

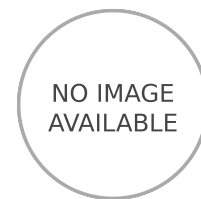


RFS rigid line components are available for both unpressurized (indoor) and pressurized, flanged (outdoor) systems. ;

Sizes available are 7/8", 1-5/8", 3-1/8", 4-1/2", 4-7/8", 6-1/8" and 7-3/16".

All components are manufactured to the most exacting tolerances.

Other line sizes are available on special order.



**FEATURES / BENEFITS**

- Line inner and outer tubing is of high conductivity, hard-drawn, copper, milled to exact dimensions. Unflanged components for indoor use are polished and sprayed with a clear lacquer to maintain a high lustre finish
- Flanges and mitred elbow joints are TIG welded for maximum strength
- Captive PTFE dielectric insulators are used exclusively in lines and elbows to ensure precision mating and stability of components after assembly
- All inner conductor connectors are silver plated
- All components conform to the relevant EIA or IEC standards

**Technical features**

**STRUCTURE**

<b>Product Line</b>		Components
<b>Product Type</b>		Copper Rigid Line Components 4-7/8" 50 ohm
<b>Size</b>		4-7/8
<b>Feeder Type</b>		Air Dielectric, solid inner and outer PTFE spacers
<b>Conductor Material</b>		High conductivity copper tube
<b>Outer Conductor OD</b>	mm (in)	123.2 (4.85)
<b>Outer Conductor ID</b>	mm (in)	120 (4.724)
<b>Inner Conductor OD</b>	mm (in)	52.1 (2.051)
<b>Inner Conductor ID</b>	mm (in)	50.1 (1.972)

**ELECTRICAL SPECIFICATIONS**

<b>Frequency Range</b>	MHz	50 - 862
<b>Frequency Band</b>		VHF Band I, VHF Band II, VHF Band III, UHF Band IV/V
<b>Impedance, ohms</b>	Ω	50 +/- 0.5
<b>Velocity</b>	%	99,8
<b>Peak Power Rating</b>	kW	2160
<b>RF Peak Voltage, Volts</b>	V	14700
<b>Part number EIA Flanged RL</b>		51,755
<b>Length EIA Flanged RL</b>	mm	55
<b>Isolation</b>	dB	32
<b>Output Power Split</b>	dB	3 +/- 0.15 Note#2
<b>Output Phase</b>	degrees	90 +/- 1 Note#2

**MECHANICAL SPECIFICATIONS**

<b>Weight</b>	kg/m (lb/ft)	7.1 (4.76)
<b>Flange Weight</b>	kg (lb)	1.5 (3.3)
<b>Flange Standard</b>		IEC
<b>Standard lengths</b>	m (ft)	5.5 (18)
<b>Max. indoor clamp spacing</b>	m (ft)	2 (6.5)
<b>Max. exterior clamp spacing</b>	m (ft)	1.2 (4)



**ORDERING INFORMATION**

Length Unflanged RL	m	55
Part number Unflanged RL		51,855

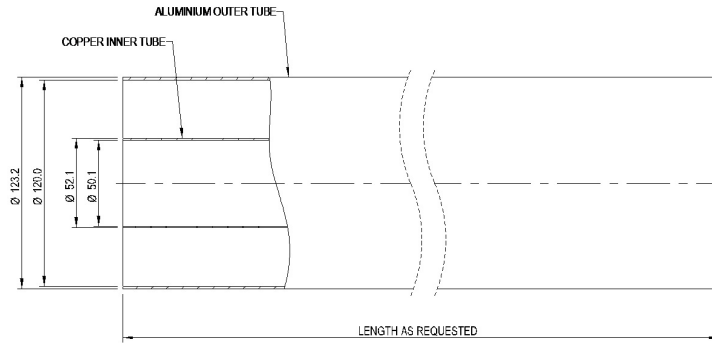
Attenuation at 20°C (68°F) cable temperature

