

# **.red<sup>®</sup> Hollow cathode lamps**



## **Product datasheet**

### **Description**

#### **Features**

• **red** brand hollow cathode lamps are offered for most atomic absorption spectrometer instrument/element combinations:

- Non-coded
- Data coded for Thermo (Unicam), Agilent (Varian) and Perkin Elmer
- Single and multi-element
- 1½" (37mm) and 2" (51mm)
- Sharp, narrow band width spectral lines
- Neon filled
- Quartz or Pyrex windowed depending on wavelength
- Unique serial number for traceability

All • **red** brand hollow cathode lamps are shipped with detailed instructions on installation.



#### **Applications**

• **red** brand hollow cathode lamps are gas discharge devices in which the discharge is highly constrained around the cathode of a specific metal. The resultant output is a unique line spectrum, the most intense of which are suitable for highly specific and sensitive metals analysis.

The technology can be extended to include the following applications:

- Atomic absorption spectrophotometry
- Atomic fluorescence spectroscopy
- Multi-wavelength laser tuning and Laser output stabilisation
- Multicomponent analysers
- Environmental analysers
- Medicinal analysers

#### **Fittings and instruments**

• **red** 1.5" (37mm) lamps are fitted with a 2-pin octal base. while the 2" (51mm) version has a flying lead terminating in a standard M9 plug. Data coded versions of these lamps use multiple pinned octal bases specific to the intended manufacturer whilst the coded plug terminating 51mm lamps mates with the M12 socket in the instrument.

1.5" (37mm) lamps are suited to most makes of AA and can be used in PE instruments with care and additional hardware.

2" (51mm) lamps are restricted for use in Perkin Elmer instruments.

Contact your dealer for further information.

**Product datasheet**

**Ordering information**

**Single element, 1.5" (37mm) diameter lamps, non-coded**

Code	Description	Model
172400	H-C lamp 1.5" Aluminium/Al non-coded	Al non-coded
172401	H-C lamp 1.5" Antimony/Sb non-coded	Sb non-coded
172402	H-C lamp 1.5" Arsenic/As non-coded	As non-coded
172403	H-C lamp 1.5" Barium/Ba non-coded	Ba non-coded
172404	H-C lamp 1.5" Beryllium/Be non-coded	Be non-coded
172405	H-C lamp 1.5" Bismuth/Bi non-coded	Bi non-coded
172406	H-C lamp 1.5" Boron/B non-coded	B non-coded
172407	H-C lamp 1.5" Cadmium/Cd non-coded	Cd non-coded
172408	H-C lamp 1.5" Cesium/Cs non-coded	Cs non-coded
172409	H-C lamp 1.5" Calcium/Ca non-coded	Ca non-coded
172410	H-C lamp 1.5" Cerium/Ce non-coded	Ce non-coded
172411	H-C lamp 1.5" Chromium/Cr non-coded	Cr non-coded
172412	H-C lamp 1.5" Cobalt/Co non-coded	Co non-coded
172413	H-C lamp 1.5" Copper/Cu non-coded	Cu non-coded
172414	H-C lamp 1.5" Dysprosium/Dy non-coded	Dy non-coded
172415	H-C lamp 1.5" Erbium/Er non-coded	Er non-coded
172416	H-C lamp 1.5" Europium/Eu non-coded	Eu non-coded
172417	H-C lamp 1.5" Gadolinium/Gd non-coded	Gd non-coded
172418	H-C lamp 1.5" Gallium/Ga non-coded	Ga non-coded
172419	H-C lamp 1.5" Germanium/Ge non-coded	Ge non-coded
172420	H-C lamp 1.5" Gold/Au non-coded	Au non-coded
172421	H-C lamp 1.5" Hafnium/Hf non-coded	Hf non-coded
172422	H-C lamp 1.5" Holmium/Ho non-coded	Ho non-coded
172423	H-C lamp 1.5" Deuterium D2 non-coded	D2 non-coded
172424	H-C lamp 1.5" Indium/In non-coded	In non-coded
172425	H-C lamp 1.5" Iridium/Ir non-coded	Ir non-coded
172426	H-C lamp 1.5" Iron/Fe non-coded	Fe non-coded
172427	H-C lamp 1.5" Lanthanum/La non-coded	La non-coded
172428	H-C lamp 1.5" Lead/Pb non-coded	Pb non-coded
172429	H-C lamp 1.5" Lithium/Li non-coded	Li non-coded
172430	H-C lamp 1.5" Lutetium/Lu non-coded	Lu non-coded
172431	H-C lamp 1.5" Magnesium/Mg non-coded	Mg non-coded
172432	H-C lamp 1.5" Manganese/Mn non-coded	Mn non-coded

