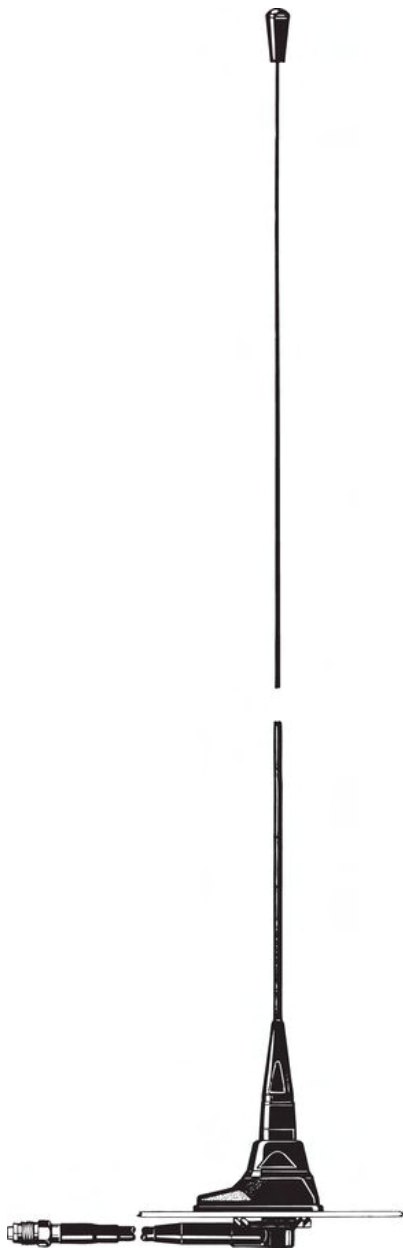


MU 9-XP4R/...

450 MHz 2 dB Mobile Antenna for Glass fibre Roof

DESCRIPTION

- Groundplane 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.



ORDERING DESIGNATIONS

FREQUENCY/CELLULAR SYSTEM		MOUNT VERSION	
		Oblong mount with 4 m cable + FME-connector	Circular mount with 4 m cable + FME-connector
FIELD TUNABLE MODELS	380...410 MHz	MU 9-XP4R/s	MU 9-CXP4R/s
	400...440 MHz	MU 9-XP4R/l	MU 9-CXP4R/l
	430...470 MHz	MU 9-XP4R/h	MU 9-CXP4R/h
READY-TUNED MODELS (examples)	NMT-450, Norway	MU 9-XP4R/h, NMT	MU 9-CXP4R/h, NMT
	TETRA BOS, Germany	MU 9-XP4R/380-400 MHz	MU 9-CXP4R/380-400 MHz
	Radiocom 2000, France	MU 9-XP4R/h, R2000	MU 9-CXP4R/h, R2000

When ordering a ready-tuned model, the name of the desired cellular system must be added to the antenna model number.

SPECIFICATIONS

ELECTRICAL	
MODEL	MU 9-XP4R/...
ANTENNA TYPE	End-fed $\frac{1}{2}$ λ mobile whip antenna
FREQUENCY	450 MHz-band covered by three models
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	2 dB (acc. to EIA RS-329-1)
BANDWIDTH	≥ 15 MHz @ SWR ≤ 1.5 ≥ 30 MHz @ SWR ≤ 2.0
SWR	≤ 1.3 @ f. res.
MAX. POWER	40 W
MECHANICAL	
MATERIALS	Whip: Black-chromed, conical stainless steel Black-chromed brass Mount: Black-chromed brass Weather- and shockproof plastics Surface treated steel
RECOMMENDED INSTALLATION TORQUE	Max. 3 Nm
CABLE	4 m cable terminated with FME-connector
COLOUR	Black
HEIGHT	Approx. 40 cm (see cutting diagram)
WEIGHT	Approx. 210 g
MOUNTING	From outside: 21 mm dia. hole From inside: 14 mm dia. hole
ROOF THICKNESS	0.6 → 5.0 mm

To help selecting the correct model for a specific cellular network, please consult the survey of cellular network frequencies under USEFUL DATA in our catalogues.

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.

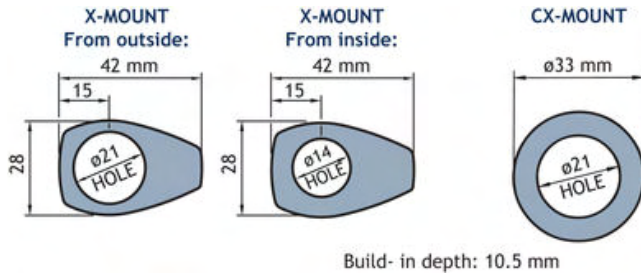
INSTALLATION

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.

