

CRYOSTATS

K/KT/KB



P-D Industriegesellschaft mbH
PRÜFGERÄTEWERK DRESDEN

**Laboratory Technology
made in Germany**

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The devices listed below are exemplary for typical cryostat configurations. In accordance with the various combinations listed inside this brochure the ideal combination for the expected application can be selected. Self-evidently we help you to find the right combination. Do not hesitate to contact us.



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Subject to modification for
technical progress.

Specifications	K10E5	KT10E20	KB55C20
Temperature range	-10... + 100°C	-10... + 100°C	-55... + 100°C
Temperature stability	± 0,1 K	± 0,01 K	± 0,01 K
Bath volume	3 l	14 l	22 l
Bath opening	135 x 105 mm	210 x 270 mm	230 x 270 mm
Bath depth	130 mm	190 mm	250 mm
Refrigerating capacity at 0°C	130 W	300 W	950 W
" -10°C	-	-	800 W
Heating power	1,0 KW	1,8 KW	1,8 KW
Pump	Pressure pump	Pressure pump	Double pump
Pump flow-rate	5 l/min	8 l/min	Pressure 20 l/min intake 18 l/min
Pump pressure	0,12 bar	0,2 bar	Pressure 0,3 bar intake 0,2 bar
Temperature display Resolution	digital 0,1	digital 0,1 (1)	digital 0,1 (1)
Temperature setting Resolution	digital 0,1	digital 0,1 (1)	digital 0,1 (1)
Safety class DIN 12876	3	3	3
Programmable	-	(2)	(2)
Interface	-	RS232	RS232
External sensor connection	-	Pt100	Pt100
Power supply	230 V/50 Hz	230 V/50 Hz	230 V/50 Hz
Dimensions	205 x 335 x 540 mm	400 x 450 x 730 mm	535 x 570 x 990 mm
Weight	approx. 17,5 kg	approx. 40,0 kg	approx. 105,0 kg
(1) digital, Touch-Panel			
(2) 2 programs with 10 segments of time			

Accessories	Type	Application	Order-No.
External temperature sensor	TF	E20, C20	3370.3.378 01
User software	SW	E20, C20	3366.1.000 01
Perbunan hose	NW 8	E5,E5s,E20	available on inquiry
Perbunan hose	NW 12	C5, C20	available on inquiry
Silicon hose	NW 8	E5,E5s,E20	available on inquiry
Silicon hose	NW 12	C5, C20	available on inquiry
Viton hose	NW 8	E5,E5s,E20	available on inquiry
Viton hose	NW 12	C5, C20	available on inquiry
Bath liquid	TF 30	-30°C to + 85°C	M 11807
Bath liquid	TF 60	-60°C to + 5°C	M 11808
Bath liquid	TF 100	-40°C to + 100°C	M 11809
Bath liquid	TF 140	0°C to + 140°C	M 11810
Bath liquid	TF 250	-30°C to + 250°C	M 11812

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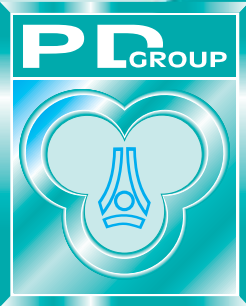
CRYOSTATS K/KT/KB

Desk and Standing Cryostats

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Three different series of devices are available. The series KT includes desk cryostats in smallest design for operating temperatures to -10°C and lower cooling capacity. Desk cryostats with stronger cooling equipment include the KT series. In these series four different cooling baths varified in cooling capacity and operating temperature range to -40°C are offered. The KB series includes four different bottom-standing cryostats equipped with powerful cooling machines usable for an operating temperature range to -55°C. These cooling baths will be completed with temperature-regulating units according to user demands. E 20K and C 20K are supplied with a cooling-control.

The P-D Industriegesellschaft mbH - PRÜFGERÄTEWERK DRESDEN - has been one of the important providers of cryostats for decades. Cryostats are well-proved in laboratories of Biotechnology, Semiconductortechnology, material testing, chemical and industrial engineering as well as medical diagnostics.



