



EasyMax™ 102 Sets

Reactors

Accessories

Peripherals






















Software

EasyMax™ – Chemistry Made Easy
The Next Generation Synthesis Tool

METTLER TOLEDO

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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EasyMax™ – Chemistry Made Easy

Editorial

- **No cryostat (–40 to 180 °C) – eliminate oil baths, ice baths, and cryostats**
- **Touchscreen control – simple and effective control, no learning curve**
- **Miniature footprint – small and mobile system to save fume hood space**
- **Window to your chemistry – window and backlight makes your reaction mixture always visible**
- **Different volumes from 1 to 150 mL – screening and optimization in one instrument**
- **Excellent control – heat flow meter and reproducible**
- **Data logging and transfer to PC – captures your experiment data and makes all data traceable**

Introduction

EasyMax™ is a new dimension of reactor system for the synthesis lab and the synthetic organic chemist. It combines proven conventional techniques with state-of-the-art technology allowing you more time to think about your chemistry. Hence, EasyMax™ supports you to carry out chemical synthesis easier, faster and better. Because dangerous oil and ice baths are eliminated and control takes place using a simple to operate touchscreen, you will enjoy increased safety at your work place. Ease-of-use and an exceptionally high quality design of EasyMax™ will make your working environment better, more enjoyable and your life in the synthetic lab easier.

New thermostat principle

EasyMax™ is a single, self-contained box with a built-in solid state thermostats covering the entire temperature range without an additional cryostat. It hosts two vessels that operate independently from each other. The powerful and self-sufficient solid state heating and cooling system controls the temperature of the reaction mixture accurately and reproducibly. The thermostat provides the necessary performance to grant outstanding heating and cooling rates in the entire temperature range from –40 to 180 °C, jacket temperature (Tj). Even chemical reactions with a large heat of reaction are kept at constant temperature, ensuring that reaction kinetics are unaffected.

Touchscreen and windows with backlight

EasyMax™ has a small footprint and occupies minimal bench space. Operation is simple and you are in control of all functions at all times. The clearly arranged touchscreen is used for control, and to display information and trends at all times during the synthesis. EasyMax™ is equipped with a wide range of accessories to provide the highest possible operating flexibility. A window in the front in combination with a strong backlight enables observation of changes that occur during the course of the reaction.

EasyMax™

The Next Generation Synthesis Tool

51 161 711**EasyMax™ 102 Standard set**

- Ease-to-use
- Self-sufficient
- Compact
- Efficient and increased productivity
- Reproducible and traceable experiments
- Low experiment cost
- High quality of information
- Improved workplace safety



EasyMax™ Thermostat System

- Reactor zones with new thermostat technology
- Touchscreen to eliminate training and learning curve
- Local data logging system for traceability and reproducibility

51 161 711 EasyMax™ thermostat system consisting of

Order number	Product description	Quantity
	EasyMax™ 102 reactor block	1
51 161 873	EasyMax™ touchscreen	1
11 132 570	Protective cover for EasyMax™ touchscreen	1
51 191 728	Pen for EasyMax™ touchscreen	1
	USB memory stick for data export	1
51 161 187	PVC industrial hose for coolant, 15 bar	2
51 191 125	PVC hose, soft, for reflux condenser	1
51 161 186	PVC hose for purge gas	1
51 192 239	PVC industrial hose for purge gas, 18 bar	1
51 191 916	Reducing connector for purge gas tubing	1
51 190 324	Quick connect coupling for purge gas inlet	3
51 161 827	Flowmeter set	1
51 192 126	Hose clamp for PVC tube	4
51 191 915	Flow indicator for coolant	1
30 031 989	EasyMax™ LOGBook, includes Operating Instructions, Guides, and other product-related documents	1



EasyMax™ 102 reactor block available only in a set

Material	Powder-coated stainless steel with FEP/PFA coated cover plate
Heating/cooling	Solid state thermostat
Temperature mode	Jacket control, reaction mixture control, distillation (constant or ramp)
Temperature range	-40 to 180 °C, jacket temperature (Tj)
Stirring type	Built-in magnetic
Stirring speed	50 to 1000 rpm
Size	380 x 410 x 280 mm (w, d, h), 380 x 410 x 500 mm (w, d, h with overhead stirrer)
Weight	16 kg, including touchscreen
Quantity	1



51 161 873	EasyMax™ touchscreen
Material	PA, aluminum
Size	195 x 135 x 60 mm (w, d, h)
Quantity	1



11 132 570	Protective cover for EasyMax™ touchscreen
Material	Barex® resin
Quantity	1



51 191 728	Pen for EasyMax™ touchscreen
Size	length 140 mm
Quantity	1



	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



51 161 187	PVC industrial hose for coolant
Material	PVC
Pressure range	15 bar
Size	Ø 8/14 mm, length 2.5 m
Quantity	1

available on special request only



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

available on special request only



51 161 186	PVC hose for purge gas
Material	PVC
Size	Ø 4 mm, length 2 m
Quantity	1

available on special request only



51 192 239	PVC industrial hose for purge gas
Material	PVC
Pressure range	18 bar
Size	Ø 4/10 mm, length 2 m
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

available on special request only

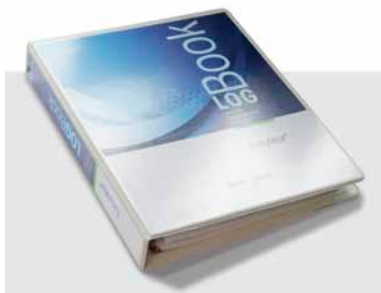


51 190 324	Quick connect coupling for purge gas inlet
Material	Stainless steel
Size	For tubes with inner Ø 4 mm
Quantity	1



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

available on special request only



30 031 989	EasyMax™ LOGBook
Material	Includes EasyMax™ Operating Instructions, Guides, and other product-related documents
Quantity	1 of each



51 161 827	Flowmeter set
	Flowmeter for water and for 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 8/12mm) in a set



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

EasyMax™ Thermostat System

Optional Accessories



51 161 099 | Lab bar 600 x 14 mm

Material	Stainless steel, 1.4435
Size	Ø 14 mm x 600 mm
Quantity	1



30 015 271 | Flowmeter for water

Material	Stainless steel, Acrylic, brass
Temperature	max. 65 °C
Size	100 mm, 0.8 – 9 L/min
Quantity	1

30 015 272 | Flowmeter for gas

Material	Stainless steel, Acrylic, brass
Temperature	max. 65 °C
Size	100 mm, 1 – 10 L/min
Quantity	1



103 472 | Lab bar 300 x 14 mm

Material	Stainless steel, 1.4301
Size	Ø 14 mm x 300 mm
Quantity	1



51 161 803 | Accessories holder set for two-piece reactor

to be attached to the lab bar of your EasyMax™ system – for stirrer motor (ST14), for condenser (ST14), for Tr sensor (ST10)

Material	Stainless steel, PTFE GF25
Size	Aperture 2 x ST14, 1 x ST10
Quantity	2 pcs in a set



51 161 804

Accessories holder set for one-piece reactor

to be attached to the lab bar of your EasyMax™ system – for stirrer motor (ST19), for condenser (ST19), for Tr sensor (ST10)

Material	Stainless steel, PTFE GF25
Size	Aperture 2 x ST19, 1 x ST10
Quantity	2 pcs in a set

EasyMax™ 100 mL Glass Reactor Set



51 161 708
100 mL glass reactor set

The 100 mL reactor set has a starting volume of 15 mL, working volume of 100 mL and nominal volume of 150 mL for work up.

Both magnetic and overhead stirring possibilities are available. Usage only for crystallization application

EasyMax™ 100 mL glass reactor set consisting of

Order number	Product description	Quantity
51 161 620	100 mL glass reactor	1
51 161 676	Reactor holder for 100 mL reactor	1
51 191 913	O-ring for 100 mL reactor	1
51 161 670	Clamp chain for 100 mL reactor	1
51 191 918	Magnetic stir bar, cross-shaped	1



51 161 620	100 mL glass reactor EasyMax™
Material	Borosilicate glass
Working volume	Max. 100 mL
Temperature	-40 to 180 °C
Size	Inner Ø 52 mm, height 90 mm, wall 2.5 mm
Quantity	1



51 161 676	Reactor holder for 100 mL reactor
Material	PE
Quantity	1



51 191 913	O-ring for 100 mL reactor
Material	Silicone rubber VQM, FEP-coated
Temperature	-60 to 200 °C
Size	Ø 56.82 x 2.62 mm; AS No. 140
Quantity	1



51 161 670	Clamp chain for 100 mL reactor
Material	Stainless steel 1.4404, Glasstherm HT 220 (Thermalite 220M)
Quantity	1



51 191 918	Magnetic stir bar, cross-shaped
Material	PTFE-coated
Size	Ø 38 mm x 15 mm
Quantity	1

EasyMax™ 100 mL Glass Cover Set



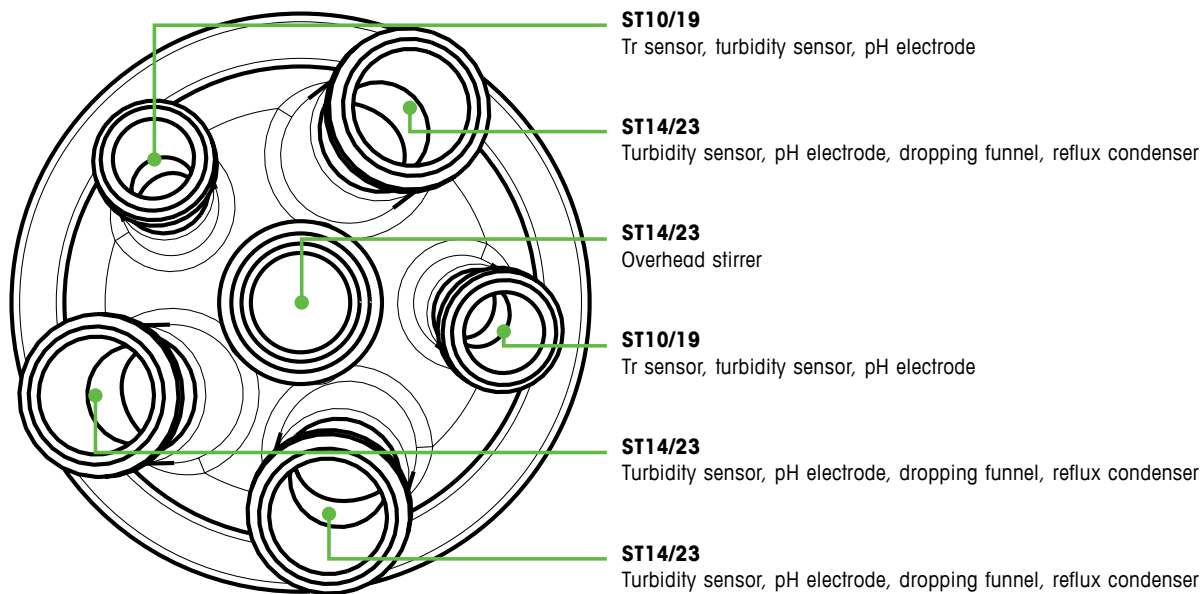
51 161 709 6-port 100 mL glass cover set

