

Unity Gain $\frac{1}{4}$ λ Mobile Antenna for the 450 MHz Band

DESCRIPTION

- Sturdy, conical, flexible rubber whip.
- MU 5-Z/s covers 370 – 410 MHz
 MU 5-Z/l covers 406 – 440 MHz
 MU 5-Z/h covers 430 – 470 MHz
 – no tuning required.
- Stainless steel Z-mount with ball-joint and wing screw whip-fastening system.
- 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.



SPECIFICATIONS

Electrical	
Model	MU 5-Z/...
Frequency	450 MHz-band covered by three models
Antenna Type	Mobile whip antenna
Max. Input Power	100 W
Polarisation	Vertical
Impedance	50 Ω
VSWR	$\leq 1.2:1$ @ f. res.
Bandwidth	≥ 45 MHz @ VSWR ≤ 1.5
Gain (EIA RS-329-1)	0 dB

Mechanical	
Materials	Whip: Sturdy, flexible rubber with cast-in multicore steel wire radiating element Chromed brass Mount: Chromed brass Weather- and shockproof plastics Stainless steel
Installation Torque	7.5 ± 1 Nm
Colour	Black / Metallic Silver
Height	Approx. 190 mm / 7.48 in.
Weight	Z-version: Approx. 160 g / 0.35 lb. ZP4-version: Approx. 300 g / 0.66 lb.
Mounting	21mm dia. hole (For roof thicknesses 2 mm up to 7.5 mm mounting hole should be 22mm dia.)
Mounting Plate Thickness	Max. 2.0 mm (Models up to 7.5 mm on request)

ORDERING

Model	Product No.	Frequency
MU 5-Z/s	130001041	370 - 410 MHz
MU 5-Z/l	130001042	406 - 440 MHz
MU 5-Z/h	130001045	430 - 470 MHz
MU 5-ZP4/s	130001050	370 - 410 MHz
MU 5-ZP4/l	130001047	406 - 440 MHz
MU 5-ZP4/h	130001048	430 - 470 MHz

THE WHIP IS COMPATIBLE WITH ALL BELOW MOUNTS

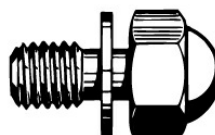
Z-Mount



ZP4-Mount



Hat screw option:



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

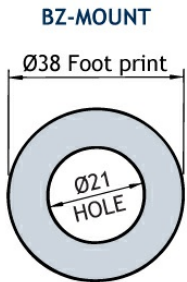
INSTALLATION

This antenna should always be mounted on the car roof to ensure best omnidirectional coverage.

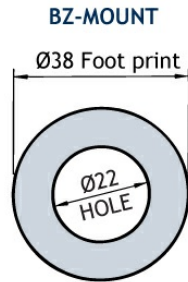
The antenna is provided with type Z-mount. The whip is fastened to the mount by means of our standard ball-joint and wing screw system. The adjustable ball-joint ensures that the whip can always be mounted in a vertical position independent of the angle of the installation spot.

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.

1. INSTALLATION DIMENSION

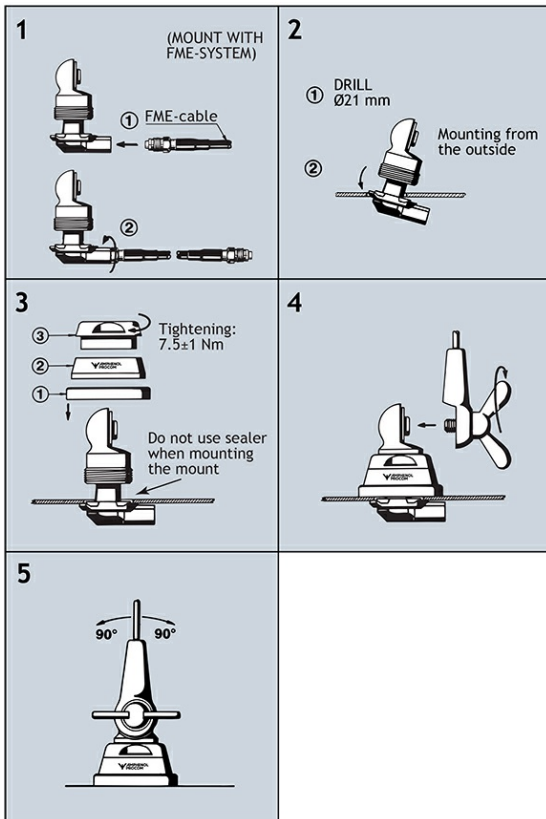


Build- in depth: 10.5 mm
Mounting from the outside



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 / MODEL CONVERSION

The antenna is delivered factory-tuned and requires no further tuning.

To convert an MU 5-Z/s model into an MU 5-Z/l model, cut off 13 mm of the top end of the whip.

To convert an MU 5-Z/l model into an MU 5-Z/h model, cut off 13 mm of the top end of the whip.

PLEASE NOTE

As standard the antenna is provided with a wing screw. However, the wing screw may be replaced by the less obtrusive hat screw (with key), which also gives an improved protection against theft. To order the antenna with hat nut, please add a "K" to the antenna designation.