



MUHV50 X-ray Tube

Applications

Materials Characterization and Identification (XRF)

- Metal and alloy sorting
- Mining and geology
- Environmental analysis
- Lead in paint
- Regulatory (RoHS/WEEE)
- Art and archeometry
- R&D

X-ray Imaging

- Medical R&D, small animal imaging
- Security
- Radiographic inspection

Moxtek® manufactures low-power, miniature x-ray sources for a variety of applications including handheld and benchtop instruments. Moxtek sources are small, lightweight, and can be packaged into custom enclosures. The MAGNUM® x-ray source produces high output with a small spot size.

Features	Benefits
Small, compact design	Close coupling of source to detector
Lightweight	Portable, versatile, easy to integrate
Stable output	Enables precise calibrated measurements
Low power consumption	Long battery life
Low spectral contamination	High precision of analysis
High x-ray output	Short sampling time
Customized configurations	Flexible form factor

40kV MAGNUM Specifications

Mechanical Specifications:

Tube Type: Metal-ceramic

Cathode Type: Tungsten filament

Operating Temperature: -10 to +50 °C

Storage Temperature: -25 to +85 °C

Cooling: Conduction

HV Insulation: Silicone potting

Weight: 1 lb. (450g)

Available Targets: Ag, W, Au, Pd, Ta, Rh

X-ray Tube Characteristics:

HV Polarity: Grounded anode

High Voltage: -4 to -40kV

Beam Current: 0 to 0.10mA

Total Power: 4.0 watts (maximum)

Stability: <1.0% RSD

Window: Beryllium, 0.25mm thick

Battery Input Power: 7-12 VDC



Ordering Information

Part Number Anode Type

TUB00045-AG1	Ag
TUB00045-W01	W
TUB00045-AU1	Au
TUB00045-PD1	Pd
TUB00045-TA1	Ta
TUB00045-RH2	Rh

Standard Package

- MAGNUM® tube potted in a brass shield
- High voltage power supply
- Standard high voltage wiring length of 11.5 inches

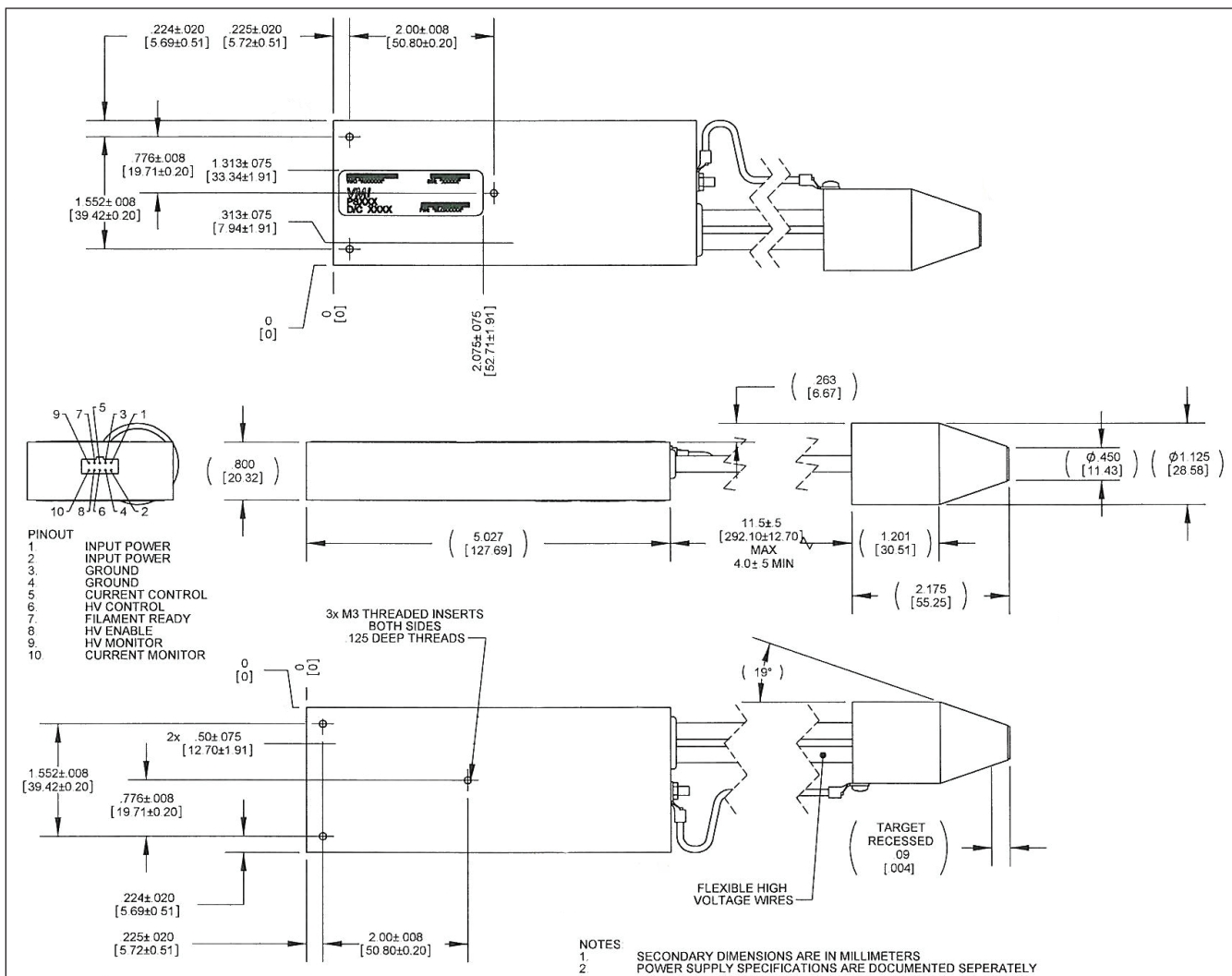
Source Controller Options

- FTC-200 Controller. Source can also operate using analog DC voltage signals.

Customizable Options

- Variable high voltage wiring length (4.0 to 11.5 inches)
- Target materials

40kV MAGNUM® Mechanical Drawing



452 West 1260 North / Orem, UT 84057
 Phone 801.225.0930 / Fax 801.221.1121
www.moxtek.com
info@moxtek.com