

# Dual-frequency Mobile Antenna for the 6 m and 2 m Amateur Bands

# DESCRIPTION

- > Dual-frequency antenna for the 6 m and the 2 m bands (see note).
- > Covers 50 52 MHz and 144 146 MHz no tuning required.
- > Shortened ¼ λ antenna at 6 m.
- > 5% λ antenna at 2 m approx. 3 dB gain.
- > Choice between glass fiber and stainless steel whip.
- > Stainless steel BZ-mount with ball-joint and wing screw.
- Easy mounting from the outside only. Models with roof thickness from 2 mm to 7.5 mm mounting from the inside.
- > Choice between two connection principles:
  - > BZ-mount: FME-connection (supplied without cable).
  - > BZP4-mount: Permanently attached 4 m cable terminated with FME-connector.
- > Sturdy mobile antenna of high quality.



#### **SPECIFICATIONS**

Electrical		
Model	MLH 6/2-BZ	
Frequency	50 - 52 MHz (6 m amateur band) 144 - 146 MHz (2 m amateur band) - no tuning required	
Antenna Type	Mobile whip antenna : Shortened ¼ λ at 6 m, ¾ λ at 2 m	
Max. Input Power	150 W	
Polarisation	Vertical	
Impedance	50 Ω	
VSWR	< 2.0 @ f.res. at 6 m < 1.3 @ f.res. at 2 m	
Gain (EIA RS-329-1)	Equal to shortened $1/4~\lambda$ at 6 m. Approx. 3 dB at 2 m	

Mechanical		
Materials	Whip: Conical glass fiber or stainless steel Black chromed brass Spring: Black stainless steel Mount: Black-chromed brass Weather- and shockproof plastics Stainless steel	
Installation Torque	7.5 ±1 Nm	
Colour	Black	
Height	Approx. 1300 mm / 51.18 in.	
Weight	BZ-version : Approx. 350 g / 0.77 lb. BZP4-version : Approx. 500 g / 1.10 lb.	
Mounting	21mm dia. hole (For roof thickness 2 mm up to 7.5 mm mounting hole should be 22mm dia.)	
Mounting Plate Thickness	2 mm / 0.08 in.	

# PLEASE NOTE

A diplexer type DIPX 88/136 can be used, when operating two transceivers at the same time.

#### **ORDERING**

Model	Product No.	Description	Frequency
MLH 6/2-BZ	130000659	Glassfibre Whip	BZ-mount with FME-system
MLH 6/2-BZP4	130000662	Glassfibre Whip	BZP4-mount with 4 m cable + FME- connector
MLH 6/2-BZR	130000660	Stainless Steel Whip	BZ-mount with FME-system
MLH 6/2-BZP4R	130000661	Stainless Steel Whip	BZP4-mount with 4 m cable + FME- connector

# 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.

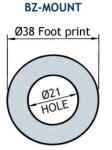


#### **INSTALLATION**

This antenna is provided with type BZ-mount. The whip is fastened to the mount by means of our standard ball-joint and wing screw system. The adjustable ball-joint ensures that the whip can always be mounted in a vertical position independent of the angle of the installation spot.

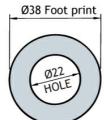
The BZ-mount is particularly well suited for mounting on car-roofs because of its ability to be installed exclusively with access from the outside. The BZ-Mount for roof thickness from 2 mm to 7.5 mm must be mounted from the inside. However, the antenna can be installed anywhere on the car, as the BZ-mount is equally well suited for mounting on e.g. trunk or wing.

#### 1. INSTALLATION DIMENSION



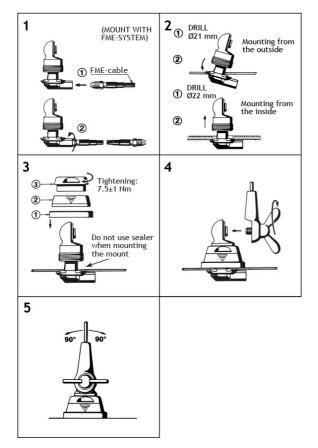
Build- in depth: 10.5 mm Mounting from the outside

# 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

The antenna is delivered factory-tuned and requires no further tuning.

#### 4. OPERATION USING A DIPLEXER

This antenna makes it possible to operate two transceivers at the same time. In this case, a diplexer type DIPX 88/136 is neccessary to complete the system (see the coupling diagram below). The tasks of the diplexer are to protect the two receiver inputs from being destroyed by the transmitter in the contrary band, and to ensure a low-loss path between the transceiver and the antenna, which is not loaded by the other branch. For further details please see the separate data sheet on the DIPX 88/136. The diplexer fully covers both bands and, consequently, tuning to specific frequencies is not required.

#### **CONNECTION DIAGRAM**

