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 aluminium.
- 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.
- $\ensuremath{\,\bullet\,}$ 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

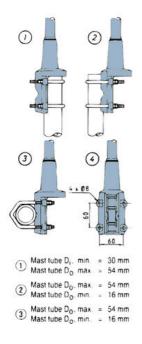
TYPE NO.	FREQUENCY
CXL 70-3LW/s	380 – 410 MHz
CXL 70-3LW/f	406 – 430 MHz
CXL 70-3LW/I	420 – 450 MHz
CXL 70-3LW/h	440 – 470 MHz

SPECIFICATIONS

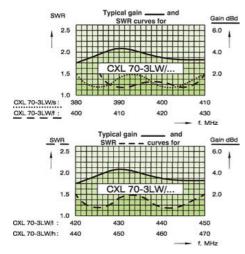
MODELCXL 70-3LW/ANTENNA TYPEColinear, broad-bandedFREQUENCY30 MHz wide frequency segments within 380-470 MHz. See model survey.IMPEDANCENom. 50 ΩRADIATIONOmnidirectionalPOLARISATIONVerticalGAIN5 dBi 3 dBdHALFPOWER BEAMWIDTH30°BAND WIDTH30 MHzSWR≤ 1.5MAX. POWER150 WANTISTATIC PROTECTIONAll metal parts DC-grounded (Connector shows a DC-short)MECHANICALVTEMP. RANGE-35°C → +70°CCONNECTORN-femaleWIND SURFACE0.026 m²WIND LOAD33 N @ 160 km/hCOLOURMarine whiteMATERIALSShroud: Polyurethane coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steelTOTAL HEIGHTApprox. 1.4 m (dep. on freq.)DIA. IN TOP END23 mmWEIGHTApprox. 1.3 kgMOUNTINGOn 16 to 54 mm dia. mast tube	ELECTRICAL	
FREQUENCY30 MHz wide frequency segments within 380-470 MHz. See model survey.IMPEDANCENom. 50 ΩRADIATIONOmnidirectionalPOLARISATIONVerticalGAIN5 dBi 3 dBdHALFPOWER BEAMWIDTH30°BAND WIDTH30 MHzSWR≤ 1.5MAX. POWER150 WANTISTATIC PROTECTIONAll metal parts DC-grounded (connector shows a DC-short)MECHANICALVerticalTEMP. RANGE-35°C + +70°CCONNECTORN-femaleWIND SURFACE0.026 m²WIND LOAD33 N @ 160 km/hCOLOURMarine whiteMATERIALSShroud: Polyurethane coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steelTOTAL HEIGHTApprox. 1.4 m (dep. on freq.)DIA. IN BOTTOM END23 mmWEIGHTApprox. 1.3 kg	MODEL	CXL 70-3LW/
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RADIATIONOmnidirectionalPOLARISATIONVerticalGAIN5 dBi 3 dBdHALFPOWER BEAMWIDTH30°BAND WIDTH30 MHzSWR≤ 1.5MAX. POWER150 WANTISTATIC PROTECTIONAll metal parts DC-grounded (Connector shows a DC-short)MECHANICAL-35°C → +70°CCONNECTORN-femaleWIND SURFACE0.026 m²WIND LOAD33 N @ 160 km/hCOLOURMarine whiteMATERIALSShroud: Polyurethane coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steelTOTAL HEIGHTApprox. 1.4 m (dep. on freq.)DIA. IN BOTTOM END23 mmWEIGHTApprox. 1.3 kg	FREQUENCY	
POLARISATIONVerticalGAIN5 dBi 3 dBdHALFPOWER BEAMWIDTH30°BAND WIDTH30 MHzBAND WIDTH30 MHzSWR≤ 1.5MAX. POWER150 WANTISTATIC PROTECTIONAll metal parts DC-grounded (Connector shows a DC-short)MECHANICALConnector shows a DC-short)MECHANICAL-35°C → +70°CCONNECTORN-femaleWIND SURFACE0.026 m²WIND LOAD33 N @ 160 km/hCOLOURMarine whiteMATERIALSShroud: Polyuethane coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steelTOTAL HEIGHTApprox. 1.4 m (dep. on freq.)DIA. IN BOTTOM END23 mmWEIGHTApprox. 1.3 kg	IMPEDANCE	Nom. 50 Ω
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SWR≤ 1.5MAX. POWER150 WANTISTATIC PROTECTIONAll metal parts DC-grounded (Connector shows a DC-short)MECHANICALTEMP. RANGE-35°C → +70°CCONNECTORN-femaleWIND SURFACE0.026 m²WIND LOAD33 N @ 160 km/hCOLOURMarine whiteMATERIALSShroud: Polyurethane coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steelTOTAL HEIGHTApprox. 1.4 m (dep. on freq.)DIA. IN TOP END16 mmWEIGHTApprox. 1.3 kg		30°
