



OptiMax™ 1001 Standard Sets

1000 mL Glass Reactor Sets

500 mL Glass Reactor Sets

250 mL Glass Reactor Sets

Accessories & Spares

Dosing Unit SP-50



OptiMax™

Your Synthesis Workstation



Glossary of Terms Used			
ReactIR	= Mid-IR spectroscopy	PA	= Polyamide
FBRM®	= Focused Beam Reflectance Measurement	PVC	= Polyvinylchloride
HC-22	= Hastelloy® C22	SAN	= Styrene acrylonitrile
PTFE GF25	= Teflon® (Polytetrafluoroethylene), 25 % glass	PE	= Polyethylene
PEEK	= Polyetheretherketone	PP	= Polypropylene
ETFE	= Ethylene tetrafluoroethylene	PU	= Polyurethane
FFKM	= Kalrez® 6375 (Perfluoroelastomer)	POM	= Polyoxymethylene
FPM	= Viton® (Fluorine rubber)	PBT	= Polybutylene terephthalate
		VQM	= Silicone rubber
		PVDF	= Kynar® (Polyvinylidene Fluoride)

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OptiMax™ – Your Synthesis Workstation

Editorial

- No oil baths, ice baths, and cryostats required
- Precise temperature control from –40 to 180 °C
- Small and mobile
- Wide range of different reactors and stirrers
- Simple and intuitive touch screen operation
- No learning curve
- Programmable
- Secure unattended operation
- Data logging making experiments traceable and reproducible
- Data export into iControl and MS-Excel®

Introduction

OptiMax™ is a synthesis workstation that is beyond traditional synthesis equipment. It is geared towards today's workflows in chemical and process development labs. It simplifies organic synthesis by eliminating cumbersome steps and ensures precise and accurate execution of chemical synthesis. It heats and cools efficiently without the need for cryostats, oil or ice baths, offers a large variety of different reactors and stirrers, and is operated by a simple touch screen. Even though its use is simple, experiments are carried out with highest precision, reproducible and traceable increasing productivity in chemical and process development significantly.

A Remarkable Thermostat

OptiMax™ is a single self-contained box with a built-in solid state thermostat covering the entire temperature range without an additional cryostat. The powerful Peltier-based thermostat provides the necessary performance to control the temperature of the reaction mixture accurately and reproducibly. It grants outstanding heating and cooling rates in the entire temperature range from –40 to 180 °C. Even strong chemical reactions are kept at constant temperature, ensuring that the experiment is carried out safely and the reaction kinetics remains unaffected.

Operation

OptiMax™ is operated completely effortless using a smart and intuitive touch screen. Changing experiment parameters, such as temperature or stirring speed is a matter of seconds and doesn't require any training. The experiment is either carried out step-by-step or programmed and completely unattended. The safety monitoring system ensures safe execution of the individual tasks without permanent supervision.

All data and relevant information are displayed and recorded as the experiment proceeds. For further evaluation the recorded data can be transferred to either iControl™, the sophisticated PC software or MS-Excel®.

OptiMax™ Starter Kit

The OptiMax™ starter kit is a ready-to-go setup that simplifies the part evaluation and ordering process. The starter kit combines all the key items for an easy-to-use 1000 mL two-piece reactor setup in just one part number.

The OptiMax™ starter kit includes the following key components:

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

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

51 162 830
OptiMax™ 1001 starter kit consists of the following items

51 162 701	OptiMax™ thermostat system
51 162 831	OptiMax™ 1000 mL two-piece glass reactor set
51 162 720	PTFE adapter for Tr, pH, and turbidity probe
51 162 839	Tr probe, HC-22
51 162 886	Accessories holder set

Details regarding these items can be found on the following pages.



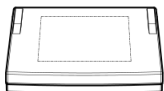
OptiMax™ Thermostat System



	OptiMax™ 1001 reactor block available only in a thermostat system set
Material	Powder-coated stainless steel with FEP/PFA coated cover plate
Power supply voltages	100 – 240 VAC
Back-/frontlight	12 LEDs
Heating/cooling	Solid state thermostat
Temperature mode	Jacket control, reaction mixture control, crystallization and distillation (constant or ramp)
Temperature range	–40 to 180 °C; jacket temperature (Tj)
Size	388 x 414 x 539 mm (w, d, h), 388 x 414 x 780 mm (w, d, h with overhead stirrer)
Weight	35 kg, including touchscreen
Quantity	1