The 100 mL glass cover set with 6 ports is built for multiple applications without limitations for dosing, reflux, pH measurement, ReactIR, FBRM® 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
51 161 619	6-port 100 mL glass reactor cover	1
51 190 878	Glass stopper ST14/23	4
51 191 167	Glass stopper ST10/19	2
51 191 505	"Keck" clamp ST14	4
51 191 504	"Keck" clamp ST10	2
51 191 515	Nut for UNF 1/4 28, 4 pcs in a set	1
51 191 514	Ferrule for tubing and sensors of outer Ø 3.2 mm, 4 pcs in a set	1
51 161 728	Adapter ST 10/19 with 1 UNF 1/4 28 port	2
51 191 428	Hose connection for purge gas tubing	2
51 190 317	Screw cap GL14, with aperture	2
51 190 319	Plastic hose, straight	2
51 161 029	Reflux condenser for ST14/23 port	1



51 161 619	Glass cover for 100 mL reactor, 6 ports 2 x ST10/9, 3 x ST14/23, center ST14/23
Material	Borosilicate glass
Temperature	-40 to 180 °C
Size	Inner Ø 52 mm
Quantity	1



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



51 191 167	Glass stopper ST10/19
Material	Glass
Quantity	1



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



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



51 191 515	Nut for UNF 1/4 28 threads
Material	ETFE
Size	Inner Ø max. 3.2 mm
Quantity	4 pcs in a set



51 191 514	Ferrule for tubing and sensors of outer Ø 3.2 mm
Material	ETFE
Size	Outer Ø max. 3.2 mm
Quantity	4 pcs in a set



51 161 728	Adapter ST 10/19 with 1 UNF 1/4 28 port
Material	PTFE GF25
Quantity	1



51 191 428	Hose connection for purge gas tubing
Material	PP
Size	For tube inner Ø 4 mm
Quantity	1



51 190 317	Screw cap GL14, with aperture
Material	PBT
Temperature	Max. 200 °C
Aperture	9.5 mm
Quantity	1



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



51 161 029	Reflux condenser for ST14/23 port with 2 GL14 connectors for coolant
Material	Borosilicate glass
Size	Outer Ø 24 mm, height 140 mm
Quantity	1

Teflon® Cover Set for 100 mL Reactor

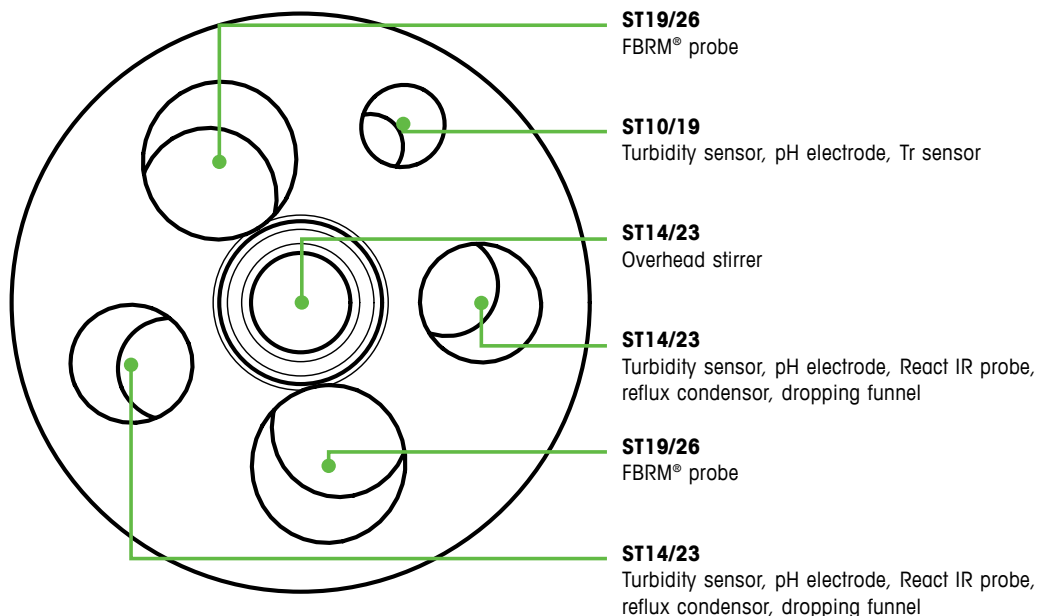


51 161 800 6-port Teflon® cover set for 100 mL reactor

The Teflon® cover set is developed to combine EasyMax™ with IR and FBRM® probes. It is mainly used to run crystallization experiments.

EasyMax™ Teflon® cover set for 100 mL reactor consisting of

Order number	Product description	Quantity
51 161 795	6-port Teflon® cover for 100 mL reactor body (works only with the 50 mL stirrer 51 161 756)	1
51 191 167	Glass stopper ST10/19	1
51 190 878	Glass stopper ST14/23	3
71 517	Glass stopper ST 19/26	2
51 161 821	Adapter PTFE for FBRM® probe, ST19-14mm	1
51 191 857	O-Ring Kalrez® 13.95 x 2.62 mm	1
51 161 817	Adapter PTFE for React IR probe, ST14-9.5mm	1
51 192 091	O-Ring Kalrez® 9.19 x 2.62 mm	1
51 191 515	Nut for UNF 1/4 28, 4 pcs in a set	1
51 191 514	Ferrule for tubing and sensors of outer Ø 3.2 mm, 4 pcs in a set	1
51 161 728	Adapter ST 10/19 with 1xUNF 1/4 28 port	2
51 190 878	Glass stopper ST14/23	3
51 190 317	Screw cap GL14, with aperture	2
51 190 319	Plastic hose, straight	2
51 161 029	Reflux condenser for ST14/23 port	1



51 161 795 | Teflon® cover for 100 mL reactor, 6 ports
1 x ST10/9, 2 x ST14/23, 2 x ST19/26,
center ST14/23

Material	PTFE GF25
Quantity	1

works only with the 50 mL stirrer 51 161 756



71517 | Glass stopper ST19/26

Material	Glass
Quantity	1



51 190 878 | Glass stopper ST14/23

Material	Glass
Quantity	1



51 191 167 | Glass stopper ST10/19

Material	Glass
Quantity	1



51 161 821	Adapter PTFE for FBRM® probe, ST19-14mm
Material	PTFE
Quantity	1
O-ring needed 51 191 857	



51 191 857	O-Ring for 51 161 821 FBRM® probe adapter
Material	FFKM (Kalrez® 6375)
Size	Ø 13.95 x 2.62 mm, AS No. 113
Quantity	1



51 161 817	Adapter PTFE for React IR probe, ST14-9.5mm
Material	PTFE
Quantity	1
O-ring needed 51 192 091	



51 192 091	O-Ring for 51 161 817 React IR probe adapter
Material	FFKM (Kalrez® 6375)
Size	Ø 9.19 x 2.62 mm, AS No. 110
Quantity	1



51 191 515	Nut for UNF 1/4 28 threads
Material	ETFE
Size	Inner Ø max. 3.2 mm
Quantity	4 pcs in a set



51 191 514	Ferrule for tubing and sensors of outer Ø 3.2 mm
Material	ETFE
Size	Outer Ø max. 3.2 mm
Quantity	4 pcs in a set



51 161 728	Adapter ST 10/19 with 1 UNF 1/4 28 port
Material	PTFE GF25
Quantity	1



51 190 317	Screw cap GL14, with aperture
Material	PBT
Temperature	Max. 200 °C
Aperture	9.5 mm
Quantity	1



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



51 161 029	Reflux condenser for ST14/23 port with 2 GL14 connectors for coolant
Material	Borosilicate glass
Size	Outer Ø 24 mm, height 140 mm
Quantity	1

5-Port 100 mL One-Piece Glass Reactor Set



51 161 805 5-port 100 mL one-piece glass reactor set

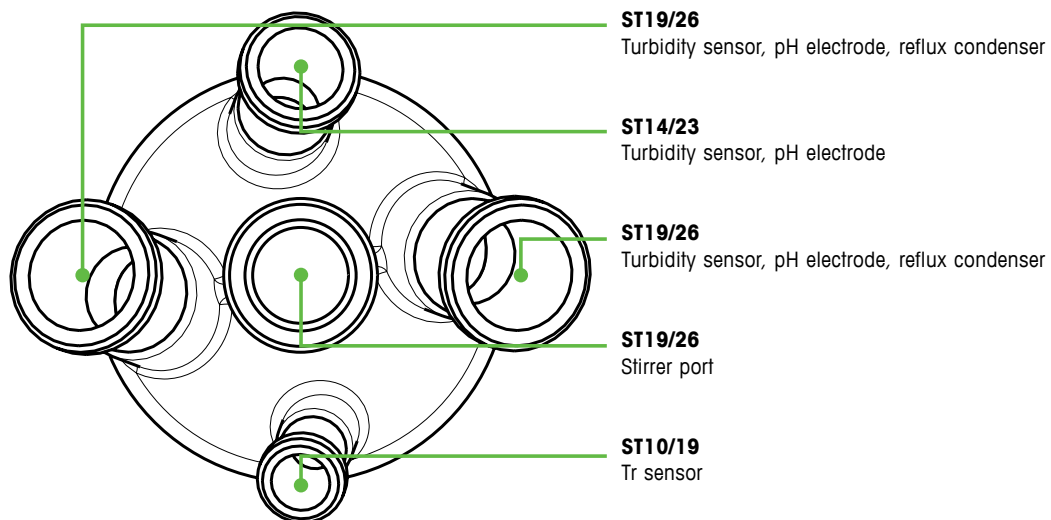
The one-piece reactor is developed to meet round bottom flask requirements so that standard lab material and handling can be used. The reactor has a starting volume of 15 mL, maximum working volume of 100 mL and a nominal volume of 180 mL.

