



## The New Quintix®.

Convenient Weighing.

### Benefits

- Intuitive application guidance
- Maximum accuracy at all time
- Easy cleaning
- "Plug & Work" connectivity to printer or computer



### Technical Specifications

#### AC Adapter

Sartorius AC adaptor module	6971790 with interchangeable country-specific plug-in AC adaptors
Primary	100 – 240 V~, -10%   +10%, 50 – 60 Hz, 0.2 A
Secondary	15 V DC, ± 5%, 530 mA (max.)   8 Watt (max.): 0 to +40 °C and 15 V DC, ± 5%, 330 mA (max.)   5 Watt (max.): 0 to +50 °C

Other data	protection class II, in accordance with EN   IEC 60950-1 up to 3000 m above sea level; IP40 as per EN   IEC 60529
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#### Balance

Power supply	only via Sartorius AC adaptor module 6971790
Input voltage	12.0 ... 18.0 V DC
Power consumption	2 W (typically)

#### Ambient Conditions

The specifications apply when the following ambient conditions are in place:

Environment	for indoor use only
Ambient temperature*	+10 °C to +30 °C
Operational capacity	guaranteed between +5 °C and +45 °C
Storage and shipping	-10 °C to +60 °C
Elevation	up to 3,000 m above sea level
Relative humidity**	15% to 80% for temperatures up to 31 °C; non-condensing, decreasing linearly to 50% relative humidity at 40 °C and 20% at 50 °C

Safety of electrical equipment	in accordance with EN 61010-1   IEC 61010-1. Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements
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Electromagnetic compatibility	in accordance with EN 61326-1   IEC 61326-1. Electrical equipment for measurement, control, and laboratory use – EMC requirements – Part 1: General requirements
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Defined immunity to interference Suitable for use in industrial areas

Interference emission Class B (suitable for use in residential areas and areas that are connected to a low voltage network that also supplies residential buildings). The device can therefore be used in both areas.

Balances verified for use in legal metrology comply with the requirements of Council Directive 2009/23/EC, EN 45501:1992, and OIML R76:2006.

- \* For balances verified for use in legal metrology in accordance with EU requirements, refer to the information on the balance.
- \*\* For balances verified for use in legal metrology in accordance with EU requirements, the legal regulations apply.

### Standard Equipment

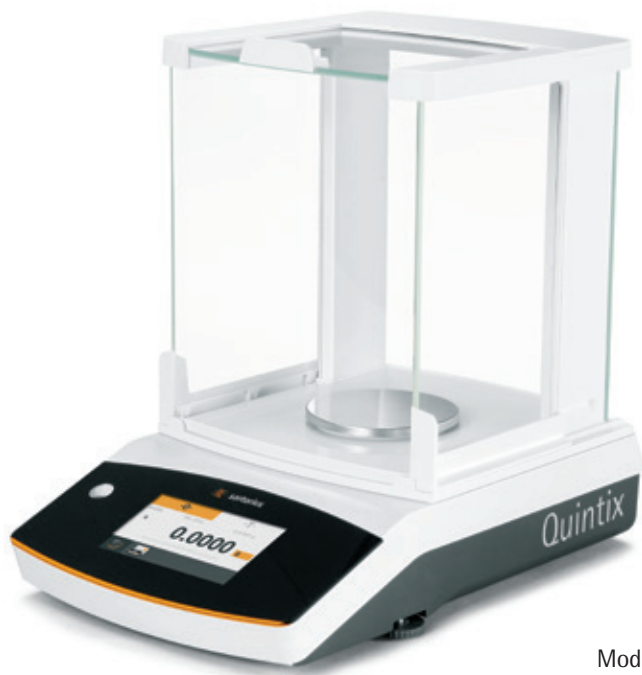
Levelling	Glass level indicator with air bubble for centering
Calibration	Internal calibration isoCAL, External calibration
Selectable weight units <sup>1</sup>	Gram, kilogram, carat, pound, ounce, troy ounce, Hong Kong tael, Singapore tael, Taiwan tael, grain, pennyweights, milligram, parts per pound, China tael, mommes, Austrian carat, tola, baht, mesghal and Newton
Interface	mini USB <ul style="list-style-type: none"><li>– Automatic recognition of Sartorius printer models YDP30 or YDP40</li><li>– Direct data transfer to Microsoft® Windows programs</li><li>– Programmable interval for data output</li><li>– Data transfer protocols SBI, xBPI, table format, text format</li></ul>
Display	Touch screen with Sartorius graphical user interface optimized for users in pharmaceutical laboratories
Standard built-in applications	Weighing, Density, Percentage, Checkweighing, Peak Hold, Counting, Unstable Conditions
Special built-in lab applications	Mixing, Components, Statistics, Conversion
Languages	English, French, German, Hungarian, Italian, Polish, Portuguese, Russian, Spanish, Turkish, Chinese, Japanese, Korean
Protection	<ul style="list-style-type: none"><li>– Chemical resistant finish of the housing</li><li>– In-use cover</li><li>– Dust cover for analytical balances</li></ul>
Password protection	Supervisor lock for protection against unintentional changes
Anti-theft lock	Kensington lock and lockdown capability for cable or chain
Underfloor weighing	Integrated

