

Thermo Scientific

FOCUS GC

Gas Chromatograph

Spare Parts Catalog

PN 31709413, Revision October 2011



FOCUS™ GC Spare Parts Catalog

October 2011 Edition

Part Number 317 094 13

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Printed in Italy

Published by Thermo Fisher Scientific S.p.A., Strada Rivoltana, 20090 Rodano - Milan - Italy

Tel: +39 02 95059373 Fax: +39 02 95059388

Printing History: First Edition, released June 2002

Second Edition, May 2003

Third Edition, April 2004

Fourth Edition, November 2004

Fifth Edition, January 2005

Sixth Edition, September 2005

Seventh Edition, January 2006

Eight Edition, released June 2006

Ninth Edition, released January 2007

Tenth Edition, released May 2007

Eleventh Edition, released October 2007

Twelfth Edition, released April 2008

Thirteenth Edition, released July 2008

Fourteenth Edition, released April 2009

Fifteenth Edition, released September 2009

Sixteenth Edition, released May 2010

Seventeenth Edition, released December 2010

Eighteenth Edition, released October 2011

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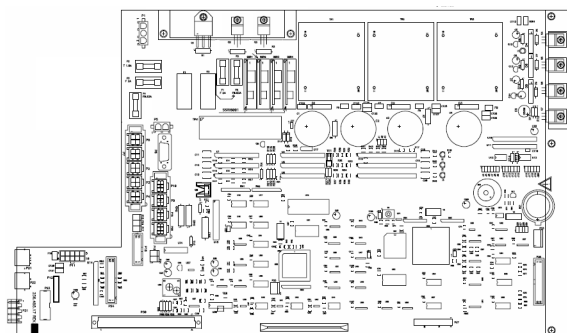
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Electronics

Table 1-1. Electronics spare parts

No	Description	Qty.	P/N
1	Front Panel assembly		43210140
2	MY04 printing circuit board		23648517
3	FRTMY 100 printing circuit board		23648516
4	ELI201 printing circuit board		23648525
5	CVA201 printing circuit board		23648570
6	TCD I-203 printing circuit board		23648765
7	TCD E-203 printing circuit board		23648770
8	MS FOCUS GC cassette control unit assembly		43210165
9	LCD display		30508510
10	FID FOCUS GC cassette control unit assembly		43210155
11	TCD FOCUS GC cassette control unit assembly		43210160
12	Battery Li 3V		21901510
13	Fuse F.1.25A 5x20 mm IEC127/I		28200015
14	Fuse T.1.6A 5x20 mm IEC127/III		28204018
15	Fuse F.2A 5x20 mm IEC127/I		28200017
16	Breaker 15A for 120 Vac		23709902
17	Breaker 15A for 230 Vac		23709912



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Pneumatics

Table 2-1. Spare parts for electronics pneumatics (DPFC 2001 Module)

No	Description	Qty.	P/N
1	Flow regulator module 250 kPa for S/SL injector		42509135
2	Flow regulator module 1000 kPa for S/SL injector		42509140
3	O-ring for injector/detector to gas regulator connection		29001303
4	O-ring for 1/8" union to gas regulator connection		29001306
5	O-ring PARKER COL TYPE V884-75 BROWN		29001301
6	Built-in Split line filter		28113195
7	ON/OFF 24V Solenoid Valve		40516101
8	Proportional Valve		40516103

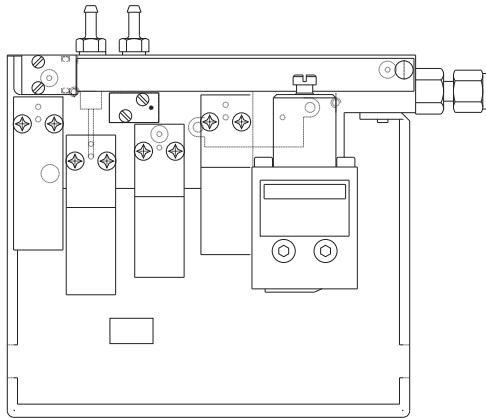


WARNING! FOCUS GCs, having S/N higher than 20024350, are equipped with the DPFC 2001 module (1000 kPa)

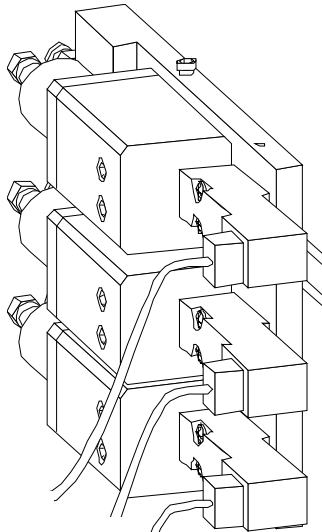
Table 2-2. Spare parts for analog pneumatics

No	Description	Qty.	P/N
1	Pressure regulator module		42509130
2	Pressure regulator – Air 600 cc		42509073
3	Pressure regulator – H ₂ 200 cc		42509074
4	Pressure regulator – H ₂ 10 cc		42509075
5	Non-DGFC regulator module (AB) for TCD		42509145
6	On-off Solenoid valve		40516095
7	O-ring for injector/detector to gas regulator connection		29001303
8	O-ring for 1/8" union to gas regulator connection		29001306
8	Manual pressure regulator module (AB) for TCD		42509145

