






iCAP Q Consumables and Parts Catalog

Contents

- Inlet System
- Forevacuum Pump
- Detector
- O-Rings
- Kits
- Manuals
- Miscellaneous
- Tools
- Calibration and Tune Solutions
- Options
- Trademarks

Inlet System

Table 1. Torch, injectors, spray chamber and nebulizers

Parts	Picture	P/N	Description	Quantity
Torch		1231000	iCAP Q torch holder	1
			1230790	iCAP Q quartz torch
Injectors		1305600	Injector 2.5 mm ID quartz	1
		1305640	Injector 2.0 mm ID quartz	1
		1325110	Injector 1.0 mm ID quartz (for organic solvents)	1
		1323600	Injector 2.0 mm ID sapphire	1
		1321200	Injector, ID 2.0 mm platinum	1
		1348920	Injector 2.0 mm ID quartz for GC	1
		1323630	Injector 2.0 mm ID quartz for Laser	1
Spray chamber		1320260	PFA cyclonic spray chamber	1
		1317080	Quartz cyclonic spray chamber	1
		1320270	PFA adapter elbow for spray chamber	1

Peristaltic Pump Tubings and Spares

Table 1. Torch, injectors, spray chamber and nebulizers, continued



Parts	Picture	P/N	Description	Quantity
Nebulizers		1317090	PFA-ST nebulizer (incl. tubing)	1
		1162030	PFA LC nebulizer (incl. connector for IC-ICP-MS, LC-ICP-MS)	1
		4600356	Burgener, MiraMist High Solids Nebulizer (0.4–2.0 mL/min)	1
		4600495	Burgener, AriMist, Low Flow, High Solids Nebulizer – HF resistant, (0.2–2.0 mL/min)	1
		1161870	Micro Mist nebulizer 200 µL/min	1
		1600427	Concentric, PFA Low Flow Nebulizer (20 µL/min)	1
		1600165	Concentric, PFA Low Flow Nebulizer (50 µL/min)	1
		1600342	Concentric, PFA Low Flow Nebulizer (100 µL/min)	1








Table 2. Peristaltic pump tubing, Teflon tubing and capillaries

Parts	Picture	P/N	Description	Quantity
Peristaltic pump tubing ^a		1320040	PVC standard pump hose - ID 0.381 - orange/green (3 bridges, flared end)	12 tubings
		1320050	PVC peristaltic pump tubing - ID 0.508 mm - orange/yellow (3 bridges, flared end)	12 tubings
		1320060	PVC standard pump hose - ID 0.762 - black/black (3 bridges, flared end)	12 tubings
		1329400	PVC peristaltic pump tubing ID 0.254 mm - orange/blue (3 bridges, flared end)	12 tubings
		1320070	Silicon tube - ID 0.508 mm - orange/yellow (3 bridges, straight end)	6 tubings
		1320080	Silicon tube - ID 0.762 mm - black/black (3 bridges, straight end)	6 tubings
		1320090	Silicon tube - ID 1.295 mm - gray/gray (3 bridges, straight end)	6 tubings
		1320100	Silicon tube - ID 2.794 mm - violet/white (3 bridges, straight end)	6 tubings
		1320110	Santoprene™ tube - ID 1.295 mm - gray/gray (3 bridges, straight end)	12 tubings
		1320120	Santoprene tube - ID 3.175 mm - black/white (3 bridges, straight end)	12 tubings

^a Tubings with 3 bridges are intended to be used from both sides to enhance the lifetime.


