

Bruker HTS YBCO Coated Conductor Data Sheet

type of coated conductor		YHT-HC standard tape for high current densities	YHT-FC tape with optimized quench behavior	YHT-UH tape with high 2D-homogeneity
architecture	Substrate	stainless steel (SS), thickness 100 μ m or 50 μ m		
	HTS film	YBCO, thickness 0.5 ... 3 μ m		
	protection layer	silver or gold, thickness 0.2 μ m		
	Cu shunt layer	20 μ m thick	not required	on request
electrical properties @ 77 K, 0 T Option: PEEK insulation layer BDV 600 V	engineering current density	300 ... 1000 A/mm ²		
	critical currents @ 3 μ m thick YBCO; 77K, self field	135 A in 4 mm wide tape		
mechanical properties (critical values @ 300 K)	axial tensile strength	650 MPa		
	critical bending radius	9 mm and 5 mm @ 100 μ m and 50 μ m thick SS		
	critical torsion	30 ang. deg. per cm-length (4mm wide and 100 μ m thick tape @ 40 N axial force)		
typical dimensions	thickness	0.105 mm or 0.05 mm		
	width	4 mm (others on request)		
	unit length	100 m @ 4mm width		