

GC Septa, Data Handling, Syringe Filters and Spares



A wide range of chromatography consumables including GC septa, data handling software and instrument spares



GC Septa

CHROMSEAL 9001

High Performance GC Septa

These GC septa have been developed by Chromacol to:

- Operate at true operating temperatures up to 306°C
- Provide better, cleaner chromatography
- Offer a longer operating life
- Be packed in a chromatographically clean container



The CHROMSEAL 9001 Range

HT - High Temperature

This red septum has been designed to provide clean chromatography at a true operating temperature of 306°C.

LL - Long Life

This blue septum has been designed for use with an autosampler where it is likely to be penetrated many times.

This septum has been designed to have a maximum operating temperature of 290°C. Note this is a true operating temperature not an indicated temperature.

ECO - Economy

The Chromseal ECO grade septa have been designed to provide low operating costs without sacrificing cleanliness or operating life.

All Chromseal septa are available in a variety of sizes and as Shimadzu plug type septa.

Quality Control and Packing

All Chromseal 9001 septa are carefully packed immediately after production to protect them from laboratory contaminants and from contamination during their shelf life.

They are all packed in glass bottles, since glass has been shown to contribute nothing to the contents during extended period of storage.

Manufacturer	Model	Septa size		Chromseal References		
		mm	ins.			
A I Cambridge	All models	9	11/32	HT-9	LL-9	ECO-9
Antek	All models	9.5	3/8	HT-9.5	LL-9.5	ECO-9.5
Carlo Erba	FV2000 and FV 4000 Mega and Vega series	12		HT-12	LL-12	ECO-12
CE 8000 and TRACE	All models	17	21/32	HT-17	LL-17	ECO-17
Chrompak	All models	9	1/32	HT-9	LL-9	ECO-9
Gow Mac	All models	9	11/32	HT-9	LL-9	ECO-9
Agilent/Hewlett-Packard	5700	9.5	3/8	HT-9.5	LL-9.5	ECO-9.5
	5880, 5890, 6890	11	7/16	HT-11	LL-11	ECO-11
PerkinElmer	All models	11	7/16	HT-11	LL-11	ECO-11
Shimadzu	All models	plug type		HT-SP	LL-SP	ECO-SP
Tracor	All models	9.5	3/8	HT-9.5	LL-9.5	ECO-9.5
Varian	All packed column models	9.5	3/8	HT-9.5	LL-9.5	ECO-9.5
	3300,3400,3500,3600,	11	7/16	HT-11	LL-11	ECO-11
	3700,Vista	11	7/16	HT-11	LL-11	ECO-11
Unicam	4600	9.5	3/8	HT-9.5	LL-9.5	ECO-9.5

Prime Chromatography Data Handling



New Version 4 with Enhanced Capabilities and compliance

Prime for Windows™ is ideally suited for use with any chromatograph offering a host of powerful features at a very affordable price that you won't find in any other package.

Prime is a multi-channel PC based chromatography data system that works under Windows 95/98, Windows NT/2000 and Windows XP operating systems.

Please contact us for a demo CD

Features

Operations

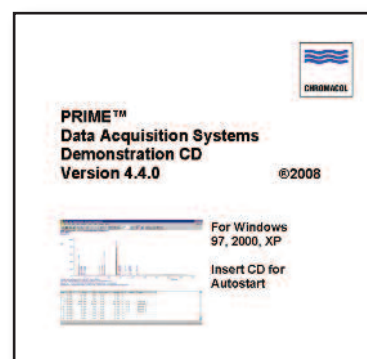
- Multiple Channels from single PC
- Multitasking in Windows
- Network Capable for Remote Operation
- External A/D converter 24-bit enhanced resolution with 32-bit calculation.
- Digital I/O

Calibration and Reporting

- Comprehensive Sequence and Multilevel Standard capabilities.
- SST module included with USP tailing component.
- Internal and External Standards
- Custom reports and Data Export
- Chromatogram Overlay

Validation and Compliance

- GLP/GMP Compliance
- Full IQ and OQ reporting
- 21 CFR Part 11 (Electronic Records and Electronic Signatures) Compliant



PART NUMBER	DESCRIPTION
PW-500	Prime for Windows – Complete single channel software with external A/D converters cables and manual.
PW-500 DEMO	Demonstration CD

Solvent Degassers

Vacuum Degassers

Vacuum degassers use only electrical power and can degas up to four solvent lines.

Gases are removed by passing the solvent through a permeable membrane, on the outside of which is a vacuum. As the solvent passes, dissolved gases diffuse through the membrane into the vacuum chamber and are removed. The membrane porosity ensures that only the unwanted gases pass through, no solvent vapours enter the laboratory. In addition, when mixed solvents are used, there is no depletion of the more volatile component.

Wetted components are PTFE or similarly inert compounds, suitable for all HPLC applications. Dead volumes are negligible, compatible with the required degassing quality and flowrates. When a four-channel system is used, the parameters of degassing quality and available flow rate can be varied by piping the various channels in parallel or in series.

SPECIFICATIONS	DESCRIPTION
Flow Rate Range:	0.2 to 5mL/min
Gas Removal:	Better than 1ppm at 1mL/min
Vacuum Source:	Vacuum pump with silencer
Vacuum Chamber:	Single vacuum chamber with one, two or four degassing lines.
Vacuum Sensor:	Automatically engages pump when required.
Dimensions:	12cm(W) x 26cm(D) x 22cm(H)
Weight:	8 kilos, 17.5lbs
Power:	220VA at 230V

PART NUMBER	DESCRIPTION
HDG-1615/1	Single Channel Degasser
HDG-1615/2	Dual Channel Degasser
HDG-1615/4	Four Channel Degasser



Each Degasser comes complete with PTFE connection tubing, finger-tight nuts and PTFE ferrules.

