

Anchoring technology

Special products for mechanical and chemical anchoring into concrete and masonry





Metal and chemical anchors

Special products for mechanical and chemical anchoring installation

The field of anchoring technology is characterised in particular by its versatility. From the temporary fastening of facade scaffolding and cladding to the anchoring of structural elements such as railings, steel stairs, facade elements, awnings, supports, beams, brackets, grids, etc., to the assembly of heavy machinery and cranes or building equipment such as cable racks and routes, ventilation systems, pipelines or sprinkler systems - everything is possible with the right anchoring element. The comprehensive EJOT product range offers the right solution for every challenge. The high quality of the products ensures safety and high load-bearing capacity values - a factor that needs a lot of attention, especially in the area of anchoring.

The large EJOT product range includes solutions for a wide variety of substrates – whether uncracked and cracked concrete, solid, perforated or natural stone, aerated concrete, expanded clay lightweight concrete, building panels, wood and steel. The broad portfolio includes various types of anchors and screws, as well as chemical and thus expansion-free products for heavy-duty fastening in concrete and masonry. We have the right solution for all of your anchoring problems - so that your projects are sure to be a success!





Base materials

The most common materials within the construction industry are the following:



Concrete

The most frequently occurring construction material. Concrete is primarily used in industrial buildings because of its high durability. For house construction, concrete is used in foundations, supporting structures, shafts and stairways. All expanding fasteners, undercutting anchors and also chemical anchors are suitable for use in concrete. The restrictions for use are spacing and edge distance.



Solid brick

A very common building material. Brick is usually used for small house construction. In industrial construction, brick is mostly used for internal walls and faced brickwork.

All expanding fasteners and undercutting anchors are suitable for use in brick. The restrictions are spacing, edge distance and the size of the fastener.



Perforated brick

A very common building material. Perforated brick is usually used as masonry on internal walls and facades and in constructions where thermal insulation of some type is required. Suitable fixings for perforated brick are nylon plugs with long expansion zones, concrete screws as well as chemical anchors with a perforated sleeve or net stocking. The restrictions are the same as for solid brick.



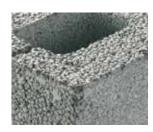
Natural stone

Used in construction work as a facade material and floor material. Most expanding fasteners and chemical anchors can be used in natural stone. The restrictions for use are spacing and edge distance. Natural stone cracks easily because of its inelasticity and brittleness.



Aerated concrete

Is a light material and therefore relatively common in different types of buildings. Autoclaved aerated concrete is primarily used in partition walls and intermediate walls but can also be used for load-bearing constructions. Aerated concrete screws, aerated concrete anchors, nylon anchors and chemical anchors are suitable for use in this material.



Light expanded clay aggregate

Is a common material for the construction of small houses. Light expanded clay aggregate, LECA, is usually used in basements and support walls. Suitable fixings in this material are nylon plugs with long expansion zones. Chemical anchors can also be used with the restriction that the hole must be drilled according to the special instructions.



Construction panels

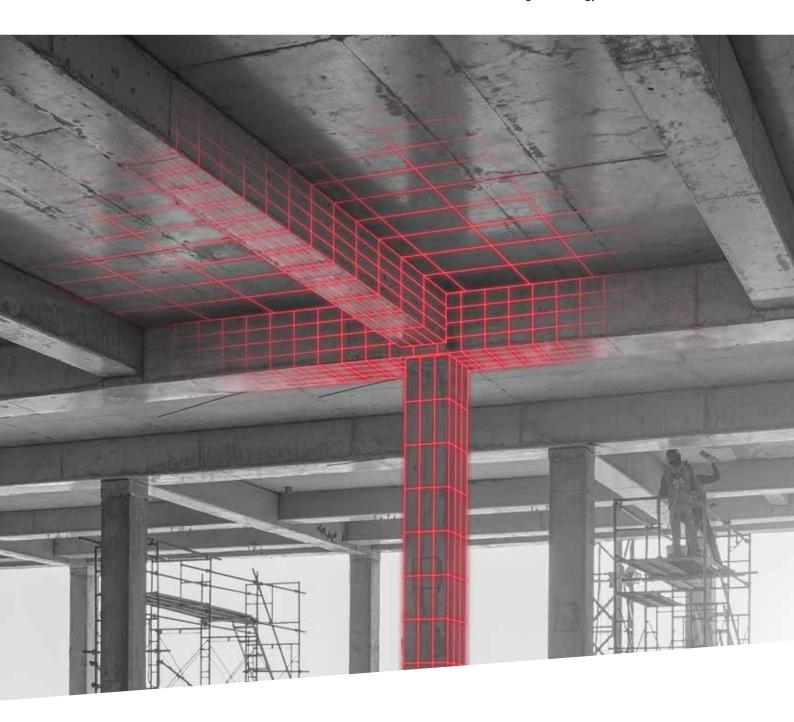
Thin wall construction panels are very common and often used as cladding. The boards can be plaster or plaster fibre panels, wood fibre panels, veneer panels, plywood panels or different types of decorative interior panels. The durability and characteristics of the panels vary greatly. The durability of the panel and the fixing's mounting points are also affected by the wood or steel constructions, such as joists, that lie behind them.



Wood and steel

Wood and steel are common materials in joists, rafters, framing, floors, decking and other interior details. Requirements for strength and durability mean that the choice of fastener is important from both an environmental and safety perspective.





Concrete

Popular building material with positive properties

Concrete is used amongst others for building bridges, ceilings and floors, factory buildings, prefabricated elements, cellars, foundations and staircases. Concrete is extremely robust and durable. Additionally, a high raw density ensures a very good sound insulation.

Concrete can be used in a variety of applications. In order to mount components reliably and durably to concrete substrates, the choice of the adequate fastening material is just as decisive as the knowledge about the properties of the substrate.

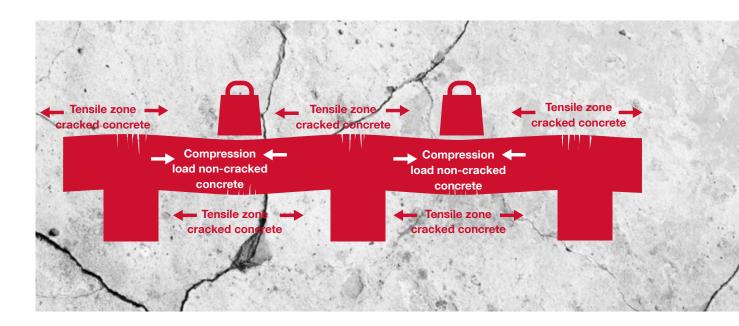


Types of concrete

Cracked and Non-cracked concrete

A concrete slab resting on support pillars creates micro cracks from the tensile stresses caused by its own weight and loads. In order to take up these tensile stresses, the slab must be reinforced so that the durability of the construction is not compromised. Embedments in cracked concrete must be made with fasteners approved for use in cracked concrete.

The existing micro cracks limit the load-carrying capacity of the fixing. Therefore, the loading values given in the product information must be considered. If the fastener is suitable for cracked concrete, this is always stated in the product information.



Installation into concrete and masonry

The fields of application for metal and chemical anchoring technology are versatile, and the respective requirements for the fastening solutions are just as different. The broad product portfolio includes solutions for mechanical installation in non-cracked and cracked concrete as well as chemical and thus expansion pressure-free products for heavy-duty fastening in concrete and masonry.

Through bolts

EJOT through bolts are the economic solution for the installation of metal and wooden constructions into concrete (facade, ceiling and floor). They meet high requirements for load-bearing capacity and safety.

The broad range of applications and the scope of dimensions make these through bolts a cost-effective all-rounder.

LIEBIG® heavy-duty anchors

The long-established brand for heavy assembly technology is part of the EJOT Group which caters for selected market segments of the building industry with special fastening and anchoring products. Every LIEBIG product has its special field of application. For higher demands, the LIEBIG® Superplus and the LIEBIG® Safety Anchor are used.

Concrete screws

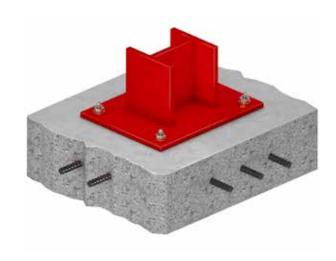
The concrete screws JC2 and JC2 Plus can be installed quickly and easily. Neither additional tools nor



additional work step are required. They can take high loads even with small spacings and edge distances. They are removable and thus well suited for temporary fastenings.

Chemical anchors

EJOT injection mortar Multifix USF is the ideal solution for the embedment of anchor rods in indoor and outdoor areas. Especially when high demands are placed on load-bearing capacity and safety. EJOT injection mortar allows small spacings and edge distances. Also available as Multifix USF Winter for low outdoor temperatures.



Nylon anchors

Nylon anchors are equally suitable for anchoring in concrete and masonry. Screw anchors are particularly popular in the area of rear-ventilated facades.

Classically used for multiple fastening, EJOT SDF nylon anchors with diameter 10 mm are also approved for single fastening in concrete.

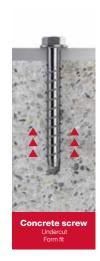
Functional principles for mechanical and chemical anchoring installation







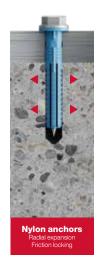


















EJOT ANCHOR FIX®

Anchor dimensioning made easy

With the brand new ANCHOR FIX®, the free dimensioning software for anchoring, EJOT is offering a very helpful tool for the static dimensioning of anchoring in your projects. Specially developed for structural engineers, specifiers, engineers and technicians, the software can also be used as a handy guide in the pre-planning phase.

With EJOT ANCHOR FIX®, the limits of the load-bearing capacity of EJOT anchoring products such as through bolts and concrete screws in concrete substrates can be determined. Another new feature is the possibility of dimensioning nylon and chemical anchors in concrete and masonry.

EJOT CROSSFIX® has also now been fully integrated. In addition, with the new software version, a design for fire and seismic load cases is possible.

ANCHOR FIX® still allows you to directly input data from site extraction tests and their evaluation in accordance with regulations.

EJOT Anchor Fix can be downloaded here: www.ejot.com/software-anchorfix

The targeted selection of the calculation methods for single vs. multiple fastening of various products offers the user application safety. also with Planning reliability on the part of the user is achieved by the output of individual quantity requirements for chemical anchors and this also with variable installation depths. All additional documents such as approvals and product data sheets can be easily accessed, directly via the software.

Try it out - for free...





Product overview

| Through bolts | | Anchor rods (steel) | | Accessories | |
|-----------------------------|-----|----------------------------------|------------|--------------------------------------|-----|
| Steel | | AST M10xL V | 64 | For ASCM 18 QM AS | |
| BA-V-PLUS | 14 | Anchor rods (A4 stainless steel) |) | Bit holder | 91 |
| BA-C NC | 20 | AST M10xL E | 64 | Socket adapter | 91 |
| Steel, hot dip galvanized | 20 | Mesh sleeves (plastics) | 0. | Cooner adapto. | 0. |
| BA-F-PLUS | 16 | Mesh sleeve USF 16xL | 65 | Tools | |
| Stainless steel A4 / HCR | 10 | WIGGIT GICCVC GGI TOXE | 00 | Universal drill SDS plus® | |
| BA-E-PLUS | 10 | Nylon anchors | | Universal drill SDS-plus | 97 |
| | 18 | Plastics/steel | | Hammer drill SDS plus® | 91 |
| BA-E-PLUS HCR | 18 | SDF-S-8VxL-V | 68 | 4-edge SDS-plus | 98 |
| Comercto corouro | | SDF-KB-8VxL-V | 69 | Hammer drill | 90 |
| Concrete screws | | SDF-ND-0VXL-V SDF-S-10VXL-V | | A cone | 99 |
| Steel | | | 70 72 | | 99 |
| JC2-FR-6xL | 26 | SDF-KB-10VxL-V | | A cone with flange | 99 |
| JC2-IT-6xL | 27 | SDF-S-10HxL-V | 74 | Bits | 404 |
| JC2-ST-6xL | 28 | SDF-KB-10HxL-V | 76 | Cross recess | 101 |
| JC2-KB-6xL | 30 | SDF-S-14AxL-V | 78 | Hexalobular TX | 102 |
| JC2-KB-PLUS-8xL | 32 | SDF-KB-14AxL-V | 80 | Socket wrench insert | |
| JC2-KB-PLUS-10xL | 32 | SDP-S-10GxL-V | 81 | Hexagon clamping socket | 103 |
| JC2-KB-PLUS-14xL | 32 | SDP-KB-10GxL-V | 82 | Socket wrenches | |
| A4 stainless steel | | Plastics/A4 stainless steel | | Hexagon socket wrench | 104 |
| JC6-FR-6xL | 35 | SDF-KB-10VxL-E | 72 | Torque wrenches | |
| JC6-KB-6xL | 36 | SDF-S-10HxL-E | 74 | 1/2" 10-50 Nm | 105 |
| JC6-KB-8xL | 36 | SDF-KB-10HxL-E | 76 | 1/2" 60-300 Nm | 105 |
| JC6-KB-10xL | 36 | SDP-S-10GxL-E | 81 | Bit holders | |
| JC6-ST-6xL | 38 | SDP-KB-10GxL-E | 82 | BT-1/4"-1/4"xL | 106 |
| | | | | Installation tools | |
| LIEBIG® safety bolts | | Double expansion wall | | Installation tools for through bolts | 107 |
| Steel | | anchors | | Installation tool 2.0 for drop-in | |
| S | 44 | Plastics/A4 stainless steel | | anchors | 108 |
| В | 46 | VSD-2G-8UxL-E | 83 | Manual setting tool 2.0 for drop-in | |
| SK | 48 | | | anchor | 109 |
| | | Nail anchors | | Applicator guns | |
| LIEBIG® SUPERPLUS | | Plastics/steel | | Side by Side AP 345 ml | 110 |
| Self-undercutting anchors | 5 | ND-K V | 84 | AP 420 ml | 110 |
| Steel | | ND-K | 85 | AP 585 ml | 111 |
| BLS | 49 | | | Anti-dust drill bits | |
| A4 stainless steel | .0 | Drop-in anchors | | Duster Expert SDS-plus | 112 |
| BLS A4 | 50 | Steel | | Other | |
| DEC A4 | 00 | LAL+ | 87 | Cleaning brushes RBT metal | 113 |
| LIEBIG® SUPERPLUS | | | ٥. | Blow-out pumps | 113 |
| Lightning protection anch | ore | Ceiling nails | | Spray oil | 114 |
| A4 stainless steel | UIS | Steel | | Corrosion protection spray | 114 |
| BLS M8-14 A4 | 51 | E-CN 6xL | 88 | Tool belt | 115 |
| BES 1010-14 A4 | 31 | E ON OXE | 00 | Tool Boil | 110 |
| LIEBIG® SUPERPLUS | | Machinery | | | |
| Step iron anchors | | Cordless screwdrivers | | | |
| A4 stainless steel | | ASCM 18-4 QW AS | 91 | | |
| BLS M8-14 SD A4 | 52 | ASCM 18-4 QM AS | 92 | | |
| BLS M8-14 SA A4 | 52 | Cordless impact screwdrivers | 02 | | |
| DES 1010-14 SA A4 | 52 | ASCD 18-300 W2 AS | 93 | | |
| Chemical installation | | Cordless hammer drills | 00 | | |
| Injection system | | ABH 18-26 AS | 94 | | |
| - | 56 | Battery packs and chargers | υ Τ | | |
| Mortar cartridge PSF | 56 | For ASCM 18-4 QM AS | | | |
| Mortar cartridge USF | 58 | For ASCD 18-300 W2 AS | | | |
| Mortar cartridge USF winter | 60 | For ABH 18-26 AS | | | |
| Mortar cartridge SE 1000 | 62 | | O.F. | | |
| Mixing nozzle USF | 59 | Battery Starter Set 18V / 6.0 Ah | 95 05 | | |
| Mixer extension 500 ml | 59 | Rapid charger ALG 80 | 95 95 | | |
| | | DATIETY DATE LOV / PULL AD | | | |



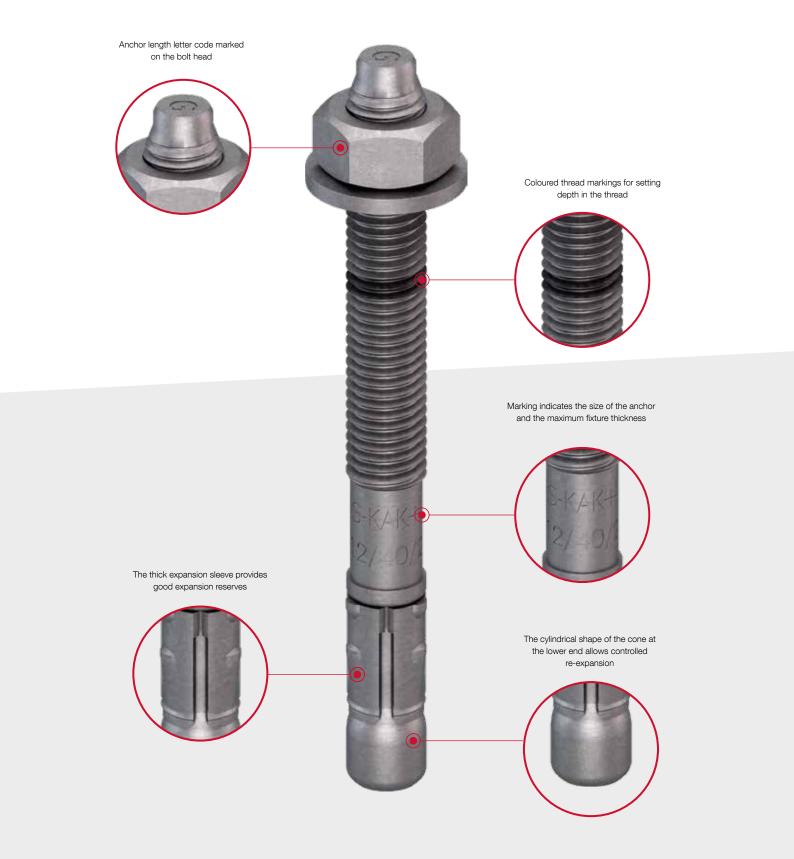


Through bolts



Through bolt BA-E Plus

These are the features



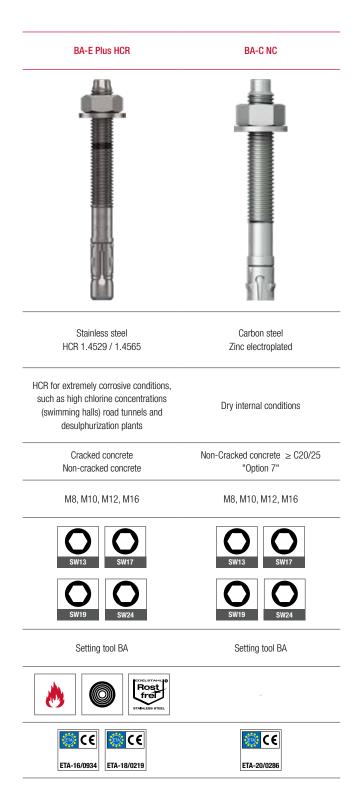


Through Bolts product overview

| | BA-V Plus | BA-F Plus | BA-E Plus | | |
|--------------------------|---|---|---|--|--|
| Anchor | | | | | |
| Material | Carbon steel Zinc electroplated | Carbon steel Hot dip galvanized | Stainless steel A4 | | |
| Application range | Dry indoor conditions, indoor with temporary condensation | Humid indoor use, outdoor inland rural areas only in not safety relevant applications | For indoor, outdoor, industrial use and maritime climate. | | |
| Base materials | Cracked concrete Non-cracked concrete | Cracked concrete Non-cracked concrete | Cracked concrete Non-cracked concrete | | |
| Thread size* | M8, M10, M12, M16 | M8, M10, M12, M16 | M8, M10, M12, M16 | | |
| drive | SW13 SW17 SW19 SW24 | SW13 SW17 SW19 SW24 | SW13 SW17 SW19 SW24 | | |
| Tools | Setting tool BA | Setting tool BA | Setting tool BA | | |
| Technical specifications | | | | | |
| Approvals | ETA-16/0934 ETA-18/0219 | ETA-16/0934 ETA-18/0219 | ETA-16/0934 ETA-18/0219 | | |

Note: Diameter M6 for multiple use for non-structural applications in concrete available on demand. BA-E Plus HCR available on request







Through bolt BA-V-PLUS



| Cross references | page |
|---------------------------------|------|
| Cleaning brush | 104 |
| Blow-out pump | 105 |
| Hammer drill SDS plus | 93 |
| Installation tool through bolts | 100 |
| Cordless hammer drill AS | 94 |
| Torque wrench | 98 |
| Socket wrench | 97 |
| | |

Application range

- > For embedment in cracked and non-cracked concrete ≥ C20/25
- > Dry internal conditions
- > For embedment of medium-heavy to heavy fixings such as pillars, metal structures and wooden structures
- > For pre-, push-through and distance installations

Properties

- > Zinc-plated steel
- > Approval for concrete, option 1
- > Fire resistance classes F30, F60, F90, F120

Notice

Characteristic values apply to the compression strength of C20/25 concrete. Design load of an anchor for centric tension in cracked concrete.

The load values in these tables are based on concrete C20/25, $f_{ck,cube} = 25 \text{ N/mm}^2$; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material

Applications



Technical specifications











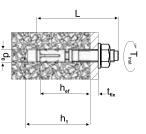


Certifications









Installation process





| Anchor type | Effective embedment | Permitted load F _{zul} [kN] | Centre distance [mm] | | | Edge d [mm] | istance | | Permitted Bending — moment | Tightening torque |
|--------------|-------------------------------|--|-------------------------|------------------|-----|--------------------|------------------|-----|----------------------------|---------------------------|
| | depth h _{ef} [mm] | | S _{cr, N} | S _{min} | С | C _{cr, N} | C _{min} | S | M _{zul} [Nm] | T _{inst} [Nm] |
| BA-V Plus 8 | 35 | 2.4 | 106 | 55 | 75 | 53 | 40 | 140 | 15.0 | 15 |
| | 48 | 4.0 | 144 | 35 | 50 | 72 | 40 | 55 | 15.0 | 15 |
| BA-V Plus 10 | 40 | 4.1 | 120 | 50 | 95 | 60 | 50 | 190 | 28.6 | 30 |
| BA-V PIUS 10 | 60 | 5.7 | 180 | 40 | 60 | 90 | 50 | 100 | 28.6 | 30 |
| DA V Dive 40 | 50 | 5.8 | 150 | 55 | 110 | 75 | 60 | 215 | 49.1 | 60 |
| BA-V Plus 12 | 70 | 7.6 | 210 | 60 | 70 | 105 | 55 | 110 | 49.1 | 60 |
| BA-V Plus 16 | 85 | 11.4 | 254 | 65 | 95 | 127 | 65 | 150 | 122.7 | 110 |
| | | | | | | | | | | |





| Order description | d _o [mm] | L [mm] | t _{fix} ≤ [mm] | h₁≥ [mm] | h _{ef} ≥ [mm] | SW [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|---------------------|------------------------|-----------|----------------------------|-------------|---------------------------|------------|----------------|--------------------|----------------|---------------|
| BA-V-PLUS-8/5/- | 8 | 57 | 5 | 47 | 35 | 13 | 50 | | 9650001308 | 4061245090719 |
| BA-V-PLUS-8/23/10 | 8 | 75 | 23/10 | 47/60 | 35/48 | 13 | 50 | | 9650001310 | 4061245037004 |
| BA-V-PLUS-8/43/30 | 8 | 95 | 43/30 | 47/60 | 35/48 | 13 | 50 | | 9650001312 | 4061245037011 |
| BA-V-PLUS-8/63/50 | 8 | 115 | 63/50 | 47/60 | 35/48 | 13 | 40 | | 9650001314 | 4061245037028 |
| BA-V-PLUS-8/98/85 | 8 | 150 | 98/85 | 47/60 | 35/48 | 13 | 40 | | 9650001316 | 4061245037035 |
| BA-V-PLUS-10/10/- | 10 | 72 | 10 | 55 | 40 | 17 | 40 | | 9650001323 | 4061245037042 |
| BA-V-PLUS-10/30/10 | 10 | 92 | 30/10 | 55/75 | 40/60 | 17 | 40 | | 9650001325 | 4061245037059 |
| BA-V-PLUS-10/40/20 | 10 | 102 | 40/20 | 55/75 | 40/60 | 17 | 25 | | 9650001326 | 4061245037066 |
| BA-V-PLUS-10/50/30 | 10 | 112 | 50/30 | 55/75 | 40/60 | 17 | 25 | | 9650001327 | 4061245037073 |
| BA-V-PLUS-10/70/50 | 10 | 132 | 70/50 | 55/75 | 40/60 | 17 | 25 | | 9650001329 | 4061245037080 |
| BA-V-PLUS-10/100/80 | 10 | 162 | 100/80 | 55/75 | 40/60 | 17 | 25 | | 9650001331 | 4061245037097 |
| BA-V-PLUS-12/10/- | 12 | 88 | 10 | 70 | 50 | 19 | 20 | | 9650001338 | 4061245037103 |
| BA-V-PLUS-12/25/5 | 12 | 103 | 25/5 | 70/90 | 50/70 | 19 | 20 | | 9650001340 | 4061245037110 |
| BA-V-PLUS-12/40/20 | 12 | 118 | 40/20 | 70/90 | 50/70 | 19 | 20 | | 9650001342 | 4061245037127 |
| BA-V-PLUS-12/50/30 | 12 | 128 | 50/30 | 70/90 | 50/70 | 19 | 20 | | 9650001343 | 4061245037134 |
| BA-V-PLUS-12/70/50 | 12 | 148 | 70/50 | 70/90 | 50/70 | 19 | 20 | | 9650001345 | 4061245037141 |
| BA-V-PLUS-12/85/65 | 12 | 163 | 85/65 | 70/90 | 50/70 | 19 | 20 | | 9650001346 | 4061245037158 |
| BA-V-PLUS-12/100/80 | 12 | 178 | 100/80 | 70/90 | 50/70 | 19 | 20 | | 9650001347 | 4061245037165 |
| BA-V-PLUS-16/5 | 16 | 123 | 5 | 110 | 85 | 24 | 10 | | 9650001357 | 4061245038919 |
| BA-V-PLUS-16/20 | 16 | 138 | 20 | 110 | 85 | 24 | 10 | | 9650001359 | 4061245038902 |
| BA-V-PLUS-16/50 | 16 | 168 | 50 | 110 | 85 | 24 | 10 | | 9650001362 | 4061245038926 |
| BA-V-PLUS-16/60 | 16 | 178 | 60 | 110 | 85 | 24 | 10 | | 9650001363 | 4061245038933 |



Through bolt BA-V-PLUS



Application range

- > For embedment in cracked and non-cracked concrete ≥ C20/25
- > Dry internal conditions
- > For embedment of medium-heavy to heavy fixings such as pillars, metal structures and wooden structures
- > For pre-, push-through and distance installations

Properties

- > Steel, hot dip galvanized
- > Approval for concrete, option 1
- > Fire resistance classes F30, F60, F90, F120
- > For increased corrosion protection

| Cross references | page |
|---------------------------------|------|
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Hammer drill SDS plus | 98 |
| Installation tool through bolts | 107 |
| Cordless hammer drill ABH | 94 |
| Torque wrench | 105 |
| Socket wrench | 104 |
| | |

Characteristic values apply to the compression strength of C20/25 concrete. Design load of an anchor for centric tension in cracked concrete.

