

# Portable Metal Ceramic Tubes



Industrial X-Ray

Overview



08/2012 - V2, specification subject to change without notice

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Technology with Passion

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#### About Portable Metal Ceramic Tubes

COMET's Portable Metal Ceramic tubes are designed for use in highly demanding field-tests applications such as pipe inspection, welding inspection, and aerospace testing. Because of their high reliability and stability, our tubes are also used in other X-Ray applications like Thickness Gauging and Non Destructive Testing.

The tube consists of a ceramic isolator and a metal envelope with air cooled anode especially designed to be continuously operated at max voltage and power.

Because of the metal ceramic design the tube's main advantages are:

- Low weight
- Very rugged mechanical design
- Small dimensions
- No oil insulation necessary
- No choke effect due to space charges
- Integrated heat sink (on request)

For special applications or for special demands for focal spot size, power and/or packaging, COMET is prepared to provide customized solutions.

#### "One Stop Shop" for Industrial X-Ray Sources: COMET's XRS Modules

COMET is pleased to offer all of the necessary components for a customized X-Ray Source: The new XRS modules each contain a COMET X-Ray tube, high voltage generator with cables and coolers designed for easy integration that will optimize system performance.

All XRS modules are factory prepared and tested for hassle free installation and operation.

This novel solution demonstrates COMET's continuous commitment and investment in delivering real added value to our worldwide customer base.

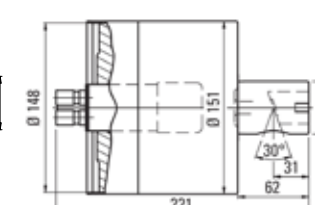
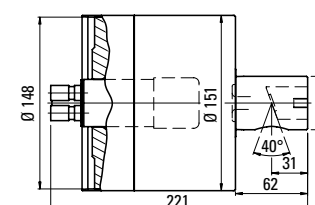
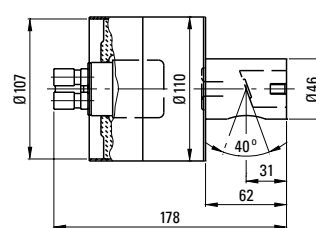
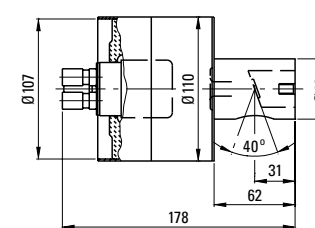
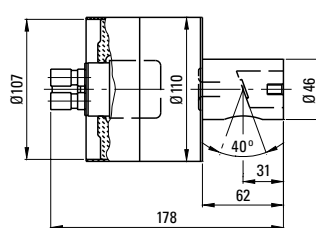
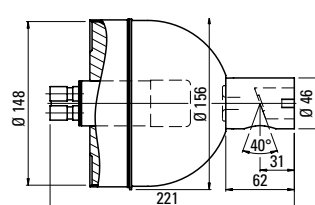
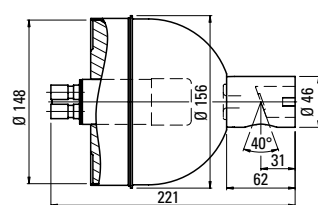
#### About the Business Unit Industrial X-Ray

COMET Industrial X-Ray is an experienced supplier of components and modules for industrial X-Ray applications and is proud of its reputation as the preferred engineering partner in terms of innovation potential, know how, flexibility and speed. Our product range features X-Ray tubes and sources with small focal spot resolution up to 6 kW in output for more power demanding requirements. From the smallest footprint for use in portable units to 600 kV fixed gantry systems that are suitable for cargo screening, we offer a solution.

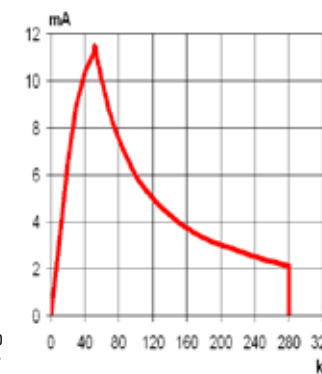
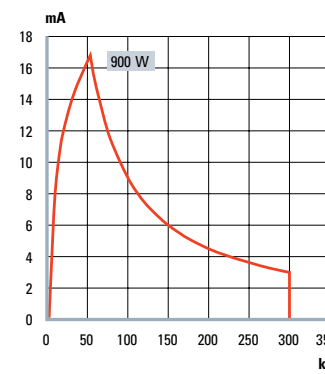
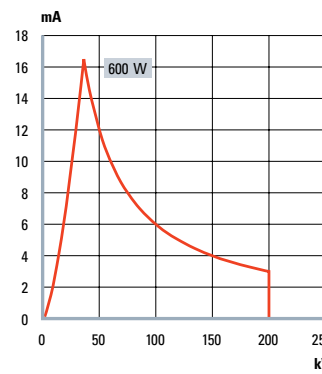
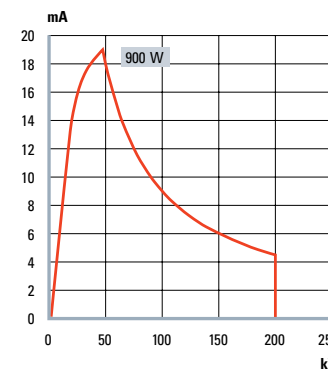
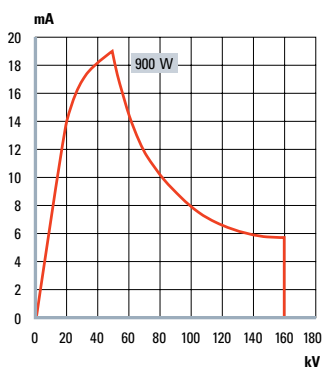
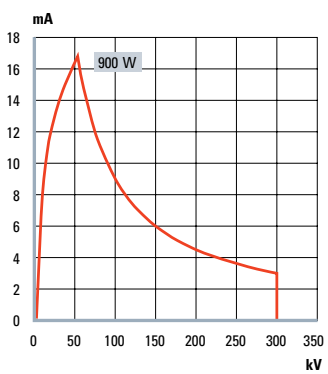
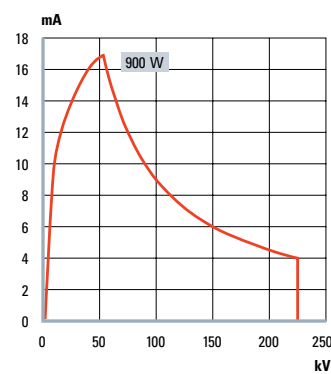


