

## Anchoring technology

Special products for mechanical and chemical anchoring into concrete and masonry

**EJOT®**

The next generation  
concrete screws for higher  
load-bearing capacity

JC2 Plus with optimised thread geometry

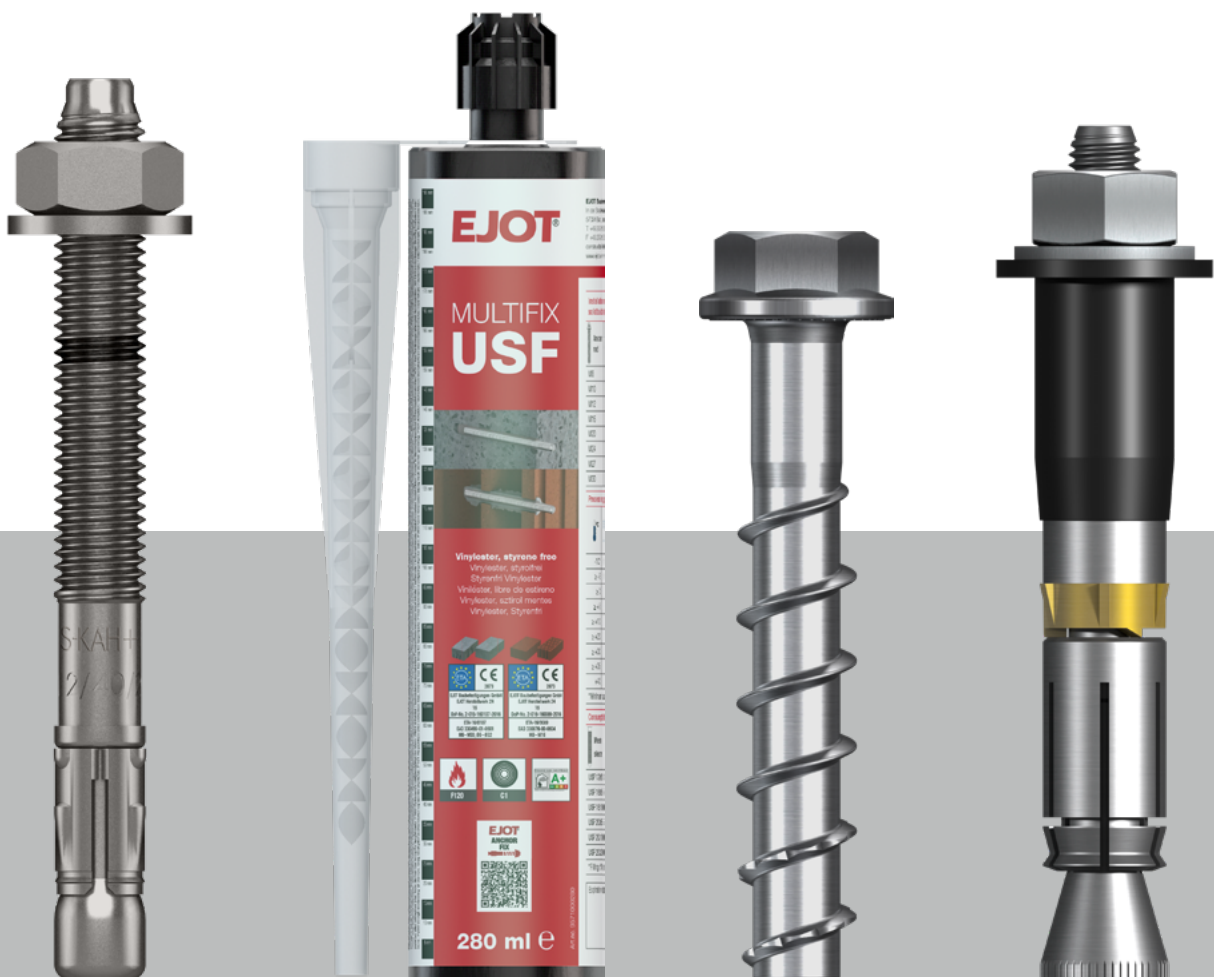


# Metal and chemical anchors

## Special products for mechanical and chemical anchoring installation

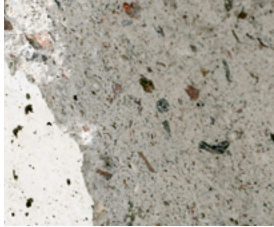
The field of anchoring technology is characterised in particular by its versatility. From the temporary fastening of facade scaffolding and cladding to the anchoring of structural elements such as railings, steel stairs, facade elements, awnings, supports, beams, brackets, grids, etc., to the assembly 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.



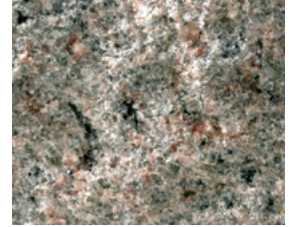
**Solid brick**

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.



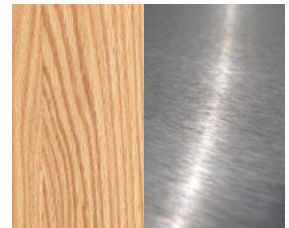
**Light expanded clay aggregate**

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.



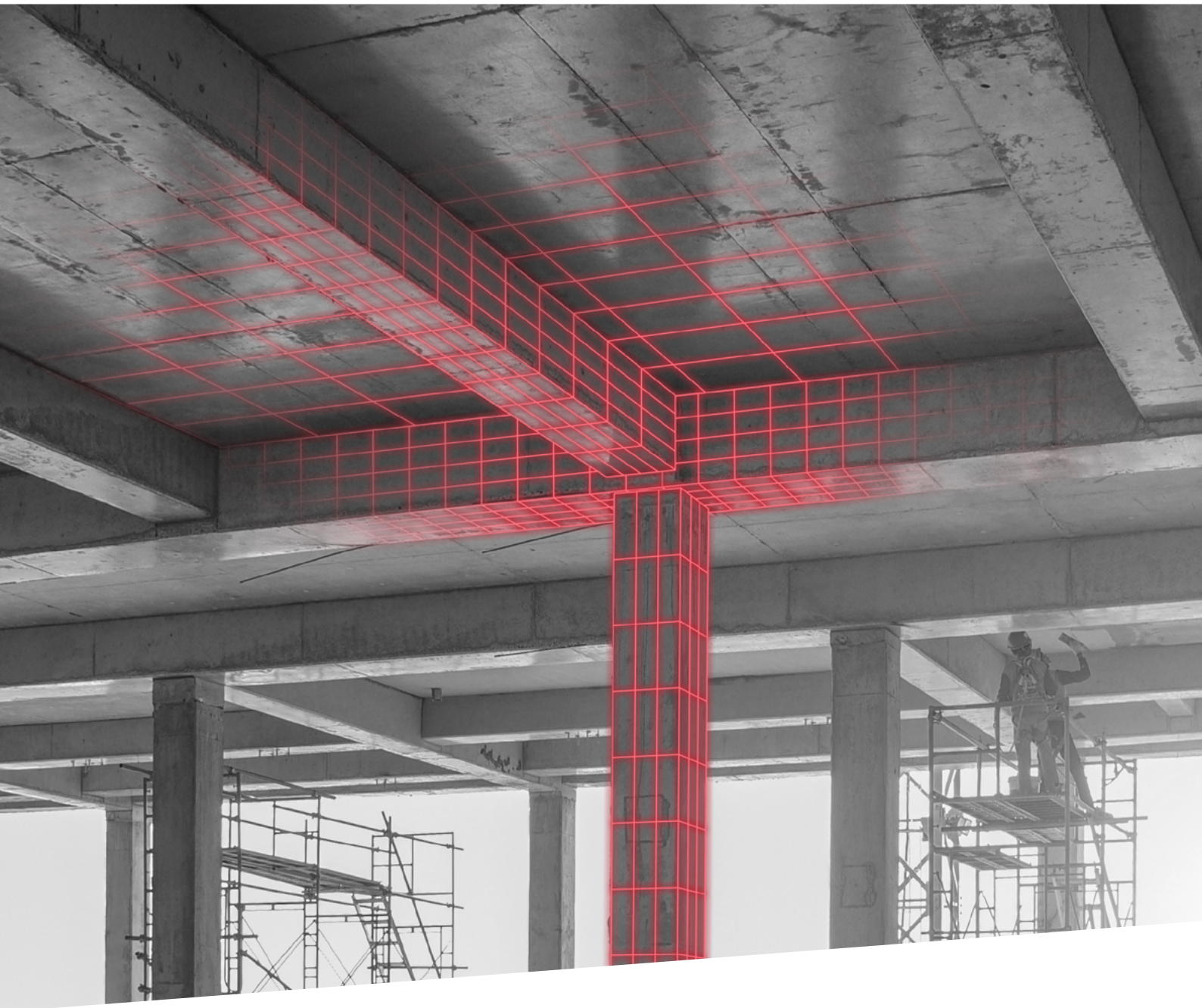
**Construction panels**

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.

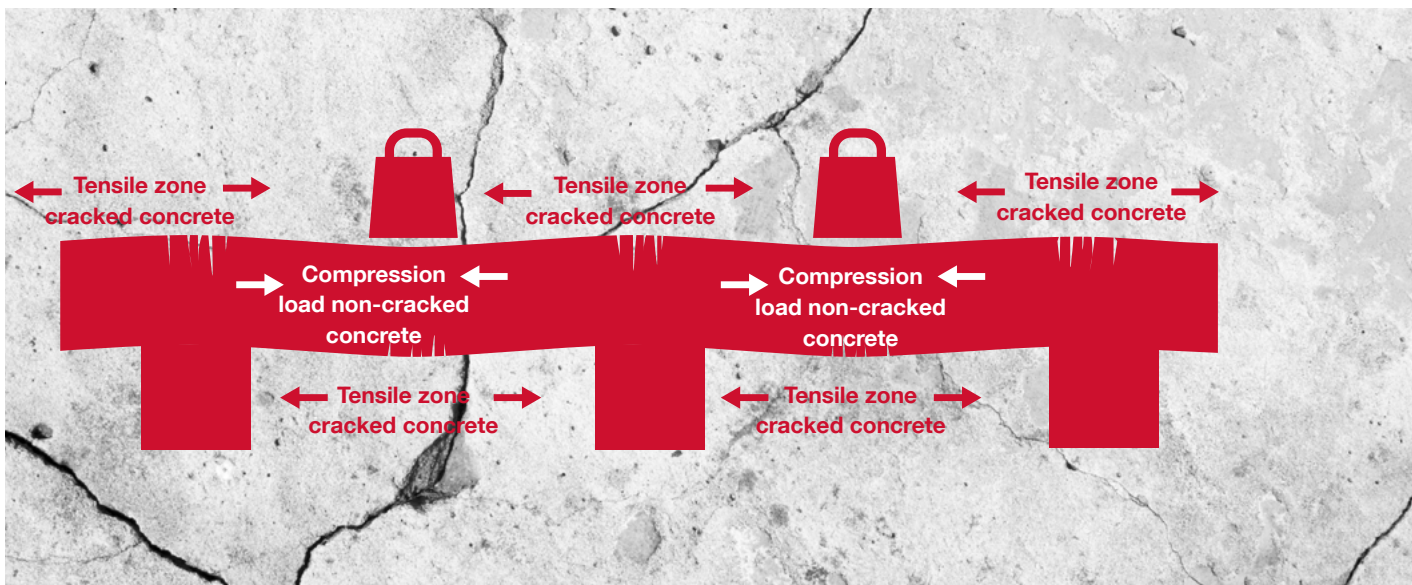
Concrete can be used in a variety of applications. In order to mount components reliably and durably to concrete substrates, the choice of the adequate fastening material is just as decisive as the knowledge about the properties of the substrate.

# 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

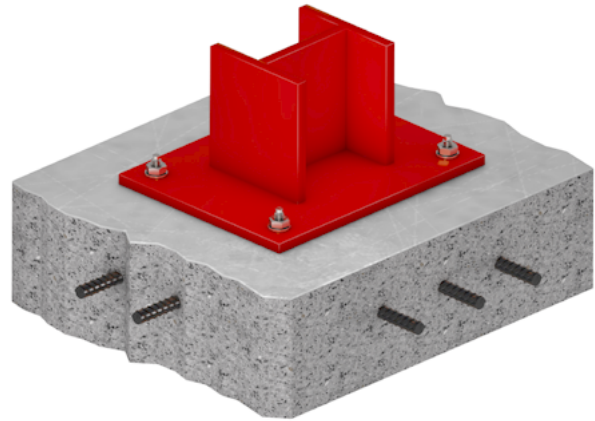
additional work step are required. They can take high loads even with small spacings and edge distances. They are removable and thus well suited for temporary fastenings.

**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.

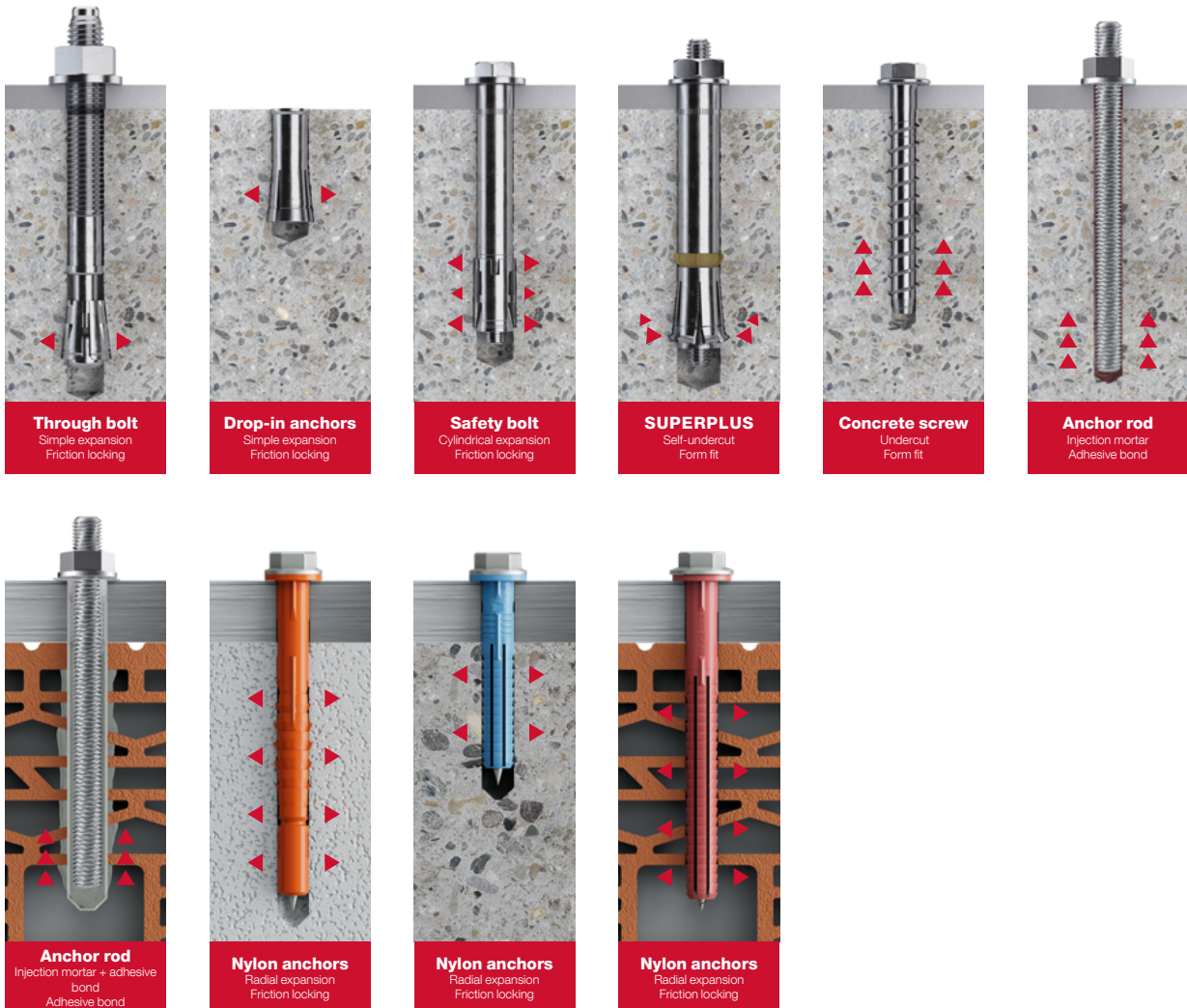
**Nylon anchors**

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.

