Premium quality

Made in Germany

The Sigma 3-16L and Sigma 3-16KL meet the highest technical requirements of laboratory standards. Developed and produced at our facility in Osterode, Germany, they are high-performance, durable and energy-efficient quality products and conform to the latest safety, emissions and environmental standards. Sigma guarantees the availability of spare parts and wearing parts for at least 10 years.

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	Sigma 3-16L	Sigma 3-16KL
Max. capacity [ml]		
Swing-out rotor	4 x 400	4 x 400
Fixed-angle rotor	6 x 94	6 x 94
Max. RCF	21,475	21,984
Maximum speed [rpm]	15,300	15,300
Minimum speed [rpm]	100	100
Noise level at maximum speed (approx.) [dB(A)]		
Fixed-angle rotor 12154	≤ 60	≤ 55
Swing-out rotor 11180 with bucket 13190	≤ 65	≤ 52
Max. acceleration time [s]		
Fixed-angle rotor 12154	≤ 25	≤ 25
Swing-out rotor 11180 with bucket 13190	≤ 20	≤ 16
Max. braking time [s]		
Fixed-angle rotor 12154	≤ 42	≤ 40
Swing-out rotor 11180 with bucket 13190	≤ 22	≤ 17
Temperature adjustment range [°C]	–	-10–+40
Power consumption [W]	500	1,010
Height x width x depth [mm]	355 x 460 x 600	355 x 630 x 600
Height with open cap [mm]	770	785
Weight without rotor [kg]	48	78
Refrigerant		R134a / R513a*
Filling quantity [kg] / Max. permissible pressure [bar]		0.385 / 23
CO_2 equivalent [t]		0.551 / 0.243**

* Complete conversion to R513a from 01/01/2023; ** Refers to the refrigerant R513a

Service Sigma
For maintenance and repairs please contact our Service department at:

Calibration

Documented proof of compliance with essential technical parameters.

Speed or run time	(item no. 17713)
Speed and run time	(item no. 17714)
Speed, run time, temperature	(item no. 17715)

Device qualification (IQOQ)

This comprehensive device qualification includes installation qualification and metrological checking of all functional parameters with a rotor.

IQOQ documents	(item no. 170000)
IQOQ on site	(upon request)

Sigma 3-16L centrifuge

220–240 V, 50/60 Hz	(item no. 10355)
120 V, 60 Hz	(item no. 10356)
100 V, 50/60 Hz	(item no. 10357)

Sigma 3-16L centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10358)
120 V, 60 Hz	(item no. 10359)

Sigma 3-16KL centrifuge

220–240 V, 50/60 Hz	(item no. 10360)
120 V, 60 Hz	(item no. 10361)
100 V, 50/60 Hz	(item no. 10362)

Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

220–240 V, 50/60 Hz	(item no. 91027)

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	Sigma 3-16L	Sigma 3-16KL
Max. capacity [ml]		
Swing-out rotor	4 x 400	4 x 400
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Max. RCF	21,475	21,984
Maximum speed [rpm]	15,300	15,300
Minimum speed [rpm]	100	100
Noise level at maximum speed (approx.) [dB(A)]		
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100 V, 50/60 Hz	(item no. 10362)

Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

220–240 V, 50/60 Hz	(item no. 91027)

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120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

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Sigma 3-16KL centrifuge, inert gas

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Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
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Sigma 3-16KL centrifuge, inert gas

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Sigma 3-16KL centrifuge

220–240 V, 50/60 Hz	(item no. 10360)
120 V, 60 Hz	(item no. 10361)
100 V, 50/60 Hz	(item no. 10362)

Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

220–240 V, 50/60 Hz	(item no. 91027)

Premium quality

Made in Germany

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Furthermore, you benefit from our extensive services portfolio, including commissioning, maintenance, device calibration and more. Our qualified service technicians are ready to provide professional maintenance and repair as well as loaner devices if necessary. All support services are designed to ensure reliability and optimise system availability.

