

The right temperature worldwide

LAUDA



- Large range of models, customizable performance output
- Flexible equipment options
- Easy and clear operation

NEW

LAUDA Variocool
Circulation chillers

LAUDA Variocool

Circulation chillers for variable use in laboratory, mini-plant and production for temperatures from -20 up to 40 °C



Application examples

- Central cooling water supply in laboratories
- Cooling of analytical devices
- Temperature control of bio-reactors
- Supply to cooling traps

Numerous options, compact design, easy operation

The **LAUDA Variocool** circulation chillers offer a broad performance spectrum for demanding temperature control tasks. The color TFT screen makes operation easy. A USB interface and an alarm contact are integrated as standard features. Additional interfaces are available as accessories. They are located in the front of the device, which means they are easy to access.

The circulation chillers with their multitude of options are very well suited to a number of different areas of application. Optional pumps, for example, enable higher supply pressure. Optional heating units, which are adapted to the cooling capacity, enable the quick heating of the connected application when needed.

Your advantages at a glance



The Variocool advantages

Your benefits



- All models with electronic expansion valve to regulate refrigeration and use only the minimum amount of energy required. These units are marked with the „Energy Saving Star“ label.
- 13 models in air or water-cooled design with cooling capacities from 600 W up to 10 kW
- Due to their compact design, units up to 2 kW of cooling capacity can be placed under the laboratory table

- Very energy efficient models with good temperature control and cost savings thanks to reduced energy consumption
- The appropriate solution to every requirement
- Saves valuable lab space



- Display and operation via color TFT screen and membrane keyboard
- Electronic fill gauge on the display and low level alarm when fluid level too low

- Easy and clear setup options
- Early detection of insufficient fluid



- Options:
 - High power pumps
 - Heaters
 - Flow control
 - Outdoor installation
 - Use with DI water
 - Noise reduction
 - Deionized water (DI water)

- Flexible customization to applications



- USB interface and alarm contact standard features in the front of the device
- Retrofittable interfaces as accessory:
 - analog module
 - RS-232/485 interface
 - contact modules
 - profibus module
 - Pt100/LiBus module

- Easy accessibility
- Flexible control options



- Front grill can be easily removed without tool
- Tower design for larger models (from VC 7000)
- Microchannel condensers in all air-cooled models
- All models (except VC 600) with adjustable bypass and pressure gauge

- Easy to clean condenser
- Space-saving setup
- Reduced footprint and lower refrigerant quantity
- Connection of pressure sensitive applications

LAUDA Variocool

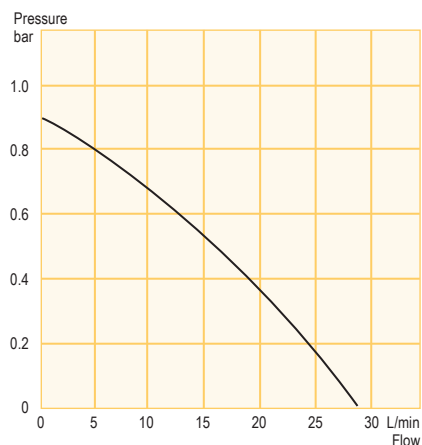
Variocool Circulation chillers with cooling capacities up to 2 kW

Variocool circulation chillers function in an operating temperature range of -20 to 40 °C. Optional heaters can be added to increase the maximum temperature to 80 °C. For greater pressure requirements, optional pumps are available with the VC 1200 version or higher. With the exception of the VC 600, all models are also available as water-cooled versions. All devices are equipped with lockable casters. The compact dimensions of the models from VC 600 to VC 2000 (W) allows to place them under the laboratory table.