Syringe Filters

Sample preparation has always been one of the most important steps in successful chromatography. It has also been one of the most time consuming.

Chromacol's 30mm and 17mm filter formats provide superior throughput and sample loading over standard, competitive 25mm and 13mm filters. Now you can process up to 50% more sample before reaching maximum sample loading for our new 30mm filters.

The new sample distribution rings promote uniform application of the sample across the membrane area. This feature maximizes the available filtration area, speed and reduces backpressure when filtering highly particulate samples.

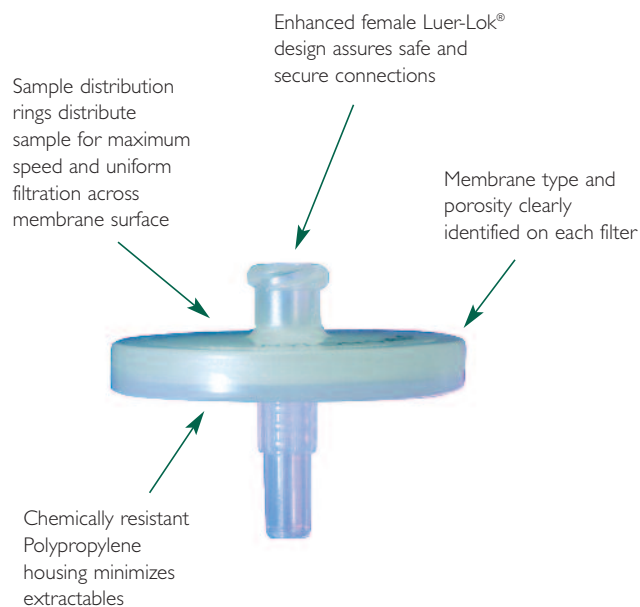
For full details of our Syringe Filters range please request a brochure.

(All Chromacol syringe filters are packed in 100)



MATERIAL	DIAMETER	PORE SIZE 0.45µm	PORE SIZE 0.2µm
Nylon	30mm	30-SF-45(N)	30-SF-02(N)
	17mm	17-SF-45(N)	17-SF-02(N)
	4mm	4-SF-45(N)	4-SF-02(N)
With pre-filter	30mm	30-SF-45(N)P	30-SF-02(N)P
PTFE	30mm	30-SF-45(T)	30-SF-02(T)
	17mm	17-SF-45(T)	
	4mm	4-SF-45(T)	4-SF-02(T)
With pre-filter	30mm	30-SF-45(T)P	
PVDF	30mm	30-SF-45(PV)	30-SF-02(PV)
	17mm		17-SF-02(PV)
	4mm	4-SF-45(PV)	4-SF-02(PV)
Polypropylene (PP)	30mm	30-SF-45(PP)	30-SF-02(PP)
	17mm	17-SF-45(PP)	17-SF-02(PP)
	4mm	4-SF-45(PP)	4-SF-02(PP)
With pre-filter	30mm	30-SF-45(PP)P	
Polyether Sulphone (PES)	30mm	30-SF-45(PES)	30-SF-02(PES)
	17mm	17-SF-45(PES)	17-SF-02(PES)
Regenerated Cellulose (RC)	30mm	30-SF-45(RC)	
	17mm	17-SF-45(RC)	17-SF-02(RC)
	4mm	4-SF-45(RC)	4-SF-02(RC)
Cellulose Acetate (CA)	30mm	30-SF-45(CA)	30-SF-02(CA)
	17mm	17-SF-45(CA)	17-SF-02(CA)
	4mm	4-SF-45(CA)	

Comprehensive quality systems ensure interference free results



PORE SIZE	DIAMETER	GLASS FIBRE (GMF)	NYLON	PFTE
0.7µm	30mm	30-SF-07(GMF)		
1.0µm	30mm			30-SF-10(T)
1.2µm	30mm	30-SF-12(GMF)		
1.5µm	30mm		30-SF-15(N))	
3.1µm	30mm	30-SF-31(GMF)		
5.0µm	30mm			30-SF-50(T)

Ion Chromatography Certified Syringe Filters

Certified Filters with ultra-low ionic residues.

PART NUMBER	DESCRIPTION	Ion Chromatography Certified Syringe Filters
13-MF-02(IC)	Econofil IC Syringe Filters 13mm 0.2µm	
25-MF-02(IC)	Econofil IC Syringe Filters 25mm 0.2µm	



HPLC - Detector Lamps

Can't find the lamp for your detector or spectrophotometer?

For further details of lamps for UV-Vis Spectrophotometers and other HPLC manufacturers contact us for a complete listing.

