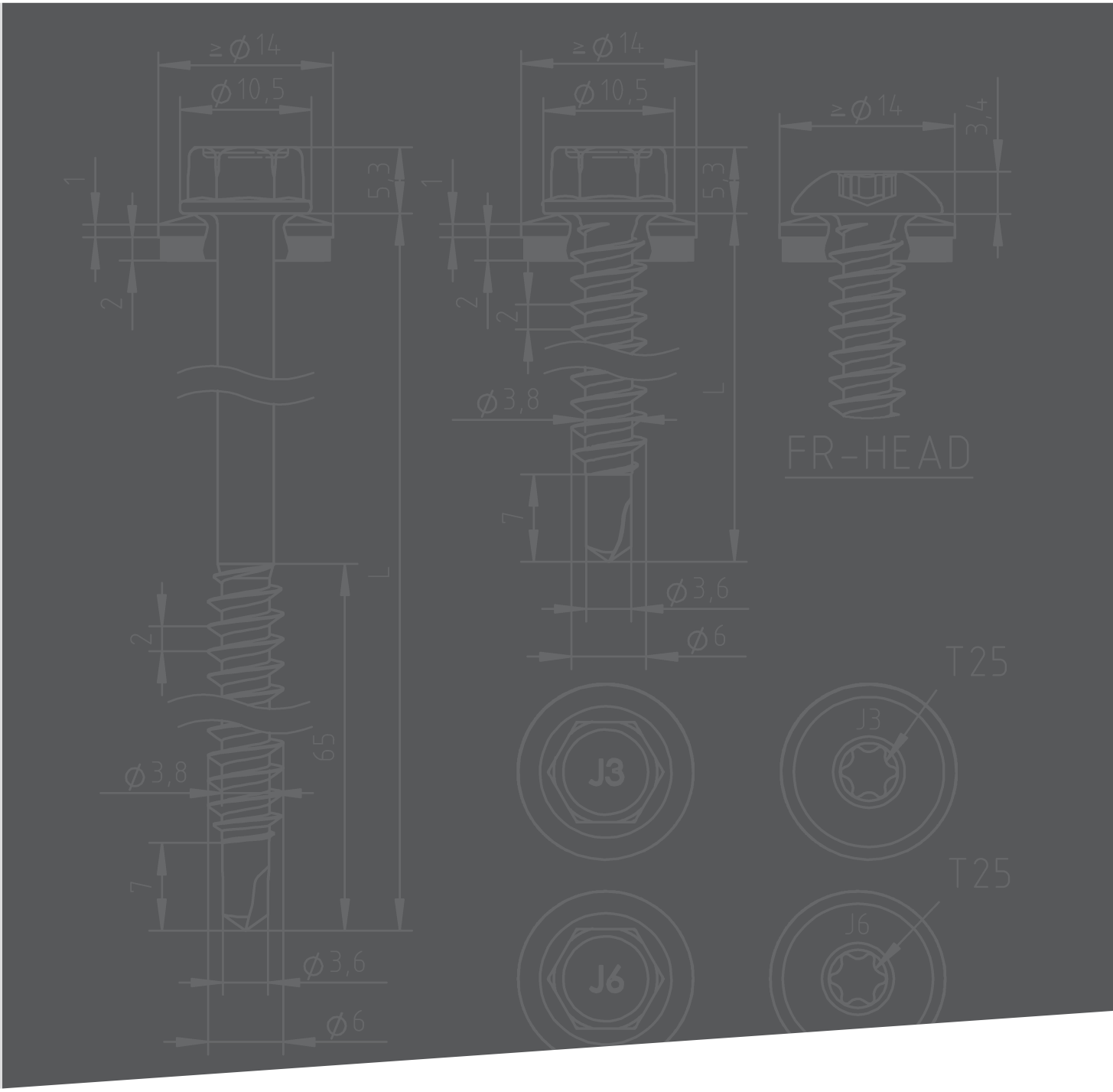
EJOT®

Anchoring Technology





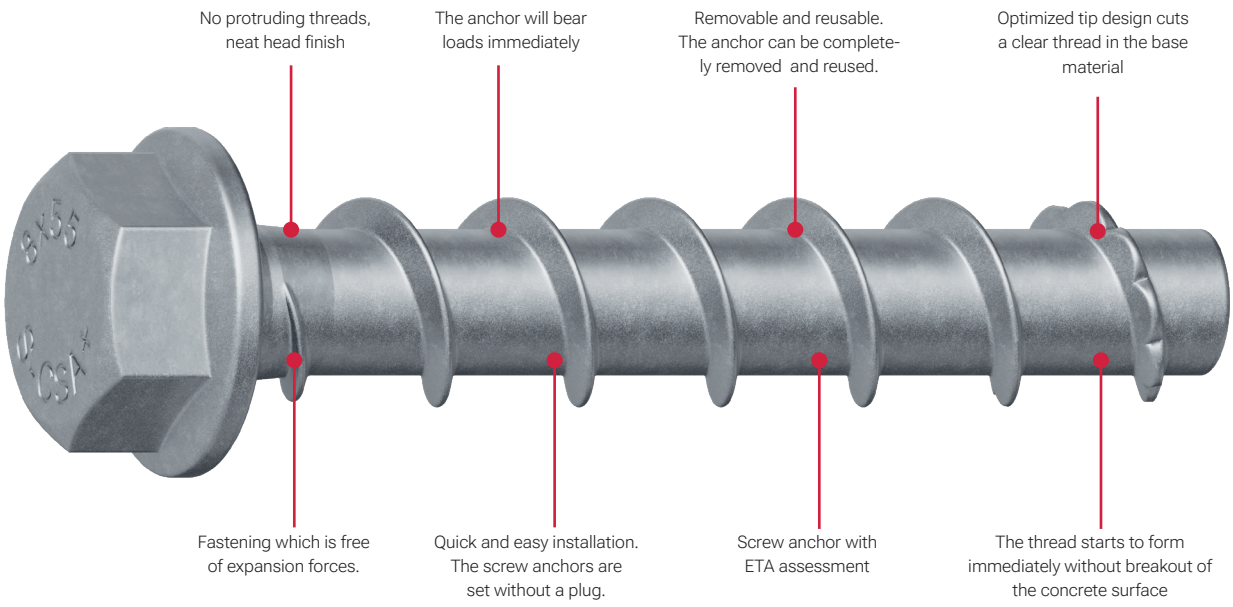
Concrete screws

Technical specifications

EJOT. Bringing it together.

Concrete screw range

High-performance metal anchors for cracked and uncracked concrete



EJOT concrete screws are very easy and quick to install. Requires neither additional tools nor operations. It is able to take high loads even with relatively small spacings and edge distances. It is removable and reusable (only JC2 Plus) and therefore fits also well for temporary fixings.

Description

> Self-tapping, approved screw anchors for push-through installations.
> No expansion forces allowing for relatively small edge distances and spacings
> Combines the benefits of undercut and chemical anchors requiring neither additional tools and operations nor hardening time.
> The concrete screw is installed directly through the fixture into the bore hole only by screwing. By doing so, the thread is cutting itself into the concrete and that way creating a mechanical interlock over the total anchorage depth.
> **JC2 Plus:** galvanized steel, for dry indoor use.
> **JC2 Plus ZA:** (zinc alloy) corrosion protection coating tested 2016 hours in SST acc. ISO 9227 and then fulfills the requirements for the neutral salt spray test with the corrosion class “C3 very high“ according to DIN EN ISO 12944-6:2018-06, for rural outdoor conditions
> **JC6 A4:** stainless steel with hardened carbon steel tip, coated, permanently humid interior, outdoor use including in industrial atmospheres and coastal environments

Base materials

Approved for

> Cracked concrete
> Uncracked concrete
> Hollow concrete slab

Also suitable for

> Solid clay brick
> Solid sand-lime brick

JC6 concrete screws

Bi-metal stainless steel range

- Self-tapping, high-performance screws
- Suitable for installation with an impact wrench
- Small spacings and edge distances
- Minimal expansion forces

Approved for

- Cracked / uncracked concrete C20/25–C50/60
- 6 mm approved for use in hollow core slabs
- Fire Resistance: R120
- Permanently wet indoor use
- Outdoor use, including industrial and marine

Head type	JC6-KB	JC6-FR	JC6-ST	JC6-IT
				
Material	A4 stainless steel			
Application range	Awnings, gates, shelving systems, cable traverses, handrails and railings, stadium seating, impact protection / ram protection, timber add-on components (e.g. joist hanger, angles, ...)			
Drive	SW13, SW15	TX30	TX30, TX45, TX50	SW13
Cracked concrete EAD-330232-01-0601	Ø 6 – 10 mm	Ø 6 mm	Ø 6 – 10 mm	Ø 6 mm
Cracked concrete EAD-330747-00-0601	Ø 6 mm	Ø 6 mm	Ø 6 mm	Ø 6 mm
Uncracked concrete	Ø 6 – 10 mm	Ø 6 mm	Ø 6 – 10 mm	Ø 6 mm
Certifications	ETA-17/1009, ETA-22/0413 Option 1			
Technical specifications				
Mode of action	Undercut			
Type of load	static			
Recommended tensile loads cracked concrete	1.2 – 4.3 kN	1.2 – 1.7 kN	1.2 – 4.3 kN	1.2 – 1.7 kN
Recommended tensile loads uncracked concrete	2.9 – 12.1 kN	2.9 – 4.5 kN	2.9 – 12.1 kN	2.9 – 4.5 kN
Recommended shear loads	6.8 – 14.0 kN	6.8 kN	6.8 – 14.0 kN	6.8 kN

