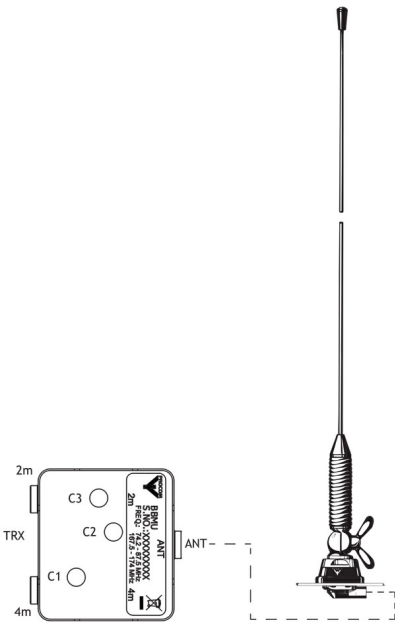


¼ λ Broad-Band Mobile Antenna for the 80 MHz and 150 MHz BOS Band

DESCRIPTION

- Sturdy ¼ λ mobile antenna in professional industry standard quality.
- Factory-adjusted broadband matching unit for 74.2 - 77.7 MHz / 84 - 87.5 MHz and 167.5-169.5 MHz / 172 - 174 MHz
- Tuning not necessary – but can be fine-tuned if needed.
- Separate broadband matching unit for time-saving mounting.
- Necessary cable length between the matching unit and the antenna mount: 100 mm (FME junction cable included).
- Stainless steel Z-mount with socket joint and wing screw.
- Simple mounting exclusively with access from the outside.
- FME antenna cable for both 80 MHz and 150 MHz BOS can be mounted directly in the matching unit without special antenna connectors.



ORDERING

Model	Product No.
ML 1-ZR/BOS2 BBMU	130000629

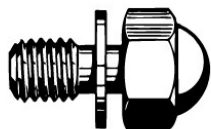
SPECIFICATIONS

Electrical	
Model	ML 1-ZR/BOS2 BBMU
Frequency	Factory adjusted: 74.2 - 77.7 MHz / 84 - 87.5 MHz and 167.5-169.5 MHz / 172 - 174 MHz
Antenna Type	Broad-Band Mobile whip Antenna
Max. Input Power	25 W
Polarisation	Vertical
Impedance	50 Ω
VSWR	74.2 - 77.7 MHz / 84.0 - 87.5 MHz: = 2.0:1 167.5-169.5 MHz / 172 - 174 MHz: = 2.25:1
Gain (EIA RS-329-1)	0 dB

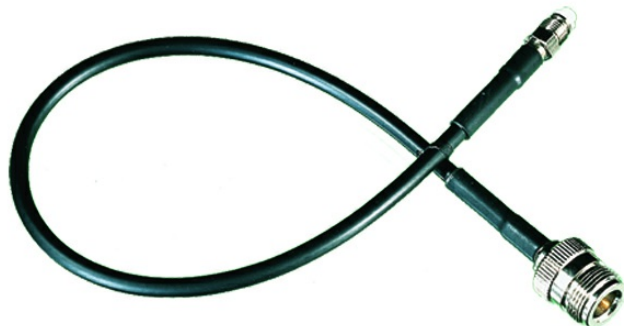
Mechanical	
Materials	Whip: Stainless steel, Chromed brass Spring: Stainless steel Mount: Chromed brass Weather- and shockproof plastics Stainless steel
Installation Torque	7.5 +/- 1 Nm
Colour	Black / Metallic Silver
Dimensions	Antenna : Approx. 1 m Matching unit : +50 x +50 x 20 mm FME junction cable : 100 mm
Mounting	21 mm dia. hole mounting from the outside 22 mm dia. hole mounting from the inside

## ADDITIONAL DATA

## Hat screw option:



For antenna delivered with hat screw instead of wing screw add a K to the antenna designation.

