Helical Mobile Antenna for the 80 MHz Band

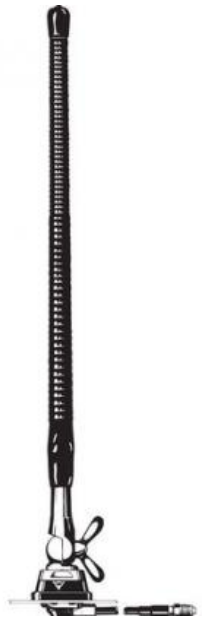
DESCRIPTION

- Reduced-size quarter-wave antenna for all applicatons where height is a problem.
- Ideal 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 FME-connector.

SPECIFICATIONS

Electrical	
Model	ML 3-ZP4
Frequency	Tunable by cutting within: 66....88 MHz
Antenna Type	Shortened ¼ λ helical antenna
Max. Input Power	30 W
Polarisation	Vertical
Impedance	50 Ω
VSWR	≤ 2.5 @ fc ±0.5 MHz
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	Approx. 390 mm / 15.35 in.
Weight	Approx. 0.4 kg / 0.88 lb.
Mounting	21 mm / 0.83 in. dia. hole (For roof thickness 2 mm / 0.08 in. up to 7.5 mm / 0.30 in. mounting hole should be 22 mm / 0.87 in. dia.)
Mounting Plate Thickness	Max. 2 mm / 0.08 in. (Models up to 7.5 mm / 0.3 in. on request)

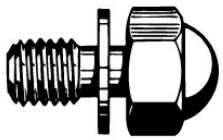


ORDERING

Model	Product No.
ML 3-ZP4	130000655

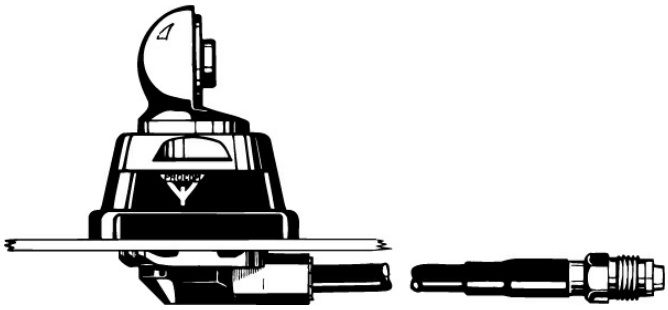
ADDITIONAL DATA

Hat screw option:



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

ZP4-Mount



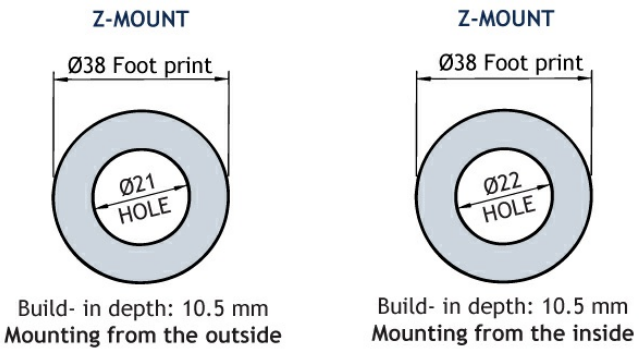
Please note that the ML 3-type ZP4-mount is provided with a built-in matching unit. Consequently, the mount cannot be used together with other whips.

INSTALLATION

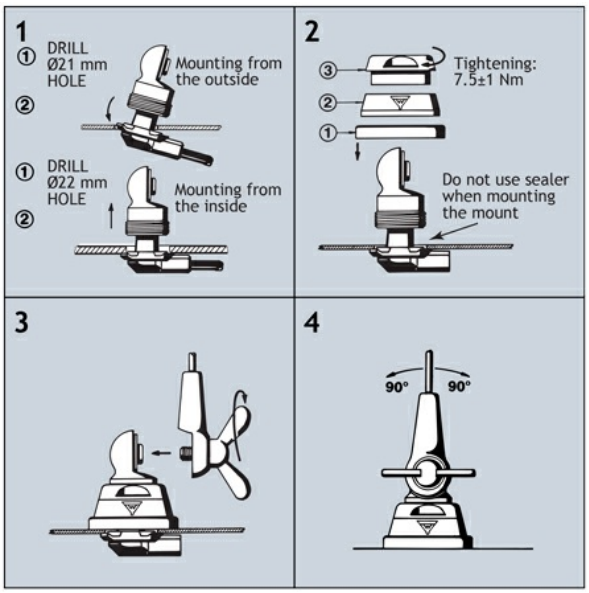
This antenna is supplied with type ZP4-mount. The whip is fastened to the mount by means of our standard ball-joint and wing screw system. The adjustable ball-joint ensures that the whip can always be mounted in a vertical position independent of the angle of the installation spot.

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



2. INSTALLATION STEPS

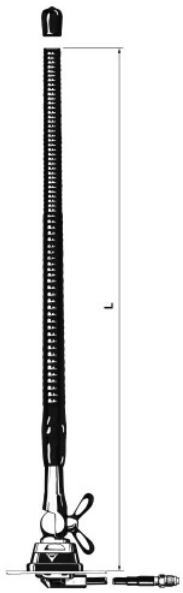


Do not use sealer on rubber gasket or other places.

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 resonance 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.