The load values in these tables are based on concrete C20/25, $f_{ck,cube} = 25 \text{ N/mm}^2$; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material

Applications



Technical specifications









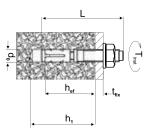


Certifications









Installation process





| Anchor type | Effective embedment | Permitted load F _{zul} [kN] | Centre distance [mm] | | | Edge distance [mm] | | | Permitted Bending — moment | Tightening torque |
|--------------|-------------------------------|--|-------------------------|------------------|-----|-----------------------|------------------|-----|----------------------------|---------------------------|
| | depth h _{ef} [mm] | | S _{cr, N} | S _{min} | С | C _{cr, N} | C _{min} | S | M _{zul} [Nm] | T _{inst} [Nm] |
| BA-F Plus 8 | 35 | 2.4 | 106 | 55 | 75 | 53 | 40 | 140 | 15.0 | 15 |
| | 48 | 4.0 | 144 | 35 | 50 | 72 | 40 | 55 | 15.0 | 15 |
| BA-F Plus 10 | 40 | 4.1 | 120 | 50 | 95 | 60 | 50 | 190 | 28.6 | 30 |
| | 60 | 5.7 | 180 | 40 | 60 | 90 | 50 | 100 | 28.6 | 30 |
| DA F Dive 40 | 50 | 5.8 | 150 | 55 | 110 | 75 | 60 | 215 | 49.1 | 60 |
| BA-F Plus 12 | 70 | 7.6 | 210 | 60 | 70 | 105 | 55 | 110 | 49.1 | 60 |
| BA-F Plus 16 | 85 | 11.4 | 254 | 65 | 95 | 127 | 65 | 150 | 122.7 | 110 |





| Order description | d _o [mm] | L [mm] | t _{fix} ≤ [mm] | h ₁ ≥ [mm] | h _{ef} ≥ [mm] | SW [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|---------------------|------------------------|-----------|----------------------------|-----------------------|---------------------------|------------|----------------|--------------------|----------------|---------------|
| BA-F-PLUS-8/5/- | 8 | 57 | 5 | 47 | 35 | 13 | 50 | | 9650003308 | 4061245090726 |
| BA-F-PLUS-8/23/10 | 8 | 75 | 23/10 | 47/60 | 35/48 | 13 | 50 | | 9650003310 | 4061245037172 |
| BA-F-PLUS-8/43/30 | 8 | 95 | 43/30 | 47/60 | 35/48 | 13 | 50 | | 9650003312 | 4061245037189 |
| BA-F-PLUS-8/63/50 | 8 | 115 | 63/50 | 47/60 | 35/48 | 13 | 40 | | 9650003314 | 4061245037196 |
| BA-F-PLUS-8/98/85 | 8 | 150 | 98/85 | 47/60 | 35/48 | 13 | 40 | | 9650003316 | 4061245037202 |
| BA-F-PLUS-10/10/- | 10 | 72 | 10 | 55 | 40 | 17 | 40 | | 9650003323 | 4061245037219 |
| BA-F-PLUS-10/30/10 | 10 | 92 | 30/10 | 55/75 | 40/60 | 17 | 40 | | 9650003325 | 4061245037226 |
| BA-F-PLUS-10/40/20 | 10 | 102 | 40/20 | 55/75 | 40/60 | 17 | 25 | | 9650003326 | 4061245037233 |
| BA-F-PLUS-10/50/30 | 10 | 112 | 50/30 | 55/75 | 40/60 | 17 | 25 | | 9650003327 | 4061245037240 |
| BA-F-PLUS-10/70/50 | 10 | 132 | 70/50 | 55/75 | 40/60 | 17 | 25 | | 9650003329 | 4061245037257 |
| BA-F-PLUS-10/100/80 | 10 | 162 | 100/80 | 55/75 | 40/60 | 17 | 25 | | 9650003331 | 4061245037264 |
| BA-F-PLUS-12/10/- | 12 | 88 | 10 | 70 | 50 | 19 | 20 | | 9650003338 | 4061245037271 |
| BA-F-PLUS-12/25/5 | 12 | 103 | 25/5 | 70/90 | 50/70 | 19 | 20 | | 9650003340 | 4061245037288 |
| BA-F-PLUS-12/40/20 | 12 | 118 | 40/20 | 70/90 | 50/70 | 19 | 20 | | 9650003342 | 4061245037295 |
| BA-F-PLUS-12/50/30 | 12 | 128 | 50/30 | 70/90 | 50/70 | 19 | 20 | | 9650003343 | 4061245037301 |
| BA-F-PLUS-12/70/50 | 12 | 148 | 70/50 | 70/90 | 50/70 | 19 | 20 | | 9650003345 | 4061245037318 |
| BA-F-PLUS-12/85/65 | 12 | 163 | 85/65 | 70/90 | 50/70 | 19 | 20 | | 9650003346 | 4061245037325 |
| BA-F-PLUS-12/100/80 | 12 | 178 | 100/80 | 70/90 | 50/70 | 19 | 20 | | 9650003347 | 4061245037332 |
| BA-F-PLUS-16/5 | 16 | 123 | 5 | 110 | 85 | 24 | 10 | | 9650003357 | 4061245038957 |
| BA-F-PLUS-16/20 | 16 | 138 | 20 | 110 | 85 | 24 | 10 | | 9650003359 | 4061245038940 |
| BA-F-PLUS-16/50 | 16 | 168 | 50 | 110 | 85 | 24 | 10 | | 9650003362 | 4061245038964 |
| BA-F-PLUS-16/60 | 16 | 178 | 60 | 110 | 85 | 24 | 10 | | 9650003363 | 4061245038971 |



Through bolt BA-E Plus



| Cross references | page |
|---------------------------------|------|
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Hammer drill SDS plus | 98 |
| Installation tool through bolts | 107 |
| Cordless hammer drill ABH | 94 |
| Torque wrench | 105 |
| Socket wrench | 1047 |
| | |

Installation process





Application range

- > For embedment in cracked and non-cracked concrete ≥ C20/25
- > Dry internal conditions
- > Wet areas
- > Outdoors, including in industrial atmospheres and coastal
- > For embedment of medium-heavy to heavy fixings such as pillars, metal structures and wooden structures
- > For pre-, push-through and distance installations

Properties

- > A4 stainless steel
- > HCR stainless steel 1.4529 available upon request
- > Approval for concrete, option 1
- > Fire resistance classes F30, F60, F90, F120

Notice

Characteristic values apply to the compression strength of C20/25 concrete. Design load of an anchor for centric tension in cracked concrete.

The load values in these tables are based on concrete C20/25, f_{ck.cube} = 25 N/mm²; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

Applications



Technical specifications













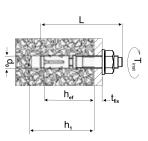


Certifications









| Anchor type | Effective embedment | Permitted load F _{zul} [kN] | Centre distance [mm] | | | Edge d [mm] | istance | | Permitted Bending — moment | Tightening torque |
|--------------|-------------------------------|--|-------------------------|------------------|-----|--------------------|------------------|-----|----------------------------|---------------------------|
| | depth h _{ef} [mm] | | S _{cr, N} | S _{min} | С | C _{cr, N} | C _{min} | S | M _{zul} [Nm] | T _{inst} [Nm] |
| BA-E Plus 8 | 35 | 2.4 | 106 | 55 | 75 | 53 | 40 | 140 | 15.0 | 20 |
| | 48 | 4.0 | 144 | 35 | 50 | 72 | 40 | 55 | 15.0 | 20 |
| BA-E Plus 10 | 40 | 4.1 | 120 | 50 | 95 | 60 | 50 | 190 | 28.6 | 45 |
| BA-E PIUS TU | 60 | 5.7 | 180 | 40 | 60 | 90 | 50 | 100 | 28.6 | 45 |
| BA-E Plus 12 | 50 | 5.8 | 150 | 55 | 110 | 75 | 60 | 215 | 49.1 | 60 |
| BA-E PIUS 12 | 70 | 7.6 | 210 | 60 | 70 | 105 | 55 | 110 | 49.1 | 60 |
| BA-E Plus 16 | 85 | 11.4 | 254 | 65 | 95 | 127 | 65 | 150 | 122.7 | 110 |







| Order description | d _o [mm] | L [mm] | t _{fix} ≤ [mm] | h ₁ ≥ [mm] | h _{ef} ≥ [mm] | SW [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|---------------------|------------------------|-----------|----------------------------|--------------------------|---------------------------|------------|----------------|--------------------|----------------|---------------|
| BA-E-PLUS-8/5/- | 8 | 57 | 5 | 47 | 35 | 13 | 50 | | 9650005308 | 4061245090733 |
| BA-E-PLUS-8/23/10 | 8 | 75 | 23/10 | 47/60 | 35/48 | 13 | 50 | | 9650005310 | 4061245037349 |
| BA-E-PLUS-8/43/30 | 8 | 95 | 43/30 | 47/60 | 35/48 | 13 | 50 | | 9650005312 | 4061245037356 |
| BA-E-PLUS-8/63/50 | 8 | 115 | 63/50 | 47/60 | 35/48 | 13 | 40 | | 9650005314 | 4061245037363 |
| BA-E-PLUS-8/98/85 | 8 | 150 | 98/85 | 47/60 | 35/48 | 13 | 40 | | 9650005316 | 4061245037370 |
| BA-E-PLUS-10/10/- | 10 | 72 | 10 | 55 | 40 | 17 | 40 | | 9650005323 | 4061245037387 |
| BA-E-PLUS-10/30/10 | 10 | 92 | 30/10 | 55/75 | 40/60 | 17 | 40 | | 9650005325 | 4061245037394 |
| BA-E-PLUS-10/40/20 | 10 | 102 | 40/20 | 55/75 | 40/60 | 17 | 25 | | 9650005326 | 4061245037400 |
| BA-E-PLUS-10/50/30 | 10 | 112 | 50/30 | 55/75 | 40/60 | 17 | 25 | | 9650005327 | 4061245037417 |
| BA-E-PLUS-10/70/50 | 10 | 132 | 70/50 | 55/75 | 40/60 | 17 | 25 | | 9650005329 | 4061245037424 |
| BA-E-PLUS-10/100/80 | 10 | 162 | 100/80 | 55/75 | 40/60 | 17 | 25 | | 9650005331 | 4061245037431 |
| BA-E-PLUS-12/10/- | 12 | 88 | 10 | 70 | 50 | 19 | 20 | | 9650005338 | 4061245037448 |
| BA-E-PLUS-12/25/5 | 12 | 103 | 25/5 | 70/90 | 50/70 | 19 | 20 | | 9650005340 | 4061245037455 |
| BA-E-PLUS-12/40/20 | 12 | 118 | 40/20 | 70/90 | 50/70 | 19 | 20 | | 9650005342 | 4061245037462 |
| BA-E-PLUS-12/50/30 | 12 | 128 | 50/30 | 70/90 | 50/70 | 19 | 20 | | 9650005343 | 4061245037479 |
| BA-E-PLUS-12/70/50 | 12 | 148 | 70/50 | 70/90 | 50/70 | 19 | 20 | | 9650005345 | 4061245037486 |
| BA-E-PLUS-12/85/65 | 12 | 163 | 85/65 | 70/90 | 50/70 | 19 | 20 | | 9650005346 | 4061245037493 |
| BA-E-PLUS-12/100/80 | 12 | 178 | 100/80 | 70/90 | 50/70 | 19 | 20 | | 9650005347 | 4061245037509 |
| BA-E-PLUS-16/5 | 16 | 123 | 5 | 110 | 85 | 24 | 10 | | 9650005357 | 4061245038995 |
| BA-E-PLUS-16/20 | 16 | 138 | 20 | 110 | 85 | 24 | 10 | | 9650005359 | 4061245038988 |
| BA-E-PLUS-16/50 | 16 | 168 | 50 | 110 | 85 | 24 | 10 | | 9650005362 | 4061245039008 |
| BA-E-PLUS-16/60 | 16 | 178 | 60 | 110 | 85 | 24 | 10 | | 9650005363 | 4061245039015 |



Through bolt BA-C NC



| page |
|------|
| 113 |
| 113 |
| 98 |
| 107 |
| 94 |
| 105 |
| 104 |
| |

Application range

- > For embedment in cracked and non-cracked concrete ≥ C20/25
- > Dry internal conditions
- > For embedment of medium heavy to heavy fixings
- > For front or in-place installation

Properties

- > Zinc-plated steel
- > Approved for uncracked concrete

Notice

The load values in these tables are based on concrete C20/25, $f_{\text{ck,cube}} = 25 \text{ N/mm}^2; \text{ correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.}$

Applications



Technical specifications





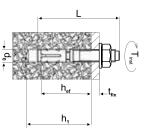






Certifications





Installation process





| Anchor type | Size | Effective embed- ment depth h _{ef} | Edge distance [mm] | Centre distance [mm] | [mm] Recommended | | Tightening torque |
|-------------|--|--|-----------------------|-------------------------|--------------------------|--------------|-------------------|
| Anonor type | ichor type Size ment depth n _{et} [mm] | C _{min} | S _{min} | [kN] | F _{rec} [kN] | Inst [Nm] | |
| BA-C 8 NC | M8 | 43 | 50 | 50 | 4.4 | 3.7 | 15 |
| BA-C 10 NC | M10 | 50 | 90 | 100 | 6.2 | 6.2 | 30 |
| BA-C 12 NC | M12 | 70 | 100 | 120 | 6.7 | 11.3 | 50 |
| BA-C 16 NC | M16 | 85 | 125 | 140 | 10.5 | 16.2 | 90 |
| | | | | | | | |







| Order example | d _o [mm] | L [mm] | h ₁ ≥ [mm] | h _{min} ≥ [mm] | t _{fix} ≤ [mm] | SW [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|---------------|------------------------|-----------|--------------------------|----------------------------|----------------------------|------------|----------------|--------------------|----------------|---------------|
| BA-C-8/10NC | 8 | 75 | 63 | 100 | 10 | 13 | 75 | | 9650007202 | 4061245066158 |
| BA-C-8/30NC | 8 | 95 | 63 | 100 | 30 | 13 | 50 | | 9650007203 | 4061245066165 |
| BA-C-8/50NC | 8 | 115 | 63 | 100 | 50 | 13 | 50 | | 9650007205 | 4061245066172 |
| BA-C-10/10NC | 10 | 85 | 69 | 120 | 10 | 17 | 50 | | 9650007208 | 4061245066189 |
| BA-C-10/20NC | 10 | 95 | 69 | 120 | 20 | 17 | 50 | | 9650007209 | 4061245066196 |
| BA-C-10/30NC | 10 | 105 | 69 | 120 | 30 | 17 | 40 | | 9650007210 | 4061245066202 |
| BA-C-10/50NC | 10 | 125 | 69 | 120 | 50 | 17 | 30 | | 9650007211 | 4061245066219 |
| BA-C-12/10NC | 12 | 110 | 92 | 150 | 10 | 19 | 30 | | 9650007212 | 4061245066226 |
| BA-C-12/20NC | 12 | 120 | 92 | 150 | 20 | 19 | 30 | | 9650007213 | 4061245066233 |
| BA-C-12/30NC | 12 | 130 | 92 | 150 | 30 | 19 | 25 | | 9650007214 | 4061245066240 |
| BA-C-12/50NC | 12 | 150 | 92 | 150 | 50 | 19 | 25 | | 9650007215 | 4061245066257 |
| BA-C-16/10NC | 16 | 135 | 109 | 160 | 10 | 24 | 10 | | 9650007217 | 4061245066264 |
| BA-C-16/20NC | 16 | 145 | 109 | 160 | 20 | 24 | 15 | | 9650007219 | 4061245066271 |
| BA-C-16/50NC | 16 | 175 | 109 | 160 | 50 | 24 | 15 | | 9650007220 | 4061245066288 |





Concrete screws



Concrete screws in action

For a wide range of indoor and outdoor applications

Facade scaffolds



Formworks



Industrial shelves



Safety elements



Wall consoles



Steel stairs



Cable racks



Railings





Concrete screws product overview

| screw | JC6-KB | JC6-FR | JC6-FR |
|--------------------------------|---|--|---|
| | | | |
| Material | | A4 stainless steel | |
| Application range | Awnings, gates, shelving systems, cable trave | erses, handrails and railings, stadium seating, components (e.g. joist hanger, angles,) | impact protection/ram protection, timber add-on |
| Drive | SW13 SW15 | | TX30 |
| Cracked concrete ETAG-001-1 | Ø 6-10 mm | 0 | 6 mm |
| Cracked concrete ETAG-001-6 | | _ | |
| Non-cracked concrete | Ø 8 mm | Ø | 6 mm |
| Certifications | | ETA-22/0413 | |
| Technical specifications | | Rost free or American Street | |
| mode of action | | Undercut | |
| Type of load | | static | |
| Recommended tensile loads | | 7.9 kN | |
| Recommended shear loads | | 11.6 kN | |

24



| JC2-KB Plus | JC2-KB | JC2-FR | JC2-ST | JC2-IT |
|---|-------------------|--|-------------------------|------------------------------|
| | | | | |
| Carbon steel, zinc electroplated | | Galvanised or zinc allo | by coated carbon steel | |
| Facade scaffolds, temporary fastening, contact surfaces, shelves, cable racks, hand rails, battens, formworks | Facade sca she | ffolds, temporary fastening, cont elves, cable racks, hand rails, bat | act surfaces, tens | Pipe brackets, profile rail: |
| SW13 SW15 SW19 SW24 | SW13/TX30 | TX30 | TX30 | SW13 |
| Ø 8–14 mm | | Ø 6 | mm | |
| - | | Ø 6 | mm | |
| Ø 8–14 mm | | Ø 6 | mm | |
| ETA-20/0446 Option 1 | | ETA-17/0835 Option 1 ETA-18/0221 | ETA-16/0945 ETA-17/1009 | |
| | | d | | |
| | | Undercut | | |
| | | static | | |
| 3.1 - 14.3 kN | | 1.2 | 2kN | |
| 10.9 - 37.1 kN | | 4.5 | i kN | |



Concrete screw JC2-FR



| Cross references | page |
|-----------------------------|------|
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Hammer drill SDS plus® | 98 |
| Cordless hammer drill ABH | 94 |
| Cordless impact screwdriver | 93 |
| Bit hexalobular TX30 | 102 |

Application range

- > Facade scaffolds
- > Temporary fastenings
- > Contact surfaces
- > Shelves
- > Cable racks
- > Hand rails
- > Battens

Properties

- > Zinc-plated steel
- > Truss head, hexalobular drive
- ETA-approved concrete screw for cracked and non-cracked concrete
- > Self-tapping approved screw anchor for push-trough instal-
- > No expansion therefore small edge and centre distances possible
- > Completely removable
- > For dry indoor use

Notice

Characteristic values apply to the compression strength of C20/25 concrete. Design load of an anchor for centric tension in cracked concrete.

The load values in these tables are based on concrete C20/25, $f_{\text{ck,cube}} = 25 \text{ N/mm}^2; \text{ correct installation; no influence of centre} \\ \text{and edge distances; observe the minimum thickness of the} \\ \text{base material.}$

Technical specifications













Certifications



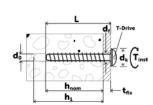






Base materials

- > Cracked concrete
- > Non-cracked concrete
- Pre-stressed hollow core slab



| Characteristic values | | | | | | Admissible I non-cracked | oads I concrete C20/25 | Admissible I cracked con | oads crete C20/25 |
|-----------------------|------------------------|---------------|------------------------|-------------------------|---------------------------|-----------------------------|---------------------------|-----------------------------|--------------------------|
| Тур | d _f [mm] | Drive [mm] | d _o [mm] | h _{ef} [mm] | T _{inst} [Nm] | N _{Rec} [kN] | V _{Rec} [kN] | N _{Rec} | V _{Rec} [kN] |
| ETA-17/0835 – approva | al according to | EAD 330232 | !-00-0601 (| option 1) for s | ingle faste | ning in concrete | | | |
| JC2-FR 6 | 9 | TX30 | 6 | 42.5 | 14 | 4.5 | 5.6* | 2.1 | 4.5 |
| ETA-18/0221 – approva | al according to | ETAG 001 pa | art 6 for mu | ıltiple fastenin | g of non-s | tructural system | s in concrete | | |
| JC2-FR 6 | 9 | TX30 | 6 | 27.6/31.9 | 14 | 1.4/1.7 | 5.4*/5.4* | 1.4/1.7 | 5.4*/5.4* |

| Order example | L [mm] | t _{fix} [mm] | h _{nom} [mm] | h _i [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|---|---------------|--------------------------|--------------------------|------------------------|----------------|--------------------|----------------|---------------|
| ETA-17/0835 – approval according to EAD 330 | 0232-00-060 |)1 (option 1) | for single fa | astening in c | concrete | | | |
| Concrete screw JC2-FR -6x60/5/20 | 60 | 5 | 55 | 65 | 50 | | 9650071549 | 4061245047812 |
| ETA-18/0221 – approval according to ETAG 00 | 01 part 6 for | multiple fas | tening of no | n-structural | systems in c | oncrete | | |
| Concrete screw JC2-FR-6x35/1 | 35 | 1 | 35 | 40 | 100 | | 9650071543 | 4061245075723 |
| Concrete screw JC2-FR-6x45/5 | 45 | 5 | 40 | 50 | 100 | | 9650071545 | 4061245063102 |
| Concrete screw JC2-FR -6x60/5/20 | 60 | 20 | 40 | 50 | 50 | | 9650071549 | 4061245047812 |



Concrete screw JC2-IT



Cross references

Hammer drill SDS plus®

Cordless hammer drill ABH

Cordless impact screwdriver

Socket wrench insert SW13

Cleaning brush

Blow-out pump

Application range

- > Pipe brackets
- > Profile rails

Properties

- > Zinc-plated steel
- > Hexagon head SW13 with internal thread M8/M10
- > ETA-approved concrete screw for cracked and non-cracked concrete
- Self-tapping approved screw anchor for push-in installation
- No expansion therefore small edge and centre distances possible
- > Completely removable
- > For dry indoor use

Notice

page

113

113

98

94

104

Characteristic values apply to the compression strength of C20/25 concrete. Design load of an anchor for centric tension in cracked concrete.

The load values in these tables are based on concrete C20/25, $\rm f_{\rm ck,cube} = 25~N/mm^2;$ correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

Technical specifications













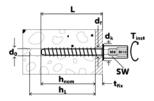


Certifications





- > Cracked concrete
- > Non-cracked concrete
- > Pre-stressed hollow core slab



| Characteristic values | | | | | | Admissible I non-cracked | oads I concrete C20/25 | Admissible loads cracked concrete C20/25 | |
|-----------------------|------------------------|---------------|------------------------|-------------------------|---------------------------|-----------------------------|---------------------------|--|--------------------------|
| Тур | d _f [mm] | Drive [mm] | d _o [mm] | h _{ef} [mm] | T _{inst} [Nm] | N _{Rec} [kN] | V _{Rec} [kN] | N _{Rec} | V _{Rec} [kN] |
| ETA-18/0221 – approv | al according to | ETAG 001 pa | ırt 6 for mu | ıltiple fastenin | g of non-s | tructural system | s in concrete | | |
| JC2-IT 6 | 9 | SW13 | 6 | 27.6/31.9 | 14 | 1.4/1.7 | 5.4*/5.4* | 1.4/1.7 | 5.4*/5.4* |

| | 1 | anuic | case | _ | 31661 | ialiule |
|---|---|-------|------|---|-------|---------|
| _ | | | | | | |

| Order example | L [mm] | | h _{nom} [mm] | h ₁ [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|---|-----------|---------|--------------------------|------------------------|----------------|--------------------|----------------|---------------|
| ETA-18/0221 – approval according to ETAG 001 part 6 for multi | ple faste | ning of | non-stru | ctural s | ystems in c | oncrete | | |
| Concrete screw JC2-IT 6x35 M8/M10x30 | 35 | 1 | 35 | 40 | 50 | | 9650071513 | 4061245075716 |
| Concrete screw JC2-IT 6x45 M8/M10x30 | 45 | 5 | 40 | 50 | 50 | | 9650071514 | 4061245074146 |



Concrete screw JC2-ST



| Cross references | page |
|-----------------------------|------|
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Hammer drill SDS plus® | 98 |
| Cordless hammer drill ABH | 94 |
| Cordless impact screwdriver | 93 |
| Bit hexalobular TX30 | 102 |

Application range

- > Facade scaffolds
- > Temporary fastenings
- > Contact surfaces
- > Shelves
- > Cable racks
- > Hand rails
- > Laths

Properties

- > Zinc-plated steel
- > Countersunk head, hexalobular drive
- > ETA-approved concrete screw for cracked and non-cracked
- > Self-tapping approved screw anchor for push-trough instal-
- > No expansion therefore small edge and centre distances possible
- > Completely removable
- > For dry indoor use

Characteristic values apply to the compression strength of C20/25 concrete. Design load of an anchor for centric tension in cracked concrete.

The load values in these tables are based on concrete C20/25, $f_{ck,cube} = 25 \text{ N/mm}^2$; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

Technical specifications











Certifications



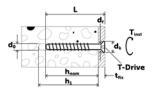






Base materials

- > Cracked concrete
- > Non-cracked concrete
- > Pre-stressed hollow core slab



| Characteristic values | | | | | | Admissible I non-cracked | oads I concrete C20/25 | Admissible loads cracked concrete C20/25 | |
|-----------------------|------------------------|---------------|------------------------|-------------------------|---------------------------|-----------------------------|---------------------------|--|--------------------------|
| Тур | d _f [mm] | Drive [mm] | d _o [mm] | h _{ef} [mm] | T _{inst} [Nm] | N _{Rec} [kN] | V _{Rec} [kN] | N _{Rec} [kN] | V _{Rec} [kN] |
| ETA-17/0835 – approv | val according to | EAD 330232 | -00-0601 (| option 1) for s | ingle faste | ning in concrete | · | | |
| JC2-ST 6 | 9 | TX30 | 6 | 42.5 | 14 | 4.5 | 5.6* | 2.1 | 4.5 |
| ETA 10/0221 approx | val according to | ETAG 001 pa | ırt 6 for mu | ıltiple fastenin | g of non-st | ructural system | s in concrete | | |
| E1A-10/0221 - approv | | | | | | | | | |







| Order example | L [mm] | t _{fix} [mm] | h _{nom} [mm] | h _, [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|--|--------------|--------------------------|--------------------------|------------------------|----------------|--------------------|----------------|---------------|
| ETA-17/0835 – approval according to EAD 3302 | 32-00-0601 | (option 1) f | or single fas | tening in co | ncrete | | | |
| Concrete screw JC2-ST-6x60/5/20 | 60 | 5 | 55 | 65 | 100 | | 9650071609 | 4061245005904 |
| Concrete screw JC2-ST-6x80/25/40 | 80 | 25 | 55 | 65 | 100 | | 9650071613 | 4061245074214 |
| Concrete screw JC2-ST-6x100/45/60 | 100 | 45 | 55 | 65 | 50 | | 9650071617 | 4061245005911 |
| Concrete screw JC2-ST-6x120/65/80 | 120 | 65 | 55 | 65 | 50 | | 9650071619 | 4061245075709 |
| ETA-18/0221 – approval according to ETAG 001 | part 6 for m | nultiple faste | ening of non | -structural s | systems in c | oncrete | | |
| Concrete screw JC2-ST-6x45/5/10 | 45 | 5 | 40 | 50 | 100 | | 9650071605 | 4061245075686 |
| Concrete screw JC2-ST-6x50/10/15 | 50 | 10 | 40 | 50 | 100 | | 9650071607 | 4061245075693 |
| Concrete screw JC2-ST-6x60/5/20 | 60 | 5 | 40 | 50 | 100 | | 9650071609 | 4061245005904 |
| Concrete screw JC2-ST-6x80/25/40 | 80 | 40 | 40 | 50 | 100 | | 9650071613 | 4061245074214 |
| Concrete screw JC2-ST-6x100/45/60 | 100 | 60 | 40 | 50 | 50 | | 9650071617 | 4061245005911 |



Concrete screw JC2-KB



| Cross references | page |
|-----------------------------|------|
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Hammer drill SDS plus® | 98 |
| Cordless hammer drill ABH | 94 |
| Cordless impact screwdriver | 93 |
| Socket wrench insert | |
| SW13, SW15 | 103 |
| Bit hexalobular TX30, TX40 | 102 |
| | |

Application range

- > Facade scaffolds
- > Temporary fastenings
- > Contact surfaces
- > Shelves
- > Cable racks
- > Hand rails
- > Laths

Properties

- > Zinc-plated steel
- > Hexagon head with hexalobular drive and combined washer
- > ETA-approved concrete screw for cracked and non-cracked concrete
- > Self-tapping approved screw anchor for push-trough installation
- > No expansion therefore small edge and centre distances possible
- > Completely removable
- > For dry indoor use

Characteristic values apply to the compression strength of C20/25 concrete. Design load of an anchor for centric tension in cracked concrete.