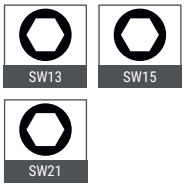
JC2 Plus ZA concrete screws

Zinc alloy steel range

- Self-tapping, high-performance screws
- Suitable for installation with an impact wrench
- Small spacings and edge distances
- Minimal expansion forces
- Suitable for rural outdoor conditions (2,016 hrs Neutral Salt Spray Test)

Approved for

- Cracked / uncracked concrete
- 6 mm approved for use in hollow core slabs
- Fire Resistance: R120
- Seismic Resistance (C1 for 6–14 mm and C2 for 8–14 mm)

Head type	JC2-KB Plus ZA	JC2-KB Plus ZA	JC2-FR Plus ZA	JC2-FR Plus (FL) ZA
				
Material	Zinc alloy coated carbon steel			
Application range	Facade scaffolds, temporary fastening, contact surfaces, shelves, cable racks, hand rails, battens		Facade scaffolds, temporary fastening, contact surfaces, shelves, cable racks, hand rails, battens, formworks	
Drive	 SW13/TX30	 SW13 SW15 SW21	 TX30	 TX30
Cracked concrete EAD-330232-02-0601	Ø 6 mm	Ø 8 – 14 mm	Ø 6 mm	
Cracked concrete EAD-330747-00-0601	Ø 6 mm	–	Ø 6 mm	
Uncracked concrete	Ø 6 mm	Ø 8 – 14 mm	Ø 6 mm	
Certifications	 ETA-17/1009 ETA-20/0446 Option 1	 ETA-20/0446 Option 1	 ETA-17/1009 ETA-20/0446 Option 1	
Technical specifications				
Mode of action	Undercut			
Type of load	static			
Recommended tensile loads cracked concrete	1.7 – 2.3 kN	3.2 – 14.4 kN	1.7 – 2.3 kN	
Recommended tensile loads uncracked concrete	3.3 – 4.6 kN	10.9 – 37.1 kN	3.3 – 4.6 kN	
Recommended shear loads	5.4 kN	10.9 – 34.9 kN	5.4 kN	

JC2-ST Plus ZA	JC2-ST Plus ZA	JC2-IT Plus ZA	JC2-ET Plus ZA
			
Zinc alloy coated carbon steel			
Facade scaffolds, temporary fastening, contact surfaces, shelves, cable racks, hand rails, battens, formworks		Pipe brackets, profile rails	Pipe brackets, profile rails
TX30	TX45 TX50	SW13	SW10
Ø 6 mm	Ø 8 – 10 mm	Ø 6 mm	
Ø 6 mm	–	Ø 6 mm	
Ø 6 mm	Ø 8 – 10 mm	Ø 6 mm	
ETA-17/1009 ETA-20/0446 Option 1	ETA-20/0446 Option 1	ETA-17/1009 ETA-20/0446 Option 1	
Undercut			
static			
1.7 – 2.3 kN	3.2 – 14.4 kN	1.7 – 2.3 kN	
3.3 – 4.6 kN	5.7 – 13.1 kN	3.3 – 4.6 kN	
5.4 kN	10.9 – 18.2 kN	5.4 kN	

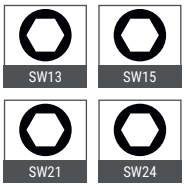
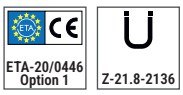
JC2 Plus concrete screws

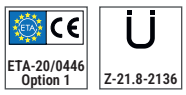
Zinc plated steel range

- Self-tapping, high-performance screws
- Suitable for installation with an impact wrench
- Small spacings and edge distances
- Minimal expansion forces
- JC2 Plus 10 & 14 are furthermore reusable
- Suitable for dry indoor conditions

Approved for

- Cracked / uncracked concrete
- 6 mm approved for use in hollow core slabs
- Fire Resistance: R120
- Seismic Resistance
  (C1 for 6–14 mm and C2 for 8–14 mm)

Head type	JC2-KB Plus	JC2-KB Plus	JC2-FR Plus	JC2-FR Plus (FL)
				
Material	Galvanized steel			
Application range	Facade scaffolds, temporary fastening, contact surfaces, shelves, cable racks, hand rails, battens		Facade scaffolds, temporary fastening, contact surfaces, shelves, cable racks, hand rails, battens, formworks	
Drive				
Cracked concrete EAD-330232-02-0601	Ø 6 mm	Ø 8 – 14 mm	Ø 6 mm	
Cracked concrete EAD-330747-00-0601	Ø 6 mm	–	Ø 6 mm	
Uncracked concrete	Ø 6 mm	Ø 8 – 14 mm	Ø 6 mm	
Certifications				
Technical specifications				
Mode of action	Undercut			
Type of load	static			
Recommended tensile loads cracked concrete	1.7 – 2.3 kN	3.2 – 14.4 kN	1.7 – 2.3 kN	
Recommended tensile loads uncracked concrete	3.3 – 4.6 kN	10.9 – 37.1 kN	3.3 – 4.6 kN	
Recommended shear loads	5.4 kN	10.9 – 34.9 kN	5.4 kN	

JC2-ST Plus	JC2-ST Plus	JC2-IT Plus	JC2-ET Plus
			
Galvanized steel			
Facade scaffolds, temporary fastening, contact surfaces, shelves, cable racks, hand rails, battens, formworks		Pipe brackets, profile rails	Pipe brackets, profile rails
			
Ø 6 mm	Ø 8 – 10 mm	Ø 6 mm	
Ø 6 mm	–	Ø 6 mm	
Ø 6 mm	Ø 8 – 10 mm	Ø 6 mm	
			
			
Undercut			
static			
1.7 – 2.3 kN	3.2 – 14.4 kN	1.7 – 2.3 kN	
3.3 – 4.6 kN	10.9 – 37.1 kN	3.3 – 4.6 kN	
5.4 kN	10.9 – 34.9 kN	5.4 kN	

Approvals / Cerfications / Applications

Description of document		Authority/ Laboratory	ID	Additional info
European Technical Assessment		ZAG National Building and Civil Engineering Institute, Slovenia	ETA-20/0446 (JC2 Plus 6, 8, 10, 14)	EAD 330232-02-0601, Option 1
European Technical Assessment		ZAG National Building and Civil Engineering Institute, Slovenia	ETA-17/1009 (JC2 Plus, JC6)	Concrete screw of size 6 for multiple use in non-structural applications, EAD 330747-00-0601, (Part 6)
European Technical Assessment		ZAG National Building and Civil Engineering Institute, Slovenia	ETA-22/0413 (JC6)	EAD 330232-01-0601, Option 1
General construction technique permit DIBt		DIBt	Z-21.8-2136	JC2 Plus 10 & 14 mm for temporary fastenings in concrete
Seismic resistance		ZAG National Building and Civil Engineering Institute, Slovenia	ETA-20/0446 (JC2 Plus 6, 8, 10, 14)	EN 1992-4
Fire resistance		ZAG National Building and Civil Engineering Institute, Slovenia	ETA-20/0446 ETA-17/1009 ETA-22/0413	EN 1992-4
YouTube installation videos		EJOT SE & Co. KG Market Unit Construction		EJOT concrete screw installation video
EJOT ANCHOR FIX® calculation software		EJOT Software		www.ejot.com/anchorfix

Additional information

> Load figures include the partial safety factors as per assessments and a partial safety factor on the action of γ_F= 1.4. Load figures apply for a rebar spacing s ≥ 15 cm or alternatively for a rebar spacing s ≥ 10 cm in combination with a rebar diameter of d_s ≤ 10 mm.

> If spacings or edge distances become smaller than the characteristic figures ($s_{cr,N}$ / $c_{cr,N}$) a calculation as per EN 1992-4 needs to be carried out. For more details, see ETA-20/0446, ETA-17/1009 and ETA-22/0413.

> Concrete is considered uncracked when the value of tension within the concrete is $\sigma_L + \sigma_R \leq 0$. In the absence of detailed verification σ_R = 3 N/mm² can be assumed (σ_L equals the tension within the concrete as a result of external loads, forces on anchor included; σ_R equals the tension coming from shrinkage or creep of the concrete, as well as displacements of supports or temperature variations).

> Shear load figures apply for an anchor without influence of a concrete edge. For shear loads close to an edge (c ≤ 10 x h_{ef}), concrete edge failure has to be checked as per EN 1992-4.

