



### Product Information

A Stainless Steel Grade A4-316 torque controlled shield anchor. Suitable for use in non-cracked concrete range between C20/25 & C50/60, solid brickwork and solid concrete blocks

### Features

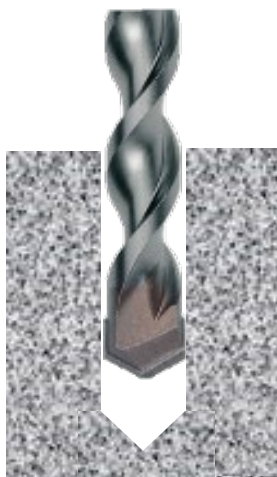
All steel anchor  
Medium to heavy duty loads  
Torque controlled expansion

### Range Data

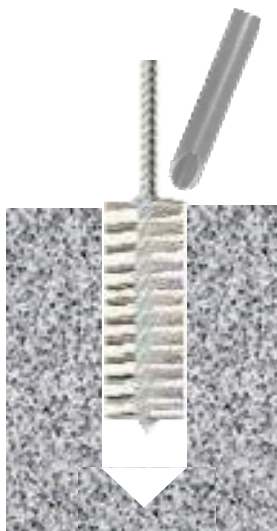
Part Number	Thread Diam	Length	Hole Diam	Minimum Bolt length	Fixture Clearance Hole	Embedment Depth	Minimum Hole Depth	Structure Thickness	Installation Torque
	mm	mm	mm	mm	mm	mm	mm	mm	Nm
PSM06SS	6	45	12	$t_{fix} + 45$	7	45	50	100	6
PSM08SS	8	50	14	$t_{fix} + 50$	10	50	55	100	14
PSM10SS	10	60	16	$t_{fix} + 60$	12	60	65	100	27
PSM12SS	12	75	20	$t_{fix} + 75$	14	75	85	120	46

$t_{fix}$  = Fixture Thickness

### Installation Instructions



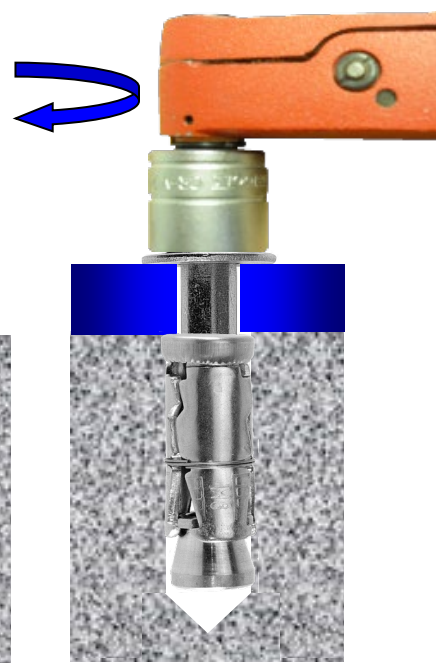
Drill correct diameter hole to correct depth



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



Insert anchor into concrete



Position fixture  
Insert bolt  
Tighten with torque wrench to recommended torque

## Non-Cracked concrete

**Performance Data (20/25 Concrete)**

Thread Diam	Characteristic Resistance		Design Resistance		Recommended		Design Spacing	Design Edge Distance	
	mm	kN	kN		kN		mm	mm	
	Tensile	Shear	Tensile	Shear	Tensile	Shear	Tensile & Shear	Tensile	Shear
6	7.2	7.0	3.9	4.4	2.8	3.1	55	55	55
8	12.7	12.8	7.0	8.2	5.0	5.8	85	80	80
10	17.9	17.8	9.9	11.9	7.1	8.5	200	100	120
12	23.4	29.5	13.0	18.9	9.3	13.5	240	120	170

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](http://www.jcpfixings.co.uk) from [www.jcpfixings.co.uk](http://www.jcpfixings.co.uk)

## Solid Brickwork

**Performance Data (20 N/mm<sup>2</sup>)**

Thread 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	
6	5.2	3.6	2.5	1.7	1.8	1.2	55	55	65	5
8	6.7	7.4	3.2	3.5	2.3	2.5	105	80	90	12
10	8.4	11.4	4.0	5.4	2.9	3.8	180	95	120	22
12	12.6	13.6	6.0	6.4	4.3	4.6	Only 1 fixing per brick is recommended			38

## Solid Concrete Blocks

**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	
6	3.8	2.1	1.6	1.4	1.1	1.0	55	55	65	5
8	6.7	4.4	3.2	2.9	2.3	2.0	105	80	90	12
10	10.7	6.7	4.4	4.4	3.1	3.1	180	95	120	22
12	12.4	8.0	5.9	5.3	4.2	3.7	285	160	365	38

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

JCP Construction Products, Unit 14 Teddington Business Park, Station Rd, Teddington, Middlesex TW11 9BQ

Tel:- 020 8943 1800

Web:- [www.jcpfixings.co.uk](http://www.jcpfixings.co.uk)