Throughbolt S.S. A4-316

Standard Embedment

Performance Data (20/25 Non-Cracked Concrete)											
Thread Diam	Minimum Structure Thickness	Characteristic Resistance		Design Resistance		Recommended Resistance		Design Spacing	Design Edge Distance		Tight. Torque
mm	mm	kN		kN		kN		mm	mm		Nm
		Tensile	Shear	Tensile	Shear	Tensile	Shear	Tensile & Shear	Tensile	Shear	
6(1)	100	7.5	7.0	4.8	5.6	3.6	3.9	35	35	65	6
8(1)	100	12.0	12.0	7.9	9.6	5.7	6.8	85	85	105	15
10	100	16.0	16.7	10.6	11.1	7.4	8.0	130	115	120	25
12	135	25.0	27.0	16.6	21.5	11.9	15.4	175	155	195	50
16	170	36.0	50.0	24.0	39.9	17.1	28.6	240	195	325	100
20	200	50.5	86.0	33.5	61.4	23.9	43.9	300	275	445	160

Shear Loads towards a free edge are for single anchors where Spacing ≥ 3 x Edge Distance

Reduced Embedment

Performance Data (20/25 Non-Cracked Concrete)											
Thread Diam	Minimum Structure Thickness	Characteristic Resistance		Design Resistance		Recommended Resistance		Design Spacing	Design Edge Distance		Tight. Torque
mm	mm	kN		kN		kN		mm	mm		Nm
		Tensile	Shear	Tensile	Shear	Tensile	Shear	Tensile & Shear	Tensile	Shear	
6(1)	80	6.0	8.3	3.8	5.5	2.7	3.9	35	55	65	6
8(1)	80	9.0	10.4	5.9	6.9	4.3	4.3	75	85	85	15
10	100	12.0	13.7	7.9	9.1	5.7	6.5	95	95	95	25
12	105	17.8	17.8	11.9	11.9	8.5	8.5	150	145	120	50
16	130	25.8	51.7	17.2	34.4	12.3	24.5	195	160	330	100
20	160	34.7	69.5	23.1	46.3	16.5	33.0	235	200	385	160

Shear Loads towards a free edge are for single anchors where Spacing ≥ 3 x Edge Distance

(1) use restricted to anchorages of indeterminate structural components