Static and quasi-static loads: JC2 Plus range

The data of these tables is based on:

- Material cold forged carbon steel
- Concrete C20/25, $f_{ck,cube}$ = 25 N/mm²
- Installation has been done correctly
- No influence of edge distances and spacings
- Respect of minimum base material thickness

Characteristic resistances			JC2 5		JC2 Plus 6				JC2 Plus 8		JC2 Plus 10			JC2 Plus 14		
			–	–	Part 6	Part 6	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1
Effective anchorage depth	h_{ef}	[mm]	19.0	27.5	27.6	31.9	29.8	42.5	39.2	51.9	42.5	55.3	68.0	49.3	66.3	91.8
Nominal anchorage depth	h_{nom}	[mm]	35	45	35	40	40	55	50	65	55	70	85	65	85	115
Uncracked concrete																
Tension	N_{Rk}	[kN]	2.4	3.5	4.0	4.0	7.0	9.7	12.1	18.4	13.6	20.2	27.6	15.8	26.6	43.3
Shear	V_{Rk}	[kN]	2.5	3.5	9.4*	9.4*	9.4*	9.4*	19.1*	19.1*	31.8*	31.8*	31.8*	52.1	61.1*	61.1*
Cracked concrete																
Tension	N_{Rk}	[kN]	NA	NA	4.0	4.0	3.5	4.8	6.8	12.5	7.9	10.3	19.3	9.0	16.6	30.2
Shear	V_{Rk}	[kN]	NA	NA	9.4*	9.4*	8.1	9.4*	19.1*	19.1*	23.7	30.9	31.8*	29.7	54.8	61.1*
*Failure mode = steel																

Design resistances			JC2 5		JC2 Plus 6				JC2 Plus 8		JC2 Plus 10			JC2 Plus 14		
			–	–	Part 6	Part 6	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1
Effective anchorage depth	h_{ef}	[mm]	19.0	27.5	27.6	31.9	29.8	42.5	39.2	51.9	42.5	55.3	68.0	49.3	66.3	91.8
Nominal anchorage depth	h_{nom}	[mm]	35	45	35	40	40	55	50	65	55	70	85	65	85	115
Uncracked concrete																
Tension	N_{Rd}	[kN]	1.6	2.3	2.7	2.7	4.7	6.5	8.0	12.3	9.1	13.5	18.4	10.5	17.7	28.8
Shear	V_{Rd}	[kN]	1.6	2.3	7.5*	7.5*	7.5*	7.5*	15.3*	15.3*	25.4*	25.4*	25.4*	34.8	48.9*	48.9*
Cracked concrete																
Tension	N_{Rd}	[kN]	NA	NA	2.7	2.7	2.3	3.2	4.5	8.3	5.3	6.9	12.9	6	11.1	20.1
Shear	V_{Rd}	[kN]	NA	NA	7.5*	7.5*	5.4	7.5*	15.3*	15.3*	15.8	20.6	25.4*	19.8	36.5	48.9*
*Failure mode = steel																

Recommended loads			JC2 5		JC2 Plus 6				JC2 Plus 8		JC2 Plus 10			JC2 Plus 14		
			–	–	Part 6	Part 6	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1
Effective anchorage depth	h_{ef}	[mm]	19.0	27.5	27.6	31.9	29.8	42.5	39.2	51.9	42.5	55.3	68.0	49.3	66.3	91.8
Nominal anchorage depth	h_{nom}	[mm]	35	45	35	40	40	55	50	65	55	70	85	65	85	115
Uncracked concrete																
Tension	N_{Rec}	[kN]	1.1	1.7	1.9	1.9	3.3	4.6	5.7	8.8	6.5	9.6	13.1	7.5	12.6	20.6
Shear	V_{Rec}	[kN]	1.1	1.7	5.4*	5.4*	5.4*	5.4*	10.9*	10.9*	18.2*	18.2*	18.2*	24.8	34.9*	34.9*
Cracked concrete																
Tension	N_{Rec}	[kN]	NA	NA	1.9	1.9	1.7	2.3	3.2	6	3.8	4.9	9.2	4.3	7.9	14.4
Shear	V_{Rec}	[kN]	NA	NA	5.4*	5.4*	3.8	5.4*	10.9*	10.9*	11.3	14.7	18.2*	14.1	26.1	34.9*
*Failure mode = steel																

Static and quasi-static loads: JC6 range

The data of these tables is based on:

- Material cold forged stainless steel A4, hardened steel tip
- Concrete C20/25, $f_{ck,cube}$ = 25 N/mm²
- Installation has been done correctly
- No influence of edge distances and spacings.
- Respect of minimum base material thickness.

Characteristic resistances			JC6 6			JC6 8		JC6 10	
			Part 6	Opt1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1
Effective anchorage depth	h_{ef}	[mm]	31.9	34.0	42.5	35.8	48.5	39.1	64.6
Nominal anchorage depth	h_{nom}	[mm]	40	45	55	50	65	55	85
Uncracked concrete									
Tension	N_{Rk}	[kN]	6.0	6.0	9.5	8.5	16.6	11.0	25.4
Shear	V_{Rk}	[kN]	12.0	14.3*	14.3*	24.3*	24.3*	29.4*	29.4*
Cracked concrete									
Tension	N_{Rk}	[kN]	6.0	2.5	3.5	3.0	8.5	2.5	9.0
Shear	V_{Rk}	[kN]	12.0	6.3	8.8	8.7	24.3*	8.3	29.4*
*Failure mode = steel									

Design resistances			JC6 6			JC6 8		JC6 10	
			Part 6	Opt1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1
Effective anchorage depth	h_{ef}	[mm]	31.9	34.0	42.5	35.8	48.5	39.1	64.6
Nominal anchorage depth	h_{nom}	[mm]	40	45	55	50	65	55	85
Uncracked concrete									
Tension	N_{Rd}	[kN]	4.0	4.0	6.3	5.7	11.1	7.3	16.9
Shear	V_{Rd}	[kN]	8.0	9.5*	9.5*	16.2*	16.2*	19.6*	19.6*
Cracked concrete									
Tension	N_{Rd}	[kN]	4.0	1.7	2.3	2.0	5.7	1.7	6.0
Shear	V_{Rd}	[kN]	8.0	4.2	5.8	5.8	16.2*	5.5	19.6*
*Failure mode = steel									

Recommended loads			JC6 6			JC6 8		JC6 10	
			Part 6	Opt1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1
Effective anchorage depth	h_{ef}	[mm]	31.9	34.0	42.5	35.8	48.5	39.1	64.6
Nominal anchorage depth	h_{nom}	[mm]	40	45	55	50	65	55	85
Uncracked concrete									
Tension	N_{Rec}	[kN]	2.9	2.9	4.5	4.0	7.9	5.2	12.1
Shear	V_{Rec}	[kN]	5.7	6.8*	6.8*	11.6*	11.6*	14.0*	14.0*
Cracked concrete									
Tension	N_{Rec}	[kN]	2.9	1.2	1.7	1.4	4.0	1.2	4.3
Shear	V_{Rec}	[kN]	5.7	3.0	4.2	4.1	11.6*	3.9	14.0*

*Failure mode = steel.
The partial safety factor for resistance is γ = 1.4.

Basic loading data for precast pre-stressed hollow core slabs: JC2 Plus 6 and JC6 6

The data of these tables is based on:

> Concrete C30/37 to C50/60
> Installation has been done correctly
> The data of these tables is based on ETA-17/1009 (JC2 Plus 6, JC6 6)

Characteristic resistances			JC2 Plus 6 (JC6 6)		
Nominal anchorage depth	h_{nom}	[mm]	35 / 40 (40)		
Flange thickness	d_b	[mm]	≥ 25	≥ 30	≥ 40
Load for all directions	F_{Rk}	[kN]	2.5 (2.0)	3.5 (3.0)	5.0 (5.5)
Bending Resistance	$M^0_{Rk,s}$	[Nm]	16.0 (16.0)		
Edge distance	$c_{cr} = c_{min}$	[mm]	100		
Spacing	$s_{cr} = s_{min}$	[mm]	100		

Design resistances			JC2 Plus 6 (JC6 6)		
Nominal anchorage depth	h_{nom}	[mm]	35 / 40 (40)		
Flange thickness	d_b	[mm]	≥ 25	≥ 30	≥ 40
Load for all directions	F_{Rd}	[kN]	1.7 (1.3)	2.3 (2.0)	3.3 (3.7)
Bending Resistance	$M^0_{Rd,s}$	[Nm]	12.8 (10.7)		
Edge distance	$c_{cr} = c_{min}$	[mm]	100		
Spacing	$s_{cr} = s_{min}$	[mm]	100		

Recommended loads			JC2 Plus 6 (JC6 6)		
Nominal anchorage depth	h_{nom}	[mm]	35 / 40 (40)		
Flange thickness	d_b	[mm]	≥ 25	≥ 30	≥ 40
Load for all directions	F_{rec}	[kN]	1.2 (1.0)	1.7 (1.4)	2.4 (2.6)
Bending Resistance	$M^0_{rec,s}$	[Nm]	9.1 (7.6)		
Edge distance	$c_{cr} = c_{min}$	[mm]	100		
Spacing	$s_{cr} = s_{min}$	[mm]	100		

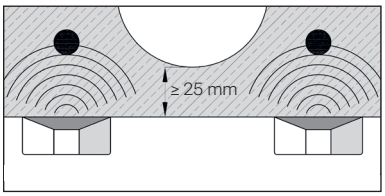
Requirements for multiple anchoring

The definition of redundant fastening according to Member States is given in the EAD 330747 § 1.2.1.
In Absence of definition by Member State the following default values may be taken.

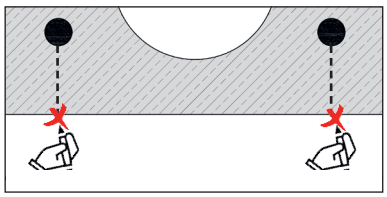
Minimum number of fixing points	Minimum number of anchors per fixing point	Maximum design load of action N_{Sd} per fixing point
3	3	2 kN
4	1	3 kN

The value N_{Sd} migth be increased if in the design it is shown that the requirements on the strength and stiffness of the fixture in the serviceability and ultimate states after the failure of one anchor are fulfilled.

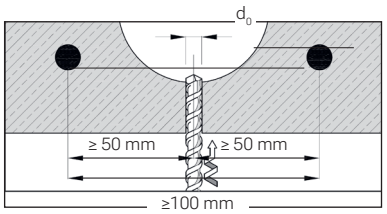
Installation instructions in pre-stressed hollow core slabs



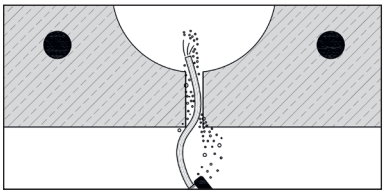
1. Locate rebars by means of suitable detector.



