

# 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 ( $\gamma_f=1.4$ )		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](http://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 <sup>2</sup> )										
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 <sup>2</sup> )										
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