The load values in these tables are based on concrete C20/25, $f_{ck,cube} = 25 \text{ N/mm}^2$; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

Technical specifications







Certifications



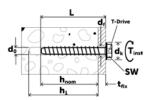






Base materials

- > Cracked concrete
- > Non-cracked concrete
- > Pre-stressed hollow core slab



| Characteristic value | es | | | Admissible I non-cracked | oads I concrete C20/25 | Admissible loads cracked concrete C20/25 | | | |
|----------------------|------------------------|----------------|------------------------|-----------------------------|---------------------------|--|--------------------------|------------------|--------------------------|
| Тур | d _f [mm] | Drive [mm] | d _o [mm] | h _{ef} [mm] | T _{inst} [Nm] | N _{Rec} [kN] | V _{Rec} [kN] | N _{Rec} | V _{Rec} [kN] |
| ETA-17/0835 – app | roval according | to EAD 330232- | 00-0601 (o | ption 1) for si | ngle faste | ning in concrete |) | | |
| | | | | | | | | | |
| JC2-KB 6 | 9 | SW13/TX30 | 6 | 42.5 | 14 | 4.5 | 5.6* | 2.1 | 4.5 |
| | | | | | | | | 2.1 | 4.5 |

| Order example | L [mm] | t _{fix} [mm] | h _{nom} [mm] | h ₁ [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|---|--------------|--------------------------|--------------------------|------------------------|----------------|--------------------|----------------|---------------|
| ETA-17/0835 – approval according to EAD 330 | 0232-00-060 | 1 (option 1) | for single fa | astening in o | concrete | | | |
| Concrete screw JC2-KB 6x60/5/20 SW13 | 60 | 5 | 55 | 65 | 100 | | 9650071310 | 4061245051222 |
| ETA-18/0221 – approval according to ETAG 00 | 1 part 6 for | multiple fas | tening of no | n-structura | l systems in c | oncrete | | |
| Concrete screw JC2-KB 6x45/5 SW13 | 45 | 5 | 40 | 50 | 100 | | 9650071306 | 4061245051208 |
| Concrete screw JC2-KB-6x50/10 SW13 | 50 | 10 | 40 | 50 | 100 | | 9650071308 | 4061245051215 |
| Concrete screw JC2-KB 6x60/5/20 SW13 | 60 | 20 | 40 | 50 | 100 | | 9650071310 | 4061245051222 |



JC2 Plus

High-performance metal anchors for cracked and uncracked concrete

Properties

- > Completely updated screw thread
- > Larger thread diameter ensures better grip
- > New thread geometry at the point for easy installation
- > Two embedment depths per size allow for more flexibility in challenging applications
- > Improved ETA with higher load-carrying capacities
- > Seismic performance category C2



- > Self-tapping screw anchors, approved for push-through installations
- > Simple and quick installation
- > Small spacings and edge distances
- > Removable
- > Minimal expansion forces
- > Various head styles for more flexibility and adaptation in use
- > JC2 Plus 14 is reusable





Concrete screw JC2-KB plus



| Cross references | page |
|-----------------------------|------|
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Hammer drill SDS plus® | 98 |
| Cordless hammer drill ABH | 94 |
| Cordless impact screwdriver | 93 |
| Socket wrench insert | |
| SW13, SW15, SW21 | 103 |

Application range

- > Facade scaffolds
- > Temporary fastenings
- > Contact surfaces
- > Shelves
- > Cable racks
- > Hand rails
- > Battens
- > Formworks

Properties

- > Zinc-plated steel
- > Hexagon head with flange
- > ETA-approved concrete screw for cracked and non-cracked concrete
- Self-tapping approved screw anchor for push-trough installation
- No expansion therefore small edge and centre distances possible
- > For dry indoor use
- > Completely removable
- > Processing with impact wrench possible
- > Reusable
- > Two embedment depths

Notice

Characteristic values apply to the compression strength of C20/25 concrete. Design load of an anchor for centric tension in cracked concrete.

The load values in these tables are based on concrete C20/25, $f_{\text{ck,cube}} = 25 \text{ N/mm}^2$; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.base material

Technical specifications

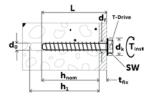


Certifications



Base materials

- > Cracked concrete
- > Non-cracked concrete



| Characteristic values | | | | | | Admissible lo non-cracked | oads concrete C20/25 | Admissible loads cracked concrete C20/25 | |
|-----------------------|------------------------|----------------|------------------------|-------------------------|---------------------------|------------------------------|--------------------------|---|------------------|
| Тур | d _f [mm] | Drive [mm] | d _o [mm] | h _{ef} [mm] | T _{inst} [Nm] | N _{Rec} [kN] | V _{Rec} [kN] | N _{Rec} [kN] | V _{Rec} |
| ETA-21/0020 – appr | oval according to E | AD 330232-00-0 | 0601 (optio | n 1) for single fa | stening in (| concrete | | | |
| JC2-KB 8 Plus | 10.8-12.0 | SW13 | 8 | 39.2/51.9 | 45 | 5.7/8.8 | 10.9*/12.3* | 3.1/5.7 | 10.9*/12.3* |
| JC2-KB 10 Plus | 13.0-14.0 | SW15 | 10 | 42.5/68.0 | 85 | 6.5/13.1 | 18.2*/20.1* | 3.6/9.0 | 13.6/20.1* |
| JC2-KB 14 Plus | 17.0-18.0 | SW21/SW24 | 14 | 49.3/91.8 | 100 | 7.1/20.0 | 26.8/37.1* | 4.0/14.3 | 18.7/37.1* |





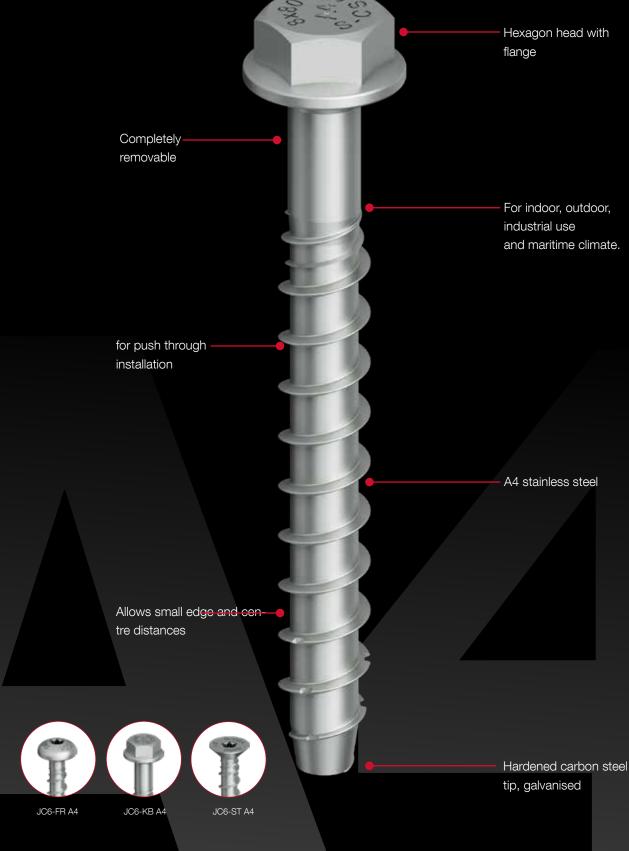


| Order example | L [mm] | t _{fix} [mm] | h _{nom} [mm] | h ₁ [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|--|------------|--------------------------|--------------------------|------------------------|----------------|--------------------|----------------|---------------|
| ETA-21/0200 – approval according to EAD 330232-0 | 00-0601 (o | ption 1) for | single fast | ening in co | ncrete | | | |
| Concrete screw JC2-KB Plus-8x55/5 SW13 | 55 | 5 | 50 | 60 | 50 | | 9650071700 | 4061245074696 |
| Concrete screw JC2-KB Plus-8x70/5/20 SW13 | 70 | 5/20 | 50/65 | 60/75 | 50 | | 9650071709 | 4061245074689 |
| Concrete screw JC2-KB Plus-8x80/15/30 SW13 | 80 | 15/30 | 50/65 | 60/75 | 50 | | 9650071715 | 4061245074672 |
| Concrete screw JC2-KB Plus-8x90/25/40 SW13 | 90 | 25/40 | 50/65 | 60/75 | 50 | | 9650071721 | 4061245074665 |
| Concrete screw JC2-KB Plus-8x100/35/50 SW13 | 100 | 35/50 | 50/65 | 60/75 | 50 | | 9650071724 | 4061245074658 |
| Concrete screw JC2-KB Plus-8x120/55/70 SW13 | 120 | 55/70 | 50/65 | 60/75 | 25 | | 9650071730 | 4061245074641 |
| Concrete screw JC2-KB Plus-8x140/75/90 SW13 | 140 | 75/90 | 50/65 | 60/75 | 25 | | 9650071736 | 4061245074702 |
| Concrete screw JC2-KB Plus-10x60/5 SW15 | 60 | 5 | 55 | 65 | 25 | | 9650071744 | 4061245074719 |
| Concrete screw JC2-KB Plus-10x70/15 SW15 | 70 | 15 | 55 | 65 | 25 | | 9650071750 | 4061245074726 |
| Concrete screw JC2-KB Plus-10x80/25 SW15 | 80 | 25 | 55 | 65 | 25 | | 9650071756 | 4061245074795 |
| Concrete screw JC2-KB Plus-10x90/5/35 SW15 | 90 | 5/35 | 55/85 | 65/95 | 25 | | 9650071762 | 4061245074733 |
| Concrete screw JC2-KB Plus-10x100/15/45 SW15 | 100 | 15/45 | 55/85 | 65/95 | 25 | | 9650071765 | 4061245074740 |
| Concrete screw JC2-KB Plus-10x120/35/65 SW15 | 120 | 35/65 | 55/85 | 65/95 | 25 | | 9650071771 | 4061245074757 |
| Concrete screw JC2-KB Plus-10x140/55/85 SW15 | 140 | 55/85 | 55/85 | 65/95 | 25 | | 9650071777 | 4061245074764 |
| Concrete screw JC2-KB Plus-10x160/75/105 SW15 | 160 | 75/105 | 55/85 | 65/95 | 25 | | 9650071783 | 4061245074771 |
| Concrete screw JC2-KB Plus-14x75/10 SW21 | 75 | 10 | 65 | 75 | 20 | | 9650071785 | 4061245074900 |
| Concrete screw JC2-KB Plus-14x100/35 SW21 | 100 | 35 | 65 | 75 | 10 | | 9650071811 | 4061245074917 |
| Concrete screw JC2-KB Plus-14x130/15/65 SW21 | 130 | 15/65 | 65/115 | 75/125 | 10 | | 9650071826 | 4061245074924 |
| Concrete screw JC2-KB Plus-14x150/35/85 SW21 | 150 | 35/85 | 65/115 | 75/125 | 10 | | 9650071839 | 4061245074931 |



Concrete screw JC6 A4

Acid-resistant concrete screws with ETA approval for aggressive environmental fluids





Concrete screw JC6-FR A4



Cross referencespageCleaning brush113Blow-out pump113Hammer drill SDS plus®98Cordless hammer drill ABH94Cordless impact screwdriver93Bit hexalobular TX30102

Application range

- > For embedment in cracked and non-cracked concrete C20/25 C50/60.
- > Permanently humid interior
- Outdoor use including in industrial atmospheres and coastal environments
- > Fastening of e.g. >Awnings
 - >gates
 - > shelving systems
 - > cable traverses
 - > handrails and railings
 - > stadium seating
 - > impact protection/ram protection
 - > timber add-on parts (e.g. joist hanger, brackets, etc.)

>....

Properties

- > A4 stainless steel with hardened steel point
- > Pan head, hexagon socket
- > ETA-approved concrete screw for cracked and non-cracked concrete C20/25- C50/60
- Self-tapping approved screw anchor for push-trough installation
- > No tightening torque

Benefits

- > Requires only a small drill hole
- > No expansion therefore small edge and centre distances
- > Completely removable

Notice

The load values in these tables are based on concrete C20/25, $\rm f_{\rm ck,cube} = 25~N/mm^2;$ correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

Technical specifications





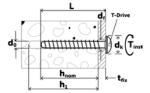


Certifications



Base materials

- > Cracked concrete
- > Non-cracked concrete



| Characteristic values | | | | | | | Admissible loads uncracked concrete | | |
|-------------------------------|------------|------------------------|--------------------------|--------------------------|---------------------------|---------------|--|--------------------------|--|
| Anchor type | do [mm] | d _f [mm] | h _{nom} [mm] | h _{min} [mm] | T _{inst} [Nm] | drive [mm] | N _{Rec} [kN] | V _{Rec} [kN] | |
| ETA-22/0413 | | | | | | | | | |
| JC6-FR 6 | 6 | ≤ 9 | 45/55 | 80/100 | max. 14 | T30 | 2.9/4.5 | 6.8*/6.8* | |
| *Enilura casa — etaal failura | | | | | | | | | |

| Order example | L [mm] | do [mm] | t _{fix} [mm] | h _{nom} [mm] | h ₁ [mm] | PU [pieces] | Article number | EAN |
|--------------------------|-----------|------------|--------------------------|--------------------------|------------------------|----------------|----------------|---------------|
| ETA-22/0413 | | | | | | | | |
| JC6-FR 6x50/5 T30 A4 | 50 | 6 | 5 | 45 | 55 | 100 | 9650071993 | 4061245105918 |
| JC6-FR 6x60/15/5 T30 A4 | 60 | 6 | 15/5 | 45/55 | 55/65 | 50 | 9650071994 | 4061245105925 |
| JC6-FR 6x80/35/25 T30 A4 | 80 | 6 | 35/25 | 45/55 | 55/65 | 50 | 9650071996 | 4061245105932 |



Concrete screw JC6-KB A4



Application range

- > For embedment in cracked and non-cracked concrete C20/25 C50/60.
- > Permanently humid interior
- Outdoor use including in industrial atmospheres and coastal environments
- > Fastening of e.g. >Awnings
 - >gates
 - > shelving systems
 - > cable traverses
 - > handrails and railings
 - > stadium seating
 - > impact protection/ram protection
 - > timber add-on parts (e.g. beam shoes, brackets, etc.)

>....

Properties

- > A4 stainless steel with hardened steel point
- > Hexagon head with flange
- > ETA-approved concrete screw for cracked and non-cracked concrete C20/25- C50/60
- Self-tapping approved screw anchor for push-trough installation
- > No tightening torque

page Benefits

93

103

- Requires only a small drill hole
 - > No expansion therefore small edge and centre distances
 - > Completely removable

Notice

Characteristic values apply to the compression strength of C20/25 concrete. Design load of an anchor for centric tension in cracked concrete.

The load values in these tables are based on concrete C20/25, $f_{\text{ck,cube}} = 25 \text{ N/mm}^2$; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

Technical specifications









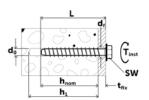
Certifications



Base materials

Approved for

- > Cracked concrete
- > Non-cracked concrete



| Characteristic values | Admissible loads Non-cracked concrete | | | | | | | |
|-----------------------|--|------------------------|--------------------------|--------------------------|---------------------------|---------------|--------------------------|--------------------------|
| Anchor type | do [mm] | d _f [mm] | h _{nom} [mm] | h _{min} [mm] | T _{inst} [Nm] | drive [mm] | N _{Rec} [kN] | V _{Rec} [kN] |
| ETA-22/0413 | | | | | | | | |
| JC6-KB 6 | 6 | ≤ 9 | 45/55 | 80/100 | max. 14 | SW13 | 2.9/4.5 | 6.8*/6.8* |
| JC6-KB 8 | 8 | ≤ 12 | 50/65 | 100/100 | max. 40 | SW13 | 4.0/7.9 | 11.6*/11.6* |
| JC6-KB 10 | 10 | ≤ 14 | 55/85 | 100/130 | max. 75 | SW15 | 5.2/12.1 | 14.0*/14.0* |

Cleaning brush 113 Blow-out pump 113 Hammer drill SDS plus® 98 Cordless hammer drill ABH 94

Cordless impact screwdriver

Socket wrench insert

SW13, SW15

Cross references





| Order example | L [mm] | do [mm] | t _{fix} [mm] | h _{nom} [mm] | h ₁ [mm] | Head Ø [mm] | PU [pieces] | Article number | EAN |
|-----------------------------|-----------|------------|--------------------------|--------------------------|------------------------|----------------|----------------|----------------|---------------|
| ETA-22/0413 | | | | | | | | | |
| JC6-KB 6x50/5 SW13 A4 | 50 | 6 | 5 | 45 | 55 | 16.5 | 100 | 9650071970 | 4061245105635 |
| JC6-KB 6x60/15/5 SW13 A4 | 60 | 6 | 15/5 | 45/55 | 55/65 | 16.5 | 100 | 9650071971 | 4061245105642 |
| JC6-KB 6x70/25/15 SW13 A4 | 70 | 6 | 25/15 | 45/55 | 55/65 | 16.5 | 100 | 9650071972 | 4061245105659 |
| JC6-KB 6x80/35/25 SW13 A4 | 80 | 6 | 35/25 | 45/55 | 55/65 | 16.5 | 100 | 9650071973 | 4061245105666 |
| JC6-KB 8x55/5 SW13 A4 | 55 | 8 | 5 | 50 | 60 | 17.5 | 50 | 9650071978 | 4061245105864 |
| JC6-KB 8x70/20/5 SW13 A4 | 70 | 8 | 20/5 | 50/65 | 60/75 | 17.5 | 50 | 9650071974 | 4061245093802 |
| JC6-KB 8x80/30/15 SW13 A4 | 80 | 8 | 30/15 | 50/65 | 60/75 | 17.5 | 50 | 9650071975 | 4061245093819 |
| JC6-KB 8x100/50/35 SW13 A4 | 100 | 8 | 50/35 | 50/65 | 60/75 | 17.5 | 50 | 9650071976 | 4061245093826 |
| JC6-KB 10x90/35/5 SW15 A4 | 90 | 10 | 35/5 | 55/85 | 65/95 | 20.5 | 25 | 9650071933 | 4061245106342 |
| JC6-KB 10x100/45/15 SW15 A4 | 100 | 10 | 45/15 | 55/85 | 65/95 | 20.5 | 25 | 9650071934 | 4061245106359 |
| JC6-KB 10x120/65/35 SW15 A4 | 120 | 10 | 65/35 | 55/85 | 65/95 | 20.5 | 25 | 9650071935 | 4061245106366 |



Concrete screw JC6-ST A4



| Cross references | page |
|-----------------------------|------|
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Hammer drill SDS plus® | 98 |
| Cordless hammer drill ABH | 94 |
| Cordless impact screwdriver | 93 |
| Bit hexalobular TX30 | 102 |
| | |

Application range

- > For embedment in cracked and non-cracked concrete C20/25 C50/60.
- > Permanently humid interior
- Outdoor use including in industrial atmospheres and coastal environments
- > Fastening of e.g. >Awnings
 - >gates
 - > shelving systems
 - > cable traverses
 - > handrails and railings
 - > stadium seating
 - > impact protection/ram protection
 - > timber add-on parts (e.g. joist hanger, brackets, etc.)
 - >....

Properties

- > A4 stainless steel with hardened steel point
- > Countersunk head, hexalobular drive
- ETA-approved concrete screw for cracked and non-cracked concrete C20/25- C50/60
- Self-tapping approved screw anchor for push-trough installation
- > No tightening torque

Benefits

- > Requires only a small drill hole
- > No expansion therefore small edge and centre distances
- > Completely removable

Notice

Characteristic values apply to the compression strength of C20/25 concrete. Design load of an anchor for centric tension in cracked concrete.

The load values in these tables are based on concrete C20/25, $f_{\text{ck,cube}} = 25 \text{ N/mm}^2; \text{ correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.}$









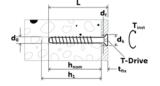
Certifications



Base materials

Approved for

- > Cracked concrete
- > Non-cracked concrete



| Characteristic values | | | | | | | Admissible loa uncracked cor | |
|-------------------------------|------------|------------------------|--------------------------|--------------------------|---------------------------|---------------|---------------------------------|--------------------------|
| Anchor type | do [mm] | d _f [mm] | h _{nom} [mm] | h _{min} [mm] | T _{inst} [Nm] | drive [mm] | N _{Rec} [kN] | V _{Rec} [kN] |
| TA-22/0413 | | | | | | | | |
| JC6-ST 6 | 6 | ≤ 9 | 45/55 | 80/100 | max. 14 | T30 | 2.9/4.5 | 6.8*/6.8* |
| *Failure case = steel failure | | | | | | | | |

| Order example | L [mm] | do [mm] | t _{fix} [mm] | h _{nom} [mm] | h ₁ [mm] | PU [pieces] | Article number | EAN |
|---------------------------|-----------|------------|--------------------------|--------------------------|------------------------|----------------|----------------|---------------|
| ETA-22/0413 | | | | | | | | |
| JC6-ST 6x50/5 T30 A4 | 50 | 6 | 5 | 45 | 55 | 100 | 9650071985 | 4061245105673 |
| JC6-ST 6x60/15/5 T30 A4 | 60 | 6 | 15/5 | 45/55 | 55/65 | 100 | 9650071986 | 4061245105680 |
| JC6-ST 6x70/25/15 T30 A4 | 70 | 6 | 25/15 | 45/55 | 55/65 | 100 | 9650071987 | 4061245105697 |
| JC6-ST 6x100/55/45 T30 A4 | 100 | 6 | 55/45 | 45/55 | 55/65 | 50 | 9650071990 | 4061245105901 |

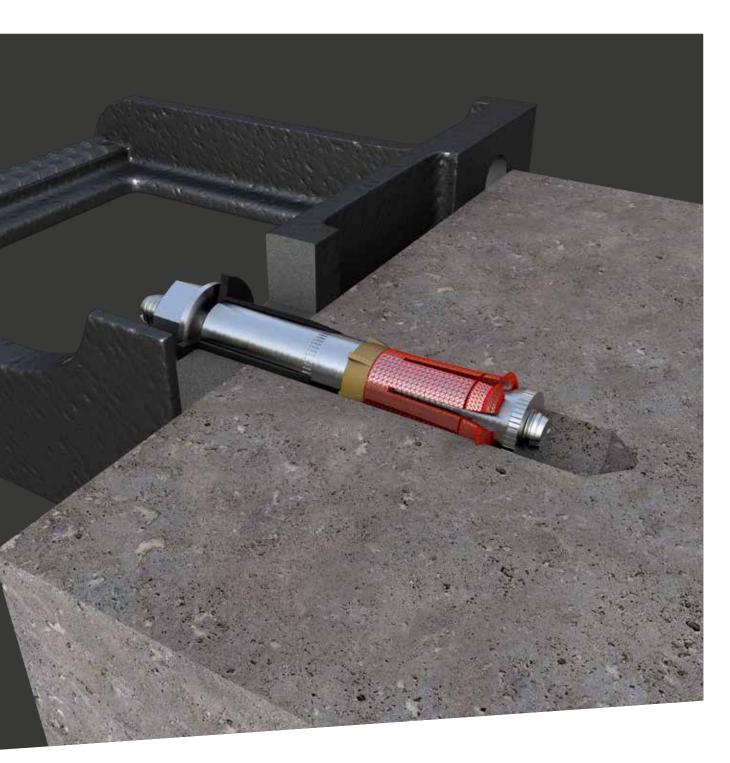


LIEBIG® heavy-duty anchors

Fastening extremely heavy loads reliably into concrete!





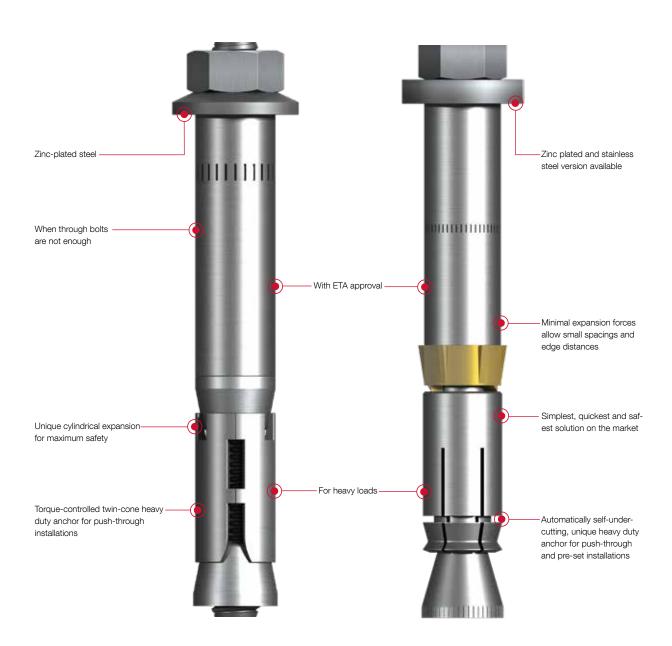


LIEBIG® anchoring products



LIEBIG® Safety bolts and LIEBIG® undercut anchors

Product features and differences





Product overview LIEBIG® Safety bolts and LIEBIG® undercut anchors

| | Safety Bolt B | Self-undercutting anchor SUPERPLUS BLS | Self-undercutting anchor SUPERPLUS BLS A4 | | |
|--|--|---|---|--|--|
| Anchor | | | | | |
| Material | Galvanized zinc-plated steel | Galvanized zinc-plated steel | A4 stainless steel | | |
| Application range | Steel structures, machinery, crash barriers, car lifting systems, railings Base plate, storage racks | Power plants, crash barriers , machines Base plate, for dynamic and seismic loads, small spacings and edge distances | Power plants, crash barriers , machines Base plate, for dynamic and seismic loads, small spacings and edge distances | | |
| mode of action | Friction locking | Form fit | Form fit | | |
| Cracked concrete ETAG-001-1 (single fastening) | M8 - M16 | M8 - M16 | M8 - M16 | | |
| Non-cracked concrete | M8 - M16 | M8 - M16 | M8 - M16 | | |
| Certifications | ETA-06/0108 Option 1 | ₹ € € ETA-01/0011 | C € ETA-01/0011 | | |
| Earthquakes | - | | | | |
| Fire protection | M | M | & | | |
| Civil protection | • | • | • | | |
| Type of load | static | static | static | | |
| Admissible tensile load [kN] | 2.4 - 24.0 | 4.3 - 83.7 | 4.3 - 83.7 | | |
| Admissible shear load [kN] | 8.6 - 54.9 | 23.7 - 67.4 | 23.7 - 67.4 | | |



| Self-undercutting anchor SUPERPLUS BLS-P | Step Iron Anchor SUPERPLUS A4 | Self-undercutting anchor SUPERPLUS ILS | Lightning protection anchor SUPER- PLUS BLS M8-14 A4 |
|---|--|---|---|
| | | | |
| Galvanized zinc-plated steel | A4 stainless steel | Galvanized zinc-plated steel | A4 stainless steel |
| Elevators, power plants, safety and crash barriers, highly stressed pipeline systems, façade fixings on slender components, tunnel ventilation systems, cranes and crane runways, machines, base plates | Step iron fixings as per DIN 1211-3 / DIN 1212-3 | Machine and base plates small spacings and edge distances | Retrofitted grounding systems |
| Form fit | Form fit | Form fit | Form fit |
| M8 - M16 | M8 | M8 (no ETA) | No ETA |
| M8 - M16 | M8 | M8 (no ETA) | No ETA |
| ETA-01/0011 | © C€ ETA-01/0011 | - | - |
| | - | - | - |
| * | * | - | - |
| • | • | - | - |
| static | static | static | - |
| 4.3 - 83.7 | 4.3 - 83.7 | 4.3 - 83.7 (no ETA) | - |
| 23.7 - 67.4 | 23.7 - 67.4 | 23.7 - 67.4 (no ETA) | - |

Further versions upon request!



