

## ONYX® 12 Rotary | Standard Magnetics

### Metric Specifications

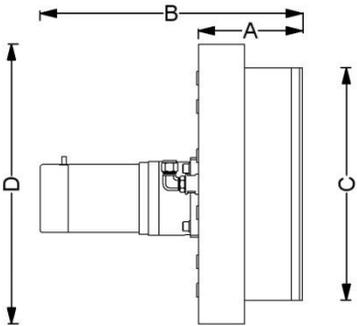
#### Construction

|              |                     |
|--------------|---------------------|
| Anode        | 304 Stainless Steel |
| Cathode Body | 304 Stainless Steel |
| Insulator    | PTFE/PEI/CTFE       |

#### Cooling Requirements

|                                    |          |
|------------------------------------|----------|
| Flow Rate at Maximum Power         | 26.5 LPM |
| Maximum Input Pressure, Open Drain | 4 Bar    |
| Maximum Input Temperature          | 20° C    |

#### Dimensions

|   |         |   |
|---|---------|---|
| A | 165mm   |  |
| B | 415.5mm |   |
| C | 370.4mm |   |
| D | 445.8mm |   |

#### General

|                                     |                                |
|-------------------------------------|--------------------------------|
| Magnetic Enhancement                | Permanent (NdFeB) Encapsulated |
| Maximum Temperature                 | 100° C                         |
| Source to Substrate Distance        | 50-300mm                       |
| Weight, Approximate Without Options | 55kg                           |

#### Maximum Sputtering Power \*

|                        |                  |
|------------------------|------------------|
| Cathode Voltage        | 100 – 1500 Volts |
| Discharge Current      | 40 Amps          |
| Direct Cooled Mode, DC | 20 kW            |
| Direct Cooled Mode, RF | Consult Factory  |
| Operating Pressure     | 0.07 – 6.7Pa     |

## Mounting Standard

|                              |                   |
|------------------------------|-------------------|
| Power                        | Screw Termination |
| Flange                       | DN320-LF          |
| Water Outer Dimension Tubing | 19mm              |

## Target

|                |                   |
|----------------|-------------------|
| Cooling        | Direct/ Bonded    |
| Outer Diameter | 305mm             |
| Form           | Circular / Planar |
| Thickness      | 6-19mm            |

## 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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