

Public-law institution jointly founded by the  
federal states and the Federation

European Technical Assessment Body  
for construction products



## European Technical Assessment

**ETA-24/0825**  
**of 27 January 2025**

English translation prepared by DIBt - Original version in German language

### General Part

Technical Assessment Body issuing the  
European Technical Assessment:

Trade name of the construction product

Product family  
to which the construction product belongs

Manufacturer

Manufacturing plant

This European Technical Assessment  
contains

This European Technical Assessment is  
issued in accordance with Regulation (EU)  
No 305/2011, on the basis of

Deutsches Institut für Bautechnik

JCP Drop-in Anchor ADB / DSS / ADSS

Mechanical fastener for use in concrete

Hexstone Ltd. T/A JCP Construction Products  
Opal Way  
Stone Business Park, Stone  
Staffordshire ST 15 0SW  
GROSSBRITANNIEN

Plant 2, Germany

16 pages including 3 annexes which form an integral part  
of this assessment

EAD 330232-01-0601, Edition 05/2021

The European Technical Assessment is issued by the Technical Assessment Body in its official language. Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and shall be identified as such.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full. However, partial reproduction may only be made with the written consent of the issuing Technical Assessment Body. Any partial reproduction shall be identified as such.

This European Technical Assessment may be withdrawn by the issuing Technical Assessment Body, in particular pursuant to information by the Commission in accordance with Article 25(3) of Regulation (EU) No 305/2011.

## Specific Part

### 1 Technical description of the product

The JCP Drop-in Anchor ADB / DSS / ADSS is a fastener made of galvanized steel, stainless steel or high corrosion resistant steel which is placed into a drilled hole and anchored by deformation-controlled expansion.

The product description is given in Annex A.

### 2 Specification of the intended use in accordance with the applicable European Assessment Document

The performances given in Section 3 are only valid if the fastener is used in compliance with the specifications and conditions given in Annex B.

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the fastener of at least 50 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

### 3 Performance of the product and references to the methods used for its assessment

#### 3.1 Mechanical resistance and stability (BWR 1)

Essential characteristic	Performance
Characteristic resistance to tension load (static and quasi-static loading) Method A	See Annex B2, C1 to C2
Characteristic resistance to shear load (static and quasi-static loading)	See Annex C3 to C4
Displacements	See Annex C5
Characteristic resistance and displacements for seismic performance category C1 and C2	No performance assessed

#### 3.2 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire	Class A1
Resistance to fire	No performance assessed

#### 3.3 Aspects of durability

Essential characteristic	Performance
Durability	See Annex B1

**4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base**

In accordance with the European Assessment Document EAD 330232-01-0601 the applicable European legal act is: [96/582/EC].

The system to be applied is: 1

**5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable European Assessment Document**

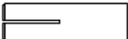

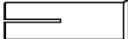

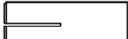

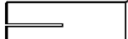

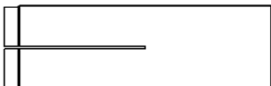



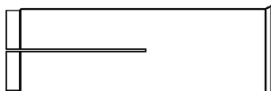

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with Deutsches Institut für Bautechnik.

Issued in Berlin on 27 January 2025 by Deutsches Institut für Bautechnik

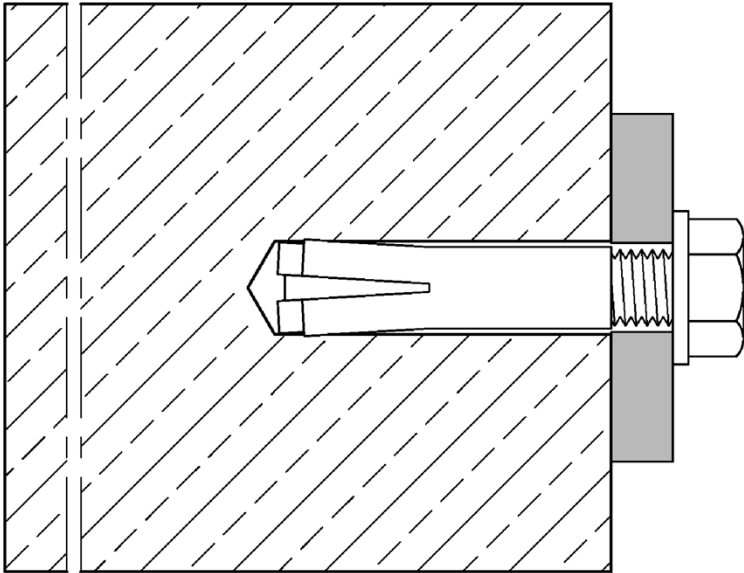
Dipl.-Ing. Beatrix Wittstock  
Head of Section

