



GMB Glasmechnik

c/o Zebra Box
Lettenweg 118
CH-4123 Allschwil

+41 (0) 61 711 72 00
info@glasmechnik.ch
www.glasmechnik.ch

EasyMax and OptiMax
Thermostat Systems
Reactors, Stirrers, and Probes
Accessories and Peripherals
Dosing and pH
Software Advanced Control
Reaction Calorimetry
Data Management
Automated Lab Reactor RX-10



Synthesis Workstations Beyond the Round Bottom Flask

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Glossary of Terms Used

ReactIR	= Mid-IR spectroscopy	PP	= Polypropylene
ETFE	= Ethylene tetrafluoroethylene	PPS GF40	= Polyphenylene sulfide, 40% glass
FEP	= Fluorinated ethylene propylene	PTFE C25	= Polytetrafluoroethylene, 25% carbon
FFKM	= Perfluoro-elastomer	PTFE GF25	= Polytetrafluoroethylene, 25% glass
FKM	= Fluoro-elastomer	PU	= Polyurethane
PA	= Polyamide	PVC	= Polyvinylchloride
PBT	= Polybutylene terephthalate	PVDF	= Polyvinylidene fluoride
PE	= Polyethylene	SAN	= Styrene acrylonitrile
PEEK	= Polyetheretherketone	VQM	= Silicone rubber
POM	= Polyoxymethylene		

The Modern Synthesis Lab

A New Workplace for Chemists

Smart synthesis workstations, combined with unattended dosing and automated sampling, provide a simple way to control reaction parameters around-the-clock, allowing the chemist to remain focused on improving chemistry.



Unattended Synthesis for Every Scientist

Programmed to 'supervise' experiment while chemist is absent allowing safe overnight experiments.



Wide Application Range

The optimization of chemical reactions is enabled by having access to a broad and seamless range of reaction conditions – dosing, sampling, stirring, and temperature control.

A modern synthesis workstation ensures recipe steps, experimental conditions, and analytical data are automatically recorded, making it easy to obtain valuable process knowledge.



EasySampler

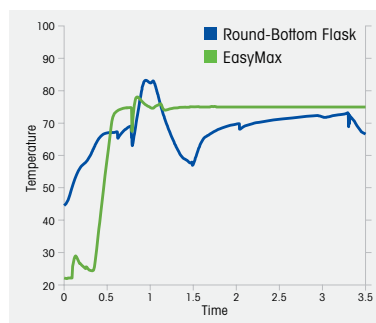


EasyMax



Personal Safety is Assured

Safe handling of hazardous and toxic compounds and solvents needs to be assured with remote control, built-in safety operating limits, and in-situ measurements.



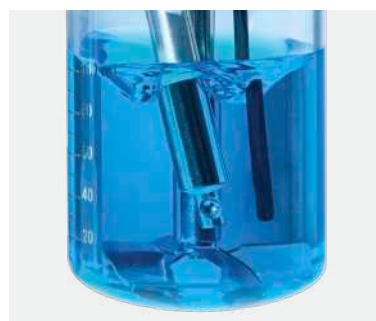
Precise Reaction Control

This ensures results are more reproducible, enables comparison between experiments with less repetition required and allows scale up to have a higher probability of success.



Data Recording and Retrieval

Ensure no data is lost, enhance understanding of the reaction, build institutional knowledge, and share information across organizations.

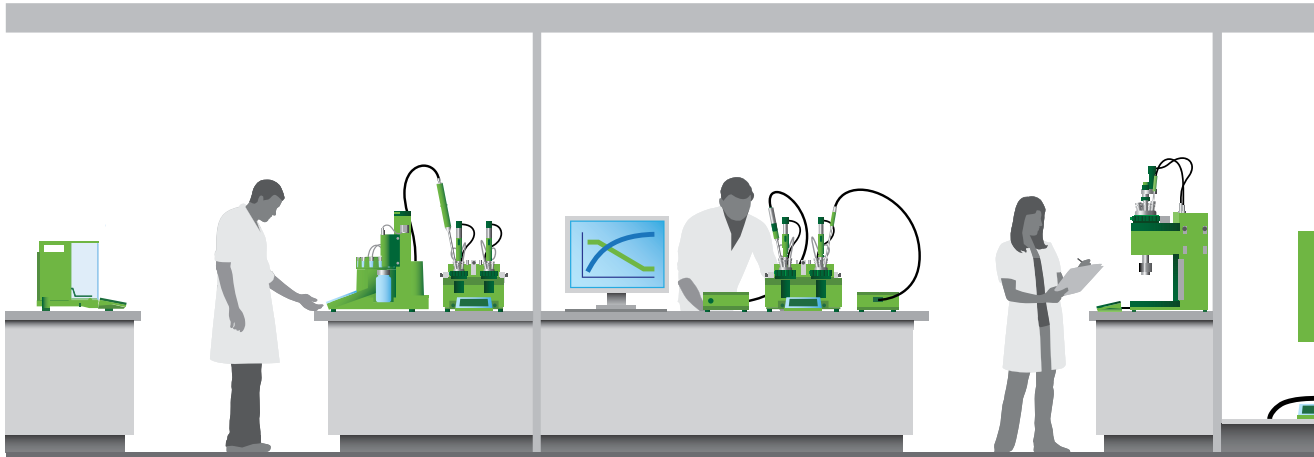


No Information Gaps

Run and sample experiments overnight – gain process understanding which is vital for good end-point decision at larger scale production.

Innovative Solutions

Along the Customer's Value Chain



Invent the Molecule

a. Create

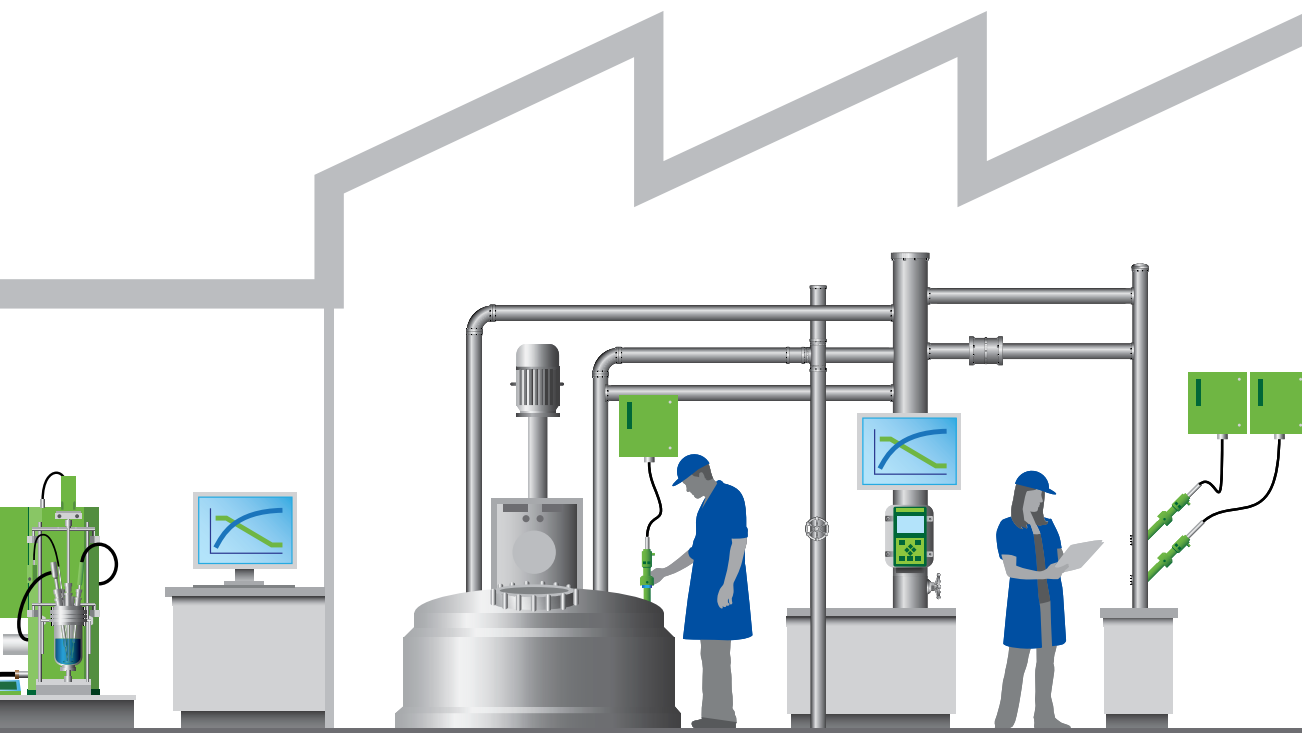
b. Optimize

Develop the Reaction

a. Create

b. Optimize

					EasySampler™
					EasyMax 102
					EasyMax 102 Basic
					EasyMax 102 LT Basic
					EasyMax 102 LT Advanced
					EasyMax 102
					EasyMax 402 Basic
					EasyMax 402 Basic
					EasyMax 402
					OptiMax™ 1001
					RX-10™
					EasyMax 102
					EasyMax 102 LT
					EasyMax 402
					OptiMax™ 1001
					RX-10™
					EasySampler™



Create the Process

Manufacture the Material

a. Characterize

b. Optimize

a. Test

b. Market

Sampler

2 Advanced

LT Advanced

+ EasyMax iControl

+ EasyMax HFCal

2 Advanced

EasyMax 402 Advanced

+ EasyMax iControl

+ EasyMax iControl

+ EasyMax HFCal

OptiMax

OptiMax

+ OptiMax iControl

+ OptiMax iControl

+ OptiMax HFCal

RX-10

RX-10

+ RX-10 iControl

+ RX-10 iControl

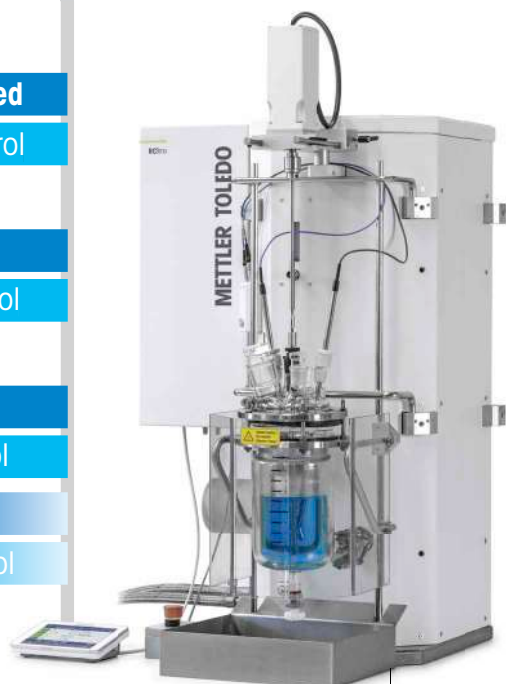
RC1mx

RC1mx

+ RC1mx iControl

+ RC1mx iControl

+ RC1mx HFCal



RC1mx™

EasySampler probes,
210 mm, 330 mm, 450 mm,
not part of this catalog



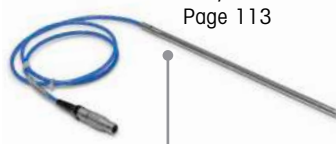
30083901
EasySampler, not part
of this catalog

SP-50 Syringes,
1 mL, 10 mL, 25 mL, 50 mL,
Page 129



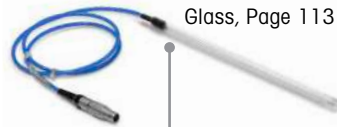
51161770
Dosing Unit SP-50,
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30090579
Calibration Heater,
Alloy C-22,
Page 113

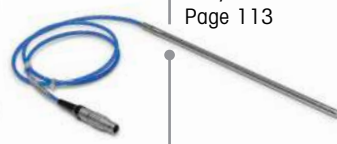


30090577
EasyMax HFCal,
Page 138

30303786
Calibration Heater,
Glass, Page 113



30050155
Calibration Heater,
Alloy C-22,
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30050151
OptiMax HFCal,
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EasyMax Basic



30548001
EasyMax 102 LT,
Page 10

EasyMax Basic Plus



30133676
EasyMax 102,
Page 11



EasyMax Advanced



30548000
EasyMax 102 LT,
Page 10

51161711
EasyMax 102,
Page 11



30133677
EasyMax 402,
Page 12



30084210
EasyMax 402,
Page 12



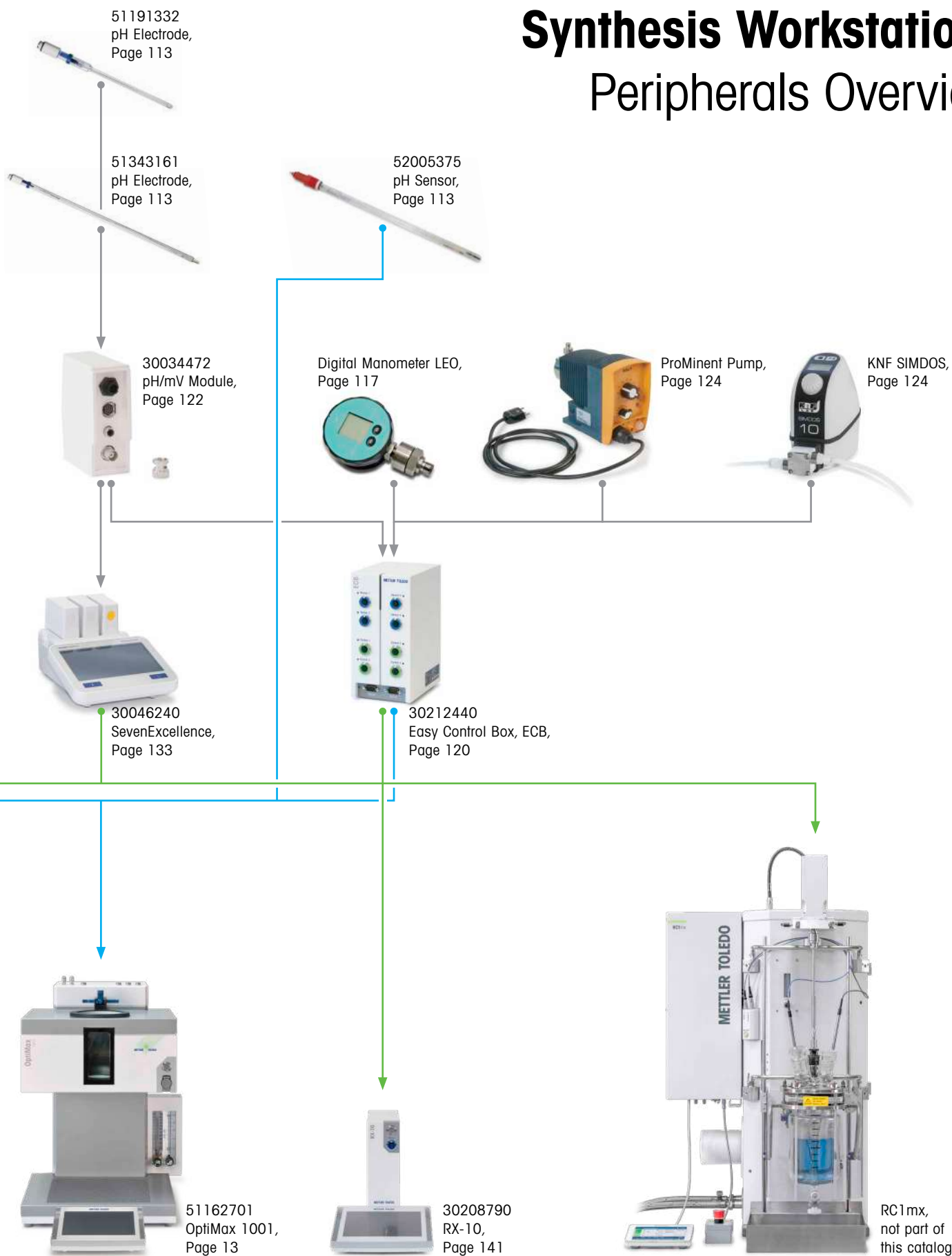
30721088
Basic Plus Upgrade, Page 19

30721089
Advanced Upgrade, Page 19



Synthesis Workstations

Peripherals Overview



iControl Software – Instrument, Office and iC Safety, Page 135

iC Data Center, Page 140

EasyMax™ 102 LT Thermostat System



EasyMax 102 LT	
Material	Powder-coated stainless steel with FEP-coated cover plate
Power Voltage	100 – 240 VAC
Backlight	2 LEDs per reactor
Heating/Cooling	Solid state thermostat
Temperature Mode	Jacket control, reaction mixture control, distillation/reflux control
Temperature Range	–90 °C to 80 °C, jacket temperature (Tj)
Stirring Type	Built-in magnetic and overhead stirring
Stirring Speed	50 rpm to 1000 rpm
Size	430 mm x 360 mm x 280 mm (w, d, h), 430 mm x 360 mm x 500 mm (w, d, h with overhead stirrer)
Weight	21 kg, including touchscreen
Quantity	1

30548001 EasyMax 102 LT Basic and 30548000 EasyMax 102 LT Advanced thermostat system consisting of

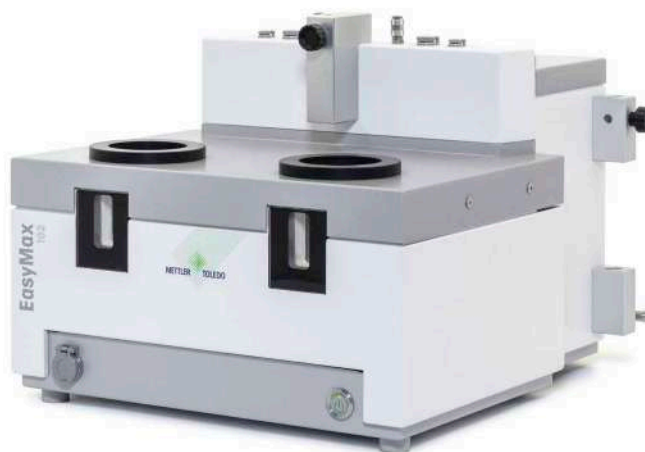
Order number	Product description	Quantity	Page
	EasyMax 102 LT reactor block	1	11
51161883	TFT touchscreen 7", 1 m cable	1	14
30778593	Protective cover for touchscreen	1	14
51191125	PVC hose for reflux condenser, Ø 8/12 mm, length 5 m	1	14
51161187	PVC industrial hose for coolant, 15 bar, Ø 8/14 mm, length 2.5 m	2	14
51192239	PVC industrial hose for purge gas, 18 bar, Ø 4/10 mm, length 2 m	1	15
51161186	PVC hose for purge gas, Ø 4/6 mm, length 2 m	2	15
51191373	Y-piece for purge gas tubing	2	15
51191916	Reducing connector for purge gas tubing	1	15
51161827	Flowmeter set	1	15
51190324	Quick connect coupling for purge gas inlet	4	15
51192126	Hose clamp for PVC tube	8	15
51191914	Knurled screw, M6 x 10 mm	3	16
30565897	Hose connectors, M16 x 1, for coolant	1	16
103298	Antistatic additive for coolant, 250 mL per bottle, 4 bottles in a set	1	16
	Insulation tubing for cooling connectors	1	16