<sup>1</sup> Limited for verified models



## Analytical Balances Quintix®

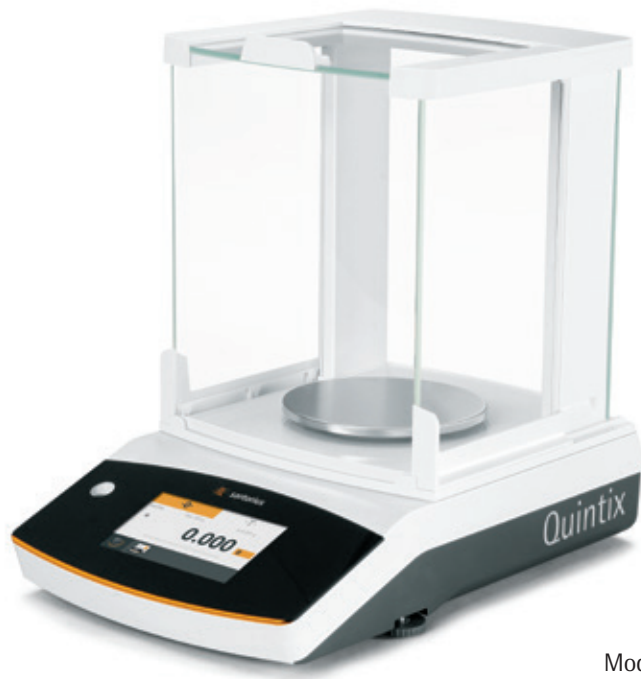
Model		224	124	64
Weighing capacity	g	220	120	60
Readability	mg	0.1	0.1	0.1
Repeatability (standard deviation)	mg	0.1	0.1	0.1
Linearity deviation	mg	0.2	0.2	0.2
Sensitivity drift between +10 °C and +30 °C	± ppm/K	1.5	1.5	1.5
Typical stabilization time	s	2	2	2
isoCAL:				
- Temperature change	K	1.5	1.5	1.5
- Time interval	h	4	4	4
Display result (depending on the set filter level)	s	0.2	0.2	0.2
Weighing pan size	mm	Ø 90	Ø 90	Ø 90
Weighing chamber height	mm	209	209	209
Net weight, approx.	kg	4.9	4.9	4.9
Dimensions, D × W × H		360 × 216 × 320		
		14.1 × 8.5 × 12.6		