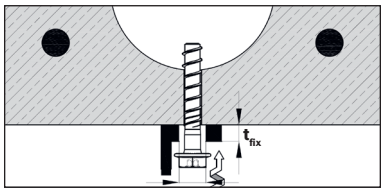
2. Mark rebar location.



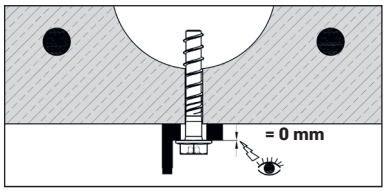
3. Make a cylindrical hole.



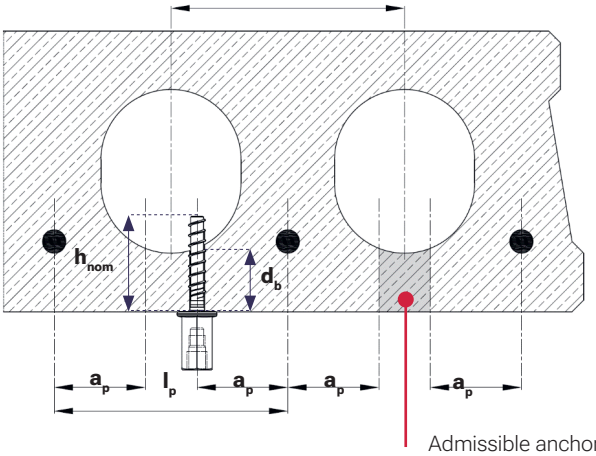
4. Clean the hole.



5. Install the screw anchor very gently by screw-driver or torque wrench. Avoid overtightening.



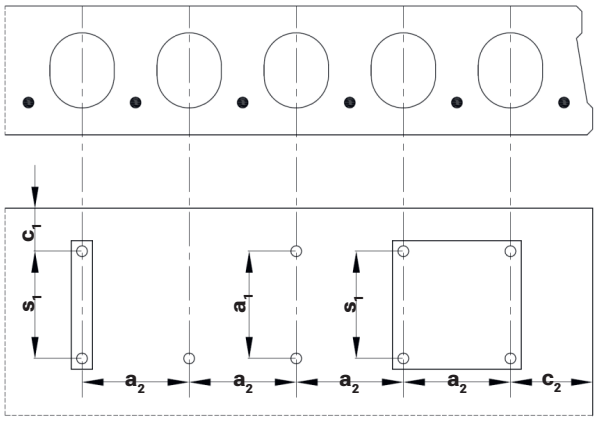
6. Ensure that the screw anchor head fully rests without any gap on the fixture and is not damaged.



Admissible anchor position

Admissible anchor position in pre-stressed hollow core slabs

Core distance	$l_c \geq 100$ mm
Pre-stressing steel distance	$l_p \geq 100$ mm
Distance between anchor position and prestressing steel	$a_p \geq 50$ mm



Minimum spacing and edge distance of anchors and distance between anchor groups in pre-stressed hollow core slabs

Minimum edge distance	$c_{min} \geq 100$ mm
Minimum anchor spacing	$s_{min} \geq 100$ mm
Minimum distance between anchor groups	$a_{min} \geq 100$ mm

c1, c2 edge distance
s1, s2 anchor spacing
a1, a2 distance between anchor groups

Basic loading data for precast pre-stressed hollow core slabs: JC2 Plus14

The data of these tables is based on:
> Concrete C30/37 to C50/60 (uncracked)
> Installation has been done correctly.
> No edge distance and spacing influence
> For single anchor
> For temporary application
> Prior to every reuse, the wear of the thread shall be verified with an appropriate checking gauge (CG+)
> Ratio core width/web thickness ≤ 5.3

Installation position for temporary fastening in hollow core slab:
> Top position of the slab is allowed.
> Anchor to be installed within position of ± 10 mm of the thickest section of the solid part.

Design resistances: Concrete C30/37			JC2 Plus 14		
Nominal anchorage depth	h_{nom}	[mm]	65	85	115
Drill hole depth	d_b	[mm]	75	95	125
Tension	N_{Rd}	[kN]	12.4	19.7	29.4
Shear	V_{Rd}	[Nm]	13.9	21.7	29.4

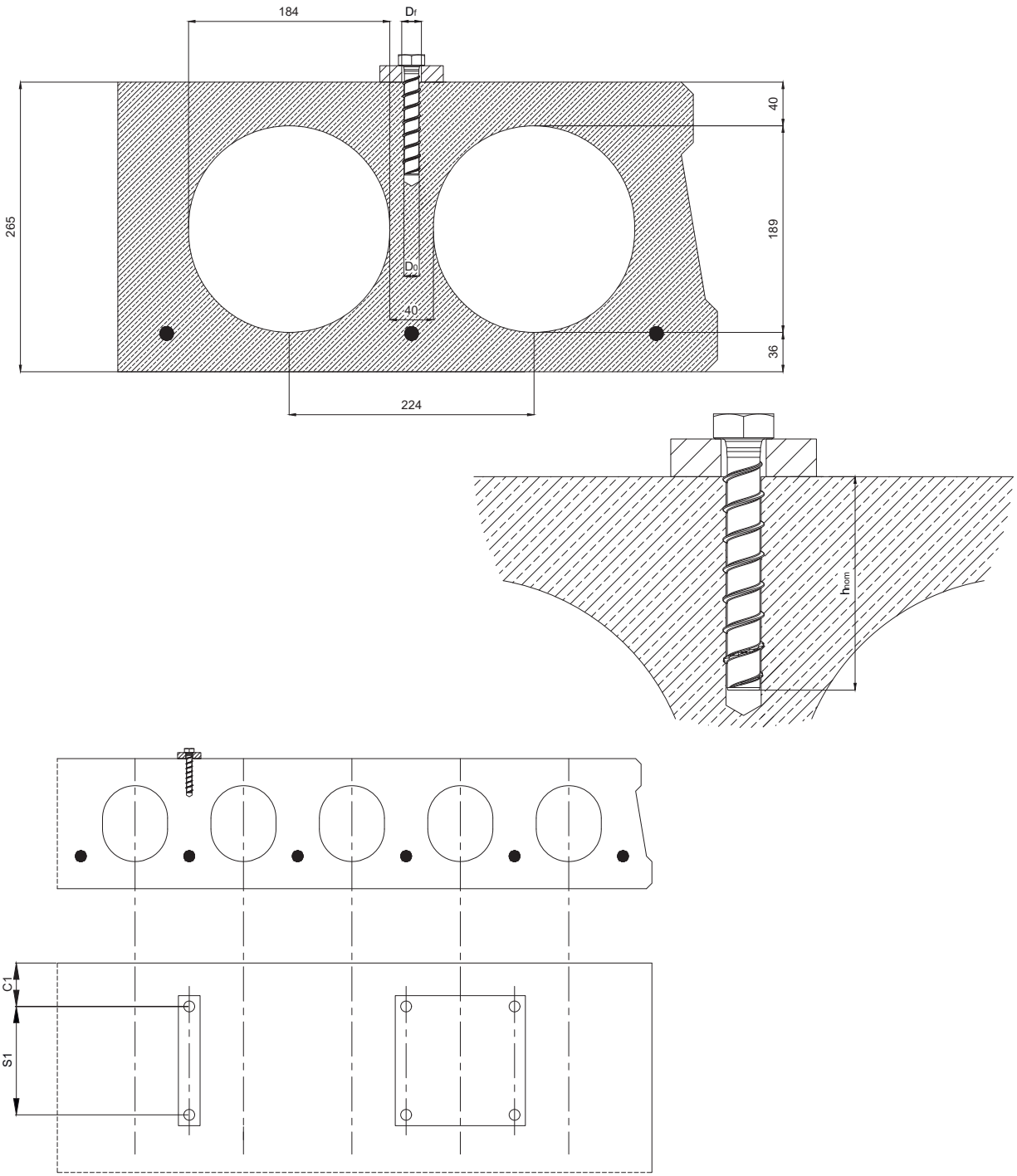
Recommended loads: Concrete C30/37			JC2 Plus 14		
Nominal anchorage depth	h_{nom}	[mm]	65	85	115
Drill hole depth	d_b	[mm]	75	95	125
Tension	N_{Rec}	[kN]	8.9	14.1	21.0
Shear	V_{Rec}	[Nm]	9.9	15.5	21.0

Design resistances: Concrete C50/60			JC2 Plus 14		
Nominal anchorage depth	h_{nom}	[mm]	65	85	115
Drill hole depth	d_b	[mm]	75	95	125
Tension	N_{Rd}	[kN]	15.3	22.6	39.4
Shear	V_{Rd}	[Nm]	17.9	28.0	38.0

Recommended loads: Concrete C50/60			JC2 Plus 14		
Nominal anchorage depth	h_{nom}	[mm]	65	85	115
Drill hole depth	d_b	[mm]	75	95	125
Tension	N_{Rec}	[kN]	10.9	16.1	28.1
Shear	V_{Rec}	[Nm]	12.8	20.0	27.1

Installation instructions in pre-stressed hollow core slabs: JC2 Plus 14

Anchor spacing and edge distances			JC2 Plus 14		
Nominal anchorage depth	h_{nom}	[mm]	65	85	115
Minimum spacing	s_{min}		60		
Minimum edge distance	c_{min}	[mm]	60		
Characteristic spacing	s_{cr}	[kN]	3 h_{ef}		
Characteristic edge distance	c_{cr}	[Nm]	1.5 h_{ef}		



Seismic resistance

Design acc. EN 1992-4 Performance category C1

The data of these tables is based on:

> Concrete C20/25, $f_{ck,cube}$ = 25 N/mm²
> Installation has been done correctly
> No influence of edge distances and spacings
> Respect of minimum base material thickness
> α_{gap} = 0.5 (used without seismic filling washer, concerns only the shear values)
> ETA-20/0446 (JC2 Plus)