*beglaubigt:*  
Baderschneider

JCP Drop-in Anchor ADB / DSS / ADSS

Anchor sizes and variations					
Drop-in Anchor ADB / DSS (without shoulder)			Drop-in Anchor ADB / ADSS (with shoulder) SH		
M6x30			M6x30		
M8x30			M8x30		
M8x40			M8x40		
M10x40			M10x30 (zinc plated)		
M12x50			M10x40		
M12x80			M12x50		
M16x65			M12x80		
M16x80			M16x65		
M20x80			M16x80		

Installation situation



JCP Drop-in Anchor ADB / DSS / ADSS	Annex A1
Product description Anchor sizes and variations / Installation situation	

**Table A1: Material**

Part	Designation	(ADB)	(DSS, ADSS)	(DSS HCR, ADSS HCR)
		Steel, zinc plated	Stainless steel A4	High corrosion resistant steel HCR
1	Anchor sleeve	Cold formed or machining steel, galvanized, EN ISO 4042:2018	Stainless steel (e.g. 1.4401, 1.4404, 1.4571) EN 10088:2014, EN ISO 3506:2020	Stainless steel, 1.4529, 1.4565, EN 10088:2014, EN ISO 3506:2020
2	Cone	Cold formed or machining steel	Stainless steel (e.g. 1.4401, 1.4404, 1.4571) EN 10088:2014	

**Requirements on the fastening screw or the threaded rod and nut according to the engineering documents:**

- Minimum screw-in depth  $L_{smin}$  see Table B1
- The length of screw or the threaded rod shall be determined depending on the thickness of fixture  $t_{fix}$ , available thread length  $L_{th}$  (= maximum screw-in depth) and the minimum screw-in depth  $L_{smin}$ .
- $A_5 > 8$  % Ductility
- Materials
  - **Steel, zinc plated**, property class 4.6 / 4.8 / 5.6 / 5.8 or 8.8 according to EN ISO 898-1:2013 or EN ISO 898-2:2012
  - **Stainless steel A4** or **high corrosion resistant steel HCR**, property class 70 or 80 according to EN ISO 3506:2020

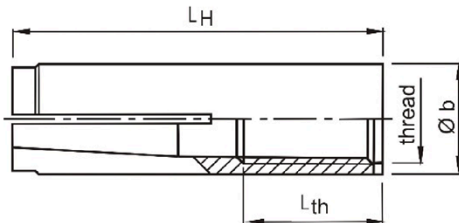
**JCP Drop-in Anchor ADB / DSS / ADSS**

**Product description**  
Materials / Requirements

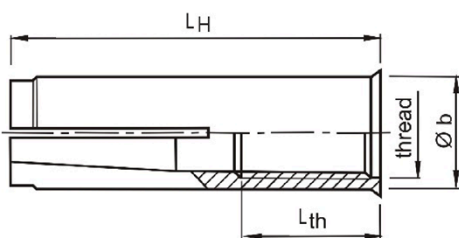
**Annex A2**

## Anchor sleeve

### Anchor version without shoulder



### Anchor version with shoulder (SH)



**Marking:** see Table A2

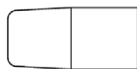
e.g.: E M8x40

- identifying mark of manufacturing plant
- E anchor identity (version without shoulder)
- ES anchor identity (version with shoulder)
- M8 size of thread
- 40 anchorage depth

additional marking

- A4 stainless steel
- HCR high corrosion resistant steel

### Cone



M6x30 and M10x30



remaining sizes

**Table A2: Dimensions and marking**

Anchor size	Anchor sleeve				Marking			Cone
	thread	Ø b	L <sub>H</sub>	L <sub>th</sub>	Version (without shoulder)	Version SH (with shoulder)	alternative	
M6x30	M6	8	30	13	E M6x30	ES M6x30	E M6	
M8x30	M8	10	30	13	E M8x30	ES M8x30	E M8	
M8x40	M8	10	40	20	E M8x40	ES M8x40	E M8x40	
M10x30	M10	12	30	12	-	ES M10x30	E M10x30	
M10x40	M10	12	40	15	E M10x40	ES M10x40	E M10	
M12x50	M12	15	50	18	E M12x50	ES M12x50	E M12	
M12x80	M12	15	80	45	E M12x80	ES M12x80	E M12x80	
M16x65	M16	19,7	65	23	E M16x65	ES M16x65	E M16	
M16x80	M16	19,7	80	38	E M16x80	ES M16x80	E M16x80	
M20x80	M20	24,7	80	34	E M20x80	-	E M20	

