45,3% lighter than average 10,3 mm full copper cables

Ham Radio Pro Cables

19dB @ 2400 Mhz by far the most performant of its class (10.3 mm cables)

M&P AIRBORNE 10 /.400"

MESSI & PAOLONI

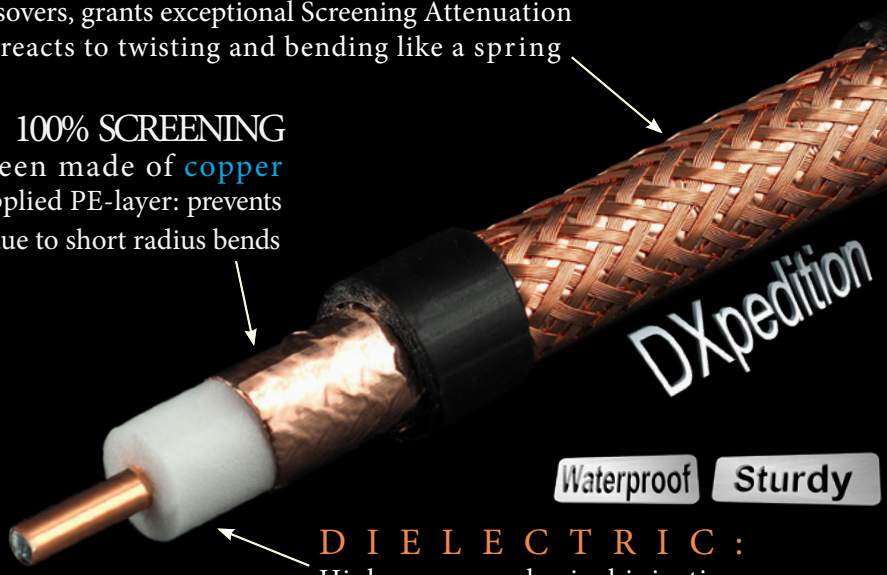
JACKET:
UV shielded polyethylene for direct burial and outdoor use
overall Ø 10,3mm ± 0,15 (0.405")

REACTIVE BRAID:
85% SCREENING - 192 wires of copper clad aluminium 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

Direct Burial

RoHS Compliant 2002/95/EC

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:
made of copper clad aluminium
overall Ø 2,78 mm ± 0,05 (Ø 0.109")

ATTENUATION (20°C /68°F)

FREQUENCY	dB/100m	dB/100ft
1,8 MHz	0,6	0,2
3,5 MHz	0,8	0,2
7 MHz	1,0	0,3
10 MHz	1,2	0,3
14 MHz	1,3	0,4
21 MHz	1,7	0,5
28 MHz	1,9	0,5
50 MHz	2,4	0,7
100 MHz	3,5	1,0
144 MHz	4,2	1,2
200 MHz	5,0	1,5
400 MHz	7,2	2,1
430 MHz	7,6	2,3
800 MHz	10,4	3,1
1000 MHz	11,8	3,6
1296 MHz	13,6	4,1
2400 MHz	19,2	5,8
3000 MHz	21,6	6,5
4000 MHz	25,6	7,8
5000 MHz	29,2	8,9
6000 MHz	32,8	10,0
7000 MHz	35,6	10,8
8000 MHz	38,6	11,7
10.000 MHz	44,6	13,5
12.000 MHz	50,2	15,3

ELECTRICAL DATA

Impedence @200Mhz:	50 Ohm ± 3
Minimum bending radius:	up to 15 bends: 103mm (4.05 in) single bend (choke): 65mm (2.56 in)
Temperature:	-45°C to +70°C (-49°F to +158°F)
Capacitance:	74 pF/m ± 2 (22.6 pF/ft ± 2)
Velocity factor:	87%
Screening Efficiency (SA)	100-2000 MHz >105 dB
Inner conductor resistance:	4,4 Ohm/Km (1.3 Ohm/1000ft)
Outer conductor resistance:	12 Ohm/Km (3.7 Ohm/1000ft)
Tension test (spark test):	8 kV
Net weight x 100m (100ft):	7,1 Kg (4,8 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	6363 W	430 MHz	550 W
3,5 MHz	5103 W	800 MHz	386 W
7 MHz	4772 W	1000 MHz	348 W
10 MHz	3927 W	1296 MHz	301 W
14 MHz	3475 W	2400 MHz	212 W
21 MHz	2722 W	3000 MHz	185 W
28 MHz	2384 W	4000 MHz	158 W
50 MHz	1796 W	5000 MHz	142 W
100 MHz	1185 W	6000 MHz	125 W
144 MHz	970 W	7000 MHz	115 W
200 MHz	826 W	8000 MHz	104 W
400 MHz	577W	10.000 MHz	90 W

OUR PRODUCTS ARE MANUFACTURED IN COMPLIANCE WITH:
CEI 46-1 (construction parameters); EN 50117 (screening efficiency); CEI EN 50289 (SA test methods);
CPR305/11 - **EuroClass Fca** - EN50575:2014 - DoP number: MP0096