DPFC 2001



Non-DGFC



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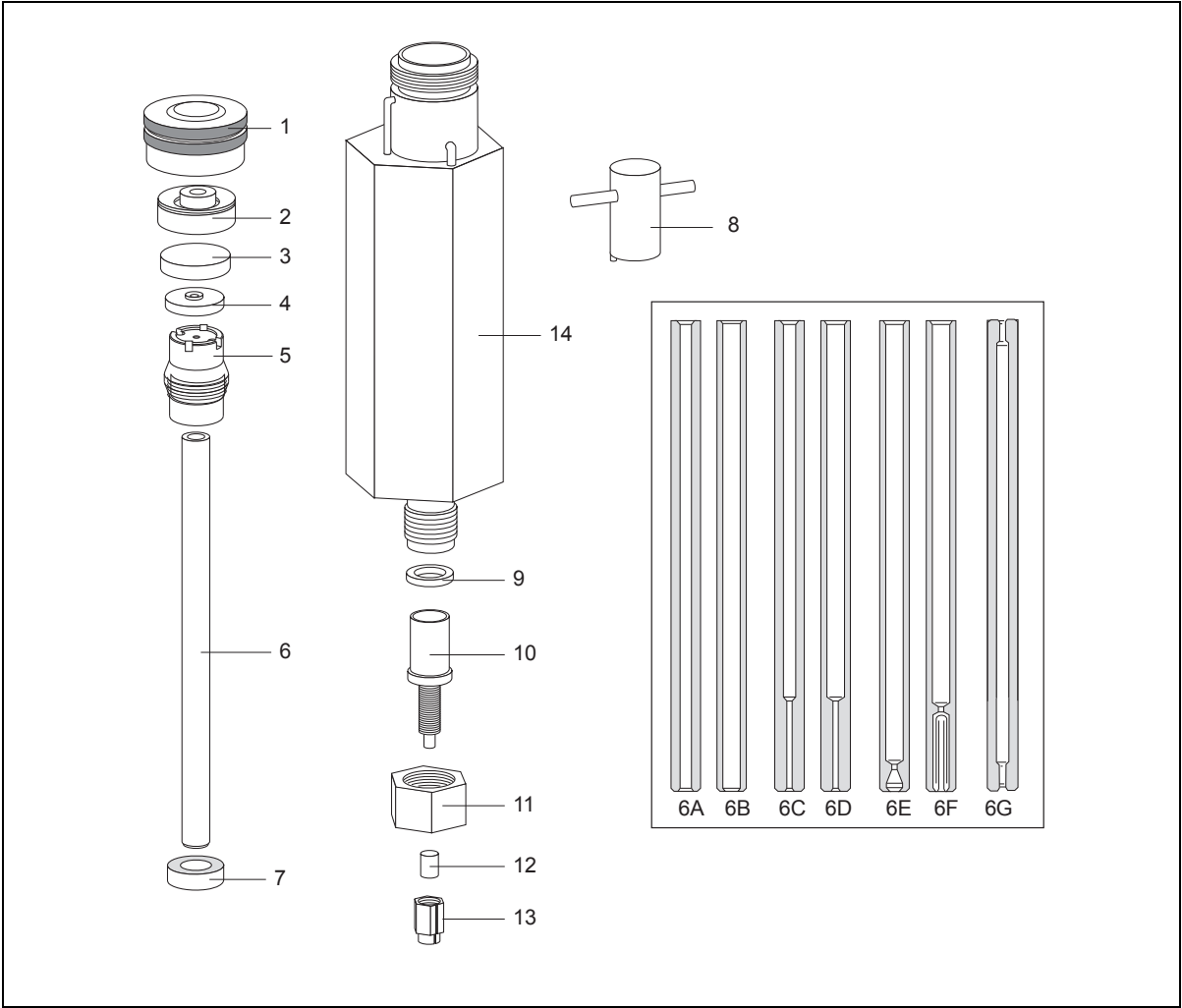
Split/Splitless Injector (S/SL)

Table 3-1. Split/splitless Injector spare parts

No	Description	Qty.	P/N
1	Septum cap		35001050
2	Septum holder		23303015
3	Septum	50	31303211
4	Septum support		35005433
5	Liner cap		29004290
6A	Liner, split 3 mm	5	45350030
6B	Liner, split 5 mm	5	45350031
6C	Liner, splitless 3 mm	5	45350032
6D	Liner, splitless 5 mm	5	45350033
6E	Liner, wide bore columns	2	45300310
6F	Liner, for polar solvent	2	45300320
6G	Liner double gooseneck for nano-volumes injections	2	45322080
7	Liner seal	10	29033406
8	Liner cap removing tool		20507010
9	Silver seal	10	29033629
10	Terminal fitting for cap. columns		34705451
11	Nut for terminal fitting	2	35022125
	Washer		35604015
12	Graphite ferrule for 0.25 mm ID column	2	29013488
	Graphite ferrule for 0.32 mm ID column	2	29013487
	Graphite ferrule for 0.53 mm ID column	2	29013486
13	Fixing nut for column	5	35032423
14	S/SL main body including heating block and filter (for FOCUS GC with S/N lower than 20024350		24705221
14	S/SL main body including heating block without filter (for FOCUS GC with S/N upper than 20024350		24705225
	Blanking disk for leak test	10	29032655

Table 3-1. Split/splitless Injector spare parts (Continued)

	S/SL body-Inj/Det cassette fixing nut	1	35002403
	Heater 115 V		35425075
	Heater 230 V		35425076
	Temperature sensor		40311250
	Ceramic insulator collar		34401135



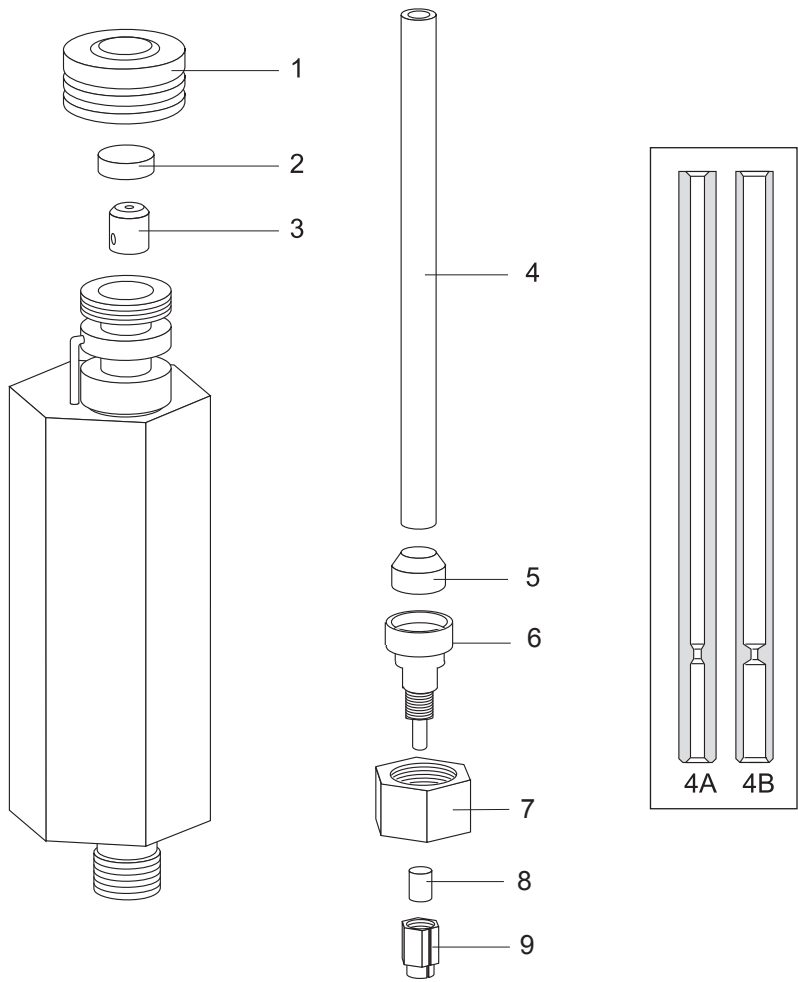
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Purged Packed Column Injector (PPKD)

Table 4-1. Purged Packed Column Injector spare parts

No	Description	Qty.	P/N
1	Septum cap		35001051
1	Septum cap for TriPlus HS and HS 2000		34750003
2	Septum	50	31303230
3	Septum support		45302048
4A	Liner, wide bore 2 mm	2	45322050
4B	Liner, wide bore 4 mm	2	45322049
5	Liner seal	10	29033405
6	Adapter for wide bore columns		34700303
7	Retaining Nut		35002404
8	Graphite ferrule for 0.53 mm ID column	2	29013486
9	Fixing nut for capillary column	5	35032423
	Blanking disk for leak test	10	29032655
	Heater 115 V		35425058
	Heater 230 V		35425057
	Temperature sensor		40311230
	Kit for capillary columns on packed injector		19050091

Please refer to Packed Column Injector (page 13) for parts relevant to the use of this injector with packed columns.