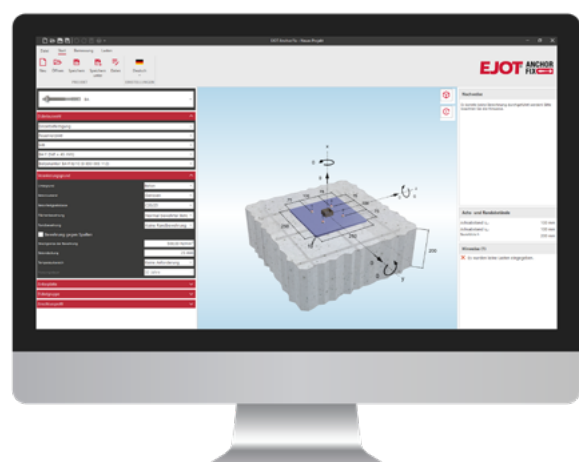
With EJOT ANCHOR FIX®, the limits of the load-bearing capacity of EJOT anchoring products such as through bolts and concrete screws in concrete substrates can be determined. Another new feature is the possibility of dimensioning nylon and chemical anchors in concrete and masonry.

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](http://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

### Steel

BA-V-PLUS	14
BA-C NC	20

### Steel, hot dip galvanized

BA-F-PLUS	16
-----------	----

### Stainless steel A4 / HCR

BA-E-PLUS	18
BA-E-PLUS HCR	18

## Concrete screws

### Steel

JC2-FR-6xL	26
JC2-IT-6xL	27
JC2-ST-6xL	28
JC2-KB-6xL	30
JC2-KB-PLUS-8xL	32
JC2-KB-PLUS-10xL	32
JC2-KB-PLUS-14xL	32

### A4 stainless steel

JC6-FR-6xL	35
JC6-KB-6xL	36
JC6-KB-8xL	36
JC6-KB-10xL	36
JC6-ST-6xL	38

## LIEBIG® safety bolts

### Steel

S	44
B	46
SK	48

## LIEBIG® SUPERPLUS

### Self-undercutting anchors

#### Steel

BLS	49
-----	----

#### A4 stainless steel

BLS A4	50
--------	----

## LIEBIG® SUPERPLUS

### Lightning protection anchors

#### A4 stainless steel

BLS M8-14 A4	51
--------------	----

## LIEBIG® SUPERPLUS

### Step iron anchors

#### A4 stainless steel

BLS M8-14 SD A4	52
BLS M8-14 SA A4	52

## Chemical installation

### Injection system

Mortar cartridge PSF	56
Mortar cartridge USF	58
Mortar cartridge USF winter	60
Mortar cartridge SE 1000	62
Mixing nozzle USF	59
Mixer extension 500 ml	59

## Anchor rods (steel)

AST M10xL V	64
-------------	----

## Anchor rods (A4 stainless steel)

AST M10xL E	64
-------------	----

## Mesh sleeves (plastics)

Mesh sleeve USF 16xL	65
----------------------	----

## Nylon anchors

### Plastics/steel

SDF-S-8VxL-V	68
SDF-KB-8VxL-V	69
SDF-S-10VxL-V	70
SDF-KB-10VxL-V	72
SDF-S-10HxL-V	74
SDF-KB-10HxL-V	76
SDF-S-14AxL-V	78
SDF-KB-14AxL-V	80
SDP-S-10GxL-V	81
SDP-KB-10GxL-V	82

### Plastics/A4 stainless steel

SDF-KB-10VxL-E	72
SDF-S-10HxL-E	74
SDF-KB-10HxL-E	76
SDP-S-10GxL-E	81
SDP-KB-10GxL-E	82

## Double expansion wall anchors

### Plastics/A4 stainless steel

VSD-2G-8UxL-E	83
---------------	----

## Nail anchors

### Plastics/steel

ND-K V	84
ND-K	85

## Drop-in anchors

### Steel

LAL+	87
------	----

## Ceiling nails

### Steel

E-CN 6xL	88
----------	----

## Machinery

### Cordless screwdrivers

ASCM 18-4 QW AS	91
ASCM 18-4 QM AS	92

### Cordless impact screwdrivers

ASCD 18-300 W2 AS	93
-------------------	----

### Cordless hammer drills

ABH 18-26 AS	94
--------------	----

### Battery packs and chargers

#### For ASCM 18-4 QM AS

#### For ASCD 18-300 W2 AS

#### For ABH 18-26 AS

Battery Starter Set 18V / 6.0 Ah	95
Rapid charger ALG 80	95
Battery pack 18V / 6.0 Ah	95

## Accessories

### For ASCM 18 QM AS

Bit holder	91
Socket adapter	91

## Tools

### Universal drill SDS plus®

Universal drill SDS-plus	97
--------------------------	----

### Hammer drill SDS plus®

4-edge SDS-plus	98
-----------------	----

### Hammer drill

A cone	99
A cone with flange	99

### Bits

Cross recess	101
Hexalobular TX	102

### Socket wrench insert

Hexagon clamping socket	103
-------------------------	-----

### Socket wrenches

Hexagon socket wrench	104
-----------------------	-----

### Torque wrenches

1/2" 10-50 Nm	105
1/2" 60-300 Nm	105

### Bit holders

BT-1/4"-1/4"xL	106
----------------	-----

### Installation tools

Installation tools for through bolts	107
Installation tool 2.0 for drop-in	

anchors	108
---------	-----

Manual setting tool 2.0 for drop-in	
anchor	109

### Applicator guns

Side by Side AP 345 ml	110
------------------------	-----

AP 420 ml	110
-----------	-----

AP 585 ml	111
-----------	-----

### Anti-dust drill bits

Duster Expert SDS-plus	112
------------------------	-----

### Other

Cleaning brushes RBT metal	113
----------------------------	-----

Blow-out pumps	113
----------------	-----

Spray oil	114
-----------	-----

Corrosion protection spray	114
----------------------------	-----

Tool belt	115
-----------	-----



## Through bolts

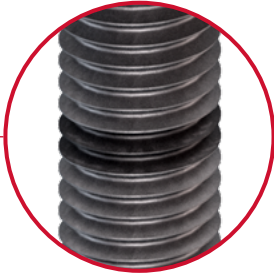
# Through bolt BA-E Plus

These are the features

Anchor length letter code marked on the bolt head



Coloured thread markings for setting depth in the thread



Marking indicates the size of the anchor and the maximum fixture thickness






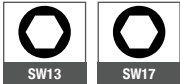

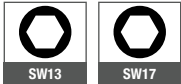









The thick expansion sleeve provides good expansion reserves





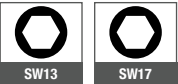

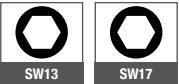







The cylindrical shape of the cone at the lower end allows controlled re-expansion



## Through Bolts product overview

	BA-V Plus	BA-F Plus	BA-E Plus
<b>Anchor</b>			
<b>Material</b>	Carbon steel Zinc electroplated	Carbon steel Hot dip galvanized	Stainless steel A4
<b>Application range</b>	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.
<b>Base materials</b>	Cracked concrete Non-cracked concrete	Cracked concrete Non-cracked concrete	Cracked concrete Non-cracked concrete
<b>Thread size*</b>	M8, M10, M12, M16	M8, M10, M12, M16	M8, M10, M12, M16
<b>Drive</b>	 	 	 
<b>Tools</b>	Setting tool BA	Setting tool BA	Setting tool BA
<b>Technical specifications</b>			
<b>Approvals</b>			

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

BA-E Plus HCR	BA-C NC
	
Stainless steel HCR 1.4529 / 1.4565	Carbon steel Zinc electroplated
HCR for extremely corrosive conditions, such as high chlorine concentrations (swimming halls) road tunnels and desulphurization plants	Dry internal conditions
Cracked concrete Non-cracked concrete	Non-Cracked concrete $\geq$ C20/25 "Option 7"
M8, M10, M12, M16	M8, M10, M12, M16
 	 
Setting tool BA	Setting tool BA
  	-
 ETA-16/0934  ETA-18/0219	 ETA-20/0286

## 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

### Installation process



### Application range

- > For embedment in cracked and non-cracked concrete  $\geq C20/25$
- > 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

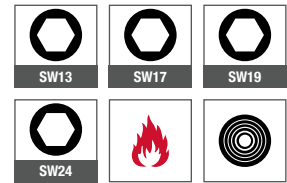
Characteristic values apply to the compression strength of C20/25 concrete. Design load of an anchor for centric tension in cracked concrete.

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

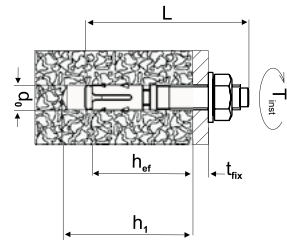
### Applications



### Technical specifications



### Certifications



Anchor type	Effective embedment depth $h_{ef}$ [mm]	Permitted load $F_{zul}$ [kN]	Centre distance [mm]			Edge distance [mm]			Permitted Bending moment $M_{zul}$ [Nm]	Tightening torque $T_{inst}$ [Nm]
			$s_{cr,N}$	$s_{min}$	C	$c_{cr,N}$	$c_{min}$	S		
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
	60	5.7	180	40	60	90	50	100	28.6	30
BA-V Plus 12	50	5.8	150	55	110	75	60	215	49.1	60
	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 <sub>0</sub> [mm]	L [mm]	t <sub>fix</sub> ≤ [mm]	h <sub>1</sub> ≥ [mm]	h <sub>ef</sub> ≥ [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  $\geq$  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

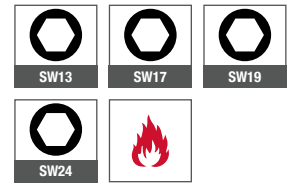
### Properties

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

### Applications



### Technical specifications



### 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

### Notice

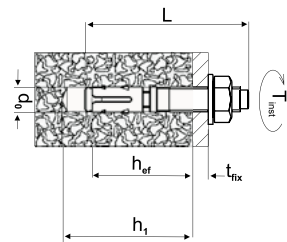
Characteristic values apply to the compression strength of C20/25 concrete. Design load of an anchor for centric tension in cracked concrete.

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

### Certifications



### Installation process



Anchor type	Effective embedment depth $h_{ef}$ [mm]	Permitted load $F_{zul}$ [kN]	Centre distance [mm]			Edge distance [mm]			Permitted Bending moment $M_{zul}$ [Nm]	Tightening torque $T_{inst}$ [Nm]
			$s_{cr,N}$	$s_{min}$	C	$c_{cr,N}$	$c_{min}$	S		
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
BA-F Plus 12	50	5.8	150	55	110	75	60	215	49.1	60
	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 <sub>0</sub> [mm]	L [mm]	t <sub>fix</sub> ≤ [mm]	h <sub>1</sub> ≥ [mm]	h <sub>ef</sub> ≥ [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

### Application range

- > For embedment in cracked and non-cracked concrete  $\geq C20/25$
- > Dry internal conditions
- > Wet areas
- > Outdoors, including in industrial atmospheres and coastal environments
- > 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,  $f_{ck,cube} = 25 \text{ N/mm}^2$ ; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

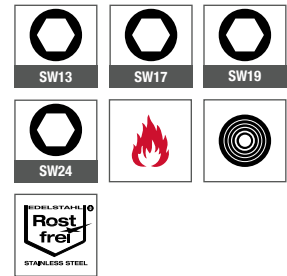
### Installation process



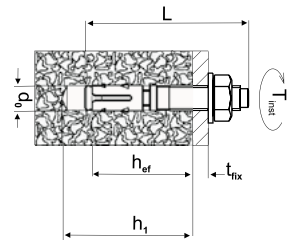
### Applications



### Technical specifications



### Certifications



Anchor type	Effective embedment depth $h_{ef}$ [mm]	Permitted load $F_{zul}$ [kN]	Centre distance [mm]			Edge distance [mm]			Permitted Bending moment $M_{zul}$ [Nm]	Tightening torque $T_{inst}$ [Nm]
			$s_{cr,N}$	$s_{min}$	C	$c_{cr,N}$	$c_{min}$	S		
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
	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
	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 <sub>0</sub> [mm]	L [mm]	t <sub>fix</sub> ≤ [mm]	h <sub>1</sub> ≥ [mm]	h <sub>ef</sub> ≥ [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



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

### Installation process



### Application range

- > For embedment in cracked and non-cracked concrete  $\geq$  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

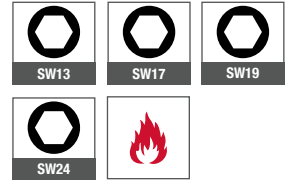
### Notice

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

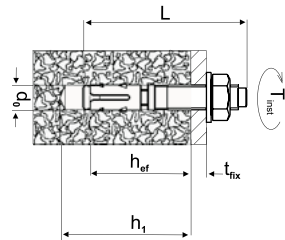
### Applications



### Technical specifications



### Certifications



Anchor type	Size	Effective embedment depth $h_{ef}$ [mm]	Edge distance [mm]	Centre distance [mm]	Recommended tensile loads $F_{rec}$ [kN]	Recommended transverse loads $F_{rec}$ [kN]	Tightening torque $T_{inst}$ [Nm]
			$C_{min}$	$S_{min}$			
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 description	$d_0$ [mm]	L [mm]	$h_1 \geq$ [mm]	$h_{min} \geq$ [mm]	$t_{fix} \leq$ [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

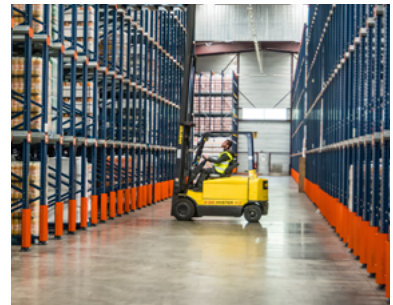
Facade scaffolds



Formworks



Industrial shelves



Safety elements



Wall consoles



Steel stairs












Cable racks



Railings

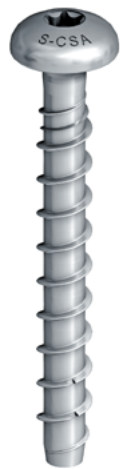


## Concrete screws product overview

screw	JC6-KB	JC6-FR	JC6-FR
			
<b>Material</b>	A4 stainless steel		
<b>Application range</b>	Awnings, gates, shelving systems, cable traverses, handrails and railings, stadium seating, impact protection / ram protection, timber add-on components (e.g. joist hanger, angles, ...)		
<b>Drive</b>	 		
<b>Cracked concrete ETAG-001-1</b>	Ø 6 – 10 mm	Ø 6 mm	
<b>Cracked concrete ETAG-001-6</b>	-		
<b>Non-cracked concrete</b>	Ø 8 mm	Ø 6 mm	
<b>Certifications</b>	 ETA-22/0413		
<b>Technical specifications</b>	 		
<b>Mode of action</b>	Undercut		
<b>Type of load</b>	static		
<b>Recommended tensile loads</b>	7.9 kN		
<b>Recommended shear loads</b>	11.6 kN		

JC2-KB Plus	JC2-KB	JC2-FR	JC2-ST	JC2-IT
Carbon steel, zinc electroplated	Galvanised or zinc alloy coated carbon steel			
Facade scaffolds, temporary fastening, contact surfaces, shelves, cable racks, hand rails, battens, formworks	Facade scaffolds, temporary fastening, contact surfaces, shelves, cable racks, hand rails, battens			Pipe brackets, profile rails
Ø 8–14 mm	Ø 6 mm			
-	Ø 6 mm			
Ø 8–14 mm	Ø 6 mm			
Undercut				
static				
3.1 - 14.3 kN	1.2kN			
10.9 - 37.1 kN	4.5 kN			

## Concrete screw JC2-FR



### Application range

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

### Properties

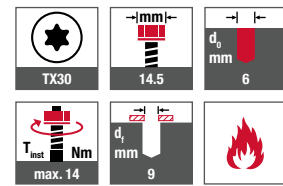
- > Zinc-plated steel
- > Truss head, hexalobular drive
- > ETA-approved concrete screw for cracked and non-cracked concrete
- > Self-tapping approved screw anchor for push-trough installation
- > No expansion therefore small edge and centre distances possible
- > Completely removable
- > For dry indoor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

### Notice

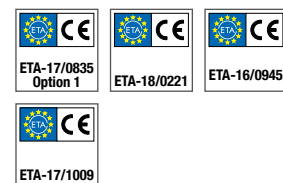
Characteristic values apply to the compression strength of C20/25 concrete. Design load of an anchor for centric tension in cracked concrete.

