

Contact / Ordering Information

How to Reach New Era

Domestic

Phone 1-800-821-4667
Fax 1-856-697-8727

International

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Fax ++ 856-697-8727

e-mail: cs@newera-spectro.com

Web page: www.newera-spectro.com

Remittance and Correspondence

New Era Enterprises, Inc.
PO Box 747
Vineland, NJ 08362-0747 USA

Ordering

Place orders directly with New Era.

To ensure the best service, when ordering be sure to include the following information:

- shipping and invoicing addresses
- purchase order number
- complete catalog numbers and quantity
- a brief description of each item

Payment

US Payments are accepted by check or by credit card.

International Payments, in US Dollars only, are accepted by credit card or by prepayment with a check drawn on a US bank or electronic transfer.

We accept Visa, MasterCard and American Express.

Prices

All prices are in US Dollars and are subject to change without notice. If you have any questions, contact New Era for updates.

For international requests, a Pro Forma Invoice, showing all costs along with delivery time and payment terms, will be prepared for your review. No actions will be taken until a purchase order is received from you.

Minimum Order / Terms / FOB

Minimum Order: \$50 USA, \$100 outside USA.

Terms: Net 30 Days

FOB: Vineland, NJ USA

Delivery

Items are shipped promptly via UPS, FedEx or Air Parcel Post as you indicate when ordering. In the event of backorders, a partial shipment would be made at your request.

Returns

Before a return is made, contact New Era to discuss the nature of the return. The original purchase order number, the catalog number and quantity of the item(s) in question are needed to resolve the matter quickly.

A restocking fee may be applied for items that are returned. All items will be inspected and a credit will be issued only on parts that have not been used or damaged and the original packaging is unopened.

Warranty

New Era Enterprises, Inc. warrants that the products listed in this catalog meet the descriptions and/or specifications so given. No other expressed or implied warranty is given. This supersedes all other warranties, representations and guarantees.

Trademarks used in this catalog

Teflon, Viton - E.I. DuPont
AAnalyst - Perkin-Elmer Corp.
SpectrAA - Varian, Inc.

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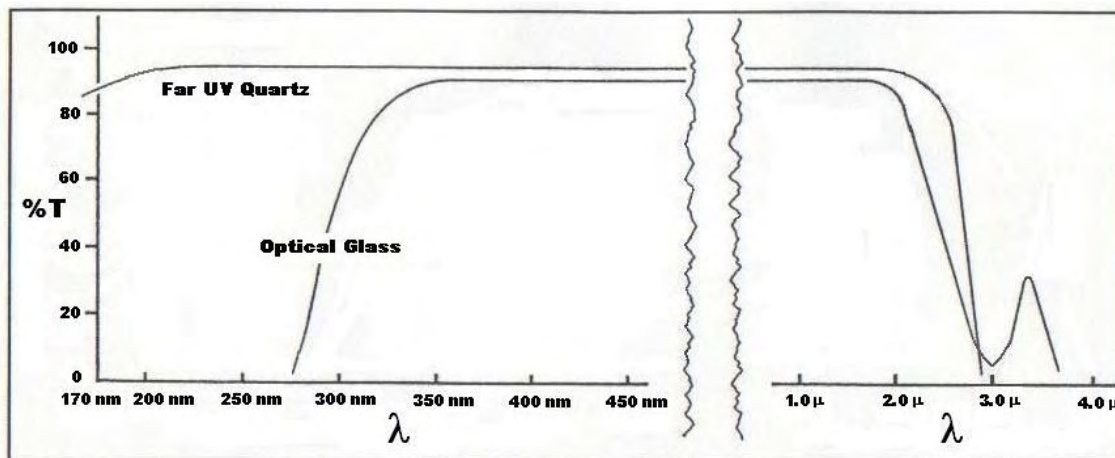
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Transmission of Lamp Materials



Source Lamps



Special selection of pure cathode materials and inert fill gases allow these lamps to produce intense and narrow spectral line widths with minimal noise and sputtering, which results in increased lamp life, stability and high output. Other features include fully "heat-fused seals" and fast warm up.

Lamps are constructed of glass if all spectral lines are found in the visible region (see **Page 1**). Otherwise, far UV quartz is used for construction.

Lamps can be made compatible with various spectrometer models by use of adapters. For Lamp Adapters, see **Pages 4-5**.

Single-Element Hollow Cathode Lamps

*For Varian, GBC, TJA, Hitachi, Shimadzu

Lamp Type → λ_p =Primary λ (nm) λ_s =Secondary λ (nm) Element	2.0" Diameter Perkin-Elmer Non-Coded (9 Pin)		2.0" Diameter Perkin-Elmer Coded (12 Pin)		2.0" Diameter Perkin-Elmer AA Analyst (4 Pin)		1.5" Diameter *See AA Mfgers Non-Coded		1.5" Diameter Varian, GBC Coded	
	Cat.No.	Price/ea	Cat.No.	Price/ea	Cat.No.	Price/ea	Cat.No.	Price/ea	Cat.No.	Price/ea
Al Aluminum λ_p =396.2 λ_s =309.3	81111-1	\$275.00	81112-1	\$280.00	81113-1	\$325.00	81121-1	\$215.00	81122-1	\$265.00
Sb Antimony λ_p =217.6 λ_s =231.1	81111-2	315.00	81112-2	335.00	81113-2	380.00	81121-2	215.00	81122-2	290.00
As Arsenic λ_p =193.7 λ_s =197.2	81111-3	365.00	81112-3	365.00	81113-3	405.00	81121-3	260.00	81122-3	330.00
Ba Barium λ_p =553.5 λ_s =493.4	81111-4	275.00	81112-4	280.00	81113-4	325.00	81121-4	215.00	81122-4	280.00
Be Beryllium λ_p =234.9 -	81111-5	315.00	81112-5	595.00	81113-5	635.00	81121-5	215.00	81122-5	445.00
Bi Bismuth λ_p =223.1 λ_s =227.7	81111-6	315.00	81112-6	335.00	81113-6	380.00	81121-6	215.00	81122-6	290.00
B Boron λ_p =249.8 λ_s =208.9	81111-7	315.00	81112-7	335.00	81113-7	380.00	81121-7	215.00	81122-7	290.00
Cd Cadmium λ_p =228.8 λ_s =326.1	81111-8	315.00	81112-8	335.00	81113-8	380.00	81121-8	215.00	81122-8	290.00
Ca Calcium λ_p =422.7 λ_s =239.9	81111-9	275.00	81112-9	280.00	81113-9	325.00	81121-9	215.00	81122-9	290.00
Cr Chromium λ_p =357.9 λ_s =427.5	81111-10	275.00	81112-10	280.00	81113-10	325.00	81121-10	215.00	81122-10	290.00
Co Cobalt λ_p =240.7 λ_s =304.4	81111-11	315.00	81112-11	335.00	81113-11	380.00	81121-11	215.00	81122-11	290.00
Cu Copper λ_p =324.8 λ_s =218.2	81111-12	280.00	81112-12	280.00	81113-12	325.00	81121-12	215.00	81122-12	265.00
Ge Germanium λ_p =265.2 λ_s =271.0	81111-13	315.00	81112-13	345.00	81113-13	385.00	81121-13	215.00	81122-13	340.00
Au Gold λ_p =242.8 λ_s =267.6	81111-14	385.00	81112-14	390.00	81113-14	435.00	81121-14	310.00	81122-14	365.00
Fe Iron λ_p =248.3 λ_s =372.0	81111-15	315.00	81112-15	335.00	81113-15	380.00	81121-15	215.00	81122-15	265.00
Pb Lead λ_p =217.0 λ_s =261.4	81111-16	315.00	81112-16	365.00	81113-16	405.00	81121-16	215.00	81122-16	275.00
Li Lithium λ_p =670.8 λ_s =323.3	81111-17	275.00	81112-17	280.00	81113-17	325.00	81121-17	215.00	81122-17	280.00
Mg Magnesium λ_p =285.2 λ_s =202.5	81111-18	315.00	81112-18	335.00	81113-18	380.00	81121-18	215.00	81122-18	290.00
Mn Manganese λ_p =279.5 λ_s =280.1	81111-19	315.00	81112-19	335.00	81113-19	380.00	81121-19	215.00	81122-19	290.00
Hg Mercury λ_p =253.7 -	81111-20	315.00	81112-20	365.00	81113-20	405.00	81121-20	215.00	81122-20	315.00

Source Lamps



Special selection of pure cathode materials and inert fill gases allow these lamps to produce intense and narrow spectral line widths with minimal noise and sputtering, which results in increased lamp life, stability and high output. Other features include fully "heat-fused seals" and fast warm up.

Lamps are constructed of glass if all spectral lines are found in the visible region (see **Page 1**). Otherwise, far UV quartz is used for construction.

Lamps can be made compatible with various spectrometer models by use of adapters. For Lamp Adapters, see **Pages 4-5**.

Single-Element Hollow Cathode Lamps

*For Varian, GBC, TJA, Hitachi, Shimadzu

Lamp Type → λ_p =Primary λ (nm) λ_s =Secondary λ (nm) Element	2.0" Diameter Perkin-Elmer Non-Coded (9 Pin)		2.0" Diameter Perkin-Elmer Coded (12 Pin)		2.0" Diameter Perkin-Elmer AAAnalyst (4 Pin)		1.5" Diameter *See AA Mfgers Non-Coded		1.5" Diameter Varian, GBC Coded	
	Cat.No.	Price/ea	Cat.No.	Price/ea	Cat.No.	Price/ea	Cat.No.	Price/ea	Cat.No.	Price/ea
Mo Molybdenum λ_p =313.3 λ_s =320.9	81111-21	\$315.00	81112-21	\$335.00	81113-21	\$380.00	81121-21	\$215.00	81122-21	\$290.00
Ni Nickel λ_p =232.0 λ_s =341.5	81111-22	315.00	81112-22	335.00	81113-22	380.00	81121-22	215.00	81122-22	290.00
Pd Palladium λ_p =247.6 λ_s =340.5	81111-23	385.00	81112-23	495.00	81113-23	515.00	81121-23	310.00	81122-23	445.00
P Phosphorus λ_p =213.6 λ_s =-	81111-24	385.00	-	-	81113-24	435.00	81121-24	310.00	81122-24	445.00
Pt Platinum λ_p =265.9 λ_s =299.8	81111-25	385.00	81112-25	390.00	81113-25	435.00	81121-25	310.00	81122-25	380.00
K Potassium λ_p =766.5 λ_s =404.4	81111-26	275.00	81112-26	280.00	81113-26	325.00	81121-26	215.00	81122-26	290.00
Rh Rhodium λ_p =343.5 λ_s =369.2	81111-27	445.00	81112-27	615.00	81113-27	645.00	81121-27	360.00	81122-27	605.00
Se Selenium λ_p =196.0 λ_s =204.0	81111-28	365.00	81112-28	365.00	81113-28	405.00	81121-28	290.00	81122-28	345.00
Si Silicon λ_p =251.6 λ_s =250.7	81111-29	315.00	81112-29	335.00	81113-29	380.00	81121-29	215.00	81122-29	270.00
Ag Silver λ_p =328.1 λ_s =338.3	81111-30	275.00	81112-30	280.00	81113-30	325.00	81121-30	215.00	81122-30	270.00
Na Sodium λ_p =589.0 λ_s =330.2	81111-31	275.00	81112-31	280.00	81113-31	325.00	81121-31	215.00	81122-31	270.00
Sr Strontium λ_p =460.7 λ_s =407.8	81111-32	305.00	81112-32	305.00	81113-32	355.00	81121-32	215.00	81122-32	290.00
Ta Tantalum λ_p =271.5 λ_s =275.8	81111-33	305.00	81112-33	305.00	81113-33	355.00	81121-33	275.00	81122-33	320.00
Tl Thallium λ_p =276.7 λ_s =258.0	81111-34	315.00	81112-34	365.00	81113-34	405.00	81121-34	215.00	81122-34	360.00
Sn Tin λ_p =235.5 λ_s =266.1	81111-35	315.00	81112-35	365.00	81113-35	405.00	81121-35	215.00	81122-35	315.00
Ti Titanium λ_p =364.3 λ_s =399.0	81111-36	315.00	81112-36	315.00	81113-36	325.00	81121-36	215.00	81122-36	275.00
W Tungsten λ_p =255.1 λ_s =400.9	81111-37	315.00	81112-37	335.00	81113-37	380.00	81121-37	215.00	81122-37	320.00
V Vanadium λ_p =318.5 λ_s =306.6	81111-38	315.00	81112-38	365.00	81113-38	405.00	81121-38	215.00	81122-38	320.00
Zn Zinc λ_p =213.9 λ_s =307.6	81111-39	315.00	81112-39	335.00	81113-39	380.00	81121-39	215.00	81122-39	275.00
Zr Zirconium λ_p =360.1 λ_s =468.7	81111-40	330.00	81112-40	335.00	81113-40	380.00	81121-40	245.00	81122-40	290.00

Source Lamps



Special selection of pure cathode materials and inert fill gases allow these lamps to produce intense and narrow spectral line widths with minimal noise and sputtering, which results in increased lamp life, stability and high output. Other features include fully "heat-fused seals" and fast warm up.

Lamps are constructed of glass if all spectral lines are found in the visible region (see **Page 1**). Otherwise, far UV quartz is used for construction.

Lamps can be made compatible with various spectrometer models by use of adapters.

For Lamp Adapters, see **below and Page 5**.