Mean power rating at 40°C (104°F) ambient temperature

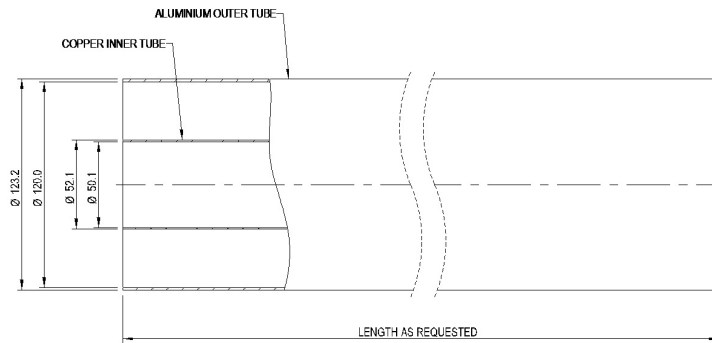
#1 Outer temp rise 23°C (73°F), Inner temp rise 80°C (176°F)

#2 Outer temp rise 30°C (86°F), Inner temp rise 100°C (212°F)

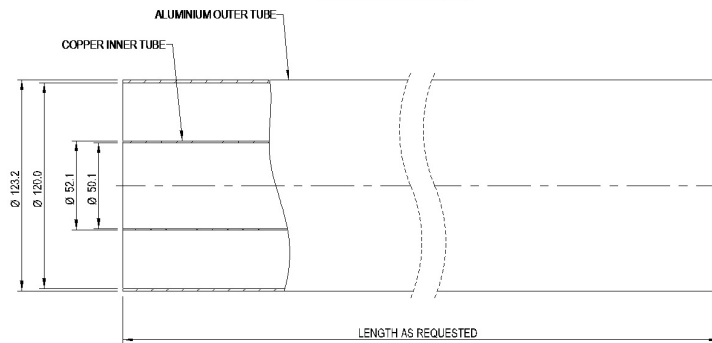
Applying a dark matt finish will reduce max temp rises.