PART NUMBER	DESCRIPTION	MODEL	Agilent Technologies (Hewlett-Packard)	MANUFACTURER'S P/N
DHP-901	Deuterium	HP 1040/HP 1050 (G1306A) DAD/HP 1050 DA (1050 MWD)/ HP 1050 MW (79854A) /HP 1090 (75880A) DAD		79883-60002
DHP-902	Deuterium	HP 1080/HP 1081/HP1081B/HP1082B/HP1084/HP1084B		79875-60012
DHP-903	Deuterium	HP 1050 VW (79853C)		79853-60002
DHP-906	Xenon	HP 1046/HP1046A		
DHP-909	Deuterium	HP 8450/8450A		08450-60106
DHP-910	Deuterium	HP 1100 (G1314) VW		G1314-60100
DHP-910LL	LL deuterium	Agilent 1100 VWD long life		
DHP-911	Deuterium	HP 1100 (G1315A) DAD		2140-0590
DHP-911LL	LL deuterium	Agilent 1100 DAD long life		5181-1530
DHP-912	Deuterium	HP 8453		2140-8605
DHP-913	Deuterium	HP 8452 A DAD/HP 8452A Opt 002		08452-60104

PART NUMBER	DESCRIPTION	MODEL	Beckman	MANUFACTURER'S P/N
DAB-905	Deuterium	155		22887153
DAB-906	Deuterium	164/165/167		236920
DAB-909	Deuterium	163		22947029
DAB-913A	Deuterium	Beckman 166 D2 lamp (prealigned) System Gold		538706
DAB-915A	Deuterium	Beckman 168 D2 lamp (prealigned) System Gold		538711
DAB-916	Deuterium	Beckman P/ACE 2000 D2 (prealigned)		

Lamps for Beckman DU Series Spectrophotometers are also available

PART NUMBER	DESCRIPTION	MODEL	Gilson/Rainin	MANUFACTURER'S P/N
DGI-901	Deuterium	Holochrome		HMD(9510)
DGI-902	Deuterium	Spectrochrome		2900-0496
DGI-903	Mercury	111B/112 FW		03-03277-10
DGI-915	Deuterium	115/116/117		100-123
DGI-918	Deuterium	118/119/151/152/155/156		100-326
DGI-918LL	LL deuterium	Gilson 115/116/117/118/119/151 152/155/156 long life		
DGI-919LL	LL deuterium	Gilson 170 DAD D2 long life		
DHP-911	Deuterium	170 Diode Array		2140-60001

PART NUMBER	DESCRIPTION	MODEL	Kontron: Biotek-Kontron	MANUFACTURER'S P/N
DKO-901	Deuterium	LC 430		93-00636
DKO-901H	Deuterium	LC 330		54-02003
DKO-903	Deuterium	Uvikon 720/720LC		035-1001
DKO-904	Xenon	Kontron SFM25 Xe lamp		54-01002
DKO-905	Deuterium	LC 433		93-00636
DKO-906	Deuterium	LC 710/LC 715/Uvikon 820/930		54-02002
DKO-908	Deuterium	Uvikon 725		
DKO-909	Deuterium	Uvikon 740/800/810/860		54-02002
DKO-910	Deuterium	440 DAD		91-910-95
DKO-911	Deuterium	735LC/Uvikon 722/730/922		54-02001
DKO-912	Deuterium	LC 332/335		93-00636
DKO-912H	Deuterium	535 VWD		91-91494

HPLC - Detector Lamps

PART NUMBER	DESCRIPTION	MODEL	Kontron: Biotek-Kontron	MANUFACTURER'S P/N
DKO-912LL	LL deuterium	Kontron 332 335 430 432 433 535 long life		91-91494
DKO-913	Deuterium	Uvikon 941/942/943		54-02002
DKO-913LL	LL deuterium	Kontron 535DAD long life		91-91494
DKO-914LL	LL deuterium	Kontron 540DAD 540+ 545V long life		54-02007
DKO-914	Deuterium	540 DAD/540+ DAD/545DAD		54-02007

PART NUMBER	DESCRIPTION	MODEL	Merck-Hitachi (Hitachi)	MANUFACTURER'S P/N
DHI-901	Deuterium	101/102/111		
DHI-902	Deuterium	100-10/100-40/100-50/100-60		799-9991
DHI-903	Deuterium	150-20/200/220/300/330/340/2000/3000/ 4000/L2500/L3000/L4000/L-4500		885-3570
DHI-908	Deuterium	L4200/L4250/L4500		371140005
DHI-910	Deuterium	LaChrom L4720/L4520/L7400/L450		371140005
DHI-911	Xenon	Hitachi fluorescence detectors F1000/2000/4000 Series		

Lamps for Hitachi Spectrophotometers are also available.

PART NUMBER	DESCRIPTION	MODEL	ABI, Kratos	MANUFACTURER'S P/N
DKA-902	Deuterium	757/769/770/773/775/783/873/FS970/120/130		2900-0496 (-0487) (-0489)
DKA-904	Tungsten	757/769/770/773/775/783/873/FS970/120/130		2450-0213
DKA-910	Deuterium	785A/FS980		2900-0484

PART NUMBER	DESCRIPTION	MODEL	PerkinElmer	MANUFACTURER'S P/N
DPE-903	Deuterium	Lambda 3/7/9		C055-0505
DPE-906	Deuterium	360/460/560		0057-0194
DPE-908	Tungsten	Lambda 2/2S/10/11 and others		
DPE-911	Deuterium	Integral 2000/Integral 4000/LC55/LC65/LC85/LC95		B016-0917/0271-340/0271-1706
DPE-913	Deuterium	LC-90/LC-290		0271-2224
DPE-914	Deuterium	Lambda 2/2S/10/11 and others		B016-0817
DPE-915	Deuterium	Series 200 DAD		N2922010

Lamps for other PerkinElmer Lambda Series Spectrophotometers are also available.

