

# Quintix<sup>®</sup> Pro



## Benefits

- Enhance the user experience with new premium features
- Offering a wide range of use in different environments and applications
- Energy efficiency, reduced carbon footprint, and sustainability, minimizing environmental impact from the manufacturing plant to the bench

## Product Information

It's easy to overlook the standard lab balance. To expect the ordinary. Until something new comes along that redefines what a standard balance can be.

Quintix<sup>®</sup> Pro Laboratory Balances deliver the performance you need, with added premium features that raise the bar in usability, flexibility, and eco-conscience design.

# Technical Specifications

## General Technical Data

<b>Ambient Conditions</b>		<b>Value</b>
Installation site	For indoor use only, max. height above sea level	3000 m
Temperature	Environment (metrological data)*	+10 - +30° C
	Environment	+5 - +40° C
	Storage and transport	-20 - +60° C
Relative humidity**	At temperatures up to 31° C, non-condensing, then linear decrease from max. 80% at 31° C to max. 50% at 40° C	80%
No heat from heating systems or direct sunlight		
No electromagnetic fields		
<b>Power Supply Device</b>		<b>Value</b>
Input voltage		15 V <sub>DC</sub> (±10%)
Power consumption, max		4 W
Only by Sartorius power supply unit YEPS01-15V0W with interchangeable country-specific plug-in AC adaptors		
<b>Power Supply Unit</b>		<b>Value</b>
Type: Sartorius power supply unit YEPS01-15V0W		
Primary	Voltage	100 - 240 V <sub>AC</sub> (±10%)
	Frequency	50 - 60 Hz
	Current consumption, maximum	0.2 A
Secondary	Voltage	15 V <sub>DC</sub> (±5%)
	Current, maximum	0.53 A
Short-circuit protection		Electronic
Protection class according to IEC 60950-1		II
Pollution level according to IEC 61010-1		2
Overvoltage category according to IEC 60664-1		II
Other data: See label on the power supply unit		
<b>Electromagnetic Compatibility</b>		
Interference resistance: Suitable for use in industrial areas		
Transient emissions	Class B Suitable for use in residential areas and areas that are connected to a low voltage network that also supplies residential buildings	
<b>Materials</b>		
Housing	Polybutylene terephthalate (PBT)	
Control module	Glass	
Draft shield	Glass   polybutylene terephthalate (PBT)	
Weighing pan	Stainless steel	
<b>Warm-up Time</b>		<b>Value</b>
Device, approx		2 hr

\* For conformity-assessed (verified) balances in accordance with EU requirements, refer to the information on the balance.

\*\* For conformity-assessed (verified) balances in accordance with EU requirements, the legal regulations apply.

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## Interfaces

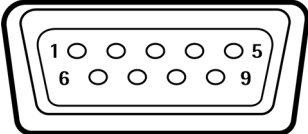
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### Specifications of the RS232 Interface

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Type of interface	Serial interface
Interface operation	Full duplex
Level	RS232
Connection	D-sub connector, 9-pin
Maximum cable length	10 m

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Pin assignment		Pin 1: Not assigned Pin 2: Data output (TxD) Pin 3: Data input (RxD) Pin 4: Not assigned Pin 5: Internal ground	Pin 6: Not assigned Pin 7: Clear to Send (CTS) Pin 8: Request to Send (RTS) Pin 9: Not assigned
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### Specifications for the USB-C Interface (back)

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Communication	USB UTL
Connectable devices	Sartorius printers, Sartorius second display, FTDI cable or USB memory stick

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### Specifications for the PC-USB Interface (back)

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Communication	USB Device
Connectable devices	PC

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### Specifications for the USB-C Interface (front)

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Communication	USB UTL
Connectable devices	Sartorius printers, Sartorius second display, FTDI cable or USB memory stick

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## Calibration

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- Internal calibration isoCAL
  - Internal calibration
  - 3-point calibration
  - External calibration
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## Selectable Weight Units\*

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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

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## Display

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Intuitive graphic touch technology

