

HFS 105 XL B / Q

Type tested to IEEE 323 and IEEE 383
Intended for use in nuclear applications

Electrical			
Properties	Method	Conditions	Value
Dielectric constant	ASTM D 150	50 Hz	3.8
Dielectric strength	-	-	-
Dissipation factor	ASTM D 150	50 Hz	0.014
Volume resistivity	ASTM D 257	-	10 ¹³ Ω x cm

Physical			
Properties	Method	Conditions	Value
Density	ASTM D 792	-	1.58 g/cm ³
Elongation at break	IEC 60811-501	50 mm/min	100 %
Hardness	ASTM D 2240	-	45 D
Radiation resistance	IEC 60544	-	10 ⁶ Gy
Tensile strength	IEC 60811-501	50 mm/min	9 MPa
Water absorption	-	-	-

Thermal			
Properties	Method	Conditions	Value
Combustion corrosivity	IEC 60754-2	pH Conductivity	4.5 42 μS/cm
Continuous temperature rating	IEC 60216	20,000 hrs	+ 110 °C
Flammability	UL 94 UL 1581	0.5 mm Dependent on cable design	V-0 VW-1
Flame propagation	IEC 60332-1-2 IEC 60332-3-22 Cat A IEEE 1202-2006	Dependent on cable design Dependent on cable design Dependent on cable design	Pass Pass Pass
Oxygen index	ISO 4589-2	-	42 %
Smoke density	ASTM E 662	1.5 mm flaming 1.5 mm non-flaming	48 350
Smoke index	-	-	-
Temperature index	ISO 4589-3	-	300 °C
Toxicity index	Def Stan 02-713	-	1.6

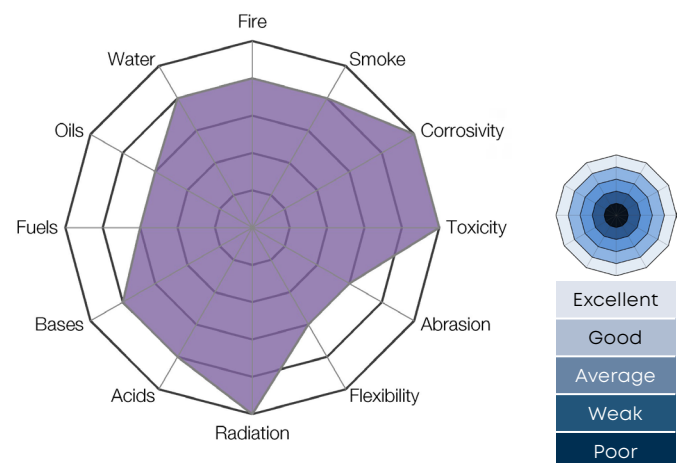
Properties

HFS 105 XL B is Habia Cable's preferred material for safety critical nuclear applications.

Sharing many of the Low Smoke, Zero Halogen (LSZH) and Flame Retardant (FR) properties of HFS 80 N, HFS 105 XL B is a cross-linked material which is able to provide much improved temperature and chemical resistance.

Extensive testing and verification on HFS 105 XL B has been done to confirm that it is suited for use to IEEE 323 and IEEE 383.

Important: Habia Cable has compiled the information contained herein from what it believes to be accurate and factual sources as of the date printed. Data is based on typical values and might vary depending on cable construction and processing method. Any changes in the data will be made without notification.



Available colours (shades may vary from material to material)



Characteristics and key properties

Intended use Small / Inner sheath	Intended use Outer sheath					Temp installation -40°C	Temp low -25°C	Temp >20,000 hrs +110°C	Temp peak +125°C
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