	MIR-225E	MIR-300E	MIR-160E	MIR-200E	MIR-201E	MIR-301E	MIR-280E/HP
<b>Ordering No.</b>	915329.01	915329.21	915328.11	915328.01	915352.01	915338.01	915374.01
<b>Nominal tube voltage</b>	225 kV	300 kV	160 kV	200 kV	200 kV	300 kV	280 kV
<b>Continuous rating</b>	900 W	900 W	900 W	900 W	600 W	900 W	340 W
<b>Focal spot acc. EN 12543</b>	d = 3.0 mm	d = 3.0 mm	d = 3.0 mm	d = 3.0 mm	d = 1.0 mm	d = 3.0 mm	d = 0.5 mm
<b>Filament current, max.</b>	3.8 A	3.8 A	3.8 A	3.8 A	4.1 A	3.8 A	3.5 A
<b>Filament voltage, typical</b>	5.0 V	5.0 V	4.6 V	4.6 V	3.0 V	4.6 V	2.6 V
<b>Inherent filtration</b>	0.8 mm Be	0.8 mm Be	0.8 mm Be	0.8 mm Be	0.8 mm Be	0.8 mm Be	0.8 mm Be
<b>Target material</b>	W	W	W	W	W	W	W
<b>Target angle</b>	20°	20°	20°	20°	20°	20°	15°
<b>Radiation coverage</b>	60° x 40°	60° x 40°	60° x 40°	60° x 40°	60° x 40°	60° x 40°	60° x 30°
<b>Cooling medium</b>	Air	Air	Air	Air	Air	Air	Air
<b>Anode temperature, max.</b>	100° C	100° C	100° C	100° C	100° C	100° C	100° C
<b>Weight</b>	2.6 kg	2.6 kg	1.9 kg	1.9 kg	1.9 kg	3.7 kg	3.7 kg

**Outline drawing**



**Tube diagram**







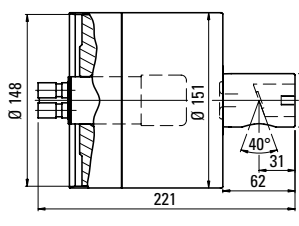
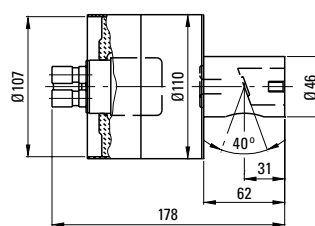
**MIRP-200E**

**MIRP-301E**

<b>Ordering No.</b>	915333.01
<b>Nominal tube voltage</b>	200 kV
<b>Continuous rating</b>	600 W
<b>Focal spot acc. EN 12543</b>	l = 0.4 mm / w = 4.0 mm
<b>Former focal spot design.</b>	0.4 x 4.0
<b>Filament current, max.</b>	4.2 A
<b>Filament voltage, typical</b>	2.3 V
<b>Inherent filtration</b>	0.4 mm Fe/Ni/Co
<b>Target material</b>	W
<b>Target angle</b>	22°
<b>Radiation coverage</b>	360° x 40°
<b>Cooling medium</b>	Air
<b>Anode temperature, max.</b>	120° C
<b>Weight</b>	3.0 kg

<b>Ordering No.</b>	915354.01
<b>Nominal tube voltage</b>	300 kV
<b>Continuous rating</b>	600 W
<b>Focal spot acc. EN 12543</b>	l = 0.5 mm / w = 5.5 mm
<b>Former focal spot design.</b>	0.4 x 4.0
<b>Filament current, max.</b>	4.2 A
<b>Filament voltage, typical</b>	2.3 V
<b>Inherent filtration</b>	0.4 mm Fe/Ni/Co
<b>Target material</b>	W
<b>Target angle</b>	22°
<b>Radiation coverage</b>	360° x 40°
<b>Cooling medium</b>	Air
<b>Anode temperature, max.</b>	120° C
<b>Weight</b>	3.2 kg

**Outline drawing**



**Tube diagram**