EasyMax 102 LT Upgrade Possibilities

Order Number	Product Description	Quantity	Page
30721088	EasyMax Basic Plus Upgrade	1	19
30721089	EasyMax Advanced Upgrade	1	19

EasyMax™ 102 Thermostat System

EasyMax 102	
Material	Powder-coated stainless steel with FEP-coated cover plate
Power Voltage	100 – 240 VAC
Backlight	2 LEDs per reactor
Heating/Cooling	Solid state thermostat
Temperature Mode	Jacket control, reaction mixture control, distillation/reflux control
Temperature Range	–40 °C to 180 °C, jacket temperature (Tj)
Stirring Type	Built-in magnetic and overhead stirring
Stirring Speed	50 rpm to 1000 rpm
Size	330 mm x 360 mm x 280 mm (w, d, h), 330 mm x 360 mm x 500 mm (w, d, h with overhead stirrer)
Weight	16 kg, including touchscreen
Quantity	1



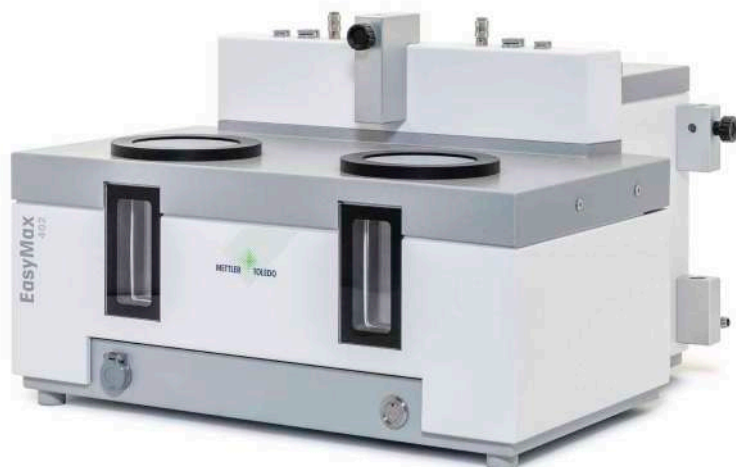
30133676 EasyMax 102 Basic and 51161711 EasyMax 102 Advanced thermostat system consisting of

Order Number	Product Description	Quantity	Page
	EasyMax 102 reactor block	1	10
51161883	TFT touchscreen 7", 1 m cable	1	14
30778593	Protective cover for touchscreen	1	14
51191125	PVC hose for reflux condenser, Ø 8/12 mm, length 5 m	1	14
51161187	PVC industrial hose for coolant, 15 bar, Ø 8/14 mm, length 2.5 m	2	14
51192239	PVC industrial hose for purge gas, 18 bar, Ø 4/10 mm, length 2 m	1	15
51161186	PVC hose for purge gas, Ø 4/6 mm, length 2 m	2	15
51191373	Y-piece for purge gas tubing	2	15
51191916	Reducing connector for purge gas tubing	1	15
51161827	Flowmeter set	1	15
51190324	Quick connect coupling for purge gas inlet	4	15
51192126	Hose clamp for PVC tube	8	15
51191915	Flow indicator for coolant	1	16
51191914	Knurled screw, M6 x 10 mm	3	16

EasyMax 102 Basic Upgrade Possibilities

Order Number	Product Description	Quantity	Page
30721088	EasyMax Basic Plus Upgrade	1	19
30721089	EasyMax Advanced Upgrade	1	19

EasyMax™ 402 Thermostat System



EasyMax 402	
Material	Powder-coated stainless steel with FEP-coated cover plate
Power Voltage	100 – 240 VAC
Backlight	2 LEDs per reactor
Heating/Cooling	Solid state thermostat
Temperature Mode	Jacket control, reaction mixture control, distillation/reflux control
Temperature Range	–40 °C to 180 °C, jacket temperature (TJ)
Stirring Type	Overhead stirring
Stirring Speed	50 rpm to 1000 rpm
Size	430 mm x 360 mm x 280 mm (w, d, h), 430 mm x 360 mm x 500 mm (w, d, h with overhead stirrer)
Weight	20 kg, including touchscreen
Quantity	1

30133677 EasyMax 402 Basic and 30084210 EasyMax 402 Advanced thermostat system consisting of

Order number	Product description	Quantity	Page
	EasyMax 402 reactor block	1	12
51161883	TFT touchscreen 7", 1 m cable	1	14
30778593	Protective cover for touchscreen	1	14
51191125	PVC hose for reflux condenser, Ø 8/12 mm, length 5 m	1	14
51161187	PVC industrial hose for coolant, 15 bar, Ø 8/14 mm, length 2.5 m	2	14
51192239	PVC industrial hose for purge gas, 18 bar, Ø 4/10 mm, length 2 m	1	15
51161186	PVC hose for purge gas, Ø 4/6 mm, length 2 m	2	15
51191373	Y-piece for purge gas tubing	2	15
51191916	Reducing connector for purge gas tubing	1	15
51161827	Flowmeter set	1	15
51190324	Quick connect coupling for purge gas inlet	4	15
51192126	Hose clamp for PVC tube	8	15
51191915	Flow indicator for coolant	1	15
51191914	Knurled screw, M6 x 10 mm	3	16

EasyMax 402 Basic Upgrade Possibilities

Order Number	Product Description	Quantity	Page
30721088	EasyMax Basic Plus Upgrade	1	19
30721089	EasyMax Advanced Upgrade	1	19

OptiMax™ 1001 Thermostat System

OptiMax 1001	
Material	Powder-coated stainless steel with FEP-coated cover plate
Power Voltage	100 – 240 VAC
Back-/Frontlight	12 LEDs
Heating/Cooling	Solid state thermostat
Temperature Mode	Jacket control, reaction mixture control, distillation/reflux control
Temperature Range	–40 °C to 180 °C, jacket temperature (TJ)
Stirring Type	Overhead stirring
Stirring Speed	30 rpm to 1200 rpm
Size	390 mm x 415 mm x 540 mm (w, d, h), 390 mm x 415 mm x 780 mm (w, d, h with overhead stirrer) Width includes the flowmeter
Weight	35 kg, including touchscreen
Quantity	1



51162701 OptiMax thermostat system set consisting of

Order Number	Product Description	Quantity	Page
	OptiMax 1001 reactor block	1	13
51161883	TFT touchscreen 7", 1 m cable	1	14
30778593	Protective cover for touchscreen	1	14
51191125	PVC hose for reflux condenser, Ø 8/12 mm, length 5 m	1	14
51161187	PVC industrial hose for coolant, 15 bar, Ø 8/14 mm, length 2.5 m	2	14
51192239	PVC industrial hose for purge gas, 18 bar, Ø 4/10 mm, length 2 m	1	15
51161186	PVC hose for purge gas, Ø 4/6 mm, length 2 m	1	15
51191373	Y-piece for purge gas tubing	1	15
51191916	Reducing connector for purge gas tubing	3	15
51190324	Quick connect coupling for purge gas inlet	5	15
51192126	Hose clamp for PVC tube	4	15
51191915	Flow indicator for coolant	1	15
51191914	Knurled screw, M6 x 10 mm	4	16

51162701 OptiMax thermostat system set consisting of (continued)

Order Number	Product Description	Quantity	Page
51162860	Reactor block plug for bottom drain valve opening	1	16
51192209	O-ring for 51162860 plug, Ø 50.39 mm x 3.53 mm	1	16
51161782	Bubble counter	1	17
51161603	Magnetic bubble counter holder	1	17
51162886	Accessories holder set	1	17
51192208	Glass adapter ST19/26-GL14	2	17
51190317	Screw cap GL14, with aperture	2	17
51103947	Sealing ring for screw cap GL14 PTFE/silicone, aperture 6 mm	2	17
30519615	Purge gas regulation valve	1	17
51161099	Lab bar, 600 mm x 14 mm	4	17
	Safeguard button (30260369 Emergency button)	1	17
51162690	Overhead stirrer drive complete	1	87

Thermostat System Parts



51161883	TFT touchscreen 7", 1 m cable
Material	PA, aluminium
Size	195 mm x 135 mm x 60 mm (w, d, h)
Quantity	1



30778593	Protective cover for touchscreen
Material	PET
Quantity	1



51191125	PVC hose for reflux condenser
Material	PVC
Size	Ø 8/12 mm, length 5 m
Quantity	1



51161187	PVC industrial hose for coolant
Material	PVC
Pressure Range	15 bar
Size	Ø 8/14 mm, length 2.5 m
Quantity	1



51192239	PVC industrial hose for purge gas
Material	PVC
Pressure Range	18 bar
Size	Ø 4/10 mm, length 2 m
Quantity	1



51161186	PVC hose for purge gas
Material	PVC
Size	Ø 4/6 mm, length 2 m
Quantity	1



51191373	Y-piece for gas tubing
Material	Acetal resin
Size	For tubes with inner Ø 4 mm
Quantity	2 pcs in a set



51191916	Reducing connector for purge gas tubing
Material	PP
Temperature	Max. 30 °C
Size	For tubes with inner Ø 7 mm to 11 mm; 4 mm to 7 mm
Quantity	1



51161827	Flowmeter set for water and gas, including lab bar holder and water/gas inlet adapter
Material	Stainless steel, acrylic, brass
Temperature	Max. 65 °C
Quantity	1 gas flowmeter, 1 water flowmeter, 1 adapter for gas inlet Ø 4.8 mm 1/8" (for tubes inner Ø 4 mm) and 1 adapter for water inlet Ø 9.6 mm 1/4" (for tubes inner Ø 8/12 mm) in a set

Note: Only available for EasyMax 102 and 402



51190324	Quick connect coupling for purge gas inlet
Material	Stainless steel
Size	For tubes with inner Ø 4 mm
Quantity	1



51192126	Hose clamp for PVC tube
Material	Stainless steel
Size	Ø 10 mm to 17 mm
Quantity	1



51191915	Flow indicator for coolant
Material	SAN
Temperature	Max. 30 °C
Size	For tubes with inner Ø 6 mm to 9 mm
Quantity	1



51191914	Knurled screw, M6 x 10
Size	M6 x 10 mm
Quantity	1



51191235	Identification clips for adhesive labels to label individual sensors, reactors etc.
Size	For cables with Ø 2 mm to 4.5 mm
Quantity	1

Thermostat System Additional Parts for EasyMax 102 LT



30565897	Hose connectors and blind nuts for coolant
Material	Stainless steel
Size	Hose connector to 8 mm tubing, nut M16 x 1
Quantity	2 of each in a set



	Insulation tubing for cooling connectors
Material	Synthetic rubber
Size	Inner Ø 18 mm, insulation thickness 14 mm, length 300 mm
Quantity	2 pcs in a set

Note: Tubings are not sold separately



103298	Antistatic additive for coolant
Volume	250 mL per bottle
Quantity	4 bottles in a set

Thermostat System Additional Parts for OptiMax



51162860	Reactor block plug for bottom drain valve opening
Material	PTFE GF25
Size	Ø 56 mm x 35 mm
Quantity	1

Note: 51192209 O-ring needed



51192209	O-ring for 51162860 plug
Material	FKM
Size	Ø 50.39 mm x 3.53 mm, AS No. 226
Quantity	1

Optional Accessories For the Thermostat Systems



51161803	Accessories holder set for two-piece reactor to be attached to the lab bar of the EasyMax 102 system – for stirrer motor, for condenser (ST14), for Tr sensor (ST10)
Material	Stainless steel, PTFE GF25
Aperture Size	2 x ST14, 1 x ST10
Quantity	2 pcs in a set



51161804	Accessories holder set for one-piece reactor to be attached to the lab bar of the EasyMax 102 system – for stirrer motor, for condenser (ST19), for Tr sensor (ST10)
Material	Stainless steel, PTFE GF25
Aperture Size	2 x ST19, 1 x ST10
Quantity	2 pcs in a set



51162886	Accessories holder set to be attached to the lab bar of the EasyMax 402 or OptiMax 1001 systems – for stirrer motor, for Ø 6 mm probes (ST14), for Ø 12 mm probes (ST19), for Ø 19 mm probes (ST24)
Material	Stainless steel, PTFE GF25
Aperture Size	Holder 1: 1 x ST14, 2 x ST19 Holder 2: 1 x ST24, 2 x ST19
Quantity	2 pcs in a set



51161802	Bubble counter set Bubble counter glass (for tubes inner Ø 4 mm), magnetic holder, gas regulation valve Ø 6 mm to 1.8"
Material	PET, borosilicate glass, PA
Quantity	2 of each in a set

Needed items to connect to glass reactor (2 of each):
 51191267 Glass adapter ST14/23-GL14, Page 96
 51190317 Screw cap GL14, with aperture, Page 96
 51103947 Sealing ring for screw cap GL14 PTFE/silicone, Page 96



30015271	Flowmeter for water
Material	Acrylic, brass
Temperature	Max. 65 °C
Size	100 mm, 0.8 L/min to 9 L/min
Quantity	1



30015272	Flowmeter for gas
Material	Acrylic, brass
Temperature	Max. 65 °C
Size	100 mm, 1 L/min to 10 L/min
Quantity	1

OptiMax Starter Kit

The OptiMax starter kit simplifies the part evaluation and ordering process. The starter kit combines all the key items for a 1000 mL two-piece reactor setup in just one part number.

The OptiMax starter kit includes the following key components:

- OptiMax thermostat system including touchscreen
- Stirrer motor and adapter
- Tr temperature probe including adapter
- 1000 mL two-piece glass reactor
- Cover and reactor holders
- Pitched blade stirrer, downward, Alloy C-22
- Bar type baffle, Alloy C-22 including adapter
- Stoppers and “Keck” clamps for all open ports
- Accessories holder

The OptiMax starter kit can be combined individually with additional items in this catalog.



51162830

OptiMax starter kit consists of the following items

Order Number	Product Description	Quantity	Page
51162701	OptiMax thermostat system	1	13
51162831	OptiMax 1000 mL two-piece glass reactor set	1	68
51162720	PTFE adapter for Tr, pH and turbidity probe	1	98
51162839	Tr probe, Alloy C-22	1	112
51162886	Accessories holder set	1	17

Receptacles

EasyMax 102



30133675	Receptacle 5 x 8 mL test tubes thermostat sleeve for EasyMax 102
Material	Aluminium anodized
Quantity	1



51161635	Receptacle 4 x 10 mL test tubes thermostat sleeve for EasyMax 102
Material	Aluminium anodized
Quantity	1



51161634	Receptacle 3 x 25 mL test tubes thermostat sleeve for EasyMax 102
Material	Aluminium anodized
Quantity	1



51161716	Receptacle for 50 mL reactor thermostat sleeve for EasyMax 102
Material	Aluminium anodized
Quantity	1



51161815	Receptacle for 50 mL one-piece reactor thermostat sleeve for EasyMax 102
Material	Aluminium anodized
Quantity	1

25 mL Glass Reactor Set

EasyMax 102



51161854 25 mL glass reactor set for screening

The 25 mL reactor provides the possibility to screen multiple reactions from 3 mL to 25 mL.

EasyMax 25 mL glass reactor set for screening consisting of

Order Number	Product Description	Quantity	Page
51161853	Test tube 25 mL GL18, borosilicate glass	6	28
51191400	Screw cap GL18, with aperture, PBT, 10 pcs in a set	1	29
51191399	Silicone rubber seal (Septa) GL18, 20 pcs in a set	1	29
51161634	Receptacle for 3 x 25 mL test tubes	1	24
51192096	Magnetic stir bar, 4.5 mm x 15 mm	3	84

Note: Large image may not show all parts in the set.

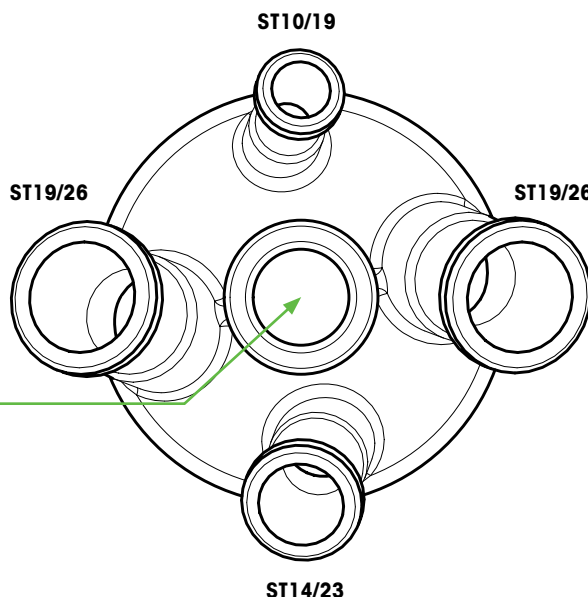
See Pages 73 – 75 for possible reactor/cover/stirrer combinations.

