

CXL 2-1/...

Base Station and Marine VHF Antenna

➤ 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.



DESCRIPTION

- 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 $\frac{1}{2} \lambda$ 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.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.	FREQUENCY	CONNECTOR
CXL 2-1/s	110000297	138 - 156 MHz	"UHF"-female
CXL 2-1/l	110000119	146 - 165 MHz	
CXL 2-1/h	110000123	155 - 175 MHz	
CXL 2-1/s-N	110000298	138 - 156 MHz	"N"-female
CXL 2-1/l-N	110000121	146 - 165 MHz	
CXL 2-1/h-N	110000124	155 - 175 MHz	
CXL 2-1/s-TNC	110000299	138 - 156 MHz	"TNC"-female
CXL 2-1/l-TNC	110000118	146 - 165 MHz	
CXL 2-1/h-TNC	110000126	155 - 175 MHz	

SPECIFICATIONS

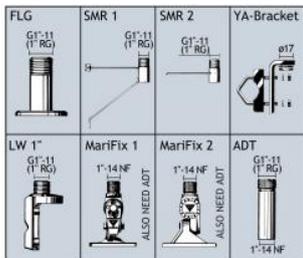
ELECTRICAL

MODEL	CXL 2-1/...
ANTENNA TYPE	$\frac{1}{2} \lambda$ coaxial dipol, broad-banded
FREQUENCY	CXL 2-1/s: 138 - 156 MHz CXL 2-1/l: 146 - 165 MHz CXL 2-1/h: 155 - 175 MHz
IMPEDANCE	Nom. 50 Ω
RADIATION	Omnidirectional
POLARIZATION	Vertical
GAIN	2 dBi 0 dBd
BANDWIDTH	18 - 21 MHz depending on model
SWR	CXL 2-1/s: 138 - 156 MHz ≤ 1.5 CXL 2-1/l: 146 - 163 MHz ≤ 1.5 146 - 165 MHz ≤ 1.75 CXL 2-1/h: 156 - 174 MHz ≤ 1.5 155 - 175 MHz ≤ 1.75
MAX. POWER	150 W
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)

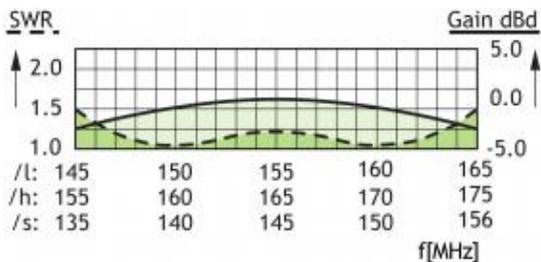
MECHANICAL

TEMP. RANGE	-30°C → +70°C
CONNECTOR	UHF-female (standard)
WIND SURFACE	0.018 m ²
WIND LOAD	25 N @ 160 km/h
MAX. WIND SPEED	Tested to 200 km/h
IP RATING	IP 66
COLOUR	Marine white
MATERIALS	Shroud: Polyurethane-coated glass fibre Mounting bracket: Chromed brass
TOTAL HEIGHT	Approx. 1.21 m
DIA. IN TOP END	8 mm
DIA. IN BOTTOM END	16 mm
WEIGHT	Approx. 300 g
MOUNTING	On 1" RG (G1" - 11) threaded water pipe or on optional mounting brackets (see below)

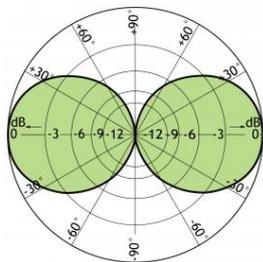
ACCESSORIES (TO BE ORDERED SEPARATELY)



TYPICAL GAIN AND SWR CURVES



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)

