

FAZ II Classic.
The cost-efficient fixing
for high performance
requirements in
cracked concrete.



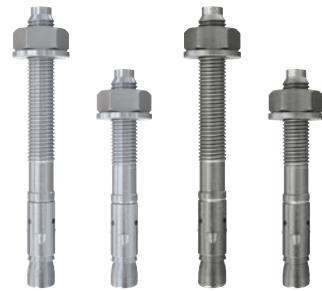
FAZ II Classic.

For high performance requirements.

The distinctive edge holds the expansion clip in position even with reinforcement hits, thus ensuring **safe installation**.



The interaction of cone and expansion clip significantly increases load-bearing capacity and makes **minimum edge distance and axial spacing possible**.



Assortment

The FAZ II Classic is available in galvanised and stainless steel (R) as well as in a short version (K).

Approvals



ETA-23/0162 of 2023/03/14 for cracked concrete and non cracked concrete



Fire resistance classification R120
Anchor available in version 1.4401

Functioning

- The FAZ II Classic is suitable for pre- and push-through mounting and also ideal for distance mounting.
- The shallow drill hole depth of the K version enables even faster installation and reduces the number of reinforcement hits.
- The ETA (assessment) also covers the use of hollow drills and diamond core bits.

Building materials

Suitable for building materials, such as



Cracked concrete



Uncracked concrete



Available software

For an easy and fast usage the anchor can be calculated with its load data in the software FiXperience.

Download-Link: www.fischer-international.com/en/service/planning-aids/fixperience

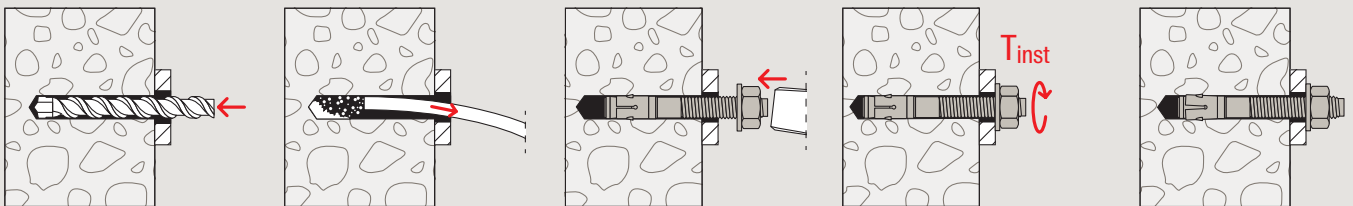
Advantages, installation and applications.

Your advantages at a glance

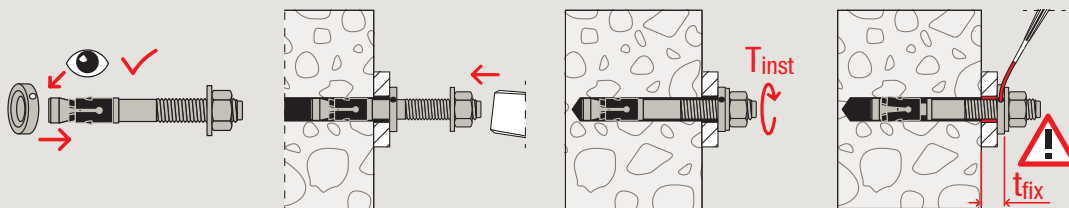
- The ETA approval Option 1 and fire resistance approval R120 in cracked and non-cracked concrete ensure a high quality standard and enable all safety-relevant applications.
- The full range M8-M16 in galvanised and stainless steel allows a wide field of indoor and outdoor applications.
- Thanks to the seismic approval (C1 and C2), the anchors can also be used safely in earthquake zones.
- The short version is particularly suitable for avoiding reinforcement hits due to the low anchoring depth.
- Quick and easy installation is possible with the help of the FA-ST II setting tool.
- The two possible anchorage depths offer more flexibility in the application.