100 mL one-piece glass reactor

EasyMax 102, 102 LT, and 402



51161786	100 mL one-piece glass reactor , 5 ports 1 x ST10/19, 1 x ST14/23, 2 x ST19/26, center ST19/26
Material	Borosilicate glass
Working Volume	100 mL, maximum
Nominal Volume	180 mL
Size	Inner Ø 52 mm, height 150 mm, wall 2.5 mm
Quantity	1



ST19/26 Overhead stirrer port

Needed items:

51161676	Reactor stand for 100 mL one-piece reactor, Page 71
30086802	Receptacle for 100 mL reactor, Working with EasyMax 402, Page 25
51161813	Glass stirrer shaft for 50 mL/100 mL one-piece reactor, Page 82
51161749	Half-moon stirrer blade, Page 83

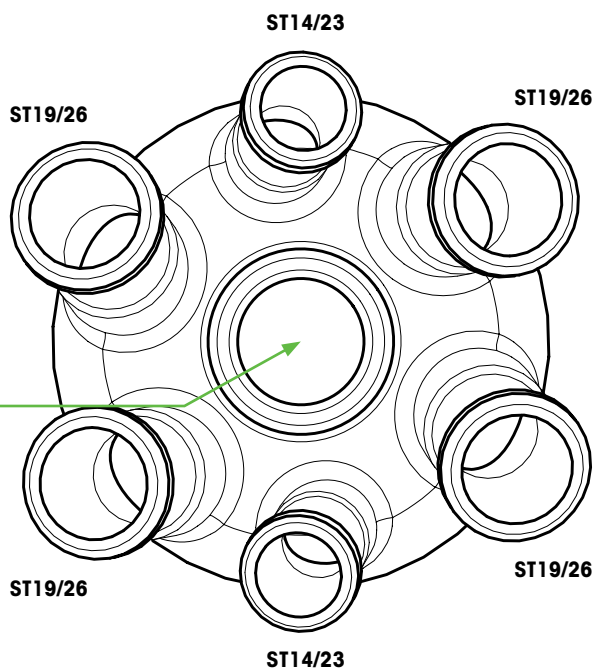
250 mL one-piece glass reactor

OptiMax 1001



51162734	250 mL one-piece glass reactor, 7 ports 2 x ST14/23, 4 x ST19/26, center ST24/29
Material	Borosilicate glass
Working Volume	250 mL, maximum
Nominal Volume	400 mL
Size	Inner Ø 62 mm, height 205 mm, wall 2.5 mm
Quantity	1

ST24/29 Overhead stirrer port



Needed items:

51162758	Reactor stand for 250 mL one-piece reactor, Page 71
51162698	Receptacle for 250 mL reactor, Page 25
51162681	Glass stirrer shaft for 250 mL/500 mL/ 1000 mL reactors, Page 82
51162684	Half-moon stirrer blade, Page 83

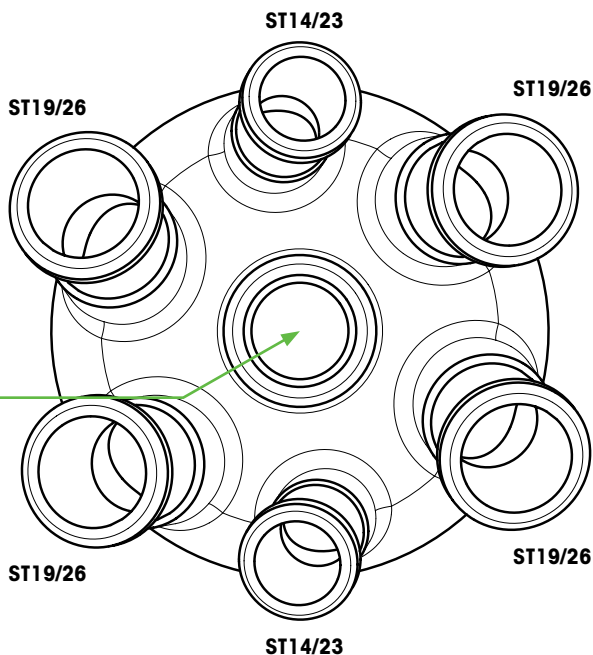
See Pages 73 – 75 for possible reactor/cover/stirrer combinations.

400 mL one-piece glass reactor

EasyMax 402



ST19/26 Overhead stirrer port



30131163	400 mL one-piece glass reactor, 7 ports 2 x ST14/23, 4 x ST19/26, center ST19/26
Material	Borosilicate glass
Working Volume	400 mL, maximum
Nominal Volume	425 mL
Size	Inner Ø 72.6 mm, height 206 mm, wall 2.5 mm
Quantity	1

Needed items:

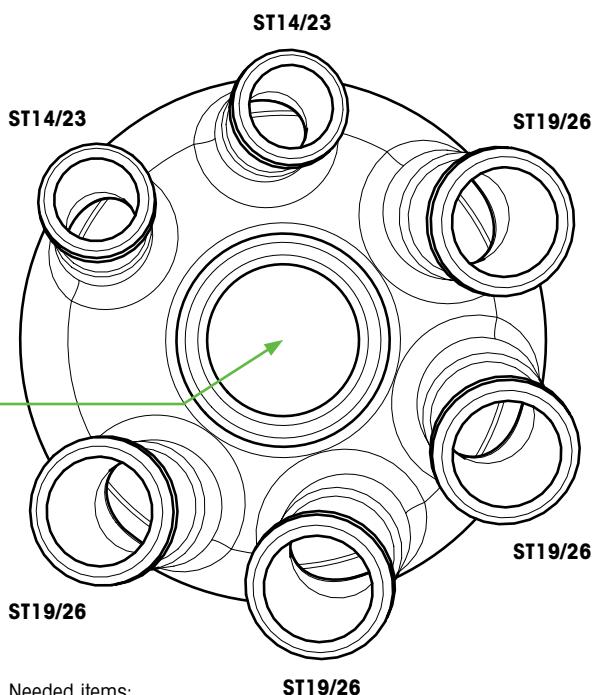
51162759	Reactor stand for 400 mL reactor , Page 71
30111614	Glass stirrer shaft for 400 mL one-piece reactor , Page 82
51161749	Half-moon stirrer blade , Page 83

500 mL one-piece glass reactor

OptiMax 1001



ST24/29 Overhead stirrer port



51162733	500 mL one-piece glass reactor, 7 ports 2 x ST14/23, 4 x ST19/26, center ST24/29
Material	Borosilicate glass
Working Volume	500 mL, maximum
Nominal Volume	700 mL
Size	Inner Ø 77 mm, height 225 mm, wall 2.5 mm
Quantity	1

Needed items:

51162759	Reactor stand for 500 mL one-piece reactor , Page 71
51162670	Receptacle for 500 mL reactor , Page 25
51162681	Glass stirrer shaft for 250/500/1000 mL reactors , Page 82
51162683	Half-moon stirrer blade for 500 mL reactor , Page 83

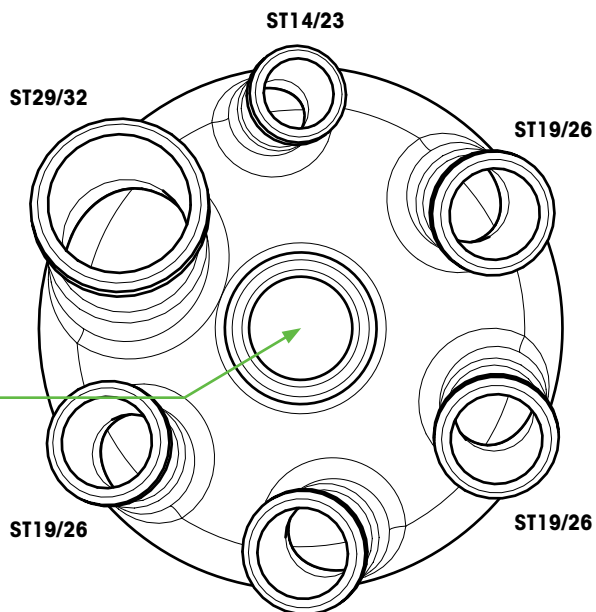
See Pages 73 – 75 for possible reactor/cover/stirrer combinations.

1000 mL one-piece glass reactor

OptiMax 1001



ST24/29 Overhead stirrer port



51162732	1000 mL one-piece glass reactor, 7 ports 1 x ST14/23, 4 x ST19/26, 1 x ST29/32, center ST24/29
Material	Borosilicate glass
Working Volume	1000 mL, maximum
Nominal Volume	1150 mL
Size	Inner Ø 101 mm, height 230 mm, wall 3 mm
Quantity	1

Needed items:

51162760	Reactor stand for 1000 mL one-piece reactor, Page 71
51162681	Glass stirrer shaft for 250/500/1000 mL reactors, Page 82
51162682	Half-moon stirrer blade for 1000 mL reactor, Page 83

50 mL One-Piece Glass Reactor Set

EasyMax 102



51161838 5-port 50 mL one-piece glass reactor set

The one piece reactor meets round bottom flask requirements so that standard lab material and handling can be used. The reactor has a maximum working volume of 50 mL and a nominal volume of 100 mL.

Magnetic and overhead stirring (only with dedicated glass stirrer and blade) are available.

EasyMax 50 mL one-piece glass reactor set consisting of

Order Number	Product Description	Quantity	Page
51161792	50 mL one-piece glass reactor, 5 ports	1	33
51161816	Reactor stand for 50 mL reactor	1	71
51161815	Receptacle for 50 mL one-piece reactor	1	24
51161813	Glass stirrer shaft for 50 mL/100 mL one-piece reactor, Ø 8 mm, length 192 mm	1	82
51161814	Half-moon stirrer blade, 15 mm x 26 mm	1	83
51191159	Magnetic stir bar, 7 mm x 30 mm	1	84
51161822	Non-height adjustable stirrer adapter, ST19/26, including sealing ring	1	86
51161728	Adapter ST10/19 with 1 UNF 1/4-28	1	97
51191514	Ferrule for tubing and sensors of outer Ø 3.2 mm, 4 pcs in a set	1	97
51191515	Nut for UNF 1/4-28, 4 pcs in a set	1	97
71517	Glass stopper ST19/26	3	110
51190878	Glass stopper ST14/23	1	110
51191167	Glass stopper ST10/19	1	110
51191429	"Keck" clamp ST19	3	111
51191505	"Keck" clamp ST14	1	111
51191504	"Keck" clamp ST10	1	111

Note: Large image may not show all parts in the set.

100 mL One-Piece Glass Reactor Set

EasyMax 102 and 102 LT



51161805

5-port 100 mL one-piece glass reactor set

The one-piece reactor is developed to meet round bottom flask requirements so that standard lab material and handling can be used. The reactor has a maximum working volume of 100 mL and a nominal volume of 180 mL.

Magnetic and overhead stirring (only with dedicated glass stirrer and blade) possibilities are available. Only overhead stirring is possible with EasyMax 402.

The ST14 port can be used for inserting e.g. 9.5 mm analytical probes.

EasyMax 100 mL one-piece glass reactor set consisting of

Order Number	Product Description	Quantity	Page
51161786	100 mL one-piece glass reactor, 5 ports	1	34
51161676	Reactor stand for 100 mL reactor	1	71
51161813	Glass stirrer shaft for 50 mL/100 mL one-piece reactor, Ø 8 mm, length 192 mm	1	82
51161749	Half-moon stirrer blade, 15 mm x 40 mm	1	83
51161822	Non-height adjustable stirrer adapter, ST19/26, including sealing ring	1	86
51191939	Magnetic stir bar, 8 mm x 40 mm	1	84
51161728	Adapter ST10/19 with 1 UNF 1/4-28 port	1	97
51191514	Ferrule for tubing and sensors of outer Ø 3.2 mm, 4 pcs in a set	1	97
51191515	Nut for UNF 1/4-28, 4 pcs in a set	1	97
71517	Glass stopper ST19/26	3	110
51190878	Glass stopper ST14/23	1	110
51191167	Glass stopper ST10/19	1	110
51191429	"Keck" clamp ST19	3	111
51191505	"Keck" clamp ST14	1	111
51191504	"Keck" clamp ST10	1	111

Note: Large image may not show all parts in the set.

250 mL One-Piece Glass Reactor Set

OptiMax 1001



51162836

7-port 250 mL one-piece glass reactor set

The different OptiMax reactor sets combine all the available parts for a particular reactor type and volume in just one part number. This simplifies the evaluation and ordering process and makes it error-free.

The 250 mL one-piece glass reactor has a maximum working volume of 250 mL and a nominal volume of 400 mL.

OptiMax 250 mL one-piece glass reactor set consisting of

Order Number	Product Description	Quantity	Page
51162734	250 mL one-piece glass reactor, 7 ports	1	34
51162758	Reactor stand for 250 mL reactor	1	65
51162698	Receptacle for 250 mL reactor	1	25
51162681	Glass stirrer shaft for 250 mL/500 mL/1000 mL one-piece reactor, Ø 10 mm, length 380 mm	1	82
51162684	Half-moon stirrer blade, 19 mm x 43 mm	1	83
71517	Glass stopper ST19/26	4	110
51190878	Glass stopper ST14/23	2	110
51191167	"Keck" clamp ST24	1	111
51191429	"Keck" clamp ST19	4	111
51191505	"Keck" clamp ST14	2	111

Note: Large image may not show all parts in the set.

400 mL One-Piece Glass Reactor Set

EasyMax 402



30138936

7-port 400 mL one-piece glass reactor set

The 400 mL one-piece reactor set has a maximum working volume of 400 mL and nominal volume of 425 mL for work up.

Overhead stirring possibilities are available.

EasyMax 400 mL one-piece glass reactor set consisting of

Order Number	Product Description	Quantity	Page
30131163	400 mL one-piece glass reactor, 7 ports	1	35
51162759	Reactor stand for 400 mL reactor	1	71
30111614	Glass stirrer shaft for 400 mL one-piece reactor, Ø 8 mm, length 242 mm	1	82
51161749	Half-moon stirrer blade, 15 mm x 40 mm	1	83
51161822	Non-height adjustable stirrer adapter, ST19/26, including sealing ring	1	86
30125685	Adapter ST14/23 with 1 UNF 1/4-28 port	1	97
51191514	Ferrule for tubing and sensors of outer Ø 3.2 mm, 4 pcs in a set	1	97
51191515	Nut for UNF 1/4-28, 4 pcs in a set	1	97
71517	Glass stopper ST19/26	5	110
51190878	Glass stopper ST14/23	1	110
51191429	"Keck" clamp ST19	5	111
51191505	"Keck" clamp ST14	2	111

Note: Large image may not show all parts in the set.

500 mL One-Piece Glass Reactor Set

OptiMax 1001



51162835

7-port 500 mL one-piece glass reactor set

The different OptiMax reactor sets combine all the available parts for a particular reactor type and volume in just one part number. This simplifies the evaluation and ordering process and makes it error-free.

The 500 mL one-piece glass reactor has a maximum working volume of 500 mL and a nominal volume of 700 mL.

OptiMax 500 mL one-piece glass reactor set consisting of

Order Number	Product Description	Quantity	Page
51162733	500 mL one-piece glass reactor, 7 ports	1	35
51162759	Reactor stand for 500 mL reactor	1	71
51162670	Receptacle for 500 mL reactor	1	25
51162681	Glass stirrer shaft for 250 mL/500 mL/1000 mL one-piece reactor, Ø 10 mm, length 380 mm	1	82
51162683	Half-moon stirrer blade, 19 mm x 54 mm	1	83
51162638	Bar type baffle for 500 mL reactor, Alloy C-22	1	94
51104154	PTFE adapter for baffle	1	100
71517	Glass stopper ST19/26	4	110
51190878	Glass stopper ST14/23	1	110
51192167	"Keck" clamp ST24	1	111
51191429	"Keck" clamp ST19	4	111
51191505	"Keck" clamp ST14	2	111

Note: Large image may not show all parts in the set.

1000 mL One-Piece Glass Reactor Set

OptiMax 1001



51162834

7-port 1000 mL one-piece glass reactor set

The different OptiMax reactor sets combine all the available parts for a particular reactor type and volume in just one part number. This simplifies the evaluation and ordering process and makes it error-free.

The 1000 mL one-piece glass reactor has a maximum working volume of 1000 mL and a nominal volume of 1150 mL.

OptiMax 1000 mL one-piece glass reactor set consisting of

Order Number	Product Description	Quantity	Page
51162732	1000 mL one-piece glass reactor, 7 ports	1	36
51162760	Reactor stand for 1000 mL reactor	1	71
51162681	Glass stirrer shaft for 250 mL/500 mL/1000 mL one-piece reactor, Ø 10 mm, length 380 mm	1	82
51162682	Half-moon stirrer blade, 19 mm x 71 mm	1	83
51162637	Bar type baffle for 1000 mL reactor, Alloy C-22	1	94
51104154	PTFE adapter for baffle	1	100
71518	Glass stopper ST29/32	1	110
71517	Glass stopper ST19/26	4	110
51190878	Glass stopper ST14/23	1	110
51192168	"Keck" clamp ST29	1	111
51192167	"Keck" clamp ST24	1	111
51191429	"Keck" clamp ST19	4	111
51191505	"Keck" clamp ST14	1	111

Note: Large image may not show all parts in the set.

Two-Piece Glass Reactors



50 mL glass reactor
EasyMax 102

51161255	50 mL glass reactor
Material	Borosilicate glass
Working Volume	50 mL, maximum
Nominal Volume	70 mL
Size	Inner Ø 36 mm, height 74.5 mm, wall 1.5 mm
100 mL.	1

Needed items:

51161716	Receptacle for 50 mL reactor , Page 24
51161288	Reactor stand , Page 71
51160817	Glass cover for 50 mL reactor, 7 ports Page 47



100 mL glass reactor
EasyMax 102 and 402

51161620	100 mL glass reactor
Material	Borosilicate glass
Working Volume	100 mL, maximum
Nominal Volume	150 mL
Size	Inner Ø 52 mm, height 90 mm, wall 2.5 mm
Quantity	1

Needed items:

51161676	Reactor stand for 100 mL reactor , Page 71
30086802	EasyMax 402 receptacle for 100 mL reactor , working with EasyMax 402, Page 25
51161619	Glass cover for 100 mL reactor, 6 ports , Page 48
51161795	PTFE cover for 100 mL reactor, 6 ports With compression fittings and standard tapered joints for 100 mL reactor, Page 48
30090541	PTFE cover for 100 mL reactor, 6 ports For ParticleTrack and ReactiR, for 100 mL reactor, Page 49
30090542	PTFE cover for 100 mL reactor, 6 ports For ParticleView V19, ParticleTrack and ReactiR, for 100 mL reactor, Page 49

See Pages 73 – 75 for possible reactor/cover/stirrer combinations.



100 mL high workup volume glass reactor

EasyMax 102, 102 LT, and 402

30111634	100 mL high workup volume glass reactor
Material	Borosilicate glass
Working Volume	100 mL, maximum
Nominal Volume	200 mL
Size	Inner Ø 52 mm, height 130 mm, wall 2.5 mm
Quantity	1

Needed items:

51161676	Reactor stand for 100 mL reactor , Page 71
30086802	EasyMax 402 receptacle for 100 mL reactor , working with EasyMax 402, Page 25
51161619	Glass cover for 100 mL reactor, 6 ports , Page 48
51161795	PTFE cover for 100 mL reactor, 6 ports With compression fittings and standard tapered joints for 100 mL reactor, Page 48
30090541	PTFE cover for 100 mL reactor, 6 ports For ParticleTrack and ReactIR, for 100 mL reactor, Page 49
30090542	PTFE cover for 100 mL reactor, 6 ports For ParticleView V19, ParticleTrack and ReactIR, for 100 mL reactor, Page 49
30593255	Purge gas cover Working with EasyMax 102 LT, Page 45



250 mL glass reactor

OptiMax 1001

51162635	250 mL glass reactor
Material	Borosilicate glass
Working Volume	250 mL, maximum
Nominal Volume	370 mL
Size	Inner Ø 62 mm, height 127 mm, wall 2.2 mm
Quantity	1

Needed items:

51162758	Reactor stand for 250 mL reactor , Page 71
51162698	Receptacle for 250 mL reactor , Page 25
51162699	Glass cover for 250 mL reactor, 7 ports Page 50



400 mL glass reactor

EasyMax 402

30072099	400 mL glass reactor
Material	Borosilicate glass
Working Volume	400 mL, maximum
Nominal Volume	425 mL
Size	Inner Ø 72.6 mm, height 140 mm, wall 2.2 mm
Quantity	1

Needed items:

51162759	Reactor stand for 400 mL reactor , Page 65
51161072	Glass cover for 400 mL reactor, 6 ports Page 44
30111620	PTFE cover set for 400 mL reactor, 6 ports Page 45

See Pages 73 – 75 for possible reactor/cover/stirrer combinations.



