

# **AV100 Sectional Antenna Series**

23' Marine VHF Antenna



The AV100 series antenna is a high gain antenna designed for the maritime VHF radio telephone service. It is a high quality antenna with a durable construction and a beautiful finish for installation on all kinds of vessels.

It consists of a base (AV100/2-B) and a top (AV100/2-T) section.

Mounting options are available, see page 2.

#### **Electrical specifications:**

| Туре              | AV100BI23-2   | AV100D23-2 | AV100M23-2 |
|-------------------|---|------------|------------|
| Frequency range   | 156 – 162 MHz<br>VSWR<1.5 @ 158.6MHz                          |            |            |
| Nominal impedance | 50 ohm  |            |            |
| Power rating      | 100 W   |            |            |
| Gain              | 10 dB   |            |            |
| Pattern           | Horizontal plane: Omnidirectional Vertical plane: See diagram |            |            |
| Polarization      | Vertical  |            |            |
| Connector         | BI female   | UHF female | UHF female |
| DC-grounded       | Yes   |            |            |

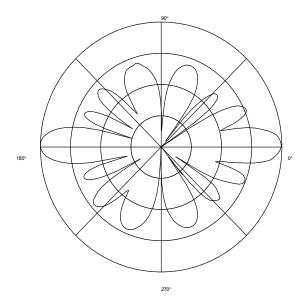
#### **Mechanical specifications:**

| Design            | Phased 1/2 λ elements in a collinear array with a coaxial choking sleeve to suppress cable radiation. Radiating elements completely enclosed in polyurethane foam within a fibreglass tube. |  |  |
|-------------------|---|--|--|
| Height            | 23' (7 m.)  |  |  |
| Weight            | 3.8 + 1.2 = 5 kg  |  |  |
| Wind rating       | 55 m/s = 125 mph  |  |  |
| Sections          | Base: 11,5 ft. (3,5 m.)   |  |  |
|                   | Top: 11.5 ft. (3.5 m.)  |  |  |
| Finish            | Polyurethane lacquer, white   |  |  |
| Temperature range | -55 °C, +71 °C; -67 °F, +160°F  |  |  |

Suitable cable: RG58, RG213 or similar.

### **Vertical radiation diagram:**

(frequency = 156.8MHz)



# **Mounting Options:**



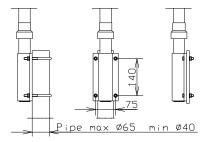
**AV100M23-2** UHF-Connector



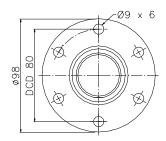
AV100D23-2 UHF-Connector



AV100BI23-2
Integrated BNC-Connector



Stainless steel M10 U-bolts are included as standard. M10 bolts for bulkhead mounting are not included.



Deck mount hole pattern

# Mounting:

To be mounted on a superstructure with UNS 1'x14 base and support approx. 1.5' above the deck. Stand off support and base are not included.

To enable cable feed at the bottom of the antenna, an AV-C adapter (included) can be used. See diagram above for detail.