



Meinhard Nebulizers

The MEINHARD® Concentric Nebulizer reflects exacting standards in design and manufacturing. Its advantages include simplicity of design and operation, reproducible and self-aligning aerosol, and close fabrication control. They provide excellent sensitivity and precision for aqueous solutions and samples with few dissolved solids (less than 1%). MEINHARD® Nebulizers are self-aspirating. They are not to be used with solutions containing hydrofluoric acid. Nebulizers require an end cap (N0680504) for use with Scott Spray Chambers.

Type	Material	AR Flow Rate	Uptake Rate	Part No.
Type C3	Glass	1.0 L/min	3 mL/min	N8102011
Type K3	Glass	1.0 L/min	3 mL/min	N0681574
Type A3	Quartz	1.0 L/min	3 mL/min	WE024371
Type A0.5 (NexION)	Quartz	1.0 L/min	0.5 mL/min	N8145011
Type C0.5 (NexION)	Glass	1.0 L/min	0.5 mL/min	N8145012

Meinhard Nebulizer Spares



Description	Part No.
Nebulizer Clip for Meinhard Nebulizers	N0777460
Nebulizer Fitting	N8145016

Liquid Connector



Low dead volume PEEK connector for use with MEINHARD® Concentric Nebulizers. Requires 0.062 in (1.59 mm) o.d. tubing (WE024375). Standard on ELAN DRCs. Not required for PFA Teflon® Nebulizers.

Description	Part No.
Liquid Connector	WE024372

EXCELLENT SENSITIVITY AND PRECISION

End Cap for Concentric Nebulizers



End cap to fit any concentric nebulizer onto a Scott Spray Chamber.

Description	Part No.
End Cap for Concentric Nebulizers	N0680504

GemClean Cross-Flow II Nebulizer

Complete chemically inert Cross-Flow II nebulizer assembly for ICP-MS. Specially processed to reduce BEC levels below 1 ppb. Contains an end cap with a GemTip clear sapphire sample tip and a GemTip red ruby argon tip optimized for ICP-MS.



ICP-MS	Part No.
NexION/ELAN DRCe/9000/6X00/5000/500/250	N8120516

Cross-Flow Replacement GemTips and Supplies

Includes a clear sapphire sample tip and a red ruby argon tip optimized for ICP-MS. The tips are constructed of PEEK for maximum corrosion resistance. Used in all GemClean Cross-Flow II nebulizers produced after September, 1998.



Description	Part No.
Cross-Flow Replacement GemTips	N0580624
Cross-Flow II Replacement GemTips	N8120515
O-Ring Kit for Gem Tip Cross-Flow Nebulizers	N9300067
Cross-Flow II Nebulizer Argon Ferrule	09920515
Cross-Flow II Nebulizer Ferrule Kit	N0680612
Cross-Flow II Nebulizer End Cap	N8122239
Cross-Flow II Nebulizer Sample Ferrule	09920518

MicroMist Nebulizers

The MicroMist micro-uptake glass concentric nebulizer offers high performance for limited sample volumes. MicroMists with sample uptakes 0.2 – 0.4 mL/min are fitted with a UniFit connector with 1.3 o.d. x 0.50 mm i.d. x 700 mm long sample tubing. MicroMists with sample uptakes 0.05 – 0.1 mL/min are fitted with a UniFit connector with 1.3 o.d. x 0.25 mm i.d. x 700 mm long sample tubing. All MicroMist nebulizers glass are supplied with the EzyLok argon connector.

AR Flow Rate	Uptake Rate	Part No.
1.0 L/min	0.4 mL/min	N0775341
1.0 L/min	0.2 mL/min	N0775342
1.0 L/min	0.1 mL/min	N0775343
1.0 L/min	0.05 mL/min	N0775344

SeaSpray Nebulizers

The SeaSpray Concentric Nebulizer is ideal for samples with high dissolved solids and offers outstanding nebulization efficiency for trace level analysis. It offers freedom from clogging while nebulizing solutions near the limit of solubility of most mineral salts, and conferring significant sensitivity gains. All SeaSpray Nebulizers are supplied with the EzyLok Argon connector.

AR Flow Rate	Uptake Rate	Part No.
1.0 L/min	2 mL/min	N0775340
1.0 L/min	1 mL/min	N0774069
1.0 L/min Quartz	1 mL/min	N0774069
1.0 L/min	0.4mL/min	N0777484

UniFit Connectors and Spares

Description	Pkg.	Part No.
0.75 mm ID x 1/16" OD x 700 mm long	3	N0774080
0.75 mm ID x 1.3 mm OD x 700 mm long	3	N0774077
Nebulizer Pressure Hose Clips	10	N0773197
EzyLok Connector for Jacketed Spray Chamber	4	N0774101
EzyLok Kit for Nebulizer Gas Side Arm Includes: EzyLok Connector for 4mm Tubing, EzyLok 6mm Hose Adaptor, Hose Clip	1	N0777413
Helix Locking Screw	1	N0777438
Helix Seal	4	N0777439



OpalMist Nebulizers

The OpalMist is ideal for the geochemistry & semiconductor industry. The OpalMist PFA concentric nebulizer is for high precision analyses involving analyses requiring high chemical resistancy to HF, alkalis and organics. It also provides excellent results for trace analyses.

AR Flow Rate	Uptake Rate	Part No.
1.0 L/min	0.4 mL/min	N0777485
1.0 L/min	0.1 mL/min	N0777486



DuraMist Nebulizers

The DuraMist concentric nebulizer is an economical nebulizer for high precision analyses involving samples digested in HF. The DuraMist nebulizer is recommended for samples containing up to 5% HF. For samples with higher concentrations of HF, the OpalMist PFA nebulizer is recommended.