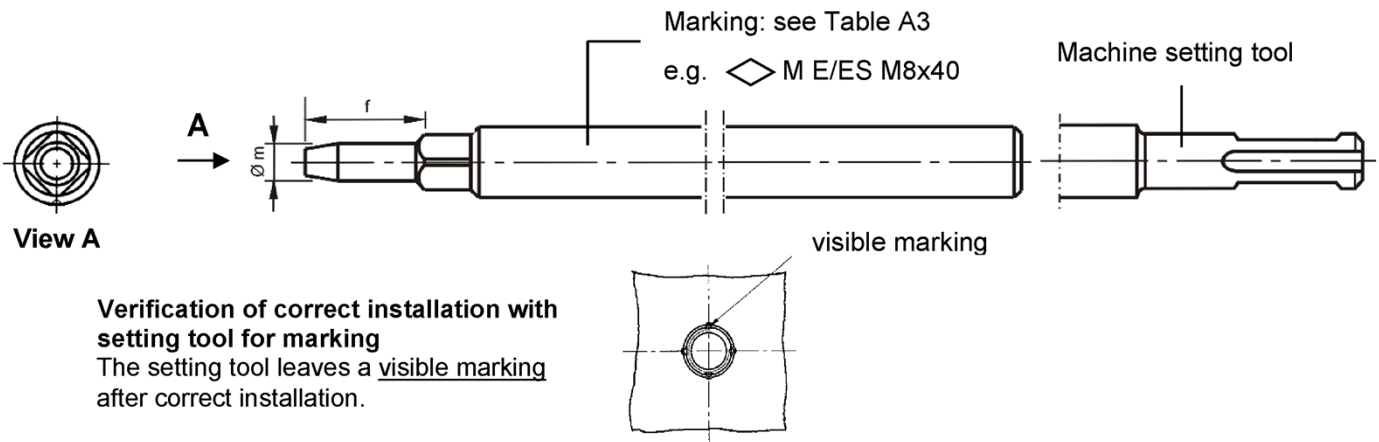
Dimensions in mm

## JCP Drop-in Anchor ADB / DSS / ADSS

**Product description**  
Dimensions and marking

**Annex A3**

### Setting tool for marking



### Setting tool

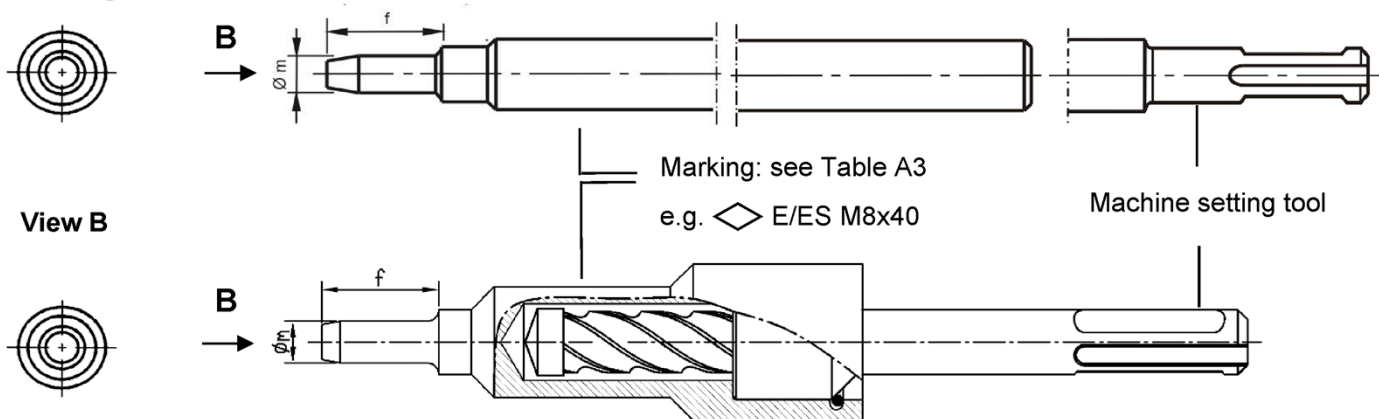


Table A3: Dimensions and marking of setting tools

Anchor size	Ø m	f	Setting tool for marking		Setting tool	
			Marking	alternative	Marking	alternative
M6x30	4,9	17	◇ M E/ES M6x30	◇ M E M6	◇ E/ES M6x30	◇ E M6
M8x30	6,4	18	◇ M E/ES M8x30	◇ M E M8	◇ E/ES M8x30	◇ E M8
M8x40	6,4	28	◇ M E/ES M8x40	◇ M E M8x40	◇ E/ES M8x40	◇ E M8x40
M10x30	8,0	18	◇ M ES M10x30	◇ M E M10x30	◇ ES M10x30	◇ E M10x30
M10x40	8,0	24	◇ M E/ES M10x40	◇ M E M10	◇ E/ES M10x40	◇ E M10
M12x50	10,0	30	◇ M E/ES M12x50	◇ M E M12	◇ E/ES M12x50	◇ E M12
M12x80	10,0	60	◇ M E/ES M12x80	◇ M E M12x80	◇ E/ES M12x80	◇ E M12x80
M16x65	13,5	36	◇ M E/ES M16x65	◇ M E M16	◇ E/ES M16x65	◇ E M16
M16x80	13,5	51	◇ M E/ES M16x80	◇ M E M16x80	◇ E/ES M16x80	◇ E M16x80
M20x80	16,5	50	◇ M E M20x80	◇ M E M20	◇ E M20x80	◇ E M20

Dimensions in mm

### JCP Drop-in Anchor ADB / DSS / ADSS

Product description  
Setting tools / Dimensions and marking

Annex A4



Specifications of intended use

Anchorage subject to:

- Static and quasi-static loads

Base materials:

- Compacted, reinforced or unreinforced normal weight concrete, without fibres according to EN 206:2013 + A1:2016
- Uncracked concrete
- Strength classes C20/25 to C50/60 according to EN 206:2013 + A1:2016

Use conditions (Environmental conditions):

- Structures subject to dry internal conditions (all materials)
- For all other conditions applies:  
Use according to EN 1993-1-4:2015 corresponding to corrosion resistance class CRC according to Annex A2, Table A1:
  - Stainless steel A4: CRC III
  - High corrosion resistant steel HCR: CRC V
- Anchor types M6x30 A4 and M8x30 A4 only for dry internal exposure

Design:

- Anchorages are designed under the responsibility of an engineer experienced in anchorages and concrete work.
- Verifiable calculation notes and drawings are prepared taking account of the loads to be anchored. The position of the anchor is indicated on the design drawings (e.g. position of the anchor relative to reinforcement or to supports, etc.).
- The strength class and the length of the fastening screw or threaded rod shall be defined by the designing engineer
- Design of fastenings according EN 1992-4:2018 (and TR 055, if necessary)
- Anchor sizes M6x30, M8x30 and M10x30 for statically indeterminate structural components only, when in case of failure, the load can be distributed to other fasteners.

Installation:

- Anchor installation in accordance with the manufacturer’s specifications and drawings and using the appropriate tools
- Drill hole by hammer drilling or vacuum drilling

