

NEUTRAL PARTICLE BEAM DUMP

- SEPARATION OF NEUTRAL PARTICLES FROM CHARGED PARTICLE BEAMS-



The Neutral Particle Beam Dump is applied for the separation of neutral particles like atoms or molecules from beams of charged particles. It consists of an electrostatic deflector with two segments. The electrostatic deflector enables the deflection of charged particle beams up to $8\,\mathrm{keV}$ per charge state in horizontal direction by an angle of 25° . The neutral particles are not deflected and dumped on the electrode surfaces which are mounted on thermally conducting insulator materials.

The standard system is delivered incl. vacuum chamber and HV feedthroughs. Power supplies and HV cables are optionally available. If necessary, an active water cooling system can be integrated for high-power applications.

Neutral Beam Dump Parameters	
maximum electrode voltage	$5\mathrm{kV}$ (higher voltages on request)
maximum beam energy	$8\mathrm{keV}\!\cdot\!\mathrm{q}$ (higher beam energies on request)
deflection angle	25°
dimensions (length x width x height)	$190\mathrm{mm} \ge 160\mathrm{mm} \ge 160\mathrm{mm}$
beamline flange	DN 63 CF (other flange types on request)
max. bake-out temperature	$150^{\circ}\mathrm{C}$
vacuum conditions during operation	from $1 \cdot 10^{-10}$ mbar up to $1 \cdot 10^{-6}$ mbar

CONTACT

Headquarters Großröhrsdorf

Dreebit GmbH Dr. Daniel Kost Southwallstr. 5 01900 Großröhrsdorf, Germany

Phone: +49-35952-420-236 Cell: +49-174-2610-366 E-Mail: ibt.sales@dreebit.com





