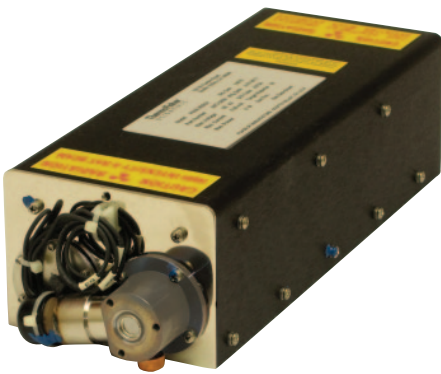
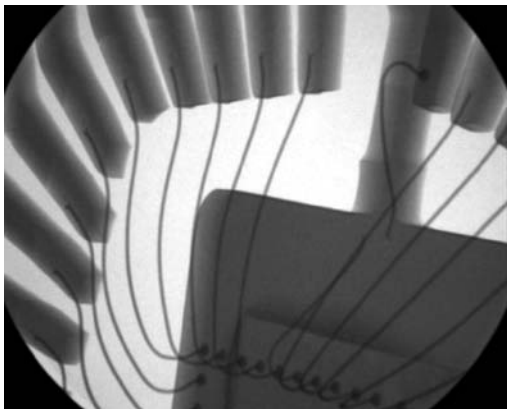


The Thermo Scientific X-Ray product line has been providing quality X-Ray sources to the industrial and medical imaging markets since 1978. Known and respected for innovation and superior microfocus technology, we are proud to introduce the next level of completely integrated, high-stability, 90 kV X-Ray source – the Thermo Scientific PXS5-925 microfocus X-Ray source.

Thermo Scientific PXS5-925 MicroFocus X-Ray Source 90kV



Thermo Scientific PXS5-925 X-Ray sources feature an integrated design with X-Ray tube, power supply, and control electronics in one package.



Lead frame with wire bonds



Description. The Thermo Scientific PXS5-925 is a 90kV microfocus X-Ray source for use in high-resolution imaging applications. The small spot size and high magnification, combined with stable output allow superior quality 2D and 3D images. It combines the X-Ray tube, high-voltage power supply, and controller in one compact package powered from a 12 VDC source.

Applications. The high-performance Thermo Scientific PXS5-925 X-Ray source is the ideal choice for:

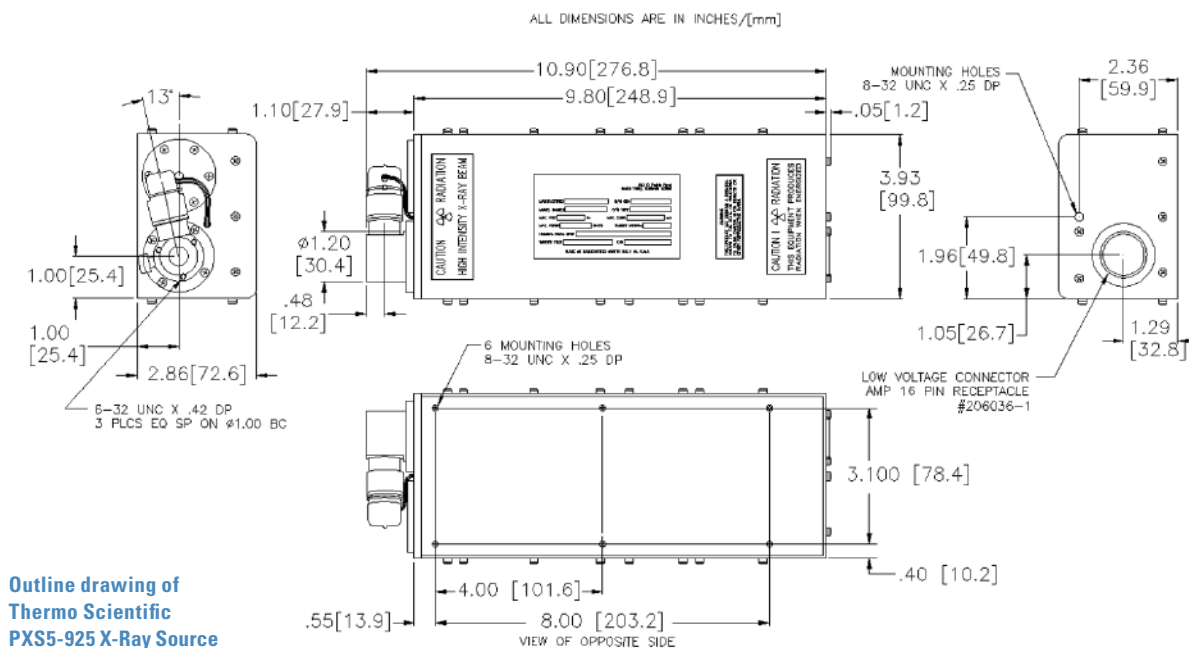
- Manual inspection of printed circuit boards and electronic devices
- Nondestructive test requiring high-resolution imaging of metal and plastic parts
- Micro-CT imaging for industrial and life sciences applications
- Rotating gantry Micro-CT systems (Thermo Scientific PXS5-925-RR)

Benefits. Thermo Scientific PXS5-925 X-Ray sources offer many attractive benefits:

- Small, round spot optimized over the range of operating voltage and power for distortion-free images
- 12 mm spot-to-window spacing for high geometric magnification and high resolution
- X-Ray tube, power supply, and control electronics in one compact package make system integration easy
- Highly stable spot location and flux for consistent image quality in Micro-CT applications

Thermo Scientific PXS5-925 Specifications

Operating Voltage Range	20-90kV	
Maximum Power	8 watts, 45-90kV	
Maximum Beam Current	.178 mA @ 45kV	
Spot Size	<u>PXS5-925</u>	<u>PXS5-925-RR</u>
4 watts	≤ 7μ, 45-90kV	≤ 9μ, 45-90kV
8 watts	≤ 9μ, 45-90kV	≤ 14μ, 45-90kV
Spot Ellipticity	±20% @ 8 watts, 90kV (either axis referred to average)	
Cone of Illumination	40° round beam	
Spot to Window Spacing	12 ± 0.5 mm (.47 in.)	
Window Diameter	Approximately 9.4 mm (.37 in.)	
Window Material and Thickness	Beryllium: 0.127 mm (.005 in.)	
Target Material	Tungsten	
Spot Location Stability	Typically <10 microns in 4 hours after 10-minute warm up	
Flux Stability	Typically < +/- 2% in 4 hours after 10-minute warm up	
Ambient Temperature and Humidity	0 to 32 °C, 0-95% RH, up to 5,000 feet	
Method of Cooling	Cooling air must be directed at the unit to maintain the tube mounting plate temperature below 50 °C (below 40 °C is recommended).	
Shielding	X-Ray leakage behind the X-Ray tube is less than 0.5mR/hour, measured one inch away with Victoreen 190.	
Weight	Approximately 3.6 kg (8 lb.)	
Input Power	12-14 VDC, 4A	
Control Interface	Analog control and monitoring of operating conditions and status	



Outline drawing of Thermo Scientific PXS5-925 X-Ray Source

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