M&P UltraFlex 10

(H2010) /.400"

Ham Radio Pro Cables — M&P AIRBORNE — MESSI & PAOLONI

CE Pb RoHS Compliant 2002/95/EC

JACKET:
UV-resistant black PVC
overall Ø 10,3mm ± 0,15
(0.405 inches ± 0.0059)

REACTIVE BRAID:
71% SCREENING - 144 wires of copper
made with 24 spool machines (instead of 16). Thanks to 50% more crossovers, grants exceptional Screening Attenuation (SA) and reacts to twisting and bending like a spring

FOIL: 100% SCREENING
First screen made of copper with an applied PE-layer: prevents cracking due to short radius bends

DIELECTRIC:
High pressure physical injection foamed polyethylene
TRIPLE LAYER
overall Ø 7,3 mm ± 0,05 (0.287 inch. ± 0.0019)

INNER CONDUCTOR:
7x1.0mm copper wires - overall Ø 2,9 mm ± 0,15
(7x0.039 inches - overall Ø 0.114 inches ± 0.0059)

ATTENUATION (20°C /68°F)

FREQUENCY	dB/100m	dB/100ft
1,8 MHz	0,8	0,2
3,5 MHz	1,0	0,3
7 MHz	1,2	0,3
10 MHz	1,3	0,4
14 MHz	1,5	0,4
21 MHz	1,8	0,5
28 MHz	2,0	0,6
50 MHz	2,7	0,8
100 MHz	3,9	1,1
144 MHz	4,7	1,4
200 MHz	5,7	1,7
400 MHz	8,3	2,5
430 MHz	8,6	2,6
800 MHz	12,1	3,7
1000 MHz	13,8	4,2
1296 MHz	16,4	5,0
2400 MHz	23,7	7,2
3000 MHz	27,3	8,3
4000 MHz	32,9	10,0
5000 MHz	38,9	11,8
6000 MHz	44,5	13,5
7000 MHz	50,2	15,3
8000 MHz	55,8	17,0

ELECTRICAL DATA

Impedence @200Mhz:	50 Ohm ± 3
Minimum bending radius:	up to 15 bends: 80mm (3.15 in) single bend (choke): 40mm (1.57 in)
Temperature:	-40°C to +60°C (-40°F to +140°F)
Capacitance:	78 pF/m ± 2 (23.8 pF/ft ± 2)
Velocity ratio:	83%
Screening Efficiency (SA)	100-2000 MHz >105 dB
Screening Class:	A++
Inner conductor resistance:	3,2 Ohm/Km (1.0 Ohm/1000ft)
Outer conductor resistance:	9,2 Ohm/Km (2.8 Ohm/1000ft)
Tension test (spark test):	8 kV
Net weight (100m/100ft):	13 Kg (8.7 lb)
Maximum peak power:	13.000 WATT
Connectors:	UHF (PL), N, BNC, SMA, TNC, 7/16

SRL

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

POWER HANDLING (40°C/104°F)

FREQUENCY	MAX P.	FREQUENCY	MAX P.
1,8 MHz	9927 W	430 MHz	803 W
3,5 MHz	7721 W	800 MHz	571 W
7 MHz	7164 W	1000 MHz	503 W
10 MHz	5345 W	1296 MHz	445 W
14 MHz	4370 W	2400 MHz	293 W
21 MHz	3657 W	3000 MHz	255 W
28 MHz	3247 W	4000 MHz	211 W
50 MHz	2518 W	5000 MHz	182 W
100 MHz	1768 W	6000 MHz	162 W
144 MHz	1466 W	7000 MHz	138 W
200 MHz	1215 W	8000 MHz	125 W
400 MHz	836 W		

OUR PRODUCTS ARE MANUFACTURED IN COMPLIANCE WITH:
CEI 46-1 (construction parameters); EN 50117 (screening efficiency); CEI EN 50289 (SA test methods); R118 (ISO7622-1);
IEC 60332-1-2 (cables with PVC and LSZH jacket); CPR305/11 (EN50575:2014 - DoP number: MP00102)

WHY CHOOSE THIS CABLE

- Extraordinary flexibility that makes it perfect for tigher bendings and rotor antennas.

