

3 dBd Gain Base Station and Marine UHF Antenna

DESCRIPTION

- This colinear UHF antenna with 3 dBd gain is developed for use on board ships as well as on masts, and thanks to the 1" revolving nut mounting system it can be mounted in the mast, in the auxiliary mast as well as on the cross-beam. By means of Procom's flange mount type "FLG", it can also be mounted on deck or rooftop.
- The CXL 70-3/... is in widespread use in connection with 450 MHz CELLULAR systems. The antenna makes it possible to extend the – normally land based – CELLULAR telephone system service for maritime use as well, and here the 3 dBd gain of the antenna comes to definite advantage.
- Bear in mind that the higher the antenna is mounted the better coverage.
- Avoid mounting the antenna parallel with and in the neighbourhood of other metal parts, such as masts, supporting wires etc. Free mounting and as high as possible is most preferable, otherwise the VSWR and the radiation diagram will be influenced.
- The antenna needs neither loading coils, ground-plane, radials nor other auxiliary arrangements.
- The antenna is a grounded radiator antenna and therefore it shows a DC-short across the coaxial cable.
- A conical glass fibre tube completely encloses the carefully designed radiating element to assure long dependable service in all climates.



SPECIFICATIONS

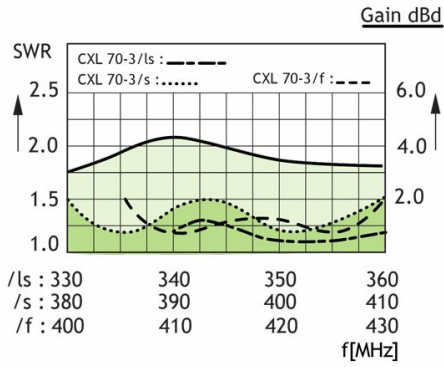
Electrical	
Model	CXL 70-3/...
Frequency	CXL 70-3/l/s : 340 - 360 MHz CXL 70-3/s : 380 - 410 MHz CXL 70-3/f : 406 - 430 MHz CXL 70-3/l : 420 - 450 MHz CXL 70-3/h: 440 - 470 MHz
Antenna Type	Coaxial dipole, broad-banded
Max. Input Power	150 W
Polarisation	Vertical
3 dB Beamwidth, E-Plane	30 °
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	3 dBd (5.2 dBi)
VSWR	< 1.5:1
Bandwidth	30 MHz
HCM Code(s)	HCM000ND00, 015DE50
Mechanical	
Connection(s)	N(f)
Materials	Shroud : Polyurethane-coated glass fibre Mounting bracket : Chromed brass
Colour	White (RAL 9003)
Wind Area	0.0337 sq. m / 0.36 sq. ft
Wind Load	43 N (160 km/h)
Dia. At Top End	16 mm / 0.63 in.
Dia. At Bottom End	23 mm / 0.91 in.
Height	Approx. 1430 mm / 56.30 in.
Weight	Approx. 1.2 kg / 2.65 lb.
Mounting	On 1" RG (G1" - 11) threaded water pipe or on optional mounting brackets (see accessories)

Environmental	
Operating temperature range	-30 °C to +70 °C

ORDERING

Model	Product No.	Frequency
CXL 70-3/l/s	100000750	340 - 360 MHz
CXL 70-3/s	110000141	380 - 410 MHz
CXL 70-3/f	110000140	406 - 430 MHz
CXL 70-3/l	110000142	420 - 450 MHz
CXL 70-3/h	110000139	440 - 470 MHz

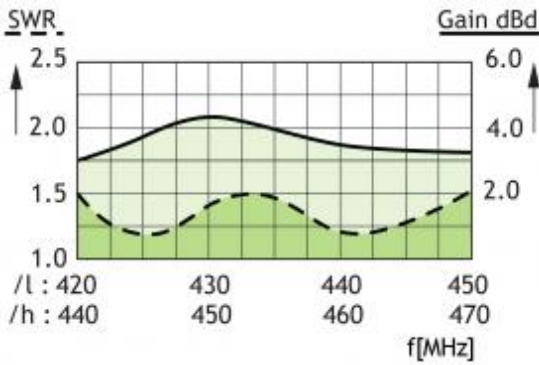
TYPICAL GAIN AND VSWR CURVES



TYPICAL RADIATION PATTERN (H-PLANE)



TYPICAL GAIN AND VSWR CURVES



ACCESSORIES (TO BE ORDERED SEPARATELY)

FLG 	SMR 1 	SMR 2 	YA-Bracket
LW-SS-1" 	MariFix 1 <p>ALSO NEED ADT</p>	MariFix 2 <p>ALSO NEED ADT</p>	ADT <p>1"-14 UNS</p>

TYPICAL RADIATION PATTERN (E-PLANE)