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## Built-in Applications

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- Weighing | Dosing
  - Mass unit conversion
  - Counting
  - Percentage weighing
  - Calculation
  - Mixing
  - Components
  - Density determination
  - Statistics
  - Checkweighing
  - Animal weighing
  - Peakhold
  - Pipette smart check
  - Differential weighing
  - Underfloor weighing
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## Languages

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Chinese, Czech, Dutch, English, French, German, Hungarian, Italian, Japanese, Korean, Polish, Portuguese, Russian, Spanish, Turkish

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## Protection

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- Chemical resistant housing parts
  - Glass parts of the draft shield are coated to reduce electrostatic influences
  - Display foil (available as accessory)
  - Dust cover for balances (also available as accessory)
  - In-use-cover for housing (also available as accessory)
  - In-use-cover for weighing pan (available as accessory)
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## Anti-theft Lock

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Kensington lock and lockdown capability for cable or chain

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\* The availability of units depends on national legislation and is therefore country-specific.

# Model specific data

## For models with internal adjustment feature

Model QTX	Unit	324lxy-1z <sup>1</sup>	224lxy-1z <sup>1</sup>	124lxy-1z <sup>1</sup>
Readability   Scale interval (d)	mg	0.1	0.1	0.1
Maximum capacity (Max)	g	320	220	120
Weighing system		EMC	EMC	EMC
<b>Repeatability</b>				
At 5% load, typical value	± mg	0.08	0.08	0.08
At approx. maximum load, typical value	± mg	0.1	0.1	0.1
<b>Linearity deviation</b>				
Limits	± mg	0.2	0.2	0.2
Typical value	± mg	0.06	0.06	0.06
<b>Eccentricity deviation (Deviation when load is off-center, positions according to OIML R76)</b>				
Test weight	g	200	100	50
Tolerance	± mg	0.4	0.4	0.4
Typical value	± mg	0.2	0.12	0.1
Sensitivity drift between +10° C and +30° C	± ppm/K	1	1	1
Tare maximum capacity (subtractive)		<100% of maximum capacity		
<b>isoCAL:</b>				
Temperature change	K	1.5	1.5	1.5
Time interval	h	4	4	4
<b>For models with approval:</b>				
Accuracy class		I	I	I
Type		BC-QA	BC-QB	BC-QB
Verification scale interval (e)	mg	1	1	1
Minimum load (Min)	mg	10	10	10
<b>Minimum initial weighing according to USP (United States Pharmacopeia), Chap. 41</b>				
Optimum minimum initial weighing	g	0.082	0.082	0.082
Typical minimum initial weighing	g	0.16	0.16	0.16
Typical measurement time	s	≤2.0	≤2.0	≤2.0
Typical stabilization time	s	≤1.5	≤1.5	≤1.5
<b>Recommended calibration weight</b>				
External calibrated test weight	g	200	200	100
Accuracy class in accordance with OIML R111-1		E2	E2	E2
Weighing pan size	mm	Ø 90	Ø 90	Ø 90
Weighing chamber height*	mm	240	240	240
Dimension (W x D x H)	mm	220 x 377 x 346	220 x 377 x 346	220 x 377 x 346
Net weight, approx.	kg	6.70	6.70	6.70
Gross weight, approx.	kg	8.65	8.65	8.65

\* upper edge of the weighing pan to the lower edge of the upper draft shield panel

<sup>1</sup> Levelling, x =  
x = R : Real-time level support  
x = M : Motorized, automatic level feet

<sup>1</sup> Draft shield, y =  
y = U : Manual, glass  
y = O : No draft shield

<sup>1</sup> Country-specific marking in model, z =  
z = S : Standard balances without country-specific additions  
z = SAR : Standard balances with country-specific additions for Argentina  
z = SJP : Standard balances with country-specific additions for Japan  
z = SKR : Standard balances with country-specific additions for South Korea  
z = CEU : Conformity-assessed balances with EU type examination certificate without country-specific additions  
z = CFR : Conformity-assessed balances with EU type examination certificate only for France

z = NUS : Balances with approval for Canada and USA  
z = OBR : Balances with approval for Brazil  
z = OCN : Balances with approval for China  
z = OIN : Balances with approval for India  
z = OJP : Balances with approval for Japan  
z = ORU : Balances with approval for Russia