- Far better performances than RG213, with an additional foil that protects it from electromagnetic interferences.

- Excellent attenuations with limited signal loss even at higher frequencies and long distances.

- Completely made of copper, with a screening efficiency >105dB and a dramatic reduction of the background noise.

FREQUENCY SUGGESTIONS

HF (from 3MHz to 30Mhz)

example at 14 MHz

EXCELLENT up to 100m of cable length
GOOD up to 150m of cable length
Choose Ø 12,7mm cable above 150m

example 28 MHz

EXCELLENT up to 75m of cable length
GOOD up to 120m of cable length
Choose Ø 12,7mm cable above 120m

VHF (from 30MHz to 300Mhz)

example at 50 Mhz

EXCELLENT up to 60m of cable length
GOOD up to 80m of cable length
Choose Ø 12,7mm cable above 80m

example at 144 Mhz

EXCELLENT up to 35m of cable length
GOOD up to 60m of cable length
Choose Ø 12,7mm cable above 60m

UHF (from 300MHz to 3000Mhz)

example at 430 MHz

EXCELLENT up to 18m of cable length
GOOD up to 28m of cable length
Choose Ø 12,7mm cable above 28m

example at 1296 MHz

EXCELLENT up to 10m of cable length
GOOD up to 15m of cable length
Choose Ø 12,7mm cable above 15m

example at 2400 MHz

EXCELLENT up to 7m of cable length
GOOD up to 10m of cable length
Choose Ø 12,7mm cable above 10m

*data valuable for Power Application (trasmission)
**you can find Watt / MAX POWER in the datasheet above.

RESIDUAL POWER PERCENTAGE (Cable Run Efficiency)

Given a power fed to the X value (any value expressed in Watts), the actual power output of the cable is shown in the table in the form of remaining percentage. (for example, if we use a cable such as M&P-ULTRAFLEX 10, entering 1000 Watts over a length of 35m, at a frequency of 144 MHz, there remains 68.1 % of 1000). **For maximum applicable power, see the Power Handling of the cable concerned.** From these values, have already been deducted the SRL values, typical of each one of our models, for the respective frequencies.
REMEMBER: Make sure to match the line accurately!

			M&P-ULTRAFLEX 10 /.400”												
	feet		16,4	32,8	49,2	65,6	82	114,8	164	246	328	426,5	524,9	656,2	984,2
	meters		5	10	15	20	25	35	50	75	100	130	160	200	300
	Wave length	MHz	Useful signal output (residual power %)												
Frequencies	85.71 m	3,5	98,9	97,8	96,8	95,8	94,9	92,9	90,1	85,5	81,2	76,3	71,7	66,0	53,6
	42.85 m	7	98,6	97,3	96,0	94,8	93,5	91,1	87,6	82,0	76,8	71,0	65,6	59,1	44,8
	21.42 m	14	98,1	96,3	94,6	92,8	91,2	87,9	83,2	75,9	69,2	62,0	55,6	48,0	34,2
	10.71 m	28	97,5	95,1	92,8	90,5	88,3	84,1	78,1	69,0	61,0	52,6	45,4	37,2	23,8
	6 m	50	96,8	93,7	90,8	88,0	85,2	80,0	72,7	62,0	52,9	43,7	36,1	28,0	14,8
	2.08 m	144	94,6	89,6	84,8	80,3	76,0	68,1	57,8	44,0	33,5	24,1	17,3	11,2	3,6
	69 cm	430	90,4	81,8	74,0	67,0	60,6	49,6	36,8	22,3	13,5	7,3	4,0	1,7	
	23.1 cm	1296	82,2	67,9	56,1	46,4	38,3	26,0	14,5	5,3					
	12.5 cm	2400	74,5	56,3	42,4	31,9	23,9	13,2	4,9						
	10 cm	3000	71,0	51,3	37,0	26,4	18,8	9,1							
	7.5 cm	4000	65,3	43,7	28,9	18,8	11,9	3,9							
	6 cm	5000	57,6	34,5	19,8	10,4	4,3								
	5 cm	6000	49,9	25,9	11,5										
	3.75 cm	8000	42,6	17,7	4,6										
	3 cm	10.000	36,3	11,5											
	2.5 cm	12.000	31,0	6,8											

