

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)

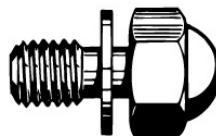


ORDERING

Model	Product No.
ML 3-ZP4	130000655

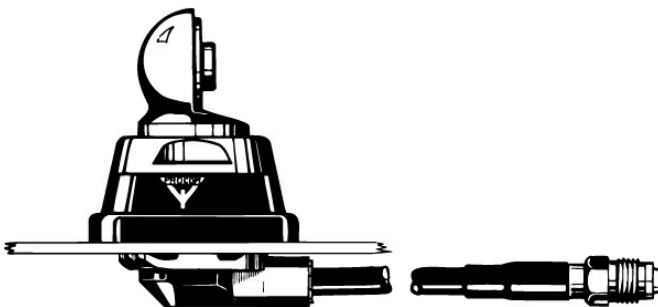
ADDITIONAL DATA

Hat screw option:



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

ZP4-Mount



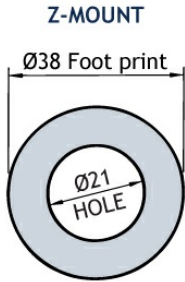
Please note that the ML 3-type ZP4-mount is provided with a built-in matching unit. Consequently, the mount cannot be used together with other whips.

INSTALLATION

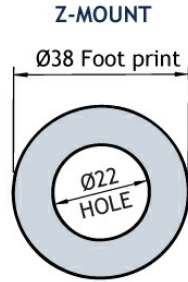
This antenna is supplied with type ZP4-mount. The whip is fastened to the mount by means of our standard ball-joint and wing screw system. The adjustable ball-joint ensures that the whip can always be mounted in a vertical position independent of the angle of the installation spot.

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

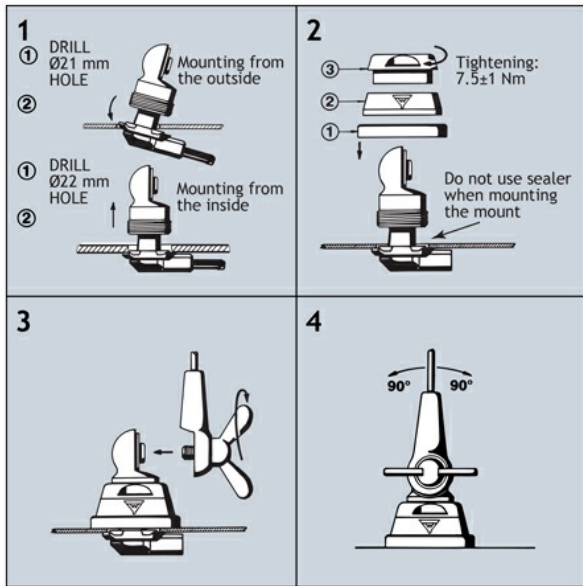


Build- in depth: 10.5 mm
Mounting from the outside



Build- in depth: 10.5 mm
Mounting from the inside

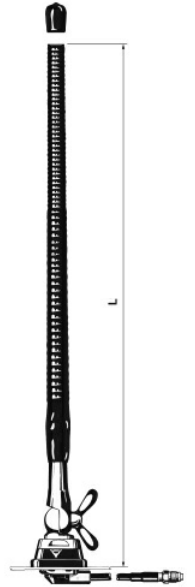
2. INSTALLATION STEPS



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 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.