

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



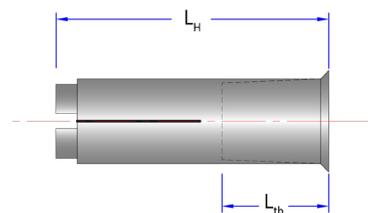
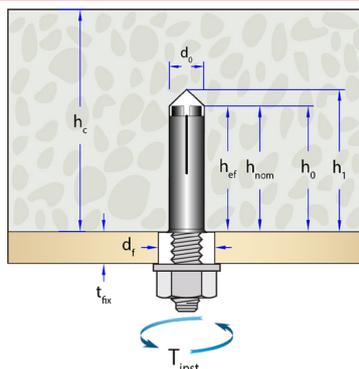
Hole Cleaning Pump



Drop In Anchor Setting Punch

RANGE DATA

RANGE DATA										
Part Number	Internal Thread diameter (d_{nom})	Drill Hole Diameter (d_o)	Depth of Drill Hole ($h_o = h_{ef} = h_{nom}$)	Anchor Length (L_H)	Internal Threaded Length (L_{th})	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	mm	Nm
Smooth Type										
DBM0830	8	10	30	30	13	9	80	200	150	11
DBM1040	10	12	40	40	19	12	80	200	150	17
DBM1250	12	16	50	50	22	14	100	250	150	38
Lipped type										
DBM0825SH	8	10	25	25	13	9	80	200	150	11
DBM0830SH	8	10	30	30	13	9	80	200	150	11
DBM1025SH	10	12	25	25	13	12	80	200	150	17
DBM1030SH	10	12	30	30	13	12	80	200	150	17
DBM1040SH	10	12	40	40	19	12	80	200	150	17
DBM1250SH	12	16	50	50	22	14	100	250	150	38





LOAD DATA (SOLID CONCRETE SLABS)

Performance Data*** (Cracked and uncracked 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* (F_{Rk})	Bending Moment ($M_{Rk,s}^0$)**	Load (F_{Rd})*	Bending Moment ($M_{Rd,s}^0$)**	Load (F_{Ra})*	Bending Moment ($M_{Ra,s}^0$)**
			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	80	2.5	15.0	1.6	12.0	1.1	8.6
8	30	80	4.0	15.0	1.9	12.0	1.3	8.6
10	25	80	4.0	30.0	2.6	24.0	1.8	17.1
10	30	80	4.5	30.0	2.1	24.0	1.5	17.1
10	40	80	4.5	30.0	2.5	24.0	1.7	17.1
12	50	100	7.0	52.4	3.0	41.9	2.1	29.9

* Load in any direction.

** Shear load with lever arm.

*** 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.
- 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.
- Characteristic and design resistances derived from JCP internal technical data.
- 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.
- When concrete-related strength factors are applied, ensure that the resulting resistance value does not exceed the steel design resistance.
- For project-specific assessments or conditions not explicitly covered, download the JCP Anchor Calculation Program.

FIRE RESISTANCE DATA



Fire Resistance Data (In Cracked and uncracked solid concrete C20/25 to C50/60)

Thread Diam (d_{nom})	Embedment Depth ($h_{nom} = h_{ef}$)	Design Resistance				Recommended Resistance				Design Spacing ($s_{d,fr}$)	Design Edge Distance ($c_{d,fr}$)
		Load* ($F_{Rd,fr}$) kN				Load* ($F_{Ra,fr}$) 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	0.50	200	150
10	30	0.89	0.89	0.89	0.71	0.63	0.63	0.63	0.50	200	150
10	40	1.13	1.13	1.13	0.90	0.80	0.80	0.80	0.64	200	150
12	50	1.75	1.75	1.75	1.40	1.25	1.25	1.25	1.00	200	150