**Product datasheet**

**Ordering information (cont.)**

**Single element, 1.5" (37mm) diameter lamps, non-coded**

Code	Description	Model
172433	H-C lamp 1.5" Mercury/Hg non-coded	Hg non-coded
172434	H-C lamp 1.5" Molybdenum/Mo non-coded	Mo non-coded
172435	H-C lamp 1.5" NeodymiumNd non-coded	Nd non-coded
172436	H-C lamp 1.5" Nickel/Ni non-coded	Ni non-coded
172437	H-C lamp 1.5" Niobium/Nb non-coded	Nb non-coded
172438	H-C lamp 1.5" Osmium/Os non-coded	Os non-coded
172439	H-C lamp 1.5" Palladium/Pd non-coded	Pd non-coded
172440	H-C lamp 1.5" Phosphorus/P non-coded	P non-coded
172441	H-C lamp 1.5" Platinum/Pt non-coded	Pt non-coded
172442	H-C lamp 1.5" Potassium/K non-coded	K non-coded
172443	H-C lamp 1.5" Praseodymium/Pr non-coded	Pr non-coded
172444	H-C lamp 1.5" Rhenium/Re non-coded	Re non-coded
172445	H-C lamp 1.5" Rhodium/Rh non-coded	Rh non-coded
172446	H-C lamp 1.5" Rubidium/Rb non-coded	Rb non-coded
172447	H-C lamp 1.5" Ruthenium/Ru non-coded	Ru non-coded
172448	H-C lamp 1.5" Samarium/Sm non-coded	Sm non-coded
172449	H-C lamp 1.5" Scandium/Sc non-coded	Sc non-coded
172450	H-C lamp 1.5" Selenium/Se non-coded	Se non-coded
172451	H-C lamp 1.5" Silicon/Si non-coded	Si non-coded
172452	H-C lamp 1.5" Silver/Ag non-coded	Ag non-coded
172453	H-C lamp 1.5" Sodium/Na non-coded	Na non-coded
172454	H-C lamp 1.5" Strontium/Sr non-coded	Sr non-coded
172455	H-C lamp 1.5" Tantalum/Ta non-coded	Ta non-coded
172456	H-C lamp 1.5" Tellurium/Te non-coded	Te non-coded
172457	H-C lamp 1.5" Terbium/Tb non-coded	Tb non-coded
172458	H-C lamp 1.5" Thallium/Tl non-coded	Tl non-coded
172459	H-C lamp 1.5" Thorium/Th non-coded	Th non-coded
172460	H-C lamp 1.5" Thulium/Tm non-coded	Tm non-coded
172461	H-C lamp 1.5" Tin/Sn non-coded	Sn non-coded
172462	H-C lamp 1.5" Titanium/Ti non-coded	Ti non-coded
172463	H-C lamp 1.5" Tungsten/W non-coded	W non-coded
172464	H-C lamp 1.5" Vanadium/V non-coded	V non-coded
172465	H-C lamp 1.5" Ytterbium/Yb non-coded	Yb non-coded
172466	H-C lamp 1.5" Yttrium/Y non-coded	Y non-coded
172467	H-C lamp 1.5" Zinc/Zn non-coded	Zn non-coded
172468	H-C lamp 1.5" Zirconium/Zr non-coded	Zr non-coded