PART NUMBER	DESCRIPTION	MODEL	Shimadzu	MANUFACTURER'S P/N
DSH-901	Deuterium	UV120/UV160/UV160A/UV240/UV260/UV265		200-75503-01
DSH-902	Deuterium	SPD-2A/SPD-3/SPD-4		062-65056
DSH-903	Deuterium	D300L/UV200S		062-70606-00
DSH-912	Xenon	Shimadzu RF530/RF510		
DSH-913	Xenon	Shimadzu RF540/RF535/RF551/RF500		
DSH-914	Xenon	Shimadzu RF1501.5301/5000		
DSH-915	Xenon	RF10A RF10AX		
DSH-916	Deuterium	SPD 6A/SPD-6AV		
DSH-917	Deuterium	SPD 10A/SPD 10AS/SPD-10AV/SPD-10AVP		228-34016-02
DSH-918	Deuterium	SPD-M10AVP PDA		228-34016
DSH-918LL	LL deuterium	Shimadzu SPD-10 Series long life		

HPLC - Detector Lamps

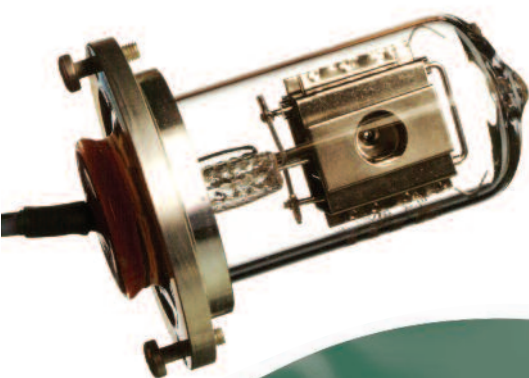
PART NUMBER	DESCRIPTION	MODEL	Thermo Scientific	MANUFACTURER'S P/N
			SpectraPhysics/LDC/Milton Roy/ Linear/Spectronics/TSP	
DLD-901	Deuterium	LDC Spectromonitor III		108035
DLD-907	Deuterium	LDC Spectromonitor I/II		
DLD-909	Deuterium	LDC SM4000 series		900918001
DLD-910	Deuterium	LDC SM3000/3100/3200		108035
DLD-911	Xenon	LDC Fluoromonitor FM4100		
DPY-915	Deuterium	Aquamate/UV1/UV2/UV3/UV4		
DPY-916	Tungsten	Helios Epsilon		
DTL-901	Tungsten	Helios Delta/Gamma		
DSP-901	Deuterium	SP8400/SP8430/SP8440/SP8450/SP8480/SP8490		3302-9540
DSP-903	Deuterium	SP8200/LC871		
DSP-905	Xenon	FL2000/LC304		
DSP-907	Deuterium	SP8480XR/SP8773XR		
DSP-908	Deuterium	Linear UV100/UV200/UV1000/UV2000/ UV3000/Focus/Spectrochrom		9551-0202
DSP-908	Deuterium	Thermo Surveyor		
DSP-912	Deuterium	TSP UV6000LP		108052

PART NUMBER	DESCRIPTION	MODEL	Unicam (Philips/ATI/Pye)	MANUFACTURER'S P/N
DPY-901	Deuterium	4020/4025		4013164-45861
DPY-902	Deuterium	4110		4013166-66428
DPY-903	Deuterium	SP8200/SP8400/SP8600		4013163-75402
DPY-904	Deuterium	600UV		4013161-05993
DPY-905	Deuterium	4021		4013164-39401
DPY-906	Deuterium	8500/8740/8625/8675		9423186-0811
DPY-907	Deuterium	SP8700/SP8750		9423185-03021
DPY-914	Deuterium	4225		9435242-25401
DPY-915	Deuterium	Helios/UV300/UV550		
DTL-901	Tungsten	Helios/UV300/UV550		943-UV9-0001E
DTL-902	Tungsten	SP8200/SP8400/SP8600 (Vis)		9423185

Lamps for Unicam spectrophotometers are also available.

PART NUMBER	DESCRIPTION	MODEL	Varian	MANUFACTURER'S P/N
DVA-901	Deuterium	UV 2050		03-951303-99
DVA-903	Deuterium	UV 50/Varichrom		03-951305
DVA-904	Deuterium	UV100/UV200		03-916077
DVA-905	Deuterium	UV5/2550		00-996800
DVA-906	Deuterium	LC5000/LC5500		03-916077-00
DVA-907	Deuterium	Star 9050		03-916077-00
DVA-909	Deuterium	ProStar 340/345 UV/Vis		03-91615691

Lamps for Varian CARY Spectrophotometers and other models also available.



HPLC - Detector Lamps

PART NUMBER	DESCRIPTION	MODEL	Waters	MANUFACTURER'S P/N
DWA-901	Mercury	440/441/490		WAT 097323
DWA-910	Deuterium	480/481/480LC/481LC/Lambda Max/LC1		WAT 099499
DWA-911	Tungsten	RI/R401/R403/R404		WAT 048419
DWA-912	Cadmium	440/441/490		WAT 097731
DWA-913	Zinc	440/441/490		WAT 097723
DWA-915	Deuterium	484		WAT 080357
DWA-918	Deuterium	486		WAT 080678
DWA-918LC	Deuterium	2486		WAT 080678
DWA-921	Deuterium	996 PDA/2996		WAT 057760
DWA-921LL	LL deuterium	Waters 996		WAT 057760
DWA-923	Xenon	470/475/2475 lamp only		WAT 047018
DWA-926	Deuterium	990/991/994 PDA		WAT 021516
DWA-929	Xenon	474		WAT 047447
DWA-930	Deuterium	2487 Dual Wavelength/2488		WAT 081142
DWA-930LL	LL deuterium	Waters Alliance 2487/2488		WAT 081142

