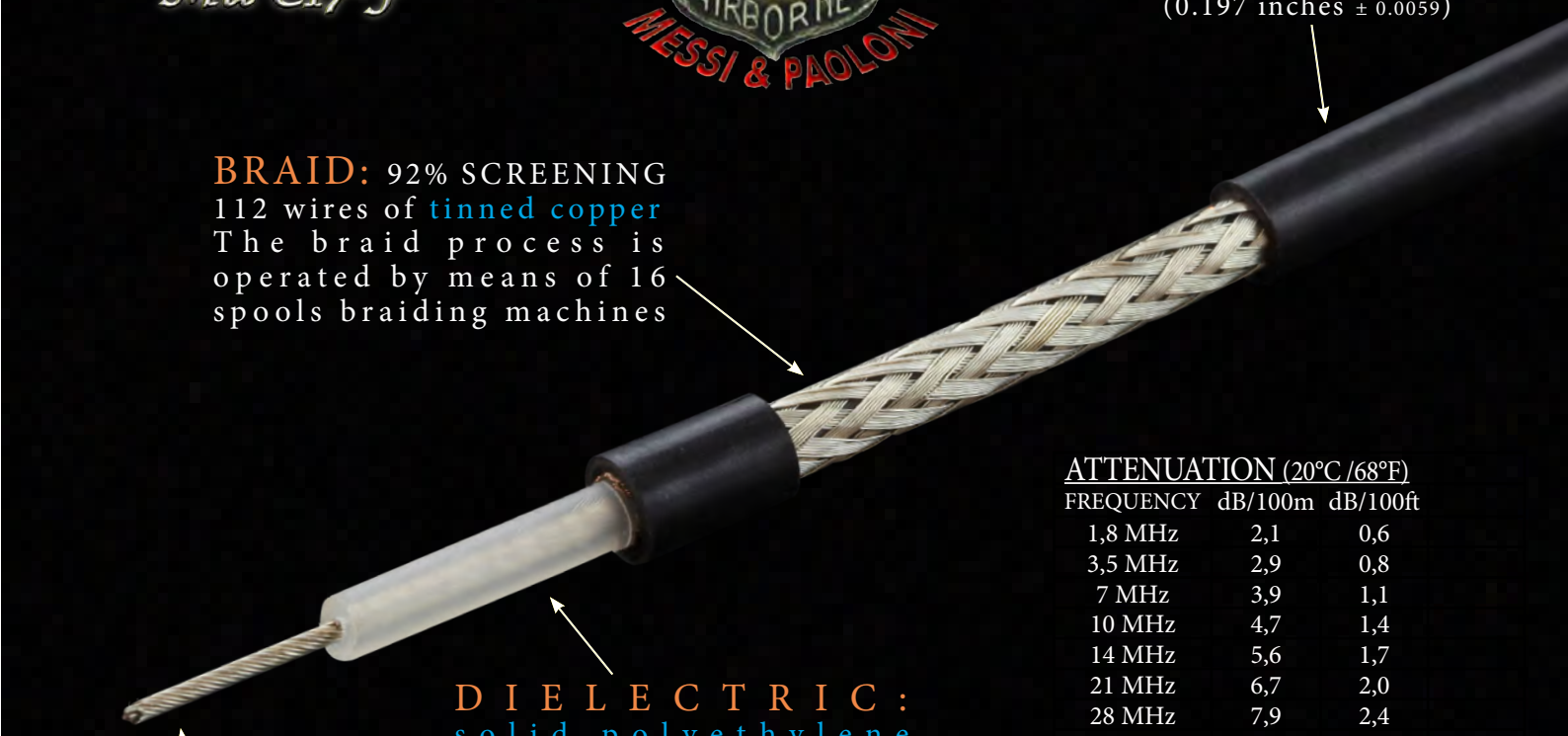
# M&P RG 58 C/U Mil C17-F

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

CE Pb RoHS Compliant 2002/95/EC



**JACKET:**
UV-resistant black PVC
overall Ø 5mm ± 0,15
(0.197 inches ± 0.0059)

**BRAID:** 92% SCREENING
112 wires of tinned copper
The braid process is operated by means of 16 spools braiding machines

