

# Consumable Parts Catalog Ver.3.32

February, 2016

- Contact Frontier-lab's channel partners when purchasing the consumable parts listed in this catalog.  
<http://www.frontier-lab.com/support/distributor/index.html>
- Appearance, specifications and kit contents are subject to change without notice.
- Refer to this catalog for details of parts compatibility.

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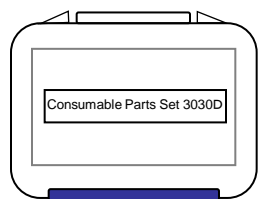
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..... 22

# 1. Pyrolyzer (EGA/PY-3030D)

## 1.1 Consumable parts set


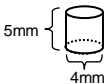

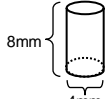








### Consumable Parts Set 3030D



P/N: PY-K303D  
for EGA/PY-3030D, 1 set

Contents of PY-K303D		Qty
1)	Eco-Cup SF (Sample cup, 100 ea)	1 bottle
2)	Eco-Cup LF (Sample cup, 100 ea)	1 bottle
3)	Eco-Stick SF (50 ea)	1 set
4)	Eco-Stick DF (50 ea)	1 set
5)	Eco-Stand AL (Sample cup stand)	5 ea
6)	Eco Pick-Up F (for sample cup recovery)	5 ea
7)	Quartz Pyrolysis Tube A30	4 ea
8)	Graphite Vespel Ferrule (for interface)	8 ea
9)	Needle Set N	8 ea
10)	Septum (for liquid sampler)	10 ea

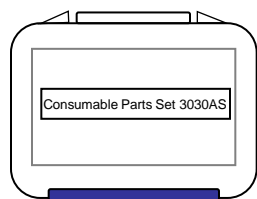
※ Use the following part numbers when ordering the parts individually. The quantities of each parts may differ from the Consumable Parts Set. The quantities of the parts contained in the Consumable Parts Set are shown in the list above.

No.	Part	Part name & specification	Qty	P/N (part number)
1)	 	Eco-Cup SF ( φ 4 x 5 mm, 50 μl )	100 ea/pk	PY1-EC50F
2)	 	Eco-Cup LF ( φ 4 x 8 mm, 80 μl )	100 ea/pk	PY1-EC80F
3)		Eco-Stick SF ( Length 30 mm, for Single-shot )	50 ea/pk	PY1-ES10F
4)		Eco-Stick DF ( Length 80 mm, for Double-shot )	50 ea/pk	PY1-ES20F
5)		Eco-Stand AL ( Aluminum, for Eco-Cup SF / LF )	5 ea	PY1-EH10AL
6)		Eco Pick-Up F ( for sample cup recovery )	5 ea	PY1-EP55F
7)		Quartz Pyrolysis Tube A30 ( Length 120 mm, quartz )	1 ea	PY1-3018A
8)		Graphite Vespel Ferrule ( Hole diameter 6 mm, for interface )	5 ea	PY1-7911
9)		Needle Set N ( Deactivated needle, For PY-3030, PY-2020 and Rx-3050 )	3 ea	PY1-1274
10)		Septum ( for liquid sampler )	20 ea	PY1-2025

# 1. Pyrolyzer (EGA/PY-3030D, PY-3030S)

## 1.1 Consumable parts set

### Consumable Parts Set 3030AS

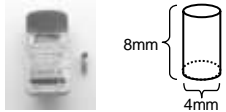







Contents of PY-K313D		Qty
1)	Eco-Cup LF (Sample cup, 100 ea)	3 bottles
2)	Quartz Pyrolysis Tube A30	4 ea
3)	Graphite Vespel Ferrule (for interface)	8 ea
4)	Needle set N	8 ea
5)	ITF Union ASN (use with Auto-Shot Sampler)	1 set
6)	Eco-Cup Stand 10	2 ea

P/N: PY-K313D

for EGA/PY-3030D or PY-3030S with  
Auto-Shot Sampler AS-1020E, 1 set

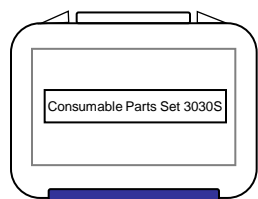
※ Use the following part numbers when ordering the parts individually. The quantities of each parts may differ from the Consumable Parts Set. The quantities of the parts contained in the Consumable Parts Set are shown in the list above.

No.	Part	Part name & specification	Qty	P/N (part number)
1)		Eco-Cup LF ( $\phi$ 4 x 8 mm, 80 $\mu$ l)	100 ea/pk	PY1-EC80F
2)		Quartz Pyrolysis Tube A30 (Length 120 mm, quartz)	1 ea	PY1-3018A
3)		Graphite Vespel Ferrule (Hole diameter 6 mm, for interface)	5 ea	PY1-7911
4)		Needle Set N (Deactivated needle, For PY-3030, PY-2020 and Rx-3050)	3 ea	PY1-1274
5)		ITF Union ASN (use with Auto-Shot Sampler AS-1020E)	1 set	PY1-3533
6)		Eco-Cup Stand 10 (Eco-Cup LF holder for 10 cups)	1 ea	PY1-3711

# 1. Pyrolyzer (PY-3030S)

## 1.1 Consumable parts set

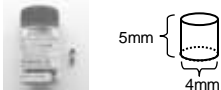








### Consumable Parts Set 3030S



P/N: PY-K303S  
for PY-3030S, 1 set

Contents of PY-K303S		Qty
1)	Eco-Cup SF (Sample cup, 100 ea)	1 bottle
2)	Eco-Cup LF (Sample cup, 100 ea)	1 bottle
3)	Eco-Stick SF (50 ea)	2 sets
4)	Eco-Stand AL (Sample cup stand)	5 ea
5)	Eco Pick-Up F (for sample cup recovery)	5 ea
6)	Quartz Pyrolysis Tube A30	4 ea
7)	Graphite Vespel Ferrule (for interface)	8 ea
8)	Needle Set N	8 ea
9)	Septum (for liquid sampler)	10 ea

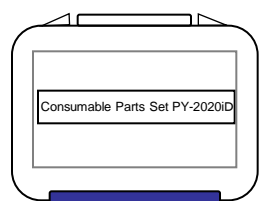
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No.	Part	Part name & specification	Qty	P/N (part number)
1)		Eco-Cup SF ( φ 4 x 5 mm, 50 μl )	100 ea/pk	PY1-EC50F
2)		Eco-Cup LF ( φ 4 x 8 mm, 80 μl )	100 ea/pk	PY1-EC80F
3)		Eco-Stick SF ( Length 30 mm, for Single-shot )	50 ea/pk	PY1-ES10F
4)		Eco-Stand AL ( Aluminum, for Eco-Cup SF / LF )	5 ea	PY1-EH10AL
5)		Eco Pick-Up F ( for sample cup recovery )	5 ea	PY1-EP55F
6)		Quartz Pyrolysis Tube A30 ( Length 120 mm, quartz )	1 ea	PY1-3018A
7)		Graphite Vespel Ferrule ( Hole diameter 6 mm, for interface )	5 ea	PY1-7911
8)		Needle Set N ( Deactivated needle, For PY-3030, PY-2020 and Rx-3050 )	3 ea	PY1-1274
9)		Septum ( for liquid sampler )	20 ea	PY1-2025

# 1. Pyrolyzer (PY-2020iD)

## 1.1 Consumable parts set


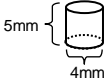

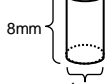









### Consumable Parts Set PY-2020iD



P/N: PY-K202D  
For PY-2020iD, 1 set

Contents of PY-K202D		Qty
1)	Eco-Cup SF (Sample cup, 100 ea)	1 bottle
2)	Eco-Cup LF (Sample cup, 100 ea)	1 bottle
3)	Eco-Stick SF (50 ea)	1 set
4)	Eco-Stick DF (50 ea)	1 set
5)	Eco-Stand AL (Sample cup stand)	5 ea
6)	Eco Pick-Up F (for sample cup recovery)	5 ea
7)	Quartz Pyrolysis Tube A20	4 ea
8)	Graphite Vespel Ferrule (for interface)	8 ea
9)	Needle Set N	8 ea
10)	Interface Union N	1 ea
11)	Septum (for liquid sampler)	10 ea

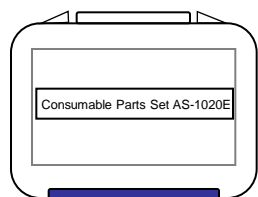
※ Use the following part numbers when ordering the parts individually. The quantities of each parts may differ from the Consumable Parts Set. The quantities of the parts contained in the Consumable Parts Set are shown in the list above.