Models with a readability of 0.1 mg

## Precision Balances Quintix®

Model		613	513	313	213	6102	5102	3102	2102
Weighing capacity	g	610	510	310	210	6100	5100	3100	2100
Readability	mg	1	1	1	1	10	10	10	10
Repeatability (standard deviation)	mg	1	1	1	1	10	10	10	10
Linearity deviation	mg	2	2	2	2	20	20	20	30
Sensitivity drift between +10 °C and +30 °C	± ppm/K	3	3	3	3	3	3	3	5
Typical stabilization time	s	1	1	1	1	1	1	1	1.5
isoCAL:									
– Temperature change	K	2	2	4	4	2	2	4	4
– Time interval	h	6	6	12	12	6	6	12	12
Display result (depending on the set filter level)	s	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2
Weighing pan size	mm	Ø 120	Ø 120	Ø 120	Ø 120	Ø 180	Ø 180	Ø 180	Ø 180
Weighing chamber height	mm	209	209	209	209	–	–	–	–
Net weight, approx.	kg	4.9	4.9	4.9	4.9	5.2	5.2	5.2	4.7
Dimensions, D×W×H	mm	360×216×320							
	Inch	14.1×8.5×12.6							



Models with a readability of 1 mg

## Precision Balances Quintix®

Model		1102	612	412	6101	5101	2101	6100	5100
Weighing capacity	g	1100	610	410	6100	5100	2100	6100	5100
Readability	mg	10	10	10	100	100	100	1000	1000
Repeatability (standard deviation)	mg	10	10	10	100	100	100	500	500
Linearity deviation	mg	30	30	30	300	300	300	1000	1000
Sensitivity drift between +10 °C and +30 °C	± ppm/K	5	5	5	10	10	10	10	10
Typical stabilization time	s	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
isoCAL:									
- Temperature change	K	4	4	4	4	4	4	4	4
- Time interval	h	24	24	24	24	24	24	24	24
Display result (depending on the set filter level)	s	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2
Weighing pan size	mm	Ø 180	Ø 180	Ø 180	Ø 180	Ø 180	Ø 180	Ø 180	Ø 180
Weighing chamber height	mm	-	-	-	-	-	-	-	-
Net weight, approx.	kg	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Dimensions, D × W × H	mm	360 × 216 × 95							
	Inch	14.1 × 8.5 × 3.75							



Models with a readability of 0.01 g, 0.1 g or 1 g

## Verified Models with Country-specific Type Approval Certificate

### Analytical Balances Quintix®

Model		224-1x <sup>1</sup>	124-1x <sup>1</sup>	64-1x <sup>1</sup>
Accuracy class		I	I	I
Type <sup>2</sup>		SQP-A	SQP-A	SQP-A
Max	g	220	120	60
Scale interval d	mg	0.1	0.1	0.1
Verification scale interval e	mg	1	1	1
Min	mg	10	10	10
Tare (subtractive)		<100 % of the max. weighing capacity		
Typical stabilization time	s	2	2	2
isoCAL:				
– Temperature change	K	1.5	1.5	1.5
– Time interval	h	4	4	4
Display result (depending on the set filter level)	s	0.2	0.2	0.2
Weighing pan size	mm	∅ 90	∅ 90	∅ 90
Weighing chamber height	mm	209	209	209
Net weight, approx.	kg	4.9	4.9	4.9
Dimensions, D × W × H	mm	360 × 216 × 320		
	Inch	14.1 × 8.5 × 12.6		

<sup>1</sup> Possible terms for country-specific models:

x = CEU: Verified balances with EC Type Approval Certificate D12-09-014 (for EU except France, Italy, and Switzerland)

x = CFR: Verified balances with EC Type Approval Certificate D12-09-014 for France only

x = CIT: Verified balances with EC Type Approval Certificate D12-09-014 for Italy only

x = CCH: Verified balances with EC Type Approval Certificate D12-09-014 for Switzerland only

x = NUS: NTEP Certificate for USA

x = CN: CMC Type Approval Certificate for China

x = OJP: Balance with Type Approval Certificate for Japan

x = OBR: Balance with Type Approval Certificate for Brazil

x = OAR: Balance with Type Approval Certificate for Argentina

x = OKR: Balance with Type Approval Certificate for South Korea

x = ORU: Balance with Type Approval Certificate for Russia

x = OIN: Balance with Type Approval Certificate for India

x = OCA: Balance with Type Approval Certificate for Canada

<sup>2</sup> All models with "...CN": type "SQP"