- Material: HF Resistant PEEK
- Low RSD's due to concentric geometry

AR Flow Rate	Uptake Rate	Part No.
1.0 L/min	0.4 mL/min	N8121046
1.0 L/min	1.0 mL/min	N8121045

Adapters and Fittings

Description	Part No.
Nebulizer Fitting (Meinhard)	N8145016
Spray Chamber Drain Fitting	N8145015
Male Barb CTFE Fitting (Part of N8145016)	N8145017
Female Barb CTFE Fitting (Part of N8145016)	N8145018
Teflon Sample Capillary 0.062 o.d. x 0.020 i.d.	WE024375
Liquid Connector for Concentric Nebulizers	WE024372

HIGH EFFICIENCY MICROFLOW NEBULIZERS

MicroFlow nebulizers are constructed entirely from chemically resistant fluoropolymers, ideal for strong acids, alkalis, organics, high salt solutions and high solid concentrations. They are resistant to clogging, are reliably self-aspirated or pumped and produce a fine aerosol for high transport efficiency and high sensitivity.

PFA-ST Nebulizer

The PFA-ST nebulizer features high purity, HF-resistance, and high performance, along with an exchangeable external sample uptake capillary. The sample uptake rate is controlled by the dimension of the external capillary or probe. For use with autosamplers. Requires a CTFE union (N8122355) to connect to the UltraClean autosampler probe. All-Teflon® construction, chemically inert. Chemically resistant—ideal for strong acids, alkalis, organics. Resistant to clogging – reliably self-aspirated or pumped. Low, spike-free background for important elements such as:

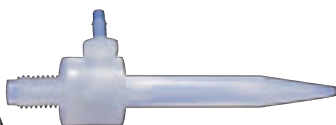


- Fe and Ca. Produces a fine aerosol for high transport efficiency and high sensitivity
- Analyze all sample types with a single introduction system
Direct analysis of volatile and non-volatile organic solvents

Description	Part No.
PFA-ST PFA Teflon® Nebulizer	N8122192

PolyPro-ST Nebulizer

The PolyPro-ST Nebulizer is an HF resistant alternative to the PFA nebulizer. The PolyPro has lower chemical resistance than the PFA nebulizer but has the same high efficiency aerosol generation. A robust nebulizer that can self aspirate with an exchangeable external sample uptake capillary or used with a peristaltic pump.



Description	Part No.
PolyPro-ST Nebulizer	N0777220

PFA-ST3 MicroFlow Nebulizer

Designed for superior clog resistance and higher sensitivity. PFA-ST3 MicroFlow nebulizer with external threaded connector. High performance, clog resistant and chemically inert nebulizer for ICP-MS.



Description	Part No.
PFA-ST3 MicroFlow Nebulizer	N8145101



PFA Nebulizer Obstruction Removal Kit

Obstruction Removal Kit while naturally resistant to obstructions, PFA nebulizers may occasionally require maintenance. Use this kit to safely remove obstructions in all PFA-ST nebulizers for long-term high performance.

Description	Part No.
Nebulizer Obstruction Removal Kit	N8145236

Teflon® Sample Capillaries

For use with ST Nebulizers.

I.D.	Self-Aspiration Rate	Part No.
0.15 mm	20 µL/min	N8122382
0.2 mm	50 µL/min	N8145135
0.25 mm	100 µL/min	N8122383
0.3 mm	200 µL/min	N8145136
0.5 mm	400 µL/min	N8122384
0.8 mm	700 µL/min	N8145137
1.0 mm	1 mL/min	N8145138

Sample Introduction Kits for NexION

Complete high purity sample introduction system for NexION. All wetted surfaces are Teflon® and Pt. Used by a majority of semiconductor labs worldwide for the analysis of semiconductor grade chemicals and Si wafer samples. Includes 2 PFA MicroFlow Nebulizers, PureCap PFA endcap with additional gas port, PFA spray chamber, Pt injector, Pt Shield and quartz torch.



Description	Part No.
PFA-Platinum HF-Resistant Sample Introduction Kit	N8142001

Complete HF-resistant sample introduction system for NexION. All wetted surfaces are Teflon® and Sapphire. Provides a chemically inert and clean introduction system. Includes a PFA-ST Nebulizer, PureCap PFA endcap with additional gas port, PFA spray chamber, Sapphire injector, Pt Shield and quartz torch.

Description	Part No.
PFA-Sapphire HF-Resistant Sample Introduction Kit	N8142002
HF Sample Introduction Kit Consists of a Scott spray chamber with a Cross-Flow II nebulizer, a 2 mm alumina injector, injector support adapter, O-rings, tubing and connectors.	N8140507

Baffled Cyclonic Spray Chambers

The spray chamber is an integral part of the sample introduction system responsible for filtering the sample mist to permit the appropriate droplet size distribution to reach the plasma. The baffled cyclonic spray chamber features a central transfer tube which acts as a secondary particle separator helping separate larger aerosol particles from the sample. This reduces solvent load in the plasma without compromising detection limits. The distance between the bottom of the baffle and the chamber wall is carefully controlled so that droplets cannot form on the bottom of the baffle. The advantage is smooth draining and improved precision.



Part No. WE025221

Baffled Quartz Cyclonic Spray Chambers

Baffled Quartz Spray Chamber (Teflon® O-Ring type) with ball joint.



