

Reactor systems

REA

NEW



Modular system

You can choose: glass vessels with glass lids or PTFE lids, agitator, vacuum pump and controller, heating mantle, chiller / cooler or heating circulator.

Wide range of vessels and comfort

- 0.1 - 100 l reaction vessels
- single or double walled glass vessels
- with or without drain valve at the bottom

Easy installation, assembly frame and components

- assembly frame for heavier work
- spare parts and optional components as modules available
- assembly frame as bench- or floor-type available
- height and length adjustable, frame removable
- 4 castors including 2 lockable castors

Controller

digital feedback controller / microprocessor controlled agitator (stirrer): LCD display, power bar graph, and status, overheat- and over current protection

Accessories

- use with k-temperature probe
- PTFE safety lid with screw joint or glass lid available
- Flexible PTFE connection for all joint parts
- with flexible safety coupling between stirring motor and shaft
- "45° DN 200" standardized flat flange system with a comprehensive range of accessories and spare parts

Reactor system | autom. lifting & tilting

jacketed reaction vessel, 5 - 100 l, digital agitator 50 - 1,000 rpm (800 rpm at 100 l)

NEW

REA-A



Ideal for:

- experiments, pilot production and production in chemistry, fine chemical engineering, pharmacy, synthesis and biomedical engineering
- dispersion, distillation, evaporation, homogenization and mixing processes at laboratories

Features:

- automatic lifting & tilting system: with induction gear motor, timing belt and pulley and limit switch for easy feeding and maintenance
- jacketed reaction vessel, ideal for -80°C to 260°C, 0.095 MPa, with drain valve
- fully adjustable assembly construction system made from stainless steel, with 4 castors including 2 lockable castors
- digital, high-torque agitator system
- storage function for rpm, timer and locking
- LCD display with power bar graph & status
- CE certified and unique serial number for tracing

Safety mechanism:

- flexible safety coupling between stirring motor and PTFE-shaft/impeller
- overheat- and over current protection

Controller:

- digital feedback controller/Microprocessor, **Jog-Shuttle control**

Model	REA-5A	REA-10A	REA-20A	REA-30A	REA-50A	REA-80A	REA-100A	
	direct control				remote control			
Vessel volume	5 l	10 l	20 l	30 l	50 l	80 l	100 l	
Jacket volume	ca. 1.2 l	ca. 2.6 l	ca. 5 l	ca. 8 l	ca. 12 l	ca. 20 l	ca. 25 l	
Vessel (O.Ø x H)	230 x 455 mm	270 x 550 mm	365 x 580 mm	365 x 710 mm	410 x 800 mm	460 x 970 mm	500 x 970 mm	
Vessel (I.Ø)	200 mm	230 mm	330 mm	330 mm	365 mm	410 mm	460 mm	
Heat hose connector	GL 25	GL 32		O.Ø 35 mm x I.Ø 18 mm flat flange & metal cap				
Drain tube size	glass tube O.Ø 34 mm x I.Ø 20 mm							
Digital stirrer (agitator)	Model	SHT-50DX			SHT-120T		SHT-140T	
	Viscosity, torque & flange	100,000 mPas, 300 Ncm, DN 150			150,000 mPas, 500 Ncm, DN200		160,000 mPas, 550 Ncm, DN200	
	Speed	50 - 1,000 rpm, resolution: display 1.0 rpm, control 1.0 rpm					50 - 800 rpm	
	Motor & rating	worm-gear DC motor (3.5:1 ratio) Input 83W, Output 75W, 1/10 HP			worm-gear DC motor (3.5:1 ratio) Input 130W, Output 120W, 1/6 HP			
Lifting speed & height	1 - 53 rpm, 15-step control, 200 - 500 mm							
Tilt angle	manual 30 degree							
Timer & alarm	99 h 59 min. (with continuous run), error status and timer end							
Shaft / impeller	Ø14 mm PTFE-encapsulated stainless steel shaft, exposed end Ø12 mm up to 50 l							
Power consumption	175 W				300 W			
Dimensions	800 x 620 x 1,900 mm		915 x 670 x 2,100 mm		1,000 x 720 x 2,400 mm	1,200 x 790 x 2,445 mm		
Power supply	1 Phase AC 230V, 50/60 Hz							
Order number with glass lid, 5 necks*	DH.Rea2531	DH.Rea2532	DH.Rea2533	DH.Rea2534	DH.Rea2535	DH.Rea2536	DH.Rea2537	
Order number with PTFE lid, 6 necks*	DH.Rea2541	DH.Rea2542	DH.Rea2543	DH.Rea2544	DH.Rea2545	DH.Rea2546	DH.Rea2547	

*Please note: Circulator and vacuum pump not included, please order separately!

