

**ANALIX™
AFX-76H-Rh**

- ◆ The ANALIX AFX-76H-Rh, a water cooled, grounded cathode X-ray tube designed for X-ray fluorescence spectrometry.
- ◆ The maximum input power 3.0 kW.
- ◆ Suitable for the microanalysis of light metals such as Ca and K contained in wasted water.
- ◆ Interchangeable with the Eimac tube, type OEG-76H.

General Data

Electrical:

Circuit:

High Voltage Generator	Constant Potential High-Voltage Generator
Grounding	Cathode grounding
Maximum Operating Tube Voltage	75 kV
Focal Spot Size	φ 14 mm
Starting Tube Voltage	Less than 20 kV

Mechanical:

Dimensions	See Dimensional Outline
Overall Length	459 mm
Diameter of Maximum Part	φ 124 mm
Target:	
Angle	90 degrees to the tube axis.
Material	Rh
Inherent Filtration	127 μm Beryllium
Weight	Approx. 9.5 kg
Cooling:	
Anode Target	Water cooled
Water Quantity	Minimum 2.4 L/min
Water	Demineralized, deoxygenated and high resistibility water
Water Resistibility	500 kΩ·cm Min.
Maximum Inlet Temperature	45°C
Maximum Water Pressure	490 kPa
Pressure Drop	68.6 kPa at 2.4 L/min
Cathode Jacket	Water cooled
Water Quantity	Minimum 2.0 L/min
Water	Tap water
Maximum Inlet Temperature	55 °C
Maximum Water Pressure	490 kPa
Pressure Drop	49 kPa at 2.0 L/min

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Absolute Maximum and Minimum Ratings
(At any time, these values must not be exceeded.)

Maximum X-ray Tube Voltage	75 kV
Minimum X-ray Tube Voltage	20 kV
Maximum X-ray Tube Current	100 mA
Maximum Filament Current	10 A
Filament Frequency Limits	AC (Sine Wave) 0 ~ 23 kHz
Maximum Input	3.0 kW

Environmental Limits

Operating Limits:

Temperature	10 ~ 40 °C
Humidity	30 ~ 85 % (No condensation)
Atmospheric Pressure	70 ~ 106 kPa

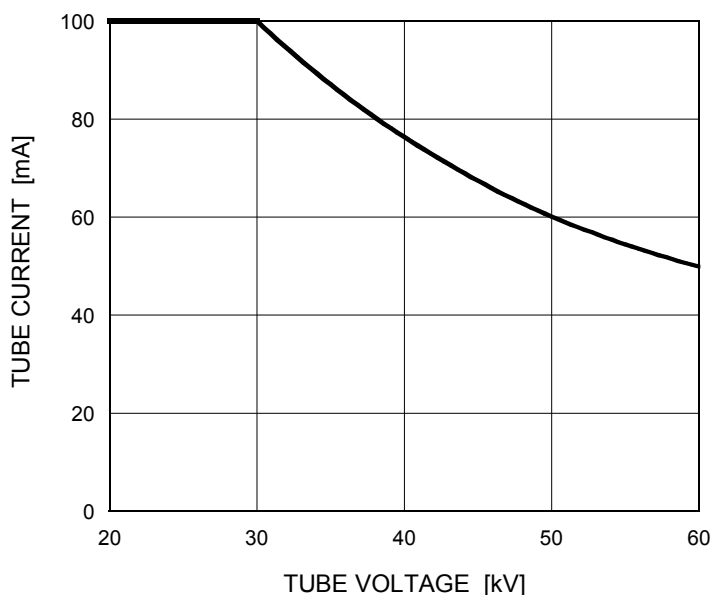
Shipping and Storage Limits:

Temperature	-18 ~ 60 °C
Humidity	20 ~ 90 % (No condensation)
Atmospheric Pressure	50 ~ 106 kPa

Maximum Rating Charts (Absolute Maximum Rating Charts)