Circulation chiller VC 600

Pump characteristic Heat transfer liquid: Water



Temperature range

-20...40 °C (-20...80 °C with optional heater)

Included as standard

USB interface · alarm contact

Included accessories

nipples · screw caps

Options

High-power pumps* · heater · flow control · outdoor installation · DI water compatibility



All technical data on page 9



595 mm



650 mm



650 mm



650 mm



650 mm

Technical features		VC 600	VC 1200	VC 1200 W	VC 2000	VC 2000 W
Working temperature range	°C	-20...40	-20...40	-20...40	-20...40	-20...40
Working temperature range with optional heater	°C	-20...80	-20...80	-20...80	-20...80	-20...80
Temperature stability	±K	0.2	0.2	0.2	0.2	0.2
Cooling output at 20 °C	kW	0.6	1.2	1.2	2.0	2.0
Pump pressure max.	bar	0.9	0.9	0.9	0.9	0.9
Pump flow	L/min	28	28	28	28	28
Cat. No. 230 V; 50 Hz		LWG 175	LWG 176	LWG 182	LWG 177	LWG 183
Cat. No. 220 V; 50/60 Hz		LWG 675**	LWG 576	LWG 582	LWG 577	LWG 583
Cat. No. 208-220 V; 60 Hz		LWG 275***	LWG 876	LWG 882	LWG 877	LWG 883
Cat. No. 115 V; 60 Hz		LWG 475	—	—	—	—

* Using such a pump can change the available cooling capacity, and causes a change of the height of the housing from 650 mm to 790 mm for VC 1200 (W) and VC 2000 (W) ** 100 V; 50/60 Hz *** 220 V; 60 Hz

Variocool

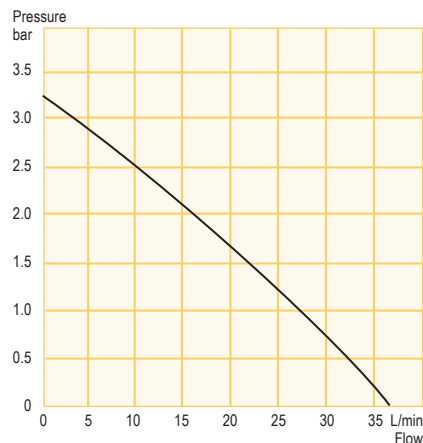
Circulation chillers with cooling capacities up to 5 kW

The models VC 3000 and VC 5000 offer cooling capacities of 3 and 5 kW. They are also available in water-cooled design (W). For flexible adaptation to different applications the chillers can also be delivered with optional high-power pumps or heaters. Further options are a flow control, outdoor installation or a noise reduction for the types VC 5000 and VC 5000 W.



Circulation chiller VC 3000 W

Pump characteristic Heat transfer liquid: Water



Temperature range

-20...40 °C (-20...80 °C with optional heater)

Included as standard

USB interface · alarm contact

Included accessories

nipples · screw caps

Options

High-power pumps* · heater · flow control · outdoor installation · noise reduction (VC 5000, VC 5000 W)



All technical data on page 9



970 mm



970 mm



970 mm



970 mm

Technical features		VC 3000	VC 3000 W	VC 5000	VC 5000 W
Working temperature range	°C	-20...40	-20...40	-20...40	-20...40
Working temperature range with optional heater	°C	-20...80	-20...80	-20...80	-20...80
Temperature stability	±K	0.2	0.2	0.2	0.2
Cooling output at 20 °C	kW	3.0	3.0	5.0	5.0
Pump pressure max.	bar	3.2	3.2	3.2	3.2
Pump flow	L/min	37	37	37	37
Cat. No. 230 V; 50 Hz		LWG 178	LWG 184	LWG 279**	LWG 285**
Cat. No. 220 V; 50/60 Hz		LWG 578	LWG 584	LWG 379***	LWG 385***
Cat. No. 208-220 V; 60 Hz		LWG 878	LWG 884	LWG 479****	LWG 485****

* Using such a pump can change the available cooling capacity ** 400 V; 3/N/PE; 50 Hz *** 208-220 V; 3/PE; 60 Hz **** 200 V; 3/PE; 50/60 Hz