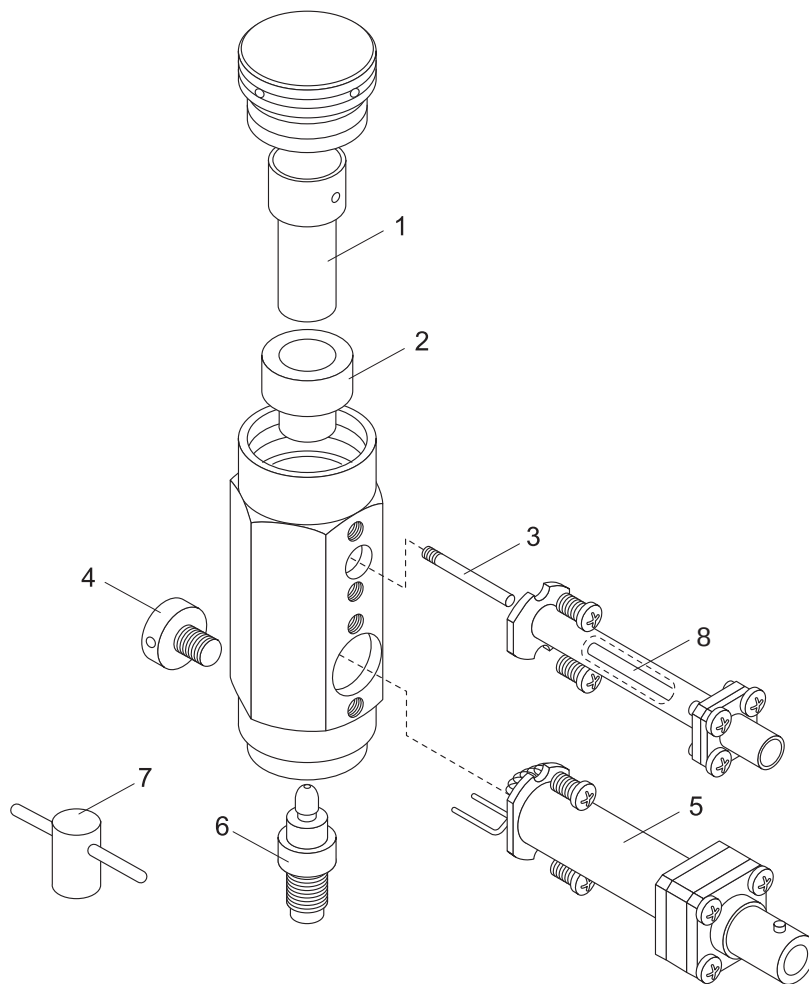


5

Flame Ionization Detector (FID)

Table 5-1. Flame Ionization Detector spare parts

No	Description	Qty.	P/N
	FID cell, complete		41910646
1	FID collecting electrode		25901115
2	Ceramic insulator		30202310
3	Collecting electrode pin		20601602
4	Retaining screw		31106008
5	Flame ignition coil/polarization electrode assembly		20601603
6	FID jet		40404301
7	Jet removing tool		20501900
8	Spring contact		20603100
	Kit Eli201 + cable (It includes 23648525+23043512)		19050635



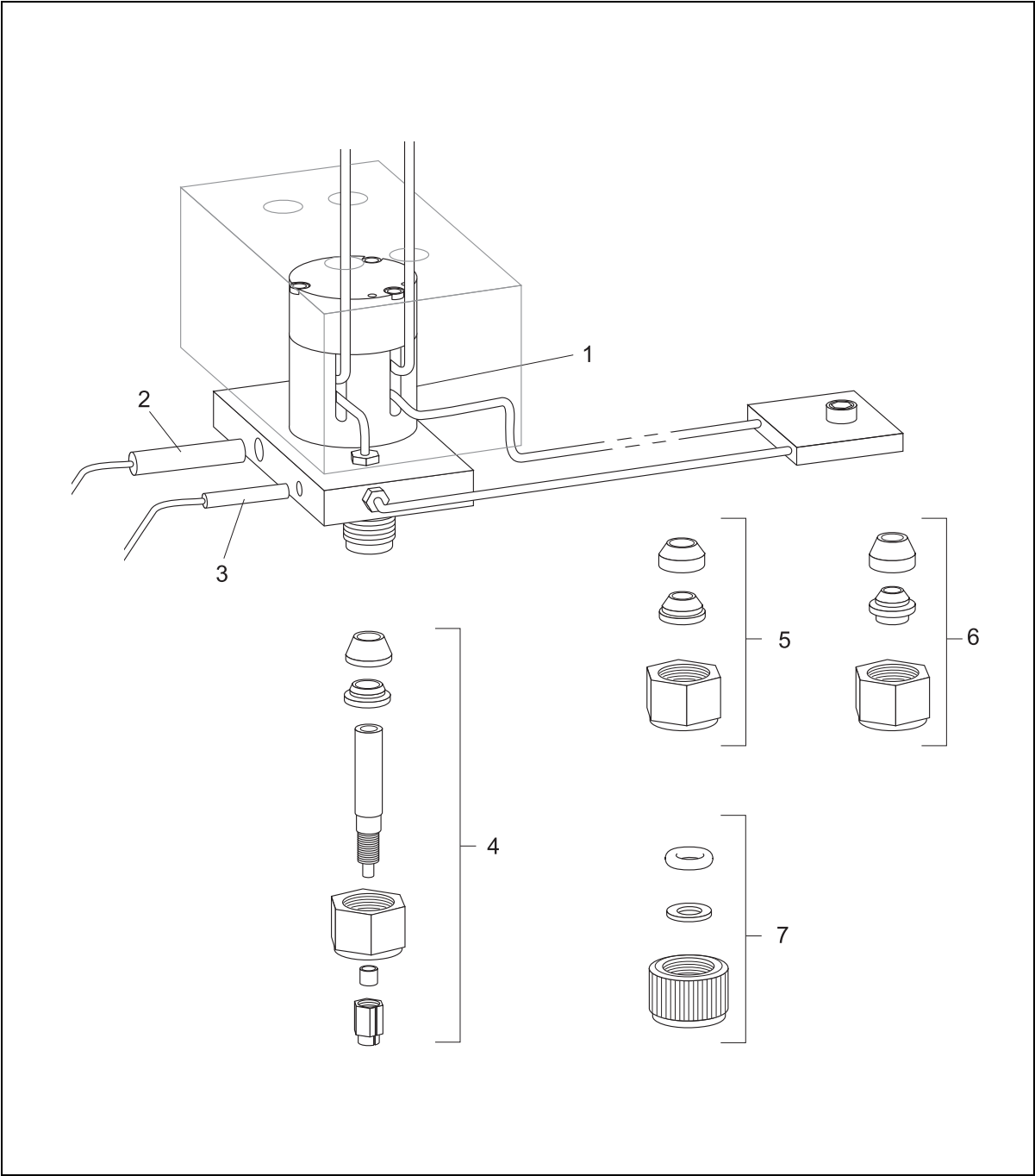
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Thermal Conductivity Detector (TCD)

Table 6-1. Thermal Conductivity Detector spare parts

No	Description	Qty.	P/N
1	TCD cell, complete		41910505
	Heater and temperature sensor assembly for TCD cell		23043471
2	Heater for TCD base 230 V		35425036
2	Heater for TCD base 115 V		35425037
3	Temperature sensor for TCD base		40311230
4	Adapter for capillary columns (kit)		34709542
5	Retaining nut for 6 mm OD metal column and ferrule		35020117
6	Brass front/back ferrule for 1/8" OD metal column		29004666
7	Retaining nut for 1/8" mm OD column and ferrule		35003062

Please refer to Detector Base Bodies for further details on parts for column connection.