No.	Part	Part name & specification	Qty	P/N (part number)
1)	 	Eco-Cup SF ( φ 4 x 5 mm, 50 μl )	100 ea/pk	PY1-EC50F
2)	 	Eco-Cup LF ( φ 4 x 8 mm, 80 μl )	100 ea/pk	PY1-EC80F
3)		Eco-Stick SF ( Length 30 mm, for Single-shot )	50 ea/pk	PY1-ES10F
4)		Eco-Stick DF ( Length 80 mm, for Double-shot )	50 ea/pk	PY1-ES20F
5)		Eco-Stand AL ( Aluminum, for Eco-Cup SF / LF )	5 ea	PY1-EH10AL
6)		Eco Pick-Up F ( for sample cup recovery )	5 ea	PY1-EP55F
7)		Quartz Pyrolysis Tube A20 ( Length 114 mm, quartz )	1 ea	PY1-2018A
8)		Graphite Vespel Ferrule ( Hole diameter 6 mm, for interface )	5 ea	PY1-7911
9)		Needle Set N ( Deactivated needle, For PY-3030, PY-2020 and Rx-3050 )	3 ea	PY1-1274
10)		Interface Union N	1 ea	PY1-3513
11)		Septum ( for liquid sampler )	20 ea	PY1-2025

# 1. Pyrolyzer (PY-2020iD, PY-2020iS)

## 1.1 Consumable parts set

### Consumable Parts Set AS-1020E

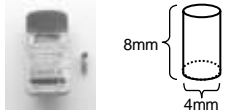







P/N: PY-K212D

For PY-2020iD or PY-2020iS with  
Auto-Shot Sampler AS-1020E, 1 set

Contents of PY-K212D		Qty
1)	Eco-Cup LF (Sample cup, 100 ea)	3 bottles
2)	Quartz Pyrolysis Tube A20	4 ea
3)	Graphite Vespel Ferrule (for interface)	8 ea
4)	Needle set N	8 ea
5)	ITF Union ASN (use with Auto-Shot Sampler)	1 set
6)	Eco-Cup Stand 10	2 ea

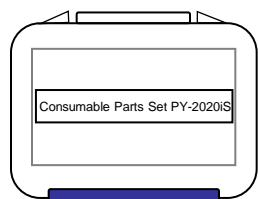
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No.	Part	Part name & specification	Qty	P/N (part number)
1)		Eco-Cup LF ( φ 4 x 8 mm, 80 μl )	100 ea/pk	PY1-EC80F
2)		Quartz Pyrolysis Tube A20 ( Length 114 mm, quartz )	1 ea	PY1-2018A
3)		Graphite Vespel Ferrule ( Hole diameter 6 mm, for interface )	5 ea	PY1-7911
4)		Needle Set N ( Deactivated needle, For PY-3030, PY-2020 and Rx-3050 )	3 ea	PY1-1274
5)		ITF Union ASN ( use with Auto-Shot Sampler AS-1020E )	1 set	PY1-3533
6)		Eco-Cup Stand 10 ( Eco-Cup LF holder for 10 cups )	1 ea	PY1-3711

# 1. Pyrolyzer (PY-2020iS)

## 1.1 Consumable parts set

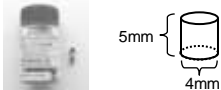









### Consumable Parts Set PY-2020iS



P/N: PY-K202S  
for PY-2020iS, 1 set

Contents of PY-K202S		Qty
1)	Eco-Cup SF (Sample cup, 100 ea)	1 bottle
2)	Eco-Cup LF (Sample cup, 100 ea)	1 bottle
3)	Eco-Stick SF (50 ea)	2 sets
4)	Eco-Stand AL (Sample cup stand)	5 ea
5)	Eco Pick-Up F (for sample cup recovery)	5 ea
6)	Quartz Pyrolysis Tube A20	4 ea
7)	Graphite Vespel Ferrule (for interface)	8 ea
8)	Needle Set N	8 ea
9)	Interface Union N	1 ea
10)	Septum (for liquid sampler)	10 ea

※ Use the following part numbers when ordering the parts individually. The quantities of each parts may differ from the Consumable Parts Set. The quantities of the parts contained in the Consumable Parts Set are shown in the list above.

No.	Part	Part name & specification	Qty	P/N (part number)
1)		Eco-Cup SF ( $\phi$ 4 x 5 mm, 50 $\mu$ l)	100 ea/pk	PY1-EC50F
2)		Eco-Cup LF ( $\phi$ 4 x 8 mm, 80 $\mu$ l)	100 ea/pk	PY1-EC80F
3)		Eco-Stick SF (Length 30 mm, for Single-shot)	50 ea/pk	PY1-ES10F
4)		Eco-Stand AL (Aluminum, for Eco-Cup SF / LF)	5 ea	PY1-EH10AL
5)		Eco Pick-Up F (for sample cup recovery)	5 ea	PY1-EP55F
6)		Quartz Pyrolysis Tube A20 (Length 114 mm, quartz)	1 ea	PY1-2018A
7)		Graphite Vespel Ferrule (Hole diameter 6 mm, for interface)	5 ea	PY1-7911
8)		Needle Set N (Deactivated needle, For PY-3030, PY-2020 and Rx-3050)	3 ea	PY1-1274
9)		Interface Union N	1 ea	PY1-3513
10)		Septum (for liquid sampler)	20 ea	PY1-2025



# 1. Pyrolyzer (EGA/PY-3030D, PY-3030S, PY-2020iD/iS)

## 1.2 Sample Cups

### Eco-Cup (Deactivated Stainless Steel)

PY1-EC50F



**Disposable Eco-Cup SF**  
φ4 x 8 mm, 50 μl, 100/pk

PY1-EC80F



**Disposable Eco-Cup LF**  
φ4 x 8 mm, 80 μl, 100/pk

PY1-EC50HF



**Disposable Eco-Cup SHF**  
tiny hole at the bottom  
φ4 x 8 mm, 50 μl, 20/pk

PY1-EC80HF



**Disposable Eco-Cup LHF**  
tiny hole at the bottom  
φ4 x 8 mm, 80 μl, 20/pk

PY1-ES10F



**Eco-Stick SF**

For stainless steel Eco-Cups, for Single-Shot, 30 mm, 50/pk

PY1-ES20F



**Eco-Stick DF**

For stainless steel Eco-Cups, for Double-Shot, 80 mm, 50/pk

PY1-EP55F



**Eco-Pickup F**

For stainless steel Eco-Cup recovery, 135 mm, 5ea

### Eco-Cup G series (Glass) **NEW**

PY1-EC50G



**Eco-Cup G**

Maximum use temp. 450°C  
φ4 x 8 mm, thickness 5 mm,  
50 μl, 100/pk

(\* Eco-Stand is not included)

PY1-EC50GQ



**Eco-Cup GQ**

Maximum use temp. 600°C  
Glass coated with bonded quartz layer  
φ4 x 8 mm, thickness 5 mm,  
50 μl, 30/pk

(\* Eco-Stand is not included)

PY1-ES10G



**Eco-Stick GS**

For glass Eco-Cups, for Single-Shot, 30 mm, 50/pk

PY1-ES20G



**Eco-Stick GD**

For glass Eco-Cups, for Double-Shot, 80 mm, 50/pk

PY1-EP55GF



**Eco-Pickup GF**

For glass Eco-Cup recovery, 135 mm, 5ea

AS1-7814



**AS Teflon Sheet G**

Teflon sheet for cup chute of Auto-Shot Sampler 3ea,  
spare fixing screw 4ea  
Attach when glass Eco-Cup is used with Auto-Shot Sampler  
(stainless steel Eco-Cups can also be used with Teflon sheet)