## Precision Balances Quintix®

Model		613-1x <sup>1</sup>	513-1x <sup>1</sup>	313-1x <sup>1</sup>	213-1x <sup>1</sup>	6102-1x <sup>1</sup>	5102-1x <sup>1</sup>	3102-1x <sup>1</sup>	2102-1x <sup>1</sup>
Accuracy class		Ⓔ	Ⓔ	Ⓔ	Ⓔ	Ⓔ	Ⓔ	Ⓔ	Ⓔ
Type <sup>2</sup>		SQP-B	SQP-B	SQP-B	SQP-B	SQP-C	SQP-C	SQP-C	SQP-D
Max	g	610	510	310	210	6100	5100	3100	2100
Scale interval d	mg	1	1	1	1	10	10	10	10
Verification scale interval e	mg	10	10	10	10	100	100	100	100
Min	g	0.02	0.02	0.02	0.02	0.5	0.5	0.5	0.5
Tare (subtractive)		< 100% of the max. weighing capacity							
Typical stabilization time	s	1	1	1	1	1	1	1	1,5
isoCAL:									
- Temperature change	K	2	2	2	2	2	2	2	2
- Time interval	h	4	4	6	6	6	6	6	6
Display result (depending on the set filter level)	s	0.1 0.2	0.1 0.2	0.1 0.2	0.1 0.2	0.1 0.2	0.1 0.2	0.1 0.2	0.1 0.2
Weighing pan size	mm	∅ 120	∅ 120	∅ 120	∅ 120	∅ 180	∅ 180	∅ 180	∅ 180
Weighing chamber height	mm	209	209	209	209	-	-	-	-
Net weight, approx.	kg	4.9	4.9	4.9	4.9	5.2	5.2	5.2	4.7
Dimensions, D×W×H	mm	360×216×320							
	Inch	14.1×8.5×12.6							

## Precision Balances Quintix®

Model		1102-1x <sup>2</sup>	612-1x <sup>2</sup>	412-1x <sup>2</sup>	6101-1x <sup>1</sup>	5101-1x <sup>1</sup>	2101-1x <sup>1</sup>	6100-1x <sup>1</sup>	5100-1x <sup>1</sup>
Accuracy class		Ⓔ	Ⓔ	Ⓔ	Ⓔ	Ⓔ	Ⓔ	Ⓔ	Ⓔ
Type <sup>2</sup>		SQP-D	SQP-D	SQP-D	SQP-E	SQP-E	SQP-E	SQP-E	SQP-E
Max	g	1100	610	410	6100	5100	2100	6100	5100
Scale interval d	mg	10	10	10	100	100	100	1000	1000
Verification scale interval e	mg	100	100	100	1000	1000	1000	1000	1000
Min	g	0.5	0.5	0.5	5	5	5	50	50
Tare (subtractive)		< 100% of the max. weighing capacity							
Typical stabilization time	s	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
isoCAL:									
- Temperature change	K	2	2	2	2	2	2	2	2
- Time interval	h	6	6	6	6	6	6	6	6
Display result (depending on the set filter level)	s	0.1 0.2	0.1 0.2	0.1 0.2	0.1 0.2	0.1 0.2	0.1 0.2	0.1 0.2	0.1 0.2
Weighing pan size	mm	∅ 180	∅ 180	∅ 180	∅ 180	∅ 180	∅ 180	∅ 180	∅ 180
Weighing chamber height	mm	-	-	-	-	-	-	-	-
Net weight, approx.	kg	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Dimensions, D×W×H	mm	360×216×95							
	Inch	14.1×8.5×3.75							

