

# Helical Mobile Antenna for the 80 MHz Band

## DESCRIPTION

- Reduced-size quarter-wave antenna for all applications where height is a problem.
- ldeal on busses, trucks, building-site machines, forestry vehicles etc.
- High efficiency due to the "continuous loading" helical principle.
- Stainless steel ZP4-mount with ball-joint and wing screw whip-fastening system.
- Simple mounting exclusively with access from the outside.
  - Models for roof thickness from 2 mm to 7.5 mm with mounting from the inside.
- Delivered with 4 m cable permanently attached to the mount and terminated with FMEconnector.

Please note that the ML 3-type ZP4-mount is provided with a built-in matching unit. Consequently, the mount cannot be used together with other whips.



## **ORDERING**

Туре	Product No.
ML 3-ZP4	130000655

## **SPECIFICATIONS**

Electrical	
Model	ML 3-ZP4
Frequency	Tunable by cutting within: 6688 MHz
Antenna Type	Shortened 1/4λ helical antenna
Polarisation	Vertical
Impedance	50 Ω
Maximum Input Power	30 W
Gain (EIA RS-329-1)	-3 dB

Mechanical	
Materials	Whip: Steel helix moulded in flexible thermoplastic rubber Chromed brass Mount: Chromed brass Weather- and shockproof plastics Stainless steel
Cable	4 m RG 58
Installation Torque	7.5 +/- 1 Nm
Colour	Black / Metallic Silver
Height	37 mm / 1.46 in.
Weight	0.4 kg / 0.88 lb
Mounting	$21\mbox{mm}$ dia. hole (For roof thicknesses 2 mm up to 7.5 mm mounting hole should be 22mm dia.)
Mounting Plate Thickness	2 mm / 0.08 in.

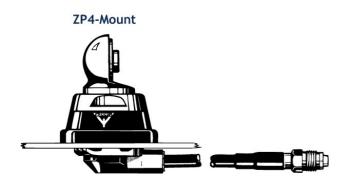


## ADDITIONAL DATA

## Hat screw option:



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



Please note that the ML 3-type ZP4-mount is provided with a built-in matching unit. Consequently, the mount cannot be used together with other whips.

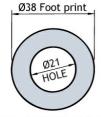
## INSTALLATION

This antenna is supplied with type ZP4-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 ZP4-mount is particularly well suited for mounting on carroofs as it can be installed exclusively with access from the outside. The ZP4-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 ZP4-mount is equally well suited for mounting on e.g. trunk or wing.

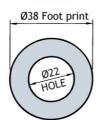
## 1. INSTALLATION DIMENSIONS

#### **Z-MOUNT**



Build- in depth: 10.5 mm Mounting from the outside

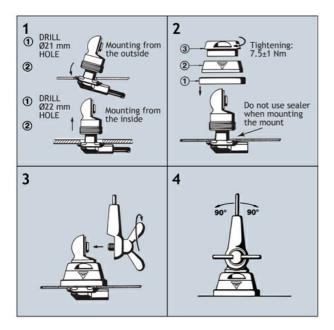
#### **Z-MOUNT**



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 should always be post-adjusted using an SWR 4000 or the like.

DO NOT cut too much at a time - one complete winding of the helix moves the antenna resonsnce considerably.





## PLEASE NOTE

To make this antenna operate as efficiently as possible, a matching unit has been built into the antenna mount. Consequently, neither mount nor whip can be used together with other mounts/whips.