**DIELECTRIC:**
solid polyethylene
overall Ø 2,95 mm ± 0,05 (0.116 inch. ± 0.0019)

**INNER CONDUCTOR:**
19x0,18mm tinned copper wires - overall Ø 0,90mm ± 0,15
(19x0.007 inches - overall Ø 0.035 inches ± 0.0059)

## ATTENUATION (20°C /68°F)

| FREQUENCY | dB/100m | dB/100ft |
|---|---|---|
| 1,8 MHz | 2,1 | 0,6 |
| 3,5 MHz | 2,9 | 0,8 |
| 7 MHz | 3,9 | 1,1 |
| 10 MHz | 4,7 | 1,4 |
| 14 MHz | 5,6 | 1,7 |
| 21 MHz | 6,7 | 2,0 |
| 28 MHz | 7,9 | 2,4 |
| 50 MHz | 10,8 | 3,2 |
| 100 MHz | 15,8 | 4,8 |
| 144 MHz | 19,3 | 5,8 |
| 200 MHz | 22,1 | 6,7 |
| 400 MHz | 33,3 | 10,1 |
| 430 MHz | 34,9 | 10,6 |
| 800 MHz | 51,1 | 15,5 |
| 1000 MHz | 58,0 | 17,6 |
| 1296 MHz | 63,0 | 19,2 |

## ELECTRICAL DATA

| | |
|---|---|
| Impedence @200Mhz: | 50 Ohm ± 3 |
| Minimum bending radius: | up to 15 bends: 50mm (1.97 in)<br>single bend (choke): 25mm (0.98 in) |
| Temperature: | -40°C to +60°C (-40°F to +140°F) |
| Capacitance: | 101 pF/m ± 2 (30.8 pF/ft ± 2) |
| Velocity ratio: | 66% |
| Screening Efficiency (SA) | 100-900 MHz >55 dB |
| Screening Class: | A++ |
| Inner conductor resistance: | 37 Ohm/Km (11.3 Ohm/1000ft) |
| Outer conductor resistance: | 15 Ohm/Km (4.6 Ohm/1000ft) |
| Tension test (spark test): | 4 kV |
| Net weight (100m/100ft): | 3,7 Kg (2,4 lb) |
| Maximum peak power: | 2.000 WATT |
| Connectors: | UHF (PL), N, BNC, SMA, TNC |

## SRL

| | |
|---|---|
| 0,3-600 MHz | >35 dB |
| 600-1200 MHz | >30 dB |
| 1200-2000 MHz | >30 dB |

## POWER HANDLING (40°C/104°F)

| FREQUENCY | MAX P. |
|---|---|
| 1,8 MHz | 1321 W |
| 3,5 MHz | 1138 W |
| 7 MHz | 846 W |
| 10 MHz | 702 W |
| 14 MHz | 589 W |
| 21 MHz | 493 W |
| 28 MHz | 418 W |
| 50 MHz | 306 W |
| 100 MHz | 209 W |
| 144 MHz | 171 W |
| 200 MHz | 149 W |
| 400 MHz | 99 W |

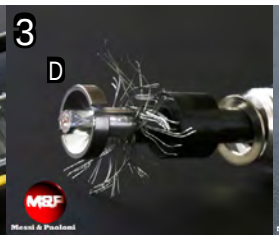
OUR PRODUCTS ARE MANUFACTURED IN COMPLIANCE WITH:
CEI 46-1 (construction parameters); EN 50117 (screening efficiency); CEI EN 50289 (SA test methods); R118 (ISO7622-1);
IEC 60332-1-2 (cables with PVC and LSZH jacket); CPR305/11 (EN50575:2014 - DoP number: MP00111)

# Connector assembly

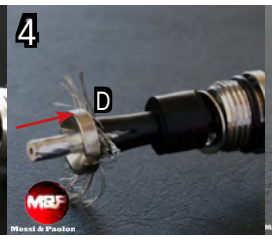
## Connector “N” type


Make a circular cut on the black PVC outer jacket at the indicated length shown in the caliber (in mm). Subsequently remove it.


