

**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
Maximum Operating Tube Voltage	60 kV
Focal Spot Size	7 × 7.5 mm
Starting Tube Voltage	Less than 20 kV

Mechanical:

Dimensions	See Dimensional Outline
Overall Length	497 mm
Diameter of Maximum Part	φ 90 mm
Target:	
Angle	26°
Material	Au, Cr, Mo, Rh, W
Inherent Filtration:	
Au, Mo, W	1.0 mm Beryllium
Rh, Cr	0.3 mm Beryllium
X-ray Beam Angle	Approx. 35°
X-ray Port	1 Directions
Weight	Approx. 15 kg
Cooling:	Water cooled
Water Quantity	Minimum 3.5 L / min
Maximum Inlet Temperature	35°C
Maximum Water Pressure	785 kPa
Pressure drop	Approx. 49 kPa

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Absolute 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 Voltage (at 4.5 A)	11.1 ~ 14.9 V
Filament Frequency Limits	DC or AC (Sine Wave) 0 ~ 20 kHz
Maximum Input	3.0 kW

Environmental Limits

Operating Limits:

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

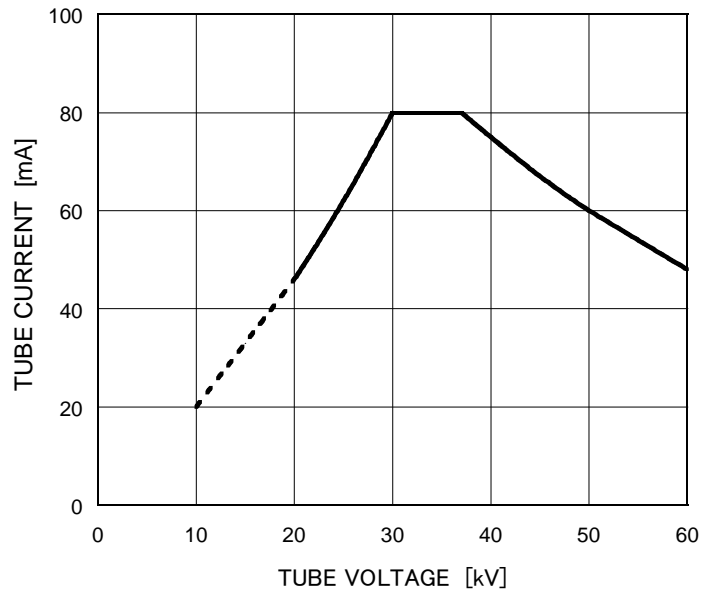
Shipping and Storage Limits:

