

## ML 3-ZP4

### Helical Mobile Antenna for the 80 MHz Band

- Reduced-size quarter-wave antenna for all applications where height is a problem.
- Ideal on busses, trucks, building-site machines, forestry vehicles etc.

#### DESCRIPTION

- 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.

#### ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
ML 3-ZP4	130000655

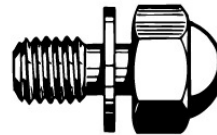
#### SPECIFICATIONS

ELECTRICAL	
MODEL	ML 3-ZP4
ANTENNA TYPE	Shortened ¼ λ helical antenna
FREQUENCY	Tunable by cutting within: 66...88 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	Approx. - 3 dB (acc. to EIA RS-329-1)
SWR	≤ 2.5 @ f <sub>c</sub> ± 0.5 MHz
MAX. POWER	30 W

MECHANICAL	
MATERIALS	Whip: Steel helix moulded in flexible thermoplastic rubber Chromed brass Mount: Chromed brass Weather- and shockproof plastics Stainless steel
RECOMMENDED INSTALLATION TORQUE	7.5 ± 1 Nm
CABLE	4 m RG 58
COLOUR	Bright/black
HEIGHT	Approx. 37 cm
WEIGHT	Approx. 400 g
MOUNTING	ø21 mm dia. hole (For roof thickness 2 mm up to 7.5 mm mounting hole should be ø22 mm dia.)
ROOF THICKNESS	Max. 2.0 mm (Models up to 7.5 mm on request)

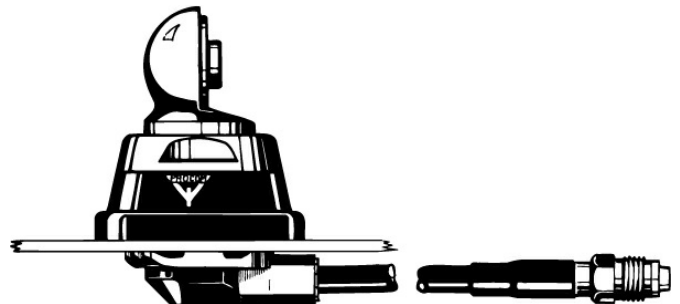


Hat screw option:



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

ZP4-Mount



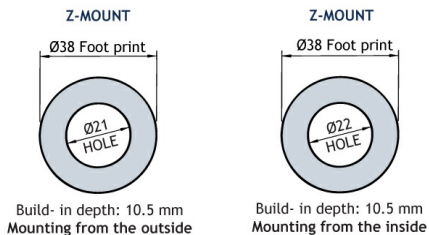
Please note that the ML 3-type ZP4-mount is provided with a built-in matching unit. Consequently, the mount cannot be used together with other whips.

**INSTALLATION**

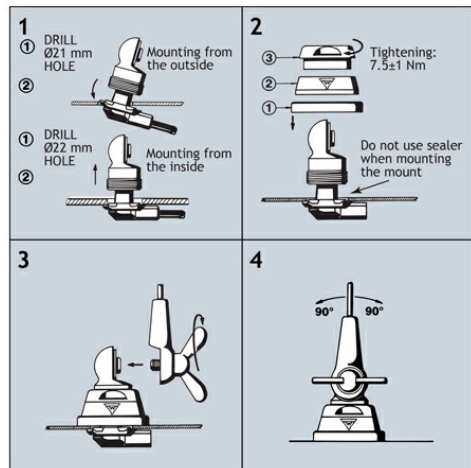
This antenna is supplied with type ZP4-mount. The whip is fastened to the mount by means of our standard ball-joint and wing screw system. The adjustable ball-joint ensures that the whip can always be mounted in a vertical position independent of the angle of the installation spot.

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**



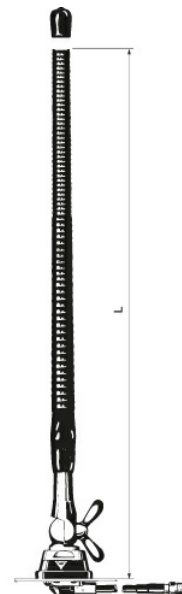
**2. INSTALLATION STEPS**



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.