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

The ST14 port can be used for inserting analytical probes

EasyMax™ 5-port 100 mL one-piece glass reactor set consisting of

Order number	Product description	Quantity
51 161 786	5-port 100 mL one-piece glass reactor	1
51 161 676	Reactor holder for 100 mL reactor	1
51 161 813	Glass stirrer shaft for 100 mL one-piece reactor	1
51 161 749	Half-moon stirrer blade	1
51 161 822	Non-height adjustable stirrer adapter, ST19, including sealing ring	1
71 517	Glass stopper ST19/26	3
51 190 878	Glass stopper ST14/23	1
51 191 167	Glass stopper ST10/19	1
51 191 515	Nut for UNF 1/4 28, 4 pcs in a set	1
51 191 514	Ferrule for tubing and sensors of outer Ø 3.2 mm, 4 pcs in a set	1
51 191 429	"Keck" clamp ST19	3
51 191 505	"Keck" clamp ST14	1
51 191 504	"Keck" clamp ST10	1
51 161 728	Adapter ST10/19 with 1 UNF 1/4 28 port	1
51 191 939	Magnetic stir bar 8 x 40 mm	1



51 161 786	100 mL one-piece glass reactor , 5 ports 1x ST10/19, 1x ST14/23, 2x ST19/26, center ST19/26
Material	Borosilicate glass
Working volume	Max. 180 mL
Temperature	-40 to 180 °C
Size	Inner Ø 52 mm, height 150 mm, wall 2.5 mm
Quantity	1



51 161 813	Glass stirrer shaft for 100/50 mL one-piece reactor
Material	Borosilicate glass
Size	Ø 8 mm, length 192 mm
Quantity	1

51 161 749	Half-moon stirrer blade
Material	PTFE
Size	15 x 40 mm
Quantity	1



51 161 676	Reactor holder for 100 mL reactor
Material	PE
Quantity	1



51 161 822	Non-height adjustable stirrer adapter, ST19 including sealing ring
Material	PEEK adapter, PTFE/FPM sealing ring
Quantity	1

Available only as a set with sealing ring 51 191 375
For optional PTFE stirrer adapter see page 57.



51 191 375	Sealing ring for stirrer adapter BOLA-sealing
Material	PTFE/FPM
Quantity	1



71 517	Glass stopper ST19/26
Material	Glass
Quantity	1



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



51 191 167	Glass stopper ST10/19
Material	Glass
Quantity	1



51 191 515	Nut for UNF 1/4 28 threads
Material	ETFE
Size	Inner Ø max. 3.2 mm
Quantity	4 pcs in a set



51 191 514	Ferrule for tubing and sensors of outer Ø 3.2 mm
Material	ETFE
Size	Outer Ø max. 3.2 mm
Quantity	4 pcs in a set



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



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



51 191 504	"Keck" clamp ST10
Material	POM
Quantity	1



51 161 728	Adapter ST 10/19 with 1 UNF 1/4 28 port
Material	PTFE GF25
Quantity	1



51 191 939	Magnetic stir bar 8 x 40 mm
Material	PTFE-coated
Size	Ø 8 mm, length 40 mm
Quantity	1

4-Port 100 mL One-Piece Glass Reactor Set



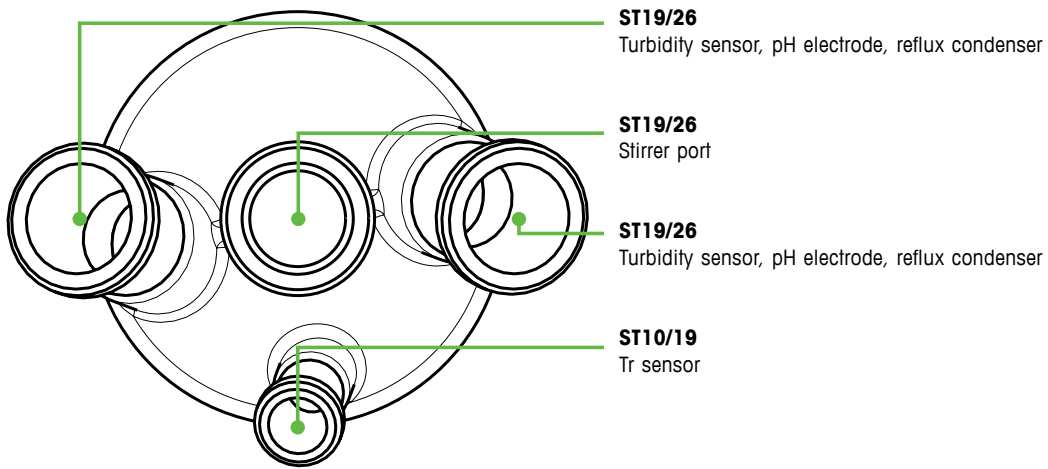
51 161 806 4-port 100 mL one-piece glass reactor set

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 starting volume of 15 mL, maximum working volume of 100 mL and a nominal volume of 180 mL.

Magnetic and overhead stirring (only with dedicated glass stirrer, blade and non-height adjustable adapter) possibilities are available.

EasyMax™ 4-port 100 mL one-piece glass reactor set consisting of

Order number	Product description	Quantity
51 161 747	4-port 100 mL one-piece glass reactor	1
51 161 676	Reactor holder for 100 mL reactor	1
51 161 813	Glass stirrer shaft for 100 mL one-piece reactor	1
51 161 749	Half-moon stirrer blade	1
51 191 939	Magnetic stir bar 8 x 40 mm	1
51 161 822	Non-height adjustable stirrer adapter, ST19, including sealing ring	1
71 517	Glass stopper ST19/26	3
51 191 167	Glass stopper ST10/19	1
51 191 429	"Keck" clamp ST19	3
51 191 504	"Keck" clamp ST10	1
51 191 515	Nut for UNF 1/4 28, 4 pcs in a set	1
51 191 514	Ferrule for tubing and sensors of outer Ø 3.2 mm, 4 pcs in a set	1
51 161 728	Adapter ST10/19 with 1 UNF 1/4 28	1



51 161 747	100 mL one-piece glass reactor, 4 ports 2x ST19/26, 1x ST10/19, center ST19/26
Material	Borosilicate glass
Working volume	max. 180 mL
Temperature	-40 to 180 °C
Size	Inner Ø 52 mm, height 150 mm, wall 2.5 mm
Quantity	1



51 161 813	Glass stirrer shaft for 100/50 mL one-piece reactor
Material	Borosilicate glass
Size	Ø 8 mm, length 192 mm
Quantity	1

51 161 749	Half-moon stirrer blade
Material	PTFE
Size	15 x 40 mm
Quantity	1



51 161 676	Reactor holder for 100 mL reactor
Material	PE
Quantity	1



51 161 822	Non-height adjustable stirrer adapter, ST19 including sealing ring
Material	PEEK adapter, PTFE/FPM sealing ring
Quantity	1

Available only as a set with sealing ring 51 191 375
For optional PTFE stirrer adapter see page 57.



51 191 375	Sealing ring for stirrer adapter BOLA-sealing
Material	PTFE/FPM
Quantity	1



71 517	Glass stopper ST19/26
Material	Glass
Quantity	1



51 191 167	Glass stopper ST10/19
Material	Glass
Quantity	1



51 191 515	Nut for UNF 1/4 28 thread
Material	ETFE
Size	outer Ø max. 3.2 mm
Quantity	4 pcs in a set



51 191 514	Ferrule for tubing and sensors of outer Ø 3.2 mm
Material	ETFE
Size	outer Ø max. 3.2 mm
Quantity	4 pcs in a set



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



51 191 504	"Keck" clamp ST10
Material	POM
Quantity	1



51 161 728	Adapter ST10/19 with UNF 1/4 28 thread
Material	PTFE GF25
Quantity	1



51 191 939	Magnetic stir bar 8 x 40 mm
Material	PTFE-coated
Size	Ø 8 mm, length 40 mm
Quantity	1

EasyMax™ 50 mL Glass Reactor Set



51 161 712
50 mL glass reactor set

The 50 mL reactor set has a starting volume of 25 mL, 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
51 161 255	50 mL round-bottom reactor	1
51 161 288	Reactor holder for 50 mL reactor	1
51 161 716	Receptacle for 50 mL reactor	1
51 160 675	Reactor clamp for 50 mL reactor	1
51 161 718	Fixing ring for receptacle	1
51 191 416	O-Ring for 50 mL glass reactor	1
51 191 919	Magnetic stir bar, cross-shaped	1



51 161 255	50 mL glass reactor
Material	Borosilicate glass
Working volume	Max. 50 mL
Temperature	-40 to 180 °C
Size	Inner Ø 36 mm, height 74.5 mm, wall 1.5 mm
Quantity	1



51 161 288	Reactor holder for 50 mL glass reactor or 50 mL glass cover
Material	PE
Quantity	1



51 161 716	Receptacle for 50 mL reactor Thermostat sleeve
Material	Aluminium anodized
Quantity	1



51 160 675	Reactor clamp for 50 mL reactor
Material	Carbon-filled PTFE
Quantity	1



51 161 718	Fixing ring for receptacle
Material	PTFE C25
Quantity	1



51 191 416	O-Ring for 50 mL glass reactor
Material	FFKM (Kalrez® 6375)
Size	Ø 36.14 x 2.62 mm, AS No. 127
Quantity	1



