

## ONYX® 12 DC | Mag. II Magnetics

### US Specifications

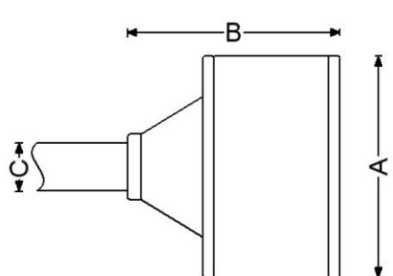
#### Construction

Anode	304 Stainless Steel
Cathode Body	OFHC Copper
Insulator	PTFE/CTFE

#### Cooling Requirements

Flow Rate at Maximum Power	7 GPM
Maximum Input Pressure, Open Drain	60 psi
Maximum Input Temperature	68° F

#### Dimensions

A	14.125"	
B	6.375"	
C	3.0"	

#### General

Magnetic Enhancement	Permanent (NdFeB) Encapsulated
Maximum Temperature	212° F
Source to Substrate Distance	2.000" – 12.000"
Weight, Approximate Without Options	120 lbs.

#### Maximum Sputtering Power \*

Cathode Voltage	100 – 1500 Volts
Discharge Current	40 Amps
Direct Cooled Mode, DC	28 kW
Direct Cooled Mode, RF	Consult Factory
Operating Pressure	0.5 – 50 mTorr

## Mounting Standard

Power	Screw Termination
Stem, Outer Dimension Tubing	3.0"
Water Outer Dimension Tubing	0.75"

## Target

Cooling	Direct/ Bonded
Outer Diameter	12"
Form	Circular / Planar
Thickness, Magnetic	0.25 Nickel (Ni)
Thickness, Non-Magnetic	0.25 - .75"

## Specifications Disclaimer

- All Angstrom Sciences NdFeB magnets are totally encapsulated and protected from degradation by water.
- \* Maximum power for cathode only, a target material's properties, such as, thermal and electrical conductivity may limit the maximum process power level.
- Specifications are subject to change without notice.
- Typical performance. Results may vary with process parameters such as pressure, flow rate, target material, substrate rotation, etc.

Please contact us for specifications regarding your application.  
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