51 162 701 OptiMax™ thermostat system set consisting of

Order number	Product description	Quantity
	OptiMax™ 1001 reactor block	1
51 161 873	7" TFT OptiMax™ touchscreen	1
51 191 728	Pen for OptiMax™ touchscreen	1
51 162 690	Overhead stirrer drive complete	1
51 161 099	Lab bar, 600 x 14 mm	4
51 162 860	Reactor block plug for bottom drain valve opening	1
51 161 187	PVC tube for coolant, length 2.5 m	2
51 191 125	PVC tube, soft, for reflux condenser, length 5 m	1
51 161 186	PVC tube for gas inlet, length 2 m	1
51 191 915	Flow indicator for coolant	1
51 191 916	Reducing connector for purge gas tubing	3
51 190 324	Quick connect coupling for purge gas inlet	5
51 192 126	Hose clamp for PVC tube	4
	USB memory stick for data export	1
51 161 782	Bubble counter	1
51 161 603	Magnetic bubble counter holder	1
51 191 945	Purge gas regulation valve	1
11 132 570	OptiMax™ touchscreen protective cover	1
51 191 235	Identification clips for adhesive labels to label individual sensors, reactors etc.	1
51 192 208	Glass adapter ST19/26-GL14	2
51 190 317	Screw cap GL14, with aperture	2
51 103 947	Sealing ring with vulcanized-on PTFE washers for GL14 cap	2
51 191 373	Y-piece for gas tubing	1
51 727 001	OptiMax™ Product Catalog/Packing List	1
51 712 001	OptiMax™ Operating Instructions	1
	OptiMax™ Product Documentation – Installation Check and Factory Test Reports, CE Certificate	1



51 161 873	7" TFT OptiMax™ touchscreen including protective cover
Material	PA, aluminum
Size	195 x 135 x 60 mm (w, d, h)
Quantity	1



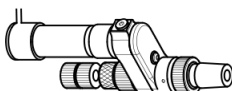
51 161 187	PVC tube for coolant
Material	PVC
Size	Ø 8/12 mm, length 2.5 m
Quantity	1



51 191 728	Pen for touch screen operation
Size	Length 140 mm
Quantity	1



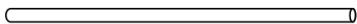
51 191 125	PVC tube, soft, for reflux condenser
Material	PVC
Size	Ø 8/12 mm, length 5 m
Quantity	1



51 162 690	Overhead stirrer drive complete
Material	Aluminium anodized, PTFE
Speed	30 to 1200 rpm
Quantity	1



51 161 186	PVC tube for purge gas inlet
Material	PVC
Size	Ø 4/6 mm, length 2 m
Quantity	1

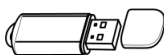


51 161 099	Lab bar 600 x 14 mm
Material	Stainless steel, 1.4435
Size	Ø 14 mm x 600 mm
Quantity	1



51 191 915	Flow indicator for coolant
Material	SAN
Temperature	Max. 30 °C
Size	For tubes with inner Ø 6 to 9 mm
Quantity	1

available on special request only



	USB 2.0 memory stick for data export
Memory size	2 GB
Size	55 x 15 x 6 mm
Quantity	1

available on special request only



51 191 916	Reducing connector for purge gas tubing
Material	PP
Temperature	Max. 30 °C
Size	For tubes with inner Ø 7 – 11 resp. 4 – 7 mm
Quantity	1



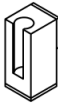
51 162 860	Reactor block plug for bottom drain valve opening
Material	PTFE GF25
Size	Ø 56 x 35 mm
Quantity	1
O-ring needed	51 192 209



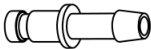
51 161 782	Bubble counter
Material	Borosilicate glass
Size	Ø 30 x 150 mm
Quantity	1



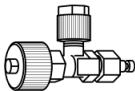
51 192 209	O-ring for 51 162 860 plug
Material	FPM
Size	Ø 50.39 x 3.53 mm, AS No. 226
Quantity	1



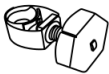
51 161 603	Magnetic bubble counter holder
Material	PET
Size	30 x 33 x 68 mm
Quantity	1



51 190 324	Quick connect coupling for purge gas in-/outlet
Material	Stainless steel
Size	For tubes with inner Ø 4 mm
Quantity	1

