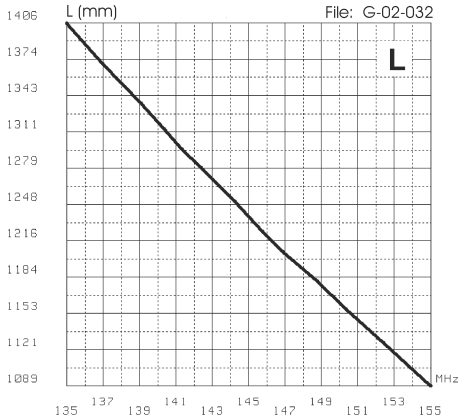
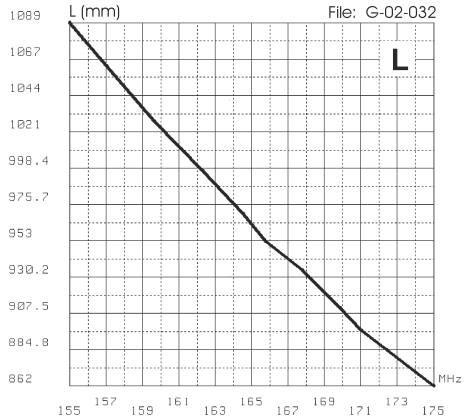
TYPICAL TUNING DIAGRAMS

TYPICAL TUNING DIAGRAM vs FREQUENCY



TYPICAL TUNING DIAGRAM vs FREQUENCY

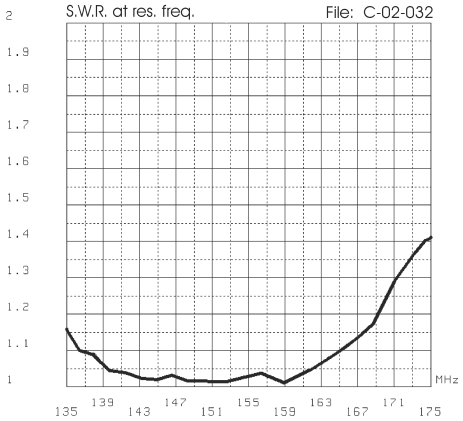


NOTE:

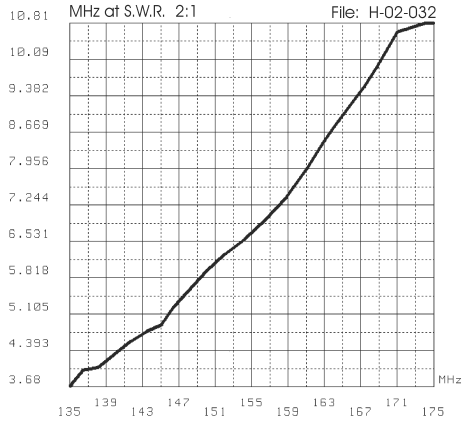
- *Use the curves just as a guide. For fine-tuning please use an SWR-Meter.*

MATCHING & BANDWIDTH DIAGRAMS

TYPICAL MATCHING DIAGRAM vs FREQUENCY



TYPICAL BANDWIDTH DIAGRAM vs FREQUENCY



SIRIO antenne HI-QUALITY ANTENNAS MADE IN ITALY

GPF 22 N

VHF Base Station Antenna 135...175 MHz

Installation Manual

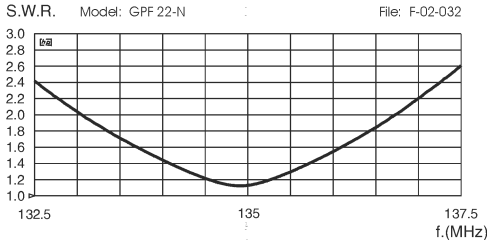
DESCRIPTION

2x5/8 λ Ground Plane base station colinear antenna for land and marine service. It works on 135...175 MHz by using the cutting diagram enclosed. The matching coil is DC feeded for a perfect protection from the static discharges. GPF 22-N is made of fiberglass, non-corrosive aluminium, stainless steel and its die-cast strong base assures the maximum robustness and the best performance. Tuning is easy by following the attached directions

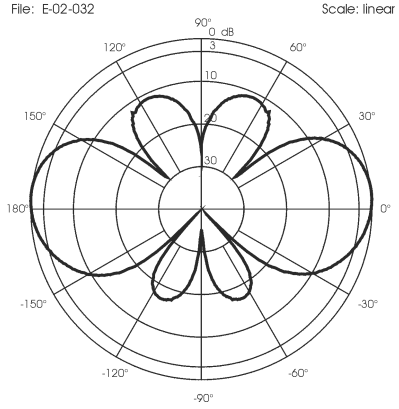
SPECIFICATIONS

Electrical Data	
Type	: 2 x 5/8 λ Ground Plane Colinear
Frequency Range	: 135...175 MHz tunable by cutting
Impedance	: 50 Ω
Radiation (H-Plane)	: 360° Omnidirectional
Radiation (E-Plane)	: Beamwidth at -3 dB = 35°
Radiation Angle deg.	: 0°
Polarization	: Linear Vertical
Gain	: 3.8 dBd, 5.95 dBi
Bandwidth @ SWR ≤ 2	: see diagram
SWR @ res. freq.	: see diagram
Max Power	: 200 Watts
Grounding Protection	: All metal parts are DC-grounded, the inner conductor is coupled capacitively
Connector	: N-female, Gold Plated central pin
Mechanical Data	
Materials	: Fiberglass, Aluminium, Brass, Stainless steel
Wind Load / Resistance	: 95 N at 150 Km/h / 150 Km/h
Wind Surface	: 0.08 m^2
Height (approx.)	: 3230 mm
Weight (approx.)	: 1630 gr
Radial Length (approx.)	: 495 mm
Mounting Mast	: ∅ 35-54 mm