Multi-Element Hollow Cathode Lamps

*For Varian, GBC, TJA, Hitachi, Shimadzu

Lamp Type → Elements	2.0" Diameter Perkin-Elmer Non-Coded (9 Pin)		2.0" Diameter Perkin-Elmer Coded (12 Pin)		2.0" Diameter Perkin-Elmer AAAnalyst (4 Pin)		1.5" Diameter *See AA Mfgers Non-Coded		1.5" Diameter Varian Coded	
	Cat.No.	Price/ea	Cat.No.	Price/ea	Cat.No.	Price/ea	Cat.No.	Price/ea	Cat.No.	Price/ea
Ca-Mg Calcium-Magnesium	81211-1	\$390.00	81212-1	\$395.00	81213-1	\$435.00	81221-1	\$310.00	81222-1	\$360.00
Cu-Zn Copper-Zinc	81211-2	395.00	-	-	-	-	81221-2	275.00	-	-
Na-K Sodium-Potassium	81211-3	390.00	81212-3	395.00	81213-3	435.00	81221-3	310.00	81222-3	360.00
Al-Ca-Mg Aluminum-Calcium Magnesium	81311-1	420.00	-	-	81313-1	490.00	81321-1	370.00	-	-
Ca-Mg-Zn Calcium-Magnesium Zinc	81311-2	415.00	-	-	81313-2	490.00	81321-2	310.00	-	-
Cu-Fe-Ni Copper-Iron-Nickel	81311-3	415.00	-	-	81313-3	490.00	81321-3	350.00	-	-
Cu-Fe-Mn-Zn Copper-Iron Manganese-Zinc	81411-1	440.00	-	-	81413-1	490.00	81421-1	340.00	-	-
Cr-Co-Cu-Fe-Mn-Ni Chromium-Cobalt Copper-Iron Manganese-Nickel	81611-1	405.00	81612-1	410.00	81613-1	450.00	81621-1	335.00	81622-1	375.00

Lamp Adapters



Allows 1.5" lamps to be used with Perkin-Elmer AA Non-Coded 9-Pin.

Cat. No. **Price/each**
81-LA-1 \$135.00



Allows 1.5" lamps to be used with Perkin-Elmer AA Coded 12-Pin.

Cat. No. **Price/each**
81-LA-2 \$135.00



Allows 1.5" lamps to be used with Perkin-Elmer AAAnalyst 4-Pin.

Cat. No. **Price/each**
81-LA-3 \$135.00

Source Lamps

Lamp Adapters



Allows Perkin-Elmer Coded 12-Pin lamps to be used with Perkin-Elmer AA Non-Coded 9-Pin.

Cat. No. **Price/each**

81-LA-4 \$135.00



Allows Perkin-Elmer Non-Coded 9-Pin lamps to be used with Perkin-Elmer AA Coded 12-Pin Models 5100(PC), 3300, 4100ZL.

Cat. No. **Price/each**

81-LA-5 \$135.00



Allows Perkin-Elmer Non-Coded 9-Pin lamps to be used with Perkin-Elmer AA Coded 12-Pin Models 4100 & ZL, 2100, 1100(B).

Cat. No. **Price/each**

81-LA-6 \$135.00



Allows Perkin-Elmer Non-Coded 9-Pin lamps to be used with Perkin-Elmer AAnalyst 4-Pin.

Cat. No. **Price/each**

81-LA-7 \$77.00



Allows Perkin-Elmer Coded 12-Pin lamps to be used with Perkin-Elmer AAnalyst 4-Pin.

Cat. No. **Price/each**

81-LA-8 \$105.00



Allows Perkin-Elmer AAnalyst 4-Pin lamps to be used with Perkin-Elmer Non-Coded 9-Pin.

Cat. No. **Price/each**

81-LA-9 \$225.00



Allows Perkin-Elmer AAnalyst 4-Pin lamps to be used with Perkin-Elmer Coded 12-Pin.

Cat. No. **Price/each**

81-LA-10 \$225.00

Deuterium Lamps for Background Correction

Perkin-Elmer

Cat. No.	Instrument Models	P-E No.	Price / ea
70101-3	4000, 5000, 5100, 5100PC	0047-0385	\$320.00
70101-3	2280, 2380, 280, 380, 460, 560, 3030(B)* *For 10-Digit Serial Numbers	0057-0194	320.00
70101-4	2100, 4100, 1100(B); AAnalyst 600, 700, 800	B014-8615	350.00

Varian

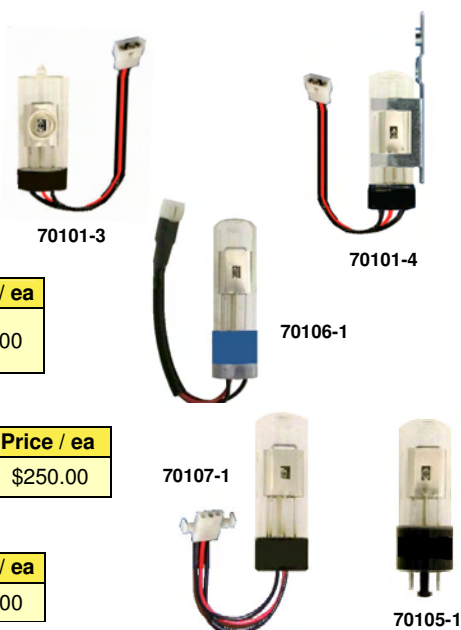
Cat. No.	Instrument Models	Varian No.	Price / ea
70106-1	SpectrAA-10, -20, -30, -40, -300, -400, -600, -640, -800 AA-275, -475, -775, -875, -975, -1275, -1475, -3000	56-100218-00	\$340.00

GBC

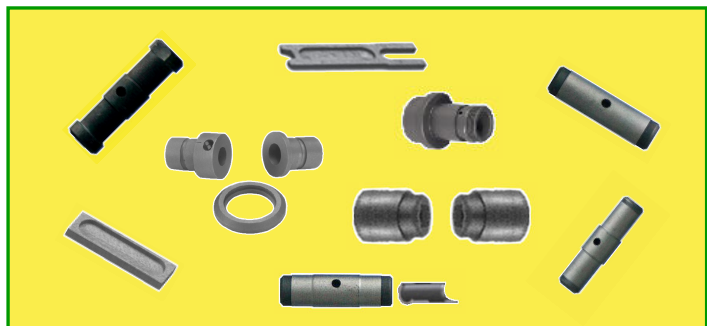
Cat. No.	Instrument Models	GBC No.	Price / ea
70107-1	902-908AA, 932AA, Explorer, SensAA, SavantAA (Σ), Avanta (Σ)	97-0301-00	\$250.00

Shimadzu

Cat. No.	Instrument Models	Shimadzu No.	Price / ea
70105-1	AA-625, -630, -640, -660, -670, -680, -6200, -6300	062-65055-05	\$340.00



Graphite Tubes and Accessories



Prepared from high purity and high density graphite, the tubes shown here are precision and uniformly machined to produce maximum analytical results.

Pyrocoated surfaces have an extremely dense and even layer of graphite deposition to prevent sample/vapor/solvent contamination and refractory element carbide formation.

Contact accessories are precision-fit to ensure uniform heating and consistent electrical contact.

Platforms provide better vaporization and atomization of the sample (especially volatiles) by more steady and even heat transfer.

Reproducibility and consistency of these tubes lead to excellent and reliable results from one tube to another...a necessity for avoiding erroneous analyses.

Perkin-Elmer

Cat. No.	Description		P-E No.	Price	Graphite Furnace Model(s)
82001-1	Graphite Tube, Pyrocoated		B010-5197, B013-5653 B300-0342, B009-1504	\$360.00 / Pk/10 39.00 / ea	HGA-300, HGA-400, HGA-500, HGA-600, HGA-700, HGA-800, HGA-850, HGA-900 (with or without Zeeman)
82001-2	Graphite Tube, Pyrocoated, for L'vov Platform		B013-7111, B012-1092 B300-1254, B010-9322 N311-0146	420.00 / Pk/10 46.00 / ea	
82002-1	L'vov Platform, Pyrocoated, Solid		B013-7112, B012-1091 B300-1256, B010-9324 N311-0145	175.00 / Pk/10 23.00 / ea	
82003-1	Graphite Tube, Pyrocoated, w/ Pre-inserted L'vov Platform		B011-2660	595.00 / Pk/10 69.00 / ea	
82003-2	Graphite Tube, Pyrocoated, w/ Pre-inserted Fork Platform		B050-5057	620.00 / Pk/10 70.00 / ea	
82004-1	Contact Cylinders, Uncoated (one LH and one RH Contact, and one Shield Ring)		B012-8490, B018-0363	98.00 / Set	HGA-400, -500
82004-2	Contact Cylinders, Uncoated (one LH and one RH Contact, and one Shield Ring)		B012-8495, B313-0086	98.00 / Set	HGA-300, -600, -700, -800, -850, -900 (without Zeeman)
82004-3	Contact Cylinders, Uncoated (one LH and one RH Contact)		B011-6823, B018-0361	115.00 / Set	HGA-300, -400, -500, -600, -700, -800, -850, -900 (with Zeeman)

Hitachi

Cat. No.	Description		Hitachi No.	Price	Graphite Furnace Model(s)
82041-1	Graphite Tube, Pyrocoated		180-7403 180-7444	\$440.00 / Pk/10 69.00 / ea	Z-5000, Z-6100 Z-8100, Z-8200 Z-9000
82043-1	Graphite Tube, Pyrocoated, w/ Pre-inserted Fork Platform		190-0028, 190-0027 ANO-0028, ANO-0027	740.00 / Pk/10 98.00 / ea	
82044-1	Contact Rings, Uncoated (one LH and one RH)		180-7401	165.00 / Set/2	

Shimadzu

Cat. No.	Description		Shimadzu No.	Price	Graphite Furnace Model(s)
82051-1	Graphite Tube, Pyrocoated, 90° Cone		206-50588	\$535.00 / Pk/10 65.00 / ea	GFA-EX7, GFA-EX7i GFZ-7000
82053-1	Graphite Tube, Pyrocoated, 90° Cone w/ Pre-inserted Fork Platform		206-50887	875.00 / Pk/10	
82054-1	Graphite Electrode, Uncoated, Left with Housing, 90° Cone		206-50602	99.00 / ea	
82054-2	Graphite Electrode, Uncoated Right, 90° Cone		206-50603	87.00 / ea	

Graphite Tubes and Accessories

Varian

Cat. No.	Description		Varian No.	Price	Graphite Furnace Model(s)
82011-1	Graphite Tube, Partition, Pyrocoated		63-100012-00	\$395.00 / Pk/10 46.00 / ea	GTA-95, GTA-96, GTA-97, GTA-100, GTA-110, GTA-120 (with or without Zeeman)
82011-2	Graphite Tube, Plateau, Pyrocoated, for Plateau Platform		63-100011-00	395.00 / Pk/10 46.00 / ea	
82012-1	Plateau Platform, Pyrocoated, Solid		63-100013-00	198.00 / Pk/10 28.00 / ea	
82011-3	Graphite Tube, Pyrocoated, for Fork Platform		63-100023-00	570.00 / Pk/10 63.00 / ea	
82012-2	Fork Platform, Pyrocoated, Solid		63-100024-00	390.00 / Pk/10 46.00 / ea	
82013-1	Graphite Tube, Pyrocoated, w/ Pre-inserted Fork Platform		63-100023-90 1-900327-00	795.00 / Pk/10	
82013-2	Graphite Tube, Pyrocoated, w/ Pre-inserted Omega (Integral) Platform		63-100037-00	725.00 / Pk/10 89.00 / ea	
82014-1	Graphite Electrodes, Uncoated (one LH and one RH)		63-100016-00	115.00 / Set/2	GTA-95, GTA-96, GTA-97, GTA-100, GTA-110 (without Zeeman)
82014-2	Graphite Shroud, Uncoated		63-100018-00	79.00 / ea	
82014-3	Graphite Electrodes, Uncoated (one LH and one RH)		63-100017-00	120.00 / Set/2	GTA-96, GTA-100, GTA-110 (with Zeeman)
82014-4	Graphite Shroud, Uncoated		63-100019-00	89.00 / ea	

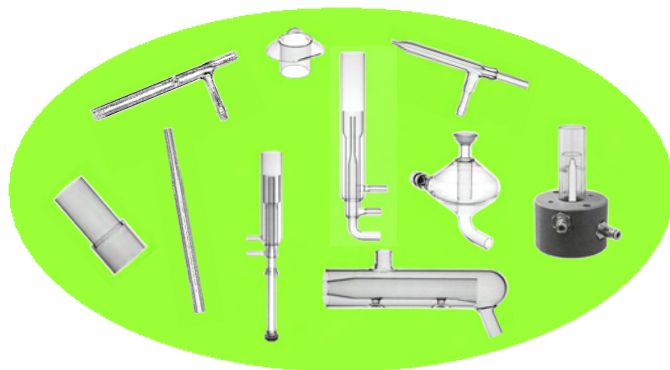
GBC

Cat. No.	Description		GBC No.	Price	Graphite Furnace Model(s)
82021-1	Graphite Tube, Pyrocoated		45-0012-00	\$890.00 / Pk/10 99.00 / ea	GF3000
82021-2	Graphite Platform Tube, Pyrocoated		99-0059-00	355.00 / Pk/10 41.00 / ea	GF3000 GF5000
82022-1	Platform, Pyrocoated, Solid		99-0060-00	175.00 / Pk/10 23.00 / ea	
82023-1	Graphite Tube, Pyrocoated, w/ Pre-inserted Omega (Integral) Platform		-	610.00 / Pk/10 73.00 / ea	
82024-1	Graphite Electrodes, Uncoated (one LH and one RH)		99-0061-00	135.00 / Set/2	GF3000
82024-2	Graphite Shroud, Uncoated		45-0004-00	68.00 / ea	

Thermo Jarrell-Ash

Cat. No.	Description		TJA No.	Price	Graphite Furnace Model(s)
82031-1	Graphite Tube, Uncoated		124544-03	\$450.00 / Pk/10 52.00 / ea	CTF-188
82031-2	Graphite Tube, Pyrocoated		124544-02	Request	
82033-1	Graphite Tube, Pyrocoated, w/ Pre-inserted Fork Platform		130941-00	920.00 / Pk/10 99.00 / ea	
82034-1	Graphite Inserts, Uncoated (one LH and one RH)		124645-01	143.00 / Set/2	

