Sleeve Anchor Hex Bolt

Specification

Product Information

A zinc plated, yellow passivated, torque controlled, sleeve anchor. Suitable for use in non-cracked concrete, dense concrete blocks, solid bricks and some natural stone.

Features

Through Fixing
Light to medium duty loads
Torque controlled expansion
Collapse feature to allow a positive clamping force
Supplied pre-assembled for rapid installation

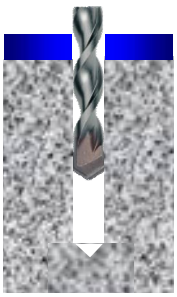
Range Data

Part Number	Outside/ Drill Diam	Anchor Length	Thread Diam	Maximum Fixture Thickness	Fixture Clearance Hole	Embedment Depth	Minimum Hole Depth	Structure Thickness	Installation Torque
mm	mm	mm	mm	mm	mm	mm	mm	mm	Nm
SLB08045	8	40	6	2	9	40	45	100	10
SLB08070		65		25					
SLB08090		90		45					
SLB10045	10	45	8	5	12	40	45	100	20
SLB10055		55		15					
SLB10080		75		30		45	50		
SLB10100		95		50					
SLB12065	12	60	10	5	14	50	65	100	35
SLB12080		75		20					
SLB12100		95		40					
SLB12125		115		65					
SLB16075	16	65	12	5	18	55	65	100	45
SLB16110		100		40					

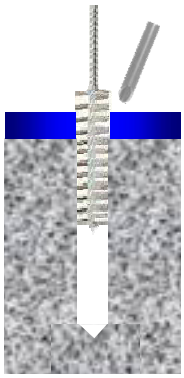
Mechanical Properties

Outside Diameter	mm	8	10	12	16
Ultimate Tensile Strength	N/mm^2	400	400	400	400
Yield Strength	N/mm^2	280	280	280	280
Bolt A/F	mm	10.0	13.0	17.0	19.0
Washer Diameter	mm	12.0	17.0	21.0	24.0

Installation Instructions



Position fixture and drill correct diameter hole to correct depth



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

Insert assembled anchor through fixture into base material

Tighten with torque wrench to recommended torque

Sleeve Anchor Hex Bolt B.Z.P.

Non-Cracked concrete (Loads are not applicable to anchors with reduced embedment depth)

Performance Data (C20/25 Concrete)									
Outside Diam	Characteristic Resistance		Design Resistance		Recommended Resistance (γ_F=1.4)		Design Spacing	Design Edge Distance	
mm	kN		kN		kN		mm	mm	
	Tensile	Shear	Tensile	Shear	Tensile	Shear	Tensile & Shear	Tensile	Shear
8	6.6	4.0	3.6	3.1	2.5	2.2	55	45	40
10	10.2	8.3	5.6	5.5	4.0	3.9	100	70	60
12	12.6	12.7	6.9	8.4	5.0	6.0	115	80	85
16	15.0	15.2	8.3	10.1	5.9	7.2	130	90	100

Shear Loads towards a free edge are for single anchors where Spacing ≥ 3 x Edge Distance

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

Influence of concrete strength Not applicable with sleeve anchors

Solid Brickwork (Loads are not applicable to anchors with reduced embedment depth)

Performance Data (20 N/mm²)										
Outside Diameter	Characteristic Resistance		Design Resistance		Recommended Resistance		Recommended Spacing	Recommended Edge Distance		Tightening Torque
mm	kN		kN		kN		mm	mm		Nm
	Tensile	Shear	Tensile	Shear	Tensile	Shear	Tensile & Shear	Tensile	Shear	
8	2.3	3.6	1.1	2.4	0.8	1.7	90	45	60	8
10	3.1	7.4	1.5	4.9	1.1	3.5	110	55	70	16
12	4.4	11.4	2.1	7.6	1.5	5.4	Only 1 fixing per brick is recommended			
16	6.3	13.6	3.0	9.0	2.2	6.4				

Solid Concrete Blocks (Loads are not applicable to anchors with reduced embedment depth)

Performance Data (7 N/mm²)										
Outside Diameter	Characteristic Resistance		Design Resistance		Recommended Resistance		Recommended Spacing	Recommended Edge Distance		Tightening Torque
mm	kN		kN		kN		mm	mm		Nm
	Tensile	Shear	Tensile	Shear	Tensile	Shear	Tensile & Shear	Tensile	Shear	
8	1.5	2.1	0.7	1.4	0.5	1.0	90	45	60	6
10	2.3	4.4	1.1	2.9	0.8	2.0	110	55	70	12
12	2.9	6.7	1.4	4.4	1.0	3.1	120	60	80	20
16	4.0	8.0	1.9	5.3	1.4	3.7	140	70	95	30

Due to the variable nature of bricks and concrete blocks these figures are for guidance only