LAUDA Variocool

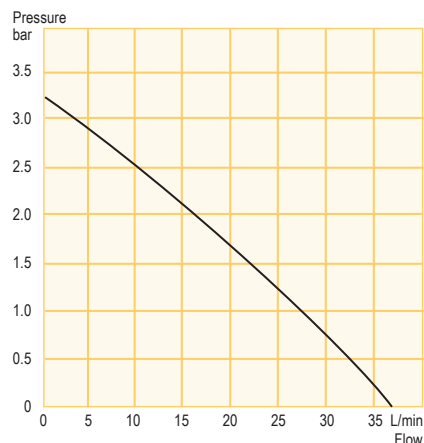
Variocool Circulation chillers with cooling capacities up to 10 kW

The highly efficient tower design circulation chillers provide cooling capacities between 7 and 10 kW. Options like heating or high-power pumps add to the devices' areas of application. The models are available in air or water-cooled design. All models are equipped with casters which can be controlled and locked.



Circulation chiller VC 7000

Pump characteristic Heat transfer liquid: Water



Temperature range

-20...40 °C (-20...80 °C with optional heater)

Included as standard

USB interface · alarm contact

Included accessories

nipples · screw caps

Options

High-power pumps* · heater · flow control · outdoor installation · noise reduction



All technical data on page 9



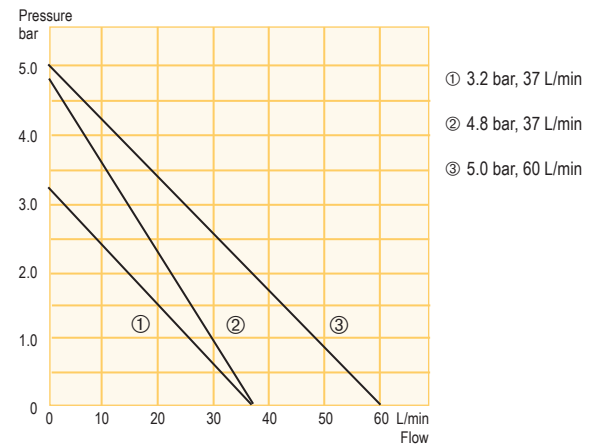
Technical features		VC 7000	VC 7000 W	VC 10000	VC 10000 W
Working temperature range	°C	-20...40	-20...40	-20...40	-20...40
Working temperature range with optional heater	°C	-20...80	-20...80	-20...80	-20...80
Temperature stability	±K	0.5	0.5	0.5	0.5
Cooling output at 20 °C	kW	7.0	7.0	10.0	10.0
Pump pressure max.	bar	3.2	3.2	3.2	3.2
Pump flow	L/min	37	37	37	37
Cat. No. 400 V; 3/N/PE; 50 Hz		LWG 280	LWG 286	LWG 281	LWG 287
Cat. No. 208-220 V; 3/PE; 60 Hz		LWG 380	LWG 386	LWG 381	LWG 387
Cat. No. 200 V; 3/PE; 50/60 Hz		LWG 480	LWG 486	LWG 481	LWG 487

* Using such a pump can change the available cooling capacity

Options Variocool

For all Variocool models, different options can be ordered. The options can only be affixed at point of production. Please check the table below for compatibility of options with the corresponding circulation chiller type.

Pump characteristics optional pumps Heat transfer liquid: water



Options

Heaters	For all types. Extension of the temperature up to 80 °C.
High-power pumps	For all types, except VC 600.
Flow control	For all types.
Outdoor installation	For all types. An additional protection with a roof is necessary.
DI water	For VC 600 to VC 2000 W. Corrosion resistant construction for use with deionized water.
Noise reduction	For models VC 5000 up to 10000 W.

