Atomic Absorption Lamps

PerkinElmer has over 40 years of expertise designing and manufacturing lamps.

PerkinElmer offers a full range of single-element and multi-element hollow cathode lamps and high intensity electrodeless discharge lamps for those elements for which they are more effective. Every genuine PerkinElmer® lamp is designed for use with and tested on PerkinElmer spectrometers to assure compatibility and the highest performance.

Order your lamps with confidence from PerkinElmer.

Lumina Single-Element Hollow Cathode Lamps

PerkinElmer offers a wide range of single-element and multi-element HCLs, which are ideal for determining most elements by atomic absorption spectroscopy. To prolong the life of a Lumina Hollow Cathode Lamp (HCL), we produce lamps with larger internal volume so that a greater supply of fill gas at optimum pressure is available. The larger the lamp, the greater the inert gas volume — and the longer the lamp lifetime.

Electrodeless Discharge Lamps

Electrodeless Discharge Lamps for greater brightness (EDLs) are typically much brighter and, in some cases, provide better sensitivity than comparable HCLs. EDLs are preferred for certain volatile elements. They offer better precision and lower detection limits for analyses that are "noisy" due to weak hollow cathode emission.

PerkinElmer System 2 EDLs consist of the element, or a salt of the element, sealed in a quartz bulb containing an inert gas atmosphere. When an RF field of sufficient power is applied, the inert gas is ionized and the coupled energy vaporizes the element and excites the atoms inside the bulb, resulting in the emission of the characteristic spectrum. PerkinElmer's System 2 EDLs consist of two major components: a dual channel power supply with matched dual RF driver assemblies, which allows simultaneous, independent operation of two EDLs, and the interchangeable lamp sleeves. The lamp sleeve contains the pre-aligned bulb for the element of interest. The sleeve has the same exterior dimensions as the PerkinElmer HCLs, allowing System 2 EDLs to be used in the same lamp mounts and turrets.

Features and Benefits

- **Experts:** Expertise designing and manufacturing quality lamps for over 40 years. A brand you can trust.
- **Compatibility:** Lumina™ hollow cathode lamps can be used with PerkinElmer's entire range of atomic absorption spectrometers. Atomax™ lamps are compatible with other manufacturer's instruments.
- **Design:** Our design provides you with the low detection limits needed for your most difficult determinations.
- **Testing:** Lamps are thoroughly tested before leaving the factory.
- **Raw Materials:** Carefully selected materials used in the manufacturing of our lamps avoid spectral interference.
- **Quality:** Lamps are built to stringent specifications in a state-of-the-art lamp manufacturing facility. Great quality every time.

PerkinElmer®
For the Better

Every genuine PerkinElmer lamp is designed for use with and tested on PerkinElmer spectrometers to assure compatibility and the highest performance.

Single-Element		Lumina 2"	EDL	Atomax 1.5"
Element Name	**Symbol**	**Part No.**	**Part No.**	**Part No.**
Aluminum	Al	N3050103		N2025301
Antimony	Sb	N3050170	N3050670	N2025347
Arsenic	As	N3050105	N3050605	N2025302
Barium	Ba	N3050109		N2025305
Beryllium	Be	N3050110		N2025306
Bismuth	Bi	N3050111	N3050611	N2025307
Boron	B	N3050108		N2025304
Cadmium	Cd	N3050115	N3050615	N2025309
Calcium	Ca	N3050114		N2025308
Cesium	Cs		N3050620	N2025312
Chromium	Cr	N3050119		N2025311
Cobalt	Co	N3050118		N2025310
Copper	Cu	N3050121		N2025313
Dysprosium	Dy	N3050122		N2025314
Erbium	Er	N3050123		N2025315
Europium	Eu	N3050124		N2025316
Gadolinium	Gd	N3050129		N2025319
Gallium	Ga	N3050128		N2025318
Germanium	Ge	N3050130	N3050630	N2025320
Gold	Au	N3050107		N2025303
Hafnium	Hf	N3050133		N2025321
Holmium	Ho	N3050135		N2025323
Indium	In	N3050137		N2025324
Iridium	Ir	N3050138		N2025325
Iron	Fe	N3050126		N2025317
Lanthanum	La	N3050141		N2025327
Lead	Pb	N3050157	N3050657	N2025339
Lithium	Li	N3050142		N2025328
Lutetium	L			N2025329
Magnesium	Mg	N3050144		N2025330
Manganese	Mn	N3050145		N2025331
Mercury	Hg	N3050134	N3050634	N2025322
Molybdenum	Mo	N3050146		N2025332
Neodymium	Nd	N3050150		N2025335
Nickel	Ni	N3050152		N2025336
Niobium	Nb	N3050149		N2025334
Osmium	Os			N2025337
Palladium	Pd	N3050158		N2025340
Phosphorus	P	N3050155	N3050655	N2025338
Platinum	Pt	N3050162		N2025342
Potassium	K	N3050139		N2025326
Praseodymium	Pr	N3050161		N2025341
Rhenium	Re	N3050165		N2025344