51 191 919	Magnetic stir bar, cross-shaped
Material	PTFE-coated
Size	Ø 25 mm, height 10 mm
Quantity	1

EasyMax™ 50 mL Glass Cover Set



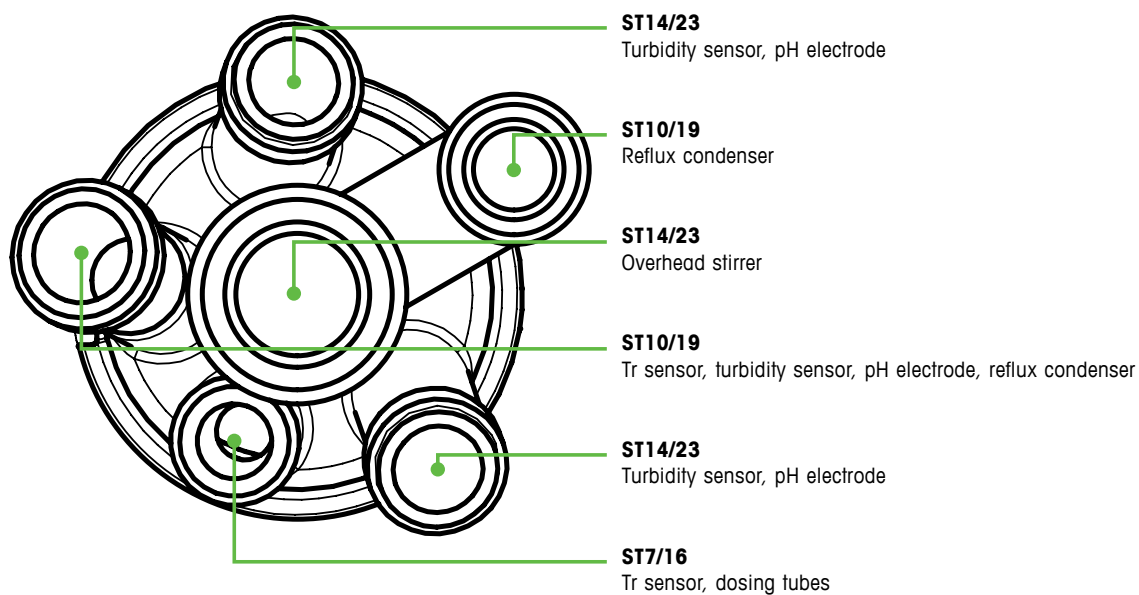
51 161 713 50 mL glass cover set

The 50 mL glass cover set with 6 openings 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™ 50 mL glass cover set consisting of

Order number	Product description	Quantity
51 160 817	Glass cover for 50 mL reactor	1
51 190 878	Glass stopper ST14/23	1
51 191 167	Glass stopper ST10/19	2
51 190 877	Glass stopper ST7/16	1
51 190 879	Clamp ST7	1
51 191 505	"Keck" clamp ST14	1
51 191 504	"Keck" clamp ST10	2
51 190 318	Screw cap GL14, closed	2
51 191 170	Silicone rubber seal (septum)	1
51 190 317	Screw cap GL14, with aperture	5
51 103 947	Silicone rubber sealing ring, outer Ø 12 mm, aperture 6 mm	1
51 191 515	Nut for UNF 1/4 28 threads, 4 pcs in a set	1
51 191 514	Ferrule for tubing outer Ø 3.2 mm, 4 pcs in a set	1
51 160 200	Adapter ST 7/16 with 1 UNF 1/4 28 port	1
51 190 319	Plastic hose, straight	2
51 161 728	Adapter ST10/19 with 1 UNF 1/4 28 port	1
51 191 267	Glass adapter ST14/23 GL14	1
51 160 813	Reflux condenser for ST10 port	1



51 160 817	Glass cover for 50 mL reactor, 7 ports 1 x ST7/16, 2 x ST10/19, 2 x GL14, center ST14/23
Material	Borosilicate glass
Temperature	-40 to 180 °C
Size	Inner Ø 36 mm
Quantity	1



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



51 191 167	Glass stopper ST10/19
Material	Glass
Quantity	1



51 190 877	Glass stopper ST7/16
Material	Glass
Quantity	1



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



51 191 504	"Keck" clamp ST10
Material	POM
Quantity	1



51 190 879	Clamp ST7
Material	Stainless steel
Quantity	1



51 191 267	Glass adapter ST14/23-GL14
Material	Glass
Size	height 54 mm
Quantity	1



51 191 515	Nut for UNF 1/4 28 threads
Material	ETFE
Size	Inner Ø max. 3.2 mm
Quantity	4 pcs in a set



51 191 514	Ferrule for tubing and sensors of outer Ø 3.2 mm
Material	ETFE
Size	Outer Ø max. 3.2 mm
Quantity	4 pcs in a set



51 190 318	Screw cap GL14, closed with PTFE sealing
Material	PBT
Temperature	Max. 200 °C
Quantity	1



51 191 170	Silicone rubber seal (septum) for screw cap GL14
Material	Silicone rubber VQM
Size	Ø 12 mm, thickness 2 mm
Quantity	1



51 190 317	Screw cap GL14, with aperture
Material	PBT
Temperature	Max. 200 °C
Aperture	9.5 mm
Quantity	1



51 103 947	Silicone rubber sealing ring with vulcanized-on PTFE washers for GL14 caps and sensors with outer Ø 6 mm
Material	Silicone rubber VQM, PTFE-coated
Size	Ø 12 mm, aperture 6 mm
Quantity	1



51 161 728	Adapter ST 10/19 with 1 UNF 1/4 28 port
Material	PTFE GF25
Quantity	1



51 160 200	Adapter ST7/16 with 1 UNF 1/4 28 port
Material	PTFE GF25
Quantity	1



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



51 160 813	Reflux condenser for ST10 port with GL14 connectors for coolant and septum
Material	Borosilicate glass
Quantity	1

5-Port 50 mL One-Piece Glass Reactor Set



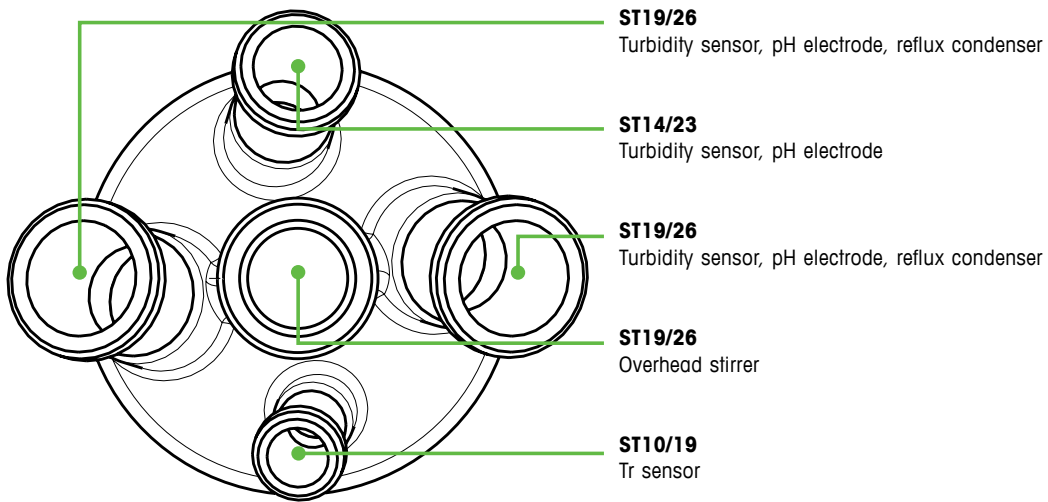
51 161 838 5-port 50 mL one-piece glass reactor set

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 starting volume of 10 mL, maximum working volume of 50 mL and a nominal volume of 100 mL.

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

EasyMax™ 5-port 50 mL one-piece glass reactor set consisting of

Order number	Product description	Quantity
51 161 792	5-port 50 mL one-piece glass reactor	1
51 161 813	Glass stirrer shaft for 50 mL one-piece reactor	1
51 161 814	Half-moon stirrer blade	1
51 190 791	Magnetic stir bar 13 x 30 mm	1
51 161 816	Reactor holder for 50 mL reactor	1
51 161 815	Reducing part for 50 mL	1
51 161 822	Non-height adjustable stirrer adapter, ST19, including sealing ring	1
71 517	Glass stopper ST19/26	3
51 190 878	Glass stopper ST14/23	1
51 191 167	Glass stopper ST10	1
51 191 429	"Keck" clamp ST19	3
51 191 505	"Keck" clamp ST14	1
51 191 504	"Keck" clamp ST10	1
51 191 515	Nut for UNF 1/4 28, 4 pcs in a set	1
51 191 514	Ferrule for tubing and sensors of outer Ø 3.2 mm, 4 pcs in a set	1
51 161 728	Adapter ST10/19 with 1 UNF 1/4 28	1



51 161 792	50 mL one-piece glass reactor, 5-ports 1 x ST10/19, 1 x ST14/23, 2 x ST19/26, center ST19/26
Material	Glass
Working volume	Max. 50 mL
Temperature	-40 to 180 °C
Size	inner Ø 43 mm, height 150 mm, wall 2.5 mm
Quantity	1



51 161 813	Glass stirrer shaft for 100/50 mL one-piece reactor
Material	Glass
Size	Ø 8 mm, length 192 mm
Quantity	1

51 161 814	Half-moon stirrer blade
Material	PTFE
Size	15 x 26 mm
Quantity	1



51 161 816	Reactor holder for 50 mL reactor
Material	PE
Quantity	1



51 161 815	Receptacle for 50 mL reactor Thermostat sleeve
Material	Aluminium anodized
Quantity	1



51 190 791	Magnetic stir bar 13 x 30 mm
Material	PTFE coated
Size	Ø 13 x 30 mm
Quantity	1



51 161 822	Non-height adjustable stirrer adapter, ST19 including sealing ring
Material	PEEK adapter, PTFE/FPM sealing ring
Quantity	1

Available only as a set with sealing ring 51 191 375
For optional PTFE stirrer adapter see page 57.



