TECHNICAL DATA SHEET

SeaShield 2000FD GFRP Fasteners

Glass Fibre Reinforced Polymer Fastener for the SeaShield 2000FD System

Description

SeaShield 2000FD GFRP Fasteners are fabricated from glass fibre reinforced polymers. They are comprised of a threaded rod, a capped nut and open nut.

Uses

SeaShield 2000FD GFRP Fasteners are used as a component of the SeaShield 2000FD System. They secure the proprietary fastening system of the SeaShield 2000FD Jacket during service.

Features

- Formulated to maintain mechanical properties in the marine environment
- Suitable for use in immersed, tidal, splash and atmospheric zones
- The nuts are 19.05 (3/4 inch) across flats and 30 mm in length. The rods are 128 mm in length ($\pm$ 5 mm)

Property	Result	Test Method
Rod Tensile Strength at Break	900 MPa	ASTM D7205
Rod Elongation at Break	1.5%	ASTM D7205
Rod Stress at 0.2% Permanent Strain	120 MPa	ASTM D7205
Fastener Water Absorption	< 2%	ASTM D570
Breaking Torque[a]	35 N/m (30 N/m)[b]	Internal Method
Installation Torque Range[a]	22 - 28 Nm	Internal Method
Fastener Tensile Force at Break	104 MPa	Internal Method[c]
Fastener Tensile Force at Break after UV Exposure[d]	103 MPa	Internal Method[c]

[a] When used as a component of the SeaShield 2000FD System
[b] Average value within 95% confidence interval (minimum value based on distribution 5th percentile)
[c] 12 mm/min rate of extension. Custom clamping device. 14 mm diameter holes.
[d] UV exposure according to ISO 4892-3 Method A, 1000 h

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