



INFORMATION

ETA Lipped 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 of the short versions of these products gives flexibility of using the anchor for applications with limited embedment depths like in pre-cast pre-stressed hollow core slabs.

Internal thread suitable for bolts or threaded studs.

BASE MATERIAL

- Solid Cracked Concrete C12/15 To C50/60
- Solid Non-Cracked Concrete C12/15 To C50/60
- Pre-cast pre-stressed hollow core slabs C30/37 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



ETA Drop-In Anchors
Bright Zinc Plated

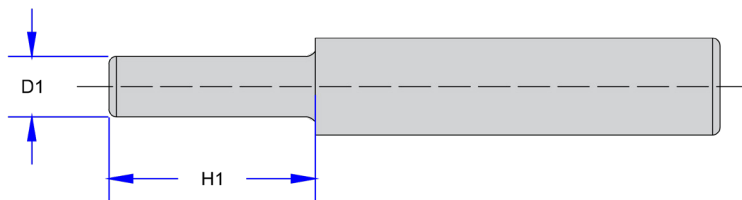
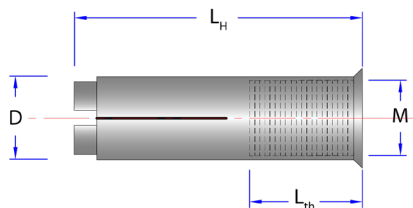


ETA Drop-In Anchors
A4 Stainless Steel





RANGE DATA



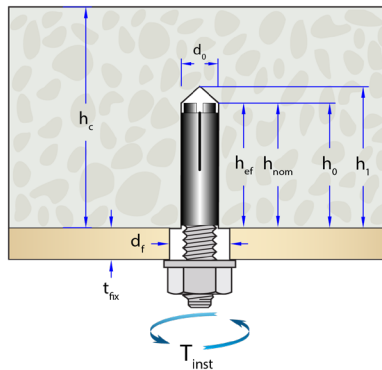
RANGE DATA

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 Lipped Drop In (Bright Zinc Plated)						
ADBM0825SH	8	10	25	12	6.4	17
ADBM0830SH	8	10	30	13	6.4	18
ADBM1025SH	10	12	25	12	8	18
ADBM1030SH	10	12	30	13	8	18
ADBM1040SH	10	12	40	15	8	24
ADBM1225SH	12	15	25	12	10	15.5
ADBM1250SH	12	15	50	18	10	30
ADSS Lipped Drop In (Stainless Steel A4)						
ADSSM08SH	8	10	30	13	6.4	18
ADSSM10SH	10	12	40	15	8	24
ADSSM12SH	12	15	50	18	10	30





INSTALLATION INTO SOLID CONCRETE

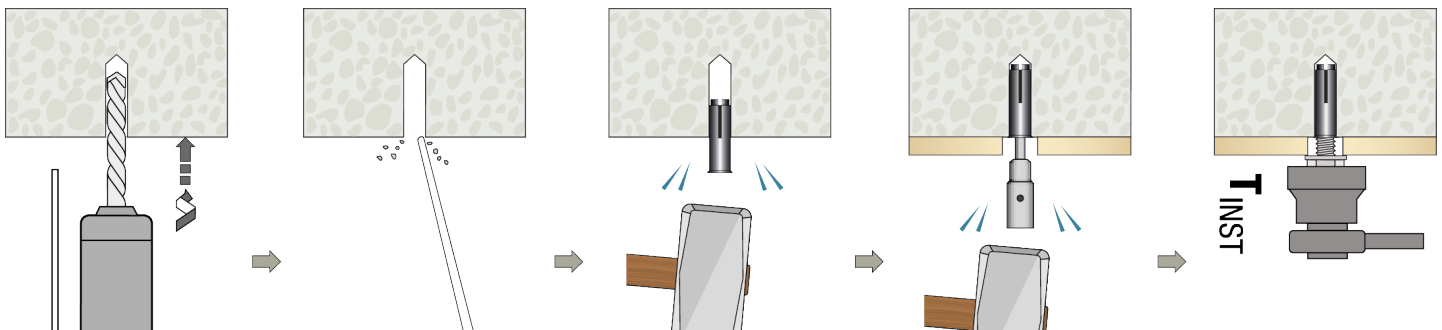


Installation Parameters

Part Number	Drill Hole Diameter (d_o)	Depth of Drill Hole (h_o)	Embedment Depth (h_{nom})	Minimum Screw-In Depth (L_{smin})	Fixture Clearance Hole (d_f)	Minimum Concrete 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 Lipped Drop In (Bright Zinc Plated)									
ADBM0825SH	10	25	25	8	9	80	70	100	8
ADBM0830SH	10	30	30	9	9	100	60	95	8
ADBM1025SH	12	25	25	10	12	80	70	100	15
ADBM1030SH	12	30	30	10	12	120	100	115	15
ADBM1040SH	12	40	40	11	12	120	100	135	15
ADBM1225SH	15	25	25	12	14	80	100	130	35
ADBM1250SH	15	50	50	13	14	130	120	165	35
ADSS Lipped Drop In (Stainless Steel A4)									
ADSSM08SH	10	30	30	9	9	100	60	95	8
ADSSM10SH	12	40	40	10	12	130	100	135	15
ADSSM12SH	15	50	50	13	14	140	120	165	35