### Common parts

PY1-EH10AL



**Eco-Stand AL**

For all Eco-Cups, 5ea

PY1-3711



**Eco-Cup Stand 10**

For Eco-Cup LF and Eco-Cup G/GQ, for 10cups, 1ea

# 1. Pyrolyzer (EGA/PY-3030D, PY-3030S, PY-2020iD/iS)

## 1.3 Pyrolyzer Furnace

Note: some of the parts are **only** compatible with 2020 or 3030 series

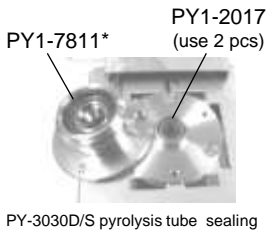
### Furnace and Interface Parts

#### PY-3030D/S Parts

PY1-3018A



**Pyrolysis Tube A30**  
Quartz, 1ea



PY-3030D/S pyrolysis tube sealing

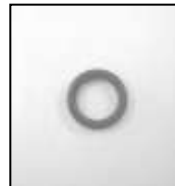
PY1-2017



**O-ring(P-6W)**  
Pyrolysis tube sealing  
Translucent silicon rubber, 20/pkg

#### Common Parts

PY1-7811\*



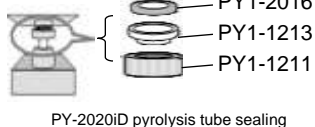
**O-ring(P-12)**  
Sampler sealing  
Black silicon rubber, 10/pkg

#### PY-2020iD/iS Parts

PY1-2018A



**Pyrolysis Tube A20**  
Quartz, 1ea



PY-2020iD pyrolysis tube sealing

PY1-2016



**O-ring(SM-6)**  
Red silicon rubber,  
20/pkg

PY1-1213



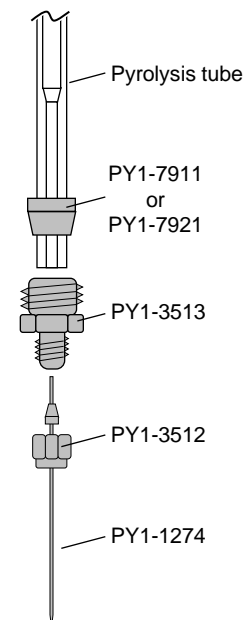
**Washer-2**  
Stainless steel washer,  
3/pkg

PY1-1211



**Quartz Tube  
Securing Nut**  
Stainless steel, 1ea

\* PY-7811 is a common part for each pyrolyzer.



Connection between pyrolysis tube and needle

PY1-7911



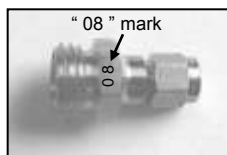
**Graphite Vespel Ferrule**  
6mm, 5/pkg

PY1-7921



**Graphite Ferrule**  
6mm, 5/pkg

PY1-3513



**Interface Union N**  
With nut, 1set

PY1-3512



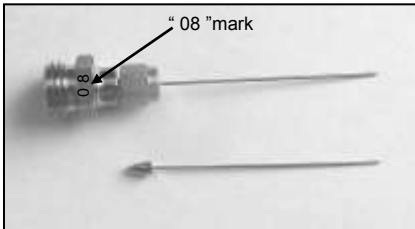
**Interface Needle Nut**  
Stainless steel 1/16", 3/pkg

PY1-1274



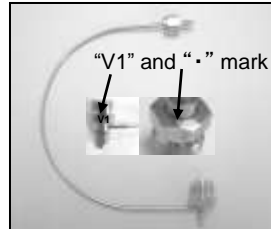
**Needle Set N**  
Deactivated needle  
for PY-3030, PY-2020 and  
Rx-3050, 3/pkg

PY1-3515



**Interface Union Assy.**  
Contains 1 interface union with a nut  
and 2 interface needles, 1set

PY1-3533



**Interface Union ASN**  
This is used in place of ITF Union N  
(PY1-3513) when Auto-Shot Sampler  
is used.  
Interface union assy., 1ea

PY1-1174



**Needle Set**  
Deactivated needle for PY-2020  
series, use with old model union  
(PY1-3511/discontinued), 3/pkg

# 1. Pyrolyzer (EGA/PY-3030D, PY-3030S, PY-2020iD/iS)

## Heat Sink Adapter Parts (for connection between pyrolyzer and GC inlet)

Depending on the combination of your GC and pyrolyzer, different part is used.

Please make sure to select parts compatible with your GC.



### Heat Sink Adapter

Heat Sink Adapter, 1ea

Part number of heat sink adapter and septum nut set for PY-3030D/S

GC	Heat sink adapter	Septum nut set
Agilent 7890 / 6890	PY1-3551	PY1-3553
ShimadzuGC-2010 / 17A	PY1-3551	PY1-3544
Thermo Fisher TRACE / Focus GC	PY1-3555	*
PerkinElmer Auto system / Clarus GC	PY1-3552	PY1-3556

\* ask your GC vendor



### Septum Nut Set

Septum nut (1ea) and needle guide(1ea), 1set

Part number of heat sink adapter and septum nut set for PY-2020iD / iS

GC	Heat sink adapter	Septum nut set
Agilent 7890 / 6890	PY1-3582	*
Shimadzu GC-2010 / 17A	PY1-3582	PY1-7411 and PY1-3581
Thermo Fisher TRACE / Focus GC	PY1-3575	*
Perkin Elmer Auto system / Clarus GC	PY1-3582	*

\* ask your GC vendor

## Sampler Parts

PY1-2025



### Septum

For liquid sampler, 20/pk

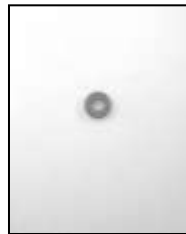
PY1-7412



### Needle Guide $\phi$ 0.8 A

For liquid sampler i.d. 0.8mm, 1ea

PY1-2112



### O-ring (P-3)

For the purge valve of Double-Shot sampler, 20/pk

## GC Inlet Parts

PY1-7301



### Septum

Surface treated, for Agilent GC and Thermo TRACE 1300/1310 GC 5/pk

PY1-7304



### Septum

Surface treated, for Shimadzu GC, Orange color, 5/pk

PY1-3561



### ITF Cover 2020 for PY-2020iD/iS

With 3 screws (incl. 2 spares), 1set

PY1-3563



### ITF Cover 3030A

for PY-3030D/S, Rx-3050TR/SR With 3 screws (incl. 2 spares), 1set



### Septum

Surface treated, for Thermo TRACE GC Ultra and Focus GC, 5/pk

AS1-1111



### ITF Protection Cover 2020 for PY-2020iD/iS use with AS-1020E

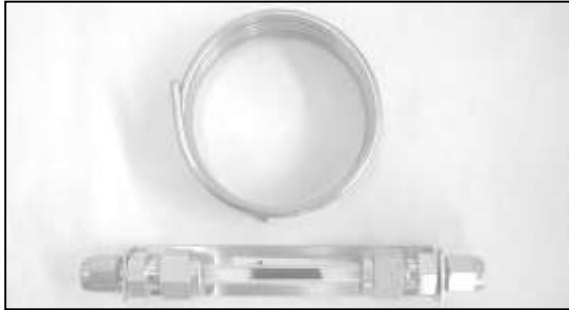
With 3 screws (incl. 2 spares), 1set

# 1. Pyrolyzer (EGA/PY-3030D, PY-3030S, PY-2020iD/iS)

## 1.4 GC related parts

### Tubing

PY1-2218



#### Absorption Trap Set 7890/6890SV

For Agilent 7890/6890 split vent , 1set

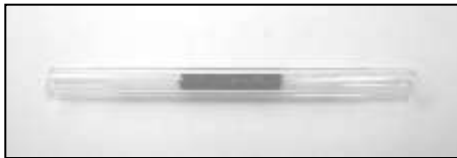
PY1-2227



#### Absorption Trap Set 17SV

For Shimadzu GC-2010 /17A split vent, 1set

PY1-2216

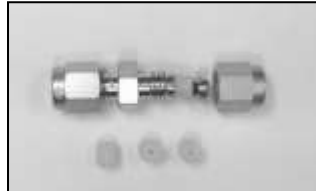


#### Absorption Trap Tube

For trap tube only.