Interface

Table 3. Skimmer cones, sample cones, and inserts

Parts	Picture	P/N	Description	Quantity
Skimmer cones and inserts		1341420	Ni Skimmer Cone - Cold and Hot Plasma	1
		1311870	Ni Skimmer Cone - Insert version	1
		1324530	Pt Skimmer Cone - Insert Version (Boron free)	1
		1341430	Pt Skimmer Cone - Cold and Hot Plasma	1
		1324540	Pt Skimmer Cone - Insert version	1
		1311880	Skimmer cone insert 2.8 (High sensitivity)	1
		1318480	Skimmer cone insert 3.5 (High Matrix Tolerance)	1
	Sample cone		1310900	Sampling cone gasket
		3600812	Ni Sample cone	1
		3601289	Pt Sample cone	1

Teflon Tubings and Capillaries


Table 4. Teflon tubing and capillaries

Picture	P/N	Description	Quantity
	1317100	20 cm PFA gas line	1
	1335460	100 µL/min self-aspirating sample capillary	1
	1335470	400 µL/min self-aspirating sample capillary	1
	1600061	Tube Teflon™, 1/16 OD 0.2 ID 10 ft	1
	1041071	PTFE microbore tubing, 0.042" ID × 0.066" OD	^a
	1320280	Spray chamber drain line	1
	1335480	Teflon gas line, 2.4 mm ID × 4 mm OD	1
	1305780	Additional Gas Line	1

^a Specify desired length.


Forevacuum Pump

Table 5. Forevacuum Pump

Picture	P/N	Description	Quantity
	1319310	Pump oil PFPE	1000 mL





Detector

Table 6. Detector

Picture	P/N	Description	Quantity
	1299710	Electron Multiplier (SEM) iCAP Q	1

O-Rings

Table 7. O-Rings

Picture	P/N	Description	Quantity
	430122820891	PTFE coated O-ring, for torch holder gas inlet	1
	1326830	FFKM 2 mm OD (Skimmer cone mount)	1
	1231640	O-ring 104 × 2.5 Viton™ (Interface block to source chamber)	1
	1231650	O-ring 60 × 2.5 Viton™ (Interface block to source chamber)	1

Kits

Consumables Kit

Table 8. Consumables Kit iCAP Qa, iCAP Qc (P/N 1324980)

Picture	P/N	Description	Quantity
	1230790	iCAP Q quartz torch	2
	1305600	Injector 2.5 mm ID quartz	2
	3600812	Ni Sample cone	1
	1311870	Ni Skimmer Cone - Insert version	1
	1318480	Skimmer cone insert 3.5 (High Matrix Tolerance)	1
	1310900	Sampling cone gasket	20
	1320050	PVC peristaltic pump tubing - ID 0.508 mm - orange/yellow (3 bridges, flared end)	6 tubings
	1320110	Santoprene™ tube - ID 1.295 mm - gray/gray (3 bridges, straight end)	12 tubings
	1041071	PTFE microbore tubing, 0.042" ID × 0.066" OD	^a
	1600061	Tube Teflon™, 1/16 OD 0.2 ID 10 ft	1

Table 9. Preventative Maintenance Kit (P/N 1322750)

Picture	P/N	Description	Quantity
	1249350	Oil Mist Filter for Fore Vacuum Pump Sogevac™ SV 40 BI	1
	1322240	Oil reservoir TP SplitFlow 310	1
	1319310	Pump oil PFPE	1
	1239630	O-ring 29.8 × 1.78 Viton	1
	3004382	Sampling cone gasket	1
	1231650	O-ring 60 × 2.5 Viton	1
	1231640	O-ring 104 × 2.5 Viton	1
	1246310	O-ring 68 × 2.5 Viton	1
	1246320	O-ring 105 × 3 Viton	1
	1600550	Inline filter 5 µm	1
	1322480	O-ring angle valve DN25	1
	1294680	Air filter iCAP Q	1

Table 10. Manuals









Picture	P/N	Description	Quantity
	1288090	iCAP Q Operating Manual	1
	1288021	iCAP Q Preinstallation Requirements Guide	1