TYPICAL S.W.R. RESPONSE



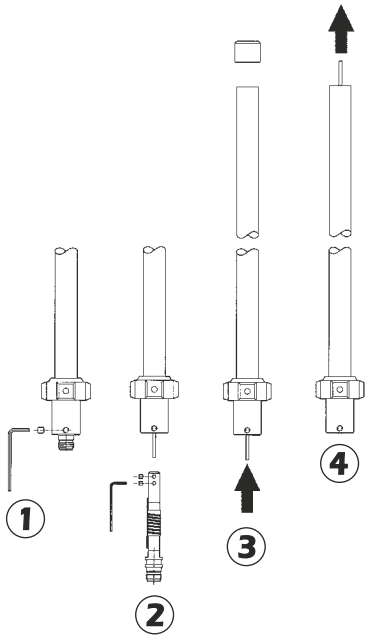
TYPICAL RADIATION PATTERN in E-plane at 145 MHz

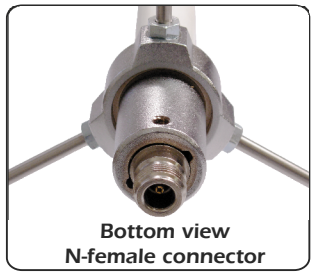


SIRIO antenne

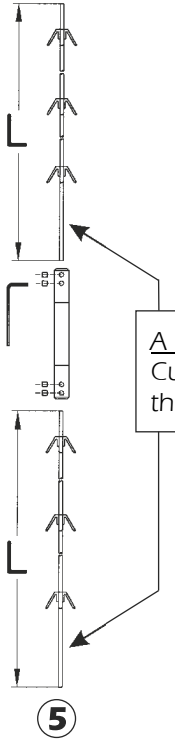
HI-QUALITY ANTENNAS MADE IN ITALY

MOUNTING AND TUNING INSTRUCTIONS

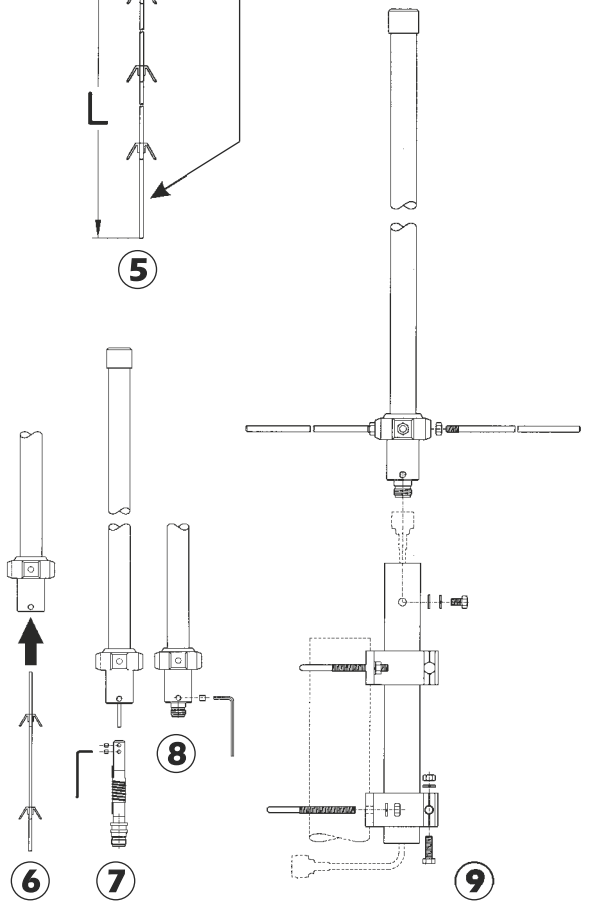




Bottom view
N-female connector



ATTENTION!!
Cut the whips on the bottom sides only



1) Unlock the hexagonal socket bottom screw using the enclosed key.
2) Remove the internal coil.
3) Remove the top cap and push the internal whip to the top
4) Pull the internal whip and re_ move it.
5) Unlock the central coil. Choose the working frequency and cut the whips according to the suitable "Typical tuning diagram".
NOTE: Use the curves just as a guide. For fine-tuning please use an SWR-Meter.
6) Insert the whip from the bottom
7) Mount and lock the coil, assem_ ble the top cap.
8) Lock the bottom screw.
9) Finally assemble the radials and the side mounting bracket.