Installation

Installation FAZ II Classic push-through installation



Installation FAZ II Classic Seismic



Application



Facade substructure



High-bay warehouse

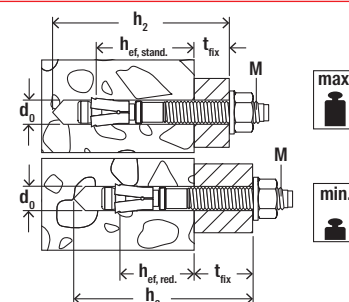


Cable trays



Stair railings

Assortment



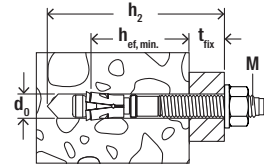
Bolt anchor FAZ II Classic



FAZ II Classic

| Item | Galvani- sized steel | Stainless steel | Seismic- Approval | Drill diameter | Min. drill hole depth for through fixings | Max. usable length $h_{ef,stand.}/h_{ef,min.}$ | Anchor length | Thread | Installation torque | Width across nut | Sales unit |
|----------------------|-------------------------|--------------------|----------------------|-------------------|--|--|------------------|-----------|------------------------|---------------------|------------|
| | Item No. gvz | Item No. R | | | | | | | | | |
| FAZ II Classic 8/10 | 570415 | – | C1 | 8 | 68 | 10 / 20 | 77 | M8 x 38 | 20 | 13 | 50 |
| FAZ II Classic 8/10 | – | 570449 | C1 | 8 | 68 | 10 / 20 | 75 | M8 x 37 | 20 | 13 | 50 |
| FAZ II Classic 8/30 | 570416 | – | C1 | 8 | 88 | 30 / 40 | 97 | M8 x 58 | 20 | 13 | 50 |
| FAZ II Classic 8/30 | – | 570450 | C1 | 8 | 88 | 30 / 40 | 95 | M8 x 57 | 20 | 13 | 50 |
| FAZ II Classic 8/50 | 570418 | – | C1 | 8 | 108 | 50 / 60 | 117 | M8 x 78 | 20 | 13 | 50 |
| FAZ II Classic 8/50 | – | 570451 | C1 | 8 | 108 | 50 / 60 | 115 | M8 x 77 | 20 | 13 | 50 |
| FAZ II Classic 8/100 | 570419 | – | C1 | 8 | 158 | 100 / 110 | 167 | M8 x 128 | 20 | 13 | 25 |
| FAZ II Classic 8/100 | – | 570452 | C1 | 8 | 158 | 100 / 110 | 165 | M8 x 127 | 20 | 13 | 20 |
| FAZ II Classic 10/10 | 570422 | – | C1 / C2 | 10 | 85 | 10 / 30 | 97 | M10 x 53 | 45 | 17 | 50 |
| FAZ II Classic 10/10 | – | 570455 | C1 / C2 | 10 | 85 | 10 / 30 | 95 | M10 x 52 | 45 | 17 | 50 |
| FAZ II Classic 10/20 | 570423 | – | C1 / C2 | 10 | 95 | 20 / 40 | 107 | M10 x 63 | 45 | 17 | 25 |
| FAZ II Classic 10/20 | – | 570456 | C1 / C2 | 10 | 95 | 20 / 40 | 105 | M10 x 62 | 45 | 17 | 50 |
| FAZ II Classic 10/30 | 570424 | – | C1 / C2 | 10 | 105 | 30 / 50 | 117 | M10 x 73 | 45 | 17 | 25 |
| FAZ II Classic 10/30 | – | 570457 | C1 / C2 | 10 | 105 | 30 / 50 | 115 | M10 x 72 | 45 | 17 | 50 |
| FAZ II Classic 10/50 | 570425 | – | C1 / C2 | 10 | 125 | 50 / 70 | 137 | M10 x 93 | 45 | 17 | 20 |
| FAZ II Classic 10/50 | – | 570462 | C1 / C2 | 10 | 125 | 50 / 70 | 135 | M10 x 92 | 45 | 17 | 20 |
| FAZ II Classic 10/70 | – | 570463 | C1 / C2 | 10 | 145 | 70 / 90 | 155 | M10 x 112 | 45 | 17 | 20 |
| FAZ II Classic 10/80 | 570430 | – | C1 / C2 | 10 | 155 | 80 / 100 | 167 | M10 x 123 | 45 | 17 | 20 |
| FAZ II Classic 12/10 | 570433 | – | C1 / C2 | 12 | 99 | 10 / 30 | 112 | M12 x 61 | 60 | 19 | 20 |
| FAZ II Classic 12/10 | – | 570475 | C1 / C2 | 12 | 99 | 10 / 30 | 109 | M12 x 59 | 60 | 19 | 20 |
| FAZ II Classic 12/20 | 570438 | – | C1 / C2 | 12 | 109 | 20 / 40 | 122 | M12 x 71 | 60 | 19 | 20 |
| FAZ II Classic 12/20 | – | 570485 | C1 / C2 | 12 | 109 | 20 / 40 | 119 | M12 x 69 | 60 | 19 | 20 |
| FAZ II Classic 12/30 | 570439 | – | C1 / C2 | 12 | 119 | 30 / 50 | 132 | M12 x 81 | 60 | 19 | 20 |
| FAZ II Classic 12/30 | – | 570486 | C1 / C2 | 12 | 119 | 30 / 50 | 129 | M12 x 79 | 60 | 19 | 20 |
| FAZ II Classic 12/50 | 570440 | – | C1 / C2 | 12 | 139 | 50 / 70 | 152 | M12 x 101 | 60 | 19 | 20 |
| FAZ II Classic 12/50 | – | 570487 | C1 / C2 | 12 | 139 | 50 / 70 | 149 | M12 x 99 | 60 | 19 | 20 |
| FAZ II Classic 16/5 | 570441 | – | C1 / C2 | 16 | 113 | 5 / 25 | 130 | M16 x 64 | 110 | 24 | 10 |
| FAZ II Classic 16/5 | – | 570488 | C1 / C2 | 16 | 113 | 5 / 25 | 127 | M16 x 62 | 110 | 24 | 10 |
| FAZ II Classic 16/25 | 570446 | – | C1 / C2 | 16 | 133 | 25 / 45 | 150 | M16 x 84 | 110 | 24 | 10 |
| FAZ II Classic 16/25 | – | 570489 | C1 / C2 | 16 | 133 | 25 / 45 | 147 | M16 x 82 | 110 | 24 | 10 |