500 mL glass reactor

OptiMax 1001

51162632	500 mL glass reactor With bottom drain valve
Material	Borosilicate glass, PTFE, PEEK, PTFE/Silicone rubber
Working Volume	500 mL, maximum
Nominal Volume	830 mL
Size	Inner Ø 77 mm, height 172 mm, wall 2.5 mm
Quantity	1

Needed items:

51162783	Reactor holder for 500 mL reactor , Page 71
51162670	Receptacle for 500 mL reactor , Page 25
51162671	Glass cover for 500 mL/1000 mL reactors, 7 ports , Page 51
30090540	PTFE cover set for 500 mL/1000 mL reactors, 7 ports , Page 52



1000 mL glass reactors

OptiMax 1001

51162634	1000 mL glass reactor With bottom drain valve
Material	Borosilicate glass, PTFE, PEEK, PTFE/Silicone rubber
Working Volume	1000 mL, maximum
Nominal Volume	1310 mL
Size	Inner Ø 101 mm, height 172 mm, wall 3 mm
Quantity	1



30230585	1000 mL glass reactor Without bottom drain
Material	Borosilicate glass
Working Volume	1000 mL, maximum
Nominal Volume	1310 mL
Size	Inner Ø 101 mm, height 172 mm, wall 3 mm
Quantity	1

Needed items:

51162782	Reactor holder for 1000 mL reactor Page 71
51162671	Glass cover for 500 mL/1000 mL reactors, 7 ports , Page 51
30090540	PTFE cover set for 500 mL/1000 mL reactors, 7 ports , Page 52

Needed items:

51162760	Reactor stand for 1000 mL reactor Page 71
51162671	Glass cover for 500 mL/1000 mL reactors, 7 ports , Page 51
30090540	PTFE cover set for 500 mL/1000 mL reactors, 7 ports , Page 52

Optional Accessories

Working with EasyMax 102 LT



30593255	Purge gas cover for 100 mL high workup volume glass reactor, 30111634
Material	PTFE C25, Elastomer core Silicone VQM, PTFE FEP-coated
Size	Inner Ø 58.2 mm, outer Ø 132 mm
Quantity	1

OptiMax Reactor Spare Parts



51162631	Glass vessel for two-piece 500 mL reactor Without parts for bottom drain valve
Material	Borosilicate glass
Working Volume	500 mL, maximum
Nominal Volume	700 mL
Size	Inner Ø 77 mm, height 172 mm, wall 2.5 mm
Quantity	1



51162633	Glass vessel for two-piece 1000 mL reactor Without parts for bottom drain valve
Material	Borosilicate glass
Working Volume	1000 mL, maximum
Nominal Volume	1310 mL
Size	Inner Ø 101 mm, height 172 mm, wall 3 mm
Quantity	1

30413310	Glass vessel for two-piece 1800 mL reactor Without parts for bottom drain valve
Material	Borosilicate glass
Working Volume	1800 mL, maximum
Nominal Volume	1950 mL
Size	Inner Ø 101 mm, height 252 mm, wall 3 mm
Quantity	1



51162730	Bottom drain connect set For bottom drain valve
Material	PEEK, PTFE
Size	Ø 52 mm
Quantity	1



71540	Sealing ring bottom valve
Material	PTFE/Silicone rubber
Size	Inner Ø 13 mm, 5 mm
Quantity	1



51191774	Spindle with tip, bottom drain valve 115 mm, with spring
Material	PTFE
Size	Ø 14 mm x 115 mm
Quantity	1



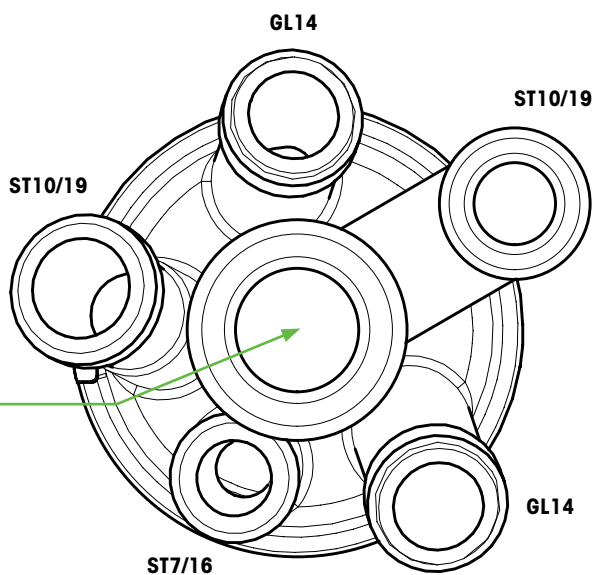
51190515	Spindle tip, light blue
Material	Lubriflon 904-filled PTFE
Quantity	1

Glass and PTFE Reactor Covers

50 mL glass reactor cover EasyMax 102



ST14/23 Overhead stirrer port



Needed items:

51160817	Glass cover for 50 mL reactor, 6 ports 1 x ST7/16, 2 x ST10/19, 2 x GL14, center ST14/23
Material	Borosilicate glass
Size	Inner Ø 36 mm
Quantity	1

51161255	50 mL glass reactor , Page 43
51161288	Reactor stand , Page 71
51161716	Receptacle for 50 mL reactor , Page 24

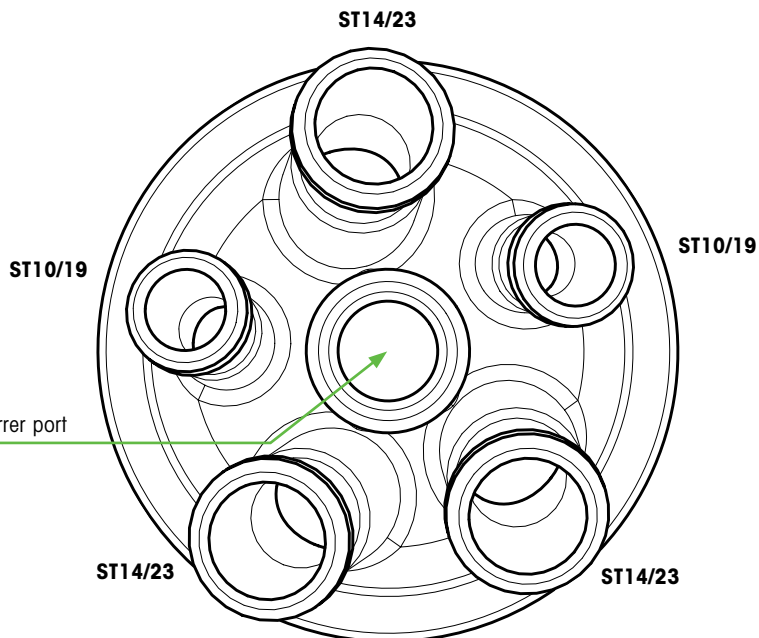
See Pages 73 – 75 for possible reactor/cover/stirrer combinations.

See Pages 73 – 75 for possible reactor/cover/stirrer combinations.

100 mL glass reactor cover
EasyMax 102, 102 LT, and 402



51161619	Glass cover for 100 mL reactor, 6 ports 2 x ST10/19, 3 x ST14/23, center ST14/23
Material	Borosilicate glass
Size	Inner Ø 52 mm
Quantity	1



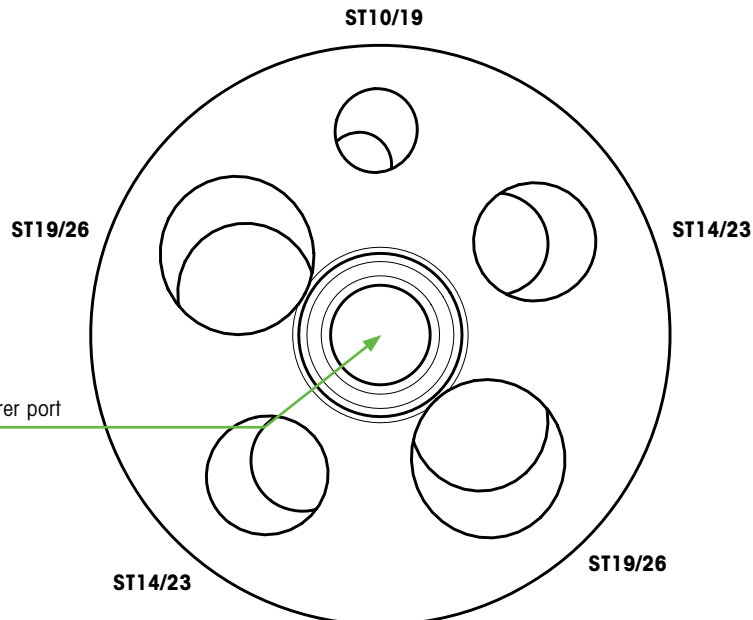
Needed items:

51161620	100 mL glass reactor , Page 43
30111634	100 mL high workup volume glass reactor , Page 44
51161676	Reactor stand for 100 mL reactor , Page 71
30086802	EasyMax 402 receptacle for 100 mL reactor Page 25

100 mL PTFE reactor cover –
Standard taper joints
EasyMax 102 and 102 LT



51161795	PTFE cover for 100 mL reactor, 6 ports 1 x ST10/19, 2 x ST14/23, 2 x ST19/26, center ST14/23
Material	PTFE GF25
Size	Inner Ø 52 mm
Quantity	1



Needed items:

51161620	100 mL glass reactor , Page 43
30111634	100 mL high workup volume glass reactor , Page 44
51161676	Reactor stand for 100 mL reactor , Page 71
30086802	EasyMax 402 receptacle for 100 mL reactor Page 25

Note: Works only with the 50 mL stirrer shaft 51161756
See 51161800 PTFE cover set, Page 59

See Pages 73 – 75 for possible reactor/cover/stirrer combinations.

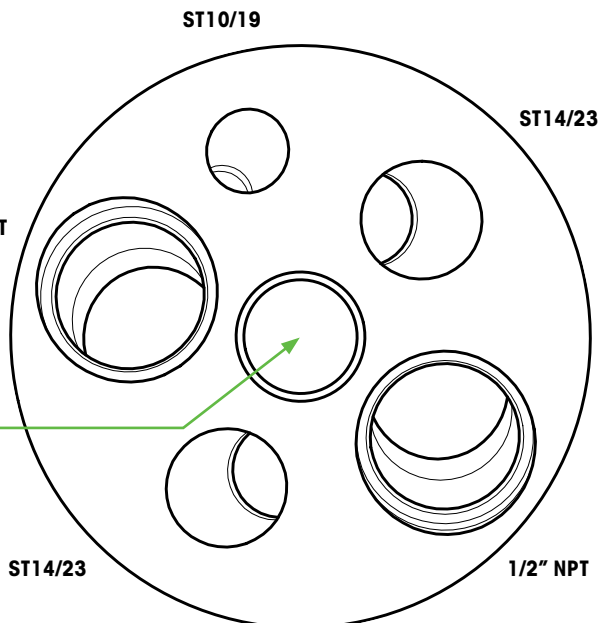
100 mL PTFE reactor cover –
ParticleTrack, ReactIR, and EasyViewer
EasyMax 102 and 102 LT

3/8" NPT Overhead stirrer port



	PTFE cover plate, 6 ports 1 x ST10, 2 x ST14, 2 x 1/2" NPT, center 3/8" NPT
Material	PTFE
Size	Inner Ø 52 mm
Quantity	1

Note: This cover plate is only available as a set including screw-in adapters. See 30090541 PTFE cover set, Page 60



Needed items:

51161620	100 mL glass reactor , Page 43
30111634	100 mL high workup volume glass reactor , Page 44
51161676	Reactor stand for 100 mL reactor , Page 71
30086802	EasyMax 402 receptacle for 100 mL reactor Page 25

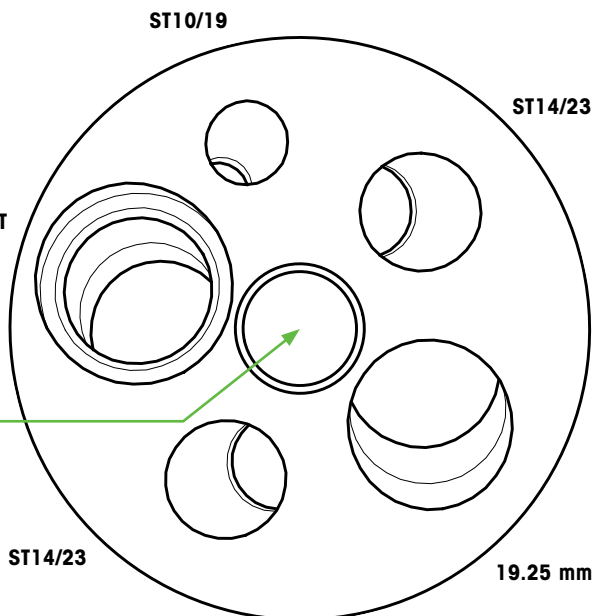
100 mL PTFE reactor cover –
ParticleView V19, ParticleTrack, ReactIR,
and EasyViewer
EasyMax 102 and 102 LT

3/8" NPT Overhead stirrer port



	PTFE cover plate, 6 ports 1 x ST10, 2 x ST14, 1 x 1/2" NPT, 1 x 19.25 mm, center 3/8" NPT
Material	PTFE
Size	Inner Ø 52 mm
Quantity	1

Note: This cover plate is only available as a set including screw-in adapters. See 30090542 PTFE cover set, Page 61



Needed items:

51161620	100 mL glass reactor , Page 43
30111634	100 mL high workup volume glass reactor , Page 44
51161676	Reactor stand for 100 mL reactor , Page 71
30086802	EasyMax 402 receptacle for 100 mL reactor Page 25

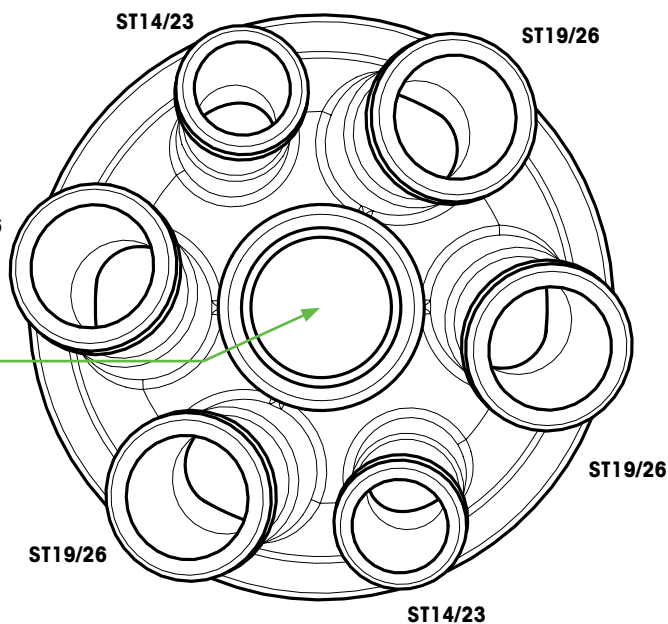
See Pages 73 – 75 for possible reactor/cover/stirrer combinations.

250 mL glass reactor cover

OptiMax 1001



51162699	Glass cover for 250 mL reactor, seven ports 2 x ST14/23, 4 x ST19/26, center ST24/29
Material	Borosilicate glass
Size	Inner Ø 68 mm
Quantity	1



ST24/29 Overhead stirrer port

Needed items:

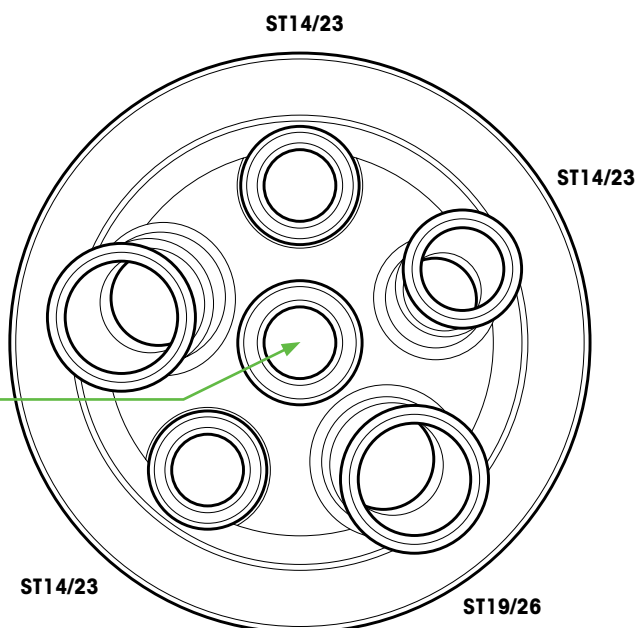
51162635	250 mL glass reactor , Page 44
51162698	Receptacle for 250 mL reactor , Page 25
51162758	Reactor stand for 250 mL reactor , Page 71
51162781	Cover holder for 250 mL reactor cover Page 71

400 mL glass reactor cover

EasyMax 402



51161072	Glass cover for 400 mL reactor, 6 ports 3 x ST14/23, 2 x ST19/26, center ST14/23
Material	Borosilicate glass
Size	Inner Ø 67 mm
Quantity	1



ST14/23 Overhead stirrer port

Needed items:

30072099	400 mL glass reactor , Page 44
51162759	Reactor stand for 400 mL reactor , Page 71

See Pages 73 – 75 for possible reactor/cover/stirrer combinations.

