



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

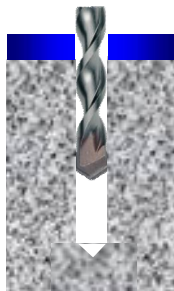
Range Data

| 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 | | | | | |

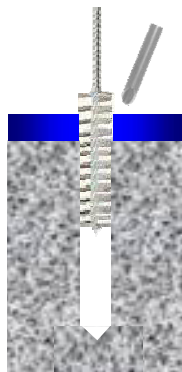
Mechanical Properties

| 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



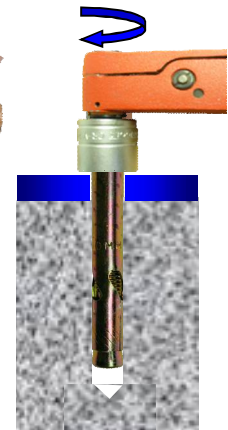
Position fixture and drill correct diameter hole to correct depth



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



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 ($\gamma_F=1.4$) | | 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 $\geq 3 \times$ Edge Distance

For variations in structure thickness, reduced spacing and edge calculations download the free [Anchor Calculation Program](http://www.jcpfixings.co.uk) 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/mm ²) | | | | | | | | | | |
|--|---------------------------|-------|-------------------|-------|------------------------|-------|--|---------------------------|-------|-------------------|
| 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/mm ²) | | | | | | | | | | |
|---|---------------------------|-------|-------------------|-------|------------------------|-------|---------------------|---------------------------|-------|-------------------|
| 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