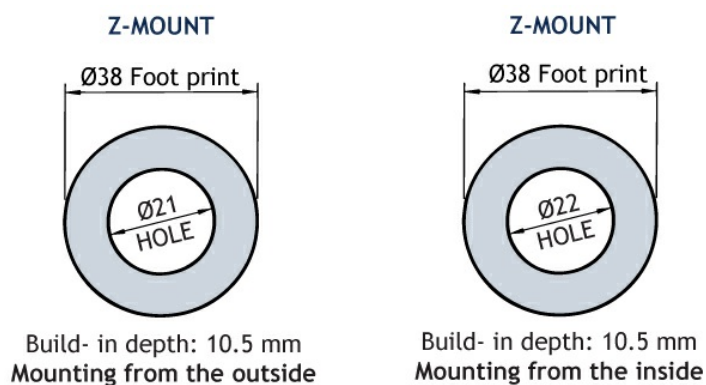


SUNDRIES: For connection of special cables (RG 213, H2000, RG 223 etc.) to the matching unit the jumper cable JPC 40/RG 58/FN can be used. This is a 40 cm long RG 58 cable with one FME connector and one N-female connector.

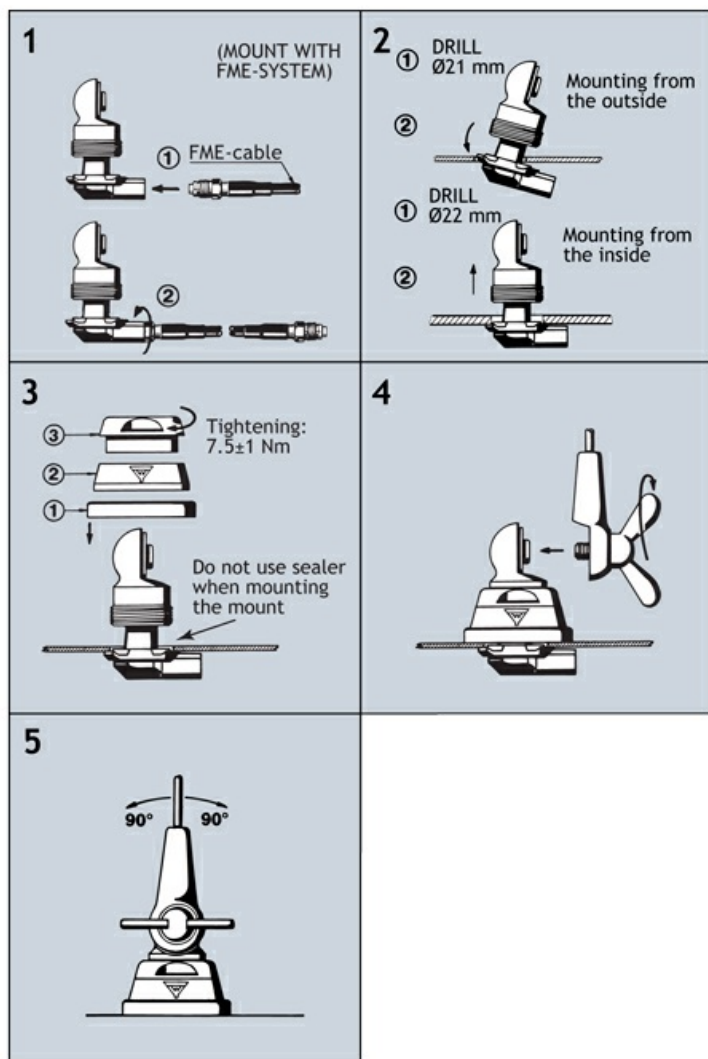
## INSTALLATION (IF MOUNTED FROM THE OUTSIDE)

- Equip the matching unit with FME antenna cables and the supplied 100 mm junction cable.
- Draw the 100 mm junction cable through the antenna hole from the outside (e.g. with a drawstring between the car roof and the dome).
- The Z-mount is particularly well suited for mounting on car-roofs because of its ability to be installed exclusively with access from the outside. The Z-Mount for roof thickness from 2 mm to 7.5 mm must be mounted from the inside. However, the antenna can be installed anywhere on the car, as the Z-mount is equally well suited for mounting on e.g. trunk or wing.
- Attach the cable to the Z-mount and install the mount from the outside following the below given instructions.

## 1. INSTALLATION DIMENSIONS



## 2. INSTALLATION STEPS



Do not use sealer on rubber gasket or other places.

