

M&P

UltraFlex 7

(HIGHFLEXX 7) *1287"*



JACKET :
UV-resistant black PVC
overall Ø 7,3mm ± 0,15
(0.287 inches ± 0.0059)

REACTIVE BRAID :
83% 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 5 mm ± 0,05 (0.196 inches ± 0.0019)

INNER CONDUCTOR :
19x0,38mm copper wires - overall Ø 1,9 mm ± 0,15
(19x0.015 inches - overall Ø 0.075 inches ± 0.0059)

ELECTRICAL DATA

Impedence @200Mhz: 50 Ohm ± 3

Minimum bending radius: { up to 15 bends: 68mm (2.68 in)
single bend (choke): 34mm (1.34 in)

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

Capacitance: 75 pF/m ± 2 (22.9 pF/ft ± 2)

Velocity ratio: 83%

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

Screening Class: A++

Inner conductor resistance: 7,3 Ohm/Km (2.2 Ohm/1000ft)

Outer conductor resistance: 9,8 Ohm/Km (3.0 Ohm/1000ft)

Tension test (spark test): 4 kV

Net weight (100m/100ft): 6,9 Kg (4.6 lb)

Maximum peak power: 8.000 WATT

Connectors: UHF (PL), N, BNC, SMA, TNC

SRL

0,3-600 MHz	>28 dB	5000 MHz	49,3	15,0
600-1200 MHz	>22 dB	6000 MHz	55,3	16,8
1200-2000 MHz	>18 dB	7000 MHz	61,6	18,7
		8000 MHz	68,4	20,8

ATTENUATION (20°C/68°F)

FREQUENCY	dB/100m	dB/100ft
1,8 MHz	1,1	0,3
3,5 MHz	1,3	0,4
7 MHz	1,7	0,5
10 MHz	1,9	0,6
14 MHz	2,2	0,6
21 MHz	2,6	0,8
28 MHz	3,0	0,9
50 MHz	4,0	1,2
100 MHz	5,8	1,7
144 MHz	6,9	2,1
200 MHz	8,2	2,5
400 MHz	11,8	3,6
430 MHz	12,3	3,7
800 MHz	17,1	5,2
1000 MHz	19,3	5,8
1296 MHz	22,3	6,8
2400 MHz	32,3	9,8
3000 MHz	36,2	11,0
4000 MHz	42,6	12,9
5000 MHz	49,3	15,0
6000 MHz	55,3	16,8
7000 MHz	61,6	18,7
8000 MHz	68,4	20,8

POWER HANDLING (40°C/104°F)

FREQUENCY	MAX P.	FREQUENCY	MAX P.
1,8 MHz	4572 W	430 MHz	353 W
3,5 MHz	3393 W	800 MHz	254 W
7 MHz	2714 W	1000 MHz	225 W
10 MHz	2286 W	1296 MHz	195 W
14 MHz	1974 W	2400 MHz	134 W
21 MHz	1670 W	3000 MHz	120 W
28 MHz	1448 W	4000 MHz	102 W
50 MHz	1086 W	5000 MHz	88 W
100 MHz	749 W	6000 MHz	79 W
144 MHz	629 W	7000 MHz	71 W
200 MHz	530 W	8000 MHz	63 W
400 MHz	368 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 - ULTRAFLEX 7 DoP number: MP00100)



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 7, entering 1000 Watts over a length of 35m, at a frequency of 144 MHz, there remains 57,3% 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 7 / .287"														
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	98.8	97.9	96.9	95.9	94.9	93	90.1	85.6	81.3	76.4	71.7	66	53.7	Useful signal output (residual power %)
	42.85 m	7	98.5	97.2	95.9	94.6	93.3	90.8	87.1	81.5	75.8	69.8	64.2	57.5	43.6	
	21.42 m	14	97.6	95.2	93	90.8	86.6	84.4	78.5	69.6	61.6	53.3	46.1	38	23.4	
	10.71 m	28	96.5	93.3	90.1	87.1	84.1	78.5	70.7	59.5	50	40.6	33	25	12.5	
	6 m	50	95.4	91.1	87.1	83.1	79.3	72.9	63	50	39.7	30.1	22.8	15.7	6.2	
	2.08 m	144	92.3	85.2	78.7	72.7	67.2	57.3	45.1	30.8	20.3	12.6	7.8	4.1		
	69 cm	430	86.6	75	65.2	56.6	49	37	24.1	11.7	5.7					
	23.1 cm	1296	76,7	59,2	45,6	35,1	27	15,9	7							
	12.5 cm	2400	67.4	45.9	31.2	21	14	5.8								
	10 cm	3000	63.4	40.9	26.1	16.4	9.9									
	7.5 cm	4000	58.1	34.3	19.8	10.9	5.4									
	6 cm	5000	52.7	28.2	14.2	6.3										
	5 cm	6000	48.9	24	10.8	3.9										