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

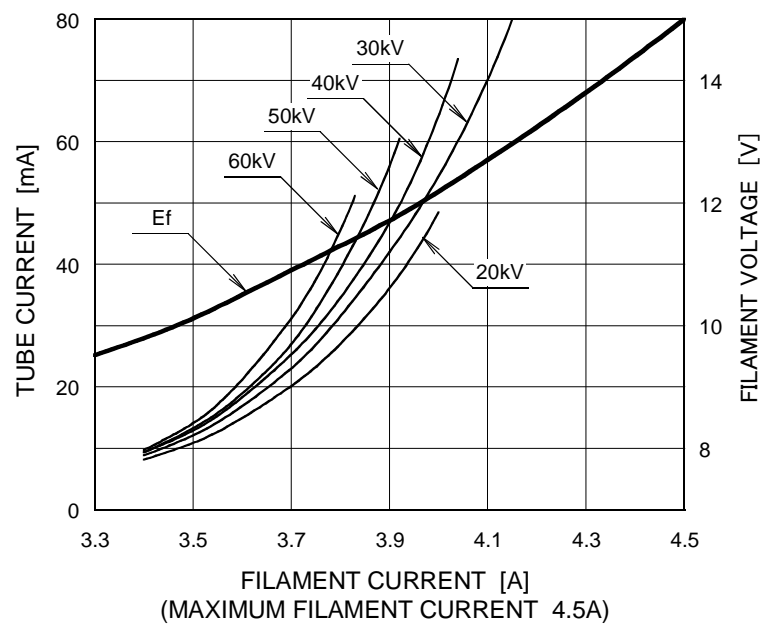
Focal Spot: 7 × 7.5 mm



Emission & Filament Characteristics

Constant Potential High-Voltage Generator

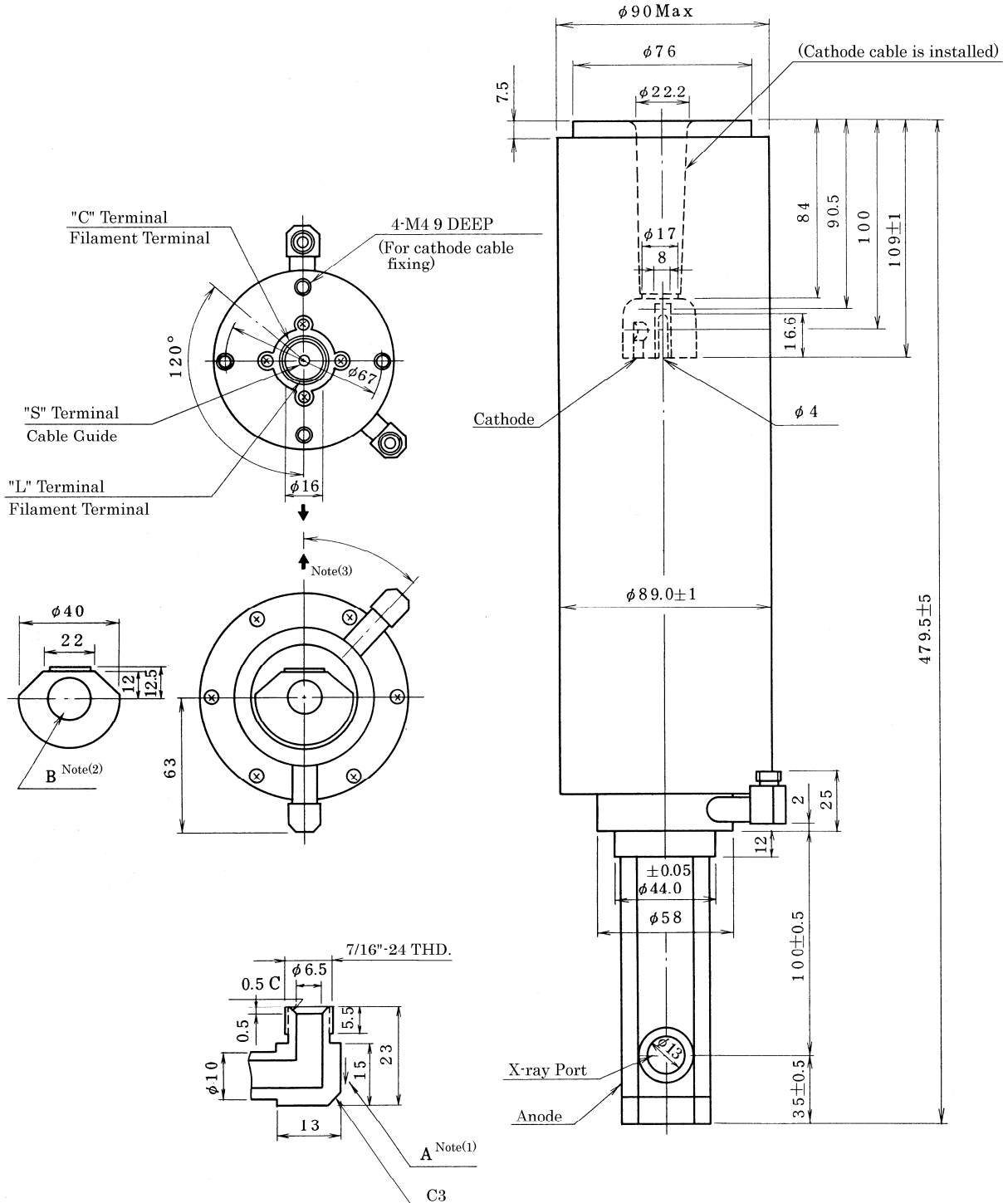
Focal Spot: 7 × 7.5 mm



Note: This graph indicates typical characteristics.

Dimensional Outline

Unit: mm



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

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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.