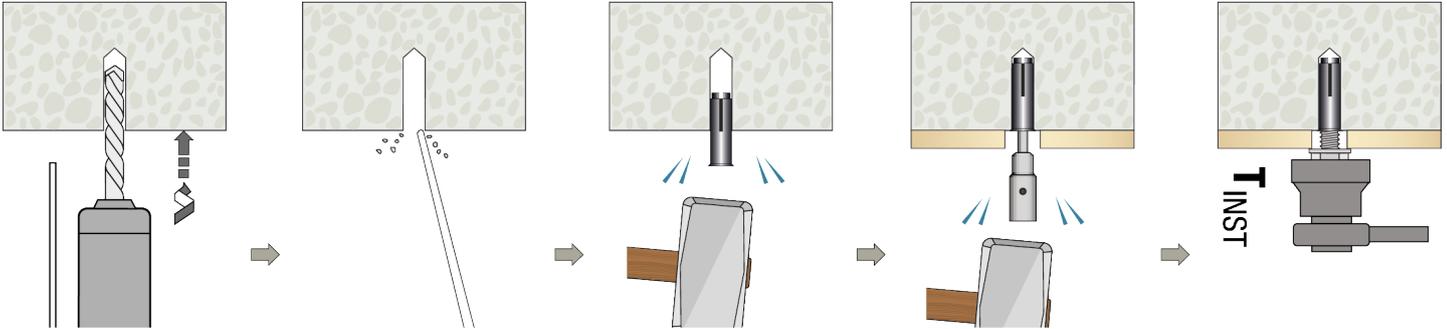
* The data covers anchors with a fire attack from one side only. If the fire attack is from more than one side, the design method may be taken only, if the edge distance of the anchor is $c \geq 300$ mm and $\geq 2 h_{ef}$.





INSTALLATION INSTRUCTIONS (SOLID CONCRETE SLABS)

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

LOAD DATA (PRE-STRESSED HOLLOW CORE SLABS)

Performance Data*** (Pre-Stressed hollow core slab C30/37 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* (F_{Rk})	Bending Moment ($M_{Rk,s}^0$)**	Load (F_{Rd})*	Bending Moment ($M_{Rd,s}^0$)**	Load (F_{Rd})*	Bending Moment ($M_{Rd,s}^0$)**
			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	15.0	3.0	12.0	2.1	8.6
10	25	35	6.5	30.0	3.0	24.0	2.1	17.1

* Load in any direction.

** Shear load with lever arm.

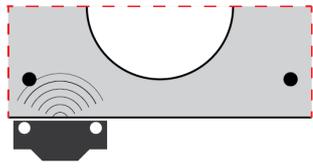
*** Important notes:

- 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.
- 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.
- Characteristic and design resistances derived from JCP internal technical data.
- 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.
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- When concrete-related strength factors are applied, ensure that the resulting resistance value does not exceed the steel design resistance.
- For project-specific assessments or conditions not explicitly covered, download the JCP Anchor Calculation Program.

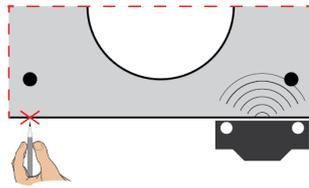




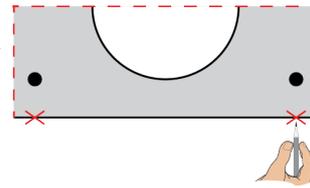
INSTALLATION INSTRUCTIONS (PRE-STRESSED HOLLOW CORE SLABS)



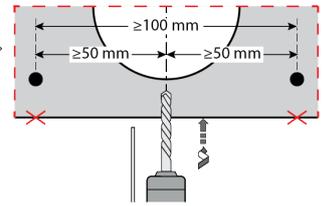
-Search for the position of the reinforcement



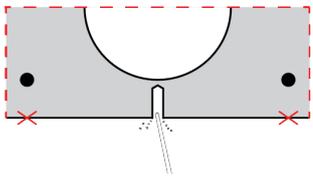
-Mark the position of the reinforcement and Search for the other position of the reinforcement



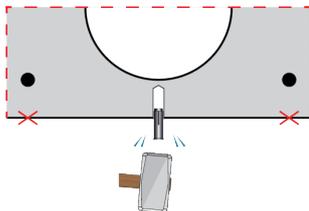
-Mark the position of the reinforcement



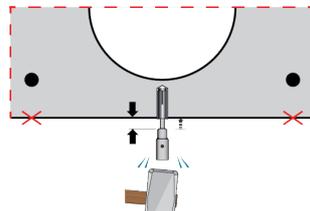
-Drill correct diameter hole to corresponding depth while maintaining the required distances



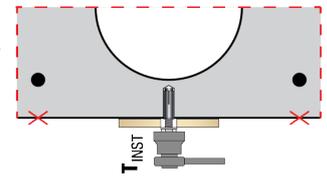
-Clean hole by blowing to remove drilling debris and dust



-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



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

