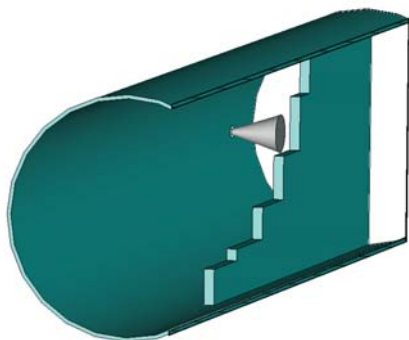




Primary Feed

SF23AA



SF23AA feed is designed as the primary feed for circular polarization dish antenna systems. Feed has two ports, which enable both, right and left circular polarization capability with excellent circularity. Feed's frequency range covers whole 23cm EU band, from 1240 up to 1300 MHz.

Feed's radiation pattern without choke is giving optimum efficiency for parabolic dish 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.

ELECTRICAL PARAMETERS

Frequency range [MHz]	1240-1300
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@1296 MHz
Impedance match RX port [dB]	better than 25, typ. 30@1296 MHz
Port-to-port isolation [dB]	min. 25@1296 MHz
Max. Input power [W]	limited by connectors
Circularity [dB]	better than 0.2@1296 MHz

MECHANICAL PARAMETERS

Connection	TX port - N or 7/16, RX port - N
Wind Surface/ with 15 mm icing [m ²]	0.141 / 0.170
Wind Load/ with 15 mm icing [N]	224 / 270 @ 150 km/h
Length /Diameter [mm]	740 / 190
Weight [kg]	3.2

RADIATION PATTERNS

E-plane	033EA08
H-plane	033EA08

Radiation Patterns code is generated with VAS9700L software