Packed with activated charcoal, 3ea

PY1-K002



#### Carrier Gas Union Set 1/8

Swagelok 1/8" union (Brass), 1ea  
Swagelok 1/8" nut (Brass), 2ea  
Swagelok 1/8" back ferrule (Brass) , 2ea  
Inlet/outlet septum, 5ea

PY1-K003



#### Cap Set

Swagelok 1/8" nut (Brass), 1ea  
Swagelok 1/8" cap (Brass), 1ea  
Swagelok 1/8" back ferrule (Brass), 1ea  
Inlet/outlet septum, 1ea

PY1-2028



#### Inlet/Outlet Septum

For connecting tubes,  
with hole, 10/pk

### Remote Signal Cable (for connection between pyrolyzer controller and GC)

Depending on the combination of your GC and pyrolyzer, different remote signal cable is used.

Please make sure to select a part compatible with your GC.



Remote Signal Cable

GC	PY-3030D/S	PY-2020iD/iS
Agilent 7890 / 6890	PY1-6111	PY1-5922
Shimadzu GC-2010	PY1-6121	PY1-5926
Shimadzu GC-17A	PY1-6122	PY1-5925
Thermo Fisher TRACE / Focus GC	PY1-6131	PY1-5928
PerkinElmer Auto system / Clarus GC	PY1-6151	PY1-5927

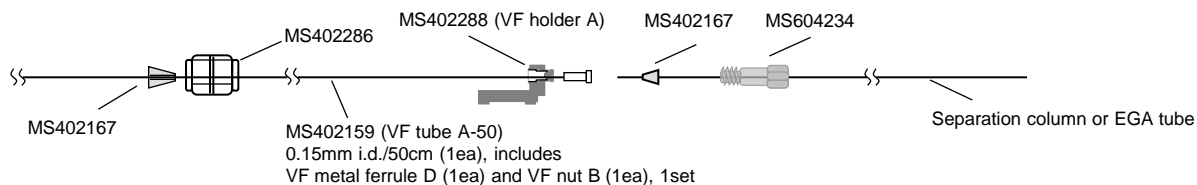
1ea.

# 1. Pyrolyzer (EGA/PY-3030D, PY-3030S, PY-2020iD/iS)

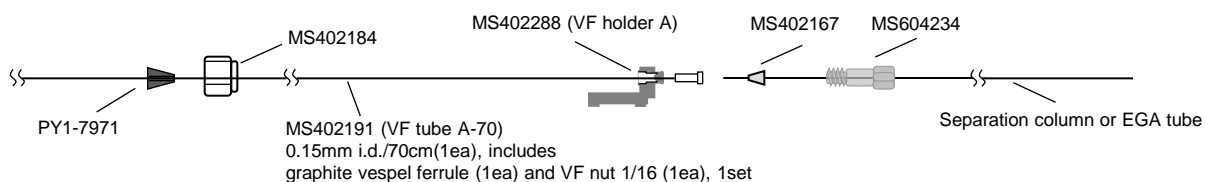
## 1.5 Column and EGA tube connection parts

### Vent-free GC/MS Adapter

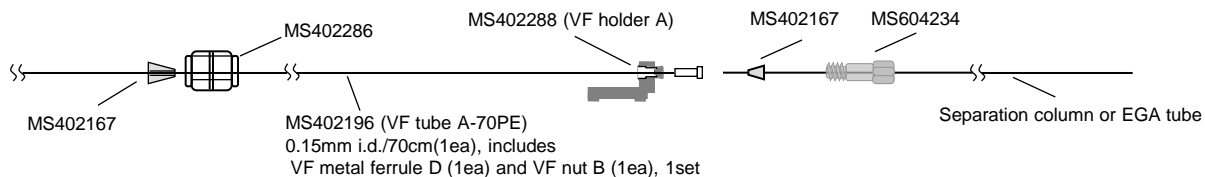
#### For Agilent and Shimadzu



#### For Thermo Fisher



#### For PerkinElmer

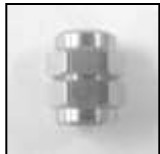


MS402167



VF Metal Ferrule D  
20/pk

MS402286



VF Nut B  
3/pk

MS402184



VF Nut 1/16  
5/pk

MS604234



Column Nut  
1ea

MS402150



Plug Nut A  
Use to plug the VF tube, 1set

PY1-7971



Graphite Vespel  
Ferrule 05  
10/pk

MS402288 **NEW**



VF Holder A  
1 ea

UAP-7001

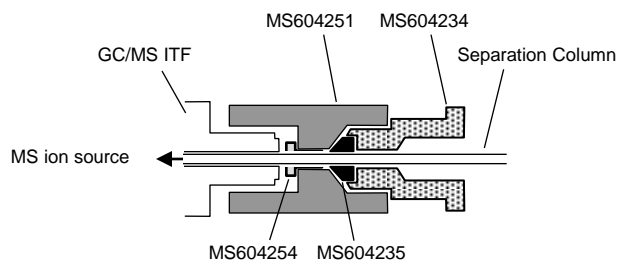


File for Ultra ALLOY  
Capillary  
Tube  
1ea

# 1. Pyrolyzer (EGA/PY-3030D, PY-3030S, PY-2020iD/iS)

## 1.5 Column and EGA tube connection parts

### GC/MS Adapter



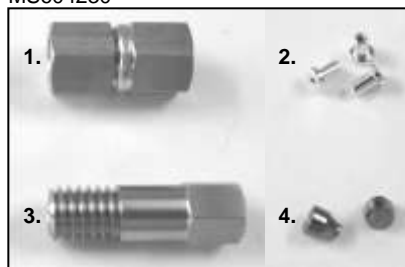
Connection between GC/MS ITF and column using GC/MS adapter

#### GC/MS Adapter Parts

Part name	P/N	Qty
MS Joint N	MS604251	1
VF Aluminum Ferrule	MS604254	5
Column Nut*	MS604234	1
Graphite Ferrule	MS604235	10

\* Agilent P/N 5181-8830 can be used

#### MS604230



#### GC/MS Adapter

Agilent MSD, Shimadzu QP-2010

For 0.25mm, 0.32mm id columns, 1set

1. MS Joint, 1ea
2. VF Aluminum ferrule, 3ea
3. Column nut, 1ea
4. Graphite ferrule (i.d. 0.5mm), 2ea

## 1.6 Standard sample

#### PY1-4908



**Polystyrene sample**  
for Pyrolyzer Performance Evaluation,  
Polystyrene 2.5mg film, Me-stearate 5w%  
in 2ml glass bottle, 1ea

# 1. Pyrolyzer (EGA/PY-3030D, PY-3030S, PY-2020iD/iS)

## 1.7 Magic Chemisorber

PY1-MC01S



**Magic Chemisorber S500**  
100% dimethylpolysiloxane,  
500 µm, 6 mm, 10/pk,  
Use with PY1-EC80HF or PY1-EC80F

PY1-MC01L



**Magic Chemisorber L500**  
100% dimethylpolysiloxane,  
500 µm, 34.5 mm, 5/pk,  
Use with PY1-MCP01

PY1-MCP01



**MC holder L**  
Deactivated stainless steel,  
3ea

PY1-MC01S-K



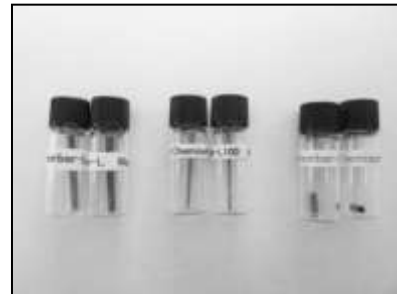
**Magic Chemisorber S500 Kit**  
Includes magic chemisorber S500(3ea),  
Eco-Stick DF (5ea) and  
MC holder S (Flow through Eco-Cup LHF, 5ea)  
, 1set

PY1-MC01L-K



**Magic Chemisorber L500 Kit**  
Includes magic chemisorber L500 (3ea),  
Eco-Stick DF (5ea) and MC holder L (2ea)  
, 1set

PY1-M01SL-K **NEW**



**Magic Chemisorber SL Kit**  
Includes magic chemisorber L500 (2ea),  
magic chemisorber L100 (2ea) and  
magic chemisorber S500 (2ea), 1set

