



## Advanced Technical Products & Services

P.O. Box 424  
 Douglassville, PA 19518  
 610.689.4540 • Fax : 610-489-1641  
 www.atpsinc.com • info@atpsinc.com

### XRD 1000 Series Diffraction Tube Spec. Sheet

#### Production Tubes Available:

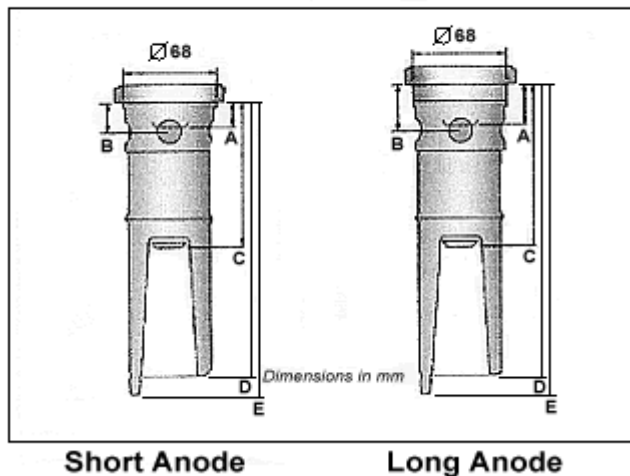
Nomenclature	Description	Focal spot data (size at anode)
XRD 1000-10	Normal focus	1.0 x 10mm <sup>2</sup>
XRD 1000-04	Fine focus	0.4 x 8mm <sup>2</sup>
XRD 1000-04x12	Long fine focus	0.4 x 12mm <sup>2</sup>
XRD 1000-20	Broad focus	2.0 x 12mm <sup>2</sup>

All above foci are available in the following anode materials  
 Ag - Silver, Co - Cobalt, Cr - Chrome, Cu - Copper, Fe - Iron, Mo - Moly, W - Tungsten

#### Characteristic Lines of Anode Materials:

Target Material	Periodic No.	Wave K (α) in Å	Length K (β)	Beta Filter	Excitation Voltage (kV)
Chromium	24	2,291	2,085	V	5.99
Iron	26	1,937	1,756	Mn	7.11
Cobalt	27	1,791	1,621	Fe	7.71
Copper	29	1,542	1,392	Ni	8.98
Molybdenum	42	0,710	0,632	NbZr	20.00
Silver	47	0,561	0,497	PdRh	25.51

#### Dimensions



Dimension	Short Anode	Long Anode
A	17.3 mm	30.1 mm
B	21 mm	34 mm
C	105 mm	118 mm
D	194 mm	207 mm
E	213 mm	226 mm

#### 100% Replacement Warranty

In the unlikely event that an XRD 1000 tube should fail due to material or workmanship within the first twelve months or 2500 hours of operation, whichever occurs first, the XRD tube will be replaced.