PART NUMBER	DESCRIPTION	MODEL	Cecil	MANUFACTURER'S P/N
DCE-901	Deuterium	Cecil Series 1		2202-0142
DCE-902	Deuterium	Cecil Series 2		2900-0484

Lamps for Cecil UV Spectrophotometers also available

PART NUMBER	DESCRIPTION	MODEL	Dionex (Gynkotek-Softron)	MANUFACTURER'S P/N
DGP-903	Deuterium	Gynkotek UVD-340S		
DDX-901	Deuterium	Dionex Summit PDA-100		

PART NUMBER	DESCRIPTION	MODEL	Knauer	MANUFACTURER'S P/N
DKN-904	Deuterium	8600/8700		
DKN-905	Deuterium	Wellchrom K-2500/2501/2600		

PART NUMBER	DESCRIPTION	MODEL	Severn Analytical	MANUFACTURER'S P/N
DSA-901	Deuterium	SA6500/SA6503/SA6504/SA6508		

ADDITIONAL NOTES

- Deuterium lamps are usually supplied ready for installation with pre-aligned bases. In some cases the holder or bracket from the lamp assembly will need to be reused. Deuterium lamps are usually warranted for 1000 hours of operation. The long-life deuterium lamps are now supplied with an extended operational life of 2000 hours+.
- Xenon lamps are supplied without mounting brackets and require manual alignment.
- Tungsten lamps are pre-aligned.

Agilent 1100
DHP-911LL



Shimadzu
DSH-917LL



Gilson
DGI-918



Varian
DVA-907





Pump Spares

Gold seals give extended lifetime in corrosive and buffered mobile phases. Universal check valves allow one check valve unit to be used as spares for a number of different pumps.

PART NUMBER	DESCRIPTION	MODEL	Agilent Technologies (Hewlett-Packard) Pistons	MANUFACTURER'S P/N
SHP-200	Piston Assembly - Sapphire	1090		3080-0672
SHP-400	Piston Assembly - Sapphire	1050 and 1100		5062-2441

PART NUMBER	DESCRIPTION	MODEL	Agilent Technologies (Hewlett-Packard) Piston Seals	MANUFACTURER'S P/N
SHP-220G	Piston Seal - Yellow All Models	1050, 1090 and 1100		
SHP-220	Piston Seal - Black 1090	1090		5062-2494
SHP-420K	Piston Seal - Black 1050 & 1100	1050 and 1100		5062-8516

PART NUMBER	DESCRIPTION	MODEL	Agilent Technologies (Hewlett-Packard) Check Valves	MANUFACTURER'S P/N
SHP-5002	Replacement Inlet/Outlet Check Valve Cartridge 1090	1090		79835-67101
SHP-5001	Inlet/Outlet Check Valve Assembly 1090	1090		79835-25211

PART NUMBER	DESCRIPTION	MODEL	Beckman-Coulter (Beckman, Altex) Piston	MANUFACTURER'S P/N
SBA-200	Piston Assembly - Sapphire	100		100-07
SBA-400	Piston Assembly - Sapphire	110, 112		243053
SBA-414	Piston Assembly - Sapphire	114, 116, 126 128 System Gold		240714

PART NUMBER	DESCRIPTION	MODEL	Beckman-Coulter (Beckman, Altex) Piston Seals	MANUFACTURER'S P/N
SBA-220	Piston Seal - Black	100		887138
SBA-220G	Piston Seal - Gold	100		
SBA-420	Piston Seal - Black	110		887138
SBA-520	Piston Seal - Black	112		236797
SBA-620	Piston Seal - Black	114, 116, 126 128 System Gold		237162/241037

PART NUMBER	DESCRIPTION	MODEL	Beckman-Coulter (Beckman, Altex) Check Valves	MANUFACTURER'S P/N
SBA-3001	Inlet Check Valve Assembly	100, 112, 114, 116, 126 128 System Gold		243038/240720
SBA-3002	Outlet Check Valve Assembly	100, 112, 114, 116, 126 128 System Gold		243040/240721
SBA-6001	Inlet Check Valve Assembly	110		243054
SBA-6002	Outlet Check Valve Assembly	110		243040

PART NUMBER	DESCRIPTION	MODEL	Gilson Piston Assemblies	MANUFACTURER'S P/N
SGI-200	WSC Piston Assembly - Sapphire	300 Series- WSC 10mL Head		E 50010
SGI-600	SC Piston Assembly - Sapphire	300 Series- SC & WSC 25mL Head		E 50011
SGI-580	SC Piston Assembly - Sapphire	300 Series- SC & WSC 5mL Head		E 500008
SGI-590	SC Piston Assembly - Sapphire	300 Series- SC & WSC 10mL Head		E 50009

Pump Spares

PART NUMBER	DESCRIPTION	MODEL	Gilson Piston Seals	MANUFACTURER'S P/N
SOT-GIL220G	Piston Seal - Yellow	300 Series- SC & WSC 10mL Head		400121
SOT-GIL220	Piston Seal - Black	300 Series- SC & WSC 10mL Head		400111
SOT-GIL250G	Piston Seal - Yellow	300 Series- SC & WSC 25mL Head		400122
SOT-GIL250	Piston Seal - Black	300 Series- SC & WSC 25mL Head		400117
SOT-GIL520G	Piston Seal - Yellow	300 Series- SC & WSC 5mL Head		400120
SOT-GIL520	Piston Seal - Black	300 Series- SC & WSC 5mL Head		400112
SOT-GIL500G	Piston Seal - Yellow	300 Series- SC & WSC 50mL Head		400123

