Partnr. 57010010 M P

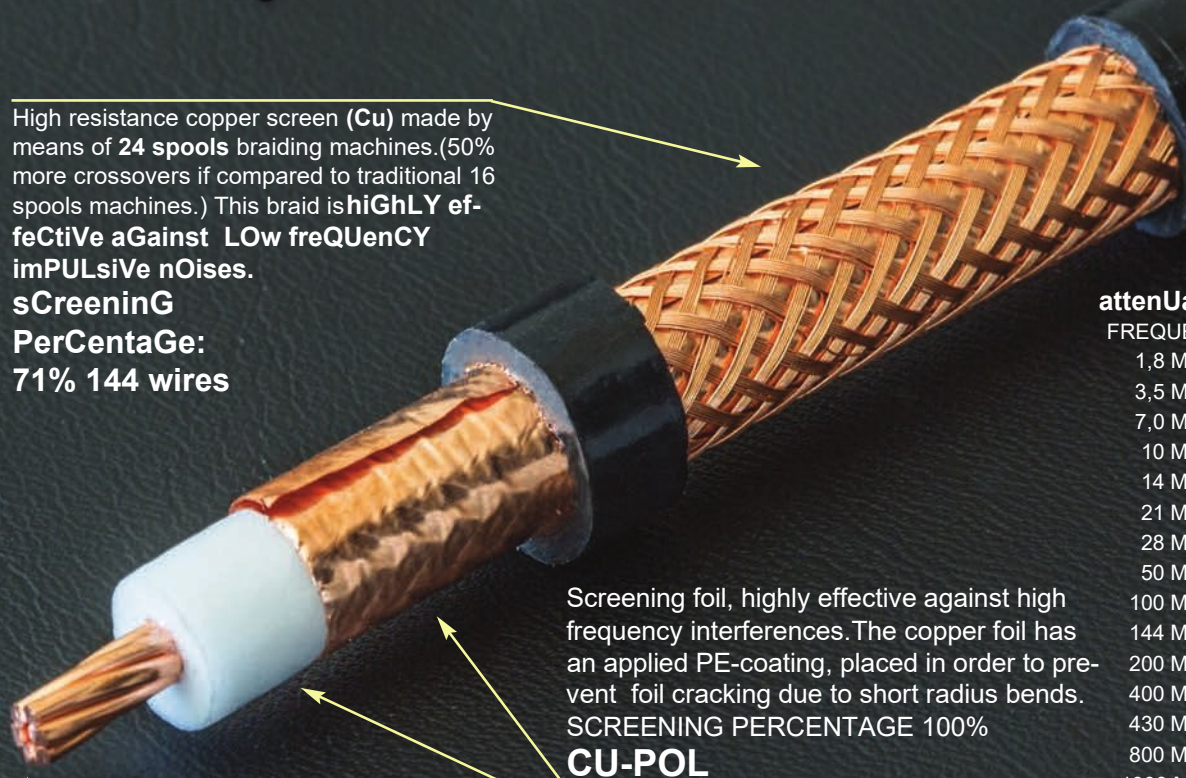
UltraFlex 10 /.400 "

eXtrafLeXiBLe

UV resistant PVC jacket.

PVC Ø 10,3 mm ± 0,15

(0.405 inches ± 0.0059)



High resistance copper screen **(Cu)** made by means of **24 spools** braiding machines.(50% more crossovers if compared to traditional 16 spools machines.) This braid is **hiGhLY ef-feCtiVe aGainst LOw freQUenCY imPULsiVe nOises.**

sCreeninG PerCentaGe: 71% 144 wires

Screening foil, highly effective against high frequency interferences.The copper foil has an applied PE-coating, placed in order to prevent foil cracking due to short radius bends.
SCREENING PERCENTAGE 100%

CU-POL

High pressure physical injection foamed polyethylene, **triPLe LaYer dieLeCtriC. fPe Ø 7,3 mm ± 0,05**

(0.287 inches ± 0.0019)

Inner conductor made of 7x1,0 stranded, geometric and concentric annealed copper wires. Purity 99,99%.

(annealed = thermal softening process)

Cu 7x1,0 mm - Ø 2,9 mm ± 0,15

(7x0.039 inches - 0.114 inches ± 0.0059)

attenUatiOn at 20°C/68°f

FREQUENCY	dB/100m	dB/100ft
1,8 MHz	0,81	0,25
3,5 MHz	1,0	0,30
7,0 MHz	1,2	0,37
10 MHz	1,34	0,41
14 MHz	1,53	0,47
21 MHz	1,82	0,55
28 MHz	2,0	0,61
50 MHz	2,7	0,82
100 MHz	3,9	1,19
144 MHz	4,74	1,44
200 MHz	5,72	1,74
400 MHz	8,31	2,53
430 MHz	8,65	2,64
800 MHz	12,17	3,71
1000 MHz	13,81	4,21
1296 MHz	16,4	5,0
2400 MHz	23,75	7,24
3000 MHz	27,3	8,32
4000 MHz	32,9	10,03
5000 MHz	38,9	11,86
6000 MHz	44,5	13,56
7000 MHz	50,2	15,30
8000 MHz	55,8	17,01