ICP Accessory Quartz/Glassware



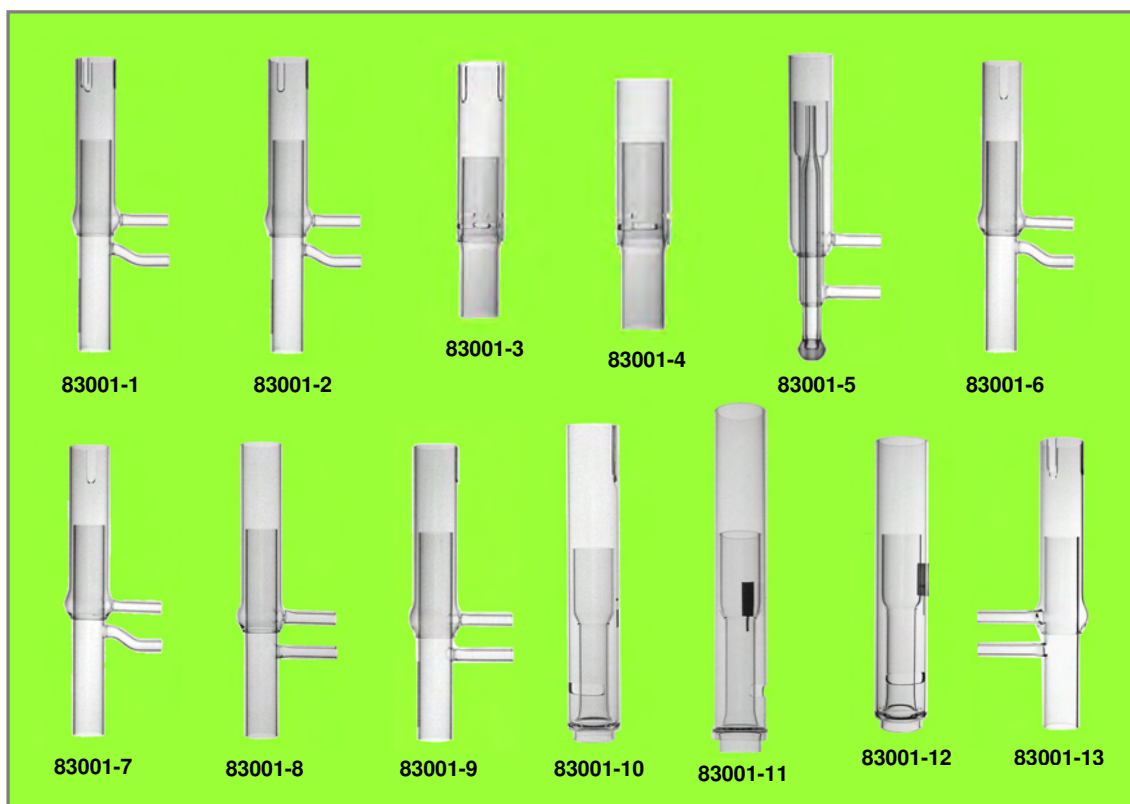
The ICP torches and accessories here are made with high quality quartz and glass so to equal or exceed the spectrometer specifications.

In order to maintain a uniform and reproducible plasma, torches are constructed with precision bore quartz tubing and carefully assembled to precise tolerances.

Torch Repair/Reconditioning

Some torches (already in your possession) can be restored to the original condition by contacting and returning to New Era. Prices will be determined after evaluation at New Era.

Perkin-Elmer

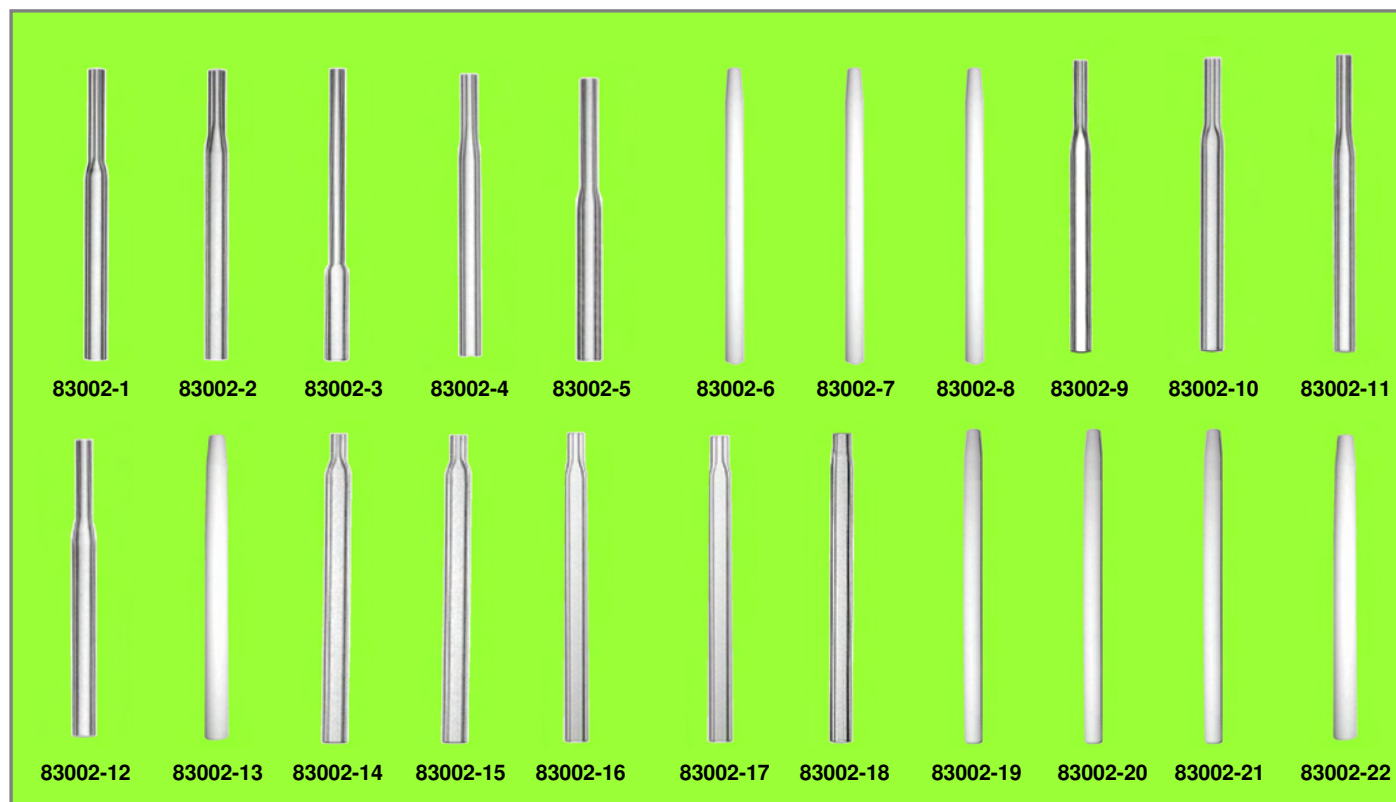


Torches

Cat. No.	Description	Instrument Model(s)	P-E No.	Price / ea
83001-1	Plasma Torch, Quartz, Type II	Plasma 1000, 2000, II, 40, 400	N058-0528	\$235.00
83001-2	Plasma Torch, Quartz, Type II	Plasma 1000, 2000, 40, 400 (Wear Metals Analyzer)	N068-1690	280.00
83001-3	Plasma Torch, Quartz, Type I	Plasma II, 40, 400	N058-0376	190.00
83001-4	Plasma Torch, Quartz, Type I	ICP/5000, 5500, 5500B, 6000, 6500 (XR)	N058-0233	140.00
83001-5	Plasma Torch, Quartz, Ball Joint	ICP/5000, 5500, 5500B, 6000, 6500 (XR)	0047-2048	240.00
83001-6	Plasma Torch, Quartz	Optima 3000 Radial	N069-0568	230.00
83001-7	Plasma Torch, Quartz	Optima 3000 Radial (Wear Metals Analyzer)	-	320.00
83001-8	Plasma Torch, Quartz	Optima 3000 XL, 3000 SC(X)	N069-5379	245.00
83001-9	Plasma Torch, Quartz, One Slot	Optima 3000 DV	N069-1662	190.00
83001-10	Plasma Torch, Quartz, One Slot, Aqueous	Optima 2000 DV, 4000 DV, 5000 DV	N077-0338	220.00
83001-11	Plasma Torch, Quartz, No Slot, Organic	Optima 2000 DV, 4000DV	N077-0343	220.00
83001-12	Plasma Torch, Quartz, No Slot, Organic (Short)	Optima 2000 DV, 4000 DV, 5000 DV	N077-0344	220.00
83001-13	Plasma Torch, Quartz, Radial, Three Slot	Optima 4000 V, 4300 V, 5300 V	N077-1500	270.00

ICP Accessory Quartz/Glassware

Perkin-Elmer

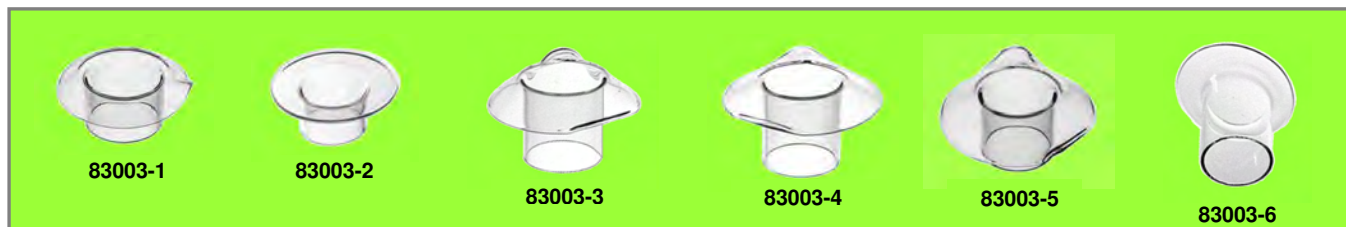


Injector Tubes

Cat. No.	Description	For Plasma Torch	P-E No.	Price / ea
83002-1	Injector Tube, Quartz, 1.2mm ID	83001-1, 83001-2, 83001-6, 83001-7	N068-1631	\$56.00
83002-2	Injector Tube, Quartz, 1.6mm ID	83001-1, 83001-2	0047-3292	56.00
83002-3	Injector Tube, Quartz, 1.6mm ID	83001-3, 83001-4	N058-0449	54.00
83002-4	Injector Tube, Quartz, 1.6mm ID	83001-6, 83001-7	N069-5448	65.00
83002-5	Injector Tube, Quartz, 2.0mm ID	83001-6, 83001-7	N069-5441	65.00
83002-6	Injector Tube, Alumina, 0.85mm ID	83001-6, 83001-7	N058-2186	149.00
83002-7	Injector Tube, Alumina, 1.5mm ID	83001-6, 83001-7	N058-2185	149.00
83002-8	Injector Tube, Alumina, 2.0mm ID	83001-6, 83001-7	N058-2184	149.00
83002-9	Injector Tube, Quartz, 0.8mm ID	83001-9	N069-5461	65.00
83002-10	Injector Tube, Quartz, 1.2mm ID	83001-8, 83001-9	N069-5460	65.00
83002-11	Injector Tube, Quartz, 1.6mm ID	83001-8, 83001-9	N069-5449	63.00
83002-12	Injector Tube, Quartz, 2.0mm ID	83001-8, 83001-9	N069-5442	63.00
83002-13	Injector Tube, Alumina, 2.0mm ID	83001-8, 83001-9	N069-5362	130.00
83002-14	Injector Tube, Quartz, 0.8mm ID	83001-10, 83001-11, 83001-12	N077-5225	78.00
83002-15	Injector Tube, Quartz, 1.2mm ID	83001-10, 83001-11, 83001-12	N077-5226	78.00
83002-16	Injector Tube, Quartz, 1.6mm ID	83001-10, 83001-11, 83001-12	N077-5223	78.00
83002-17	Injector Tube, Quartz, 2.0mm ID	83001-10, 83001-11, 83001-12	N077-5014	78.00
83002-18	Injector Tube, Quartz, 3.0mm ID	83001-10, 83001-11, 83001-12	N077-5224	78.00
83002-19	Injector Tube, Alumina, 0.8mm ID	83001-10, 83001-11, 83001-12	N077-5227	178.00
83002-20	Injector Tube, Alumina, 1.2mm ID	83001-10, 83001-11, 83001-12	N077-5228	178.00
83002-21	Injector Tube, Alumina, 2.0mm ID	83001-10, 83001-11, 83001-12	N077-5177	178.00
83002-22	Injector Tube, Alumina, 1.2mm ID	83001-13	N077-1531	149.00

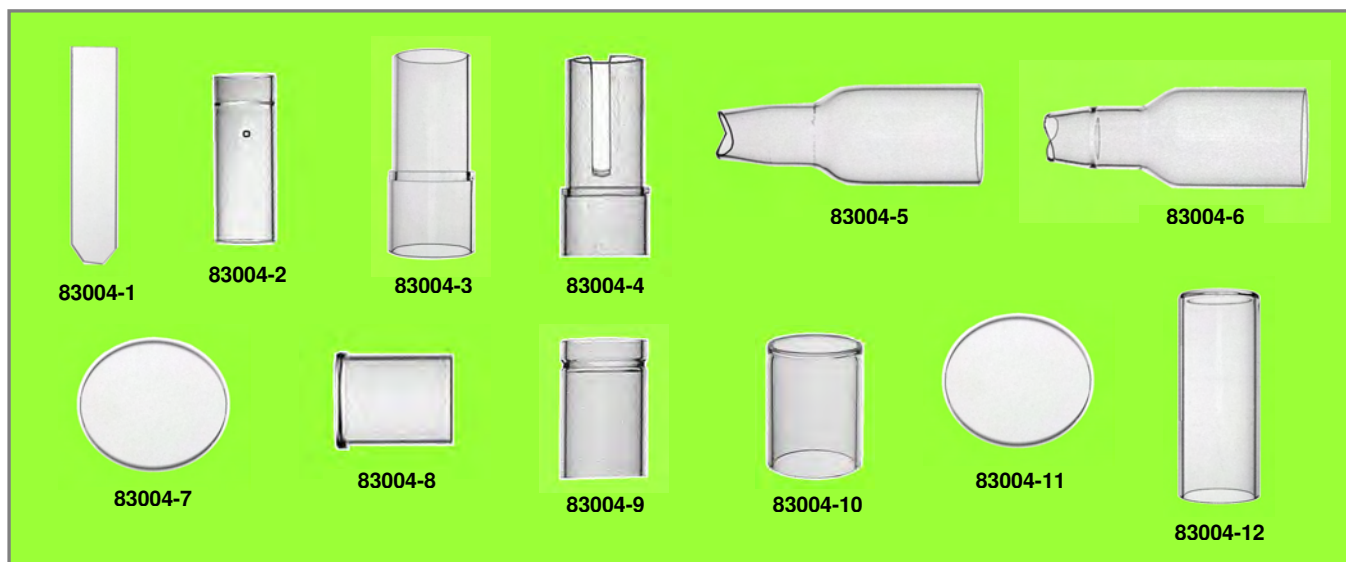
ICP Accessory Quartz/Glassware

Perkin-Elmer



Bonnets

Cat. No.	Description	Instrument Model(s)	P-E No.	Price / ea
83003-1	Bonnet, Quartz	Plasma 1000, 2000, II	N058-2235	\$56.00
83003-2	Bonnet, Quartz	ICP/5000, 5500, 5500B, 6000	0047-2033	43.00
83003-3	Bonnet, Quartz	Optima 3000 Radial (9/94 and Before)	N069-5295	54.00
83003-4	Bonnet, Quartz	Optima 3000 Radial (After 9/94)	N069-5456	54.00
83003-5	Bonnet, Quartz	Optima 3000 XL, 3000 SC(X), 3000 DV	N069-1664	58.00
83003-6	Bonnet, Quartz	Optima 2000 DV, 4000 DV, 4000 V, 4300 V	N077-5289	63.00

