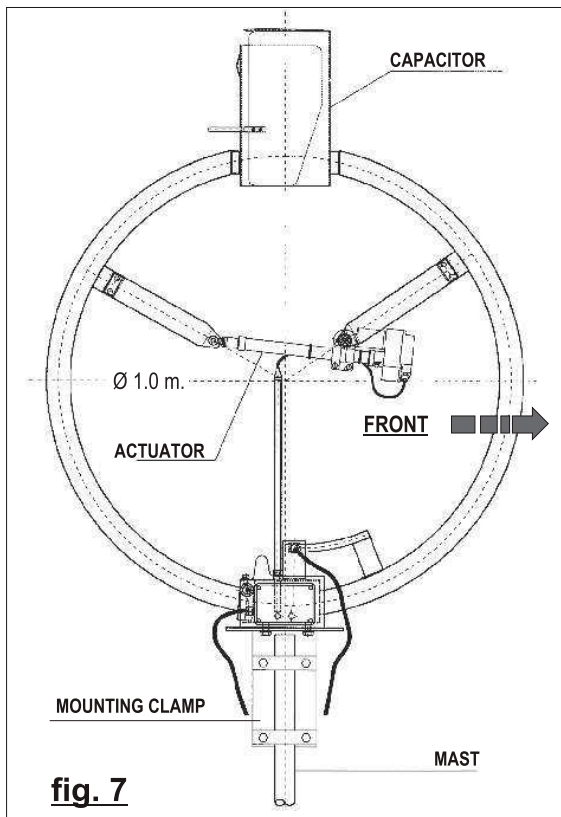




## Electrical / mechanical specifications and sketch of Baby



**fig. 7**

### Electrical specifications

Continuous frequency range: 6.600 ÷ 29.800 MHz  
 S.W.R.: 1,3 : 1 (typical)  
 Front to back ratio : 6 db  
 Front to side ratio : 25 db  
 50 Ohm input impedance with gamma match  
 short circuited (*electrostatic discharge protection*)  
 Negligible noise and harmonics  
 $L = 3 \mu\text{H}$        $Q = 1.100$  at 7.0 MHz  
 $C = 400 \text{ pF}$  at 17 KV r.m.s.  
 Power rating: 450 W up to 21 MHz \*\*  
                   1 KW to 22.0 ÷ 29.800 MHz\*\*  
 Bandwidth: 4 KHz @ 7.0 MHz  
               6 KHz @ 14.0 MHz  
               12KHz @ 21.0 MHz  
               20KHz @ 28.0 MHz  
 Gain compared to  $\lambda/2$  dipole (1 "S" point = 6 db) :  
               -4 db @ 7.0 MHz  
               -0.3 db @ 28.0 MHz

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

### Mechanical specifications

Antenna diameter: 1.0 m (39.8in)  
 Aluminum alloy 60/60 welded with Tungsten and Injection of Gas  
 Tubular element  $\varnothing 50 \times 2$  mm thickness (1.9in x .08in)  
 All stainless steel hardware and support pin  
 Galvanized mounting clamp for a mast of  $\varnothing 60 \div 76$  mm (2.4in - 3.0in)  
 Net/gross weight Kg. 16/26 (26.5lbs / 57.3lbs)  
 Windload 0.25 mq (2.7 ftq)  
 Maximum supported wind velocity 161 km/h (100 mph).  
 Force exerted 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  
 $\varnothing 6$  cm, height 3.0 m (2.36in, height 9.84in) = 720 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).