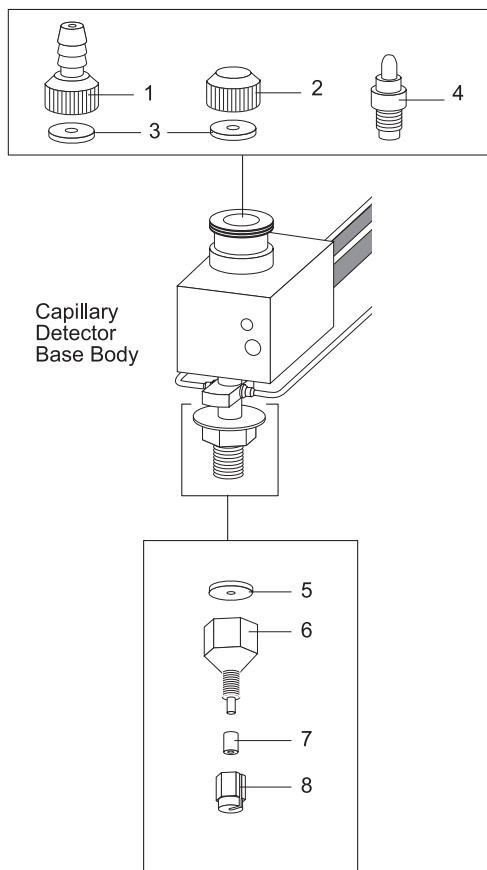


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Detector Base Body

Table 7-1. Spare parts for Detector Base Body

No	Description	Qty.	P/N
	CB71 CAP		29902281
	CB70 PKD/WB		29902286
	Heating Block for CB71		22206150
1	Adapter for flow measurement		35004107
2	Brass blind cap		35006101
3	Silicon seal	10	29033037
4	Blind jet	2	40401900
5	Seal, silver	10	29037100
6	Adapter for capillary column	2	34725436
7	Graphite ferrule for 0.25 mm ID column	2	29013488
7	Graphite ferrule for 0.32 mm ID column	2	29013487
7	Graphite ferrule for 0.53 mm ID column	2	29013486
	Anti-turn fixing plate for capillary and packed injector base body	3	33412119
	Nut, 1/4" for PKD detector base body	1	35002403
	Aluminium seal for PKD detector base body	1	35603403
	Nut, 1/8" for capillary detector base body	1	35002418
	Aluminium seal for capillary detector base body	1	35603448
8	Fixing nut for column	5	35032423
	Heater 115 V		35425080
	Heater 230 V		35425081
	Temperature sensor		40311250

