



## Type 18B

### Marine HF antenna for vessels over 11 metres (36 feet)

A 5.5 metre (18ft) heavy duty whip, similar to type 18W, designed to provide highly efficient communications in the HF Band range from 2-30 MHz, both in the transmit and receive modes, where deck mounting is required.

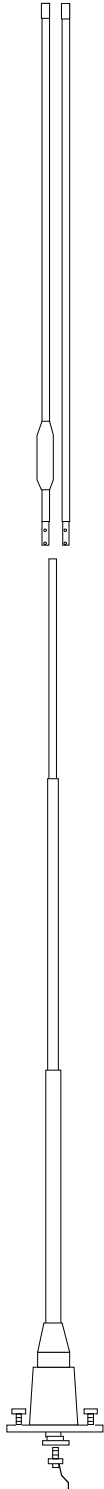
Specially suitable for large yachts, the 18B is neatly mounted by means of a nylon base insulator with chrome bronze flange support and stainless steel bolt deck feed through insulator [fits decks to 19mm (¾) thick], which allows direct under deck connection.

The antenna is constructed from tempered aluminium alloy tubing and is protected by a high durability epoxy based coating resistant to chemical attack, abrasion and the effects of ozone and ultra-violet radiation. To facilitate transport, the antenna breaks down into two sections [base: 3.65m (12ft); top: 1.85m (6ft)], which slip together and fasten with 2 stainless steel self tapping screws.

It is available unloaded or resonant at a single frequency (the highest to be used, normally 2.6, 4.6, 6.3, 8.3 or 10 MHz). For operation on frequencies other than the resonant frequency, the difference is made up in the ATU.

### SPECIFICATIONS

<b>Colour</b>	Standard is Black. Optional White.
<b>HF Marine Band</b>	2-30 MHz
<b>Length</b>	5.5 metres (18 ft)
<b>Pattern</b>	Omnidirectional
<b>Polarisation</b>	Vertical
<b>Base Diameter</b>	25.4cm (1 in) (radiator)
<b>Frequency Range</b>	Pre-tuned to frequency or frequencies required, or unloaded 2-30 MHz with suitable ATU
<b>Wind Loading</b>	4.9 kg at 100 km/h (10.8 lbs at 60 mph) 8.3 kg at 130 km/h (18.3 lbs at 81 mph)
<b>Power Capability</b>	800W PEP for unloaded top sections, 600W PEP for normal loaded top sections; 400W PEP for trapped top sections; higher power to order
<b>Mounting</b>	One integral base insulator and 12.7cm (5 in) chrome bronze flange with 'O' ring seal between insulator and flange, and 4 x 6.75mm (17/64 in) mounting holes (bolts not supplied). Centre feed through hole 15.8mm (5/8 in) dia.
<b>Connection</b>	Under deck to lug on feedthrough bolt
<b>Packed Weight</b>	5 kg (11 lbs) with mounting



Specifications subject to change – Issued 07/13

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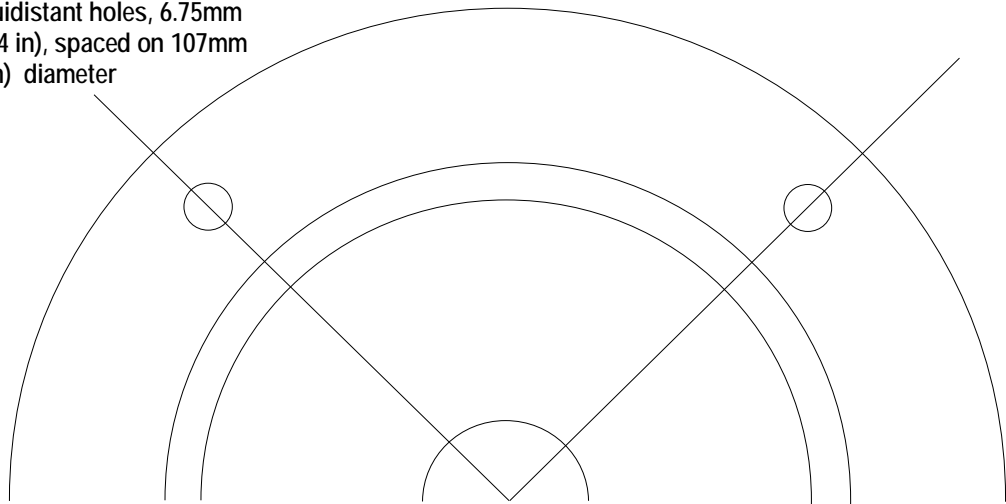
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## 18B INSTALLATION INSTRUCTIONS

4 equidistant holes, 6.75mm  
(17/64 in), spaced on 107mm  
(4.2in) diameter



Base flange 127mm diameter

Sealant groove, 5mm wide x 1mm  
deep, centred on 85mm

### Assembly and Mounting

1. Drill a 16mm (5/8 in) hole through deck or cabin top in most suitable position for the antenna.
2. Temporarily locate the antenna base and flange over the hole.
3. Mark the position of the four flange bolt holes.
4. Drill the 4 mounting holes.
5. Remove the joint screws from the top section of the antenna.
6. Apply a thin layer of grease to the bare aluminium of the top section slip joint and slide it inside the top of the base section.
7. N.B. This grease will greatly assist with future disassembly of the joint.
8. Replace the joint screws and tighten firmly by hand only.
9. Place sealing compound between the flange and deck and around feed through hole.
10. Erect antenna and fasten flange mounting bolts.
11. From underside of deck, using sealing compound, screw up feed through washer and connection bolt. (This bolt is not designed to support the antenna as the flange mounting bolts do this).

### Important Factors

1. Deck should be strong enough to support antenna and should be strengthened if necessary.
2. For best results the antenna should be mounted vertically (not sloping).
3. Keep the lead clear of ship's wiring and other metallic objects and avoid running parallel to, metal decks, etc., with less than 2 cm (3/4 in) clearance. Moonraker silicone antenna feed lead and standoff/cable run insulators are recommended.
4. Lead should be run as short and direct as possible between the antenna and equipment.
5. Earth leads should be connected directly to the ATU and kept as short as possible.
6. Copper strip at least 50mm (2 in) wide is recommended for earth lead between equipment and Moonraker earth plate.



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