**Product datasheet**

Code	Description	Model
173251	H-C lamp 2.0" Molybdenum/Mo non-coded	Mo non-coded
173252	H-C lamp 2.0" Neodymium/Nd non-coded	Nd non-coded
173253	H-C lamp 2.0" Nickel/Ni non-coded	Ni non-coded
173254	H-C lamp 2.0" Niobium/Nb non-coded	Nb non-coded
173255	H-C lamp 2.0" Osmium/Os non-coded	Os non-coded
173256	H-C lamp 2.0" Palladium/Pd non-coded	Pd non-coded
173257	H-C lamp 2.0" Phosphorus/P non-coded	P non-coded
173258	H-C lamp 2.0" Platinum/Pt non-coded	Pt non-coded
173259	H-C lamp 2.0" Potassium/K non-coded	K non-coded
173260	H-C lamp 2.0" Praseodymium/Pr non-coded	Pr non-coded
173261	H-C lamp 2.0" Rhenium/Re non-coded	Re non-coded
173262	H-C lamp 2.0" Rhodium/Rh non-coded	Rh non-coded
173263	H-C lamp 2.0" Rubidium/Rb non-coded	Rb non-coded
173264	H-C lamp 2.0" Ruthenium/Ru non-coded	Ru non-coded
173265	H-C lamp 2.0" Samarium/Sm non-coded	Sm non-coded
173266	H-C lamp 2.0" Scandium/Sc non-coded	Sc non-coded
173267	H-C lamp 2.0" Selenium/Se non-coded	Se non-coded
173268	H-C lamp 2.0" Silicon/Si non-coded	Si non-coded
173269	H-C lamp 2.0" Silver/Ag non-coded	Ag non-coded
173270	H-C lamp 2.0" Sodium/Na non-coded	Na non-coded
173271	H-C lamp 2.0" Strontium/Sr non-coded	Sr non-coded
173272	H-C lamp 2.0" Tantalum/Ta non-coded	Ta non-coded
173273	H-C lamp 2.0" Tellurium/Te non-coded	Te non-coded
173274	H-C lamp 2.0" Terbium/Tb non-coded	Tb non-coded
173275	H-C lamp 2.0" Thallium/Tl non-coded	Tl non-coded
173276	H-C lamp 2.0" Thorium/Th non-coded	Th non-coded
173277	H-C lamp 2.0" Thulium/Tm non-coded	Tm non-coded
173278	H-C lamp 2.0" Tin/Sn non-coded	Sn non-coded
173279	H-C lamp 2.0" Titanium/Ti non-coded	Ti non-coded
173280	H-C lamp 2.0" Tungsten/W non-coded	W non-coded
173281	H-C lamp 2.0" Vanadium/V non-coded	V non-coded
173282	H-C lamp 2.0" Ytterbium/Yb non-coded	Yb non-coded
173283	H-C lamp 2.0" Yttrium/Y non-coded	Y non-coded
173284	H-C lamp 2.0" Zinc/Zn non-coded	Zn non-coded
173285	H-C lamp 2.0" Zirconium/Zr non-coded	Zr non-coded

