



M&P UltraFlex 7

(AC 7 PLus, HIGHFLEXX 7)

ULTRAFLEXIBLE
UV resistant PVC jacket.
PVC Ø 7,3 ± 0,15 mm
(0,287 inches)



High resistance copper screen (**Cu**) made by means of **24 spools** braiding machines. (50% more intersections if compared to traditional 16 spools machines.) This braid is **HIGHLY EFFECTIVE AGAINST IMPULSIVE NOISES.**

SCREENING PERCENTAGE: 83%

High pressure physical injection foamed polyethylene.

TRIPLE LAYER DIELECTRIC

FPE Ø 5 ± 0,05 mm

144 wires

The copper foil has an applied PE-coating, placed in order to prevent foil cracking due to short radius bends.

SCREENING PERCENTAGE 100%

CU-POL

Inner conductor made of 19X0,38 stranded geometric and concentric copper wires. Purity 99,99% annealed.

(annealed = thermal softening process)

Cu 19x0,38 mm - Ø 1,9 mm
(19x0,015 inches) (0,075 inches)

ATTENUATION at 20°C

FREQUENCY	dB/100m	dB/100ft
1,8 MHz	0,6	0,19
3,5 MHz	0,9	0,27
7,0 MHz	1,2	0,36
10 MHz	1,6	0,48
14 MHz	2,1	0,64
21 MHz	2,6	0,79
28 MHz	3,0	0,91
50 MHz	4,0	1,21
100 MHz	5,8	1,76
144 MHz	6,9	2,10
200 MHz	8,2	2,49
400 MHz	11,8	3,59
430 MHz	12,3	3,74
800 MHz	17,1	5,21
1000 MHz	19,3	5,88
1296 MHz	22,3	6,79
2400 MHz	32,3	9,84
3000 MHz	36,2	11,03
4000 MHz	42,6	12,98
5000 MHz	49,3	15,02
6000 MHz	55,3	16,85

POWER HANDLING

FREQUENCY	MAXP
1,8 MHz	3890 W
3,5 MHz	3700 W
7,0 MHz	3380 W
10 MHz	3080 W
14 MHz	2740 W
21 MHz	2450 W
28 MHz	2230 W
50 MHz	1820 W
100 MHz	1200 W
144 MHz	910 W
200 MHz	680 W
400 MHz	460 W
430 MHz	440 W
800 MHz	320 W
1000 MHz	280 W
1200 MHz	250 W
2400 MHz	140 W
3000 MHz	100 W
4000 MHz	70 W

ELECTRICAL DATA

Impedance @200MHz :	50 Ohm ± 3
Minimum bending radius:	
Multiple bends(15)/single bend	68/34 mm
Temperature:	installation -40° to + 60° C
	operative -55° to + 85° C
Capacitance:	75 pF/m ± 2
Velocity ratio:	83 %
Screening efficiency:	
100-2000 MHz	>105 dB
Inner conductor resistance:	7,3 Ohm/Km
Outer conductor resistance:	9,8 Ohm/Km
Tension test (spark test):	4 kV
Weight (100m):	6,9 Kg
Maximum peak power:	4400 WATT
Connectors :	C.UHF.AC7.M-S; C.N.AC7.M-S;
	C.TNC.AC7-M-S

SRL

0,3-600 MHz	>28 dB
600-1200 MHz	>22 dB
1200-2000 MHz	>18 dB

HINTS ABOUT POWER HANDLING:

Power handling and peak power values have been calculated in a "cautious" manner. Physical accidental alterations and excessive VSWR values (impedance mismatch), are certainly increasing the lost power dissipated in the form of heat. Moreover unwanted stationary waves ratios, are making the situation even worse. In SSB operations a 5/6 seconds transmission time, followed by the same reception lag, is giving the chance to push the power handling values up. **Be aware that the power should never be exceeding the declared peak power value.**