Part No. N8145013

ICP-MS Model	Part No.
NexION*	N8145013
ELAN DRC/DRCplus/DRC II	WE025221
O-Ring for Baffled Quartz Cyclonic Spray Chamber	09210011

*O-Ring free

NexION O-Ring Free Baffled Cyclonic Spray Chambers for PC³

Feature o-ring free connections to the nebulizer and torch injector, secure, leak-free threaded drain port, internal baffle and threaded auxiliary port for addition gas.



Part No. N8145120

Description	Part No.
High purity quartz cyclonic spray chamber provides excellent sensitivity and stability with low background	N8145120
Micro cyclonic spray chamber provides the fastest washout at low-flow rates compared to larger versions	N8145121
Borosilicate glass spray chamber	N8145119



Part No. N0777034

Baffled Quartz Cyclonic Spray Chambers

7 mm baffle, aux. gas port, drain line included and connects directly to ESI injectors. An adapter is needed to connect to other injectors. All-purpose for non-HF samples. Provides excellent sensitivity and stability with low background. For use with PC³.

ICP-MS Model	Part No.
ELAN with Auxillary Gas Port	N0777034
ELAN without Auxillary Gas Port	N0777035

Baffled Glass Cyclonic Spray Chambers

The Cyclonic Spray Chamber relies on momentum to efficiently and quickly remove the larger droplets from the sample mist decreasing any opportunity for occlusion or agglomeration of the smaller droplets. The result is higher efficiency, better precision and faster washouts than other spray chamber designs. For use with ball joint injectors.



Part No. N8145014

ICP-MS Model	Part No.
NexION (Standard with NexION Q/X/D)**	N8145014
ELAN	N0773196

**O-Ring free

Water-Cooled Baffled Glass Cyclonic Spray Chambers

The water-cooled design permits the introduction of coolant for temperature control. Thermostatting to constant temperature helps ensure highly reproducible results and long-term stability. Can also be cooled to suppress volatilization, allowing the direct aspiration of highly volatile solvents such as naphtha and petrol/gasoline. Glass with baffle and oxygen port. Recommended for light organic solvents and chromatography use.



Part No. N8120180

ICP-MS Model	Part No.
ELAN DRC-e/9000/6x00/5000	N8120180
ELAN DRC/DRCplus/DRC II	N8120181
ELAN DRC-e/9000/6x00/5000 (O-Ring Free)	N0775353

Cyclonic Spray Chambers

- The Cyclonic Spray Chamber relies on momentum to efficiently and quickly remove the larger droplets from the sample mist decreasing any opportunity for occlusion or agglomeration of the smaller droplets. The result is higher efficiency, better precision and faster washouts than other spray chamber designs
- Decreased sample introduction system installation and optimization time due to the preset nature of the spray chamber/nebulizer combination
- More samples per hour due to minimal dead volume and efficient draining

Unique design characteristics:

- The nebulizer port is oversized so that sample solution cannot build up around the nebulizer as it will in other cyclonic designs
- The nebulizer port angle is tightly controlled so that the nebulizer mist impacts on the same chamber wall area in each and every spray chamber
- Each spray chamber incorporates a precisely machined ridge a long the inside top of the spray chamber. This eliminates the periodic “spiking” that adversely affects precision and fosters faster washout times



Part No. N8122188



Part No. N0775350

Glass Cyclonic Spray Chamber Kit

Contains one Glass Cyclonic Spray Chamber, mounting hardware and instructions. Requires, but does not include, a concentric nebulizer.

Description	Part No.
For ELAN 9000/6x00/5x00/DRC-e	
Glass Cyclonic Spray Chamber Kit	N8120150
Glass Cyclonic Spray Chamber Only	N8122188
O-Ring Free Glass Cyclonic Spray Chamber	N0775350

Water-Cooled O-Ring Free Glass Cyclonic Spray Chamber

O-Ring Free Glass Cyclonic Spray Chamber only. Ball joint type.



ICP-MS Model	Part No.
ELAN DRC/DRCplus/DRC II	N0775354

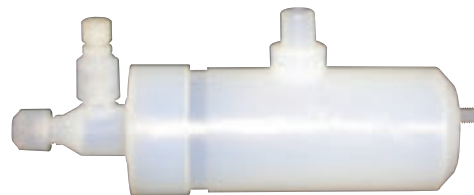


Part No. N8120124

Scott Spray Chambers

Complete HF-resistant Scott Spray Chamber Includes (1) large O-Ring (WE013060), (1) Retaining Ring (WE014081) and (1) Right-Angled Drain Connector (WE013119).

Description	Part No.
For NexION/ELAN 9000/6x00/5000/DRC-e	
Scott Spray Chamber	N8120124
Scott Spray Chamber Large O-Ring	WE013060
Scott Spray Chamber Retaining Ring	WE014081
End-cap for Concentric Nebulizer. Ryton endcap to fit nebulizer onto Scott Spray Chamber	N0680504



Part No. N8142000

PFA Teflon® Scott Spray Chamber

UltraClean, low volume 47 mm Scott Spray Chamber. For use with concentric nebulizers. Requires a PFA injector assembly and the PFA End Cap (N8122357).

Description	Part No.
PFA Teflon® Scott Spray Chamber	N8122356
PFA Spray Chamber with PFA End Cap for NexION*	N8142000

* Requires PFA body injector N8122411 or N8122412 or N8122413.

Water-Cooled Glass Scott Spray Chamber

Water-Cooled Glass Scott Spray Chamber included in Heavy Organics Sample Introduction System (N8122132). Recommended for use with heavy organic solvents.

Does not include end cap.

