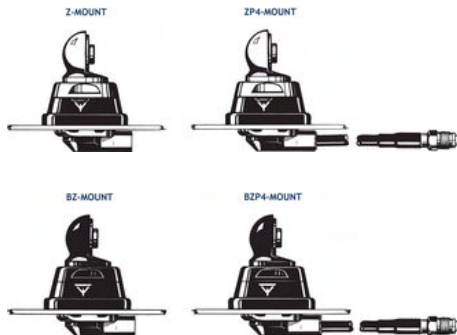


# ML 1-Z

## 1/4 λ Mobile Antenna with Shock Spring for the 80 MHz Band

### DESCRIPTION

- Sturdy, general-purpose 1/4 λ antenna in professional quality.
- Available with glassfiber or stainless steel whip.
- Stainless steel Z-mount with ball-joint and wing screw whip-fastening system.
- Available with bright or black-chromed metal parts (mount and whip):
  - ML 1-Z...: Bright version.
  - ML 1-BZ...: Black version.
- Simple mounting exclusively with access from the outside.  
Models with roof thickness from 2 mm to 7.5 mm mounting from the inside.
- Choice between two connection principles:
  - Z-mount: FME-connection (supplied without cable).
  - ZP4-mount: Permanently attached 4 m cable terminated with FME-connector.



### ORDERING DESIGNATIONS

MOUNT	WHIP Glassfiber	WHIP Stainless steel
Z-mount with FME-system BRIGHT	ML 1-Z	ML 1-ZR
BZ-mount with FME-system BLACK	ML 1-BZ	ML 1-BZR
ZP4-mount with 4 m cable and FME-connector BRIGHT	ML 1-ZP4	ML 1-ZP4R
BZP4-mount with 4 m cable and FME-connector BLACK	ML 1-BZP4	ML 1-BZP4R

### SPECIFICATIONS

ELECTRICAL	
MODEL	ML 1-Z
ANTENNA TYPE	1/4 λ mobile whip antenna
FREQUENCY	Tunable by cutting within: 66...88 MHz (Also applicable: 88...175 MHz)
IMPEDANCE	Nom. 50 Ω
POLARISATION	Vertical
GAIN	0 dB (acc. to EIA RS-329-1)
BAND WIDTH	≥ 8 MHz @ SWR ≤ 2.0
SWR	≤ 1.3 @ f. res.
MAX. POWER	250 W
MECHANICAL	
MATERIALS	<b>Whip:</b> Conical glassfiber or stainless steel Chromed brass <b>Spring:</b> Stainless steel <b>Mount:</b> Chromed brass Environment-proof plastics Stainless steel
RECOMMENDED INSTALLATION TORQUE	7.5 ± 1 Nm
COLOUR	Black or bright, see above
HEIGHT	Approx. 1.1 m
WEIGHT	Z-version: Approx. 250 g ZP4-version: 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)

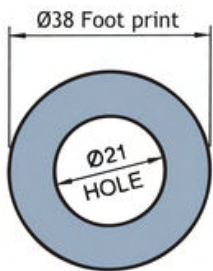
## INSTALLATION

This antenna is supplied with type Z-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 Z-mount is particularly well suited for mounting on car-roofs because of its ability to be installed exclusively with access from the outside. The Z-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 Z-mount is equally well suited for mounting on e.g. trunk or wing.

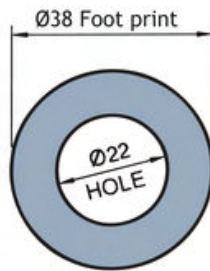
### 1. INSTALLATION DIMENSIONS

#### Z-MOUNT



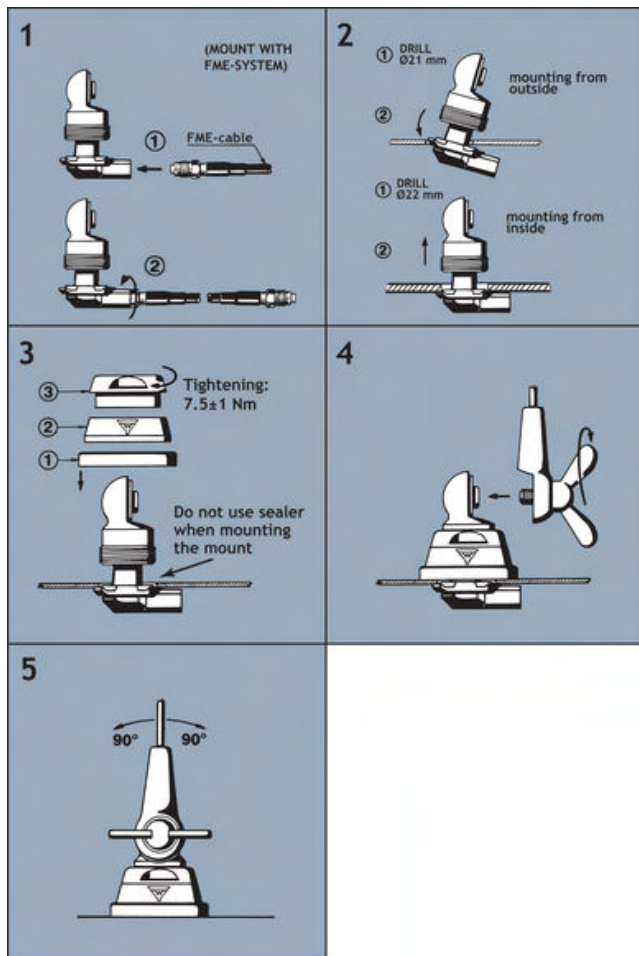
Build- in depth: 10.5 mm  
Mounting from the outside

#### Z-MOUNT



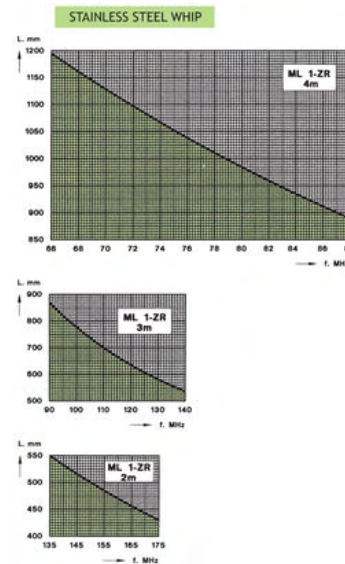
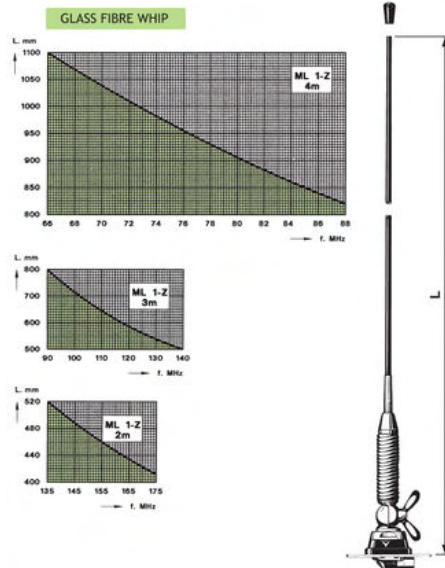
Build- in depth: 10.5 mm  
Mounting from the inside

### 2. INSTALLATION STEPS



## 3. TUNING

The antenna should always be tuned using an SWR-meter. The cutting diagrams below serve as a guide for this procedure.



PROCOM A/S reserve the right to amend specifications without prior notice.

19/05/2009