JCP Drop-in Anchor ADB / DSS / ADSS	Annex B1
Intended use Specifications	

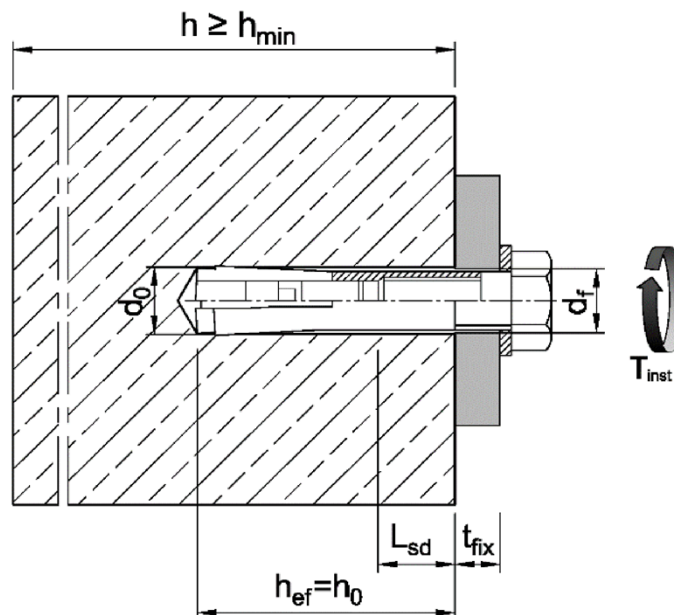
**Table B1: Installation parameters**

Anchor size		M6x30	M8x30	M8x40	M10x30	M10x40	M12x50	M12x80	M16x65	M16x80	M20x80
Depth of drill hole	$h_0 =$ [mm]	30 <sup>1)</sup>	30 <sup>1)</sup>	40	30 <sup>1)</sup>	40	50	80	65	80	80
Drill hole diameter	$d_0 =$ [mm]	8	10	10	12	12	15	15	20	20	25
Cutting diameter of drill bit	$d_{cut} \leq$ [mm]	8,45	10,45	10,45	12,5	12,5	15,5	15,5	20,55	20,55	25,55
Max. installation torque <sup>2)</sup>	$T_{inst} \leq$ [Nm]	4	8	8	15	15	35	35	60	60	120
Diameter of clearance hole in the fixture	$d_f \leq$ [mm]	7	9	9	12	12	14	14	18	18	22
Thread length	$L_{th}$ [mm]	13	13	20	12	15	18	45	23	38	34
Minimum screw-in depth	$L_{sdmin}$ [mm]	7	9	9	10	11	13	13	18	18	22
<b>Steel, zinc plated</b>											
Minimum thickness of member	$h_{min}$ [mm]	100	100	100	120	120	130	130	160	160	200
Minimum spacing	$s_{min}$ [mm]	55	60	80	100	100	120	120	150	150	160
Minimum edge distance	$c_{min}$ [mm]	95	95	95	115	135	165	165	200	200	260
<b>Stainless steel A4, HCR</b>											
Minimum thickness of member	$h_{min}$ [mm]	100	100	100	- <sup>3)</sup>	130	140	140	160	160	250
Minimum spacing	$s_{min}$ [mm]	50	60	80	- <sup>3)</sup>	100	120	120	150	150	160
Minimum edge distance	$c_{min}$ [mm]	80	95	95	- <sup>3)</sup>	135	165	165	200	200	260

<sup>1)</sup> Only for statically indeterminate non-structural systems (multiple use) according to EN 1992-4:2018, in dry internal conditions.

<sup>2)</sup> If the screw or threaded rod is otherwise secured against unscrewing, the torque can be omitted

<sup>3)</sup> Anchor version is not part of the ETA

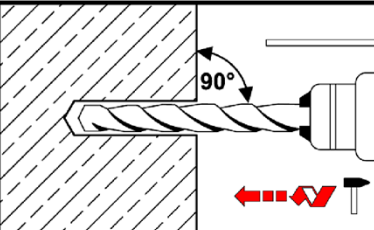
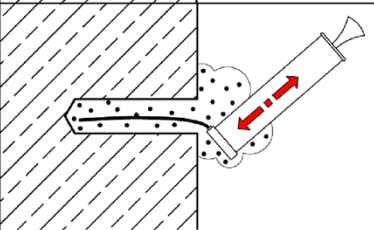
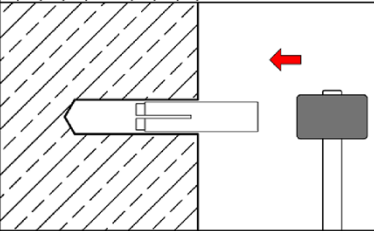
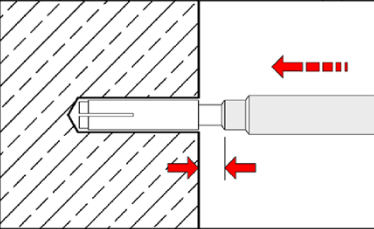
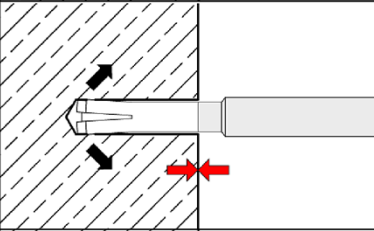
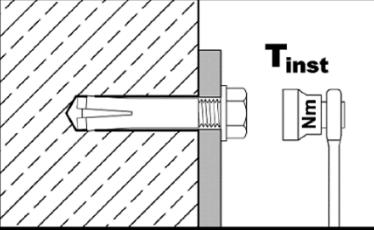


**JCP Drop-in Anchor ADB / DSS / ADSS**

**Intended use**  
Installation parameters

**Annex B2**

Installation instructions

1		Drill hole perpendicular to concrete surface. Using vacuum drill bit proceed with step 3.
2		Blow out dust. Alternatively, vacuum clean down to the bottom of the hole.
3		Drive in anchor.
4		Drive in cone by using setting tool.
5		Shoulder of setting tool must fit on anchor rim.
6		Turn in screw or threaded rod with nut, observe minimum screw-in depth (see Annex B2). Apply installation torque $T_{inst}$ .