Safety Bolt S



Safety Bolt SK



SUPERPLUS SLS A4



SUPERPLUS SKLS A4



LIEBIG® safety bolt S



| 113 |
|-----|
| 110 |
| 113 |
| 98 |
| 107 |
| 94 |
| 105 |
| 104 |
| |

Application range

- > Steel structures
- > Machinery
- > Guard rails
- > Automatic hub systems
- > Railings
- > Base plates
- > Storage racks

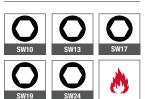
Properties

- > Safety bolt with hexagon screw
- > Zinc-plated steel
- Torque-controlled heavy-duty anchor with double cone for push-through installation
- > Suitable for heavy loads due to optimum frictional resistance. Cylindrical, wide expansion zone of the sleeve along the whole length
- > With dome-shaped washers for visual assembly inspection
- > For dry indoor and temporary outdoor use
- > Removable

Notice

The load values in these tables are based on concrete C20/25, $\rm f_{\rm ck,cube} = 25~N/mm^2;$ correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

Technical specifications



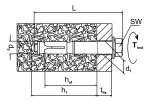
Certifications



Base materials

Approved for

- > Cracked concrete
- > Non-cracked concrete



| Characteristic values | | | | | | Admissible non-cracke | loads ed concrete C20/25 | Admissible loads cracked concrete C20/25 | |
|-----------------------|------------------------|------------|------------------------|-------------------------|-------------------|--------------------------|-----------------------------|---|--------------------------|
| Тур | d _f [mm] | SW [mm] | d _o [mm] | h _{ef} [mm] | T _{inst} | N _{Rec} [kN] | V _{Rec} [kN] | N _{Rec} [kN] | V _{Rec} [kN] |
| M8-12/55/5 | 14 | 13 | 12 | 55 | 20 | 4.8 | 9.8 | 3.6 | 7.0 |
| M8-12/55/15 | 14 | 13 | 12 | 55 | 20 | 4.8 | 9.8 | 3.6 | 7.0 |
| M8-12/55/40 | 14 | 13 | 12 | 55 | 20 | 4.8 | 9.8 | 3.6 | 7.0 |
| M10-15/70/5 | 17 | 17 | 15 | 70 | 60 | 9.5 | 22.3 | 7.6 | 20.1 |
| M10-15/70/15 | 17 | 17 | 15 | 70 | 60 | 9.5 | 22.3 | 7.6 | 20.1 |
| M10-15/70/40 | 17 | 17 | 15 | 70 | 60 | 9.5 | 22.3 | 7.6 | 20.1 |
| M12-20/80/5 | 21 | 19 | 20 | 80 | 90 | 17.1 | 34.3 | 12.3 | 24.5 |
| M12-20/80/15 | 21 | 19 | 20 | 80 | 90 | 17.1 | 34.3 | 12.3 | 24.5 |
| M12-20/80/40 | 21 | 19 | 20 | 80 | 90 | 17.1 | 34.3 | 12.3 | 24.5 |







| Order example | Nominal size [mm] | L [mm] | d _o [mm] | h ₁ [mm] | t _{fix} [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|-----------------------|----------------------|-----------|------------------------|------------------------|--------------------------|----------------|--------------------|----------------|---------------|
| LIEBIG S M8-12/55/5 | M8 | 80 | 12 | 70 | 5 | 25 | | 9652055105 | 4061245001043 |
| LIEBIG S M8-12/55/15 | M8 | 90 | 12 | 70 | 15 | 25 | | 9652055115 | 4061245001036 |
| LIEBIG S M8-12/55/40 | M8 | 115 | 12 | 70 | 40 | 25 | | 9652055140 | 4061245001029 |
| LIEBIG S M10-15/70/5 | M10 | 95 | 15 | 85 | 5 | 25 | | 9655070105 | 4061245000459 |
| LIEBIG S M10-15/70/15 | M10 | 105 | 15 | 85 | 15 | 25 | | 9655070115 | 4061245000442 |
| LIEBIG S M10-15/70/40 | M10 | 130 | 15 | 85 | 40 | 10 | | 9655070140 | 4061245000435 |
| LIEBIG S M12-20/80/5 | M12 | 113 | 20 | 100 | 5 | 10 | | 9650080105 | 4061245001531 |
| LIEBIG S M12-20/80/15 | M12 | 123 | 20 | 100 | 15 | 10 | | 9650080115 | 4061245001524 |
| LIEBIG S M12-20/80/40 | M12 | 148 | 20 | 100 | 40 | 10 | | 9650080140 | 4061245001517 |





LIEBIG® safety bolt B



| Cross references | page |
|--------------------------------|------|
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Hammer drill SDS plus® | 98 |
| Installation tool through bolt | 107 |
| Cordless hammer drill ABH | 94 |
| Torque wrench | 105 |
| Socket wrench | 104 |
| | |

Application range

- > Steel structures
- > Machinery
- > Guard rails
- > Automatic hub systems
- > Railings
- > Base plates
- > Storage racks

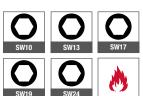
Properties

- > Safety bolt with threaded bolt and nut
- > Zinc-plated steel
- > Torque-controlled heavy-duty anchor with double cone for push-through installation
- > Suitable for heavy loads due to optimum frictional resistance. Cylindrical, wide expansion zone of the sleeve along the whole length
- > With dome-shaped washers for visual assembly inspection
- > For dry indoor and temporary outdoor use
- > Removable

Notice

The load values in these tables are based on concrete C20/25, $\rm f_{\rm ck,cube} = 25~N/mm^2;$ correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

Technical specifications



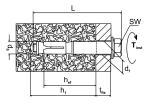
Certifications



Base materials

Approved for

- > Cracked concrete
- > Non-cracked concrete



| Characteristic values | Characteristic values | | | | | Admissible non-cracke | loads ed concrete C20/25 | Admissible loads cracked concrete C20/25 | |
|-----------------------|------------------------|------------|------------------------|-------------------------|---------------------------|--------------------------|-----------------------------|---|--------------------------|
| Тур | d _f [mm] | SW [mm] | d _o [mm] | h _{ef} [mm] | T _{inst} [Nm] | N _{Rec} [kN] | V _{Rec} [kN] | N _{Rec} [kN] | V _{Rec} [kN] |
| M8-12/55/5 | 14 | 13 | 12 | 55 | 15 | 4.8 | 9.8 | 3.6 | 7.0 |
| M8-12/55/15 | 14 | 13 | 12 | 55 | 15 | 4.8 | 9.8 | 3.6 | 7.0 |
| M8-12/55/40 | 14 | 13 | 12 | 55 | 15 | 4.8 | 9.8 | 3.6 | 7.0 |
| M8-12/55/65 | 14 | 13 | 12 | 55 | 15 | 4.8 | 9.8 | 3.6 | 7.0 |
| M8-12/55/100 | 14 | 13 | 12 | 55 | 15 | 4.8 | 9.8 | 3.6 | 7.0 |
| M10-15/70/5 | 17 | 17 | 15 | 70 | 40 | 9.5 | 22.3 | 7.6 | 20.1 |
| M10-15/70/15 | 17 | 17 | 15 | 70 | 40 | 9.5 | 22.3 | 7.6 | 20.1 |
| M10-15/70/40 | 17 | 17 | 15 | 70 | 40 | 9.5 | 22.3 | 7.6 | 20.1 |
| M10-15/70/65 | 17 | 17 | 15 | 70 | 40 | 9.5 | 22.3 | 7.6 | 20.1 |
| M10-15/70/100 | 17 | 17 | 15 | 70 | 40 | 9.5 | 22.3 | 7.6 | 20.1 |
| M12-20/80/5 | 21 | 19 | 20 | 80 | 70 | 17.1 | 34.3 | 12.3 | 24.5 |
| M12-20/80/15 | 21 | 19 | 20 | 80 | 70 | 17.1 | 34.3 | 12.3 | 24.5 |
| M12-20/80/40 | 21 | 19 | 20 | 80 | 70 | 17.1 | 34.3 | 12.3 | 24.5 |
| M12-20/80/65 | 21 | 19 | 20 | 80 | 70 | 17.1 | 34.3 | 12.3 | 24.5 |
| M12-20/80/100 | 21 | 19 | 20 | 80 | 70 | 17.1 | 34.3 | 12.3 | 24.5 |







| Order example | Nominal size [mm] | L [mm] | d _o [mm] | h ₁ [mm] | t _{fix} [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|------------------------|----------------------|-----------|------------------------|------------------------|--------------------------|----------------|--------------------|----------------|---------------|
| LIEBIG B M8-12/55/5 | M8 | 85 | 12 | 70 | 5 | 25 | | 9652055005 | 4061245001098 |
| LIEBIG B M8-12/55/15 | M8 | 95 | 12 | 70 | 15 | 25 | | 9652055015 | 4061245001081 |
| LIEBIG B M8-12/55/40 | M8 | 120 | 12 | 70 | 40 | 25 | | 9652055040 | 4061245001074 |
| LIEBIG B M8-12/55/65 | M8 | 145 | 12 | 70 | 65 | 25 | | 9652055065 | 4061245001067 |
| LIEBIG B M8-12/55/100 | M8 | 180 | 12 | 70 | 100 | 25 | | 9652055100 | 4061245001050 |
| LIEBIG B M10-15/70/5 | M10 | 100 | 15 | 85 | 5 | 25 | | 9655070005 | 4061245000503 |
| LIEBIG B M10-15/70/15 | M10 | 110 | 15 | 85 | 15 | 25 | | 9655070015 | 4061245000497 |
| LIEBIG B M10-15/70/40 | M10 | 135 | 15 | 85 | 40 | 10 | | 9655070040 | 4061245000480 |
| LIEBIG B M10-15/70/65 | M10 | 160 | 15 | 85 | 65 | 10 | | 9655070065 | 4061245000473 |
| LIEBIG B M10-15/70/100 | M10 | 195 | 15 | 85 | 100 | 10 | | 9655070100 | 4061245000466 |
| LIEBIG B M12-20/80/5 | M12 | 120 | 20 | 100 | 5 | 10 | | 9650080005 | 4061245001593 |
| LIEBIG B M12-20/80/15 | M12 | 130 | 20 | 100 | 15 | 10 | | 9650280015 | 4061245001142 |
| LIEBIG B M12-20/80/40 | M12 | 155 | 20 | 100 | 40 | 10 | | 9650080040 | 4061245001562 |
| LIEBIG B M12-20/80/65 | M12 | 180 | 20 | 100 | 65 | 10 | | 9650080065 | 4061245001555 |
| LIEBIG B M12-20/80/100 | M12 | 215 | 20 | 100 | 100 | 10 | | 9650080100 | 4061245001548 |





LIEBIG® safety bolt SK



| page |
|------|
| 113 |
| 113 |
| 98 |
| 107 |
| 94 |
| 105 |
| 104 |
| |

Application range

- > Steel structures
- > Machinery
- > Guard rails
- > Railings
- > Base plates
- > Storage racks

Properties

- > Safety bolt with countersunk screw
- > Zinc-plated steel
- Torque-controlled heavy-duty anchor with double cone for push-through installation
- Suitable for heavy loads thanks to the optimum frictional resistance
- > Cylindrical, wide expansion zone of the sleeve along the whole length
- > For dry indoor use
- > Removable

Notice

The load values in these tables are based on concrete C20/25, $f_{\text{ck,cube}} = 25 \text{ N/mm}^2; \text{ correct installation; no influence of centre} \\ \text{and edge distances; observe the minimum thickness of the} \\ \text{base material.}$

Technical specifications



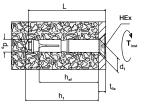
Certifications



Base materials

Approved for

- > Cracked concrete
- > Non-cracked concrete



| Characteristic values | | | | | | Admissible non-crack | e loads ed concrete C20/25 | Admissible cracked co | e loads oncrete C20/25 |
|-----------------------|------------------------|-------------|------------------------|-------------------------|---------------------------|--------------------------|-------------------------------|--------------------------|---------------------------|
| Тур | d _f [mm] | HEX [mm] | d _o [mm] | h _{ef} [mm] | T _{inst} [Nm] | N _{Rec} [kN] | V _{Rec} [kN] | N _{Rec} [kN] | V _{Rec} [kN] |
| M6-10/45/15 | 12 | 4 | 10 | 45 | 12 | 3.0 | 7.2 | 2.4 | 5.2 |
| M6-10/45/40 | 12 | 4 | 10 | 45 | 12 | 3.0 | 7.2 | 2.4 | 5.2 |
| M8-12/55/15 | 14 | 5 | 12 | 55 | 20 | 4.8 | 9.8 | 3.6 | 7.0 |
| M8-12/55/40 | 14 | 5 | 12 | 55 | 20 | 4.8 | 9.8 | 3.6 | 7.0 |
| | | | | | | | | | |

| Order example | Nominal size [mm] | L [mm] | d _o [mm] | h ₁ [mm] | t _{fix} [mm] | d _k [mm] | k [mm] | HEX [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|-----------------------|----------------------|-----------|------------------------|------------------------|--------------------------|------------------------|-----------|-------------|----------------|--------------------|----------------|---------------|
| LIEBIG SK M6-10/45/15 | M6 | 70 | 10 | 60 | 15 | 20 | 5.5 | 4 | 50 | | 9650045415 | 4061245005591 |
| LIEBIG SK M6-10/45/40 | M6 | 95 | 10 | 60 | 40 | 20 | 5.5 | 4 | 50 | | 9650045440 | 4061245005584 |
| LIEBIG SK M8-12/55/15 | M8 | 85 | 12 | 70 | 15 | 20 | 6.5 | 5 | 25 | | 9652055415 | 4061245000947 |
| LIEBIG SK M8-12/55/40 | M8 | 110 | 12 | 70 | 40 | 24 | 6.5 | 5 | 25 | | 9652055440 | 4061245000930 |





LIEBIG® self-undercutting anchor SUPERPLUS BLS



| Cross references | page |
|--------------------------------|------|
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Hammer drill SDS plus® | 98 |
| Installation tool through bolt | 107 |
| Cordless hammer drill ABH | 94 |
| Torque wrench | 105 |
| Socket wrench | 104 |

Application range

- > Power plants
- > Guard rails
- > Machinery
- > Base plates
- > For dynamic and seismic loads
- > Small spacings and edge distances

Properties

- > Self-undercutting anchor with threaded bolt, nut and washer
- > Zinc-plated steel
- Automatic self-undercutting, unique heavy-duty anchor for push through installation
- > Simplest, quickest and safest solution on the market
- Cost-effective: No special drills, undercutting or setting tools required
- Minimal expansion forces allow for small centre and edge distances
- > For dry indoor use
- > Removable

Notice

The load values in these tables are based on concrete C20/25, $\rm f_{\rm ck,cube} = 25~N/mm^2;$ correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

Technical specifications











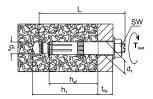
Certifications



Base materials

Approved for

- > Cracked concrete
- > Non-cracked concrete



| Characteristic values | | | | | | | e loads ed concrete C20/25 | | Admissible loads cracked concrete C20/25 | | |
|-----------------------|------------------------|------------|------------------------|-------------------------|---------------------------|--------------------------|-------------------------------|--------------------------|--|--|--|
| Тур | d _f [mm] | SW [mm] | d _o [mm] | h _{ef} [mm] | T _{inst} [Nm] | N _{Rec} [kN] | V _{Rec} [kN] | N _{Rec} [kN] | V _{Rec} [kN] | | |
| M8-14/80/25 | 16 | 13 | 14 | 80 | 25 | 13.9 | 23.7 | 7.6 | 23.7 | | |
| M12-20/80/15 | 21 | 19 | 20 | 80 | 80 | 17.2 | 34.4 | 11.9 | 24.6 | | |
| M12-20/80/30 | 21 | 19 | 20 | 80 | 80 | 17.2 | 34.4 | 11.9 | 24.6 | | |
| M16-25/150/30 | 26 | 24 | 25 | 150 | 180 | 44.1 | 67.4 | 23.8 | 63.0 | | |
| M16-25/200/40 | 26 | 24 | 25 | 200 | 180 | 59.8 | 67.4 | 35.7 | 67.4 | | |
| M16-25/200/60 | 26 | 24 | 25 | 200 | 180 | 59.8 | 67.4 | 35.7 | 67.4 | | |

| Order example | Nominal size [mm] | L [mm] | d _o [mm] | h ₁ [mm] | t _{fix} [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|------------------------------------|----------------------|-----------|------------------------|------------------------|--------------------------|----------------|--------------------|----------------|---------------|
| LIEBIG SUPERPLUS BLS M8-14/80/25 | M8 | 130 | 14 | 100 | 25 | 25 | | 9654080025 | 4061245000756 |
| LIEBIG SUPERPLUS BLS M12-20/80/15 | M12 | 130 | 20 | 105 | 15 | 10 | | 9650080015 | 4061245001586 |
| LIEBIG SUPERPLUS BLS M12-20/80/30 | M12 | 145 | 20 | 105 | 30 | 10 | | 9650080030 | 4061245001579 |
| LIEBIG SUPERPLUS BLS M16-25/150/30 | M16 | 220 | 25 | 185 | 30 | 5 | | 9655150030 | 4061245000091 |
| LIEBIG SUPERPLUS BLS M16-25/200/40 | M16 | 280 | 25 | 235 | 40 | 5 | | 9655200040 | 4061245000039 |
| LIEBIG SUPERPLUS BLS M16-25/200/60 | M16 | 300 | 25 | 235 | 60 | 5 | | 9655200060 | 4061245000022 |





LIEBIG® self-undercutting anchor SUPERPLUS BLS A4



| Cross references | page |
|--------------------------------|------|
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Hammer drill SDS plus® | 98 |
| Installation tool through bolt | 107 |
| Cordless hammer drill ABH | 94 |
| Torque wrench | 105 |
| Socket wrench | 104 |
| | |

Application range

- > Power plants
- > Guard rails
- > Machinery
- > Base plates
- > For dynamic and seismic loads
- > Small spacings and edge distances

Properties

- > Self-undercutting anchor with threaded bolt, nut and washer
- > A4-80 stainless steel
- Automatic self-undercutting, unique heavy-duty anchor for push through installation
- > Simplest, quickest and safest solution on the market
- Cost-effective: No special drills, undercutting or setting tools required
- Minimal expansion forces allow for small centre and edge distances
- For indoor and outdoor areas, as well as industrial applications
- > Removable

Notice

The load values in these tables are based on concrete C20/25, $\rm f_{\rm ok,cube} = 25~N/mm^2;$ correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

Technical specifications











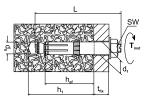
Certifications



Base materials

Approved for

- > Cracked concrete
- > Non-cracked concrete



| Characteristic values | | | | | | Admissible non-crack | e loads ed concrete C20/25 | Admissible cracked co | e loads oncrete C20/25 |
|-----------------------|------------------------|------------|------------------------|-------------------------|-------------------|--------------------------|-------------------------------|--------------------------|---------------------------|
| Тур | d _f [mm] | SW [mm] | d _o [mm] | h _{ef} [mm] | T _{inst} | N _{Rec} [kN] | V _{Rec} [kN] | N _{Rec} [kN] | V _{Rec} [kN] |
| M8-14/80/25 | 16 | 16 | 14 | 80 | 25 | 13.1 | 24.0 | 5.7 | 24.0 |
| M12-20/80/15 | 21 | 19 | 20 | 80 | 80 | 17.2 | 34.4 | 11.9 | 24.5 |
| M16-25/150/30 | 26 | 24 | 25 | 150 | 180 | 44.1 | 67.4 | 28.6 | 63.0 |

| Order example | Nominal size [mm] | L [mm] | d _o [mm] | h ₁ [mm] | t _{fix} [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|---------------------------------------|----------------------|-----------|------------------------|------------------------|--------------------------|----------------|--------------------|----------------|---------------|
| LIEBIG SUPERPLUS BLS M8-14/80/25 A4 | M8 | 130 | 14 | 100 | 25 | 25 | | 9654080254 | 4061245000732 |
| LIEBIG SUPERPLUS BLS M12-20/80/15 A4 | M12 | 130 | 20 | 105 | 15 | 10 | | 9650080154 | 4061245001500 |
| LIEBIG SUPERPLUS BLS M16-25/150/30 A4 | M16 | 220 | 25 | 185 | 30 | 5 | | 9655150304 | 4061245000053 |

Further versions upon request!



SUPERPLUS SLS A4



SUPERPLUS SKLS A4



SUPERPLUS BLS-P



SUPERPLUS ILS



LIEBIG® lightning protection anchor SUPERPLUS BLS M8-14 A4



Cross referencespageCleaning brush113Blow-out pump113Hammer drill SDS plus®98Installation tool through bolt107Cordless hammer drill ABH94Torque wrench105Socket wrench104

Application range

> Retrofitted grounding systems

Properties

- > A4 stainless steel
- > Automatically self-undercutting, unique heavy duty anchor for pre-set installations
- Connected retrofitted grounding systems with reinforced bars in concrete structures
- A4 for indoor and outdoor areas, as well as industrial applications
- > Removable

Notice

The load values in these tables are based on concrete C20/25, $\rm f_{\rm ok,cube} = 25~N/mm^2;$ correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

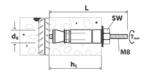
Technical specifications



Base materials

Also suitable for

> Concrete



| Order example | Nominal size [mm] | L [mm] | d _o [mm] | h _i [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|---|----------------------|-----------|------------------------|------------------------|----------------|--------------------|----------------|---------------|
| LIEBIG lightning protection anchor BLS M8-14 A4 | M8 | 85 | 14 | 40 60 | 25 | | 9650814085 | 4061245001111 |



LIEBIG® step iron anchor SUPERPLUS A4



Cross referencespageCleaning brush113Blow-out pump113Hammer drill SDS plus®98Installation tool through bolt107Cordless hammer drill ABH94Torque wrench105Socket wrench104

Application range

> Step iron fastenings as per DIN 1211-3 / DIN 1212-3

Properties

- > A4 stainless steel
- > Automatic self-undercutting, unique heavy-duty anchor for push through installation
- > Used to attach step irons in wastewater revision chutes. The special plastic sleeves prevent contact corrosion between the step iron and the anchor
- > Also easy to install in areas difficult to access.
- > A4 for indoor and outdoor areas, as well as industrial applications
- > Removable

Notice

The load values in these tables are based on concrete C20/25, $f_{\text{ck,cube}} = 25 \text{ N/mm}^2; \text{ correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.} \label{eq:fk}$

Technical specifications







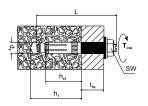
Certifications



Base materials

Approved for

- > Cracked concrete
- > Non-cracked concrete



Installation process

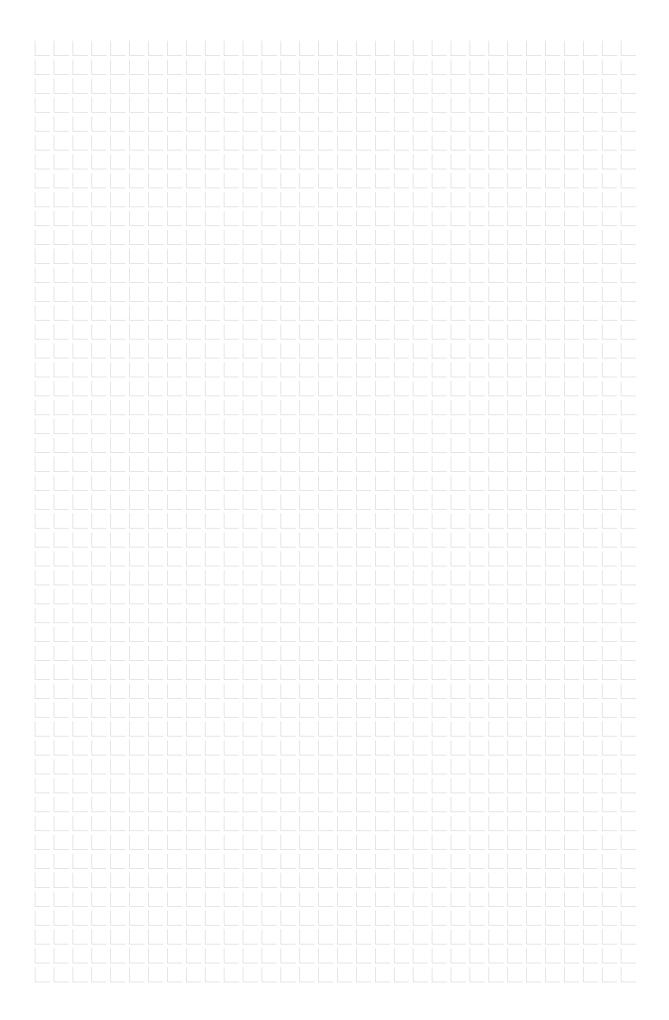




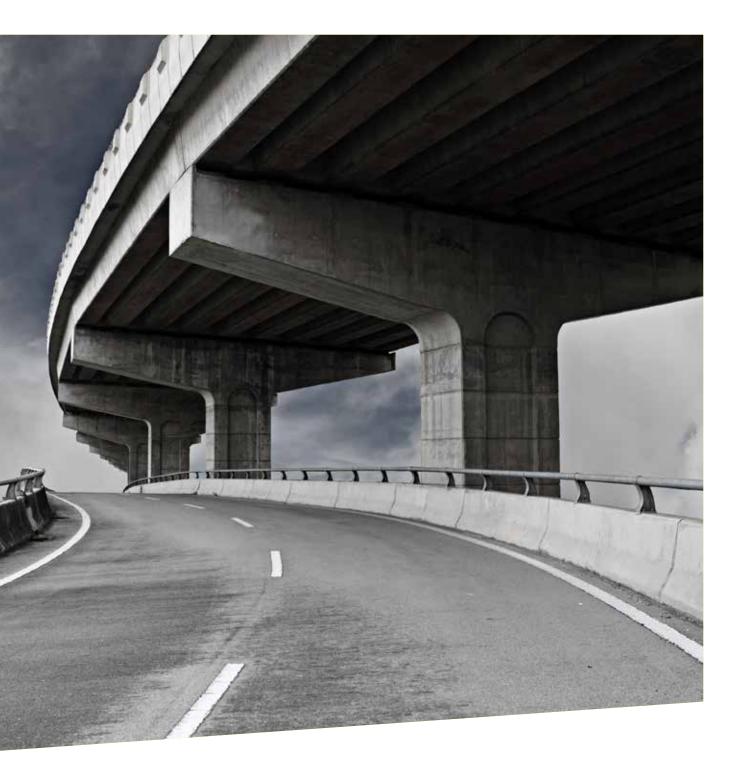
| Characteristic values | | | | | | Admissible non-cracke | loads ed concrete C20/25 | Admissible loads cracked concrete C20/25 | |
|-----------------------|------------------------|------------|------------------------|-------------------------|-------------------|--------------------------|-----------------------------|---|--------------------------|
| Тур | d _f [mm] | SW [mm] | d _o [mm] | h _{ef} [mm] | T _{inst} | N _{Rec} [kN] | V _{Rec} [kN] | N _{Rec} [kN] | V _{Rec} [kN] |
| M8-14/40 | 16 | 16 | 14 | 40 | 25 | 6.1 | 6.1 | 4.3 | 4.3 |
| M8-14/60 | 16 | 16 | 14 | 60 | 25 | 6.1 | 6.1 | 4.3 | 4.3 |

| Order example | Nominal size [mm] | L [mm] | d _o [mm] | h ₁ [mm] | t _{fix} [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|---|----------------------|-----------|------------------------|------------------------|--------------------------|----------------|--------------------|----------------|---------------|
| LIEBIG step iron anchor BLS M8-14/40SD A4 | M8 | 95 | 14 | 60 | 25 | 100 | | 9650814040 | 4061245001135 |
| LIEBIG step iron anchor BLS M8-14/60SA A4 | M8 | 115 | 14 | 80 | 25 | 25 | | 9650040060 | 4061245001630 |









Chemical installation



Product overview composite anchors

| | Injection system Multifix PSF+ | Injection system Multifix USF | Injection system Multifix USF Winter | Injection system Multifix SE1000 Seismic |
|--------------------------------|--|---|---|---|
| Anchor | EJOT MULTIFR PSF+ 2 420 ml C | EJOT USF | USF WINTER WINTER Soo me (1) | MUUNA MELUNA ME MELUNA MELUNA MELUNA MELUNA MELUNA MELUNA MELUNA MELUNA MELUNA |
| Material | Polyester resin, styrene free | Vinyl resin, styrene-free | Vinyl resin, styrene-free | Epoxy resin |
| Application range | Anchoring at low load level in non-cracked concrete and masonry. | Anchoring at medium load level in cracked and non-cracked concrete and masonry. | Anchoring at medium load level in cracked and non-cracked concrete and masonry. | Anchoring at high load level in cracked and non-cracked concrete and masonry. |
| Cracked concrete ETAG-001-1 | - | M8 - M30 Ø 8 - 32 mm | M8 - M30 Ø 8 - 32 mm | M8-M30 Ø 8-32 mm |
| Non-cracked concrete | M8-M24 | M8 - M30 Ø 8 - 32 mm | M8 - M30 Ø 8 - 32 mm | M8-M30 Ø 8-32 mm |
| Hollow masonry | M8-M16 | M8-M16 | M8-M16 | - |
| Solid masonry | M8-M16 | M8-M16 | M8-M16 | - |
| Technical specifications | - | | | |
| Approvals | ETA-21/0664 ETA-22/0438 | ETA-16/0107 ETA-16/0089 | ETA-16/0107 ETA-16/0089 | ETA-20/1280 |
| Admissible tensile load [kN] | 5.6-31.0 | 4.3-93.9 | 4.3-93.9 | 13.8-103.9 |
| Admissible shear load [kN] | 5.1-50.3 | 3.3-65.5 | 3.3-65.5 | 8.6-72.3 |



Injection system Multifix PSF+



Included in delivery 1 mortar cartridge

1 mixing nozzles

Cross references

Application range

- > Installation in non-cracked concrete (option 7)
- > Installation into masonry (perforated brick and solid brick)
- > Approved for anchor rods M8, M10, M12, M16, M20, M24

Properties

- > Polyester resin, styrene free
- > Short curing time
- > Can be used in wet concrete and water-filled drill holes
- > Available in cartridge sizes 300ml and 420ml

Please observe the corresponding approvals during planning

The storage temperature must not permanently exceed 25 °C! Please store upright!