**Product datasheet**

**Ordering information**

**2-Element, 1.5" (37mm) diameter lamps, non-coded**

Code	Description	Model
172469	H-C lamp 1.5" Al/Ca non-coded	Al/Ca non-coded
172470	H-C lamp 1.5" Al/Si non-coded	Al/Si non-coded
172471	H-C lamp 1.5" Ba/Ca non-coded	Ba/Ca non-coded
172472	H-C lamp 1.5" Ba/Sr non-coded	Ba/Sr non-coded
172473	H-C lamp 1.5" Cd/Cu non-coded	Cd/Cu non-coded
172474	H-C lamp 1.5" Ca/Mg non-coded	Ca/Mg non-coded
172475	H-C lamp 1.5" Cr/Ag non-coded	Cr/Ag non-coded
172476	H-C lamp 1.5" Cr/Cu non-coded	Cr/Cu non-coded
172477	H-C lamp 1.5" Cr/Mn non-coded	Cr/Mn non-coded
172478	H-C lamp 1.5" Co/Cu non-coded	Co/Cu non-coded
172479	H-C lamp 1.5" Co/Mn non-coded	Co/Mn non-coded
172480	H-C lamp 1.5" Co/Ni non-coded	Co/Ni non-coded
172481	H-C lamp 1.5" Co/Zr non-coded	Co/Zr non-coded
172482	H-C lamp 1.5" Cu/Mg non-coded	Cu/Mg non-coded
172483	H-C lamp 1.5" Cu/Ni non-coded	Cu/Ni non-coded
172484	H-C lamp 1.5" Au/Ni non-coded	Au/Ni non-coded
172485	H-C lamp 1.5" Fe/Mn non-coded	Fe/Mn non-coded
172486	H-C lamp 1.5" Li/Mg non-coded	Li/Mg non-coded
172487	H-C lamp 1.5" Na/K non-coded	Na/K non-coded
172488	H-C lamp 1.5" Na/K Argon non-coded	Na/K Argon non-coded
172489	H-C lamp 1.5" Na/K Quartz non-coded	Na/K Quartz non-coded
172490	H-C lamp 1.5" Al/Li non-coded	Al/Li non-coded
172491	H-C lamp 1.5" As/Bi non-coded	As/Bi non-coded
172492	H-C lamp 1.5" Cr/Zr non-coded	Cr/Zr non-coded
172493	H-C lamp 1.5" In/P non-coded	In/P non-coded
172494	H-C lamp 1.5" Sn/Te non-coded	Sn/Te non-coded
172495	H-C lamp 1.5" Cu/Pb non-coded	Cu/Pb non-coded
172496	H-C lamp 1.5" Al/Cu non-coded	Al/Cu non-coded
172497	H-C lamp 1.5" As/Ni non-coded	As/Ni non-coded
172498	H-C lamp 1.5" Ba/Mg non-coded	Ba/Mg non-coded
172499	H-C lamp 1.5" Cd/Ag non-coded	Cd/Ag non-coded
172500	H-C lamp 1.5" Ca/Cu non-coded	Ca/Cu non-coded
172501	H-C lamp 1.5" Ca/Zn non-coded	Ca/Zn non-coded
172502	H-C lamp 1.5" Cr/Co non-coded	Cr/Co non-coded
172503	H-C lamp 1.5" Cr/Fe non-coded	Cr/Fe non-coded
172504	H-C lamp 1.5" Cr/Ni non-coded	Cr/Ni non-coded

**Product datasheet**

**Ordering information (cont.)**

**2-Element element, 1.5" (37mm) diameter lamps, non-coded**

Code	Description	Model
172505	H-C lamp 1.5" Co/Fe non-coded	Co/Fe non-coded
172506	H-C lamp 1.5" Co/Mo non-coded	Co/Mo non-coded
172507	H-C lamp 1.5" Co/Zn non-coded	Co/Zn non-coded
172508	H-C lamp 1.5" Cu/Fe non-coded	Cu/Fe non-coded
172509	H-C lamp 1.5" Cu/Mn non-coded	Cu/Mn non-coded
172510	H-C lamp 1.5" Cu/Zn non-coded	Cu/Zn non-coded
172511	H-C lamp 1.5" In/Ag non-coded	In/Ag non-coded
172512	H-C lamp 1.5" Fe/Ni non-coded	Fe/Ni non-coded
172513	H-C lamp 1.5" Mg/Zn non-coded	Mg/Zn non-coded
172514	H-C lamp 1.5" Al/Mg non-coded	Al/Mg non-coded
172515	H-C lamp 1.5" Al/Ti non-coded	Al/Ti non-coded
172516	H-C lamp 1.5" Bi/Sb non-coded	Bi/Sb non-coded
172517	H-C lamp 1.5" Au/Ag non-coded	Au/Ag non-coded
172518	H-C lamp 1.5" Si/Ti non-coded	Si/Ti non-coded
172519	H-C lamp 1.5" Cd/Zn non-coded	Cd/Zn non-coded

