

Mining & Tunneling Stabilization

GFRP Bolt

The all-thread bolt was developed for strata support in mining and tunneling and for slope and face stabilization. Due to its continuous thread the bolt can be trimmed if needed.

The bolt has a high ultimate load and due to its profile it offers a maximum bondage with all grouting material.

The cut ability protect machinery and equipment and prevents damage to machinery while drifting and enlarging tunnels.

The bolt has a high corrosion resistance and is well suited for permanent support. The high flexibility is well suited for application without couplings in confined location. Due to its high Tensile strength the bolt has a high and immediate load bearing capacity if applied with fast setting resin capsules.

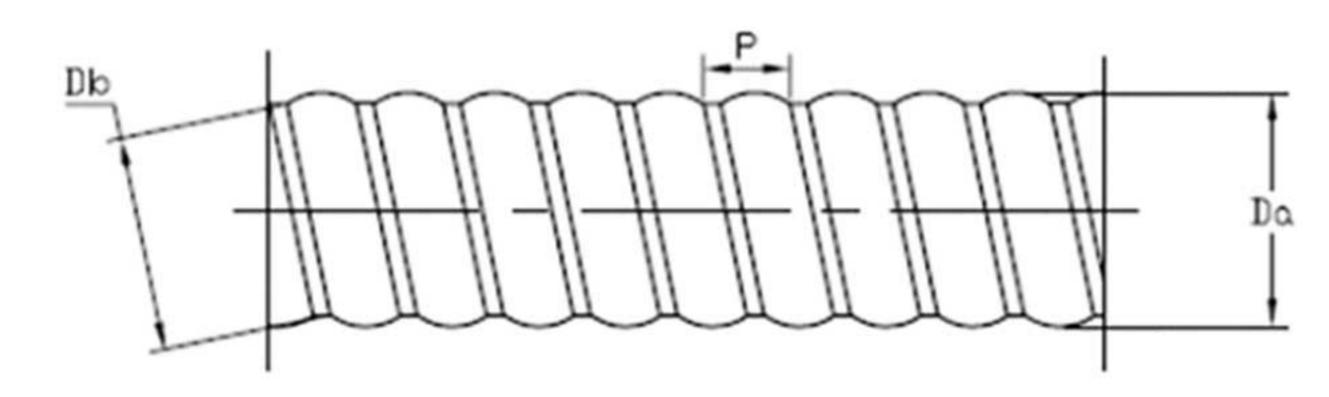
The low weight facilitates handling. For the setting of all-thread bolts all standard rotating machines can be used provided they are not used with percussion. The setting of bolts can be carried out with resin capsules, cementations grout, or chemical grout.



GFRP Bolt®

Internal Standard Specification

Product up to 40mm



Technial Data

Item	Unit	Specification
Tensile strength	N/mm ²	1095
Bending strength	N/mm ²	970
Shear strength	N/mm ²	420
Tensile E-modulus	Gpa	46
Torsion	N.m	139
Antistatic	Ω.cm	3.9*10 ⁸
Weight	g/m	690+25
Glass Fiber content	%	75
Fire resistance	S	2
Pitch(p)	mm	10±0.2
Dia, Top(Da)	mm	22.0±0.5
Dia, Deep(Db)	mm	19.7±0.5