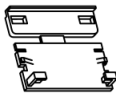


51 191 945	Purge gas regulation valve
Material	PA 6.6, NBR
Size	Tube Ø 6 mm
Quantity	1

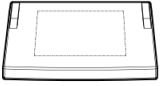


51 192 126	Hose clamp for PVC tube
Material	Stainless steel
Size	Ø 14 – 9.5 mm
Quantity	1

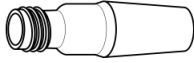
available on special request only



51 191 235	Identification clips for adhesive labels to label individual sensors, readers etc.
Size	For cables with Ø 2 – 4.5 mm
Quantity	1



11 132 570	OptiMax™ touchscreen protective cover
Material	Borex® resin
Quantity	1



51 192 208	Glass adapter ST19/26-GL14
Material	Glass
Size	Height 50 mm
Quantity	1



51 190 317	Screw cap GL14, with aperture
Material	PBT
Size	Aperture Ø 9.5 mm
Quantity	1



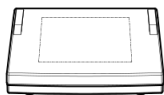
51 103 947	Sealing ring with vulcanized-on PTFE washers for GL14 cap
Material	Silicone rubber VQM, PTFE-coated
Size	Ø 12 mm, aperture 6 mm
Quantity	1



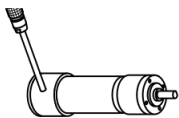
51 191 373	Y-piece for gas tubing
Material	Acetal resin
Size	for tubes with inner Ø 4 mm
Quantity	1

OptiMax™ Thermostat System

Spare Parts



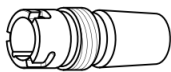
51 161 883	7" TFT OptiMax™ touchscreen Including protective cover
Material	PA, aluminum
Size	195 x 135 x 60 mm (w, d, h)
Quantity	1



51 162 841	Overhead stirrer motor standard
Material	Aluminium anodized, PTFE
Speed	30 to 1200 rpm ± 5 rpm
Quantity	1



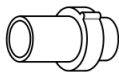
51 162 763	Security ring to hold stirrer shaft
Material	PEEK
Speed	Inner Ø 10 mm
Quantity	1



51 162 643	Stirrer adapter, ST24
Material	PTFE (Vollflon 117)
Size	Inner Ø 10 mm
Quantity	1



51 162 820	Loosening nut for 51 162 643 stirrer adapter
Material	PTFE (Vollflon 117)
Size	Inner Ø M26
Quantity	1



51 192 163	Bearing sleeve for overhead stirrer
Material	PEEK/PTFE
Size	Inner Ø 10 mm
Quantity	1

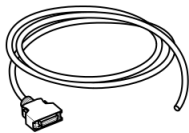


51 192 164	Compression spring for overhead stirrer
Material	PEEK
Size	Inner Ø 10 mm
Quantity	1

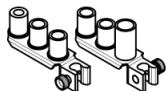
Accessories for OptiMax™ System



51 190 319	Plastic hose, straight with silicone rubber seal, for GL14 screw cap
Material	PP, VQM
Size	For tube inner Ø 6 – 9 mm
Quantity	1



51 162 885	Touchscreen cable extension to be ordered with base unit or assembled by a field service engineer
Size	Length 3 m
Quantity	1



51 162 886	Accessories holder set to be attached to the lab bar of your OptiMax™ system – for stirrer motor (ST24), for Ø 12 mm probes (ST19), for Ø 6 mm probes (ST14)
Material	Stainless steel, PTFE GF25
Quantity in a set	2 x holders 1 x adapter with ST14 aperture 4 x adapters with ST19 aperture 1 x adapter with ST24 aperture



51 161 778	Purge gas set for overhead stirrer available only as a set
Material	Stainless steel, PVC, PP
Temperature	PP max 30 °C
Quantity in a set	1 x bulkhead connector 2 x quick connect couplings (for tubes inner Ø 4 mm) 1 x reducing connector (for tubes inner Ø 7-11 mm and 4-7 mm) 1 x PVC tube (inner Ø 4 mm)

