

## Interconnection lines

The implementation of broadcast antennas by stacking arrays of elementary radiators requires the use of a power splitting network, to make the signals reach every unitary element with the appropriate phase and amplitude. This is achieved by using transmission lines interconnecting the radiating elements with the power splitter outputs. For complex dividers, composed of several splitters, these lines are also used for the connectivity between them.

RYMSA provides flexible and rigid interconnection lines. The connections from the splitters to the unitary antennas are usually implemented with flexible cables. Inter-splitter connections are made either with flexible or rigid line.

Flexible lines can be provided either using foam or air dielectric cable. Several sizes with a varied type of connectors are available, as for the rigid lines. Each manufactured flexible and rigid interconnection line is properly coded to enable its identification within the antenna system, and put under exhaustive quality tests, including the measurement of phase and return loss, hi-pot test and weatherproofing verification.

### Technical Specifications

Frequency range		0 - 862 MHz
Impedance		50 Ohm
VSWR	Flexible	< 1.06:1 (B-I, B-II, B-III) < 1.10:1 (B-IV/V)
	Rigid	< 1.06:1
Pressurization (typical operating value)		0.5 bar
Temperature range		-40°C to +80°C
Materials	Conductors	Copper
	Isolators	Polyethylene foam or helix, PTFE
	Finishing	Polyethylene black cover (flexible) Long lasting grey paint (rigid)
Temperature range		-40°C to +80°C



1/2", 5/8" and 7/8" flexible interconnection cables

### Flexible cable models

Series	Cable size	Dielectric	Connectors
LKC012	1/2"	Foam	DIN 7/16 male
LKH058	5/8"	Air	DIN 7/16 male / EIA 7/8" female
LKH078	7/8"	Air	EIA 7/8" female / DIN 13/30 male
LKH118	1 1/8"	Air	DIN 13/30 male / EIA 1 5/8" female
LKH158	1 5/8"	Air	EIA 1 5/8" female
LAH300	3"	Air	EIA 3 1/8" female
LKH318	3 1/8"	Air	EIA 3 1/8" female

### Rigid line models

Model	Size	Connectors
LR20-314	7/8"	EIA 7/8" female
LR22-314	1 5/8"	EIA 1 5/8" female
LR24-314	3 1/8"	EIA 3 1/8" female
LR30-314	4 1/2"	IEC 4 1/2" female



Interconnection rigid lines of several electrical lengths and coaxial sizes

RYMSA will reserve the right to make any changes without notice.