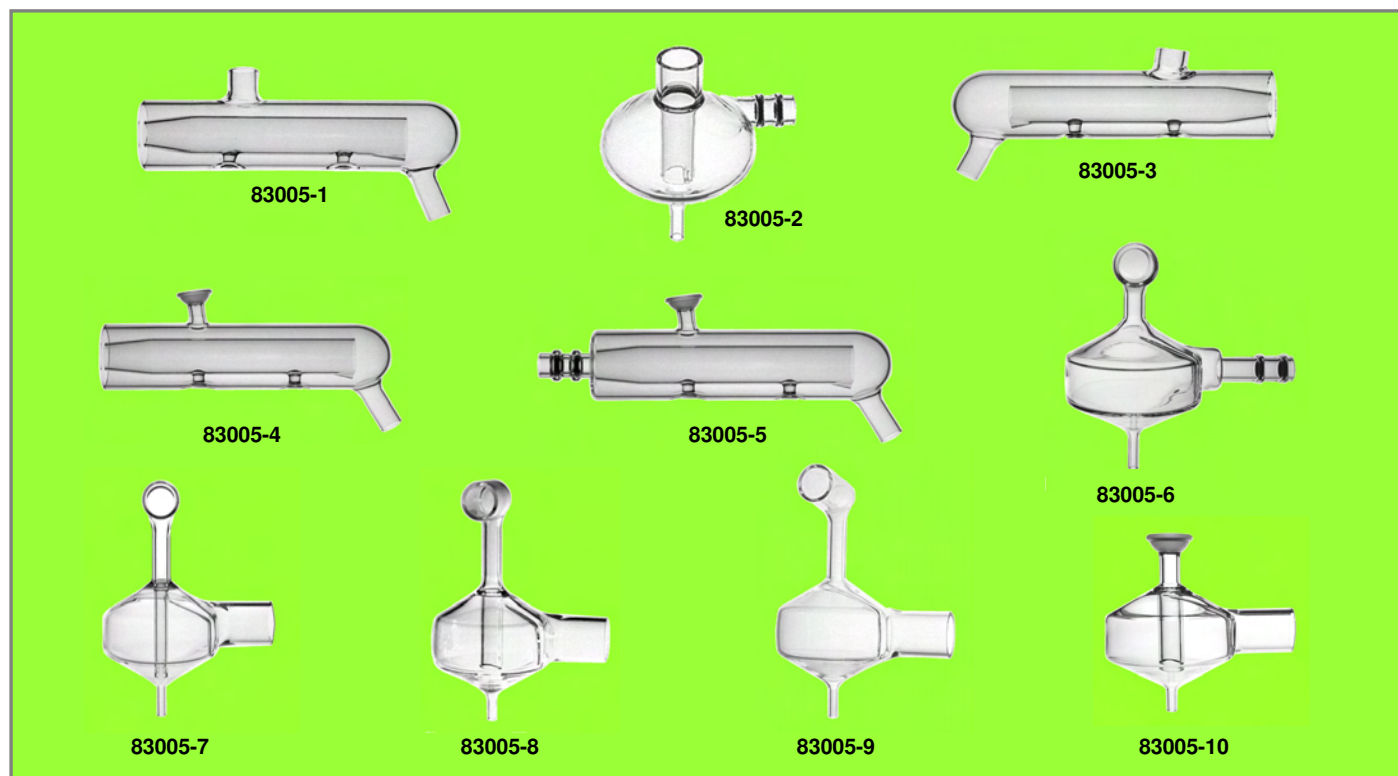


Torch Extensions, Purge Tubes and Windows

Cat. No.	Description	Instrument Model(s)	P-E No.	Price / ea
83004-1	Purge Extension Window, Quartz	Plasma 1000, 2000, II, Optima 3000 Radial, 4300 V, 5300 V	N058-1497	\$70.00
83004-2	Purge Extension, Quartz	Plasma 40, 400	N068-1234	119.00
83004-3	Torch Extension, Quartz	ICP/5000, 5500, 5500B, 6000	0047-3052	54.00
83004-4	Torch Extension, Slotted, Quartz	ICP/5000, 5500, 5500B, 6000	0047-3560	69.00
83004-5	Purge Tube, Quartz	ICP/5000, 5500, 5500B, 6000	0047-3187	165.00
83004-6	Purge Tube for Slotted Extension, Quartz	ICP/5000, 5500, 5500B, 6000	0047-3561	295.00
83004-7	Purge Viewing Window, Quartz	Optima 3000 XL	0999-2731	39.00
83004-8	Purge Tube Window, Axial, Quartz	Optima 3000 XL, 3000 DV	N069-1678	85.00
83004-9	Purge Tube Window, Radial, Quartz	Optima 3000 DV	N069-1689	110.00
83004-10	Purge Tube Window, Radial (Short), Quartz	Optima 3000 DV, 2000 DV	N069-0672	105.00
83004-11	Axial Purge Window, Quartz	Optima 3000 DV	B006-6549	25.00
83004-12	Radial Purge Window, Quartz	Optima 4000 DV, 5000 DV	N077-0322	100.00
83004-11	Axial Purge Window, Quartz	Optima 4000 DV, 5000 DV, 4300 V, 5300 V	N077-1116	25.00

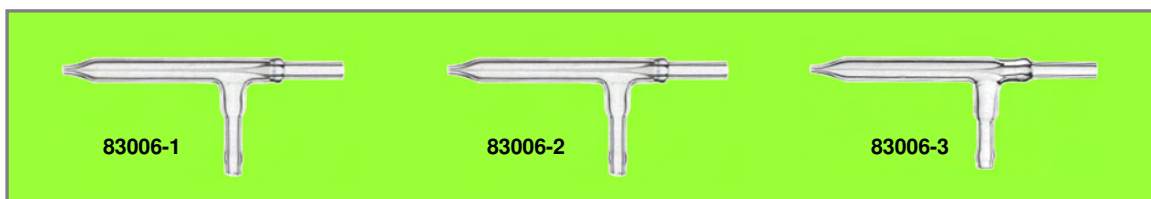
ICP Accessory Quartz/Glassware

Perkin-Elmer



Spray Chambers

Cat. No.	Description	Instrument Model(s)	P-E No.	Price / ea
83005-1	Spray Chamber, Type II, Glass	Plasma 1000, 2000, II, 40, 400, Optima 3000 Radial	-	\$140.00
83005-2	Spray Chamber, Cyclonic, Glass	Plasma 1000, 2000, II, 40, 400, Optima 3000 Radial	-	210.00
83005-3	Spray Chamber, Type II, Top w/Angle, Glass	Optima 3000 Radial	-	145.00
83005-4	Spray Chamber, Ball Joint, Glass	ICP/5000, 5500, 5500B, 6000	0047-2047	140.00
83005-5	Spray Chamber, Ball Joint, for Conc. Neb, Glass	ICP/5000, 5500, 5500B, 6000	-	190.00
83005-6	Spray Chamber, Cyclonic, Glass	Optima 3000 XL, 3000 SC(X), 3000 DV	N812-2188	210.00
83005-7	Spray Chamber, Cyclonic, Baffle w/4mm ID, Glass	Optima 2000 DV, 4000 DV, 5000DV	N077-6090	245.00
83005-8	Spray Chamber, Cyclonic, Baffle w/Neb Adapter, Glass	Optima 2000 DV, 4000 DV, 5000 DV	N077-6053	245.00
83005-9	Spray Chamber, Cyclonic, w/ Nebulizer Adapter, Glass	Optima 2000 DV, 4000 DV, 5000 DV	N077-6052	245.00
83005-10	Spray Chamber, Cyclonic, Baffle, Glass	Optima 4300 V, 4000 V, 5000 V	N077-1501	435.00

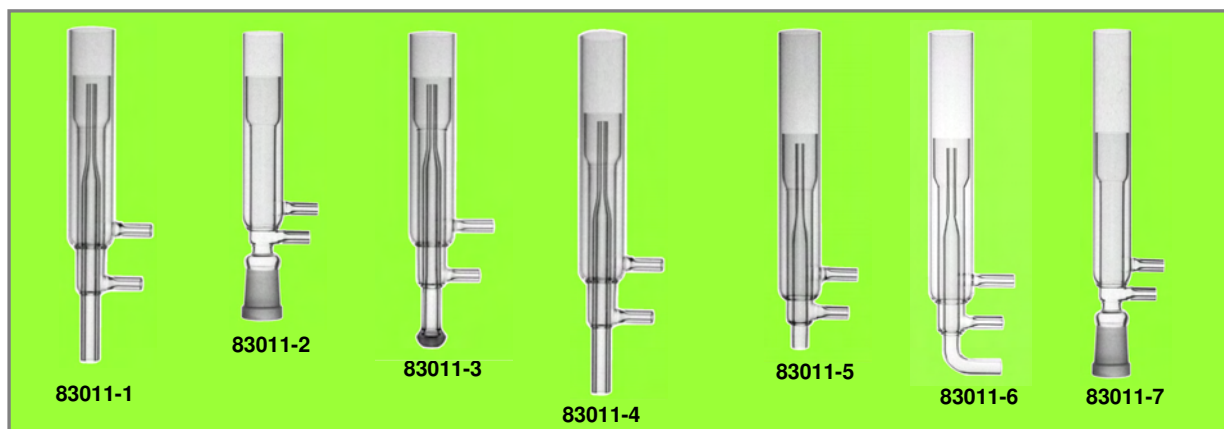


Nebulizers

Cat. No.	Description	Sample - Gas Uptake	Application	P-E No.	Price / ea
83006-1	Concentric Nebulizer, Type A, Glass	3ml/min - 1lpm Ar @ 30psi	General Purpose	0047-2020	\$200.00
83006-2	Concentric Nebulizer, Type C, Glass	1ml/min - 1lpm Ar @ 50psi	High levels of solids in solutions	0047-2022	325.00
83006-3	Concentric Nebulizer, Type K, Glass	3ml/min - 0.7lpm Ar @ 30psi	Low gas flow rates, Organics	N068-1574	285.00

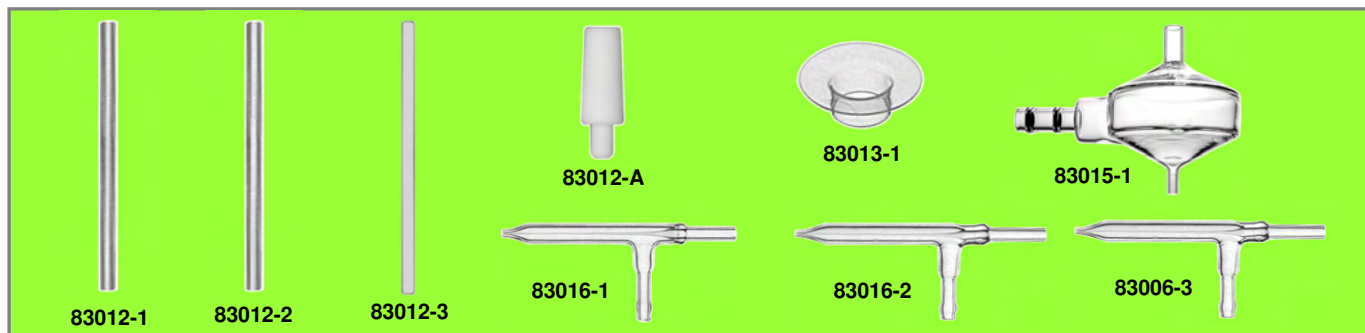
ICP Accessory Quartz/Glassware

Varian



Torches

Cat. No.	Description	Instrument Model(s)	Varian No.	Price / ea
83011-1	Plasma Torch, Quartz, Low Flow	Liberty, Vista, 700 ES	20-100696-90	\$245.00
83011-2	Plasma Torch, Quartz, Demountable	Liberty, Vista, 700 ES	20-100729-00	260.00
83011-3	Plasma Torch, Quartz, Low Flow, Ball Joint	Liberty, Vista, 700 ES	20-100696-90B	300.00
83011-4	Plasma Torch, Quartz, Extended, for N ₂	Liberty	20-100764-00	350.00
83011-5	Plasma Torch, Quartz, Low Flow, Axial	Liberty, Vista, 700 ES	20-100812-00	275.00
83011-6	Plasma Torch, Quartz, Low Flow, Axial, 90°	Liberty, Vista, 700 ES	20-100904-00	280.00
83011-7	Plasma Torch, Quartz, Demountable, Axial	Liberty, Vista, 700 ES	20-100834-00	280.00



Injector Tubes

Cat. No.	Description	For Plasma Torch	Varian No.	Price / ea
83012-1	Injector Tube, Quartz, 0.8mm ID	83011-2, 83011-7	20-100775-00	\$125.00
83012-2	Injector Tube, Quartz, 1.8mm ID	83011-2, 83011-7	20-100730-00	85.00
83012-3	Injector Tube, Alumina, 1.8mm ID	83011-2, 83011-7	20-100675-00	95.00
83012-A	Injector Tube Holder, Teflon	83011-2, 83011-7	99-100573-00	78.00

Bonnet, Spray Chamber

Cat. No.	Description	Instrument Model(s)	Varian No.	Price / ea
83013-1	Bonnet, Quartz	Liberty, Vista, 700-ES	20-100707-00	\$43.00
83015-1	Spray Chamber, Cyclonic, 8mm Top, 4mm Drain, Glass	Liberty, Vista, 700-ES	20-100817-00	190.00