51 191 375	Sealing ring for stirrer adapter BOLA-sealing
Material	PTFE/FPM
Quantity	1



71 517	Glass stopper ST19/26
Material	Glass
Quantity	1



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



51 191 167	Glass stopper ST10/19
Material	Glass
Quantity	1



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



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



51 191 504	"Keck" clamp ST10
Material	POM
Quantity	1



51 191 515	Nut for UNF 1/4 28 thread
Material	ETFE
Size	outer Ø max. 3.2 mm
Quantity	4 pcs in a set



51 191 514	Ferrule for tubing and sensors of outer Ø 3.2 mm
Material	ETFE
Size	outer Ø max. 3.2 mm
Quantity	4 pcs in a set



51 161 728	Adapter ST10/19 with UNF 1/4 28 thread
Material	PTFE GF25
Quantity	1

100 mL Pressure Reactor Sets

EM20-100-HC and EM60-100-HC



30 030 945 EM20-100-HC pressure reactor set

The pressure reactor is developed to fulfill applications which need pressures from 0 up to 20 bar abs.

30 030 946 EM60-100-HC pressure reactor set

The pressure reactor is developed to fulfill applications which need pressures from 0 up to 60 bar abs.

The HC-22 material allows customers to work also with aggressive media. Both reactors have a working volume between 30 and 100 mL, and a nominal volume of 120 mL.

EasyMax™ 100 mL pressure reactor sets consisting of

Order number	EM20-100-HC pressure reactor set	EM60-100-HC pressure reactor set	Quantity
	Pressure reactor complete		1
51 161 875	Tr sensor for pressure reactor		1
30 030 952	O-ring for 100 mL reactor, Kalrez®		1
30 030 950	Gassing stirrer, Ø 30 mm, HC-22		1
30 030 947	Rupture disc, 25 bar, HC-276		1
	Analog pressure gauge, 40 bar		1
30 030 948		Rupture disc, 65 bar, HC-276	1
		Analog pressure gauge, 100 bar	1
30 032 722	EasyMax™ 100 mL pressure operating instructions		1



51 161 875	Tr sensor for pressure reactor
Material	Stainless steel – no direct contact with the reaction media
Size	Outer Ø 2.2 mm
Quantity	1



30 030 952	O-Ring for 100 mL reactor
Material	FFKM (Kalrez® 6375)
Size	Ø 50.47 x 2.62 mm
Quantity	1



30 030 950	Gassing stirrer with 4 grooves at suction part
Material	HC-22
Size	Ø 30 mm
Quantity	1



30 030 947	Rupture disc, 25 bar standard for the EM20-100-HC reactor
Material	HC-276
Pressure range	0 to 25 bar abs. ± 10%
Quantity	1

30 030 948	Rupture disc, 65 bar standard for the EM60-100-HC reactor
Material	HC-276
Pressure range	0 to 65 bar abs. ± 10%
Quantity	1

Note:

All the external connectors and fittings are Swagelok® compatible.

EasyMax™ 100 mL Pressure Reactor Optional Accessories



30 030 950	Gassing stirrer with 4 grooves at suction part
Material	HC-22
Size	Ø 30 mm
Quantity	1



30 030 951	Pitched-blade stirrer upwards, 4 impellers
Material	HC-22
Size	Ø 30 mm
Quantity	1

EasyMax™ Pressure Reactor Optional Accessories

EasyMax™ 100 mL Pressure Reactor



51 192 161	Rupture disc, 15 bar
Material	HC-276
Pressure range	0 to 15 bar abs. ± 10%
Quantity	1

30 030 949	Rupture disc, 110 bar
Material	HC-276
Pressure range	0 to 110 bar abs. ± 10%
Quantity	1



30 030 953	Adapter set for 1/4" ReactIR probe
Material	HC-22
Pressure range	0 to 60 bar abs. ± 10%
Quantity	1

30 030 954	Adapter set for 3/8" ReactIR probe
Material	HC-22
Pressure range	0 to 60 bar abs. ± 10%
Quantity	1

EasyMax™ 50 and 100 mL Pressure Reactors



51 191 811	Digital manometer LEO 3, 30 bar
Material	HC-276
Pressure range	0 to 30 bar abs. ± 10%
Resolution	10 mbar
Quantity	1

51 191 349	Digital manometer LEO 3, 300 bar
Material	HC-276
Pressure range	0 to 300 bar abs. ± 10%
Resolution	100 mbar
Quantity	1



51 161 310	Analog cable to connect digital manometer to the UCB
Position	"In" inputs of the Universal Control Box, UCB
Quantity	1

51 161 586	Analog cable to connect digital manometer to the UCB
Position	"C In" inputs of the Universal Control Box, UCB
Quantity	1

EasyMax™ 50 and 100 mL Pressure Reactors



51 104 377	Analog cable with integrated current supply for stand-alone connection of digital manometers
Position	"In" inputs of the Universal Control Box, UCB
Quantity	1



51 161 410 **Toolbox**

This toolbox is for the 100 mL and the 50 mL pressure reactors. It contains a 12 mm hexagonal socket wrench and replacement parts.

Toolbox consisting of

Order number	Product description	Quantity
	Toolbox, including a 12 mm hexagonal socket wrench	1
51 191 343	Friction bearing TK25, set of 4 pcs	1
51 191 344	Ball bearing, stainless steel, set of 4 pcs	1
51 191 347	Replacement cone 1/8" for needle valve, HC-22, set of 2 pcs	1
51 191 388	Thrust disk TK25, set of 2 pcs	1
51 191 389	Grub screw M4x4 for stirrer, HC-22, set of 2 pcs	1
51 191 390	Spacer sleeve for driven shaft, HC-22, Ø 8/6 x 3 mm, set of 4 pcs	1
	Front ferrule 2 mm, Swagelok®, stainless steel, set of 4 pcs	1
	Rear ferrule 2 mm, Swagelok®, stainless steel, set of 4 pcs	1
30 030 952	O-ring, FFKM (Kalrez® 6375), Ø 50.47 x 2.62 mm	1

EasyMax™ 50 mL Pressure Reactor Set



51 161 870 EasyMax™ 50 mL pressure reactor set

The pressure reactor is developed to fulfill applications which need pressures from 0 up to 200 bar abs. The HC-22 material allows customers to work also with aggressive media. The reactor has a working volume between 25 and 50 mL, and a nominal volume up to 60 mL.

EasyMax™ 50 mL pressure reactor set consisting of

Order number	Product description	Quantity
	Pressure reactor complete, 200 bar	1
51 161 875	Tr sensor for pressure reactor	1
	Receptacle for 50 mL pressure reactor	1
51 161 718	Fixing ring for receptacle	1
51 191 452	O-ring for 50 mL reactor, Kalrez®	1
51 191 587	Gassing stirrer, Ø 18 mm with 4 grooves at suction part, HC-22	1
51 191 331	Rupture disc, 200 bar, HC-22	1
51 161 009	Flexible spiral tube, Ø 2 mm, stainless steel	1
51 191 348	Needle valve, 1/8", HC-22, Swagelok® part in stainless steel	1



51 161 875	Tr sensor for pressure reactor
Material	Stainless steel – no direct contact with the reaction media
Size	Outer Ø 2.2 mm
Quantity	1



	Receptacle for 50 mL reactor
	Thermostat sleeve
Material	Aluminium anodized
Quantity	1

only available in the set



51 161 718	Fixing ring for receptacle
Material	PTFE C25
Quantity	1



51 191 452	O-Ring for 50 mL reactor
Material	FFKM (Kalrez® 6375)
Size	Ø 31.42 x 2.62 mm, AS No. 124
Quantity	1



51 191 587	Gassing stirrer with 4 grooves at suction part
Material	HC-22
Size	Ø 18 mm
Quantity	1



51 191 331	Rupture disc for the 50 mL reactor
Material	HC-276
Pressure range	0 to 200 bar abs. ± 10%
Quantity	1



51 161 009	Flexible spiral tube
Material	Stainless steel
Size	Inner Ø 2 mm
Quantity	1



51 191 348	Needle valve
Material	HC-22, Swagelok® part in stainless steel
Size	1/8"
Quantity	1

Note:

All the external connectors and fittings are Swagelok® compatible.

EasyMax™ 50 mL Pressure Reactor Optional Accessories



51 191 588	Gassing stirrer with 4 grooves at suction part
Material	HC-22
Size	Ø 25 mm
Quantity	1



51 192 161	Rupture disc for the 50 mL reactor
Material	HC-276
Pressure range	0 to 15 bar abs. ± 10%
Quantity	1

EasyMax™ 50 mL Pressure Reactor Upgrade Set



51 161 876 Pressure reactor upgrade set

Use the pressure reactor upgrade set to upgrade your current MultiMax™ pressure reactor to an EasyMax™ pressure reactor. The set contains overhead stirrer motor, Tr probe, receptacle, and fixing ring.

EasyMax™ 50 mL pressure reactor upgrade set consisting of

Order number	Product description	Quantity
51 161 830	EasyMax™ stirrer motor without coupling	1
51 161 875	Tr sensor for pressure reactor	1
	Receptacle for 50 mL pressure reactor, only available in the set	1
51 161 718	Fixing ring for receptacle	1

EasyMax™ 25 mL Glass Reactor Set



51 161 854
25 mL glass reactor set
for screening

The 25 mL reactor provides you with the possibility to increase the screening functionality in 6 reactions in 2 different temperature zones from 3 to 25 mL.

