

**ANALIX™  
AFX-66D**

- ◆ The ANALIX AFX-66D, a water cooled, grounded anode X-ray tube designed for X-ray fluorescence spectrometry.
- ◆ The maximum input power 3.0 kW.

**General Data****Electrical:**

Circuit:

High Voltage Generator .....	Constant Potential High-Voltage Generator
Grounding .....	Anode Grounded
Nominal X-ray Tube Voltage .....	60 kV
Focal Spot .....	7 × 7.5 mm
Starting Tube Voltage .....	20 kV or Less

**Mechanical:**

Dimensions:

Overall Length .....	497.5 mm
Diameter of Maximum Part .....	Maximum $\phi$ 90 mm

Target:

Angle .....	26 degrees to the tube axis
Material .....	Cr, Mo, W

Inherent Filtration:

Cr Target .....	0.3 mm Beryllium
Mo, W Target .....	1.0 mm Beryllium
X-ray Beam Angle .....	Approx. 35°
X-ray Port .....	1 Direction
Weight .....	Approx. 15 kg
Cooling Method .....	Water Cooled
Cooling Water .....	Minimum 3.5 l/min
Maximum Input Temperature .....	35 °C
Maximum Water Pressure .....	490 kPa

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

Maximum X-ray Tube Voltage .....	60 kV
Minimum X-ray Tube Voltage .....	20 kV
Maximum X-ray Tube Current .....	80 mA
Maximum Filament Current .....	4.5 A
Filament Frequency Limits .....	20 kHz or Less
Maximum Input .....	3.0 kW

## Environmental Limits

### Operating Limits:

Temperature ..... 10 ~ 40 °C

Humidity ..... 85 % or Less  
(No condensation)

Atmospheric Pressure ..... 70 ~ 106 kPa

Vibration and Shock ..... Use it in environment without vibration and a shock

### Shipping and Storage Limits:

Temperature ..... -20 ~ 70 °C

Humidity ..... 85 % or Less  
(No condensation)

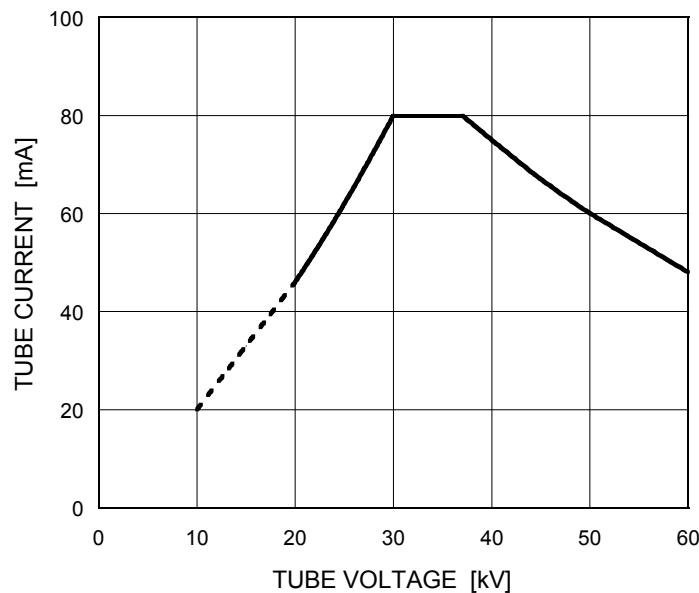
Atmospheric Pressure ..... 50 ~ 106 kPa

Vibration ..... 4.9 m/s<sup>2</sup> or Less

Shock ..... 98 m/s<sup>2</sup> or Less

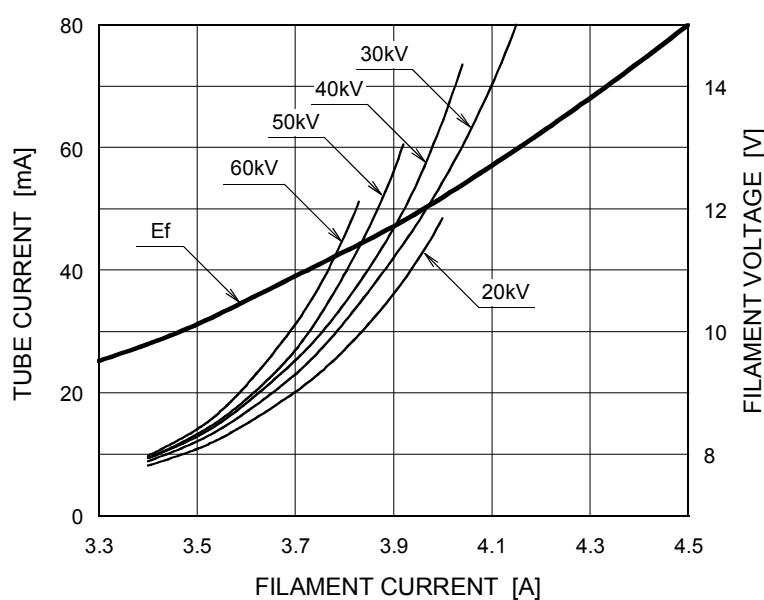
## Maximum Rating Charts (Absolute Maximum Rating Charts)

