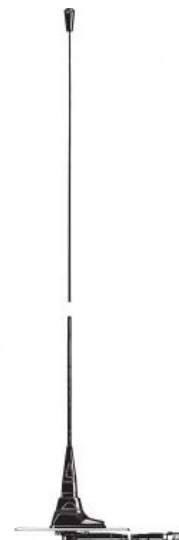


450 MHz 2 dB Mobile Antenna for Glass fibre Roof

DESCRIPTION

- Ground plane independent antenna for installation on non-conducting surfaces.
- Ideal for glass fibre roofs as can be found on some trucks, busses, transport vans and trains.
- Black-chromed, conical stainless steel whip.
- MU 9-XP4R/s can be tuned by cutting within 380...410 MHz.
MU 9-XP4R/l can be tuned by cutting within 400...440 MHz.
MU 9-XP4R/h can be tuned by cutting within 430...470 MHz.
- M6-thread whip-fastening system.
- Simple mounting exclusively with access from the outside.
- Models available with oblong or circular mount.
- Delivered with permanently attached 4 m cable terminated with FME-connector (other models on request).

Please note that the MU 9-XP4R type "s"-, "l"- and "h"-mounts contain matching transformers. Consequently, these special mounts cannot operate with other whip types.



ORDERING

Type	Product No.	Description	Frequency
MU 9-XP4R/s	130001549	Oblong mount with 4 m cable and FME-conn.	380... 410 MHz
MU 9-XP4R/l	130001550	Same mount as above	400... 440 MHz
MU 9-XP4R/h	130001551	Same mount as above	430... 470 MHz
MU 9-CXP4R/s	130001094	Circular mount with 4 m cable and FME-conn.	380... 410 MHz
MU 9-CXP4R/l	130001759	Same mount as above	400... 440 MHz
MU 9-CXP4R/h	130001606	Same mount as above	430... 470 MHz
MU 9-CXP1R/s- TNC	130001891	Circular mount with 1 m cable and TNC-male conn. (MOQ 25)	380... 410 MHz
MU 9-CXP1R/l- TNC	130001901	Same mount as above (MOQ 25)	400... 440 MHz
MU 9-CXP1R/h- TNC	130001902	Same mount as above (MOQ 25)	430... 470 MHz

SPECIFICATIONS

Electrical	
Model	MU 9-XP4R/...
Frequency	450 MHz band covered by three models
Antenna Type	End-fed ½λ dipole mobile antenna
Max. Input Power	40 W
Polarisation	Vertical
Impedance	50 Ω
VSWR	≤ 1.3 @ f. res.
Bandwidth	≥ 15 MHz @ SWR ≤ 1.5 ≥ 30 MHz @ SWR ≤ 2.0
Gain (EIA RS-329-1)	2 dB

Mechanical	
Materials	Whip: Black-chromed, conical stainless steel Black-chromed brass Mount: Black-chromed brass Weather- and shockproof plastics Surface treated steel
Cable	4 m cable terminated with FME-connector (Other cable lengths and connector types on request)
Installation Torque	Max. 3 Nm
Colour	Black
Height	Approx. 400 mm / 15.75 in. (see cutting diagram)
Weight	Approx. 0.21 kg / 0.46 lb
Mounting	From outside : 21 mm dia. hole From inside : 14 mm dia. hole
Mounting Plate Thickness	0.6 - 5 mm / 0.02 - 0.20 in.

INSTALLATION

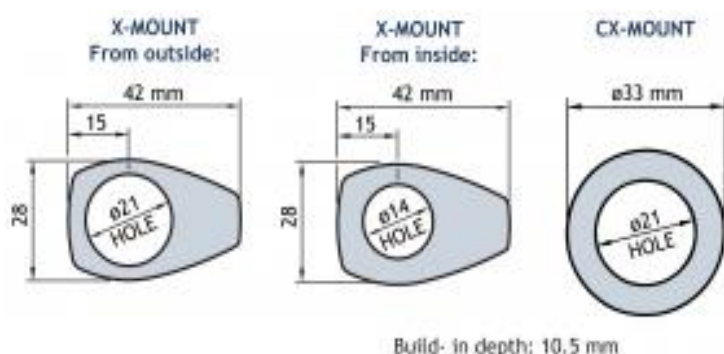
This antenna is especially designed for installation on non-conducting surfaces as e.g. glass fibre roofs, as can be found on some trucks, busses, transport vans and trains.

The antenna is an end-fed, $\frac{1}{2} \lambda$ -dipole concept which can be fed in such a way that the antenna does not require a "ground plane" as required by the standard $\frac{1}{4} \lambda$, $\frac{5}{8} \lambda$ or collinear mobile whips.

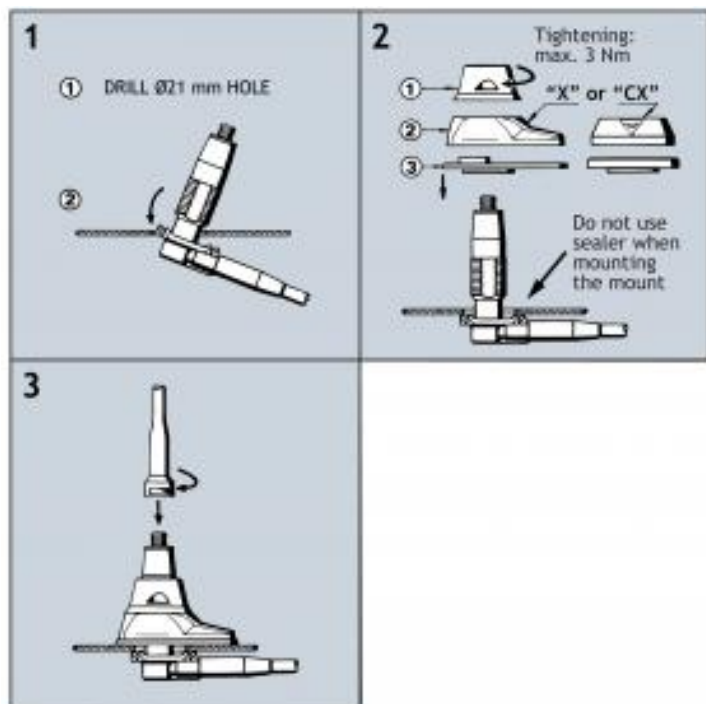
It is useful to note that this antenna type can be used anywhere where the ground plane is poor or completely missing, as e.g.: side-mounted on a clamp as a pager antenna on a wall or mounted at the very edge of a ground plane without the loss induced by a tilted radiation pattern.

The antenna must be mounted on a horizontal surface. When cleaning the vehicle in car-washing machines, the whip is easily dismounted using a spanner, size 9 mm. The whip is refitted again by screwing it onto the M6 thread stud on the mount and tightening it lightly with the spanner.

1. INSTALLATION DIMENSIONS



2. INSTALLATIONS STEPS (FROM OUTSIDE)



Do not use sealer on rubber gasket or other places.

3. TUNING

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