Accessories

The cryostat series are completed by extensive accessories for different applications, e.g.: test tube racks of high-grade steel, adjustable lifting bottoms, hose material, bath liquids, external temperature sensors and user software.

	Cooling baths	K10	K21	K22	K31	K32	KT	KT10	KT30	KT40	KB10	KB30	KB40	KB55	KB75	
	Temperature range Cooling capacity at 0°C at -10°C Bath opening Bath depth Bath volume	- 10°C to RT 130 W - 135 x 105 mm 130 mm 3 l	- 20°C to RT 425 W 100 W 235 x 165 mm 150 mm 8 l	- 20°C to RT 425 W 100 W 235 x 165 mm 200 mm 10 l	- 30°C to RT 500 W 200 W 300 x 190 mm 150 mm 11 l	- 30°C to RT 500 W 200 W 300 x 190 mm 200 mm 15 l	0°C to RT 250 W - 210 x 270 mm 190 mm 14 l	-10°C to RT 300 W - 210 x 270 mm 190 mm 14 l	- 30°C to RT 450 W 250 W 210 x 270 mm 190 mm 14 l	- 40°C to RT 550 W 400 W 210 x 270 mm 190 mm 14 l	- 10°C to RT 400 W 200 W 230 x 270 mm 250 mm 22 l	- 30°C to RT 500 W 350 W 230 x 270 mm 250 mm 22 l	- 40°C to RT 700 W 600 W 230 x 270 mm 250 mm 22 l	- 55°C to RT 950 W 800 W 230 x 270 mm 250 mm 22 l	- 75°C to RT 800 W 500 W 230 x 180 mm 150 mm 12 l	
	Thermostat-Cooling Bath-Combinations															
E5	Temperature stability ± 0,1 K PID-temperature control Heating power 1 KW Pressure pump 5 l/min; 0,12 bar	K10E5 - 10 to + 100°C 3347.1.000 01	K21E5 - 20 to + 100°C 3347.1.000 11	K22E5 - 10 to + 100°C 3347.1.000 21	K31E5 - 30 to + 100°C 3347.1.000 31	K32E5 - 30 to + 100°C 3347.1.000 41	KTE5 0 to + 100°C 3348.1.000 05	KT10E5 - 10 to + 100°C 3348.1.000 11								
E5s	Temperature stability ± 0,1 K PID-temperature control Heating power 1,8 KW Pressure pump 5 l/min; 0,12 bar								KT30E5s - 30 to + 100°C 3348.1.000 60	KT40E5s - 40 to + 100°C 3348.1.000 61	KB10E5s - 10 to + 100°C 3349.1.000 50	KB30E5s - 30 to + 100°C 3349.1.000 51	KB40E5s - 40 to + 100°C 3349.1.000 52	KB55E5s - 55 to + 100°C 3349.1.000 53	KB75E5s - 75 to + 100°C 3349.1.000 54	
E20	Temperature stability ± 0,01 K self-adjusting PID-controller Heating power 1,8 KW Pressure pump 8 l/min; 0,2 bar programmable ramps (1) RS 232 Interface External sensor connection	K10E20 -10 to +100°C 3347.1.000 04	K21E20 -20 to +100°C 3347.1.000 18	K22E20 -20 to +100°C 3347.1.000 27	K31E20 -30 to +100°C 3347.1.000 37	K32E20 -30 to +100°C 3347.1.000 47	KTE20 0 to +100°C 3348.1.000 30	KT10E20 - 10 to +100°C 3348.1.000 31	KT30E20 - 30 to +100°C 3348.1.000 32	KT40E20 - 40 to +100°C 3348.1.000 33	KB10E20 - 10 to +100°C 3349.1.000 39	KB30E20 - 30 to +100°C 3349.1.000 40	KB40E20 - 40 to +100°C 3349.1.000 41	KB55E20 - 55 to +100°C 3349.1.000 42	KB75E20 - 75 to +100°C 3349.1.000 43	
