



### Product Information

The Heavy Duty Anchor is a torque controlled expansion anchor designed for rapid through fixing into concrete. Manufactured from A4-316 Stainless Steel it is suitable for use in marine and corrosive environments.

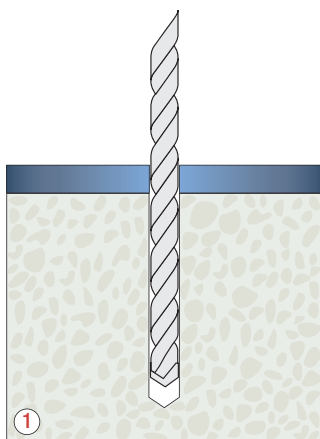
### Features

- 1 Through Fixing
- 2 Torque controlled expansion
- 3 Heavy Duty applications
- 4 A4-316 Stainless Steel

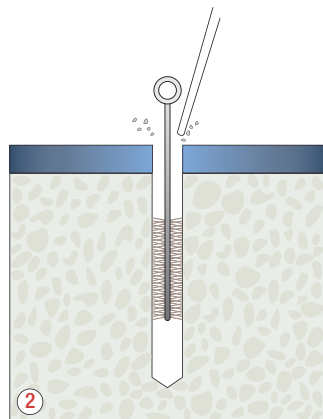
### Range Data

Part Number	Thread Diameter mm	Anchor Length mm	Maximum Fixture Thickness mm	Drill Hole Diameter mm	Minimum Hole Depth mm	Embedment Depth mm	Fixture Clearance Hole mm	Minimum Structure Thickness mm	Tightening Torque Nm
SLB12/10SS	8	82	10	12	70	63	14	160	25
SLB12/25SS		97	25						
SLB14/10SS	10	96	10	14	85	73	16	200	50
SLB14/25SS		111	25						
SLB18/15SS	12	117	15	18	100	93	20	240	80
SLB18/25SS		127	25						
SLB18/40SS		142	40						

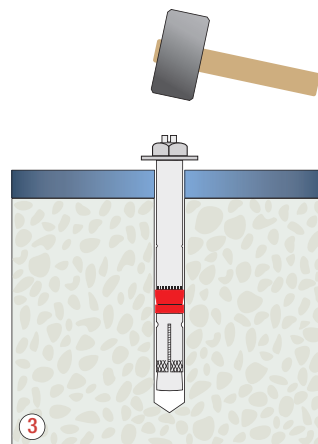
### Installation Instructions



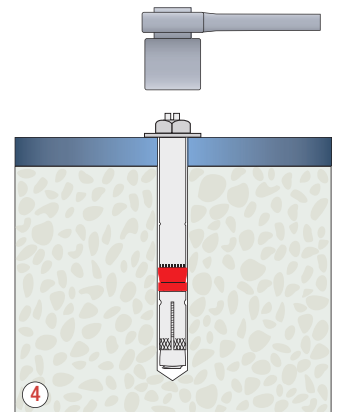
1 Position fixture and drill correct diameter hole to minimum recommended depth through fixture



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



3 Insert Heavy Duty anchor through fixture into drilled hole



4 Tighten anchor to Recommended Torque

Performance Data (20/25 Concrete)									
Thread Diameter mm	Characteristic Resistance kN		Design Resistance kN		Recommended Load kN		Spacing mm	Edge Distance mm	
	Tensile	Shear	Tensile	Shear	Tensile	Shear		Tensile & Shear	Tensile
8	25.6	22.2	13.7	14.2	9.8	10.2	165	160	150
10	26.4	31.6	17.6	20.3	12.6	14.5	195	190	175
12	36.0	55.5	24.0	35.6	17.2	25.4	240	215	255

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

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

Edge Distance (C20/25 Concrete) for single anchors						
Edge mm	Tensile Resistance			Shear Resistance		
	M8	M10	M12	M8	M10	M12
110	10.6			11.2		
115	10.9			11.6		
120	11.2			12.0		
125	11.5			12.4		
130	11.8	13.6		12.8	15.8	
135	12.2	13.9		13.2	16.6	
140	12.5	14.2		13.6	17.1	
145	12.8	14.6		14.0	17.6	
150	13.2	14.9		14.2	18.1	
155	13.5	15.3			18.6	
160	13.7	15.6	19.3		19.1	24.3
165		16.0	19.7		19.6	24.9
170		16.4	20.1		20.1	25.6
175		16.7	20.5		20.2	26.2
180		17.1	20.9			26.8
190		17.6	21.8			28.0
200			22.6			29.3
215			24.0			31.1
225						32.3
235						33.5
245						34.7
255						35.6

Spacing (C20/25 Concrete)			
Spacing mm	Tensile Resistance per Pair of Anchors		
	M8	M10	M12
80	20.4		
85	20.8		
90	21.2		
95	21.6		
100	22.0	26.6	
110	22.8	27.5	
120	23.7	28.4	36.1
130	24.5	29.4	37.1
140	25.3	30.3	38.1
150	26.2	31.2	39.1
165	27.4	32.5	40.6
170		33.0	41.1
180		33.9	42.1
195		35.2	43.6
210			45.1
220			46.1
230			47.1
240			48.1

**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 Tensile and Shear Resistance is not exceeded

**Steel Design Resistance for single anchor**

		M8	M10	M12
Tension	kN	13.7	21.7	31.5
Shear	kN	14.2	20.2	35.6

**Anchor Mechanical Properties**

		M8	M10	M12
Tensile Strength	N/mm <sup>2</sup>	700	700	700
Yield Strength	N/mm <sup>2</sup>	450	450	450
Nut A/F	mm	13.0	17.0	19.0
Washer Diameter	mm	20.0	24.5	30.0