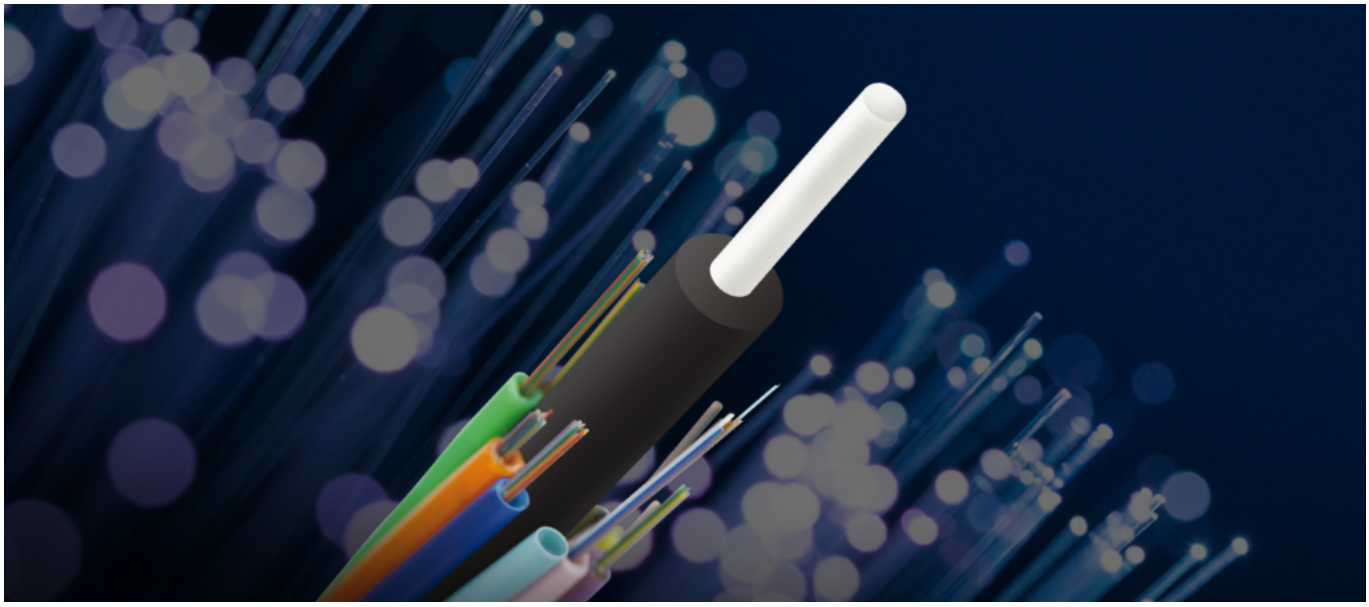


Our “hybrid” GRP with high adhesion and waterproof HDPE coating to meet your highest standards. We may provide you with HDPE coated GRP up to 10,00mm outer diameter (meter marking every 5 meters for diameters above 1.0mm). By outsourcing this coating operation you release your own capacity and then save time and money => monthly capacity 3 000km

MATERIAL SAFETY DATA SHEET

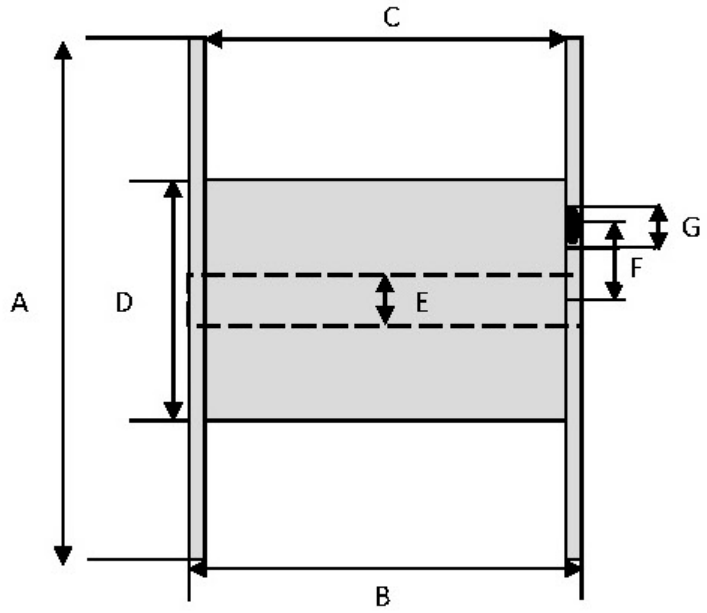
ISO 9001 CERTIFICATE

GRP A mm HDPE coated to B mm Characteristics

ITEM	UNIT	SPECIFICATION	TEST METHOD
Appearance	Shall be Good	Good	–
Diameter Tolerance	mm	dia. ± 0.05	Micrometer
Specific Gravity	g/cm^3	2.1 ± 0.1	ASTM D 792
Tensile Strength	Kgf/mm^2	Min. 140	ASTM D 3916
Tensile Modulus	Kgf/mm^2	Min. 4500	ASTM D 3916
Elongation at Break	%	Min 2.5	ASTM D 3916
Flexural Strength	Kgf/mm^2	Min. 150	ASTM D 790
Flexural Modulus	Kgf/mm^2	Min. 5000	ASTM D 790
Coef. of Thermal Expansion	/°C	Nom. $7*10^{-6}$	ASTM D 696
Minimum Bending Radius	mm	25 X Dia	–

ITEM	UNIT	SPECIFICATION	TEST METHOD
Glass Content	%	Min. 80	–
Outer Diameter Tolerance	mm	B ± 0.1	Micrometer
Water-Proof Test (24hrs)	–	PASS	–
Length / Drum	Km	Min. 6.1	–

Drum dimensions



(mm)

STANDARD DRUM	A	B	C	D	E	F	G	LENGTH
1	650	455	401	300	80	130	40	6.1~50.0 Km
2	800	560	494	400	80	160	40	6.1~50.0 Km
3	900	560	494	400	80	160	40	6.1~50.0 Km
4	1000	560	480	400	80	160	40	6.1~50.0 Km
5	1100	560	480	400	80	160	60	6.1~50.0 Km
6	1100	730	650	400	80	160	60	6.1~50.0 Km
7	1200	790	710	630	80	160	60	6.1~50.0 Km
8	1400	790	710	700	80	160	60	6.1~50.0 Km

STANDARD DRUM	A	B	C	D	E	F	G	LENGTH
9	1500	820	740	700	80	160	60	6.1~50.0 Km