INSTALLATION INSTRUCTIONS FOR SOLID CONCRETE

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



-Drill correct diameter hole to corresponding depth

-Clean hole by blowing to remove drilling debris and dust

-Insert anchor through concrete using suitable hammer

-Drive in cone by using the setting punch until the shoulder of the setting tool is aligned with the concrete surface.

-Tighten with torque wrench to recommended torque





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

Performance Data* (Non-Cracked Solid 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	4.49	4.37	3.21	3.12
10*	30	120	8.08	8.08	4.49	5.38	3.21	3.84
10	40	120	12.45	9.6	6.91	5.75	4.94	4.11
12	50	130	17.39	16.8	9.66	10.06	6.90	7.19
Zinc Plated Steel Grade 5.8								
8*	30	100	8.08	8.08	4.49	5.38	3.21	3.84
10*	30	120	8.08	8.08	4.49	5.38	3.21	3.84
10	40	120	12.45	7.2	6.91	5.76	4.94	4.11
12	50	130	17.39	19.4	9.66	15.52	6.90	11.09
Zinc Plated Steel Grade 8.8								
8*	30	100	8.08	8.08	4.49	5.38	3.21	3.84
10*	30	120	8.08	8.08	4.49	5.38	3.21	3.84
10	40	120	12.45	7.2	6.91	5.76	4.94	4.11
12	50	130	17.39	19.4	9.66	15.52	6.90	11.09
Stainless Steel Grade A4-316 Class 70								
8*	30	100	8.08	10.6	5.3	6.7	3.8	4.8
10	40	120	12.45	13.4	8.2	8.5	5.9	6.1
12	50	130	17.4	25.1	11.6	16	8.2	11.4

* 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 Solid Concrete C20/25 to C50/60)

Internal threaded Diameter (M)	Overall Embedment Depth (h _{nom} =h _{ef})	Minimum Concrete Thickness (h _{min})	Characteristic Resistance			Design Resistance			Recommended 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 _{Rrec,s})
			C12/15 and C16/20	C20/25 to C50/60		C12/15 and C16/20	C20/25 to C50/60		C12/15 and C16/20	C20/25 to C50/60	
mm	mm	mm	kN		Nm	kN		Nm	kN		Nm
Zinc Plated Steel Grade 4.6											
8	25	80	2.5	4.0	15.0	1.7	2.7	9.0	1.2	1.9	6.4
8	30	100	N/A	5.0	15.0	N/A	2.3	9.0	N/A	1.7	6.4
10	25	80	3.5	4.5	30.0	2.3	3.0	18.0	1.7	2.1	12.8
10	30	120	N/A	6.0	30.0	N/A	2.8	18.0	N/A	2.0	12.8
10	40	120	N/A	6.0	30.0	N/A	2.8	18.0	N/A	2.0	12.8
12	25	80	3.5	4.5	52.0	2.3	3.0	31.1	1.7	2.1	22.2
12	50	130	N/A	6.0	52.0	N/A	3.3	31.1	N/A	2.4	22.2
Zinc Plated Steel Grade 5.8											
8	25	80	2.5	4.0	19.0	1.7	2.7	15.2	1.2	1.9	10.9
8	30	100	N/A	5.0	19.0	N/A	2.3	15.2	N/A	1.7	10.9
10	25	80	3.5	4.5	37.0	2.3	3.0	29.6	1.7	2.1	21.1
10	30	120	N/A	6.0	37.0	N/A	2.8	29.6	N/A	2.0	21.1
10	40	120	N/A	6.0	37.0	N/A	2.8	29.6	N/A	2.0	21.1
12	25	80	3.5	4.5	65.0	2.3	3.0	52.0	1.7	2.1	37.1
12	50	130	N/A	6.0	65.0	N/A	3.3	52.0	N/A	2.4	37.1
Zinc Plated Steel Grade 8.8											
8	25	80	2.5	4.0	30.0	1.7	2.7	24.0	1.2	1.9	17.1
8	30	100	N/A	5.0	30.0	N/A	2.3	24.0	N/A	1.7	17.1
10	25	80	3.5	4.5	60.0	2.3	3.0	48.0	1.7	2.1	34.3
10	30	120	N/A	6.0	59	N/A	2.8	48.0	N/A	2.0	33.7
10	40	120	N/A	6.0	60.0	N/A	2.8	48.0	N/A	2.0	34.3
12	25	80	3.5	4.5	105.0	2.3	3.0	84.0	1.7	2.1	60.0
12	50	130	N/A	6.0	105.0	N/A	3.3	84.0	N/A	2.4	60.0
Stainless Steel Grade A4-316 Class 70											
8	30	100	N/A	5.0	26.0	N/A	2.3	16.7	N/A	1.7	11.9
10	40	120	N/A	6.0	52.0	N/A	2.8	33.3	N/A	2.0	23.8
12	50	130	N/A	6.0	92.0	N/A	3.3	59.0	N/A	2.4	42.1

