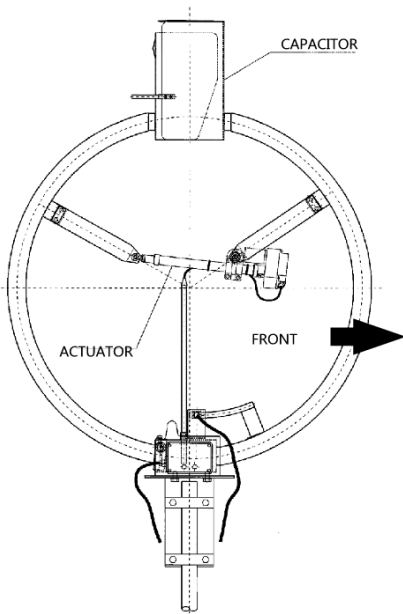


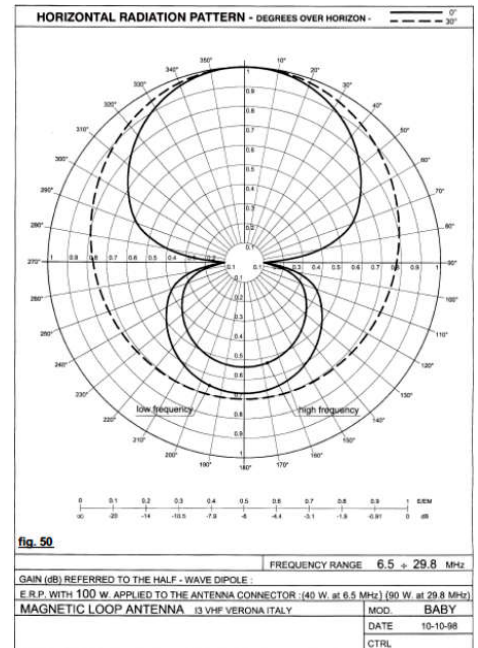
Electrical and mechanical specifications of BABY LOOP

Electrical specifications



Continuous frequency coverage 6.6-29.8 MHz
 S.W.R. 1,3:1 (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
 $L = 3 \mu\text{H}$ $Q = 1.100$ a 7 MHz
 $C = 400 \text{ pF}$ a 17 KV r.m.s.
 Power rating: 450 W up to a 21 MHz **
 1 KW from 22 to 29.8 MHz**
 Bandwidth : 4 KHz @ 7 MHz
 6 KHz @ 14 MHz
 12KHz @ 21 MHz
 20KHz @ 28 MHz
 Gain compared to $\lambda/2$ dipole (1 point "S" = 6 dB)
 - 4 dB @ 7 MHz
 - 0.3 dB @ 28 MHz

****NOTE:**
with this **LOOP ANTENNA** the peak power is equal to the continuous power



Mechanical specifications

Antenna diameter 1.0m (39.8in)
 Aluminum alloy 60/60 T.I.G. welded (*Tungsten Inert Gas*)
 Tubular elements $\varnothing 50 \times 2\text{mm}$ thickness (1.9in x 0.08in)
 All stainless steel hardware and support pin
 Stainless steel mounting clamp for a mast of $\varnothing 50 \div 60\text{mm}$ (2.0in – 2.3in)
 Net/gross weight 16/26kg (26.5lbs/57.3lbs)
 Windload 0.25m² (2.7ft²)
 Maximum wind velocity supported 161km/h (100mph)
 Force exerted on antenna by wind of 129km/h (80.15mph) = 240 N
 Maximum flexibility on the antenna base anchoring point to a metal mast $\varnothing 6\text{cm}$ (2.36in) height 3.0m (9.84in) = 720 N/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)