ICP-MS Model	Part No.
ELAN DRCe/9000/6x00/5000	WE013829



PC³ Peltier Coolers for NexION

The PC³ is a small and robust Peltier cooler for ICP-MS cyclonic spray chambers. The cyclonic spray chamber offers the advantages of low memory effects, fast rinseout and high sample transport efficiency. The PC³ cools the outer walls of the cyclonic spray chamber to a constant temperature, enhancing long-term signal stability, reducing polyatomic interferences such as oxides, and reducing solvent loading when volatile organic solvents are analyzed. The PC³ has 2 preset temperatures +2°C / -5°C and is ideal for analysis of aqueous or aqueous/organic mixtures. The PC³-LT operates at -20°C to reduce the solvent load on the plasma for analysis of 100% volatile organic solvents.

Description	Additional Gas Port	Part No.
PC ³ Organic Sample Introduction Kit – Peltier Cooler for NexION +2°C / -5°C Quartz	Yes	N8142003
PC ³ -LT Organic Sample Introduction Kit – Peltier Cooler for NexION +2°C / -20°C Quartz	Yes	N8145099

PC³ Peltier Coolers for ELAN

The PC³ is a small and robust Peltier cooler for ICP-MS cyclonic spray chambers. The cyclonic spray chamber offers the advantages of low memory effects, fast rinse-out and high sample transport efficiency. The PC³ cools the outer walls of the cyclonic spray chamber to a constant temperature, enhancing long-term signal stability, reducing polyatomic interferences such as oxides, and reducing solvent loading when volatile organic solvents are analyzed. The PC³ has two present temperatures +2°C / -5°C and is ideal for analysis of aqueous or aqueous/organic mixtures. The PC³-LT operates at +2°C / -20°C to reduce the solvent load on the plasma for analysis of 100% volatile organic solvents.



ICP-MS Model	Part No.
ELAN Cassette Torch Mount	N8122410
ELAN Twist Type Torch Mount	N8122389
ELAN PC ³ -LT	N8122452



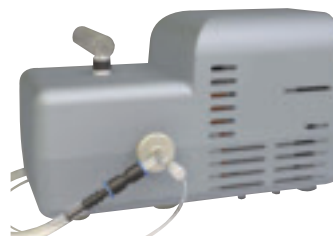
Part No. N8145120



Part No. N8145122

Spray Chambers for NexION PC³

Description	Part No.
High Purity Quartz Cyclonic Spray Chamber	N8145120
Borosilicate Glass Spray Chamber	N8145119
PFA Cyclonic Spray Chamber	N8145122



IsoMist Programmable Temperature Spray Chambers

The IsoMist Programmable Temperature Spray Chamber lets you select any temperature between -10 °C and +60 °C in 1 °C increments to provide the optimum conditions for any application. The rapid response of the Peltier device allows a spray chamber temperature of -5 °C to be reached within 15 minutes. The spray chamber temperature can be monitored through a temperature versus time plot on your PC screen. And, for regulatory compliance, the temperature versus time data file can be saved with your results. If these features are not required, once the temperature has been programmed, the IsoMist can be run in stand-alone mode without a PC connection.

- Temperature range: -10C to +60C
- Temperature set in 1C increments
- Temperature stability: +/- 0.1C

ICP-MS Model	Part No.
ELAN	N0777364
NexION	N8141426

FULL SELECTION OF INJECTORS AND ADAPTERS



Alumina Injectors

Alumina injectors are compatible with twist type and cassette torch mounts. They are vacuum baked to reduce contamination.

Features and Benefits

- 2.0 mm i.d. for use with HF-resistant sample introduction system. Standard injector for aqueous solutions and less volatile organic solvents
- 0.85 mm i.d. for use with volatile organic solutions on the HF-resistant sample introduction system

Alumina Injectors for NexION/ELAN DRC-e/9000/6x00/5000/500

Dimension	Part No.
2.0 mm i.d.	N8126041
1.5 mm i.d.	N8126040
0.85 mm i.d.	N8126039

Quartz Injectors

Quartz injectors are compatible with twist type and cassette torch mounts. The ELAN DRC II uses a specially designed all-quartz sample introduction system to minimize background contamination levels. The standard 2.0 mm i.d. quartz injector is held by a specially designed pass-through, injector support assembly to minimize contact with materials that could cause sample contamination, a must for determinations made at the parts-per-trillion level.

Quartz Injectors

For the NexION/ELAN DRC-e/9000/6x00/5000 when using the HF-Resistant Sample Introduction System (WE024782).

Description	Recommended Use	Part No.
1.2 mm i.d.	Organic Solvents	N0681631
1.6 mm i.d.	Organic Solvents	00473292
2.0 mm i.d.	Clinical Samples	N8125029

Quartz Ball Joint Injectors

For NexION/ELAN DRC/DRCplus/DRC II. For use with Pass-Through Ball Joint Injector Support Adapters (WE023951 or W1012406).

Description	Recommended Use	Part No.
0.85 mm i.d.*	Volatile Organics	WE027030
1.5 mm i.d.*	Organics	WE027005
2.0 mm i.d.	General Purpose	WE023948

*For reduced sample loading.

Sapphire Injectors

Sapphire Injector Tube, 2.0 mm i.d.

Demountable injector for use with the HF-resistant sample introduction system. Not for use with PFA sample introduction system.

