

Product Information

The Drop In Anchor is a deformation controlled anchor for use in solid concrete. It has an internal thread suitable for attaching threaded studs and bolts. The Lipped Drop In Can be used in Hollow Concrete Planks and set independent of hole depth

Features

1. Internal thread suitable for bolt or threaded stud
2. Permanent socket to allow removal and replacement of fixture
3. Lipped version allows for installation independent of hole depth
4. Stainless Steel version available

Straight Drop In anchors (Figures in brackets are for Stainless Steel anchors)								
Part Number		Thread Diam mm	Drill Hole Diam mm	Anchor Length mm	Hole Depth mm	Internal Thread Length mm	Fixture Clearance Hole mm	Tightening Torque Nm
Zinc Plated	Stainless Steel							
DBM06	DSSM06	6	8	25 (30)	25 (30)	10 (11)	8	4
DBM08	DSSM08	8	10	30	30	14 (13)	10	9
DBM10	DSSM10	10	12	40	40	15 (15)	12	17
DBM12	DSSM12	12	15	50	50	20 (19)	14	30
DBM16	DSSM16	16	20	65	65	22 (25)	18	75
DBM20		20	25	80	80	30	22	144

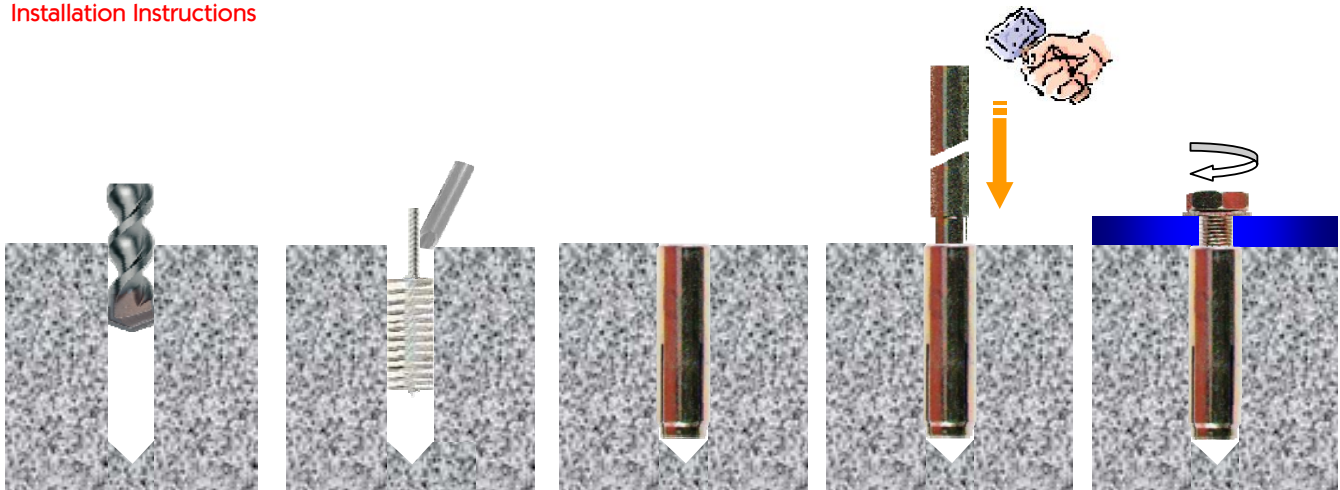
Lipped Drop In								
Part Number		Thread Diam	Drill Hole Diam mm	Anchor Length mm	Min Hole Depth mm	Internal Thread Length mm	Fixture Clearance Hole mm	Tightening Torque Nm
Zinc Plated								
DBM06SH		M6	8	25	25	10	8	4
DBM08SH		M8	10	30	30	14	10	9
DBM10SH		M10	12	30	30	15	12	9
DBM10SHL		M10	12	40	40	15	12	17
DBM12SH		M12	15	50	50	20	14	30
DBM16SH		M16	20	65	65	22	18	75

Setting Punch



The correct size Setting Punch must be used to safely install Drop In Anchors

Installation Instructions



Drill correct diameter hole to correct depth

Clean hole by brushing and blowing to remove all dust and drilling debris

Insert Drop In Anchor

Expand anchor using correct Setting Punch and a suitable size hammer

Position fixture, insert bolt and tighten to Recommended Torque



Performance Data (C20/25 Concrete)

Thread Diam mm	Characteristic Resistance kN		Design Resistance kN		Recommended Resistance kN		Spacing mm	Edge Distance mm	
	Tensile	Shear	Tensile	Shear	Tensile	Shear	Tensile & Shear	Tensile	Shear
6	5.9	4.4	3.3	2.9	2.3	2.1	90	95	95
8	8.3	4.8	4.6	3.2	3.3	2.3	100	100	100
10	12.7	6.1	7.1	4.1	5.1	2.9	140	135	135
12	17.8	11.6	9.9	7.7	7.1	5.5	180	175	175
16	26.4	18.3	14.7	12.2	10.3	8.7	230	230	230
20	36.1	22.1	20.0	14.7	14.3	10.5	280	285	285

Shear Loads towards a free edge are for single anchors where Spacing $\geq 3 \times$ Edge Distance

* For M10 Short Lipped Drop In use Loads for M8 anchors

Reduced Design Resistance (kN) • Divide Resistance by 1.4 for Recommended Resistance

Edge Distance (C20/25 Concrete) for single anchors

Edge mm	Tensile Resistance						Shear Resistance					
	M6	M8	M10	M12	M16	M20	M6	M8	M10	M12	M16	M20
70												
80												
90	0.0						0.0					
95	3.3	0.0					2.9	0.0				
100		4.6						3.2				
120			0.0						0.0			
135			7.1						4.1			
165				0.0						0.0		
175				9.9						7.7		
220					0.0						0.0	
230					14.7						12.2	
275						0.0						0.0
285						20.0						14.7

Spacing (C20/25 Concrete)

Spacing mm	Tensile Resistance per Pair of Anchors					
	M6	M8	M10	M12	M16	M20
70	5.9					
80	6.2					
90	6.6	8.7				
95		9.0				
100		9.2	12.2			
110			12.7			
120			13.2			
140			14.2	17.6		
150				18.2		
160				18.7		
180				19.8	22.6	
200					23.7	
210					24.2	
230					25.3	36.4
250						37.9
270						39.3
280						40.0

Influence of concrete strength

Concrete Strength		C20/25	C25/30	C30/37	C40/50	C45/55	C50/60
Cylinder	N/mm ²	20	25	30	40	45	50
Cube	N/mm ²	25	30	37	50	55	60
Factor		1.0	1.1	1.22	1.41	1.48	1.55

When using concrete factors check all other information to ensure Steel Tensile and Shear Resistance is not exceeded

Steel design resistance for single anchor

		M6	M8	M10	M12	M16	M20
Tension	kN	4.1	5.2	5.7	11.7	20.5	30.7
Shear	kN	2.9	3.2	4.1	7.7	12.2	14.7

(May be limited by bolt strength)

Steel Sheer is for a Grade 4.6 bolt

Anchor mechanical properties

		M6	M8	M10	M12	M16	M20
Tensile Strength	N/mm ²	500	500	500	500	500	500
Yield Strength	N/mm ²	400	400	400	400	400	400