OptiMax™ 1000 mL Glass Reactor Set

Two-Piece



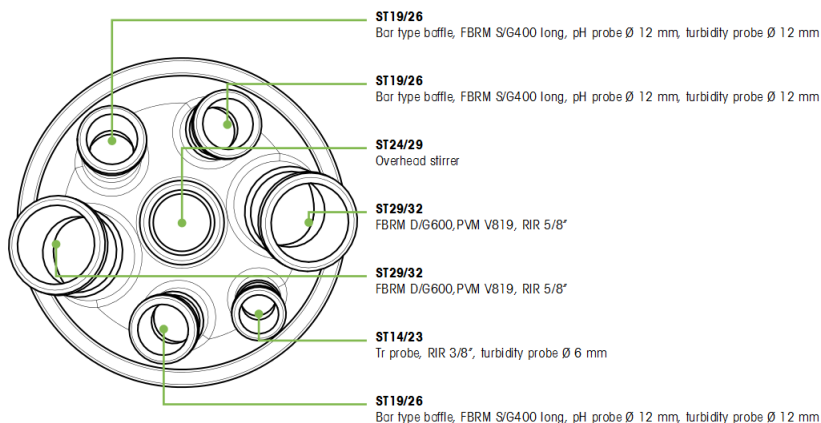
51 162 831
1000 mL two-piece glass reactor set

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 working volume of 1000 mL, a nominal volume of 1310 mL and a starting volume of 200 mL.

OptiMax™ 1000 mL two-piece glass reactor set consisting of

Order number	Product description	Quantity
51 162 634	Glass reactor, 1000 mL	1
51 162 782	Reactor holder for 1000 mL reactor	1
51 162 671	Glass cover, for 1000/500 mL reactor, 7 parts	1
51 162 780	Cover holder for 1000/500 mL reactor cover	1
51 162 673	Reactor clamp for 1000/500 mL reactor	1
51 192 205	O-ring for 1000/500 mL reactor	1
51 162 722	Stirrer shaft for 1000/500 mL reactor, HC-22	1
103 504	Pitched stirrer blade, HC-22, downward	1
51 162 637	Bar type baffle for 1000 mL reactor, HC-22	1
51 104 154	PTFE adapter for baffle	1
51 162 685	Drain union, bended	1
51 192 169	Pinch clamp ST9	1
71 518	Glass stopper ST29/32	2
71 517	Glass stopper ST19/26	3
51 190 878	Glass stopper ST14/23	1
51 192 168	*Kedk* clamp ST29	2
51 192 167	*Kedk* clamp ST24	1
51 191 429	*Kedk* clamp ST19	3
51 191 505	*Kedk* clamp ST14	1



51 162 634	1000 mL glass reactor
Material	Borosilicate glass, PTFE, PEEK, silicone
Working volume	Max. 1000 mL
Nominal volume	1310 mL
Temperature	-40 to 180 °C
Size	Inner Ø 101 mm, height 172 mm, wall 3 mm
Quantity	1



51 162 671	Glass cover for 1000/500 mL reactor, 7 ports
	1 x ST14/23, 3 x ST19/26, 2 x ST29/32, center ST24/29
Material	Borosilicate glass
Temperature	-40 to 180 °C
Size	Inner Ø 98 mm
Quantity	1



51 162 782	Reactor holder for 1000 mL reactor
Material	Stainless steel 1.4404, PE
Quantity	1



51 162 780	Cover holder for 1000/500 mL reactor cover
Material	Stainless steel 1.4404, PE
Size	Inner Ø 121 x 22 mm
Quantity	1



51 162 673	Reactor clamp for 1000/500 mL reactor
Material	Stainless steel 1.4404, Glastherm HT 220 (Thermalite 220M)
Quantity	1



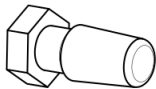
51 192 205	O-ring for 1000/500 mL reactor
Material	Elastomer Vollkorn Silicone VQM, Teflon FEP-coated
Temperature	-60 to 200 °C
Size	Ø 107.5 x 3.53 mm, AS No. 244
Quantity	1



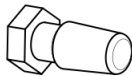
51 162 685	Drain union, bended
Material	Borosilicate glass
Size	Inner 9 mm, spherical joint ST9
Quantity	1



51 192 169	Pinch clamp ST9 drain union clamp
Material	Stainless steel
Quantity	1



71 518	Glass stopper ST29/32
Material	Glass
Quantity	1



71 517	Glass stopper ST19/26
Material	Glass
Quantity	1



51 190 878	Glass stopper ST14/23
Material	Glass
Quantity	1



51 192 168	"Keek" clamp ST29
Material	POM
Quantity	1



51 192 167	"Keek" clamp ST24
Material	POM
Quantity	1



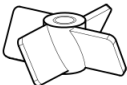
51 191 429	"Keek" clamp ST19
Material	POM
Quantity	1



