M&P UltraFlex 10 C Sahara

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

JACKET:
UV-resistant white PVC
overall Ø 10,3mm ± 0,15
(0.405")

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")

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

ATTENUATION (20°C /68°F)

FREQUENCY	dB/100m	dB/100ft
1,8 MHz	0,7	0,2
3,5 MHz	0,9	0,3
7 MHz	1,0	0,3
10 MHz	1,2	0,4
14 MHz	1,4	0,4
21 MHz	1,7	0,5
28 MHz	1,9	0,6
50 MHz	2,6	0,8
100 MHz	3,8	1,1
144 MHz	4,6	1,4
200 MHz	5,5	1,7
400 MHz	8,2	2,5
430 MHz	8,5	2,6
800 MHz	11,8	3,6
1000 MHz	13,3	4,1
1296 MHz	15,3	4,7
2400 MHz	21,7	6,6
3000 MHz	24,5	7,5
4000 MHz	29,0	8,8
5000 MHz	33,0	10,0
5800 MHz	34,9	10,6
6000 MHz	36,8	11,1
7000 MHz	40,6	12,3
8000 MHz	44,1	13,4
9000 MHz	48,1	14,6
10000 MHz	52,0	15,8
11000 MHz	55,8	16,9
12000 MHz	59,9	18,2

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 factor:	87%
Screening Efficiency (SA)	100-2000 MHz >105 dB
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 x 100m (100ft):	13 Kg (8.7 lb)
Maximum peak power:	13000 WATT
Structural Return Loss:	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	8171 W	430 MHz	679 W
3,5 MHz	6590 W	800 MHz	489 W
7 MHz	5071 W	1000 MHz	435 W
10 MHz	4483 W	1296 MHz	378 W
14 MHz	3875 W	2400 MHz	269 W
21 MHz	3243 W	3000 MHz	238 W
28 MHz	2837 W	4000 MHz	203 W
50 MHz	2103 W	5000 MHz	179 W
100 MHz	1474 W	6000 MHz	161 W
144 MHz	1226 W	7000 MHz	145 W
200 MHz	1010 W	8000 MHz	134 W
400 MHz	705 W	10000 MHz	116 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 - **EuroClass Eca** - EN50575:2014 - DoP number: MP00102

WHY CHOOSE THIS CABLE

- The most flexible 10,3mm cable, perfect for tight bendings and rotor antennas.
- The best attenuations for a stranded core 10,3mm coaxial cable.
- Best velocity ratio in the coax range
- Excellent performances with limited signal loss even at higher frequencies and long distances.

FREQUENCY SUGGESTIONS

HF (from 3MHz to 30Mhz)

example at 14 MHz
EXCELLENT up to 100m of cable length
GOOD up to 160m of cable length
Choose Ø 12,7mm cable above 160m

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 20m of cable length
GOOD up to 30m of cable length
Choose Ø 12,7mm cable above 28m

example at 1296 MHz
EXCELLENT up to 12m of cable length
GOOD up to 17m of cable length
Choose Ø 12,7mm cable above 17m

example at 2400 MHz
EXCELLENT up to 8m of cable length
GOOD up to 10m of cable length
Choose Ø 12,7mm cable above 12m

*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											

ULTRAFLEX 10/.400” Power Handling/Temperature (in Continuous Carrier - 50% Duty Cycle)

			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	9949	9615	9332	8741	8047	7224	6427	5482	4537	3599	WATT
	85.71 m	3,5	7960	7692	7466	6993	6438	5780	5142	4386	3630	2880	
	42.85 m	7	6633	6410	6222	5828	5365	4816	4285	3655	3025	2400	
	30 m	10	6122	5917	5743	5379	4952	4445	3955	3374	2792	2215	
	21.42 m	14	5307	5128	4977	4662	4292	3853	3428	2924	2420	1920	
	14.28 m	21	4421	4273	4147	3884	3576	3210	2856	2436	2016	1599	
	10.71 m	28	3772	3646	3539	3314	3051	2739	2437	2079	1721	1365	
	6 m	50	2862	2766	2685	2515	2315	2078	1849	1577	1305	1035	
	3 m	100	1974	1907	1851	1734	1596	1433	1275	1088	900	714	
	2.08 m	144	1624	1569	1523	1427	1313	1179	1049	895	741	587	
	1.5 m	200	1367	1321	1282	1201	1106	992	883	753	623	494	
	75 cm	400	944	913	886	830	764	686	610	520	431	342	
	69 cm	430	909	878	852	798	735	660	587	501	414	329	
	37.5 cm	800	649	627	608	570	525	471	419	357	296	235	
	30 cm	1000	576	557	540	506	466	418	372	317	263	208	
	23.1 cm	1296	497	480	466	437	402	361	321	274	227	180	
	12.5 cm	2400	345	334	324	303	279	251	223	190	157	125	
	10 cm	3000	299	289	280	262	242	217	193	165	136	108	
	7.5 cm	4000	245	236	229	215	198	178	158	135	112	88	
	6 cm	5000	209	202	196	184	169	152	135	115	95	76	
	5 cm	6000	181	175	170	159	146	132	117	100	83	66	
	4.2 cm	7000	161	156	151	141	130	117	104	89	73	58	
	3.75 cm	8000	144	139	135	126	116	105	93	79	66	52	

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



POTA-SPEED





POTA-CASE

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



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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