Nebulizers

Cat. No.	Description	Sample - Gas Uptake	Application	Varian No.	Price / ea
83016-1	Concentric Nebulizer, Type C, Glass	1ml/min - 1lpm Ar @ 30psi	High levels of solids in solutions	20-100765-00	\$280.00
83016-2	Concentric Nebulizer, Type K, Glass	2ml/min - 0.7lpm Ar @ 30psi	Low gas flow rates, Organics	20-100695-00	285.00
83006-3	Concentric Nebulizer, Type K, Glass	3ml/min - 0.7lpm Ar @ 30psi	High gas flow rates	20-100816-00	285.00

ICP Accessory Quartz/Glassware

Thermo Jarrell-Ash



Torches (including injector tubes)

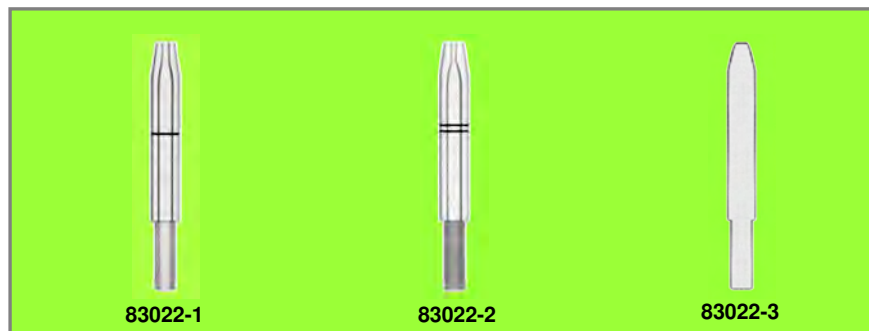
Cat. No.	Description	Instrument Model(s)	TJA No.	Price / ea
83021-1	Plasma Torch with Removable 1.0mm Tip, Quartz	975, 9000, ICAP 61, 1100	190400-54	\$320.00
83021-2	Plasma Torch with two Removable 1.0mm Tips, Quartz		-	435.00
83021-3	Plasma Torch, Quartz, High/Low Flow, Aqueous, 1.5mm	ICAP 61E, AtomScan 16, 25, PolyScan 61E, Iris, Advantage, Intrepid, Intrepid II (Radial)	126432-02	495.00
83021-4	Plasma Torch, Quartz, High Flow, Aqueous, 1.5mm		126432-01	490.00
83021-5	Plasma Torch, Quartz, High Flow, Organics, 1.0mm		125124-01	495.00
83021-6	Plasma Torch, Quartz, High Flow, One Slot, 1.5mm		126432-04	545.00
83021-7	Plasma Torch, Quartz, High Flow, HF w/Alumina Inj, 1.5mm		127179-01	625.00
83021-8	Plasma Torch, Quartz, High Flow, Trace, Axial, 1.5mm	ICAP 61E Trace, TraceScan, Iris AP, Intrepid, Intrepid II (Axial)	126432-03	495.00
83021-9	Plasma Torch, Quartz, Trace, HF w/Alumina Inj, Axial, 1.5mm		138566-03	635.00
83021-10	Plasma Torch, Quartz, Dual View, Axial, 1.5mm (Optic Sleeve and Seal are ordered separately)		138562-00	545.00
83024-3	Optic Sleeve, for Plasma Torch 83021-10	-	138563-00	43.00
83024-4	Optic Sleeve Seal, for 83024-3	-	137688-00	35.00

Torches (excluding injector tubes)

Cat. No.	Description	Instrument Model(s)	TJA No.	Price / ea
83021-3-NI	Plasma Torch, Quartz, High/Low Flow, Aqueous	ICAP 61E, AtomScan 16, 25, PolyScan 61E, Iris, Advantage, Intrepid, Intrepid II (Radial)	126440-02	415.00
83021-4-NI	Plasma Torch, Quartz, High Flow, Aqueous, Organics		126440-01	410.00
83021-6-NI	Plasma Torch, Quartz, High Flow, One Slot		126440-06	465.00
83021-8-NI	Plasma Torch, Quartz, High Flow, Trace, Axial	ICAP 61E Trace, TraceScan, Iris AP, Intrepid, Intrepid II (Axial)	126440-03	420.00
83021-10-NI	Plasma Torch, Quartz, Dual View, Axial		126440-05	450.00

ICP Accessory Quartz/Glassware

Thermo Jarrell-Ash



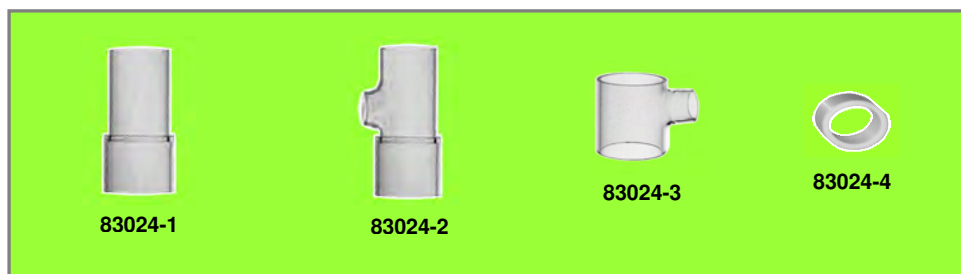
Injector Tubes

Cat. No.	Description	For Plasma Torch	TJA No.	Price / ea
83022-1	Injector Tube, Quartz, 1.5mm ID	83021-3, -4, -6, -8, -10	125407-00	\$108.00
83022-2	Injector Tube, Quartz, 1.0mm ID	83021-5, -8, -10	125407-01	108.00
83022-3	Injector Tube, Alumina, 1.5mm ID	83021-7, -9	136436-01	285.00



Bonnets

Cat. No.	Description	Instrument Model(s)	TJA No.	Price / ea
83023-1	Bonnet, Quartz	975, 9000, ICAP 61, 1100	190400-75	\$43.00
83023-2	Anti-Arc Cap, Quartz	ICAP 61E, AtomScan 16, 25, PolyScan 61E, Iris, Advantage, Intrepid, Intrepid II (Radial)	085207-00	40.00
83023-3	Anti-Arc Cap, Flat Edge, Quartz		085207-01	43.00

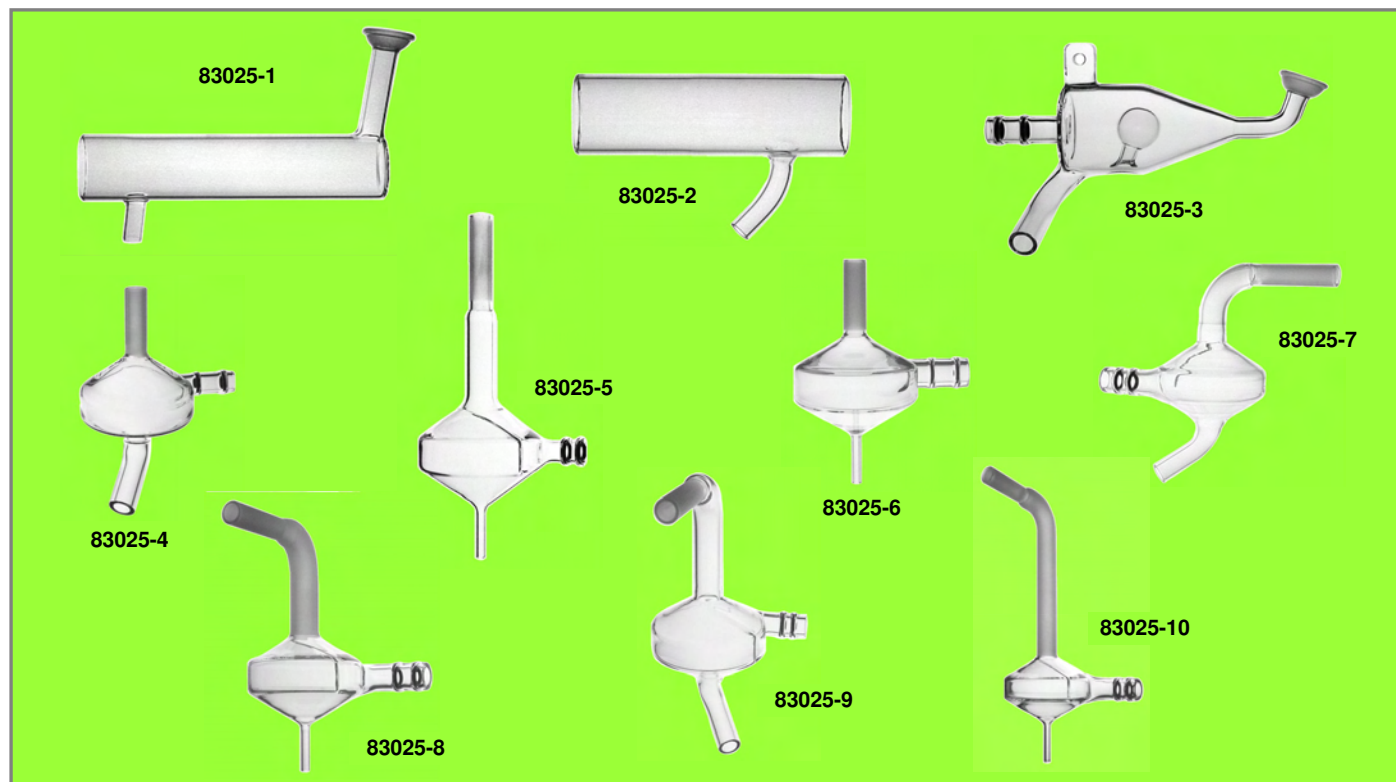


Torch Extensions, Optic Sleeve

Cat. No.	Description	Instrument Model(s)	TJA No.	Price / ea
83024-1	Torch Extension, Quartz	975, 9000, ICAP 61, 1100	-	\$54.00
83024-2	Torch Extension with Optical Port, Quartz		-	72.00
83024-3	Optic Sleeve, for Plasma Torch 83021-10	-	138563-00	43.00
83024-4	Optic Sleeve Seal, for 83024-3	-	137688-00	35.00

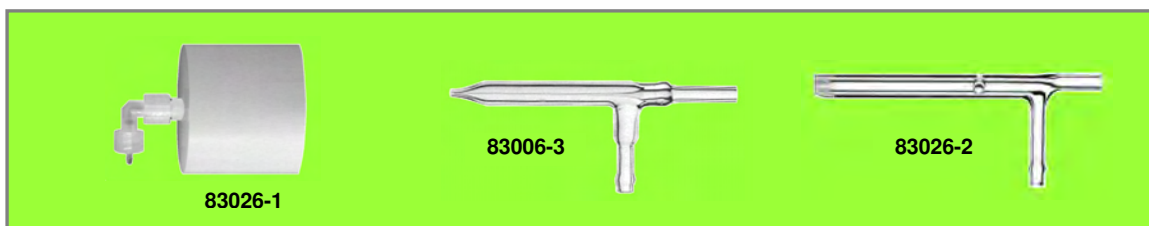
ICP Accessory Quartz/Glassware

Thermo Jarrell-Ash



Spray Chambers

Cat. No.	Description	Instrument Model(s)	TJA No.	Price / ea
83025-1	Spray Chamber, Standard, Glass	975, 9000, ICAP 61, 1100	190400-65	\$105.00
83025-2	Spray Chamber, Curved Drain, Open Ends, Glass	ICAP 61E, AtomScan 16, 25, PolyScan 61E, Iris, Advantage, Intrepid, Intrepid II (Radial)	130089-00	95.00
83025-3	Spray Chamber, Conical, Glass		139219-00	210.00
83025-4	Spray Chamber, Cyclonic, 12mm Drain, Glass		136105-00	145.00
83025-5	Spray Chamber, Cyclonic, Pump Drain, Glass		139663-00	142.00
83025-6	Spray Chamber, Cyclonic, Pump Drain, Glass		140542-00	145.00
83025-7	Spray Chamber, Cyclonic, 10mm Gravity Drain, Trace, Glass	ICAP 61E Trace, TraceScan, Iris AP, Intrepid, Intrepid II (Axial)	134620-00	145.00
83025-8	Spray Chamber, Cyclonic, Pump Drain, Glass		139662-00	190.00
83025-9	Spray Chamber, Cyclonic, Gravity Drain, Glass		136120-00	155.00
83025-10	Spray Chamber, Cyclonic, Gravity Drain, Glass		144515-00	190.00



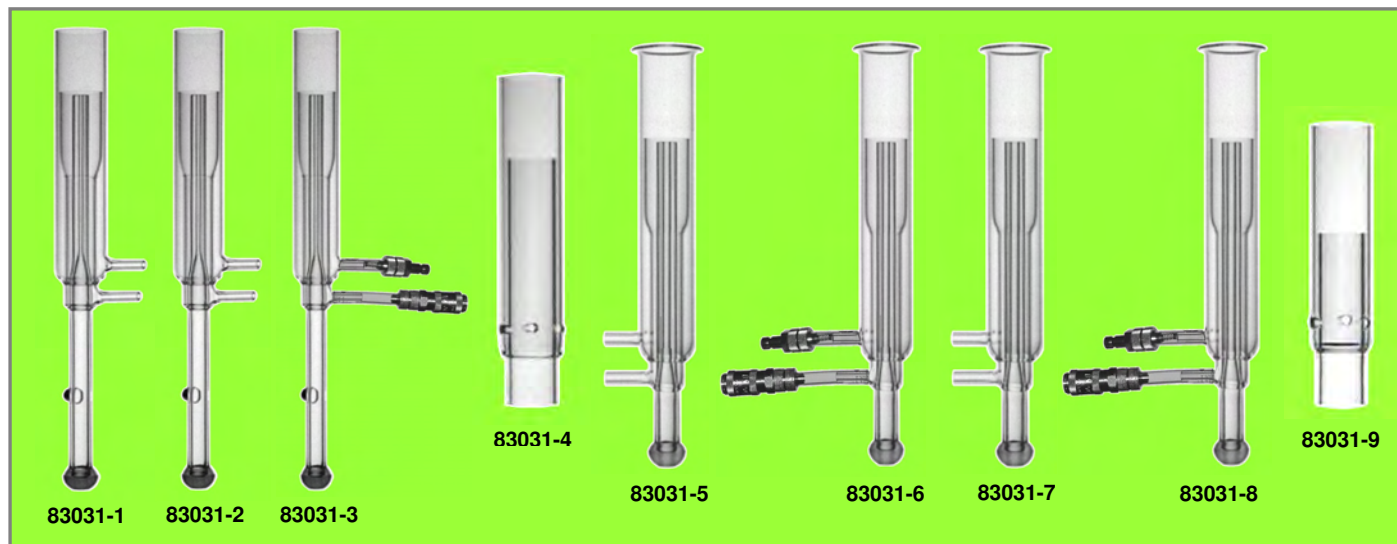
Nebulizers

Cat. No.	Description	Sample - Gas Uptake	Application	TJA No.	Price / ea
83026-1	Cross-Flow Nebulizer, PVDF	-	High solids, for 83025-1, -2	126989-00	\$460.00
83006-3	Concentric Nebulizer, Type K, Glass	3ml/min - 0.7lpm Ar @ 30psi	Low gas flow rates, Organics	134365-00	285.00
83026-2	Noordermeer V-Groove Nebulizer, Glass	0.7lpm Ar	High solids	140094-00	510.00

