



### Product Information

The Epoxy Acrylate, Spin In Capsules are suitable for use in solid concrete and some solid brickwork and natural stone where an expansion free, high strength fixing is required. They can be used in wet and corrosive environments with a suitable grade of threaded stud and also give good resistance to vibrating loads.

### Features

- 1 Expansion free
- 2 High Loads
- 3 Close Spacing and Edge Distance
- 4 Suitable for making fixings underwater  
*(for more details contact the Technical Department)*



Capsule Data			
Part Number	To Suit Stud Diameter mm	Capsule Diameter mm	Capsule Length mm
JCAPSM08	8	9	80
JCAPSM10	10	11	80
JCAPSM12	12	13	95
JCAPSM16	16	17	95
JCAPSM20	20	22	175
JCAPSM24	24	24	210

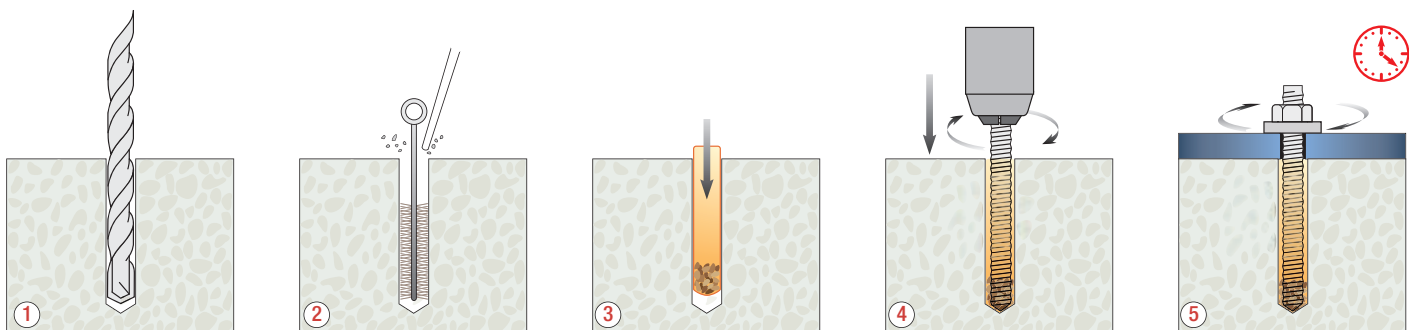
Setting Times		
Base Material Temp °C	Cure Time Dry Concrete	Cure Time Wet Concrete
-5	5 hrs	10 hrs
0	5 hrs	10 hrs
5	1 hr	2 hrs
10	1 hr	2 hrs
20	20 mins	40 mins
30	10 mins	20 mins
35	10 mins	20 mins

### Stud Data

Part Number			Thread Diameter mm	Stud Length mm	Maximum Fixture Thickness mm	Drill Hole Diameter mm	Hole Depth mm	Fixture Clearance Hole mm	Minimum Structure Thickness mm	Tightening Torque Nm
Zinc Plated	Hot Dipped Galvanised	Stainless Steel A4/316								
JSTUD08110	JSTUD08110G	JSTUD08110SS A4	8	110	18	10	80	9	110	10
JSTUD10130	JSTUD10130G	JSTUD10130SS A4	10	130	25	12	90	12	120	20
JSTUD12160	JSTUD12160G	JSTUD12160SS A4	12	160	34	14	110	14	140	40
JSTUD16190	JSTUD16190G	JSTUD16190SS A4	16	190	45	18	125	18	160	80
JSTUD20260	JSTUD20260G	JSTUD20260SS A4	20	260	55	25	170	22	220	120
JSTUD24300	JSTUD24300G	JSTUD24300SS A4	24	300	55	28	210	26	260	180

A2 studs also available but are not part of the Approval

### Installation Instructions



1 Drill correct diameter hole to correct depth

2 Clean out hole by brushing and blowing to remove drilling debris and dust

3 Insert Spin-In Capsule into drilled hole with air gap in capsule nearest to surface

4 Attach setting tool to stud & spin into capsule with drilling machine using rotary hammer action until Depth Mark is reached