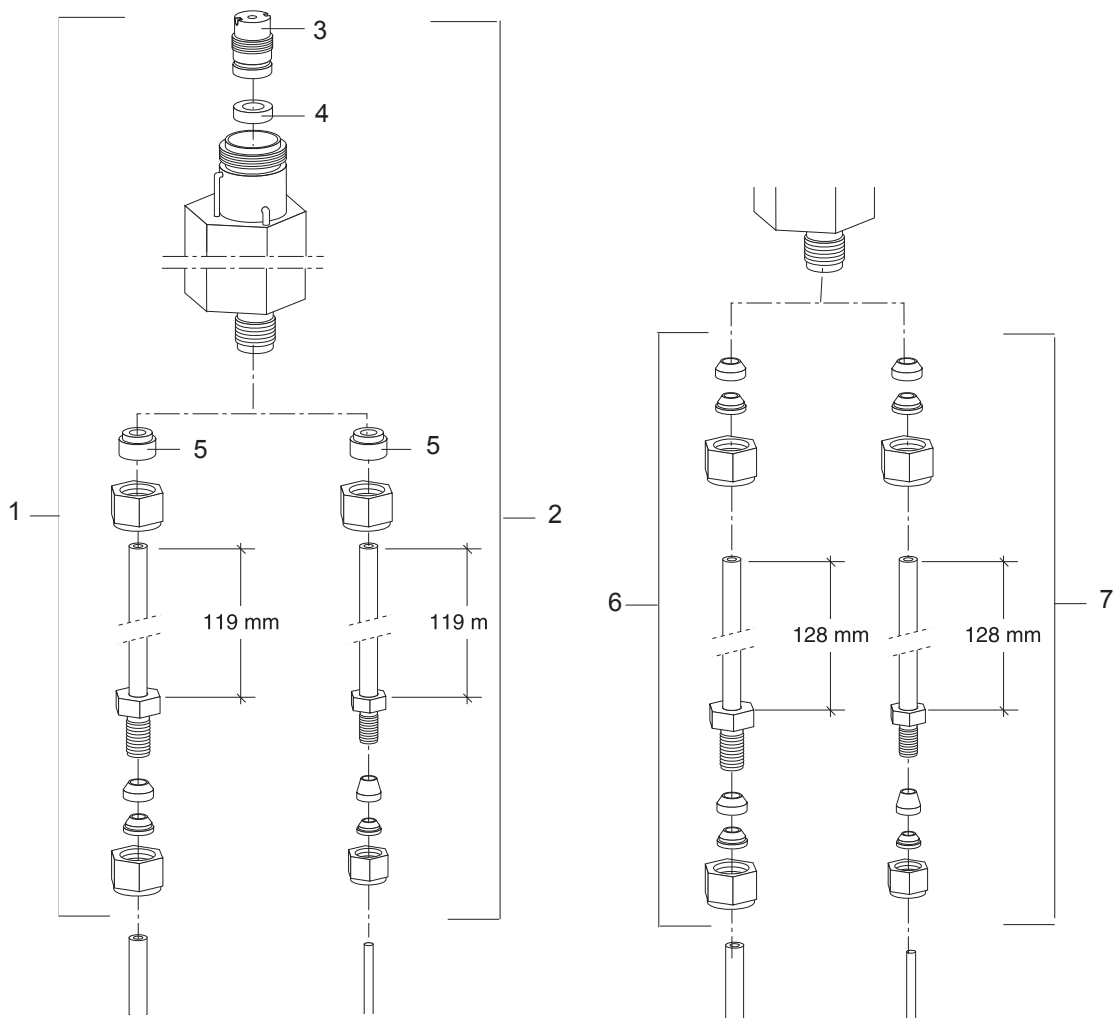


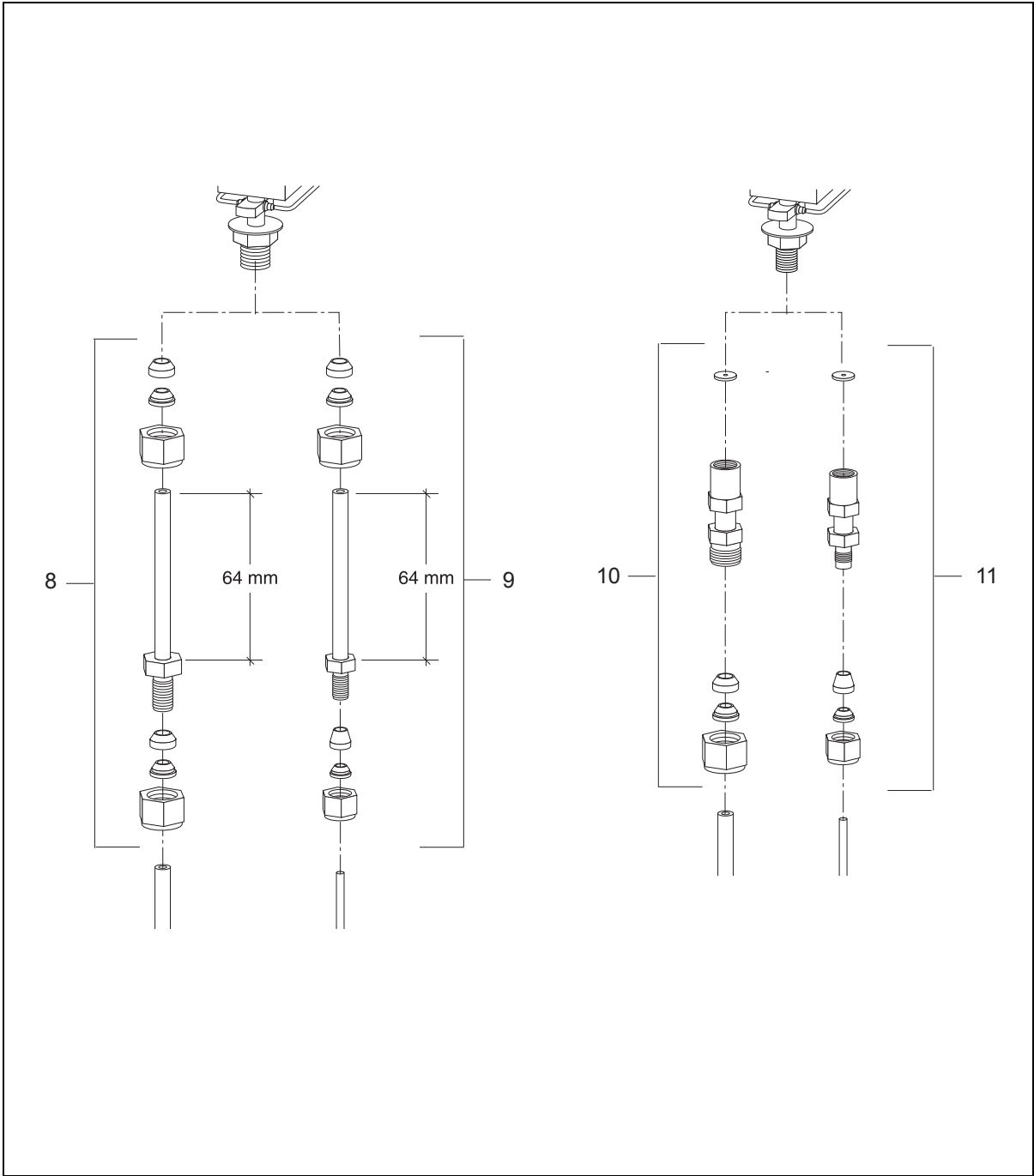
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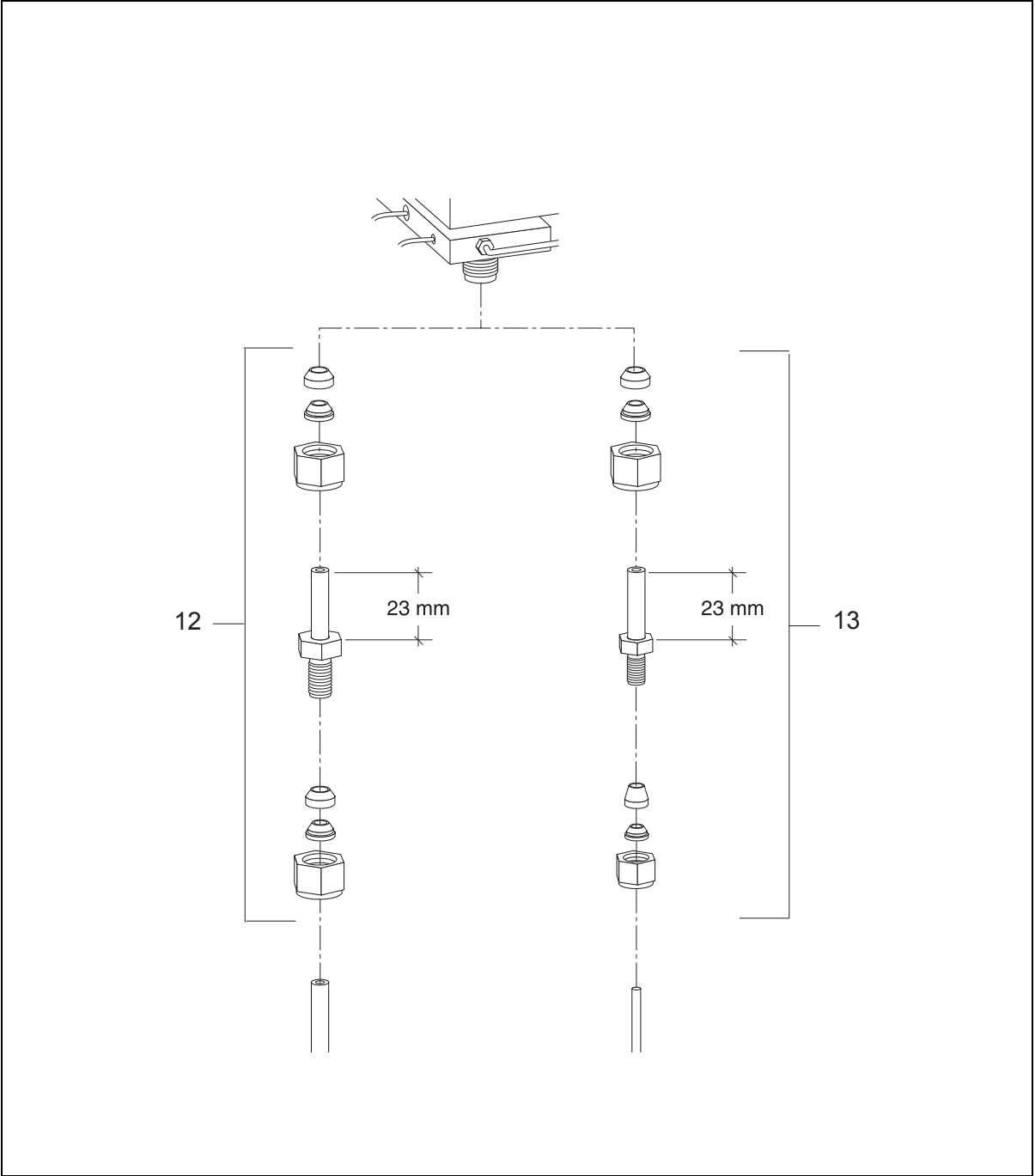
Adapters for Packed Columns

