



# M&P UltraFlex 10

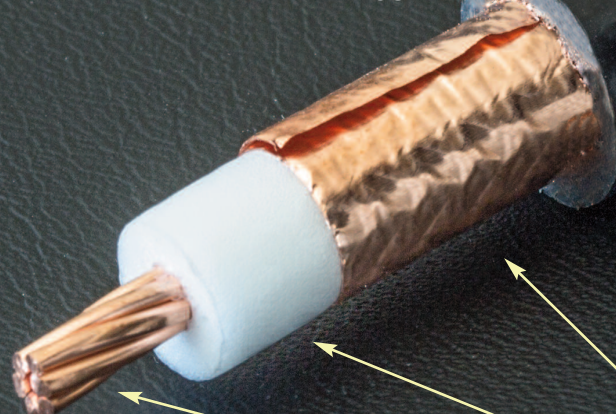
( MEP-FLEX 10, H2010, NEOFLEX 10 )

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 LOW FREQUENCY IMPULSIVE NOISES.**

## SCREENING

**PERCENTAGE: 71%**

**144 wires**



Screening foil, highly effective against high frequency interferences. 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

High pressure physical injection foamed polyethylene, **TRIPLE LAYER DIELECTRIC.**

**FPE Ø 7,3 ± 0,05 mm**

Inner conductor made of 7X1,0 stranded, geometric and concentric annealed copper wires. Purity 99,99%. (annealed = thermal softening process) **(7x0,039 inches)**

**Cu 7x1,0 mm - Ø 3 mm**  
**(0,118 inches)**

## ELECTRICAL DATA

|                                |                                                                                      |
|--------------------------------|--------------------------------------------------------------------------------------|
| Impedance @200MHz:             | 50 Ohm ± 3                                                                           |
| Minimum bending radius:        |                                                                                      |
| Multiple bends(15)/single bend | 80/40 mm                                                                             |
| Temperature range:             |                                                                                      |
| installation                   | -40° to +60° C                                                                       |
| operative                      | -55° to +85° C                                                                       |
| Capacitance:                   | 78 pF/m ± 2                                                                          |
| Velocity ratio:                | 83 %                                                                                 |
| Screening efficiency:          |                                                                                      |
| 100-2000 MHz                   | >105 dB                                                                              |
| Class                          | A++                                                                                  |
| Inner conductor resistance:    | 3,2 Ohm/Km                                                                           |
| Outer conductor resistance:    | 9,2 Ohm/Km                                                                           |
| Tension test (spark test):     | 8 kV                                                                                 |
| Weight (100m):                 | 13 Kg                                                                                |
| Maximum peak power:            | 8300 WATT                                                                            |
| Connectors :                   | C.BNC.BROAD50-M; C.N.BROAD50-M;<br>C.UHF.BROAD50-M; C.BROAD.PL259; C.TNC.BROAD50-M-S |

## EXTRAFLEXIBLE

UV resistant PVC jacket.

**PVC Ø 10,3 ± 0,15 mm**  
**(0,405 inches)**



## ATTENUATION at 20°C

| FREQUENCY | dB/100m | dB/100ft |
|-----------|---------|----------|
| 1,8 MHz   | 0,51    | 0,16     |
| 3,5 MHz   | 0,66    | 0,20     |
| 7,0 MHz   | 0,97    | 0,30     |
| 10 MHz    | 1,20    | 0,37     |
| 14 MHz    | 1,59    | 0,48     |
| 21 MHz    | 1,90    | 0,58     |
| 28 MHz    | 2,14    | 0,65     |
| 50 MHz    | 2,76    | 0,84     |
| 100 MHz   | 3,93    | 1,20     |
| 144 MHz   | 4,74    | 1,44     |
| 200 MHz   | 5,72    | 1,74     |
| 400 MHz   | 8,31    | 2,53     |
| 430 MHz   | 8,65    | 2,64     |
| 800 MHz   | 12,17   | 3,71     |
| 1000 MHz  | 13,81   | 4,21     |
| 1296 MHz  | 15,60   | 4,75     |
| 2400 MHz  | 23,75   | 7,24     |
| 3000 MHz  | 27,30   | 8,32     |
| 4000 MHz  | 32,90   | 10,03    |
| 5000 MHz  | 38,18   | 11,64    |
| 6000 MHz  | 42,80   | 13,05    |

## SRL

|               |        |
|---------------|--------|
| 0,3-600 MHz   | >30 dB |
| 600-1200 MHz  | >25 dB |
| 1200-2000 MHz | >20 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.**

Our products are manufactured in compliance with:  
CEI 46-1 (construction parameters); EN 50117 (screening efficiency); CEI EN 50289(SA test methods); IEC 60332-1-2(cables with LSZH jacket); EN 50290-2-22(cables with PVC jacket); EN 50290-2-23(cables with PE jacket).

## POWER HANDLING

| FREQUENCY | MAXP   |
|-----------|--------|
| 1,8 MHz   | 7660 W |
| 3,5 MHz   | 7410 W |
| 7,0 MHz   | 6920 W |
| 10 MHz    | 6550 W |
| 14 MHz    | 6040 W |
| 21 MHz    | 5600 W |
| 28 MHz    | 5300 W |
| 50 MHz    | 4500 W |
| 100 MHz   | 3390 W |
| 144 MHz   | 2780 W |
| 200 MHz   | 2255 W |
| 400 MHz   | 1290 W |
| 430 MHz   | 1260 W |
| 800 MHz   | 600 W  |
| 1000 MHz  | 430 W  |
| 1200 MHz  | 360 W  |
| 2400 MHz  | 200 W  |
| 3000 MHz  | 170 W  |
| 4000 MHz  | 120 W  |
| 5000 MHz  | 105 W  |
| 6000 MHz  | 95 W   |