

10.2m

3 sections

751 HP

Freestanding HF antenna

DESCRIPTION

Vertical, 3 section, free-standing HF antenna; 10,2 m in height and tunable in the frequency band 1,5 – 30 MHz.

APPLICATION

Light marine antenna, intended to equip coastal or land stations, off-shore drilling platforms as well as ships.

CONSTRUCTION

Materials and design comply with standard MIL-E-16 400. The three sections are manufactured from SPIRGLASS* glass-fibre reinforced resin, protected by a hard Epoxy varnish – providing high mechanical strength and fatigue resistance. The insulating base, an integral part of the lower section, permits the installation of the antenna on any horizontal flat surface and also provides feeder cable protection. The radiating multifibular conductor is welded to the «marine» chrome-plated bronze intermediate fittings. The conductor is sunk into the structure and is thus completely protected.

* SPIRGLASS and LERC are tradenames.

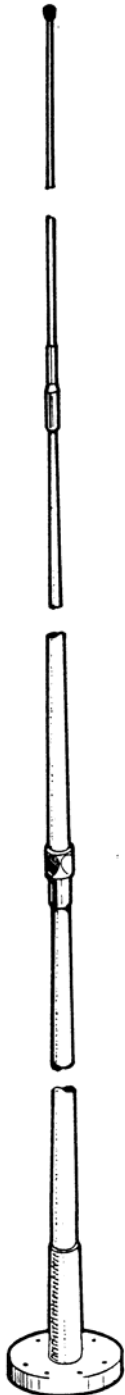
Standard: marine grey

DIMENSIONS

- Total length : 10 200 mm
- Length of lower section : 3 820 mm
- Length of middle section : 3 650 mm
- Length of upper section : 2 800 mm
- Diameter at base : 55 mm
- Diameter at tip : 6 mm
- Mass : 11,5 kg
- Wind loading at 200km/h (as per DIN 1055) : 68 daN

RADIOELECTRICAL CHARACTERISTICS

- Frequency range : 1,5 – 30 MHz
- Peak power : 1 kW
- Polarization : vertical
- Breakdown voltage (dry) : greater than 15 kV eff
- Impedance variation : see graphs



LERC S.A.

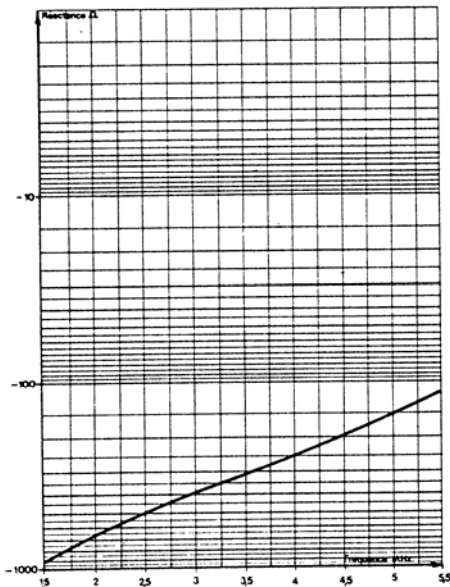
BP 10119 – 59732 SAINT AMAND LES EAUX CEDEX – France

Tel: +33 3.27.22.85.50 – Fax: +33 3.27.22.85.55 – e-mail: commercial@lerc.fr

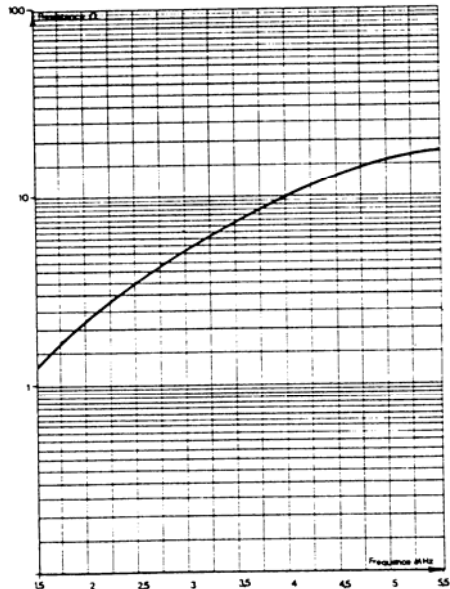
Internet: www.lerc-composites.com



Ω Réactance



Ω Résistance



Ω Réactance



Courbe graduée en MHz.

