HYTEM
Microwave Systems

MICROWAVE LOW LOSS FLEXIBLE COAXIAL CABLE

CABLES

REF : HY110AF

SPECIFICATIONS MECANIQUES / *MECHANICAL SPECIFICATIONS*	
Type de câble / *Cable type*	Test & Instrumentation
Températures d'utilisation / *Temperature range*	-55 °C ~ +125 °C
Rayon de courbure / *Bend radius (Static / Dynamic)*	19 mm / 38 mm
Poids / *Weight*	26 kg/km

SPECIFICATIONS ELECTRIQUES / *ELECTRICAL SPECIFICATIONS*	
Frequence d'utilisation / *Frequency range*	DC ~ 110 GHz
Impédance / *Impedance*	50 Ohms
Capacité / *Capacitance*	88 pF/m
Vitesse de propagation / *Velocity of propagation*	76 % (typ)
Efficacité de blindage / *Shielding effectiveness*	100 dB (min)
Tension d'utilisation / *Voltage Withstand*	1000 V
Variation de phase vs flexion / *Phase change vs bending*	±0,2 °/GHz
Variation de phase vs temp. / *Phase variation vs temp.*	<1500ppm (-45°C/+85°C)

CONSTRUCTION ET MATERIAUX / *CONSTRUCTION AND MATERIAL SPECIFICATIONS*	
Conducteur central / *Inner conductor*	SPC wire Ø 0,30 mm
Diélectrique / *Insulation*	LD PTFE Ø 0,85 mm
Première tresse de blindage / *Inner shield braid*	SPC strip Ø 1,00 mm
Feuillard inter-blindage / *Interlayer braid*	Low Density PTFE Ø 1,20 mm
Seconde tresse de blindage / *Outer shield braid*	SPC wire Ø 1,45 mm
Gaine interne / *Internal jacket*	FEP Jacket Ø 1,85 mm
Ressort anti-écrasement / *Anti-crush tubular spring*	Stainless steel Ø 2,50 mm
Troisieme tresse de blindage / *Strengthened shield braid*	Tinned wire Ø 2,90 mm
Revétement anti-torsion / *Anti-twist layer*	PTFE wrapping tape Ø 3,20 mm
Gaine externe / *External jacket*	PTFE fiber/braid Ø 3,85 mm

ATTENUATION ET PUISSANCE / *ATTENUATION AND POWER HANDLING*

Frequency (MHz)	500	1000	3000	6000	8000	10000	18000	26500	40000	67000	110000
Typical attenuation (dB/m)	0,802	1,137	1,985	2,829	3,280	3,680	4,993	6,115	7,604	10,027	13,143
Typical attenuation (dB/m) = (1,015556388 x √(FMHz)) + (0,000598459 x FMHz) ÷ 100 with VSWR = 1.0 and Temperature = 25 °C											
Max power handling (kW/cw)	55	39	22	16	13	12	9	7	6	4	3

ATTENUATION (dB/m) / *TYPICAL ATTENUATION (dB/m) vs FREQUENCY (GHz)*