Applications









Technical specifications



Certifications







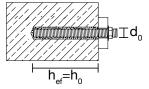
Anchor rod 64 Mesh sleeve 65 Cleaning brush 113 Blow-out pump 113 Applicator gun AP410/420ml 110 Hammer drill SDS plus® 98 Duster Expert SDS plus 112 Cordless hammer drill

page

Installation process











| Installation parameters (concrete) | | | | | | |
|------------------------------------|------------------------|-------------------------------|--------------------------------------|--|--|--|
| Anchor rod | d _o [mm] | $h_{ef} = h_0$ min - max [mm] | T _{inst} concrete ≤ [Nm] | | | |
| M8 | 10 | 60 - 160 | 10 | | | |
| M10 | 12 | 60 - 200 | 20 | | | |
| M12 | 14 | 70 - 240 | 40 | | | |
| M16 | 18 | 80 - 320 | 80 | | | |
| M20 | 24 | 90 - 400 | 120 | | | |
| M24 | 28 | 96 - 480 | 160 | | | |

| ambient temperature °C] | Processing time | Curing time in dry weather |
|----------------------------|-----------------|----------------------------------|
| ≥ -5 | 1h 30' | 6h |
| 2 0 | 45' | 3h |
| +5 | 25' | 2h |
| +10 | 20' | 1h 40' |
| +20 | 6' | 45' |
| +30 | 4' | 25' |
| : +39 | 2' | 20' |

| Consumption in perforated building materials (standard value) | | | | | |
|---|------------|------------------------|------------------------|-------------------|--|
| Msh sleeve | Anchor rod | d _o [mm] | h _o [mm] | Swept volume [mm] | |
| USF 12x80 | M8 | 12 | 85 | 13 | |
| USF 16x85 | M8/M10 | 16 | 90 | 27 | |
| USF 16x130 | M8/M10 | 16 | 135 | 42 | |
| USF 20x85 | M12/M16 | 20 | 90 | 44 | |
| USF 20x130 | M12/M16 | 20 | 135 | 67 | |
| USF 20x200 | M12/M16 | 20 | 205 | 102 | |

| Order description | Content [ml] | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|--|-----------------|----------------|------------------|----------------|---------------|
| Mortar cartridge Multifix PSF+ 300ml | 300 | 1 | | 9573002300 | 4061245079004 |
| Mortar cartridge Multifix PSF+ 420ml | 420 | 1 | | 9573000410 | 4061245079011 |
| Mixer extension 500ml | - | 1 | | 8682900004 | 4061245081106 |
| Replacement mixer | - | 1 | | 9570040141 | 4061245061900 |
| Ordering information: Multifix PSF incl. 1 mixing nozzle included in the scope of de | elivery | | | | |

 $[\]mathbf{d_{0}} = \text{nominal drill diameter; } \mathbf{h_{ef}} = \text{effective embedment depth; } \mathbf{h_{0}} = \text{drill hole depth; } \mathbf{T_{inst}} = \text{tightening torque}$



Injection system Multifix USF



Application range

- For installation in cracked concrete (option 1) and noncracked concrete (option 7) (ETA-16/0107)
- > For installation in masonry (ETA-16/0089)
- > Approved for anchor rods M8, M10, M12, M16, M20, M24, M27, M30

Properties

- > Vinyl resin, styrene-free
- > Can be used in wet concrete and water-filled drill holes

Notice

Please observe the corresponding approvals during planning and processing.

The storage temperature must not permanently exceed 25 °C! Please store upright!

Included in delivery

- 1 mortar cartridge USF 280 ml incl. 2 mixing nozzles
- 1 mortar cartridge USF 420 ml incl.
- 1 mixing nozzle

| Cross references | page |
|---------------------------|------|
| Anchor rod | 64 |
| Mesh sleeve | 65 |
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Applicator gun | 110 |
| Hammer drill SDS plus® | 98 |
| Cordless hammer drill ABH | 94 |

| Installation parameters | | | | | | |
|-------------------------|------------------------|-----------------------------|--------------------------------------|--|--|--|
| Anchor rod | d _o [mm] | $h_{ef} = h_0$ min-max [mm] | T _{inst} concrete ≤ [Nm] | | | |
| M8 | 10 | 60-160 | 10 | | | |
| M10 | 12 | 60-200 | 20 | | | |
| M12 | 14 | 70-240 | 40 | | | |
| M16 | 18 | 80-320 | 60 | | | |
| M20 | 22 | 90-400 | 100 | | | |
| M24 | 28 | 96-480 | 170 | | | |
| M27 | 30 | 108-540 | 250 | | | |
| M30 | 35 | 120-600 | 300 | | | |

Product video Installation parameters (IISE 280 m





Installation process





| Installation param | eters (USF 280 ml) | | |
|---------------------|--------------------|----------------------------------|----------------------------------|
| Ambient temperature | Processing time | Curing time in dry weather | Curing time in wet weather |
| -10* | 1h 30' | 24h | 48h |
| ≥ -5 | 1h 30' | 14h | 28h |
| ≥ 0 | 45' | 7h | 14h |
| ≥ +5 | 25' | 2h | 4h |
| ≥ +10 | 15' | 1h 20' | 2h 40' |
| ≥ +20 | 6' | 45' | 1h 30' |
| ≥ +30 | 4' | 25' | 50' |
| ≥ +35 | 2' | 20' | 40' |
| +40 | 1.5' | 15' | 30' |

Applications









Technical specifications







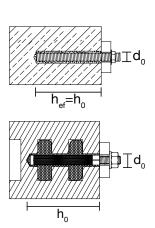
Certifications

















| Consumption in solid bu | uilding materials (USF | 280 ml) | |
|-------------------------|------------------------|------------------------|-----------------|
| Anchor rod | d _o [mm] | h _o [mm] | Number of fills |
| M8x130 | 10 | 80 | 41 |
| M10x130 | 12 | 90 | 26 |
| M10x170 | 12 | 130 | 18 |
| M12x160 | 14 | 110 | 15 |
| M16x190 | 18 | 125 | 8 |
| | | | |

| Consumption i | n perforated build | ling materials | 8 | |
|---------------|--------------------|------------------------|------------------------|-----------------|
| Msh sleeve | Anchor rod | d _o [mm] | h _o [mm] | Number of fills |
| USF 12x80 | M8 | 12 | 85 | 13 |
| USF 16x85 | M8/M10 | 16 | 90 | 27 |
| USF 16x130 | M8/M10 | 16 | 135 | 42 |
| USF 20x85 | M12/M16 | 20 | 90 | 44 |
| USF 20x130 | M12/M16 | 20 | 135 | 67 |
| USF 20x200 | M12/M16 | 20 | 205 | 102 |

| Order description | Content [ml] | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|---|-----------------|----------------|------------------|----------------|---------------|
| Mortar cartridge USF 280 ml | 280 | 1 | | 9571000280 | 4061245010557 |
| Mortar cartridge USF 420 ml | 420 | 1 | | 9571001420 | 4061245081007 |
| Mixer extension 500ml | - | 1 | | 8682900004 | 4061245081106 |
| Mixing nozzle USF | - | 1 | | 9570040141 | 4061245061900 |
| Ordering information: USF 280 ml incl. 2 mixing nozzles or USF 420 ml incl. 1 mixing nozzle included in the scope of delivery | | | | | |



Injection system Multifix USF Winter



Application range

- > For installation in cracked concrete (option 1) and noncracked concrete (option 7) (ETA-16/0107)
- > For installation in masonry (ETA-16/0089)
- > Approved for anchor rods M8, M10, M12, M16, M20, M24, M27, M30

Properties

- > Vinyl resin, styrene-free
- > Cartridge temperature may conform to the low outside temperature
- > Shorter curing times at low temperatures
- > Can be used in wet concrete and water-filled drill holes

Please observe the corresponding approvals during planning

The storage temperature must not permanently exceed

Technical specifications



Applications





Included in delivery

1 mortar cartridge

2 mixing nozzles

| Cross references | page |
|---------------------------|------|
| Anchor rod | 64 |
| Mesh sleeve | 65 |
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Applicator gun | 110 |
| Hammer drill SDS plus® | 98 |
| Cordless hammer drill ARH | 9/1 |

Product video





Installation parameters

25 °C! Please store upright!







Certifications









Installation process



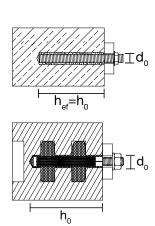


| ilistaliation par | installation parameters | | | | | | | |
|-------------------|-------------------------|-----------------------------|--------------------------------------|--|--|--|--|--|
| Anchor rod | d _o [mm] | $h_{ef} = h_0$ min-max [mm] | T _{inst} concrete ≤ [Nm] | | | | | |
| M8 | 10 | 60-160 | 10 | | | | | |
| M10 | 12 | 60-200 | 20 | | | | | |
| M12 | 14 | 70-240 | 40 | | | | | |
| M16 | 18 | 80-320 | 60 | | | | | |
| M20 | 22 | 90-400 | 100 | | | | | |
| M24 | 28 | 96-480 | 170 | | | | | |
| M27 | 30 | 108-540 | 250 | | | | | |
| M30 | 35 | 120-600 | 300 | | | | | |

Installation parameters (USF Winter 300 ml)

| Installation parameters (USF Winter 300 ml) | | | | | | |
|---|-----------------|----------------------------------|----------------------------------|--|--|--|
| Ambient temperature [°C] | Processing time | Curing time in dry weather | Curing time in wet weather | | | |
| -20* | 1h 15' | 24h | 48h | | | |
| ≥ -15 | 55' | 16h | 32h | | | |
| ≥ -10 | 35' | 10h | 20h | | | |
| ≥ -5 | 20' | 5h | 10h | | | |
| ≥ 0 | 10' | 2h 30' | 5h | | | |
| ≥ +5 | 6' | 1h 20' | 2h 40' | | | |
| 10 | 6' | 1h | 2h | | | |

^{*}Min. cartridge temperature -20 °C









| Consumption in solid building materials (USF winter 300 ml) | | | | | | |
|---|------------------------|------------------------|-----------------|--|--|--|
| Anchor rod | d _o [mm] | h _o [mm] | Number of fills | | | |
| M8x130 | 10 | 80 | 44 | | | |
| M10x130 | 12 | 90 | 27 | | | |
| M10x170 | 12 | 130 | 19 | | | |
| M12x160 | 14 | 110 | 16 | | | |
| M16x190 | 18 | 125 | 9 | | | |

| Consumption in perforated building materials | | | | | | | |
|--|------------|------------------------|------------------------|-----------------|--|--|--|
| Msh sleeve | Anchor rod | d _o [mm] | h _o [mm] | Number of fills | | | |
| USF 12x80 | M8 | 12 | 85 | 13 | | | |
| USF 16x85 | M8/M10 | 16 | 90 | 27 | | | |
| USF 16x130 | M8/M10 | 16 | 135 | 42 | | | |
| USF 20x85 | M12/M16 | 20 | 90 | 44 | | | |
| USF 20x130 | M12/M16 | 20 | 135 | 67 | | | |
| USF 20x200 | M12/M16 | 20 | 205 | 102 | | | |

| Order description | Content [ml] | PU [pieces] | Price/1 [EUR] | Article number | EAN | | |
|--|-----------------|----------------|------------------|----------------|---------------|--|--|
| Mortar cartridge USF winter 300 ml | 300 | 1 | | 9571000300 | 4061245010540 | | |
| Mixer extension 500ml | - | 1 | | 8682900004 | 4061245081106 | | |
| Mixing nozzle USF | - | 1 | | 9570040141 | 4061245061900 | | |
| Ordering information: USF Winter 300 ml incl. 2 mixing nozzles included in the scope of delivery | | | | | | | |



Injection system Multifix SE1000 Seismic



Included in delivery

1 mortar cartridge

1 mixing nozzles

Cross references

Anchor rod

Mesh sleeve

Cleaning brush

Blow-out pump

Applicator gun AP585ml

Hammer drill SDS plus®

Duster Expert SDS plus

Cordless hammer drill

Application examples

> Suitable for fastening facades, awnings, wooden structures, metal structures, metal profiles, supports, beams, consoles, railings, grids, sanitary objects, pipelines, cable routes.

Application range

Substrates:

> Cracked and non-cracked concrete.

Fastening elements:

Threaded rods (galvanized, diffusion galvanized or hot-dip galvanized, stainless steel A4, A2 or HCR), reinforcing iron, internally threaded sleeves.

Properties

page

64

65

113

113

111

98

112

- > Fire behavior test report
- > For heavy duty applications
- > Overhead installation
- > Water-filled drill holes
- > Fastening without expansion pressure, therefore small edge and center distances possible
- > Good chemical resistance
- > Low odor development
- > High flexural and compressive strength
- The cartridge can be used again until the end of its shelf life by replacing the static mixer or by closing it again with the original cap
- > State-of-the-art ingredients, complies with the latest REACH regulations
- > 100 years service life

Applications



Technical specifications







Certifications











| Installaton parai | neters | | | | | | |
|-------------------|------------------------|---|-----------------------------|--|---|-----------------------------------|--------------------------|
| Anchor rod | d _o [mm] | h _{ef} = h _o min - max [mm] | T _{inst} ≤ [Nm] | Pre-set installation d _f [mm] | In-place installation d _f [mm] | h _{min} [mm] | S _{min} [mm] |
| M8 | 10 | 60 - 160 | 10 | 9 | 12 | $h_{ef} + 30 \ge 100$ | 40 |
| M10 | 12 | 60 - 200 | 20 | 12 | 14 | $h_{ef} + 30 \ge 100$ | 50 |
| M12 | 14 | 70 - 240 | 40 | 14 | 16 | $h_{ef} + 30 \ge 100$ | 60 |
| M16 | 18 | 80 - 320 | 60 | 18 | 20 | $h_{ef} + 2d_0$ | 75 |
| M20 | 22 | 90 - 400 | 100 | 22 | 24 | h _{ef} + 2d ₀ | 95 |
| M24 | 28 | 96 - 480 | 170 | 26 | 30 | h _{ef} + 2d ₀ | 115 |
| M27 | 30 | 108 - 540 | 250 | 30 | 33 | $h_{ef} + 2d_0$ | 125 |
| M30 | 35 | 120 - 600 | 300 | 33 | 40 | $h_{ef} + 2d_0$ | 140 |
| | | | | | | | |

 d_0 = nominal drill diameter; h_{ef} = effective installation depth; h_0 = drill hole depth; T_{inst} = tightening torque; d_f = diameter of the through hole in the attachment; h_{min} = minimum component thickness; S_{min} = minimum center distance

| Installation parameter | S | | |
|-----------------------------------|----------------------|----------------------------------|----------------------------------|
| Temperature in the substrate [°C] | Open processing time | Curing time in dry weather | Curing time in wet weather |
| 0 - 4 | 80' | 144h | 288h |
| 5 - 9 | 80' | 48h | 96h |
| 10 - 14 | 60' | 28h | 56h |
| 15 - 19 | 40' | 18h | 36h |
| 20 - 24 | 30' | 12h | 24h |
| 25 - 34 | 12' | 9h | 18h |
| 25 - 39 | 8' | 6h | 12h |
| +40 | 8' | 4h | 8h |

Cartridge temperature +5 °C to +40 °C Ambient temperature after complete curing -40 ° C to +72 ° C

| Order description | Content [ml] | PU [pieces] | Price/1 [EUR] | Article number | EAN | | |
|--|-----------------|----------------|------------------|----------------|---------------|--|--|
| Mortar cartridge Multifix SE1000 Seismic 585 ml | 585 | 1 | | 9571001000 | 4061245074788 | | |
| Ordering information: Multifix SE1000 Seismic 585 ml incl. one mixing nozzle included in the scope of delivery | | | | | | | |



Anchor rod AST / threaded rod



Application range

- > For embedment in concrete and solid brick
- > For embedment in perforated brick in combination with mesh sleeve

Properties of AST steel

- > Anchor rod: property class 5.8 or 8.8 acc. to EN ISO 898-1
- > Nut: property class 5 or 8 according to EN ISO 898-2
- > Washer: acc. to EN ISO 7089

Properties of AST A4 stainless steel (1.4401 / 1.4571)

- Anchor rod: EN 10088; property class 70 (A4-70) acc. to EN ISO 3506
- Nut: EN 10088; property class 70 (A4-70) acc. to EN ISO 3506
- > Washer: acc. to EN 10088

Notice

To determine the characteristic load-bearing capacity in concrete or masonry, the ETAs of the chemical mortars in the Multifix range must be observed.

Cross references page Mortar cartridge USF 58 60 Mortar cartridge USF winter Mesh sleeve 65 Cleaning brush 113 Blow-out pump 113 Hammer drill SDS plus® 98 Cordless hammer drill ABH 94

| Technical specifications | | | | | | |
|--------------------------|------------------------------------|---------------------------------------|-------------------------|--|--|--|
| Threads | Embedment depth in concrete ≥ [mm] | Embedment depth in solid brick ≥ [mm] | Drill hole depth ≥ [mm] | | | |
| M10 | 60 | 90 | 12 | | | |

| Order description | Threads | Length [mm] | PU [pieces] | Price/100 piece [EUR] | Article number | EAN |
|------------------------------------|---------|----------------|----------------|--------------------------|----------------|---------------|
| Anchor rod AST, zinc-plated steel | | | | | | |
| AST M10x130-V | M10 | 130 | 10 | | 9570910130 | 4061245010588 |
| AST M10x170-V | M10 | 170 | 10 | | 9570910170 | 4061245010571 |
| Anchor rod AST, A4 stainless steel | | | | | | |
| AST M10x110-E | M10 | 110 | 10 | | 9571910110 | 4061245061597 |
| AST M10x130-E | M10 | 130 | 10 | | 9571910130 | 4061245010472 |
| AST M10x170-E | M10 | 170 | 10 | | 9571910170 | 4061245010465 |

Further lengths upon request



Technical specifications





Mesh sleeve



Application range

> For anchoring in perforated brick in combination with Multifix USF, Multifix USF Winter and Multifix PSF+.

Properties

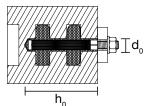
> For exact centering of the threaded rod

Notice

Please observe the ETAs of the chemical mortars in the Multifix range when planning and processing

Certifications

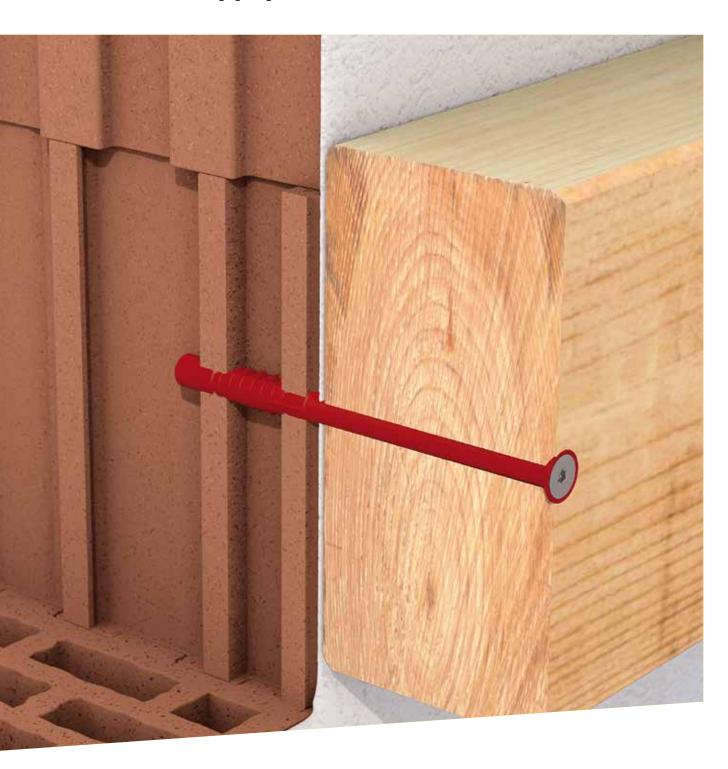




| Cross references | page |
|-----------------------------|------|
| Mortar cartridge USF | 58 |
| Mortar cartridge USF winter | 60 |
| Anchor rot | 64 |
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Hammer drill SDS plus® | 98 |
| Cordless hammer drill ABH | 94 |

| Order description | d _o [mm] | h _o [mm] | For threaded rod | Packag- ing unit [pieces] | Price/100 [EUR] | Article number | EAN |
|------------------------|------------------------|------------------------|------------------|---------------------------------|--------------------|----------------|---------------|
| Mesh sleeve USF 16x85 | 16 | 85 | M8 / M10 | 10 | | 9571016085 | 4061245010526 |
| Mesh sleeve USF 16x130 | 16 | 130 | M8 / M10 | 10 | | 9571016130 | 4061245010519 |





Nylon anchors



| Anchor type | | F-S V | | -KB V | | F-S OV | | -KB OV | | F-S DH | | -KB DH | | F-S 4A | | -KB 4A | | P-S OG | | P-KB DG |
|----------------|-------------|----------|-------------|----------|----|-----------|----|--|----|-----------|----|-----------|-----|-----------|----|-----------|----|-------------|----|------------|
| Length [mm] | | · · | | entro- | | | - | THE STATE OF THE S | | | - | | - | 7 | | | | | | |
| Material | -V | -E | -V | -E | -V | -E | -V | -E | -V | -E | -V | -E | -V | -E | -V | -E | -V | -E | -V | -E |
| 50 | | | | | | | • | • | | | | | | | | | | | | |
| 60 | | | • | | • | | • | • | | | | | | | | | | | | |
| 70 | | | | | • | | • | • | | | | | | | | | | | | |
| 80 | • | | • | | • | | • | | • | • | • | • | | | • | • | • | • | • | • |
| 100 | • | | • | | • | | • | | • | • | • | • | | | • | • | • | • | • | • |
| 120 | • | | • | | • | | • | | • | • | • | • | • | | | | • | • | • | • |
| 140 | • | | • | | • | | • | | • | • | • | • | • | | | | • | • | • | • |
| 160 | • | | • | | • | | • | | • | • | • | • | • | | | | • | • | • | • |
| 180 | • | | • | | • | | • | | • | • | • | • | • | | | | • | • | • | • |
| 200 | ● 1) | | ● 1) | | • | | • | | • | • | • | • | • | | | | • | ● 1) | • | •1) |
| 220 | ● 1) | | •1) | | • | | • | | • | • | • | • | • | | | | • | ● 1) | • | •1) |
| 240 | | | | | | | | | • | • | | | • | | | | | | | |
| 260 | | | | | | | | | • | • | | | • | | | | | | | |
| 280 | | | | | | | | | • | • | | | •1) | | | | | | | |
| 300 | | | | | | | | | • | • | | | • | | | | | | | |
| 320 | | | | | | | | | | | | | • | | | | | | | |
| 340 | | | | | | | | | | | | | • | | | | | | | |
| 360 | | | | | | | | | | | | | • | | | | | | | |

| Building materials | Standard | SDF-8V | SDF-10V | SDF-10H | SDF-14A | SDP-10G | |
|--|-----------------|--------|---------|---------|---------|---------|--|
| Standard concrete ≥ C12/15 | DIN EN 1992-1-1 | • | • | • | • | | |
| Solid brick Mz | EN 771-1 | • | • | • | • | | |
| Vertically perforated brick HIz | EN 771-1 | | | • | • | | |
| Vertically perforated brick LHIz ¹⁾ | EN 771-1 | | | • | | | |
| Solid sand-lime brick KS | EN 771-2 | (•) | • | • | • | | |
| Perforated lime sand brick KSL | EN 771-2 | | | • | • | | |
| Lightweight concrete cavity block ≥ HBL 2 | EN 771-3 | | | • | • | | |
| Solid lightweight concrete bricks | EN 771-3 | (•) | | • | | | |
| Solid concrete bricks | EN 771-3 | (•) | | | • | | |
| Concrete cavity blocks ¹⁾ | EN 771-3 | | | | | | |
| Concrete rain screens ≥ C 12/15 | DIN EN 1992-1-1 | | | • | | | |
| aerated concrete | EN 771-4 | | | • | • | • | |

¹⁾ As a rule: pull-out test on the structure

Note: Please observe the corresponding approvals for determining the characteristic load-carrying capacity.



Facade anchor SDF-S-8V



Application range

- > Installation of wood parts
- For multiple fastening of non-load-bearing systems according to EAD 330284-00-0604

Properties

- > Countersunk head
- > Small drill hole diameter
- > Product identification through different sleeve colours

Notice

For planning and processing, please observe ETA-15/0387. For bricks of unknown quality, the load-bearing capacity must be determined through pull-out tests on the structure.

Cross references page Cleaning brush 113 Blow-out pump 113 Tool belt 115 Corrosion protection spray Hammer drill SDS plus® 98 Cordless screwdriver ASCM QSW 91 Cordless hammer drill ABH 94 Hexalobular bit TX30 102

| Permitted load* | |
|---|---------|
| Tensile strength $N_{Rk,p}$ in concrete $< C16/20$ | 1.79 kN |
| Tensile strength $N_{Rk,p}$ in concrete $\geq C16/20$ | 2.58 kN |
| Brick Mz 28-1.8, NF | 0.71 kN |
| Solid sand-lime brick KS, NF 20-2.0 | 0.57 kN |
| Shear load capacity V _{Rk,s} | |
| Steel screw (γMs = 1.25) | 4.24 kN |
| Bending moment M _{Rk,s} | |
| Steel screw (γMs = 1.25) | 6.56 Nm |
| *Applies to temperature range 30-50 °C / 50-80 °C | |

Applications





Technical specifications













Certifications

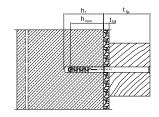




Base materials

Approved for

- > Cracked concrete
- > Non-cracked concrete
- > Solid masonry



| Order description | Length [mm] | Fastening thickness $t_{fix} \le [mm]$ | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|---|----------------|--|----------------|--------------------|----------------|---------------|
| Anchors with steel screws with zinc-plated Cr(VI)-fre | e coating (-\ | /) | | | | |
| SDF-S-8Vx80-V | 80 | 30 | 100 | | 8569080430 | 4061245105604 |
| SDF-S-8Vx100-V | 100 | 50 | 50 | | 8569100430 | 4061245019116 |
| SDF-S-8Vx120-V | 120 | 70 | 50 | | 8569120430 | 4061245019109 |
| SDF-S-8Vx140-V | 140 | 90 | 50 | | 8569140430 | 4061245019093 |
| SDF-S-8Vx160-V | 160 | 110 | 50 | | 8569160430 | 4061245019086 |
| SDF-S-8Vx180-V | 180 | 130 | 50 | | 8569180430 | 4061245019079 |





Facade anchor SDF-KB-8V



Application range

- > Installation of metal attachments
- > For multiple fastening of non-load-bearing systems according to EAD 330284-00-0604

Properties

- > Hexagon head with flange
- > Small drill hole diameter
- > Thermal and galvanic separation
- > Product identification through different sleeve colours

Notice

For planning and processing, please observe ETA-15/0387. For bricks of unknown quality, the load-bearing capacity must be determined through pull-out tests on the structure.

| Cross references | page |
|----------------------------|------|
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Tool belt | 115 |
| Corrosion protection spray | 114 |
| Hammer drill SDS plus® | 98 |
| Cordless screwdriver ASCM | |
| QSW | 91 |
| Cordless hammer drill ABH | 94 |
| Socket wrench insert SW10 | 103 |

| Permitted load* | |
|--|---------|
| Tensile strength $N_{\rm Rk,p}$ in concrete $<$ C16/20 | 1.79 kN |
| Tensile strength $N_{Rk,p}$ in concrete $\geq C16/20$ | 2.58 kN |
| Brick Mz 28-1.8, NF | 0.71 kN |
| Solid sand-lime brick KS, NF 20-2.0 | 0.57 kN |
| Shear load capacity V _{Rk,s} | |
| Steel screw (γ Ms = 1.25) | 4.24 kN |
| Bending moment M _{Rk,s} | |
| Steel screw (γMs = 1.25) | 6.56 Nm |
| *Applies to temperature range 30-50 °C / 50-80 °C | |

Applications





Technical specifications













Certifications

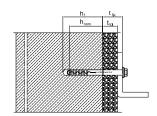




Base materials

Approved for

- > Cracked concrete
- > Non-cracked concrete
- > Solid masonry



| Order description | Length [mm] | Fastening thickness $t_{fix} \le $ [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN | | |
|---|----------------|---|----------------|--------------------|----------------|---------------|--|--|
| Anchors with steel screws with zinc-plated Cr(VI)-free coating (-V) | | | | | | | | |
| SDF-KB-8Vx60-V | 60 | 10 | 100 | | 8570060430 | 4061245019048 | | |
| SDF-KB-8Vx80-V | 80 | 30 | 100 | | 8570080430 | 4061245019024 | | |





Facade anchor SDF-S-10V



Cross references page 113 Cleaning brush Blow-out pump 113 Tool belt 115 Corrosion protection spray 114 Hammer drill SDS plus® 98 Cordless screwdriver ASCM **QSW** 91 Cordless hammer drill ABH 94 Hexalobular bit TX40 102

Application range

- > Installation of wood parts
- For multiple fastening of non-load-bearing systems according to EAD 330284-00-0604
- Suitable for the structural fastening of gates, doors, windows, square timber
- > For application as single fastening in concrete

Properties

- > Countersunk head
- When used according to EAD 330284-00-0604, embedment depth in concrete can be reduced to 40 mm (h_{nom,1})
- > Very short expansion part for extremely fast installation
- > Optimal expanding part due to radial expansion
- > Very high bending moment
- > Product identification through different sleeve colours
- > Double safety lock against torsion for secure installation

Notice

For planning and processing the products, please observe ETA-10/0305 and Z-21.2-2122. Further information about parameters and loads can be found in the approvals. For bricks of unknown quality, the load-bearing capacity must be determined through pull-out tests on the structure.

