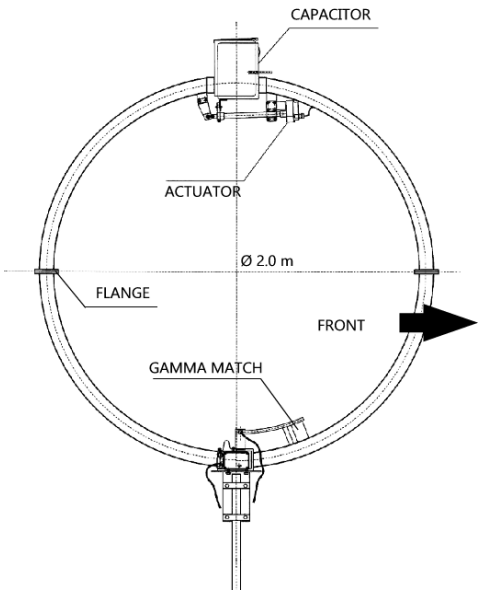
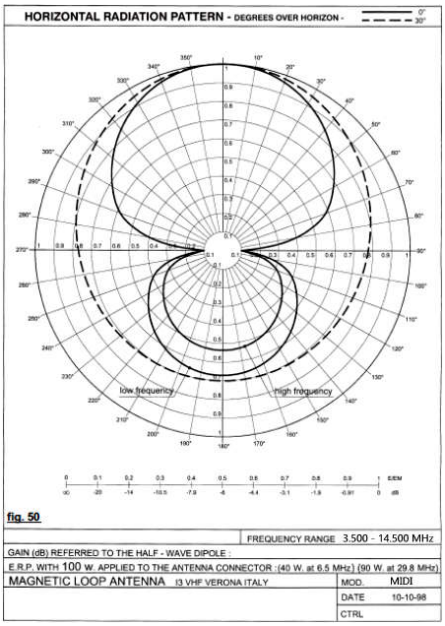
Electrical and mechanical specifications of MiDi LOOP



Electrical specifications

Continuous frequency coverage 3.5-14.5 MHz
S.W.R. 1.2:1 (typical)
Front to back ratio: 6 dB
Front to side ratio: 25 dB
50 Ohm input with gamma match short circuited (electrostatic discharge protection)
Negligible noise and harmonics
L = 4.5 µH Q = 1.500 a 3.5 MHz
C = 560 pF a 14 KV r.m.s.
Power rating: 300 W from 3.5 to 7 MHz **
800 W from 8 to 14.5 MHz**
Bandwidth: 4 KHz @ 3.5 MHz
6 KHz @ 7.0 MHz
10KHz @ 14.0 MHz
Gain compared to λ/2 dipole (1 point "S" = 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 continuous power



Mechanical specifications

Antenna diameter 2.0m (78.7in)
Aluminium alloy 60/60 T.I.G. welded (*Tungsten Inert Gas*)
Tubular elements Ø 75 x 2mm thickness (2.9in x 0.08in)
All stainless steel hardware and support pin
Stainless steel mounting clamp for a mast of Ø 50÷ 60mm (2.0in – 2.3in)
Net/gross weight 20/32kg (44.1lbs/70.5lbs)
Windload 0.5m2 (5.38ft2)
Maximum wind velocity supported 161km/h (100mph)
Force exerted on antenna by wind of 129km/h (80.15mph) = 480 N
Maximum flexibility on the antenna base anchoring point to a metal mast Ø 6cm (2.36in) height 3.5m (11.48in) = 1680N/m
Note: *C.E.I. regulations require the installation of wind-guys for areas of high wind with possible ice formation (in this case **NON** metallic guys)*