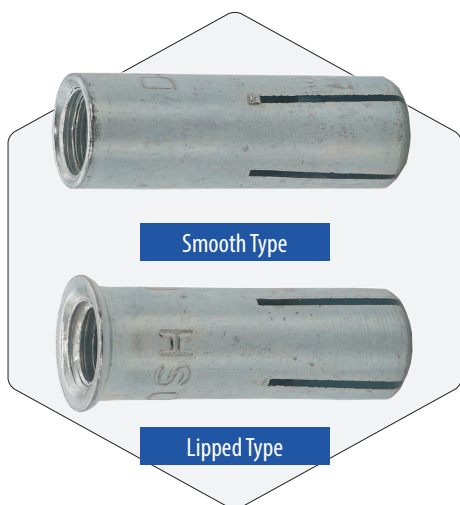




Smooth Type

Lipped Type

INFORMATION

Deformation controlled zinc plated anchor suitable for multiple use for non-structural applications in concrete.

The specific design gives flexibility of using the anchor for applications with limited embedment depths like in pre-stressed hollow core slabs.

Internal thread suitable for bolts or threaded studs.

BASE MATERIAL

- Solid Concrete C20/25 To C50/60 Cracked and Non Cracked
- 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
EAD 330747-00-0601



ETA-23/1029



SOFTWARE



[Click here to download the software](#)

RELATED PRODUCTS



SDS+ Drill Bits



Stop Drill Bits



Drop In Anchor Setting Punch



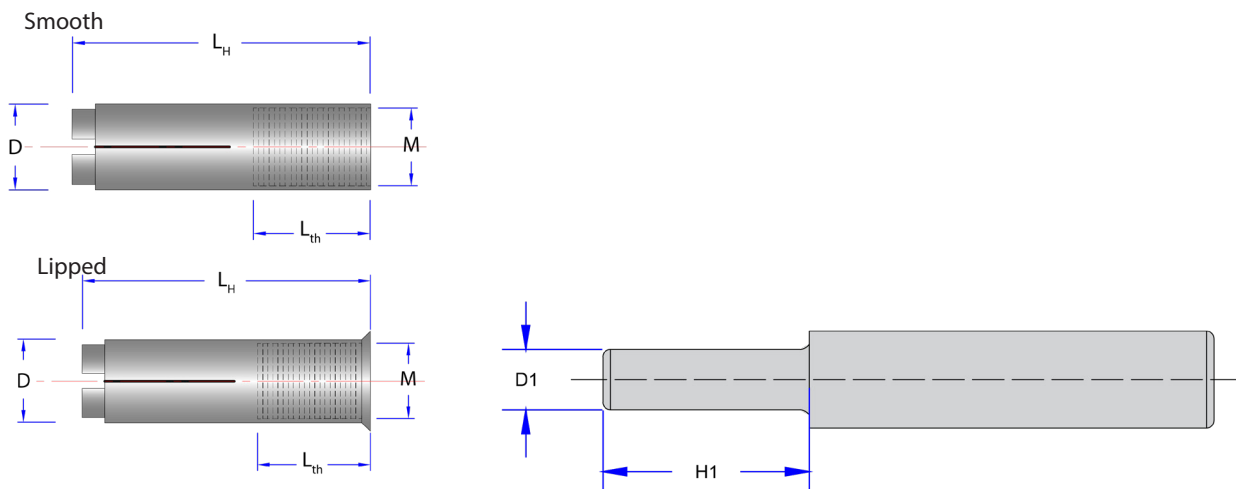
Hole Cleaning Pump

BOP1





RANGE DATA



1RANGE 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
Smooth Type						
DBM0830	8	10	30	13	6.5	18
DBM1040	10	12	40	19	8	24
DBM1250	12	16	50	22	10.2	30
Lipped type						
DBM0825SH	8	10	25	10	6.4	15
DBM0830SH	8	10	30	13	6.5	18
DBM1025SH	10	12	25	10	8.2	16
DBM1030SH	10	12	30	13	8	18
DBM1040SH	10	12	40	19	8	24
DBM1250SH	12	16	50	22	10.2	30



