

COPRA Plasma Technology

COPRA DN160-200

Plasma Beam Sources for Research and Development

COPRA DN160-200

COPRA Source

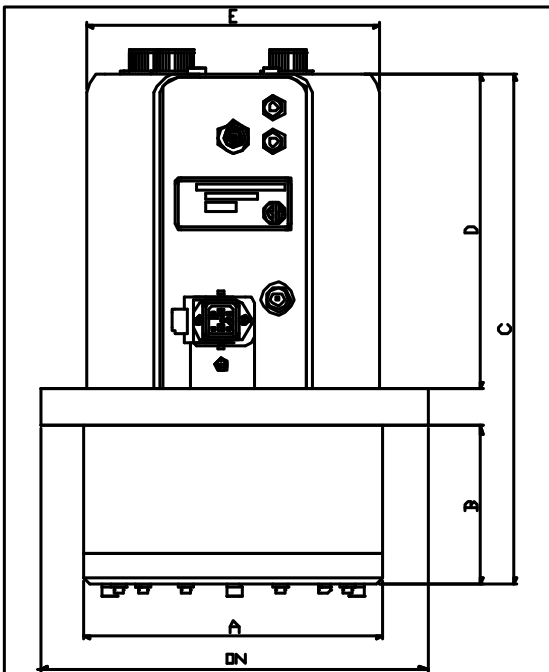


COPRA™ stands for "Controlled Plasma Reactor" and represents an inductively coupled plasma source technology which can easily be scaled for industrial applications.

The COPRA DN160 and COPRA DN200 are especially be designated for Research and Development in the field of Plasma Surface Science. High plasma densities in combination with dissociation degrees of up to 90% enable to drive fast PECVD processes as well as surface cleaning, oxidation, nitridation and activation processes.

Results achieved by the COPRA DN160 and COPRA DN200 can be transferred to upscaled COPRA Plasma Sources and therefore a fast transfer to industrial production is enabled.

Dimensions



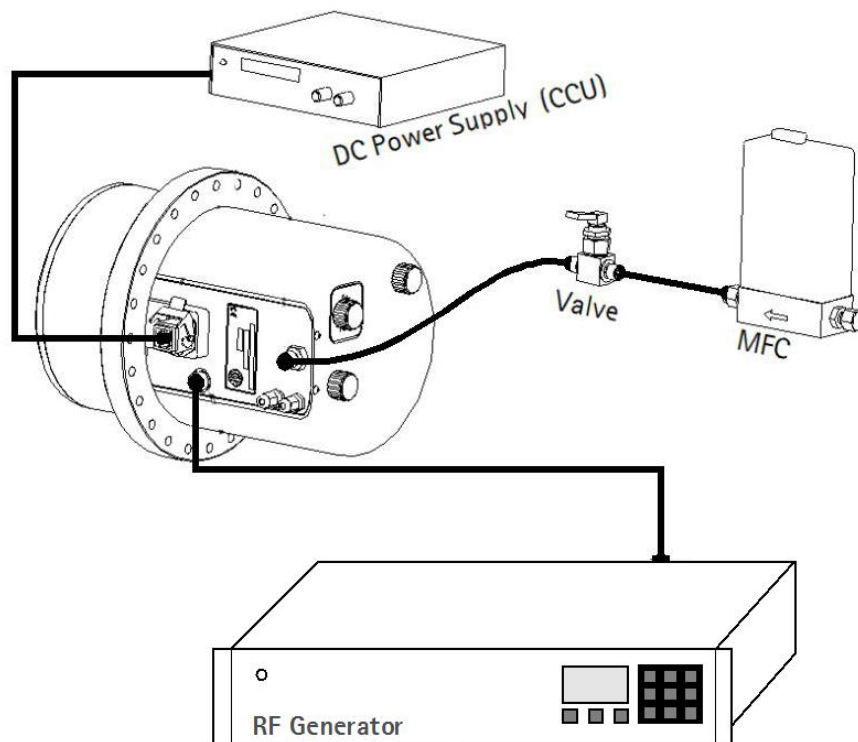
Dimension (mm)	DN160 CF	DN200 CF
A	148	196
B	80	103
C	280	333
D	178	206
E	166	192
DN	160 CF	200 CF
Extraction Ø	84	122

Spare Parts

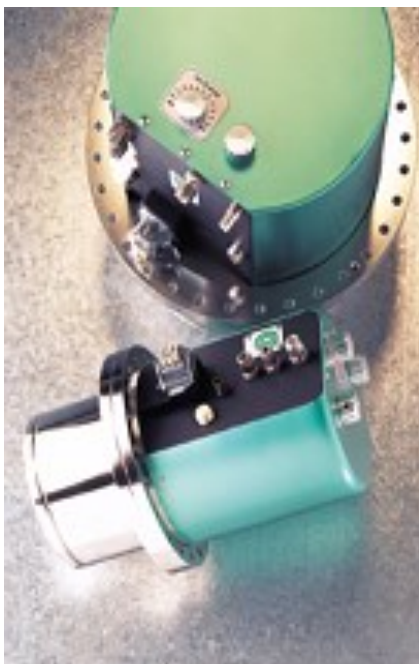
1.)	Tungsten Grid(completely mounted)
2.)	Tungsten Grid(only Grid)
3.)	Quarz glass liner

COPRA DN160-200

Installation Drawing



Technical Data



Technical Data	DN160 CF	DN200 CF
Excitation Frequency	13,56 MHz	
Match	Manual	
RF-Power	600 W	
RF-Connection	N Type J 01021	
DC-Supply(Magnetic Field Coils)	1 to 5 Amps/ 6 to 30 V	
DC-Connection	Amphenol C 146 B	
Water Connection	Serto 6 mm	
Water Flow	> 1l/min	
Operation Gas Pressure	1×10^{-4} to 1 mbar	
Gas Connection	VCR	
Weight	10 kg	15 kg

COPRA DN160-200

Main Features

- Long Term Process stability
- Easy to handle
- Quasi Maintenance free
- Low operating costs
- Low contamination level
- High Amount of O₂
- Current Control independent from Energy
- Simple to mount
- Selective activation of surface

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The COPRA technology is patent protected!

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