Unity Gain ¼ λ Mobile Antenna for the 450 MHz Band



DESCRIPTION

- Sturdy, conical, flexible rubber whip.
- MU 5-X/s covers 370 – 410 MHz
  MU 5-X/l covers 406 – 440 MHz
  MU 5-X/h covers 430 – 470 MHz
  – no tuning required.
- Stainless steel X-mount with M6-thread whip-fastening system.
  Simple mounting exclusively with access from the outside.
- Models available with X-mount (oblong), CX-mount (circular) and MM-mount (magnetic).
- Choice between two connection principles:
  - X-mount, MM-mount: FME-connection (supplied without cable).
  - XP4-mount: Permanently attached 4 m cable terminated with FME-connector.
    All whips are compatible with all mounts.

SPECIFICATIONS

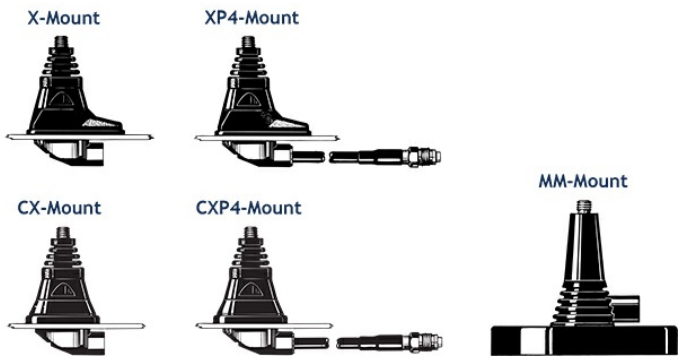
Electrical	
Model	MU 5-X/...
Frequency	450 MHz-band covered by three models
Antenna Type	Mobile whip antenna
Max. Input Power	100 W
Polarisation	Vertical
Impedance	50 Ω
VSWR	≤ 1.3:1 @ f.res.
Bandwidth	≥ 45 MHz @ VSWR ≤ 1.5
Gain (EIA RS-329-1)	0 dB

Mechanical	
Materials	Whip: Sturdy, flexible rubber with cast-in multicore steel wire radiating element Mount: Black-chromed brass Weather- and shockproof plastics Stainless steel
Installation Torque	4 ±1 Nm
Colour	Black
Height	Approx. 170 mm / 6.69 in.
Weight	X-version : Approx. 70 g / 0.15 lb. XP4-version : Approx. 210 g / 0.46 lb. MM-version : Approx. 320 g / 0.70 lb.
Mounting	18 mm dia. hole

ORDERING

Model	Product No.	Frequency
MU 5-X/s	130001027	370 - 410 MHz
MU 5-X/l	130001028	406 - 440 MHz
MU 5-X/h	130001029	430 - 470 MHz
MU 5-CX/s	130001037	370 - 410 MHz
MU 5-CX/l	130001033	406 - 440 MHz
MU 5-CX/h	130001036	430 - 470 MHz
MU 5-XP4/s	130001477	370 - 410 MHz
MU 5-XP4/l	130001030	406 - 440 MHz
MU 5-XP4/h	130001031	430 - 470 MHz
MU 5-CXP4/s	130001038	370 - 410 MHz
MU 5-CXP4/l	130001035	406 - 440 MHz
MU 5-CXP4/h	130001034	430 - 470 MHz
MU 5-MM/s	130001024	370 - 410 MHz
MU 5-MM/l	130001025	406 - 440 MHz
MU 5-MM/h	130001026	430 - 470 MHz

THE WHIP IS COMPATIBLE WITH ALL BELOW MOUNTS

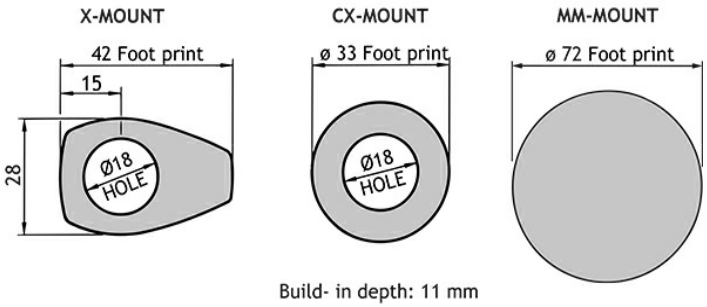


INSTALLATION

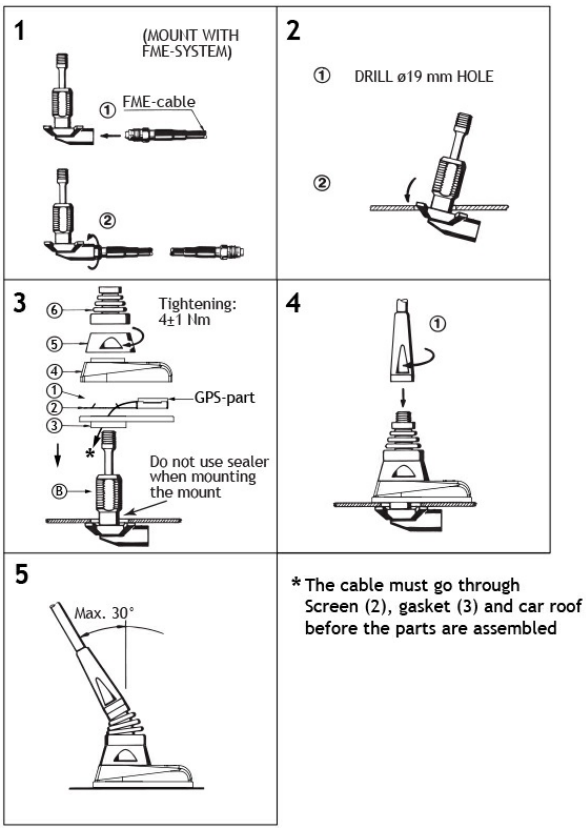
This antenna should be mounted on the car roof to ensure best omnidirectional coverage. Mounting can take place exclusively with access from the outside when drilling an 18 mm dia. hole. Mounting can take place from the inside by drilling a 14 mm dia. hole. When mounting in a 14 mm dia. hole, remove the bottom plastic ring of the packing gasket with a sharp cutter.

When cleaning the car in car-washing machines, remove the whip using a spanner, size 9 mm. After wash, refit the whip and tighten it lightly with the spanner.
The MiniMag (abbreviated: MM) is a small, light-weight magnetic mount with a high attaching effect. A silicone layer applied to the contact surface protects the car roof and ensures maximum friction.

1. INSTALLATION DIMENSION



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-X/s model into an MU 5-X/l model, cut off 12 mm of the top end of the whip.

To convert an MU 5-X/l model into an MU 5-X/h model, cut off 11 mm of the top end of the whip.

PLEASE NOTE

For safety reasons:

When using the MU 5-MM, car speed must not exceed 180 km/h.