Options – not power supply dependent

Option	Cat. No.	VC 600	VC 1200	VC 1200 W	VC 2000	VC 2000 W	VC 3000	VC 3000 W	VC 5000	VC 5000 W	VC 7000	VC 7000 W	VC 10000	VC 10000 W
Flow control 1/2"	LWZ 118	●	●	●	●	●	–	–	–	–	–	–	–	–
Flow control 3/4"	LWZ 119	–	–	–	–	–	●	●	●	●	●	●	●	●
Outdoor installation	LWZ 120	●	●	●	●	●	●	●	–	–	–	–	–	–
Outdoor installation	LWZ 121	–	–	–	–	–	–	–	●	●	–	–	–	–
Outdoor installation	LWZ 122	–	–	–	–	–	–	–	–	–	●	●	–	–
Outdoor installation	LWZ 123	–	–	–	–	–	–	–	–	–	–	–	●	●
DI water	LWZ 124	●	–	–	–	–	–	–	–	–	–	–	–	–
DI water	LWZ 125	–	●	●	●	●	–	–	–	–	–	–	–	–
Noise reduction	LWZ 126	–	–	–	–	–	–	–	●	●	–	–	–	–
Noise reduction	LWZ 127	–	–	–	–	–	–	–	–	–	●	●	–	–
Noise reduction	LWZ 128	–	–	–	–	–	–	–	–	–	–	–	●	●

LAUDA Variocool

Options – power supply dependent

		230 V; 50 Hz							400 V; 3/N/PE; 50 Hz					
Option	Cat. No.	VC 600	VC 1200*	VC 1200 W*	VC 2000*	VC 2000 W*	VC 3000	VC 3000 W	VC 5000	VC 5000 W	VC 7000	VC 7000 W	VC 10000	VC 10000 W
Heater 1.5 kW	LWZ 1095	●	●	●	●	●	●	●	–	–	–	–	–	–
Heater 4.5 kW	LWZ 2096	–	–	–	–	–	–	–	●	●	●	●	–	–
Heater 9.0 kW	LWZ 2097	–	–	–	–	–	–	–	–	–	–	–	●	●
Pump, 3.2 bar 37 L/min**	LWZ 1100	–	●	●	–	–	–	–	–	–	–	–	–	–
Pump, 3.2 bar 37 L/min**	LWZ 1101	–	–	–	●	●	–	–	–	–	–	–	–	–
Pump, 4.8 bar 37 L/min**	LWZ 1103	–	●	●	–	–	–	–	–	–	–	–	–	–
Pump, 4.8 bar 37 L/min**	LWZ 1104	–	–	–	●	●	–	–	–	–	–	–	–	–
Pump, 4.8 bar 37 L/min**	LWZ 1102	–	–	–	–	–	●	●	–	–	–	–	–	–
Pump, 4.8 bar 37 L/min**	LWZ 2105	–	–	–	–	–	–	–	●	●	●	●	●	●
Pump, 5.0 bar 60 L/min**	LWZ 2106	–	–	–	–	–	–	–	●	●	●	●	●	●

