1,4 Kg/100m lighter than RG58

3,6 dB/100m better @50 MHz than RG58

Ham Radio Pro Cables

M&P AIRBORNE 5 /.200"

MESSI & PAOLONI

JACKET:

UV shielded polyethylene
for direct burial and outdoor use
overall Ø 5mm ± 0,15 (0.200")

REACTIVE BRAID:

84% SCREENING - 96 wires of aluminium magnesium
Strong and lightweight braid for an ultimate result of toughness and reliability, under a structural and Screenining Attenuation (SA) point of view

ATTENTION:use only our connectors as with this sort of braid, no soldering is allowed!



FOIL: 100% SCREENING

First screen made of aluminium - polyester - aluminium: prevents cracking due to short radius bends

DIELECTRIC:

High pressure physical injection foamed polyethylene
TRIPLE LAYER
overall Ø 3 mm ± 0,05 (0.118")

INNER CONDUCTOR:

made of 99,9% pure bare copper
overall Ø 1,13 mm ± 0,05 (Ø 0.044")

ATTENUATION (20°C /68°F)

FREQUENCY	dB/100m	dB/100ft
1,8 MHz	1,7	0,5
3,5 MHz	2,3	0,7
7 MHz	3,0	0,9
10 MHz	3,4	1,0
14 MHz	4,0	1,2
21 MHz	4,8	1,4
28 MHz	5,5	1,6
50 MHz	7,1	2,1
100 MHz	9,4	2,8
144 MHz	11,1	3,3
200 MHz	12,8	3,9
400 MHz	18,3	5,6
430 MHz	19,0	5,7
800 MHz	26,5	8,1
1000 MHz	29,8	9,1
1296 MHz	34,2	10,4
2400 MHz	47,5	14,5
3000 MHz	53,5	16,3
4000 MHz	61,0	18,5
5000 MHz	68,6	20,9
6000 MHz	75,6	23,0

ELECTRICAL DATA

Impedence @200Mhz:	50 Ohm ± 3
Minimum bending radius:	up to 15 bends: 50mm (1.97 in) single bend (choke): 25mm (0.98 in)
Temperature:	-45°C to +70°C (-49°F to +158°F)
Capacitance:	76 pF/m ± 2 (23.2 pF/ft ± 2)
Velocity factor:	85%
Screening Efficiency (SA)	100-2000 MHz >105 dB
Inner conductor resistance:	17 Ohm/Km (5.2 Ohm/1000ft)
Outer conductor resistance:	34 Ohm/Km (10.4 Ohm/1000ft)
Tension test (spark test):	8 kV
Net weight x 100m (100ft):	2,3 Kg (1.5 lb)
Maximum peak power:	2000 WATT
Structural Return Loss:	0,3-600 MHz >30 dB; 600-1200 MHz >28 dB; 1200-2000 MHz >25 dB

POWER HANDLING (40°C/104°F)

FREQUENCY	MAX P.	FREQUENCY	MAX P.
1,8 MHz	1172 W	400 MHz	102 W
3,5 MHz	837 W	430 MHz	99 W
7 MHz	625 W	800 MHz	71 W
10 MHz	543 W	1000 MHz	63 W
14 MHz	471 W	1296 MHz	55 W
21 MHz	394 W	2400 MHz	39 W
28 MHz	346 W	3000 MHz	35 W
50 MHz	268 W	4000 MHz	31 W
100 MHz	198 W	5000 MHz	27 W
144 MHz	170 W	6000 MHz	25 W
200 MHz	146 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: MP0095

WHY CHOOSE THIS CABLE

- best 5mm (.200”) coaxial cable available.
- 3,6dB/100m less at 50MHz than RG58 C/U.
- suitable for direct burial and totally waterproof.
- perfect for outdoor use and weatherproof.
- superlative resistance thanks to the PE tearproof sheath.
- incredible lightness: 1,4Kg x 100m less than RG58 C/U.

FREQUENCY SUGGESTIONS

HF (from 3MHz to 30Mhz)

example at 14 MHz

EXCELLENT up to 25m of cable length
GOOD up to 40m of cable length
Choose a bigger cable above 40m:

example 28 MHz

EXCELLENT up to 15m of cable length
GOOD up to 35m of cable length
Choose a bigger cable above 35m

VHF (from 30MHz to 300Mhz)

example at 50 Mhz

EXCELLENT up to 12m of cable length
GOOD up to 28m of cable length
Choose a bigger cable above 30m

example at 144 Mhz

EXCELLENT up to 8m of cable length
GOOD up to 15m of cable length
Choose a bigger cable above 15m