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

### Technical specifications

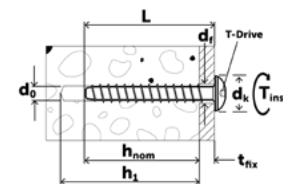


### Certifications



### Base materials

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



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

Characteristic values	Admissible loads non-cracked concrete C20/25							Admissible loads cracked concrete C20/25	
	$d_i$ [mm]	Drive [mm]	$d_0$ [mm]	$h_{ef}$ [mm]	$T_{inst}$ [Nm]	$N_{Rec}$ [kN]	$V_{Rec}$ [kN]	$N_{Rec}$ [kN]	$V_{Rec}$ [kN]
<b>ETA-17/0835 – approval according to EAD 330232-00-0601 (option 1) for single fastening in concrete</b>									
JC2-FR 6	9	TX30	6	42.5	14	4.5	5.6*	2.1	4.5
<b>ETA-18/0221 – approval according to ETAG 001 part 6 for multiple fastening of non-structural systems in concrete</b>									
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*

\*Failure case = steel failure

Order description	L [mm]	$t_{fix}$ [mm]	$h_{nom}$ [mm]	$h_1$ [mm]	PU [pieces]	Price/100 [EUR]	Article number	EAN
<b>ETA-17/0835 – approval according to EAD 330232-00-0601 (option 1) for single fastening in concrete</b>								
Concrete screw JC2-FR -6x60/5/20	60	5	55	65	50		9650071549	4061245047812
<b>ETA-18/0221 – approval according to ETAG 001 part 6 for multiple fastening of non-structural systems in concrete</b>								
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



## Application range

- > Pipe brackets
- > Profile rails

## Properties

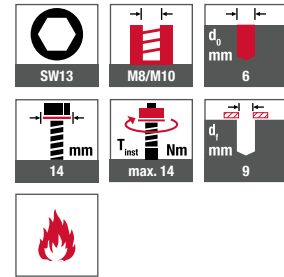
- > Zinc-plated steel
- > Hexagon head SW13 with internal thread M8/M10
- > ETA-approved concrete screw for cracked and non-cracked concrete
- > Self-tapping approved screw anchor for push-in installation
- > No expansion therefore small edge and centre distances possible
- > Completely removable
- >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

## Notice

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

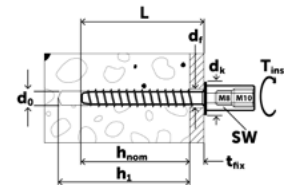


## Certifications



## Base materials

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



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	104

## Characteristic values

Admissible loads  
non-cracked concrete C20/25Admissible loads  
cracked concrete C20/25

Typ	$d_1$ [mm]	Drive [mm]	$d_0$ [mm]	$h_{ef}$ [mm]	$T_{inst}$ [Nm]	$N_{Rec}$ [kN]	$V_{Rec}$ [kN]	$N_{Rec}$ [kN]	$V_{Rec}$ [kN]
-----	---------------	---------------	---------------	------------------	--------------------	-------------------	-------------------	-------------------	-------------------

ETA-18/0221 – approval according to ETAG 001 part 6 for multiple fastening of non-structural systems 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*
----------	---	------	---	-----------	----	---------	-----------	---------	-----------

\*Failure case = steel failure

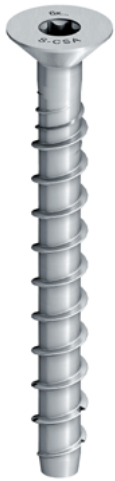
## Order description

L [mm]	$t_{fix}$ [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 multiple fastening of non-structural systems in concrete

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

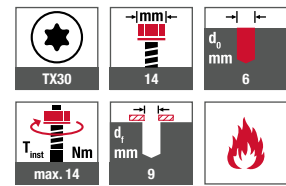
- > Zinc-plated steel
- > Countersunk head, hexalobular drive
- > ETA-approved concrete screw for cracked and non-cracked concrete
- > Self-tapping approved screw anchor for push-trough installation
- > No expansion therefore small edge and centre distances possible
- > Completely removable
- > For dry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

### Notice

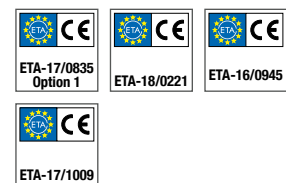
Characteristic values apply to the compression strength of C20/25 concrete. Design load of an anchor for centric tension in cracked concrete.

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.

### Technical specifications

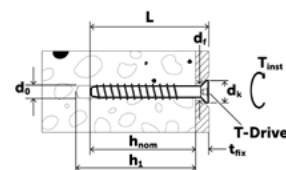


### Certifications



### Base materials

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



Characteristic values	Admissible loads non-cracked concrete C20/25							Admissible loads cracked concrete C20/25		
	Typ	$d_i$ [mm]	Drive [mm]	$d_o$ [mm]	$h_{ef}$ [mm]	$T_{inst}$ [Nm]	$N_{Rec}$ [kN]	$V_{Rec}$ [kN]	$N_{Rec}$ [kN]	$V_{Rec}$ [kN]
<b>ETA-17/0835 – approval according to EAD 330232-00-0601 (option 1) for single fastening in concrete</b>										
JC2-ST 6	9	TX30	6	42.5	14	4.5	5.6*	2.1	4.5	
<b>ETA-18/0221 – approval according to ETAG 001 part 6 for multiple fastening of non-structural systems in concrete</b>										
JC2-ST 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*	

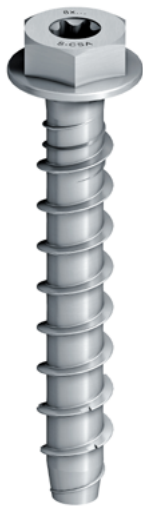
\*Failure case = steel failure





Order description	L [mm]	t <sub>fix</sub> [mm]	h <sub>nom</sub> [mm]	h <sub>1</sub> [mm]	PU [pieces]	Price/100 [EUR]	Article number	EAN
<b>ETA-17/0835 – approval according to EAD 330232-00-0601 (option 1) for single fastening in concrete</b>								
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
<b>ETA-18/0221 – approval according to ETAG 001 part 6 for multiple fastening of non-structural systems in concrete</b>								
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

### Notice

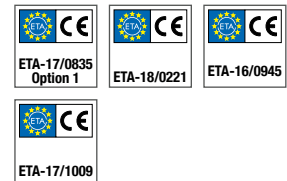
Characteristic values apply to the compression strength of C20/25 concrete. Design load of an anchor for centric tension in cracked concrete.

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.

### Technical specifications

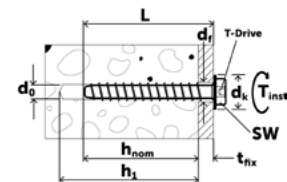


### Certifications



### Base materials

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



Characteristic values	Admissible loads non-cracked concrete C20/25							Admissible loads cracked concrete C20/25		
	Typ	d <sub>1</sub> [mm]	Drive [mm]	d <sub>0</sub> [mm]	h <sub>of</sub> [mm]	T <sub>inst</sub> [Nm]	N <sub>Rec</sub> [kN]	V <sub>Rec</sub> [kN]	N <sub>Rec</sub> [kN]	V <sub>Rec</sub> [kN]
ETA-17/0835 – approval according to EAD 330232-00-0601 (option 1) for single fastening in concrete										
JC2-KB 6	9	SW13/TX30	6	42.5	14	4.5	5.6*	2.1	4.5	
ETA-18/0221 – approval according to ETAG 001 part 6 for multiple fastening of non-structural systems in concrete										
JC2-KB 6	9	SW13/TX30	6	27.6/31.9	14	1.4/1.7	5.4*/5.4*	1.4/1.7	5.4*/5.4*	

\*Failure case = steel failure

Order description	L [mm]	t <sub>fix</sub> [mm]	h <sub>nom</sub> [mm]	h <sub>1</sub> [mm]	PU [pieces]	Price/100 [EUR]	Article number	EAN
ETA-17/0835 – approval according to EAD 330232-00-0601 (option 1) for single fastening in concrete								
Concrete screw JC2-KB 6x60/5/20 SW13	60	5	55	65	100		9650071310	4061245051222
ETA-18/0221 – approval according to ETAG 001 part 6 for multiple fastening of non-structural systems in concrete								
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

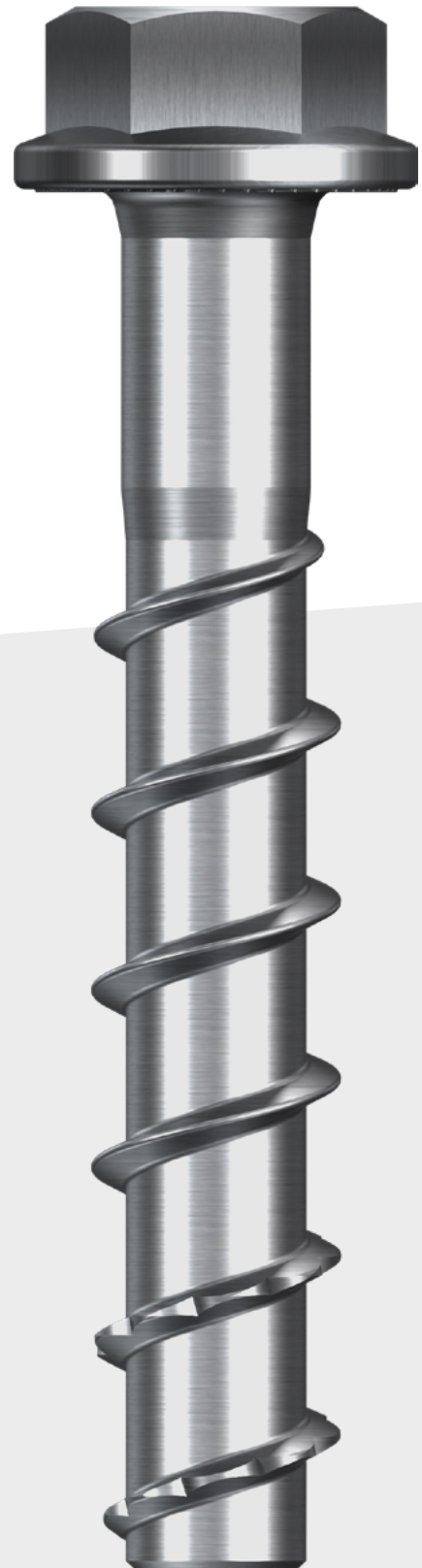
High-performance metal anchors for cracked and uncracked concrete

### 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

### All advantages at a glance

- > 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

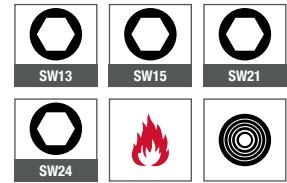
- > Zinc-plated steel
- > Hexagon head with flange
- > ETA-approved concrete screw for cracked and non-cracked concrete
- > Self-tapping approved screw anchor for push-trough installation
- > No expansion therefore small edge and centre distances possible
- > For dry indoor use
- > Completely removable
- > 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,  $f_{ck,cube} = 25 \text{ N/mm}^2$ ; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

### Technical specifications

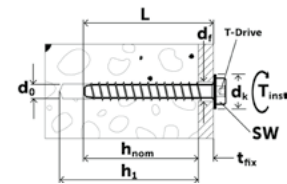


### Certifications



### Base materials

- Approved for
- > Cracked concrete
  - > Non-cracked concrete



Characteristic values						Admissible loads non-cracked concrete C20/25		Admissible loads cracked concrete C20/25		
	Typ	$d_1$ [mm]	Drive [mm]	$d_0$ [mm]	$h_{ef}$ [mm]	$T_{inst}$ [Nm]	$N_{Rec}$ [kN]	$V_{Rec}$ [kN]	$N_{Rec}$ [kN]	$V_{Rec}$ [kN]
ETA-21/0020 – approval according to EAD 330232-00-0601 (option 1) for single fastening 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*	

\*Failure case = steel failure

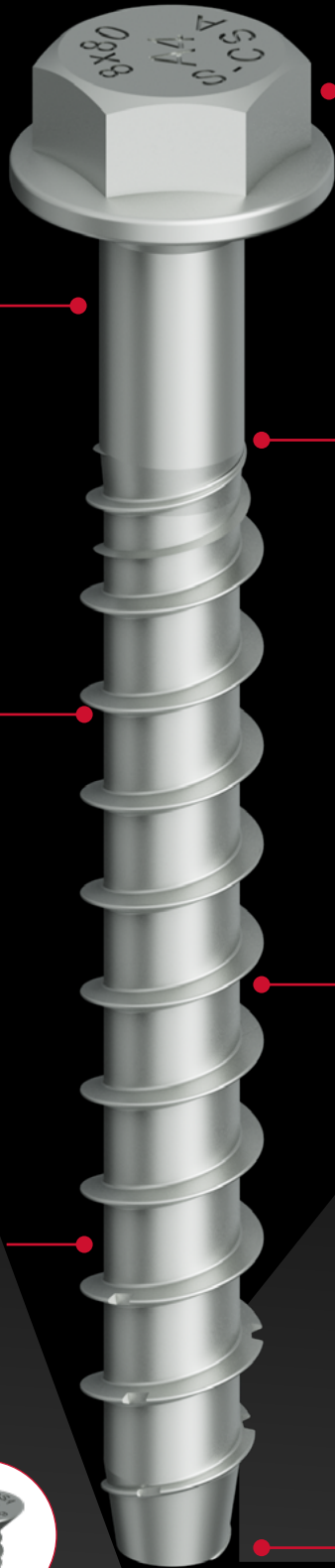




Order description	L [mm]	t <sub>fix</sub> [mm]	h <sub>nom</sub> [mm]	h <sub>1</sub> [mm]	PU [pieces]	Price/100 [EUR]	Article number	EAN
<b>ETA-21/0200 – approval according to EAD 330232-00-0601 (option 1) for single fastening in concrete</b>								
Concrete screw JC2-KB Plus-8x55/5 SW13	55	5	50	60	50		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



Hexagon head with flange

Completely removable

For indoor, outdoor, industrial use and maritime climate.