PVDF = Polyvinylidene Fluoride

ICP Accessory Quartz/Glassware

Spectro Analytical



Torches

Cat. No.	Description	Instrument Model(s)	Spectro No.	Price / ea
83031-1	Plasma Torch, Quartz, SOP, 1.0mm	Spectroflame, CIROS, Genesis, ARCOS	48205001	\$385.00
83031-2	Plasma Torch, Quartz, SOP, 1.8mm	Spectroflame, CIROS, Genesis, ARCOS	-	285.00
83031-3	Plasma Torch, Quartz, SOP, 1.8mm, w/ Fittings	Spectroflame, CIROS, Genesis, ARCOS	75060596	335.00
83031-4	Plasma Torch, Quartz, SOP, Demountable	Spectroflame, CIROS, Genesis, ARCOS	48206002	215.00
83031-5	Plasma Torch, Quartz, Flared End, EOP, 1.8mm	CIROS, Genesis, ARCOS	48105052A	345.00
83031-6	Plasma Torch, Quartz, Flared End, EOP, 1.8mm, w/ Fittings	CIROS, Genesis, ARCOS	75160592	395.00
83031-7	Plasma Torch, Quartz, Flared End, EOP, 2.5mm	CIROS, Genesis, ARCOS	48105052	345.00
83031-8	Plasma Torch, Quartz, Flared End, EOP, 2.5mm, w/ Fittings	CIROS, Genesis, ARCOS	75160526	395.00
83031-9	Plasma Torch, Quartz, EOP, Demountable	CIROS, Genesis, ARCOS	48206007	235.00

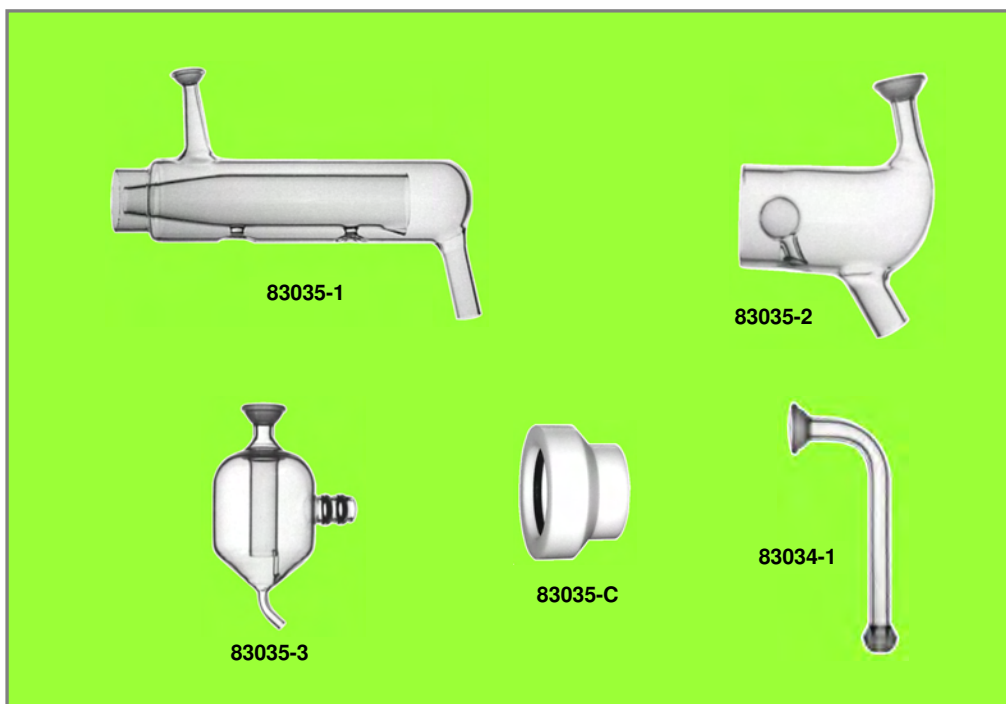


Injector Tubes

Cat. No.	Description	For Plasma Torch	Spectro No.	Price / ea
83032-1	Injector Tube, Quartz, 1.5mm ID	83031-4, 83031-9	48105008	\$105.00
83032-2	Injector Tube, Quartz, 1.8mm ID	83031-4, 83031-9	48105010	105.00
83032-3	Injector Tube, Quartz, 2.5mm ID, 175mm OAL	83031-4, 83031-9	48105009	110.00
83032-4	Injector Tube, Quartz, 2.5mm ID, 140mm OAL	83031-9	48105058	105.00

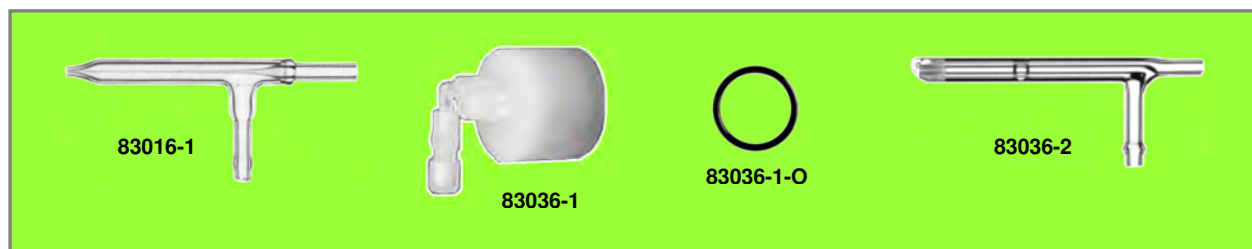
ICP Accessory Quartz/Glassware

Spectro Analytical



Spray Chambers

Cat. No.	Description	Instrument Model(s)	Spectro No.	Price / ea
83035-1	Spray Chamber, Scott, Double Pass, Glass	Spectroflame, CIROS, Genesis, ARCOS	48105006	\$175.00
83035-2	Spray Chamber, Conical, Vertical Exit, Open End, Glass	Spectroflame, CIROS, Genesis, ARCOS	48105003	130.00
83035-3	Spray Chamber, Cyclonic, Mod Lichte Neb, Pump Drain, Glass	CIROS, Genesis, ARCOS	48105061	199.00
83034-1	Elbow Adapter, for EOP Torch to Spray Chamber, Glass	-	48105062	45.00
83035-C	End Cap, for 83035-1, -2 to Conc. Nebulizer, PTFE	-	75060522	110.00

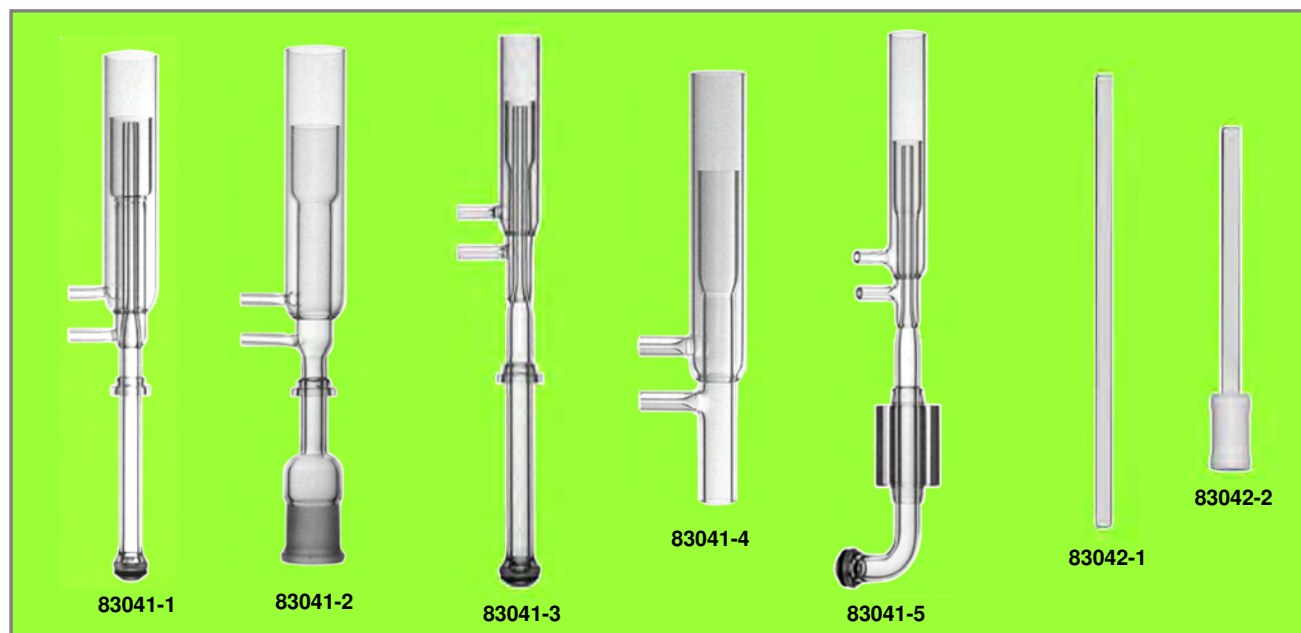


Nebulizers

Cat. No.	Description	Sample - Gas Uptake	Application	Spectro No.	Price / ea
83016-1	Concentric Nebulizer, Type C, Glass	1ml/min - 1lpm Ar @ 30psi	High levels of solids in solutions	76060510	\$280.00
83036-1	Cross-Flow Nebulizer, 34mm	-	High solids, for 83035-1, -2	75060502	510.00
83036-2	Modified Lichte Nebulizer, MDSN, Glass	1lpm Ar	High solids	48205036	565.00
83036-1-O	O-Ring, Viton, for 83036-1	-	-	-	11.00

ICP Accessory Quartz/Glassware

Applied Research Laboratories (ARL)



Torches

Cat. No.	Description	Instrument Model(s)	ARL No.	Price / ea
83041-1	Plasma Torch, Quartz, Standard, Maxi	3500 Maxi Series	139009-0003	\$270.00
83041-2	Plasma Torch, Quartz, Demountable HF	3500 Maxi Series	173131-0000	270.00
83041-3	Plasma Torch, Quartz, Mini, 1.5mm	3400/3500 Mini Series, Accuris	173463-0000	345.00
83041-4	Plasma Torch, Quartz, Mini, Demountable HF	3400/3500 Mini Series, Accuris	173473-0000	280.00
83041-5	Plasma Torch, Quartz, Maxim	Maxim 1, 3	S111403	560.00

Injector Tubes

Cat. No.	Description	For Plasma Torch	ARL No.	Price / ea
83042-1	Injector Tube, Alumina	83041-2	1200079	\$63.00
83042-2	Injector Tube, Alumina	83041-4	144857	260.00

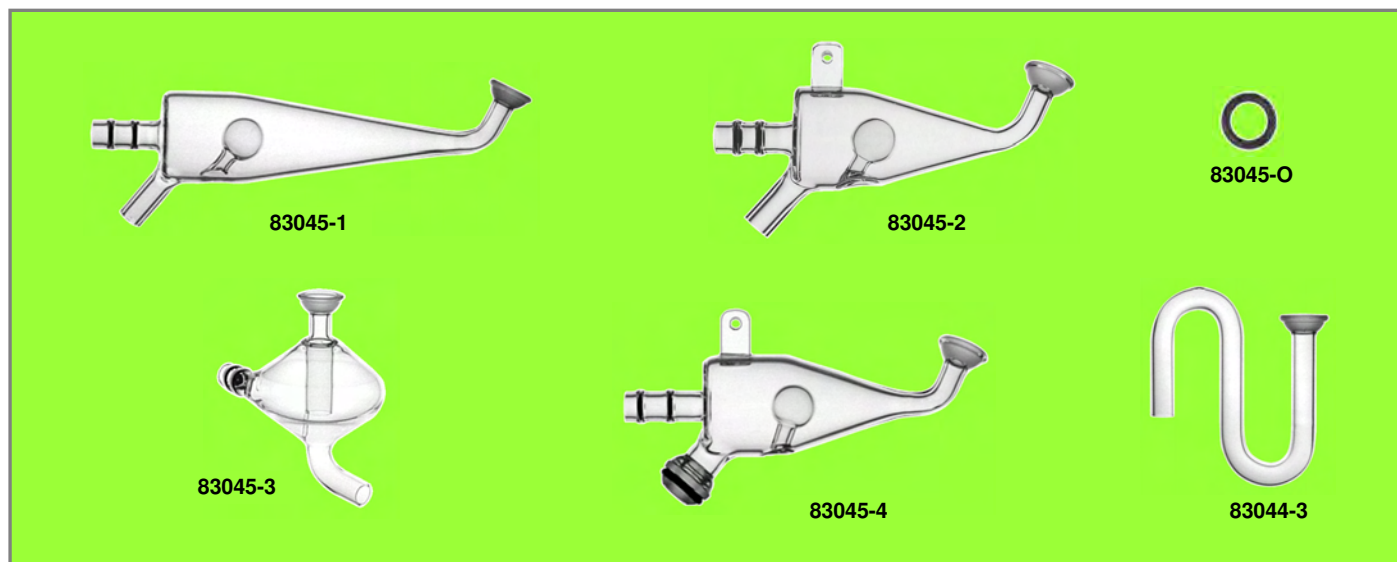


Bonnets, Torch Extensions

Cat. No.	Description	Instrument Model(s)	ARL No.	Price / ea
83043-1	Bonnet, Quartz	3500 Maxi Series	-	\$49.00
83043-2	Bonnet, Quartz, Induction Coil M/S	3500 Maxi Series	173251-0000	60.00
83043-3	Bonnet, Quartz, Mini	3400/3500 Mini Series, Accuris	173252-0000	43.00
83044-1	Torch Extension, Quartz	3500 Maxi Series	-	56.00
83044-2	Torch Extension with Optical Port, Quartz	3500 Maxi Series	-	72.00