## Optional Accessories

Printers and Communications	
Premium GLP Laboratory Printer	YDP30
– Printer paper for GLP laboratory printer	69Y03285
– Endless labels for GLP laboratory printer	69Y03286
Standard Laboratory Printer	YDP40
– Printer paper for standard laboratory printer	69Y03287
Data Cable Mini USB   USB A	YCC04-D09
Date Cable Mini USB   RS232 9-pin	YCC03-D09
Date Cable Mini USB   RS232 25-pin	YCC03-D25
General	
Battery Pack for Standard Lab Balances	YRB11Z
Draft shield for balances with a readability of 0.01 g   0.1 g   1g	YDS01SQP
Draft shield for balances with a readability of 1 mg	YDS02SQP
In-use cover for balances with a readability of 0.1 mg and 1 mg	6960SE01
In-use cover for balances with a readability of 0.01 g   0.1 g   1 g	6960SE02
Dust cover for analytical balances with draft shield	6960SE03
Density Determination	
Density kit for balances with a readability of 0.1 mg   1 mg	YDK03
Density kit for balances with a readability of 0.01 g   0.1 g   1 g	YDK04



YDP40, Standard Laboratory Printer



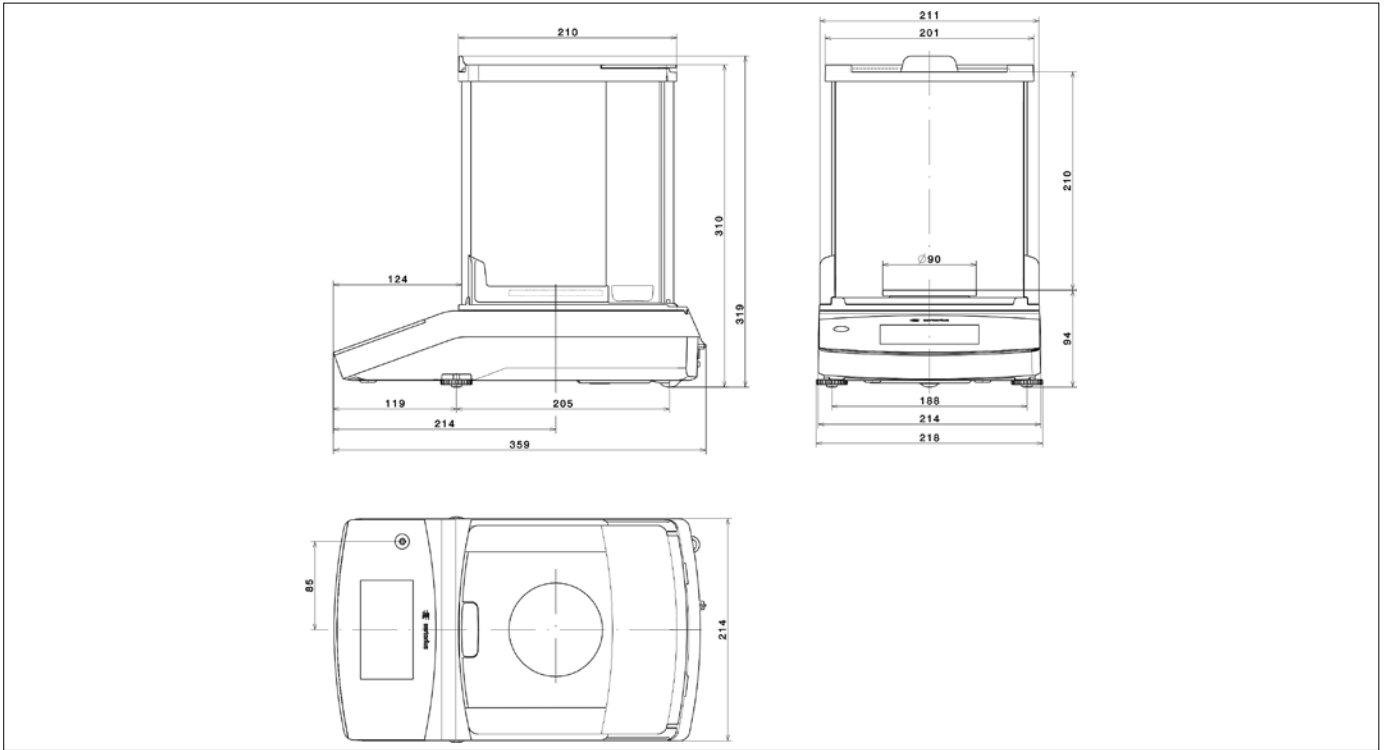
Calibration Weights	
Calibration for lab balance model 224; 313; 213 – Proof Line knob weight 200 g, OIML class E2, with DAkkS certificate	YCW522-AC-02
Calibration for lab balance model 124 – Proof Line knob weight 100 g, OIML class E2, with DAkkS certificate	YCW512-AC-02
Calibration for lab balance model 64 – Proof Line knob weight 50 g, OIML class E2, with DAkkS certificate	YCW452-AC-02
Calibration for lab balance model 613; 513 – Proof Line knob weight 500 g, OIML class E2, with DAkkS certificate	YCW552-AC-02
Calibration for lab balance model 6102; 5102 – Proof Line knob weight 5 kg, OIML class E2, with DAkkS certificate	YCW652-AC-02
Calibration for lab balance model 3102; 2102 – Proof Line knob weight 2 kg, OIML class F1, with DAkkS certificate	YCW623-AC-02
Calibration for lab balance model 1102 – Proof Line knob weight 1 kg, OIML class F1, with DAkkS certificate	YCW613-AC-02
Calibration for lab balance model 612 – Proof Line knob weight 500 g, OIML class F1, with DAkkS certificate	YCW553-AC-02
Calibration for lab balance model 412 – Proof Line knob weight 200 g, OIML class F1, with DAkkS certificate	YCW523-AC-02
Calibration for lab balance model 6101; 5101; 6100; 5100 – Proof Line knob weight 5 kg, OIML class F2, with DAkkS certificate	YCW654-AC-02
Calibration for lab balance model 2101 – Proof Line knob weight 2 kg, OIML class F2, with DAkkS certificate	YCW624-AC-02



