

# Waveguide to Coaxial Adaptor

EIA / IEC



## PRODUCT FEATURES

- High quality low-loss aluminium alloy
- Can be optimised for customer frequency
- Customised length
- Standards, RS-271-A, RS-261, IEC 60154-2, IEC 60153-1, 2, MIL-DTL-85K, MIL-DTL-3922D

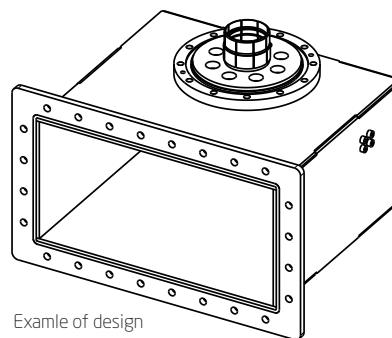
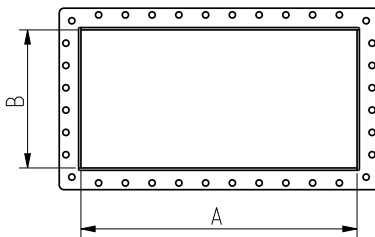
## PRODUCT PROFILE

Exir Broadcasting supplies Waveguide lines of different types. Low-loss aluminium alloys are used to ensure high conductivity.

Exir Broadcastings waveguides fulfill all general standards. It's welded in a four-corner welding process with no welding in direction of propagation which yield excellent performance and minimise loss.

All adaptors can be combined with standard coaxial adaptor to flange all the way down to N-type connector.

More detailed information is available on request.



Example of design

## ARTICLE STRUCTURE: WR2300-618F-A

- WR = Rigid type
- 2300 = Size of line
- 618F = Coaxial size and type
- A = Version

ARTICLE	WR2300-xxxx-x	WR23HH-xxxx-x	WR1800-xxxx-x	WR1500-xxxx-x	WR1150-xxxx-x	WR650-xxxx-x	OPTIONS
TYPE OF LINE	WR2300 (R3)	WR2300 Half Height	WR1800 (R5)	WR1500 (R6)	WR1150 (R7)	WR650 (R14)	Customized freq.
RECOMMENDED FREQUENCY	330 - 460 MHz	330 - 460 MHz	420 - 580 MHz	510 - 700 MHz	660 - 920 MHz	1170 - 1620 MHz	
IEC FREQUENCY	320 - 490 MHz	320 - 490 MHz	410 - 620 MHz	490 - 750 MHz	640 - 980 MHz	1130 - 1730 MHz	
RECOMMENDED FREQ. RETURN LOSS (VSWR)	>23 dB (<1.15)	>23 dB (<1.15)	>23 dB (<1.15)	>23 dB (<1.15)	>23 dB (<1.15)	>23 dB (<1.15)	>30 dB (<1.06) @10% bandwidth
IEC FREQ. RETURN LOSS (VSWR)	>17 dB (<1.33)	>17 dB (<1.33)	>17 dB (<1.33)	>17 dB (<1.33)	>17 dB (<1.33)	>17 dB (<1.33)	
MAX PEAK POWER RATING	Limited by the specification of coaxial connection						
MAX AVG. POWER RATING	Limited by the specification of coaxial connection						
COAXIAL CONNECTION	6 1/8"	6 1/8"	6 1/8"	6 1/8"	6 1/8"	6 1/8"	Other on request
A	584.2 mm	584.2 mm	457.2 mm	381.0 mm	292.1 mm	165.1 mm	
B	292.1 mm	146.05 mm	228.6 mm	190.5 mm	146.05 mm	82.55 mm	
WALL THICKNESS	5 mm	5 mm	5 mm	5 mm	5 mm	5 mm	
WEIGHT	27kg	22.5kg	20kg	19kg	8.6kg	5.5kg	
MATERIAL	6082-T6	6082-T6	6082-T6	6082-T6	6082-T6	6082-T6	Other on request
COLOUR	Frosted black	Frosted black	Frosted black	Frosted black	Frosted black	Frosted black	Other on request

Notes: The Recommended Frequency Range corresponds to wavelength that is between 1.6 times the guide width and 1.05 times the guide width. This range may be extended however attenuation will increase significantly below this frequency range and higher order waveguide modes may start to propagate above it.

Attenuation is based on 6082-T6 aluminum waveguide with ra 1,6 surface finish. Average power is based on unpressurized painted aluminum waveguide under free convection cooling with an operating temperature that is 25°C above the ambient temperature. Cooling options should be considered if the waveguide will be operating at higher power levels, please consult the factory.