		115 V; 60 Hz	220 V; 60 Hz	208-220 V; 60 Hz						208-220 V; 3/PE; 60 Hz					
Option	Cat. No.	VC 600	VC 600	VC 1200*	VC 1200 W*	VC 2000*	VC 2000 W*	VC 3000	VC 3000 W	VC 5000	VC 5000 W	VC 7000	VC 7000 W	VC 10000	VC 10000 W
Heater 1.15 kW	LWZ 4095	●	–	–	–	–	–	–	–	–	–	–	–	–	–
Heater 1.35 kW	LWZ 2095	–	●	–	–	–	–	–	–	–	–	–	–	–	–
Heater 1.20-1.35 kW	LWZ 8095	–	–	●	●	●	●	●	●	–	–	–	–	–	–
Heater 3.65-4.1 kW	LWZ 3096	–	–	–	–	–	–	–	●	●	●	●	–	–	–
Heater 7.35-8.2 kW	LWZ 3097	–	–	–	–	–	–	–	–	–	–	–	●	●	–
Pump, 3.2 bar 37 L/min**	LWZ 8100	–	–	●	●	–	–	–	–	–	–	–	–	–	–
Pump, 3.2 bar 37 L/min**	LWZ 8101	–	–	–	–	●	●	–	–	–	–	–	–	–	–
Pump, 4.8 bar 37 L/min**	LWZ 2103	–	–	●	●	–	–	–	–	–	–	–	–	–	–
Pump, 4.8 bar 37 L/min**	LWZ 2104	–	–	–	–	●	●	–	–	–	–	–	–	–	–
Pump, 4.8 bar 37 L/min**	LWZ 2102	–	–	–	–	–	–	●	●	–	–	–	–	–	–
Pump, 4.8 bar 37 L/min**	LWZ 3105	–	–	–	–	–	–	–	●	●	●	●	●	●	●
Pump, 5.0 bar 60 L/min**	LWZ 3106	–	–	–	–	–	–	–	●	●	●	●	●	●	●

		100 V; 50/60 Hz	200 V; 50/60 Hz						200 V; 3/PE; 50/60 Hz					
Option	Cat. No.	VC 600	VC 1200*	VC 1200 W*	VC 2000*	VC 2000 W*	VC 3000	VC 3000 W	VC 5000	VC 5000 W	VC 7000	VC 7000 W	VC 10000	VC 10000 W
Heater 1.0 kW	LWZ 6095	●	–	–	–	–	–	–	–	–	–	–	–	–
Heater 1.1 kW	LWZ 5095	–	●	●	●	●	●	●	–	–	–	–	–	–
Heater 3.4 kW	LWZ 4096	–	–	–	–	–	–	–	●	●	●	●	–	–
Heater 6.8 kW	LWZ 4097	–	–	–	–	–	–	–	–	–	–	–	●	●
Pump, 3.2 bar 37 L/min**	LWZ 5100	–	●	●	–	–	–	–	–	–	–	–	–	–
Pump, 3.2 bar 37 L/min**	LWZ 5101	–	–	–	●	●	–	–	–	–	–	–	–	–
Pump, 4.8 bar 37 L/min**	LWZ 5103	–	●	●	–	–	–	–	–	–	–	–	–	–
Pump, 4.8 bar 37 L/min**	LWZ 5104	–	–	–	●	●	–	–	–	–	–	–	–	–
Pump, 4.8 bar 37 L/min**	LWZ 5102	–	–	–	–	–	●	●	–	–	–	–	–	–
Pump, 4.8 bar 37 L/min**	LWZ 4105	–	–	–	–	–	–	–	●	●	●	●	●	●
Pump, 5.0 bar 60 L/min**	LWZ 4106	–	–	–	–	–	–	–	●	●	●	●	●	●

* Use with high-power pumps causes a change of the height of the housing from 650 mm to 790 mm.