## 1.8 Sampling Tools

### Micro-puncher



**Micro-punchers and  
Cutting Mat L**

Name	P/N	i.d.	Contents	Color
Micro-puncher 050S	HMP-0.50S	0.50mm	3 punchers, 1 Cutting Mat L	Light blue
Micro-puncher 075S	FMP-0.75S	0.75mm	3 punchers, 1 Cutting Mat L	Green
Micro-puncher 125S	FMP-1.25S	1.25mm	3 punchers, 1 Cutting Mat L	Red
Micro-puncher 200S	FMP-2.00S	2.00mm	3 punchers, 1 Cutting Mat L	Gray
Micro-puncher 300S	HMP-3.00S	3.00mm	3 punchers, 1 Cutting Mat L	Navy
Micro-puncher 400S	HMP-4.00S	4.00mm	3 punchers, 1 Cutting Mat L	Brown
Micro-puncher 500S	HMP-5.00S	5.00mm	3 punchers, 1 Cutting Mat L	Orange

Name	P/N	Contents
Micro-puncher 03Kit	FMP-03KIT	3 pcs each of 0.75 / 1.25 / 2.0 (mm id) punchers and 2 sheets of Cutting Mat L
Micro-puncher 04Kit	HMP-04KIT	3 pcs each of 3.0 / 4.0 / 5.0 (mm id) punchers and 2 sheets of Cutting Mat L

Name	P/N	size(mm)	Contents	Color
Cutting Mat L	FCM – 6577	L150 x W220	5 sheets	Light green

### Polymer Prepper

PY1-7510



\* Order of cleaning tape only  
P/N: PY1-7515,  
cleaning tape 2 m, 3 roles

**Polymer Prepper**  
Polymer Prepper (3ea) incl.  
cleaning tape (2m, 1ea), 1set

### Sampling Tool Kit 01 **NEW**

PY1-K101



Includes:  
Micro-puncher 125 (5 ea),  
Cutting knife (incl.25pcs spare  
blades, 2 ea),  
Scissors (1 ea),  
Tweezers (3 ea),  
Cutting mat L (2 ea)

**Sampling Tool Kit 01**  
1set

## 2. Sampler

### 2.1 On-line Micro Reaction Sampler (PY1-1050)

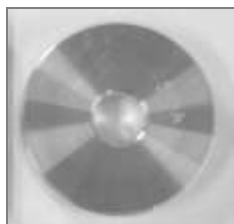
PY1-5315

PY1-5316

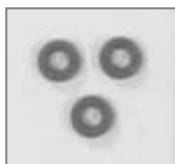


**Glass Capsule Holder A1**  
1 ea

PY1-5317



**Glass Capsule Holder B1**  
1 ea



**O-ring S3**  
red, 3 ea  
(re-order : PY1-5319, 20 ea)

PY1-5311



**Reaction chamber**  
1 ea

PY1-3321



**SUS Pyrolysis Tube 3030**  
1 ea

**Glass capsule sealing assembly**  
1 set

PY1-5113



**Glass Capsule B**  
40mm  
40 ea/1 bottle

PY1-5114



**Glass Capsule B120**  
120mm  
40 ea/1 bottle

UV1-7701



**O-ring S4**  
10 ea

UV1-3802



**UV Sampler Stand**  
1 ea

### 2.2 Micro Thermal Desorption Sampler (PY1-1060)

PY1-5210



**TD tube packed with Tenax**  
3 ea

PY1-5220



**TD tube**  
5 ea

UV1-7701



**O-ring S4**  
10 ea

UV1-3802



**UV Sampler Stand**  
1 ea

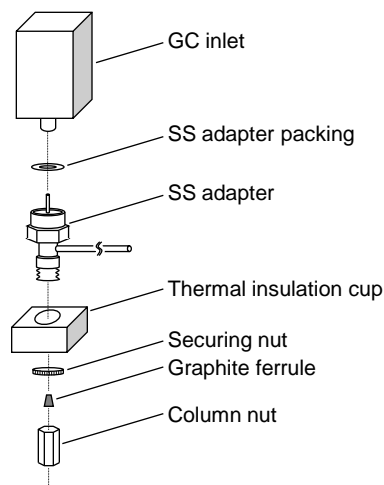


# 3. Selective Sampler (SS-1010E)

## Connection parts for GC inlet

Depending on the combination of your GC and pyrolyzer, different part is used.

Please make sure to select parts compatible with your GC.



Connection parts underneath GC inlet



**SS Adapter Packing**  
10/pk



**SS Adapter**  
1ea



**Thermal Insulation Cap (for Agilent)**  
1 ea



**Thermal Insulation Cup (for Shimadzu)**  
1ea



**Securing Nut**  
1ea

GC	SS Adapter Packing	SS Adapter	Thermal Insulation Cup	Securing nut	Graphite ferrule	Column nut
Agilent 7890 / 6890	SS1-1011	SS1-1001	SS1-1012	SS1-1013	PY1-7971	MS604234 <sup>1)</sup>
Shimadzu GC-2010 / 17A	SS1-2011	SS1-2001	SS1-2012	not necessary <sup>2)</sup>	SS1-7215	SS1-7201 <sup>3)</sup>
Thermo Fisher TRACE 1300/1310 GC	SS1-1011	SS1-3101	not necessary <sup>4)</sup>	not necessary	PY1-7971	MS604234
Thermo Fisher TRACE GC	*	SS1-3001	SS1-3012	SS1-1013	PY1-7971	SS1-7301
Thermo Fisher Focus GC	*	SS1-3001	SS1-3022	SS1-1013	PY1-7971	SS1-7301

<sup>1)</sup> Agilent column nut (Agilent P/N :5181-8830) can be used

<sup>2)</sup> Standard screws for GC are used

<sup>3)</sup> Shimadzu column nut (Shimadzu P/N:221-32705) can be used

<sup>4)</sup> Use the thermal insulator (P/N: MJ1-1518)

\* Order Thermo Fisher's genuine part (Thermo Fisher P/N: 29033629)

## Other Parts

SS1-4210



### Purge Line Kit

Whole assembly connecting SS Adapter and SS-1010E flow controller, incl. each 3pcs of 1/8 nut, back ferrule and Silicone rubber packing (bored), 1set

SS1-4020



### Valve Control Cable

For controlling SS-1010E from PY Temp. controller, 1 ea

PY1-3337



### Deactivated Glass Insert

For Agilent GC, deactivated, 1ea

## 4. MicroJet Cryo-Trap (MJT-1030Ex/E, MJT-1035E)

### MJT parts in GC oven

MJ1-1111



**MicroJet Tube**  
Quartz, 1ea

MJ1-1121



**LN<sub>2</sub> Saver**  
2ea

MJ1-3101



**MicroJet Tube Union**  
For securing MicroJet Tube,  
1ea

MJ1-7941



**Graphite Ferrule**  
For MicroJet Tube,  
5/pk

### Liquid Nitrogen Container

MJ1-1500



#### **Bench Top Liquid Nitrogen Container Set**

Includes each 1 of thermal exchange coil (2 L), liquid nitrogen container (2 L), container cap (2 L), floating indicator, Stand base, stand pole and clamp, 1set

