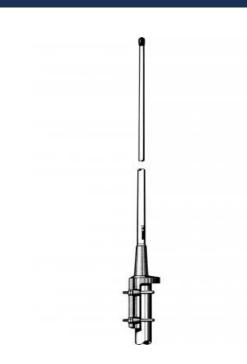
# AMPHENOL

## colinear, 3 dBd Base Station and Marine Antenna for the 450 MHz Band

#### DESCRIPTION

- CXL 70-3C/... is a 3 dBd, vertically polarized, omnidirectional base station and marine antenna, which covers the 340 – 470 MHz band in 4 models with up to 10 MHz overlap.
- The antenna is provided with our "C" universal fixation bracket made of epoxy-coated, seawater resistant aluminium. The accompanying U-bolts and fittings are made of stainless steel.
- CXL 70-3C/... 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 atmospherical 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 ensures long dependable service in all environments.



#### ORDERING

Туре	Product No.	Frequency
CXL 70-3C/s	100000113	380 - 410 MHz
CXL 70-3C/f	100000109	406 - 430 MHz
CXL 70-3C/I	100000112	420 - 450 MHz
CXL 70-3C/h	100000110	440 - 470 MHz
CXL 70-3C/ls	100000749	340 – 360 MHz

#### SPECIFICATIONS

Electrical	
Model	CXL 70-3C/
Frequency	30 MHz wide frequency segments within 380 - 470 MHz. See model survey.
Antenna Type	Collinear, broad-band
3 dB Beamwidth, H- Plane	Omnidirectional
Polarisation	Vertical
Pattern Type	Omnidirectional
3 dB Beamwidth, E- Plane	30 °
Impedance	50 Ω
Gain	3 dBd (5.2 dBi)
VSWR	< 1.5:1
Maximum Input Power	150 W
Bandwidth	30 MHz
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	

Mechanical				
Wind Area	0.032 sq. m / 0.34 sq. ft			
Connection(s)	N(f)			
Materials	Shroud: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steel			
Colour	White (RAL 9003)			
Height	1450 mm / 57.09 in.			
Wind Load	40 N (160km/h)			
Dia. At Top End	16 mm / 0.63 in.			
Weight	2.4 kg / 5.29 lb			
Dia. At Bottom End	25 mm / 0.98 in.			
Mounting	On 27 - 65 mm dia. mast tube			
Environmental				
Operating Temperature Range		-30°C to +70°C		
Survival Wind Speed		200 km/h		
Ingress Protection		IP66		

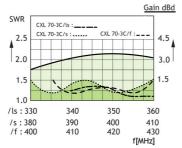


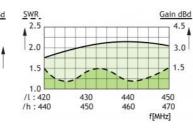
#### DIAGRAM

#### MULTI-PURPOSE MOUNTING BRACKET

Mast tube e32 - e65 mm Wast tube e27 - e42 mm

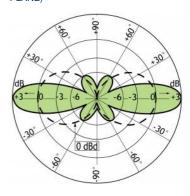
#### TYPICAL GAIN AND SWR CURVES

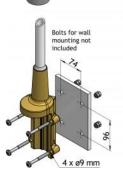




TYPICAL GAIN AND SWR CURVES

### TYPICAL RADIATION PATTERN (E-PLANE)





TYPICAL RADIATION PATTERN (H-PLANE)