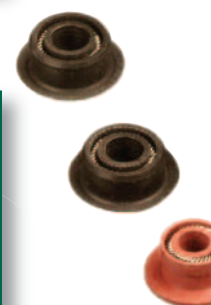
PART NUMBER	DESCRIPTION	MODEL	Gilson Check Valves	MANUFACTURER'S P/N
SGI-1144	Inlet Check Valve Cartridge	300 Series- SC & WSC Head		E 50082
SGI-1145	Outlet Check Valve Cartridge	300 Series- SC & WSC Head		E 50085
SGI-3001	Inlet Check Valve Cartridge Assembly	300 Series- SC & WSC Head		645042
SGI-3002	Outlet Check Valve Cartridge Assembly	300 Series- SC & WSC Head		645243
SGI-8001	Inlet Check Valve Body	300 Series- SC & WSC Head		E 45356
SGI-8002	Outlet Check Valve Body	300 Series- SC & WSC Head		E 45219

PART NUMBER	DESCRIPTION	MODEL	Kontron Pistons	MANUFACTURER'S P/N
SKO-200	Piston Assembly - Sapphire	410, 414		
SKO-300	Piston Assembly - Sapphire	320 M, 325 M, 422		96-90015
SKO-400	Piston Assembly - Sapphire	420 L		92-00834
SKO-500	Piston Assembly - Zirconia	500, 522, 525		67-90030
SKO-800	Piston Assembly - Sapphire	420M		92-00833
SKO-900	Piston Assembly - Sapphire	420S		92-00832

PART NUMBER	DESCRIPTION	MODEL	Kontron Piston Seals	MANUFACTURER'S P/N
SKO-220	Piston Seal - Black	410, 414		35-30011
SKO-320	Piston Seal - Black (Standard)	320 M, 325 M, 422		35-99005
SKO-420	Primary Piston Seal - Black	420 L		35-99004
SKO-420S	Secondary Piston Seal-Clear	420 L		35-30018
SKO-520	Piston Seal - Black	500, 522, 525		35-99025C
SKO-520G	Piston Seal - Yellow	500, 522, 525		35-99025
SKO-820	Primary Piston Seal - Black	420M		35-99002
SKO-820S	Secondary Piston Seal-Clear	420M		35-30016
SKO-920	Primary Piston Seal - Black	420S		35-99003
SKO-920S	Secondary Piston Seal-Clear	420S		35-30020

Kontron pumps may have different heads installed. These may give micro, analytical or preparative versions. Check head unit before ordering.

PART NUMBER	DESCRIPTION	MODEL	Kontron Check Valves	MANUFACTURER'S P/N
SKO-3001	Inlet Check Valve Assembly	410, 414		92-00626
SKO-3002	Outlet Check Valve Assembly	410, 414		87-00462
SKO-5001	Inlet Check Valve Assembly	420 L, 500, 522, 525		92-90003
SKO-5002	Outlet Check Valve Assembly	420 L, 500, 522, 525		92-90278
SKO-6001	Inlet Check Valve Assembly (Isocratic)	420M, 420MDA, 420S		92-90007
SKO-6002	Outlet Check Valve Assembly	420M, 420MDA, 420S		92-90008
SKO-6003	Dummy Check Valve Assembly	420M		
SKO-7001	Inlet Check Valve Assembly (Isocratic)	320 M, 325 M, 422		92-90007
SKO-7002	Outlet Check Valve Assembly	320 M, 325 M, 422		92-0008
SKO-6001G	Inlet Check Valve Assembly (Gradient)	420M		92-90016



Pump Spares

PART NUMBER	DESCRIPTION	MODEL	Kratos ABI Piston Assembly	MANUFACTURER'S P/N
SOT-KS200	Piston Assembly - Sapphire	SF 400 Analytical		1400-1970

PART NUMBER	DESCRIPTION	MODEL	Kratos ABI Piston Seals	MANUFACTURER'S P/N
SKS-220G	Piston Seal - Yellow	SF 400 Analytical		
SKS-220	Piston Seal - Grey	SF 400 Analytical		7200-0088
SKS-220U	Piston Seal - Clear	SF 400 Analytical		

PART NUMBER	DESCRIPTION	MODEL	Kratos ABI Check Valve Assembly	MANUFACTURER'S P/N
SKS-6002	Outlet Check Valve Assembly	SF 400 Analytical		7200-0062
SKS-6001	Inlet Check Valve Assembly	SF 400 Analytical		7200-0060

Also used with - Gynkotek 300C, M480, P580, Severn Analytical SA6200, Dionex 300C, M480, P580

PART NUMBER	DESCRIPTION	MODEL	Merck Hitachi Pistons	MANUFACTURER'S P/N
SMH-200	Piston Assembly - Sapphire	655, LaChrom L6000, L7100		635-1021

PART NUMBER	DESCRIPTION	MODEL	Merck Hitachi Piston Seals	MANUFACTURER'S P/N
SMH-220	Piston Seal - Black	655, LaChrom L6000, L7100		655-1080

PART NUMBER	DESCRIPTION	MODEL	Merck Hitachi Check Valves	MANUFACTURER'S P/N
SMH-3001	Inlet Check Valve Assembly (Not L7100)	655, LaChrom L6000		885-1330
SMH-3002	Outlet Check Valve Assembly (Not L7100)	655, LaChrom L6000		885-1331
SMH-4001	Inlet/Outlet Check Valve Cartridge (L7100 only) *	655, LaChrom L6000, L7100		