#### **Bench Top Liquid Nitrogen Container Set (MJ1-1500)**

MJ1-1511



**Liquid Nitrogen Container**  
For 2L container, 1ea

MJ1-1512



**Container Cap 2L**  
For 2L container, 1ea

MJ1-1305



**Thermal Exchange Coil 2L (Standard)**  
For use with a 2L liquid nitrogen container, 1 ea

MJ1-1517



**Indicator**  
1ea

MJ1-1513



**Stand Base**  
1ea

MJ1-1514



**Stand Pole**  
1set

MJ1-1515



**Cramp**  
1ea

## 4. MicroJet Cryo-Trap (MJT-1030Ex/E, MJT-1035E)

MJ1-1600

MJ1-1522



**Container Cap 30L**

For 30L container, 1ea

MJ1-1306



**Thermal Exchange Coil 30L**

For use with a 30L liquid nitrogen container, 1 ea

Thermal Exchange Coil Set for 30L Container

Includes each 1 of Container Cap 30L and Thermal Exchange Coil 30L, 1 set

MJ1-1512



**Container Cap 2L**

For 2L container, 1ea

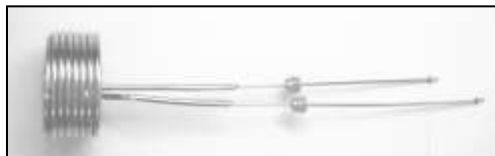
MJ1-1522



**Container Cap 30L**

For 30L container, 1ea

MJ1-1305



**Thermal Exchange Coil 2L (Standard)**

For use with a 2L liquid nitrogen container, 1 ea

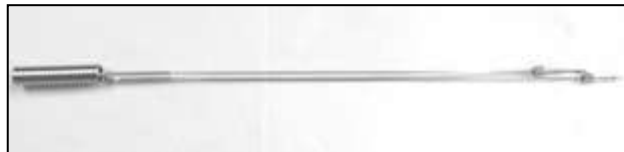
MJ1-1304



**Thermal Exchange Coil 10L**

For use with a 10L liquid nitrogen container, 1 ea

MJ1-1306



**Thermal Exchange Coil 30L**

For use with a 30L liquid nitrogen container, 1 ea

### Liquid Nitrogen Feed Tube Securing Plate for Major GCs

The shape and size of the liquid nitrogen feed tube securing plates vary depending on your GC model. Choose the right one for your GC from the table below.



**Securing Plate**

1set

GC

Support Plate

Agilent 7890 / 6890

MJ1-1201

Shimadzu GC-2010 / 17A

MJ1-1204

Thermo Fisher TRACE GC

MJ1-1207

Thermo Fisher TRACE 1300/1310 GC

MJ1-1218

PerkinElmer Clarus GC

MJ1-1209

### Miscellaneous Parts

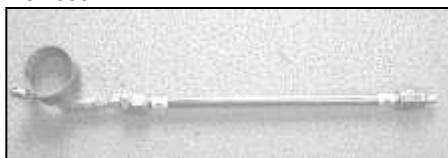
MJ1-1303



**Liquid Nitrogen Feed Tube Ex**, 1 set

\*Refurbished assembly is available with part number MJ1-1353. Returning the defective part is required.

MJ1-5501



**MS (Molecular Sieve) Trap**

With copper tube 1.2m and 15 $\mu$ m filter, 1 set

MJ1-4211

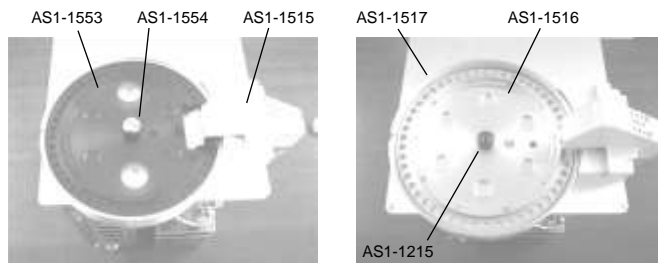


**Short Plug**

For terminating temp. sensor input connector, 1ea

# 5. Auto-Shot Sampler (AS-1020E)

## Component Parts for Upper Section of Unit



Component parts of top of Auto-Shot Sampler



**Sample Cup Recovery Chute (AS Teflon sheet)**  
1ea



**Sample Cup Recovery Container**  
2ea



**Sample Cup Tray Cover**, 1ea



**Sample Cup Tray Cover Securing Screw**, 1ea



**Sample Cup Tray**  
1ea

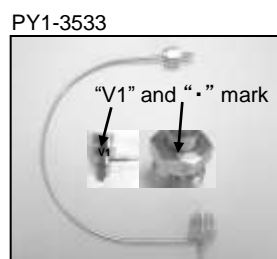
**Sample Cup Carrousel**  
1ea

**Sample Cup Tray Securing Screw**, 1ea

## Installation Kit for Major GCs

GC	P/N
Agilent 7890 / 6890 (front injection port)	AS1-K680
Agilent 7890 (rear injection port)	AS1-K780
Shimadzu GC-2010 / 17A	AS1-K201
Thermo TRACE GC	AS1-K902

## Miscellaneous Parts



**Interface Union ASN**  
This is used in place of ITF Union N (PY1-3513) when Auto-Shot Sampler is used. Interface union assy., 1ea



**Eco-cup LF**  
φ4 x 8mm, 80μl, 100/pk



**Sample Cup Inspector**  
1ea



**Eco-Cup Stand 10**  
For Eco-Cup LF and Eco-Cup G/GQ, for 10 cups, 1ea



**Valve Control Cable**  
1ea



**Auto-Rx Disc 100**  
100/pk (in glass vial)  
1ea



**Auto-Rx Disc 300**  
100/pk (in glass vial)  
3ea



**Fine quartz wool 2g**  
1set



**AS Teflon Sheet G**  
Teflon sheet for cup chute of Auto-Shot Sampler 3ea, spare fixing screw 4ea  
\*Attach when glass Eco-Cup is used with Auto-Shot Sampler (stainless steel Eco-Cups can also be used with Teflon sheet)

## 6. Micro UV Irradiator (UV-1047Xe)

### UV Light Source Lamp

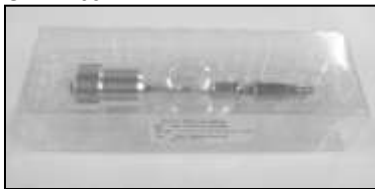
UV1-7105



**Xenon Arc Lamp (contains Hg)**

1ea

UV1-7106



**Xenon Arc Lamp (contains no Hg)**

1ea

### UV Sampler Parts

UV1-3801



**UV Sampler**

1ea

UV1-7012



**UV Fiber Xe**

1ea

UV1-3802



**UV Sampler Stand**

1ea

### Miscellaneous Parts

PY1-EC80UV



**Eco-Cup UV  
with side openings**  
80µl, 20/pk

UV1-7201



**Dewar 350**  
Liquid nitrogen container, 350ml,  
1ea

UV1-7501



**Dewar Holder**

1ea

UV1-4201



**UV Sampler Adjusting Tool**

1ea

PY1-7802



**Communication Cable**  
RS-232C, D-sub 9pins, female,  
reverse, 1ea

### UV Tube Kit (UV1-K001)

UV1-K101



**Air Tube Set**

Includes each 1 of 1/8" copper tube (3m), 1/8" union, 1/8"nut, back ferrule and front ferrule,  
1 set

UV1-K104



**Extension Tube Set**

Includes each 2 of 1/16" stainless steel tube(1.5m) and union sets for carrier gas connection  
1 set

# 7. micro-Reactor (Rx-3050TR, Rx-3050SR)

## 1<sup>st</sup> and 2<sup>nd</sup> Reactor furnace parts

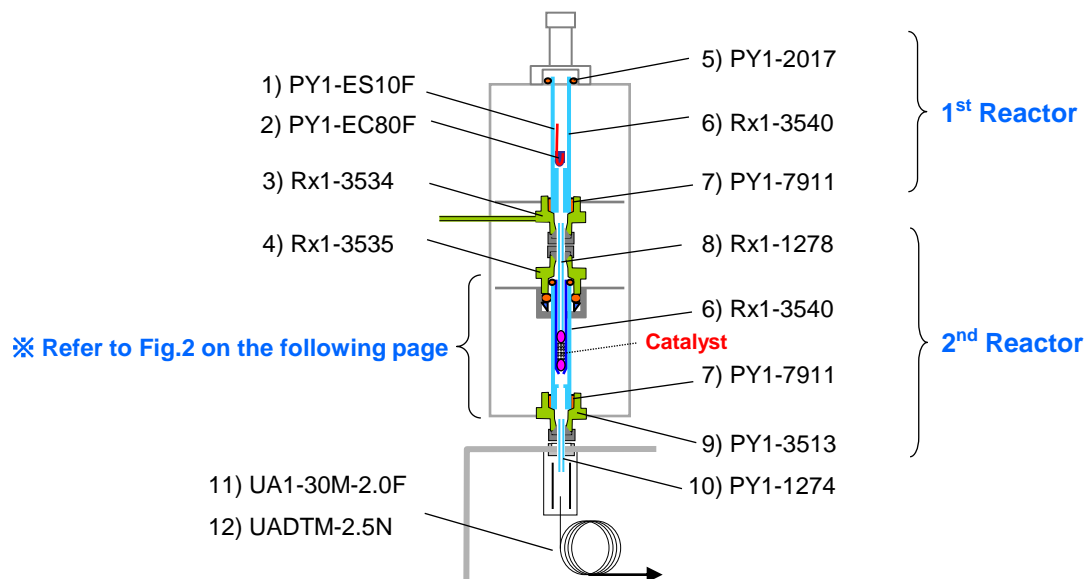


Fig.1 Visual list of consumables (part 1 of 2)