	Sigma 3-16L	Sigma 3-16KL
Max. capacity [ml]		
Swing-out rotor	4 x 400	4 x 400
Fixed-angle rotor	6 x 94	6 x 94
Max. RCF	21,475	21,984
Maximum speed [rpm]	15,300	15,300
Minimum speed [rpm]	100	100
Noise level at maximum speed (approx.) [dB(A)]		
Fixed-angle rotor 12154	≤ 60	≤ 55
Swing-out rotor 11180 with bucket 13190	≤ 65	≤ 52
Max. acceleration time [s]		
Fixed-angle rotor 12154	≤ 25	≤ 25
Swing-out rotor 11180 with bucket 13190	≤ 20	≤ 16
Max. braking time [s]		
Fixed-angle rotor 12154	≤ 42	≤ 40
Swing-out rotor 11180 with bucket 13190	≤ 22	≤ 17
Temperature adjustment range [°C]	–	-10–+40
Power consumption [W]	500	1,010
Height x width x depth [mm]	355 x 460 x 600	355 x 630 x 600
Height with open cap [mm]	770	785
Weight without rotor [kg]	48	78
Refrigerant		R134a / R513a*
Filling quantity [kg] / Max. permissible pressure [bar]		0.385 / 23
CO_2 equivalent [t]		0.551 / 0.243**

* Complete conversion to R513a from 01/01/2023; ** Refers to the refrigerant R513a

Service Sigma
For maintenance and repairs please contact our Service department at:

Calibration

Documented proof of compliance with essential technical parameters.

Speed or run time	(item no. 17713)
Speed and run time	(item no. 17714)
Speed, run time, temperature	(item no. 17715)

Device qualification (IQOQ)

This comprehensive device qualification includes installation qualification and metrological checking of all functional parameters with a rotor.

IQOQ documents	(item no. 170000)
IQOQ on site	(upon request)

Sigma 3-16L centrifuge

220–240 V, 50/60 Hz	(item no. 10355)
120 V, 60 Hz	(item no. 10356)
100 V, 50/60 Hz	(item no. 10357)

Sigma 3-16L centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10358)
120 V, 60 Hz	(item no. 10359)

Sigma 3-16KL centrifuge

220–240 V, 50/60 Hz	(item no. 10360)
120 V, 60 Hz	(item no. 10361)
100 V, 50/60 Hz	(item no. 10362)

Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

220–240 V, 50/60 Hz	(item no. 91027)

Premium quality

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	Sigma 3-16L	Sigma 3-16KL
Max. capacity [ml]		
Swing-out rotor	4 x 400	4 x 400
Fixed-angle rotor	6 x 94	6 x 94
Max. RCF	21,475	21,984
Maximum speed [rpm]	15,300	15,300
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Refrigerant		R134a / R513a*
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CO_2 equivalent [t]		0.551 / 0.243**

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Calibration

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Speed and run time	(item no. 17714)
Speed, run time, temperature	(item no. 17715)

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Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

220–240 V, 50/60 Hz	(item no. 91027)

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100 V, 50/60 Hz	(item no. 10362)

Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

220–240 V, 50/60 Hz	(item no. 91027)

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100 V, 50/60 Hz	(item no. 10362)

Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

220–240 V, 50/60 Hz	(item no. 91027)

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	Sigma 3-16L	Sigma 3-16KL
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Calibration

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100 V, 50/60 Hz	(item no. 10362)

Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

220–240 V, 50/60 Hz	(item no. 91027)

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	Sigma 3-16L	Sigma 3-16KL
Max. capacity [ml]		
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Max. RCF	21,475	21,984
Maximum speed [rpm]	15,300	15,300
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Noise level at maximum speed (approx.) [dB(A)]		
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Calibration

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220–240 V, 50/60 Hz	(item no. 10358)
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Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
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Sigma 3-16KL centrifuge, inert gas

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	Sigma 3-16L	Sigma 3-16KL
Max. capacity [ml]		
Swing-out rotor	4 x 400	4 x 400
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IQOQ documents	(item no. 170000)
IQOQ on site	(upon request)

Sigma 3-16L centrifuge

220–240 V, 50/60 Hz	(item no. 10355)
120 V, 60 Hz	(item no. 10356)
100 V, 50/60 Hz	(item no. 10357)

Sigma 3-16L centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10358)
120 V, 60 Hz	(item no. 10359)

Sigma 3-16KL centrifuge

220–240 V, 50/60 Hz	(item no. 10360)
120 V, 60 Hz	(item no. 10361)
100 V, 50/60 Hz	(item no. 10362)

Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

220–240 V, 50/60 Hz	(item no. 91027)

Premium quality

Made in Germany

The Sigma 3-16L and Sigma 3-16KL meet the highest technical requirements of laboratory standards. Developed and produced at our facility in Osterode, Germany, they are high-performance, durable and energy-efficient quality products and conform to the latest safety, emissions and environmental standards. Sigma guarantees the availability of spare parts and wearing parts for at least 10 years.