Table 8-1. Spare parts for Adapters for Packed Columns

No	Description	Qty.	P/N
1	Adapter for S/SL 6 mm and 1/4" columns		34709337
2	Adapter for S/SL 1/8" columns		34709323
3	Adapter cap for S/SL		29004292
4	Adapter seal for S/SL	2	29013416
5	Adapter PTFE ferrule	2	29014576
6	Adapter for PKD/PPKD 6 mm and 1/4" columns		34709325
7	Adapter for PKD/PPKD 1/8" columns		34709320
8	Adapter for capillary base body 6 mm and 1/4" columns		34709339
9	Adapter for packed base body 1/8" columns		34709321
10	Adapter for packed base body 6 mm and 1/4" columns		34709327
11	Adapter for capillary base body 1/8" columns		34709324
12	Adapter for TCD base body 6 mm and 1/4" columns		34709329
13	Adapter for TCD base body 1/8" columns		34709322
	Adapter kit for packed columns on capillary injector and base body (includes items 1, 2, 8, 9, 13)		19050096







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Miscellanea

Table 9-1. Oven spare parts

Description	Qty.	P/N
Heater with diaphragm and temperature sensor (230 V)		35408060
Heater with diaphragm and temperature sensor (120 V)		35408065
Oven temperature sensor		40311255
Stepping motor for flapper		31807050
Door switch assembly		23706903
Fan motor assembly (120 V)		31807058
Fan motor assembly (230 V)		31807057
Oven fan assy		41003515
Spring (flap return) [replaceable only on FOCUS GC with S/N upper than 20024350]		31504606

Table 9-2. Cables

Description	Qty.	P/N
Power cable (230 V)		23033025
Power cable (120 V)		23033030
Generic start/stop cable (integrator)		23043457
RS232 cable for FOCUS/PC communication, 2.5 m		23043485
Analog cable for detector connection to integrator		23038071
Connector, 4 positions, for cable 230 380 71		23809602

Table 9-3. Test mixtures

Description	Qty.	P/N
Test mix for FID		33819020
Test mix for TCD		33819016
Column (Mega-5, 7 m x 0.32 mm) for GC test		26080001

Table 9-4. Merlin Microseal™ High Pressure Valve Option Spare Parts

Description	Qty.	P/N
Microseal Valve (Merlin) for SSL		40523053
10 µl syringe (for Merlin Microseal Valve)		36520060
Merlin Vespel Seal		35603450
Merlin Vespel Seal (set of 5)		35603450

Table 9-5. Kits

Description	Qty.	P/N
Kit CS ELI201 + Cable FID FOCUS (It includes P/N 236 485 25 and P/N 230 435 12)	1	19050635

Table 9-6. Tools

Description	Qty.	P/N
Flow meter: Thermo Scientific GFM Pro Flowmeter		66002-010
Leak detector: Thermo Scientific GLD Pro		66002-001

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AI/AS 3000 & AI/AS 3000 II Autosamplers

Table 10-1. Tower Assy

Description	Qty.	P/N
Complete tower assy for AI/AS 3000		37001430
Complete tower assy for AI/AS 3000 II		37001440
Complete top cover assy		24105570
AS 3000 M/S printing circuit boards assy		15220050
AS 3000 II M/S printing circuit boards assy		15220070
Slide stepping motor for AI/AS 3000		31802917
Slide stepping motor for AI/AS 3000 II		31802920
Elastic of injection head		31505260
Flat Cable H-FLEX 26F/16F+10F (FC1389) for AI/AS 3000		23043610
Flat Cable H-FLEX 26F/16F+10F (FC1526) for AI/AS 3000 II		23045617
Front door AI 3000		33330942
Front door AS 3000		33330944
Front door AI 3000 II		33330948
Front door AS 3000 II		33330949
10 µL syringe (Standard)		36500525
5 µl, 50 mm needle syringe for microvolumes S/SL injector		36500505
10 µL syringe (for Merlin Microseal Valve)		36520060

Table 10-2. Base Assy

Description	Qty.	P/N
Complete Base assy for AI/AS 3000		22107100
Complete Base assy for AI/AS 3000 II		22107110
Waste bottle (Set of 5)		19004646
Tray 8-position assy		24010140
Tray 105-position assy		24010145
Tray 105-position with tray holder		25117545
Power supply 100-240Vac/24Vdc		20806060

Table 10-2. Base Assy

Round cable H-FLEX 34-pin (FC1377) for AI/AS 3000		23045612
Round cable H-FLEX 34-pin (FC1524) for AI/AS 3000 II		23045615

Table 10-3. Vials and Septa

	Qty.	P/N
2 mL screw top vials plus screw-top caps with septa. (Thermo Scientific brand combination of vials P/N 24014021 and caps/septa P/N 38606092)		
2 mL screw top vials, set of 100 (require screw top cap with septa P/N 38606092)		24014021
4 mL screw top vials, set of 100 (require screw top cap with septa P/N 38606092)		24014031
300 µL micro-volume sampling vials, set of 100 (require screw top cap with septa P/N 38606092)		24014026
Screw to caps 2 mL, 4 mL and 300 µL vials complete with septa, set of 100		38606092
Septa for Waste bottle, set of 100		31303217
Screw caps for Waste bottle, set of 100		38606074

Table 10-4. Cables

Description	Qty.	P/N
RS232 cable (9-pin)		23043453
GC - AI/AS 3000 and AI/AS 3000 II cable (6-pin)		23043577
Power cable 10A/250V		23033000
Power cable 10A/125V		23033035

Table 10-5. Alignment Brackets with Centering Plate

	Qty.	P/N
Centering Plate for Merlin Adapter on S/SL injector		36812734
Centering Plate for S/SL injector		36812738

Table 10-6. Autosampler Support

	Qty.	P/N
Autosampler support assy		36812732

Table 10-7. Upgrade kits

	Qty.	P/N
Kit Merlin Microseal Valve for AI/AS 3000 and AI/AS 3000 II (requires P/N 19050205)		19050225
AS 3000 Upgrade kit for AI 3000 II		19050294