JCP Drop-in Anchor ADB / DSS / ADSS

Intended use  
Installation instructions

Annex B3

**Table C1: Characteristic values for tension loads, zinc plated steel**

Anchor size			M6x30 <sup>1)</sup>	M8x30 <sup>1)</sup>	M8x40	M10x30 <sup>1)</sup>	M10x40	M12x50	M12x80	M16x65 M16x80	M20x80			
Installation factor		$\gamma_{inst}$	[-]		1,2									
Steel failure														
Characteristic resistance	property class	4.6	$N_{Rk,s}$	[kN]	8,0	14,6		23,2		33,7		62,8	98,0	
		4.8			8,0	14,6		18,0	20,2	33,7		62,8	98,0	
		5.6			10,0	18,3		18,0	20,2	42,1		78,3	122,4	
		5.8			10,0	17,6	18,3	18,0	20,2	40,2	42,1	67,1	106,4	
		8.8			15,0	17,6	19,9	18,0	20,2	40,2	43,0	67,1	106,4	
Partial factor	property class	4.6	$\gamma_{Ms}^{(2)}$	[-]	2,0									
		5.6			2,0		1,5		2,0					
		4.8			1,5								1,6	
		5.8												
		8.8												
Pull-out failure														
Characteristic resistance in concrete C20/25		$N_{Rk,p}$	[kN]	8,1	8,1	9,0	8,1	12,4	17,4	17,4	25,8	35,2		
Increasing factor $N_{Rk,p} = \psi_c \cdot N_{Rk,p} \text{ (C20/25)}$		$\psi_c$	[-]	$\left(\frac{f_{ck}}{20}\right)^{0,5}$		$\left(\frac{f_{ck}}{20}\right)^{0,3}$	$\left(\frac{f_{ck}}{20}\right)^{0,5}$							
Splitting														
Characteristic resistance in concrete C20/25		$N^0_{Rk,sp}$	[kN]	$\min \left( N_{Rk,p} ; N^0_{Rk,c} \right)$										
Characteristic edge distance		$C_{cr,sp}$	[mm]	95	95	95	115	135	165		200	260		
Characteristic spacing		$S_{cr,sp}$	[mm]	$2 \cdot C_{cr,sp}$										
Concrete cone failure														
Effective anchorage depth		$h_{ef}$	[mm]	30	30	40	30	40	50	80	65 80 <sup>3)</sup>	80		
Characteristic edge distance		$C_{cr,N}$	[mm]	$1,5 h_{ef}$										
Characteristic spacing		$S_{cr,N}$	[mm]	$2 \cdot C_{cr,N}$										
Factor	uncracked concrete	$k_{ucr,N}$	[-]	11,0										
	cracked concrete	$k_{cr,N}$	[-]	No performance assessed										

<sup>1)</sup> Only for statically indeterminate non-structural systems (multiple use) according to EN 1992-4:2018, in dry internal conditions.

