$ [kN] | $V_{rec}$ [kN] | Anchorage depth $h_{ef}$ [mm] |
|---|---|---|---|
| BAZ 6-40/2 | 1,6 | 2,0 | 25 |
| BAZ 6-65/15 | 1,8 | 2,5 | 35 |
| BAZ 8-52/2 | 2,6 | 4,8 | 30 |
| BAZ 10-60/10 | 1,6 | 2,0 | 23 |

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

# Quick-fix anchor BA plus

## Advantages

BA plus, zinc plated



BA plus, zinc plated with large washer according to DIN 440 for woodworking

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

## Approvals and certificates

ETA CE Option 7

European Technical Assessment
Option 7 for non-cracked concrete

## Suitable building materials

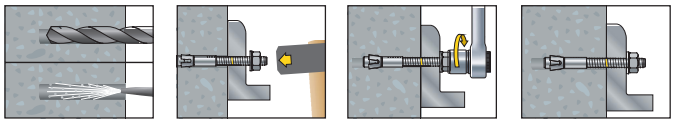
### Very suitable

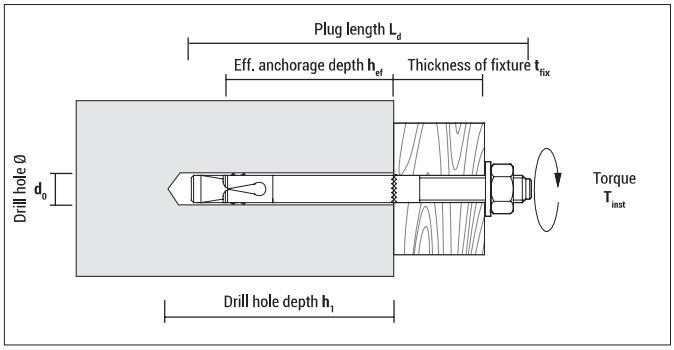
- Concrete

### 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 |
| 8-75/10 | 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 |
| 10-215/140* | 910215BAP | 10 | 65 | 50 | 215 | 140 | M10 | ● | | 25 | 100 |
| 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 |
| 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 |
| 16-95/10 | 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 |
| 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 |
| 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 |

* With large washer according to ISO 7094 (DIN 440) for woodworking


### 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 |

## Quick-fix anchor BA plus


### Single label 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 | € / pcs | [pcs] |
|---|---|---|---|---|---|---|---|---|---|---|
| 8-75/10 | 1875BAP | 8 | 60 | 45 | 75 | 10 | M8 | ● | | 50 |
| 10-92/17 | 11092BAP | 10 | 65 | 50 | 92 | 17 | M10 | ● | | 40 |
| 10-125/50 | 110125BAP | 10 | 65 | 50 | 125 | 50 | M10 | ● | | 25 |
| 12-110/10 | 112110BAP | 12 | 90 | 70 | 110 | 10 | M12 | ● | | 20 |
| 12-150/50 | 112150BAP | 12 | 90 | 70 | 150 | 50 | M12 | ● | | 20 |
| 12-180/80 | 112180BAP | 12 | 90 | 70 | 180 | 80 | M12 | ● | | 20 |
| 12-200/100* | 112200BAP | 12 | 90 | 70 | 200 | 100 | M12 | ● | | 10 |
| 12-240/140* | 112240BAP | 12 | 90 | 70 | 240 | 140 | M12 | ● | | 10 |

* With large washer according to DIN 440 for woodworking

### 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 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

# Quick-fix anchor BA A4

## Advantages

- Quick-fix anchor made of stainless steel A4 for fast installation in non-cracked concrete
- The BA A4 can be used for a wide range of approval relevant applications for outdoor usage, facade substructures aso.
- High load values and at the same time small edge and axial distances; usable even in tough installation situations