Impedance of the 751 antenna mounted on an artificial ground plane (50m²)

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Operating temperature range	:	-28° à +65°C
Resistance to humidity	:	RH 95%
Resistance to saline fog	:	96 hours
Fungal resistance	:	excellent
Permissible windspeed for normal functioning	:	120 km/h
Endurance windspeed	:	200 km/h
Deflection at tip when mounted horizontally	:	1300 mm

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INSTALLATION

Before installation, ensure that the support can resist a bending moment of 220 daNm.

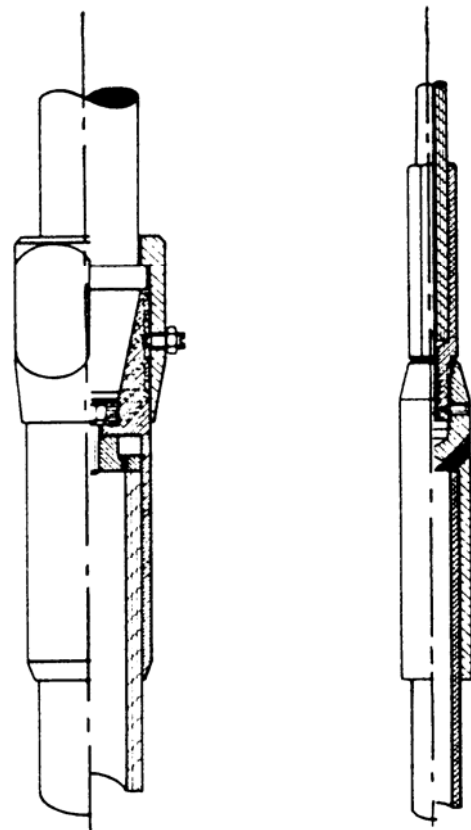
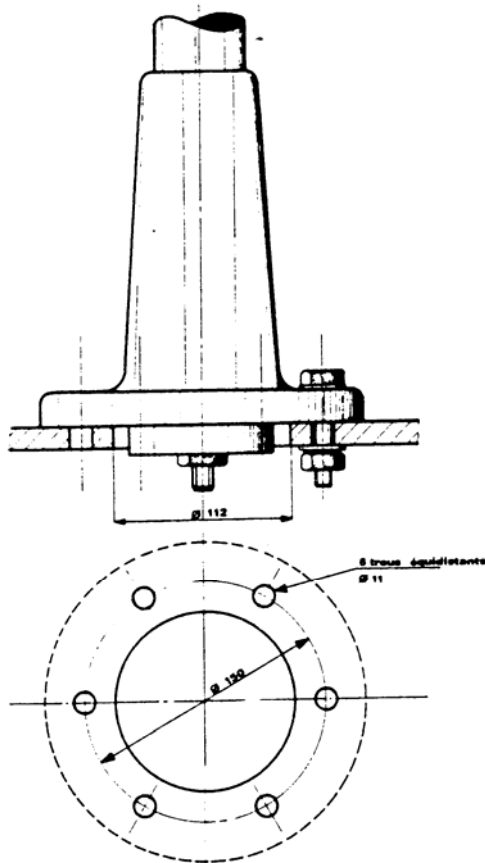
Coat the support with a thin layer of SILASTENE (or similar) to render it waterproof. Under no circumstances must a rubber plate be used.

Washers for the M10 bolts must have a thickness of at least 5mm.

Tightening torque: 2 daNm.

For land installation, construct a ground plane comprising at least eight equidistant radials consisting of 1mm² section copper of minimum length 5m linked to ground by a connection which ensures a resistance less than 5 Ω.

The feeder cable must be of copper and have a minimum section of 10mm² and must comply with marine standards E 540 and E 502.



Detail of locking system connection

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