**Ordering information**

**3-Element, 1.5" (37mm) diameter lamps, non-coded**

Code	Description	Model
172521	H-C lamp 1.5" Al/Ca/Li non-coded	Al/Ca/Li non-coded
172522	H-C lamp 1.5" Al/Cu/Si non-coded	Al/Cu/Si non-coded
172523	H-C lamp 1.5" Al/Mg/Li non-coded	Al/Mg/Li non-coded
172524	H-C lamp 1.5" Ba/Ca/Sr non-coded	Ba/Ca/Sr non-coded
172525	H-C lamp 1.5" Cd/Cu/Ag non-coded	Cd/Cu/Ag non-coded
172526	H-C lamp 1.5" Ca/Mg/Zn non-coded	Ca/Mg/Zn non-coded
172527	H-C lamp 1.5" Cr/Co/Fe non-coded	Cr/Co/Fe non-coded
172528	H-C lamp 1.5" Cr/Co/Ni non-coded	Cr/Co/Ni non-coded
172529	H-C lamp 1.5" Cr/Cu/Fe non-coded	Cr/Cu/Fe non-coded
172530	H-C lamp 1.5" Cr/Cu/Ni non-coded	Cr/Cu/Ni non-coded
172531	H-C lamp 1.5" Cr/Fe/Ni non-coded	Cr/Fe/Ni non-coded
172532	H-C lamp 1.5" Cr/Mn/Zn non-coded	Cr/Mn/Zn non-coded
172533	H-C lamp 1.5" Co/Cu/Mn non-coded	Co/Cu/Mn non-coded
172534	H-C lamp 1.5" Co/Fe/Mn non-coded	Co/Fe/Mn non-coded

**Product datasheet**

**Ordering information (cont.)**

**3-Element, 1.5" (37mm) diameter lamps, non-coded**

Code	Description	Model
172535	H-C lamp 1.5" Co/Mn/Ni non-coded	Co/Mn/Ni non-coded
172536	H-C lamp 1.5" Cu/Fe/Mn non-coded	Cu/Fe/Mn non-coded
172537	H-C lamp 1.5" Cu/Fe/Ni non-coded	Cu/Fe/Ni non-coded
172538	H-C lamp 1.5" Cu/Mn/Ni non-coded	Cu/Mn/Ni non-coded
172539	H-C lamp 1.5" Cu/Ni/Zn non-coded	Cu/Ni/Zn non-coded
172540	H-C lamp 1.5" Co/Cd/Ni non-coded	Co/Cd/Ni non-coded
172541	H-C lamp 1.5" Al/Cu/Fe non-coded	Al/Cu/Fe non-coded
172542	H-C lamp 1.5" As/Sb/Bi non-coded	As/Sb/Bi non-coded
172543	H-C lamp 1.5" Cd/Cu/Ni non-coded	Cd/Cu/Ni non-coded
172544	H-C lamp 1.5" Cr/Fe/Mo non-coded	Cr/Fe/Mo non-coded
172545	H-C lamp 1.5" Co/Ni/Pt non-coded	Co/Ni/Pt non-coded
172546	H-C lamp 1.5" Pb/Ag/Zn non-coded	Pb/Ag/Zn non-coded
172547	H-C lamp 1.5" Mn/Fe/Zn non-coded	Mn/Fe/Zn non-coded
172548	H-C lamp 1.5" Al/Ca/Mg non-coded	Al/Ca/Mg non-coded
172549	H-C lamp 1.5" Al/Mg/Fe non-coded	Al/Mg/Fe non-coded
172550	H-C lamp 1.5" Ba/Ca/Mg non-coded	Ba/Ca/Mg non-coded
172551	H-C lamp 1.5" Ba/Mg/Sr non-coded	Ba/Mg/Sr non-coded
172552	H-C lamp 1.5" Cd/Cu/Zn non-coded	Cd/Cu/Zn non-coded
172553	H-C lamp 1.5" Cr/Co/Cu non-coded	Cr/Co/Cu non-coded
172554	H-C lamp 1.5" Cr/Co/Mn non-coded	Cr/Co/Mn non-coded
172555	H-C lamp 1.5" Cr/Cu/Ag non-coded	Cr/Cu/Ag non-coded
172556	H-C lamp 1.5" Cr/Cu/Mn non-coded	Cr/Cu/Mn non-coded
172557	H-C lamp 1.5" Cr/Fe/Mn non-coded	Cr/Fe/Mn non-coded
172558	H-C lamp 1.5" Cr/Mn/Ni non-coded	Cr/Mn/Ni non-coded
172559	H-C lamp 1.5" Co/Cu/Fe non-coded	Co/Cu/Fe non-coded
172560	H-C lamp 1.5" Co/Cu/Ni non-coded	Co/Cu/Ni non-coded
172561	H-C lamp 1.5" Co/Fe/Ni non-coded	Co/Fe/Ni non-coded
172562	H-C lamp 1.5" Co/Mo/Zn non-coded	Co/Mo/Zn non-coded
172563	H-C lamp 1.5" Cu/Fe/Mo non-coded	Cu/Fe/Mo non-coded
172564	H-C lamp 1.5" Cu/Fe/Zn non-coded	Cu/Fe/Zn non-coded
172565	H-C lamp 1.5" Cu/Mo/Zn non-coded	Cu/Mo/Zn non-coded
172566	H-C lamp 1.5" Cu/Pb/Zn non-coded	Cu/Pb/Zn non-coded
172567	H-C lamp 1.5" Al/Ca/Ni non-coded	Al/Ca/Ni non-coded
172568	H-C lamp 1.5" Al/Cu/Mg non-coded	Al/Cu/Mg non-coded
172569	H-C lamp 1.5" Ca/Cu/Zn non-coded	Ca/Cu/Zn non-coded
172570	H-C lamp 1.5" Al/Ca/Fe non-coded	Al/Ca/Fe non-coded
172571	H-C lamp 1.5" Co/Ni/Au non-coded	Co/Ni/Au non-coded
172572	H-C lamp 1.5" Cu/Fe/Mg non-coded	Cu/Fe/Mg non-coded