Classic reactor system

NEW

jacketed reaction vessel, 5 - 100 l, digital agitator 50 - 1,000 rpm (800 rpm at 100 l)



REA-C

Ideal for:

- experiments, pilot production and production in chemistry, fine chemical engineering, pharmacy, synthesis and biomedical engineering
- dispersion, distillation, evaporation, homogenization and mixing processes at laboratories

Features:

- jacketed cylindrical reaction vessel, ideal for -80°C to 260°C, 0.095 MPa, with drain valve
- fully adjustable assembly construction system made from stainless steel, with 4 castors including 2 lockable castors
- digital, high-torque agitator system
- storage function for rpm, timer and locking
- LCD display with power bar graph & status
- CE certified and unique serial number for tracing

Safety mechanism:

- locking mode for more safety
- flexible safety coupling between stirring motor and PTFE-shaft/impeller

Model	REA-5C	REA-10C	REA-20C	REA-30C	REA-50C	REA-80C	REA-100C	
	direct control				remote control			
Vessel volume	5 l	10 l	20 l	30 l	50 l	80 l	100 l	
Jacket volume	ca. 1.2 l	ca. 2.6 l	ca. 5 l	ca. 8 l	ca. 12 l	ca. 20 l	ca. 25 l	
Vessel (O.Ø x H)	230 x 455 mm	270 x 550 mm	365 x 580 mm	365 x 710 mm	410 x 800 mm	460 x 970 mm	500 x 970 mm	
Vessel (I.Ø)	200 mm	230 mm	330 mm	330 mm	365 mm	410 mm	460 mm	
Heat hose connector	GL 25	GL 32		O.Ø 35 mm x I.Ø 18 mm flat flange & metal cap				
Drain tube size	glass tube O.Ø 34 mm x I.Ø 20 mm							
Digital stirrer (agitator)	Model	SHT-50DX			SHT-120T		SHT-140T	
	Viscosity, torque & flange	100,000 mPas, 300 Ncm, DN 150			150,000 mPas, 500 Ncm, DN 200		160,000 mPas, 550 Ncm, DN 200	
	Speed	50 - 1,000 rpm, resolution: display 1.0 rpm, control 1.0 rpm					50 - 800 rpm	
	Motor & rating	worm-gear DC motor (3.5:1 ratio) Input 83W, Output 75W, 1/10 HP			worm-gear DC motor (3.5:1 ratio) Input 130W, Output 120W, 1/6 HP			
Timer & alarm	99 h 59 min. (with continuous run), error status and timer end							
Shaft / impeller	Ø10/8 mm PTFE-encapsulated stainless steel shaft				Ø12/10 mm PTFE-encapsulated stainless steel shaft			
Power consumption	85 W				120 W			
Dimensions	45 x 45 x 130 cm		55 x 55 x 170 cm		60 x 60 x 180 cm		67 x 67 x 200 cm	
Power supply	1 Phase AC 230V, 50/60 Hz							
Order number with glass lid, 5 necks*	DH.Rea2511	DH.Rea2512	DH.Rea2513	DH.Rea2514	DH.Rea2515	DH.Rea2516	DH.Rea2517	
Order number with PTFE lid, 6 necks*	DH.Rea2521	DH.Rea2522	DH.Rea2523	DH.Rea2524	DH.Rea2525	DH.Rea2526	DH.Rea2527	

*Please note: Circulator and vacuum pump not included, please order separately!

