

X-RAY Sources

40kV MAGNUM[®] X-ray Tubes



Applications

Portable XRF

- RoHS/WEEE
- Alloy sorting
- Soil analysis
- Environmental
- Lead in paint
- Plastics analysis
- Material ID
- Security

Handheld Imaging

- Medical/Dental
- Material ID
- Security

Bench top EDXRF

Instrument Calibration

Micro-Fluorescence

Micro-Diffraction

The MAGNUM[®] 40kV x-ray tube is a low power, miniature x-ray tube used for a variety of applications including handheld and benchtop instrumentation. MAGNUM x-ray tubes are small, lightweight, and can be packaged into custom enclosures.

Features

Small, compact design
Lightweight
Close coupling of collimator and target
Stable output
Low power consumption
Low spectral contamination
High x-ray output
Customizable configurations

Benefits

Close coupling of source to detector
Portable, versatile, comfortable
Higher x-ray output with lower power tube
Low detection limit
Long battery life
Clean spectrum
Short sampling time
Flexible form factor

Standard Package Includes:

- Transmission Target (End Window)
- MAGNUM tube potted in a brass shield
- High voltage power supply
- High voltage wire length is 11.5 inches

Customizable Options:

- Target materials and thickness
- Tube shield design
- Power supply packaging
- High voltage wiring length (minimum 4.0 inches; maximum 11.5 inches)
- Integrated tube and power supply
- DB9 Cable (Manufacturer: 3M Part Number: 3473)



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MOXTEK[®] www.moxtek.com

40 kV MAGNUM

Mechanical Specifications

Tube Type:	Metal-ceramic
Cathode Type:	Tungsten filament
Ambient Temperature:	-10° to +50° C
Storage Temperature:	-40° to +60° C
Cooling:	Conduction
HV Insulation:	Silicone potting
Weight:	≈1 lb. (450g)
Available Targets:	Ag, W, Pd, Rh

40 kV MAGNUM

X-ray Tube Characteristics

HV Polarity:	Grounded anode
High Voltage Potential:	4 to 40 kV
Beam Current:	0 to 0.10 mA
Maximum Power:	4.0 watts
Focal Spot Size:	Typical ~ 400 μm
Stability:	< 1.0% RSD
Windows:	Beryllium, 0.25 mm thick
Input Power:	7W (7-10 VDC)
Standard Warranty	One year

40kV Ordering Information

Part Number	Anode Target Material
TUB00045-1	Ag
TUB00045-2	W
TUB00045-4	Pd
TUB00045-7	Rh

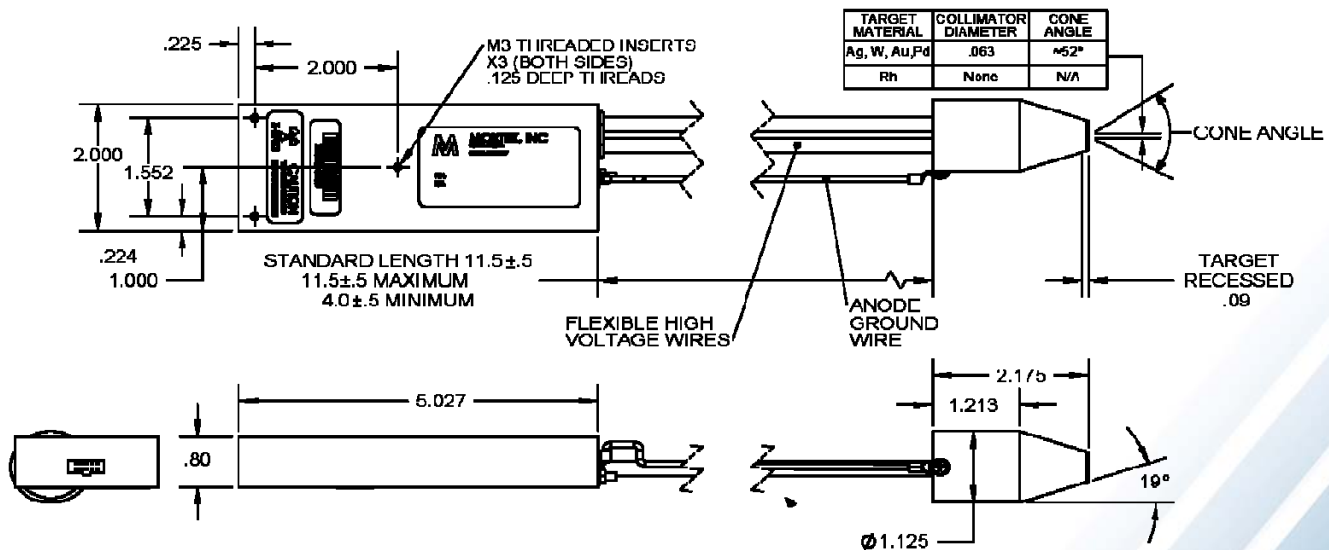
Tube Control Options

- TUB00051 FTC-200 Controller
- ASM00362 DB9 Cable

Please contact MOXTEK for price and delivery information.

See Moxtek for Target thicknesses

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