



INFORMATION

ETA Drop-In Anchors are deformation controlled fixings that are available in bright zinc plated carbon steel or A4-316 stainless steel. These products are suitable for both structural applications in non-cracked concrete or for multiple use non-structural applications in cracked and non cracked concrete. The specific design gives flexibility of using the anchor for applications with the embedment depths greater than 30mm in solid concrete. Internal thread suitable for bolts or threaded studs. A4 Stainless Steel version is ideal for outdoor applications with high corrosion resistance.

BASE MATERIAL

- Solid Cracked Concrete C20/25 To C50/60
- Solid Non-Cracked Concrete C20/25 To C50/60

FEATURES

- Deformation-controlled Expansion
- Fast And Secure Installation
- Reaction To Fire Class A1
- Fire Resistant Loading
- Permanent Socket To Allow Removal And Replacement Of Fixture
- Use Conditions: Check The ETA

APPROVALS

European Technical Assessment



ETA-24/0825
Option 7 Structural Applications

ETA-18/0213
Multiple Use Non-Structural Applications



Software



[Click here to download the software](#)

RELATED PRODUCTS



SDS+ Drill Bits



Stop Drill Bits



Drop In Anchor Setting Punch



Hole Cleaning Pump

BOP1



Lipped Drop-In Anchors
Bright Zinc Plated

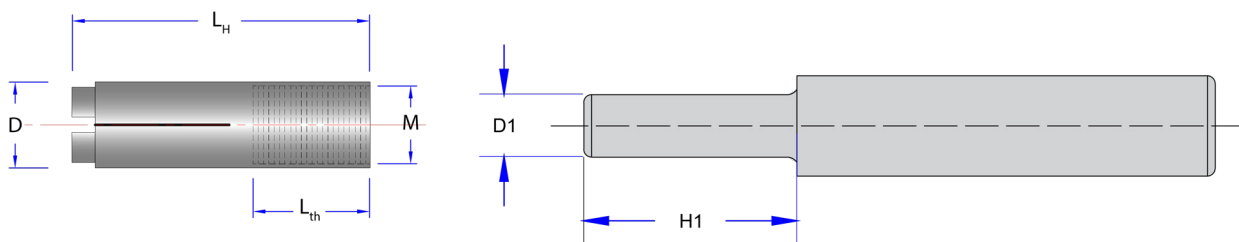


Lipped Drop-In Anchors
A4 Stainless Steel





RANGE DATA



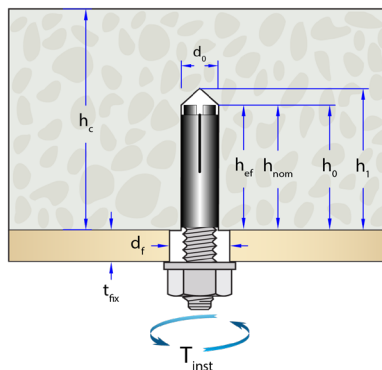
RANGE DATA

Part Number	Internal Threaded Diameter (M)	Anchor Outside Diameter (D)	Anchor Length (L_H)	Internal Threaded Length (L_{th})	Setting punch dimensions	
					D1	H1
	mm	mm	mm	mm	mm	mm
ADB Drop In (Zinc Plated 5µm)						
ADBM08	8	10	30	13	6.4	18
ADBM10	10	12	40	15	8	24
ADBM12	12	15	50	18	10	30
ADBM16	16	20	65	23	13.5	36
DSS Drop In (Stainless Steel A4)						
DSSM06	6	8	30	13	4.9	17
DSSM08	8	10	30	13	6.4	18
DSSM10	10	12	40	15	8	24
DSSM12	12	15	50	18	10	30
DSSM16	16	20	65	23	13.5	36