1503lxy-1z <sup>1</sup>	1203lxy-1z <sup>1</sup>	623lxy-1z <sup>1</sup>	423lxy-1z <sup>1</sup>	323lxy-1z <sup>1</sup>
1	1	1	1	1
1.500	1,200	620	420	320
EMC	EMC	EMC	EMC	EMC
0.5	0.5	0.5	0.5	0.5
1	1	1	1	1
2	2	2	2	2
0.6	0.6	0.6	0.6	0.6
500	500	200	200	200
2	2	2	2	2
1	1	1	1	1
1,5	1,5	2	2	2
<100% of maximum capacity				
1.5	1.5	2	2	2
4	4	6	6	6
I	I	II	II	II
BC-QC	BC-QC	BC-QD	BC-QD	BC-QD
10	10	10	10	10
100	100	20	20	20
0.82	0.82	0.82	0.82	0.82
1	1	1	1	1
≤1.5	≤1.5	≤1.5	≤1.5	≤1.5
≤1.0	≤1.0	≤1.0	≤1.0	≤1.0
1,000	1,000	500	200	200
E2	E2	F1	F1	F1
Ø 120	Ø 120	Ø 120	Ø 120	Ø 120
240	240	240	240	240
220×377×346	220×377×346	220×377×346	220×377×346	220×377×346
8.10	8.10	6.70	6.70	6.70
10.03	10.03	8.65	8.65	8.65

Model QTX	Unit	6202lxy-1z <sup>1</sup>	4202lxy-1z <sup>1</sup>	3202lxy-1z <sup>1</sup>	2202lxy-1z <sup>1</sup>
Readability   Scale interval (d)	mg	10	10	10	10
Maximum capacity (Max)	g	6,200	4,200	3,200	2,200
Weighing system		EMC	EMC	EMC	EMC
<b>Repeatability</b>					
At 5% load, typical value	± mg	5	5	5	5
At approx. maximum load, typical value	± mg	10	10	10	10
<b>Linearity deviation</b>					
Limits	± mg	20	20	20	20
Typical value	± mg	6	6	6	6
<b>Eccentricity deviation (Deviation when load is off-center, positions according to OIML R76)</b>					
Test weight	g	2,000	2,000	2,000	1,000
Tolerance	± mg	20	20	20	20
Typical value	± mg	10	10	10	10
Sensitivity drift between +10° C and +30° C	± ppm/K	2	2	2	2
Tare maximum capacity (subtractive)		<100% of maximum capacity			
<b>isoCAL:</b>					
Temperature change	K	2	2	2	2
Time interval	h	6	6	6	6
<b>For models with approval:</b>					
Accuracy class		II	II	II	II
Type		BC-QE	BC-QE	BC-QE	BC-QE
Verification scale interval (e)	mg	100	100	100	100
Minimum load (Min)	mg	500	500	500	500
<b>Minimum initial weighing according to USP (United States Pharmacopeia), Chap. 41</b>					
Optimum minimum initial weighing	g	8.2	8.2	8.2	8.2
Typical minimum initial weighing	g	10	10	10	10
Typical measurement time	s	≤1.0	≤1.0	≤1.0	≤1.0
Typical stabilization time	s	≤0.9	≤0.9	≤0.9	≤0.9
<b>Recommended calibration weight</b>					
External calibrated test weight	g	5,000	2,000	2,000	2,000
Accuracy class in accordance with OIML R111-1		F1	F1	F1	F1
Weighing pan size	mm	182 × 182	182 × 182	182 × 182	182 × 182
Weighing chamber height*	mm	-	-	-	-
Dimension (W x D x H)	mm	215 × 377 × 95	215 × 377 × 95	215 × 377 × 95	215 × 377 × 95
Net weight, approx.	kg	6.20	6.20	6.20	6.20
Gross weight, approx.	kg	8.40	8.40	8.40	8.40

\* upper edge of the weighing pan to the lower edge of the upper draft shield panel

<sup>1</sup> Levelling, x =  
x = R : Real-time level support  
x = M : Motorized, automatic level feet