Characteristic resistances			**6 – 2**	**8 – 2**	**10 – 3**	**14 – 3**
Effective anchorage depth	h_{ef}	[mm]	42.5	51.9	68.0	91.8
Cracked concrete						
Tension	$N_{Rk,\,seis}$	[kN]	4.8	11.3	17.8	30.2
Shear	$V_{Rk,\,seis}$	[kN]	3.7*	6.5*	9.7*	26.0*

Design resistances			**6 – 2**	**8 – 2**	**10 – 3**	**14 – 3**
Effective anchorage depth	h_{ef}	[mm]	42.5	51.9	68.0	91.8
Cracked concrete						
Tension	$N_{Rd,\,seis}$	[kN]	3.2	7.3	10.9	17.2
Shear	$V_{Rd,\,seis}$	[kN]	3.0*	5.2*	7.8*	20.8*

Recommended loads			**6 – 2**	**8 – 2**	**10 – 3**	**14 – 3**
Effective anchorage depth	h_{ef}	[mm]	42.5	51.9	68.0	91.8
Cracked concrete						
Tension	$N_{Rec,\,seis}$	[kN]	2.3	5.2	7.8	12.3
Shear	$V_{Rec,\,seis}$	[kN]	2.1*	3.7*	5.5*	14.8*

α_{seis} and α_{gap} included as per EOTA TR 045. The values don't consider any filling of the annular gap between the anchor and the fixture.
* Failure mode = steel

Seismic resistance

Design acc. EN 1992-4 Performance category C2

The data of these tables is based on:

- Concrete C20/25, $f_{ck,cube}$ = 25 N/mm²
- Installation has been done correctly
- No influence of edge distances and spacings
- Respect of minimum base material thickness
- α_{gap} = 1.0 (used with seismic filling washer, concerns only the shear values)
- ETA-20/0446 (JC2 Plus)

Characteristic resistances			**8 – 2**	**10 – 3**	**14 – 3**
Effective anchorage depth	h_{ef}	[mm]	51.9	68.0	91.8
Cracked concrete					
Tension	$N_{Rk,\,seis}$	[kN]	1.9	3.8	6.9
Shear	$V_{Rk,\,seis}$	[kN]	13.6*	24.6*	41.5*

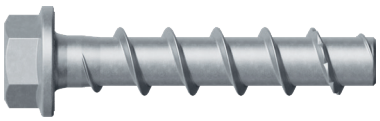
Design resistances			**8 – 2**	**10 – 3**	**14 – 3**
Effective anchorage depth	h_{ef}	[mm]	51.9	68.0	91.8
Cracked concrete					
Tension	$N_{Rd,\,seis}$	[kN]	1.3	2.5	4.6
Shear	$V_{Rd,\,seis}$	[kN]	10.9*	19.7*	33.2*

Recommended loads			**8 – 2**	**10 – 3**	**14 – 3**
Effective anchorage depth	h_{ef}	[mm]	51.9	68.0	91.8
Cracked concrete					
Tension	$N_{Rec,\,seis}$	[kN]	0.9	1.8	3.3
Shear	$V_{Rec,\,seis}$	[kN]	7.8*	14.1*	23.7*

α_{seis} and α_{gap} included as per EN 1992-4. The shear values consider filling of the annular gap between the anchor and the fixture.
* Failure mode = steel

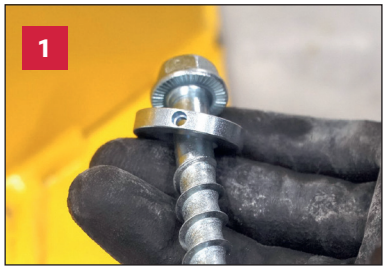
Filling washer

For seismic applications installation with JC2 Plus concrete screw

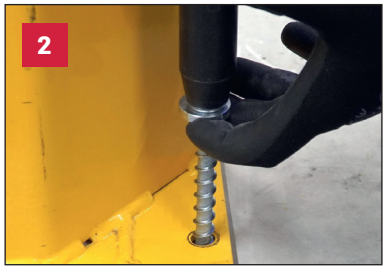




When selecting a JC2 Plus concrete screw, please note that the use of the Filling Washer reduces the fixture thickness t_{fix} of the concrete screw.



1. Mount matching filling washer additionally to concrete screw.



2. Drive in concrete screw with filling washer until the anchorage depth hnom is reached



3. Stick mixer reducer tip on static mixer nozzle. Adhesive tape can be used if necessary.



4. Fill the annular gap between Concrete screw and fixture through the hole of the filling washer until resin leaks out of this hole.

Please observe installation instructions of injection resin. Load may only be applied after the curing time of the injection resin is reached.

Filling Washer is used for filling the gap between fixture and concrete screw after it has been set.

After installation, EJOT Multifix injection resin is injected using the mixer reducer tip (included) until resin seeps out.

JC2 Plus concrete screw	8	10	14
Filling washer size	26 x 12 x 5	28 x 14 x 5	34 x 17 x 5
Reduction of fixture thickness t_{fix}	t_{fix} -5 mm	t_{fix} -5 mm	t_{fix} -5 mm

Fire resistance: JC2 Plus range

Design under fire exposure is performed according to the design method given in EN 1992-4.

The data of these tables is based on: ETA-20/0446 and ETA-17/1009

> Concrete C20/25, $f_{ck,cube}$ = 25 N/mm²
> Values cannot be used with hollow core slabs
> Installation has been done correctly.
> No influence of edge distances and spacings
> Respect of minimum base material thickness

Characteristic resistances			JC2 Plus 6				JC2 Plus 8		JC2 Plus 10			JC2 Plus 14		
			Part 6	Part 6	Opt 1	Opt1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1
Effective anchorage depth	h_{ef}	[mm]	27.6	31.9	29.8	42.5	39.2	51.9	42.5	55.3	68.0	49.3	66.3	91.8
Nominal anchorage depth	h_{nom}	[mm]	35	40	40	55	50	65	55	70	85	65	85	115
Fire Exposure R30														
Tension	$N_{Rk,fi}$	[kN]	0.24	0.24	0.24	0.24	0.42	0.42	0.95	0.95	0.95	2.65	2.65	2.65
Shear	$V_{Rk,fi}$	[kN]	0.24	0.24	0.24	0.24	0.42	0.42	0.95	0.95	0.95	2.65	2.65	2.65
Fire Exposure R60														
Tension	$N_{Rk,fi}$	[kN]	0.22	0.22	0.22	0.22	0.38	0.38	0.83	0.83	0.83	1.99	1.99	1.99
Shear	$V_{Rk,fi}$	[kN]	0.22	0.22	0.22	0.22	0.38	0.38	0.83	0.83	0.83	1.99	1.99	1.99
Fire Exposure R90														
Tension	$N_{Rk,fi}$	[kN]	0.17	0.17	0.17	0.17	0.29	0.29	0.64	0.64	0.64	1.73	1.73	1.73
Shear	$V_{Rk,fi}$	[kN]	0.17	0.17	0.17	0.17	0.29	0.29	0.64	0.64	0.64	1.73	1.73	1.73
Fire Exposure R120														
Tension	$N_{Rk,fi}$	[kN]	0.12	0.12	0.12	0.12	0.21	0.21	0.51	0.51	0.51	1.33	1.33	1.33
Shear	$V_{Rk,fi}$	[kN]	0.12	0.12	0.12	0.12	0.21	0.21	0.51	0.51	0.51	1.33	1.33	1.33

The values shown are characteristic fire resistances according to the relevant ETA. In the absence of national provisions, a partial safety factor for resistance under fire exposure of $\gamma_{M,fi}$ = 1.0 is recommended in the ETA. Design shall be performed in accordance with EN 1992-4.

Fire resistance: JC6 range

Design under fire exposure is performed according to the design method given in EN 1992-4.

+The data of these tables is based on: ETA-22/0413

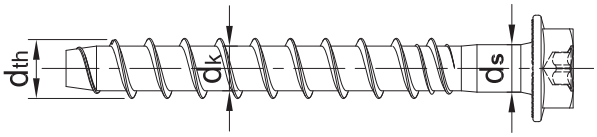
> Concrete C20/25, $f_{ck,cube}$ = 25 N/mm²
> Values cannot be used with hollow core slabs
> Installation has been done correctly.
> No influence of edge distances and spacings
> Respect of minimum base material thickness

Characteristic resistances			JC6 6		JC6 8		JC6 10	
			Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1
Effective anchorage depth	h_{ef}	[mm]	34.0	42.5	35.8	48.5	39.1	64.6
Nominal anchorage depth	h_{nom}	[mm]	45	55	50	65	55	85
Fire Exposure R30								
Tension	$N_{Rk,\,fi}$	[kN]	0.24	0.24	0.85	0.85	1.70	1.70
Shear	$V_{Rk,\,fi}$	[kN]	0.24	0.24	0.85	0.85	1.70	1.70
Fire Exposure R60								
Tension	$N_{Rk,\,fi}$	[kN]	0.22	0.22	0.68	0.68	1.36	1.36
Shear	$V_{Rk,\,fi}$	[kN]	0.22	0.22	0.68	0.68	1.36	1.36
Fire Exposure R90								
Tension	$N_{Rk,\,fi}$	[kN]	0.17	0.17	0.51	0.51	1.09	1.09
Shear	$V_{Rk,\,fi}$	[kN]	0.17	0.17	0.51	0.51	1.09	1.09
Fire Exposure R120								
Tension	$N_{Rk,\,fi}$	[kN]	0.12	0.12	0.42	0.42	0.95	0.95
Shear	$V_{Rk,\,fi}$	[kN]	0.12	0.12	0.42	0.42	0.95	0.95

The values shown are characteristic fire resistances according to the relevant ETA. In the absence of national provisions, a partial safety factor for resistance under fire exposure of $\gamma_{M,fi}$ = 1.0 is recommended in the ETA. Design shall be performed in accordance with EN 1992-4.