NEW

Vacuum reactor set

reaction vessel, 0.5 - 20 l, digital agitator 50 - 1,000 rpm



REA-S

Ideal for:

- experiments, pilot production and production in chemistry, fine chemical engineering, pharmacy, synthesis and biomedical engineering
- dispersion, distillation, evaporation, homogenization and mixing processes at laboratories

Features:

- jacketed reaction vessel ideal for -80°C to 260°C, 0.095 MPa, with drain valve
- fully adjustable assembly construction system made from stainless steel, with 4 castors including 2 lockable castors, with heavy-duty stainless steel support guide for REA-S10 and REA-S20
- with heavy-duty aluminium vessel suspension support device, very easy vessel exchange
- digital, high-torque agitator system
- storage function for rpm, timer and locking
- LCD display with power bar graph & status
- CE certified and unique serial number for tracing

Safety mechanism:

- locking mode for more safety
- flexible safety coupling between stirring motor and PTFE-shaft/impeller

Model	REA-S0.5	REA-S1	REA-S2	REA-S3	REA-S5	REA-S10	REA-S20
Vessel volume	0,5 l	1 l	2 l	3 l	5 l	10 l	20 l
Jacket volume	ca. 0.2 l	ca. 0.4 l	ca. 0.8 l	ca. 1.1 l	ca. 1.2 l	ca. 2.6 l	ca. 5 l
Vessel (O.Ø x H)	130 x 140 mm	130 x 210 mm	160 x 250 mm	160 x 340 mm	230 x 455 mm	270 x 550 mm	365 x 580 mm
Vessel (I.Ø)	105 mm	105 mm	130 mm	130 mm	200 mm	230 mm	330 mm
Heat hose connector	GL 18			GL 25		GL 32	
Drain tube size	15 x 10 mm		18 x 13 mm		34 x 20 mm		
Digital stirrer (agitator)	Model	integrated control, SHT-50DX					
	Viscosity, torque & flange	100,000 mPas, 300 Ncm					
	Speed	50 - 1,000 rpm, resolution: display 1.0 rpm, control 1.0 rpm					
	Motor & rating	worm-gear DC motor (3.5:1 ratio), Input 83W, Output 75W, 1/10 HP					
Timer & alarm	99 h 59 min. (with continuous run), error status and timer end						
Shaft / impeller	Ø8/6 mm PTFE-encapsulated stainless steel shaft			Ø10/8 mm PTFE-encapsulated stainless steel shaft			
Power consumption	85 W						
Dimensions	45 x 45 x 75 cm		45 x 45 x 130 cm		50 x 50 x 150 cm		55 x 55 x 170 cm
Power supply	1 Phase AC 230V, 50/60 Hz						
Order number with glass lid, 5 necks*	DH.Rea2481	DH.Rea2482	DH.Rea2483	DH.Rea2484	DH.Rea2485	DH.Rea2486	DH.Rea2487
Order number with PTFE lid, 6 necks*	DH.Rea2491	DH.Rea2492	DH.Rea2493	DH.Rea2494	DH.Rea2495	DH.Rea2496	DH.Rea2497

*Please note: Circulator and vacuum pump not included, please order separately!

Reactor system | mantle heated

NEW

cylindrical reaction vessel, 2 - 20 l, digital agitator 50 - 1,000 rpm



REA-M

Ideal for:

- experiments, pilot production and production in chemistry, fine chemical engineering, pharmacy, synthesis and biomedical engineering
- dispersion, distillation, evaporation, homogenization and mixing processes at laboratories

Features:

- cylindrical reaction vessel, ideal for -80°C to 260°C, 0.095 MPa, with drain valve, with glass- or PTFE-lid
- digital, high-torque agitator system with storage function of rpm, timer and locking
- remote controlled heating mantle up to 450°C, with digital feedback control
- use with external direct contact-K-temperature probe (optional)
- both devices with digital backlight LCD-display
- CE certified and unique serial number for tracing

Safety mechanism:

- flexible safety coupling between stirring motor and PTFE-shaft/impeller
- overheat- and over current protection

Controller:

