COMROD

Application:

The AV90 antenna series are high gain antennas designed for the maritime VHF radio telephone service.   They are high quality antennas with a durable construction and a beautiful finish for installation on all kinds of vessels.

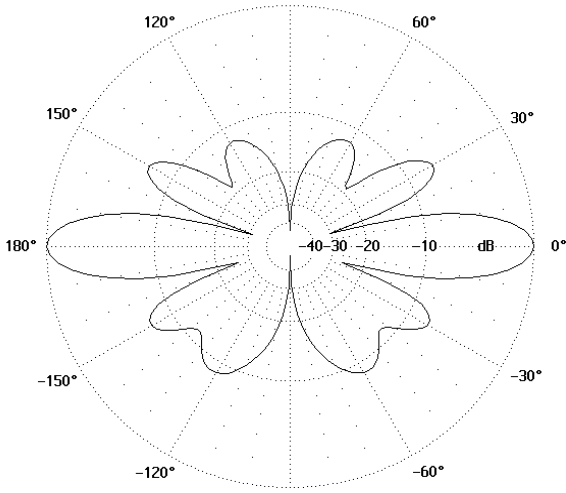Base sections are available depending on the mounting configuration required. See page 2 for details.

All section lengths are nominally 2.4m to allow a shipping length of less than 8 feet (2.43m).
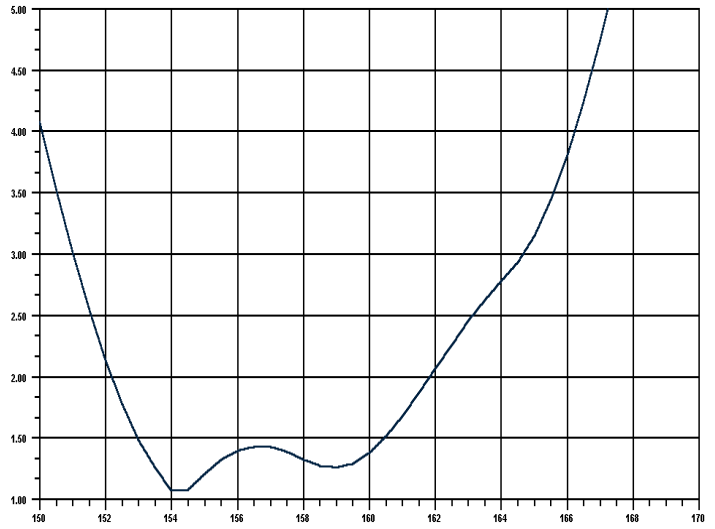
Electrical specifications:

Type	AV90BI16-2	AV90D16-2	AV90M16-2
Frequency range	156-159 MHz, VSWR < 1.5 : 1 159-162 MHz, VSWR < 2.5 : 1		
Nominal impedance	50 ohm		
Power rating	100 W		
Gain	9 dB Base section 3dB Top whip section 6dB		
Pattern	Horizontal plane: Omnidirectional Vertical plane: See reverse side		
Polarization	Vertical		
Connector	BNC female	UHF female	UHF female
DC-grounded	Yes		

Mechanical specifications:

Design	The top section is an AV60BI antenna using two 5/8 elements, and the base section is a stacked co-linear array. Radiating elements completely enclosed in polyurethane foam within a fiber-glass tube.
Height	16' (4.73 m) nominal
Weight	3.5 + 1.1 =4.6 kg
Wind rating	55 m/s = 125 mph
Finish	Polyurethane lacquer, white
Temperature range	-55 °C, +71 °C; -67 °F, +160°F

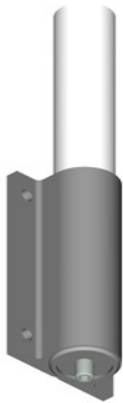AV90BI version shown
See page 2 for mounting options

Vertical radiation diagram
f= 156.8MHz

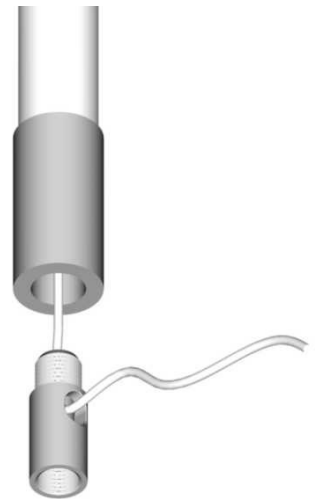
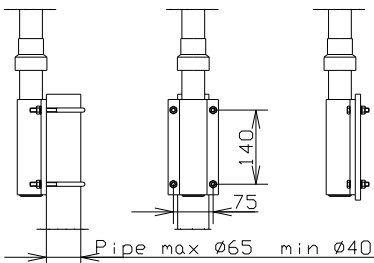Standing wave ratio

Mounting Options:

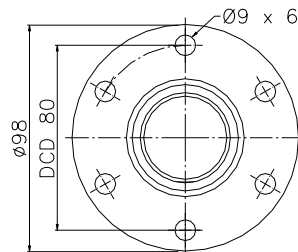**AV90M**
UHF-Connector
(AV90M16-2 + AV60-BI)

AV90D
UHF-Connector
(AV90D16-2 + AV60-BI)

AV90BI
Integrated BNC-Connector
(AV90BI16-2 + AV60-BI)

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.