

SV 150/40/80HC-100

X-ray Tube Assembly

Data Sheet

Description

This compact X-ray tube assembly was developed for use in radiography and fluoroscopy systems. It allows for excellent image quality at high patient throughput.

Based on many years of experience in X-ray tube manufacturing, the SV 150/40/80HC-100 was designed to meet the demand for low total cost of ownership.

Features and customer benefits

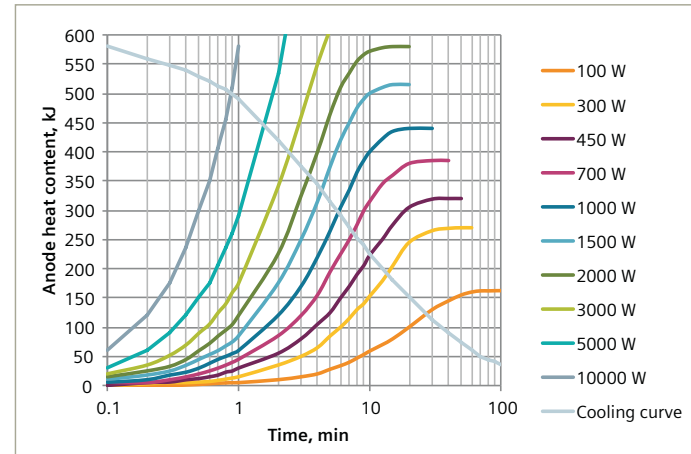
- 800 kWh anode heat storage capacity for efficient X-ray examinations
- Focal spots of IEC 0.6 and IEC 1.0 allow excellent image quality
- High power on both focal spots
- High long-term dose yield
- Excellent quality and reliability

Technical Data			
Nominal voltage	150 kV		IEC 60613 (2010)
Nominal voltage Fluoroscopy	110 kV		
Nominal focal spot values	0.6	1.0	IEC 60336
Nominal anode input power (150 Hz / 180 Hz)	52 kW	103 kW	IEC 60613 (1989) (at 0 W average anode input power)
Nominal radiographic anode input power	47 kW	85 kW	IEC 60613 (2010)
Filament Heating	maximum current	5.1 A	AC < 20 kHz
	maximum voltage	≈ 11.9 V	
Anode Angle	12°		
Anode heat storage capacity	580 kJ = 800 kWh		IEC 60613 (1989)
Anode drive frequencies for	exposure fluoro	150 / 180 Hz (50 ± 5) Hz	
Heat storage capacity of assembly	1.800 MJ = 2.484 MHU		IEC 60613
Nominal continuous input power (without / with fan)	300 W / 450 W		IEC 60613 (2010) (at ambient temperature < 25 °C)
Radiation Leakage	≤ 0.8 mGy/h		IEC 60601-1-3 (at 150 kV, 450 W, 1 m distance)
Inherent filtration	permanent filtration: 1.5 mm Al additional filtration: 2 x 0.5 mm (= 1 mm) Al		IEC 60522, IEC 60601-1-3 (at 75 kV)
Weight	≈ 26 kg		

SV 150/40/80HC-100 X-ray Tube Assembly

Heating and cooling curves

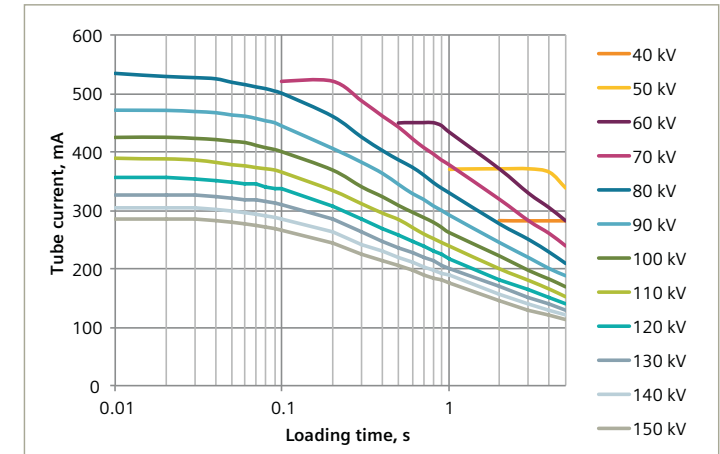
Anode



According to IEC 60613 (1989)

