Electrical / mechanical specifications and sketch of **Midi**

Electrical specifications

Continous frequency range: 3.500 - 14.500 MHz
S. W. R.: 1,2 : 1 (*typical*)
Front to back ratio : 6 db
Front to side ratio : 25 db
50 Ohm input impedance with gamma-match short circuited
Negligible noise and harmonics
L = 4,5 µH Q = 1.500 at 3.5 MHz
C = 560 pF at 14 KV r.m.s.
Power rating: 300 W 3.5 ÷ 7.0 MHz**
800 W 8.0 ÷ 14.5 MHz**
Bandwidth: 4 KHz @ 3.5 MHz
6 KHz @ 7.0 MHz
10 KHz @ 14.0 MHz
Gain compared to ½ **(1 "S" point = 6 db)** :
-4 db @ 3.5 MHz
-0.3 db @ 14.0 MHz

****NOTE: With this LOOP ANTENNA the peak power is equal to the continous power.**

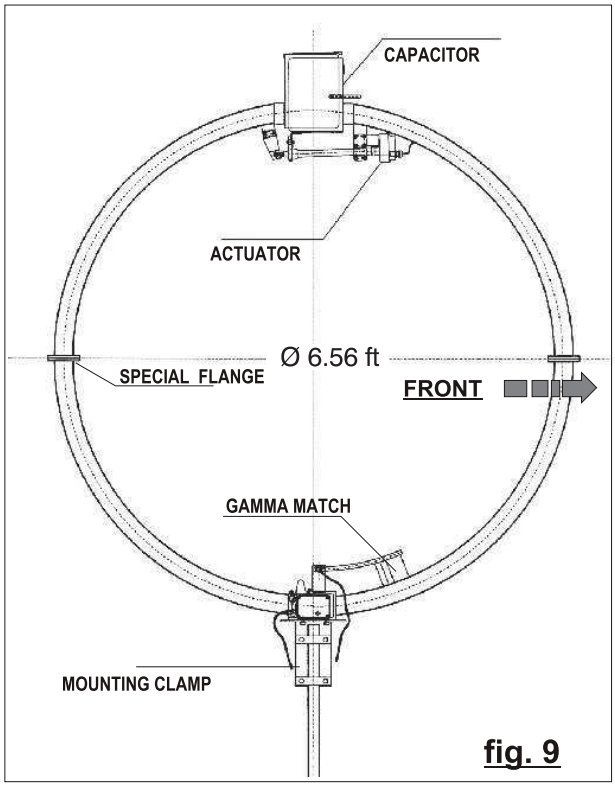

fig. 9

Mechanical specifications

Antenna diameter: 2.0 m (78.7in)
Aluminum alloy 60/60 welded with Tungsten and Injection of Gas
Tubular element Ø 75 x 2 mm tickness (2.9in x .08in)
All steinless steel hardware and support pin
Galvanized mounting clamp for a mast of Ø 60÷ 76 mm (2.4in - 3.0in)
Net / Gross Weight Kg. 20 / 32 (44.1 / 70.5 lbs)
Windload 0.5 mq (5.38 ftq)
Maximum supported wind velocity 161 km/h (100 mph)
Force exterted on antenna by wind of 129 km/h (80.15 mph) = 480 N.
Maximum flexibility moment on the antenna base anchoring point to a metal mast Ø 6 cm, height 3.5 m (2.36in, height 11.48 ft) = 1.680 N/m.

Note: *C.E.I. regulation require the installation of a wind-guys for areas of high wind with possible ice formation (in this case NON metallic guys).*

fig. 10 **S.W.R. TEST** **Continous coverage from 3,5 a 14,5 MHz**