EasyMax™ 25 mL glass reactor set for screening consisting of

Order number	Product description	Quantity
51 161 853	Reagent tube 25 mL GL18, glass	6
51 161 634	Receptacle 3 x 25 mL, aluminium	1
51 192 096	Magnetic stir bar 5 x 15 mm	3
51 191 400	Screw cap GL18	6
51 191 399	Septum-Set GL18, 20 pcs in a set	1



51 161 853	Reagent tube 25 mL with GL18 thread
Material	Borosilicate glass
Working volume	Max. 25 mL
Size	Outer Ø 22 mm, height 120 mm
Quantity	1



51 161 634	Receptacle 3 x 25 mL reagent tubes
	Thermostat sleeve
Material	Aluminium anodized
Quantity	1



51 191 400	Screw cap GL18, with aperture
Material	PBT
Temperature	Max. 200 °C
Aperture	Ø 11 mm
Quantity	10 pcs in a set



51 191 399	Silicone rubber seal (septum)
	for use with screw cap GL18
Material	Silicone rubber VQM
Size	Outer Ø 12 mm, thickness 2 mm
Quantity	20 pcs in a set



51 192 096	Magnetic stir bar
Material	PTFE coated
Size	Ø 5 mm, length 15 mm
Quantity	1

EasyMax™ 10 mL Glass Reactor Set



51 161 714 10 mL glass reactor set

The 10 mL reactor set provides you with the possibility to screen 8 reactions in 2 different temperature zones from 1 to 5 mL scale.

Of course, you can use standard screening tubes with the sleeve.

EasyMax™ 10 mL glass reactor set consisting of

Order number	Product description	Quantity
51 161 285	Reagent tube 18 x 180 mm with GL18 thread, 10 pcs in a set	1
51 161 635	Receptacle for 4 x 10 mL reagent tubes	1
51 191 324	Magnetic stir bar	4
51 191 400	Screw cap GL18, with aperture, 10 pcs in a set	1
51 191 399	Septum-Set GL18, 10 pcs in a set	1



51 161 285	Reagent tube 10 mL with GL18 thread incl. GL18 screw cap with PTFE sealing
Material	Borosilicate glass
Working volume	Max. 5 mL
Size	Ø 18 mm, height 180 mm
Quantity	10 pcs in a set



51 161 635	Receptacle 4 x 10 mL reagent tubes Thermostat sleeve
Material	Aluminium anodized
Quantity	1



51 191 400	Screw cap GL18, with aperture
Material	PBT
Temperature	Max. 200 °C
Aperture	Ø 11 mm
Quantity	10 pcs in a set



51 191 399	Silicone rubber seal (septum) for use with screw cap GL18
Material	Silicone rubber VQM
Size	Outer Ø 12 mm, thickness 2 mm
Quantity	20 pcs in a set



51 191 324	Magnetic stir bar
Material	PTFE-coated
Size	Ø 7 mm, length 10 mm
Quantity	1

EasyMax™ Overhead Stirrer Set



51 161 700 Overhead stirrer set

The overhead stirrer set will allow you to run very viscous mixtures or do crystallization studies in the speed range from 50 to 1000 rpm. The new principle (patent pending) allows you to have your blade at 5 different heights depending on the application need with a press on the button.

The newly designed motor and coupling allows very fast connect and disconnect of the motor.

EasyMax™ overhead stirrer set consisting of

Order number	Product description	Quantity
	EasyMax™ stirrer motor	1
51 161 654	Height adjustment unit for stirrer adapter, incl. O-ring	1
51 161 731	Stirrer adapter ST14/23	1
51 191 375	Sealing ring for stirrer adapter (1 piece already fitted)	2
51 161 651	Chuck, PTFE C25	1
51 161 652	Clamping nut	1
51 191 376	Washer for stirrer adapter	2



	EasyMax™ stirrer motor with coupling
Material	Aluminum anodized (flange), stainless steel (upper coupling)
Speed	50 to 1000 rpm
Quantity	1
available on special request only	



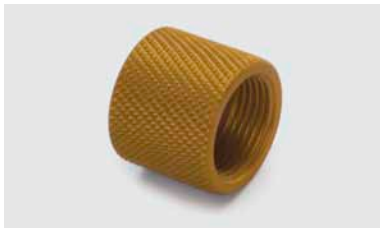
51 161 654	Height adjustment unit for stirrer adapter
	Upper part for height adjustment, incl. O-ring
Material	PEEK
Quantity	1
available on special request only	



51 161 731	Stirrer adapter ST14/23, lower part
Material	PEEK
Quantity	1
available on special request only	



51 191 375	Sealing ring for stirrer adapter
Material	PTFE/FPM
Size	Ø 16 mm, thickness 5 mm, aperture 8 mm
Quantity	1



51 161 652	Clamping nut
Material	Aluminum anodized
Quantity	1



51 161 651	Chuck, PTFE C25
	For stirrer shafts with outer Ø 8 mm
Material	PTFE C25
Quantity	1



51 191 376	Washer for stirrer adapter
Material	PA
Size	Ø 16 mm, thickness 2 mm, aperture 8 mm
Quantity	1

EasyMax™ 50 mL Reactor Optional Accessories



51 161 547	Set of knurled screws with washers for 50 mL reactor clamp
Material	Stainless steel
Quantity	8 pcs of each

EasyMax™ Overhead Stirrer

Optional Accessories



51 161 830	EasyMax™ stirrer motor without coupling
Material	Stainless steel (upper coupling)
Speed	50 to 1000 rpm
Quantity	1



51 161 360	Set of upper stirrer coupling comprising upper coupling and 2 threaded pins
Material	Stainless steel, 1.4301
Quantity	1

available on special request only



71 652	O-ring for stirrer adapter
Material	FPM
Size	21.89 x 2.62 mm, AS No. 118
Quantity	1

EasyMax™ Accessories

Available Stirrers

- Hastelloy® C22 or glass material
- Multiple-blades available
- Different shafts available



51 161 723	Stirrer shaft for 100 mL EasyMax™ reactor
Material	HC-22
Size	Ø 8 mm, length 258 mm
Quantity	1



51 161 756	Stirrer shaft for 50 and 100* mL EasyMax™ reactors
Material	HC-22
Size	Outer Ø 8/6 mm, length 218 mm
Quantity	1

*in combination with the Teflon® cover set



51 161 356	Pitched-blade element upward, 4 impellers, 45°, for 50 and 100 mL EasyMax™ reactors
Material	HC-22
Size	Outer Ø 25 mm
Quantity	1



51 161 549	Pitched-blade element downward, 4 impellers, 45°, for 50 and 100 mL EasyMax™ reactors
Material	HC-22
Size	Outer Ø 25 mm
Quantity	1



51 162 442	Pitched-blade element upward, 45°, 4 impellers, for 100 mL EasyMax™ reactor
Material	HC-22
Size	Outer Ø 38 mm
Quantity	1



51 162 418	Pitched-blade element downward, 45°, 4 impellers, for 100 mL EasyMax™ reactor
Material	HC-22
Size	Outer Ø 38 mm
Quantity	1



51 161 364	Rushton turbine blade for 50 mL and 100 mL EasyMax™ reactors
Material	HC-22
Size	Outer Ø 25 mm
Quantity	1



51 161 724	Anchor blade for 100 mL EasyMax™ reactor
Material	HC-22
Size	Outer Ø 48 mm, height 55 mm
Quantity	1



51 161 725	Pitched-blade stirrer upward, 45°, for 100 mL EasyMax™ reactor
Material	Glass
Size	Outer Ø 30 mm
Quantity	1



51 161 726	Pitched-blade stirrer downward, 45°, for 100 mL EasyMax™ reactor
Material	Glass
Size	Outer Ø 30 mm
Quantity	1



51 161 727	Anchor stirrer for 100 mL EasyMax™ reactor
Material	Glass
Size	Outer Ø 48 mm, height 55 mm, length 261 mm
Quantity	1

EasyMax™ Accessories

Stirrers and Adapters



51 161 813	Glass stirrer shaft for 100/50 mL one-piece reactor
Material	Borosilicate glass
Size	Ø 8 mm, length 192 mm
Quantity	1



51 161 813	Glass stirrer shaft for 100/50 mL one-piece reactor
Material	Glass
Size	Ø 8 mm, length 192 mm
Quantity	1

51 161 749	Half-moon stirrer blade
Material	PTFE
Size	15 x 40 mm
Quantity	1

51 161 814	Half-moon stirrer blade
Material	PTFE
Size	15 x 26 mm
Quantity	1



51 161 728	Adapter ST 10/19 with 1 UNF 1/4 28 port
Material	PTFE GF25
Quantity	1



51 160 200	Adapter ST7/16 with 1 UNF 1/4 28 port
Material	PTFE GF25
Quantity	1



51 161 821	Adapter PTFE for FBRM® probe, ST19-14mm
Material	PTFE
Quantity	1
O-ring needed 51 191 857	



51 191 857	O-Ring for 51 161 821 FBRM® probe adapter
Material	FFKM
Size	Ø 13.95 x 2.62 mm, AS No. 113
Quantity	1



51 161 817	Adapter PTFE for React IR probe, ST14-9.5mm
Material	PTFE
Quantity	1
O-ring needed 51 192 091	



51 192 091	O-Ring for 51 161 817 React IR probe adapter
Material	FFKM
Size	Ø 9.19 x 2.62 mm, AS No. 110
Quantity	1

EasyMax™ 100 mL and 50 mL One-Piece Glass Reactor Optional Accessories



51 161 835	Non-height adjustable PTFE stirrer adapter with metal brace, ST19, including sealing ring
Material	Aluminium anodized with PTFE adapter, PTFE/FPM sealing ring
Quantity	1

Available only as a set with sealing ring 51 191 375

Dosing Unit SP-50 Set



51 161 770 Dosing unit SP-50 set

This unit will allow you to dose 1 reagent in 2 reactors completely independent and in parallel via touchscreen or PC software.

Only available in the set.