For push through installation

A4 stainless steel

Allows small edge and centre distances

Hardened carbon steel tip, galvanised



JC6-FR A4

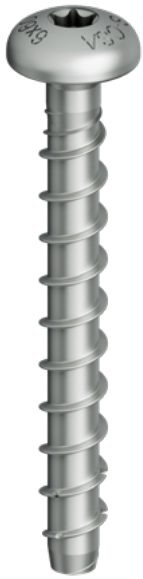


JC6-KB A4



JC6-ST A4

## Concrete screw JC6-FR 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
- > 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,  $f_{ck,cube} = 25 \text{ N/mm}^2$ ; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

### Technical specifications

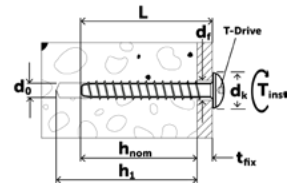


### Certifications



### Base materials

- Approved for
- > Cracked concrete
  - > Non-cracked concrete

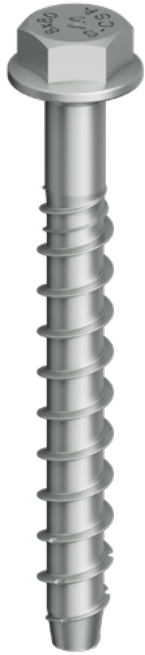


Anchor type	Characteristic values						Admissible loads uncracked concrete	
	do [mm]	df [mm]	h <sub>nom</sub> [mm]	h <sub>min</sub> [mm]	T <sub>inst</sub> [Nm]	drive [mm]	N <sub>Rec</sub> [kN]	V <sub>Rec</sub> [kN]
ETA-22/0413								
JC6-FR 6	6	≤ 9	45/55	80/100	max. 14	T30	2.9/4.5	6.8*/6.8*

\*Failure case = steel failure

Order description	L [mm]	do [mm]	t <sub>fix</sub> [mm]	h <sub>nom</sub> [mm]	h <sub>1</sub> [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



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

### 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

### Benefits

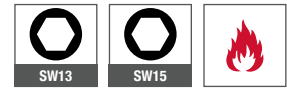
- > Requires only a small drill hole
- > No expansion therefore small edge and centre distances
- > Completely removable

### 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,  $f_{ck,cube} = 25 \text{ N/mm}^2$ ; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

### Technical specifications

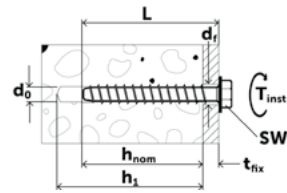


### Certifications



### Base materials

- Approved for
- > Cracked concrete
  - > Non-cracked concrete



### Characteristic values

### Admissible loads Non-cracked concrete

Anchor type	$d_0$ [mm]	$d_f$ [mm]	$h_{nom}$ [mm]	$h_{min}$ [mm]	$T_{inst}$ [Nm]	drive [mm]	$N_{Rec}$ [kN]	$V_{Rec}$ [kN]
<b>ETA-22/0413</b>								
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*

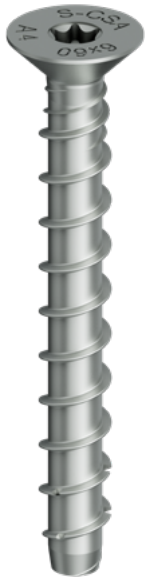
\*Failure case = steel failure





Order description	L [mm]	do [mm]	t <sub>fix</sub> [mm]	h <sub>nom</sub> [mm]	h <sub>1</sub> [mm]	Head Ø [mm]	PU [pieces]	Article number	EAN
<b>ETA-22/0413</b>									
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. beam shoes, 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,  $f_{ck,cube} = 25 \text{ N/mm}^2$ ; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

### Technical specifications

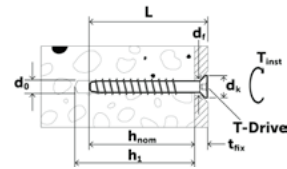


### Certifications



### Base materials

- Approved for
- > Cracked concrete
  - > Non-cracked concrete



### Characteristic values

### Admissible loads uncracked concrete

Anchor type	d <sub>0</sub> [mm]	d <sub>1</sub> [mm]	h <sub>nom</sub> [mm]	h <sub>1</sub> [mm]	T <sub>inst</sub> [Nm]	drive [mm]	N <sub>Rec</sub> [kN]	V <sub>Rec</sub> [kN]
<b>ETA-22/0413</b>								
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 description	L [mm]	d <sub>0</sub> [mm]	t <sub>fix</sub> [mm]	h <sub>nom</sub> [mm]	h <sub>1</sub> [mm]	PU [pieces]	Article number	EAN
<b>ETA-22/0413</b>								
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

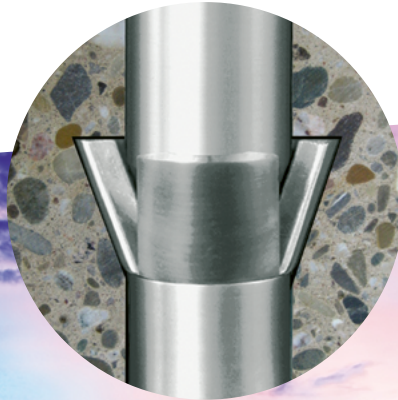
Fastening extremely heavy loads reliably into concrete!

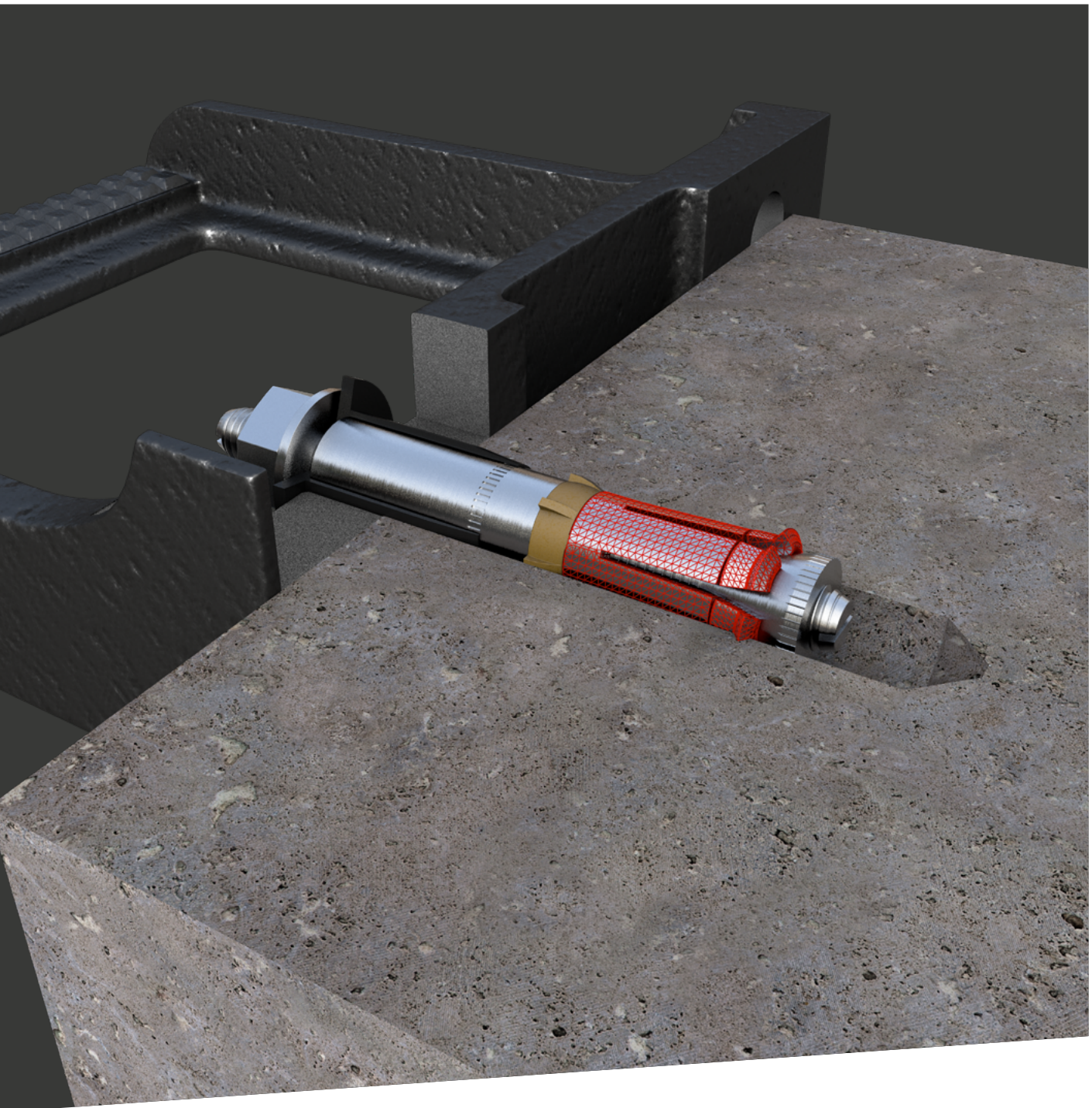
When it comes to heavy duty anchors, you cannot get around the name LIEBIG®. Since 1946, LIEBIG® has been well known for highest-level heavy fastenings! And since 2017, the brand LIEBIG® is part of the EJOT Group.

Above all, the LIEBIG® self-undercutting anchors stand for highest tensile and transverse strength. The extremely high load-bearing capacity is generated by the mechanical gear tooth system in concrete (form-fit).

[www.ejot.com/liebig-schwerlastanker](http://www.ejot.com/liebig-schwerlastanker)

**LIEBIG**

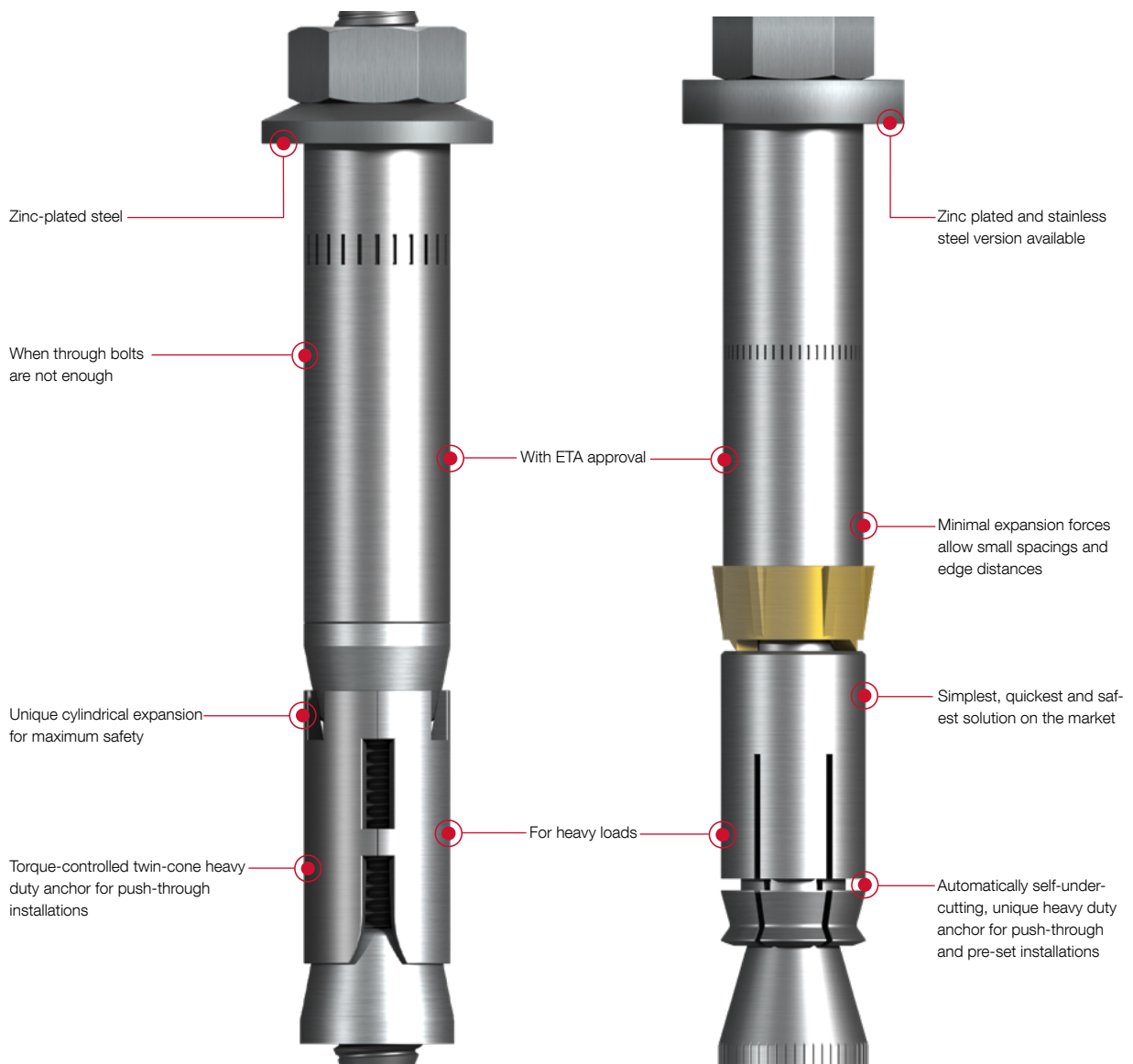















## LIEBIG<sup>®</sup> anchoring products

# 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
<b>Anchor</b>			
<b>Material</b>	Galvanized zinc-plated steel	Galvanized zinc-plated steel	A4 stainless steel
<b>Application range</b>	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
<b>Mode of action</b>	Friction locking	Form fit	Form fit
<b>Cracked concrete ETAG-001-1 (single fastening)</b>	M8 - M16	M8 - M16	M8 - M16
<b>Non-cracked concrete</b>	M8 - M16	M8 - M16	M8 - M16
<b>Certifications</b>			
<b>Earthquakes</b>	-		
<b>Fire protection</b>			
<b>Civil protection</b>	•	•	•
<b>Type of load</b>	static	static	static
<b>Admissible tensile load [kN]</b>	2.4 - 24.0	4.3 - 83.7	4.3 - 83.7
<b>Admissible shear load [kN]</b>	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 SUPERPLUS 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
		-	-
		-	-
	-	-	-
		-	-
•	•	-	-
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)	-

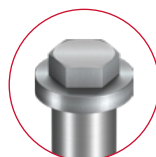
Further versions upon request!



Safety Bolt S



Safety Bolt SK



SUPERPLUS SLS A4



SUPERPLUS SKLS A4

## LIEBIG® safety bolt S



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 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,  $f_{ck,cube} = 25 \text{ N/mm}^2$ ; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

### Technical specifications

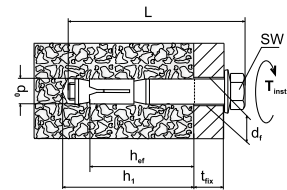


### Certifications



### Base materials

- Approved for
- > Cracked concrete
  - > Non-cracked concrete



Characteristic values	Characteristic values						Admissible loads non-cracked concrete C20/25		Admissible loads cracked concrete C20/25	
	Typ	$d_i$ [mm]	SW [mm]	$d_0$ [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	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 description	Nominal size [mm]	L [mm]	d <sub>0</sub> [mm]	h <sub>1</sub> [mm]	t <sub>fix</sub> [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

Further lengths  
upon request



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

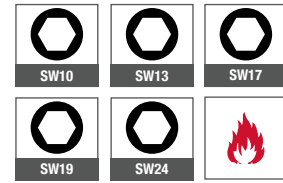
**Properties**

- > 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,  $f_{ck,cube} = 25 \text{ N/mm}^2$ ; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

**Technical specifications**

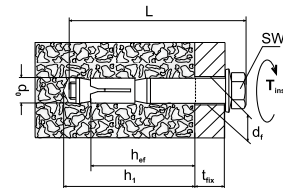


**Certifications**



**Base materials**

- Approved for
- > Cracked concrete
  - > Non-cracked concrete



Characteristic values						Admissible loads non-cracked concrete C20/25		Admissible loads cracked concrete C20/25	
	Typ	$d_t$ [mm]	SW [mm]	$d_0$ [mm]	$h_{ef}$ [mm]	$T_{inst}$ [Nm]	$N_{Rec}$ [kN]	$V_{Rec}$ [kN]	$N_{Rec}$ [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 description	Nominal size [mm]	L [mm]	d <sub>0</sub> [mm]	h <sub>1</sub> [mm]	t <sub>fix</sub> [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

Further lengths  
upon request



## LIEBIG® safety bolt SK



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
- > 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,  $f_{ck,cube} = 25 \text{ N/mm}^2$ ; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

### Technical specifications

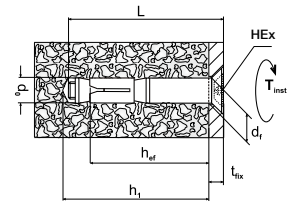


### Certifications



### Base materials

- Approved for
- > Cracked concrete
  - > Non-cracked concrete



Characteristic values						Admissible loads non-cracked concrete C20/25		Admissible loads cracked concrete C20/25	
	Typ	$d_i$ [mm]	HEX [mm]	$d_0$ [mm]	$h_{ef}$ [mm]	$T_{inst}$ [Nm]	$N_{Rec}$ [kN]	$V_{Rec}$ [kN]	$N_{Rec}$ [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 description	Nominal size [mm]	L [mm]	$d_0$ [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