Insert in the cable components A, B, C and immediately after, make a circular cut on the red PE jacket at the indicated length shown in the caliber (in mm). Subsequently remove it.

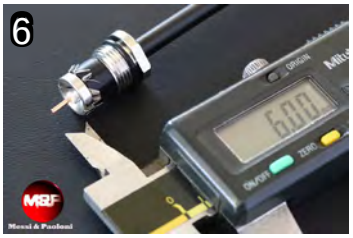



After having made the first cut, as shown in picture 2, rotate the cable 180 degrees and make a second cut in the same way, in order to facilitate the introduction of component D




Insert component D after having opened the braid as shown in the picture. Push component D between the foil and the braid until it stops against the red PE jacket.


Flatten the wires as shown in the picture and cut the excess.



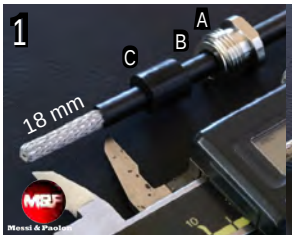

Cut and remove the tape and dieletric for a lenght as shown in the picture (in mm).


Insert one of the two teflon discs and subsequently the central pin. Solder the pin to the inner conductor, inserting tin in the provided hole. Avoid heating the pin for a too long time in order not to damage with excessive heat the cable dielectric.
(which is not made in teflon!)

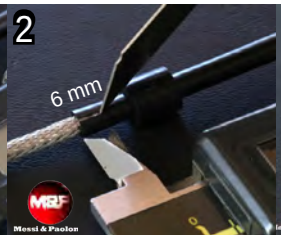

Insert the second teflon disc as shown in the picture.


Insert the connector and fasten accurately until the o-ring present in component A, will be pressed against the connector body. Inside, the rubber component C (pic. 1) will expand, granting optimal sealing against moisture and a perfect contact to ground.

## Connector “UHF/PL” type

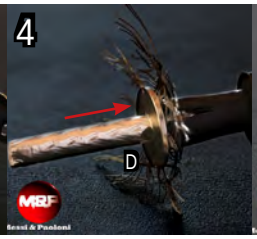



Insert in the cable components A, B, C and immediately after, make a circular cut on the jacket at the indicated length shown in the caliber. (in mm). Subsequently remove it.




After having made the first cut, as shown in picture 2, rotate the cable 180 degrees and make a second cut in the same way, in order to facilitate the introduction of component D (pic.3 and 4)

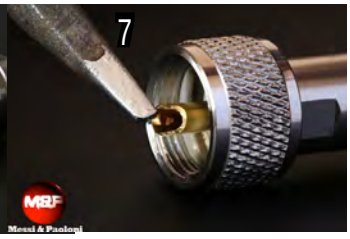

Insert component D after having opened the braid as shown in the picture.




Push component D between the foil and the braid until it stops against the jacket.


Flatten the wires as shown in the picture and cut the excess.


Cut and remove the tape and dieletric for a lenght as shown in the picture.




Insert the connector and solder it with tin to the inner conductor (see picture above). Avoid heating for a too long time in order not to damage with excessive heat the cable dielectric (which is not made in teflon!)

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Fasten together the connector and component A, until it will be pressed against the connector body. Inside, the rubber component C (pic. 1) will expand, granting optimal sealing against moisture and a perfect contact to ground.

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# CONNECTORS for 5mm/.200” cables

## N solder male

NO braid soldering needed!

Perfect match with M&P PRO cables! 105dB (SA)

## UHF/PL solder male

## BNC solder male

Humidity proof compression design!

Dramatic suppression of the background noise!

## TNC solder male

## SMA crimp male

## UHF/PL solder female

## N solder female