

# **Product Model**

# Internal Threaded Sockets

The Internal threaded Sockets provide a flush fixing which allows for the attachment of a suitable bolt or threaded rod. Available in zinc plated and A2/304 stainless steel versions.

#### **Installation Guide**

- Drill correct diameter hole to correct depth
- Clean hole by brushing and blowing to remove all dust and drilling debris
- Insert Spin In Capsule with air bubble nearest to surface of concrete
- Attach setting tool to socket and spin in with drilling machine using rotary hammer action flush with surface
- Allow resin to cure, attach fixture, insert bolt and tighten to Recommended Torque

Technical data supplied by the manufacturer



#### **Key Features**

- Expansion free
- High Loads
- Close Spacing and Edge Distance
- Allows removal of bolt to leave a re-usable socket in place

For injection resin inject resin to fill hole approx 1/3 full and insert socket rotating by hand to ensure even distribution of resin. For injection resin installation it is advisable to insert a bolt into the socket prior to installation to prevent resin entering the internal thread of the socket.

## Data is for Spin In Capsules and Vinylester (Highload) Resin

Socket Data										
Part Number		Socket		Drill Hole Diam	Hole Depth	Fixture Clearance	Minimum Structure	Installation Torque		
Zinc Plated	Stainless Steel A2-304	Use with Capsule	Diam Length (mm) (mm)	Length (mm)	(mm)	(mm)	Hole (mm)	Thickness (mm)	(Nm)	
ITSM08BZP	ITSM08SS	JCAPSM12	8	90	30	14	90	10	110	7
ITSM10BZP	ITSM10SS	JCAPSM16	10	90	35	18	90	12	120	11
ITSM12BZP	ITSM12SS	JCAPSM16	12	90	40	25	90	14	140	25
ITSM016ZP	ITSM16SS	JCAPSM16	16	125	40	28	125	18	160	50



# **Fixmart Data Sheet V01**

Performance Data (C20/25 Concrete)											
Thread Diam (mm)	Characteristic	Resistance (kN)	Design Resistance (kN) F		Recommended Resistance (kN)		Spacing (mm)	Edge Dist	Edge Distance (mm)		
	Tensile	Shear	Tensile	Shear	Tensile	Shear	Tensile & Shear	Tensile	Shear		
8	25.6	9.0	12.2	7.2	8.7	5.7	135	80	90		
10	35.5	14.0	16.9	11.2	12.1	8.5	180	90	125		
12	43.5	21.0	20.7	16.8	14.8	11.3	200	100	160		
16	76.9	39.0	36.6	31.2	26.1	14.2	250	125	270		

Shear Resistance towards a free edge is for single anchors where Spacing  $\geq$  3 x Edge Distance. Loads are for Grade 5.8 Bolts and Grade 70 Stainless Steel Bolts

#### Reduced Design Resistance (kN) • Divide Resistance by 1.4 for Recommended Resistance

Edge Distance (C20/25 Concrete) for single anchors										
Edge (mm)	Tensile Resis	Tensile Resistance								
	M8	M10	M12	M16						
45	8.5									
50	9.0	11.6								
55	9.5	12.3	14.2							
60	10.1	13.0	14.9							
65	10.6	13.6	15.6							
70	11.1	14.3	16.4	24.3						
80	12.2	15.6	17.8	25.3						
90		16.9	19.3	27.4						
100			20.7	29.4						
110				31.5						
120				33.5						
125				36.6						
140										
160										
180										
200										
220										
250										
270										

Edge Distance (C20/25 Concrete) for single anchors								
Shear Resistance	e							
M8	M10	M12	M16					
3.6								
4.0								
4.4								
4.8								
5.2	5.8							
5.6	6.3							
6.4	7.2	8.4						
7.2	8.1	9.5						
	9.0	10.5						
	9.9	11.6						
	10.8	12.6						
	11.2	13.1						
		14.7	16.2					
		16.8	18.5					
			20.8					
			23.1					
			25.4					
			28.9					
			31.2					

# **Fixmart Data Sheet V01**

## Reduced Design Resistance (kN) • Divide Resistance by 1.4 for Recommended Resistance

Spacing (C20/25 Concrete)									
Spacing (mm)	Tensile Resistance per Pair of Anchors								
	M8	M10	M12	M16					
70	18.5								
80	19.4								
90	20.3								
100	21.2	26.3							
110	22.1	27.2							
120	23.0	28.2	33.1						
135	24.4	29.6	34.7						
150		31.0	36.2	58.6					
160		31.9	37.3	60.0					
170		32.9	38.3	61.5					
180		33.8	39.3	63.0					
190			40.4	64.4					
200			41.4	65.9					
210				67.3					
220				68.8					
230				70.3					
240				71.7					
250				73.2					

### Influence of concrete strength

Concrete Strength	C20/25	C25/30	C30/37	C40/50	C50/60
Cylinder N/mm²	20	25	30	40	50
Cube N/mm²	25	30	37	50	60
Factor	1.00	1.10	1.22	1.41	1.55

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

#### Steel Design Resistance for single anchor

	840		B440		B#40		1440		
	IVI8	M8		M10		M12		M16	
	Tension	Shear	Tension	Shear	Tension	Shear	Tension	Shear	
Grade 5.8 Bolts	12.0	7.2	19.3	11.2	28.0	16.8	52.0	31.2	
Stainless Steel Grade 70	13.9	8.3	21.4	12.8	31.5	18.5	58.8	35.2	

## Anchor mechanical properties

	M8		M10		M12		M16	
	Nominal Tensile N/mm²	Yield Strength N/mm <sup>2</sup>	Nominal Tensile N/mm²	Yield Strength N/mm <sup>2</sup>	Nominal Tensile N/mm²	Yield Strength N/mm²	Nominal Tensile N/mm²	Yield Strength N/mm <sup>2</sup>
Zinc plated	500	400	500	400	500	400	500	400
Stainless Steel	700	450	700	450	700	450	700	450

**Remark:** This technical data sheet replaces all previous versions. The technical data contained herein is given in good faith and we cannot be held liable for any errors, inaccuracies, omissions or editorial failings. The information detailed in this technical data sheet is given by way of indication and is not exhaustive, users should contact either the seller or the manufacturer of the product for additional technical information concerning its use, if they think the information in their possession needs to be clarified in any way.