PART NUMBER	DESCRIPTION	MODEL	PerkinElmer Pistons	MANUFACTURER'S P/N
SOT-PE600	H. P. Piston Assembly - Sapphire	SERIES 200, 400, 410, 620, Model 250, Integral 4000		N2600124
SOT-PE500	L. P. Piston Assembly - Sapphire	SERIES 200, 400, 410, 620, Model 250, Integral 4000		N2600104

PART NUMBER	DESCRIPTION	MODEL	PerkinElmer Piston Seals	MANUFACTURER'S P/N
SOT-PE220	H. P. Piston Seal - Grey	SERIES 200, 400, 410, 620, Model 250, Integral 4000		9907328
SOT-PE220G	H. P. Piston Seal - Yellow	SERIES 200, 400, 410, 620, Model 250, Integral 4000		9907324
SOT-PE320	L. P. Piston Seal - Black	SERIES 200, 400, 410, 620, Model 250, Integral 4000		9907330
SOT-PE320G	L. P. Piston Seal - Yellow	SERIES 200, 400, 410, 620, Model 250, Integral 4000		9907339

PART NUMBER	DESCRIPTION	MODEL	PerkinElmer Check Valves	MANUFACTURER'S P/N
SOT-PE3001	Inlet/Intermediate Check Valve Assembly	SERIES 200, 400, 410, 620, Model 250, Integral 4000		2540177
SOT-PE3002	Outlet Check Valve Assembly	SERIES 200, 400, 410, 620, Model 250, Integral 4000		2540197

PART NUMBER	DESCRIPTION	MODEL	Shimadzu Pistons	MANUFACTURER'S P/N
SOT-SH200	Piston Assembly - Sapphire	LC-10 AS, LC-6, LC-6A		228-17019-00
SOT-SH202	Piston Assembly - Sapphire	LC-9, LC-10AD, LC-600		228-18523-91

PART NUMBER	DESCRIPTION	MODEL	Shimadzu Piston Seals	MANUFACTURER'S P/N
SOT-SH-100-01	Piston Seal - Yellow	LC-10 AT		228-21975-00
SOT-SH-100-02	Wash Seal - White	LC-10 AT		228-28499-00
SOT-SH220	Piston Seal - Grey	LC-3, LC-4, LC-5, LC-6, LC-6A, LC-10 AS		228-11999
SOT-SH220G	Wash Seal - White	LC-3, LC-4, LC-5, LC-6, LC-6A, LC-10 AS		228-28499
SOT-SH520G	Piston Seal - Yellow	LC-3, LC-4, LC-5, LC-6, LC-6A, LC-10 AS		228-21975
SOT-SH420	Piston Seal - Grey	LC-9, LC-10AD, LC-600		228-18745
SOT-SH520	Piston Seal - Black	LC-10 ATvp		228-35145-00

PART NUMBER	DESCRIPTION	MODEL	Shimadzu Check Valves	MANUFACTURER'S P/N
SOT-SSH3001	Inlet Check Valve Assembly	LC-3, LC-4, LC-5, LC-6, LC-6A, LC-10 AS		228-12353-91
SOT-SSH3002	Outlet Check Valve Assembly	LC-3, LC-4, LC-5, LC-6, LC-6A, LC-10 AS		228-090540-93
SSH-6001	Inlet Check Valve Assembly - Cartridge Type	LC-9, LC-10AD, LC-600		Equiv. to 228-18522-91
SSH-6002	Outlet Check Valve Assembly - Cartridge Type	LC-9, LC-10AD, LC-600		Equiv. to 228-18522-92

PART NUMBER	DESCRIPTION	MODEL	Thermo Scientific Pistons	MANUFACTURER'S P/N
SLD-200	Piston Assembly - Sapphire	CONSTAMETRIC I, II, III, 3000, 4000		8013060000
SOT-SP200	Piston Assembly - Sapphire	8100, 8700		A 1593-010
SOT-SP202	Piston Assembly - Sapphire	8800, 8810, ISOCHROM, P-SERIES		A 3102-010
SFS-200	Piston Assembly - Sapphire	Surveyor LC		00950-30020S
SFS-300	Piston Assembly - Zirconia	Surveyor MS		00201-11324

PART NUMBER	DESCRIPTION	MODEL	Thermo Scientific Piston Seals	MANUFACTURER'S P/N
SOT-SP220	Piston Seal - Black	8100, 8700		
SOT-SP220G	Piston Seal - Yellow	8100, 8700		
SOT-SP100	Piston Seal - Black	8800, 8810, ISOCHROM, P-SERIES		A 2962-020
SOT-SP420	Piston Seal - Black	8800, 8810, ISOCHROM, P-SERIES		A 2962-020
SOT-SP420U	Piston Seal - Clear	8800, 8810, ISOCHROM, P-SERIES		
SOT-SP420G	Piston Seal - Yellow	8800, 8810, ISOCHROM, P-SERIES		A 2962-010
SOT-SP102	Piston Wash Seal - White	8800, 8810, ISOCHROM, P-SERIES		A 2963-010
SLD-220	Piston Seal - Black	CONSTAMETRIC I, II, III, 3000, 4000		2061290010
SLD-220G	Piston Seal - Yellow	CONSTAMETRIC I, II, III, 3000, 4000		2062340000
SLD-500	Standard Seal Kit - Black	CONSTAMETRIC I, II, III, 3000, 4000		8015980000
SLD-500G	Standard Seal Kit - Yellow	CONSTAMETRIC I, II, III, 3000, 4000		8018920010
SFS-220	Piston Seal - Black	Surveyor LC		00950-30004B
SFS-220G	Piston Seal - Yellow	Surveyor LC		00950-30004Y
SFS-230	Wash Seal White	Surveyor LC		00950-30025
SFS-320	Piston Seal - Black	Surveyor MS		00107-18110
SFS-320U	Piston Seal - Clear	Surveyor MS		00107-18111
SFS-330	Wash Seal - Clear	Surveyor MS		00107-18114