Table 11. Miscellaneous

Pictures	P/N	Description	Quantity
	1600550	Inline water filter 5 µm	1
	1305260	Load Coil assembly iCAP Q	1
	1294680	Air filter iCAP Q	1
	1289600	Extraction Lens 1 connector	1
	1289610	Extraction Lens 2 connector	1
	1277030	Linear connector - OD 4 mm	1
	1332580	Autosampler housing filter assembly	1
	1277070	Drip tray	1
	121123010000008	Chiller - water recirculator TF-2500 IPR, 208 V, 60 Hz	1
	121163010000004	Chiller - water recirculator TF-2500 IPR, 230 V, 50 Hz	1

Tools

Table 12. Tools




Picture	P/N	Description	Quantity
	1292160	Mounting tool for sample and skimmer cone	1
	1322590	Tool for skimmer cone insert	1
	1330270	Plasma coil adjustment jig	1




Table 13. Calibration and Tune solutions

Picture	P/N	Description	Quantity
	1323760	iCAP Q calibration solution	1
	1323770	iCAP Q tune solution	1

Options

Extraction Lens

Table 14. Extraction Lens

Picture	P/N	Description	Quantity
	1310730	Extraction lens 2 - iCAP Q	1
	1341380	Cold Plasma Lens Kit	1
	1298450	Extraction lens 1 - cold plasma	1
	1298460	Extraction lens 2 - cold plasma	1

Autosampler

Table 15. SC- Fast Autosampler

Parts	P/N	Description	Quantity
Autosampler SC-ESI	1317120	SC-Autosampler probe, 0.5 mm ID carbon fib. sup.	1
Valves	1301560	CTFE high-flow valve head for SC-FAST, uses 1/4-28 fittings	1
	1301570	PTFE rotor for high flow valve	1
	1301580	PEEK/Teflon™ composite rotor for 6 port high-flow FAST valve	1
	1301590	CTFE stator for 6 port valve with 1/4-28 fittings (high flow) sample uptake tube	1

Table 15. SC- Fast Autosampler, continued

Parts	P/N	Description	Quantity
Sample probes	1301600	Carrier probe, carbon fiber support, 0.5 mm ID (orange marker), port #2, 1/4-28 fittings	1
	1301610	Internal Standard addition tee, used with ST nebulizer, 0.25 mm ID, port #3, 1/4-28 fittings	1
	1301750	SC autosampler probe 0.50 mm (orange marker)	1
	1301620	Internal Standard line, 0.5 mm ID	1
	1301630	Internal Standard probe, carbon fiber support, 0.5 mm ID (orange marker), 1/4-28 fittings	1
	1301640	Sample probe, carbon fiber support, 0.8 mm ID, 150 cm, (blue marker) (1/4-28 fitting)	1
	1301650	Sample probe, carbon fiber support, 1 mm ID, 150 cm, (gray marker) (1/4-28 fitting)	1
Tubes and Sample Loops	1301690	ST Nebulizer line, 0.25 ID (green marker)	1
	1301700	ST Nebulizer line, 0.5 ID (orange marker)	1
	1301710	0.25 mL sample loop	1
	1301720	0.5 mL sample loop	1
	1301730	2 mL sample loop	1
	1301740	4 mL sample loop	1
Racks	1301510	Large rack, 21 position (3×7) (30 mm)	1
	1301520	Large rack, 40 position (4×10) (20 mm)	1
	1301530	Large rack, 60 position (5×12) (16 mm)	1
	1301540	Large rack, 90 position (6×15) (13 mm)	1
Pumps	1302480	PTFE SC-FAST vacuum pump assembly for SC-2 DX/SC-4 DX	1
	1302470	Rinse pump for SC-2 DX/SC-4 DX pumped rinsed option	1

Trademarks

LEYBONOL is a registered trademark of Oerlikon Leybold Vacuum GmbH, Santoprene is a registered trademark of Monsanto, Inc., SOGEVAC is a registered trademark of Leybold Vacuum GmbH. Teflon is a registered trademark of E. I. du Pont de Nemours & Co., Viton is a registered trademark of DuPont Performance Elastomers LLC.