### 3. TUNING

The ML 1-ZR/BOS2 BBMU is factory-tuned to the following

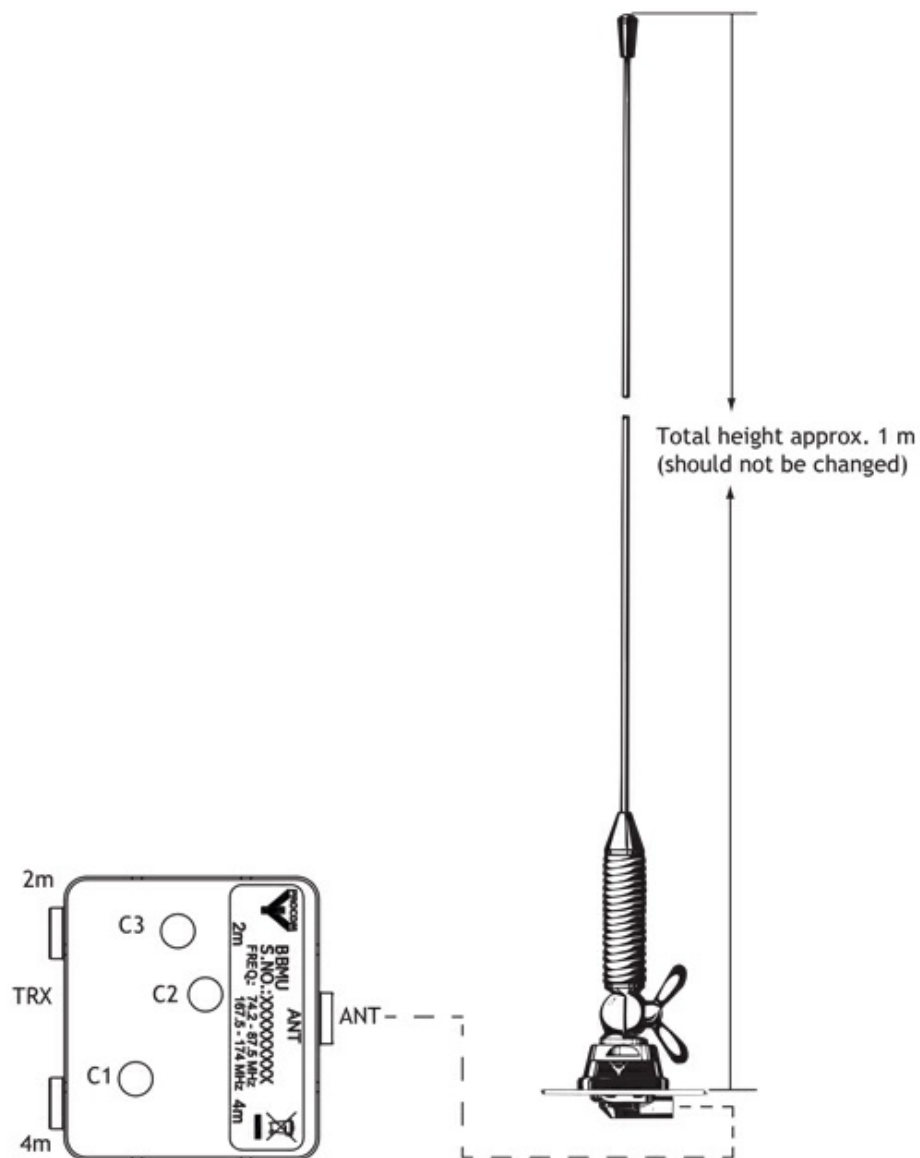
80 MHz BOS area:  
LOW: 74.2 - 77.7 MHz  
HIGH: 84 - 87.5 MHz

150 MHz BOS area:  
LOW: 167.5 - 169.5 MHz  
HIGH: 172 - 174 MHz

Fine-tuning or frequency change can if needed be done as follows:

#### Adjustment of the BBMU BOS2 by means of SWR 4000

1. Fine tune C1 for adjusting the 4m band.
2. Fine tune C2 and C3 for adjusting the 2m band.



100 mm FME cable (included in the supply of the broad-band antenna).  
Important: The cable length should not be changed!

**SWR 4000 Analyzer** with built-in signal generator and graphic display range of measurement 30 - 2700 MHz.



## Z-Mount