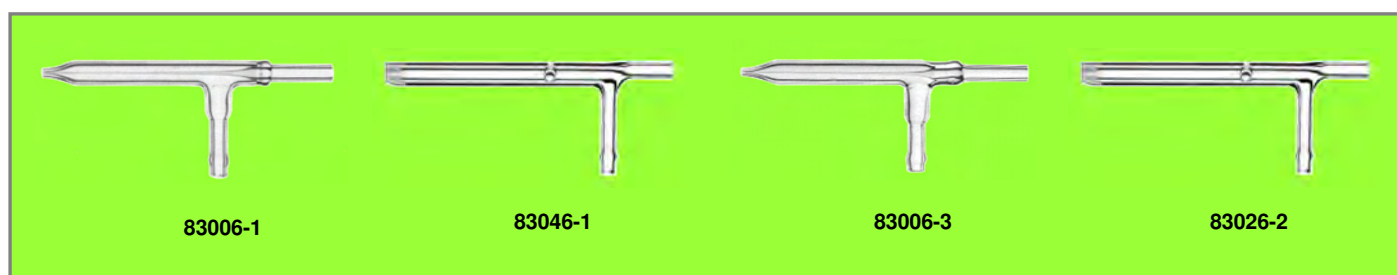
ICP Accessory Quartz/Glassware

Applied Research Laboratories (ARL)



Spray Chambers

Cat. No.	Description	Instrument Model(s)	ARL No.	Price / ea
83045-1	Spray Chamber, Conical, for Concentric Nebulizer, Glass	3500 Maxi Series	173142-0000	\$175.00
83045-2	Spray Chamber, Conical, for Concentric Nebulizer, Mini, Glass	3400/3500 Mini Series, Accuris	173142-0002	195.00
83045-3	Spray Chamber, Cyclonic, 10mm Drain, Glass	3500 Maxi Series 3400/3500 Mini Series, Accuris	-	195.00
83045-4	Spray Chamber, Conical, for Concentric Nebulizer, Glass	Maxim 1, 3	S702171	210.00
83045-O	O-Ring, Teflon-Coated Viton, for 83045-1, -2, -3, -4	-	-	8.50
83044-3	Drain Trap, for 83045-4, Glass	-	S702232	54.00

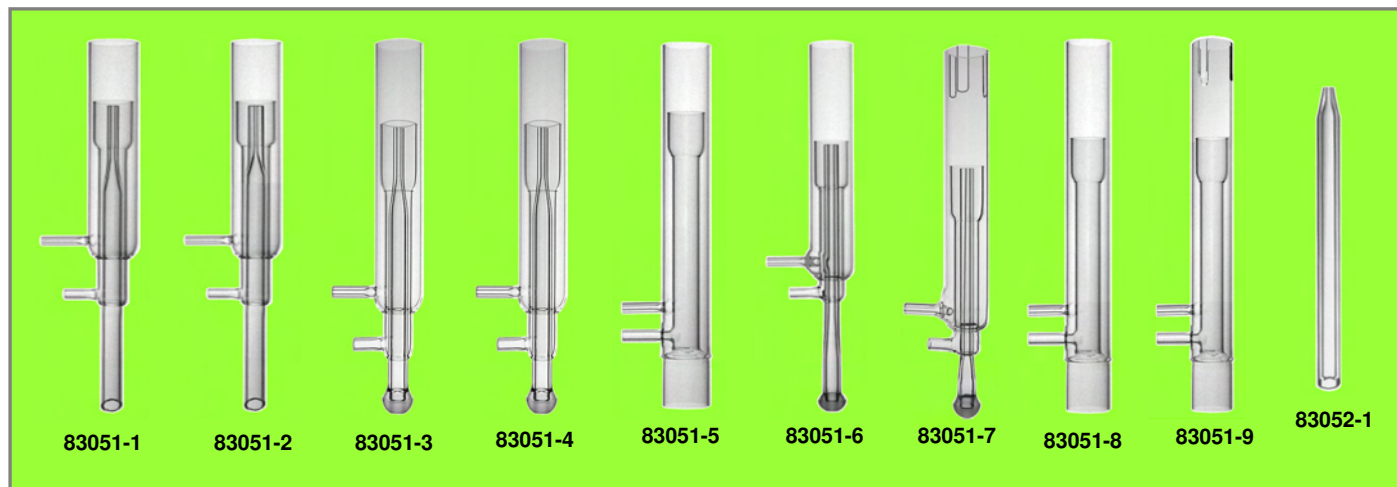


Nebulizers

Cat. No.	Description	Sample - Gas Uptake	Application	ARL No.	Price / ea
83006-1	Concentric Nebulizer, Type A, Glass	3ml/min - 1lpm Ar @ 30psi	General Purpose, 3500 Maxi	914319	\$200.00
83046-1	Noordermeer V-Groove Nebulizer, Glass	1 lpm Ar	High Solids, 3500 Maxi	-	510.00
83006-3	Concentric Nebulizer, Type K, Glass	3ml/min - 0.7lpm Ar @ 30psi	Low gas flow rates, Organics 3400/3500 Mini	915375	285.00
83026-2	Noordermeer V-Groove Nebulizer, Glass	0.7 lpm Ar	High solids, 3400/3500 Mini, Maxim 1, 3	915817-0000	510.00

ICP Accessory Quartz/Glassware

Leeman Labs (Teledyne)

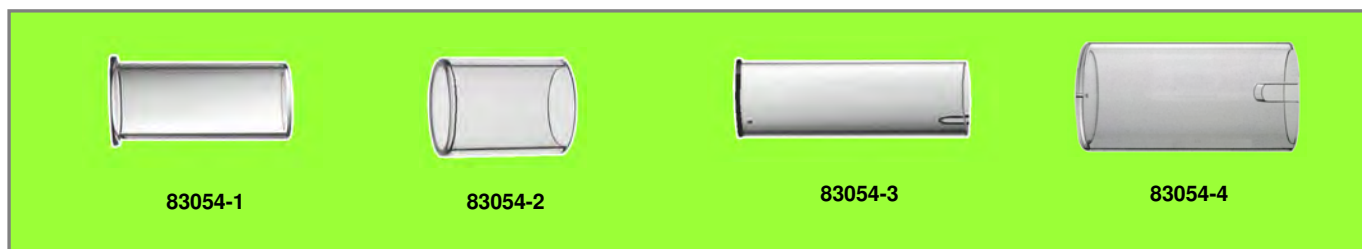


Torches

Cat. No.	Description	Instrument Model(s)	Leeman No.	Price / ea
83051-1	Plasma Torch, Quartz, Beveled End, Aqueous, 1.5mm	PS Series, Plasma-Spec, Prism, Prodigy, Profile	-	\$275.00
83051-2	Plasma Torch, Quartz, Beveled End, Organics, 1.0mm		318-0016	275.00
83051-3	Plasma Torch, Quartz, Ball Joint, Aqueous		120-3748	280.00
83051-4	Plasma Torch, Quartz, Ball Joint, Organics		120-3749	290.00
83051-5	Plasma Torch, Quartz, Demountable, Aqueous		318-0001	295.00
83051-6	Plasma Torch, Quartz, Axial, Aqueous, 190mm Length	Prism, Prodigy, Profile	318-00062	420.00
83051-7	Plasma Torch, Quartz, Axial, Aqueous, Dual View		318-00065	445.00
83051-8	Plasma Torch, Quartz, Demountable, Axial, Aqueous		318-00069	415.00
83051-9	Plasma Torch, Quartz, Demountable, Axial, Aqueous, Dual View		318-00070	395.00

Injector Tube

Cat. No.	Description	For Plasma Torch	Leeman No.	Price / ea
83052-1	Injector Tube, Quartz, 1.2mm	83051-5, 83051-8, 83051-9	318-0004	\$59.00

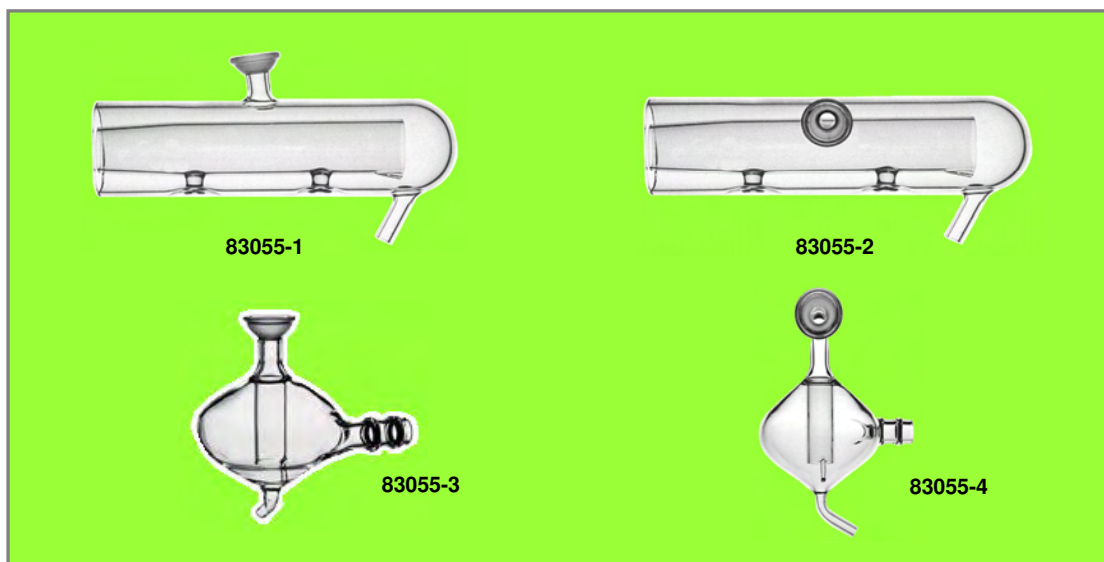


Purge Window and Tubes

Cat. No.	Description	Instrument Model(s)	Leeman No.	Price / ea
83054-1	Purge Window, Quartz	PS Series, Plasma-Spec	121-0034	\$125.00
83054-2	Purge Tube, Quartz, Axial	Prism, Prodigy, Profile	318-00066	130.00
83054-3	Purge Tube, Quartz, Radial		318-00068	145.00
83054-4	Purge Tube, Quartz, Dual View		318-00067	125.00

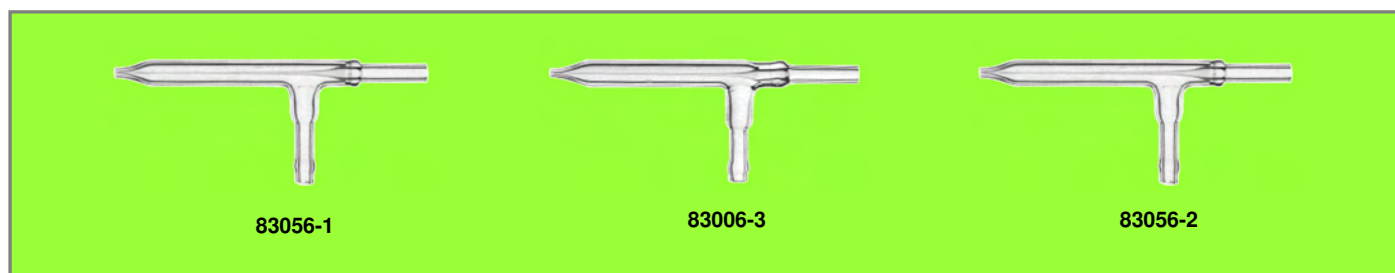
ICP Accessory Quartz/Glassware

Leeman Labs (Teledyne)



Spray Chambers

Cat. No.	Description	Instrument Model(s)	Leeman No.	Price / ea
83055-1	Spray Chamber, Scott, Radial, Glass	PS Series, Plasma-Spec, Prism, Prodigy, Profile	120-3751	\$130.00
83055-2	Spray Chamber, Scott, Axial, Glass	Prism, Prodigy, Profile	120-00201-1	142.00
83055-3	Spray Chamber, Cyclonic, Radial, Conc. Neb, Glass	PS Series, Plasma-Spec, Prism, Prodigy, Profile	-	200.00
83055-4	Spray Chamber, Cyclonic, Axial, Conc. Neb, Glass	Prism, Prodigy, Profile	-	180.00

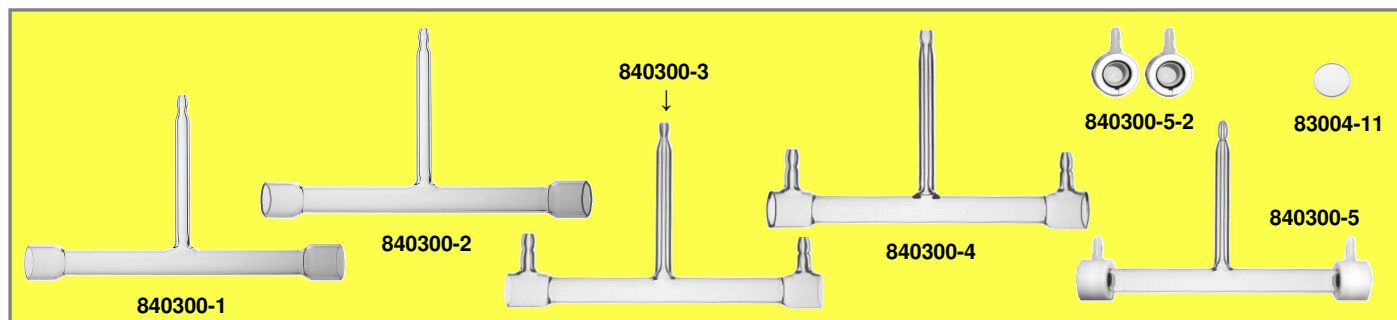


Nebulizers

Cat. No.	Description	Sample - Gas Uptake	Application	Leeman No.	Price / ea
83056-1	Concentric Nebulizer, Type C, Glass	2ml/min - 1lpm Ar @ 30psi	High levels of solids in solutions	-	\$260.00
83006-3	Concentric Nebulizer, Type K, Glass	3ml/min - 0.7lpm Ar @ 30psi	Low gas flow rates, Organics	-	285.00
83056-2	Concentric Nebulizer, Type C, Glass	3ml/min - 1lpm Ar @ 30psi	High levels of solids in solutions	-	260.00

