

Omnidirectional Base and Marine Antenna

Type TCXL 70-1LW/... UHF



This rod-type UHF antenna is developed for use onboard ships as well as on masts and covers the 450 MHz band in three models.

The 1" revolving nut mounting system makes it possible to mount the antenna in the mast, in the auxiliary mast or on the crossbeam. By means of Procom's flange mount type "FLG", it can easily be mounted even on the rooftop.

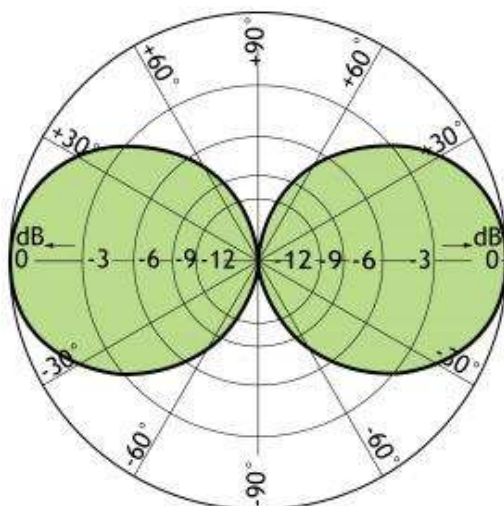
DESCRIPTION

- This antenna type can be used for a wide variety of purposes. It is very popular and widely used in connection with 70 cm CELLULAR systems – as for instance the Nordic Mobile Telephone system NMT – making it possible to extend the – normally land based – CELLULAR telephone system for maritime mobile service as well.
- The antenna is a $\frac{1}{2} \lambda$ design and this means that it needs neither loading coils, ground plane, radials nor other auxiliary arrangements.
- Bear in mind that the higher the antenna is mounted the better coverage.
- Avoid mounting the antenna parallel with or in the neighborhood of other metal parts, such as masts, supporting wires etc. Free mounting and as high as possible is most preferable, otherwise the SWR and the radiation diagram will be influenced.
- The antenna is a grounded radiator antenna and therefore it shows a DC-short across the coaxial cable.
- A conical glass fiber tube completely encloses the carefully designed radiating element to assure long dependable service in all climates.

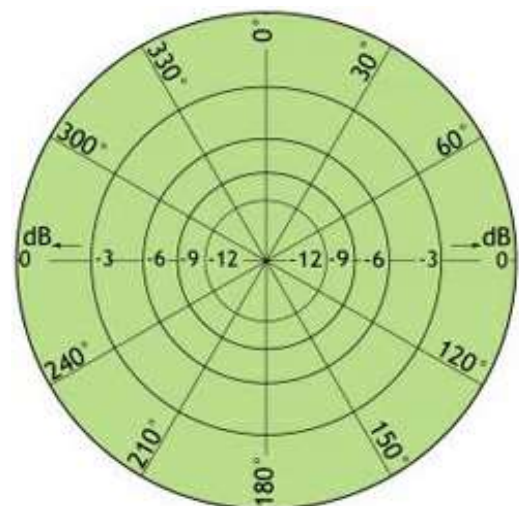
ORDERING DESIGNATIONS

Type No.	Frequency
TCXL 70-1LW/l	380 - 430 MHz
TCXL 70-1LW/h	420 - 470 MHz
TCXL 70- /hs	460 - 510 MHz

TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



SPECIFICATIONS

ELECTRICAL

MODEL	TCXL 70-1/...
ANTENNA TYPE	½ λ coaxial dipole, broad-banded
FREQUENCY	TCXL 70-1/l : 380 – 430 MHz TCXL 70-1/h : 420 – 470 MHz TCXL 70-1/hs: 460 - 510 MHz
IMPEDANCE	Nom. 50 Ω
RADIATION	Omnidirectional
POLARIZATION	Vertical
GAIN	2 dBi 0 dBd
BANDWIDTH	50 MHz
SWR	≤ 1.5
MAX. POWER	150 W
HCM CODE	HCM000ND00, 040DE00

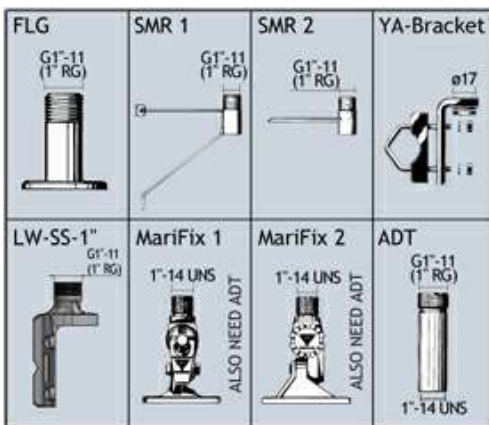
MECHANICAL

CONNECTOR	N-female
WIND SURFACE	0.0093 m²
WIND LOAD	12 N @ 160 km/h
MAX. WIND SPEED	Tested to 200 km/h
COLOUR	White (RAL 9003)
MATERIALS	Shroud: Polyurethane-coated glass fiber Mounting bracket: Chromed brass
TOTAL HEIGHT	Approx. 560 mm
DIA. IN TOP END	12 mm
DIA. IN BOTTOM END	16 mm
WEIGHT	Approx. 350 g
MOUNTING	On 1" RG (G1" - 11) threaded water pipe or on optional mounting brackets (see accessories)

ENVIRONMENTAL

TEMP. RANGE	-30°C → +70°C
IP RATING	IP 66

ACCESSORIES (TO BE ORDERED SEPARATELY)



TYPICAL GAIN AND SWR CURVES

