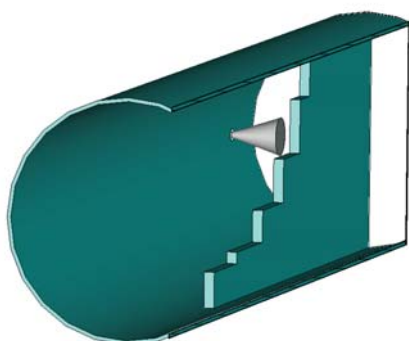




Primary Feed

SF13AA



SF13AA feed is designed as the prime-focus feed for circular polarization dish antenna systems. Feed has two ports, which enable both, right and left circular polarization with excellent circularity.

Feed frequency range covers whole 13cm band, from 2300 up to 2424 MHz. Feed may be used for EME or radioamateur satellite applications.

Feed radiation pattern without choke is giving optimum efficiency for parabolic reflector with $f/D = 0.42$ ratio. For this and various f/D dish ratio (from 0.25 up to 0.65), it is possible additional efficiency enhancement with choke. We are able to optimize and design choke according to customer's specification.

Feed is made of hardened aluminium alloy. The surfaces are passivated by chromate coating with high electric conductivity.

ELECTRICAL PARAMETERS

Frequency range [MHz]	2300-2424
Gain [dBic]	8.6
Radiation angle in E-plane for -10 dB [°]	126
Radiation angle in H-plane for -10 dB [°]	126
Polarization	RHCP, LHCP
Impedance [Ohm]	50
Impedance match TX port [dB]	better than 25, typ. 30@2363 MHz
Impedance match RX port [dB]	better than 25, typ. 30@2363 MHz
Port-to-port isolation [dB]	min. 26@2370 MHz
Max. Input power [W]	limited by connectors
Circularity [dB]	better than 0.5 dB in whole frequency range

MECHANICAL PARAMETERS

Connection	N
Wind Surface/ with 15 mm icing [m ²]	0.044 / 0.060
Wind Load/ with 15 mm icing [N]	70 / 96 @ 150 km/h
Length /Diameter [mm]	415 / 106
Weight [kg]	1.4

RADIATION PATTERNS

E-plane	033EA08
H-plane	033EA08

Radiation Patterns code is generated with VASSTOOL software