**Product datasheet**

**Ordering information**

**4-Element, 1.5" (37mm) diameter lamps, non-coded**

Code	Description	Model
172574	H-C lamp 1.5" Al/Ca/Fe/Mg non-coded	Al/Ca/Fe/Mg non-coded
172575	H-C lamp 1.5" Ba/Ca/Mg/Sr non-coded	Ba/Ca/Mg/Sr non-coded
172576	H-C lamp 1.5" Cd/Cu/Pb/Zn non-coded	Cd/Cu/Pb/Zn non-coded
172577	H-C lamp 1.5" Cr/Ag/Cu/Ni non-coded	Cr/Ag/Cu/Ni non-coded
172578	H-C lamp 1.5" Cr/Co/Cu/Mn non-coded	Cr/Co/Cu/Mn non-coded
172579	H-C lamp 1.5" Cr/Co/Fe/Mn non-coded	Cr/Co/Fe/Mn non-coded
172580	H-C lamp 1.5" Cr/Co/Mn/Ni non-coded	Cr/Co/Mn/Ni non-coded
172581	H-C lamp 1.5" Cr/Cu/Fe/Ni non-coded	Cr/Cu/Fe/Ni non-coded
172582	H-C lamp 1.5" Cr/Fe/Mn/Ni non-coded	Cr/Fe/Mn/Ni non-coded
172583	H-C lamp 1.5" Co/Cu/Fe/Ni non-coded	Co/Cu/Fe/Ni non-coded
172584	H-C lamp 1.5" Co/Cu/Mn/Ni non-coded	Co/Cu/Mn/Ni non-coded
172585	H-C lamp 1.5" Co/Fe/Mn/Ni non-coded	Co/Fe/Mn/Ni non-coded
172586	H-C lamp 1.5" Al/Cu/Fe/Ti non-coded	Al/Cu/Fe/Ti non-coded
172587	H-C lamp 1.5" Co/Cu/Fe/Mo non-coded	Co/Cu/Fe/Mo non-coded
172588	H-C lamp 1.5" Al/Ca/Li/Mg non-coded	Al/Ca/Li/Mg non-coded
172589	H-C lamp 1.5" Cd/Ag/Cu/Zn non-coded	Cd/Ag/Cu/Zn non-coded
172590	H-C lamp 1.5" Cr/Ag/Cu/Fe non-coded	Cr/Ag/Cu/Fe non-coded
172591	H-C lamp 1.5" Cr/Co/Cu/Fe non-coded	Cr/Co/Cu/Fe non-coded
172592	H-C lamp 1.5" Cr/Co/Cu/Ni non-coded	Cr/Co/Cu/Ni non-coded
172593	H-C lamp 1.5" Cr/Co/Fe/Ni non-coded	Cr/Co/Fe/Ni non-coded
172594	H-C lamp 1.5" Cr/Cu/Fe/Mn non-coded	Cr/Cu/Fe/Mn non-coded
172595	H-C lamp 1.5" Cr/Cu/Mn/Ni non-coded	Cr/Cu/Mn/Ni non-coded
172596	H-C lamp 1.5" Co/Cu/Fe/Mn non-coded	Co/Cu/Fe/Mn non-coded
172597	H-C lamp 1.5" Co/Cu/Mn/Mo non-coded	Co/Cu/Mn/Mo non-coded
172598	H-C lamp 1.5" Co/Cu/Mo/Zn non-coded	Co/Cu/Mo/Zn non-coded
172599	H-C lamp 1.5" Cu/Fe/Mn/Zn non-coded	Cu/Fe/Mn/Zn non-coded
173200	H-C lamp 1.5" Ca/Cu/Mn/Mo non-coded	Ca/Cu/Mn/Mo non-coded
173201	H-C lamp 1.5" Cr/Cu/Fe/Zn non-coded	Cr/Cu/Fe/Zn non-coded
173210	H-C lamp 1.5" Cu/Co/Fe/Mn/Zn non-coded	Cu/Co/Fe/Mn/Zn non-coded