Assortment



Bolt anchor FAZ II Classic K



FAZ II Classic K

| Item | Galvanised steel | Stainless steel | Seismic-Approval | Drill diameter d_0 [mm] | Min. drill hole depth for through fixings h_2 [mm] | Max. fixture thickness t_{fix} [mm] | Anchor length l [mm] | Thread $\emptyset \times \text{length}$ [mm] | Installation torque T_{inst} [Nm] | Width across nut SW [mm] | Sales unit [pcs] |
|------------------------|------------------|-----------------|------------------|---------------------------------|--|---|------------------------------|--|---|--------------------------------|---------------------|
| | Item No. gvz | Item No. R | | | | | | | | | |
| FAZ II Classic 8/5 K | 570414 | - | - | 8 | 53 | 5 | 62 | M8 x 23 | 20 | 13 | 50 |
| FAZ II Classic 8/5 K | - | 570447 | - | 8 | 53 | 5 | 60 | M8 x 22 | 20 | 13 | 50 |
| FAZ II Classic 10/10 K | 570420 | - | C1 / C2 | 10 | 65 | 10 | 77 | M10 x 33 | 45 | 17 | 50 |
| FAZ II Classic 10/10 K | - | 570453 | C1 / C2 | 10 | 65 | 10 | 75 | M10 x 32 | 45 | 17 | 50 |
| FAZ II Classic 10/20 K | 570421 | - | C1 / C2 | 10 | 75 | 20 | 87 | M10 x 43 | 45 | 17 | 25 |
| FAZ II Classic 10/20 K | - | 570454 | C1 / C2 | 10 | 75 | 20 | 85 | M10 x 42 | 45 | 17 | 50 |
| FAZ II Classic 12/10 K | 570431 | - | C1 / C2 | 12 | 79 | 10 | 92 | M12 x 41 | 60 | 19 | 20 |
| FAZ II Classic 12/10 K | - | 570464 | C1 / C2 | 12 | 79 | 10 | 89 | M12 x 39 | 60 | 19 | 20 |
| FAZ II Classic 12/20 K | 570432 | - | C1 / C2 | 12 | 89 | 20 | 102 | M12 x 51 | 60 | 19 | 20 |
| FAZ II Classic 12/20 K | - | 570472 | C1 / C2 | 12 | 89 | 20 | 99 | M12 x 49 | 60 | 19 | 20 |

