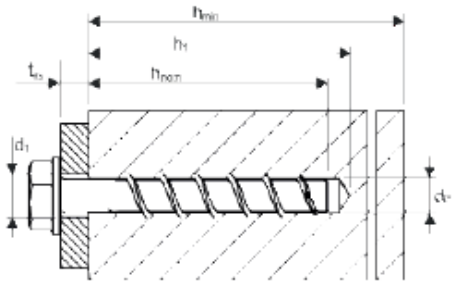
Engineering Technical Bulletin

TOGE TSM LT (316) A4 HIGH PERFORMANCE SCREW-BOLTS

Stainless steel - LT A4

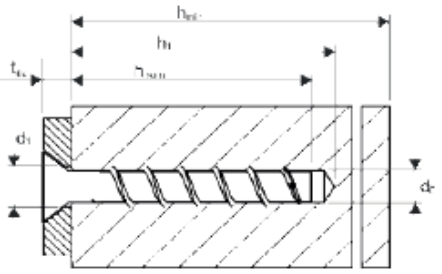
Version with hexagon head and pressed-on washer

Size	Washer-Ø
6	17,0 mm
8	16,0 mm
10	20,0 mm



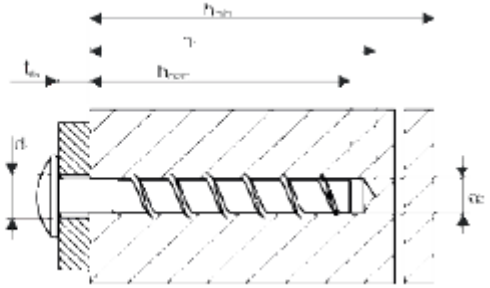
Version with countersunk head with multipoint drive

Size	Head-Ø
6	13,0 mm
8	19,5 mm
10	21,5 mm



Version with panhead and multipoint drive

Size	Head-Ø
6	15,0 mm



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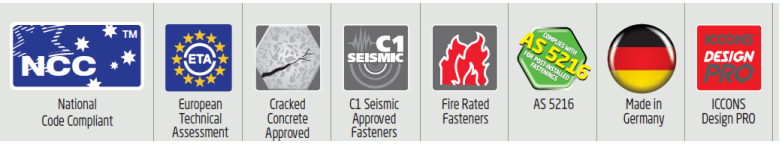

TOGE TSM LT SS PERFORMANCE IN 20 MPa CONCRETE

Single anchor remote from edge

							TENSILE DESIGN RESISTANCE			SHEAR DESIGN RESISTANCE						
Size	Drill Hole diameter (mm)	Anchor Embedment (mm)	Effective Anchor Depth h_{ef} (mm)	Fixture Hole Diameter (mm)	Installation torque (Nm)	Min. Concrete Thickness (mm)	Non-Cracked Concrete (kN)	Cracked Concrete (kN)	SEISMIC C1 (kN)	Non-Cracked Concrete (kN)	Cracked Concrete (kN)	SEISMIC C1 (kN)	CSK (Only) SEISMIC C1 (kN)	Impact Screw Driver Max. Torque (Nm)	Minimum Edge Distance (mm)	Minimum Spacing Distance (mm)
TSM LT SS 6	6	35	25	8	10	80	2.3	1.7	-	5.2	3.6	-	-	160	35	35
		45	34			80	2.7	1.0	1.0	5.6	5.6	2.8	2.0			
		55	42			100	5.7	2.0	2.0	5.6	5.6	3.2	-			
TSM LT SS 8	8	45	32	12	20	80	6.0	2.0	2.0	10.8	10.8	6.4	3.6	300	35	35
		55	41			100	8.0	3.7	-	10.8	10.8	-	-			
		65	49			120	11.3	5.3	5.7	13.6	13.6	8.0	5.6			
TSM LT SS 10	10	55	40	14	40	100	7.3	4.0	4.0	18.0	18.0	11.2	11.2	450	40	40
		75	57			130	12.7	8.7	-	27.2	27.2	-	-			
		85	65			130	16.7	11.3	10.2	27.2	27.2	12.8	8.0			

Notes:
The TSM LT SS high performance anchor may be used in applications subject to static or quasi-static loading in reinforced or unreinforced normal weight concrete of strength classes C20/25 - C50/60.

The TSM LT SS high performance anchor may be used in cracked or non-cracked concrete.

For specific design information including minimum edge and anchor spacing information please refer to ETA-21/0425.

C1 Seismic design loads have been derived using AS 5216:2021 / EN 1992-4:2018 & TR049 (agap = 1.0).

Performance data in the above table has been calculated using the relevant published ETA and based on single anchor installation at characteristic spacing and edge distance parameters.