Single-Element, *cont.*		Lumina 2"	EDL	Atomax 1.5"
Element Name	**Symbol**	**Part No.**	**Part No.**	**Part No.**
Rhodium	Rh	N3050166		N2025345
Rubidium	Rb		N3050664	N2025343
Ruthenium	Ru	N3050168		N2025346
Samarium	Sm	N3050174		N2025351
Scandium	Sc	N3050171		N2025348
Selenium	Se	N3050172	N3050672	N2025349
Silicon	Si	N3050173		N2025350
Silver	Ag	N3050102		N2025300
Sodium	Na	N3050148		N2025333
Strontium	Sr	N3050176		N2025353
Tantalum	Ta	N3050177		N2025354
Tellurium	Te	N3050180	N3050680	N2025356
Terbium	Tb	N3050178		N2025355
Thallium	Tl	N3050183	N3050683	N2025359
Thorium	Th			N2025357
Thulium	Tm	N3050184		N2025360
Tin	Sn	N3050175	N3050675	N2025352
Titanium	Ti	N3050182		N2025358
Tungsten	W	N3050187		N2025362
Vanadium	V	N3050186		N2025361
Ytterbium	Yb	N3050190		N2025364
Yttrium	Y	N3050189		N2025363
Zinc	Zn	N3050191	N3050691	N2025365
Zirconium	Zr	N3050192		N2025366

Multi-Element		Lumina 2"
Element Name	**Symbol**	**Part No.**
Silver, Gold	Ag, Au	N3050201
Calcium, Magnesium	Ca, Mg	N3050202
Calcium, Zinc	Ca, Zn	N3050203
Potassium, Sodium	K, Na	N3050204
Platinum, Ruthenium	Pt, Ru	N3050205
Tin, Tellurium	Sn, Te	N3050206
Aluminum, Calcium, Magnesium	Al, Ca, Mg	N3050207
Calcium, Magnesium, Zinc	Ca, Mg, Zn	N3050208
Copper, Iron, Nickel	Cu, Fe, Ni	N3050209
Silver, Chromium, Copper, Nickel	Ag, Cr, Cu, Ni	N3050210
Aluminum, Copper, Iron, Titanium	Al, Cu, Fe, Ti	N3050211
Copper, Iron, Manganese, Zinc	Cu, Fe, Mn, Zn*	N3050212
Silver, Chromium, Copper, Iron, Nickel	Ag, Cr, Cu, Fe, Ni	N3050213
Cobalt, Chromium, Copper, Manganese, Nickel	Co, Cr, Cu, Mn, Ni	N3050214
Cobalt, Copper, Iron, Manganese, Molybdenum	Co, Cu, Fe, Mn, Mo	N3050215
Silver, Aluminum, Chromium, Copper, Iron, Magnesium	Ag, Al, Cr, Cu, Fe, Mg*	N3050216
Cobalt, Chromium, Copper, Iron, Manganese, Nickel	Co, Cr, Cu, Fe, Mn, Ni	N3050217
Aluminum, Calcium, Copper, Iron, Magnesium, Silicon, Zinc	Al, Ca, Cu, Fe, Mg, Si, Zn*	N3050218

**These multi-element lamps are produced with quartz windows.*

Every day, you can count on PerkinElmer to provide you with solutions that deliver reliable performance, control operating costs and maximize operational time. Our complete portfolio of consumables, parts, supplies, training and service helps you meet both routine and demanding measurement challenges. We invest heavily in testing and validating our products to ensure you receive guaranteed compatibility and performance – on-time, for every instrument in your laboratory.

For a complete listing of AA Consumables, please visit www.perkinelmer.com/supplies

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