Dimension	Part No.
NexION/ELAN DRC-e/9000/6x00/5000	N0695495

PFA Injector Assemblies

PFA/Quartz Torch Injector Assembly

Description	Dimension	Part No.
PFA/Quartz Twist Type	1.5 mm i.d.	N8122394
PFA/Quartz Cassette	1.5 mm i.d.	N8122413

PFA/Sapphire Torch Injector Assembly

Description	Dimension	Part No.
PFA/Sapphire Twist Type	1.8 mm i.d.	N8122358
PFA/Sapphire Cassette	1.8 mm i.d.	N8122411

PFA/Platinum Torch Injector Assembly

Description	Dimension	Part No.
PFA/Platinum Twist Type	2.0 mm i.d.	N8122359
PFA/Platinum Cassette	2.0 mm i.d.	N8122412

Injector Support Adapters

ICP-MS Model	Part No.
ELAN DRC/DRCplus/DRC II	
Ball Joint Twist Type Torch Injector Support Adapter	WE023951
ELAN DRC II	
Ball Joint Cassette Torch Injector Support Adapter	W1012406
ELAN 9000/6x00/5000/DRC-e	
Twist Type Torch Injector Support Adapter	N8122007
Twist Type Torch Injector Support Adapter (Assembled with O-Rings)	N8120116
NexION/ELAN 9000/6x00/5000/DRCs	
Injector Support Adapter O-Ring Kit	N8120100
Cassette Torch Injector Support Adapter For Non-Ball Joint Injectors	W1013266
Cassette Torch Injector Support Adapter For Ball Joint Injectors	W1012406

Injector Support Adapter O-Rings

Position	Torch Type	Part No.
External	Twist/Cassette	09210011
External (large)	Cassette	W1013545
Internal	Twist/Cassette	09210012



Demountable Quartz Torch

The EasyGlide™ torch mount and alignment system used in the ELAN and NexION ICP-MS system. It is a demountable design that incorporates a quartz torch with a fully replaceable sample injector made of fused alumina, quartz or sapphire.

ICP-MS Model	Part No.
NexION/ELAN	N8122006



High Efficiency Demountable Quartz Torch

Demountable Quartz Torch only. Operates at 25% reduced argon gas flows compared to the Demountable Quartz Torch (N8122006). The ELAN 9000 and 6x00 require the High Efficiency Torch Kit (W1007468) for first time installation.

ICP-MS Model	Part No.
NexION/ELAN 9000/6x00/DRCs	W1008384

High Efficiency Torch Kit

Includes the High Efficiency Torch (W1008384) and flow restrictors required for use with the ELAN 9000 and 6x00.

ICP-MS Model	Part No.
ELAN 9000 and 6x00	W1007468

Torch Alignment Tool

Used to align the torch in the load coil.



ICP-MS Model	Part No.
NexION/ELAN 9000/6x00/DRCs	WE015554



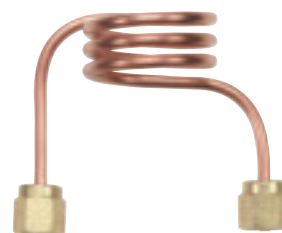
Cassette Torch Mount

The Cassette Torch Mount is an innovative torch design that is fully modular, demountable, rugged and easy to maintain. Now changing torch components is a simple process – no tools are required. Cassette Torch Mount does not include Demountable Quartz Torch or Injector.



ICP-MS Model	Part No.
NexION	W1037485
ELAN DRC II	W1020672
ELAN 9000/DRC-e	W1020668

RF Load Coil Assemblies



ICP-MS Model	Part No.
NexION/ELAN 9000/6x00/DRCs	WE021816
ELAN 5000	WE012411

Power Amplifier Tube (Ceramic)

ICP-MS Model	Part No.
NexION/ELAN 9000/6x00/DRCs and ELAN 5000As manufactured after September, 1992	N0695477

NexION SimulScan Dual-Stage Detector



The dual-stage detector is an integral part of the NexION 300 ICP-MS SimulScan™ system. This electron multiplier measures both high- and low-level analytes simultaneously. This conserves valuable or limited samples, eliminates the need to perform time-consuming sample dilutions and allows you to quickly characterize unknown samples.

ICP-MS Model	Part No.
NexION*	N8145000

Original SimulScan Dual-Stage Detector



The original dual-stage detector is an integral part of the ELAN SimulScan™ system. This electron multiplier measures both high- and low-level analytes simultaneously. This conserves valuable or limited samples, eliminates the need to perform time-consuming sample dilutions and allows you to quickly characterize unknown samples.

ICP-MS Model	Part No.
ELAN 9000/6x00/DRCs* manufactured prior to April, 2005	N8125001

Improved SimulScan Dual-Stage Detector



The improved Dual-Stage Detector is designed for better stability and longer lifetime than its predecessor. ELAN instruments produced after April, 2005 have the proper electronics to accept this detector without modification. ELAN instruments manufactured before April, 2005 will require a one-time upgrade to the Detector Electronics (W1013195). Using this detector in an instrument without the upgraded electronics will result in higher noise levels and shorter lifetime.

ICP-MS Model	Part No.
ELAN 9000/6x00/DRCs*	N8125050

Detector Electronics Upgrade Kit

Boosts detector life at least 20%.

ICP-MS Model	Part No.
ELAN 9000/6x00/DRCs* manufactured prior to April, 2005	W1013195

* Service installation is required, but not included.

Ion Optics

PerkinElmer offers the industry's only single-ion lens with the exclusive SwiftMount™ II cassette lens mount. No tools are required as the design incorporates a clean capture-and-release concept.