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TriPlus Autosampler

Consumables and Accessories

Table 11-1. Sample Vials

Description	Qty.	P/N
Adapters for 1ml Crimp-top vials; set of 100		29064690
Adapters for 1ml Crimp-top vials; set of 10		29034690
1 ml Crimp-top vials, 8 mm finish; set of 100 (require 8 mm aluminum caps and seals P/N 38606031; compatible also with LVI enhanced performance seals P/N 31301103)		24070015
2 ml Screw-top vials, 8 mm finish, set of 100 (require 8 mm plastic screw-top caps P/N 38606074 and teflon faced seals P/N 31303217; compatible also with LVI enhanced performance seals P/N 38610055)		24074041
2 ml Crimp-top vials, 11 mm finish, set of 100 (require 11 mm aluminum caps and seals P/N 38606040)		24074003
2 mL screw top vials plus screw-top caps with septa. (Thermo Scientific brand combination of vials P/N 24014021 and caps/septa P/N 38606092)		24014019
2 mL Screw-top vials, set of 100 (require screw-top caps with septa P/N 38606092)		24014021
300 µL micro-volume sampling vials, set of 100 (require screw top cap with septa PN 38606092)		24014026
2.5 ml Crimp-top vials, 11 mm finish, set of 100 (require 11 mm aluminum caps and seals P/N 38606040; compatible also with ring shaped silicon septa with Teflon membrane for LVI P/N 38610050, set of 100)		24070005
8 mm aluminum caps with teflon faced septa, set of 100		38606031
8 mm plastic screw-top caps, set of 100		38606074
8 mm teflon faced seals set of 100		31303217

Table 11-1. Sample Vials (Continued)

Description	Qty.	P/N
Screw-top caps for 2 ml vials P/N 24014021 complete with septa, set of 100		38606092
11 mm aluminum caps, with teflon faced septa, set of 100		38606040
LVI enhanced performance seals for crimp-top vials P/N 24070005 and P/N 240 740 03, with 11 mm aluminium caps, set of 100		38610050
LVI enhanced performance seals for vials P/N 24070015 and P/N 240 740 41, set of 100		31301103
LVI enhanced performance seals for vials P/N 24070015 and P/N 24074041 with 8mm screw-top caps, set of 100		38610055
10 ml Crimp-top vials, 20 mm finish, set of 125 (require 20 mm aluminum caps and seals and spacers only for the HS oven)		24074020
20 ml Crimp-top vials, 20 mm finish, set of 125 (require 20 mm aluminum caps and seals)		24006305
20 mm aluminum crimp-top caps with buthyl rubber seals, set of 100 Suitable for low temperatures applications		38603800
20 mm aluminium crimp-top caps with teflon-coated buthyl rubber seals, set of 100. Suitable for temperature up to 100°C.		38603600
20 mm aluminium crimp-top caps with high performance septa, set of 100. Suitable for high temperature applications or when multiple samplings are performed from the same vials.		38609410
20 mm snap caps and teflon faced septa for liquid applications, set of 100		38610040
20 mm teflon faced septa for liquid applications, set of 100		31303250
20 mm ring shaped silicon septa, and 20mm crimp-top aluminum caps, (set of 100) suitable for LVI liquid applications		38610030
Stainless steel spacers for 10 ml vials, set of 6 (used only in the HS oven).		34709540
Accessories		
Hand crimper for 8 mm vials		20511001
Hand crimper for 11 mm vials		20511000

Table 11-1. Sample Vials (Continued)

Description	Qty.	P/N
Hand crimper for 20 mm vials		20500700
Decapping tool for septum removal from glass vials		20500710
Magnetic caps for Bar Code Reader, assembled with 9 mm caps and septa, set of 100		38606095
Labels for bar code reading, set of 1000		38706782

Table 11-2. Washing Station Vials

Description	Qty.	P/N
10 ml Crimp-top washing solvent vials, complete of 20 mm snap-cap seals and teflon faced septa, set of 5		19004647
100 ml washing solvent bottle		24014085
10 ml Crimp-top waste vial with 2m long drain tube and fittings		19050550
20 mm snap caps with teflon faced septa, set of 5		38610045
20 mm ring shaped silicon septa with 20 mm crimp-top aluminum caps, set of 5		38610035

Table 11-3. Syringe Holders

Description	Qty.	P/N
TriPlus AS		
Syringe holder for 50 mm needle length for 5, 10, 100 250 µl syringes		25401010
Syringe holder for 50 mm needle length for 0.5, 10, 100 500 µl syringes		25401015
Syringe holder for 80 mm needle length for 5, 10, 100 250 µl syringes		25401020
Syringe holder for 80 mm needle length for 0.5, 10, 100 500 µl syringes		25401025
TriPlus HS		
Syringe holder		36503008
TriPlus SPME		
SPME fiber holder		25401080
SPME syringe adapter		34709360

Table 11-4. Syringes and needles

Description	Qty.	P/N
TriPlus AS		
5 µl syringe (0.47/50/cone) fixed needle, suitable for Split injections		36504047
10 µl syringe (0.5/50/cone) fixed needle, suitable for Split injections		36500525
10 µl syringe (0.47/80/cone) fixed needle, suitable for Splitless and OC injections		36502019
10 µl syringe (0.63/50/cone) suitable for Merlin valve, suitable for Split injections		36520060
10 µl syringe (0.63/80/cone) suitable for Merlin valve, suitable for Splitless injections		36520061
10 µl syringe (dual gauge: 0.63-0.47/50/cone) suitable for PTV-simil OC with Merlin Valve		36500580
100 µl syringe (0.63/50/side hole) removable needle, suitable for PTV-LVI		36520050
250 µl syringe (0.63/50/side hole) removable needle, suitable for PTV-LVI		36520051
100 µl syringe (0.63/50/cone) removable needle, suitable for LV-SL		36500495
250 µl syringe (0.47/80/cone) removable needle, suitable for OC-LVI		36500490
Set of 2 needles (0.63/50/side hole) suitable for PTV-LVI		36550040
Set of 5 needles (0.47/80/cone) suitable for OC-LVI		36566480
Set of 5 needles (0.63/50/cone) suitable for LV-SL		36566485
TriPlus HS		
Gas tight syringe 1.0 ml capacity, without plunger (0.72/80/side hole)		36503005
Gas tight syringe 2.5 ml capacity, without plunger (0.72/80/side hole)		36503006
Gas tight syringe 5.0 ml capacity, without plunger (0.72/80/side hole)		36503007
Gas tight syringe 2.5 ml capacity, without plunger (0.64/80/side hole), suitable for Merlin valve		36503010
Gas tight syringe 1.0 ml capacity, complete with plunger and adapter		19005326
Gas tight syringe 2.5 ml capacity, complete with plunger and adapter		19005327
Gas tight syringe 5.0 ml capacity, complete with plunger and adapter		19005328

Table 11-4. Syringes and needles (Continued)

Description	Qty.	P/N
PTFE seal for plunger of 1.0 mL syringe		29003197
PTFE seal for plunger of 2.5 mL syringe		29003198
PTFE seal for plunger of 5.0 mL syringe		29003199

