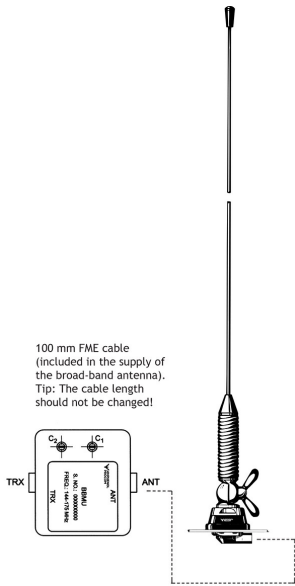


160 MHz 2 dB Mobile Antenna for Glass Fibre Roof

DESCRIPTION

- Sturdy 1/2 λ mobile antenna in professional industry standard quality.
- Groundplane independent antenna for mounting on non-conducting surfaces.
- Ideal for glass fibre roofs as can be found on some trucks, lorries, transport vans, busses and farm machinery.
- The ML 1-ZR/160/BBMU/... can be tuned from 144 - 175 MHz via the adapter box.
- Necessary cable length between the adapter box and the mount: 100 mm (FME junction cable included).
- Simple mounting exclusively with access from the outside. Models with roof thickness from 2 mm to 7.5 mm mounting from the inside.
- FME antenna cable can be mounted directly in the adapter box.



SPECIFICATIONS

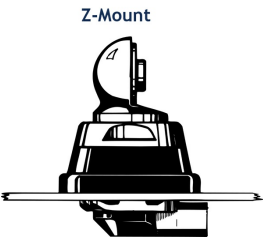
Electrical	
Model	ML 1-ZR/160/BBMU/...
Frequency	Tunable within 144 - 175 MHz
Antenna Type	Mobile whip antenna
Max. Input Power	25 W
Polarisation	Vertical
Impedance	50 Ω
VSWR	≤ 1.3:1 @ f. res.
Bandwidth	≥ 4 MHz @ VSWR ≤ 2.0 ≥ 6 MHz @ VSWR ≤ 3.0
Gain (EIA RS-329-1)	2 dB

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	Bright/black
Dimensions	Antenna : Approx. 800 mm Matching unit : 50 x 50 x 20 mm FME junction cable : 100 mm
Mounting	21 mm dia. hole (For roof thickness 2 mm up to 7.5 mm mounting hole should be 22 mm dia.)
Mounting Plate Thickness	0.5 - 2 mm and 5 - 7.5 mm respectively depending on mounting ring

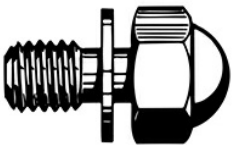
ORDERING

Model	Product No.
ML 1-ZR/160/BBMU/...	130000627

THE WHIP IS COMPATIBLE WITH ALL BELOW MOUNTS



Hat screw option:



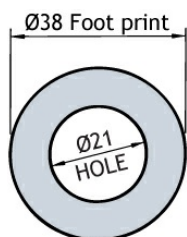
For antenna delivered with hat screw instead of wing screw add a K to the antenna designation.

INSTALLATION

- Mount and adapter box to be connected by means of the 100 mm junction cable included in the supply.
- Connect the FME cable for the radio station to the adapter box.
- 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 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.
- Adjust the frequency by means of an VSWR-analyser via C1 and C2 on the adapter box.

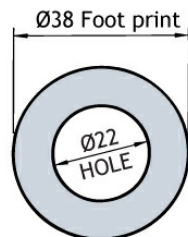
1. INSTALLATION DIMENSION

BZ-MOUNT



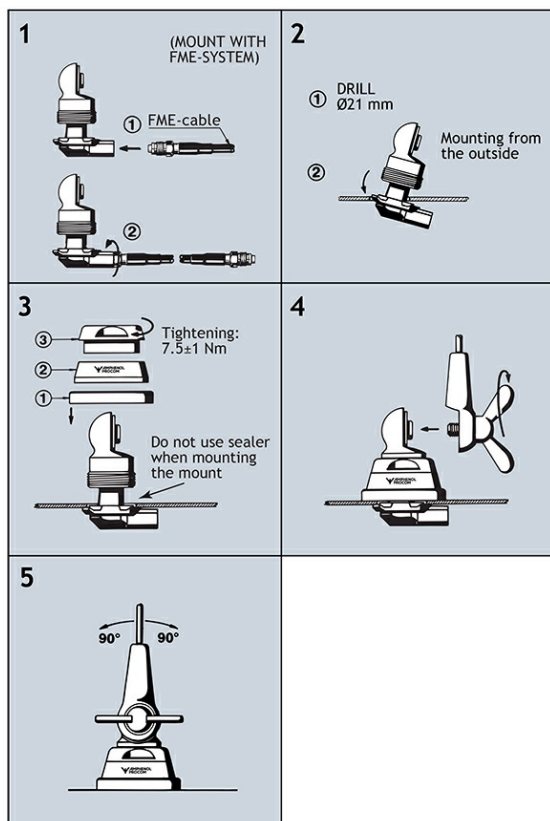
Build- in depth: 10.5 mm
Mounting from the outside

BZ-MOUNT



Build- in depth: 10.5 mm
Mounting from the inside

2. INSTALLATION STEPS



Do not use sealer on rubber gasket or other places.

3. TUNING

VSWR 4000 Analyser with built-in signal generator and graphic display range of measurement 30-2700 MHz



Tune the VSWR in on the desired centre frequency and suitable spacing (for instance 30 MHz).
Adjust C1 till the VSWR curve emerges on the display. Adjust C2 till the best possible SWR minimum is reached on the required frequency.
Fine-tune the VSWR minimum and the bandwidth step by step by means of C1 and C2.