** Using such a pump can change the available cooling capacity

Type	Working temperature range (with optional heater)	Temperature stability	Ambient temperature range	Cooling output (measured with ethanol and with standard pump, 20 °C ambient temperature)					Heater power optional heater	Pump pressure max.	Pump flow max. (pressure)	Pump connection thread (inner diameter in mm)	For tubings	Filling volume	Dimensions (WxDxH)	Noise level	Weight	Power supply	Cat. No.
	°C	±K	°C	kW	kW	kW	kW	kW	kW	bar	L/min	"	L	mm		dB(A)	kg	V;Hz	
LAUDA Variocool																			
VC 600	-20...40 (80)	0.2	5...40	0.60	0.50	0.36	0.21	0.08	1.5	0.9	28	M16 x 1 (10)	1/2"	8	350x480x595	47	39	230; 50	LWG 175
VC 1200	-20...40 (80)	0.2	5...40	1.20	1.00	0.70	0.40	0.18	1.5	0.9	28	G 3/4 (15)	3/4"	15	450x550x650	51	54	230; 50	LWG 176
VC 1200 W	-20...40 (80)	0.2	5...40	1.20	1.00	0.70	0.40	0.18	1.5	0.9	28	G 3/4 (15)	3/4"	15	450x550x650	49	51	230; 50	LWG 182
VC 2000	-20...40 (80)	0.2	5...40	2.00	1.50	1.06	0.68	0.38	1.5	0.9	28	G 3/4 (15)	3/4"	15	450x550x650	52	57	230; 50	LWG 177
VC 2000 W	-20...40 (80)	0.2	5...40	2.00	1.50	1.06	0.68	0.38	1.5	0.9	28	G 3/4 (15)	3/4"	15	450x550x650	50	54	230; 50	LWG 183
VC 3000	-20...40 (80)	0.2	5...40	3.00	2.40	1.68	1.03	0.60	1.5	3.2	37	G 3/4 (15)	3/4"	33	550x650x970	57	93	230; 50	LWG 178
VC 3000 W	-20...40 (80)	0.2	5...40	3.00	2.40	1.68	1.03	0.60	1.5	3.2	37	G 3/4 (15)	3/4"	33	550x650x970	55	89	230; 50	LWG 184
VC 5000	-20...40 (80)	0.2	5...40	5.00	3.90	2.75	1.70	1.00	4.5	3.2	37	G 3/4 (15)	3/4"	33	550x650x970	59	98	400; 3/N/PE; 50	LWG 279
VC 5000 W	-20...40 (80)	0.2	5...40	5.00	3.90	2.75	1.70	1.00	4.5	3.2	37	G 3/4 (15)	3/4"	33	550x650x970	57	94	400; 3/N/PE; 50	LWG 285
VC 7000	-20...40 (80)	0.5	5...40	7.00	5.30	3.70	2.40	1.30	4.5	3.2	37	G 1 1/4 (20)	1"	64	650x670x1250	60	138	400; 3/N/PE; 50	LWG 280
VC 7000 W	-20...40 (80)	0.5	5...40	7.00	5.30	3.70	2.40	1.30	4.5	3.2	37	G 1 1/4 (20)	1"	64	650x670x1250	58	131	400; 3/N/PE; 50	LWG 286
VC 10000	-20...40 (80)	0.5	5...40	10.00	7.60	5.30	3.50	2.00	9.0	3.2	37	G 1 1/4 (20)	1"	64	650x670x1250	67	147	400; 3/N/PE; 50	LWG 281
VC 10000 W	-20...40 (80)	0.5	5...40	10.00	7.60	5.30	3.50	2.00	9.0	3.2	37	G 1 1/4 (20)	1"	64	650x670x1250	65	140	400; 3/N/PE; 50	LWG 287

