# AMPHENOL

## Unity Gain Base Station and Marine UHF Antenna

### DESCRIPTION

- 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 cross-beam. By means of Procom's flange mount type "FLG", it can easily be mounted even on the rooftop. The antenna is a  $\frac{1}{2}\lambda$  design and this means that it needs neither loading coils, groundplane, 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 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 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 70-1/
Frequency	CXL 70-1/l : 380 - 430 MHz CXL 70-1/h : 420 - 470 MHz CXL 70-1/hs : 460 - 510 MHz
Antenna Type	Coaxial dipole, broad-banded
Max. Input Power	150 W
Polarisation	Vertical
Pattern Type	Omnidirectional
3 dB Beamwidth, E-Plane	80 °
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	0 dBd (2.0 dBi)
VSWR	< 1.5:1
Bandwidth	50 MHz
HCM Code(s)	HCM000ND00, 040DE00

Environmental	
Operating temperature range	-30 °C to +70 °C
Survival Wind Speed	200 km/h
Ingress Protection	IP66

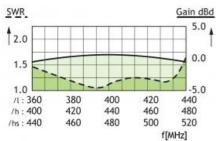
## ORDERING

Model	Product No.	Frequency
CXL 70-1/I	110000137	380 - 430 MHz
CXL 70-1/h	110000136	420 - 470 MHz
CXL 70-1/hs	110000135	460 - 510 MHz

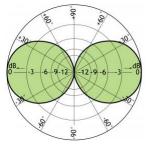
Mechanical	
Connection(s)	N(f)
Materials	Shroud : Polyurethane-coated glass fibre Mounting bracket : Chromed brass
Colour	White (RAL 9003)
Wind Area	0.0093 sq. m / 0.10 sq. ft
Wind Load	12 N (160 km/h / 99.42 mph)
Dia. At Top End	12 mm / 0.47 in.
Dia. At Bottom End	16 mm / 0.63 in.
Height	600 mm (± 1 cm) / 23.62 in.
Weight	Approx. 0.35 kg / 0.77 lb.
Mounting	On 1" RG (G1" - 11) threaded water pipe or on optional mounting brackets (see accessories)



TYPICAL GAIN AND VSWR CURVES



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



ACCESSORIES (TO BE ORDERED SEPARATELY)