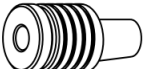
51 191 505	"Keek" clamp ST14
Material	POM
Quantity	1



51 162 722	Stirrer shaft for 1000/500 mL reactor M8 thread
Material	HC-22
Size	Ø 10 mm, length 400 mm
Quantity	1



103 504	Pitched stirrer blade for 1000/500 mL reactor downward, 4 impellers, 45°, M8 thread
Material	HC-22
Size	Outer Ø 45 mm
Quantity	1



51 104 154	PTFE adapter for baffle, eccentric for baffle, including 103 047 sealing ring
Material	PTFE
Size	Inner Ø 10 mm, ST19
Quantity	1



51 162 637	Bar type baffle for 1000 mL reactor
Material	HC-22
Size	Ø 10 mm, width 15 mm, length 249 mm
Quantity	1

OptiMax™ 1000 mL Glass Reactor

Optional Accessories



51 192 218	O-ring for 1000/500 mL reactor
Material	FFKM
Temperature	up to 275 °C
Size	Ø 107.5 x 3.53 mm, AS No. 244
Quantity	1

OptiMax™ 500 mL Glass Reactor Set

Two-Piece



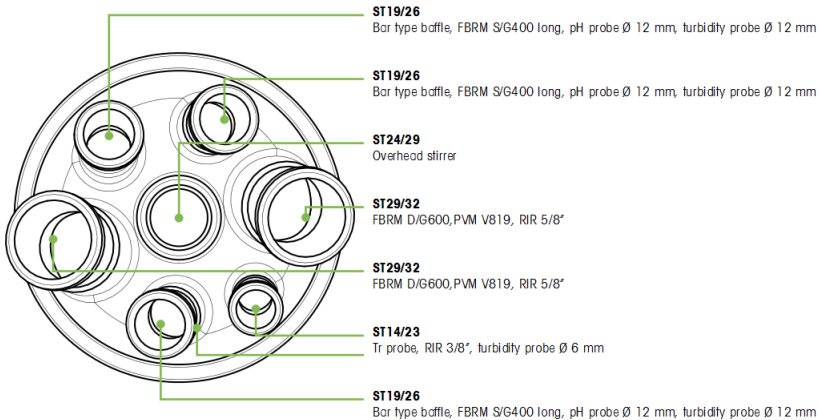
51 162 832
500 mL two-piece glass reactor set

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 working volume of 500 mL, a nominal volume of 830 mL and a starting volume of 70 mL.

OptiMax™ 500 mL two-piece glass reactor set consisting of

Order number	Product description	Quantity
51 162 632	Glass reactor, 500 mL	1
51 162 783	Reactor holder for 500 mL reactor	1
51 162 671	Glass cover, for 1000/500 mL reactor, 7 parts	1
51 162 780	Cover holder for 1000/500 mL reactor cover	1
51 162 670	Receptacle for 500 mL reactor	1
51 162 673	Reactor clamp for 1000/500 mL reactor	1
51 192 205	O-ring for 1000/500 mL reactor	1
51 162 722	Stirrer shaft for 1000/500 mL reactor, HC-22	1
103 504	Pitched stirrer blade, HC-22, downward	1
51 162 638	Bar type baffle for 500 mL reactor, HC-22	1
51 104 154	PTFE adapter for baffle	1
51 162 685	Drain union, bended	1
51 192 169	Pinch clamp ST9	1
71 518	Glass stopper ST29/32	2
71 517	Glass stopper ST19/26	3
51 190 878	Glass stopper ST14/23	1
51 192 168	*Kek® clamp ST29	2
51 192 167	*Kek® clamp ST24	1
51 191 429	*Kek® clamp ST19	3
51 191 505	*Kek® clamp ST14	1



51 162 632	500 mL glass reactor
Material	Borosilicate glass, PTFE, PEEK, silicone
Working volume	Max. 500 mL
Nominal volume	830 mL
Temperature	-40 to 180 C
Size	Inner Ø 77 mm, height 172 mm, wall 2.5 mm
Quantity	1



51 162 671	Glass cover for 1000/500 mL reactor, 7 ports
	1 x ST14/23, 3 x ST19/26, 2 x ST29/32, center ST24/29
Material	Borosilicate glass
Temperature	-40 to 180 C
Size	Inner Ø 98 mm
Quantity	1