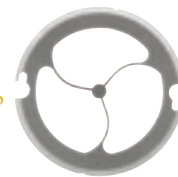
Ion Lens

Description	ICP-MS Model	Part No.
Cassette Ion Lens Upgrade Kit	ELANs manufactured before April, 2005	W1017871
Series II Ion Lens	ELAN 9000/6x00/DRCs manufactured after January, 1998	WE018034
Ion Lens	ELAN 6000s manufactured before January, 1998	WE014777
Series II Lens Removal Tool	ELAN 9000/6x00/DRCs manufactured between January, 1998 and April, 2005	W1010620

Series II Ion Lens



Series II ShadowStop



ShadowStop

Description	ICP-MS Model	Part No.
Cassette Lens ShadowStop	ELAN 9000/DRCs manufactured after April, 2005	W1013361
Series II ShadowStop	ELAN 9000/6x00/DRCs manufactured between January, 1998 and April, 2005	WE029011

Vacuum Pump Fluid for ELAN

For use with roughing pumps. One gallon (3.8 liters).

Pump Model	Part No.
Leybold	N8122004
Varian	N8122308

Fomblin (PFPE) Vacuum Pump Fluid

For use with NexION ICP-MS only. One liter Fomblin GV80 fluid (perfluoro polyether). 1L required per pump.

Description	Part No.
NexION Vacuum Pump Fluid	N8145003

High Vacuum Silicon Grease

For lubrication of vacuum system O-Rings.

Description	Part No.
High Vacuum Silicon Grease	09905147

TESTED AND APPROVED

Sampler and Skimmer Cones

Precision-designed and manufactured, large-orifice sampler and skimmer cones provide superior long-term stability and resist clogging, allowing analysis under both high and low sample-uptake conditions. Nickel is a very rugged, long-lasting material for the majority of sample types, while platinum is the material of choice for more corrosive samples. The ELAN sampler cone, with a 1.1 mm orifice diameter, and the skimmer cone, with a 0.9 mm orifice diameter, are the largest in the industry. They have been designed to maximize signal stability and to minimize clogging during extended runs of samples containing high dissolved solids. The sampler cone, which is continually exposed to the plasma and the sample, utilizes a threadless pop-in, pop-out design for rapid removal.



NexION Cones



Hyper Skimmer Cone and Spares

Description	ICP-MS Model	Part No.
Hyper Skimmer Cone	NexION	W1033995
Hyper Skimmer O-Ring	NexION	09902123
Hyper Skimmer Screw	NexION	09919737

Nickel Sampler and Skimmer Cones*

ICP-MS Model	Type	Part No.
NexION	Sampler	W1033612
NexION	Skimmer	W1026356
ELAN 9000/6x00/DRC	Sampler	WE021140
ELAN 9000/6x00/DRC	Skimmer	WE021137

Sampler and Skimmer Cone O-Rings

ICP-MS Model	Type	Qty.	Part No.
ELAN 9000/6x00/DRC	Sampler	5	N8120511
ELAN 9000/6x00/DRC	Skimmer	5	N8120512

Platinum Sampler and Skimmer Cones*

ICP-MS Model	Type	Part No.
NexION	Sampler	W1033614
NexION	Skimmer	W1026907
ELAN 9000/6x00/DRC	Sampler	WE027802
ELAN 9000/6x00/DRC	Skimmer	WE027803

Sampler Cone Aluminum Gasket

ICP-MS Model	Part No.
NexION	W1040148

* Prices subject to change based on volatile precious metal prices.

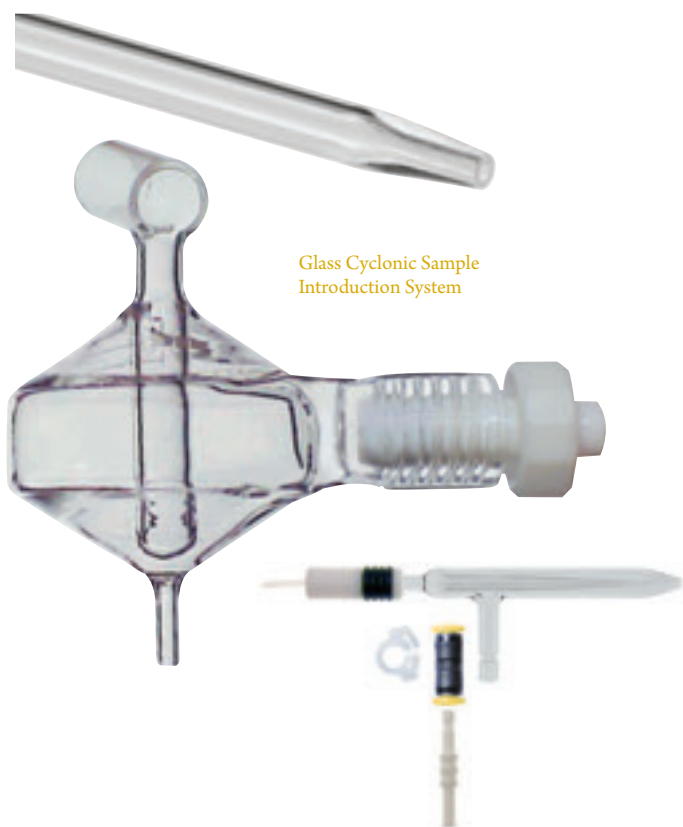


ELAN Cones



Cone Removal Tool

ICP-MS Model	Part No.
NexION	W1034694
ELAN 9000/6x00/DRC	WE017142



Glass Cyclonic Sample Introduction System

Glass Cyclonic Sample Introduction System for ELAN

Description	Part No.
Glass Cyclonic Sample Introduction System	N8120518
System Includes:	
Baffled Glass Cyclonic Spray Chamber O-Ring Free	N0775352
Cyclonic Spray Chamber Mount	WE014034
MicroMist Micro-uptake Glass Concentric Nebulizer 0.2 mL/min.	N0775342
Quartz Injector 2.0 mm i.d.	N8125029
Tygon Tubing (1 foot)	02506516
Insert	09903094
¼ in. Front Ferrule	09903456
Fitting	09903464
Tube Fitting	09903465
Black/Black Standard PVC Tubing 0.76 mm i.d. (Pkg. 12)	09908585
Green/Yellow Flared End PVC Tubing 0.44 mm i.d. (Pkg. 6)	N0773113

