



Throughbolt S.S. A4-316

Specification



ETA 07/0332
 Option 7 Non-Cracked Concrete

Product Information

A Grade A4-316 Stainless Steel, torque controlled through fixing suitable for use in non-cracked concrete range between C20/25 & C50/60.

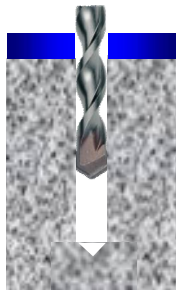
Features

Through Fixing
 Medium to heavy duty loads
 Torque controlled expansion
 Supplied pre-assembled for rapid installation

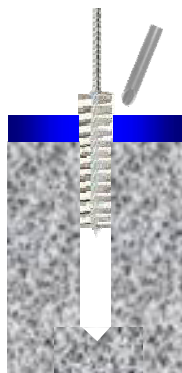
Range Data

Part Number	Anchor Diam & Length	Hole Diam	Fixture Clearance Hole	Max. Fix. Thickness		Min Embedment Depth		Minimum Hole Depth	
				Standard Embedment	Reduced Embedment	Standard Embedment	Reduced Embedment	Standard Embedment	Reduced Embedment
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
TSS06040	6x40	6	7	-	5	-	27	-	35
TSS06065	6x67			10	20	49	39	55	45
TSS08050	8x50	8	9	-	5	-	35	-	45
TSS08075	8x75			10	19	56	47	65	55
TSS08095	8x95			30	39				
TSS08120	8x120			55	64				
TSS10060	10x60	10	12	-	10	-	40	-	50
TSS10080	10x85			10	16	62	56	70	65
TSS10100	10x105			30	36				
TSS10125	10x125			50	56				
TSS10175	10x175	100	106						
TSS12085	12x95	12	14	-	14	81	66	90	75
TSS12100	12x105			10	25				
TSS12115	12x115			20	35				
TSS12145	12x145			50	65				
TSS12200	12x200			105	120				
TSS16110	16x115	16	18	-	14	99	83	110	95
TSS16125	16x130			10	26				
TSS16150	16x150			30	46				
TSS16175	16x180			60	76				
TSS20170	20x180	20	22	35	57	121	99	130	110
TSS20220	20x240			95	117				

Installation Instructions



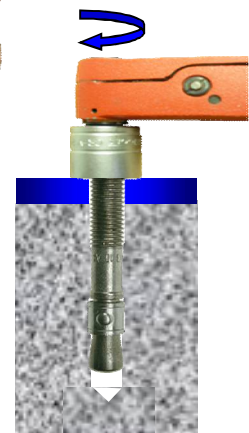
Position fixture and drill correct diameter hole to correct depth



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



Insert assembled anchor through fixture into concrete



Tighten with torque wrench to recommended torque

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 $\geq 3 \times$ 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 $\geq 3 \times$ Edge Distance

(1) use restricted to anchorages of indeterminate structural components