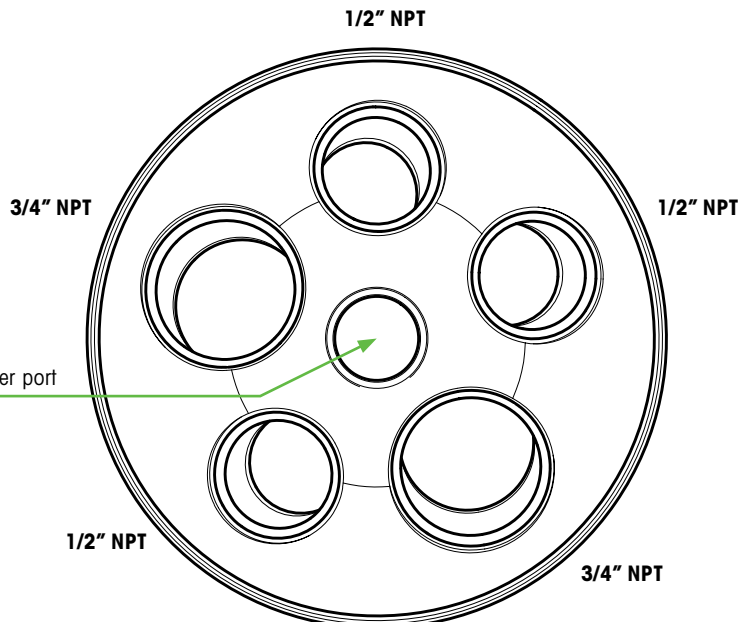
400 mL PTFE reactor cover

EasyMax 402



	PTFE cover plate, 6 ports 3 x 1/2" NPT, 2 x 3/4" NPT, center 3/8" NPT
Material	PTFE
Size	Inner Ø 67 mm
Quantity	1

Note: This cover plate is only available as a set including screw-in adapters. See 30111620 PTFE cover set, Page 65



Needed items:

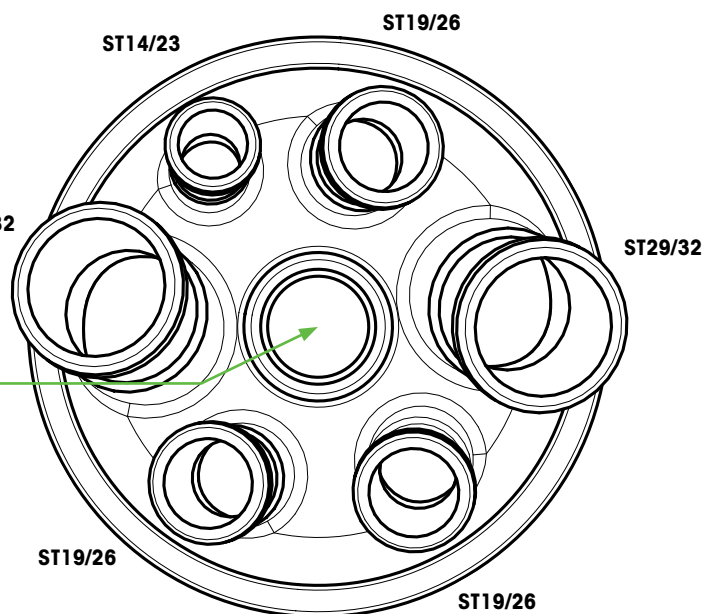
30072099	400 mL glass reactor , Page 44
51162759	Reactor stand for 400 mL reactor , Page 71

500 mL/1000 mL glass reactor cover

OptiMax 1001



51162671	Glass cover for 500 mL/1000 mL reactor, 7 ports 1 x ST14/23, 3 x ST19/26, 2 x ST29/32, center ST24/29
Material	Borosilicate glass
Size	Inner Ø 98 mm
Quantity	1



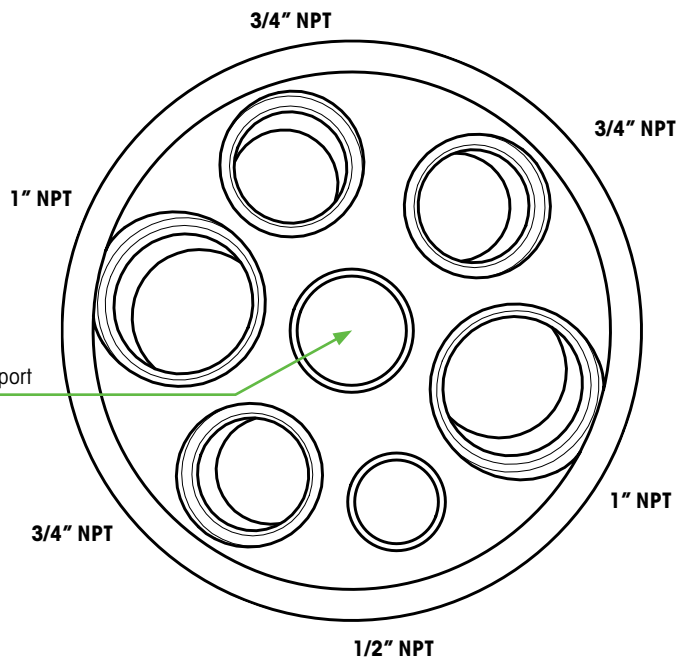
Needed items:

51162632	500 mL glass reactor , Page 45
51162783	Reactor holder for 500 mL reactor , Page 71
51162670	Receptacle for 500 mL reactor , Page 25
51162634	1000 mL glass reactor , Page 45
51162782	Reactor holder for 1000 mL reactor Page 71
51162780	Cover holder for 500 mL/1000 mL reactor cover , Page 71

See Pages 73 – 75 for possible reactor/cover/stirrer combinations.

500 mL/1000 mL PTFE reactor cover
OptiMax 1001

3/4" NPT Overhead stirrer port



	PTFE cover plate, 7 ports 2 x 1" NPT, 4 x 3/4" NPT, 1 x 1/2" NPT
Material	PTFE
Size	Inner Ø 98 mm
Quantity	1

Note: This cover plate is only available as a set including screw-in adapters. See 30090540 PTFE cover set, Page 67

Needed items:

51162632	500 mL glass reactor , Page 45
51162783	Reactor holder for 500 mL reactor , Page 71
51162670	Receptacle for 500 mL reactor , Page 25
51162634	1000 mL glass reactor , Page 45
51162782	Reactor holder for 1000 mL reactor Page 71
51162780	Cover holder for 500 mL/1000 mL reactor cover , Page 71

50 mL Glass Reactor Set



51161712

50 mL glass reactor set

The 50 mL reactor set has a maximum working volume of 50 mL and nominal volume of 70 mL for work up. Both magnetic and overhead stirring possibilities are available.

A special sleeve with window provides visibility into the mixture.

EasyMax 50 mL glass reactor set consisting of

Order Number	Product Description	Quantity	Page
51161255	50 mL round-bottom reactor	1	43
51161288	Reactor stand for 50 mL reactor	1	71
51161716	Receptacle for 50 mL reactor	1	24
51160675	Reactor clamp for 50 mL reactor	1	69
51161718	Fixing ring for receptacle	1	69
51191416	O-ring for 50 mL glass reactor, Ø 36.14 mm x 2.62 mm	1	70
51191919	Magnetic stir bar, cross-shaped, 10 mm x 25 mm	1	84

50 mL Glass Cover Set

EasyMax 102



51161713

6-port 50 mL glass cover set

The 50 mL glass cover set with six openings is built for multiple applications including dosing, reflux, pH measurement, ReactIR, or turbidity.

EasyMax 50 mL glass cover set consisting of

Order Number	Product Description	Quantity	Page
51160817	Glass cover for 50 mL reactor, 6 ports	1	47
51190318	Screw cap GL14, without aperture, PBT	2	110
51191170	Silicone rubber seal (Septa) GL14	2	110
51190317	Screw cap GL14, with aperture, PBT	3	96
51103947	Sealing ring for screw cap GL14 PTFE/silicone, aperture 6 mm	3	96
51191267	Glass adapter ST14/23-GL14	1	96
51161037	Adapter for GL14, 6 mm – 6.35 mm sensors, PTFE	2	96
51161558	Adapter GL14-UNF with 1 UNF 1/4-28 port, PTFE GL25	2	96
51161728	Adapter ST10/19 with 1 UNF 1/4-28 port	1	97
51160200	Adapter ST 7/16 with 1 UNF 1/4-28 port	1	97
51191514	Ferrule for tubing outer Ø 3.2 mm, 4 pcs in a set	1	97
51191515	Nut for UNF 1/4-28 threads, 4 pcs in a set	1	97
51190878	Glass stopper ST14/23	1	110
51191167	Glass stopper ST10/19	2	110
51190877	Glass stopper ST7/16	1	110
51191505	“Keck” clamp ST14	1	111
51191504	“Keck” clamp ST10	2	111
51190879	Clamp ST7	1	111

Note: Large image may not show all parts in the set.

100 mL Glass Reactor Set

EasyMax 102



51161708

100 mL glass reactor set

The 100 mL reactor set has a maximum working volume of 100 mL and nominal volume of 150 mL for work up.

Both magnetic and overhead stirring possibilities are available.

EasyMax 100 mL glass reactor set consisting of

Order Number	Product Description	Quantity	Page
51161620	100 mL glass reactor	1	43
51161676	Reactor stand for 100 mL reactor	1	71
51191913	O-ring for 100 mL reactor, \varnothing 56.82 mm x 2.62 mm	1	69
51161670	Clamp chain for 100 mL reactor	1	69
51191918	Magnetic stir bar, cross-shaped, 15 mm x 38 mm	1	84

100 mL Glass Reactor Set

EasyMax 402



30125690

100 mL glass reactor set

The 100 mL reactor set has a maximum working volume of 100 mL and nominal volume of 150 mL for work up.

Both magnetic and overhead stirring possibilities are available. Only overhead stirring is possible with EasyMax 402.

EasyMax 100 mL glass reactor set consisting of

Order Number	Product Description	Quantity	Page
51161620	100 mL glass reactor	1	43
51161676	Reactor stand for 100 mL reactor	1	71
51191913	O-ring for 100 mL reactor, Ø 56.82 mm x 2.62 mm	1	69
51161670	Clamp chain for 100 mL reactor	1	69
30086802	EasyMax 402 receptacle for 100 mL reactor	1	25

100 mL High Workup Volume Set

EasyMax 402



30111633

100 mL high workup volume glass reactor set

The 100 mL high workup volume reactor set has a maximum working volume of 100 mL and nominal volume of 200 mL for work up.

Both magnetic and overhead stirring possibilities are available. Only overhead stirring is possible with EasyMax 402.

EasyMax 100 mL high workup volume glass reactor set consisting of

Order Number	Product Description	Quantity	Page
30111634	100 mL high workup volume glass reactor	1	44
51161676	Reactor stand for 100 mL reactor	1	71
51191913	O-ring for 100 mL reactor, Ø 56.82 mm x 2.62 mm	1	69
51161670	Clamp chain for 100 mL reactor	1	69
30111635	EasyMax 402 receptacle for 100 mL high workup volume reactor	1	25

100 mL Glass Cover Set

EasyMax 102, 102 LT, and 402



51161709 6-port 100 mL glass cover set

The 100 mL glass cover set with six ports is built for multiple applications without limitations for dosing, reflux, pH measurement, ReactIR, or turbidity.

The set includes all adapters, stoppers and clamps needed for full operation.

EasyMax 100 mL glass cover set consisting of

Order Number	Product Description	Quantity	Page
51161619	Glass cover for 100 mL reactor, 6 ports	1	48
51191428	Hose connection for purge gas tubing with 1 UNF 1/4-28 thread	2	98
51161728	Adapter ST 10/19 with 1 UNF 1/4-28 port	2	97
51191514	Ferrule for tubing and sensors of outer Ø 3.2 mm, 4 pcs in a set	1	97
51191515	Nut for UNF 1/4-28, 4 pcs in a set	1	97
51190878	Glass stopper ST14/23	4	110
51191167	Glass stopper ST10/19	2	110
51191505	"Keck" clamp ST14	4	111
51191504	"Keck" clamp ST10	2	111

Note: Large image may not show all parts in the set.

100 mL PTFE Cover Set

EasyMax 102, 102 LT, and 402



51161800 6-port PTFE cover set with standard tapered joints for 100 mL reactor

This version of a PTFE cover is equipped with a series of standard taper joints in order to accommodate standard ST adapters and lab equipment.

The PTFE cover can be used in combination with the standard O-rings and reactor clamp as used for the glass cover.

EasyMax 100 mL PTFE cover set consisting of

Order Number	Product Description	Quantity	Page
51161795	PTFE cover for 100 mL reactor body (works only with the 50 mL stirrer shaft 51161756), 6 ports	1	48
51161821	Adapter PTFE for ParticleTrack probe, ST19/26-14 mm	1	101
51191857	O-ring for adapter, Ø 13.95 mm x 2.62 mm	1	101
51161817	Adapter PTFE for ReactIR probe, ST14/23-9.5 mm	1	99
51192091	O-ring for adapter, Ø 9.19 mm x 2.62 mm	1	99
51161728	Adapter ST10/19 with 1 UNF 1/4-28 port	2	97
51191514	Ferrule for tubing and sensors of outer Ø 3.2 mm, 4 pcs in a set	1	97
51191515	Nut for UNF 1/4-28, 4 pcs in a set	1	97
71517	Glass stopper ST19/26	2	110
51190878	Glass stopper ST14/23	3	110
51191167	Glass stopper ST10/19	1	110

Note: Large image may not show all parts in the set.

100 mL PTFE Cover Set

EasyMax 102, 102 LT, and 402



30090541 6-port PTFE cover set with compression fittings and standard tapered joints for 100 mL reactor – for ParticleTrack (14 mm), ReactIR and EasyViewer

This cover is designed to be used in combination with METTLER TOLEDOs ParticleTrack, ReactIR and EasyViewer probes up to 14 mm in diameter.

The adapters with compression fittings are perfectly suited to hold the various probes and insert in an ideal and secure position.

The PTFE cover comes as full set with all the required adapters to accommodate typical combinations of probes and inserts.

The cover can be used in combination with the standard O-rings and reactor clamp as used for the glass cover.

EasyMax 100 mL PTFE cover set consisting of

Order Number	Product Description	Quantity	Page
	PTFE cover for 100 mL reactor, 6 ports	1	49
	Standard stirrer adapter, 3/8" NPT ST14/-	1	104
30245647	Compression fitting 1/2" NPT, 14 mm bore	1	101
30245649	Compression fitting 1/2" NPT, 3/8" 9.525 mm bore	1	99
30245648	Compression fitting 1/2" NPT, 1/4" 6.35 mm bore	1	98
30245707	Taper joint adapter 1/2" NPT ST19/-	2	104
51161728	Adapter ST 10/19 with 1 UNF 1/4-28 port	1	97
51191514	Ferrule for tubing and sensors of outer Ø 3.2 mm, 4 pcs in a set	1	97
51191515	Nut for UNF 1/4-28, 4 pcs in a set	1	97
	Sealing plug for Ø 14 mm compression fitting	1	
	Sealing plug for Ø 3/8" compression fitting	1	
	Sealing plug for Ø 1/4" compression fitting	1	

Note: Large image may not show all parts in the set.

100 mL PTFE Cover Set

EasyMax 102, 102 LT, and 402



30090542

6-port PTFE cover set with compression fittings, standard tapered joints and 19 mm bore for 100 mL reactor – for ParticleTrack, ReactIR, ParticleView V19, EasyViewer

This cover is designed to be used in combination with METTLER TOLEDOs ParticleTrack and ReactIR probes up to 14 mm in diameter as well as the ParticleView V19 and EasyViewer 400 probes with 19 mm in diameter. The adapters with compression fittings are perfectly suited to hold the various probes and insert in an ideal and secure position.

The PTFE cover comes as full set with all the required adapters to accommodate typical combinations of probes and inserts. The cover can be used in combination with the standard O-rings and reactor clamp as used for the glass cover.

EasyMax 100 mL PTFE cover set consisting of

Order Number	Product Description	Quantity	Page
	PTFE cover for 100 mL reactor, 6 ports	1	49
	Standard stirrer adapter, 3/8" NPT ST14/-	1	104
30245647	Compression fitting 1/2" NPT, 14 mm bore	1	101
51161728	Adapter ST 10/19 with 1 UNF 1/4-28 port	1	97
51191514	Ferrule for tubing and sensors of outer Ø 3.2 mm, 4 pcs in a set	1	97
51191515	Nut for UNF 1/4-28, 4 pcs in a set	1	97
	Sealing plug for Ø 14 mm compression fitting	1	
	Number 19 flask stopper for 19.25 mm port	1	
	PTFE sleeves for 19.25 mm port	10	

Note: Large image may not show all parts in the set.

250 mL Two-Piece Glass Reactor Set

OptiMax 1001



51162833 250 mL two-piece glass reactor set

The different OptiMax reactor sets combine all the available parts for a particular reactor type and volume in just one part number. This simplifies the evaluation and ordering process and makes it error-free.

The 250 mL two-piece glass reactor has no bottom drain valve. The reactor has a maximum working volume of 250 mL and a nominal volume of 370 mL.

OptiMax 250 mL two-piece glass reactor set consisting of

Order Number	Product Description	Quantity	Page
51162635	Glass reactor, 250 mL	1	44
51162758	Reactor stand for 250 mL reactor	1	71
51162699	Glass cover for 250 mL reactor, 7 ports	1	50
51162781	Cover holder for 250 mL reactor cover	1	71
51162698	Receptacle for 250 mL reactor	1	25
51162703	Clamp chain for 250 mL reactor	1	69
51192170	O-ring for 250 mL reactor, Ø 69.44 mm x 3.53 mm	1	69
51162417	Stirrer shaft for 250 mL reactor, Alloy C-22	1	79
51162418	Pitched stirrer blade, Alloy C-22, downward, Ø 38 mm	1	80
71517	Glass stopper ST19/26	4	110
51190878	Glass stopper ST14/23	2	110
51192167	"Keck" clamp ST24	1	111
51191429	"Keck" clamp ST19	4	111
51191505	"Keck" clamp ST14	2	111

Note: Large image may not show all parts in the set.

400 mL Glass Reactor Set

EasyMax 402



30111619

400 mL glass reactor set

The 400 mL reactor set has a maximum working volume of 400 mL and nominal volume of 425 mL for work up.

Only overhead stirring is possible with EasyMax 402.

EasyMax 400 mL glass reactor set consisting of

Order Number	Product Description	Quantity	Page
30072099	400 mL glass reactor	1	44
51162759	Reactor stand for 400 mL reactor	1	71
51191335	O-ring for 400 mL reactor, Ø 82.22 mm x 2.62 mm	1	69
30111610	Clamp chain for 400 mL reactor	1	69

400 mL Glass Cover Set EasyMax 402



30111632 6-port 400 mL glass cover set

The 400 mL glass cover set with 6 ports is built for multiple applications like dosing or pH measurement. The set includes all stoppers and clamps needed for normal operation.

EasyMax 400 mL glass cover set consisting of

Order Number	Product Description	Quantity	Page
51161072	Glass cover for 400 mL reactor, 6 ports	1	50
30125685	Adapter ST14/23 with 1 UNF 1/4-28 port	1	97
51191514	Ferrule for tubing and sensors of outer Ø 3.2 mm, 4 pcs in a set	1	97
51191515	Nut for UNF 1/4-28, 4 pcs in a set	1	97
71517	Glass stopper ST19/26	2	110
51190878	Glass stopper ST14/23	4	110
51191429	"Keck" clamp ST19	2	111
51191505	"Keck" clamp ST14	4	111

Note: Large image may not show all parts in the set.

400 mL PTFE Cover Set

EasyMax 402



30111620 6-port PTFE cover set with standard ST19/38 fittings for 400 mL reactor

This cover is designed for normal use and use with probes up to 14 mm in diameter

The PTFE cover set comes with standard ST19 adapters to accommodate typical combinations of probes and inserts. The cover can be used with the same clamp and O-ring as used with the glass cover.

EasyMax 400 mL PTFE cover set consisting of

Order Number	Product Description	Quantity	Page
	PTFE cover for 400 mL reactor, 6 ports	1	51
	Standard stirrer adapter, 3/8" NPT ST14/-	1	104
30245707	Taper joint adapter 1/2" NPT ST19/-	3	104
30245672	Taper joint adapter 3/4" NPT ST19/-	2	104
30125686	Adapter ST19/26 with 1 UNF 1/4-28 port	1	97
51191514	Ferrule for tubing and sensors of outer Ø 3.2 mm, 4 pcs in a set	1	97
51191515	Nut for UNF 1/4-28, 4 pcs in a set	1	97

Note: Large image may not show all parts in the set.

