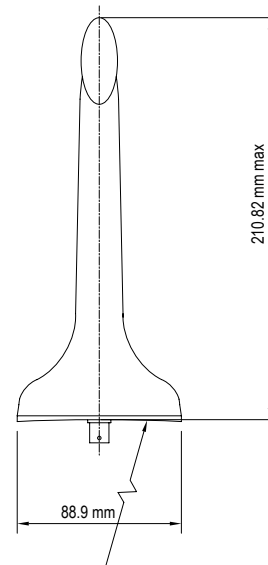
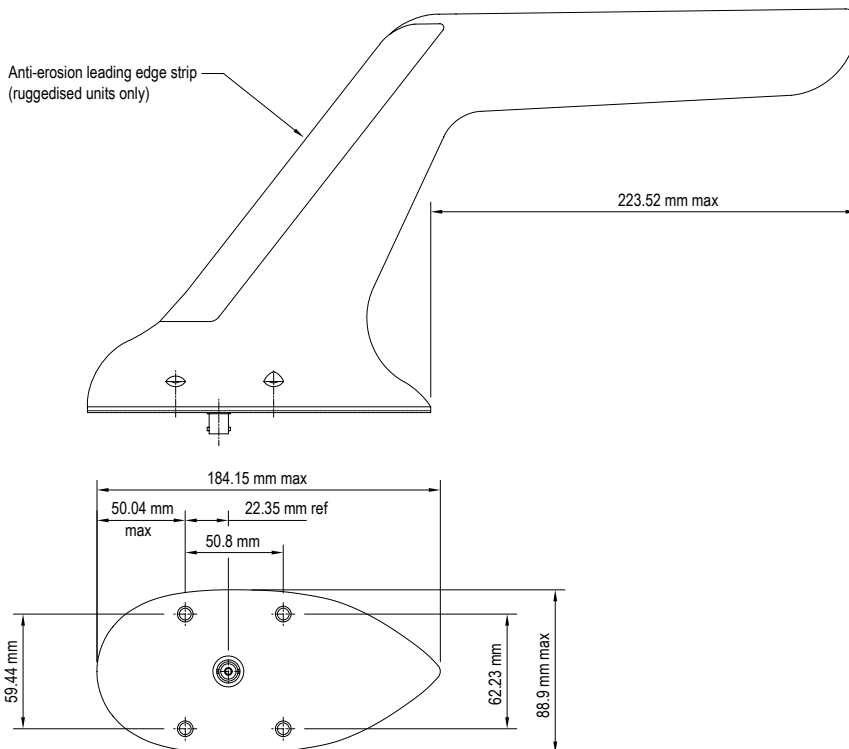
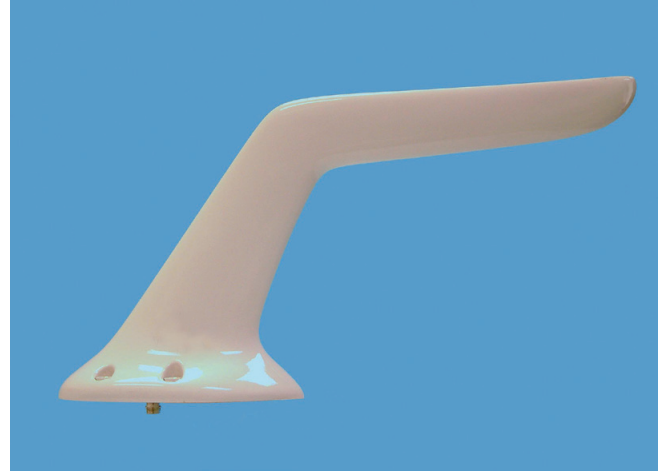


VHF Antenna

The 21-38 Series of VHF antennas are low profile blade antennas for general airborne application. The series covers a variety of frequency bandwidth requirements according to type.

If intended for homing use they are supplied as matched pairs, in which case a common serial number is suffixed by the letter A or B. The omission of this suffix indicates that the antenna is for communications use and that the phase stability requirements are not applicable.

The 21-38 antennas consist of a high performance GRP blade, housing an RF matching assembly, mounted on aluminium alloy baseplate with a single RF female connector.



On radiused antennas part number is defined on baseplate as follows:
36" rad = 21-38-1RF/36



VHF Antenna

ELECTRICAL

Type	21-38	21-38-1 21-38-1RF 21-38-1RF/XX*	21-38-2	21-38-3	21-38-4	21-38-5	21-38-6	21-38-8	21-38-10	21-38 (59 - 63)	
Frequency Range (MHz)¹	108 - 174	118-137	118-153	118-174	137-174	137-175 243 ± 3	121.5 ± 2 156.8 ± 2 243 ± 3	108-174	74-88	59-63	
Impedance (nominal)	50 Ω										
VSWR	2.5:1										
Radiation Pattern	Nominally Omnidirectional in Azimuth										
Gain	-3 dBi min	0 dBi min	-3 dBi min	-3 dBi min	+1 dBi min	135-175 (-1 dBi min) 243 -1 dBi (min)	121.5 ± 2 -1 dBi (min) 156.8 ± 2 -1 dBi (min) 243 ± 3 -0 dBi (min)	-4 dBi min	-8 dBi (ave min) -11 dBi (min)	-9 dBi (ave full band)	
Power Handling (max)	50 W cw	20 W cw	50 W cw				Rx only	50 W cw			
Phase (between pairs)	N/A					3° (max)	3° (max)	N/A			
Polarisation	Essentially vertical (when mounted vertically)										
Connectors	Type 'BNC' Female or 'TNC' Female if Part No. suffixed by 'T'										

ENVIRONMENTAL

Temperature and Altitude	RTCA DO-160E, Section 4, Category F2
Humidity	RTCA DO-160E, Section 6, Category C
Shock	RTCA DO-160C, Section 7 Operational: 6g,11ms Crash Safety (Impulse): 15g,11ms Crash Safety(Sustained): 12g,3secs
Vibration	RTCA DO-160C, Section 8, Categories C, J, L, M & Y
Waterproofness	RTCA DO-160C, Section 10, Category R
Fluid Susceptibility	RTCA DO-160C, Section 11, Category F

MECHANICAL

Dimensions (LxWxH)	408 x 89 x 210 mm
Weight	0.8 kg max