WHY CHOOSE THIS CABLE

- Best attenuation tested in a 10,3mm coax , boosting 19dB/100m at 2400 Mhz.
- Suitable for direct burial and totally waterproof.
- Also perfect for outdoor use and weatherproof.
- Superlative robustness and resistance thanks to the PE tearproof sheath.
- Incredible lightness: 45% lighter than average 10,3mm cable.
- Super thick braid of 192 wires that leads to 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 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 18m of cable length
Choose Ø 12,7mm cable above 17m

example at 2400 MHz
EXCELLENT up to 8m of cable length
GOOD up to 12m 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-AIRBORNE 10, entering 1000 Watts over a length of 35m, at a frequency of 144 MHz, there remains 71.2% 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-AIRBORNE 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	98,0	97,0	96,1	95,1	93,3	90,6	86,2	82,1	77,4	73,0	67,5	55,5
	42.85 m	7	98,7	97,4	96,2	95,0	93,9	91,6	88,2	82,9	77,9	72,3	67,1	60,7	47,3
	21.42 m	14	98,3	96,8	95,2	93,7	92,2	89,3	85,1	78,6	72,5	65,9	59,8	52,6	38,2
	10.71 m	28	97,7	95,6	93,5	91,4	89,4	85,5	80,0	71,6	64,0	56,0	49,0	41,0	26,3
	6 m	50	97,1	94,4	91,8	89,2	86,7	82,0	75,3	65,4	56,8	47,9	40,5	32,3	18,3
	2 m	144	95,2	90,7	86,4	82,3	78,4	71,2	61,6	48,3	37,9	28,3	21,2	14,4	5,4
	69 cm	430	91,5	83,8	76,8	70,3	64,4	54,0	41,5	26,8	17,2	10,1	5,9		
	23.1 cm	1296	84,9	72,5	61,9	52,8	45,1	32,8	20,3	8,9	3,7				
	12.5 cm	2400	78,6	62,7	49,9	39,7	31,5	19,7	9,4						
	10 cm	3000	76,4	59,2	45,8	35,4	27,3	16,0	6,7						
	7.5 cm	4000	72,9	53,9	39,7	29,2	21,3	11,1	3,7						
	6 cm	5000	69,5	49,1	34,5	24,1	16,6	7,5							
	5 cm	6000	66,6	45,0	30,2	20,1	13,1	5,1							
	3.75 cm	8000	61,0	38,0	24,4	13,7	7,7								
	3 cm	10.000	49,8	25,8	11,4										
	2.5 cm	12.000	46,1	21,5	7,7										

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

	Wave length		Temperature C° / F°									
		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	13300	13300	13300	13300	12900	12174	10831	9239	7647	6065
	85.71 m	3,5	13112	12672	12299	11520	10605	9521	8471	7225	5980	4744
	42.85 m	7	10320	9973	9680	9067	8347	7493	6667	5687	4707	3733
	30 m	10	9288	8976	8712	8160	7512	6744	6000	5118	4236	3360
	21.42 m	14	8018	7749	7521	7045	6485	5822	5180	4418	3657	2901
	14.28 m	21	6369	6155	5974	5595	5151	4624	4114	3509	2905	2304
	10.71 m	28	5775	5581	5417	5074	4671	4193	3731	3182	2634	2089
	6 m	50	4549	4396	4267	3997	3679	3303	2939	2507	2075	1646
	3 m	100	3166	3060	2970	2782	2561	2299	2045	1745	1444	1145
	2.08 m	144	2647	2558	2483	2326	2141	1922	1710	1459	1207	958
	1.5 m	200	2229	2154	2091	1958	1803	1619	1440	1228	1017	806
	75 cm	400	1535	1484	1440	1349	1242	1115	992	846	700	555
	69 cm	430	1461	1412	1370	1283	1181	1061	944	805	666	528
	37.5 cm	800	1072	1036	1005	942	867	778	692	591	489	388
	30 cm	1000	945	913	886	830	764	686	610	520	431	342
	23.1 cm	1296	820	792	769	720	663	595	529	452	374	296
	12.5 cm	2400	581	561	545	510	470	422	375	320	265	210
	10 cm	3000	516	499	484	453	417	375	333	284	235	187
	7.5 cm	4000	435	421	408	383	352	316	281	240	199	158
	6 cm	5000	382	369	358	335	309	277	247	210	174	138
	5 cm	6000	340	328	319	299	275	247	220	187	155	123
	4.2 cm	7000	313	303	294	275	253	227	202	173	143	113
	3.75 cm	8000	289	279	271	254	234	210	187	159	132	104
	3.3 cm	9000	269	260	252	236	217	195	173	148	122	97
	3 cm	10.000	250	242	234	220	202	181	161	138	114	90

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



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



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