* 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 (Solid Concrete C20/25 to C50/60)*									
Internal threaded Diameter (M)	Overall Embedment Depth (h_{nom})	Design Resistance				Recommended Resistance			
		Tensile ($N_{Rd,n}$) or Shear ($V_{Rd,n}$) (kN)				Tensile ($N_{Rrec,n}$) or Shear ($V_{Rrec,n}$) (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	25	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.4
8	30	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.4
10	25	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.4
10	30	0.9	0.8	0.6	0.5	0.6	0.6	0.4	0.4
10	40	0.9	0.8	0.6	0.5	0.6	0.6	0.4	0.4
12	25	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.4
12	50	1.5	1.3	1.1	0.8	1.1	0.9	0.8	0.6
Stainless Steel Grade A4-316 Class 70									
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

* 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 $c \geq 300$ mm and $\geq 2 h_{ef}$.



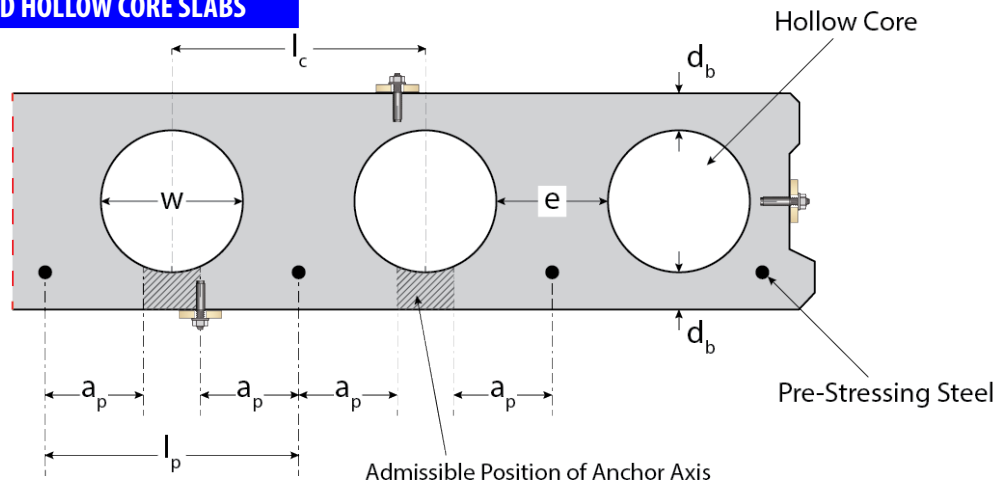


INSTALLATION INTO PRE-CAST PRE-STRESSED HOLLOW CORE SLABS

-Core distance:
 $l_c \geq 100 \text{ mm}$

-Pre-stressing steel distance:
 $l_p \geq 100 \text{ mm}$

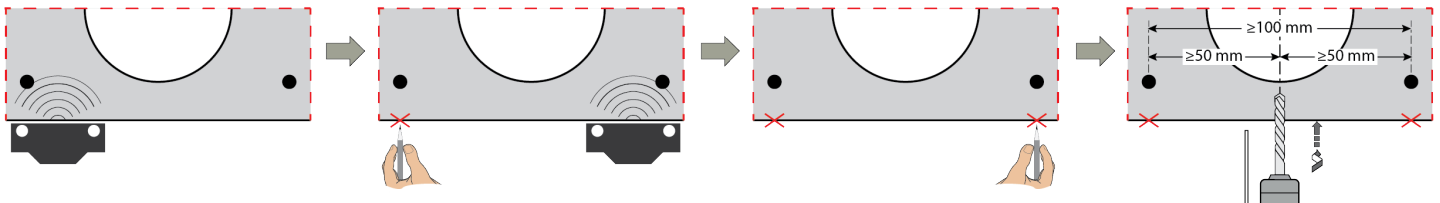
-Distance between anchor position and
pre-stressing steel:
 $a_p \geq 50 \text{ mm}$