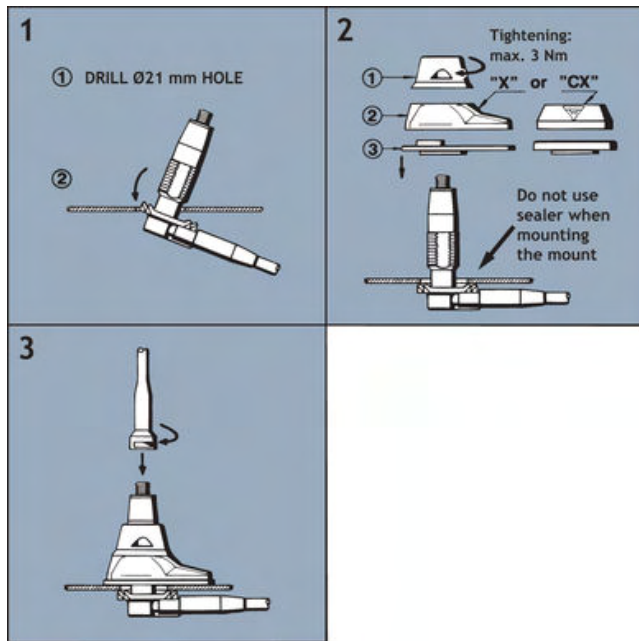
The antenna is an end-fed, $\frac{1}{2} \lambda$ -dipole concept which can be fed in such a way that the antenna does not require a "groundplane" as required by the standard $\frac{1}{4} \lambda$, $\frac{5}{8} \lambda$ or colinear mobile whips.

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 dismantled 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:



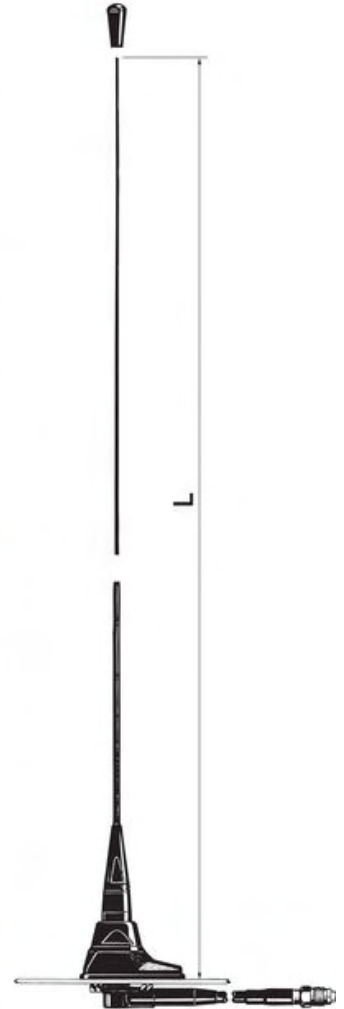
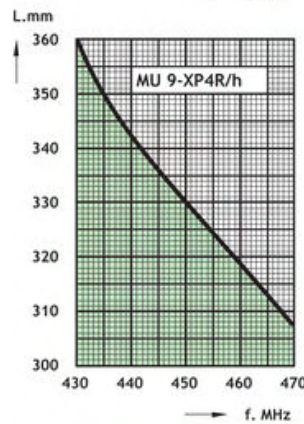
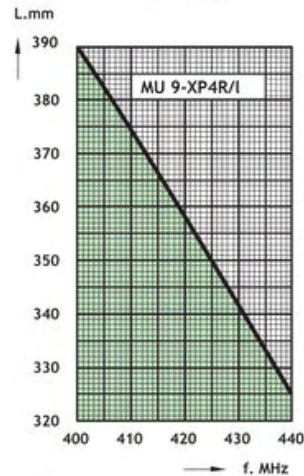
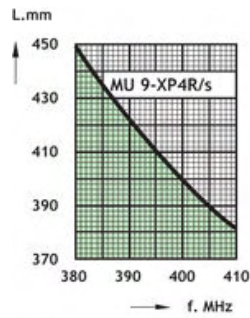
2. INSTALLATION STEPS (From outside):



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.



PROCOM A/S reserve the right to amend specifications without prior notice.

15/04/2011