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	Sigma 3-16L	Sigma 3-16KL
Max. capacity [ml]		
Swing-out rotor	4 x 400	4 x 400
Fixed-angle rotor	6 x 94	6 x 94
Max. RCF	21,475	21,984
Maximum speed [rpm]	15,300	15,300
Minimum speed [rpm]	100	100
Noise level at maximum speed (approx.) [dB(A)]		
Fixed-angle rotor 12154	≤ 60	≤ 55
Swing-out rotor 11180 with bucket 13190	≤ 65	≤ 52
Max. acceleration time [s]		
Fixed-angle rotor 12154	≤ 25	≤ 25
Swing-out rotor 11180 with bucket 13190	≤ 20	≤ 16
Max. braking time [s]		
Fixed-angle rotor 12154	≤ 42	≤ 40
Swing-out rotor 11180 with bucket 13190	≤ 22	≤ 17
Temperature adjustment range [°C]	–	-10–+40
Power consumption [W]	500	1,010
Height x width x depth [mm]	355 x 460 x 600	355 x 630 x 600
Height with open cap [mm]	770	785
Weight without rotor [kg]	48	78
Refrigerant		R134a / R513a*
Filling quantity [kg] / Max. permissible pressure [bar]		0.385 / 23
CO_2 equivalent [t]		0.551 / 0.243**

* Complete conversion to R513a from 01/01/2023; ** Refers to the refrigerant R513a

Service Sigma
For maintenance and repairs please contact our Service department at:

Calibration

Documented proof of compliance with essential technical parameters.

Speed or run time	(item no. 17713)
Speed and run time	(item no. 17714)
Speed, run time, temperature	(item no. 17715)

Device qualification (IQOQ)

This comprehensive device qualification includes installation qualification and metrological checking of all functional parameters with a rotor.

IQOQ documents	(item no. 170000)
IQOQ on site	(upon request)

Sigma 3-16L centrifuge

220–240 V, 50/60 Hz	(item no. 10355)
120 V, 60 Hz	(item no. 10356)
100 V, 50/60 Hz	(item no. 10357)

Sigma 3-16L centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10358)
120 V, 60 Hz	(item no. 10359)

Sigma 3-16KL centrifuge

220–240 V, 50/60 Hz	(item no. 10360)
120 V, 60 Hz	(item no. 10361)
100 V, 50/60 Hz	(item no. 10362)

Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

220–240 V, 50/60 Hz	(item no. 91027)

Premium quality

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	Sigma 3-16L	Sigma 3-16KL
Max. capacity [ml]		
Swing-out rotor	4 x 400	4 x 400
Fixed-angle rotor	6 x 94	6 x 94
Max. RCF	21,475	21,984
Maximum speed [rpm]	15,300	15,300
Minimum speed [rpm]	100	100
Noise level at maximum speed (approx.) [dB(A)]		
Fixed-angle rotor 12154	≤ 60	≤ 55
Swing-out rotor 11180 with bucket 13190	≤ 65	≤ 52
Max. acceleration time [s]		
Fixed-angle rotor 12154	≤ 25	≤ 25
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Max. braking time [s]		
Fixed-angle rotor 12154	≤ 42	≤ 40
Swing-out rotor 11180 with bucket 13190	≤ 22	≤ 17
Temperature adjustment range [°C]	–	-10–+40
Power consumption [W]	500	1,010
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Height with open cap [mm]	770	785
Weight without rotor [kg]	48	78
Refrigerant		R134a / R513a*
Filling quantity [kg] / Max. permissible pressure [bar]		0.385 / 23
CO_2 equivalent [t]		0.551 / 0.243**

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Calibration

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Speed or run time	(item no. 17713)
Speed and run time	(item no. 17714)
Speed, run time, temperature	(item no. 17715)

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100 V, 50/60 Hz	(item no. 10362)

Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

220–240 V, 50/60 Hz	(item no. 91027)

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	Sigma 3-16L	Sigma 3-16KL
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Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

220–240 V, 50/60 Hz	(item no. 91027)

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	Sigma 3-16L	Sigma 3-16KL
Max. capacity [ml]		
Swing-out rotor	4 x 400	4 x 400
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120 V, 60 Hz	(item no. 10361)
100 V, 50/60 Hz	(item no. 10362)

Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

220–240 V, 50/60 Hz	(item no. 91027)

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	Sigma 3-16L	Sigma 3-16KL
Max. capacity [ml]		
Swing-out rotor	4 x 400	4 x 400
Fixed-angle rotor	6 x 94	6 x 94
Max. RCF	21,475	21,984
Maximum speed [rpm]	15,300	15,300
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Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

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	Sigma 3-16L	Sigma 3-16KL
Max. capacity [ml]		
Swing-out rotor	4 x 400	4 x 400
Fixed-angle rotor	6 x 94	6 x 94
Max. RCF	21,475	21,984
Maximum speed [rpm]	15,300	15,300
Minimum speed [rpm]	100	100
Noise level at maximum speed (approx.) [dB(A)]		
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Speed and run time	(item no. 17714)
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Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

