CXL 70-3LW/...

Lightweight, Medium Duty, 3 dBd Base Station and Marine Antenna for the 450 MHz Band

DESCRIPTION

- CXL 70-3LW/... is a 3 dBd, vertically polarised, omnidirectional base station and marine antenna, which covers the UHF band in 4 models with up to 10 MHz overlap.
- The antenna meets the demand for a medium duty, cost-effective antenna to be chosen, when the exceptional mechanical capabilities of our extremely rugged heavy-duty model CXL 70-3C/... are not needed.
- 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.
- Provided with the sturdy "LW" mast mount a lightweight, multipurpose, epoxy-coated mounting bracket made of non-corrosive
- The accompanying U-bolts and fittings are made of stainless steel.
- To be mounted on vertical or horizontal mast tubes, 16 to 54 mm in outer diameter.
- The cable can be led either on the outside or along the inside of the mast tube.
- Large bandwidth with respect to both SWR and gain.
- To substantially reduce noise caused by atmospherical discharges, all metal parts in the antenna are DC-grounded. Consequently, the antenna shows a DC-short across the coaxial cable.
- The CXL 70-3LW/... is a vibration-proof, lightweight, slim-line, corrosion resistant, modern style base station and marine antenna.



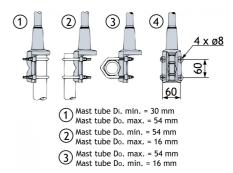
ORDERING DESIGNATIONS

TYPE	PRODUCT NO.	FREQUENCY
CXL 70-3LW/s	110000092	380 – 410 MHz
CXL 70-3LW/f	110000088	406 – 430 MHz
CXL 70-3LW/I	110000091	420 – 450 MHz
CXL 70-3LW/h	110000089	440 – 470 MHz

SPECIFICATIONS

ELECTRICAL	
MODEL	CXL 70-3LW/
ANTENNA TYPE	Collinear, broad-banded
FREQUENCY	30 MHz wide frequency segments within 380 – 470 MHz. See model survey.
IMPEDANCE	Nom. 50 Ω
RADIATION	Omnidirectional
POLARIZATION	Vertical
GAIN	5 dBi 3 dBd
HALFPOWER BEAMWIDTH	30°
BANDWIDTH	30 MHz
SWR	≤ 1.5
MAX. POWER	150 W
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)
MECHANICAL	
TEMP, RANGE	-35°C → +70°C
TEMP. KANGE	-33 C 7 +70 C
CONNECTOR	N-female
12.11.10.1102	
CONNECTOR	N-female
CONNECTOR WIND SURFACE	N-female 0.026 m ²
CONNECTOR WIND SURFACE WIND LOAD	N-female 0.026 m ² 33 N @ 160 km/h
CONNECTOR WIND SURFACE WIND LOAD COLOUR	N-female 0.026 m² 33 N @ 160 km/h Marine white Shroud: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated
CONNECTOR WIND SURFACE WIND LOAD COLOUR MATERIALS	N-female 0.026 m² 33 N @ 160 km/h Marine white Shroud: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steel
CONNECTOR WIND SURFACE WIND LOAD COLOUR MATERIALS TOTAL HEIGHT	N-female 0.026 m² 33 N @ 160 km/h Marine white Shroud: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steel Approx. 1.4 m (dep. on freq.)
CONNECTOR WIND SURFACE WIND LOAD COLOUR MATERIALS TOTAL HEIGHT DIA. IN TOP END	N-female 0.026 m² 33 N @ 160 km/h Marine white Shroud: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steel Approx. 1.4 m (dep. on freq.) 16 mm
CONNECTOR WIND SURFACE WIND LOAD COLOUR MATERIALS TOTAL HEIGHT DIA. IN TOP END DIA. IN BOTTOM END	N-female 0.026 m² 33 N @ 160 km/h Marine white Shroud: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steel Approx. 1.4 m (dep. on freq.) 16 mm 23 mm

MULTI-PURPOSE MOUNTING BRACKET



PLEASE NOTE

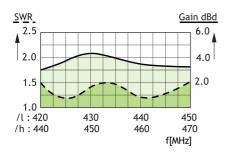
The antenna is delivered with a DC-connection between the antenna element and the mounting bracket.



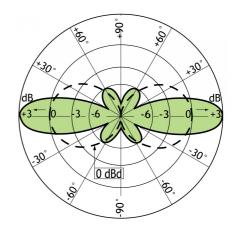
TYPICAL GAIN AND SWR CURVES

SWR Gain dBd 2.5 CXL 70-3LW/s :.... CXL 70-3LW/f :___ 6.0 2.0 4.0 2.0 1.5 1.0 /s:380 390 400 410 /f:400 410 420 430 f[MHz]

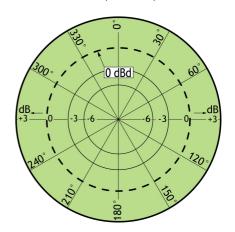
TYPICAL GAIN AND SWR CURVES



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)





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

12/11/13