E20K	Techn. Data as E20 additionally connection cooling control, temperature- range to +200°C			K21E20K - 20 to + 200°C 3347.1.000 50	K22E20K - 20 to + 200°C 3347.1.000 54	K31E20K - 30 to + 200°C 3347.1.000 58	K32E20K - 30 to + 200°C 3347.1.000 62	KTE20 K 0 to + 200°C 3348.1.000 35	KT10E20K - 10 to + 200°C 3348.1.000 36	KT30E20K - 30 to + 200°C 3348.1.000 37	KT40E20K - 40 to + 200°C 3348.1.000 38	KB10E20K - 10 to + 200°C 3349.1.000 60	KB30E20K - 30 to + 200°C 3349.1.000 61	KB40E20K - 40 to + 200°C 3349.1.000 62	KB55E20K - 55 to + 200°C 3349.1.000 63	KB75E20K - 75 to + 200°C 3349.1.000 64
C5	Temperature stability ± 0,1 K PID-temperature control Heating power 1,8 KW Pressure pump Pressure 20 l/min; 0,3 bar Intake 18 l/min; 0,2 bar			K21C5 -20 to +100°C 3347.1.000 16	K22C5 -20 to +100°C 3347.1.000 26	K31C5 -30 to +100°C 3347.1.000 36	K32C5 -30 to +100°C 3347.1.000 46	KTC5 0 to +100°C 3348.1.000 08	KT10C5 -10 to +100°C 3348.1.000 14	KT30C5 -30 to +100°C 3348.1.000 20	KT40C5 -40 to +100°C 3348.1.000 26	KB10C5 -10 to +100°C 3349.1.000 22	KB30C5 -30 to +100°C 3349.1.000 24	KB40C5 -40 to +100°C 3349.1.000 25	KB55C5 -55 to +100°C 3349.1.000 26	KB75C5 -75 to +100°C 3349.1.000 35
C20	Temperature stability ± 0,01 K self-adjusting PID-controller Heating power 1,8 KW Pressure pump Pressure 20 l/min; 0,3 bar Intake 18 l/min; 0,2 bar programmable ramps (1) RS 232 Interface External sensor connection			K21C20 -20 to +100°C 3347.1.000 19	K22C20 -20 to +100°C 3347.1.000 28	K31C20 -30 to +100°C 3347.1.000 38	K32C20 -30 to +100°C 3347.1.000 48	KTC20 0 to +100°C 3348.1.000 40	KT10C20 -10 to +100°C 3348.1.000 41	KT30C20 -30 to +100°C 3348.1.000 42	KT40C20 -40 to +100°C 3348.1.000 43	KB10C20 -10 to +100°C 3349.1.000 45	KB30C20 -30 to +100°C 3349.1.000 46	KB40C20 -40 to +100°C 3349.1.000 47	KB55C20 -55 to +100°C 3349.1.000 48	KB75C20 -75 to +100°C 3349.1.000 49
C20K	Techn. data as C20 additionally connection cooling control, temperature- range to +200°C			K21C20K - 20 to + 200°C 3347.1.000 52	K22C20K - 20 to + 200°C 3347.1.000 56	K31C20K - 30 to + 200°C 3347.1.000 60	K32C20K - 30 to + 200°C 3347.1.000 64	KTC20K 0 to + 200°C 3348.1.000 45	KT10C20K - 10 to + 200°C 3348.1.000 46	KT30C20K - 30 to + 200°C 3348.1.000 47	KT40C20K - 40 to + 200°C 3348.1.000 48	KB10C20K - 10 to + 200°C 3349.1.000 65	KB30C20K - 30 to + 200°C 3349.1.000 66	KB40C20K - 40 to + 200°C 3349.1.000 67	KB55C20K - 55 to + 200°C 3349.1.000 68	KB75C20K - 75 to + 200°C 3349.1.000 69

Die E5, E5s and C5 have an integrated timer up to 99,99 minutes
(1) - 2 programs with 10 segments of time