INSTALLATION INTO CONCRETE

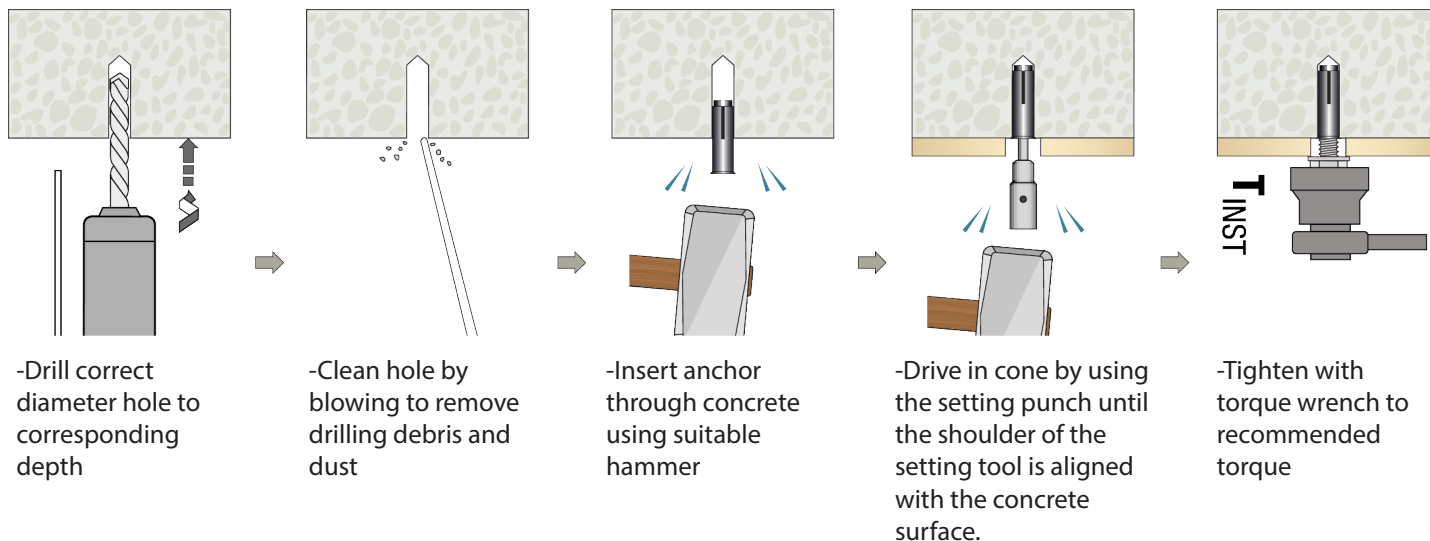


RANGE DATA

Part Number	Drill Hole Diameter (d_0)	Depth of Drill Hole (h_0)	Embedment Depth (h_{nom})	Minimum Screw-In Depth (L_{smin})	Fixture Clearance Hole (d_f)	Minimum Member Thickness (h_{min})	Minimum Spacing (s_{min})	Minimum Edge Distance (c_{min})	Tightening Torque (T_{inst})
	mm	mm	mm	mm	mm	mm	mm	mm	Nm
ADB Drop In (Zinc Plated 5µm)									
ADBM08	10	30	30	9	9	100	60	95	8
ADBM10	12	40	40	11	12	120	100	135	15
ADBM12	15	50	50	13	14	130	120	165	35
ADBM16	20	65	65	18	18	160	150	200	60
DSS Drop In (Stainless Steel A4)									
DSSM06	8	30	30	13	7	100	50	80	4
DSSM08	10	30	30	9	9	100	60	95	8
DSSM10	12	40	40	11	12	130	100	135	15
DSSM12	15	50	50	13	14	140	120	165	35
DSSM16	20	65	65	18	18	160	150	200	60

INSTALLATION INSTRUCTIONS

Click on the QR code or scan it to watch the video





PERFORMANCE DATA FOR STRUCTURAL APPLICATIONS (NON-CRACKED SOLID CONCRETE)

