

# CXL 70-5C/...

Colinear, Heavy-Duty 5 dBd Base Station and Marine Antenna for the 450 MHz Band

## DESCRIPTION

- CXL 70-5C/... is a 5 dBd, vertically polarised, omnidirectional base station and marine antenna, which covers the 380 – 470 MHz band in 4 models with up to 10 MHz overlap.
- The antenna is provided with our heavy-duty type "C" universal fixation bracket made of epoxy-coated, seawater resistant aluminium. The accompanying U-bolts and fittings are made of stainless steel.
- CXL 70-5C/... can be mounted on 27 to 65 mm dia. mast tubes, and it is possible to lead the cable either along the inside or on the outside of the mast tube.
- The carefully designed radiating element is sealed in a high-quality, conical glass fibre tube with low wind-load, which will ensure performance undisturbed by corrosive environments.
- To substantially reduce noise caused by atmospheric discharges, all metal parts in the antenna are DC-grounded. Consequently, the antenna shows a DC-short across the coaxial cable.
- The exceptional mechanical capabilities of this antenna ensure long dependable service in all environments.



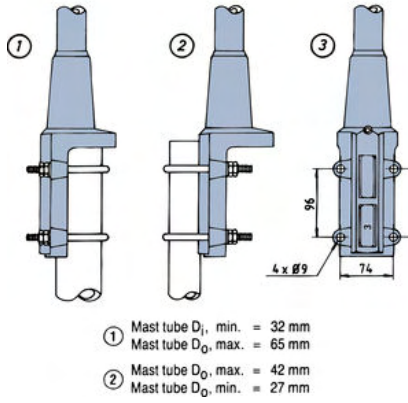
## ORDERING DESIGNATIONS

TYPE	PRODUCT NO.	FREQUENCY
CXL 70-5C/s	100 000 120	380 – 410 MHz
CXL 70-5C/f	100 000 115	406 – 430 MHz
CXL 70-5C/l	100 000 118	420 – 450 MHz
CXL 70-5C/h	100 000 117	440 – 470 MHz

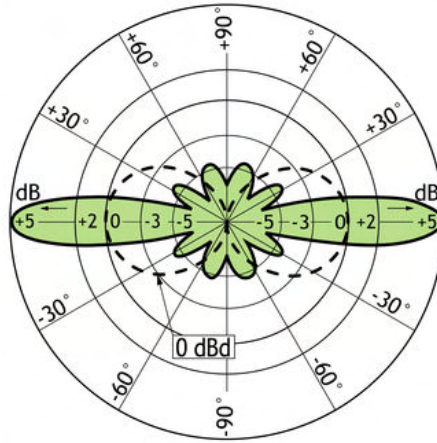
## SPECIFICATIONS

ELECTRICAL	
MODEL	CXL 70-5C/...
ANTENNA TYPE	Colinear, broad-banded
FREQUENCY	30 MHz wide frequency segments within 380 – 470 MHz.
IMPEDANCE	Nom. 50 $\Omega$
RADIATION	Omnidirectional
POLARISATION	Vertical
GAIN	7 dBi 5 dBd
HALF POWER BEAMWIDTH	18°
SWR	/s: < 1.5 @ 380-400 MHz, < 2 @ 400-410 MHz /f: < 1.5 @ 406-426 MHz, < 1.7 @ 426-430 MHz /l: < 1.5 @ 420-440 MHz, < 2 @ 440-450 MHz /h: < 1.5 @ 440-460 MHz, < 2 @ 460-470 MHz
MAX. POWER	150 W
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)
MECHANICAL	
TEMP. RANGE	-35°C → +70°C
CONNECTOR	N-female
WIND SURFACE	0.045 m <sup>2</sup>
WIND LOAD	57 N @ 160 km/h
COLOUR	Marine white
MATERIALS	Shroud: Polyurethane coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steel
TOTAL HEIGHT	Approx. 2.2 m (dep. on freq.)
DIA. IN TOP END	13 mm
DIA. IN BOTTOM END	25 mm
WEIGHT	Approx. 2.8 kg
MOUNTING	On 27–65 mm dia. mast tube

**MULTI-PURPOSE MOUNTING BRACKET**

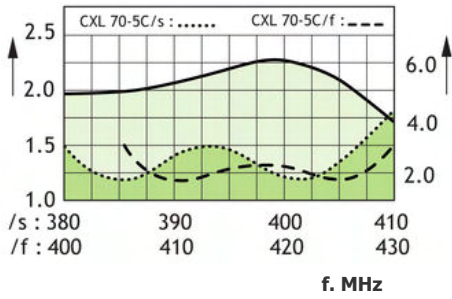


**TYPICAL RADIATION PATTERN (E-PLANE)**

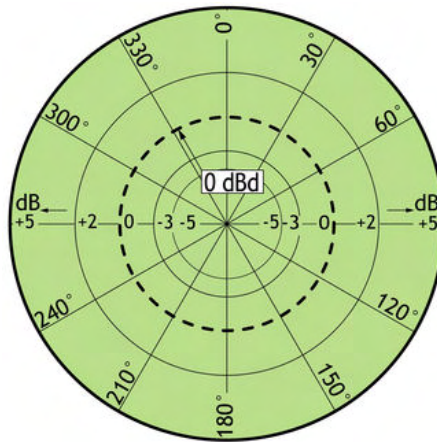


**TYPICAL GAIN AND SWR CURVES**

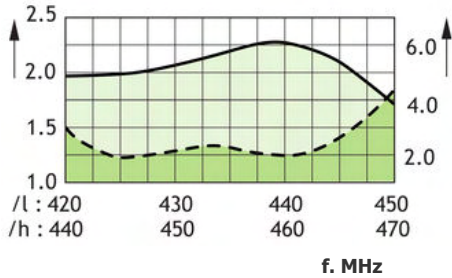
**SWR** **Gain dBd**



**TYPICAL RADIATION PATTERN (H-PLANE)**



**SWR** **Gain dBd**



PROCOM A/S reserve the right to amend specifications without prior notice.

07/09/2010