<sup>2)</sup> In absence of other national regulations

<sup>3)</sup> For M16x80

**JCP Drop-in Anchor ADB / DSS / ADSS**

**Performance**  
Characteristic values for **tension loads, zinc plated steel**

**Annex C1**

**Table C2: Characteristic values for tension loads, stainless steel A4, HCR**

Anchor size			M6x30 <sup>1)</sup>	M8x30 <sup>1)</sup>	M8x40	M10x40	M12x50 M12x80	M16x65 M16x80	M20x80	
Installation factor		$\gamma_{inst}$	[-]	1,0						
Steel failure										
Characteristic resistance (property class 70)		$N_{Rk,s}$	[kN]	14,1	23,3	29,4	50,2	83,8	133,0	
Characteristic resistance (property class 80)		$N_{Rk,s}$	[kN]	17,5	23,3	29,4	50,2	83,8	133,0	
Partial factor		$\gamma_{Ms}^{2)}$	[-]	1,87						
Pull-out failure										
Characteristic resistance in concrete C20/25		$N_{Rk,p}$	[kN]	8,1	8,1	11,0	12,4	17,4	25,8	35,2
Increasing factor $N_{Rk,p} = \psi_c \cdot N_{Rk,p} \text{ (C20/25)}$		$\psi_c$	[-]	$\left(\frac{f_{ck}}{20}\right)^{0,5}$		$\left(\frac{f_{ck}}{20}\right)^{0,3}$	$\left(\frac{f_{ck}}{20}\right)^{0,5}$			
Splitting failure										
Characteristic resistance in concrete C20/25		$N^0_{Rk,sp}$	[kN]	min ( $N_{Rk,p}$ ; $N^0_{Rk,c}$ )						
Edge distance		$c_{cr,sp}$	[mm]	80	95	95	135	165	200	260
Spacing		$s_{cr,sp}$	[mm]	$2 \cdot c_{cr,sp}$						
Concrete cone failure										
Effective anchorage depth		$h_{ef}$	[mm]	30	30	40	40	50 80 <sup>3)</sup>	65 80 <sup>3)</sup>	80
Edge distance		$c_{cr,N}$	[mm]	$1,5 h_{ef}$						
Spacing		$s_{cr,N}$	[mm]	$2 \cdot c_{cr,N}$						
Factor	uncracked concrete	$k_{ucr,N}$	[-]	11,0						
	cracked concrete	$k_{cr,N}$	[-]	No performance assessed						

<sup>1)</sup> Only for statically indeterminate non-structural systems (multiple use) according to EN 1992-4:2018, in dry internal conditions

<sup>2)</sup> In absence of other national regulations

<sup>3)</sup> For M12x80 and M16x80

**JCP Drop-in Anchor ADB / DSS / ADSS**

**Performance**  
Characteristic values for **tension loads, stainless steel A4, HCR**

**Annex C2**

**Table C3: Characteristic values for shear loads, zinc plated steel**

Anchor size				M6x30 <sup>1)</sup>	M8x30 <sup>1)</sup>	M8x40	M10x30 <sup>1)</sup>	M10x40	M12x50	M12x80	M16x65 M16x80	M20x80		
Steel failure without lever arm														
Characteristic resistance	property class	4.6	V <sup>0</sup> <sub>Rk,s</sub>	[kN]	4,0	7,3	11,6	9,6	16,8		31,3	49,0		
		4.8			4,0	7,3	10,1	10,1	16,9		31,3	49,0		
		5.6			5,0	9,1	10,1	9,6	21,1		39,2	61,2		
		5.8			5,0	6,9	10,1	7,2	19,4	21,1	33,5	53,2		
		8.8			5,0	6,9	10,1	7,2	19,4	21,5	33,5	53,2		
Partial factor	property class	4.6	γ <sub>Ms</sub> <sup>2)</sup>	[-]	1,67									
		5.6			1,67		1,25	1,67						
		4.8			1,25								1,33	
		5.8												
		8.8												
Factor of ductility				k <sub>7</sub>	[-]	1,0								
Steel failure with lever arm														
Characteristic bending resistance	property class	4.6	M <sup>0</sup> <sub>Rk,s</sub>	[Nm]	6,1	15	30		52		133	259		
		4.8			7,6	19	37		65		166	324		
		5.6			12	30	59	60	105	266	519			
		5.8												
Partial factor	property class	4.6	γ <sub>Ms</sub> <sup>2)</sup>	[-]	1,67									
		5.6			1,25									
		4.8												
		5.8												
		8.8												
Factor of ductility				k <sub>7</sub>	[-]	1,0								
Concrete pry-out failure														
Pry-out factor				k <sub>8</sub>	[-]	1,0			1,5	2,0				
Concrete edge failure														
Effective length of fastener in shear loading				l <sub>f</sub>	[mm]	30	30	40	30	40	50	80	65 80 <sup>3)</sup>	80
Outside diameter of fastener				d <sub>nom</sub>	[mm]	8	10		12		15		20	25

<sup>1)</sup> Only for statically indeterminate non-structural systems (multiple use) according to EN 1992-4:2018, in dry internal conditions