COMPLETE SAMPLE INTRODUCTION SOLUTIONS

Quartz Cyclonic Sample Introduction System for ELAN

Description	Part No.
Quartz Cyclonic Sample Introduction System	N8120519
System Includes:	
Baffled Quartz Cyclonic Spray Chamber Baffled Quartz Spray Chamber (Teflon® O-Ring Type) with Ball Joint.	WE025221
MicroMist Micro-uptake Glass Concentric Nebulizer Offers High Performance for Limited Sample Volumes. Fitted with an EzyFit Connector with 1.3 o.d. x 0.50 mm i.d. x 700 mm Long Sample Tubing.	N0775342
Quartz Ball Injector 2.0 mm i.d.	WE023948
Tygon Tubing (1 foot)	02506516
Insert	09903094
¼ in. Front Ferrule	09903456
Fitting	09903464
Tube Fitting	09903465
Black/Black Standard PVC Tubing 0.76 mm i.d. (Pkg. 12)	09908585
Green/Yellow Flared End PVC Tubing 0.44 mm i.d. (Pkg. 6)	N0773113
Ball Joint Cassette Torch Injector Support Adapter	W1012406
UV Safety Shield	W1020996
Connector 1A	B0199233



ELAN Spares Kits Always keep spares on hand!



ELAN® DRC-e/9000 Spares Kit

Description	Qty	Part No.
ELAN® DRC-e/9000 Spares Kit		N8120610
Kit Includes:		
Demountable Quartz Torch	1	N8122006
RF Coil Assembly	1	WE021816
Alumina Injector 2.0 mm i.d.	1	N8126041
Cross-Flow II Replacement GemTips™	1	N8120515
Series II Ion Lens	1	WE018034
Nickel Sampler Cones	2	WE021140
Nickel Skimmer Cones	2	WE021137
Sampler Cone O-Rings (Pkg. 5)	1	N8120511
Skimmer Cone O-Rings (Pkg. 5)	1	N8120512



ELAN® DRC II Spares Kit

Description	Qty	Part No.
ELAN® DRC II Spares Kit		N8120611
Kit Includes:		
Demountable Quartz Torch	1	N8122006
RF Coil Assembly	1	WE021816
Quartz Ball Joint Injector 2.0 mm i.d.	1	WE023948
Series II Ion Lens	1	WE018034
Platinum Sampler Cone	1	WE027802
Platinum Skimmer Cone	1	WE027803
Sampler Cone O-Rings (Pkg. 5)	1	N8120511
Skimmer Cone O-Rings (Pkg. 5)	1	N8120512
Skimmer Cone O-Rings (Pkg. 5)	1	N8120512

NexION 300Q/X/D Consumables Kit

Typical one year's supply of consumables.



Description	Qty	Part No.
NexION 300Q/X/D Consumables Kit		N8140513
Kit Includes:		
Demountable Quartz Torch	2	N8122006
Load Coil	1	WE021816
Quartz Ball Joint Injector 2.0 mm i.d.	2	WE023948
Cassette Torch Injector Support Adapter for Ball Joint Injectors	1	W1012406
Glass Cyclonic Spray Chamber	1	N8145014
Nickel Skimmer Cone	2	W1026356
Nickel Sampler Cone	2	W1033612

NexION 300Q/X/D Consumables Kit (Continued)

Description	Qty	Part No.
Hyper Skimmer Cone	1	W1033995
Sampler Cone Gasket	3	W1040148
Hyper Skimmer O-Ring	2	09902123
Hyper Skimmer Screw	2	09919737
Santoprene® 1.30 mm Gray/Gray Pump Tubing	4	N0777444
Flared PVC 0.38 mm Green/Orange Pump Tubing	4	N0777042
Drain Tubing (feet)	6	02506495
Sample Uptake Tubing (cm)	12	WE024375
Instrument Filter (left)	2	W1036712
Instrument Filter (back right)	2	W1036713
Spray Chamber Drain Fitting	2	N8145015
Nebulizer Fitting	2	N8145016
Male Barb CTFE Fitting	2	N8145017
Female Barb CTFE Fitting	2	N8145018

NexION 300S Consumables Kit

Typical one year's supply of consumables.



Description	Qty	Part No.
NexION 300S Consumables Kit		N8140514
Kit Includes:		
Demountable Quartz Torch	2	N8122006
Load Coil	1	WE021816
Quartz Ball Joint Injector 2.0 mm i.d.	2	WE023948
Cassette Torch Injector Support Adapter for Ball Joint Injectors	1	W1012406
Quartz Cyclonic Spray Chamber	1	N8145013
Platinum Skimmer Cone	1	W1026907
Platinum Sampler Cone	1	W1033614
Hyper Skimmer Cone	1	W1033995
Sampler Cone Gasket	3	W1040148
Hyper Skimmer O-Ring	2	09902123
Hyper Skimmer Screw	2	09919737
Santoprene® 1.30 mm Gray/Gray Pump Tubing	4	N0777444
Flared PVC 0.38 mm Green/Orange Pump Tubing	4	N0777042
Drain Tubing (feet)	6	02506495
Sample Uptake Tubing (cm)	12	WE024375
Instrument Filter (left)	1	W1036712
Instrument Filter (back right)	1	W1036713
Spray Chamber Drain Fitting	2	N8145015
Nebulizer Fitting	2	N8145016
Male Barb CTFE Fitting	2	N8145017
Female Barb CTFE Fitting	2	N8145018

ENSURE INSTRUMENT REPRODUCIBILITY

Pump Tubing

PerkinElmer offers a wide range of high-quality peristaltic pump tubing for all of your Atomic Spectroscopy applications. Remember to replace your tubing frequently and always keep spares on hand.