Further lengths  
upon request



## 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

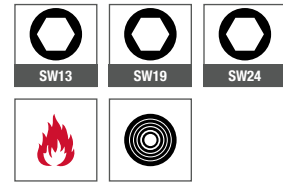
## Properties

- > 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,  $f_{ck,cube} = 25 \text{ N/mm}^2$ ; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

## Technical specifications

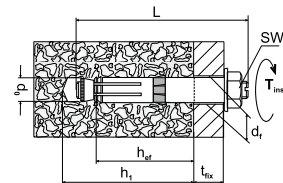


## Certifications



## Base materials

- Approved for
- > Cracked concrete
  - > Non-cracked concrete



## Characteristic values

Typ	$d_t$ [mm]	SW [mm]	$d_0$ [mm]	$h_{ef}$ [mm]	$T_{inst}$ [Nm]	Admissible loads non-cracked concrete C20/25		Admissible loads cracked concrete C20/25	
						$N_{Rec}$ [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 description	Nominal size [mm]	L [mm]	$d_0$ [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

Further lengths upon  
request



## LIEBIG® self-undercutting anchor SUPERPLUS BLS A4



### Application range

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

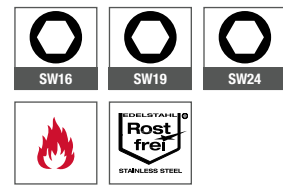
### Properties

- > 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,  $f_{ck,cube} = 25 \text{ N/mm}^2$ ; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

### Technical specifications

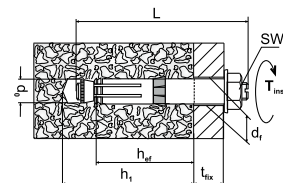


### Certifications



### Base materials

- Approved for
- > Cracked concrete
  - > Non-cracked concrete



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

Characteristic values	Admissible loads							Admissible loads	
	non-cracked concrete C20/25							cracked concrete C20/25	
Typ	$d_i$ [mm]	SW [mm]	$d_0$ [mm]	$h_{ef}$ [mm]	$T_{inst}$ [Nm]	$N_{Rec}$ [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 description	Nominal size [mm]	L [mm]	$d_0$ [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!



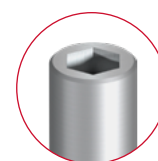
SUPERPLUS SLS A4



SUPERPLUS SKLS A4



SUPERPLUS BLS-P



SUPERPLUS ILS

## LIEBIG® lightning protection anchor SUPERPLUS BLS M8-14 A4

**Application range**

- > Retrofitted grounding systems

**Properties**

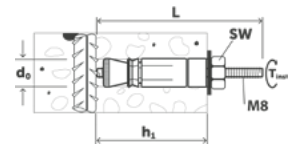
- > A4 stainless steel
- > Automatically self-undercutting, unique heavy duty anchor for pre-set installations
- > Connected retrofitted grounding systems with reinforced bars in concrete structures
- > A4 for indoor and outdoor areas, as well as industrial applications
- > Removable

**Notice**

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

**Technical specifications****Base materials**

- Also suitable for
- > Concrete



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

Order description	Nominal size [mm]	L [mm]	d <sub>0</sub> [mm]	h <sub>1</sub> [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 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

### Installation process



### 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,  $f_{ck,cube} = 25 \text{ N/mm}^2$ ; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

### Technical specifications

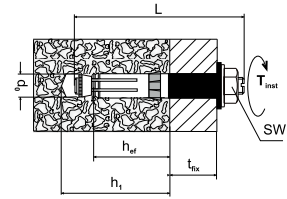


### Certifications



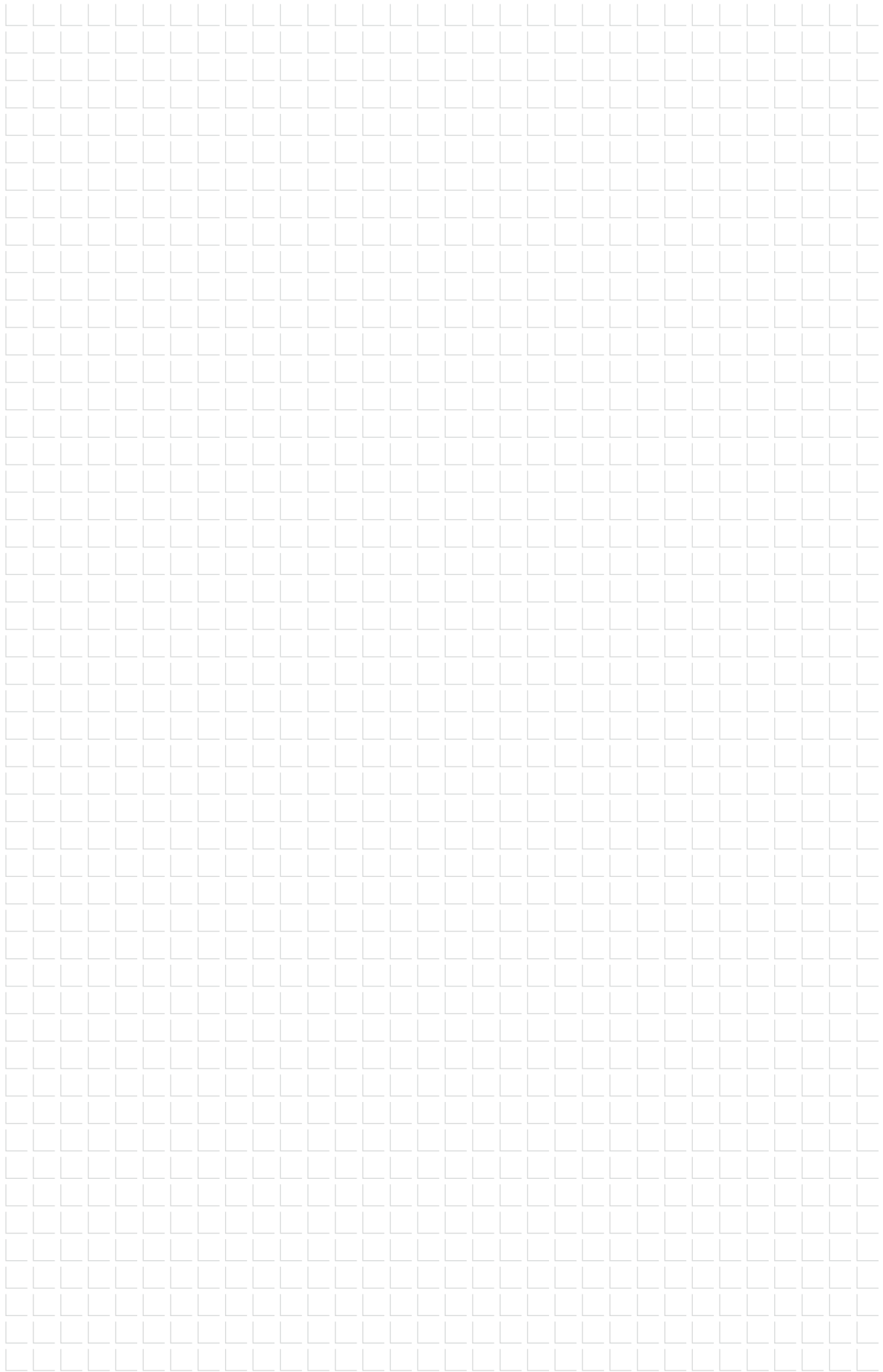
### Base materials

- Approved for
- > Cracked concrete
  - > Non-cracked concrete



Characteristic values	Characteristic values					Admissible loads non-cracked concrete C20/25		Admissible loads cracked concrete C20/25		
	Typ	$d_i$ [mm]	SW [mm]	$d_0$ [mm]	$h_{ef}$ [mm]	$T_{inst}$ [Nm]	$N_{Rec}$ [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 description	Nominal size [mm]	L [mm]	$d_0$ [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
<b>Anchor</b>				
<b>Material</b>	Polyester resin, styrene free	Vinyl resin, styrene-free	Vinyl resin, styrene-free	Epoxy resin
<b>Application range</b>	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.
<b>Cracked concrete ETAG-001-1</b>	–	M8 - M30 Ø 8 - 32 mm	M8 - M30 Ø 8 - 32 mm	M8 - M30 Ø 8 - 32 mm
<b>Non-cracked concrete</b>	M8 - M24	M8 - M30 Ø 8 - 32 mm	M8 - M30 Ø 8 - 32 mm	M8 - M30 Ø 8 - 32 mm
<b>Hollow masonry</b>	M8 - M16	M8 - M16	M8 - M16	–
<b>Solid masonry</b>	M8 - M16	M8 - M16	M8 - M16	–
<b>Technical specifications</b>	–	 	 	 
<b>Approvals</b>	 	 	 	
<b>Admissible tensile load [kN]</b>	5.6–31.0	4.3–93.9	4.3–93.9	13.8–103.9
<b>Admissible shear load [kN]</b>	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

	page
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	94

### Installation process



### 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

### Notice

Please observe the corresponding approvals during planning and processing.

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

### Installation parameters (concrete)

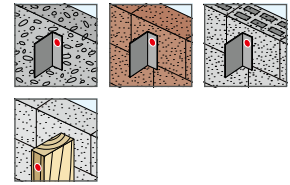
Anchor rod	$d_0$ [mm]	$h_{ef} = h_0$ min - max [mm]	$T_{inst. \text{ concrete}}$ $\leq$ [Nm]
<b>M8</b>	10	60 - 160	10
<b>M10</b>	12	60 - 200	20
<b>M12</b>	14	70 - 240	40
<b>M16</b>	18	80 - 320	80
<b>M20</b>	24	90 - 400	120
<b>M24</b>	28	96 - 480	160

### Installation parameters

Ambient temperature [°C]	Processing time	Curing time in dry weather
$\geq -5$	1h 30'	6h
$\geq 0$	45'	3h
$\geq +5$	25'	2h
$\geq +10$	20'	1h 40'
$\geq +20$	6'	45'
$\geq +30$	4'	25'
$\geq +39$	2'	20'

\*Min. cartridge temperature +15 °C

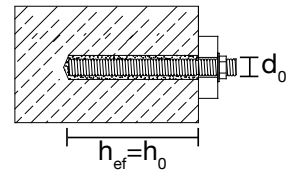
### Applications



### Technical specifications



### Certifications





Consumption in perforated building materials (standard value)				
Msh sleeve	Anchor rod	d <sub>0</sub> [mm]	h <sub>0</sub> [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 delivery**

d<sub>0</sub> = nominal drill diameter; h<sub>eff</sub> = effective embedment depth; h<sub>0</sub> = drill hole depth; T<sub>inst</sub> = tightening torque

# Injection system Multifix USF



**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

**Product video**



**Installation process**



**Application range**

- > For installation in cracked concrete (option 1) and non-cracked 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!**

**Installation parameters**

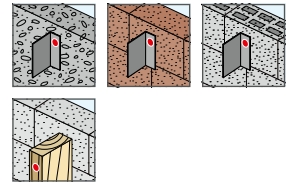
Anchor rod	d <sub>0</sub> [mm]	h <sub>ef</sub> = h <sub>0</sub> min-max [mm]	T <sub>inst. concrete</sub> ≤ [Nm]
M8	10	60-160	10
M10	12	60-200	20
M12	14	70-240	40
M16	18	80-320	60
M20	22	90-400	100
M24	28	96-480	170
M27	30	108-540	250
M30	35	120-600	300

**Installation parameters (USF 280 ml)**

Ambient temperature [°C]	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'

\*Min. cartridge temperature +15 °C

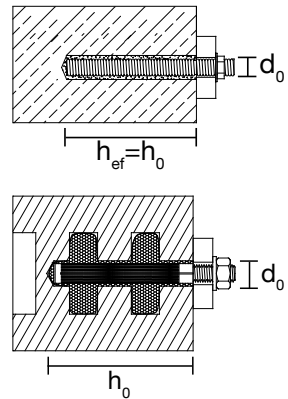
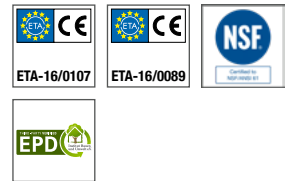
**Applications**



**Technical specifications**



**Certifications**





Consumption in solid building materials (USF 280 ml)			
Anchor rod	d <sub>0</sub> [mm]	h <sub>0</sub> [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 in perforated building materials				
Msh sleeve	Anchor rod	d <sub>0</sub> [mm]	h <sub>0</sub> [mm]	Number of fills
USF 12x80	M8	12	85	17
USF 16x85	M8/M10	16	90	11
USF 16x130	M8/M10	16	135	6
USF 20x85	M12/M16	20	90	6
USF 20x130	M12/M16	20	135	4
USF 20x200	M12/M16	20	205	2

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



**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 ABH	94

**Product video**



**Installation process**



**Application range**

- > For installation in cracked concrete (option 1) and non-cracked 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

**Notice**

Please observe the corresponding approvals during planning and processing.

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

**Installation parameters**

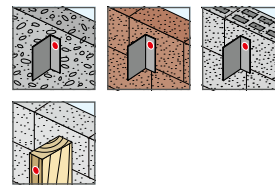
Anchor rod	d <sub>0</sub> [mm]	h <sub>ef</sub> = h <sub>0</sub> min-max [mm]	T <sub>inst. concrete</sub> ≤ [Nm]
M8	10	60-160	10
M10	12	60-200	20
M12	14	70-240	40
M16	18	80-320	60
M20	22	90-400	100
M24	28	96-480	170
M27	30	108-540	250
M30	35	120-600	300

**Installation parameters (USF Winter 300 ml)**

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

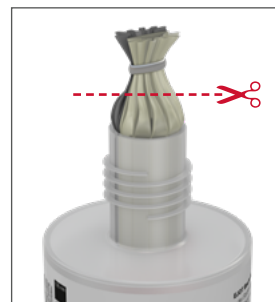
**Applications**



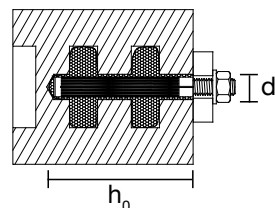
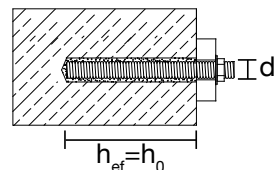
**Technical specifications**



**Certifications**



**Note:**  
Plastic bag must be cut open before processing!





Consumption in solid building materials (USF winter 300 ml)			
Anchor rod	d <sub>0</sub> [mm]	h <sub>0</sub> [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 <sub>0</sub> [mm]	h <sub>0</sub> [mm]	Number of fills
USF 12x80	M8	12	85	17
USF 16x85	M8/M10	16	90	11
USF 16x130	M8/M10	16	135	6
USF 20x85	M12/M16	20	90	6
USF 20x130	M12/M16	20	135	4
USF 20x200	M12/M16	20	205	2

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
<b>Ordering information: USF Winter 300 ml incl. 2 mixing nozzles included in the scope of delivery</b>					

## Injection system Multifix SE1000 Seismic



### Included in delivery

- 1 mortar cartridge
- 1 mixing nozzle

### Cross references

	page
Anchor rod	64
Mesh sleeve	65
Cleaning brush	113
Blow-out pump	113
Applicator gun AP585ml	111
Hammer drill SDS plus®	98
Duster Expert SDS plus	112
Cordless hammer drill	94

### 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

- > 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
- > 100 years service life

### Applications



### Technical specifications



### Certifications





### Installation parameters

Anchor rod	$d_0$ [mm]	$h_{ef} = h_0$ min - max [mm]	$T_{inst}$ $\leq$ [Nm]	Pre-set installation $d_i$ [mm]	In-place installation $d_i$ [mm]	$h_{min}$ [mm]	$S_{min}$ [mm]
M8	10	60 - 160	10	9	12	$h_{ef} + 30 \geq 100$	40
M10	12	60 - 200	20	12	14	$h_{ef} + 30 \geq 100$	50
M12	14	70 - 240	40*	14	16	$h_{ef} + 30 \geq 100$	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