220–240 V, 50/60 Hz	(item no. 91027)

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	Sigma 3-16L	Sigma 3-16KL
Max. capacity [ml]		
Swing-out rotor	4 x 400	4 x 400
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Max. RCF	21,475	21,984
Maximum speed [rpm]	15,300	15,300
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Noise level at maximum speed (approx.) [dB(A)]		
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Temperature adjustment range [°C]	–	-10–+40
Power consumption [W]	500	1,010
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Sigma 3-16KL centrifuge, inert gas

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Filling quantity [kg] / Max. permissible pressure [bar]		0.385 / 23
CO_2 equivalent [t]		0.551 / 0.243**

* Complete conversion to R513a from 01/01/2023; ** Refers to the refrigerant R513a

Service Sigma
For maintenance and repairs please contact our Service department at:

Calibration

Documented proof of compliance with essential technical parameters.

Speed or run time	(item no. 17713)
Speed and run time	(item no. 17714)
Speed, run time, temperature	(item no. 17715)

Device qualification (IQOQ)

This comprehensive device qualification includes installation qualification and metrological checking of all functional parameters with a rotor.

IQOQ documents	(item no. 170000)
IQOQ on site	(upon request)

Sigma 3-16L centrifuge

220–240 V, 50/60 Hz	(item no. 10355)
120 V, 60 Hz	(item no. 10356)
100 V, 50/60 Hz	(item no. 10357)

Sigma 3-16L centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10358)
120 V, 60 Hz	(item no. 10359)

Sigma 3-16KL centrifuge

220–240 V, 50/60 Hz	(item no. 10360)
120 V, 60 Hz	(item no. 10361)
100 V, 50/60 Hz	(item no. 10362)

Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

220–240 V, 50/60 Hz	(item no. 91027)

Premium quality

Made in Germany

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	Sigma 3-16L	Sigma 3-16KL
Max. capacity [ml]		
Swing-out rotor	4 x 400	4 x 400
Fixed-angle rotor	6 x 94	6 x 94
Max. RCF	21,475	21,984
Maximum speed [rpm]	15,300	15,300
Minimum speed [rpm]	100	100
Noise level at maximum speed (approx.) [dB(A)]		
Fixed-angle rotor 12154	≤ 60	≤ 55
Swing-out rotor 11180 with bucket 13190	≤ 65	≤ 52
Max. acceleration time [s]		
Fixed-angle rotor 12154	≤ 25	≤ 25
Swing-out rotor 11180 with bucket 13190	≤ 20	≤ 16
Max. braking time [s]		
Fixed-angle rotor 12154	≤ 42	≤ 40
Swing-out rotor 11180 with bucket 13190	≤ 22	≤ 17
Temperature adjustment range [°C]	–	-10–+40
Power consumption [W]	500	1,010
Height x width x depth [mm]	355 x 460 x 600	355 x 630 x 600
Height with open cap [mm]	770	785
Weight without rotor [kg]	48	78
Refrigerant		R134a / R513a*
Filling quantity [kg] / Max. permissible pressure [bar]		0.385 / 23
CO_2 equivalent [t]		0.551 / 0.243**

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Speed and run time	(item no. 17714)
Speed, run time, temperature	(item no. 17715)

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120 V, 60 Hz	(item no. 10359)

Sigma 3-16KL centrifuge

220–240 V, 50/60 Hz	(item no. 10360)
120 V, 60 Hz	(item no. 10361)
100 V, 50/60 Hz	(item no. 10362)

Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

220–240 V, 50/60 Hz	(item no. 91027)

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	Sigma 3-16L	Sigma 3-16KL
Max. capacity [ml]		
Swing-out rotor	4 x 400	4 x 400
Fixed-angle rotor	6 x 94	6 x 94
Max. RCF	21,475	21,984
Maximum speed [rpm]	15,300	15,300
Minimum speed [rpm]	100	100
Noise level at maximum speed (approx.) [dB(A)]		
Fixed-angle rotor 12154	≤ 60	≤ 55
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Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

220–240 V, 50/60 Hz	(item no. 91027)

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	Sigma 3-16L	Sigma 3-16KL
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Sigma 3-16KL centrifuge, IVD version

220–240 V, 50/60 Hz	(item no. 10363)
120 V, 60 Hz	(item no. 10364)

Sigma 3-16KL centrifuge, inert gas

220–240 V, 50/60 Hz	(item no. 91027)

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