1) PY1-ES10F



**Eco-Stick SF**  
50ea/ pk

2) PY1-EC80F



**Eco-Cup LF**  
80 µl, 100 ea/ pk

3) Rx1-3534



**Rx ITF Union A**  
with reaction gas feed tube,  
1 ea

4) Rx1-3535



**Rx ITF Union B**  
1/16" – 1/4", 1 ea

5) PY1-2017



**O-ring P-6W**  
silicon rubber, white,  
20 ea/ pk

6) Rx1-3540



**Rx Deactivated SUS Tube A**  
6 mm i.d. x L 120 mm, 1 ea

7) PY1-7911



**Graphite Vespel Ferrule**  
6 mm i.d., 5 ea/ pk

8) Rx1-1278



**Rx ITF Needle A Set**  
1/16" o.d., with nut and ferrule,  
3 ea/ pk

9) PY1-3513



**ITF Union N**  
1 ea

10) PY1-1274



**ITF Needle Set N**  
3 ea/ pk

11) UA1-30M-2.0F



**Ultra ALLOY<sup>®</sup> Capillary Column**  
dimethylpolysiloxane,  
30m, 0.25mm i.d., 2.0um, 1 ea

12) UADTM-2.5N



**EGA Capillary Tube**  
Evolved gas analysis,  
2.5m, 0.15mm i.d., 1 ea

# 7. micro-Reactor (Rx-3050TR, Rx-3050SR)

## 1<sup>st</sup> and 2<sup>nd</sup> Reactor furnace parts

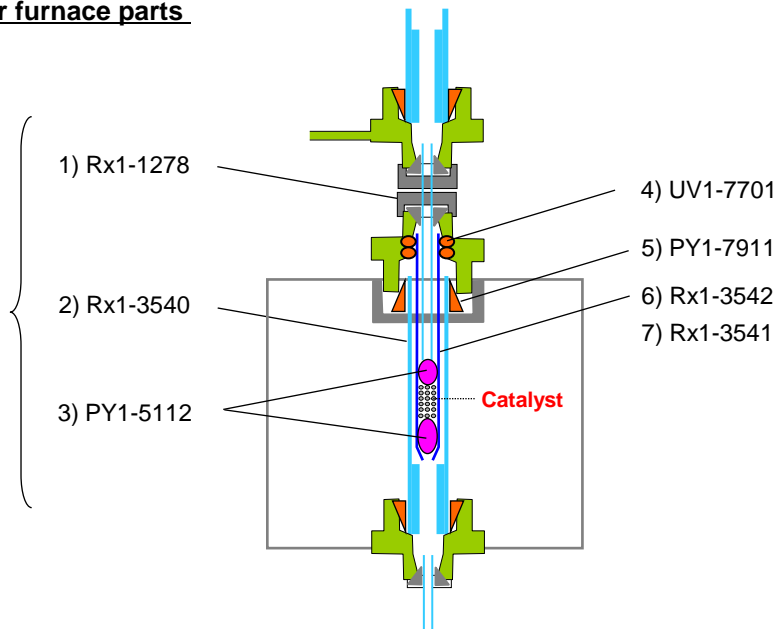


Fig. 2 Visual list of consumables (part 2 of 2)

1) Rx1-1278



**Rx ITF Needle A Set**  
1/16" o.d., with nut and ferrule,  
3 ea/ pk

2) Rx1-3540



**Rx Deactivated SUS Tube A**  
6 mm i.d. x L 120 mm, 1 ea

3) PY1-5112



**Fine Quartz Wool (0.5g)**  
1 ea

4) UV1-7701



**O-ring S4**  
fluorine rubber, black, 10 ea/ pk

5) PY1-7911



**Graphite Vespel Ferrule**  
6 mm i.d., 5 ea/ pk

6) Rx1-3542



**Rx ZMS-5 Quartz Insert A**  
3 mm i.d., 4 mm o.d., x 78 mm  
1 ea

7) Rx1-3541



**Rx Blank Quartz Insert A**  
3 mm i.d., 4 mm o.d., x 78 mm  
5 ea

# 7. micro-Reactor (Rx-3050TR, Rx-3050SR)

## 1<sup>st</sup> Reactor furnace parts (others)

PY1-1035



**Liquid Injection Sampler N**  
1 ea

PY1-3631



**Storage Stand 30A**  
1 ea

Rx1-3578



**Rx Heat Sink Adapter Set A**  
1 set

Rx1-2501



**Rx Tandem Reactor Cover A**  
1 ea

Rx1-1040



**High Pressure Solid Sampler**  
1 ea

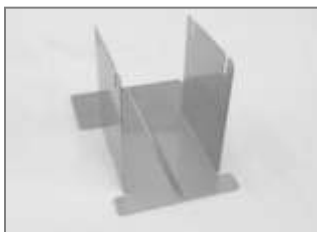
Rx1-2023



**High Pressure Solid Sampler Stand**  
1 ea

## 2<sup>nd</sup> Reactor furnace parts (others)

PY1-3631



**Storage Stand 30A**  
1 ea

Rx1-2502



**Rx Interface Cover A**  
1 ea

PY1-3563



**ITF Cover 3030A**  
for PY-3030D/S, Rx-3050TR/SR  
With 3 screws (incl. 2 spares), 1set

PY1-7805



**USB Cable**  
2m, type A male – type B male  
1 ea

## Controller parts

PY1-7801



**Cooling Gas Connecting Tube**  
with one-touch connector and  
1/8 Swagelok female, 1.5m, 1 ea

PY1-7613



**Cooling Gas Tube**  
with restrictor, 1.5m, 1ea

Rx1-7808



**Tandem micro-Reactor  
Control Cable**  
1 ea

Rx1-7806



**1<sup>st</sup> Reactor Control Cable**  
1 ea

PY1-7001



**AC Power Cable 100V  
for UL standard**  
100 – 120V, 1 ea

PY1-7002



**AC Power Cable 200V  
for VDE standard**  
200 – 240V, 1 ea

PY1-6034



**Noise Filter for AC Power Cable**  
1 ea

PY1-3751



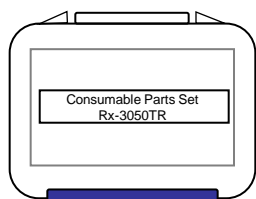
**USB Cable Fixing Bracket**  
1 ea



# 7. micro-Reactor (Rx-3050TR, Rx-3050SR)

## Rx Consumable Parts Set

Rx Consumable Parts Set TR






P/N: Rx1-K040TR

For Tandem micro-Reactor Rx-3050TR,  
1 set

Contents of Rx Consumable Parts Set TR	Qty
1) Rx Deactivated SUS Reaction Tube A	3 ea
2) Rx Blank Quartz Insert A	10 ea
3) ITF Needle Set N	3 ea
4) Rx ITF Needle A Set	5 ea
5) Graphite Vespel Ferrule	10 ea
6) O-ring P-6W	5 ea
7) O-ring S4	10 ea
8) Fine Quartz Wool (0.5g)	1 ea
9) Rx ITF Union B	1 ea

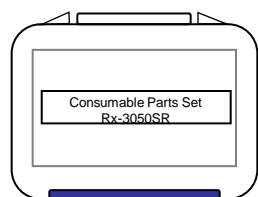
※ Use the following part numbers when ordering the parts individually. The quantities of each parts may differ from the Consumable Parts Set. The quantities of the parts contained in the Consumable Parts Set are shown in the list above.