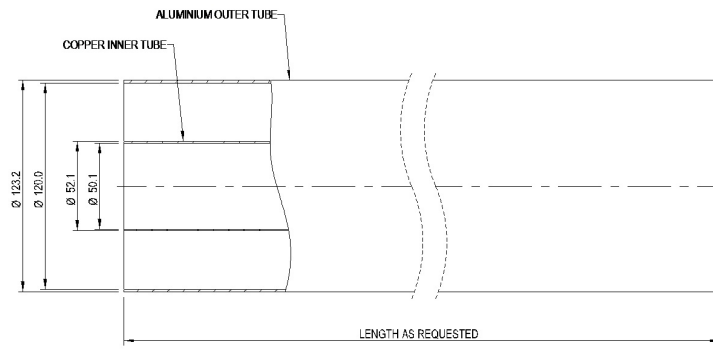
53.7XXXX RIGID LINE UF AL



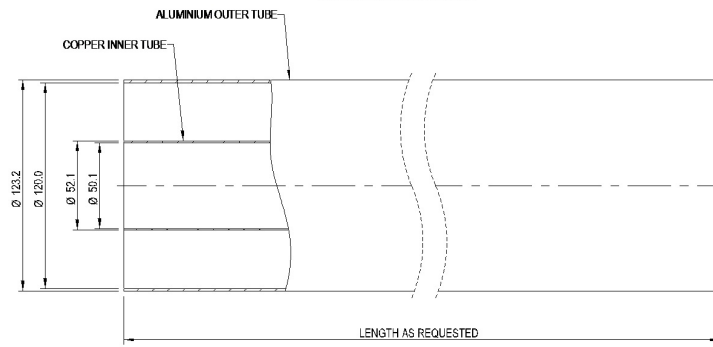
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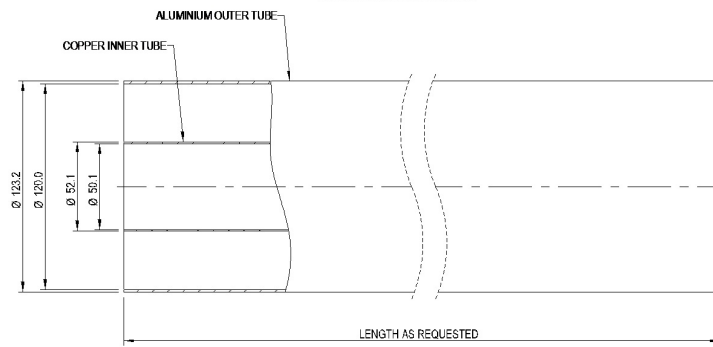
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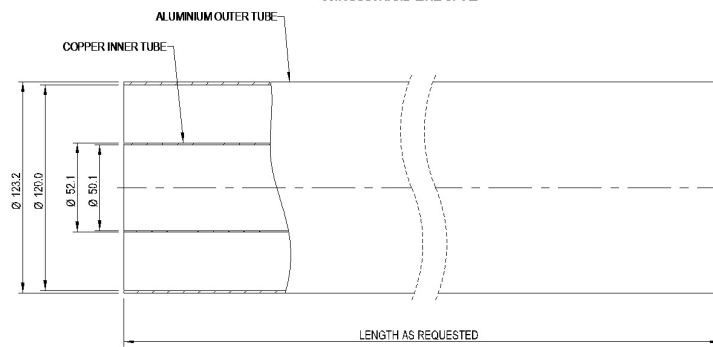
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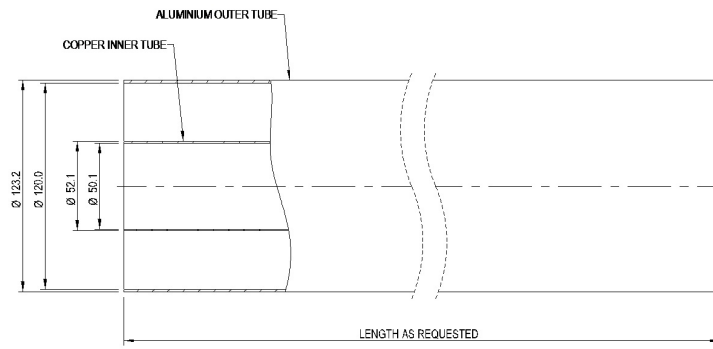
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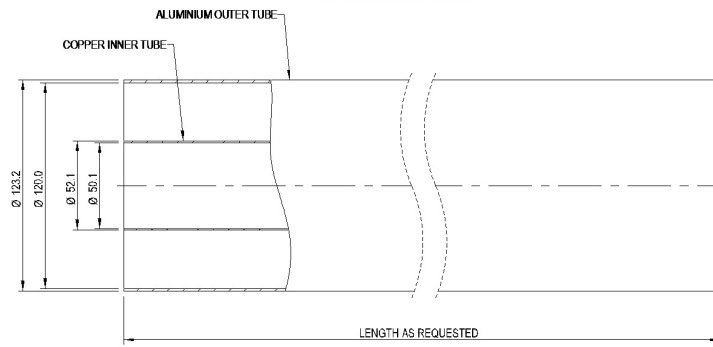
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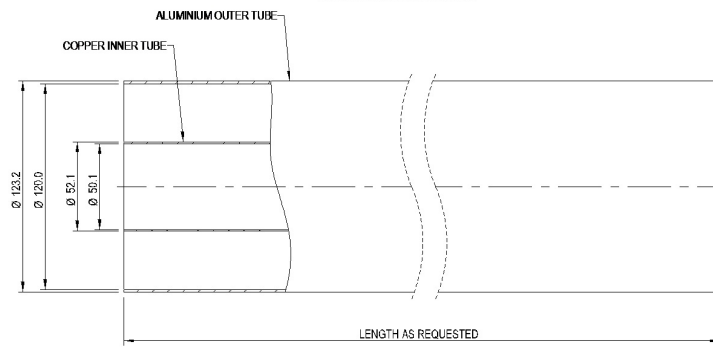