M&P-ULTRAFLEX 10 /.400" Power Handling/Temperature (in Continuous Carrier)

			Temperature C° / F°									
	Wave length	MHz	-10 / 14	-5 / 23	0 / 32	10 / 50	20 / 68	30 / 86	40 / 104	50 / 122	60 / 140	70 / 158
Frequencies	166.66 m	1,8	12000	12000	12000	11980	11178	10710	9927	8468	7008	5559
	85.71 m	3,5	11700	11450	11211	10500	9667	8678	7721	6586	5451	4324
	42.85 m	7	11089	10717	10402	9743	8969	8052	7164	6111	5058	4012
	30 m	10	8274	7996	7761	7270	6692	6008	5345	4559	3774	2993
	21.42 m	14	6765	6538	6346	5944	5472	4912	4370	3728	3085	2447
	14.28 m	21	5661	5471	5310	4974	4579	4111	3657	3120	2582	2048
	10.71 m	28	5027	4858	4715	4416	4065	3650	3247	2770	2292	1818
	6 m	50	3897	3766	3656	3424	3152	2830	2518	2148	1777	1410
	3 m	100	2737	2645	2567	2405	2214	1987	1768	1508	1248	990
	2.08 m	144	2269	2193	2129	1994	1835	1648	1466	1250	1035	821
	1.5 m	200	1881	1817	1764	1652	1521	1365	1215	1036	858	680
	75 cm	400	1294	1251	1214	1137	1047	940	836	713	590	468
	69 cm	430	1244	1202	1166	1093	1006	903	803	685	567	450
	37.5 cm	800	884	854	829	777	715	642	571	487	403	320
	30 cm	1000	779	753	731	684	630	566	503	429	355	282
	23.1 cm	1296	690	666	647	606	558	501	445	380	314	249
	12.5 cm	2400	453	438	425	398	366	329	293	250	207	164
	10 cm	3000	394	381	370	346	319	286	255	217	180	143
	7.5 cm	4000	327	316	307	287	264	237	211	180	149	118
	6 cm	5000	282	272	264	248	228	205	182	155	128	102
	5 cm	6000	251	243	236	221	203	182	162	138	115	91
	4.2 cm	7000	214	207	201	188	173	156	138	118	98	78
	3.75 cm	8000	193	186	181	169	156	140	125	106	88	70

WATT

Do not use the cable as power supply for both direct current and 50-60 HZ mains

GENERIC COAXIAL CABLE APPLICATIONS*

- Aircraft communications
- Amateur Radio
- Antenna
- Antenna Analyzer
- Beacons Base Station
- Broadcast Radios
- CB Radio (Citizen Band)
- CB Radio Scanner
- Dummy Load
- Land Mobile Communications
- Maritime Mobile Communications
- Military Communications
- Microwave Relay System
- Moon Bouncing Trasmission EME
- Mobile Transmission Applications (Car, Van, Caravans, Trucks, etc.)
- Motorhome
- Network Analyzer
- Portable Handheld Radio (Walkie Talkie - PMR antenna extension)
- Radar
- Radio Astronomy and Telescope
- Radio Receivers
- Router connections
- Satellite Radio
- Scanner
- Switch connections
- SWR Meter connections
- Transceiver
- Tuner connections
- Weather Radio Antenna Extension

*See "Frequency Suggestions" for a correct correlation

PRE-ASSEMBLED COAX JUMPERS

YOU'VE NO TIME FOR ASSEMBLING THE CONNECTORS YOURSELF?
GRAB OUR FACTORY MADE COAX JUMPERS **"LAB TESTED"** ONE BY ONE!
LAB CERTIFICATE ENCLOSED IN EACH PACKAGING.