\*Maximum installation torque for M12 with steel grade 4.6 is 35 Nm

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

### Installation parameters

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

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 acc. to EN ISO 898-1
- > Nut: property class 5 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

### Technical specifications



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

### 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.

### Technical specifications

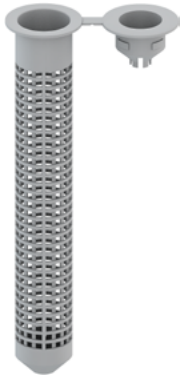
Threads	Embedment depth in concrete ≥ [mm]	Embedment depth in solid brick ≥ [mm]	Drill hole depth ≥ [mm]
M10	60	90	12

Order description	Threads	Length [mm]	PU [pieces]	Price/100 piece [EUR]	Article number	EAN
<b>Anchor rod AST, zinc-plated steel</b>						
AST M10x130-V	M10	130	10		9570910130	4061245010588
AST M10x170-V	M10	170	10		9570910170	4061245010571
<b>Anchor rod AST, A4 stainless steel</b>						
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



## Mesh sleeve



### Application range

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

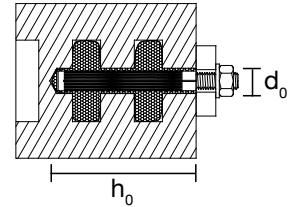
### Properties

- > 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

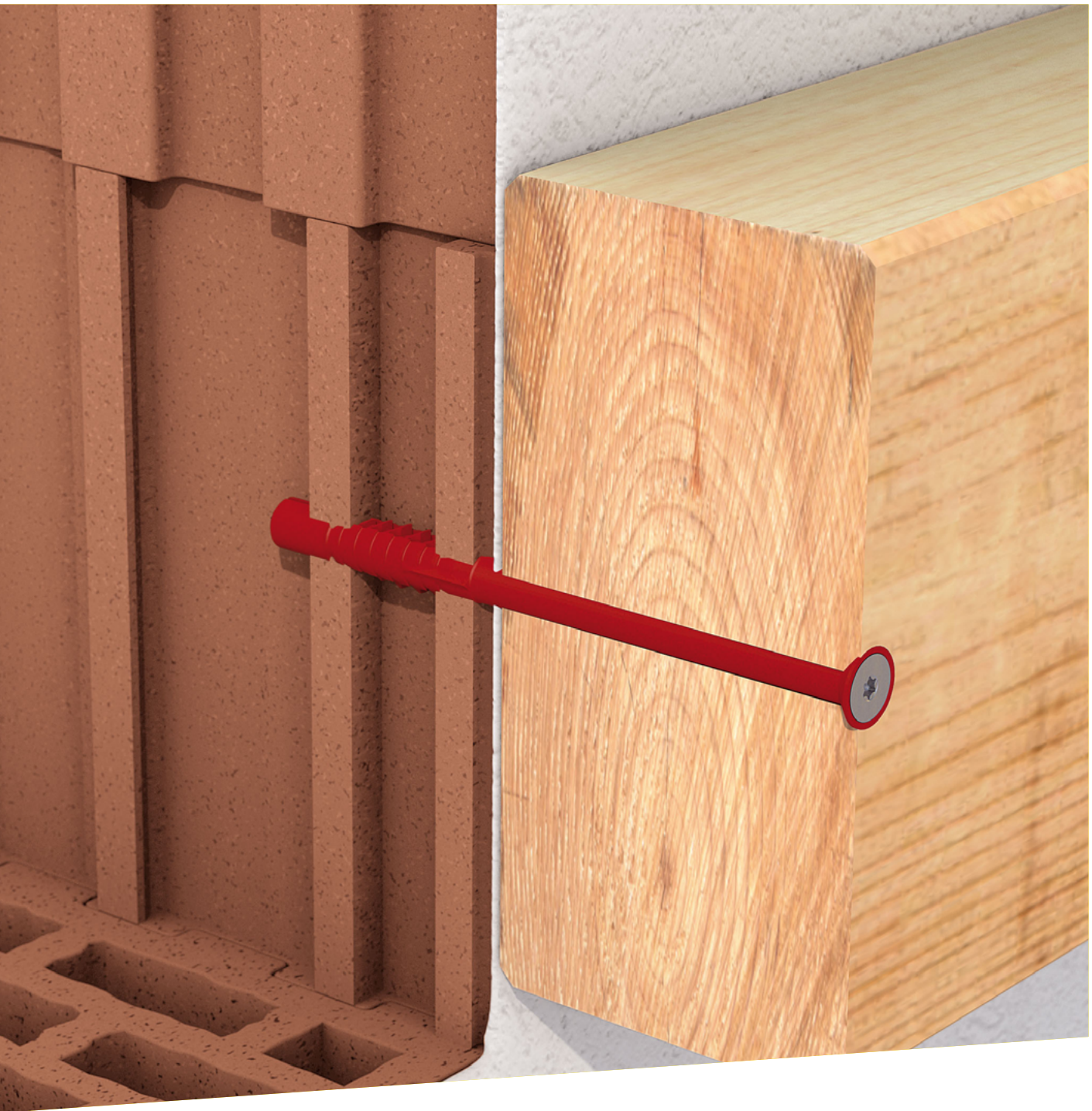


Cross references	page
Mortar cartridge USF	58
Mortar cartridge USF winter	60
Anchor rot	64
Cleaning brush	113
Blow-out pump	113
Hammer drill SDS plus®	98
Cordless hammer drill ABH	94

Order description	d <sub>0</sub> [mm]	h <sub>0</sub> [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

Further lengths  
upon request





## Nylon anchors

Length range of anchors with zinc-plated steel screws and Cr(VI)-free coating (-V) or made of A4 stainless steel (-E)

Anchor type	SDF-S 8V		SDF-KB 8V		SDF-S 10V		SDF-KB 10V		SDF-S 10H		SDF-KB 10H		SDF-S 14A		SDF-KB 14A		SDP-S 10G		SDP-KB 10G	
Length [mm]																				
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	• <sup>1)</sup>		• <sup>1)</sup>		•		•		•	•	•	•	•				•	• <sup>1)</sup>	•	• <sup>1)</sup>
220	• <sup>1)</sup>		• <sup>1)</sup>		•		•		•	•	•	•	•				•	• <sup>1)</sup>	•	• <sup>1)</sup>
240									•	•			•							
260									•	•			•							
280									•	•			• <sup>1)</sup>							
300									•	•			•							
320													•							
340													•							
360													•							

1) Delivery time upon request

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

<sup>1)</sup> 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

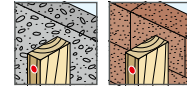
### Properties

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

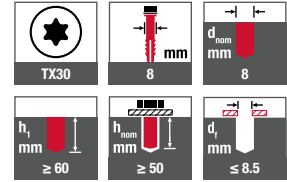
### Notice

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.

### Applications



### Technical specifications

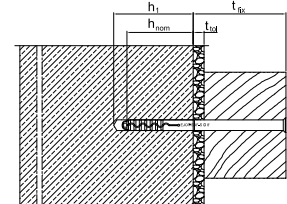


### Certifications



### Base materials

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



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 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 ( $\gamma Ms = 1.25$ )	4.24 kN
Bending moment $M_{Rk,s}$	
Steel screw ( $\gamma Ms = 1.25$ )	6.56 Nm

\*Applies to temperature range 30-50 °C / 50-80 °C

Order description	Length [mm]	Fastening thickness $t_{fix} \leq$ [mm]	PU [pieces]	Price/100 [EUR]	Article number	EAN
<b>Anchors with steel screws with zinc-plated Cr(VI)-free coating (-V)</b>						
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

Further lengths on request



## 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

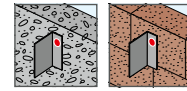
### Properties

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

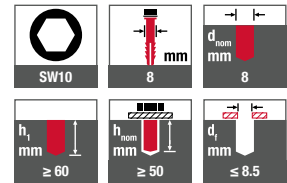
### Notice

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.

### Applications



### Technical specifications

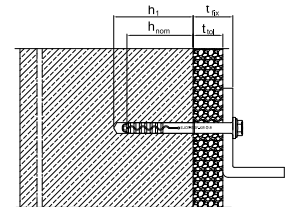


### Certifications



### Base materials

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



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 $N_{Rk,p}$ 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 ( $\gamma_{Ms} = 1.25$ )	4.24 kN
Bending moment $M_{Rk,s}$	
Steel screw ( $\gamma_{Ms} = 1.25$ )	6.56 Nm

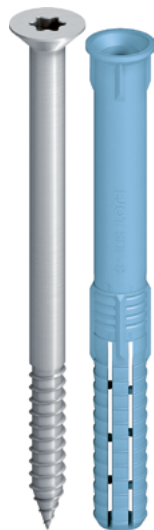
\*Applies to temperature range 30-50 °C / 50-80 °C

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

Further lengths on request



## Facade anchor SDF-S-10V



### 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

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

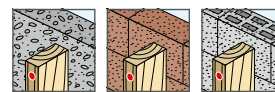
### Notice

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.

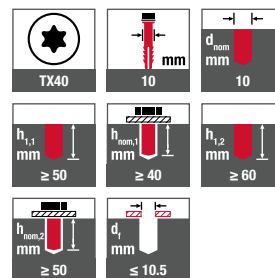
### Admissible loads

Tensile load $N_{Rk,p}$ 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
$F_{Rk}$ solid sand-lime brick KS 20, 8 DF	1.29 kN
Transverse load $V_{Rk,s}$ at $h_{nom,1} = 40$ mm	
Steel screw ( $\gamma_{Ms} = 1.25$ )	6.34 kN
Transverse load $V_{Rk,s}$ at $h_{nom,2} = 50$ mm	
Steel screw ( $\gamma_{Ms} = 1.25$ )	8.87 kN
Bending moment $M_{Rk,s}$ at $h_{nom,1} = 40$ mm	
Steel screw ( $\gamma_{Ms} = 1.25$ )	11.04 kN
Bending moment $M_{Rk,s}$ at $h_{nom,2} = 50$ mm	
Steel screw ( $\gamma_{Ms} = 1.25$ )	18.41 Nm

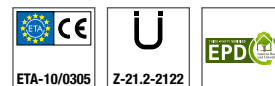
### Applications



### Technical specifications

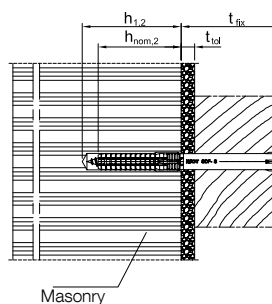
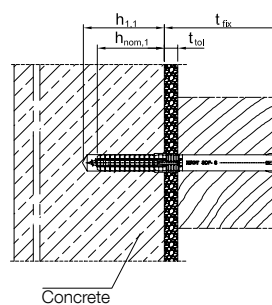


### Certifications



### Base materials

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



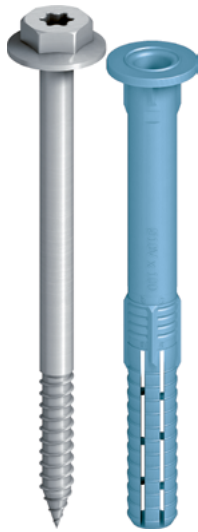


Order description	Length [mm]	Fastening thickness $t_{fix}$ (concrete* / masonry) ≤ [mm]	PU [pieces]	Price/100 [EUR]	Article number	EAN
<b>Anchors with steel screws with zinc-plated Cr(VI)-free coating (-V)</b>						
SDF-S-10Vx60-V	60	20 / 10	100		8580060450	4061245018928
SDF-S-10Vx70-V	70	30 / 20	100		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						

Further lengths on  
request



## 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  $N_{Rk,p}$  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

$F_{Rk}$  solid sand-lime brick KS 20, 8 DF 1.29 kN

Transverse load  $V_{Rk,s}$  at  $h_{nom,1} = 40$  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  $h_{nom,2} = 50$  mm

Steel screw ( $\gamma Ms = 1.25$ )	8.87 kN
Stainless steel screw ( $\gamma Ms = 1.56$ )	8.29 kN

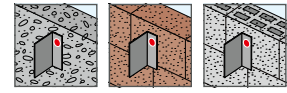
Bending moment  $M_{Rk,s}$  at  $h_{nom,1} = 40$  mm

Steel screw ( $\gamma Ms = 1.25$ )	11.04 kN
Stainless steel screw ( $\gamma Ms = 1.56$ )	10.31 kN

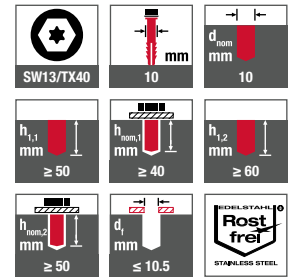
Bending moment  $M_{Rk,s}$  at  $h_{nom,2} = 50$  mm

Steel screw ( $\gamma Ms = 1.25$ )	18.41 Nm
Stainless steel screw ( $\gamma Ms = 1.56$ )	17.06 kN

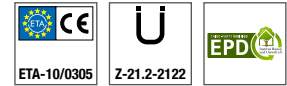
### Applications



### Technical specifications

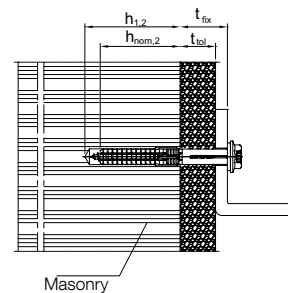
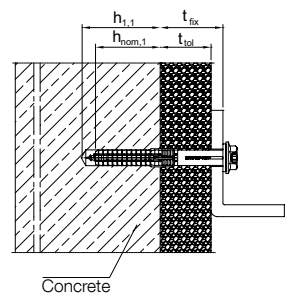


### Certifications



### Base materials

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



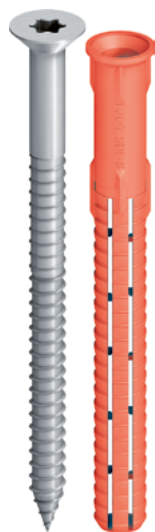


Order description	Length [mm]	Fastening thickness $t_{fix}$ (concrete* / masonry) ≤ [mm]	PU [pieces]	Price/100 [EUR]	Article number	EAN
<b>Anchors with steel screws with zinc-plated Cr(VI)-free coating (-V)</b>						
SDF-KB-10Vx50-V	50	10 / -	100		8581050450	4061245018829
SDF-KB-10Vx60-V	60	20 / 10	100		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
<b>Anchors with A4 stainless steel screws (-E)</b>						
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



### 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

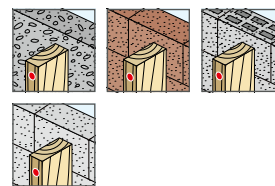
### Notice

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.