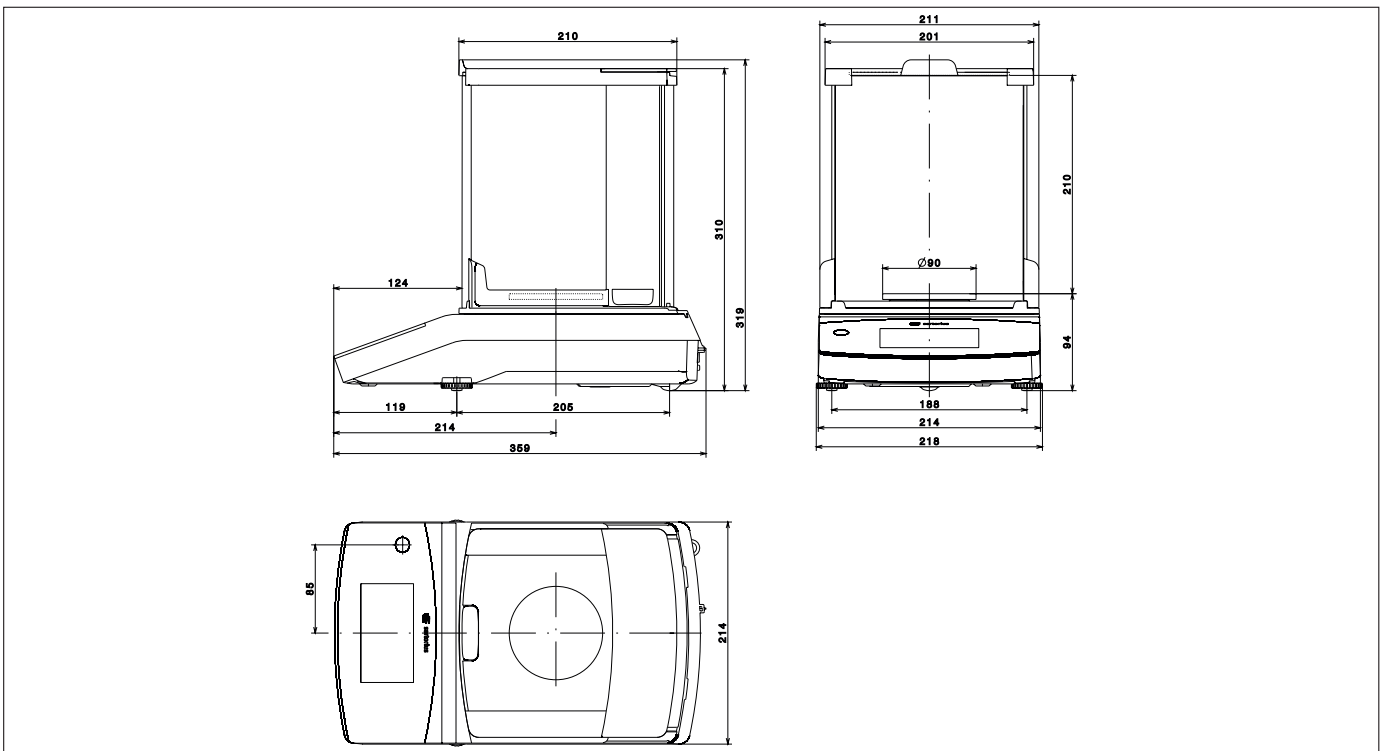
Calibration weights

## Technical Drawings