2-Stop Peristaltic Pump Tubing

i.d. (mm)	Stop Colors	Part No.
Standard PVC (Pkg. 12)		
0.19	Orange - Red	N0695476
0.25	Orange - Blue	N0773117
0.38	Orange - Green	N0777110
0.64	Orange - White	N8122012
0.76	Black - Black	09908587
1.14	Red - Red	09908585
1.42	Yellow - Yellow	N0777521
1.52	Yellow - Blue	09923536
1.85	Green - Green	N0777518
2.06	Purple - Purple	N0777561
Flared PVC (Pkg. 12)		
0.19	Orange - Red	N0773111
0.25	Orange - Blue	N0773112
0.38	Orange - Green	N0777042
0.44	Green - Yellow	N0773113
0.51	Orange - Yellow	N0777476
0.64	Orange - White	N0777711
0.76	Black - Black	N0777043
Solvent Flex (Pkg. 12)		
0.38	Orange - Green	N8145211
0.76	Black - Black	00473550
1.14	Red - Red	09923037
2.79	Purple - White	02508080

i.d. (mm)	Stop Colors	Part No.
Viton® (Pkg. 12)		
0.51	Orange - Yellow	N0777446
0.76	Black - Black	N0773118
1.02	White - White	N0777442
1.14	Red - Red	N0773115
1.30	Gray - Gray	N0777445
1.65	Blue - Blue	N0777447
Santoprene® (Pkg. 12)		
1.14	Red - Red	N0773119
1.30	Gray - Gray	N0777444
1.85	Green - Green	N0773116
Silicone (Pkg. 6)		
0.76	Black - Black	00473552
1.02	White - White	N0777441
1.14	Red - Red	N0691595
1.30	Gray - Gray	N0777443
2.79	Purple - White	09923448

3-Stop Peristaltic Pump Tubing

i.d. (mm)	Stop Colors	Part No.
Standard PVC (Pkg. 12)		
0.76	Black - Black	B0506058
1.14	Red - Red	B0193160
1.52	Yellow - Blue	B0193161
2.06	Purple - Purple	B0199034
3.18	Black - White	B0508310



CLEAN, RELIABLE, TEMPERATURE CONTROLLED FLUID

POLYSCIENCE® WHISPERCOOL™ REFRIGERATED CHILLER

The PolyScience® WhisperCool™ Refrigerated Chiller is designed to deliver quiet and reliable performance over a broad range of operating temperatures and conditions. Extremely dependable and energy efficient, it features a -10 to 40 °C operating temperature range, built-in process and equipment protection, and highly intuitive user interface. This chiller is designed for use on both ICP-OES and ICP-MS instruments.

Key Advantages

- 50% quieter operation than comparable models
- 2900 watts (9889 BTU/hour) cooling capacity
- Built-in temperature, pressure, and flow rate alarms

Chiller Coolant Mix

Non-glycol coolant, which is made up of five half gallon bottles of distilled water and includes an additive to control black algae and other resistant strains.

Description	Part No.
Chiller Coolant Mix	N0776099

Part No.	N0772046	N0772045
Electrical Requirements	208-230 V, 60 Hz, 12.2 A	240 V, 50 Hz, 12.2 A
Operating Temperature Range	-10 to 40 °C	
Temperature Stability	±0.1 °C (±1.8 °F)	
Cooling Capacity at 20 °C	2900 Watts (9889 BTU/hr)	
at 10 °C	1925 Watts (6574 BTU/hr)	
at 0 °C	1000 Watts (3410 BTU/hr)	
Compressor	1.0 HP	
Reservoir Capacity	4.2 L	
Pump Type	Turbine	
Maximum Pump Pressure	90 PSI	
Maximum Pump Flow	13.2 LPM	
Replacement Air Filter	N0777095 (Air Filter with Frame, 13x14")	
Chiller Coolant Mix	N0776099 (Five Half-gallon Bottles)	

Coolant Fluid

1 liter bottle. It is essential that this chiller coolant be used with ELAN 9000/6xX00/DRC/NexION series instruments. Also suitable for organics chillers.

Description	Part No.
ELAN Coolant Fluid	WE016558

Heat Exchanger System

Cooling systems for the ELAN 9000/DRC II/e/NexION systems. Air cooled recirculator without refrigeration. Not to be placed in areas with temperatures above 30 °C (86 °F). Requires the use of Coolant Fluid (WE016558).

ICP-MS Power Requirement	Part No.
120 V, 60 Hz	N8122248
220/250 V, 50/60 Hz	N8122247

Chillers/Recirculating Water Cooling Systems

ICP Model	Power Requirement	Operating Temp.	Flow Rate	Part No.
Optima/ELAN/NexION	208 – 230 V, 60 Hz, 8 A	-15° to 40 °C	60 psi: 4.3 gpm/16.3 Lpm	N0772046
Optima/ELAN/NexION	240 V, 50 Hz, 8.5 A	-15° to 40 °C	60 psi: 4.3 gpm/16.3 Lpm	N0772045