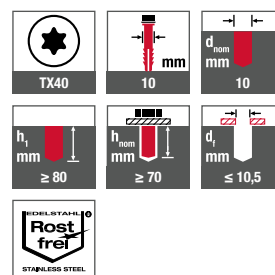
### Admissible loads

Tensile load $N_{Rk,p}$ 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	
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 kN
Vertically 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 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/mm <sup>2</sup> ] 30 - 50 °C	
Aerated concrete $f_b \geq 4$ N/mm <sup>2</sup>	0.54 kN
Aerated concrete $f_b \geq 5$ N/mm <sup>2</sup>	0.71 kN
Aerated concrete $f_b \geq 6$ N/mm <sup>2</sup>	0.89 kN
Aerated concrete $f_b \geq 7$ N/mm <sup>2</sup>	0.89 kN

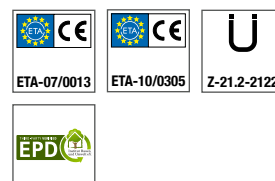
### Applications



### Technical specifications

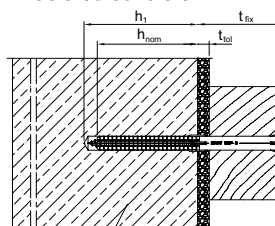


### Certifications



### Base materials

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



Installation substrate

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
Universal drill SDS plus®	97



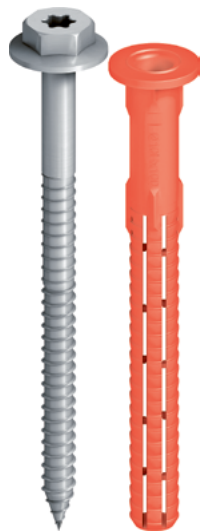


Order description	Length [mm]	Fastening thickness $t_{fix} \leq$ [mm]	PU [pieces]	Price/100 [EUR]	Article number	EAN
<b>Anchors with steel screws with zinc-plated Cr(VI)-free coating (-V)</b>						
SDF-S-10Hx80-V	80	10	100		8510080420	4061245019864
SDF-S-10Hx100-V	100	30	50		8510100420	4061245019840
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
<b>Anchors with A4 stainless steel screws (-E)</b>						
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



### 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

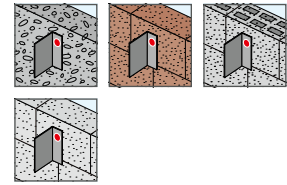
### Notice

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.

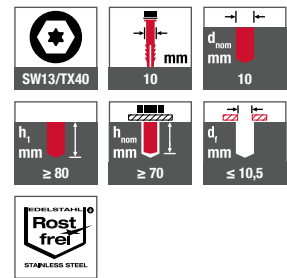
### Admissible loads

Tensile load $N_{Rk,p}$ 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 kN
Vertically 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 Hbl 10, 12 DF	0.34 kN
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/mm <sup>2</sup> ] 30 - 50 °C	
Aerated concrete $f_b \geq 4$ N/mm <sup>2</sup>	0.54 kN
Aerated concrete $f_b \geq 5$ N/mm <sup>2</sup>	0.71 kN
Aerated concrete $f_b \geq 6$ N/mm <sup>2</sup>	0.89 kN
Aerated concrete $f_b \geq 7$ N/mm <sup>2</sup>	0.89 kN

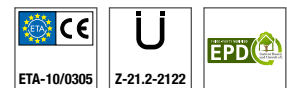
### Applications



### Technical specifications

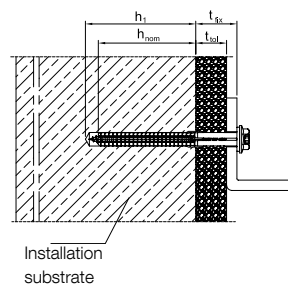


### Certifications



### Base materials

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



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
Bit hexalobular TX40	102



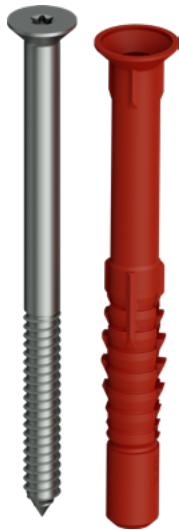


Order description	Length [mm]	Fastening thickness $t_{fix} \leq$ [mm]	PU [pieces]	Price/100 [EUR]	Article number	EAN
<b>Anchors with steel screws with zinc-plated Cr(VI)-free coating (-V)</b>						
SDF-KB-10Hx80-V	80	10	100		8513080420	4061245019642
SDF-KB-10Hx100-V	100	30	50		8513100420	4061245019611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



### 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.

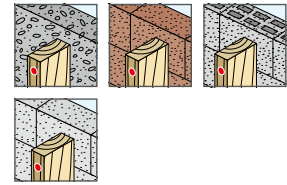
When used in concrete, a silicone lubricant paste (e.g. FUCHS CHEMPLEX SI-LK 2) and the use of an impact screwdriver with particularly high torque are recommended.

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

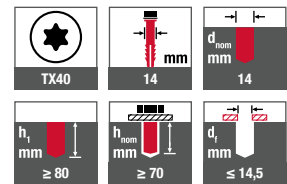
### Permitted load\*

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 HZL, 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 $f_b \geq 2 \text{ N/mm}^2$	0.43 kN
Aerated concrete $f_b \geq 4 \text{ N/mm}^2$	0.89 kN
Aerated concrete $f_b \geq 6 \text{ N/mm}^2$	1.60 kN
Transverse load $V_{Rk,s}$	
Steel screw ( $\gamma_{Ms} = 1.25$ )	17.4 kN
Stainless steel screw ( $\gamma_{Ms} = 1.56$ )	16.2 kN
Bending moment $M_{Rk,s}$	
Steel screw ( $\gamma_{Ms} = 1.25$ )	50.0 Nm
Stainless steel screw ( $\gamma_{Ms} = 1.56$ )	46.7 Nm

### Applications



### Technical specifications

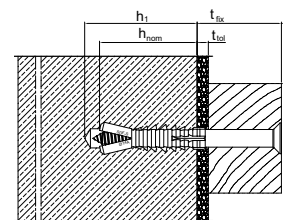


### Certifications



### Base materials

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





Order description	Length [mm]	Fastening thickness $t_{fix} \leq$ [mm]	PU [pieces]	Price/100 [EUR]	Article number	EAN
<b>Anchors with steel screws with zinc-plated Cr(VI)-free coating (-V)</b>						
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

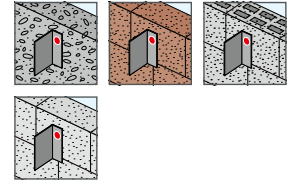
For planning, please observe approval ETA-15/0027. For bricks of unknown quality, the load-bearing capacity must be determined through pull-out tests on the structure.

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.

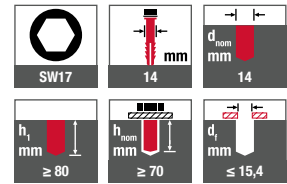
### Permitted load\*

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 $f_b \geq 2 \text{ N/mm}^2$	0.43 kN
Aerated concrete $f_b \geq 4 \text{ N/mm}^2$	0.89 kN
Aerated concrete $f_b \geq 6 \text{ N/mm}^2$	1.60 kN
Transverse load $V_{Rk,s}$	
Steel screw ( $\gamma_{Ms} = 1.25$ )	17.4 kN
Stainless steel screw ( $\gamma_{Ms} = 1.56$ )	16.2 kN
Bending moment $M_{Rk,s}$	
Steel screw ( $\gamma_{Ms} = 1.25$ )	50.0 Nm
Stainless steel screw ( $\gamma_{Ms} = 1.56$ )	46.7 Nm

### Applications



### Technical specifications

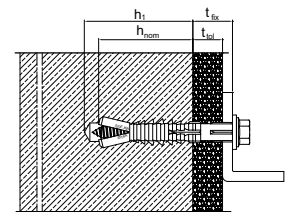


### Certifications



### Base materials

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



Order description	Length [mm]	Fastening thickness $t_{fix} \leq$ [mm]	PU [pieces]	Price/100 [EUR]	Article number	EAN
<b>Anchors with steel screws with zinc-plated Cr(VI)-free coating (-V)</b>						
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 expansion zones
- > High load-bearing capacity
- > Available with steel screws or stainless steel screws
- > Product identification through different sleeve colours

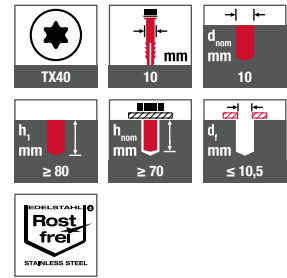
### Notice

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.

### Applications



### Technical specifications



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

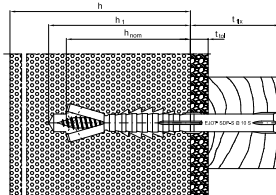
### Admissible loads

#### Compressive strength of aerated concrete [N/mm<sup>2</sup>]

Aerated concrete fb ≥ 2 N/mm <sup>2</sup>	0.27 kN
Aerated concrete fb ≥ 3 N/mm <sup>2</sup>	0.47 kN
Aerated concrete fb ≥ 4 N/mm <sup>2</sup>	0.67 kN
Aerated concrete fb ≥ 6 N/mm <sup>2</sup>	1.07 kN

#### Characteristic Bending moment

Steel screw (γMs = 1.5)	11.80 Nm
Stainless steel screw (γMs = 1.87)	11.02 Nm



### Certifications



### Base materials

- Approved for
- > aerated concrete

Order description	Length [mm]	Fastening thickness $t_{fix} \leq$ [mm]	PU [pieces]	Price/100 [EUR]	Article number	EAN
<b>Anchors with steel screws with zinc-plated Cr(VI)-free coating (-V)</b>						
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 expansion zones
- > 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/mm²]

Aerated concrete $f_b \geq 2$ N/mm <sup>2</sup>	0.27 kN
Aerated concrete $f_b \geq 3$ N/mm <sup>2</sup>	0.47 kN
Aerated concrete $f_b \geq 4$ N/mm <sup>2</sup>	0.67 kN
Aerated concrete $f_b \geq 6$ N/mm <sup>2</sup>	1.07 kN

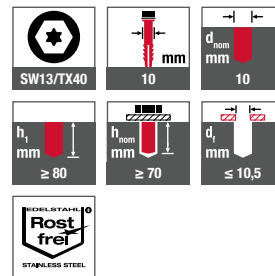
#### Characteristic Bending moment

Steel screw ( $\gamma_{Ms} = 1.5$ )	11.80 Nm
Stainless steel screw ( $\gamma_{Ms} = 1.87$ )	11.02 Nm

### Applications



### Technical specifications

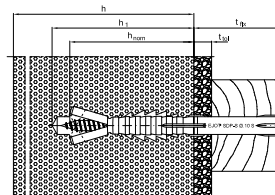


### Certifications



### Base materials

- Approved for  
> aerated concrete



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



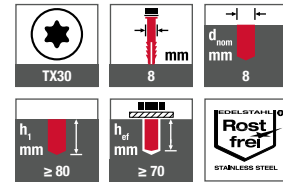
### Application range

- > 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

### Technical specifications



### Certifications



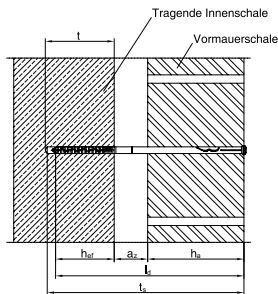
### Base materials

- Suitable for load-bearing inner sheets made of
- > Concrete
  - > solid brick
  - > Perforated brick and outer sheet of
  - > Solid clinker
  - > Vertically perforated clinker
  - > Face brick

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.



### Installation process



Order description	Length $l_d$ [mm]	Drill hole depth $t_s \leq$ [mm]	Max. air layer thickness az [mm]	Curtain wall $h_a \geq$ [mm]	Packaging unit [pieces]	Price/100 [EUR]	Article number	EAN
<b>Anchors with A4 stainless steel screws (-E)</b>								
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 Posidriv 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

### Technical specifications



### Base materials

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

Characteristic values	Recommended loads		Recommended loads			
	Non-cracked concrete C20/25		Solid clay brick $f_b$ 20.5 N/mm <sup>2</sup>			
Typ	d <sub>0</sub> [mm]	h <sub>ef</sub> [mm]	N <sub>Rec</sub> [kN]	V <sub>Rec</sub> [kN]	N <sub>Rec</sub> [kN]	V <sub>Rec</sub> [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

Order description	Length [mm]	Fastening thickness t <sub>fix</sub> [mm]	PU [pieces]	Price/100 [EUR]	Article number	EAN
<b>Anchors with zinc-plated steel nail (GVZ)</b>						
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
<b>Anchors with stainless steel nail</b>						
ND-K 6/40 E	40	10	200		9650075692	4061245083094

Further lengths and A2 stainless steel on request



## Nail anchor ND-S

**Application range**

Speed plug for light-duty fixings:

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

**Properties**

- > 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

**Technical specifications****Base materials**

Suitable for

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

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

Typ	d <sub>0</sub> [mm]	h <sub>ef</sub> [mm]	Recommended loads		Recommended loads	
			N <sub>Rec</sub> [kN]	V <sub>Rec</sub> [kN]	Non-cracked concrete C20/25	Solid clay brick f <sub>b</sub> 20.5 N/mm <sup>2</sup>
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

Order description	Length [mm]	Fastening thickness t <sub>fix</sub> [mm]	PU [pieces]	Price/100 [EUR]	Article number	EAN
<b>Anchors with zinc-plated steel nail</b>						
ND-S 6/40 V	40	10	200		9650075660	4061245083131

Further lengths and A2 stainless steel on request



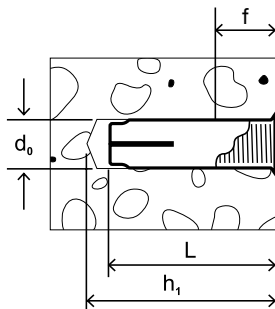


Fastener for light applications

## 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
- > 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,  $f_{ck,cube} = 25 \text{ N/mm}^2$ ; correct installation; no influence of centre and edge distances; observe the minimum thickness of the base material.

## Applications



## Technical specifications



## Certifications



## Base materials

- Approved for
- > Cracked concrete
  - > Non-cracked concrete

## Installation process



Characteristic values	Admissible loads non-cracked concrete C20/25					
	$f_{max}$ [mm]	$f_{min}$ [mm]	$d_1$ [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 description	Threads [mm]	L [mm]	$d_0$ [mm]	$h_1$ [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



**Application range**

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

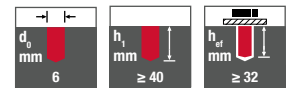
**Properties**

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

**Applications**



**Technical specifications**



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

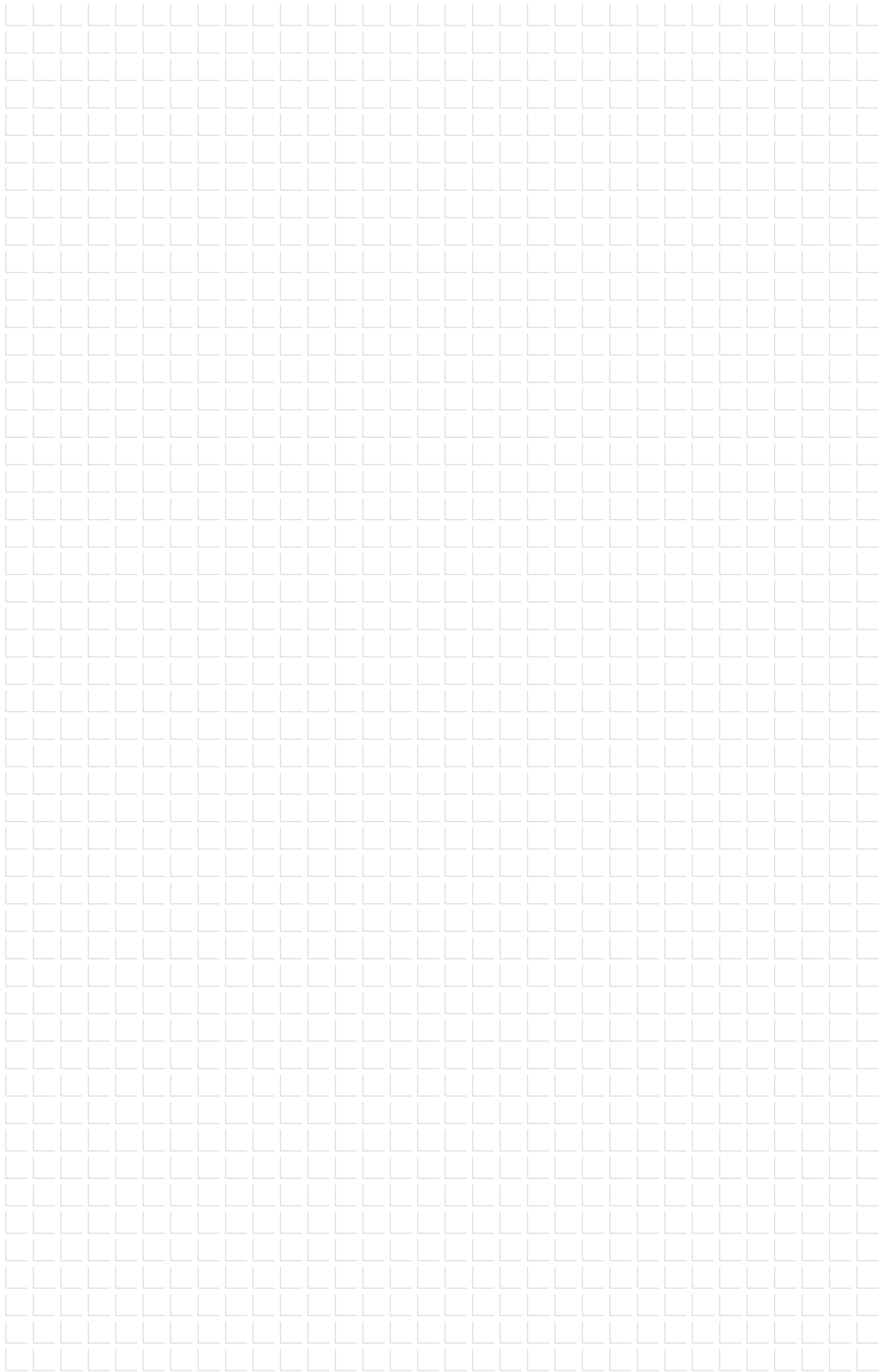
**Characteristic values without fire exposure**

