

# ONYX® 2" IC Target, MAG.II

## Metric Specifications

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|----|------|-----|-----|----|
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|    |      |     |     |    |

| Anode        | 304 Stainless Steel |
|--------------|---------------------|
| Cathode Body | OFHC Copper         |
| Insulator    | CTFE                |

# **Cooling Requirements**

| Flow Rate at Maximum Power         | 0.05 LPS |
|------------------------------------|----------|
| Maximum Input Pressure, Open Drain | 4 BAR    |
| Maximum Input Temperature          | 20 °C    |

#### **Dimensions**

| Δ | 71.5 mm     | ₩ R → |
|---|-------------|-------|
|   | 7 1.5 11111 |       |
| В | 71.8 mm     |       |
| С | 19.1 mm     |       |
|   |             |       |
|   |             | ١١.   |

#### General

| Magnetic Enhancement                | Permanent (NdFeB) Encapsulated |
|-------------------------------------|--------------------------------|
| Maximum Temperature                 | 100 °C                         |
| Source to Substrate Distance        | 50.8 mm - 304.8 mm             |
| Weight, Approximate Without Options | 1.4 kg                         |

## Maximum Sputtering Power \*

| Cathode Voltage 100 -          | 1500 Volts |
|--------------------------------|------------|
| Discharge Current 0.1 - 2      | 2 Amps     |
| Indirect Cooled Mode, DC 1 kW  |            |
| Indirect Cooled Mode, RF 600 V | /atts      |
| Operating Pressure 0.5 - 5     | 50 mTorr   |

#### Mounting, Standard

| Power Cable, DC               | 1675A                               |
|-------------------------------|-------------------------------------|
| Power Cable, RF               | 1675A                               |
| Power Connector, DC           | Type N Connector, External Threads  |
| Power Connector, RF           | Type HN Connector, External Threads |
| Stem, Outer Dimension Tubing  | 19.1 mm                             |
| Water, Outer Dimension Tubing | 6.4 mm                              |
|                               |                                     |

#### Target

| Cooling                 | Indirect          |
|-------------------------|-------------------|
| Diameter                | 50.8 mm           |
| Form                    | Circular / Planar |
| Thickness, Magnetic     | Up to 3.2 mm Ni   |
| Thickness, Non-Magnetic | 0.3 mm - 9.6 mm   |

## Specifications Disclaimer

- All Angstrom Sciences NdFeB magnets are totally encapsulated and protected from degradation by water.
- All sources are available in external configurations.
- Magnetic material calculations are optimized with Nickel targets.
- \* Maximum power for cathode only, a target material's properties, such as, thermal and electrical conductivity may limit the maximum process power level.
- Some custom-engineered and specialty magnetrons may not meet standard specifications.
- Specifications are subject to change without notice.
- Thickness will vary depending upon coercivity of target material.
- Typical performance. Results may vary with process parameters such as pressure, flow rate, target material, and substrate rotation, etc.

Please contact us for specifications regarding your application.

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