Performance Data* (Non-Cracked Concrete C20/25)								
Internal threaded Diameter (M)	Overall Embedment Depth ($h_{nom}=h_{ef}$)	Minimum Concrete Thickness (h_{min})	Characteristic Resistance		Design Resistance		Recommended Resistance	
			Tensile (N_{Rk})	Shear (V_{Rk})	Tensile (N_{Rd})	Shear (V_{Rd})	Tensile (N_{Rec})	Shear (V_{Rec})
mm	mm	mm	kN	kN	kN	kN	kN	kN
Zinc Plated Steel Grade 4.6								
8**	30	100	8.08	7.3	4.4	4.3	3.2	3.1
10	40	120	12.4	9.6	6.9	5.7	4.9	4.1
12	50	130	17.3	16.8	9.6	10	6.9	7.1
16	65	160	25.7	31.3	14.3	18.7	10.2	13.3
Zinc Plated Steel Grade 5.8								
8**	30	100	8	8	4.4	5.3	3.2	3.8
10	40	120	12.4	9.6	6.9	5.7	4.9	4.1
12	50	130	17.3	19.4	9.6	15.5	6.9	11
16	65	160	25.7	33.5	14.3	25.1	10.2	17.9
Zinc Plated Steel Grade 8.8								
8**	30	100	8	8	4.4	5.3	3.2	3.8
10	40	120	12.4	9.6	6.9	5.7	4.9	4.1
12	50	130	17.3	19.4	9.6	15.5	6.9	11
16	65	160	25.7	33.5	14.3	25.1	10.2	17.9
Stainless Steel Grade A4-316 Class 70								
6**	30	100	8	7	5.3	4.4	3.8	3.2
8**	30	100	8	10.6	5.3	6.7	3.8	4.8
10	40	120	12.4	13.4	8.2	8.5	5.9	6.1
12	50	130	17.4	25.1	11.6	16	8.2	11.4
16	65	160	25.7	42	17.1	26.9	12.2	19.2

** Use is restricted to anchorage of indeterminate structural components and subject to internal exposure conditions.

For variations in structure thickness, reduced spacing and edge calculations download the free Anchor Calculation Program from www.jcpfixings.co.uk

* Important notes:

- Fasteners subject to static and quasi-static loads.
- Performance data stated for a single anchor, without the effect of spacing and edge distances. The influence of these parameters must be verified where applicable.
- Minimum concrete thickness, hole diameter, and embedment depth shall correspond to the dimensions stated in this document.
- Concrete strength class C20/25 is assumed for performance data. Anchor calculation software or ETA data can be used for determining the resistance for other concrete classes. When concrete-related strength factors are applied, ensure that the resulting resistance value does not exceed the steel design resistance.
- Drill holes produced using rotary hammer drilling, unless otherwise noted.
- Installation carried out strictly in accordance with the product's Installation Instructions and performed by a trained operator.
- Design resistances are calculated from characteristic values using the appropriate partial safety factors corresponding to the decisive failure mode.
- The Recommended Resistance is calculated using an additional safety factor (γ_{Add}) equal to 1.4.
- Performance data is valid for shear loading without a lever arm; installations involving a lever arm require additional verifications.
- Performance data is not valid for combined tensile and shear loading; where combined loading occurs, further checks shall be performed.
- For project-specific assessments or conditions not explicitly covered, download the JCP Anchor Calculation Program.





PERFORMANCE DATA FOR MULTIPLE USE NON STRUCTURAL APPLICATIONS (CRACKED- NON-CRACKED SOLID CONCRETE)

Performance Data* (Cracked and Non-Cracked Concrete C20/25 to C50/60)								
Internal threaded Diameter (M)	Overall Embedment Depth ($h_{nom} = h_{ef}$)	Minimum Concrete Thickness (h_{min})	Characteristic Resistance		Recommended Resistance		Approved Resistance	
			Load in any direction (F_{Rk})	Bending Moment ($M^0_{Rk,s}$)	Load in any direction (F_{Rd})	Bending Moment ($M^0_{Rd,s}$)	Load in any direction (F_{Rrec})	Bending Moment ($M^0_{Ra,s}$)
			C20/25 to C50/60		C20/25 to C50/60		C20/25 to C50/60	
mm	mm	mm	kN	Nm	kN	Nm	kN	Nm
Zinc Plated Steel Grade 4.6								
8	30	100	5	15	2.3	9	1.7	6.4
10	40	120	6	30	2.8	18	2.0	12.8
12	50	130	6	52	3.3	31.1	2.4	22.2
16	65	160	16	133	8.9	79.6	6.3	56.9
Zinc Plated Steel Grade 5.8								
8	30	100	5	19	2.3	15.2	1.7	10.9
10	40	120	6	37	2.8	29.6	2.0	21.1
12	50	130	6	65	3.3	52	2.4	37.1
16	65	160	16	166	8.9	132.8	6.3	94.9
Zinc Plated Steel Grade 8.8								
8	30	100	5	30	2.3	24	1.7	17.1
10	40	120	6	60	2.8	48	2.0	34.3
12	50	130	6	105	3.3	84	2.4	60
16	65	160	16	266	8.9	212.8	6.3	152.0
Stainless Steel Grade A4-316 Class 70								
6	30	100	3	11	1.7	7.1	1.2	5
8	30	100	5	26	2.3	16.7	1.7	11.9
10	40	120	6	52	2.8	33.3	2.0	23.8
12	50	130	6	92	3.3	59	2.4	42.1
16	65	160	16	233	8.9	149.4	6.3	106.7