Accessories

Accessories



Filling disc FFD



FABS



FA-ST II



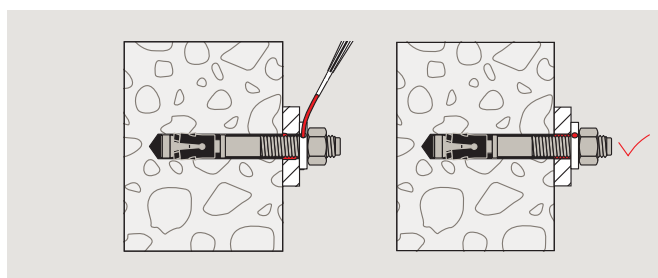
FA-ST II Set

| Item | Item No. | Internal diameter D [mm] | External- ϕ d [mm] | Match | Contents | Sales unit [pcs] |
|-------------------|----------|--------------------------------|-------------------------------|---------------------------------------|--------------------------------------|---------------------|
| FFD 26 x 12 x 6 | 538458 | 12 | 26 | FAZ II Plus / FAZ II Classic M8/M10 | | 4 |
| FFD 26 x 12 x 6 R | 541986 | 12 | 26 | FAZ II Plus / FAZ II Classic M8/M10 R | | 4 |
| FFD 30 x 14 x 6 | 538459 | 14 | 30 | FAZ II Plus / FAZ II Classic M12 | | 4 |
| FFD 30 x 14 x 6 R | 541987 | 14 | 30 | FAZ II Plus / FAZ II Classic M12 R | | 4 |
| FFD 38 x 19 x 7 | 538460 | 19 | 38 | FAZ II Plus / FAZ II Classic M16 | | 4 |
| FFD 40 x 19 x 7 R | 541988 | 19 | 40 | FAZ II Plus / FAZ II Classic M16 R | | 4 |
| FABS | 077937 | - | - | Bolt anchor M6 - M12 | | 1 |
| FA-ST II M10 | 558790 | - | - | Bolt anchor M10 | SDS Adapter; Socket SW17 | 1 |
| FA-ST II M12 | 558791 | - | - | Bolt anchor M12 | SDS Adapter; Socket SW19 | 1 |
| FA-ST II M16 | 558792 | - | - | Bolt anchor M16 | SDS Adapter; Socket SW24 | 1 |
| FA-ST II Set | 558789 | - | - | Bolt anchor M10 - M16 | SDS Adapter; Socket SW17, SW19, SW24 | 1 |

fischer filling disc FFD

For use under seismic loads C2 or optional to minimise the hole clearance:

The annular gap between bolt and attachment may be filled with mortar compressive strength $\geq 50 \text{ N/mm}^2$ e.g. FIS V Plus, FIS EM Plus, FIS HB and FIS SB. The backfilling disc would be used in addition to the standard washer to be used. The thickness of the backfill disc must be taken into account for t_{fix} . The counterbore in the filling disk must point in the direction of the attachment part.



Loads

Bolt anchor FAZ II Classic

Permissible loads of a single anchor¹⁾ in normal concrete of strength class C20/25.
For the design the complete current assessment ETA-23/0162 of 14.03.2023 has to be considered.

