Base Station and Marine VHF Antenna

DESCRIPTION

- This base station and maritime VHF antenna 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 auxilliary mast as well as on the cross-beam. By means of Procom’s flange mount it can also be mounted on deck or rooftop.
- 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 mast, 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 ½ λ design and this means that it needs neither loading coils, ground-plane, radials nor other auxiliary arrangements.
- CXL 2-1/... can, without problems, operate with duplex radioes and on the semi-duplex channels, owing to the fact that it is broad-banded (see SWR diagram). In other words, CXL 2-1/... has a shipshape SWR on the RX-frequencies, which is just as important as it is for the TX-frequencies.
- Furthermore, 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 2-1/...
Frequency	CXL 2-1/s: 138 - 156 MHz CXL 2-1/l: 146 - 165 MHz CXL 2-1/h: 155 - 175 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 (2.2 dBi)
VSWR	CXL 2-1/s : <1.5:1 CXL 2-1/l: 146 - 163 MHz < 1.5:1 and 146 - 165 MHz < 1.75:1 CXL 2-1/h: 156 - 174 MHz < 1.5:1 and 155 - 175 MHz < 1.75:1
Bandwidth	18 - 21 MHz depending on model
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	HCM000ND00, 040DE00

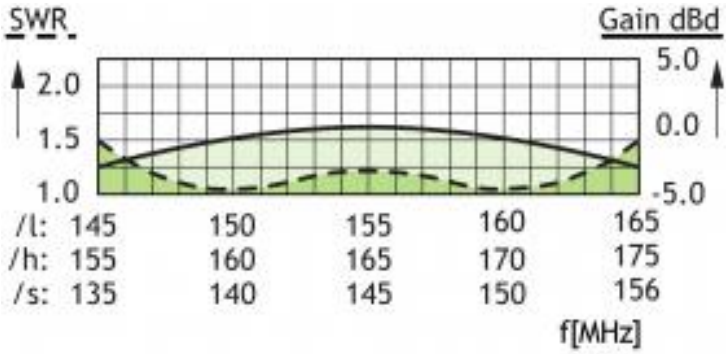
Mechanical	
Connection(s)	UHF female (standard)
Materials	Shroud: Polyurethane-coated glass fibre Mounting bracket: Chromed brass
Colour	White (RAL 9003)
Wind Area	0.018 sq. m / 0.19 sq. ft
Wind Load	25 N (160km/h)
Dia. At Top End	8 mm / 0.31 in.
Dia. At Bottom End	16 mm / 0.63 in.
Height	1210 mm / 47.64 in.
Weight	0.3 kg / 0.66 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
Survival Wind Speed	200 km/h
Ingress Protection	IP66

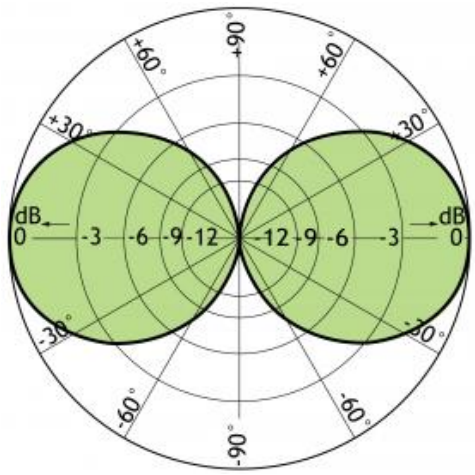
ORDERING

Model	Product No.	Description	Frequency
CXL 2-1/s	110000297	"UHF"-female	138 - 156 MHz
CXL 2-1/l	110000119	"UHF"-female	146 - 165 MHz
CXL 2-1/h	110000123	"UHF"-female	155 - 175 MHz
CXL 2-1/s-N	110000298	"N"-female	138 - 156 MHz
CXL 2-1/l-N	110000121	"N"-female	146 - 165 MHz
CXL 2-1/h-N	110000124	"N"-female	155 - 175 MHz
CXL 2-1/s-TNC	110000299	"TNC"-female	138 - 156 MHz
CXL 2-1/l-TNC	110000118	"TNC"-female	146 - 165 MHz
CXL 2-1/h-TNC	110000126	"TNC"-female	155 - 175 MHz

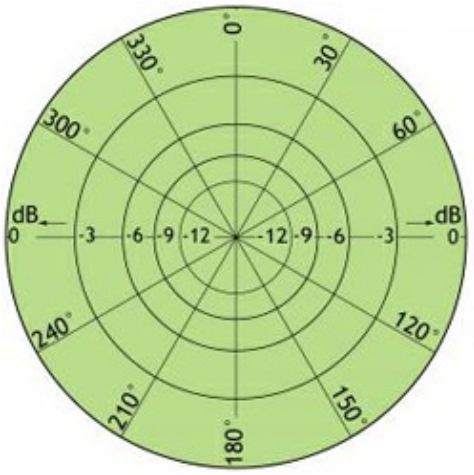
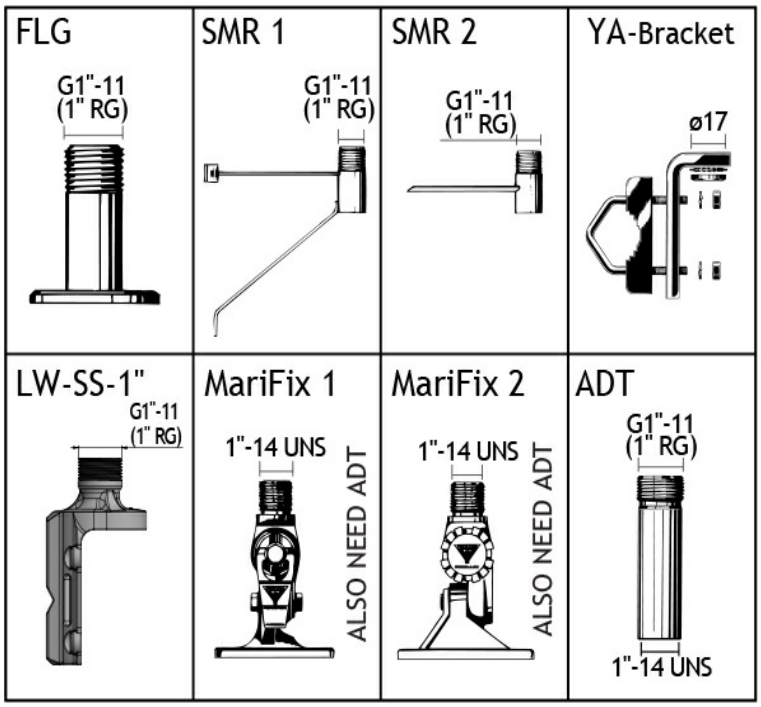
TYPICAL GAIN AND SWR CURVES



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



ACCESSORIES (TO BE ORDERED SEPARATELY)