500 mL Two-Piece Glass Reactor Set

OptiMax 1001



51162832 500 mL two-piece glass reactor set

The different OptiMax reactor sets combine all the available parts for a particular reactor type and volume in just one part number. This simplifies the evaluation and ordering process and makes it error-free.

The 500 mL two-piece glass reactor is equipped with a bottom drain valve and has a maximum working volume of 500 mL and a nominal volume of 830 mL.

Note: Large image may not show all parts in the set.

OptiMax 500 mL two-piece glass reactor set consisting of

Order Number	Product Description	Quantity	Page
51162632	Glass reactor, 500 mL	1	45
51162783	Reactor holder for 500 mL reactor	1	71
51162671	Glass cover, for 500 mL/1000 mL reactor, 7 ports	1	51
51162780	Cover holder for 500 mL/1000 mL reactor cover	1	71
51162670	Receptacle for 500 mL reactor	1	25
51162673	Clamp chain for 500 mL/1000 mL reactor	1	69
51192205	O-ring for 500 mL/1000 mL reactor, Ø 107.5 mm x 3.53 mm	1	60
51162722	Stirrer shaft for 500 mL/1000 mL reactor, Alloy C-22	1	79
103504	Pitched stirrer blade, Alloy C-22, downward, Ø 45 mm	1	80
51162638	Bar type baffle for 500 mL reactor, Alloy C-22	1	94
51104154	PTFE adapter for baffle	1	100
51162685	Drain union, bended	1	94
51192169	Pinch clamp S19, stainless steel	1	111
71518	Glass stopper ST29/32	2	110
71517	Glass stopper ST19/26	3	110
51190878	Glass stopper ST14/23	1	110
51192168	"Keck" clamp ST29	2	111
51192167	"Keck" clamp ST24	1	111
51191429	"Keck" clamp ST19	3	111
51191505	"Keck" clamp ST14	1	111

500 mL/1000 mL PTFE Cover Set

OptiMax 1001



30090540

7-port 500 mL/1000 mL PTFE cover set

This reactor cover is an extremely robust alternative for the standard glass cover 51162671.

It is the perfect choice if the reactor is equipped with heavy inserts and probes which bears the risk to break the glass version of the cover.

The PTFE cover comes as full set with all the required adapters to accommodate typical combinations of probes and inserts.

The cover can be used in combination with the standard O-rings and reactor clamp as used for the glass cover.

OptiMax PTFE cover set consisting of

Order Number	Product Description	Quantity	Page
	PTFE cover for 500 mL/1000 mL reactors, 7 ports	1	52
	OptiMax standard stirrer adapter, 3/4" NPT ST24/-	1	104
30245706	Taper joint adapter 1/2" NPT ST14/-	1	104
30245672	Taper joint adapter 3/4" NPT ST19/-	3	104
30245709	Taper joint adapter 1" NPT ST29/-	2	105
30245704	Compression fitting 1" NPT, 19 mm bore	1	106
30245705	Compression fitting 1" NPT, 5/8" 15.875 mm bore	1	102
30245682	Compression fitting 3/4" NPT, 14 mm bore	1	101
30245681	Compression fitting 3/4" NPT, 12 mm bore	1	100
30245680	Compression fitting 3/4" NPT, 8 mm bore	1	99
30245700	Compression fitting 3/4" NPT, 3/8" 9.525 mm bore	1	99
30245684	Compression fitting 3/4" NPT., 1/4" 6.35 mm bore	1	98
	Compression fitting 1/2" NPT, 6 mm bore	1	98
30245648	Compression fitting 1/2" NPT, 1/4" 6.35 mm bore	1	98

Note: Large image may not show all parts in the set.

1000 mL Two-Piece Glass Reactor Set

OptiMax 1001



51162831

1000 mL two-piece glass reactor set

The different OptiMax reactor sets combine all the available parts for a particular reactor type and volume in just one part number. This simplifies the evaluation and ordering process and makes it error-free.

The 1000 mL two-piece glass reactor is equipped with a bottom drain valve and has a maximum working volume of 1000 mL and a nominal volume of 1310 mL.

Note: Large image may not show all parts in the set.

OptiMax 1000 mL two-piece glass reactor set consisting of

Order Number	Product Description	Quantity	Page
51162634	Glass reactor, 1000 mL	1	45
51162782	Reactor holder for 1000 mL reactor	1	71
51162671	Glass cover, for 500 mL/1000 mL reactor, 7 ports	1	51
51162780	Cover holder for 500 mL/1000 mL reactor cover	1	71
51162673	Clamp chain for 500 mL/1000 mL reactor	1	69
51192205	O-ring for 500 mL/1000 mL reactor, Ø 107.5 mm x 3.53 mm	1	69
51162722	Stirrer shaft for 500 mL/1000 mL reactor, Alloy C-22	1	79
103504	Pitched stirrer blade, Alloy C-22, downward, Ø 45 mm	1	80
51162637	Bar type baffle for 1000 mL reactor, Alloy C-22	1	94
51104154	PTFE adapter for baffle	1	100
51162685	Drain union, bended	1	94
51192169	Pinch clamp S19, stainless steel	1	111
71518	Glass stopper ST29/32	2	110
71517	Glass stopper ST19/26	3	110
51190878	Glass stopper ST14/23	1	110
51192168	"Keck" clamp ST29	2	111
51192167	"Keck" clamp ST24	1	111
51191429	"Keck" clamp ST19	3	111
51191505	"Keck" clamp ST14	1	111

Clamps and Standard O-Rings For Two-Piece Reactors



51160675	Reactor clamp for 50 mL reactor For EasyMax 102
Material	PTFE C25
Quantity	1



51161718	Fixing ring for receptacle
Material	PTFE C25
Quantity	1



51161670	Clamp chain for 100 mL reactor For EasyMax 102 and 402
Material	Stainless steel 1.4404, PPS GF40
Quantity	1

51162703	Clamp chain for 250 mL reactor For OptiMax 1001
Material	Stainless steel 1.4404, PPS GF40
Quantity	1

30111610	Clamp chain for 400 mL reactor For EasyMax 402
Material	Stainless steel 1.4404, PPS GF40
Quantity	1

51162673	Clamp chain for 500 mL/1000 mL reactors For OptiMax 1001
Material	Stainless steel 1.4404, PPS GF40
Quantity	1



51161547	Set of knurled screws with washers For 50 mL reactor clamp
Material	Stainless steel
Quantity	8 pcs of each

VQM, PTFE FEP-coated O-rings



51191913	O-ring for 100 mL reactor, standard For EasyMax 102 and 402
Material	Elastomer core Silicone VQM, PTFE FEP-coated
Size	Ø 56.82 mm x 2.62 mm; AS no. 140
Quantity	1

51192170	O-ring for 250 mL reactor, standard For OptiMax 1001
Material	Elastomer core Silicone VQM, PTFE FEP-coated
Size	Ø 69.44 mm x 3.53 mm; AS No. 232
Quantity	1

51191335	O-ring for 400 mL reactor, standard For EasyMax 402
Material	Elastomer core Silicone VQM, PTFE FEP-coated
Size	Ø 82.22 mm x 2.62 mm; AS no. 152
Quantity	1

51192205	O-ring for 500 mL/1000 mL reactors, standard For OptiMax 1001
Material	Elastomer core Silicone VQM, PTFE FEP-coated
Size	Ø 107.5 mm x 3.53 mm; AS No. 244
Quantity	1

Note: See next page for FFKM O-rings

FFKM O-Rings

FFKM O-rings



51191416	O-ring for 50 mL glass reactor, standard For EasyMax 102
Material	FFKM
Size	Ø 36.14 mm x 2.62 mm, AS no. 127
Quantity	1
30213715	O-ring for 100 mL reactor, optional For EasyMax 102 and 402
Material	FFKM
Size	Ø 56.82 mm x 2.62 mm, AS No. K# 140
Quantity	1
51192219	O-ring for 250 mL reactor, optional For OptiMax 1001
Material	FFKM
Size	Ø 69.44 mm x 3.53 mm, AS No. K# 232
Quantity	1
51191738	O-ring for 400 mL reactor, optional For EasyMax 402
Material	FFKM
Size	Ø 82.22 mm x 2.62 mm; AS no. K# 152
Quantity	1
51192218	O-ring for 500 mL/1000 mL reactors, optional For OptiMax 1001
Material	FFKM
Size	Ø 107.5 mm x 3.53 mm, AS No. K# 244
Quantity	1

FFKM O-rings for pressure reactors



51191452	O-ring for 50 mL pressure reactor, standard For EasyMax 102
Material	FFKM
Size	Ø 31.42 mm x 2.62 mm, AS no. 124
Quantity	1
30030952	O-ring for 100 mL pressure reactor, standard For EasyMax 102
Material	FFKM
Size	Ø 50.47 mm x 2.62 mm
Quantity	1

Reactor Stands and Holders



51161288	Reactor stand for 50 mL reactor For EasyMax 102
Material	PE
Size	Inner Ø 39 mm, height 80 mm
Quantity	1

51161816	Reactor stand for 50 mL one-piece reactor For EasyMax 102
Material	PE
Size	Inner Ø 43 mm, height 63 mm
Quantity	1

51161676	Reactor stand for all 100 mL reactors For EasyMax 102 and 402
Material	PE
Size	Inner Ø 57.5 mm, height 96 mm
Quantity	1

51162758	Reactor stand for 250 mL reactor For OptiMax 1001
Material	PE
Size	Inner Ø 67.5 mm, height 105 mm
Quantity	1

51162759	Reactor stand for 400 mL/500 mL one-piece reactors For EasyMax 402 (400 mL) and OptiMax 1001 (500 mL)
Material	PE
Size	Inner Ø 82.5 mm, height 120 mm
Quantity	1

51162760	Reactor stand for 1000 mL one-piece reactor For OptiMax 1001
Material	PE
Size	Inner Ø 107.5 mm, height 120 mm
Quantity	1



51162783	Reactor holder for 500 mL reactor For OptiMax 1001
Material	Stainless steel 1.4404, PE
Size	Inner Ø 90 mm, height 155 mm
Quantity	1



51162782	Reactor holder for 1000 mL reactor For OptiMax 1001
Material	Stainless steel 1.4404, PE
Size	Inner Ø 110 mm, height 155 mm
Quantity	1



51162781	Cover holder for 250 mL reactor cover For OptiMax 1001
Material	Stainless steel 1.4404, PTFE GF25
Quantity	1



51162780	Cover holder for 500 mL/1000 mL reactor cover For OptiMax 1001
Material	Stainless steel 1.4404, PTFE GF25
Quantity	1

Reflux Condensers and Dropping Funnel



51160813	Reflux condenser, ST10/19, GL14 With GL14 connectors for coolant and septum
Material	Borosilicate glass
Size	Outer Ø 20 mm, height 101 mm
Quantity	1



51161029	Reflux condenser, ST14/23, GL14 With 2 GL14 connectors for coolant
Material	Borosilicate glass
Size	Outer Ø 24 mm, height 140 mm
Quantity	1



51162530	Reflux condenser, ST19/26, GL14
Material	Borosilicate glass
Size	Outer Ø 50 mm, height 250 mm
Quantity	1



51192166	Reflux condenser, ST19/26, GL14
Material	Borosilicate glass
Size	Outer Ø 40 mm, height 250 mm
Quantity	1



51191952	50 mL dropping funnel, ST14/23 With PTFE stopcock and pressure equalizing tube
Material	Glass, PTFE
Size	Ø 35 mm, length 250 mm
Quantity	1



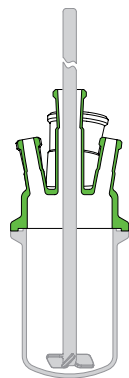
51190317	Screw cap GL14, with aperture
Material	PBT
Temperature	Max. 200 °C
Aperture	Ø 9.5 mm
Quantity	1



51190319	Plastic hose, straight With silicone rubber seal, for screw cap GL14
Material	PP, VQM
Size	For tube inner Ø 6 mm to 9 mm
Quantity	1

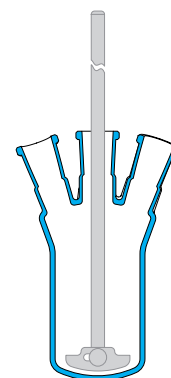
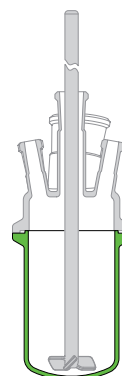
Guide – How to Combine Reactors, Covers, Stirrers, and Shafts

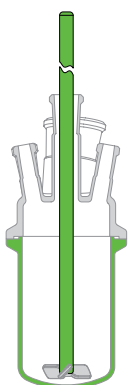
Reactors have dedicated covers which fit the specific reactor diameter and volume. Select the reactor and cover in the table below to determine the stirrer shaft options. See next pages for explanation of A, B, C, ...



Cover

Reactor	No separate cover needed	51160817 Glass cover for 50 mL reactor	51161619 Glass cover for 100 mL reactor	51161795 PTFE cover for 100 mL reactor, standard taper joints	30090541 PTFE cover set for 100 mL reactor for ParticleTrack and ReactIR	30090542 PTFE cover set for 100 mL reactor for ParticleView V19, ParticleTrack and ReactIR	51162699 Glass cover for 250 mL reactor	51161072 Glass cover for 400 mL reactor	30111620 PTFE cover set for 400 mL reactor	51162671 Glass cover for 500 mL/1000 mL reactor	30090540 PTFE cover set for 500 mL/1000 mL reactor
51161255 50 mL glass reactor		A									
51161792 50 mL one-piece glass reactor	B										
51161620 100 mL glass reactor			C	A	C	C					
30111634 100 mL high workup volume glass reactor			D	C	D	D					
51161786 100 mL one-piece glass reactor	E										
51162635 250 mL glass reactor							F				
51162734 250 mL one-piece glass reactor	G										
30072099 400 mL glass reactor								H	H		
30131163 400 mL one-piece glass reactor	I										
51162632 500 mL glass reactor										J	J
51162733 500 mL one-piece glass reactor	K										
51162634 1000 mL glass reactor										J	J
51162732 1000 mL one-piece glass reactor	K										





Combination

A

50 mL reactor + glass cover;
100 mL reactor + PTFE cover

B

50 mL one-piece reactor

Stirrers and Stirrer Shaft Options

Length **Page**

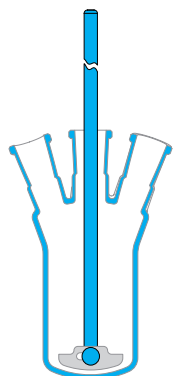
51161756 Stirrer shaft, Alloy C-22 218 mm 78

30130412 Stirrer shaft for magnetic drive, Alloy C-22 94 mm 78

51161813 Stirrer shaft for 50 mL/100 mL one-piece reactors, glass 192 mm 82

30138937 Stirrer shaft for 50 mL/100 mL one-piece reactors, PTFE-coated 192 mm 82

30130413 Stirrer shaft for 50 mL/100 mL one-piece reactors, for magnetic drive, Alloy C-22 118 mm 78



C

100 mL reactor + glass/PTFE covers;
100 mL high workup reactor + PTFE cover

51161725 Pitched-blade stirrer, upward, Ø 30 mm, glass 250 mm 76

51161726 Pitched-blade stirrer, downward, Ø 30 mm, glass 250 mm 76

51161727 Anchor stirrer, Ø 48 mm, glass 261 mm 76

51161723 Stirrer shaft, Alloy C-22 258 mm 78

30130575 Stirrer shaft for magnetic drive, Alloy C-22 129 mm 78

D

100 mL high workup volume reactor + glass/PTFE covers

30111637 Pitched-blade stirrer, upward, Ø 38 mm, for 100 mL high workup volume/400 mL EasyMax reactors, glass 298 mm 77

30111638 Pitched-blade stirrer, downward, Ø 38 mm, for 100 mL high workup volume/400 mL EasyMax reactors, glass 298 mm 77

30111611 Stirrer shaft for 100 mL high workup volume/400 mL reactors, Alloy C-22 298 mm 79

30138114 Stirrer shaft for 100 mL high workup volume/400 mL reactors, for magnetic drive, Alloy C-22 184 mm 79

E

100 mL one-piece reactor

51161813 Stirrer shaft for 50 mL/100 mL one-piece reactors, glass 192 mm 82

30138937 Stirrer shaft for 50 mL/100 mL one-piece reactors, PTFE-coated 192 mm 82

30130413 Stirrer shaft for 50 mL/100 mL one-piece reactors, for magnetic drive, Alloy C-22 118 mm 78

F

250 mL reactor + glass cover

51162424 Pitched-blade stirrer, upward, Ø 38 mm, glass 400 mm 76

51162423 Pitched-blade stirrer, downward, Ø 38 mm, glass 400 mm 76

51162417 Stirrer shaft, Alloy C-22 400 mm 79

30130575 Stirrer shaft for magnetic drive, Alloy C-22 129 mm 78

Note: Use 30216881 OptiMax magnetic drive and mount stirrer blade upside down.