<sup>1</sup> Draft shield, y =  
y = U : Manual, glass  
y = O : No draft shield

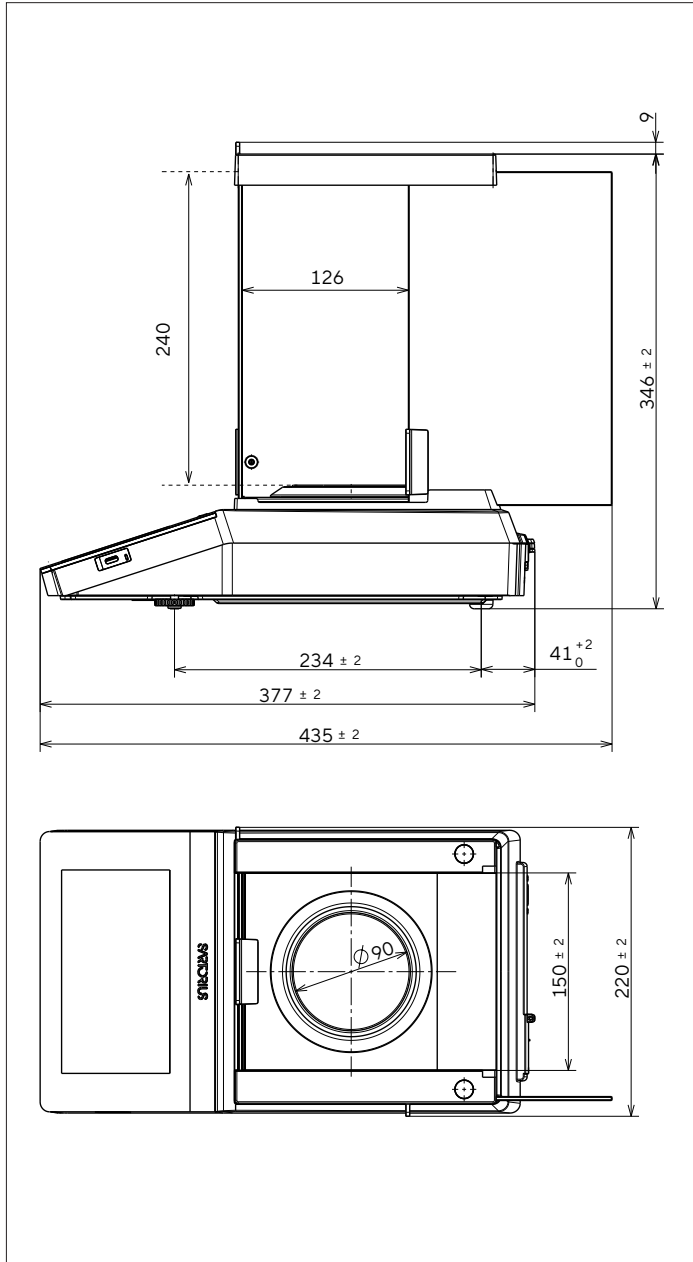
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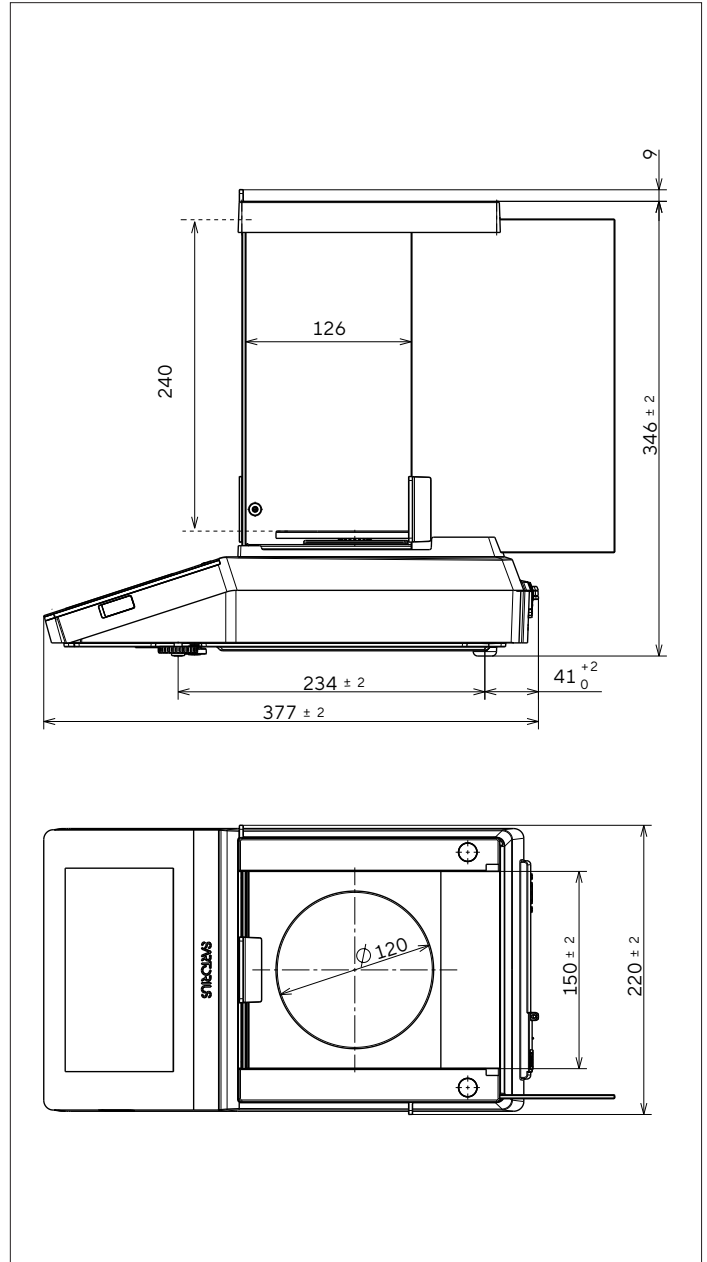
1202lxy-1z <sup>1</sup>	12201lxy-1z <sup>1</sup>	10201lxy-1z <sup>1</sup>	8201lxy-1z <sup>1</sup>	6201lxy-1z <sup>1</sup>	3201lxy-1z <sup>1</sup>
10	100	100	100	100	100
1,200	12,200	10,200	8,200	6,200	3,200
EMC	EMC	EMC	EMC	EMC	EMC
5	50	50	50	50	50
10	100	100	100	50	50
20	100	100	100	100	100
6	60	60	60	60	60
500	5,000	5,000	5,000	2,000	2,000
20	200	200	200	200	200
10	100	100	100	100	100
2	4	4	4	2	2
<100% of maximum capacity					
2	2	2	2	2	2
6	6	6	6	6	6
II	II	II	II	II	II
BC-QE	BC-QG	BC-QG	BC-QG	BC-QG	BC-QE
100	1,000	1,000	1,000	100	100
500	5,000	5,000	5,000	5,000	5,000
8.2	82	82	82	82	82
10	100	100	100	100	100
≤1.0	≤1.0	≤1.0	≤1.0	≤1.0	≤1.0
≤0.9	≤0.9	≤0.9	≤0.9	≤0.9	≤0.9
1,000	10,000	10,000	5,000	5,000	2,000
F1	F2	F2	F2	F2	F2
182×182	182×182	182×182	182×182	182×182	182×182
-	-	-	-	-	-
215×377×95	215×377×95	215×377×95	215×377×95	215×377×95	215×377×95
6.20	6.20	6.20	6.20	6.20	6.20
8.40	8.40	8.40	8.40	8.40	8.40

