

Hollow Cathode Lamps

Mitorika Co., Ltd.

Hollow cathode lamps are special spectrum lamp for Atomic absorption spectrophotometers. Over diameter is 38mm. Hollow cathode lamp has a tubular cathode of metal element or alloy containing the element. The cathode is put into a glass bulb and encapsulated. With glow discharge, special spectrum of each element is emitted. There are many kinds of lamps with different elements are available, and a correct lamps should be selected to measure the specific element. Mitorika has 50 kinds of single element lamps and 10 kinds of multiple elements lamps.

Single Element type

Element	Part No.	Spectrum (nm)
Ag Silver	10-047	328.1 338.3
Al Aluminum	10-013	309.3 396.2
As Arsenic	10-033	193.7 197.2
Au Gold	10-079	242.8 267.6
B Boron	10-005	249.8
Ba Barium	10-056	350.1 553.6
Be Beryllium	10-004	234.9
Bi Bismuth	10-083	223.1 306.8
Ca Calcium	10-020	422.7
Cd Cadmium	10-048	228.8 326.1
Co Cobalt	10-027	240.7 352.7
Cr Chromium	10-024	357.9 359.3
Cu Copper	10-029	324.8 327.4
Fe Iron	10-026	248.3 372.0
Ga Gallium	10-031	294.4 417.2
Ge Germanium	10-032	265.2 259.3
Hf Hafnium	10-072	307.3 286.6
Hg Mercury	10-080	253.7
In Indium	10-049	303.9 325.6
Ir Iridium	10-077	208.9 264.0
K Potassium	10-019	766.5 404.4
La Lanthanum	10-057	550.1 357.4
Li Lithium	10-003	670.8 610.4
Mg Magnesium	10-012	285.2 202.5
Mn Manganese	10-025	279.5 403.1

Element	Part No.	Spectrum (nm)
Mo Molybdenum	10-042	313.3 317.0
Na Sodium	10-011	589.0 330.2
Nb Niobium	10-041	334.9 358.0
Ni Nickel	10-028	232.0 341.5
Pb Lead	10-082	217.0 283.3
Pd Palladium	10-046	244.8 247.6
Pt Platinum	10-078	265.9 299.8
Rh Rhodium	10-045	343.5 369.2
Ru Ruthenium	10-044	349.9 392.5
Sb Antimony	10-051	217.6 231.2
Sc Scandium	10-021	391.2 390.7
Se Selenium	10-034	196.0 204.0
Si Silicon	10-014	251.6 288.2
Sn Tin	10-050	224.6 286.3
Sr Strontium	10-038	460.7
Ta Tantalum	10-073	271.5 277.6
Te Tellurium	10-052	214.3 225.9
Ti Titanium	10-022	364.3 365.3
Tl Thallium	10-081	276.8 377.6
V Vanadium	10-023	318.4 385.6
W Tungsten	10-074	255.1 400.9
Y Yttrium	10-039	410.2 407.7
Yb Ytterbium	10-070	398.8 346.4
Zn Zinc	10-030	213.9 307.6
Zr Zirconium	10-040	360.1 468.8

Multiple Elements type

Element	Part No.	Spectrum (nm)
Ca-Mg	10-101	Ca 422.7 Mg 285.2
Cd-Pb	10-102	Cd 228.8 Pb 283.3
Cd-Zn	10-103	Cd 228.8 Zn 213.9
Cu-Fe-Mn	10-104	Cu 324.8 Fe 248.3 Mn 279.5
Cu-Mn-Si	10-105	Cu 324.8 Mn 279.5 Si 251.6

Element	Part No.	Spectrum (nm)
Cu-Fe-Ni	10-106	Cu 324.8 Fe 248.3 Ni 232.0
Fe-Mn-Ni	10-107	Fe 248.3 Mn 279.5 Ni 232.0
Cr-Cu-Mn	10-108	Cr 357.9 Cu 324.8 Mn 279.5
5 elements (Cr-Cu-Fe-Mn-Ni)	10-109	357.9-324.8- 248.3-279.5- 232.0
6 elements (Co-Cr-Cu-Fe-Mn-Ni)	10-110	240.7-357.9- 324.8-248.3- 279.5-232.0