

M&P

Broad-pro 50C
LSZH 1.400"



JACKET :
 UV-resistant black **LSZH**
 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 :
 made of 99,9 % pure bare **copper**
 overall Ø 2,76 mm ± 0,05 (Ø 0.108 inches ± 0.0019)

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	2,5	0,7
100 MHz	3,6	1,1
144 MHz	4,4	1,3
200 MHz	5,2	1,5
400 MHz	7,5	2,2
430 MHz	7,8	2,3
800 MHz	10,9	3,3
1000 MHz	12,3	3,7
1296 MHz	14,1	4,3
2400 MHz	19,8	6,0
3000 MHz	22,5	6,8
4000 MHz	26,8	8,1
5000 MHz	30,5	9,3
6000 MHz	34,1	10,3
7000 MHz	37,6	11,4
8000 MHz	41,0	12,5
10.000 MHz	46,8	14,2
12.000 MHz	52,2	15,1

ELECTRICAL DATA

Impedance @200Mhz: 50 Ohm ± 3

Minimum bending radius: { up to 15 bends: 103mm (4.05 in)
 single bend (choke): 65mm (2.56 in)

Temperature: -40°C to +60°C (-40°F to +140°F)

Capacitance: 74 pF/m ± 2 (22.6 pF/ft ± 2)

Velocity ratio: 85%

Screening Efficiency (SA) 100-2000 MHz >105 dB

Screening Class: A++

Inner conductor resistance: 3 Ohm/Km (0.9 Ohm/1000ft)

Outer conductor resistance: 9,2 Ohm/Km (2.8 Ohm/1000ft)

Tension test (spark test): 8 kV

Net weight (100m/100ft): 14,2Kg (9.5 lb)

Maximum peak power: 14.500 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	10831 W	430 MHz	947 W
3,5 MHz	8471 W	800 MHz	679 W
7 MHz	6667 W	1000 MHz	600 W
10 MHz	6000 W	1296 MHz	522 W
14 MHz	5180 W	2400 MHz	364 W
21 MHz	4114 W	3000 MHz	314 W
28 MHz	3731 W	4000 MHz	261 W
50 MHz	2769 W	5000 MHz	225 W
100 MHz	2045 W	6000 MHz	199 W
144 MHz	1682 W	7000 MHz	178 W
200 MHz	1412 W	8000 MHz	161 W
400 MHz	986 W	10.000 MHz	136 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: MP0087)



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-BROAD-PRO 50/c, entering 1000 Watts over a length of 35m, at a frequency of 144 MHz, there remains 70.7% 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!**

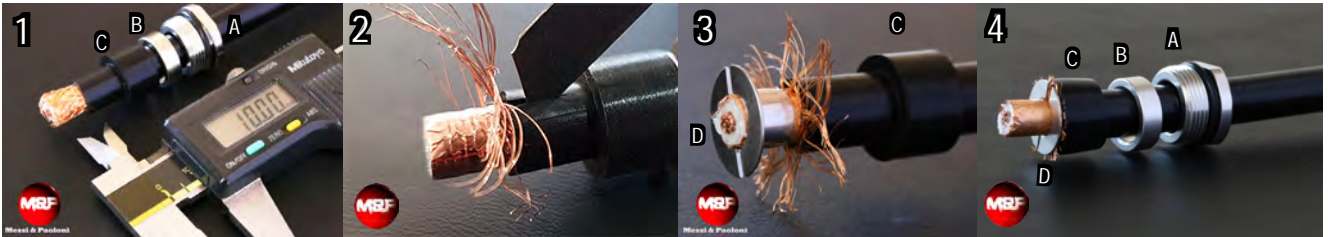
		M&P-BROAD-PRO 50/C /.400''														
length -->		16,4	32,8	49,2	65,6	82	114,8	164	246	328	426,5	524,9	656,2	984,2	feet	
Wave length	MHz	5	10	15	20	25	35	50	75	100	130	160	200	300	m	
Frequencies / Frequenze	85.71 m	3,5	98,9	98,0	97,0	96,1	95,1	93,3	90,6	86,2	82,1	77,4	73,0	67,5	55,5	Useful signal output (residual power %)
	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	94,3	91,6	89,0	86,5	81,7	74,9	64,8	56,1	47,2	39,7	31,5	17,7	
	2 m	144	95,0	90,3	85,8	81,6	77,5	70,0	60,2	46,7	36,2	26,7	19,7	13,1	4,7	
	69 cm	430	91,3	83,4	76,2	69,7	63,7	53,2	40,6	25,8	16,4	9,5	5,5			
	23.1 cm	1296	84,4	71,6	60,8	51,6	43,8	31,5	19,1	8,1	3,3					
	12.5 cm	2400	78,6	62,4	49,5	39,2	31,0	19,3	9,2							
	10 cm	3000	76,2	58,6	45,0	34,5	26,4	15,3	6,5							
	7.5 cm	4000	71,9	52,4	38,0	27,5	19,8	9,9	3,0							
	6 cm	5000	68,8	48,0	33,3	23,0	15,7	7,0								
	5 cm	6000	65,9	44,0	29,2	19,2	12,5	4,8								
	3.75 cm	8000	59,9	36,4	22,7	12,6	6,9									
	3 cm	10.000	52,0	27,7	13,6	5,3										
2.5 cm	12.000	48,5	23,8	10,2												