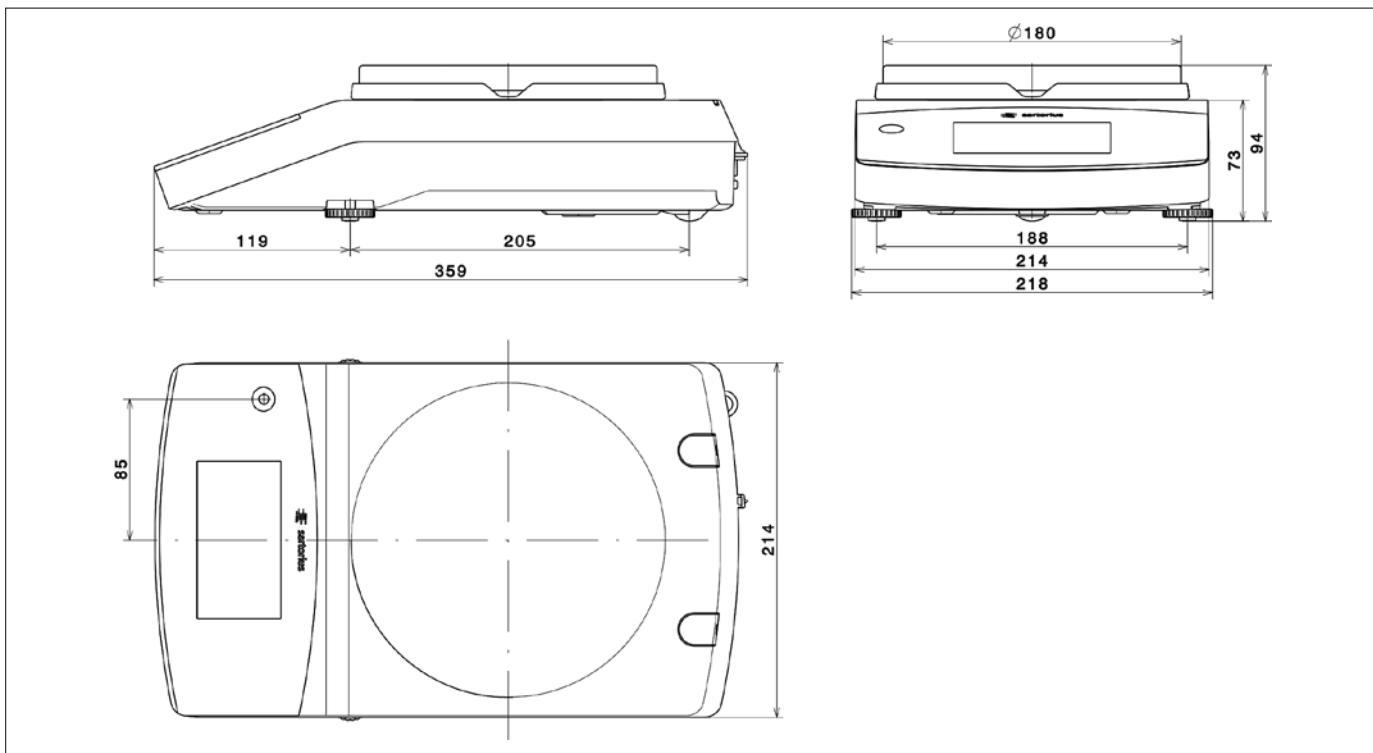
Models with a readability of 0.1 mg,  
in mm