## Approvals and certificates

ETA CE Option 7 A4 STAINLESS STEEL

European Technical Assessment
Option 7 for non-cracked concrete

## Suitable building materials

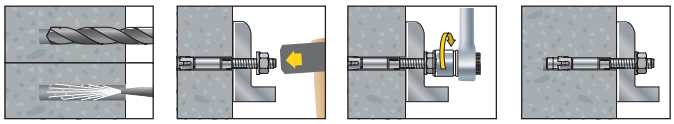
### Very suitable

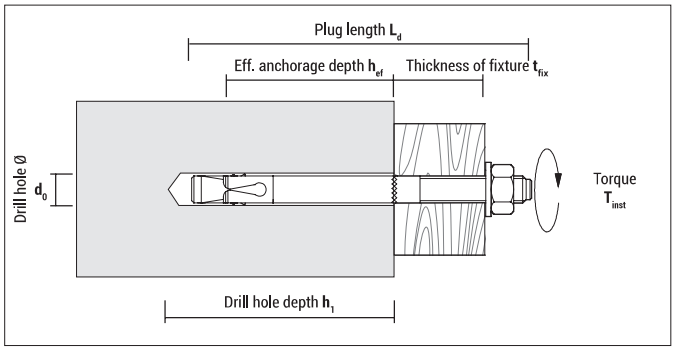
- Concrete

### Suitable to a limited extent

- Dense natural stone (up to M8)

## Mounting





## Quick-fix anchor BA A4

### BA A4, stainless steel A4

| 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] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8-72/10 A4 | 9X872BA | 8 | 60 | 45 | 72 | 10 | M8 | ● | | 50 | 250 |
| 8-92/30 A4 | 9X892BA | 8 | 60 | 45 | 92 | 30 | M8 | ● | | 50 | 250 |
| 8-112/50 A4 | 9X8112BA | 8 | 60 | 45 | 112 | 50 | M8 | ● | | 40 | 200 |
| 10-92/10 A4 | 9X1092BA | 10 | 75 | 60 | 92 | 10 | M10 | ● | | 40 | 200 |
| 10-102/20 A4 | 9X10102BA | 10 | 75 | 60 | 102 | 20 | M10 | ● | | 25 | 125 |
| 10-112/30 A4 | 9X10112BA | 10 | 75 | 60 | 112 | 30 | M10 | ● | | 25 | 125 |
| 10-132/50 A4 | 9X10132BA | 10 | 75 | 60 | 132 | 50 | M10 | ● | | 25 | 125 |
| 12-103/5 A4 | 9X12103BA | 12 | 90 | 70 | 103 | 5 | M12 | ● | | 20 | 100 |
| 12-118/20 A4 | 9X12118BA | 12 | 90 | 70 | 118 | 20 | M12 | ● | | 20 | 100 |
| 12-128/30 A4 | 9X12128BA | 12 | 90 | 70 | 128 | 30 | M12 | ● | | 20 | 100 |
| 12-148/50 A4 | 9X12148BA | 12 | 90 | 70 | 148 | 50 | M12 | ● | | 20 | 100 |
| 12-163/65 A4 | 9X12163BA | 12 | 90 | 70 | 163 | 65 | M12 | ● | | 20 | 100 |
| 16-123/5 A4 | 9X16123BA | 16 | 110 | 85 | 123 | 5 | M16 | ● | | 10 | 50 |
| 16-138/20 A4 | 9X16138BA | 16 | 110 | 85 | 138 | 20 | M16 | ● | | 10 | 50 |
| 16-168/50 A4 | 9X16168BA | 16 | 110 | 85 | 168 | 50 | M16 | ● | | 10 | 50 |

## Installation parameters

| BA Size | | M8 | M10 | M12 | M16 |
|---|---|---|---|---|---|
| Torque | $T_{inst}$ [Nm] | 20 | 35 | 70 | 120 |
| Width across flats | SW [mm] | 13 | 17 | 19 | 24 |
| Ø of clearance hole in fixture | $d_f$ [mm] | 9 | 12 | 14 | 18 |
| Washer outer Ø x thickness | [mm] | 17 x 1,6 | 21 x 2,0 | 24 x 2,5 | 30 x 3,0 |

## Loads, spacing and edge distance BA A4 approved sizes M8 - M16

| 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] | $S_{min}$ [mm] | $S_{cr}$ [mm] | $C_{min}$ [mm] | $C_{cr}$ [mm] | $h_{min}$ [mm] |
| BA A4 8 | 3,6 | 6,3 | 12,6 | 50 | 135 | 50 | 68 | 100 |
| BA A4 10 | 6,3 | 9,7 | 25,7 | 55 | 180 | 50 | 90 | 120 |
| BA A4 12 | 7,9 | 14,3 | 45,1 | 60 | 210 | 55 | 105 | 140 |
| BA A4 16 | 16,7 | 26,9 | 114,3 | 70 | 255 | 85 | 128 | 170 |

[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. 28%.

[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.