No.	Part	Part name & specification	Qty	P/N (part number)
1)		Rx Deactivated SUS Reaction Tube A (6 mm i.d. x L 120 mm)	1 ea	Rx1-3540
2)		Rx Blank Quartz Insert A (3 mm i.d., 4 mm o.d., x 78 mm)	5 ea	Rx1-3541
3)		Needle Set N ( Deactivated needle, For PY-3030, PY-2020 and Rx-3050)	3 ea	PY1-1274
4)		Rx ITF Needle A Set (1/16" o.d., with nut and ferrule)	3 ea	Rx1-1278
5)		Graphite Vespel Ferrule ( Hole diameter 6 mm, for interface )	5 ea	PY1-7911
6)		O-ring P-6W (Silicon rubber, white)	20 ea	PY1-2017
7)		O-ring S4 (Fluorine rubber, black)	10 ea	UV1-7701
8)		Fine Quartz Wool (0.5g)	1 ea	PY1-5112
9)		Rx ITF Union B (1/16" – 1/4")	1 ea	Rx1-3535

# 7. micro-Reactor (Rx-3050TR, Rx-3050SR)

## Rx Consumable Parts Set

Rx Consumable Parts Set SR



P/N: Rx1-K040SR

For Single micro-Reactor Rx-3050SR,  
1 set

Contents of Rx Consumable Parts Set SR	Qty
1) Rx Deactivated SUS Reaction Tube A	3 ea
2) Rx Blank Quartz Insert A	10 ea
3) ITF Needle Set N	5 ea
4) Graphite Vespel Ferrule	10 ea
5) O-ring P-6W	5 ea
6) O-ring S4	10 ea
7) Fine Quartz Wool (0.5g)	1 ea

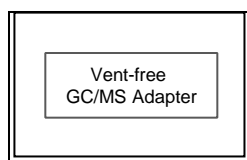
※ Use the following part numbers when ordering the parts individually. The quantities of each parts may differ from the Consumable Parts Set. The quantities of the parts contained in the Consumable Parts Set are shown in the list above.

No.	Part	Part name & specification	Qty	P/N (part number)
1)		Rx Deactivated SUS Reaction Tube A (6 mm i.d. x L 120 mm)	1 ea	Rx1-3540
2)		Rx Blank Quartz Insert A (3 mm i.d., 4 mm o.d., x 78 mm)	5 ea	Rx1-3541
3)		Needle Set N ( Deactivated needle, For PY-3030, PY-2020 and Rx-3050)	3 ea	PY1-1274
4)		Graphite Vespel Ferrule ( Hole diameter 6 mm, for interface )	5 ea	PY1-7911
5)		O-ring P-6W (Silicon rubber, white)	20 ea	PY1-2017
6)		O-ring S4 (Fluorine rubber, black)	10 ea	UV1-7701
7)		Fine Quartz Wool (0.5g)	1 ea	PY1-5112

# 7. micro-Reactor (Rx-3050TR, Rx-3050SR)

## Vent-free GC/MS Adapter

Vent-free GC/MS Adapter-50



P/N: MS402180


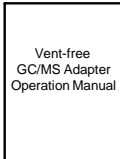

For Agilent, Shimadzu and JEOL,

1 set

Contents of Vent-free GC/MS Adapter - 50	Qty
1) VF Tube A-50 (with each one of VF metal ferrule D and VF nut B )	2 ea
2) Operation Manual	1 ea
3) VF Holder A	1 ea
4) Column Nut	2 ea
5) Plug Nut A	1 set
6) VF Metal Ferrule D	10 ea

※Refer to the page 13 of this catalog for more details.

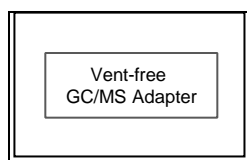
※ Use the following part numbers when ordering the parts individually. The quantities of each parts may differ from the Vent-free GC/MS Adapter-50. The quantities of the parts contained in the Vent-free GC/MS Adapter-50 are shown in the list above.

No.	Part	Part name & specification	Qty	P/N (part number)
1)		VF Tube A-50 (with each one of VF metal ferrule D and VF nut B )	1 ea	MS402159
2)		Operation Manual	-	※Not for sale. This can be downloaded from Frontier Lab's website for free.
3)		VF Holder A	1 ea	MS402288
4)		Column Nut	1 ea	MS604234
5)		Plug Nut A	1 set	MS402150
6)		VF Metal Ferrule D	20 ea	MS402167
7)		VF Nut B (use with VF Tube A-50)	3 ea	MS402286

# 7. micro-Reactor (Rx-3050TR, Rx-3050SR)

## Vent-free GC/MS Adapter

Vent-free GC/MS Adapter-70



P/N: MS402190

For Thermofisher,

1 set

Contents of Vent-free GC/MS Adapter - 70		Qty
1) VF Tube A-70 (with each one of Graphite Vespel Ferrule 05 and VF Nut 1/16 )		2 ea
2) Operation Manual		1 ea
3) VF Holder A		1 ea
4) Column Nut		2 ea
5) Plug Nut A		1 set
6) VF Metal Ferrule D		10 ea

※Refer to the page 13 of this catalog for more details.

※ Use the following part numbers when ordering the parts individually. The quantities of each parts may differ from the Vent-free GC/MS Adapter-70. The quantities of the parts contained in the Vent-free GC/MS Adapter-70 are shown in the list above.

No.	Part	Part name & specification	Qty	P/N (part number)
1)		VF Tube A-70 (with each one of Graphite Vespel Ferrule 05 and VF Nut 1/16 )	1 ea	MS402191
2)		Operation Manual	-	※Not for sale. This can be downloaded from Frontier Lab's website for free.
3)		VF Holder A	1 ea	MS402288
4)		Column Nut	1 ea	MS604234
5)		Plug Nut A	1 set	MS402150
6)		VF Metal Ferrule D	20 ea	MS402167
7)		Graphite Vespel Ferrule 05 (use with VF Tube A-70)	10 ea	PY1-7971
8)		VF Nut 1/16 (use with VF Tube A-70)	5 ea	MS402184

# 7. micro-Reactor (Rx-3050TR, Rx-3050SR)

## Tool Set






Rx Tool Set A P/N: Rx1-K050, 1 set

Contents of Rx Tool Set A	Qty
1) Tweezers	1 ea
2) Double Head Wrench (12/13 mm)	1 ea
3) Double Head Wrench (6/8 mm)	2 ea
4) Hex Screw Driver 2	1 ea
5) Hex Screw Driver 2.5	1 ea

Rx Tool Set B P/N: Rx1-K051, 1 set

Contents of Rx Tool Set B	Qty
1) Tweezers	1 ea
2) Double Head Wrench (12/13 mm)	1 ea
3) Double Head Wrench (6/8 mm)	2 ea
4) Hex Screw Driver 2	1 ea

※ Use the following part numbers when ordering the parts individually. The quantities of each parts may differ from the Rx Tool Set. The quantities of the parts contained in the Rx Tool Set are shown in the list above.

No.	Part	Part name & specification	Qty	P/N (part number)
1)		Tweezers	1 ea	PY1-7141
2)		Double Head Wrench (12/13 mm)	1 ea	Rx1-3531
3)		Double Head Wrench (6/8 mm)	1 ea	Rx1-3532
4)		Hex Screw Driver 2 (2.0 mm)	1 ea	PY1-7111
5)		Hex Screw Driver 2.5 (2.5 mm)	1 ea	PY1-7113

# 7. micro-Reactor (Rx-3050TR, Rx-3050SR)

## Miscellaneous Parts

PY1-EH10AL



**Eco-Stand AL**

For all Eco-Cups, 5ea

PY1-EP55F



**Eco-Pickup F**

For stainless steel Eco-Cup recovery,  
135 mm, 5ea

PY1-2025



**Septum**

For liquid sampler, 20/pk

PY1-7131



**Level Vial**

1 ea

UV1-7201



**Dewar 350**

Liquid nitrogen container,  
350ml, 1ea

UV1-7501



**Dewar Holder**

1ea

Rx1-K033



**Rx Piping Kit A**

1/16" SUS tube 1.5m, 0.8 mm i.d.,  
Carrier Gas Union Set, with 1/8" union, 1 set

PY1-3563



**ITF Cover 3030A**

for PY-3030D/S, Rx-3050TR/SR  
With 3 screws (incl. 2 spares), 1set

PY1-7616



**Furnace purge gas restrictor**

1 ea