51 162 783	Reactor holder for 500 mL reactor
Material	Stainless steel 1.4404, PE
Quantity	1



51 162 780	Cover holder for 1000/500 mL reactor cover
Material	Stainless steel 1.4404, PE
Size	Inner Ø 121 x 22 mm
Quantity	1



51 162 670	Receptacle for 500 mL reactor
	Thermostat sleeve
Material	Aluminium anodized
Quantity	1



51 162 673	Reactor clamp for 1000/500 mL reactor
Material	Stainless steel 1.4404, Glostherm HT 220 (Thermolite 220M)
Quantity	1



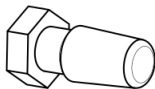
51 192 205	O-ring for 1000/500 mL reactor
Material	Elastomer Vollkern Silicone VQM, Teflon FEP-coated
Temperature	-60 to 200 °C
Size	Ø 107.5 x 3.53 mm, AS No. 244
Quantity	1



51 162 685	Drain union, bended
Material	Borosilicate glass
Size	Inner 9 mm, spherical joint S19
Quantity	1



51 192 169	Pinch clamp S19 drain union clamp
Material	Stainless steel
Quantity	1



71 518	Glass stopper S129/32
Material	Glass
Quantity	1



71 517	Glass stopper S119/26
Material	Glass
Quantity	1



51 190 878	Glass stopper S114/23
Material	Glass
Quantity	1



51 192 168	"Keek" clamp S129
Material	POM
Quantity	1



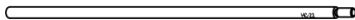
51 192 167	"Keek" clamp S124
Material	POM
Quantity	1



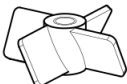
51 191 429	"Keck" clamp ST19
Material	POM
Quantity	1



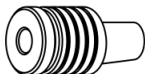
51 191 505	"Keck" clamp ST14
Material	POM
Quantity	1



51 162 722	Stirrer shaft for 1000/500 mL reactor M8 thread
Material	HC-22
Size	Ø 10 mm, length 400 mm
Quantity	1



103 504	Pitched stirrer blade for 1000/500 mL reactor downward, 4 impellers, 45°, M8 thread
Material	HC-22
Size	Outer Ø 45 mm
Quantity	1



51 104 154	PTFE adapter for baffle, eccentric for baffle, including 103 047 sealing ring
Material	PTFE
Size	Inner Ø 10 mm, ST19
Quantity	1



51 162 638	Bar type baffle for 500 mL reactor
Material	HC-22
Size	Ø 10 mm, width 15 mm, length 237 mm
Quantity	1

OptiMax™ 500 mL Glass Reactor
Optional Accessories



51 192 218	O-ring for 1000/500 mL reactor
Material	FFKM
Temperature	up to 275 °C
Size	Ø 107.5 x 3.53 mm, ASNo. 244
Quantity	1

OptiMax™ 250 mL Glass Reactor Set

Two-Piece



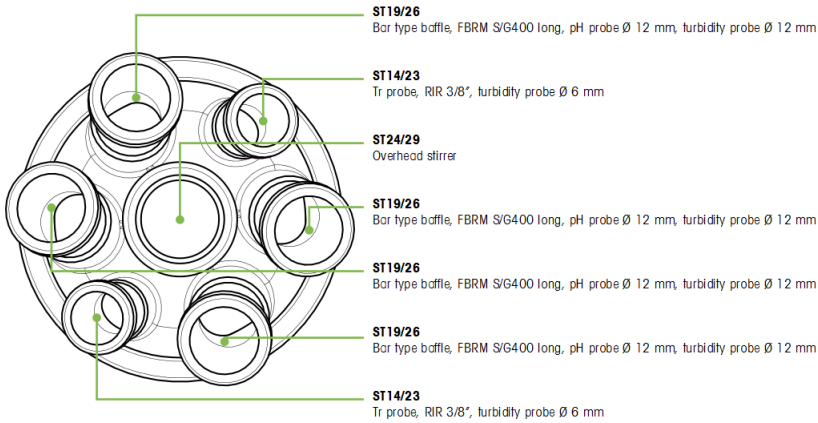
51 162 833
250 mL two-piece glass reactor set

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 and has a working volume of 250 mL, a nominal volume of 370 mL and a starting volume of 50 mL.