Dosing unit SP-50 set consisting of

Order number	Product description	Quantity
	Dosing Unit SP-50, only available in the set	1
51 109 886	CAN cable 60 cm	1
51 191 306	PTFE dosing tube Ø 3.2 mm	3
51 191 304	PTFE dosing tube Ø 1.6 mm	2
51 191 515	Nut for UNF 1/4 28 threads, outer Ø max. 3.2 mm , 4 pcs in a set	1
51 191 514	Ferrule for tubing and sensors of outer Ø 3.2 mm, 4 pcs in a set	1
51 191 204	Plug for UNF 1/4 28 threads, 4 pcs in a set	1
51 191 203	Nut for UNF 1/4 28 threads, outer Ø max. 1.6 mm, 4 pcs in a set	1
51 191 202	Ferrule for tubing and sensors of outer Ø 1.6 mm, 4 pcs in a set	1
51 191 267	Glass adapter ST14/23-GL14	2
51 190 318	Screw cap GL14, closed	3
51 191 170	Silicone rubber seal (septum)	1
51 191 591	Bottle GL45 250 mL	1
51 191 972	Distributor cap GL45 2x GL14	1
51 161 558	Adapter GL14-UNF	3
51 190 317	Screw cap GL14, with aperture	3
51 103 947	Silicone rubber sealing ring, outer Ø 12 mm, aperture 6 mm	6
51 191 687	Assorted heat-shrink tubings, 8 pcs in a set	1
51 710 599	EasyMax™ product catalog / packing list	1
51 710 710	EasyMax™ operating instructions	1
	EasyMax™ factory test report	1



	Dosing unit SP-50
Quantity	1
only available in the set	



51 109 886	CAN cable 60 cm
Size	length 60 cm
Quantity	1



51 191 306	PTFE dosing tube Ø 3.2 mm
Material	PTFE
Size	Ø 3.2 mm, length 2.5 m
Quantity	1



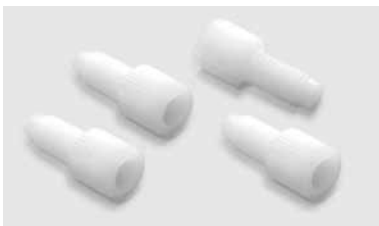
51 191 304	PTFE dosing tube Ø 1.6 mm
Material	PTFE
Size	Ø 1.6 mm, length 2.5 m
Quantity	1



51 191 515	Nut for UNF 1/4 28 threads
Material	ETFE
Size	Inner Ø max. 3.2 mm
Quantity	4 pcs in a set



51 191 514	Ferrule for tubing and sensors of outer Ø 3.2 mm
Material	ETFE
Size	Outer Ø max. 3.2 mm
Quantity	4 pcs in a set



51 191 204	Plug for UNF 1/4 28 threads
Material	ETFE
Size	outer Ø max. 1.6 mm
Quantity	4 pcs in a set



51 191 203	Nut for UNF 1/4 28 threads
Material	ETFE
Size	Outer Ø max. 1.6 mm
Quantity	4 pcs in a set



51 191 202	Ferrule for tubing and sensors of outer Ø 1.6 mm
Material	ETFE
Size	Outer Ø max. 1.6 mm
Quantity	4 pcs in a set



51 191 267	Glass adapter ST14/23-GL14
Material	Glass
Size	Height 54 mm
Quantity	1



51 190 318	Screw cap GL14, closed with PTFE sealing
Material	PBT
Temperature	Max. 200 °C
Quantity	1



51 191 170	Silicone rubber seal (septum) for screw cap GL14
Material	Silicone rubber VQM
Size	Ø 12 mm, thickness 2 mm
Quantity	1



51 190 317	Screw cap GL14, with aperture
Material	PBT
Temperature	Max. 200 °C
Aperture	Ø 9.5 mm
Quantity	1



51 103 947	Silicone rubber sealing ring with vulcanized-on PTFE washers for GL14 caps and sensors with outer Ø 6 mm
Material	Silicone rubber VQM, PTFE-coated
Size	Ø 12 mm, aperture 6 mm
Quantity	1



51 191 591	Bottle GL45 250 mL with cap
Material	Glass, PP
Quantity	1



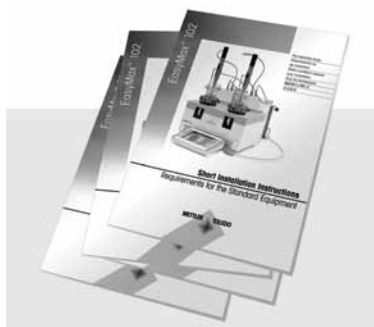
51 191 972	Distributor cap GL45 2x GL14
Material	PP
Quantity	1



51 161 558	Adapter GL14-UNF
Material	PTFE GF25
Size	36.14 x 2.62 mm
Quantity	1



51 191 687	Assorted heat-shrink tubings 8 pcs in a set
Material	Polyolefin
Quantity	1



51 161 710	EasyMax™ Operating Instructions
51 710 599	EasyMax™ Product Catalog/Packing List
	Factory Test Report
Quantity	1 of each

Dosing Unit SP-50 Syringes

- Flexible volumes from 1, 10, 25, and 50 mL syringes
- Automatic refill of syringes possible with Dosing Unit SP-50
- Interchangeable at all times during an experiment



51 191 793	Syringe 1 mL
Material	Glass, PTFE, metal
Volume	1 mL
Quantity	1



51 191 792	Syringe 10 mL
Material	Glass, PTFE, metal
Volume	10 mL
Quantity	1



51 191 794	Syringe 25 mL
Material	Glass, PTFE, metal
Volume	25 mL
Quantity	1



51 191 987	Syringe 50 mL
Material	Glass, PTFE, metal
Volume	50 mL
Quantity	1

EasyMax™ Optional Accessories

A variety of optional accessories will expand the functionality of your EasyMax™ and facilitate your day-to-day work. For your convenience, a number of spare parts and consumables are also available.



51 191 267	Glass adapter ST14/23-GL14
Material	Glass
Size	height 54 mm
Quantity	1



51 160 827	Adapter ST 14/23-ST 10/19
Material	PTFE GF25
Size	height 30 mm
Quantity	1



51 190 317	Screw cap GL14, with aperture
Material	PBT
Temperature	max. 200 °C
Aperture	9.5 mm
Quantity	1



51 161 102	Silicone rubber sealing ring with vulcanized-on PTFE washers for GL14 caps and sensors with outer Ø 8 mm
Material	Silicone rubber VQM, PTFE-coated
Size	Ø 12 mm x 5 mm
Quantity	1

EasyMax™ 3-Way Dosing Adapter Set



51 161 834
3-way dosing adapter set

This adapter set allows you to connect 3 dosing channels to the reactor.

EasyMax™ 3-way dosing adapter set consisting of

Order number	Product description	Quantity
51 162 615	3-way glass adapter ST14/23-GL14	1
51 190 318	Screw cap GL14, closed	2
51 161 558	Adapter GL14-UNF	2
51 190 317	Screw cap GL14, with aperture	3
51 103 947	Silicone rubber sealing ring, outer Ø 12 mm, aperture 6 mm	3
51 191 203	Nut for UNF 1/4 28 threads, outer Ø max. 1.6 mm, 4 pcs in a set	1



51 162 615	3-way glass adapter, ST14/23-GL14
Material	Borosilicate glass
Temperature	-40 to 180 °C
Quantity	1



51 161 558	Adapter GL14-UNF
Material	PTFE GF25
Size	36.14 x 2.62 mm
Quantity	1

Sealing ring needed 51 103 947



51 190 318	Screw cap GL14, closed with PTFE sealing
Material	PBT
Temperature	max. 200 °C
Quantity	1



51 190 317	Screw cap GL14, with aperture
Material	PBT
Temperature	max. 200 °C
Aperture	9.5 mm
Quantity	1



51 103 947	Silicone rubber sealing ring with vulcanized-on PTFE washers for GL14 caps and sensors with outer Ø 6 mm
Material	Silicone rubber VQM, PTFE-coated
Size	Ø 12 mm, aperture 6 mm
Quantity	1



51 191 203	Nut for UNF 1/4 28 threads
Material	ETFE
Size	outer Ø max. 1.6 mm
Quantity	4 pcs in a set

EasyMax™ Peripherals

Optional Accessories



51 161 852
Adapter Set for probes,
Ø 1.6 – 8 mm

This adapter set allows you to connect IR probes with 1/4" and FBRM with 8 mm, pH probes with 6 mm, tubes with 1.6 and 3.2 mm to your reactor.

Glass adapter set for Ø 1.6 – 8 mm consisting of

Order number	Product description	Quantity
51 191 267	Glass adapter ST14/23-GL14	1
51 190 317	Screw cap GL14, with aperture	1
51 161 558	Adapter GL14-UNF	1
51 103 947	Silicone rubber sealing ring, outer Ø 12 mm, aperture 6 mm	1
51 161 037	Adapter for GL14 and 6.4 mm sensors	1
51 161 102	Silicone rubber sealing, outer Ø 12 mm, aperture 8 mm	1



51 191 267	Glass adapter ST14/23-GL14
Material	Glass
Size	height 54 mm
Quantity	1



51 161 558	Adapter GL14-UNF
Material	PTFE GF25
Size	36.14 x 2.62 mm
Quantity	1

Sealing ring needed 51 103 947



51 190 317	Screw cap GL14, with aperture
Material	PBT
Temperature	max. 200 °C
Aperture	9.5 mm
Quantity	1



51 103 947	Silicone rubber sealing ring with vulcanized-on PTFE washers for GL14 caps and sensors with outer Ø 6 mm
Material	Silicone rubber VQM, PTFE-coated
Size	Ø 12 mm, aperture 6 mm
Quantity	1



51 161 037	Adapter for GL14 and 6.4 mm sensors
Material	PTFE
Size	inner Ø 6.4 mm, outer Ø 12 mm,
Quantity	1

Sealing ring needed 51 161 102



51 161 102	Silicone rubber sealing ring with vulcanized-on PTFE washers for GL14 caps and sensors with outer Ø 8 mm
Material	Silicone rubber VQM, PTFE-coated
Size	Ø 12 mm x 5 mm, aperture 8 mm
Quantity	1

Peripherals

EasyMax™ pH Measurement Equipment



SevenMulti pH meter system

We provide pH measurement without any additional control box. Just connect the SevenMulti pH meter to the EasyMax™. The EasyMax™ will log pH data and show them online on the touchscreen.