LAUDA Variocool																			
VC 600	-20...40 (80)	0.2	5...40	0.60	0.50	0.36	0.21	0.08	1.15	0.9	28	M16 x 1 (10)	1/2"	8	350x480x595	47	39	115; 60	LWG 475
VC 600	-20...40 (80)	0.2	5...40	0.60	0.50	0.36	0.21	0.08	1.35	0.9	28	M16 x 1 (10)	3/4"	8	350x480x595	47	39	208-220; 60	LWG 275
VC 1200	-20...40 (80)	0.2	5...40	1.20	1.00	0.70	0.40	0.18	1.35	0.9	28	G 3/4 (15)	3/4"	15	450x550x650	51	54	208-220; 60	LWG 876
VC 1200 W	-20...40 (80)	0.2	5...40	1.20	1.00	0.70	0.40	0.18	1.35	0.9	28	G 3/4 (15)	3/4"	15	450x550x650	49	51	208-220; 60	LWG 882
VC 2000	-20...40 (80)	0.2	5...40	2.00	1.50	1.06	0.68	0.38	1.35	0.9	28	G 3/4 (15)	3/4"	15	450x550x650	52	57	208-220; 60	LWG 877
VC 2000 W	-20...40 (80)	0.2	5...40	2.00	1.50	1.06	0.68	0.38	1.35	0.9	28	G 3/4 (15)	3/4"	15	450x550x650	50	54	208-220; 60	LWG 883
VC 3000	-20...40 (80)	0.2	5...40	3.00	2.40	1.68	1.03	0.60	1.35	3.2	37	G 3/4 (15)	3/4"	33	550x650x970	57	93	208-220; 60	LWG 878
VC 3000 W	-20...40 (80)	0.2	5...40	3.00	2.40	1.68	1.03	0.60	1.35	3.2	37	G 3/4 (15)	3/4"	33	550x650x970	55	89	208-220; 60	LWG 884
VC 5000	-20...40 (80)	0.2	5...40	5.00	3.90	2.75	1.70	1.00	4.1	3.2	37	G 3/4 (15)	3/4"	33	550x650x970	59	98	208-220; 3/PE; 60	LWG 379
VC 5000 W	-20...40 (80)	0.2	5...40	5.00	3.90	2.75	1.70	1.00	4.1	3.2	37	G 3/4 (15)	3/4"	33	550x650x970	57	94	208-220; 3/PE; 60	LWG 385
VC 7000	-20...40 (80)	0.5	5...40	7.00	5.30	3.70	2.40	1.30	4.1	3.2	37	G 1 1/4 (20)	1"	64	650x670x1250	60	138	208-220; 3/PE; 60	LWG 380
VC 7000 W	-20...40 (80)	0.5	5...40	7.00	5.30	3.70	2.40	1.30	4.1	3.2	37	G 1 1/4 (20)	1"	64	650x670x1250	58	131	208-220; 3/PE; 60	LWG 386
VC 10000	-20...40 (80)	0.5	5...40	10.00	7.60	5.30	3.50	2.00	8.2	3.2	37	G 1 1/4 (20)	1"	64	650x670x1250	67	147	208-220; 3/PE; 60	LWG 381
VC 10000 W	-20...40 (80)	0.5	5...40	10.00	7.60	5.30	3.50	2.00	8.2	3.0	37	G 1 1/4 (20)	1"	64	650x670x1250	65	140	208-220; 3/PE; 60	LWG 387

LAUDA Variocool																			
VC 600	-20...40 (80)	0.2	5...40	0.60	0.50	0.36	0.21	0.08	1.0	0.9	28	M16 x 1 (10)	1/2"	8	350x480x595	47	39	100; 50/60	LWG 675
VC 1200	-20...40 (80)	0.2	5...40	1.20	1.00	0.70	0.40	0.18	1.1	0.9	28	G 3/4 (15)	3/4"	15	450x550x650	51	54	200; 50/60	LWG 576
VC 1200 W	-20...40 (80)	0.2	5...40	1.20	1.00	0.70	0.40	0.18	1.1	0.9	28	G 3/4 (15)	3/4"	15	450x550x650	49	51	200; 50/60	LWG 582
VC 2000	-20...40 (80)	0.2	5...40	2.00	1.50	1.06	0.68	0.38	1.1	0.9	28	G 3/4 (15)	3/4"	15	450x550x650	52	57	200; 50/60	LWG 577
VC 2000 W	-20...40 (80)	0.2	5...40	2.00	1.50	1.06	0.68	0.38	1.1	0.9	28	G 3/4 (15)	3/4"	15	450x550x650	50	54	200; 50/60	LWG 583
VC 3000	-20...40 (80)	0.2	5...40	3.00	2.40	1.68	1.03	0.60	1.1	3.2	37	G 3/4 (15)	3/4"	33	550x650x970	57	93	200; 50/60	LWG 578
VC 3000 W	-20...40 (80)	0.2	5...40	3.00	2.40	1.68	1.03	0.60	1.1	3.2	37	G 3/4 (15)	3/4"	33	550x650x970	55	89	200; 50/60	LWG 584
VC 5000	-20...40 (80)	0.2	5...40	5.00	3.90	2.75	1.70	1.00	3.4	3.2	37	G 3/4 (15)	3/4"	33	550x650x970	59	98	200; 3/PE; 50/60	LWG 479
VC 5000 W	-20...40 (80)	0.2	5...40	5.00	3.90	2.75	1.70	1.00	3.4	3.2	37	G 3/4 (15)	3/4"	33	550x650x970	57	94	200; 3/PE; 50/60	LWG 485
VC 7000	-20...40 (80)	0.5	5...40	7.00	5.30	3.70	2.40	1.30	3.4	3.2	37	G 1 1/4 (20)	1"	64	650x670x1250	60	138	200; 3/PE; 50/60	LWG 480
VC 7000 W	-20...40 (80)	0.5	5...40	7.00	5.30	3.70	2.40	1.30	3.4	3.2	37	G 1 1/4 (20)	1"	64	650x670x1250	58	131	200; 3/PE; 50/60	LWG 486
VC 10000	-20...40 (80)	0.5	5...40	10.00	7.60	5.30	3.50	2.00	6.8	3.2	37	G 1 1/4 (20)	1"	64	650x670x1250	67	147	200; 3/PE; 50/60	LWG 481
VC 10000 W	-20...40 (80)	0.5	5...40	10.00	7.60	5.30	3.50	2.00	6.8	3.2	37	G 1 1/4 (20)	1"	64	650x670x1250	65	140	200; 3/PE; 50/60	LWG 487