OptiMax™ 250 mL two-piece glass reactor set consisting of

Order number	Product description	Quantity
51 162 635	Glass reactor, 250 mL	1
51 162 758	Reactor stand for 250 mL reactor	1
51 162 699	Glass cover for 250 mL reactor, 7 parts	1
51 162 781	Cover holder for 250 mL reactor cover	1
51 162 698	Receptacle for 250 mL reactor	1
51 162 703	Reactor clamp for 250 mL reactor	1
51 192 170	O-ring for 250 mL reactor	1
51 162 417	Stirrer shaft for 250 mL reactor, HC-22	1
51 162 418	Pitched stirrer blade, HC-22, downward	1
71 517	Glass stopper ST19/26	4
51 190 878	Glass stopper ST14/23	2
51 192 167	*Kedck* clamp ST24	1
51 191 429	*Kedck* clamp ST19	4
51 191 505	*Kedck* clamp ST14	2



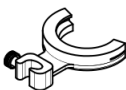
51 162 635	Glass reactor, 250 mL
Material	Borosilicate glass
Working volume	Max. 250 mL
Nominal volume	370 mL
Temperature	-40 to 180 °C
Size	Inner Ø 62 mm, height 127 mm, wall 2.2 mm
Quantity	1



51 162 699	Glass cover for 250 mL reactor, 7 ports
2 x ST14/23, 4 x ST19/26, center ST24/29	
Material	Borosilicate glass
Temperature	-40 to 180 °C
Size	Inner Ø 68 mm
Quantity	1



51 162 758	Reactor stand for 250 mL reactor
Material	PE
Size	Ø 108 x 105 mm
Quantity	1



51 162 781	Cover holder for 250 mL reactor cover
Material	Stainless steel 1.4404, PE
Size	Inner Ø 88 x 22 mm
Quantity	1



51 162 698	Receptacle for 250 mL reactor
Thermostat sleeve	
Material	Aluminium anodized
Quantity	1



51 162 703	Reactor clamp for 250 mL reactor
Material	Stainless steel 1.4404, Glostherm HT 220 (Thermolite 220M)
Quantity	1



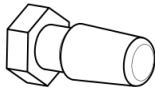
51 192 170	O-ring for 250 mL reactor
Material	Elastomer Vollkern Silicone VQM, Teflon FEP-coated
Temperature	–60 to 200 °C
Size	Ø 69.44 x 3.53 mm, AS No. 232
Quantity	1



51 162 417	Stirrer shaft for 250 mL reactor M3 thread
Material	HC-22
Size	Ø 10/8 mm, length 400 mm
Quantity	1



51 162 418	Pitched stirrer blade for 250 mL reactor downward, 4 impellers, 45°, M3 thread
Material	HC-22
Size	Outer Ø 38 mm
Quantity	1



71 517	Glass stopper ST19/26
Material	Glass
Quantity	1



51 190 878	Glass stopper ST14/23
Material	Glass
Quantity	1



51 192 167	"Keek" clamp ST24
Material	POM
Quantity	1



51 191 429	"Keek" clamp ST19
Material	POM
Quantity	1



51 191 505	"Keek" clamp ST14
Material	POM
Quantity	1

OptiMax™ 250 mL Glass Reactor

Optional Accessories



51 192 219	O-ring for 250 mL reactor
Material	FFKM
Temperature	up to 275 °C
Size	Ø 69.44 x 3.53 mm, AS No. 232
Quantity	1

OptiMax™ 1000 mL Glass Reactor Set

One-Piece



51 162 834
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 working volume of 1000 mL, a nominal volume of 1150 mL and a starting volume of 200 mL.

OptiMax™ 1000 mL one-piece glass reactor set consisting of

Order number	Product description	Quantity
51 162 732	One-piece glass reactor, 1000 mL	1
51 162 760	Reactor stand for 1000 mL reactor	1
51 162 681	Glass stirrer shaft for 1000/500/250 mL one-piece reactor	1
51 161 682	Half-moon stirrer blade, 71 mm	1
51 162 637	Bar type baffle for 1000 mL reactor, HC-22	1
51 104 154	PTFE adapter for baffle	1
71 518	Glass stopper ST29/32	1
71 517	Glass stopper ST19/26	4
51 190 878	Glass stopper ST14/23	1
51 192 168	*Kedk* clamp ST29	1
51 192 167	*Kedk* clamp ST24	1
51 191 429	*Kedk* clamp ST19	4
51 191 505	*Kedk* clamp ST14	1