USEFUL ACCESSORIES

SPECIAL COAX SCISSORS

ADHESIVE REUSABLE VELCRO

CABLE PULLING LUBRIFICANT

M&P T-SHIRT

UNWINDERS FOR COILS AND BOBBINS

CONNECTORS for 10,3mm (.400") Coaxial Cables

EVOlution

"UHF" (PL-259) Male Solder

Watch the Assembly Video: https://youtu.be/35SWUllkVjw

Code: CO.UHF.10M-S EVO

"UHF" (PL-259) Female Solder

Watch the Assembly Video: https://youtu.be/vVuTp_wYSio

Code: C.UHF.BROAD50F-S

"UHF" Male Solder - 90° Angle

Watch the Assembly Video: https://youtu.be/qQoZT4TqF4w

Code: C.UHF.BROAD50-M90

"PL259" Male Solder (standard)

Watch the Assembly Video: https://youtu.be/DWIKgI62M_8

Code: C.BROAD.PL259

"N" Male Solder

Watch the Assembly Video: https://youtu.be/c6Z8jHE3gC4

Code: CO.N.10M-S

"N" Female Solder

Watch the Assembly Video: https://youtu.be/P18ViE8Exhk

Code: C.N.BROAD50-FS

"N" Male Solderless

Watch the Assembly Video: https://youtu.be/Sexpy1fQn6Y

Code: C.N.BROAD50-SL

"N" Female Solderless

Watch the Assembly Video: https://youtu.be/RJdiLYvtpBk

Code: C.N.BROAD50-FSL

"N" Male Solder - 90° Angle

Watch the Assembly Video: https://youtu.be/8NY0a-v7h74

Code: C.N.BROAD50-M90

For other connectors and adapters, visit **www.messi.it** or contact us at **web@messi.it**

CONNECTORS for 10,3mm (.400”) Coaxial Cables

“N” Male Crimp

Watch the Assembly **Video:** https://youtu.be/sggjEZKue8k

Code: C.N.BROAD50-MCR

“N” Female Crimp

Watch the Assembly **Video:** https://youtu.be/l9lgcDznJlo

Code: C.N.BROAD50-FCR

“BNC” Male Solder

Watch the Assembly **Video:** https://youtu.be/tsaUjVnIPkI

Code: C.BNC.BROAD50-M

“BNC” Female Solder

Watch the Assembly **Video:** https://youtu.be/46SLt5mODjg

Code: C.BNC.BROAD50-FS

“TNC” Male Solder

Watch the Assembly **Video:** https://youtu.be/A-ayPwR-epY

Code: C.TNC.BROAD50-MS

“TNC” Male Crimp

Watch the Assembly **Video:** https://youtu.be/X1QgKRtIesk

Code: C.TNC.BROAD50-CR

“SMA” Male Solder

Watch the Assembly **Video:** https://youtu.be/whXmqoRqj_0

Code: C.SMA.UF10M-S

7/16

Watch the Assembly **Video:** https://youtu.be/CK12Z7Agj4U

Code: C.7-16.10M-S

HEAT SUPPRESSOR

Pairing to our “N” or ‘’UHF” connectors, the Heat Suppressor represents an extension of the operational life of your valuable cables and a greater homogeneity of their performance in hot enviroments.

The benefits will also be more evident for those who use high power linear amplifiers for prolonged periods during contests.

Cooling and stabilizing the cable, could be the ace in your sleeve!

For other connectors and adapters, visit www.messi.it or contact us at web@messi.it