<sup>2)</sup> In absence of other national regulations

<sup>2)</sup> For M16x80

## JCP Drop-in Anchor ADB / DSS / ADSS

**Performance**  
Characteristic values for **shear loads, zinc plated steel**

**Annex C3**

**Table C4: Characteristic values for shear loads, stainless steel A4, HCR**

Anchor size			M6x30 <sup>1)</sup>	M8x30 <sup>1)</sup>	M8x40	M10x40	M12x50	M12x80	M16x65	M16x80	M20x80
Steel failure without lever arm											
Characteristic resistance (property class 70)	V <sup>0</sup> <sub>Rk,s</sub>	[kN]	7,0	10,6		13,4	25,1		41,9		66,5
Characteristic resistance (property class 80)	V <sup>0</sup> <sub>Rk,s</sub>	[kN]	8,7	10,6		13,4	25,1		41,9		66,5
Partial factor	γ <sub>Ms</sub> <sup>2)</sup>	[-]	1,56								
Factor of ductility	k <sub>7</sub>	[-]	1,0								
Steel failure with lever arm											
Characteristic bending resistance (property class 70)	M <sup>0</sup> <sub>Rk,s</sub>	[Nm]	11	26		52	92		233		454
Partial factor	γ <sub>Ms</sub> <sup>2)</sup>	[-]	1,56								
Characteristic bending resistance (property class 80)	M <sup>0</sup> <sub>Rk,s</sub>	[Nm]	12	30		60	105		266		519
Partial factor	γ <sub>Ms</sub> <sup>2)</sup>	[-]	1,33								
Factor of ductility	k <sub>7</sub>	[-]	1,0								
Concrete pry-out failure											
Pry-out factor	k <sub>8</sub>	[-]	1,0	1,7				2,0			
Concrete edge failure											
Effective length of fastener in shear loading	l <sub>f</sub>	[mm]	30	30	40	40	50	80	65	80	80
Outside diameter of fastener	d <sub>nom</sub>	[mm]	8	10		12	15		20		25

<sup>1)</sup> Only for statically indeterminate non-structural systems (multiple use) according to EN 1992-4:2018, in dry internal conditions

<sup>2)</sup> In absence of other national regulations

**JCP Drop-in Anchor ADB / DSS / ADSS**

**Performance**  
Characteristic values for **shear loads, stainless steel A4, HCR**

**Annex C4**



**Table C5: Displacements under tension loads**

Anchor size			M6x30 <sup>1)</sup>	M8x30 <sup>1)</sup>	M8x40	M10x30 <sup>1)</sup>	M10x40	M12x50 M12x80	M16x65 M16x80	M20x80
Steel, zinc plated										
Tension load in uncracked concrete	N	[kN]	3	3	3,6	3,3	4,8	6,4	10	14,8
Displacements	δ <sub>N0</sub>	[mm]	0,24							
	δ <sub>N∞</sub>	[mm]	0,36							
Stainless steel A4 / HCR										
Tension load in uncracked concrete	N	[kN]	4	4	4,3	- <sup>2)</sup>	6,1	8,5	12,6	17,2
Displacements	δ <sub>N0</sub>	[mm]	0,12							
	δ <sub>N∞</sub>	[mm]	0,24							

<sup>1)</sup> Only for statically indeterminate non-structural systems (multiple use) according to EN 1992-4:2018, in dry internal conditions

<sup>2)</sup> Anchor version is not part of the ETA

**Table C6: Displacements under shear loads**

Anchor size			M6x30 <sup>1)</sup>	M8x30 <sup>1)</sup>	M8x40	M10x30 <sup>1)</sup>	M10x40	M12x50 M12x80	M16x65 M16x80	M20x80
<b>Steel, zinc plated</b>										
Shear load in uncracked concrete	V	[kN]	2	4	4	5,7	4,0	11,3	18,8	32,2
Displacements	$\delta_{V0}$	[mm]	0,9	0,9	1,0	1,5	0,6	1,2	1,2	1,6
	$\delta_{V\infty}$	[mm]	1,3	1,3	1,5	2,3	0,9	1,9	1,9	2,4
<b>Stainless steel A4 / HCR</b>										
Shear load in uncracked concrete	V	[kN]	3,5	5,2	5,2	- <sup>2)</sup>	6,5	11,5	19,2	30,4
Displacements	$\delta_{V0}$	[mm]	1,9	1,1	0,7	- <sup>2)</sup>	1,0	1,7	2,4	2,6
	$\delta_{V\infty}$	[mm]	2,8	1,6	1,0	- <sup>2)</sup>	1,5	2,6	3,6	3,8

<sup>1)</sup> Only for statically indeterminate non-structural systems (multiple use) according to EN 1992-4:2018, in dry internal conditions

<sup>2)</sup> Anchor version is not part of the ETA

**JCP Drop-in Anchor ADB / DSS / ADSS**

**Performance**  
Displacements

**Annex C5**