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PROTECTION(Connector shows a DC-short)MECHANICALTEMP. RANGE-35°C → +70°CCONNECTORN-femaleWIND SURFACE0.026 m²WIND LOAD33 N @ 160 km/hCOLOURMarine whiteMATERIALSShroud: Polyurethane coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steelTOTAL HEIGHTApprox. 1.4 m (dep. on freq.)DIA. IN TOP END16 mmDIA. IN BOTTOM END23 mmWEIGHTApprox. 1.3 kg	MAX. POWER	150 W
TEMP. RANGE-35°C → +70°CCONNECTORN-femaleWIND SURFACE0.026 m²WIND LOAD33 N @ 160 km/hCOLOURMarine whiteMATERIALSShroud: Polyurethane coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steelTOTAL HEIGHTApprox. 1.4 m (dep. on freq.)DIA. IN TOP END16 mmDIA. IN BOTTOM END23 mmWEIGHTApprox. 1.3 kg		
CONNECTORN-femaleWIND SURFACE0.026 m²WIND LOAD33 N @ 160 km/hCOLOURMarine whiteMATERIALSShroud: Polyurethane coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steelTOTAL HEIGHTApprox. 1.4 m (dep. on freq.)DIA. IN TOP END16 mmDIA. IN BOTTOM END23 mmWEIGHTApprox. 1.3 kg	MECHANICAL	
WIND SURFACE0.026 m²WIND LOAD33 N @ 160 km/hCOLOURMarine whiteMATERIALSShroud: Polyurethane coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steelTOTAL HEIGHTApprox. 1.4 m (dep. on freq.)DIA. IN TOP END16 mmDIA. IN BOTTOM END23 mmWEIGHTApprox. 1.3 kg	TEMP. RANGE	-35°C → +70°C
WIND LOAD33 N @ 160 km/hCOLOURMarine whiteMATERIALSShroud: Polyurethane coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steelTOTAL HEIGHTApprox. 1.4 m (dep. on freq.)DIA. IN TOP END16 mmDIA. IN BOTTOM END23 mmWEIGHTApprox. 1.3 kg	CONNECTOR	N-female
COLOURMarine whiteMATERIALSShroud: Polyurethane coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steelTOTAL HEIGHTApprox. 1.4 m (dep. on freq.)DIA. IN TOP END16 mmDIA. IN BOTTOM END23 mmWEIGHTApprox. 1.3 kg	WIND SURFACE	0.026 m ²
MATERIALSShroud: Polyurethane coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steelTOTAL HEIGHTApprox. 1.4 m (dep. on freq.)DIA. IN TOP END16 mmDIA. IN BOTTOM END23 mmWEIGHTApprox. 1.3 kg	WIND LOAD	33 N @ 160 km/h
Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steelTOTAL HEIGHTApprox. 1.4 m (dep. on freq.)DIA. IN TOP END16 mmDIA. IN BOTTOM END23 mmWEIGHTApprox. 1.3 kg	COLOUR	Marine white
DIA. IN TOP END16 mmDIA. IN BOTTOM END23 mmWEIGHTApprox. 1.3 kg	MATERIALS	Mounting bracket: Seawater resistant aluminium, epoxy-coated
DIA. IN BOTTOM END 23 mm WEIGHT Approx. 1.3 kg	TOTAL HEIGHT	Approx. 1.4 m (dep. on freq.)
WEIGHT Approx. 1.3 kg	DIA. IN TOP END	16 mm
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MOUNTING On 16 to 54 mm dia. mast tube	WEIGHT	Approx. 1.3 kg
	MOUNTING	On 16 to 54 mm dia. mast tube



MULTI-PURPOSE MOUNTING BRACKET



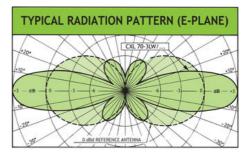
TYPICAL GAIN AND SWR CURVES

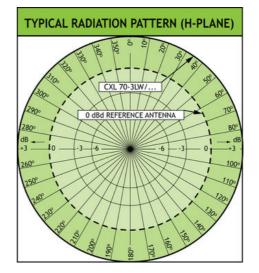


PLEASE NOTE

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

TYPICAL RADIATION PATTERN







PROCOM A/S reserve the right to amend specifications without prior notice. 25/01/2011