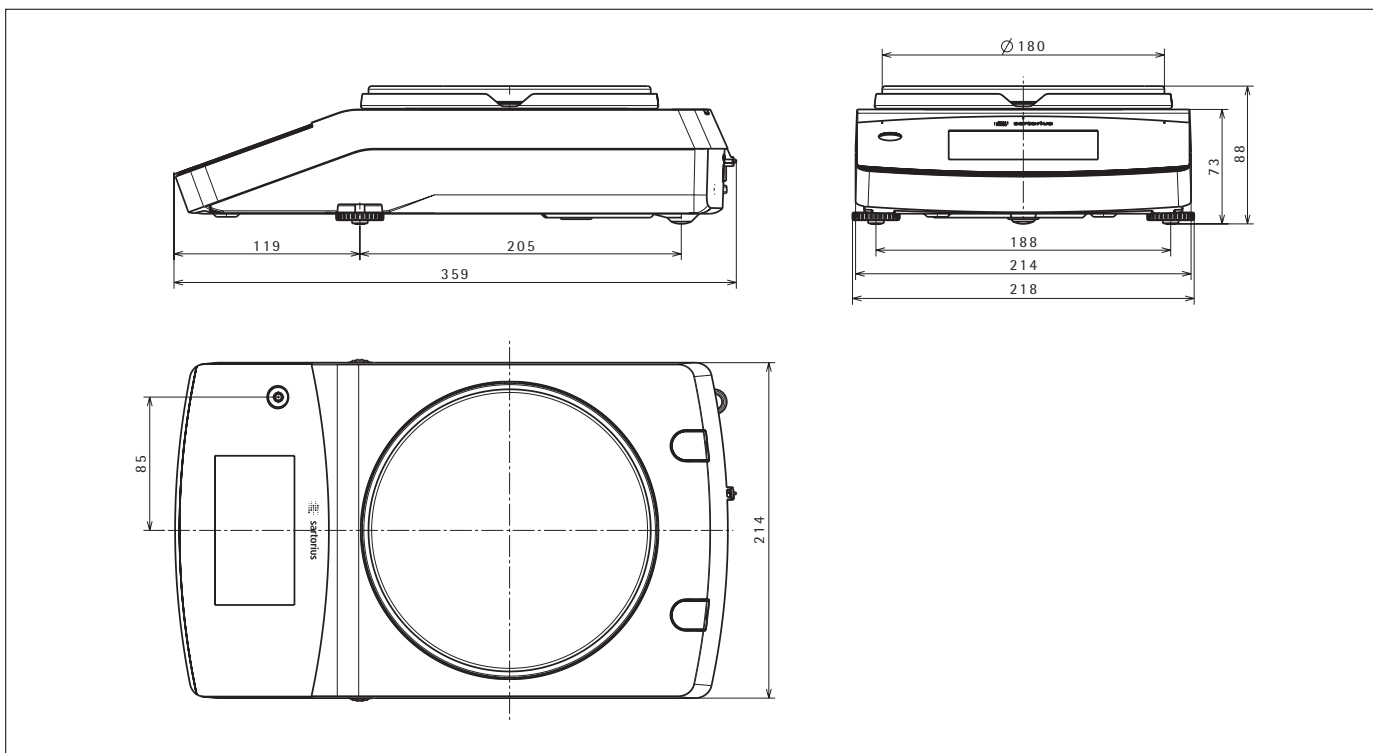
Models with a readability of 1 mg,  
in mm



Models with a readability of  $\geq 10$  mg (exclude 3102, 5102, 6102),  
in mm



Models with a readability of 10 mg and a capacity of  $\geq 3,100$  g,  
in mm



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