M&P-ULTRAFLEX 7 / .287" Power Handling/Temperature (in RTTY)

		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	6838	6838	6638	6217	5724	5138	4572	3900	3228	2560	WATT
	85.71 m	3,5	5252	5076	4927	4614	4248	3814	3393	2894	2395	1900	
	42.85 m	7	4202	4061	3941	3692	3398	3051	2714	2315	1916	1520	
	30 m	10	3538	3420	3319	3109	2862	2569	2286	1950	1614	1280	
	21.42 m	14	3056	2953	2866	2685	2472	2219	1974	1684	1394	1105	
	14.28 m	21	2586	2499	2425	2272	2091	1878	1670	1425	1179	935	
	10.71 m	28	2241	2166	2102	1969	1812	1627	1448	1235	1022	811	
	6 m	50	1681	1624	1577	1477	1359	1220	1086	926	767	608	
	3 m	100	1159	1120	1087	1018	937	842	749	639	529	419	
	2.08 m	144	974	942	914	856	788	707	629	537	444	352	
	1.5 m	200	820	792	769	720	663	595	530	452	374	297	
	75 cm	400	570	551	534	501	461	414	368	314	260	206	
	69 cm	430	547	528	513	480	442	397	353	301	249	198	
	37.5 cm	800	393	380	369	345	318	285	254	217	179	142	
	30 cm	1000	348	337	327	306	282	253	225	192	159	126	
	23.1 cm	1296	301	291	283	265	244	219	195	166	137	109	
	12.5 cm	2400	208	201	195	183	168	151	134	115	95	75	
10 cm	3000	186	179	174	163	150	135	120	102	85	67		
7.5 cm	4000	158	153	148	139	128	115	102	87	72	57		
6 cm	5000	136	132	128	120	110	99	88	75	62	49		
5 cm	6000	122	117	114	107	98	88	79	67	55	44		
4.2 cm	7000	109	105	102	96	88	79	71	60	50	39		
3.75 cm	8000	98	95	92	86	79	71	63	54	45	36		

Connector assembly

Connector "N" type



1 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.

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

3 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.

4 Cut and remove the tape and dielectric for a length as illustrated in the caliber (mm).

5 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!)



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

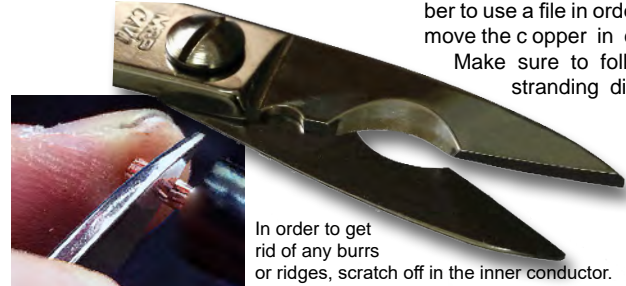
7 Insert the connector and fasten accurately until the o-ring present in component A, will be pressed against the connector body. Inside, the rubber component C (pic. 1) will expand, granting optimal sealing against moisture and a perfect contact to ground.



Cut made with special M&P scissors.



Common scissors: remember to use a file in order to remove the copper in excess. Make sure to follow the stranding direction.



In order to get rid of any burrs or ridges, scratch off in the inner conductor.

Connector "UHF/PL" type



1 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.

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

3 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.

4 Cut and remove the tape and dielectric for a length as shown in the picture.



5 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!)

6 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 7,3mm/.287" cables

N solder male



N solder female



N at 90°



N crimp male



UHF/PL solder male



UHF/PL solder female



UHF/PL twist



BNC solder male



BNC solder female





CONNECTORS for 7,3mm/.287" cables

BNC crimp male



SMA solder male



TNC solder male



TNC crimp male



N male (1st version)



UHF male (1st version)



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

Humidity proof
compression design!

NO braid soldering needed!

Dramatic suppression of
the background noise!