Admissible loads Tensile load N_{Rk.n} in concrete C12/15 Temperature range 30 °C / 50 °C 1.79kN Temperature range 50 °C / 80 °C 1.59 kN F_{Rk} brick Mz 20-1.8, NF 0.71 kN F_{Rk} solid sand-lime brick KS 36, NF 1.14 kN $F_{\rm Rk}$ solid sand-lime brick KS 20, 8 DF 1.29 kN Transverse load $V_{Rk,s}$ at $h_{nom,1} = 40 \text{ mm}$ Steel screw ($\gamma Ms = 1.25$) 6.34 kN Transverse load V_{Rks} at $h_{nom 2} = 50 \text{ mm}$ Steel screw ($\gamma Ms = 1.25$) 8.87 kNBending moment M_{Bks} at $h_{nom.1} = 40 \text{ mm}$ Steel screw ($\gamma Ms = 1.25$) 11.04 kN Bending moment $M_{Rk,s}$ at $h_{nom,2} = 50 \text{ mm}$ Steel screw ($\gamma Ms = 1.25$) 18.41 Nm

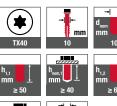
Applications







Technical specifications





Certifications



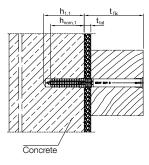


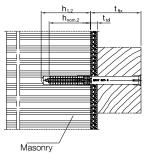


Base materials

Approved for

- > Cracked concrete
- > Non-cracked concrete
- > Solid masonry
- > Hollow and perforated bricks











| Order description | Length [mm] | Fastening thickness t _{fix} (concrete* / masonry) ≤ [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|--|----------------|---|----------------|--------------------|----------------|---------------|
| Anchors with steel screws with zinc-plated Cr(VI)-free | e coating (-V |) | | | | |
| SDF-S-10Vx60-V | 60 | 20 / 10 | 100 | | 8580060450 | 4061245018928 |
| SDF-S-10Vx70-V | 70 | 30 / 20 | 100 | | 8580070450 | 4061245018911 |
| SDF-S-10Vx80-V | 80 | 40 / 30 | 100 | | 8580080450 | 4061245082998 |
| SDF-S-10Vx100-V | 100 | 60 / 50 | 50 | | 8580100450 | 4061245018898 |
| SDF-S-10Vx120-V | 120 | 80 / 70 | 50 | | 8580120450 | 4061245018881 |
| SDF-S-10Vx140-V | 140 | 100 / 90 | 50 | | 8580140450 | 4061245018874 |
| SDF-S-10Vx160-V | 160 | 120 / 110 | 50 | | 8580160450 | 4061245018867 |
| SDF-S-10Vx180-V | 180 | 140 / 130 | 50 | | 8580180450 | 4061245018850 |
| *When using h _{nom,} 1 according ETAG 020 | | | | | | |





Facade anchor SDF-KB-10V



Cross references page Cleaning brush 113 Blow-out pump 113 Tool belt 115 Corrosion protection spray 114 Hammer drill SDS plus® 98 Cordless screwdriver ASCM **QSW** 91 Cordless hammer drill ABH 94 Socket wrench insert SW13 103 Hexalobular bit TX30 102

Application range

- > Installation of metal attachments
- For multiple fastening of non-load-bearing systems according to EAD 330284-00-0604
- Suitable for the structural fastening of wall cupboards, cladding, metal angle pieces
- > For application as single fastening in concrete

Properties

- > Hexagon head with flange
- When used according to EAD 330284-00-0604, embedment depth in concrete can be reduced to 40 mm (h_{nom.1})
- > Very short expansion part for extremely fast installation
- > Optimal expanding part due to radial expansion
- > Very high bending moment
- > Product identification through different sleeve colours
- > Double safety lock against torsion for secure installation

Notice

For planning and processing the products, please observe ETA-10/0305 and Z-21.2-2122. Further information about parameters and loads can be found in the approvals. For bricks of unknown quality, the load-bearing capacity must be determined through pull-out tests on the structure.

Admissible loads Tensile load N_{Bk.n} in concrete C12/15 Temperature range 30 °C / 50 °C 1.79 kN Temperature range 50 °C / 80 °C 1.59 kN F_{Rk} brick Mz 20-1.8, NF 0.71 kN F_{Rk} solid sand-lime brick KS 36, NF 1.14 kN $F_{\rm Rk}$ solid sand-lime brick KS 20, 8 DF 1.29 kN Transverse load $V_{Rk,s}$ at $h_{nom,1} = 40 \text{ mm}$ Steel screw ($\gamma Ms = 1.25$) 6.34 kN Stainless steel screw ($\gamma Ms = 1.56$) 5.85 kN Transverse load $V_{Rk,s}$ at $h_{nom,2} = 50 \text{ mm}$ Steel screw ($\gamma Ms = 1.25$) 8.87 kN Stainless steel screw ($\gamma Ms = 1.56$) 8.29 kN Bending moment $M_{Rk,s}$ at $h_{nom,1} = 40 \text{ mm}$ Steel screw ($\gamma Ms = 1.25$) 11.04 kN Stainless steel screw ($\gamma Ms = 1.56$) 10.31 kN Bending moment $M_{Rk,s}$ at $h_{nom,2} = 50 \text{ mm}$ Steel screw ($\gamma Ms = 1.25$) 18.41 Nm Stainless steel screw ($\gamma Ms = 1.56$) 17.06 kN

Applications







Technical specifications

















Certifications



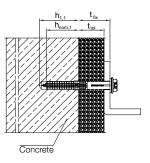


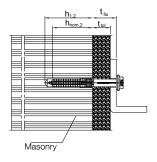


Base materials

Approved for

- > Cracked concrete
- > Non-cracked concrete
- > Solid masonry
- > Hollow and perforated bricks











| Order description | Length [mm] | Fastening thickness t_{fix} (concrete* / masonry) \leq [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|--|----------------|---|----------------|--------------------|----------------|---------------|
| Anchors with steel screws with zinc-plated Cr(VI)-free | e coating (-\ | /) | | | | |
| SDF-KB-10Vx50-V | 50 | 10 / – | 100 | | 8581050450 | 4061245018829 |
| SDF-KB-10Vx60-V | 60 | 20 / 10 | 100 | | 8581060450 | 4061245018805 |
| SDF-KB-10Vx70-V | 70 | 30 / 20 | 100 | | 8581070450 | 4061245018775 |
| SDF-KB-10Vx80-V | 80 | 40 / 30 | 100 | | 8581080450 | 4061245018751 |
| SDF-KB-10Vx100-V | 100 | 60 / 50 | 50 | | 8581100450 | 4061245018744 |
| SDF-KB-10Vx120-V | 120 | 80 / 70 | 50 | | 8581120450 | 4061245018737 |
| Anchors with A4 stainless steel screws (-E) | | | | | | |
| SDF-KB-10Vx50-E | 50 | 10 / – | 100 | | 8581050650 | 4061245018812 |
| SDF-KB-10Vx60-E | 60 | 20 / 10 | 100 | | 8581060650 | 4061245018799 |
| SDF-KB-10Vx70-E | 70 | 30 / 20 | 100 | | 8581070650 | 4061245018768 |
| *When using h _{nom,} 1 according ETAG 020 | | | | | | |

Further lengths on request





Universal anchor SDF-S-10H



Cross references page 113 Cleaning brush Blow-out pump 113 Tool belt 115 Corrosion protection spray 114 Hammer drill SDS plus® 98 Cordless screwdriver ASCM **QSW** 91 Cordless hammer drill ABH 94 Hexalobular bit TX40 102 Universal drill SDS plus®

Application range

- > Installation of wood parts
- > For multiple fastening of non-load-bearing systems according to EAD 330284-00-0604
- Suitable for the structural fastening of gates, doors, windows, square timber
- > For embedment in rain screens
- > For application as single fastening in concrete

Properties

- > Countersunk head
- > approved for all common building materials
- Reliable hold in problematic building materials thanks to optimised expansion part
- Radial expansion for reliable hold
- > Product identification through different sleeve colours
- > Double safety lock against torsion for secure installation

For planning and processing the products, please observe ETA-10/0305 and Z-21.2-2122. Further information about parameters and loads can be found in the approvals. For bricks of unknown quality, the load-bearing capacity must be determined through pull-out tests on the structure.

Admissible loads Tensile load N_{Rk,p} in concrete C12/15 Temperature range 30 °C / 50 °C 1.79 kN 1.59 kN Temperature range 50 °C / 80 °C Brick Mz 20-1.8, NF 1.14 kN Solid sand-lime brick KS 36, NF 1.29 kN Solid sand-lime brick KS 20, 8 DF 1.29 kN Solid lightweight concrete brick V6, 2 DF 0.57 kNVertically perforated brick HLz 12-0.9, NF 0.57 kN Perforated sand-lime brick KSL 12, 4 DF 0.71 kN 0.34 kN Cavity block made of lightweight concrete Hbl 10, 12 DF Transverse load V_{Rk.s} Steel screw ($\gamma Ms = 1.25$) 7.48 kN Stainless steel screw ($\gamma Ms = 1.56$) 6.99 kN Bending moment M_{Rk.s} Steel screw ($\gamma Ms = 1.25$) 14.14 Nm Stainless steel screw ($\gamma Ms = 1.56$) 13.22 Nm Compressive strength of aerated concrete [N/mm2] 30 - 50 °C Aerated concrete fb \geq 4 N/mm2 0.54 kN Aerated concrete fb \geq 5 N/mm2 0.71 kN Aerated concrete fb \geq 6 N/mm2 0.89 kN Aerated concrete fb ≥ 7 N/mm2 0.89 kN

Applications









Technical specifications















Certifications





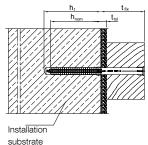




Base materials

Approved for

- > Cracked concrete
- > Non-cracked concrete
- > Solid masonry
- > Hollow and perforated bricks
- > aerated concrete









| Order description | Length [mm] | Fastening thickness $t_{\text{fix}} \leq \text{[mm]}$ | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|--|----------------|---|----------------|--------------------|----------------|---------------|
| Anchors with steel screws with zinc-plated Cr(VI)-fr | ee coating (- | V) | | | | |
| SDF-S-10Hx80-V | 80 | 10 | 100 | | 8510080420 | 4061245019864 |
| SDF-S-10Hx100-V | 100 | 30 | 50 | | 8510100420 | 4061245019840 |
| SDF-S-10Hx120-V | 120 | 50 | 50 | | 8510120420 | 4061245019826 |
| SDF-S-10Hx140-V | 140 | 70 | 50 | | 8510140420 | 4061245019802 |
| SDF-S-10Hx160-V | 160 | 90 | 50 | | 8510160420 | 4061245019789 |
| SDF-S-10Hx180-V | 180 | 110 | 50 | | 8510180420 | 4061245019765 |
| SDF-S-10Hx200-V | 200 | 130 | 50 | | 8510200420 | 4061245019741 |
| Anchors with A4 stainless steel screws (-E) | | | | | | |
| SDF-S-10Hx80-E | 80 | 10 | 100 | | 8510080620 | 4061245019857 |
| SDF-S-10Hx100-E | 100 | 30 | 50 | | 8510100620 | 4061245019833 |
| SDF-S-10Hx120-E | 120 | 50 | 50 | | 8510120620 | 4061245019819 |
| SDF-S-10Hx140-E | 140 | 70 | 50 | | 8510140620 | 4061245019796 |
| SDF-S-10Hx160-E | 160 | 90 | 50 | | 8510160620 | 4061245019772 |
| SDF-S-10Hx180-E | 180 | 110 | 50 | | 8510180620 | 4061245019758 |
| SDF-S-10Hx200-E | 200 | 130 | 50 | | 8510200620 | 4061245019734 |

Further lengths on request





Universal anchor SDF-KB-10H



Cross references page 113 Cleaning brush Blow-out pump 113 Tool belt 115 Corrosion protection spray 114 Hammer drill SDS plus® 98 Cordless screwdriver ASCM **QSW** 91 Cordless hammer drill ABH 94 Socket wrench insert SW13 103 Bit hexalobular TX40 102

Application range

- > Installation of metal attachments
- For multiple fastening of non-load-bearing systems according to EAD 330284-00-0604
- Suitable for the structural fastening of wall cupboards, cladding, metal angle pieces
- > For embedment in rain screens
- > For application as single fastening in concrete

Properties

- > Hexagon head with flange
- > approved for all common building materials
- Reliable hold in problematic building materials thanks to optimised expansion part
- > Radial expansion for reliable hold
- > Product identification through different sleeve colours
- > Double safety lock against torsion for secure installation

Notice

For planning and processing the products, please observe ETA-10/0305 and Z-21.2-2122. Further information about parameters and loads can be found in the approvals. For bricks of unknown quality, the load-bearing capacity must be determined through pull-out tests on the structure.

Admissible loads Tensile load N_{Bk.n} in concrete C12/15 Temperature range 30 °C / 50 °C 1.79 kN Temperature range 50 °C / 80 °C 1.59 kN Brick Mz 20-1.8, NF 1.14 kN Solid sand-lime brick KS 36, NF 1.29 kN Solid sand-lime brick KS 20, 8 DF 1.29 kN Solid lightweight concrete brick V6, 2 DF 0.57 kNVertically perforated brick HLz 12-0.9, NF 0.57 kN Perforated sand-lime brick KSL 12, 4 DF 0.71 kN Cavity block made of lightweight concrete HbI 10, 12 DF 0.34 kNTransverse load V_{Rk.s} Steel screw ($\gamma Ms = 1.25$) 7.48 kN Stainless steel screw ($\gamma Ms = 1.56$) 6.99 kN Bending moment M_{Rk.s} Steel screw ($\gamma Ms = 1.25$) 14.14 Nm 13.22 Nm Stainless steel screw ($\gamma Ms = 1.56$) Compressive strength of aerated concrete [N/mm2] 30 - 50 °C Aerated concrete fb ≥ 4 N/mm2 0.54 kN Aerated concrete fb \geq 5 N/mm2 0.71 kN Aerated concrete fb \geq 6 N/mm2 0.89 kN Aerated concrete fb ≥ 7 N/mm2 $0.89 \, kN$

Applications









Technical specifications















Certifications



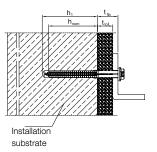




Base materials

Approved for

- > Cracked concrete
- > Non-cracked concrete
- > Solid masonry
- > Hollow and perforated bricks
- > aerated concrete









| Order description | Length [mm] | Fastening thickness $t_{fix} \le [mm]$ | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|--|----------------|--|----------------|--------------------|----------------|---------------|
| Anchors with steel screws with zinc-plated Cr(VI)-free | e coating (-V |) | | | | |
| SDF-KB-10Hx80-V | 80 | 10 | 100 | | 8513080420 | 4061245019642 |
| SDF-KB-10Hx100-V | 100 | 30 | 50 | | 8513100420 | 4061245019611 |
| SDF-KB-10Hx120-V | 120 | 50 | 50 | | 8513120420 | 4061245019581 |
| SDF-KB-10Hx140-V | 140 | 70 | 50 | | 8513140420 | 4061245019567 |
| Anchors with A4 stainless steel screws (-E) | | | | | | |
| SDF-KB-10Hx80-E | 80 | 10 | 100 | | 8513080620 | 4061245019635 |
| SDF-KB-10Hx100-E | 100 | 30 | 50 | | 8513100620 | 4061245019604 |
| SDF-KB-10Hx120-E | 120 | 50 | 50 | | 8513120620 | 4061245019574 |
| SDF-KB-10Hx140-E | 140 | 70 | 50 | | 8513140620 | 4061245019550 |

Further lengths on request





Facade anchor SDF-S-14A



| Cross references | page |
|----------------------------|------|
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Tool belt | 115 |
| Corrosion protection spray | 114 |
| Hammer drill SDS plus® | 98 |
| Cordless screwdriver ASCM | |
| QSW | 91 |
| Cordless hammer drill ABH | 94 |
| Hexalobular bit TX40 | 102 |

Application range

- > Installation of wood parts
- For multiple fastening of non-load-bearing systems according to EAD 330284-00-0604
- Suitable for the structural fastening of gates, doors, windows, square timber

Properties

- > Countersunk head
- > approved for all common building materials
- Reliable hold in problematic building materials thanks to optimised expansion part
- > Radial expansion for reliable hold
- > Product identification through different sleeve colours
- > Double safety lock against torsion for secure installation

Notice

For planning, please observe approval ETA-15/0027. For bricks of unknown quality, the load-bearing capacity must be determined through pull-out tests on the structure.

When used in concrete, a silicone lubricant paste (e.g. FUCHS CHEMPLEX SI-LK 2) and the use of an impact screwdriver with particularly high torque are recommended.

Permitted load* Tensile load $N_{\rm Rk, D}$ in concrete > C12/153.37 kNBrick Mz 20-1.8, NF 1.57 kN Solid sand-lime brick KS, 2 DF 20-2.0 1.71 kN Solid sand-lime brick KS, 8 DF 20-1.8 2.00 kN Solid brick V, 3 DF 0.86 kNVertically perforated brick HLz, 2 DF 28-1.2 0.57 kN Perforated sand-lime brick KSL, 8 DF 16-1.4 0.71 kN Cavity block tile made of lightweight concrete Hbl, 12 DF 0.71 kN Aerated concrete fb ≥ 2 N/mm2 0.43 kNAerated concrete fb ≥ 4 N/mm2 0.89 kN Aerated concrete fb ≥ 6 N/mm2 1.60 kN Transverse load $V_{\rm Rk,s}$ Steel screw ($\gamma Ms = 1.25$) 17.4 kN Stainless steel screw ($\gamma Ms = 1.56$) 16.2 kN Bending moment M_{Rk} Steel screw ($\gamma Ms = 1.25$) 50.0 Nm 46.7 Nm Stainless steel screw ($\gamma Ms = 1.56$)

Applications









Technical specifications













Certifications

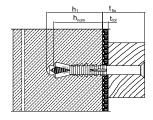




Base materials

Approved for

- > Cracked concrete
- > Non-cracked concrete
- > Solid masonry
- > Hollow and perforated bricks
- > Aerated concrete









| Order description | Length [mm] | Fastening thickness $t_{fix} \le [mm]$ | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|---|----------------|--|----------------|--------------------|----------------|---------------|
| Anchors with steel screws with zinc-plated Cr(VI)-fre | e coating (-V |) | | | | |
| SDF-S-14Ax140-V | 140 | 70 | 50 | | 8591140430 | 4061245018621 |
| SDF-S-14Ax160-V | 160 | 90 | 50 | | 8591160430 | 4061245018614 |
| SDF-S-14Ax180-V | 180 | 110 | 50 | | 8591180430 | 4061245018607 |
| SDF-S-14Ax200-V | 200 | 130 | 50 | | 8591200430 | 4061245018591 |
| SDF-S-14Ax220-V | 220 | 150 | 50 | | 8591220430 | 4061245018584 |
| SDF-S-14Ax240-V | 240 | 170 | 25 | | 8591240430 | 4061245018577 |

Further lengths on request





Facade anchor SDF-KB-14A



| Cross references | page |
|----------------------------|------|
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Tool belt | 115 |
| Corrosion protection spray | 114 |
| Hammer drill SDS plus® | 98 |
| Cordless screwdriver ASCM | |
| QSW | 91 |
| Cordless hammer drill ABH | 94 |
| Socket wrench insert SW17 | 103 |

Application range

- > Installation of metal attachments
- For multiple fastening of non-load-bearing systems according to EAD 330284-00-0604
- Suitable for the structural fastening of wall cupboards, cladding, metal angle pieces

Properties

- > Hexagon head with flange
- > approved for all common building materials
- Reliable hold in problematic building materials thanks to optimised expansion part
- > Radial expansion for reliable hold
- > Product identification through different sleeve colours
- > Double safety lock against torsion for secure installation

Notice

For planning, please observe approval ETA-15/0027. For bricks of unknown quality, the load-bearing capacity must be determined through pull-out tests on the structure.

When used in concrete, a silicone lubricant paste (e.g. FUCHS CHEMPLEX SI-LK 2) and the use of an impact screwdriver with particularly high torque are recommended.

| Permitted load* | |
|---|---------|
| Tensile load N _{Rk,p} in concrete > C12/15 | 3.37 kN |
| Brick Mz 20-1.8, NF | 1.57 kN |
| Solid sand-lime brick KS, 2 DF 20-2.0 | 1.71 kN |
| Solid sand-lime brick KS, 8 DF 20-1.8 | 2.00 kN |
| Solid brick V, 3 DF | 0.86 kN |
| Vertically perforated brick HLz, 2 DF 28-1.2 | 0.57 kN |
| Perforated sand-lime brick KSL, 8 DF 16-1.4 | 0.71 kN |
| Cavity block tile made of lightweight concrete Hbl, 12 DF | 0.71 kN |
| Aerated concrete fb ≥ 2 N/mm2 | 0.43 kN |
| Aerated concrete fb ≥ 4 N/mm2 | 0.89 kN |
| Aerated concrete fb ≥ 6 N/mm2 | 1.60 kN |
| Transverse load V _{Rk,s} | |
| Steel screw (γMs = 1.25) | 17.4 kN |
| Stainless steel screw (γMs = 1.56) | 16.2 kN |
| Bending moment M _{Rk,s} | |
| Steel screw (γMs = 1.25) | 50.0 Nm |
| Stainless steel screw (γMs = 1.56) | 46.7 Nm |

Applications









Technical specifications













Certifications

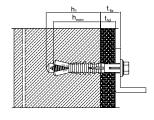




Base materials

Approved for

- > Cracked concrete
- > Non-cracked concrete
- > Solid masonry
- > Hollow and perforated bricks
- > Aerated concrete



| Order description | Length [mm] | Fastening thickness $t_{\text{fix}} \leq$ [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|--|----------------|--|----------------|--------------------|----------------|---------------|
| Anchors with steel screws with zinc-plated Cr(VI)-free | e coating (- | v) | | | | |
| SDF-KB-14Ax80-V | 80 | 10 | 50 | | 8590080430 | 4061245018676 |
| SDF-KB-14Ax100-V | 100 | 30 | 50 | | 8590100430 | 4061245018652 |



Facade anchor SDP-S-10G



Application range

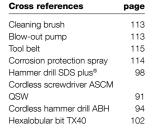
> Installation of wood parts

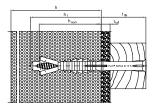
Properties

- > Countersunk head
- > Facade anchor with two-stage screw
- > Reliable form fit in the substrate thanks to combined expan-
- > High load-bearing capacity
- > Available with steel screws or stainless steel screws
- > Product identification through different sleeve colours

Notice

For planning and processing, please observe approval ETA-12/0502. For bricks of unknown quality, the load-bearing capacity must be determined through pull-out tests on the structure.





| Admissible loads | |
|---|----------|
| Compressive strength of aerated concrete [N/r | mm²] |
| Aerated concrete fb ≥ 2 N/mm2 | 0.27 kN |
| Aerated concrete fb ≥ 3 N/mm2 | 0.47 kN |
| Aerated concrete fb ≥ 4 N/mm2 | 0.67 kN |
| Aerated concrete fb ≥ 6 N/mm2 | 1.07 kN |
| Characteristic Bending moment | |
| Steel screw (γMs = 1.5) | 11.80 Nm |
| Stainless steel screw (γMs = 1.87) | 11.02 Nm |
| | |

Applications



Technical specifications















Certifications







Base materials

Approved for

> aerated concrete

| Order description | Length [mm] | Fastening thickness $t_{\text{fix}} \leq \text{[mm]}$ | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|--|-----------------|---|----------------|--------------------|----------------|---------------|
| Anchors with steel screws with zinc-plated Cr(VI)- | free coating (- | V) | | | | |
| SDP-S-10Gx120-V | 120 | 50 | 50 | | 8530120420 | 4061245019420 |
| SDP-S-10Gx140-V | 140 | 70 | 50 | | 8530140420 | 4061245019406 |
| SDP-S-10Gx160-V | 160 | 90 | 50 | | 8530160420 | 4061245019383 |

Further lengths and A2 stainless steel on request





Facade anchor SDP-KB-10G



Application range

> For installation of metal components

Properties

- > Hexagon head with flange
- > Facade anchor with two-stage screw
- > Reliable form fit in the substrate thanks to combined expan-
- > High load-bearing capacity
- > Available with steel screws or stainless steel screws
- > Product identification through different sleeve colours

Notice

For planning and processing, please observe approval ETA-12/0502. For bricks of unknown quality, the load-bearing capacity must be determined through pull-out tests on the structure.

| Cross references | page |
|----------------------------|------|
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Tool belt | 115 |
| Corrosion protection spray | 114 |
| Hammer drill SDS plus® | 98 |
| Cordless screwdriver ASCM | |
| QSW | 91 |
| Cordless hammer drill ABH | 94 |
| Hexalobular bit TX40 | 102 |
| Socket wrenches | 103 |
| | |

| Admissible loads | | |
|---|----------|--|
| Compressive strength of aerated concrete [N/m | ım²] | |
| Aerated concrete fb ≥ 2 N/mm2 | 0.27 kN | |
| Aerated concrete fb ≥ 3 N/mm2 | 0.47 kN | |
| Aerated concrete fb ≥ 4 N/mm2 | 0.67 kN | |
| Aerated concrete fb ≥ 6 N/mm2 | 1.07 kN | |
| Characteristic Bending moment | | |
| Steel screw ($\gamma Ms = 1.5$) | 11.80 Nm | |
| Stainless steel screw ($\gamma Ms = 1.87$) | 11.02 Nm | |
| | | |

Applications



Technical specifications















Certifications

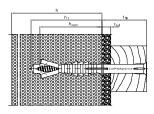




Base materials

Approved for

> aerated concrete



| Order description | Length [mm] | Fastening thickness $t_{\text{fix}} \leq$ [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN | | |
|---|----------------|--|----------------|--------------------|----------------|---------------|--|--|
| Anchors with steel screws with zinc-plated Cr(VI)-free coating (-V) | | | | | | | | |
| SDP-KB-10Gx80-V | 80 | 10 | 100 | | 8532080420 | 4061245019307 | | |
| SDP-KB-10Gx100-V | 100 | 30 | 50 | | 8532100420 | 4061245019277 | | |
| Anchors with A4 stainless steel screws (-E) | | | | | | | | |
| SDP-KB-10Gx80-E | 80 | 10 | 100 | | 8532080620 | 4061245019291 | | |
| SDP-KB-10Gx100-E | 100 | 30 | 50 | | 8532100620 | 4061245019260 | | |

Further lengths on request





VSD 2G 8U Cavity Wall Repair Anchor



Application range

- > For subsequent securing of outer sheets to buildings
- > Cost-effective restoring of the structural integrity

Properties

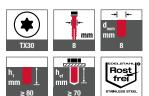
- Additional length 145 mm for subsequent securing of face bricks
- Optimised expansion zone now also for post-securing of vertically perforated clinkers
- Universal expansion zone secure installation in all substrates (A-C)
- > Double expansion wall anchor: simultaneous embedment in both the supporting wall and the outer sheet
- > The use of A4 stainless steel screws guarantees corrosion protection
- > With general building authorities approval
- > Clean and fast installation
- > Can be installed at 0°C

| Cross references | page |
|---------------------------|------|
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Tool belt | 115 |
| Hammer drill SDS plus® | 98 |
| Cordless screwdriver ASCM | |
| QSW | 91 |
| Cordless hammer drill ABH | 94 |
| Hexalobular bit TX30 | 102 |

Notice

The VSD cavity wall repair anchor enables the subsequent renovation of double-sheet masonry. Advanced corrosion or a complete lack of wire anchors can lead to decreased stability of the curtain wall and possibly cause considerable physical injury. In particular curtain walls made before 1979 should be subject to further inspection. When renovating the outer facade, the stability of the curtain wall must be verified. The EJOT® VSD is a particularly cost-effective solution for subsequent installation between load-bearing shell and curtain wall.