**Product datasheet**

**Ordering information**

**5-Element, 1.5" (37mm) diameter lamps, non-coded**

Code	Description	Model
173202	H-C lamp 1.5" Cr/Co/Cu/Fe/Mn non-coded	Cr/Co/Cu/Fe/Mn non-coded
173203	H-C lamp 1.5" Cr/Co/Cu/Mn/Ni non-coded	Cr/Co/Cu/Mn/Ni non-coded
173204	H-C lamp 1.5" Cr/Cu/Fe/Mn/Ni non-coded	Cr/Cu/Fe/Mn/Ni non-coded
173205	H-C lamp 1.5" Co/Cu/Fe/Mn/Ni non-coded	Co/Cu/Fe/Mn/Ni non-coded
173206	H-C lamp 1.5" Cr/Cu/Fe/Mn/Zn non-coded	Cr/Cu/Fe/Mn/Zn non-coded
173207	H-C lamp 1.5" Co/Cu/Fe/Mn/Mo non-coded	Co/Cu/Fe/Mn/Mo non-coded
173208	H-C lamp 1.5" Cr/Co/Cu/Fe/Ni non-coded	Cr/Co/Cu/Fe/Ni non-coded
173209	H-C lamp 1.5" Cr/Co/Fe/Mn/Ni non-coded	Cr/Co/Fe/Mn/Ni non-coded
173211	H-C lamp 1.5" Ca/Cu/Mg/Mn/Mo non-coded	Ca/Cu/Mg/Mn/Mo non-coded
173212	H-C lamp 1.5" Cr/Cu/Fe/Ni/Ag non-coded	Cr/Cu/Fe/Ni/Ag non-coded
173213	H-C lamp 1.5" Cu/Fe/Pb/Ni/Zn non-coded	Cu/Fe/Pb/Ni/Zn non-coded

**Ordering information**

**6+-Element, 1.5" (37mm) diameter lamps, non-coded**

Code	Description	Model
173214	H-C lamp 1.5" Cr/Co/Cu/Fe/Mn/Ni non-code	Cr/Co/Cu/Fe/Mn/Ni non-cod
173215	H-C lamp 1.5" Cr/Co/Fe/Mn/Ni/Ti non-code	Cr/Co/Fe/Mn/Ni/Ti non-cod
173216	H-C lamp 1.5" Al/Ca/Cu/Fe/Mg/Si non -cod	Al/Ca/Cu/Fe/Mg/Si non -co
173217	H-C lamp 1.5" Al/Ca/Cu/Fe/Mg/Si/Zn N.C.	Al/Ca/Cu/Fe/Mg/Si/Zn N.C.