Constant Potential High-Voltage Generator

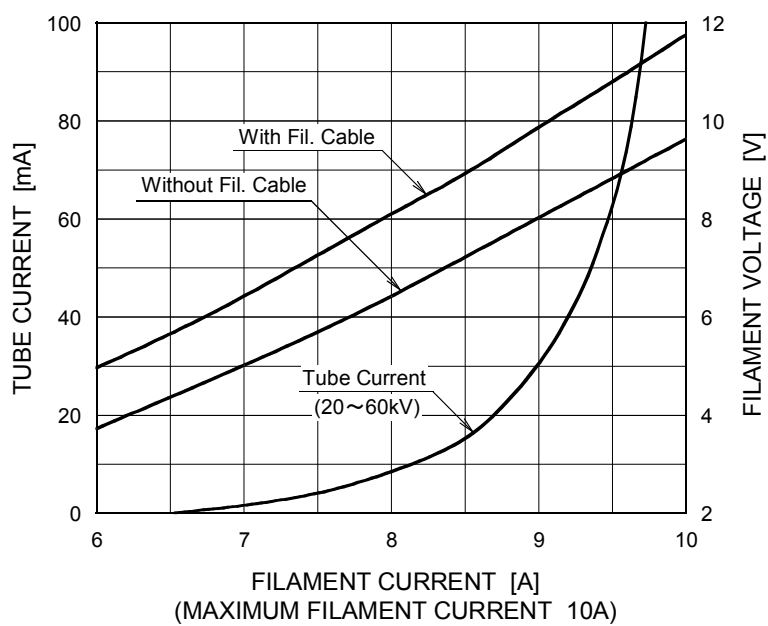
Focal Spot: ϕ 14 mm



Emission & Filament Characteristics

Constant Potential High-Voltage Generator

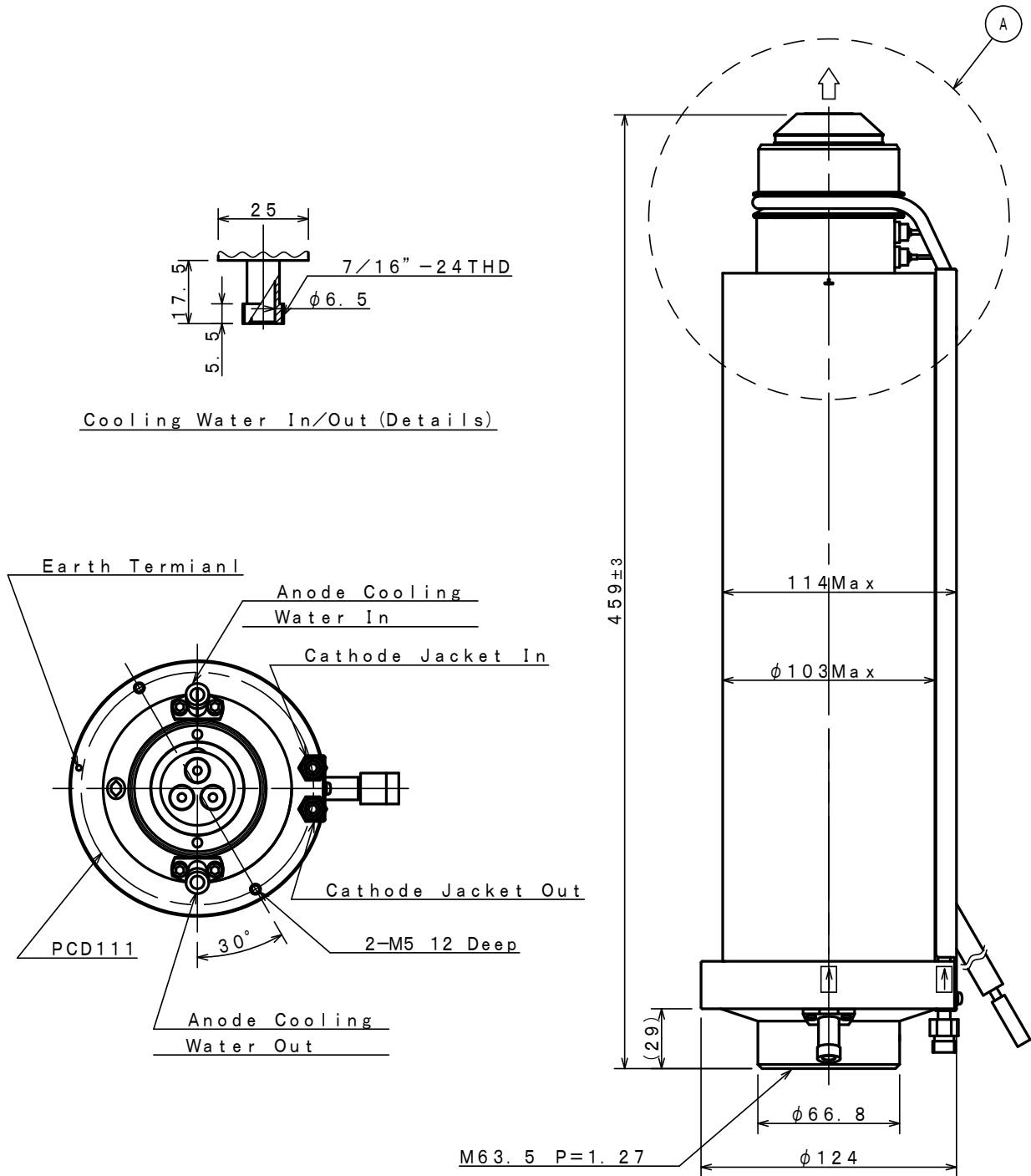
Focal Spot: ϕ 14 mm



Note: This graph indicates typical characteristics.