| Type | Material/ surface ²⁾ | Effective anchorage depth h_{ef} [mm] | Minimum member thickness h_{min} [mm] | Instal- lation torque T_{inst} [Nm] | Cracked concrete | | | | Non-cracked concrete | | | |
|-------------------|------------------------------------|---|---|---|--|-------------------------|------------------------|------------------------|--|-------------------------|------------------------|------------------------|
| | | | | | Permissible tension (N_{perm}) and shear loads (V_{perm}); minimum spacing (s_{min}) and edge distances (c_{min}) with reduced loads | | | | Permissible tension (N_{perm}) and shear loads (V_{perm}); minimum spacing (s_{min}) and edge distances (c_{min}) with reduced loads | | | |
| | | | | | $N_{perm}^{3)}$ [kN] | $V_{perm}^{3)}$ [kN] | $s_{min}^{3)}$ [mm] | $c_{min}^{3)}$ [mm] | $N_{perm}^{3)}$ [kN] | $V_{perm}^{3)}$ [kN] | $s_{min}^{3)}$ [mm] | $c_{min}^{3)}$ [mm] |
| FAZ II Classic 8 | gvz | 35 | 80 | 20 | 2.6 | 8.1 | 35 | 40 | 4.9 | 8.1 | 40 | 40 |
| | gvz | 90 | 140 | 20 | 3.8 | 8.1 | 35 | 40 | 6.7 | 8.1 | 40 | 40 |
| | R | 35 | 80 | 20 | 2.6 | 8.1 | 35 | 40 | 4.9 | 8.1 | 40 | 40 |
| | R | 90 | 140 | 20 | 3.8 | 8.1 | 35 | 40 | 6.7 | 8.1 | 40 | 40 |
| FAZ II Classic 10 | gvz | 40 | 80 | 45 | 4.1 | 10.8 | 40 | 45 | 5.9 | 13.1 | 40 | 45 |
| | gvz | 100 | 150 | 45 | 6.2 | 13.1 | 40 | 45 | 9.5 | 13.1 | 40 | 45 |
| | R | 40 | 80 | 45 | 4.1 | 10.8 | 40 | 45 | 5.9 | 13.1 | 40 | 45 |
| | R | 100 | 150 | 45 | 6.2 | 13.1 | 40 | 45 | 9.5 | 13.1 | 40 | 45 |
| FAZ II Classic 12 | gvz | 50 | 80 | 60 | 5.8 | 18.0 | 50 | 55 | 8.3 | 18.5 | 50 | 55 |
| | gvz | 125 | 190 | 60 | 9.5 | 18.5 | 50 | 55 | 10.5 | 18.5 | 50 | 55 |
| | R | 50 | 80 | 60 | 5.8 | 18.0 | 50 | 55 | 8.3 | 18.5 | 50 | 55 |
| | R | 125 | 190 | 60 | 9.5 | 18.5 | 50 | 55 | 10.5 | 18.5 | 50 | 55 |
| FAZ II Classic 16 | gvz | 65 | 100 | 110 | 8.6 | 27.5 | 65 | 65 | 12.3 | 34.2 | 65 | 65 |
| | gvz | 160 | 240 | 110 | 12.9 | 34.2 | 65 | 65 | 18.4 | 34.2 | 65 | 65 |
| | R | 65 | 100 | 110 | 8.6 | 27.5 | 65 | 65 | 12.3 | 34.2 | 65 | 65 |
| | R | 160 | 240 | 110 | 12.9 | 34.2 | 65 | 65 | 18.4 | 34.2 | 65 | 65 |

¹⁾ Design according to EN 1992-4:2018 (for static resp. quasi-static loads). The partial safety factors for material resistance as regulated in the ETA as well as a partial safety factor for load actions of $\gamma_L = 1.4$ are considered. As a single anchor counts e.g. an anchor with a spacing $s \geq 3 \times h_{ef}$ and an edge distance $c \geq 1.5 \times h_{ef}$. For anchorage depths of less than 40 mm, the use of a single anchor is only permitted for multiple use of redundant non-structural applications. Accurate data see ETA.

²⁾ Further steel grades, versions and technical data see ETA, e.g. for dry internal conditions, galvanised steel (gvz); for damp interiors and for outdoor use, stainless steel (R).

³⁾ In the case of combinations of tension and shear loads, bending moments with reduced or minimum spacing and edge distances (anchor groups), the design must be carried out in accordance with the provisions of the complete ETA and the provisions of the EN 1992-4:2018. We recommend using our anchor design software C-FIX.

Dealer:

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fischer stands for

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