Materials and dimensions: JC2 Plus range

JC2 Plus: KB / FR / IT / ST / ET	
Coating ZP	Zinc electroplated according to EN ISO 4042 ≥ 5 µm
Coating ZA	Zinc alloy coating ≥ 8 µm

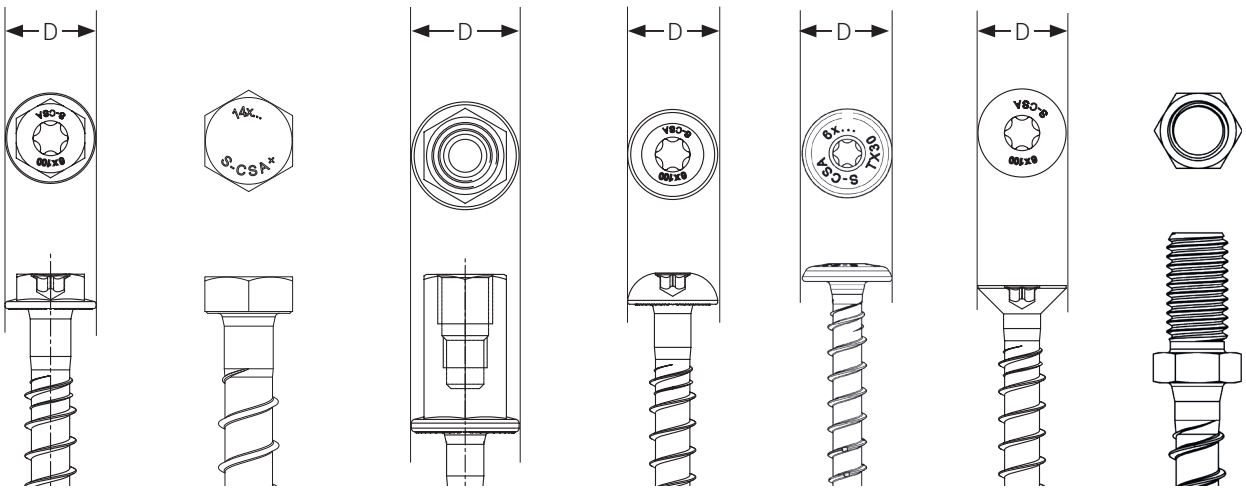


Materials properties: JC2 Plus

Specifications			JC2 5		JC2 Plus 6			JC2 Plus 8		JC2 Plus 10			JC2 Plus 14		
Effective anchorage depth	h_{ef}	[mm]	19	27.5	27.6	31.9	42.5	39.2	51.9	42.5	55.3	68	49.3	66.3	91.8
Nominal anchorage depth	h_{nom}	[mm]	35	45	35	40	55	50	65	55	70	85	65	85	115
Nominal tension strength	F_{uk}	[N/mm²]	800		800			800		800			800		
Char. bending resistance	$M^0_{Rk,s}$	[Nm]	8.6		16			37	37	69	69	69	207	207	207
Design bending resistance	$M_{Rd,s}$	[Nm]	5.7		12.8			29.6	29.6	52.2	55.2	55.2	165.6	165.6	165.6
Recommended bending resistance	M_{rec}	[Nm]	4.1		9.1			21.1	21.1	39.4	39.4	39.4	118.3	118.3	118.3

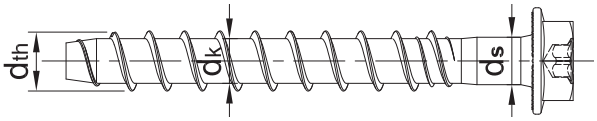
Specifications			JC2 5	JC2 Plus 6	JC2 Plus 8	JC2 Plus 10	JC2 Plus 14
Nominal diameter	d_{nom}	[mm]	5.0	6.0	8.0	10.0	14.0
Thread outer diamter	d_{th}	[mm]	6.12	7.45	10.50	12.70	16.55
Core diameter	d_k	[mm]	4.5	5.55	7.3	9.0	13.0
Shaft diameter	d_s	[mm]	4.9	5.88	7.8	9.62	13.4
Stressed section	A_s	[mm²]	15.9	24.19	41.85	63.62	132.73
Diameter of flange KB	D	[mm]	11.5	16.5	17.5	20.5	28/29.5
Diameter of flange IT	D	[mm]	–	14.2	–	–	–
Diameter of pan head FR, FR (FL)	D	[mm]	–	14.5 (17.4)	–	–	–
Diameter of countersunk ST	D	[mm]	9.8	14.0	18.2	21.0	–

KB KB IT FR FR (FL) ST ET



Materials and dimensions: JC6 range

JC6: KB / ST / IT	
Material	Cold forged stainless steel A4, hardened steel tip

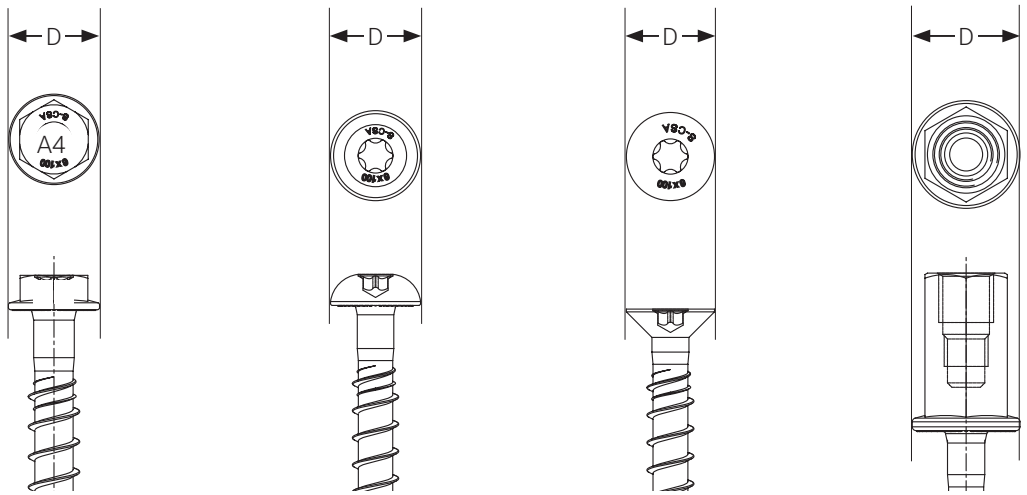


Materials properties: JC6

Specifications			JC6 6		JC6 8		JC6 10	
Effective anchorage depth	h_{ef}	[mm]	34	42.5	35.8	48.5	39.1	64.6
Nominal anchorage depth	h_{nom}	[mm]	45	55	50	65	55	85
Nominal tension strength	F_{uk}	[N/mm²]	800		800		705	
Characteristic bending resistance	$M^0_{Rk,s}$	[Nm]	19.4		45.6		75.1	
Design bending resistance	$M_{Rd,s}$	[Nm]	12.9		30.4		50.1	
Recommended bending resistance	M_{rec}	[Nm]	9.2		21.7		35.8	

Specifications			JC6 6	JC6 8	JC6 10
Nominal diameter	d_{nom}	[mm]	6	8	10
Thread outer diamter	d_{th}	[mm]	7.45	9.9	11.9
Core diameter	d_k	[mm]	5.55	7.35	9.3
Shaft diameter	d_s	[mm]	5.9	7.85	9.67
Stressed section	A_s	[mm²]	24.19	42.43	67.93
Diameter of flange KB	D	[mm]	16.5	17.5	20.5
Diameter of flange FR	D	[mm]	14.5	–	–
Diameter of pan head ST	D	[mm]	14	–	–
Diameter of countersunk IT	D	[mm]	14.2	–	–

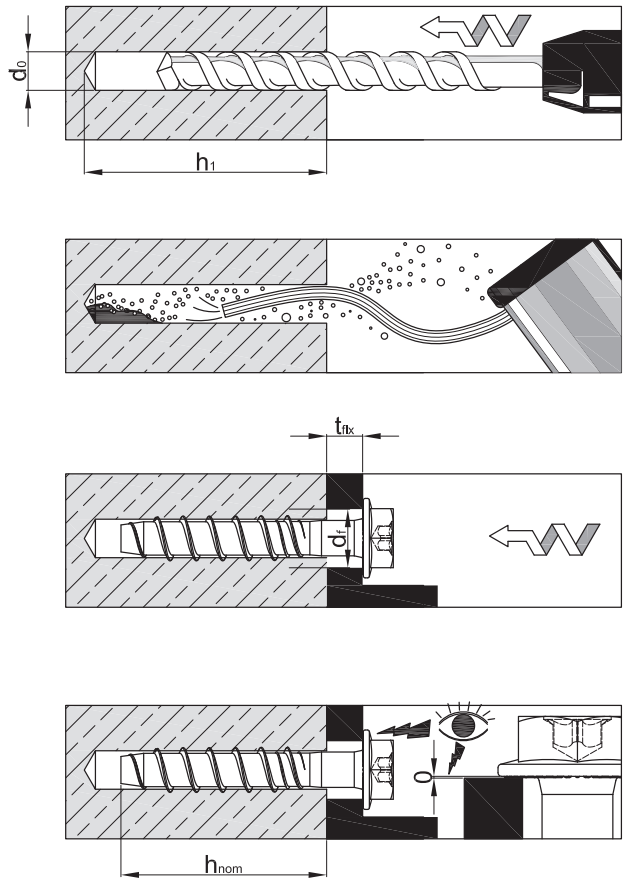
KB **FR** **ST** **IT**



Installation instructions

Installation equipment

Specifications	JC2 5	JC2 Plus 6	JC2 Plus 8	JC2 Plus 10	JC2 Plus 14	JC6 6	JC6 8	JC6 10
Rotary hammer	750…1200 r.p.m / 1.8 …3.3 J							
Drill bit	SDS+ 2-CUT or 4-CUT sizes 5, 6, 8, 10, 14 mm							
Socket (SW) [mm]	8	13	13	15	21 or 24	13	13	15
T-drive / Torx	T25	T30	T45	T50	–	T30	T45	T50
Additional tools	air pump/compressor, torque wrench, impact screw driver							



Notes:

Concrete and hollow core slab

Concrete strength is C20/25 to C50/60
Hollow core slabs C30/37 to C50/60

> No significant voids in concrete.
> Concrete is well compacted.
> Thickness of concrete is acc. TDS installation data.

