



NK-Series Mercury Lamps from Heraeus Noblelight



Absorption measurements and fluorimetric measurements require single monochromatic lines with high radiation density. Mercury low-pressure lamps emit a single monochromatic line at 253.7 nm, which is well reproducible and stable.

Heraeus Noblelight NK-series lamps are low-pressure mercury lamps that are stabilised by the geometric form of the discharge tube and by a cover bulb which reduces influences of ambient fluctuations.

NK-series mercury lamps are used in photometers, polarimeters, fluorimeters, refractometers, densitometers and in mercury gas detection equipment. Additionally they are used for wavelength calibration of optical measuring instruments and for disinfection. NK-series lamps are equipped with a quartz material that absorbs the 185 nm line produced in the low-pressure gas discharge. Therefore the NK-lamps do not produce any ozone.

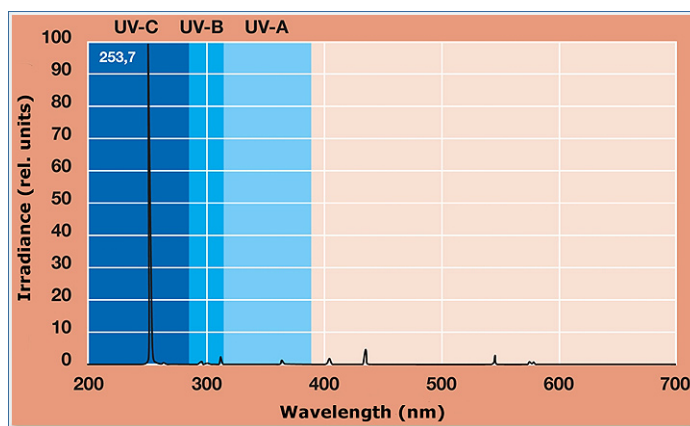
The guaranteed operating life for all lamp types is 2000 hrs with a reduction of the output of max. 50%. A normal useful operating life can be between 4000 and 6000 hrs. The lamp should be operated at ambient temperatures.

MANUFACTURER SAFETY WARNING

UV radiation damages skin and eyes. Always wear protective glasses, gloves and clothing.

Relative Intensity (%) - for all NK lamp types

Wave Length (nm)	Intensity	Wave Length (nm)	Intensity
248	0.1	313	2.8
253.7	100.0	334	0.1
265	0.1	366	2.2
276	0.1	405	1.6
280	0.1	408	1.6
289	0.9	436	1.1
297	0.6	546	1.6
302	0.4	577/579	0.5



Right image: Spectral Distribution NK 2/1

TECHNICAL INFORMATION AND SPECIFICATIONS

	NK 2/1	NK 4/1	NK 4/4
Lamp Type:			
Part No.:	56001012	56001013	56001636
Total Length (mm):	85	140	116
Outer Bulb Ø (mm):	21.3	21.3	n/a
Discharge Tube Ø (mm):	5	5	5
Arc Length (mm):	10	10	10
Base:	Noval EF 80	Noval EF 80	n/a
Ignition Voltage (VAC/VDC):	650/900	1000/900	1000/900
Wattage (W):	2	3.5	3.5
Lamp Voltage (V):	220	200 ± 40	220 ± 20
Lamp Current (A):	0.01	0.02	0.02
Factor/Radiation Flux* (mW):	2	5	5
Radiation Flux at 253.7 nm (mW):	200	500	500
Radiation at 253.7 nm (mW cm ⁻² sr ⁻¹):	6.5	15	15



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TECHNICAL INFORMATION AND SPECIFICATIONS - continued

Lamp Type:	NK 6/12	NK 7/8
Part No.:	56001781	80001987
Total Length (mm):	125	106 ± 2
Outer Bulb Ø (mm):	n/a	n/a
Discharge Tube Ø (mm):	8.5	7
Arc Length (mm):	65	75
Base:	metal tube 12 x 60 mm	base sleeve Ø 13 mm
Ignition Voltage (VAC/VDC):	1000/-	900/-
Wattage (W):	6	5
Lamp Voltage (V):	320	230 ± 30
Lamp Current (A):	0.025	0.02
Factor/Radiation Flux* (mW):	8	-
Radiation Flux at 253.7 nm (mW):	800	-
Radiation at 253.7 nm (mW cm ⁻² sr ⁻¹):	15	-

*Example: Factor x Intensity (table above): 2 x 100 = 200 mW

ORDER INFORMATION

Type	Part No.
NK 2/1	56001012
NK 4/1	56001013
NK 4/4	56001636
NK 6/12	56001781
NK 7/8	80001987

Current prices at: www.msscientific.de/line_sources_pdfpricelist.pdf