M&P

POTA-FLEX 7

/.300”

YELLOW JACKET:

High visibility and reflective polyethylene, for outdoor use, direct burial, trample resistant & constant handling overall Ø 7,65mm ± 0,15 (0.301”)

TWIN BRAID + COPPER FOIL

1st Braid = 83% SCREENING - 144 wires of copper clad aluminium
2nd Braid = 80% SCREENING - 144 wires of copper clad aluminium
Light and flexible, yet sturdy: the twin braids form a real **armor** to resist extreme conditions. This device has been designed for demanding applications: for a longer operative life consider treating it wisely.



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”)

INNER CONDUCTOR:

19x0,38mm copper wires - overall Ø 1,9 mm ± 0,15
(19x0.015” - overall Ø 0.075“)

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

ELECTRICAL DATA

Impedence @200Mhz:	50 Ohm ± 3
Minimum bending radius:	successfully tested up to 100 bends, using our “PotaSpeed” with inner core Ø126mm (4,96 in)
Temperature:	-40°C to +60°C (-40°F to +140°F)
Capacitance:	75 pF/m ± 2 (22.9 pF/ft ± 2)
Velocity factor:	83%
Screening Efficiency (SA)	100-2000 MHz >105 dB
Inner conductor resistance:	7,3 Ohm/Km
Outer conductor resistance:	12 Ohm/Km
Tension test (spark test):	4 kV
Net weight 100m (100ft):	5,4 Kg (3,63 lbs)
Maximum peak power:	8000 WATT
Structural Return Loss:	0,3-600 MHz >28 dB; 600-1200 MHz >22 dB; 1200-2000 MHz >18 dB

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); CPR305/11 - **EuroClass Fca** - EN50575:2014

WHY CHOOSE THIS CABLE

• Unique model, excellent for any type of application. Double braid with additional copper foil which form a real armor to resist extreme conditions. Incredibly sturdy, but also light and flexible. (This device was designed for demanding applications, for greater operational longevity use it wisely.)

• Totally waterproof and buriable, trample resistant and perfect for constant handling.

• High visibility reflective sheath, a very important detail in crowded places, stages and events, audio-video systems, outdoor applications (e.g. Park on the Air Activations).

• Designed in such a way that it can be stripped smoothly and well frictioned, greatly facilitating the installation of the connectors (especially using our specific scissors).

• We have carefully tested this cable to evaluate its performance after 200 unwindings, obtaining very minimal variations. These results are guaranteed especially in combination with our POTA-SPEED, which ensures that the minimum bending radius is always respected, as well as the fast and practical management of the coils.

FREQUENCY SUGGESTIONS

HF (from 3MHz to 30Mhz)

example at 14 MHz
EXCELLENT up to 60m of cable length
GOOD up to 100m of cable length
Choose a bigger cable above 100m:

example 28 MHz
EXCELLENT up to 50m of cable length
GOOD up to 75m of cable length
Choose a bigger cable above 75m

VHF (from 30MHz to 300Mhz)

example at 50 Mhz
EXCELLENT up to 35m of cable length
GOOD up to 50m of cable length
Choose a bigger cable above 50m

example at 144 Mhz
EXCELLENT up to 15m of cable length
GOOD up to 25m of cable length
Choose Ø 10,3mm cable above 20m

UHF (from 300MHz to 3000Mhz)

example at 430 MHz
EXCELLENT up to 10m of cable length
GOOD up to 15m of cable length
Choose a bigger cable above 15m

example at 1296 MHz
GOOD up to 5m of cable length
Choose a bigger cable above 5m

example at 2400 MHz
GOOD up to 3m of cable length
Choose a bigger cable above 3m

*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-ULTRAFLEX 7, entering 1000 Watts over a length of 35m, at a frequency of 144 MHz, there remains 57,2% 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-POTAFLEX 7

	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	98,4	97,0	95,6	94,2	92,8	90,1	86,2	80,1	74,4	68,1	62,3	55,4	41,2
	42.85 m	7	98,1	96,3	94,5	92,8	91,1	87,8	83,1	75,8	69,1	61,8	55,4	47,8	33,0
	21.42 m	14	97,4	95,0	92,6	90,3	88,0	83,7	77,5	68,3	60,2	51,7	44,4	36,2	21,8
	10.71 m	28	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
	6 m	50	95,4	91,1	87,0	83,1	79,3	72,3	63,0	50,0	39,7	30,1	22,8	15,7	6,2
	2.08 m	144	92,3	85,2	78,7	72,7	67,1	57,2	45,1	30,3	20,3	12,6	7,8	4,1	
	69 cm	430	86,6	75,2	65,2	56,6	49,1	37,0	24,1	11,8	5,7				
	23.1 cm	1296	76,7	59,2	45,6	35,1	27,0	15,9	7,0						
	12.5 cm	2400	67,4	45,9	31,2	21,0	14,0	5,8							
	10 cm	3000	64,3	41,9	27,1	17,3	10,9	3,8							
	7.5 cm	4000	59,2	35,4	20,9	12,0	6,6								
	6 cm	5000	53,5	28,9	15,0	7,1									
	5 cm	6000	48,9	24,0	10,8	3,8									

M&P-POTAFLEX 7 Power Handling/Temperature (in Continuous Carrier)

	Wave length	MHz	Temperature C° / F° -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	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	

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
- Hotspot
- 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



M&P-STRAP



POTA-CASE

CONNECTORS for 7,3mm (.287”) Coaxial Cables



EVOlution

“UHF” (PL-259) Male Solder

Watch the Assembly Video: https://youtu.be/c9FhvNKpMR4

Code: CO.UHF.7M-S EVO



“UHF” (PL-259) Female Solder

Watch the Assembly Video: https://youtu.be/-hoInER7UGo

Code: C.UHF.AC7F-S



“N” Male Solder

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

Code: CO.N.7M-S



“N” Female Solder

Watch the Assembly Video: https://youtu.be/-RTkDU4gxjw

Code: C.N.AC7F-S



“N” Male Crimp

Watch the Assembly Video: https://youtu.be/hDcL8rDc6JA

Code: C.N.AC7M-CR



“UHF” Male Solder - 90° Angle

Watch the Assembly Video: https://youtu.be/M-9Cs-iZqoE

Code: C.UHF.AC7-M90



“N” Male Solder - 90° Angle

Watch the Assembly Video: https://youtu.be/QXKIR4a-OOo

Code: C.N.AC7M-90

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

CONNECTORS for 7,3mm (.287”) Coaxial Cables



“SMA” Male Solder

Watch the Assembly Video: https://youtu.be/ClaO7xDQPUw

Code: C.SMA.AC7M-S



“BNC” Male Solder

Watch the Assembly Video: https://youtu.be/Ss13iNlygrQ

Code: C.BNC.AC7M-S



“BNC” Male Crimp

Watch the Assembly Video: https://youtu.be/dQpnp1WhWP4

Code: C.BNC.AC7M-CR



“BNC” Female Solder

Watch the Assembly Video: https://youtu.be/ruVcqS2ry8o

Code: C.BNC.AC7F-S



“TNC” Male Solder

Watch the Assembly Video: https://youtu.be/AuVS2MEoSAI

Code: C.TNC.AC7M-S



“TNC” Male Crimp

Watch the Assembly Video: https://youtu.be/vW9gifg-pK4

Code: C.TNC.AC7M-CR

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