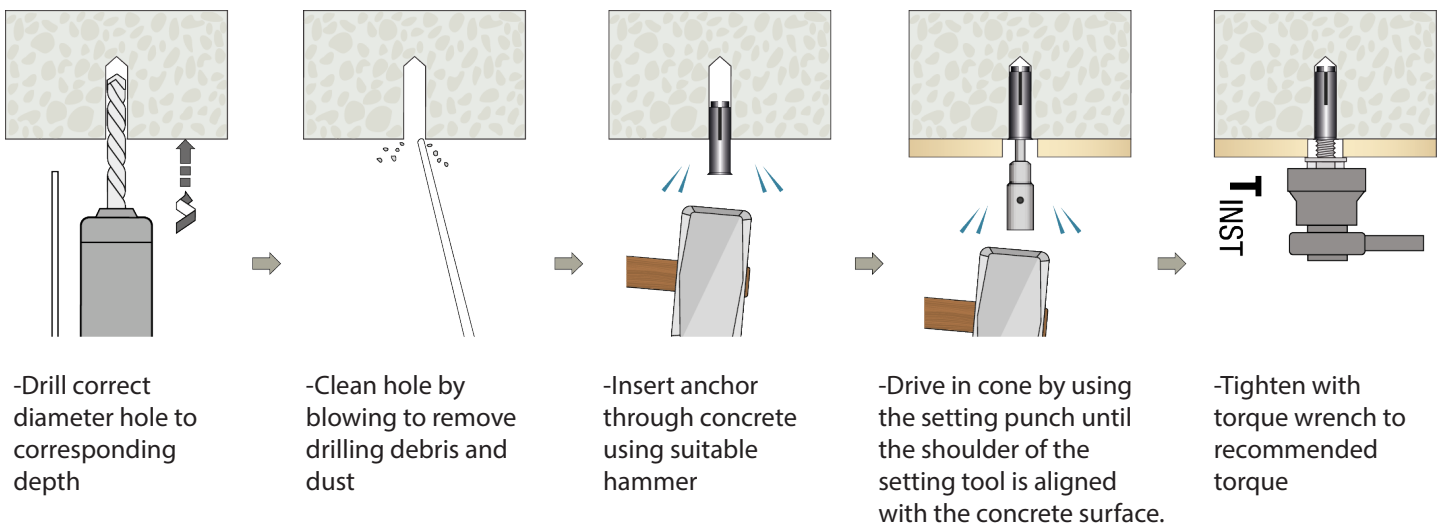


INSTALLATION INSTRUCTIONS (SOLID CONCRETE SLABS)

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 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
Smooth Type									
DBM0830	10	30	30	8	9	80	200	150	11
DBM1040	12	40	40	10	12	80	200	150	17
DBM1250	16	50	50	12	14	100	250	150	38
Lipped type									
DBM0825SH	10	25	25	7	9	80	200	150	11
DBM0830SH	10	30	30	8	9	80	200	150	11
DBM1025SH	12	25	25	8	12	80	200	150	17
DBM1030SH	12	30	30	10	12	80	200	150	17
DBM1040SH	12	40	40	10	12	80	200	150	17
DBM1250SH	16	50	50	12	14	100	250	150	38

INSTALLATION INSTRUCTIONS (SOLID CONCRETE SLABS)

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





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)								
Thread Diam (d _{nom})	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 _{Rk,s})	Load in any direction (F _{Rd})	Bending Moment (M _{Rd,s})	Load in any direction (F _{Rrec})	Bending Moment (M _{Rrec,s})
mm	mm	mm	C20/25 to C50/60		C20/25 to C50/60		C20/25 to C50/60	
kN				Nm	kN	Nm	kN	Nm
Fastening screw or threaded rod property class >4.8								
8	25	80	2.5	15	1.6	12	1.1	8.6
8	30	80	4	15	1.9	12	1.3	8.6
10	25	80	4	30	2.6	24	1.8	17.1
10	30	80	4.5	30	2.1	24	1.5	17.1
10	40	80	4.5	30	2.5	24	1.7	17.1
12	50	100	7	52.4	3	41.9	2.1	29.9

* 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 (In Cracked and Non-Cracked Solid Concrete C20/25 to C50/60)											
Thread Diam (d_{nom})	Embedment Depth ($h_{nom}=h_{ef}$)	Design Resistance				Recommended Resistance				Design Spacing ($s_{cr,fi}$)	Design Edge Distance ($c_{cr,fi}$)
		Load* ($F_{Rd,fi}$) kN				Load* ($F_{Ra,fi}$) kN					
mm	mm	30min (R30)	60min (R60)	90min (R90)	120min (R120)	30min (R30)	60min (R60)	90min (R90)	120min (R120)	mm	mm
Fastening screw or threaded rod property class >4.8											
8	30	0.89	0.89	0.89	0.71	0.63	0.63	0.63	0.5	200	150
10	30	0.89	0.89	0.89	0.71	0.63	0.63	0.63	0.5	200	150
10	40	1.13	1.13	1.13	0.9	0.8	0.8	0.8	0.64	200	150
12	50	1.75	1.75	1.75	1.4	1.25	1.25	1.25	1	200	150

* The data 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 ≥ 300 mm and ≥ 2 h_{ef}.



