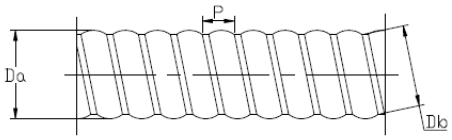
GFRP-THREAD (REBAR)

GFRP-THREAD is a thread with advanced strength and head load. Due to continuous coarse thread profiles, the bolts and tubes can be trimmed if needed. The products have a high ultimate load and due to their profile, they offer maximum bondage with all grouting material.



The bolts and tubes have a high corrosion resistance under acid conditions and are well suited for permanent support. The improved flexibility of long tendons is well suited for application without couplings in confined locations.

Due to its high tensile strength the bolt has a high and immediate load bearing capacity if applied with fast setting resin capsules. The low weight facilitates handling.

			Solid Bolt					
Selection of Items		Unit	GC60-22	GC60-25	GC60-27	GC60-32	GC60-38	GC60-40
Outer diameter		mm	22	25	27	32	38	40
Tensile stress area		mm²	250	350	400	580	830	950
Ultimate load		kN	250	350	380	560	750	860
Ultimate strength		N/mm²	1,000	1,000	950	960	900	900
Tensile E-Modulus		N/mm²	50,000	50,000	50,000	50,000	50,000	50,000
Breaking Load Thread	GFRP Nut L=70mm	kN	60	70	70	90	–	–
	Steel Nut L=100mm	kN	100	180	200	–	–	–
	Steel Nut L=150mm	kN	–	–	–	320	360	380
	GFRP POWER Nut	kN	100	180	180	200	–	–
	Steel Duo Nut	kN	–	300	–	450	–	800
	Steel coupler L=200mm	kN	100	180	200	250	280	380*
Torsion resistance		Nm	70	120	130	230	–	–
Shear resistance 90°		N/mm²	460	460	460	420	420	420
Strain at failure		%	2.1	2.1	2.1	2.1	2.1	2.1
Weight		g/m	690	900	1,050	1,500	2,230	2,340

*L=300mm

			Tubular Bolt		
Selection of Items		Unit	GC64-25/12	GC64-28/12	GC64-32/12
Outer diameter		mm	25	28	32
Inner diameter		mm	12	12	12
Tensile stress area		mm²	250	350	470
Ultimate load		kN	220	320	420
Ultimate strength		N/mm²	880	900	890
Tensile E-Modulus		N/mm²	50,000	50,000	50,000
Breaking Load Thread	GFRP Nut L=70mm	kN	70	70	80
	Steel Nut L=100mm	kN	140	200	220
	GFRP POWER Nut	kN	120	180	–
Torsion resistance		Nm	80	120	–
Shear resistance 90°		N/mm²	300	350	350
Strain at failure		%	2.1	2.1	2.1
Weight		g/m	630	860	1,340