

Fiberglass Reinforced Plastic

Rev. No: 250626

Fiberglass Reinforced Plastic

Fokabeks Kablo ve Sistemleri Ltd. Şti.



'where
fiber optic happens'

TECHNICAL DATASHEET

Product	Fiberglass Reinforced Plastic
Product PN	FX FRP
Material	Produced with thermal pultrusion technique, UV/ thermal coated and made from high modulus e-glass yarns & special high heat resistant resin. In constant diameter, smooth surface and hard coating. Dustless, corrosion free, no harmful to humans, natural color, nonconductive & nonwoven product.
Features & Benefits	It is ideal to use as central or peripheral strength member/ strain relief element in fiber optic cables. Emdded into the outer jacket mostly in small diameters & mainly located in the center of the cable in larger diameters. It is also being reinforcement element without making stress on fibers with its highly flexible, high tenacity and anti-buckling feature. Can be used as self support nonmetallic messenger wire in aerial cables. Flat form alternatives available too. Wide dimensional spectrum from 0.5 mm to 4.0 mm. Also depending on cable design can serve as anti-rodent armour material preferred for non-metallic/ all dielectric optical fiber cables.

Typical Specs

Properties (@T = 23°C & RH = 50%)	Value	Unit	Test Method
Diameter Tolerance	± 2 %	mm	ASTM F 16
Ovality	≤ 5%	%	–
Tensile Strength	≥ 1100	MPa	ASTM D 3916
Tensile Modulus	≥ 50	GPa	ASTM D 3916
Elongation at Break	≤ 4%	%	ASTM D 3916
Flexural Strength	≥ 1100	MPa	ASTM D 790
Flexural Modulus	≥ 50	GPa	ASTM D 790
Min. Bend. Radius Perf. (25D, 20°C ± 5°C)	No delamination, no decomposition	–	–
High Temp. Bend. Perf. (50D, 100°C ± 1°C, 120h)	No delamination, no decomposition	–	–
Low Temp. Bend. Perf. (50D, -40°C ± 1°C, 120h)	No delamination, no decomposition	–	–
Density	2.0 to 2.15	g/cm ³	ASTM D 885
Moisture Content	≤ 0.1%	%	ASTM D 570
Torsional Performance	No disintegration	–	–
Coeff. of thermal expansion	≤8×10E6	1/°C	ASTM D 696
Temperature Stability	-50 to 150	°C	–

Packaging

FRP is precision, flawless & consistent wound to non-returnable & strong plywood drums or ABS hard plastic reels (Only 0.5 mm) in standart lengths as 25,2 / 50,4 km/reels. ABS Reels are placed inside of thick & strong cardboard boxes.

*Pls. ask us reel dimensions & FRP lengths dependent on OD per drum when needed.