Miscellaneous Accessories for AA Quartz Cells for Cold Vapor-Hydride

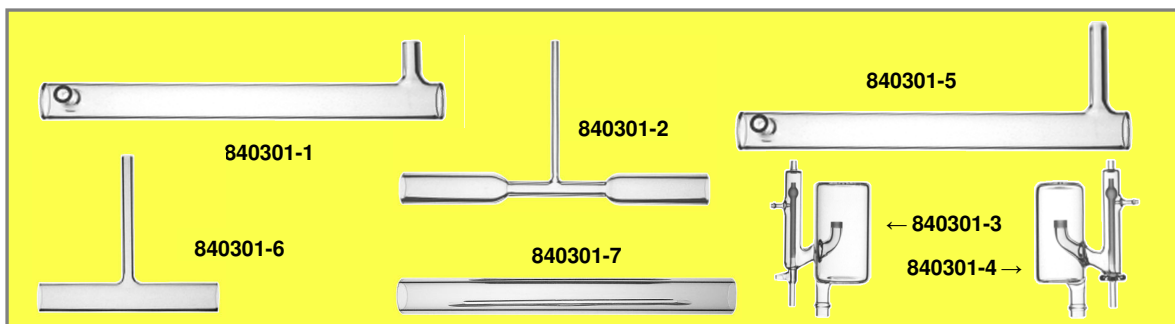
Perkin-Elmer



Cat. No.	Description	Accessory Model(s)	P-E No.	Price / ea
840300-1	Quartz Cell (no windows) *	MHS-10, MHS-15	B009-4415	\$105.00
840300-2	Quartz Cell (with fused-on windows) *	MHS-10, MHS-15	-	138.00
840300-3	Quartz Cell (no windows)	MHS-20	B009-7694	112.00
840300-4	Quartz Cell (with fused-on windows)	MHS-20	B009-7693	142.00
840300-5	Quartz Cell (with windows and end caps)	FI-MHS	-	635.00
840300-5-1	Quartz Cell (no windows or end caps)	FI-MHS	B050-7486	420.00
840300-5-2	Window/Cap Assembly (2 windows, 2 caps)	FI-MHS	B050-7487	218.00
83004-11	Quartz Window	FI-MHS	B006-6549	25.00

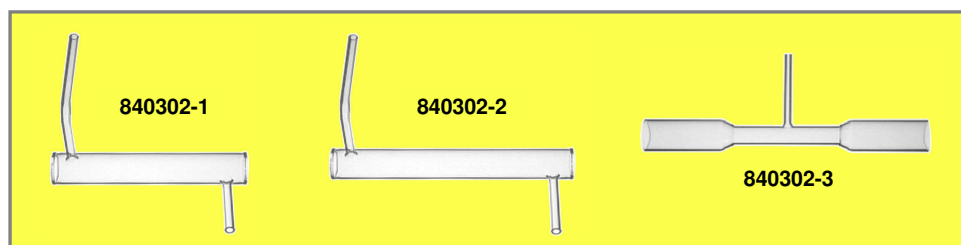
* Cooling rings and rubber sleeves not included

Varian



Cat. No.	Description	Accessory Model(s)	Varian No.	Price / ea
840301-1	Mercury Flow-Through Cell, Quartz	VGA-76, VGA-77	99-100407-00	\$125.00
840301-2	Hydride Absorption Cell, Quartz	VGA-76, VGA-77	99-100400-00	105.00
840301-3	Gas/Liquid Separator	VGA-76	99-100402-00	420.00
840301-4	Gas/Liquid Separator	VGA-77	99-100711-00	420.00
840301-5	Mercury Flow-Through Cell, Quartz	M-65	01-102551-00	160.00
840301-6	Hydride Absorption Cell, Quartz	M-65	01-102576-90	95.00
840301-7	Atom Concentrator Tube, Quartz	ACT-80	99-100544-00	58.00

Thermo Jarrell-Ash



Cat. No.	Description	Accessory Model	TJA No.	Price / ea
840302-1	Quartz Cell, 120mm Length	AVA-880	85476	\$115.00
840302-2	Quartz Cell, 150mm Length		122910	135.00
840302-3	Hydride Absorption Cell, Quartz		131395	95.00

Miscellaneous Accessories for AA/ICP

Vent-Exhaust System

For proper removal of fumes and corrosive and toxic vapors from atomic absorption burner heads and ICP torches. Also used to remove dispersed heat from ICP spectrometers.

Includes stainless steel hood (10" diameter), stainless steel flexible hose (10' long x 4" diameter), vent-exhaust blower unit (110 volt), stainless steel blower adapter, and two stainless steel hose clamps.

A stainless steel connector sleeve is optional and used to join two stainless steel hoses. **Order separately.**

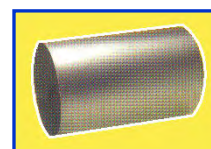
Cat. No.	Description	Price / ea
84011	Vent-Exhaust System, 110 Volt	\$650.00

Additional/Replacement Parts for Vent-Exhaust System

Cat. No.	Description	Price / ea
84011-1	Stainless Steel Hood, 10" Dia.	\$195.00
84011-2	Stainless Steel Flexible Hose, 10' L x 4" Dia.	225.00
84011-3	Vent-Exhaust Blower Unit, 110 Volt	210.00
84011-4	Stainless Steel Blower Adapter	80.00
84011-5	Stainless Steel Hose Clamp	18.00
84011-6	Stainless Steel Connector Sleeve	55.00



84011



84011-6

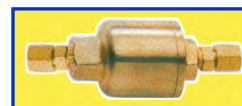
Balston Air Filter

Used to remove oil, water and particulate matter from compressed air lines of AA and ICP spectrometers. Includes automatic water drainage. Furnished with 1/4" fittings.



Cat. No.	Description	Price / ea
84021	Balston Air Filter	\$150.00
84021-1	Replacement Filter Cartridge	33.00

Flashback Arrestor



For AA spectrometers, the Flashback Arrestor prevents flashbacks started at the burner head by stopping the gas supply, extinguishing any flame within the housing, and monitoring reverse flow under all conditions. Can be re-set after a flashback. Furnished with 1/4" NPT-F fittings.

Cat. No.	Description	Price / ea
84022	Flashback Arrestor	\$99.00

Gas Pressure Regulators

These brass single regulators have a two-stage design (delivery pressure/tank pressure) to maintain a steady gas flow for AA spectrometers.

Cat. No.	Description	Price / ea
84023-1	Pressure Regulator, Acetylene (includes adapters for CGA-510 fittings)	\$215.00
84023-2	Pressure Regulator, Air (includes adapters for CGA-580 fittings)	215.00
84023-3	Pressure Regulator, Hydrogen (includes adapters for CGA-350 fittings)	215.00
84023-4	Pressure Regulator, Nitrous Oxide (includes adapters for CGA-326 fittings and heat sink to prevent freezing of diaphragm)	295.00



Periodic Chart of the Elements

1 +1 -1 H 1.0079 Hydrogen																	2 He 4.00260 Helium																																																																																																																																									
3 +1 Li 6.941 Lithium	4 +2 Be 9.01218 Beryllium	Atomic Number → 82 +2 +4 Symbol → Pb Atomic Weight → 207.2 Element → Lead										5 +3 B 10.81 Boron	6 +2 +4 -4 C 12.011 Carbon	7 -1 -2 -3 +1 +2 +3 +4 +5 N 14.0067 Nitrogen	8 -2 O 15.9994 Oxygen	9 -1 F 18.9940 Fluorine	10 Ne 20.179 Neon											11 +1 Na 22.98977 Sodium	12 +2 Mg 24.305 Magnesium											13 +3 Al 26.98154 Aluminum	14 +2 +4 -4 Si 6.941 Lithium	15 +3 +5 -3 P 30.97376 Phosphorus	16 +4 +6 -2 S 32.06 Sulfur	17 +1 +5 +7 -1 Cl 35.453 Chlorine	18 Ar 39.948 Argon											19 +1 K 39.098 Potassium	20 +2 Ca 40.08 Calcium	21 +3 Sc 44.9559 Scandium	22 +2 +3 +4 Ti 47.90 Titanium	23 +2 +3 +4 +5 V 50.9414 Vanadium	24 +2 +3 +6 Cr 51.996 Chromium	25 +2 +3 +4 +7 Mn 54.9380 Manganese	26 +2 +3 Fe 55.847 Iron	27 +2 +3 Co 58.9332 Cobalt	28 +2 +3 Ni 58.71 Nickel	29 +1 +2 Cu 63.546 Copper	30 +2 Zn 65.38 Zinc	31 +3 Ga 69.72 Gallium	32 +2 +4 Ge 72.59 Germanium	33 +3 +5 -3 As 74.9216 Arsenic	34 +4 +6 -2 Se 78.96 Selenium	35 +1 +5 -1 Br 79.904 Bromine	36 Kr 83.80 Krypton											37 +1 Rb 85.4678 Rubidium	38 +2 Sr 87.62 Strontium	39 +3 Y 88.9059 Yttrium	40 +4 Zr 91.22 Zirconium	41 +3 +5 Nb 92.9064 Niobium	42 +6 Mo 95.94 Molybdenum	43 +4 +6 +7 Tc 98.9062 Technetium	44 +3 Ru 101.07 Ruthenium	45 +3 Rh 102.9055 Rhodium	46 +2 +4 Pd 106.4 Palladium	47 +1 Ag 107.868 Silver	48 +2 Cd 112.41 Cadmium	49 +3 In 114.82 Indium	50 +2 +4 Sn 118.69 Tin	51 +3 +5 -3 Sb 121.75 Antimony	52 +4 +6 -2 Te 127.60 Tellurium	53 +1 +5 +7 -1 I 126.9045 Iodine	54 Xe 131.30 Xenon											55 +1 Cs 132.9054 Cesium	56 +2 Ba 137.33 Barium	57 +3 La* 138.9055 Lanthanum	58 +3 Hf 178.49 Hafnium	59 +5 Ta 180.9479 Tantalum	60 +6 W 183.85 Tungsten	61 +4 +6 +7 Re 186.2 Rhenium	62 +3 +4 Os 190.2 Osmium	63 +3 +4 Ir 192.22 Iridium	64 +1 +3 Pt 195.09 Platinum	65 +1 +3 Au 196.9665 Gold	66 +2 Hg 200.59 Mercury	67 +1 +3 Tl 204.37 Thallium	68 +2 +4 Pb 207.2 Lead	69 +3 Bi 208.9804 Bismuth	70 +2 Po 208.9824 Polonium	71 At 209.9871 Astatine	72 Rn 222.0176 Radon											87 +1 Fr 223.0197 Francium	88 +2 Ra 226.0254 Radium	89 +3 Ac** 227.0278 Actinium	90 +4 (Rf) (260)Ruthenium	91 +4 (Ha) (262)Hahnium										

*Lanthanide Series

**Actinide Series

AA Flame Types

G ₀ =Oxidant Gas G ₁ =Fuel Gas	G ₀ =Oxidant Gas G ₁ =Fuel Gas	G ₀ =Oxidant Gas G ₁ =Fuel Gas	G ₀ =Oxidant Gas G ₁ =Fuel Gas	G ₀ =Oxidant Gas G ₁ =Fuel Gas
Element Flame Type	Element Flame Type	Element Flame Type	Element Flame Type	Element Flame Type
Al Aluminum G ₀ =N ₂ O G ₁ =C ₂ H ₂	Ca Calcium G ₀ =N ₂ O G ₁ =C ₂ H ₂	Li Lithium G ₀ =Air G ₁ =C ₂ H ₂	Pt Platinum G ₀ =Air G ₁ =C ₂ H ₂	Ta Tantalum G ₀ =N ₂ O G ₁ =C ₂ H ₂
Sb Antimony G ₀ =Air G ₁ =C ₂ H ₂	Cr Chromium G ₀ =Air G ₁ =C ₂ H ₂	Mg Magnesium G ₀ =Air G ₁ =C ₂ H ₂	K Potassium G ₀ =Air G ₁ =C ₂ H ₂	Tl Thallium G ₀ =Air G ₁ =C ₂ H ₂
As Arsenic G ₀ =Air G ₁ =H ₂	Co Cobalt G ₀ =Air G ₁ =C ₂ H ₂	Mn Manganese G ₀ =Air G ₁ =C ₂ H ₂	Rh Rhodium G ₀ =Air G ₁ =C ₂ H ₂	Sn Tin G ₀ =Air G ₁ =H ₂
Ba Barium G ₀ =N ₂ O G ₁ =C ₂ H ₂	Cu Copper G ₀ =Air G ₁ =C ₂ H ₂	Hg Mercury Cold Vapor	Se Selenium G ₀ =Air G ₁ =H ₂	Ti Titanium G ₀ =N ₂ O G ₁ =C ₂ H ₂
Be Beryllium G ₀ =N ₂ O G ₁ =C ₂ H ₂	Ge Germanium G ₀ =N ₂ O G ₁ =C ₂ H ₂	Mo Molybdenum G ₀ =N ₂ O G ₁ =C ₂ H ₂	Si Silicon G ₀ =N ₂ O G ₁ =C ₂ H ₂	W Tungsten G ₀ =N ₂ O G ₁ =C ₂ H ₂
Bi Bismuth G ₀ =Air G ₁ =C ₂ H ₂	Au Gold G ₀ =Air G ₁ =C ₂ H ₂	Ni Nickel G ₀ =Air G ₁ =C ₂ H ₂	Ag Silver G ₀ =Air G ₁ =C ₂ H ₂	V Vanadium G ₀ =N ₂ O G ₁ =C ₂ H ₂
B Boron G ₀ =N ₂ O G ₁ =C ₂ H ₂	Fe Iron G ₀ =Air G ₁ =C ₂ H ₂	Pd Palladium G ₀ =Air G ₁ =C ₂ H ₂	Na Sodium G ₀ =Air G ₁ =C ₂ H ₂	Zn Zinc G ₀ =Air G ₁ =C ₂ H ₂
Cd Cadmium G ₀ =Air G ₁ =C ₂ H ₂	Pb Lead G ₀ =Air G ₁ =C ₂ H ₂	P Phosphorus G ₀ =N ₂ O G ₁ =C ₂ H ₂	Sr Strontium G ₀ =N ₂ O G ₁ =C ₂ H ₂	Zr Zirconium G ₀ =N ₂ O G ₁ =C ₂ H ₂