900 MHz 2 dB Mobile Antenna for Glassfiber Roof

DESCRIPTION

- Groundplane independent antenna for installation on non-conducting surfaces.
- Ideal for glassfiber roofs as can be found on some trucks, busses, transport vans and trains.
- MU 909-XP4/l can be tuned by cutting within: 820 – 890 MHz.
- MU 909-XP4/h can be tuned by cutting within: 870 – 940 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 low loss cable terminated with FME-connector.

ORDERING

Type	Product No.	Description	Frequency
MU 909-XP4/l	130001227	Oblong mount with 4 m cable + FME-connector	820...890 MHz
MU 909-XP4/h	130001222	Same mount as above	870...940 MHz
MU 909-CXP4/l	130001228	Circular mount with 4 m cable + FME-connector	820...890 MHz
MU 909-CXP4/h	130001223	Same mount as above	870...940 MHz
	MU 909-XP4/h, EGSM	Oblong mount with 4 m cable + FME-connector	EGSM
	MU 909-XP4/h, ETACS	Same mount as above	ETACS, USA
	MU 909-XP4/h, EAMPS	Same mount as above	EAMPS, USA
	MU 909-CXP4/h, EGSM	Circular mount with 4 m cable + FME-connector	EGSM
	MU 909-CXP4/h, ETACS	Same mount as above	ETACS, USA
	MU 909-CXP4/h, EAMPS	Same mount as above	EAMPS, USA

SPECIFICATIONS

Electrical	
Model	MU 909-XP4/...
Frequency	820-940 MHz - covered by two models
Antenna Type	End-fed ½λ dipole mobile antenna
Polarisation	Vertical
Impedance	50 Ω
Maximum Input Power	25 W
Gain (EIA RS-329-1)	2 dB

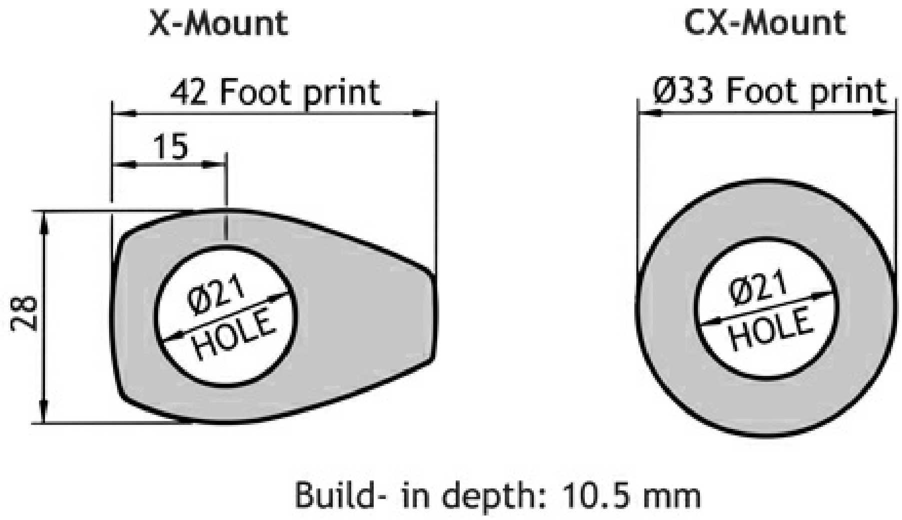
Mechanical	
Materials	Whip: Polyethylene-covered spring steel wire Mount: Black-chromed brass Weather- and shockproof plastics Surface treated steel
Cable	4 m cable terminated with FME-connector
Installation Torque	Max. 3 Nm
Colour	Black
Height	260 mm / 10.24 in.
Weight	0.2 kg / 0.44 lb
Mounting	From outside: 21 mm dia. hole From inside: 14 mm dia. hole
Mounting Plate Thickness	0.6 - 5 mm / 0.02 - 0.20 in.

ADDITIONAL DATA

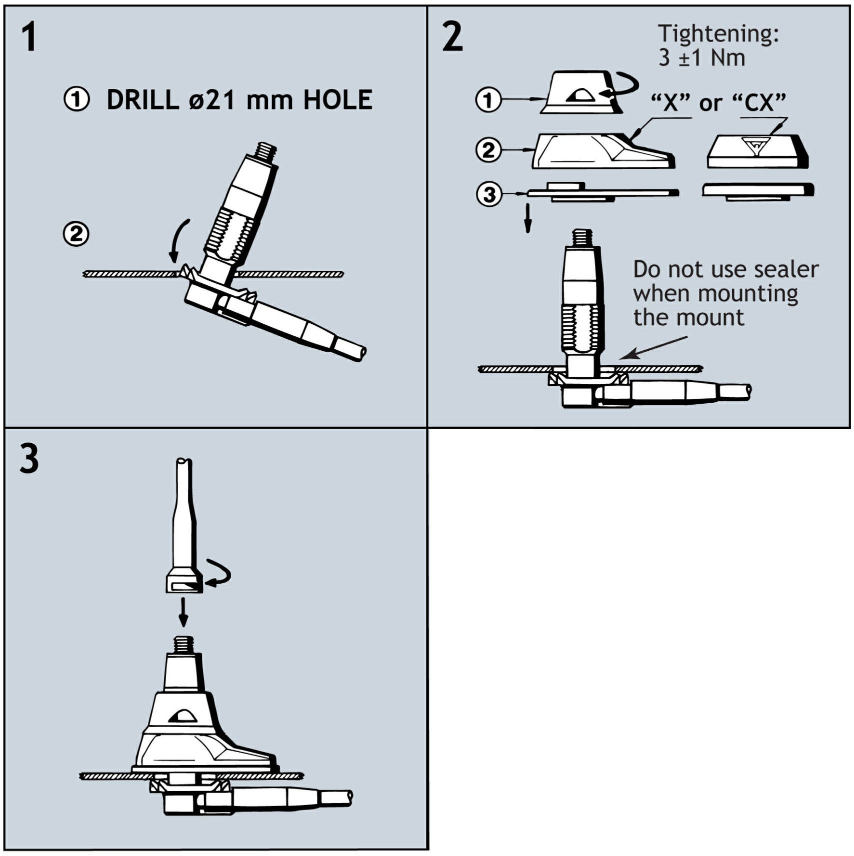
INSTALLATION

This antenna is especially designed for installation on non-conducting surfaces as e.g. glassfiber roofs, as can be found on some trucks, busses, transport vans and trains. The antenna is an end-fed, ½ ◆-dipole concept which can be fed in such a way that the antenna does not require a “groundplane” as required by the standard ¼ ◆, ◆ ◆ 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. A polyethylene-covered, closely spirally wound flat steel-band material causes the whip always to stand erect while at the same time being very flexible.

1. INSTALLATION DIMENSIONS:

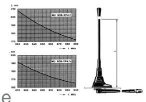


2. INSTALLATION STEPS:



Do not use sealer on rubber gasket or other places.

3. TUNING:



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