Combination
G

250 mL one-piece reactor

Stirrers and Stirrer Shaft Options

		Length	Page
51162681	Stirrer shaft for 250 mL/500 mL/1000 mL one-piece reactors, glass	400 mm	82

Combination
H

400 mL reactor + glass/PTFE covers

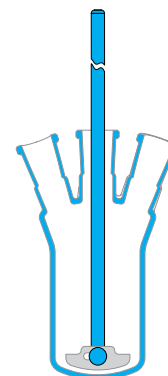
Stirrers and Stirrer Shaft Options

		Length	Page
30111637	Pitched-blade stirrer, upward, Ø 38 mm, for 100 mL high workup volume//400 mL EasyMax reactors, glass	298 mm	77
30111638	Pitched-blade stirrer, downward, Ø 38 mm, for 100 mL high workup volume//400 mL EasyMax reactors, glass	298 mm	77
30111639	Anchor stirrer, Ø 65 mm, glass	298 mm	77
30111611	Stirrer shaft for 100 mL high workup volume/400 mL reactors, Alloy C-22	298 mm	79
30138114	Stirrer shaft for 100 mL high workup volume//400 mL reactors, for magnetic drive, Alloy C-22	184 mm	79


I

400 mL one-piece reactor

30111614	Stirrer shaft for 400 mL one-piece reactor, glass	242 mm	82
30138938	Stirrer shaft for 400 mL one-piece reactor, PTFE-coated	242 mm	82
30138113	Stirrer shaft for 400 mL one-piece reactor, for magnetic drive, Alloy C-22	175 mm	79


J

 500 mL reactor + glass/PTFE covers;
1000 mL reactor + glass/PTFE covers

51162826	Pitched-blade stirrer, upward, Ø 45 mm, glass	400 mm	77
51162825	Pitched-blade stirrer, downward, Ø 45 mm, glass	400 mm	77
51162722	Stirrer shaft, Alloy C-22	400 mm	79
30138111	Stirrer shaft for magnetic drive, Alloy C-22	189 mm	79

K

500 mL/1000 mL one-piece reactors

51162681	Stirrer shaft for 250 mL/500 mL/1000 mL one-piece reactors, glass	380 mm	82
30138110	Stirrer shaft for 250 mL/500 mL/1000 mL one-piece reactor, for magnetic drive, Alloy C-22	155 mm	79

Glass Stirrers

For Two-Piece Reactors

100 mL glass stirrers



51161725	Pitched-blade stirrer Upward, three impellers, 45°, for 100 mL EasyMax reactor
Material	Borosilicate glass
Size	Outer Ø 30 mm, length 250 mm
Quantity	1



51161726	Pitched-blade stirrer Downward, three impellers, 45°, for 100 mL EasyMax reactor
Material	Borosilicate glass
Size	Outer Ø 30 mm, length 250 mm
Quantity	1



51161727	Anchor stirrer For 100 mL EasyMax reactor
Material	Borosilicate glass
Size	Outer Ø 48 mm, height 55 mm, length 261 mm
Quantity	1

250 mL glass stirrers



51162424	Pitched-blade stirrer Upward, four impellers, 45°, for 250 mL OptiMax reactor
Material	Borosilicate glass
Size	Outer Ø 38 mm, length 400 mm
Quantity	1



51162423	Pitched-blade stirrer Downward, four impellers, 45°, for 250 mL OptiMax reactor
Material	Borosilicate glass
Size	Outer Ø 38 mm, length 400 mm
Quantity	1

400 mL glass stirrers



30111637	Pitched-blade stirrer Upward, three impellers, 45°, for 100 mL high workup volume/400 mL EasyMax reactors
Material	Borosilicate glass
Size	Outer Ø 38 mm, length 298 mm
Quantity	1



30111638	Pitched-blade stirrer Downward, three impellers, 45°, for 100 mL high workup volume/400 mL EasyMax reactors
Material	Borosilicate glass
Size	Outer Ø 38 mm, length 298 mm
Quantity	1



30111639	Anchor stirrer For 400 mL EasyMax reactor
Material	Borosilicate glass
Size	Outer Ø 65 mm, height 75 mm, length 298 mm
Quantity	1

500 mL/1000 mL glass stirrers



51162826	Pitched-blade stirrer Upward, four impellers, 45°, for 500 mL/1000 mL OptiMax reactors
Material	Borosilicate glass
Size	Outer Ø 45 mm, length 400 mm
Quantity	1



51162825	Pitched-blade stirrer Downward, four impellers, 45°, for 500 mL/1000 mL OptiMax reactors
Material	Borosilicate glass
Size	Outer Ø 45 mm, length 400 mm
Quantity	1

250 mL reactor OptiMax 1001



51162417	Stirrer shaft, length 400 mm Two-piece reactor, 250 mL
Material	Alloy C-22
Size	Ø 10/8 mm, length 400 mm, M3 thread
Quantity	1

Note: Use 30216881 OptiMax magnetic drive and mount stirrer blade upside down.



30130575	Stirrer shaft for magnetic drive Two-piece reactor, 100 mL
Material	Alloy C-22
Size	Outer Ø 9.5/6 mm, length 129 mm, M3 thread
Quantity	1

Set includes: 30138089 Grub screw M4 x 3

100 mL high workup volume/400 mL reactors EasyMax 402



30111611	Stirrer shaft, length 298 mm Two-piece reactor, 100 mL high workup volume/400 mL
Material	Alloy C-22
Size	Ø 8 mm, length 298 mm, M3 thread
Quantity	1



30138114	Stirrer shaft for magnetic drive Two-piece reactor, 100 mL high workup volume/400 mL
Material	Alloy C-22
Size	Outer Ø 9.5/6 mm, length 184 mm, M3 thread
Quantity	1

Set includes: 30138089 Grub screw M4 x 3

500 mL/1000 mL reactors OptiMax 1001



51162722	Stirrer shaft, length 400 mm Two-piece reactor, 500 mL/1000 mL
Material	Alloy C-22
Size	Ø 10 mm, length 400 mm, M8 thread
Quantity	1



30138113	Stirrer shaft for magnetic drive One-piece reactor, 400 mL
Material	Alloy C-22
Size	Outer Ø 9.5/6 mm, length 175 mm
Quantity	1

Set includes: 30138089 Grub screw M4 x 3
30130576 Screw D11-M3 for half-moon blades



30138111	Stirrer shaft for magnetic drive Two-piece reactor, 500 mL/1000 mL
Material	Alloy C-22
Size	Outer Ø 9.5 mm, length 189 mm, M8 thread
Quantity	1

Set includes: 30138089 Grub screw M4 x 3



30138110	Stirrer shaft for magnetic drive One-piece reactor, 500 mL/1000 mL
Material	Alloy C-22
Size	Outer Ø 9.5 mm, length 155 mm
Quantity	1

Set includes: 30138089 Grub screw M4 x 3
30238893 Screw D13.5-M5 for half-moon blades

Metal Stirrer Blades

Pitch-blade elements



51161356	Pitched-blade element Upward, four impellers, 45°, for 50 mL/100 mL reactors, M3 thread
Material	Alloy C-22
Size	Outer Ø 25 mm
Quantity	1



51161549	Pitched-blade element Downward, four impellers, 45°, for 50 mL/100 mL reactors, M3 thread
Material	Alloy C-22
Size	Outer Ø 25 mm
Quantity	1



51162442	Pitched-blade element Upward, four impellers, 45°, for 100 mL/250 mL/400 mL reactors, M3 thread
Material	Alloy C-22
Size	Outer Ø 38 mm
Quantity	1



51162418	Pitched-blade element Downward, four impellers, 45°, for 100 mL/250 mL/400 mL reactors, M3 thread
Material	Alloy C-22
Size	Outer Ø 38 mm
Quantity	1



30111616	Pitched-blade element Upward, four impellers, 45°, for 100 mL/250 mL/400 mL reactors, M3 thread
Material	Alloy C-22
Size	Outer Ø 38 mm
Quantity	1



30111615	Pitched-blade element Downward, four impellers, 45°, for 100 mL/250 mL/400 mL reactors, M3 thread
Material	Alloy C-22
Size	Outer Ø 38 mm
Quantity	1



51160025	Pitched-blade element Upward, four impellers, 60°, for 500 mL/1000 mL reactors, M8 thread
Material	Alloy C-22
Size	Outer Ø 45 mm
Quantity	1



103504	Pitched-blade element Downward, four impellers, 60°, for 500 mL/1000 mL reactors, M8 thread
Material	Alloy C-22
Size	Outer Ø 45 mm
Quantity	1

Glass and PTFE-Coated Stirrer Shafts For One-Piece Reactors



Glass stirrer shafts

51161813	Glass stirrer shaft One-piece reactors, 50 mL/100 mL
Material	Borosilicate glass
Size	Ø 8 mm, length 192 mm
Quantity	1
30111614	Glass stirrer shaft One-piece reactor, 400 mL
Material	Borosilicate glass
Size	Ø 8 mm, length 242 mm
Quantity	1
51162681	Glass stirrer shaft One-piece reactors, 250 mL/500 mL/1000 mL
Material	Borosilicate glass
Size	Ø 10 mm, length 380 mm
Quantity	1



PTFE-coated stirrer shafts

30138937	PTFE-coated stirrer shaft One-piece reactors, 50 mL/100 mL
Material	PTFE-coated
Size	Ø 8 mm, length 192 mm
Quantity	1
30138938	PTFE-coated stirrer shaft One-piece reactor, 400 mL
Material	PTFE-coated
Size	Ø 8 mm, length 242 mm
Quantity	1

PTFE Stirrer Blades For One-Piece Reactors



51161814	Half-moon stirrer blade One-piece reactor, 50 mL
Material	PTFE
Size	15 mm x 26 mm
Quantity	1



30208854	Half-moon stirrer blade for PTFE shaft One-piece reactor, 50 mL
Material	PTFE
Size	15 mm x 26 mm
Quantity	1

Needed items: 30111614 Glass stirrer shaft
30130413 Stirrer shaft, magnetic drive
(50 mL/100 mL)

Needed items: 30138937 PTFE-coated stirrer shaft

Magnetic Stir Bars

PTFE-Coated



51191324	Magnetic stir bar, 6 mm x 10 mm
Material	PTFE-coated
Size	Ø 7 mm, length 10 mm
Quantity	1

51192096	Magnetic stir bar, 4.5 mm x 15 mm
Material	PTFE-coated
Size	Ø 4.5 mm, length 15 mm
Quantity	1

51191159	Magnetic stir bar, 7 mm x 30 mm
Material	PTFE-coated
Size	Ø 7 mm, length 30 mm
Quantity	1

51190791	Magnetic stir bar, 13 mm x 30 mm
Material	PTFE-coated
Size	Ø 13 mm, length 30 mm
Quantity	1

51191939	Magnetic stir bar, 8 mm x 40 mm
Material	PTFE-coated
Size	Ø 8 mm, length 40 mm
Quantity	1

Note: The magnetic stir bars do not work with EasyMax 402 and OptiMax 1001



51191919	Magnetic stir bar, cross-shaped 10 mm x 25 mm
Material	PTFE-coated
Size	Ø 25 mm, height 10 mm
Quantity	1

51191918	Magnetic stir bar, cross-shaped 15 mm x 38 mm
Material	PTFE-coated
Size	Ø 38 mm x 15 mm
Quantity	1

Note: The magnetic stir bars do not work with EasyMax 402 and OptiMax 1001

Overhead Stirrer Spare Parts

EasyMax 102 and 402



51161830	EasyMax stirrer motor without coupling
Material	Stainless steel
Speed	50 rpm to 1000 rpm
Quantity	1



51161655	Motor flange
Material	Aluminium alloy 6026
Quantity	1

Note: Three (3) screws (76692 screw, M2 x 10 mm, 10 pcs in a set) are needed to connect to the 51161830 stirrer motor



71652	O-ring for stirrer adapter
Material	FKM
Size	21.89 mm x 2.62 mm, AS no. 118
Quantity	1



51161360	Set of upper stirrer coupling Comprising upper coupling and two (2) threaded pins
Material	Stainless steel, 1.4301
Quantity	1

Note: Available on special request only

Non-Height Adjustable Stirrer Adapters

For One-Piece EasyMax Reactors



51161822	Non-height adjustable stirrer adapter ST19/26, including 51191375 sealing ring
Material	PEEK adapter, PTFE/FKM sealing ring
Quantity	1

Note: 51161822 adapter and 51161835 adapter are available only as sets with 51191375 sealing ring



51191375	Sealing ring for stirrer adapter
Material	PTFE/FKM
Size	Ø 16 mm, thickness 5 mm, aperture 8 mm
Quantity	1

Certain solvents like Methylene-chloride, DMSO and THF may cause swelling in PEEK. We recommend to use the optional 51161835 PTFE stirrer adapter as an alternative to avoid breakage of the glass port.



51161835	Non-height adjustable PTFE stirrer adapter With metal brace, ST19/26, including 51191375 sealing ring
Material	Aluminium anodized with PTFE adapter, PTFE/FKM sealing ring
Quantity	1

Spare Parts for OptiMax Stirrer



51162690	OptiMax overhead stirrer drive complete
Material	Aluminium anodized, PTFE
Speed	30 rpm to 1200 rpm
Quantity	1

Set includes: 51162841 Overhead stirrer motor standard
30451755 Stirrer adapter, ST24



51162841	Overhead stirrer motor standard
Material	Aluminium anodized, PTFE
Speed	30 rpm to 1200 rpm
Quantity	1



30451755	Stirrer adapter, ST24
Material	PTFE carbon
Size	Inner Ø 10 mm
Quantity	1

Set includes: 30477337 Stirrer adapter, top
Sealing ring
Stirrer adapter, bottom
51162820 Loosening nut



30477337	Stirrer adapter, top
Material	PTFE carbon
Size	Inner Ø 10 mm
Quantity	1



103547	Sealing ring for 30451755 adapter
Material	PTFE cord
Size	Inner Ø 10 mm
Quantity	5 pcs in a set



51162820	Loosening nut for 30451755 stirrer adapter
Material	PEEK
Size	Inner Ø M26
Quantity	1



51162763	Security ring to hold stirrer shaft
Material	PEEK
Speed	Inner Ø 10 mm
Quantity	1

Overhead Stirrer Magnetic Drive Sets

EasyMax and OptiMax



50 mL reactors

30213866	Magnetic drive set for two-piece reactor For 50 mL, EasyMax
Material of Wetted Parts	Alloy C-22, FFKM, PTFE C25
Size	Stirrer shaft length 94 mm, pitch-blade element, downward, outer Ø 25 mm
Speed	50 rpm to 1000 rpm
Quantity	1
Set includes:	51161830 EasyMax stirrer motor 30130412 Stirrer shaft for magnetic drive 51161549 Pitched-blade element, downward



100 mL reactors

30113925	Magnetic drive set for two-piece reactor For 100 mL, EasyMax
Material of Wetted Parts	Alloy C-22, FFKM, PTFE C25
Size	Stirrer shaft length 129 mm, pitch-blade element, downward, outer Ø 25 mm
Speed	50 rpm to 1000 rpm
Quantity	1
Set includes:	51161830 EasyMax stirrer motor 30130575 Stirrer shaft for magnetic drive 51161549 Pitched-blade element, downward



50 mL/100 mL reactors

30113924	Magnetic drive set for one-piece reactors For 50 mL/100 mL, EasyMax
Material of Wetted Parts	Alloy C-22, FFKM, PTFE, PTFE C25, PTFE GF25 (adapter)
Size	Stirrer shaft length 118 mm, half-moon stirrer blade 15 mm x 26 mm, half-moon stirrer blade 15 mm x 40 mm, adapter ST19/ST14
Speed	50 rpm to 1000 rpm
Quantity	1
Set includes:	51161830 EasyMax stirrer motor 30130413 Stirrer shaft for magnetic drive 51161814 Half-moon stirrer blade 51161749 Half-moon stirrer blade 51161509 Reducing adapter ST19/26 to ST14/23



100 mL high workup volume/400 mL reactors

30130319	Magnetic drive set for two-piece reactor For 100 mL high workup volume/400 mL, EasyMax
Material of Wetted Parts	Alloy C-22, FFKM, PTFE C25
Size	Stirrer shaft length 184 mm, pitch-blade element, downward, outer Ø 38 mm
Speed	50 rpm to 1000 rpm
Quantity	1
Set includes:	51161830 EasyMax stirrer motor 30138114 Stirrer shaft for magnetic drive 30111615 Pitched-blade element, downward



400 mL reactors

30125692	Magnetic drive set for one-piece reactor For 400 mL, EasyMax
Material of Wetted Parts	Alloy C-22, FFKM, PTFE, PTFE C25, PTFE GF25 (adapter)
Size	Stirrer shaft length 175 mm, half-moon stirrer blade 15 mm x 40 mm, adapter ST19/ST14
Speed	50 rpm to 1000 rpm
Quantity	1
Set includes:	51161830 EasyMax stirrer motor 30138113 Stirrer shaft for magnetic drive 51161749 Half-moon stirrer blade 51161509 Reducing adapter ST19/26 to ST14/23



500 mL/1000 mL reactors

30111285	Magnetic drive set for two-piece reactor For 500 mL/1000 mL, OptiMax
Material of Wetted Parts	Alloy C-22, FFKM, PTFE C25
Size	Stirrer shaft length 189 mm pitch-blade element, downward, outer Ø 45 mm
Speed	30 rpm to 1200 rpm
Quantity	1
Set includes:	51162841 OptiMax stirrer motor 30138111 Stirrer shaft for magnetic drive 103504 Pitched-blade element, downward



30113923	Magnetic drive set for one-piece reactor For 500 mL/1000 mL, OptiMax
Material of Wetted Parts	Alloy C-22, FFKM, PTFE, PTFE C25
Size	Stirrer shaft length 155 mm, half-moon stirrer blade 19 mm x 71 mm
Speed	30 rpm to 1200 rpm
Quantity	1
Set includes:	51162841 OptiMax stirrer motor 30138110 Stirrer shaft for magnetic drive 51162682 Half-moon stirrer blade

Magnetic Drive Upgrade Sets

EasyMax and OptiMax



30092602	EasyMax magnetic drive upgrade set Magnetic coupling 20 Ncm ST14
Material of Wetted Parts	Alloy C-22, FFKM, PTFE C25
Speed	50 rpm to 1000 rpm
Quantity	1

Note: To upgrade an existing stirrer motor set-up. Stirrer motor (51161830) is not included. Stirrer shafts must be purchased separately.



30216881	OptiMax magnetic drive upgrade set Magnetic coupling 50 Ncm ST24
Material of Wetted Parts	Alloy C-22, FFKM, PTFE C25
Speed	30 rpm to 1200 rpm
Quantity	1

Note: To upgrade an existing stirrer motor set-up. Stirrer motor (51162841) is not included. Stirrer shafts must be purchased separately.

