



Medium Pressure UV Lamps

For Disinfection, Oxidation and Photochemical Processes

UV radiation, at wavelengths below 300nm, has an intensive germicidal effect. Micro-organisms such as viruses, bacteria, yeasts and spores are effectively destroyed, without the addition of chemicals.

The energy of UV radiation is sufficient to dissociate chemical compounds or to achieve molecular re-structuring.

These reactions are used for the synthesis of organic materials as well as for oxidation processes and the decomposition of organic compounds in water purification.

Medium Pressure UV Lamps

have a broad band emission in the UV- and visible light spectral range. Their strong UV radiation flux results in high penetration depth and efficient disinfection. This allows the design of compact UV disinfection plants. Their high UV intensity also makes them particularly suitable for photochemical processes. The first mercury medium pressure UV lamps were developed at Heraeus in 1904.

Lamps for Specific Applications

By varying the gas filling, doping and the quartz material, the radiation flux and the spectrum of UV lamps can be matched to suit specific applications. This allows lamp efficiency to be optimised for disinfection, oxidation or photochemistry.

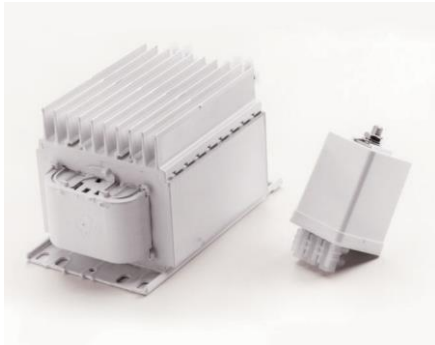
Noblelight Medium Pressure UV Lamps from Excelitas

- DQ lamps: Medium pressure UV lamps, spectral lines from 200nm to 600nm, high radiation output in the UVC spectrum, powerful disinfection action.
- QC lamps: Compact medium pressure UV lamps with increased output, compact design, good germicidal and oxidation action.
- Doped lamps: By means of doping materials, the spectra of the DQ and QC lamps can be changed or additional spectral lines can be produced.
- Lamps with roll-seal: DQ and QC lamps with roll-seal offer greater stability when operating under high mechanical stress.





Different ceramic bases for medium pressure UV lamps. Further models available on request.



Power supplies are offered to match the UV lamps.

Excelitas offers the complete UV technology

- Low pressure UVC lamps
- Medium pressure UV lamps
- Excimer UV lamps
- Power supplies

We also offer a wide range of standard models as replacement lamps. Custom-built lamps are designed in close co-operation with customers.

Excelitas is the preferred partner of companies producing UV Systems for the disinfection of water, air and surfaces as well as for photochemistry and photo-oxidation.

We are available to provide advice, so please contact us.

Excelitas Technologies
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DQ Lamp, 400W, ceramic base and Teflon leads, pinch-seal



DQ Lamp: power range 2-10kW, plug-in, metal pin on ceramic base, roll-seal



QC Lamp: power range 1-30kW, no base, bare leads, pinch-seal

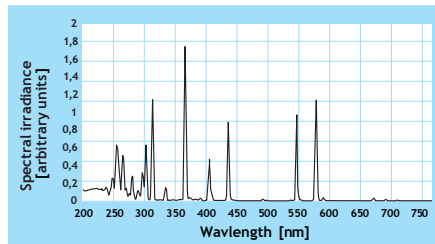


TQ Lamp: power range 4-60kW, metal base with lead, roll-seal

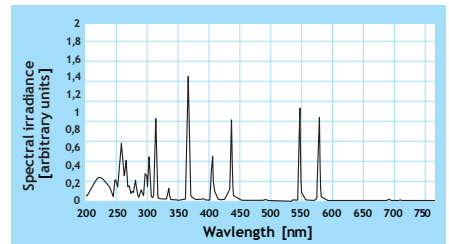


DQ Lamp: power range 1-10kW, standard base and lead, reflector-coated ends, pinch-seal

Examples of DQ- and QC-lamps in different designs, with different types of bases and leads. Further designs available on request.



Typical spectrum of DQ lamps



Typical spectrum of QC lamps

Comparative Data of DQ- and QC-Lamps

	DQ-Lamps	QC-Lamps
Principal Application	Disinfection	Disinfection and Oxidation
Effective Spectral Range	200 - 300nm	200 - 300nm
Specific Electrical Power	80 - 120W/cm	120 - 250W/cm
Specific Radiation Flux UVC	12 - 18W/cm	18 - 40W/cm
Power Range	0.5 - 15kW	1 - 60kW
Dimensions/Arc Length	5 - 150cm	7 - 200cm
Tube Diameter	22 - 28mm	19 - 45mm
Surface Temperature	600 - 900 °C	800 - 900 °C