Table 11-5. Trays

Description	Qty.	P/N
Tray holder, configurable in field as Primary or Secondary		36812755
Primary Tray, positions 1-150, for 1, 2, 2.5 ml vials		24010150
Primary Tray, positions 1-54, for 10, 20 ml vials		24010160
Secondary Tray, positions 151-300, for 1, 2, 2.5 ml vials		24010155
Secondary Tray, positions 55-108, for 10, 20 ml vials		24010165
Cooled/heated tray holder		24010190
Primary cooled/heated tray 1-96 positions		24010195
Primary cooled/heated tray 1-33 positions		24010200
Secondary cooled/heated tray 97-192 positions		24010215
Secondary cooled/heated tray 34-66 positions		24010220

Spare Parts

Table 11-6. Print Circuit Boards

Description	Qty.	P/N
MFS_XY motor driver board	1	23648780
MFS_XY 1200 motor driver board	1	23648781
MFS_ZP ASSY motor driver board	1	23648785
MFS_ZP HS motor driver board	1	23648790
MFS_TC temperature controller board	1	23648655
MFS_SY syringe identification	1	23648660
MFS_CP main CPU board	1	23648815

Table 11-6. Print Circuit Boards (Continued)

Description	Qty.	P/N
MFS_FN incubation oven and stirrer board	1	23648795
MFS_HS hs syringe board	1	23648680
MFS_PI power interface board	1	23648685
MFS_EI external interface board	1	23648690
MFS_TI tray identifier board	1	23648695
MFS_CR bar code reader board	1	23648820
MFS_TR tray reader board	1	
MFS_TR W.A. programmed for Washing Station 4 solvents		23648812
MFS_TR W.B. programmed for Washing Station 2 solvents		23648813
MFS_TR TRAY programmed for Tray Holders		23648814
MFS_OC on-column presence board	1	23648710
MFS_OD on-column driver board	1	
MFS_OD ACT “A” programmed for Actuator A		23648800
MFS_OD ACT “B” programmed for Actuator B		23648805

Table 11-7. Assembled Parts

Description	Qty.	P/N
Truck motor assy		25401030
XY crossrails assy		25401040
XY extended crossrail assy		25401070
Turret AS assy		25401050
Turret HS assy		25401060
External power supply module		20806070
External power supply module + LAN		20806080
Incubation Oven/Agitator		35408070
Pressure regulator modulator (it is a part of P/N 354 080 70)		42507230
Assy front door for TriPlus AS		33930950
Assy front door for TriPlus HS		33930951

Table 11-7. Assembled Parts (Continued)

Description	Qty.	P/N
Heated Syringe Holder for TriPlus HS		36503008
Fast Washing Station		43210175
4-solvents Washing Station		43210180
2-solvents Washing Station		43210185

Table 11-8. Cables

Description	Qty.	P/N
Autosampler 9M/F cable		23043453
6-pin M-DIN M/M cable		23043577

Table 11-9. Miscellanea

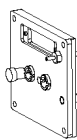
Description	Qty.	P/N
2-m Black plastic tube		42001002
Spring injection head AS		31505667
Spring injection head HS		31505668
Spring cable assy X-y TP		31505270
 Crossrail Y - Guide pin with washer	2	21200410
 Crossrail Y - Plate assy for Z axis connection	1	33413052
 Label for Y axis	1	38706790
 Needle Guide assembly for 50 mm syringe needle (AS)	1	29001310

Table 11-9. Miscellanea

Description		Qty.	P/N
	Screwdriver for 3-mm Allen screw		20502606
	Phillips screwdriver		20502607

Table 11-10. Installation Kits

Description	Qty.	P/N
Kit External Tube (for TriPlus HS)		19050560
OC actuator		19050262

TriPlus HS

Table 11-11. TriPlus for HS Spare Parts

Description	Qty.	P/N
Septum cap for S/SL suitable for HS and SPME	1	34750004
Septum cap for PTV suitable for HS and SPME	1	35001048
Septum cap for Merlin Valve - S/SL-PTV	1	35001056

TriPlus for SPME

Table 11-12. TriPlus for SPME Spare Parts

Description	Qty.	P/N
Liners 0.8 mm ID for S/SL (Set of 5)	1	45352083
Liners 1 mm ID for PTV (Set of 2)	1	45322054
Septum cap for S/SL suitable for HS and SPME	1	34750004

Table 11-12. TriPlus for SPME Spare Parts

Description	Qty.	P/N
Septum cap for PTV suitable for HS and SPME	1	35001048
Septum cap for Merlin Valve - S/SL-PTV	1	35001056

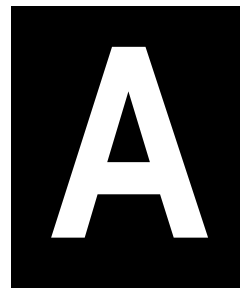
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TriPlus RSH Autosampler

Consumables and Accessories

Table 12-1. Kits

Description	Qty.	P/N
Headspace upgrade Kit	1	1R77010-1039
Preventive Maintenance Kit	1	1R77010-1040
Gas Tube Replacement kit	1	1R77010-1041
Complete Z-Head for Direct Exchange	1	1R77010-1042
Kit motor assy for X-axis	1	1R77010-1043
Kit motor assy for Y-axis	1	1R77010-1044
Kit motor assy for Z-axis	1	1R77010-1045
Kit motor assy for Needle Guide	1	1R77010-1046
Kit motor assy for Syringe Plunger	1	1R77010-1047
Kit motor assy for Agitator		1R77010-1048
Kit motor assy for Vortexer	1	1R77010-1049
CPU Board	1	1R77010-1050
Security Key	1	1R77010-1051
Electronic Mainboard Kit	1	1R77010-1052
Electronic Board Kit of the Z-Head	1	1R77010-1053
Electronic Board Kit of the Agitator	1	1R77010-1054
Electronic Board Kit of the ATC Station	1	1R77010-1055
Electronic Board Kit of the Cooled Stack	1	1R77010-1056
Main Power Supply	1	1R77010-1057



Customer Communication

Thermo Fisher Scientific provides comprehensive technical assistance worldwide and is dedicated to the quality of our customer relationships and services.

This appendix also contains a one-page *Reader Survey*. Use this survey to give us feedback on this manual and help us improve the quality of our documentation.

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Use http://www.thermo.com/com/cda/resources/resource_detail/1,,12512,00.html address for products information.

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Reader Survey

Product: FOCUS GC
Manual: Spare Parts Catalog
Part No.: 317 094 13

**Please help us improve the quality of our documentation by completing and returning this survey.
Circle one number for each of the statements below.**

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The manual is well organized.	1	2	3	4	5
The manual is clearly written.	1	2	3	4	5
The manual contains all the information I need.	1	2	3	4	5
The instructions are easy to follow.	1	2	3	4	5
The instructions are complete.	1	2	3	4	5
The technical information is easy to understand.	1	2	3	4	5
Examples of operation are clear and useful.	1	2	3	4	5
The figures are helpful.	1	2	3	4	5
I was able to install the system using this manual.	1	2	3	4	5

If you would like to make additional comments, please do. (Attach additional sheets if necessary.)

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