- digital *Jog-Shuttle-control*

Model	REA-2M	REA-4M	REA-6M	REA-10M	REA-20M
Heating mantle Watt & DN flange	550 W, DN100	800 W, DN150		1,400 W, DN150	2,000W, DN200
Vessel volume	2 l	4/5 l	6/7 l	10/12 l	20/21 l
Vessel (O.Ø x H)	130 x 240 mm	200 x 165 mm	215 x 165 mm	240 x 165 mm	250 x 215 mm
Drain tube size (O.Ø x l. Ø)	13 x 9 mm	15 x 10 mm	18 x 13 mm		
Digital stirrer (agitator)	Controller, model	direct control, SHT-50DX			
	Viscosity, torque & flange	100,000 mPas, 300 Ncm			
	Speed	50 - 1,000 rpm, resolution: display 1 rpm, control 1 rpm			
	Motor & rating	worm-gearred DC motor (3.5:1 ratio), Input 83, Output 75 W, 1/10 HP			
	Timer & alarm	99 h 59 min. (with continuous run), error status and timer end			
	Display	digital backlight LCD-Display			
Controller	digital feedback control with Jog-Shuttle switch (Turn + Push)				
Shaft / impeller	Ø8/6 PTFE-encapsulated stainless steel shaft		Ø10/8 PTFE-encapsulated stainless steel shaft		
Power consumption	635 W	855 W	935 W	1485 W	2085 W
Power supply	1 Phase AC 230V, 50/60 Hz				
Order number with glass lid, 5 necks*	DH.Rea2553	DH.Rea2554	DH.Rea2555	DH.Rea2556	DH.Rea2557
Order number with PTFE lid, 5 necks*	DH.Rea2563	DH.Rea2564	DH.Rea2565	DH.Rea2566	DH.Rea2567

NEW

Reactor system | mantle heated

flat flange-round flask, 2 - 50 l, digital agitator 50 - 1,000 rpm



REA-MR

Ideal for:

- experiments, pilot production and production in chemistry, fine chemical engineering, pharmacy, synthesis and biomedical engineering
- dispersion, distillation, evaporation, homogenization and mixing processes at laboratories

Features:

- flat flange-reaction vessel, ideal for -80°C to 260°C, 0.095 MPa, with drain valve, with glass- or PTFE-lid
- digital, high-torque agitator system with storage function of rpm, timer and locking
- remote controlled heating mantle up to 450°C, with digital feedback control
- use with external direct contact-K-temperature probe (optional)
- both devices with digital backlight LCD-display
- CE certified and unique serial number for tracing

Safety mechanism:

- flexible safety coupling between stirring motor and PTFE-shaft/impeller
- overheat- and over current protection

Controller:

- digital *Jog-Shuttle-control*

Model	REA-2MR	REA-4MR	REA-6MR	REA-10MR	REA-20MR	REA-50MR	
Heating mantle Watt & DN flange	450 W, DN100	750 W, DN120	850 W, DN120	1,500 W, DN150	2,000W, DN150	4,000W, DN200	
Vessel volume	2 l	3 l	5 l	10 l	20 l	50 l	
Vessel (O.Ø x H)	165 x 215 mm	185 x 240 mm	225 x 280 mm	280 x 350 mm	350 x 430 mm	480 x 650 mm	
Drain tube size (O.Ø x l. Ø)	13 x 9 mm	15 x 10 mm	18 x 13 mm				
Digital stirrer (agitator)	Controller, model	direct control, SHT-50DX				remote control, SHT-120T	
	Viscosity, torque & flange	100,000 mPas, 300 Ncm				150,000 mPas, 500 Ncm	
	Speed	50 - 1,000 rpm, resolution: display 1 rpm, control 1 rpm					
	Motor & rating	worm-gear DC motor (3.5:1 ratio), Input 83, Output 75 W, 1/10 HP					30 / 120 W, 1/6 PS
	Timer & alarm	99 h 59 min. (with continuous run), error status and timer end					
	Display	digital backlight LCD-Display					
	Controller	digital feedback control with Jog-Shuttle switch (Turn + Push)					
Shaft / impeller	Ø8/6 PTFE-encapsulated stainless steel shaft		Ø10/8 PTFE-encapsulated stainless steel shaft			Ø12/10 PTFE-shaft	
Power consumption	635 W	855 W	935 W	1485 W	2085 W	4120 W	
Power supply	1 Phase AC 230V, 50/60 Hz						
Order number with glass lid, 5 necks*	DH.Rea2573	DH.Rea2574	DH.Rea2575	DH.Rea2576	DH.Rea2577	DH.Rea2578	
Order number with PTFE lid, 5 necks*	DH.Rea2583	DH.Rea2584	DH.Rea2585	DH.Rea2586	DH.Rea2587	DH.Rea2588	