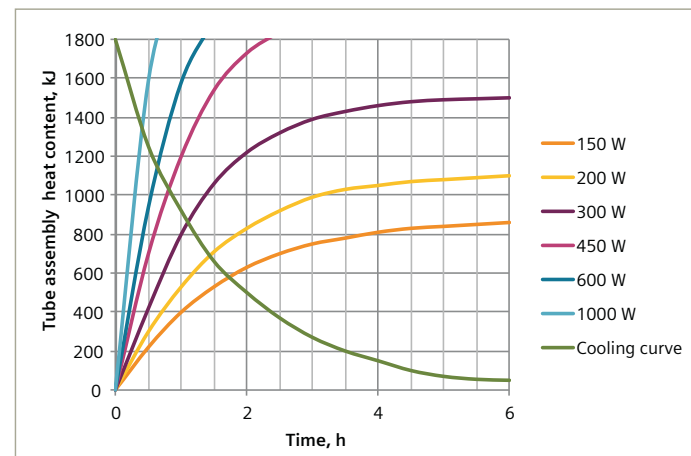
Rating charts

Focal spot IEC 0.6



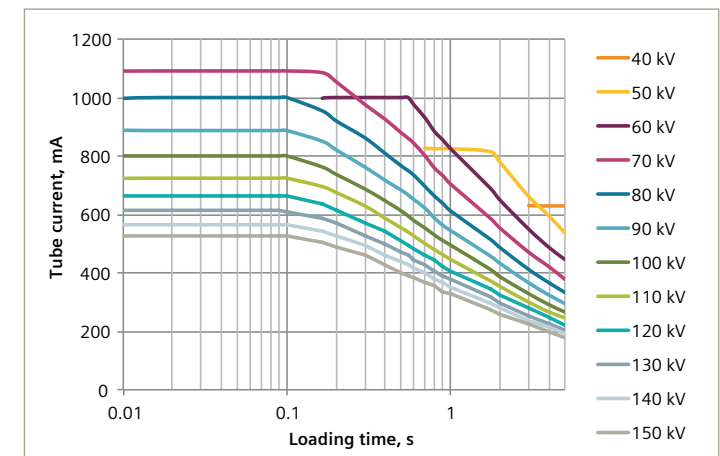
According to IEC 60613 (1989)
Anode drive 150/180 Hz
Thermal anode reference power 300 W

X-ray tube assembly (without fan)



According to IEC 60613 (1989)

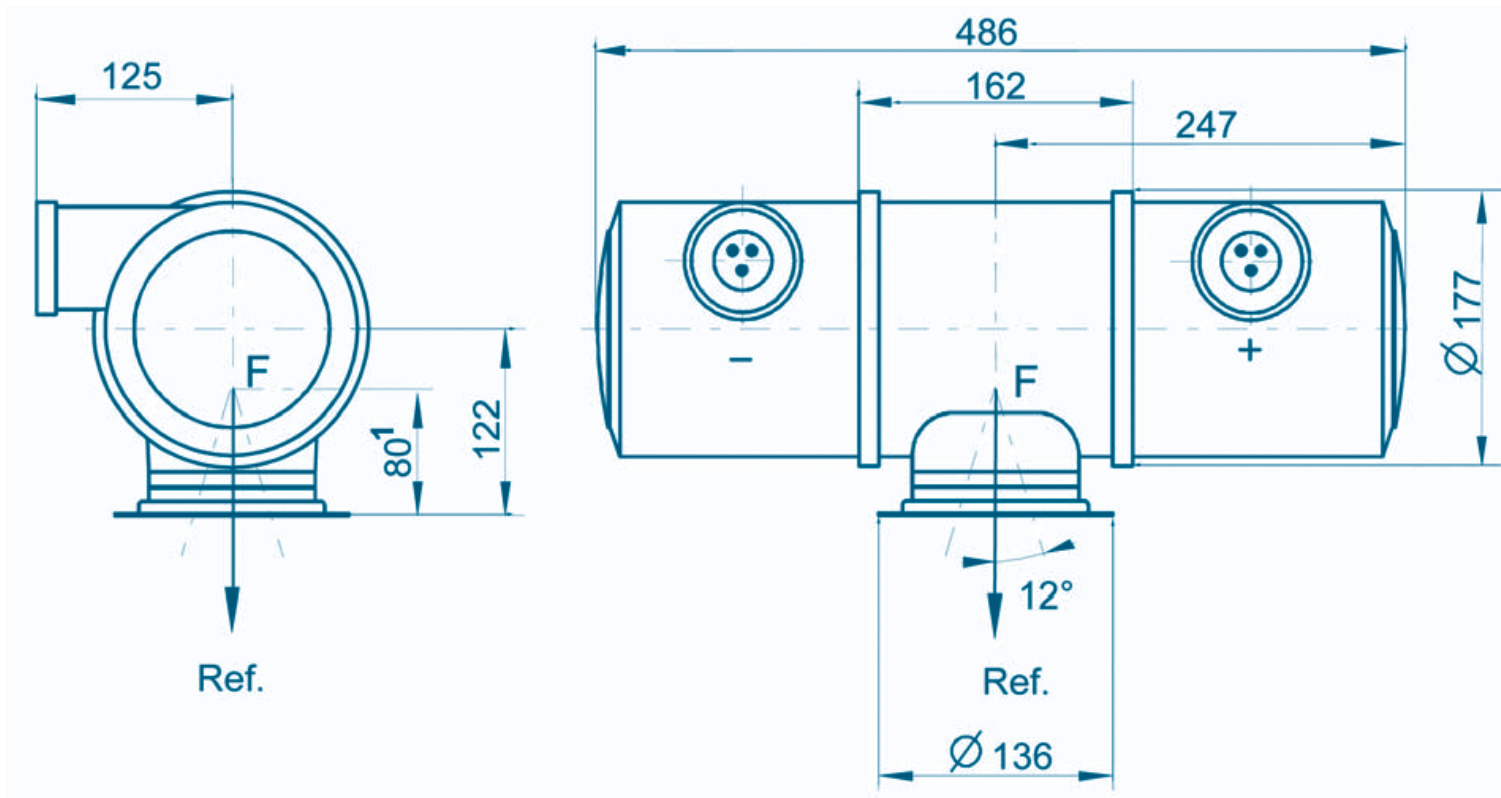
Focal spot IEC 1.0



According to IEC 60613 (1989)
Anode drive 150/180 Hz
Thermal anode reference power 300 W



Dimensional drawings



¹Tolerance +2.0/-0.5

F = Focus position

Ref. = Reference axis

Dimensions are given in mm

Trunnion rings, high-voltage cables, stator cables with shielding and safety switch cables are optionally available.

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