

RF同轴电缆



Design:

Inner conductor: copper-clad aluminium wire	∅ 3.6 mm (0.142) in
Insulation of foamed Polyethylene (PE) with skin	∅ 9.5mm (0.378) in
Outer conductor: copper-tape, longitudinal welded Spiral corrugation	∅ (11.9 ±0.15) mm (0.468 ±0.006) in

Jacket:

Thermoplastic copolymer (FRNC) (LS0H) BK	
Wall thickness about 0.5 mm (0.02 in)	∅ (13.2 +0.2/-0.1) mm (0.519 +0.008/ -0.004) in
Printing: Amphenol FY-50-1/2" S LS0H XXXXXm	801 LOT xx(Y)xx(M)xx(D)

Electrical data at 20°C:

Insulation resistance	≥ 10 GOhm*km (32.8 GOhm*1000ft)
Capacitance (1 kHz)	82 nF/km (25 nF/1000ft)
Characteristic Impedance	(50 ± 1) Ohm
Relative velocity of propagation	82 %
Test voltage (wire/screen rms 50Hz 1min)	2500 V
HF-operating voltage (peak)	≤ 1000 V
Return loss (typical)	
0-3GHz	≤-23dB (VSWR 1.15)
Screening attenuation	≥ 120 dB
Passive intermodulation	≥ 160 dBc
Inductance	0.195 μH/m (0.059 μH/ft)
Max. operating frequency	10.2 GHz
Cut-off frequency	13 GHz
Max. power range	40 Kw

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Specification

Attenuations table

Frequency (MHz)	100	450	800	900	1000	1800	2000	2200	2400	3000
Attenuation typ. (dB/100m)(dB/100ft)	3. 3 (1.01)	7.29 (2.22)	9.92 (3.02)	10.6 (3.22)	11.2 (3.41)	15.5 (4.72)	16.4 (5.01)	17.3 (5.28)	18.2 (5.55)	20.7 (6.3)
Mean. Power (kW)at 40°C (104 °F)	2.59	1.18	0.87	0.81	0.77	0.56	0.53	0.49	0.47	0.42
Value of typical gradient 10%.										

Mechanical and thermal characteristics:

Screen material acc. to DIN EN 13602 Cu-ETP-R

Jacket material acc. to DIN EN 50290-2-27 (HD 624.7)

Flame retardant acc. to EN50575: B2ca class

Other characteristics:

Corrosivity of fire gases acc. to IEC 60754-2

Permissible temperature, installation range

-40 °C (-40 °F) up to +60 °C (+140 °F)

Permissible temperature range, operation

-55°C (-67°F) up to +85°C (+185°F)

Min. bending radius allowed

repeated 35mm, single 25mm

Number of bends. minimum (typical)

20 (50)

Tensile strength

350N

Weight about

173 Kg/km (116.3 lb/1000ft)

Application/Special feature:

Mobile network and telecommunication equipment

Designation of order:

3.6/9.5 - 50 FRNC

500 ± 25 m (1640 ± 82 ft) on reel