Installation

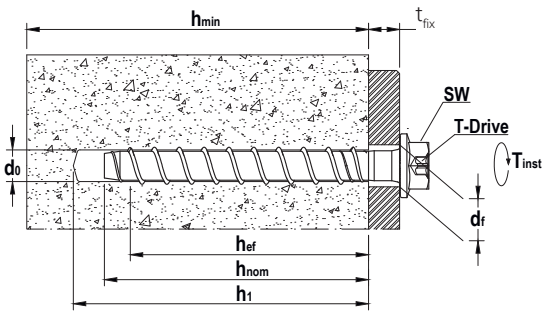
Edge distances and spacing are acc. TDS installation data.

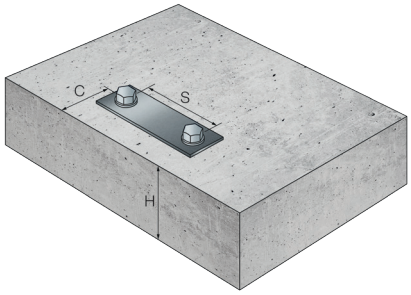
> Use proper air pump or compressor.
> Drill hole is deep enough (mentioned h_1 in PDS installation data).
> All dust should be cleaned from the hole to avoid screw jamming during installation.
> Pay special attention to cleaning, especially when installing downwards.
> In case of aborted hole, drilling of new hole at a minimum distance of twice the depth of the aborted hole, or smaller distance provided the aborted drill hole is filled with high strength non-shrinkage mortar. No shear or oblique tension loads are allowed in the direction of a not filled aborted hole.

Other base materials

> Concrete screw can be used also in other base materials such as solid clay brick and solid sand-lime brick.

Installation: JC2 Plus range





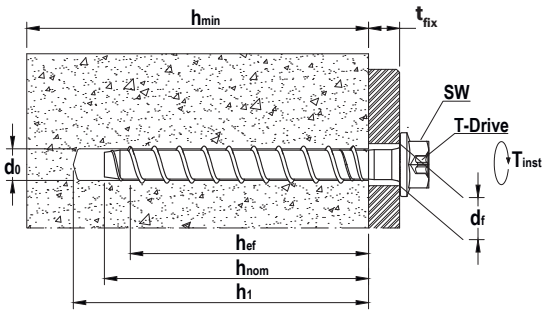
Installation data

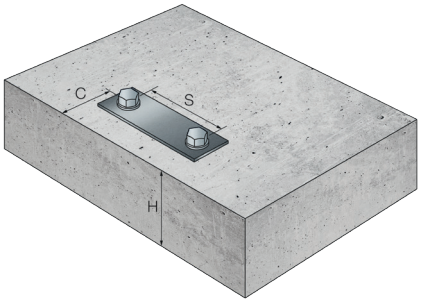
Specification			JC2 5		JC2 Plus 6				JC2 Plus 8		JC2 Plus 10			JC2 Plus 14		
Assessment			–	–	Part 6	Part 6	Opt1	Opt1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1
Drill hole diameter	d_o	[mm]	5		6				8		10			14		
Cutting diameter at the upper tolerance limit (max. diam. bit)	$d_{cut,max \leq}$	[mm]	5.40		6.40				8.45		10.45			14.50		
Depth of drilled hole to deepest point	$h_{1 \geq}$	[mm]	45	55	45	50	50	65	60	75	65	80	95	75	95	125
Effective anchorage depth	h_{ef}	[mm]	19.0	27.5	27.6	31.9	29.8	42.5	39.2	51.9	42.5	55.3	68	49.3	66.3	91.8
Nominal anchorage depth	h_{nom}	[mm]	35	45	35	40	40	55	50	65	55	70	85	65	85	115
Diameter of clearance hole in the fixture	d_f	[mm]	6.3–7.0		7.7 – 9.0				10.8 – 12.0		13.0 – 14.0			17.0–18.0		
Max. torque, manual	T_{inst}	[Nm]	12		14				45		85			100		
Max. torque. impact screw driver	T_{SD}	[Nm]	–		90				290		650			650		
Width across flats	SW	[mm]	8		13				13		15			21/24		
T-drive (in types KB, ST and FR)	T-drive		ST	T25	T30				T45		T50			–		

Minimum thickness of concrete member, spacing and edge distance

Cracked and uncracked concrete			JC2 5		JC2 Plus 6				JC2 Plus 8		JC2 Plus 10			JC2 Plus 14		
Assessment			–	–	Part 6	Part 6	Opt1	Opt1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1	Opt 1
Effective anchorage depth	h_{ef}	[mm]	19.0	27.5	27.6	31.9	29.8	42.5	39.2	51.9	42.5	55.3	68	49.3	66.3	91.8
Nominal anchorage depth	h_{nom}	[mm]	35	45	35	40	40	55	50	65	55	70	85	65	85	115
Minimum thickness of base material	h_{min}	[mm]	80	80	80	80	80	92.7	100	112.7	100	112.8	125.5	120	137	162.5
Minimum spacing	s_{min}	[mm]	35	35	35	35	35	35	35	35	40	40	40	60	60	60
Minimum edge distance	c_{min}	[mm]	35	35	30	35	35	35	35	35	40	40	40	60	60	60
Critical **spacing** for splitting failure and concrete cone failure (in case characteristic loading affects)	$s_{cr.sp}$	[mm]	53	82	110	96	ETA-20/0446									
	$s_{cr.N}$	[mm]	53	83	83	96	89	128	118	156	128	166	204	148	199	275
Critical **edge** distance for splitting failure and concrete cone failure (in case characteristic loading affects)	$c_{cr.sp}$	[mm]	27	41	55	48	ETA-20/0446									
	$c_{cr.N}$	[mm]	27	41	41.5	48	44	64	59	78	64	83	102	74	99	138

Installation: JC6 range





Installation data

Specification			JC6 6			JC6 8		JC6 10	
Assessment			Part 6	Opt1		Opt 1		Opt 1	
Drill hole diameter	d_o	[mm]	6	6		8		10	
Cutting diameter at the upper tolerance limit (max. diam. bit)	$d_{cut,max \leq}$	[mm]	6.40	6.40		8.45		10.45	
Depth of drilled hole to deepest point	$h_{1 \geq}$	[mm]	50	55	65	60	75	65	95
Effective anchorage depth	h_{ef}	[mm]	31.9	34	42.5	35.8	48.5	39.1	64.6
Nominal anchorage depth	h_{nom}	[mm]	40	45	55	50	65	55	85
Diameter of clearance hole in the fixture	d_f	[mm]	7.7 – 9.0	≤ 9		≤ 12		≤ 14	
Max. torque, manual	T_{inst}	[Nm]	14	14		40		75	
Max. torque. impact screw driver	T_{SD}	[Nm]	90	90		290		360	
Width across flats	SW	[mm]	13	13		13		15	
T-drive (in types ST and FR)	T-drive		T30	T30		T45		T50	

Minimum thickness of concrete member, spacing and edge distance

Specification			JC6 6			JC6 8		JC6 10	
Assessment			Part 6	Opt1		Opt 1		Opt 1	
Effective anchorage depth	h_{ef}	[mm]	31.9	34	42.5	35.8	48.5	39.1	64.6
Nominal anchorage depth	h_{nom}	[mm]	40	45	55	50	65	55	85
Minimum thickness of base material	h_{min}	[mm]	80	80	100	100	100	100	130
Minimum spacing	s_{min}	[mm]	35	35	35	35	35	40	40
Minimum edge distance	c_{min}	[mm]	35	35	35	35	35	40	40
Critical **spacing** for splitting failure and concrete cone failure (in case characteristic loading affects)	$s_{cr.sp}$	[mm]	120	136.0	127.5	121.7	165.0	195.5	184.5
	$s_{cr.N}$	[mm]	96	102.0	127.5	107.4	145.5	117.3	193.8
Critical **edge** distance for splitting failure and concrete cone failure (in case characteristic loading affects)	$c_{cr.sp}$	[mm]	60	68.0	63.8	60.9	82.5	97.8	92.3
	$c_{cr.N}$	[mm]	48	51.0	63.8	53.7	72.8	58.7	96.9

Reusability: JC2 Plus 10 & JC2 Plus 14

DIBt Z-21.8-2136 approves the reuse of the JC2 Plus concrete screw, 10 and 14 mm diameter in combination with the CG+ checking gauge. The checking gauge is a tool for measuring the reusability of the JC2 Plus 10 and 14 concrete screw for temporary applications. The checking must be performed before each reuse.