PART NUMBER	DESCRIPTION	MODEL	Thermo Scientific Check Valves	MANUFACTURER'S P/N
SLD-3501	Inlet Check Valve Assembly Cartridge Type	CONSTAMETRIC I, II, III, 3000, 4000		9009470010
SLD-3502	Outlet Check Valve Assembly Cartridge Type	CONSTAMETRIC I, II, III, 3000, 4000		9009470020
SOT-SP304	Transducer Check Valve Assembly	8100, 8700, 8800, 8810, ISOCHROM, P-SERIES		A 3990-010
SSP-6001	Inlet Check Valve Assembly	8100, 8700, 8800, 8810, ISOCHROM, P-SERIES		A 3495-010
SSP-6002	Outlet Check Valve Assembly	8100, 8700, 8800, 8810, ISOCHROM, P-SERIES		A 3480-010
SFS-3001	Inlet Check Valve Assembly - Cartridge Type	Surveyor LC		00950-30026
SFS-3002	Outlet Check Valve Assembly - Cartridge Type	Surveyor LC		00950-30021
SFS-6001C	Inlet/Outlet Check Valve Cartridge	Surveyor MS		00110-05110

Pump Spares

PART NUMBER	DESCRIPTION	MODEL	Varian Sapphire Pistons	MANUFACTURER'S P/N
SOT-VA200	Piston Assembly - Sapphire	5000, 5500, 5600		03-905337-00
SOT-VA400	Piston Assembly - Sapphire	2010, 2210, 2510		00-997261-08

PART NUMBER	DESCRIPTION	MODEL	Varian Piston Seals	MANUFACTURER'S P/N
SOT-VA220	Piston Seal - Black	5000, 5500, 5600		27-459632-00
SOT-VA320	Piston Seal - Black	2010, 2210, 2510		
SOT-VA320G	Piston Seal - Yellow	2010, 2210, 2510		00-997261-37

PART NUMBER	DESCRIPTION	MODEL	Varian Check Valves and Spares	MANUFACTURER'S P/N
SVA-3001	Inlet Check Valve Assembly	2010, 2210, 2510		00-997261-09
SVA-3002	Outlet Check Valve Assembly	2010, 2210, 2510		00-997261-10

PART NUMBER	DESCRIPTION	MODEL	Waters Pistons	MANUFACTURER'S P/N
SWA-WA200	Piston Assembly - Sapphire	M510, M590, M600, M610 M6000		WAT025656
SWA-WA200R	Piston Assembly - Ruby	M510, M590, M600, M610 M6000		
SWA-WA205	Piston Assembly - Sapphire	M45, M501		WAT026524
SWA-WA600S	Piston Assembly - Sapphire	M510EF, M590EF, M600EF, M610EF, M6000EF		WAT060304
SWA-WA800	Piston Assembly - Sapphire	M515		WAT0207069
SWA-WA900	Piston Assembly - Sapphire	Alliance 2690		WAT0270959

PART NUMBER	DESCRIPTION	MODEL	Waters Piston Seals	MANUFACTURER'S P/N
SWA-WA220	Piston Seal - Black	M45, M501, M510, M590, M600, M610 M6000		WAT026613
SWA-WA220G	Piston Seal - Yellow	M45, M501, M510, M590, M600, M610 M6000		WAT022934
SWA-WA600	Piston Seal - Grey	M510EF, M590EF, M600EF, M610EF, M6000EF		WAT026644
SWA-WA820	Piston Seal - Black	M515		WAT026613
SWA-WA820G	Piston Seal - Yellow	M515		WAT022934
SWA-WA920	Piston Seal - Black	Alliance 2690		
SWA-WA920G	Piston Seal - Yellow	Alliance 2690		WAT0270789

PART NUMBER	DESCRIPTION	MODEL	Waters Check Valves and Spares	MANUFACTURER'S P/N
SWA-3201	Inlet Check Valve Assembly	M45, M501, M510, M590, M600, M610 M6000		25214
SWA-3202	Outlet Check Valve Assembly Actuator Type	M45, M501, M510, M590, M600, M610 M6000		25028
SWA-3202B	Outlet Check Valve Assembly Ball & Seat Type	M45, M501, M510, M590, M600, M610 M6000		25216
SWA-3212	Inlet Check Valve Repair Kit	M510, M590, M600, M610 M6000		60495
SWA-3402B	Outlet Check Valve Assembly Ball & Seat Type	M45, M501, M510, M590, M600, M610 M6000		25216
SWA-3402	Outlet Check Valve Assembly Actuator Type	M510, M590, M600, M610 M6000		25028
SWA-4107	Inlet Check Valve Assembly	M510EF, M590EF, M600EF, M610EF, M6000EF		60307
SWA-4123	Inlet Check Valve Repair Kit	M510EF, M590EF, M600EF, M610EF, M6000EF		88223
SWA-8001	Inlet Check Valve Assembly	M515		25214
SWA-8002	Outlet Check Valve Assembly	M515		25216
SWA-9001	Check Valve Cartridge	Alliance 2690		

ADDITIONAL NOTES

- The spare parts are suitable for the analytical version of the pumps referenced.
- When preparative pump heads are used please insure that the piston dimensions are known.