Magnetic Drive Spare Parts

EasyMax and OptiMax



30130411	Driven shaft for the magnetic drive EasyMax
Material	Alloy C-22
Size	Ø 6 mm x 125 mm
Quantity	1



30238894	Driven shaft for the magnetic drive OptiMax
Material	Alloy C-22
Size	Ø 6 mm x 100 mm
Quantity	1



30238892	Closure screw OptiMax
Material	Alloy C-22
Size	Inner Ø 6.4 mm x 14 mm
Quantity	1



30138112	Inner magnet 20 Ncm without 30138089 grub screw EasyMax
Material	Alloy C-22
Size	Ø 11.6 mm x 33.5 mm
Quantity	1



30092479	O-ring for ST14 part, lower EasyMax
Material	FFKM
Size	Ø 9.25 mm x 1.78 mm
Quantity	1

30092600	O-ring for ST14 part, upper EasyMax
Material	FFKM
Size	Ø 10.82 mm x 1.78 mm
Quantity	1

51191214	O-ring (inside housing) EasyMax
Material	FFKM
Size	Ø 23.4 mm x 3.53 mm
Quantity	1

30238897	O-ring OptiMax
Material	FFKM
Size	Ø 17.13 mm x 2.62 mm
Quantity	1



30138107	Outer magnet 20 Ncm without 30238895 set screw M5 x 6 EasyMax
Material	Stainless steel
Size	Ø 28 mm x 40.5 mm
Quantity	1

Bar Type Baffles and Drain Union

OptiMax 500 mL and 1000 mL Reactors



51162638	Bar type baffle for 500 mL reactor
Material	Alloy C-22
Size	Ø 10 mm, width 15 mm, length 237 mm
Quantity	1

Adapter needed: 51104154 PTFE adapter ST19/26, eccentric



51162637	Bar type baffle for 1000 mL reactor
Material	Alloy C-22
Size	Ø 10 mm, width 15 mm, length 249 mm
Quantity	1

Adapter needed: 51104154 PTFE adapter ST19/26, eccentric



51162685	Drain union, bended
Material	Borosilicate glass
Size	Inner Ø 9 mm, spherical joint S19
Quantity	1

Clamp needed: 51192169 Pinch clamp S19, stainless steel

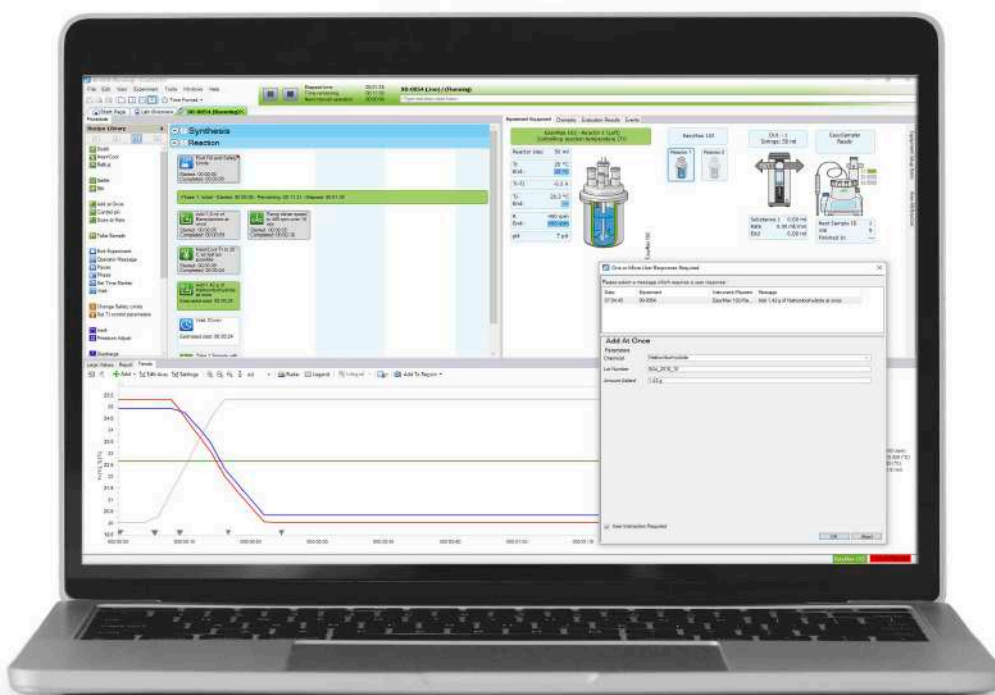
iControl™ Software

For EasyMax, OptiMax, RX-10, and RC1mx

iControl enhances the user experience running advanced procedures including complex reactions, automated sampling, calorimetric investigations or the determination of the reaction kinetics or critical process parameters.

iControl software enable to seamlessly integrate the synthesis workstations EasyMax, OptiMax, RX-10, and RC1mx with Real-Time Analytical tools such as EasyViewer, ReactIR or ReactRaman. iControl enables scientists to:

- Display, process, and analyze experimental data
- Import, overlay, and compare data from different experiments
- Copy and paste trends between iControl and other iC products
- Customize reports with experiment specific text and images.



▶ WATCH

iControl Software for EasyMax, OptiMax, RX-10, and RC1mx

Order Number	License type	Description
30721094	Software iControl Single Instrument	Software license for experiment preparation, control and data evaluation for one instrument
30721096	Software iControl Multiple Instrument Option	Software option to connect up to four (4) synthesis workstations to an existing iControl installation
30721119	Software iControl Office	Software license for experiment preparation and experiment evaluation
30721090	Software iC Safety Option for iControl	Software license for EasyMax, OptiMax or RC1mx. iCSafety automates the calculation of thermal safety parameters

EasyMax HFCal Kit

Calorimetry



To perform calorimetric studies, the 30090576 Upgrade Kit, the 30720937 Software Option as well as 30721094 iControl software are required.

30090576 **Upgrade Kit EasyMax HFCal**

A calorimetry Upgrade Kit for EasyMax contains all necessary parts to convert the workstation into a fully functional calorimeter (needs software).

30720937 **Software EasyMax HFCal** **Option for iControl**

Software option enabling calorimetric experiments and heat flow evaluations in iControl.

iControl software is not included.

Upgrade Kit EasyMax HFCal consisting of

Order Number	Product Description	Quantity	Page
30090577	Module EasyMax HFCal	1	138
30099798	Temperature sensor, glass, 260 mm	2	138
30090579	Calibration heater, Alloy C-22, 260 mm	2	138
51162720	Adapter ST14, PTFE, with sealing ring	4	138
51191988	CAN cable, 100 cm	1	138
	HFCal Quick Start Guide	1	

Software EasyMax HFCal Option iControl

Order Number	Product Description	Quantity	Page
30720937	Software EasyMax HFCal Option iControl	1	

Note: Large image may not show all parts in the set.

OptiMax HFCal Kit

Calorimetry



To perform calorimetric studies, the 30050150 Upgrade Kit, the 30720936 Software Option as well as 30721094 iControl software are required.

30050150

Upgrade Kit OptiMax HFCal

A calorimetry Upgrade Kit for OptiMax. It is plug-and-play and contains all necessary parts to convert the workstation into a fully functional calorimeter (needs software).

30720936

Software OptiMax HFCal Option for iControl

Software option enabling calorimetric experiments and heat flow evaluations in iControl.

iControl software is not included.

Upgrade Kit OptiMax HFCal consisting of

Order Number	Product Description	Quantity	Page
30050151	OptiMax HFCal box	1	138
30050155	Calibration heater, 300 mm	1	138
30064131	Adapter ST19, PTFE, with sealing ring	1	138
51191988	CAN cable, 100 cm	1	138
	HFCal Quick Start Guide	1	

Software OptiMax HFCal Option iControl

Order Number	Product Description	Quantity	Page
30720936	Software OptiMax HFCal Option iControl	1	

Note: Large image may not show all parts in the set.



30090577	Module EasyMax HFCal Can be attached on the left or right side of the EasyMax
Size	120 mm x 40 mm x 170 mm (w, d, h)
Quantity	1



30050151	OptiMax HFCal box Can be attached on the left or right side of the OptiMax
Size	120 mm x 40 mm x 170 mm (w, d, h)
Quantity	1



51191988	CAN cable, 100 cm
Size	Length 100 cm
Quantity	1



30099798	Pt100 temperature sensor, EasyMax
Material	Wetted part: Glass
Size	Sensor Ø 6 mm, length 260 mm
Quantity	1

Note: Find out more about the immersion depth on Page 27



30090579	EasyMax calibration heater
Material	Wetted part: Alloy C-22
Size	Sensor Ø 6.35 mm, length 260 mm
Quantity	1



30050155	OptiMax calibration heater
Material	Wetted part: Alloy C-22
Size	Sensor Ø 8 mm, length 300 mm
Quantity	1



51162720	PTFE adapter ST14/23, eccentric Including 51162716 sealing ring
Material	PTFE GF25
Port size	ST14/23
Size	Inner Ø 6 mm
Quantity	1

Note: Can also be used for Ø 1/4" 6.35 mm inserts



30064131	PTFE adapter ST19/26, eccentric For calibration heater, including 30064134 sealing ring
Material	PTFE GF25
Port size	ST19/26
Size	Inner Ø 8 mm
Quantity	1



51162716	Sealing ring for 51162720 PTFE adapters
Material	PTFE
Size	Inner Ø 6 mm
Quantity	1

Note: Can also be used for Ø 1/4" 6.35 mm inserts



30064134	Sealing ring for 30064131 PTFE adapter
Material	PTFE
Size	Inner Ø 8 mm
Quantity	1

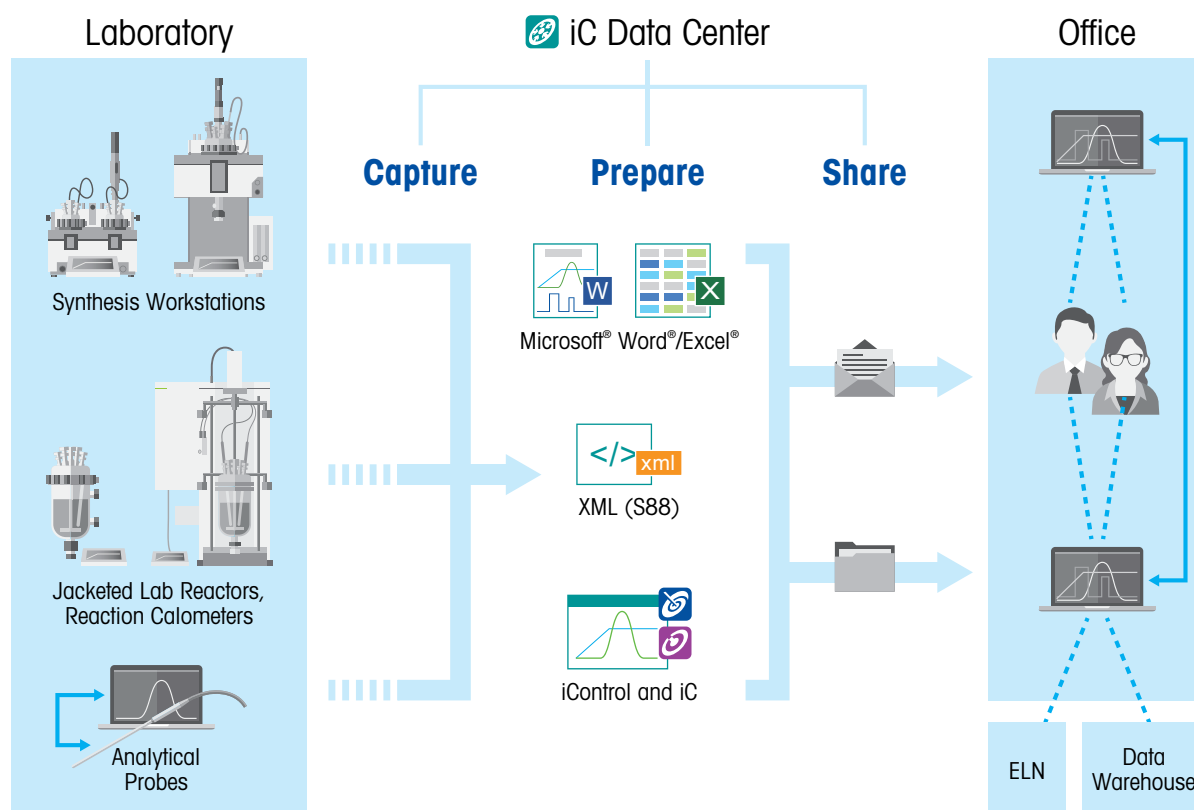
iC Data Center™

Capture, Prepare, Share

An estimated 85% of lab data is lost because it is not transferred from lab instruments or is not recorded at all.

iC Data Center ensures all experiment data is automatically captured, prepared into useful formats, and shared on a central file store. It allow scientist to focus on the science while taking care of:

- Collecting experiment data automatically of all AutoChem instruments
- Preparing standardized reports and distribute these centrally
- Emailing users with links to the files after the experiment completion



iC Data Center is a powerful tool that improves productivity for the researcher while facilitating knowledge management for the organization. For further details please contact your local METTLER TOLEDO organization.



RX-10™

Reactor Control and Capture



30208790 RX-10 with 1 m touchscreen cable

Touchscreen-based control unit to automate and monitor jacketed lab reactors. Third-party thermostats, stirrers and sensors can be connected via plug-and-play interfaces.

30217050 RX-10 with 3 m touchscreen cable

30208790 RX-10 unit with 1 m touchscreen cable consisting of

Order Number	30208790 RX-10 Unit	Quantity	Page
30303438	RX-10 main unit	1	141
51161883	Touchscreen 7", 1 m cable	1	141
30281496	Lab bar holder	1	141
30090591	Power supply	1	141
30281497	Thermostat/stirrer RS232 cable set, 6 cables	1	141
	RX-10 Quick Start Guide	1	

30217050 RX-10 unit with 3 m touchscreen cable consisting of

Order Number	Product Description	Quantity	Page
30303438	RX-10 main unit	1	141
30303580	Touchscreen 7", 3 m cable	1	141
30281496	Lab bar holder	1	141
30090591	Power supply	1	141
30281497	Thermostat/stirrer RS232 cable set, 6 cables	1	141
	RX-10 Quick Start Guide	1	

Note: Large image may not show all parts in the sets.



30303438	RX-10 main unit
Size	70 mm x 152 mm x 215 mm (w, d, h)
Weight	2.88 kg, including touchscreen
Quantity	1



51161883	TFT touchscreen 7", 1 m cable
Material	PA, aluminium
Size	195 mm x 135 mm x 60 mm (w, d, h)
Quantity	1

30303580	TFT touchscreen 7", 3 m cable
Material	PA, aluminium
Size	195 mm x 135 mm x 60 mm (w, d, h)
Quantity	1



30281496	Lab bar holder
Material	Aluminium, stainless steel
Size	134.75 mm x 35.5 mm x 30 mm (l, w, h)
Quantity	1



30090591	Power supply for CAN bus devices Required if additional CAN devices are connected
Quantity	1



30281497	Thermostat/stirrer RS232 cable set Dedicated and color coded
Size	Length 2.9 m each
Quantity	6 pcs per set

Optional Accessories For RX-10



30260369	Emergency button
Size	125 mm x 80 mm x 95 mm (l, w, h) cable length 6.9 m
Quantity	1

30267163	SmartConnect Pt100 cable with loose ends For Pt100 sensors, Page 123
Quantity	1

30267165	SmartConnect sensor cable with loose ends For Pt100 and other sensors, Page 123
Quantity	1

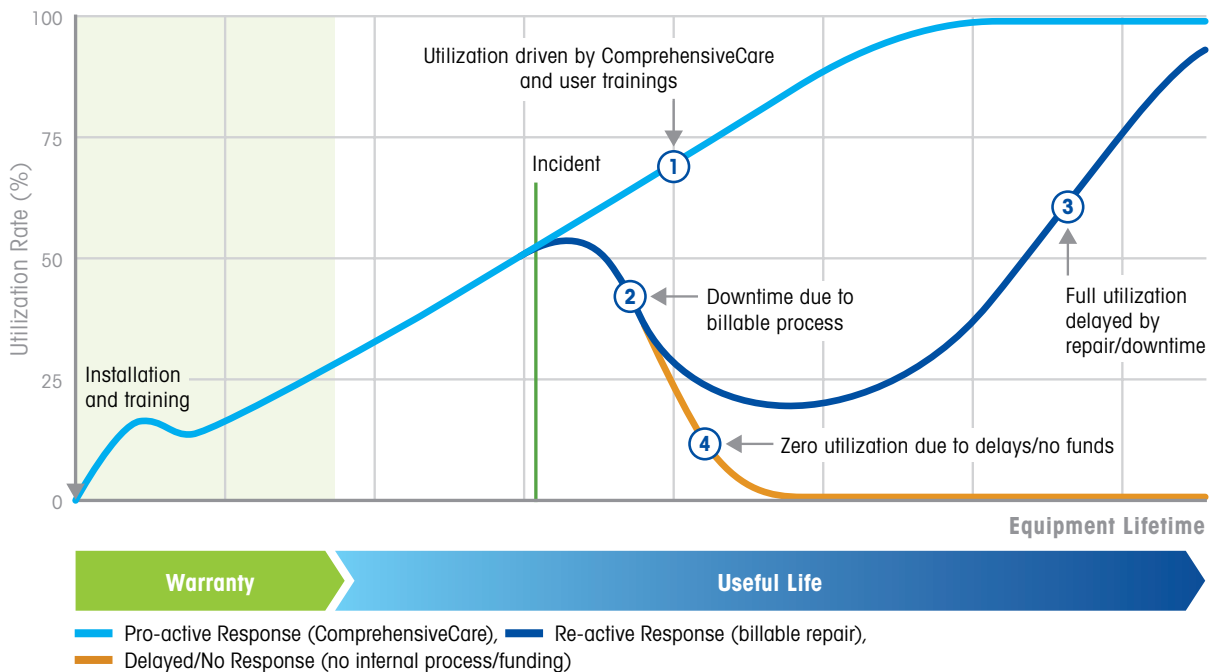
30254779	SmartConnect LE03/EV-120 cable For pressure measurement, Page 123
Quantity	1

Post-Warranty Maintenance

Ensuring Performance and Repeatability

Implementing a maintenance plan before the warranty period ends, is the most effective way to commit to your team's success.

Impact of Downtime on Utilization



View these videos for the best way to learn about the proper care of your instruments.



Six Components of a Long-Term Instrument Maintenance Strategy (2:08)



▶ WATCH



Selecting a Maintenance & Support Plan (2:37)



▶ WATCH



Understanding Scheduled Maintenance (3:11)



▶ WATCH

Preventive Maintenance Service Includes:

One on-site Preventive Maintenance and Calibration Validation service of a METTLER TOLEDO automated reactor system.

- **Travel and Labor for Preventive Maintenance**
- **Verification of Installation Qualification (IQ)**
To ensure performance and stability is unaffected by environmental challenges
- **Performance of Operational Qualifications (OQ)**
To ensure accurate and reproducible data collection
- **Support of Performance Qualification (PQ) Against METTLER TOLEDO Factory Specifications**
To show objective evidence and records to satisfy Quality requirements of documented compliance to internal and external standards
- **Performance of Annual Maintenance Qualifications (MQ)**
To mitigate risk of unexpected part failure over the life of the instrument

Activities Performed During Preventive Maintenance Service:

- **Verification of Cooling and Purge**
- **Verification of Stirrer and Replacement of Sealing Ring (EasyMax)/Stirrer Internals (OptiMax)**
- **Calibration of Tr and Tj Sensors**
- **Specification Test (Heat/Cool, Speed and Stability)**
- **Electronic Asset Management and Maintenance Documentation (MPAC – Maintenance Qualification Package)**

EasyMax & OptiMax Lifecycle Maintenance Checklist	Annual	Scheduled
Temperature Calibration, Heat/Cool, Stability and Speed Verification To ensure temperature accuracy, repeatability, and response time	<input type="checkbox"/>	-
Replace Sealing Ring (EasyMax)/Stirrer Internals (OptiMax) To prevent solvent loss	<input type="checkbox"/>	-
Replace Touchscreen Cover To preserve LCD surface	<input type="checkbox"/>	-
Replace Battery To ensure diagnostic logging	-	<input type="checkbox"/> (2 years)
Replace Cooling Fan To maintain operating conditions	-	<input type="checkbox"/> (5 years)
Replace Thermostat Blocks To ensure heating/cooling, speed, and stability	-	<input type="checkbox"/> (6 years)

- Replaced at annual Preventive Maintenance (PM)
- Replaced based on age/utilization (Scheduled Maintenance, SM); no additional labor charge when done during PM