Technical specifications



Certifications



Base materials

Suitable for load-bearing inner sheets made of

- > Concrete
- > solid brick
- > Perforated brick and outer sheet of
- > Solid clinker
- > Vertically perforated clinker
- > Face brick

Installation process





| Order description | Length I _d [mm] | Drill hole depth t _s ≤ [mm] | Max. air layer thick- ness az [mm | Curtain wall h _a ≥ [mm] | Packag- ing unit [pieces] | Price/100 [EUR] | Article number | EAN |
|-----------------------|-------------------------------|--|---|--|---------------------------------|--------------------|----------------|---------------|
| Anchors with A4 stain | less steel scre | ews (-E) | | | | | | |
| VSD-2G-8Ux145-E | 145 | 155 | - | 60* | 100 | | 8502145600 | 4061245081939 |
| VSD-2G-8Ux205-E | 205 | 215 | 20 | 115 | 100 | | 8502205600 | 4039161009771 |
| VSD-2G-8Ux225-E | 225 | 235 | 40 | 115 | 100 | | 8502225600 | 4039161009788 |
| VSD-2G-8Ux245-E | 245 | 255 | 60 | 115 | 100 | | 8502245600 | 4039161009795 |
| VSD-2G-8Ux265-E | 265 | 275 | 80 | 115 | 100 | | 8502265600 | 4039161009801 |
| VSD-2G-8Ux285-E | 285 | 295 | 100 | 115 | 100 | | 8502285600 | 4039161009818 |
| VSD-2G-8Ux305-E | 305 | 315 | 120 | 115 | 100 | | 8502305600 | 4039161009825 |
| *Face brick | | | | | | | | |



Nail anchor ND-K



| Cross references | page |
|---------------------------|------|
| Hammer drill SDS plus® | 98 |
| Cordless screwdriver ASCM | |
| QSW | 91 |
| Cordless hammer drill ABH | 94 |
| Cross recess Z2 | 101 |

Application range

Speed plug for light-duty fixings:

- > Substructures
- > Cabinets, Skirting boards, lath
- > Cable ducts, cable clamps
- > pipe supports

Properties

- > Ready-to-install nylon collar flange plug with nail made of zinc-plated steel (GVZ) / Stainless steel
- > Drive-in installation
- Nail head with Pozidriv recess for removal or adjustment of the anchor
- > The plug collars serve as plastic insulating washers and thus prevent contact corrosion
- > GVZ for dry indoor areas

| Characteristic values | | loads Non-cra | mended acked e C20/25 | loads Solid cl | Recommended loads Solid clay brick f _b 20.5 N/mm ² | | |
|-----------------------|------------------------|-------------------------|-----------------------------|--------------------------|---|--------------------------|--|
| Тур | d _o [mm] | h _{ef} [mm] | N _{Rec} [kN] | V _{Rec} [kN] | N _{Rec} [kN] | V _{Rec} [kN] | |
| 5x30 | 5 | 30 | 0.1 | 0.1 | 0.1 | 0.1 | |
| 5x40 | 5 | 30 | 0.1 | 0.1 | 0.1 | 0.1 | |
| 5x50 | 5 | 30 | 0.1 | 0.1 | 0.1 | 0.1 | |
| 6x40 | 6 | 30 | 0.2 | 0.2 | 0.2 | 0.2 | |
| 6x60 | 6 | 30 | 0.2 | 0.2 | 0.2 | 0.2 | |
| 6x80 | 6 | 30 | 0.2 | 0.2 | 0.2 | 0.2 | |
| 8x60 | 8 | 40 | 0.3 | 0.3 | 0.3 | 0.3 | |
| 8x80 | 8 | 40 | 0.3 | 0.3 | 0.3 | 0.3 | |
| 8x100 | 8 | 40 | 0.3 | 0.3 | 0.3 | 0.3 | |

Technical specifications





Base materials

Suitable for

- > Concrete
- > Solid clay brick
- > vertically perforated brick

| Order description | Length [mm] | Fastening thickness t _{fix} [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|---|----------------|---|----------------|--------------------|----------------|---------------|
| Anchors with zinc-plated steel nail (GVZ) | | | | | | |
| ND-K 5/30 V | 30 | 0-5 | 200 | | 9650075678 | 4061245083001 |
| ND-K 6/40 V | 40 | 10 | 200 | | 9650075679 | 4061245083032 |
| ND-K 8/60 V | 60 | 20 | 100 | | 9650075684 | 4061245083063 |
| Anchors with stainless steel nail | | | | | | |
| ND-K 6/40 E | 40 | 10 | 200 | | 9650075692 | 4061245083094 |

Further lengths and A2 stainless steel on request





Nail anchor ND-S



Cross references

QSW

Hammer drill SDS plus®

Cordless screwdriver ASCM

Application range

Speed plug for light-duty fixings:

- > Substructures
- > Cabinets, Skirting boards, lath
- > Cable ducts, cable clamps
- pipe supports

Properties

page

98

91

- > Ready-to-install nylon countersunk plug with nail made of zinc-plated steel (GVZ)
- > Drive-in installation
- > Nail screw head with Pozidriv recess for the removal or adjustment of the anchor
- > GVZ for dry indoor areas

| Characte | eristic value | 9S | loads Non-cr | mended acked te C20/25 |
|----------|------------------------|-------------------------|--------------------------|------------------------------|
| Тур | d _o [mm] | h _{ef} [mm] | N _{Rec} [kN] | V _{Rec} [kN] |
| 5x30 | 5 | 30 | 0.1 | 0.1 |
| 5x40 | 5 | 30 | 0.1 | 0.1 |
| | | | | |

| Cordless hammer drill ABH | 94 | | | | concre | te C20/25 | f _b 20.5 | N/mm² |
|---------------------------|-----|-------|------------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Cross recess Z2 | 101 | Тур | d _o [mm] | h _{ef} [mm] | N _{Rec} [kN] | V _{Rec} [kN] | N _{Rec} [kN] | V _{Rec} [kN] |
| | | 5x30 | 5 | 30 | 0.1 | 0.1 | 0.1 | 0.1 |
| | | 5x40 | 5 | 30 | 0.1 | 0.1 | 0.1 | 0.1 |
| | | 5x50 | 5 | 30 | 0.1 | 0.1 | 0.1 | 0.1 |
| | | 6x40 | 6 | 30 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | 6x60 | 6 | 30 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | 6x80 | 6 | 30 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | 8x60 | 8 | 40 | 0.3 | 0.3 | 0.3 | 0.3 |
| | | 8x80 | 8 | 40 | 0.3 | 0.3 | 0.3 | 0.3 |
| | | 8x100 | 8 | 40 | 0.3 | 0.3 | 0.3 | 0.3 |
| | | | | | | | | |

Suitable for > Concrete > Solid clay brick

Recommended

Solid clay brick

loads

> vertically perforated brick

Base materials

Technical specifications

| Order description | Length [mm] | Fastening thickness \mathbf{t}_{fix} [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|-------------------------------------|----------------|--|----------------|--------------------|----------------|---------------|
| Anchors with zinc-plated steel nail | | | | | | |
| ND-S 6/40 V | 40 | 10 | 200 | | 9650075660 | 4061245083131 |

Further lengths and A2 stainless steel on request







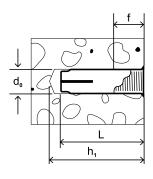
Fastener for light applications



Drop-in anchor LAL+



| Cross references | page |
|----------------------------------|------|
| Cleaning brush | 113 |
| Blow-out pump | 113 |
| Cordless hammer drill ABH | 94 |
| Installation tool drop-in anchor | 108 |



Application range

- > Suspension systems
- > Pipelines
- > Air ducts
- > Sprinkler systems
- > Cable racks
- > Machinery
- > Consoles
- > Ceiling girders
- > Suitable for sprinkler systems
- > For dry indoor use
- Approved for usage in pre-stressed hollow core ceiling slabs (ETA-13/0441)

Properties

- > Zinc-plated steel
- > Drop-in anchor for pre-assembly with an assembly tool
- > Internal thread for metric screws and rods
- > The suitable bolt length is 1-1.5 x nominal anchor length + thickness of component
- > The small required drill hole depth facilitates drilling and overhead mounting

Notice

The load values in these tables are based on concrete C20/25, $f_{\text{ck,cube}} = 25 \text{ N/mm}^2; \text{ correct installation; no influence of centre} \\ \text{and edge distances; observe the minimum thickness of the} \\ \text{base material.}$

Applications



Technical specifications



Certifications



Base materials

Approved for

- > Cracked concrete
- > Non-cracked concrete

Installation process





| Characteristic values | | | | | Admissib non-cracl C20/25 | le loads ked concrete |
|-----------------------|--------------------------|--------------------------|------------------------|---------------------------|---------------------------------|--------------------------|
| Тур | f _{max} [mm] | f _{min} [mm] | d _r [mm] | T _{inst} [Nm] | N _{Rec} [kN] | V _{Rec} [kN] |
| LAL+6 | 11 | 6 | 7 | 4 | 1.9 | 1.7 |
| LAL+8 | 13 | 8 | 9 | 8 | 3.6 | 3.1 |
| LAL+10 | 16 | 10 | 12 | 15 | 4.8 | 4.5 |

| Order example | Threads [mm] | L [mm] | d _。 [mm] | h _i [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|---------------|-----------------|-----------|------------------------|------------------------|----------------|--------------------|----------------|---------------|
| LAL+6 | M6 | 25 | 8 | 27 | 100 | | 9650070070 | 4061245003757 |
| LAL+8 | M8 | 30 | 10 | 32 | 100 | | 9650070072 | 4061245003740 |
| LAL+10 | M10 | 40 | 12 | 43 | 100 | | 9650070074 | 4061245003733 |



Ceiling nail



| Cross references | page |
|------------------------|------|
| Hammer drill SDS plus® | 98 |
| Cordless hammer drill | 94 |

Application range

- > For use as a multiple fastener of non-supporting systems in concrete
- > Approved for concrete strengths from C20/25 to C50/60

Properties

- > Steel, galvanized zinc-plated
- > High load-bearing capacity in cracked and non-cracked concrete
- > Small drill holes
- > Fast and reliable installation

| Characteristic values without fire exposure | |
|---|--------|
| Drill hole diameter d _o | 6 mm |
| Drill hole depth $\geq h_1$ | 40 mm |
| Embedment depth ≥ h _{ef} | 32 mm |
| Min. component thickness h _{min} | 80 mm |
| Edge distance c _{min} | 150 mm |
| Centre distance s _{min} | 200 mm |

Applications



Technical specifications







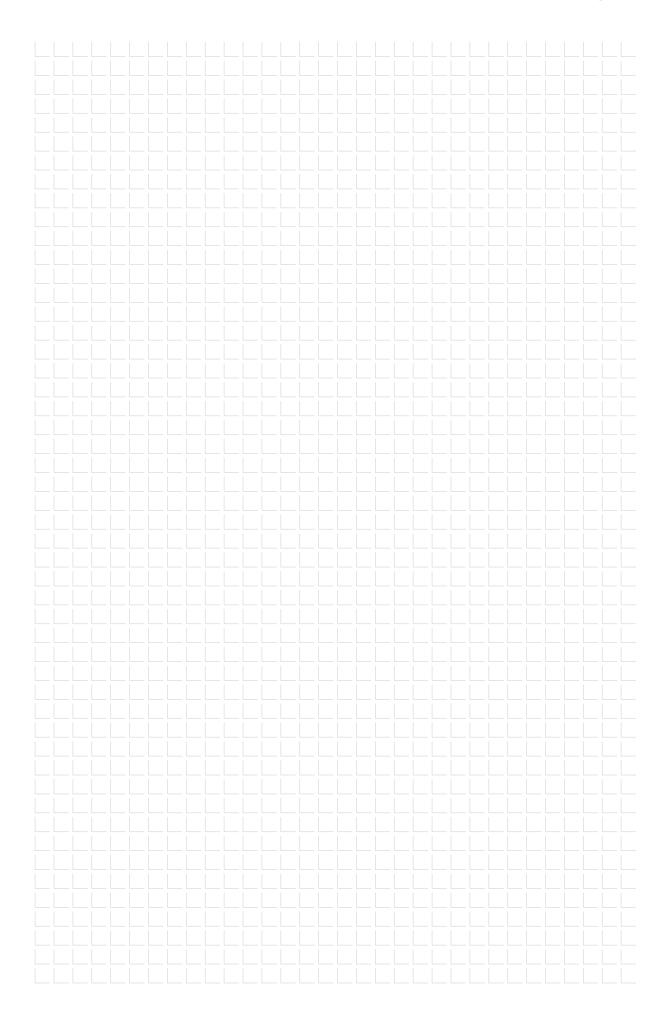


Certifications



| Order example | Length [mm] | Max. attachment thickness t _{fix} [mm] | PU [pieces] | Price/100 [EUR] | Article number | EAN |
|------------------------|----------------|---|----------------|--------------------|----------------|---------------|
| Ceiling Nail E-CN 6x40 | 40 | 5 | 100 | | 9700050100 | 4061245093406 |
| Ceiling Nail E-CN 6x70 | 70 | 35 | 100 | | 9700050101 | 4061245093413 |









Equipment, Spare Parts, Tools



Cordless screwdriver ASCM 18 QSW AS



Scope of delivery

- 1 ASCM 18-4 QM AS (without battery pack or battery charger)
- 1 plastic tool case
- 1 scaffolding hooks
- 1 depth stop
- 1 insert for hexagon head screws SW 8
- 1 removable full metal drill chuck

| Cross references | page | |
|----------------------------|------|--|
| Battery packs and chargers | 95 | |

Application range

Speed-optimised cordless drill driver with four gears for screw connections in metal up to screw diameters 6.0 mm

Properties

- > 4-speed full metal gearbox
- > Mechanical torque adjustment
- > Quick tool-free change of QuickIN attachments between applications in seconds
- > Brushless FEIN PowerDrive motor with 30 % higher efficiency enables longer service life
- > Compatible with AMPShare / Bosch Professional 18 V batteries

| Technical specifications | |
|----------------------------|---------------------------|
| Battery voltage | 18 V |
| Battery compatibility | Li-lonen/ProCORE Li-lonen |
| Motor | brushless |
| Gear | 4-gear |
| Idle speed | 400/700/1400/2500 1/min |
| Max. torque (hard/soft) | 40/30 Nm |
| Torque levels | 20 + 1 |
| Drill chuck clamping width | 1,5-13 mm |
| Screw | 8 x 200 mm |
| Drill Ø timber | 40 mm |
| Drill Ø steel | 13 mm |
| Battery pack | not included in delivery |

| Order description | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|---|----------------|------------------|----------------|---------------|
| 4-speed cordless drill driverASCM 18 QSW AS | 1 | | 9150660000 | 4014586898919 |
| Accessories | | | | |
| QuickIN bit holder ASCM 18-QSW AS | 1 | | 9150610001 | 4014586404820 |
| QuickIN Socket adapter ASCM 18-4 QM AS | 1 | | 9150610002 | 4014586404844 |
| QuickIN depth stop ASCM 18-4 QM AS / ASCM 18-QSW AS | 1 | | 9150610003 | 4014586476902 |

3-year FEIN PLUS Warranty

including battery and charger (if registered online)



Cordless screwdriver ASCM 18-4 QM AS



Scope of delivery

- 1 ASCM 18-4 QM AS (without battery pack or battery charger)
- 1 belt clip
- 1 bit holder
- 1 telescopic handle
- 1 removable full metal drill chuck
- 1 plastic tool case

| Cross references | page |
|----------------------------|------|
| Battery packs and chargers | 95 |

Application range

- > Powerful 4-speed cordless drill driver
- > With brushless motor and QuickIN MAX interface
- > Uncompromising performance for drilling and tapping up to 13 mm and drilling with carbide-tipped hole saws

Properties

- > 4-gear full metal gear unit
- > Tool-free change of QuickIN attachments between applications in seconds
- > Brushless FEIN PowerDrive motor with 30 % higher efficiency enables longer service life
- > High torques up to 130 Nm in hard bolting applications
- > Full metal drill chuck/bit holder with carbide-tipped clamping jaws without the insert tool slipping through
- > Intuitive control panel with dimmable LED
- > Compatible with AMPShare / Bosch Professional 18 V batteries

| Technical specifications | |
|----------------------------|-----------------------------|
| Battery voltage | 18 V |
| Battery compatibility | Li-lon / ProCORE Li-lon |
| Motor | brushless |
| Gear | 4-gear |
| Idle speed | 430 / 850 / 2000 / 4000 rpm |
| Max. torque (hard/soft) | 90/45 Nm |
| Torque levels | 15 + 1 |
| Drill chuck clamping range | 1.5 - 13 mm |
| Screw | 10 x400mm no pre-drilling |
| Drill Ø timber | 60 mm |
| Drill Ø steel | 13 mm |
| Battery pack | not included in delivery |

| Battery pack | not included in delivery | | | |
|---|--------------------------|------------------|----------------|---------------|
| | | | | |
| Order description | PU [pieces] | Price/1 [EUR] | Article number | EAN |
| Cordless screwdriver ASCM 18 QSW AS | 1 | | 9150610000 | 4014586900100 |
| Accessories | | | | |
| QuickIN bit holder ASCM 18-QSW AS | 1 | | 9150610001 | 4014586404820 |
| QuickIN Socket adapter ASCM 18-4 QM AS | 1 | | 9150610002 | 4014586404844 |
| QuickIN depth stop ASCM 18-4 QM AS / ASCM 18-QSW AS | 1 | | 9150610003 | 4014586476902 |

3-year FEIN PLUS



Cordless impact screwdriver ASCD18-300 W2 AS



Application range

- > Up to max. 290 Nm with brushless motor and torque adjustment in 6 stages
- > For the use of concrete screws (JC2, JBS-R and frame anchor)

Properties

- > For extremely precise work: electronic torque adjustment in 6 stages prevents screw heads from tearing off
- > Brushless FEIN PowerDrive motor with 30% higher degree of efficiency and long service life
- > 1/2 in square for holding sockets. Robust solid metal impact gear
- Metric screws up to M18 (8.8). Contact guard on gearbox head
- > 10% more torque in reverse running to loosen screws which are extremely tight.
- > Compatible with AMPShare / Bosch Professional 18 V batteries

Scope of delivery

- 1 ASCD 18-300 W2 AS (without battery pack or battery charger)
- 1 belt clip
- 1 bit holder
- 1 plastic tool case

| Cross references | page |
|----------------------------|------|
| Battery packs and chargers | 95 |

| Technical specifications | |
|--------------------------|--------------------------|
| Battery voltage | 18 V |
| Battery compatibility | Li-lon / ProCORE Li-lon |
| Motor | brushless |
| Idle speed | 0 - 1700 rpm |
| Impacts | 0 - 3400 rpm |
| Max. torque | 290 Nm |
| Torque levels | 6 |
| Tool holder | 1/2" external square |
| max. metric screw | M18 (8.8) |
| Weight without battery | 1.20 kg |
| Battery pack | not included in delivery |

| Order description | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|--|----------------|------------------|----------------|---------------|
| Cordless impact screwdriver ASCD18-300 W2 AS | 1 | | 9150620000 | 4014586898889 |

3-year FEIN PLUS Warranty

including battery and charge (if registered online)



Cordless hammer drill ABH 18-26AS



Scope of delivery

- 1 ABH 18-26 AS (without battery pack or battery charger)
- 1 handle
- 1 depth stop
- 1 machine cloth
- 1 plastic tool case

| Cross references | page |
|----------------------------|------|
| Battery packs and chargers | 95 |

Application range

> For drilling up to 26 mm in concrete

Properties

- Rapid work progress thanks to brushless motor with high impact energy- fast construction progress and high chisel removal rate
- Protection for the user and tool by means of safety clutch and overload protection
- > Electronic Precicision Control (EPC) perfect handling and control for sensitive materials and challenging surfaces
- > Fatigue-free working thanks to compact design and few vibrations
- > Compatible with AMPShare / Bosch Professional 18 V batteries

| Technical specifications | |
|--------------------------|--------------------------|
| Battery voltage | 18 V |
| Battery compatibility | Li-lon / ProCORE Li-lon |
| Motor | brushless |
| Idle speed | 0 - 980 rpm |
| Impacts | 0 - 4350 rpm |
| impact energy | 2.6 J |
| Tool holder | SDS-plus |
| Drill Ø concrete | 26 mm |
| Drill Ø masonry | 68 mm |
| Drill Ø steel | 13 mm |
| Drill Ø timber | 30 mm |
| Weight without battery | 3.20 kg |
| Battery pack | not included in delivery |

3-year FEIN PLUS Warranty

including battery and charge (if registered online)

| Order description | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|-----------------------------------|----------------|------------------|----------------|---------------|
| Cordless hammer drill ABH 18-26AS | 1 | | 9150650000 | 4014586897264 |



Battery packs and chargers



Application range

- > For cordless screwdriver ASCM 18 QSW AS
- > For cordless screwdriver ASCM 18-4 QM AS
- > For cordless impact screwdriver ASCD 18-300 W2 AS
- > For cordless nibbler ABLK 18 1.6 E AS
- > For cordless slitting shears ABBS 18 1.6 E AS
- > Cordless hammer drill ABH 18-26 AS

| Cross references | page |
|-------------------|------|
| ASCM 18 QSW AS | 91 |
| ASCM 18-4 QM AS | 91 |
| ASCD 18-300 W2 AS | 93 |
| ABH 18-26 AS | 94 |

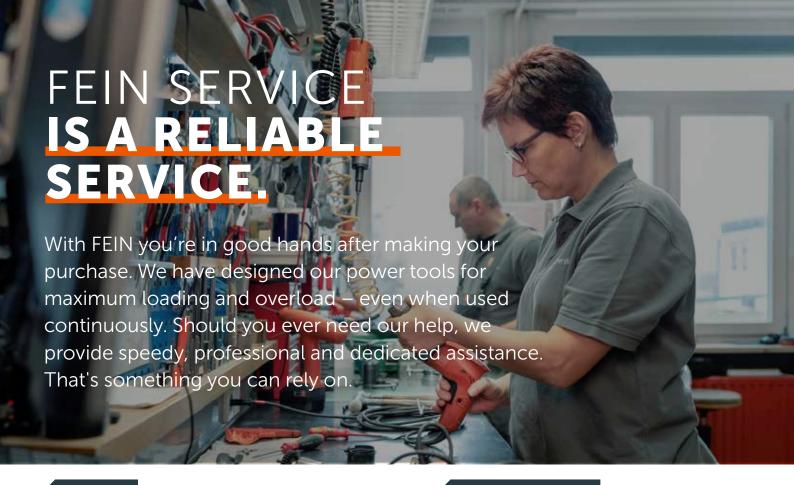
Properties

- > 2 ProCORE Li-ion batteries with high-power cells with GAL 18V-160 quick charger (ProCORE battery starter set)
- Short charging times thanks to the high charging current of 8 amps, air-cooling and process-controlled charging management
- > User-friendly and space-saving thanks to the device for winding up the mains cable
- Charging times (80 % of max. capacity): ProCORE 18 V 4.0 Ah: 32 min., ProCORE 18 V 8.0 Ah: 68 min., ProCORE 18 V 12.0 Ah: 113 min.
- Maximum work progress with AMPShare 18 V ProCORE batteries: COOLPACK 2.0 technology ensures 135 % longer battery life and 87 % more power than conventional batteries "Electronic Cell Protection" ECP protects the battery and tool from overload, overheating and total discharge

3-year FEIN PLUS Warranty

including battery and charger (if registered online)

| Order description | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|---|----------------|------------------|----------------|---------------|
| Battery Starter Set ProCORE 18 V 8.0 Ah AS* | 1 | | 9150600108 | 4014586895611 |
| Battery Starter Set ProCORE 18 V 12.0 Ah AS* | 1 | | 9150600012 | 4014586896922 |
| Rapid charger GAL 18V-160 AS | 1 | | 9150600100 | 4014586896861 |
| Battery pack ProCORE 18V 8,0 Ah AS | 1 | | 9150600008 | 4014586896908 |
| Battery pack ProCORE 18V 12.,0 Ah AS | 1 | | 9150600012 | 4014586896922 |
| *Every Starter Set includes two ProCORE Li-lon batteries and a battery charger. | | | | |



ONLINE PORTAL

One log-in – and the FEIN world of service is at your fingertips. With my.FEIN, we make it easy for you to bundle services in one place and ensure that you always have them to hand. Either with the convenience of the app or online at my.FEIN.com

3-YEAR FEIN PLUS WARRANTY

Quick registration – extended warranty period: We offer the 3-year FEIN PLUS warranty for all your FEIN power tools. All you need to do is register your new FEIN product at www.fein.com/warranty within 3 months of purchase. Here you will find which countries are covered and further information.

FEIN REPAIR SERVICE

No matter whether you contact us regarding repairs, maintenance or warranty claims – we process your orders quickly and efficiently through our FEIN authorised repair centres. They hold the right genuine FEIN spare parts in stock – even for many older tools. So you can get back to work as soon as possible.

FEIN SPAR PART

You can easily find the right FEIN spare parts for your FEIN power tool online – using the FEIN spare part catalogue with intuitive search function and exploded views of the products.

MORE FEIN SERVICES

On our website www.fein.com, you will find lots more information and service offerings:

- + FEIN premium service
- + Operating instructions and brochures available to download
- + FAQ
- + Maintenance information



Go to the FEIN Services directly using the following QR code:





Universal drill SDS plus®

Application range

> Materials for rotary drilling

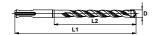
Properties

- > Drill bit specially designed for use in masonry
- > Extremely sharp, specially ground carbide-metal plate
- > For rotary drilling no impact drilling possible thanks to special SDS-plus retainer
- > Significantly higher anchor performance possible due to the precise and clean drill hole

Technical specifications







| Order description | D [mm] | L1 [mm] | L2 [mm] | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|---------------------------------|-----------|------------|------------|----------------|------------------|----------------|---------------|
| Universal drill SDS-plus 10/160 | 10 | 160 | 100 | 1 | | 9200000063 | 4061245021034 |
| Universal drill SDS-plus 10/260 | 10 | 260 | 200 | 1 | | 9200000064 | 4061245021041 |



Hammer drill SDS plus®



Application range

> For masonry, concrete, natural stone, artificial stone etc.

Benefits

- > Long service life
- > Centering point for easy, pinpoint drilling
- > Short spiral starts for optimized drill dust transport
- > Radially shaped reinforcement protection against hooking in case of reinforcement hits
- > 4x4 design allows precise concentricity and minimizes wear and friction losses
- > High-quality hardened and tempered steel for the toughest applications

Technical specifications









| Order description | D [mm] | L1 [mm] | L2 [mm] | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|------------------------|-----------|------------|------------|----------------|------------------|----------------|---------------|
| 4 edges | | | | | | | |
| 4 edge SDS-plus 5x160 | 5.0 | 160 | 100 | 1 | | 9270005160 | 4061245080208 |
| 4-edge SDS-plus 5x260 | 5.0 | 260 | 200 | 1 | | 9270005060 | 4061245080314 |
| 4-edge SDS-plus 5x410 | 5.0 | 410 | 350 | 1 | | 9270005350 | 4061245080239 |
| 4-edge SDS-plus 6x160 | 6.0 | 160 | 100 | 1 | | 9270006160 | 406124508025 |
| 4-edge SDS-plus 6x260 | 6.0 | 260 | 200 | 1 | | 9270006260 | 406124508027 |
| 4-edge SDS-plus 8x160 | 8.0 | 160 | 100 | 1 | | 9270008160 | 406124508028 |
| 4-edge SDS-plus 8x260 | 8.0 | 260 | 200 | 1 | | 9270008260 | 406124508030 |
| 4-edge SDS-plus 8x360 | 8.0 | 360 | 300 | 1 | | 9270008360 | 406124508033 |
| 4-edge SDS-plus 8x600 | 8.0 | 600 | 540 | 1 | | 9270008600 | 4061245080369 |
| 4-edge SDS-plus 10x160 | 10.0 | 160 | 100 | 1 | | 9270010160 | 406124508037 |
| 4-edge SDS-plus 10x260 | 10.0 | 260 | 200 | 1 | | 9270010260 | 4061245080390 |
| 4 edge SDS-plus 10x360 | 10.0 | 360 | 300 | 1 | | 9270010360 | 406124508113 |
| 4-edge SDS-plus 10x460 | 10.0 | 460 | 400 | 1 | | 9270010460 | 406124508040 |
| 4-edge SDS-plus 12x160 | 12.0 | 160 | 100 | 1 | | 9270012160 | 406124508114 |
| 4-edge SDS-plus 12x260 | 12.0 | 260 | 200 | 1 | | 9270012260 | 406124508115 |
| 4-edge SDS-plus 14x160 | 14.0 | 160 | 100 | 1 | | 9270014160 | 406124508117 |
| 4-edge SDS-plus 14x310 | 14.0 | 310 | 250 | 1 | | 9270014310 | 4061245081267 |
| 4-edge SDS-plus 16x260 | 16.0 | 260 | 200 | 1 | | 9270016260 | 4061245081212 |

Further lengths up on request





Hammer drill A cone



Application range

> For masonry, concrete, natural stone, artificial stone etc.