Installation Parameters

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 Concrete Flange Thickness (d_f)	Minimum Spacing (s_{min})	Minimum Edge Distance (c_{min})	Tightening Torque (T_{inst})
	mm	mm	mm	mm	mm	mm	mm	mm	Nm
ADB Lipped Drop In (Bright Zinc Plated)									
ADB0825SH	10	25	25	8	9	≥ 35 (30)*	200	150	8
ADB1025SH	12	25	25	10	12	≥ 35 (30)*	200	150	15
ADB1225SH	15	25	25	12	14	≥ 35 (30)*	200	150	35

INSTALLATION INSTRUCTIONS FOR PRE-CAST PRE-STRESSED HOLLOW CORE SLABS

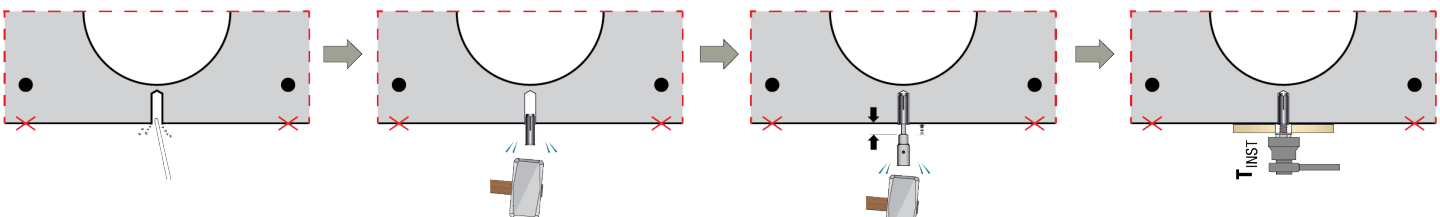


-Search for the position of the reinforcement

-Mark the position of the reinforcement and Search for the other position of the reinforcement

-Mark the position of the reinforcement

-Drill correct diameter hole to corresponding depth while maintaining the required distances



-Clean hole by blowing to remove drilling debris and dust

-Insert anchor through concrete using suitable hammer

-Drive in cone by using the setting punch until the shoulder of the setting tool is aligned with the concrete surface.

-Tighten with torque wrench to recommended torque





PERFORMANCE DATA FOR MULTIPLE USE NON STRUCTURAL APPLICATIONS (PRE-CAST PRE-STRESSED HOLLOW CORE)

Performance Data (PRE-CAST PRE-STRESSED HOLLOW CORE C30/37 TO C50/60)								
Internal thread- ed Diameter (M)	Overall Embedment Depth ($h_{nom}=h_{ef}$)	Flange Thickness (d_b)	Characteristic Resistance		Design Resistance		Recommended Resistance	
			Load in any direction (F_{Rk})	Bending Moment ($M_{Rk,s}^0$)	Load in any direction (F_{Rd})	Bending Moment ($M_{Rd,s}^0$)	Load in any direction (F_{Rec})	Bending Moment ($M_{Rec,s}^0$)
			C30/37 to C50/60		C30/37 to C50/60		C30/37 to C50/60	
mm	mm	mm	kN	Nm	kN	Nm	kN	Nm
Steel Grade 4.6 ($\gamma_{MS}=1.67$)								
8	25	≥ 35 (30)	4.0	15.0	2.7	9.0	1.9	6.4
10	25	≥ 35 (30)	4.5	30.0	3.0	18.0	2.1	12.8
12	25	≥ 35 (30)	4.5	52.0	3.0	31.1	2.1	22.2
Steel Grade 4.8 ($\gamma_{MS}=1.25$)								
8	25	≥ 35 (30)	4.0	15.0	2.7	12.0	1.9	8.6
10	25	≥ 35 (30)	4.5	30.0	3.0	24.0	2.1	17.1
12	25	≥ 35 (30)	4.5	52.0	3.0	41.6	2.1	29.7
Steel Grade 5.8 ($\gamma_{MS}=1.25$)								
8	25	≥ 35 (30)	4.0	19.0	2.7	15.2	1.9	10.9
10	25	≥ 35 (30)	4.5	37.0	3.0	29.6	2.1	21.1
12	25	≥ 35 (30)	4.5	65.0	3.0	52.0	2.1	37.1
Steel Grade 8.8 ($\gamma_{MS}=1.25$)								
8	25	≥ 35 (30)	4.0	30.0	2.7	24.0	1.9	17.1
10	25	≥ 35 (30)	4.5	60.0	3.0	48.0	2.1	34.3
12	25	≥ 35 (30)	4.5	105.0	3.0	84.0	2.1	60.0

* Important notes:

- Fasteners subject to static and quasi-static loads.
- 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.
- The anchor may be set in a flange thickness of 30 mm with identical characteristic loads, if the borehole cuts no hollow core.
- 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.
- 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.