5 Allow resin to cure for appropriate time. Attach fixture and tighten anchor to Recommended Torque

Performance Data (20/25 Concrete)									
Thread Diameter mm	Characteristic Resistance kN		Design Resistance kN		Approved Load kN		Spacing mm	Edge Distance mm	
	Tensile	Shear	Tensile	Shear	Tensile	Shear		Tensile & Shear	Tensile
8	20.0	9.0	11.1	7.2	7.9	5.1	160	80	90
10	30.0	14.0	16.7	11.2	11.9	8.0	180	90	125
12	40.0	21.0	22.2	16.8	15.9	12.0	220	110	160
16	50.0	39.0	27.8	31.2	19.8	22.3	250	125	270
20	75.0	61.0	41.7	48.8	29.8	34.9	340	170	300
24	90.0	88.0	50.0	70.4	35.7	50.3	420	210	360

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

Loads are for JCP Grade 5.8 Studs and Grade 70 Stainless Steel Studs

**Reduced Design Resistance (kN) • Divide Loads by 1.4 for Approved Loads**

Edge mm	Tensile Resistance						Shear Resistance						Spacing mm	Tensile Resistance per Pair of Anchors					
	M8	M10	M12	M16	M20	M24	M8	M10	M12	M16	M20	M24		M8	M10	M12	M16	M20	M24
40	7.2												40	13.9					
45	7.7	10.9											45	14.2	20.9				
50	8.2	11.5					4.0						50	14.6	21.3				
55	8.7	12.2	14.4				4.4						55	14.9	21.8	27.8			
60	9.2	12.8	15.1				4.8						60	15.3	22.3	28.3			
65	9.6	13.5	15.8	18.5			5.2	5.8					65	15.6	22.7	28.8	35.0		
70	10.1	14.1	16.5	19.2			5.6	6.3					70	16.0	23.2	29.3	35.6		
80	11.1	15.4	18.0	20.8			6.4	7.2	8.4				80	16.7	24.1	30.3	36.7		
90		16.7	19.4	22.4	28.0		7.2	8.1	9.5				90	17.3	25.1	31.3	37.8	52.7	
100			20.8	23.9	29.7			9.0	10.5				100	18.0	26.0	32.3	38.9	54.0	
110			22.2	25.5	31.4	33.3		9.9	11.6				110	18.7	26.9	33.3	40.0	55.2	
125				27.8	34.0	35.8		11.2	13.1	14.4			120	19.4	27.8	34.3	41.1	56.4	64.3
150					38.3	40.0			15.8	17.3	24.4		160	22.2	31.5	38.3	45.6	61.3	69.0
160					40.0	41.7			16.8	18.5	26.0		180		33.4	40.4	47.8	63.8	71.4
170					41.7	43.3				19.6	27.7		200			42.4	50.0	66.2	73.8
190						46.7				22.0	30.9	37.2	220			44.4	52.3	68.7	76.2
210						50.0				24.3	34.2	41.1	235				53.9	70.5	78.0
230										26.6	37.4	45.0	250				55.6	72.4	79.8
270										31.2	43.9	52.8	300					78.5	85.7
300											48.8	58.7	340					83.4	90.5
330												64.5	380						95.2
360											70.4		420						100.0

**Influence of Concrete Strength**

Concrete Strength		C20/25	C25/30	C30/37	C40/50	C45/55	C50/60
Cylinder	N/mm <sup>2</sup>	20	25	30	40	45	50
Cube	N/mm <sup>2</sup>	25	30	37	50	55	60
Factor		1.00	1.10	1.22	1.41	1.48	1.55

When using concrete factors check all other information to ensure Steel Strength and Pull out Resistance is not exceeded

**Steel Design Resistance for single anchor**

		M8	M10	M12	M16	M20	M24	
Tension	kN	12.0	19.3	28.0	52.0	82.0	118.0	Grade 5.8
	kN	13.9	21.4	31.5	58.8	91.9	132.0	Stainless Steel Grade 70
Shear	kN	7.2	11.2	16.8	31.2	48.8	70.4	Grade 5.8
	kN	8.3	12.8	18.5	35.2	55.1	79.4	Stainless Steel Grade 70

**Anchor Mechanical Properties**

		M8	M10	M12	M16	M20	M24	
Nominal Tensile Strength	N/mm <sup>2</sup>	500	500	500	500	500	500	Zinc plated & H.D.G
		700	700	700	700	700	700	Stainless Steel
Yield Strength	N/mm <sup>2</sup>	400	400	400	400	400	400	Zinc plated & H.D.G
		450	450	450	450	450	450	Stainless Steel
Nut A/F	mm	13	17	19	24	30	36	
Washer Diameter	mm	16	21	24	30	37	44	