Cross referencespageDrill bit extension398

| Order description | Diameter [mm] | Total length [mm] | Effective length [mm] | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|---------------------------|------------------|----------------------|-----------------------|----------------|------------------|----------------|---------------|
| Hammer drill A cone 5x160 | 5.0 | 160 | 100 | 1 | | 9270050160 | 4061245080154 |
| Hammer drill A cone 6x160 | 6.0 | 160 | 100 | 1 | | 9270060160 | 4061245080185 |
| Hammer drill A cone 8x160 | 8.0 | 160 | 100 | 1 | | 9200080100 | 4039161009405 |

Hammer drill A cone with flange



Application range

> For masonry, concrete, natural stone, artificial stone etc.

Benefits

- > For exact depth control and for optimal penetration of insulations
- > Long service life due to short working length

| Cross references | page |
|---------------------|------|
| Drill bit extension | 398 |

| Order description | Diameter [mm] | Total length [mm] | Effective length [mm] | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|------------------------------|------------------|----------------------|--------------------------|----------------|------------------|----------------|---------------|
| Hammer drill A cone 6x100/35 | 6.0 | 100 | 35 | 1 | | 9270060102 | 4061245080178 |



Drill bit extension



Cross reference

Hammer drill A cone

Order description

Drill bit extension SDS 500 mm

EJOT drillX spare part kits (3 cone extractors)

page

100

Application range

- > For hammer drill A cone
- > For hammer drill A cone with flange

Properties

> Inclusive cone extractor

Technical data



Length

[mm]

500

PU

1

[pieces]

Price/1

[EUR]

Article number

9271950000

9151950003

EAN

4061245080109

4039161009399



Bit cross recess

Form C 6,3 Form E 6,3 Form M6

Application range

- > For use in the flat roof area
- > For use in the window and Glass Facade area

Technische Daten





| Cross references | page |
|------------------|------|
| Bit holder | 106 |

| Order description | Drive and Size | Length [mm] | PU [pieces] | Price/1 [EUR] | Article number | EAN | |
|---|-------------------|----------------|----------------|------------------|----------------|---------------|--|
| Drive: 1/4" hexagon DIN ISO 1173-Form C 6,3 | | | | | | | |
| PH2-1/4"/Cx25 | H2 | 25 | 1 | | 9250474000 | 4050623100232 | |
| Bit PZ2-1/4"/Cx25 | Z2 | 25 | 1 | | 9250473000 | 4061245054254 | |
| Drive: 1/4" hexagon D | OIN ISO 1173-For | m E 6,3 | | | | | |
| PH2-1/4"/Ex50 | H2 | 50 | 1 | | 9250709000 | 4050623102281 | |
| PH2-1/4"/Ex200 | H2 | 200 | 1 | | 9200000200 | 4061245021058 | |
| PH2-1/4"/Ex350 | H2 | 350 | 1 | | 9200000350 | 4061245021065 | |
| Drive: thread connect | ion M6 | | | | | | |
| Bit PH2-M6x35 | H2 | 35 | 1 | | 9250612000 | 4061245021027 | |



Bit hexalobular TX



Cross references

Bit holders

106

page

Application range

> For fastening of all EJOT fasteners with drive hexalobular TX

Technical specifications



| Order description | Drive and Size | Length [mm] | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|---|--------------------|----------------|----------------|------------------|----------------|---------------|
| Drive: 1/4" hexagon DIN/ISO 1173 - E 6.3 | | | | | | |
| TX20-1/4"/Cx25 | TX20 | 25 | 1 | | 9150010000 | 4050623100553 |
| TX20W-1/4"/Cx25* | TX20W | 25 | 1 | | 9150008000 | 4050623100744 |
| TX25-1/4"/Cx25 | TX25 | 25 | 1 | | 9150009000 | 4061245021072 |
| TX25W-1/4"/Cx25* | TX25W | 25 | 1 | | 9150003000 | 4061245021102 |
| TX30-1/4"/Cx25 | TX30 | 25 | 1 | | 9250431000 | 4050623100584 |
| TX30W-1/4"/Cx25* | TX30W | 25 | 1 | | 9250431002 | 4050623100775 |
| TX40-1/4"/Cx25 | TX40 | 25 | 1 | | 9250480000 | 4050623100591 |
| Drive: 1/4" hexagon DII | N/ISO 1173 - E 6.3 | | | | | |
| TX25HF-1/4"/Ex50** | TX25 | 50 | 1 | | 9506008401 | 4013288106926 |
| TX25-1/4"/Ex350 | TX25 | 350 | 1 | | 9252014350 | 4061245105611 |
| TX30-1/4"/Ex50 | TX30 | 50 | 1 | | 9250431001 | 4050623102670 |
| TX30-1/4"/Ex200 | TX30 | 200 | 1 | | 9253014200 | 4039161010975 |
| TX30-1/4"/Ex350 | TX30 | 350 | 1 | | 9253014350 | 4061245021096 |
| Drive: threaded connec | tion M 6 | | | | | |
| TX25-M6x33 | TX25 | 33 | 1 | | 9250251425 | 4061245021089 |
| TX30-M6x33 | TX30 | 33 | 1 | | 9250251430 | 4050623103936 |
| * Special bit: conical design for force fit at screw head of painted screws | | | | | | |

^{**}Bit with holding function for unpainted screws



Socket wrench insert



Application range

> For fastening of all EJOT fasteners with hexagon head

Properties

- > Clamping spring with ball
- > Secure fit of the screw

| Cross references | page |
|------------------|------|
|------------------|------|

Cordless screwdriver ASCM QSW

91

| Order description | Drive and Size | Length [mm] | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|----------------------------------|-------------------|----------------|----------------|------------------|----------------|---------------|
| Drive: 1/4" hexagon DIN/IS0 | 0 1173 - E 6.3 | | | | | |
| K-SW7-1/4"x50 | | | | | | |
| with ball and flat spiral spring | SW7 | 50 | 1 | | 9250705106 | 4061245019987 |
| K-SW8-1/4"x50 | | | | | | |
| with ball and flat spiral | SW8 | 50 | 1 | | 9250705104 | 4061245020006 |
| spring | | | | | | |
| K-SW3/8"-1/4"x50 | | | | | | |
| with ball and flat spiral | SW3/8" | 50 | 1 | | 9250705105 | 4061245019994 |
| spring | | | | | | |
| K-SW10-1/4"x50 | 0.04.0 | 50 | | | 0050705100 | 4004045000000 |
| with ball and flat spiral spring | SW10 | 50 | 1 | | 9250705102 | 4061245020020 |
| K-SW13-1/4"x50 | | | | | | |
| with ball and flat spiral spring | SW13 | 50 | 1 | | 9250705103 | 4061245020013 |
| S-SW17-1/4"x65 | SW17 | 65 | 1 | | 9250705107 | 4061245021119 |



Socket wrenches



Application range

- > For the installation of through bolts, concrete screws, LIEBIG® SUPERPLUS anchors and LIEBIG® safety anchors with hexagonal drive
- > For processing concrete screws with hexalobular socket drive
- > For use with torque wrench
- > For use with impact wrench

Technical specifications





| Cross references | page |
|-----------------------------|------|
| Torque wrench 1/2" | 105 |
| Cordless impact screwdriver | |
| ASCD | 93 |
| Concrete screw | 24 |
| | |

| Order description | Drive and Size | Length [mm] | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|----------------------------|-------------------|----------------|----------------|------------------|----------------|---------------|
| Drive: 1/2" square | | | | | | |
| Nut socket S-SW13-1/2"x78 | SW13 | 78 | 1 | | 9250072062 | 4050623702849 |
| Nut socket S-SW15-1/2"x78 | SW15 | 78 | 1 | | 9250172028 | 4050623702863 |
| Nut socket S-SW17-1/2"x78 | SW17 | 78 | 1 | | 9250072065 | 4050623702887 |
| Nut socket S-SW19-1/2"x78 | SW19 | 78 | 1 | | 9250072067 | 4050623702900 |
| Nut socket S-SW22-1/2"x78 | SW22 | 78 | 1 | | 9250072069 | 4050623702924 |
| Nut socket S-SW24-1/2"x78 | SW24 | 78 | 1 | | 9250072070 | 4050623702931 |
| Nut socket S-SW27-1/2"x78 | SW27 | 78 | 1 | | 9250072071 | 4050623702948 |
| Nut socket S-SW30-1/2"x78 | SW30 | 78 | 1 | | 9250172032 | 4050623702955 |
| Nut socket S-SW32-1/2"x78 | SW32 | 78 | 1 | | 9250172033 | 4050623702962 |
| Nut socket S-SW36-1/2"x78 | SW36 | 78 | 1 | | 9250172072 | 4050623702979 |
| Socket wrench TX30-1/2"x35 | TX30 | 35 | 1 | | 8682900001 | 4061245082073 |
| Socket wrench TX40-1/2"x35 | TX40 | 35 | 1 | | 8682900002 | 4061245082080 |



Torque wrench 1/2" 10-50 Nm



Properties

- > Automatically triggered
- > With audible and tactile clicks when reaching the scale values
- > Robust design with reversible ratchet
- > With ergonomic 2-component handle
- > Trigger accuracy \pm 3 % according to DIN EN ISO 6789-1:2017-07

| Technical specifications | |
|--------------------------|-----------------|
| Length | 360 mm |
| Drive square | 1/2" |
| Area of operation | 10-50 Nm |
| Model | Click-Torque C1 |
| Scale division | 0.25 Nm |

| Cross references | page |
|------------------|------|
| Socket wrench | 104 |

| Order description | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|-----------------------------|----------------|------------------|----------------|---------------|
| Torque wrench 1/2" 10-50 Nm | 1 | | 9250580858 | 4013288193216 |



Torque wrench 1/2" 60-300 Nm



Properties

- > Automatically triggered
- > With audible and tactile clicks when reaching the scale values
- > Robust design with reversible ratchet
- > With ergonomic 2-component handle
- > Trigger accuracy ± 3 % according to DIN EN ISO 6789-1:2017-07

| Technical specifications | |
|--------------------------|-----------------|
| Length | 595 mm |
| Drive square | 1/2" |
| Area of operation | 60-300 Nm |
| Model | Click-Torque C4 |
| Scale division | 1 Nm |

| Cross references | page |
|------------------|------|
| Socket wrench | 104 |

| Order description | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|------------------------------|----------------|------------------|----------------|---------------|
| Torque wrench 1/2" 60-300 Nm | 1 | | 9250580861 | 4013288193247 |



Bit holders



page

102

101

91

Cross references

Cross recess bit
Cordless screwdriver ASCM

Hexagon bit

QSW

Application range

> For holding all bits with drive form C

Technical specifications



| Order description | Length [mm] | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|--|----------------|-------------|------------------|----------------|---------------|
| Drive: 1/4" hexagon DIN/ISO 1173 - E 6.3 | | [biooca] | [EOII] | | |
| BT-1/4"-1/4"x57 | 57 | 1 | | 9150506031 | 4050623800019 |
| BT-1/4"-1/4"x250 | 250 | 1 | | 9250010120 | 4061245021126 |



Installation tool for through bolts

page



Cross references

BA anchors

hors

Application range

> For the reliable installation of through bolts BA Plus

Technical specifications



| Order description | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|---|----------------|------------------|----------------|---------------|
| Installation tool for through bolts M6 - M10 | 1 | | 9650079020 | 4061245001791 |
| Installation tool for through bolts M12 - M20 | 1 | | 9650079021 | 4061245001784 |

Installation tool for drop-in anchors



Properties

LAL+

> Weight-optimised design

Application range

> For hole drilling

> Optimised 4-cutting edge geometry

Notice

The use of specially developed setting tools is highly recommended for installing drop-in anchors Drop-in anchors cannot be tightened by a screw or bolt! If makeshift tools instead of professional setting tools are used to install anchors, the thread can be damaged and this causes problems during installation.

> For fast and reliable installation of drop-in anchors LA+ and



| Order description | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|---|----------------|------------------|----------------|---------------|
| Installation tool for drop-in anchors 8x30 | 1 | | 9160000830 | 4014496053330 |
| Installation tool for drop-in anchors 10x40 | 1 | | 9160001040 | 4014496053354 |
| Accessories | | | | |
| Drill bit with depth stop 8x30 | 1 | | 9160105941 | 4014496053347 |
| Drill bit with depth stop 10x40 | 1 | | 9160105949 | 4014496053361 |

Technical specifications





Installation tool LT PRO



Cross references

Drop-in anchor LAL+

87

Application range

> For installation of drop-in anchors LA+ and LAL+

Properties

- > Hand protection made of rubber
- > Polyethylene / galvanized zinc-plated steel

| Order description | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|-----------------------------|----------------|------------------|----------------|---------------|
| Installation tool LT+6 PRO | 1 | | 9650079306 | 4061245001685 |
| Installation tool LT+8 PRO | 1 | | 9650079308 | 4061245001678 |
| Installation tool LT+10 PRO | 1 | | 9650079310 | 4061245001661 |



Applicator gun Side by Side AP 345ml



Application range

- > For Multifix USF 280 ml
- > For Multifix USF Winter 300 ml
- > For pressing-out of other various cartridges 280 / 300 ml (e.g. silicone)

| Cross references | page |
|------------------|------|
| | |

Mortar cartridge USF 280 ml 58 Mortar cartridge USF winter 60

Properties

Additional pressing-out cylinder can be used to read the cartridge scale

Notice

Depending on the temperature, mortar cartridges require higher contact forces (~ 1 kN) than e.g. silicone cartridges. These applicator guns feature an appropriate transmission ratio.

| Order description | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|--------------------------------------|----------------|------------------|----------------|---------------|
| Applicator gun Side by Side AP 345ml | 1 | | 9570010345 | 4001990541951 |

Applicator gun AP 420 ml



Application range

- > For Multifix USF 420 ml
- > For Multifix PSF+ 420 ml

Notice

Depending on the temperature, mortar cartridges require higher contact forces (~ 1 kN) than e.g. silicone cartridges. These applicator guns feature an appropriate transmission ratio.

Cross references page

Mortar cartridge USF 420 ml
Mortar cartridge PSF+ 420 ml

| Order description | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|--------------------------|----------------|------------------|----------------|---------------|
| Applicator gun AP 420 ml | 1 | | 9570010380 | 4061245091808 |



Applicator gun AP 585 ml

Application range

> For Multifix SE1000 Seismic and comparable 585 ml side-byside cartridges

Cross referencespageMortar cartridge SE 100062

| Order description | PU [pieces] | Price/PU [EUR] | Article number | EAN |
|--------------------------|----------------|-------------------|----------------|---------------|
| Δnnlicator gun ΔP 585 ml | 1 | | 9640072648 | 6416031726484 |



Duster Expert SDS plus®



Application range

- > Concrete
- > Gas concrete
- > Granite
- > Sand-lime brick
- > Clinker brick
- > aerated concrete
- > Marble
- > Masonry
- > Stone

Properties

> Anti-dust drill bit for drilling and cleaning in one step

Benefits

- > Dust is removed directly in the drill hole
- Simple usage and reliable anchor installation: Removes dust almost completely - subsequent cleaning of the drill hole is redundant
- > Cheap solution for the end user: Saves time during drill hole and / or environment cleaning
- > Same robustness and comparable performance as a standard drill
- > Universal and flexible usage with SDS-plus hammers and commercial vacuum cleaners

Recommended performance features for vacuum cleaners

- > Industrial vacuum cleaner class M
- > Hose length up to 5 m
- > Performance P ≥ 1,400 W
- > Volume flow rate $v \ge 40$ l/sec
- > Reduced pressure p ≥ 230 mbar
- > Automatic filter cleaning







| Order description | Diameter [mm] | Width [mm] | Length [mm] | PU [pieces] | Price/PU [EUR] | Article number | EAN |
|-------------------------------|------------------|---------------|----------------|----------------|-------------------|----------------|---------------|
| Duster Expert SDS-plus 8x270 | 8.0 | 150 | 270 | 1 | | 9250815270 | 4010159289702 |
| Duster Expert SDS-plus 10x270 | 10.0 | 150 | 270 | 1 | | 9251015270 | 4010159289719 |
| Duster Expert SDS-plus 12x320 | 12.0 | 200 | 320 | 1 | | 9251220320 | 4010159287838 |
| Duster Expert SDS-plus 14x370 | 14.0 | 250 | 370 | 1 | | 9251425370 | 4010159287845 |
| Duster Expert SDS-plus 16x370 | 16.0 | 250 | 370 | 1 | | 9251625370 | 4010159287869 |
| Duster Expert SDS-plus 20x370 | 20.0 | 250 | 370 | 1 | | 9252025370 | 4010159287883 |



Cleaning brush RBT metal



Application range

> For cleaning drill holes of chemical anchoring in concrete and masonry

Benefits

- > For approval-compliant drill hole cleaning
- > Use in combination with standard cordless screwdriver, drill or T-handle

| Order description | Total length [mm] | Diameter Brush head [mm] | For drill hole diameter [mm] | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|-----------------------------|----------------------|--------------------------------|------------------------------------|----------------|------------------|----------------|---------------|
| SDS-plus-adapter RBT M6 | 110 | - | _ | 1 | | 9150100100 | 4061245081014 |
| T-handle for metal brush M6 | - | - | - | 1 | | 9150100200 | 4061245105970 |
| Cleaning brush 10 metal | 170 | 12 | 8 | 1 | | 9150100010 | 4061245082011 |
| Cleaning brush 12 metal | 170 | 14 | 10 | 1 | | 9150100012 | 4061245082028 |
| Cleaning brush 14 metal | 170 | 16.3 | 12 | 1 | | 9150100014 | 4061245082035 |
| Cleaning brush 16 metal | 200 | 18 | 14 | 1 | | 9150100016 | 4061245082042 |
| Cleaning brush 18 metal | 200 | 20 | 16 | 1 | | 9150100018 | 4061245082059 |
| Cleaning brush 20 metal | 250 | 22.6 | 18 | 1 | | 9150100020 | 4061245082066 |

Blow-out pump



Application range

> For cleaning the drill hole in concrete and masonry

Benefits

- > Easy to use
- > High cleaning effect
- > Universal purpose

| Order description | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|----------------------------|----------------|------------------|----------------|---------------|
| Blow-out pump 6 mm | 1 | | 9150300001 | 4061245020433 |
| Blow-out pump from 8 mm on | 1 | | 9150300000 | 4039161019084 |



spray oil



Application range

- > Industry and trade applications
- > Suitable for lubricating mechanical parts

Properties

- > Maintenance, lubrication, disinfection, rust protection
- > Creeps in smallest corners, very glide-active
- > Does not resinify, completely bio-degradable
- > Food-safe, dermatologically tested and completely harmless

| Order description | Content [ml] | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|-------------------|-----------------|----------------|------------------|----------------|---------------|
| Spray oil 200 ml | 200 | 1 | | 9150911000 | 4008153740343 |

Corrosion protection spray



Application range

To protect zinc-plated facade anchor screws from moisture and driving rain

Properties

- > Permanently elastic protection from moisture and driving rain
- Can be sprayed upside-down and reaches otherwise inaccessible corners and edges that are especially susceptible to corrosion
- > Fast-drying and non-dripping when applied evenly

Instructions for using galvanic zinc-plated facade anchor screws (excerpt from ETA-10/0305)

The special screw made of galvanic zinc-plated steel may also be used outside, after careful installation and if the area of the screw head is protected against moisture and driving rain in such a way that no moisture can enter the anchor shaft. This requires facade cladding or a rain screen fixed in front of the screw head and the screw head has to be coated with a soft-plastic, permanently elastic, bitumen oil combination coat (e.g. car underbody coating or cavity protection).

| Order description | Content [ml] | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|----------------------------|-----------------|----------------|------------------|----------------|---------------|
| Corrosion protection spray | 500 | 1 | | 8200020100 | 4008153740343 |



Tool belt

Cross reference

Facade anchors

Through bolts



Application range

> For ergonomic installation of two-part insulation support anchors DH, facade anchors and through bolts

Properties

page

67 12 > Can take up to 50 insulation support anchors DH



| Order description | PU [pieces] | Price/1 [EUR] | Article number | EAN |
|-------------------|----------------|------------------|----------------|---------------|
| Tool belt | 1 | | 9150000001 | 4061245020457 |

Product and note charts

Technical data | Certifications | Other

Technical specifications







max. 1,800





Clamping thick-ness screw















Diameter LT Pan head



Diameter LT Pan head with cutting ring



Diameter Truss head



Height hexagon head

























13

Lenath

























+ = mm











X

4-edge

Drill with 4-cutting edge geometry



Tool for FR

screws with sealing washer



head with cutting ring





Diameter rivet setting head



2.7 Diameter rivet-ting mandrel











TX



T_{inst} Nm

Tightening



Effective shaft

SDS plus

Drive SDS plus®











M8 Internal thread diameter

H2



8.0









Drive external square





Metal anchor















Manufacurer

PGM Masonry Drill Bit Certifi-







Sealing washer size and



Drive cross recess H







Drive cross recess Z





Z2

Drive external cross recess Z



Drive internal square





















to seismic performance category

Slip resistance through support (metal-metal) Slip resistance through support (metal-plastic)

















high-strength substructures



















Top Coating CLIMADUR

CLIMA





Certifications



European Technical



al techpproval



General construction technique permit aBG



National technical test certificate abP



FM Approval Er product Pr certification by rate FM Global



Environmental Product Declaration EPD less report no. 509 20107/1+. ift Rosenheim test report



Emission category according to French VOC directive



International Code Counc Evaluation

Other







Cross reference to next page



Follow assembly instructions



Video

Applications

Metal and Chemical Anchoring Technology



Timber substructure to



ure to



Timber substructure to perforated



Timber substructure to aerated



Metal substructure t



al substructo solid

Meta
subs



Metal substructure to perforated



Metal substru



Embedmer in concrete

Technical abbreviations

| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | |
|---|----------------|
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | |
| $ \begin{array}{c cccc} C & & & & & & & & & & & & & & \\ C & & & &$ | |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | |
| $\begin{array}{cccc} c_{\text{cr,N}} & \text{Characteristic edge distance} & \text{mm} \\ c_{\text{min}} & \text{Minimum edge distance} & \text{mm} \\ d & \text{Thread outer diameter / nominal diameter} \\ d_{0} & \text{Nominal drill diameter / drill hole diameter} \\ DC & \text{Drilling capacity} & \text{mm} \\ d_{\text{cut}} & \text{Cutting diameter of the drill bit} & \text{mm} \\ d_{t} & \text{Diameter of the through hole in the attachment} \end{array}$ | |
| C _{min} Minimum edge distance mm d Thread outer diameter / nominal diameter d ₀ Nominal drill diameter / drill hole diameter DC Drilling capacity mm d _{cut} Cutting diameter of the drill bit mm d ₁ Diameter of the through hole in the attachment mm | |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | |
| diameter mm do diameter mm Nominal drill diameter / drill hole diameter mm DC Drilling capacity mm dout Cutting diameter of the drill bit mm dout Diameter of the through hole in the attachment mm | |
| d ₀ diameter mm DC Drilling capacity mm d _{cut} Cutting diameter of the drill bit mm d _t Diameter of the through hole in the attachment mm | |
| d _{cut} Cutting diameter of the drill bit mm d _f Diameter of the through hole in the attachment mm | |
| d _t Diameter of the through hole in the attachment mm | |
| q, attachment mm | |
| d _h head diameter mm | |
| | |
| d _{head} head diameter mm | |
| d _{nom} Effective external diameter mm | |
| d _k Diameter cone mm | |
| f Thread length in the anchor mm | |
| f _b Minimum compressive strength N/mm | 12 |
| $\mathbf{f}_{\rm ck} \qquad \qquad {\rm Nominal\ characteristic\ compressive} \\ {\rm strength} \qquad \qquad {\rm N/mr}$ | 1 ² |
| f _{max} Maximum installation depth mm | |
| f_{\min} Minimum installation depth mm | |
| F _{Rk} Characteristic resistance kN | |
| F _{zul} Permitted load kN | |
| h Component thickness mm | |
| h Component height mm | |
| h _o Drill hole depth mm | |
| h, Drill hole depth to deepest point mm | |
| $\label{eq:hamman} \textbf{h}_{\text{a}} \qquad \qquad \textbf{Thickness of the outer sheet} \qquad \qquad \textbf{mm}$ | |
| $\mathbf{h}_{_{\mathrm{D}}} \hspace{1.5cm} \textbf{Insulation thickness} \hspace{1.5cm} \mathbf{mm}$ | |
| $\begin{array}{cc} & & \text{Installation depth in the load-bearing} \\ \text{layer} & & \text{mm} \end{array}$ | |

| Abbreviation | Description | Unit |
|--------------------|--|--------|
| h _{ef} | Effective embedment depth | mm |
| h _{min} | Minimum thickness of base materials | mm |
| h _{nom} | Nominal embedment depth | mm |
| k | Height of cone | mm |
| L | Length | mm |
| I | Screw length | mm |
| I _d | Anchor length | mm |
| l _g | Thread length | mm |
| I _s | Sleeve length | mm |
| I _s | Screw length | mm |
| L _s | Thread length in the anchor | mm |
| M | Internal thread diameter | mm |
| M _{Rk} | Bending moment | Nm |
| M _{zul} | Admissible bending moment | Nm |
| N | Tensile load | kN |
| N _{rec} | Recommended tensile capacity | kN |
| N _{Rk} | Characteristic resistance | kN |
| S | Minimum centre distance for C _{min} | mm |
| S ₁ | Center distance (perpendicular to the free edge) within an anchor group | mm |
| S ₂ | Center distance (parallel to the free edge) within an anchor group | mm |
| S _{cr.N} | Characteristic centre distance | mm |
| S _{min} | Minimum centre distance | mm |
| SW | Wrench size | mm |
| t | Drill hole depth | mm |
| | Component thickness 1 | mm |
| t _{fix} | t _{tol} + thickness of attachment | mm |
| Tinst | Tightening torque | Nm |
| t _s | Overall drill hole depth | mm |
| t _{sheet} | Panel thickness | mm |
| t _{tol} | Thickness of tolerance compensation or of the non-load-bearing outer layer | mm |
| V | Transverse load | kN |
| V _{rec} | Recommended shear load capacity | kN |
| V _{Rk} | Shear load capacity | kN |
| ρ | Raw density class | kg/dm³ |
| | | |



Notes

EJOT products undergo continuous further improvement. Technical specifications, ranges and prices are subject to changes.

During planning and use of EJOT products, please comply with the accepted rules of technology, construction legislation and the relevant safety regulations. National technical approvals, test certificates and European Technical Assessments of EJOT products can be downloaded from the website:

https://www.ejot.com/construction/downloads

The current General Terms and Conditions are available on the website:

www.ejot.com/terms-conditions

 ${\rm EJOT}^{\tiny{\circledcirc}}$ is a registered trademark of EJOT Holding GmbH & Co. KG.

CORREMAKS®, CROSSFIX®, DABO®, DELTA PT®, PT®, ECORIV®, EJOFAST®, ejotherm®, T-FAST® und EJOT ANCHOR FIX® are registered trademarks of EJOT Baubefestigungen GmbH.

SDS plus® is a registered trademark of Robert Bosch GmbH.

DEKTITE® is a registered trademark of Deks Industries Pty. Ltd.

 TORX^{\otimes} is a registered trademark of Acument Intellectual Properties, LLC.



EJOT SE & Co. KG Market Unit Construction

In der Stockwiese 35
57334 Bad Laasphe
T +49 2752 908-0
F +49 2752 908-731
construction@ejot.com
www.ejot.com/construction