

**DATA SHEET**

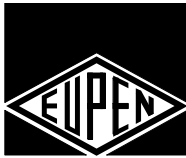
**50Ω - LOW LOSS**

**CONSTRUCTION:**

		<b>58RT5 LOW LOSS</b>	<b>213RT5 LOW LOSS</b>
Inner conductor	Material Diameter	Copper wire	
		1.05 mm	2.7 mm
Dielectric	Material Diameter	Gas injected cellular (foam) polyethylene	
		2.95 mm	7.15 mm
Outer conductor	Material and constr. Diameter	Aluminium tape + tinned copper braid	
		3.5 mm	7.9 mm
Outer sheath	Material Diameter	Black PE 4.9 mm	Black or Grey PE 10.1 mm
	Minimum thickness	0.7 mm	1.1 mm

**ELECTRICAL CHARACTERISTICS:**

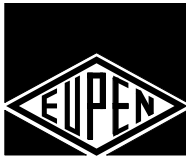
Characteristic impedance	50 ± 2Ω	50 ± 2Ω
Velocity ratio	82 %	82 %
Capacitance	82 pF/m	82 pF/m



	<b>58RT5 LOW LOSS</b>	<b>213RT5 LOW LOSS</b>
Nominal attenuation at 20°C	dB/100m	dB/100m
10 MHz	4,4	1,7
50 MHz	8,1	3,35
100 MHz	10,5	4,3
200 MHz	14,4	5,9
300 MHz	17,9	7,2
450 MHz	22,4	8,9
900 MHz	33,0	12,9
1000 MHz	35,0	13,6
1800 MHz	49,3	18,8
2000 MHz	52,5	19,9
2400 MHz	58,5	22,0
3000 MHz	67,0	24,9
<p>The nominal attenuation (at 20°C) at the frequency f can be approximately calculated by the formula:  <math>a_{20}(f)[dB/100m] = a \cdot \sqrt{f[MHz]} + b \cdot f[MHz]</math></p>		
Attenuation coefficients	200 - 3000 MHz	200 - 3000 MHz
a =	0,95	0,4
b =	0,005	0,001

**MECHANICAL CHARACTERISTICS:**

Minimum bending radius	25 mm	50 mm
Weight	40 kg/km	133 kg/km
Temperature rating (working and storage)	-40°C to +85°C	-40°C to +85°C
Max. pulling force	2 daN	4 daN



	<b>58RT5 LOW LOSS</b>	<b>213RT5 LOW LOSS</b>
Average Power rating (40°C)	kW	kW
10 MHz	1,70	5,92
50 MHz	0,74	2,62
100 MHz	0,52	1,84
200 MHz	0,36	1,29
300 MHz	0,29	1,04
450 MHz	0,23	0,84
900 MHz	0,16	0,58
1000 MHz	0,15	0,55
1800 MHz	0,11	0,40
2000 MHz	0,10	0,38
2400 MHz	0,09	0,34
3000 MHz	0,08	0,30

***ELECTRICAL CHARACTERISTICS:***

Peak power rating	2 kW	11 kW
Sheath spark test (r.m.s.)	3 kV <sub>rms</sub>	8 kV <sub>rms</sub>
Dielectric withstand voltage (DC)	0.87 kV	2.1 kV
Inductance	0.2 µH/m	0.2 µH/m
Inner conductor resistance (20°C, nom.)	19.5 Ω/km	3.0 Ω/km
Outer conductor resistance (20°C, nom.)	28.5 Ω/km	4.9 Ω/km
Shielding attenuation (30 - 1000 MHz)	> 75 dB	> 75 dB