EasyMax pH measurement equipment consisting of

Order number	Product description	Quantity
51 302 807	SevenMulti S40 professional pH meter	1
51 302 821	pH Expansion unit SevenMulti	1
51 191 332	InLab 1022 pH electrode, 140 x 6 mm	1
51 343 161	InLab Semi-Micro-L pH electrode, 230 x 6 mm	1
51 190 589	Connection cable SevenMulti to EasyMax™	1
52 300 004	BNC cable, 1.2 m	1
51 161 852	Adapter set for probes, Ø 1.6 – 8 mm	1
59 902 417	BNC cable, 2.5 m	1



51 302 807	SevenMulti S40 professional pH meter with one pH measurement extension unit
Size	190 x 240 x 65 mm (w x d x h)
Quantity	1



51 302 821	pH Expansion unit SevenMulti to connect a second 2 pH electrode
Quantity	1



51 191 332	InLab 1022 pH electrode 140 x 6 mm
Temperature	0 °C to 80 °C
Size	Ø 6 mm, length 140 mm, electrode head S7
Quantity	1



51 343 161	InLab Semi-Micro-L pH electrode 230 x 6 mm
Temperature	0 °C to 100 °C
Size	Ø 6 mm, length 230 mm, electrode head S7
Quantity	1



51 190 589	Connection cable for data transfer from SevenMulti to EasyMax™
Size	length 1.8 m
Quantity	1



52 300 004	BNC cable, 1.2 m to connect pH electrode with S7 head to SevenMulti pH Meter
Size	length 1.2 m
Quantity	1



51 161 852	Adapter set for Ø 1.6 – 8 mm
Material	Glass, PBT, PTFE, silicone rubber
Quantity	1 of each in a set



59 902 417	BNC cable, 2.5 m to connect pH electrode with S7 head to SevenMulti pH Meter
Size	length 2.5 m
Quantity	1

EasyMax™ General Accessories

- Bubble counter set
- Purge set SP-50
- Pt100 temperature sensor



51 161 802

Bubble counter set

The bubble counter set allows you to regulate your inertisation of your reactors via a gas regulation valve.

51 161 802

Bubble counter set

Bubble counter glass (for tubes inner Ø 4 mm), magnetic holder, and gas regulation valve Ø 6 mm-1.8"

Material	PET, Borsilicate glass, PA
Temperature	-40 to 180 °C
Quantity	2 of each in a set



51 161 778
Purge set SP-50

With this purge set you are able to purge your dosing unit SP-50. Available only as a set.

51 161 778

Purge set SP-50

Quick connect coupling for purge gas inlet (for tubes inner Ø 4 mm), PVC tube for gas inlet (inner Ø 4 mm, length 2 m), reducing connector for purge gas tubing (for tubes inner Ø 7-11 mm and 4-7 mm)

Material	Stainless steel, PVC, PP
Temperature	PP max 30 °C
Quantity	1 of each in a set



51 161 730
Pt100 temperature sensor,
Bendable DIN class B temperature probe which offers accurate, stable, and reproducible temperature measurements. Resistant to most of the chemicals.

51 161 730

Pt100 temperature sensor for EasyMax™

Material	Stainless steel, FEP-coated
Temperature	max. 200 °C
Size	Ø 3.2 mm, length 175 mm, cable length 450 mm
Quantity	1

Use 51 161 728 adapter for ST10 port.
Use 51 160 200 adapter for ST7 port.

Peripherals

EasyMax™ Manual Dosing

- 50-mL dosing funnel in glass
- Compatible with your existing lab glassware
- Easy-to-use



51 191 952
50 mL dropping funnel,
ST14/23

To provide the chemists the same tools they are using today, we offer a glass dosing funnel of 50 mL.

51 191 952	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

iControl™ Software for EasyMax™

Optional Accessories

The software for experiment preparation, instrument control and data evaluation

- iControl™ for single or multiple instruments
- iControl™ for Office
- iCare software maintenance



iControl™ is tailored to provide the maximum amount of information from a single experiment. It uses a simple-to-operate user interface allowing to operate the EasyMax™ by either the PC software or in combination with the touchscreen.

iControl™ links with any of the iC Suite software packages and enables smooth data exchange online. The experiment data are displayed together with the recipe and stored for evaluation or long-term storage.

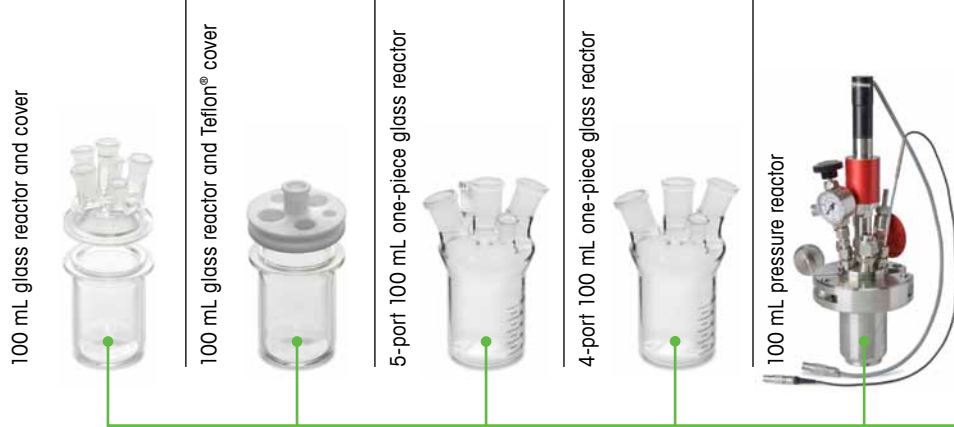
iControl™ is ideal for more complex or long-lasting experiments, when pre-programming is required, information with METTLER TOLEDO analytics tools need to be shared or data evaluation is essential.

iControl™ Software for EasyMax™

Order number	License type	Description
51 161 893	iControl™ Single Instrument License	Software license for experiment preparation, control and data evaluation for one instrument
51 162 612	iControl™ Multiple Instrument License	Software license for experiment preparation, control and data evaluation for up to three instruments
51 162 613	iControl™ Office License	Software license for experiment preparation and experiment evaluation
51 162 629	iCare for iControl™ Instrument	Software maintenance for instrument license
51 162 630	iCare for iControl™ Office	Software maintenance for office license

Compatibility List

	100 mL reactor and cover	100 mL reactor and Teflon cover	5-port 100 mL one-piece reactor	4-port 100 mL one-piece reactor	100 mL pressure reactor
51 161 700 Overhead stirrer set	● (Select a stirrer)	● (Select a stirrer)	● (Select a stirrer)	● (Select a stirrer)	
51 161 725 Pitched-blade stirrer, upward, 45°, glass	● 1				
51 161 726 Pitched-blade stirrer, downward, 45°, glass	● 1				
51 161 727 Anchor stirrer, glass	● 1				
51 162 442 Pitched-blade element, upward, 4 impellers, 45°, HC-22	● 1	● 2			
51 162 418 Pitched-blade element, down, 4 impellers, 45°, HC-22	● 1	● 2			
51 161 724 Anchor blade, HC-22	● 1				
51 161 356 Pitched-blade element, upward, 4 impellers, 45°, HC-22	● 1	● 2			
51 161 549 Pitched-blade element, downward, 4 impellers, 45°, HC-22	● 1	● 2			
51 161 364 Rushton turbine blade, HC-22	● 1	● 2			
51 161 749 Half-moon stirrer blade, PTFE			● 3	● 3	
30 030 950 Gassing stirrer with 4 grooves at suction part, Ø 30 mm, HC-22					●
30 030 951 Pitched-blade stirrer, upward, 4 impellers, Ø 30 mm, HC-22					●
51 343 161 Semi Micro L pH electrode, 230 x 6 mm	●	●	●	●	
51 191 952 50 mL dropping funnel, ST14/23, glass	●	●	●		



Needed items

- 1) **51 161 723** Stirrer shaft, length 258 mm, HC-22
- 2) **51 161 756** Stirrer shaft, length 218 mm, HC-22
- 3) **51 161 813** Stirrer shaft, length 380 mm, glass

		50 mL reactor and cover	5-port 50 mL one-piece reactor	50 mL pressure reactor	25 and 10 mL glass reactors
51 161 700	Overhead stirrer set	● (Select a stirrer)	● (Select a stirrer)		No sensors or peripherals needed.
51 161 356	Pitched-blade element, upward, 4 impellers, 45°, HC-22	● 2			
51 161 549	Pitched-blade element, downward, 4 impellers, 45°, HC-22	● 2			
51 161 364	Rushton turbine blade, HC-22	● 2			
51 161 749	Half-moon stirrer blade, PTFE		● 3		
51 343 161	Semi Micro L pH electrode, 230 x 6 mm	●	●		
51 191 952	50 mL dropping funnel, ST14/23, glass		●		
51 191 587	Gassing stirrer with 4 grooves at suction part, Ø 18 mm, HC-22			●	
51 191 588	Gassing stirrer with 4 grooves at suction part, Ø 25 mm, HC-22			●	

50 mL glass reactor and cover



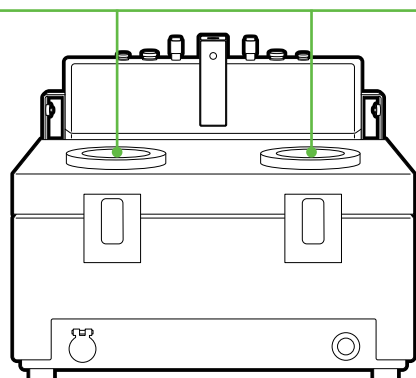
5-port 50 mL one-piece glass reactor



50 mL pressure reactor



25 and 10 mL glass reactors



Configure and customize your thermostat system

The system is built to hold different sizes of reactors for screening and optimization.

Interactive Web-based Seminars

METTLER TOLEDO offers interactive webinars on a regular basis.

They are presented by members of our technology and applications consulting team and give you an opportunity to learn more about specific areas of interest, including:

- Process development
- Crystallization
- Safety
- Particle processing
- Emerging applications
- Fermentation
- Catalysis
- Automated weighing
- Process Analytical Technology (PAT)
- Sample management and logistics
- Synthesis
- Pressure chemistry
- Lab informatics
- Kinetics
- Reaction analysis
- Advanced data analysis
- And much more

On-demand webinars

All live webinars are recorded and will be available as "on-demand webinars" from the METTLER TOLEDO website or the AutoChem Community Site.

Go to <https://community.autochem.mt.com> and log in.

www.mt.com/EasyMax

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