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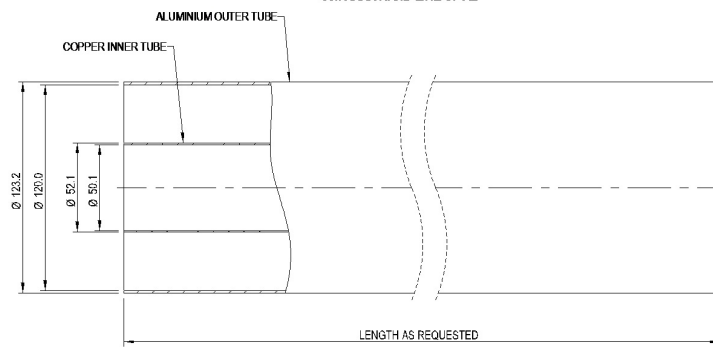
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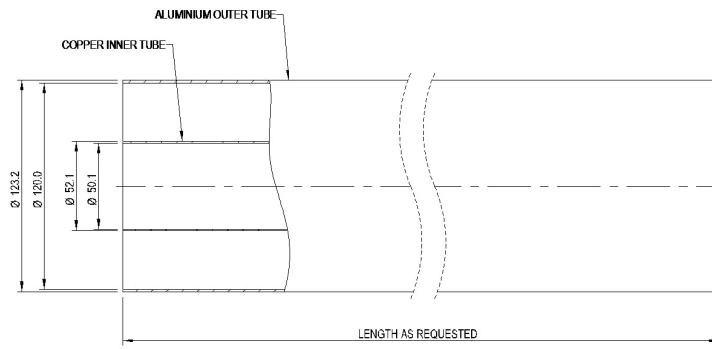
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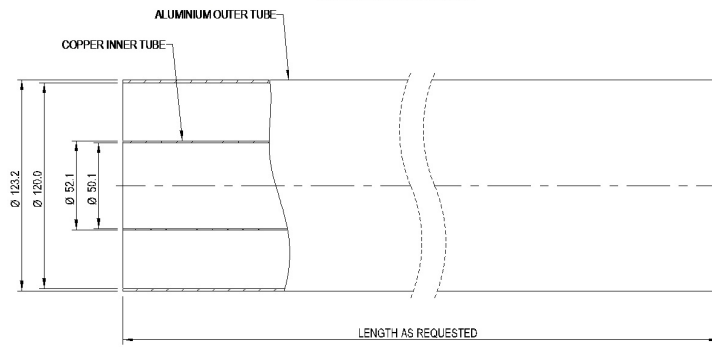
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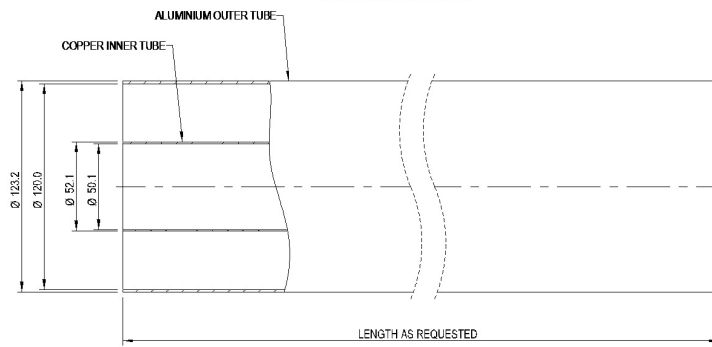
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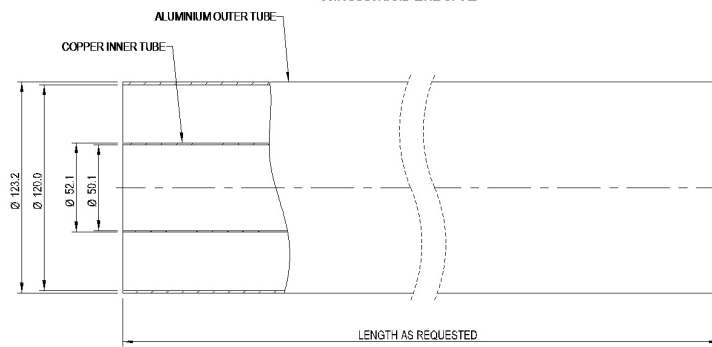
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Notes