Field of application

JC2 Plus 10 and 14 shall only be applied for temporary fastening of construction site equipment, such as shoring props, fall protection devices or scaffolds. Installations can be performed in „green" concrete with a strength of ≥ C8/10. After it has been unscrewed, the fastener may be reused in new drill holes. However, a drilled hole shall not be reused after the fastener has been removed. Reusability of the fastener shall be checked prior to every use, both visually as well as with a checking gauge in accordance with installation parameters. Installed fasteners shall be checked for visible damage (for example due to corrosion) on an ongoing basis and replaced if required. The fastener may be used in cracked and uncracked concrete. The fastener is intended for temporary use in internal and external conditions.

Installation

JC2 Plus 10 and 14 is only intended for temporary application in a single drilled hole. After it has been removed, it may be reused in new drill holes. However, it may not be screwed into the same drilled hole for a second time. Prior to every reuse, the wear of the thread shall be verified with an appropriate checking gauge (CG+). The fastener shall only be reused under the condition that it will penetrate the sleeve only so far that it does not protrude at the rear of the sleeve. Screws which are visibly damaged, e.g. due to corrosion, shall not be reused. The fastener may be screwed in using an impact screw driver. To prevent the screw from spinning, the screw driver with a power output in the upper range shall be equipped with an automatic cut-off device, e.g. via a depth stop.

The fastener is installed correctly if

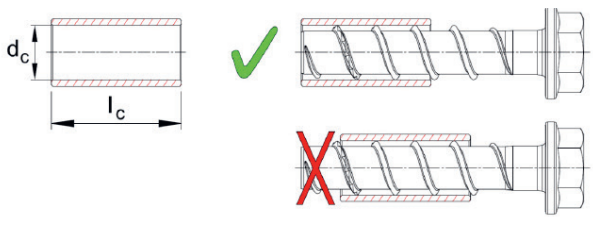
> the base plate (fixture) is screwed flush against the concrete without an intermediate layer,
> the fastener head is fully in contact with the base plate,
> the fastener cannot easily be turned further,
> the anchorage depth hnom is adhered to.

Anchor size			JC2 Plus 10			JC2 Plus 14		
Nominal anchorage depth	h_{nom}	[mm]	55	70	85	65	85	115
Design resistance for concrete with a compressive strength f_{ck} cylinder ≥ 8 N/mm²	F_{Rd} [1)]	[mm]	2.00	4.67	6.33	3.00	5.67	12.00
Design resistance for concrete with a compressive strength f_{ck} cylinder ≥ 12 N/mm²	F_{Rd} [1)]	[mm]	3.00	5.67	8.67	4.00	6.67	13.33
Design resistance for concrete with a compressive strength f_{ck} cylinder ≥ 16 N/mm²	F_{Rd} [1)]	[mm]	4.33	6.33	11.33	5.00	7.33	16.00
Design resistance for concrete with a compressive strength f_{ck} cylinder ≥ 16 N/mm²	F_{Rd} [1)]	[mm]	5.33	6.67	13.33	6.00	8.00	18.67

[1)] Design resistance incl. partial safety factor.

Checking gauge CG+

Gauge CG+ 10	
Gauge inner diameter d_c	12.1 mm
Length l_c	30 mm
Gauge CG+ 14	
Gauge inner diameter d_c	15.8 mm
Length l_c	40 [mm]





Delivery program: JC6

JC6-KB		Size	t_{fix}	ETA
	6	6x50	5	• •
		6x60	5/15	• •
		6x70	15/25	• •
		6x80	25/35	• •
	8	8x55	5	•
		8x70	5/20	•
		8x80	15/25	•
		8x100	35/50	•
	10	10x90	5/35	•
		10x100	15/45	•
		10x120	35/65	•
Stainless Steel A4, hardened tip, coated				

JC6-ST		Size	t_{fix}	ETA
	6	6x50	5	• •
		6x60	5/15	• •
		6x70	15/25	• •
		6x100	45/55	• •
Stainless Steel A4, hardened tip, coated				

JC6-FR		Size	t_{fix}	ETA
	6	6x50	5	• •
		6x60	5/15	• •
		6x80	25/35	• •
		6x100	45/55	• •
Stainless Steel A4, hardened tip, coated				

JC6-IT		Size	ETA
	6	6x50 M8/M10x30	• •
Stainless Steel A4, hardened tip, coated			

• Option 1 | • Part 6

Delivery program: JC2 Plus & JC2 Plus ZA

JC2-KB		Size	t_{fix}	ETA
	5	5x40	5	–
		5x50	5	–

JC2-KB Plus		Size	t_{fix}	ETA
	6	6x35	1	•
		6x45	5/10	•
		6x50	10/15	•
		6x60	5/20	• •
		6x70	15/30	• •
		6x80	25/40	• •
		6x100	45/60	• •
		6x120	65/80	• •
		6x140	85/100	• •
	8	8x55	5	•
		8x70	5/20	•
		8x80	15/30	•
		8x90	25/40	•
		8x100	35/50	•
		8x120	55/70	•
		8x140	75/90	•
		8x200	135/150	•
		8x240	175/190	•
	10	10x60	5	•
		10x70	15	•
		10x80	10/25	•
		10x90	5/35	•
		10x100	15/45	•
		10x120	35/65	•
		10x140	55/85	•
		10x160	75/105	•
		10x200	115/145	•
		10x240	155/185	•
	14	14x75 SW21	10	•
		14x100 SW21	15/35	•
		14x130 SW21	15/65	•
		14x150 SW21	35/85	•
		14x80 SW24 *	15	•
		14x110 SW24 *	25/45	•
		14x130 SW24 *	15/65	•

Zinc plated or Zinc alloy coating, * = only Zinc plated

JC2-ST		Size	t_{fix}	ETA
	5	5x50	5	–
		5x75	30	–
		5x100	55	–

JC2-ST Plus		Size	t_{fix}	ETA
	6	6x45	5/10	•
		6x50	10/15	•
		6x60	5/20	• •
		6x80	25/40	• •
		6x100	45/60	• •
		6x120	65/80	• •
	8	8x60	10	•
		8x80	15/30	•
		8x100	35/50	•
	10	10x70	15	•
		10x90	5/35	•
		10x100	15/45	•
		10x120	35/65	•

Zinc plated, Zinc alloy coating

JC2-FR Plus		Size	t_{fix}	ETA
	6	6x35	1	•
		6x45	5/10	•
		6x60	5/25	• •

Zinc plated, Low pan head

JC2 Plus 10 & JC2 Plus 14 CG+ checking gauge for reusability



• Option 1 | • Part 6

Delivery program: JC2 Plus & JC2 Plus ZA

JC2-FR Plus (FL)		Size	t_{fix}	ETA
	6	6x40	5	•
		6x60	5/25	• •

Zinc plated, Zinc alloy coating. Flat panhead

JC2-ET Plus		Size	ETA
	6	6x35 M8x16	•
		6x60 M8x16	•

Zinc plated

JC2-IT Plus		Size	ETA
	6	6x35 M8/M10x30 *	•
		6x45 M8/M10x30	•
		6x60 M8/M10x30	• •

Zinc plated, * = Zinc alloy coating

• Option 1 | • Part 6

Accessories and tools

Hammer drill SDS plus®

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



Blow-out pump

> For cleaning the drill hole in concrete and masonry



Socket wrench

> For the installation of concrete screws
> For processing concrete screws with hexalobular socket drive
> For use with torque wrench
> For use with impact wrench



Torque wrench 1/2" 10-50 Nm

> Trigger accuracy ± 3 % acc. to DIN EN ISO 6789-1:2017-07
> Length: 360 mm
> Scale division: 0.25 Nm



Torque wrench 1/2“ 60-300 Nm

> Trigger accuracy ± 3 % acc. to DIN EN ISO 6789-1:2017-07
> Length: 595 mm
> Scale division: 1 Nm





EJOT ANCHOR FIX®

Anchor dimensioning made easy

With the brand 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.

In addition, with the new software version, a design for fire and seismic load cases is possible. EJOT ANCHOR FIX® still allows you to directly input data from site pull-out tests and their evaluation in accordance with regulations.

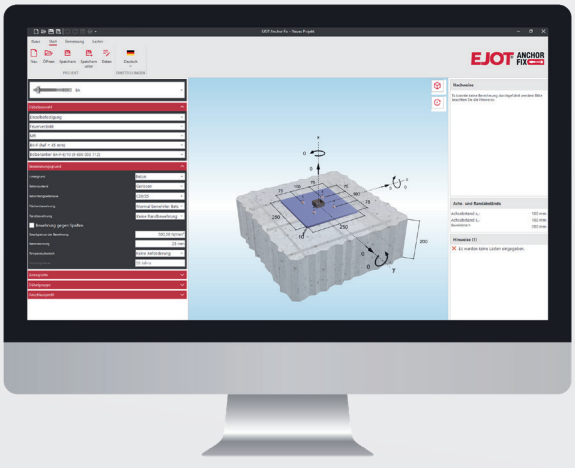
The targeted selection of the calculation methods for single vs. multiple fastening of various products offers the user application safety. Also with planning reliability on the part of the user is achieved by the output of individual quantity requirements for chemical anchors and this also with variable installation depths.

All additional documents such as approvals and product data sheets can be easily accessed, directly via the software.

That´s new:

- Geometry Editor: Allows user defined base plate and anchor positions
- Annular gap filling: Required to transfer actions on base plates with more than 4 anchors (with an edge distance)
- Improved C2 seismic resistance for BA Plus
- New Multifix HSF hybrid resin
- Uprated data and ETAs

Try it out – for free...



EJOT ANCHOR FIX® can be downloaded here:
www.ejot.com/software-anchorfix

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