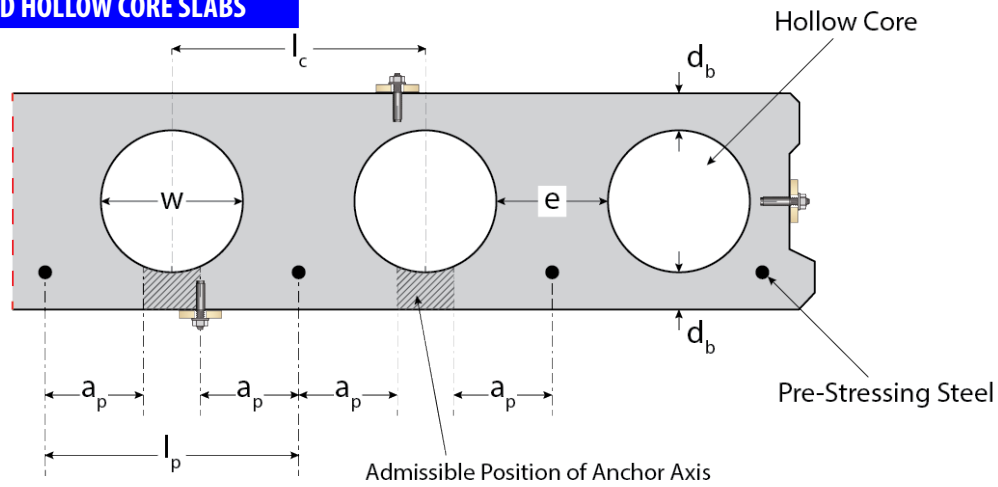


INSTALLATION INTO PRE-CAST PRE-STRESSED HOLLOW CORE SLABS

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

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

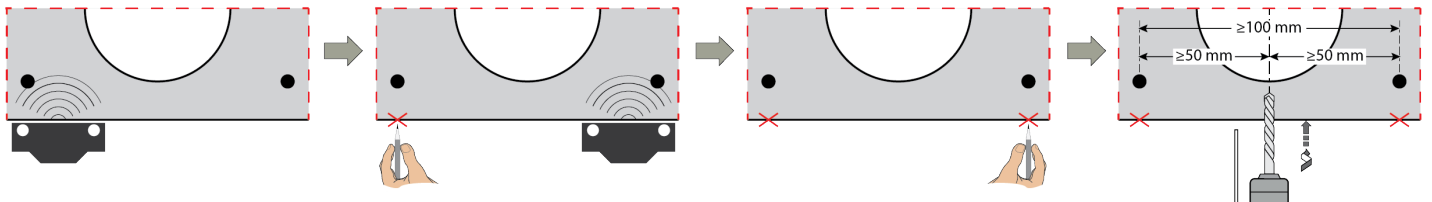
-Distance between anchor position and
pre-stressing steel:
 $a_p \geq 50 \text{ mm}$



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)									
DBM0825SH	10	25	25	7	9	35	200	150	8
DBM1025SH	12	25	25	8	12	35	200	150	15

INSTALLATION INSTRUCTIONS (PRE-STRESSED HOLLOW CORE SLABS)

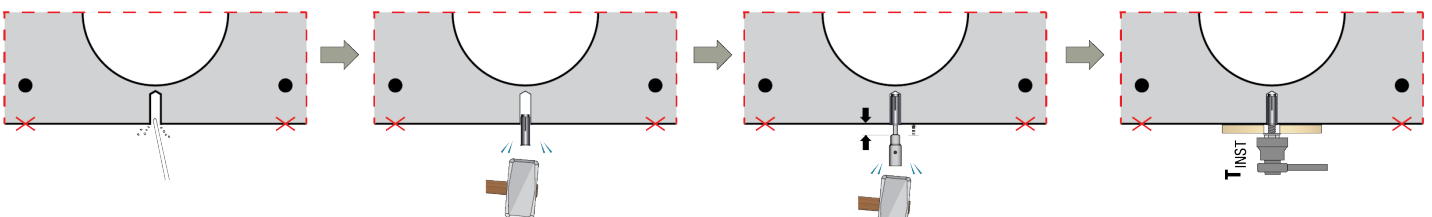


-Search for the position of the reinforcement

-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-Stressd Hollow Core Slab C30/37 to C50/60)								
Thread Diam (d_{nom})	Embedment Depth ($h_{nom}=h_{ef}$)	Minimum Concrete Flange Thickness (d_b)	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 (F_{Rec})	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
Fastening screw or threaded rod property class >4.8								
8	25	35	6	15	3.0	12	2.1	8.6
10	25	35	6.5	30	3.0	24	2.1	17.1

* 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.
- 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.