Min. component thickness $h_{min}$	80 mm
Edge distance $c_{min}$	150 mm
Centre distance $s_{min}$	200 mm

**Certifications**



Order description	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-Ionen / ProCORE Li-Ionen
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

**3-year FEIN PLUS****Warranty**

including battery and charger  
(if registered online)

Info see page 96

Order description	PU [pieces]	Price/1 [EUR]	Article number	EAN
4-speed cordless drill driver ASCM 18 QSW AS	1		9150660000	401458689819
<b>Accessories</b>				
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

## 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-Ion / ProCORE Li-Ion
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

### 3-year FEIN PLUS

#### Warranty

including battery and charger (if registered online)

Info see page 96

Order description	PU [pieces]	Price/1 [EUR]	Article number	EAN
Cordless screwdriver ASCM 18 QSW AS	1		9150610000	4014586900100
<b>Accessories</b>				
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

## Cordless impact screwdriver ASCD18-300 W2 AS

**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

**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

**3-year FEIN PLUS****Warranty**

including battery and charger  
(if registered online)

Info see page 96

**Technical specifications**

Battery voltage	18 V
Battery compatibility	Li-Ion / ProCORE Li-Ion
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**

Cordless impact screwdriver ASCD18-300 W2 AS

PU  
[pieces]

Price/1  
[EUR]

Article number

EAN

1

9150620000

4014586898889

## 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 Precision 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-Ion / ProCORE Li-Ion
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 charger  
(if registered online)

Info see page 96

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

## Battery packs and chargers



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

### 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

### 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)

Info see page 96

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-Ion batteries and a battery charger.

# FEIN SERVICE IS A RELIABLE SERVICE.

With FEIN you're in good hands after making your purchase. We have designed our power tools for maximum loading and overload – even when used continuously. Should you ever need our help, we provide speedy, professional and dedicated assistance. That's something you can rely on.

## 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](http://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 CATALOGUE

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 ONLINE

On our website [www.fein.com](http://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®



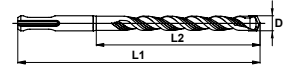
### Application range

- > 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®



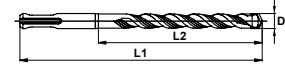
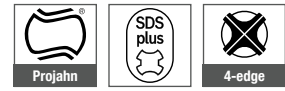
### Application range

- > 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
<b>4 edges</b>							
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	4061245080253
4-edge SDS-plus 6x260	6.0	260	200	1		9270006260	4061245080277
4-edge SDS-plus 8x160	8.0	160	100	1		9270008160	4061245080284
4-edge SDS-plus 8x260	8.0	260	200	1		9270008260	4061245080307
4-edge SDS-plus 8x360	8.0	360	300	1		9270008360	4061245080338
4-edge SDS-plus 8x600	8.0	600	540	1		9270008600	4061245080369
4-edge SDS-plus 10x160	10.0	160	100	1		9270010160	4061245080376
4-edge SDS-plus 10x260	10.0	260	200	1		9270010260	4061245080390
4 edge SDS-plus 10x360	10.0	360	300	1		9270010360	4061245081137
4-edge SDS-plus 10x460	10.0	460	400	1		9270010460	4061245080406
4-edge SDS-plus 12x160	12.0	160	100	1		9270012160	4061245081144
4-edge SDS-plus 12x260	12.0	260	200	1		9270012260	4061245081151
4-edge SDS-plus 14x160	14.0	160	100	1		9270014160	4061245081175
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 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 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



### Application range

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

### Properties

- > Inclusive cone extractor

### Technical data



### Cross reference page

Hammer drill A cone	100
---------------------	-----

Order description	Length [mm]	PU [pieces]	Price/1 [EUR]	Article number	EAN
Drill bit extension SDS 500 mm	500	1		9271950000	4061245080109
EJOT drillX spare part kits (3 cone extractors)	–	1		9151950003	4039161009399

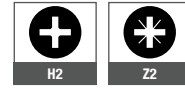
## Bit cross recess



### Application range

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

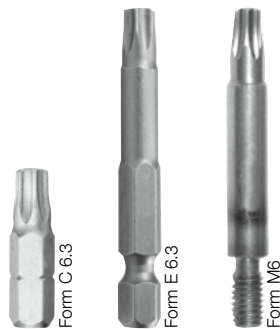
### Technische Daten



Cross references	page
Bit holder	106

Order description	Drive and Size	Length [mm]	PU [pieces]	Price/1 [EUR]	Article number	EAN
<b>Drive: 1/4" hexagon DIN ISO 1173 – Form C 6,3</b>						
PH2-1/4"/Cx25	H2	25	1		9250474000	4050623100232
Bit PZ2-1/4"/Cx25	Z2	25	1		9250473000	4061245054254
<b>Drive: 1/4" hexagon DIN ISO 1173 – Form E 6,3</b>						
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
<b>Drive: thread connection M6</b>						
Bit PH2-M6x35	H2	35	1		9250612000	4061245021027

## Bit hexalobular TX



Cross references	page
Bit holders	106

### 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
<b>Drive: 1/4" hexagon DIN/ISO 1173 - E 6.3</b>						
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
<b>Drive: 1/4" hexagon DIN/ISO 1173 - E 6.3</b>						
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
<b>Drive: threaded connection M 6</b>						
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

Cross references	page
Cordless screwdriver ASCM QSW	91

Order description	Drive and Size	Length [mm]	PU [pieces]	Price/1 [EUR]	Article number	EAN
<b>Drive: 1/4" hexagon DIN/ISO 1173 - E 6.3</b>						
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 spring	SW8	50	1		9250705104	4061245020006
K-SW3/8"-1/4"x50 with ball and flat spiral spring	SW3/8"	50	1		9250705105	4061245019994
K-SW10-1/4"x50 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
<b>Drive: 1/2" square</b>						
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  $\pm 3\%$  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



Form E 6.3

### Application range

> For holding all bits with drive form C

### Technical specifications



Cross references	page
Hexagon bit	102
Cross recess bit	101
Cordless screwdriver ASCM QSW	91

Order description	Length [mm]	PU [pieces]	Price/1 [EUR]	Article number	EAN
<b>Drive: 1/4" hexagon DIN/ISO 1173 - E 6.3</b>					
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



Cross references	page
BA anchors	12

### Application range

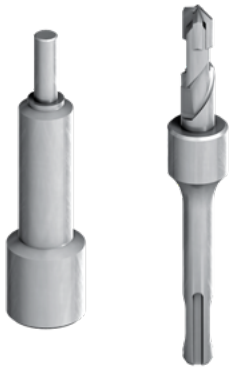
- > For the reliable installation of through bolts BA Plus

### 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



Cross references	page
Drop-in anchor LAL+	87

### Application range

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

### Technical specifications



### Properties

- > Weight-optimised design
- > 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.

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
<b>Accessories</b>				
Drill bit with depth stop 8x30	1		9160105941	4014496053347
Drill bit with depth stop 10x40	1		9160105949	4014496053361

## Installation tool LT PRO



### Application range

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

### Properties

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

Cross references	page
Drop-in anchor LAL+	87

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

Cross references	page
Mortar cartridge USF 420 ml	58
Mortar cartridge PSF+ 420 ml	56

### 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 AP 420 ml	1		9570010380	4061245091808

## Applicator gun AP 585 ml



### Application range

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

### Cross references

	page
Mortar cartridge SE 1000	62

Order description	PU [pieces]	Price/PU [EUR]	Article number	EAN
Applicator gun AP 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 ≥ 40 l/sec
- > Reduced pressure p ≥ 230 mbar
- > Automatic filter cleaning

### Technical specifications



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



### Application range

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

### Properties

- > Can take up to 50 insulation support anchors DH



Cross reference	page
-----------------	------




































































































Facade anchors	67
Through bolts	12

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

 DC t <sub>+</sub> +t <sub>-</sub> 1.0 + 1.0 mm mm	 DC t <sub>+</sub> 1.0 mm	 DC t <sub>-</sub> 1.0 mm	 1/min max. 1,800	 Screw with swarf-reducing point	 0 - 4 mm	 Diameter Hexagon head 16 mm	 Diameter Countersunk head 7.5 mm	 Diameter Countersunk head with flange 12.0 mm	 Diameter Pan head 12.0 mm	 Diameter LT Pan head 12.0 mm	 Diameter LT Pan head with cutting ring 12.0 mm
 Diameter Truss head 12.0 mm	 Diameter Cylinder head 12.0 mm	 Height hexagon head 2.0 mm	 Height LT pan head 13 mm	 Height LT pan head with cutting ring 13 mm	 Height truss head 13 mm	 Height flat head 13 mm	 Screw diameter with Hexagon head 4.8 mm	 Screw diameter with countersunk head 4.8 mm	 Screw diameter with STS countersunk head 4.8 mm	 Screw diameter with pan head 4.8 mm	 Screw diameter with LT pan head 4.8 mm
 Screw diameter with LT pan head with cutting ring 4.8 mm	 Screw diameter with truss head 4.8 mm	 Screw diameter with flat head 4.8 mm	 End mill	 Wing drill screw	 Flange head diameter 13 mm	 Undercut 5 mm	 High thread diameter 6.3 mm	 Length non-threaded part Hexagon head screw 5 mm	 Length non-threaded part LT pan head screw 13 mm	 Length non-threaded part LT-XT pan head screw 13 mm	 Tool for FR screws with sealing washer
 Tool for screws without sealing washer	 Diameter left-hand thread 4.9 mm	 Diameter rivet setting head 9.5 mm	 Height rivet setting head 1.5 mm	 Diameter rivet-titting mandrel 2.7 mm	 Diameter rivet shaft 4.8 mm	 Drill hole diameter rivet d <sub>0</sub> 4.9 mm	 Push-on cap TX white	 Centring grommet XT	 Effective shaft length 13 mm	 Flat roofing anchor diameter 8.0 mm	 Flat roof stress plate diameter 50 mm
 Clamp thickness metal anchor t <sub>fix</sub> 15 mm	 Set screw diameter M12	 Internal thread diameter M8	 Threaded sleeve external diameter 10 mm	 Insulation support anchor shaft diameter 8.0 mm	 Insulation support anchor washer diameter 90 mm	 Nylon anchor diameter 8.0 mm	 Metal anchor diameter 8.0 mm	 Tightening torque T <sub>test</sub> 60 Nm	 Drive SDS plus®	 Drill with 4-cutting edge geometry 4-edge	 PGM Masonry Drill Bit Certification Board Manufacturer
 Sealing washer size and material E16	 Drive cross recess H H2	 Drive external cross recess H H2	 Drive cross recess Z Z2	 Drive external cross recess Z Z2	 Drive internal square 5	 Drive external square 5	 Drive external triangular Triangular	 Drive external hexagon SW8	 Drive internal hexagon SW8	 Drive external hexagon/hexalobular SW13/TX40	 Drive hexalobular TX25
 Drive external hexalobular TX25	 Nominal drill diameter d <sub>nom</sub> 10 mm	 Drill hole diameter d <sub>0</sub> 10 mm	 Drill hole depth h <sub>1</sub> 10 mm	 Drill hole depth t 10 mm	 Nominal embedment depth h <sub>nom</sub> mm ≥ 70	 Effective embedment depth h <sub>eff</sub> mm ≥ 50	 Embedment depth h <sub>v</sub> mm ≥ 70	 Through hole component I d <sub>22</sub> 10 mm	 Slip resistance due to telescopic system	 Slip resistance through support (metal-plastic)	 Slip resistance through support (metal-metal)
 Checked fastening element acc. to ETB guideline ETB	 Resistance class of burglar-resistant components RC2	 Waterproof	 Protect from moisture	 Stainless steel material ROESTSTAHL ROSTFREI STAINLESS STEEL	 Suitable for high-strength substructures	 Also available as painted version	 Values determined by the Passivhaus Institute Passivhaus Institut	 Fire performance class acc. to European standard and DIN A1	 Fire resistant	 Suitability acc. to seismic performance category	 Top Coating C 1000
 Top Coating CLIMADUR	 Top Coating EJO GUARD	 EJO GUARD+ coating									

## Certifications



ETA-10/0200  
European  
Technical  
Assessment



Z-14.4-426  
National technical approval  
abZ



Z-21.2-2122  
General  
construction  
technique  
permit aBG



P-BWU02-  
168012  
National  
technical test  
certificate abP



FM Approval  
product  
certification by  
FM Global



Environmental  
Product Decla-  
ration EPD



ift Rosenheim  
test report  
Test report no.  
509 20107/1+2



Emission cate-  
gory according  
to French VOC  
directive



International  
Code Council  
Evaluation  
Service

## Other



Cross reference  
to previous  
page



Cross reference  
to next page



Follow assem-  
bly instructions



Video

## Applications

### Metal and Chemical Anchoring Technology



Timber  
substructure to  
concrete



Timber  
substructure to  
solid brick



Timber  
substructure  
to perforated  
brick



Timber  
substructure  
to aerated  
concrete



Metal  
substructure to  
concrete



Metal substructure  
to solid  
brick



Metal  
substructure  
to perforated  
brick



Metal substructure  
to aerated  
concrete



Embedment  
in concrete  
ceiling

# Technical abbreviations

Abbreviation	Description	Unit
a	Spacing	mm
$a_p$	Distance between drill hole and armouring	mm
$a_z$	Shell distance / gap	mm
b	Component width	mm
C	Minimum edge distance for $S_{min}$	mm
c	Edge distance	mm
$C_{cr,N}$	Characteristic edge distance	mm
$C_{min}$	Minimum edge distance	mm
d	Thread outer diameter / nominal diameter	mm
$d_0$	Nominal drill diameter / drill hole diameter	mm
DC	Drilling capacity	mm
$d_{cut}$	Cutting diameter of the drill bit	mm
$d_i$	Diameter of the through hole in the 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 <sup>2</sup>
$f_{ck}$	Nominal characteristic compressive strength	N/mm <sup>2</sup>
$f_{max}$	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
$h_0$	Drill hole depth	mm
$h_1$	Drill hole depth to deepest point	mm
$h_a$	Thickness of the outer sheet	mm
$h_D$	Insulation thickness	mm
$h_{ef}$	Installation depth in the load-bearing layer	mm

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
l	Screw length	mm
$l_d$	Anchor length	mm
$l_g$	Thread length	mm
$l_s$	Sleeve length	mm
$l_s$	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
$t_1$	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
$\rho$	Raw density class	kg/dm <sup>3</sup>

## 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](http://www.ejot.com/terms-conditions)**

EJOT® 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 Deko Industries Pty. Ltd.

TORX® 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](mailto:construction@ejot.com)

[www.ejot.com/construction](http://www.ejot.com/construction)