srL

0,3-600 MHz	>30 dB
600-1200 MHz	>25 dB
1200-2000 MHz	>20 dB

electrical data

Impedance @200MHz:	50 Ohm ± 3	
Minimum bending radius:		
Multiple bends(15)/single bend	80/40 mm	(3.15/1.57 in)
Temperature range:		
installation:	-40°C to +60°C (-40°F to +140°F)	
operative:	-55°C to +85°C (-67°F to +185°F)	
Capacitance:	78 pF/m ± 2	(23.8 pF/ft ± 2)
Velocity ratio:	83 %	
Screening efficiency:		
100-2000 MHz	>105 dB	
Class	A++	
Inner conductor resistance:	3,2 Ohm/Km	(1 Ohm/1000ft)
Outer conductor resistance:	9,2 Ohm/Km	(2.8 Ohm/1000ft)
Tension test (spark test):	8 kV	
Weight (100m/100ft):	13 Kg	(8.74 lb)
Maximum peak power:	13000 WATT	

POwer handLinG (at 40°C/104°f)

FREQUENCY	MAXP	FREQUENCY	MAXP
1,8 MHz	9927 W	430 MHz	803 W
3,5 MHz	7721 W	800 MHz	571 W
7,0 MHz	7164 W	1000 MHz	503 W
10 MHz	5345 W	1296 MHz	445 W
14 MHz	4370 W	2400 MHz	293 W
21 MHz	3657 W	3000 MHz	255 W
28 MHz	3247 W	4000 MHz	211 W
50 MHz	2518 W	5000 MHz	182 W
100 MHz	1768 W	6000 MHz	162 W
144 MHz	1466 W	7000 MHz	138 W
200 MHz	1215 W	8000 MHz	125 W
400 MHz	836 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 (frnC)LsZh jacket);
CPr305/11(en50575:2014 - doP number: mP0102);

Messi & Paoloni coaxial cables
www.messi.it

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 10, entering 1000 Watts over a length of 35m, at a frequency of 144 MHz, there remains 68.2 % 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-ULTRAFLEX 10 /.400" (H 2010)

Frequencies (MHz) \ length in meters	5	10	15	20	25	35	50	75	100	130	160	200	300
3,5	99.2	98.5	97.7	97	96.2	94.8	92.7	89.2	85.9	82	78.4	73.8	63.4
7	98.9	97.8	96.7	95.6	94.5	92.4	89.4	84.5	80	74.8	69.9	63.9	51.1
14	98.1	96.4	94.6	92.9	91.2	87.9	83.2	75.9	69.3	62.1	55.6	48.1	33.3
28	97.5	95.2	92.8	90.6	88.4	84.1	78.1	69.1	61.1	52.7	45.4	37.3	22.8
50	96.8	93.8	90.9	88	85.3	80	72.7	62.1	52.9	43.7	36.1	28	14.8
144	94.6	89.6	84.8	80.3	76.1	68.2	57.9	44	33.5	24.1	17.4	11.2	3.7
430	90.4	81.8	74.1	67	60.7	49.7	36.8	22.3	13.5	7.4	4		
1200	83.5	70.2	58.9	49.5	41.5	29.2	17.2	6.9					
2400	74.5	56.3	42.9	31.9	23.9	13.2	4.9						
3000	71.4	51.7	37.4	26.9	19.2	9.5							
4000	66.5	44.9	30.1	20	13.1	5.1							
5000	61.9	39	24.2	14.7	8.6								
6000	57.9	34.2	19.6	10.8									
8000	51	26.2	12.6	5.1									
10.000	43.2	18.2	5.9										
12.000	38.4	13.6											

Useful signal output (residual power %)

M&P-ULTRAFLEX 10 /.400" (Power Handling/Temperature)

Frequencies / Frequenze (MHz) \ Temperature C° / F°	-10 / 14	-5 / 23	0 / 32	10 / 50	20 / 68	30 / 86	40 / 104	50 / 122	60 / 140	70 / 158
1,8	12000	12000	12000	11980	11178	10710	9927	8468	7008	5559
3,5	11700	11450	11211	10500	9667	8678	7721	6586	5451	4324
7	11089	10717	10402	9743	8969	8052	7164	6111	5058	4012
10	8274	7996	7761	7270	6692	6008	5345	4559	3774	2993
14	6765	6538	6346	5944	5472	4912	4370	3728	3085	2447
21	5661	5471	5310	4974	4579	4111	3657	3120	2582	2048
28	5027	4858	4715	4416	4065	3650	3247	2770	2292	1818
50	3897	3766	3656	3424	3152	2830	2518	2148	1777	1410
100	2737	2645	2567	2405	2214	1987	1768	1508	1248	990
144	2269	2193	2129	1994	1835	1648	1466	1250	1035	821
200	1881	1817	1764	1652	1521	1365	1215	1036	858	680
400	1294	1251	1214	1137	1047	940	836	713	590	468
430	1244	1202	1166	1093	1006	903	803	685	567	450
800	884	854	829	777	715	642	571	487	403	320
1000	779	753	731	684	630	566	503	429	355	282
1296	690	666	647	606	558	501	445	380	314	249
2400	453	438	425	398	366	329	293	250	207	164
3000	394	381	370	346	319	286	255	217	180	143
4000	327	316	307	287	264	237	211	180	149	118
5000	282	272	264	248	228	205	182	155	128	102
6000	251	243	236	221	203	182	162	138	115	91
7000	214	207	201	188	173	156	138	118	98	78
8000	193	186	181	169	156	140	125	106	88	70

WATT