## ML 1-Z

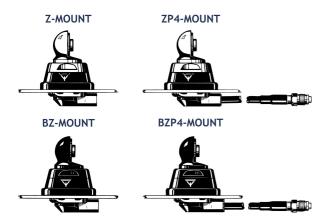
# $\frac{1}{4}$ $\lambda$ Mobile Antenna with Shock Spring for the 80 MHz Band

#### DESCRIPTION

- Sturdy, general-purpose  $\frac{1}{4}$   $\lambda$  antenna in professional quality.
- Available with glass fiber 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):
  - 1. ML 1-Z...: Bright version
  - 2. 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:
  - 1. FME-connection (supplied without cable)
  - 2. ZP4-mount: Permanently attached 4 m cable terminated with  $\mbox{\sc FME-connector}$







#### ORDERING DESIGNATIONS

TYPE WHIP GLASS FIBER	PRODUCT NO.	TYPE WHIP STAINLESS STEEL	PRODUCT NO.	MOUNT
ML 1-Z	130000605	ML 1-ZR	130000616	Z-mount with FME-system BRIGHT
ML 1-BZ	130000606	ML 1-BZR	130000621	BZ-mount with FME-system BLACK
ML 1- ZP4	130000607	ML 1-ZP4R	130000618	ZP4-mount with 4 m cable and FME- connector BRIGHT
ML 1- BZP4	130000608	ML 1-BZP4R	130000622	BZP4-mount with 4 m cable and FME- connector BLACK

### **SPECIFICATIONS**

ELECTRICAL				
MODEL	ML 1-Z			
ANTENNA TYPE	¼ λ mobile whip antenna			
FREQUENCY	Tunable by cutting within: 6688 MHz (Also applicable: 88175 MHz)			
IMPEDANCE	Nom. 50 Ω			
POLARIZATION	Vertical			
GAIN	0 dB (acc. to EIA RS-329-1)			
BANDWIDTH	≥ 8 MHz @ SWR ≤ 2.0			
SWR	≤ 1.3 @ f. res.			
MAX. POWER	250 W			
MECHANICAL				
MATERIALS	Whip: Conical glass fiber or Stainless steel Chromed brass Spring: Stainless steel Mount: Chromed brass Weather- and shockproof 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)			

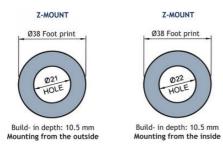


#### INSTALLATION

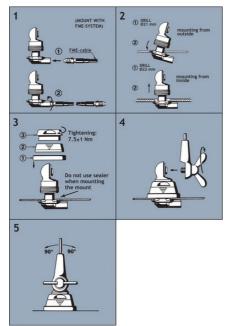
This antenna is supplied with type Z-mount. The whip is fastened to the mount by means of our standard ball-joint and wing screw system. The adjustable ball-joint ensures that the whip can always be mounted in a vertical position independent of the angle of the installation spot.

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



#### 2. INSTALLATION STEPS

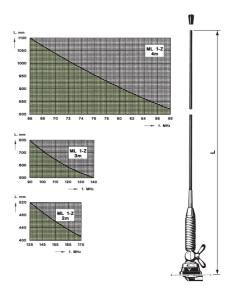


Do not use sealer on rubber gasket or other places.

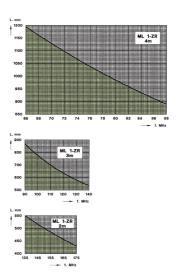
#### 3. TUNING

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

#### **GLASS FIBRE WHIP**



#### STAINLESS STEEL WHIP





 $\ensuremath{\mathsf{PROCOM}}$  A/S reserve the right to amend specifications without prior notice.

08/11/11