Constant Potential High-Voltage Generator



## Tube Current & Filament Characteristics

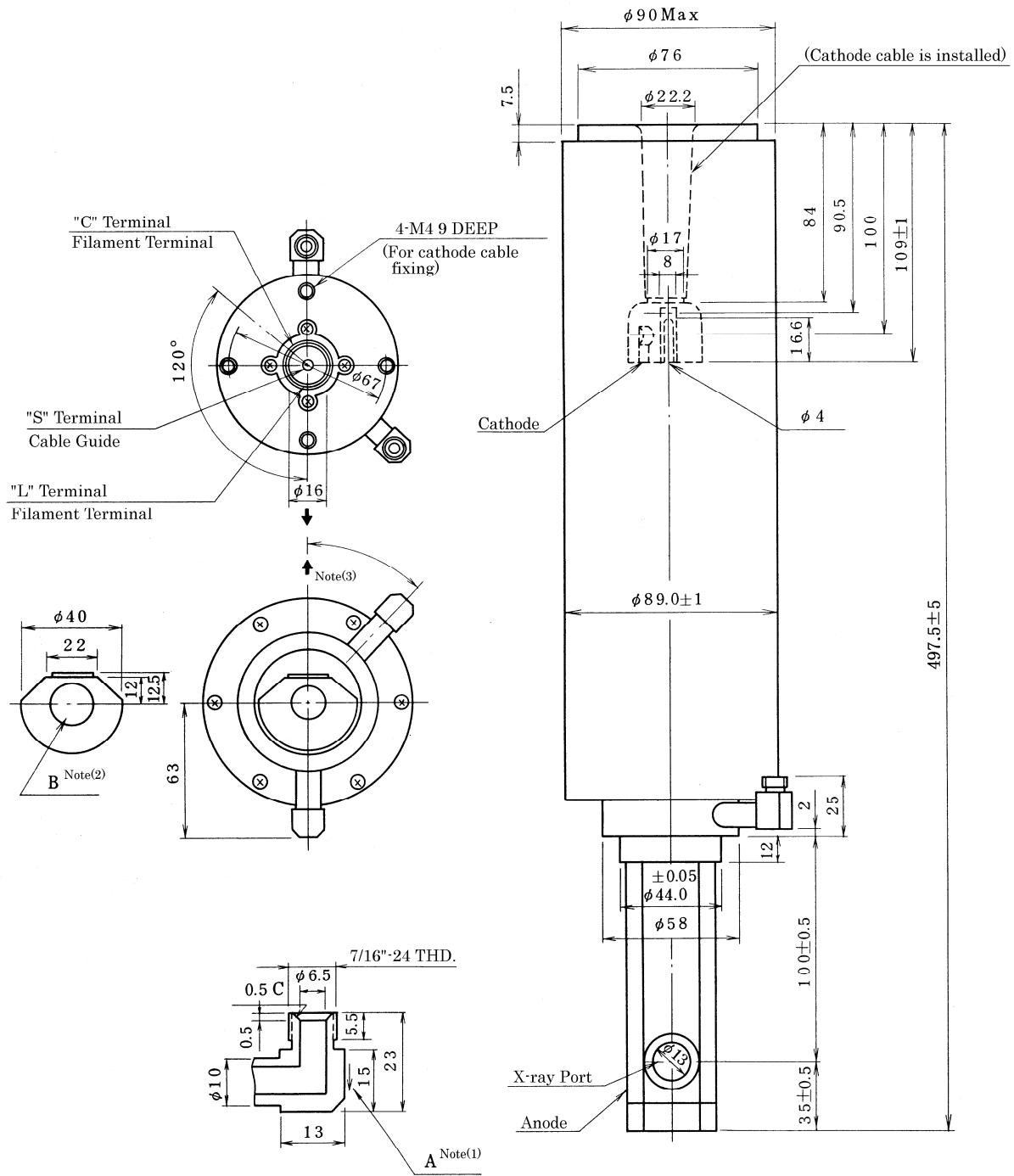
Constant Potential High-Voltage Generator



For Reference Only

## **Dimensional Outline**

Unit: mm



## Note

- (1) The mark "A" gives a direction of water-flow.
  - (2) In the part of "B" the material of target is signified with the chemical element symbol.
  - (3) Mark → indicates the direction of central X-ray.



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• The head office of Canon Electron Tubes & Devices Co., Ltd. has been certified to meet all the requirements of Environmental Management System ISO14001.  
• Canon Electron Tubes & Devices Co., Ltd. has been certified to meet all the requirements of Quality Management Systems ISO9001 and ISO13485.  
Product scope is referred to the following URL. <https://etd.canon/eng/company/quality.htm>.