All units are carried out in protection class IP 32

LAUDA Variocool

Variocool accessories (excerpt)

Tubings EPDM

(also to use for cooling water)

Cat. No.	d _i (mm)	d _e (mm)	Temp. range °C	Pressure max. bar
RKJ 031	13 (1/2")	19	-40...100	20
RKJ 032	19 (3/4")	27	-40...100	20
RKJ 033	25 (1")	34	-40...100	20
RKJ 111	9	11	10...120	1
RKJ 112	12	14	10...120	1

d_i = internal diameter ; d_e = external diameter

Tube clips, stainless steel

To secure tubings

Cat. No.	Description
EZS 032	Tube clip 16-27 mm, 1/2" external Ø
EZS 015	Tube clip 20-32 mm, 3/4"
EZS 016	Tube clip 25-40 mm, 1"

Heat transfer liquids

Designation	Temperature range	5 L	Cat. No. 10 L	20 L
Aqua 90	5...90 °C	LZB 120	LZB 220	LZB 320
Kryo 30	-30...90 °C	LZB 109	LZB 209	LZB 309

Interface modules

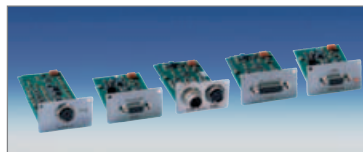
Cat. No.	Description
LRZ 912	Analog module, 2 x In, 2 x Out, 0(4)...20 mA or 0...10 V
LRZ 913	RS 232/485 interface, electrically isolated, 9-pin SUB-D
LRZ 914	Contact module NAMUR, 1 x In, 1 x Out, NE 28, 2 DIN sockets
LRZ 915	Contact module SUB-D, 3 x In, 3 x Out, 15-pin SUB-D
LRZ 917	Profibus interface, electrically isolated, 9-pin SUB-D
LRZ 918	Pt100/LiBus module



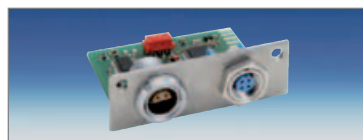
RKJ 031



EZS 032



LRZ 912 LRZ 913 LRZ 914 LRZ 915 LRZ 917



LRZ 918

Thermostats · Circulation chillers · Water baths
Process cooling systems · Heat transfer systems · Secondary circuit systems
Viscometers · Tensiometers

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