Dimensional Outline (1)

Unit: mm



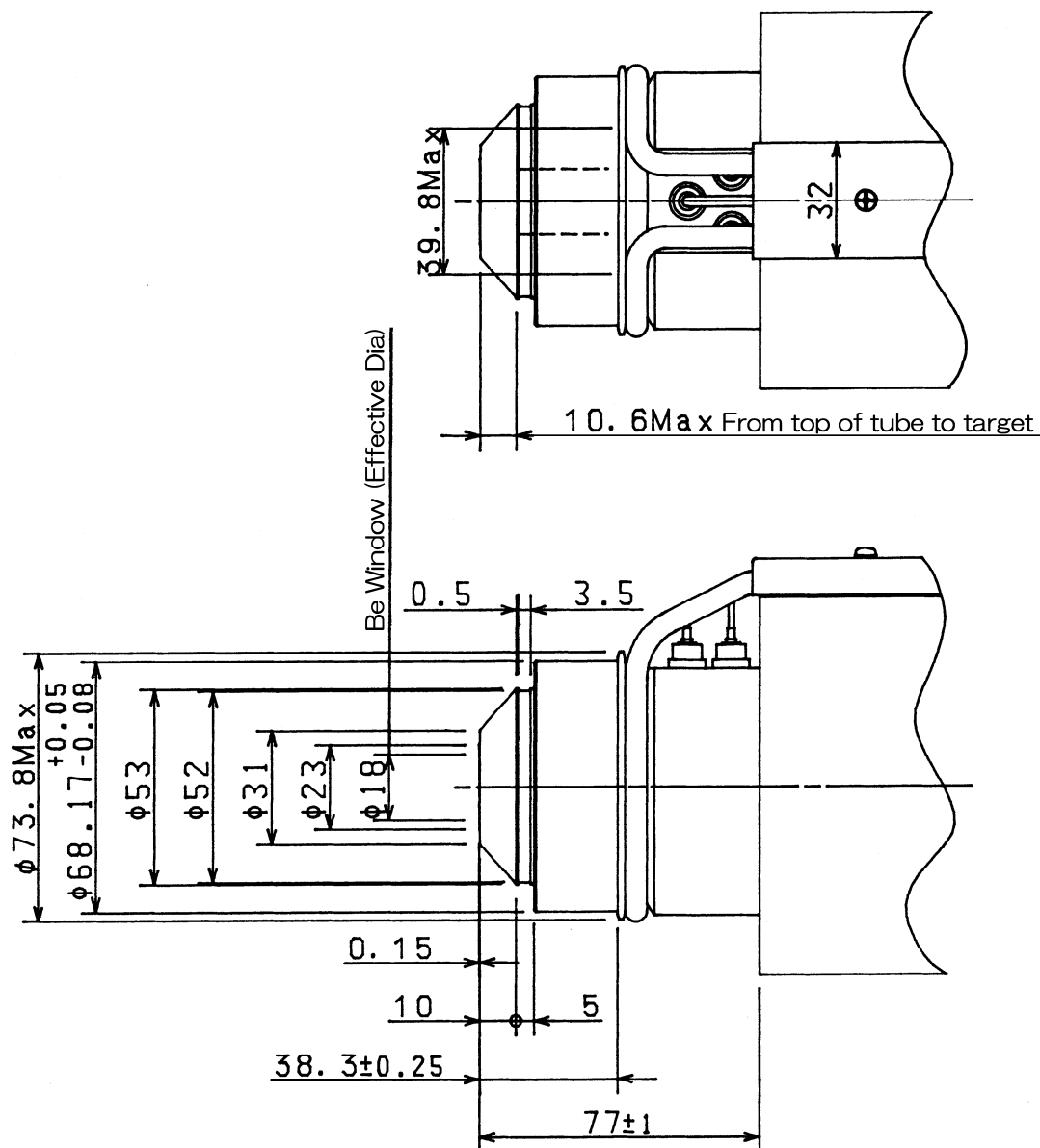
Note:

1. Mark indicates the direction of central X-ray.
2. Filamet cable terminal: Amp power lock connector.
(No. 108-11026, UL No. E28476) Made by AMP (Japan)
3. High voltage cable receptacle: IEC60526 Type.

Dimensional Outline (2)

Unit: mm

Ⓐ Enlargement



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·Toshiba Electron Tubes & Devices Co., Ltd. meets the Environmental Management System Standard, ISO14001.

·Toshiba Electron Tubes & Devices Co., Ltd. meets internationally recognized Standards for Quality Management System ISO9001, ISO13485.