M&P-BROAD-PRO 50C 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 / Frequenze	166.66 m	1,8	13300	13300	13300	13300	12900	12174	10831	9239	7647	6065	WATT
	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	4287	4143	4021	3766	3467	3113	2769	2362	1955	1551	
	3 m	100	3166	3060	2970	2782	2561	2299	2045	1745	1444	1145	
	2.08 m	144	2604	2517	2443	2288	2106	1891	1682	1435	1188	942	
	1.5 m	200	2185	2112	2050	1920	1768	1587	1412	1204	997	791	
	75 cm	400	1527	1476	1432	1341	1235	1109	986	841	696	552	
	69 cm	430	1467	1417	1376	1288	1186	1065	947	808	669	531	
	37.5 cm	800	1051	1016	986	924	850	763	679	579	480	380	
	30 cm	1000	929	898	871	816	751	674	600	512	424	336	
	23.1 cm	1296	808	781	758	710	653	586	522	445	368	292	
	12.5 cm	2400	563	544	528	495	455	409	364	310	257	204	
	10 cm	3000	487	470	457	428	394	353	314	268	222	176	
	7.5 cm	4000	404	390	379	355	327	293	261	223	184	146	
6 cm	5000	348	337	327	306	282	253	225	192	159	126		
5 cm	6000	308	298	289	270	249	224	199	170	140	111		
4.2 cm	7000	275	266	258	242	223	200	178	152	126	100		
3.75 cm	8000	249	241	234	219	202	181	161	137	114	90		
3.3 cm	9000	227	220	213	200	184	165	147	125	104	82		
3 cm	10.000	211	204	198	185	171	153	136	116	96	76		

Connector assembly

Connector "N" type

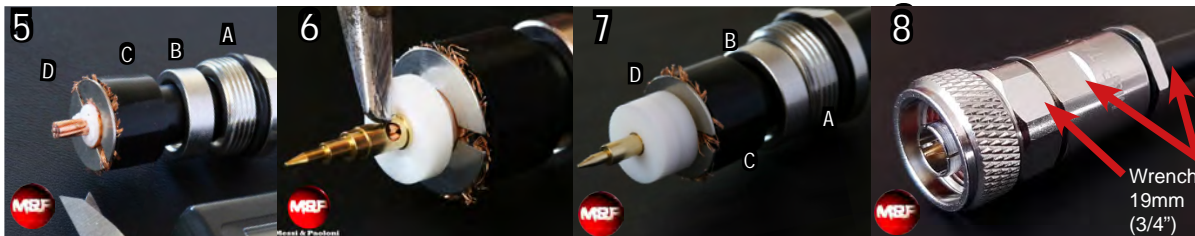


1 Insert in the cable components A, B, C and immediately after, make a circular cut on the black PVC jacket at the indicated length shown in the caliber (in mm). Subsequently remove it.

2 Make a cut on the jacket of 7mm, then rotate the cable of 180° and make an other equal cut.

3 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 black PVC jacket.

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



5 Cut and remove the tape and dielectric for a length as shown in the picture (6mm).

6 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 transfer excessive heat to the highly conductive copper underneath. Excessive heat deforms the dielectric which is made of foam PE and not in teflon!.

7 Insert the second teflon disc as shown in the picture.

8 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.

Wrench 18mm (23/32")

Wrench 19mm (3/4")

Connector "UHF" type

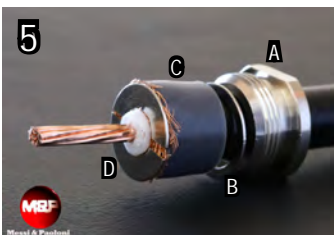


1 Insert in the cable components A, B, C and immediately after, make a circular cut on the black PVC jacket at the indicated length shown in the caliber (in mm). Subsequently remove it.

2 Make a cut on the jacket of 7mm, then rotate the cable of 180° and make an other equal cut.

3 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 black PVC jacket.

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



5 Cut and remove the tape and dielectric for a length as shown in the picture (6mm).



6 Insert the connector and solder it with tin to the inner conductor (see picture above). Avoid heating the pin for a too long time in order not to transfer excessive heat to the highly conductive copper underneath. Excessive heat deforms the dielectric which is made of foam PE and not in teflon!.



7 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.

Wrench 18mm (23/32")

Wrench 19mm (3/4")



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CONNECTORS for 10,3mm/.400" cables

N solder male



N solderless male



N solderless female



N at 90°

NO braid soldering needed!

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



Humidity proof compression design!

Dramatic suppression of the background noise!

N crimp male



UHF/PL solder male



UHF/PL solder female





CONNECTORS for 10,3mm/.400" cables

PL259 AMPHENOL®



BNC solder male



SMA solder male



TNC solder male



NO braid soldering needed!

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

Humidity proof compression design!

Dramatic suppression of the background noise!

TNC crimp male



7/16



Heat Suppressor