* Important notes:

- Fasteners subject to static and quasi-static loads. Performance data stated for a single anchor, without the effect of spacing and edge distances. The influence of these parameters must be verified where applicable.
- For multiple-use, non-structural applications, the maximum design load per fixing point and the minimum number of fixing points shall comply with the applicable national requirements.
- Minimum concrete thickness, hole diameter, and embedment depth shall correspond to the dimensions stated in this document.
- Drill holes produced using rotary hammer drilling, unless otherwise noted.
- Installation carried out strictly in accordance with the product's Installation Instructions and performed by a trained operator.
- Design resistances are calculated from characteristic values using the appropriate partial safety factors corresponding to the decisive failure mode.
- The Recommended Resistance is calculated using an additional safety factor (γ_{Add}) equal to 1.4.
- For installations involving a lever arm require verifications of bending resistance of the anchors are needed to be done.
- Performance data is not valid for combined tensile and shear loading; where combined loading occurs, further checks shall be performed.





FIRE RESISTANCE DATA



Fire Resistance Data (For Anchorage Size $h_{ef} \geq 30\text{mm}$ in Solid Concrete Slabs C20/25 to C50/60)*

Internal threaded Diameter (M)	Overall Embedment Depth (h_{nom})	Design Resistance				Recommended Resistance			
		Tensile ($N_{Rd,fi}$) or Shear ($V_{Rd,fi}$) (kN)				Tensile ($N_{Rrec,fi}$) or Shear ($V_{Rrec,fi}$) (kN)			
mm	mm	30min (R30)	60min (R60)	90min (R90)	120min (R120)	30min (R30)	60min (R60)	90min (R90)	120min (R120)
Zinc Plated Steel Grade 4.6									
8	30	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.4
10	40	0.9	0.8	0.6	0.5	0.6	0.6	0.4	0.4
12	50	1.5	1.3	1.1	0.8	1.1	0.9	0.8	0.6
16	65	3.1	2.4	2.0	1.6	2.2	1.7	1.4	1.1
Zinc Plated Steel Grade 4.8									
8	30	0.9	0.9	0.6	0.5	0.6	0.6	0.4	0.4
10	40	1.5	1.5	1.1	0.9	1.1	1.1	0.8	0.6
12	50	1.5	1.5	1.5	1.2	1.1	1.1	1.1	0.9
16	65	4.0	4.0	3.0	2.4	2.9	2.9	2.1	1.7
Zinc Plated Steel Grade ≥ 5.6									
8	30	0.9	0.9	0.9	0.5	0.6	0.6	0.6	0.4
10	40	1.5	1.5	1.5	1.0	1.1	1.1	1.1	0.7
12	50	1.5	1.5	1.5	1.2	1.1	1.1	1.1	0.9
16	65	4.0	4.0	3.7	2.4	2.9	2.9	2.6	1.7
Stainless Steel Grade A4-316 Class 70									
6	30	0.8	0.8	0.4	0.3	0.6	0.6	0.3	0.2
8	30	0.9	0.9	0.9	0.5	0.6	0.6	0.6	0.4
10	40	1.5	1.5	1.5	1.0	1.1	1.1	1.1	0.7
12	50	1.5	1.5	1.5	1.2	1.1	1.1	1.1	0.9
16	65	4.0	4.0	3.7	2.4	2.9	2.9	2.6	1.7

* The determination covers anchors with a fire attack from one side only. If the fire attack is from more than one side, the design method may be taken only, if the edge distance of the anchor is $c \geq 300\text{ mm}$ and $\geq 2 h_{ef}$.

