

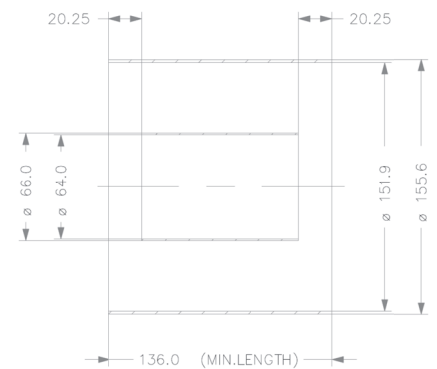
RYMSA RF supplies 50 Ohm unflanged 6 1/8" rigid line sections for indoor applications. The inner conductor is made in copper, and the outer conductor is made in aluminium. Crossed isolators made of two PTFE rods are available to achieve the alignment between the two conductors, ensuring minimum VSWR contribution to the line performance by applying the relative spacing directions supplied below. The outer conductor can be supplied either as such or with a standard EIA flanged factory welded.

RYMSA RF also manufactures the related rigid coaxial accessories such as rigid line coupling elements, devoted to enable the connection between sections of unflanged rigid line, PTFE cross isolators, coupling elements, unflanged elbows, inner and adapters.

Both the rigid line and the corresponding accessories are manufactured optimizing the VSWR and insertion loss values.

Rigid line conductors

Frequency range	DC-830 MHz				
Impedance	50 Ohm				
Maximum power handling ⁽¹⁾	70 MHz	100 MHz	200 MHz	500 MHz	800 MHz
	211 kW	176 kW	125 kW	79 kW	62 kW
RF Peak Voltage at sea level	17.9 KV				
Insertion loss (dB/100m) ⁽²⁾	70 MHz	100 MHz	200 MHz	500 MHz	800 MHz
	0.13	0.16	0.22	0.35	0.44
Maximum Length section	5 m				
Materials	Outer conductor	Aluminium			
	Inner conductor	Copper			
Temperature range	-10°C to +50°C				



Line Size	Conductor	Material	Reference
6 1/8"	Inner	Copper	1123119450
6 1/8"	Outer	Aluminium	1253112100
6 1/8"	Outer with one welded flanged	Aluminium	LR26-313

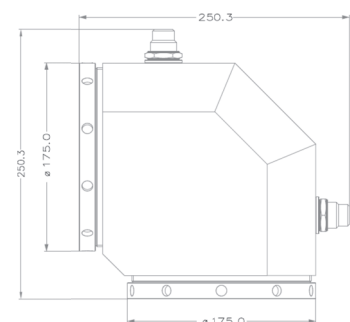
⁽¹⁾ This value is referred to ambient temperature of +40°C and VSWR 1.0

⁽²⁾ This value is referred to ambient temperature of +20°C

Unflanged Elbow

This element provides a standard flanged EIA termination to an unflanged rigid

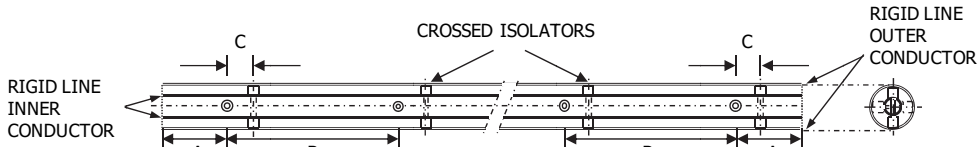
Model	CD26-010	
Frequency range	DC-830 MHz	
Impedance	50 Ohm	
VSWR	<1.03:1	
Insertion loss	Negligible	
Max. Power and voltage	According to line size	
Materials	Outer conductor	Aluminium
	Inner conductor	Silver plated brass
	Isolator	PTFE
	Finishing	Chromatized plating
Temperature range	-10°C to +50°C	



Crossed isolators

These elements enable the alignment between the two conductors ensuring minimum VSWR

Model LR22-090	VHF (BI/II/III)	500 MHz	600 Mhz	700 MHz	800 MHz
A	600	600	600	600	600
B	2250	2250	2250	2250	2200
C	100	150	125	107	94

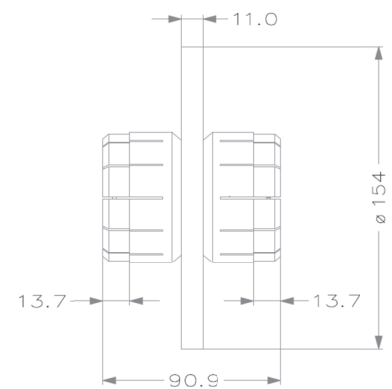


NOTE: INNER CONDUCTOR HAS TO BE DRILLED WITH THE TOOL COMPOSED BY THE PIECES CQ 3036 003 0 AND CQ 3036 004 0

Inner connector

This element enables the connection between two standard EIA flanged coaxial transmission line terminations

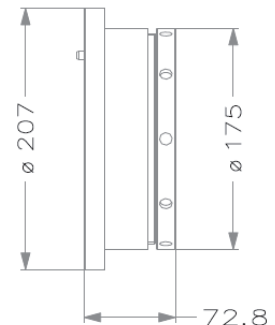
Model	LR26-600	
Max. Power and voltage	According to line size	
Materials	Conductor	Brass
	Isolator	PTFE
	Finishing	White brass
Temperature range	-10°C to +50°C	



Unflanged to flange adapter

This element provides a standard flanged EIA termination to unflanged rigid line. Two of these elements, plus an inner connector are used to connect two unflanged rigid line sections.

Model	TR23-127	
Frequency range	DC-830 MHz	
Impedance	50 Ohm	
VSWR	<1.03:1	
Insertion loss	Negligible	
Max. Power and voltage	According to line size	
Materials	Outer Conductor	Aluminium
	Finishing	Chromatized plating
Temperature range	-10°C to +50°C	



Assembling diagram for 6 1/8" elements