UHF (from 300MHz to 3000Mhz)

example at 430 MHz

GOOD up to 3m of cable length
Choose a bigger cable above 3m

example at 1296 MHz

Choose Ø 10,3mm or Ø 12,7mm cable

example at 2400 MHz

Choose Ø 10,3mm or Ø 12,7mm cable

*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-AIR-BORNE 5, entering 1000 Watts over a length of 35m, at a frequency of 144 MHz, there remains 41.1 % 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-AIRBORNE 5 /.200"												
	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	97,4	94,9	92,5	90,1	87,8	83,4	77,2	67,8	59,6	51,0	43,7	35,5	21,2
	42.85 m / 7	96,5	93,2	90,1	87,0	84,0	78,4	70,7	59,5	50,0	40,6	33,0	25,0	12,5
	21.42 m / 14	95,4	91,1	87,1	83,2	79,4	72,5	63,1	50,2	39,9	30,3	23,0	15,9	6,3
	10.71 m / 28	93,9	88,2	82,8	77,8	73,1	64,5	53,5	39,1	28,6	19,6	13,5	8,1	
	6 m / 50	92,2	85,0	78,4	72,3	66,7	56,8	44,6	29,8	19,9	12,2	7,5	3,9	
	2.08 m / 144	88,0	77,5	68,3	60,2	53,0	41,1	28,1	14,9	7,8	3,6			
	69 cm / 430	80,2	64,4	51,7	41,5	33,3	21,5	11,0	3,6					
	23.1 cm / 1296	66,8	44,9	30,1	20,1	13,3	5,7							
	12.5 cm / 2400	56,2	31,9	17,7	9,6	4,9								
	10 cm / 3000	52,4	27,6	14,2	6,9	3,0								
	7.5 cm / 4000	46,4	21,4	9,0										
	6 cm / 5000	39,1	14,3	3,0										
	5 cm / 6000	31,9	7,5											

M&P-AIRBORNE 5 /.200" 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	1600	1600	1600	1594	1467	1317	1172	1000	827	656	WATT
	85.71 m	3,5	1296	1252	1215	1138	1048	941	837	714	591	469	
	42.85 m	7	968	935	908	850	783	703	625	533	441	350	
	30 m	10	841	813	789	739	680	611	543	464	384	304	
	21.42 m	14	729	705	684	641	590	530	471	402	333	264	
	14.28 m	21	610	589	572	536	493	443	394	336	278	221	
	10.71 m	28	536	518	502	470	433	389	346	295	244	194	
	6 m	50	415	401	389	364	335	301	268	228	189	150	
	3 m	100	307	297	288	270	248	223	198	169	140	111	
	2.08 m	144	264	255	248	232	213	192	170	145	120	95	
	1.5 m	200	226	218	212	198	183	164	146	124	103	82	
	75 cm	400	158	153	148	139	128	115	102	87	72	57	
	69 cm	430	153	148	143	134	123	111	99	84	70	55	
	37.5 cm	800	109	106	102	96	88	79	71	60	50	40	
	30 cm	1000	97	94	91	85	79	71	63	54	44	35	
	23.1 cm	1296	85	82	80	75	69	62	55	47	39	31	
	12.5 cm	2400	61	59	57	54	49	44	39	34	28	22	
	10 cm	3000	54	52	51	48	44	39	35	30	25	20	
	7.5 cm	4000	48	46	45	42	38	35	31	26	22	17	
	6 cm	5000	42	41	40	37	34	31	27	23	19	15	
	5 cm	6000	38	37	36	34	31	28	25	21	18	14	

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 5mm (.200”) Coaxial Cables



“UHF” (PL-259) Male Solder

Watch the Assembly Video: https://youtu.be/N6_H2Qx6fFY

Code: CO.UHF.5M-S



“UHF” (PL-259) Female Solder

Watch the Assembly Video: https://youtu.be/96CqtaKSoQg

Code: C.UHF.AC5F-S



“N” Male Solder

Watch the Assembly Video: https://youtu.be/GVV9uFAbbXo

Code: CO.N.5M-S



“N” Female Solder

Watch the Assembly Video: https://youtu.be/Tx7rS401XPs

Code: C.N.AC5F-S



“BNC” Male Solder

Watch the Assembly Video: https://youtu.be/y-KgVhoJmBM

Code: C.BNC.AC5M-S



“BNC” Female Solder

Watch the Assembly Video: https://youtu.be/CFlc-BHYQxk

Code: C.BNC.AC5F-S



“BNC” Male Solder - 90° Angle

Watch the Assembly Video: https://youtu.be/Kbe4lGOPpwk

Code: C.BNC.HYF5MS-90



“TNC” Male Solder

Watch the Assembly Video: https://youtu.be/YAJsUnNq_2c

Code: C.TNC.AC5M-S



“SMA” Male Crimp

Watch the Assembly Video: https://youtu.be/zeGYWW-cPxk

Code: C.SMA.AC5M-CR

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