# Technical Drawings

Models with a readability of 0.1 mg  
All dimensions are given in millimeters

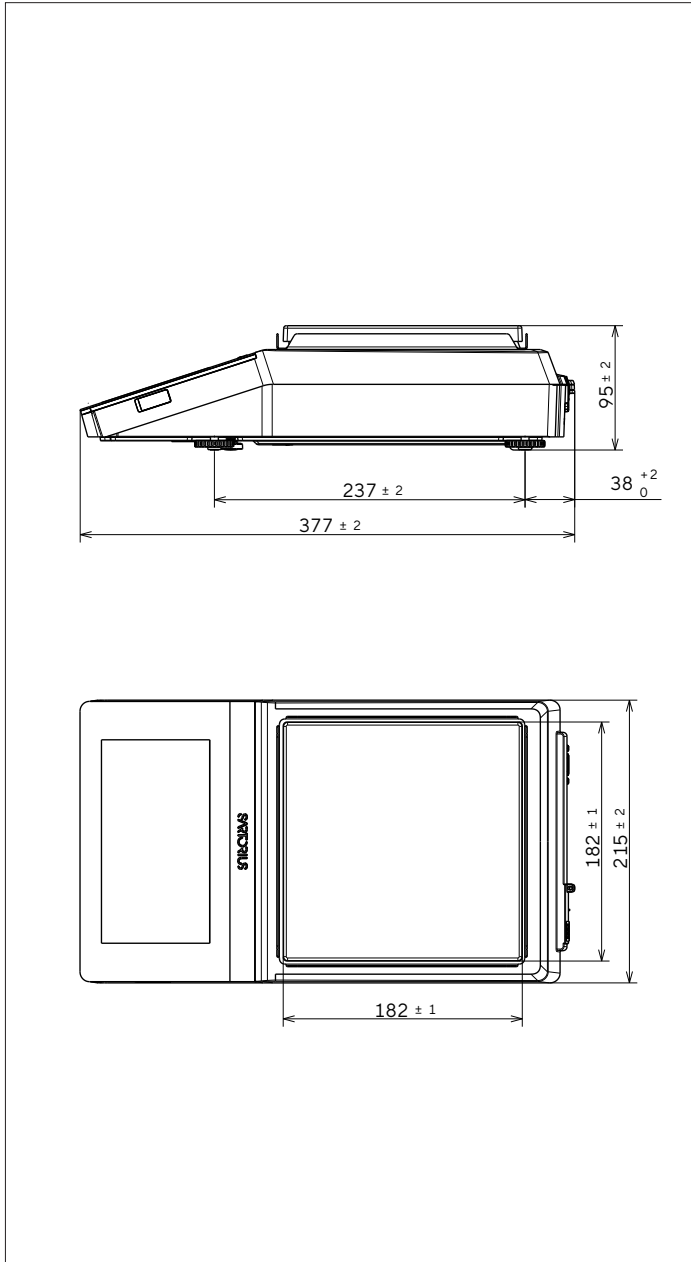


Models with a readability of 1 mg  
All dimensions are given in millimeters





Models with a readability of  $\geq 10$  mg  
All dimensions are given in millimeters



# Accessories

These tables contain an excerpt of the accessories that can be ordered. For information on other products, contact Sartorius.

## Balance Accessories

Item	Quantity	Order number
Display protection film (set of 5)	1	YDC40
Dust cover for balances with an analytical draft shield	1	6960SE06
Dust cover for balances with rectangular weighing pan	1	6960SE07
In-use cover for balances with an analytical draft shield (1 piece)	1	6960SE08
In-use cover for balances with an analytical draft shield (set of 5)	1	6960SE08-5
In-use cover for balances with rectangular weighing pan (1 piece)	1	6960SE09
In-use cover for balances with rectangular weighing pan (set of 5)	1	6960SE09-5
Set protection cover for 90 mm weighing pan and draft shield base plate (set of 5)	1	YIC02-A
Set protection cover for 120 mm weighing pan and draft shield base plate (set of 5)	1	YIC02-M
Set protection cover for 182 × 182 mm weighing pan (set of 5)	1	YIC02-P
Round glass draft shield for balances with a readability of 1 mg	1	YDS02QTX
Density determination set		
for solids and liquids for balances with a readability of 0.1 mg   1 mg	1	YDK03
for solids and liquids for balances with a readability of ≥10 mg	1	YDK04QTX
Demo   transportation case	1	YDB01QTX
“Kensington Lock” anti-theft device	1	YKL01
Pedal button   foot switch	1	YFS04
Second display   remote display	1	YSD01
Converter cable 5 VDC > 15 VDC	1	YCC-5V-15V
Weighing table		
Made from wood with natural stone	1	YWT09
Made from natural stone, with vibration dampening	1	YWT03
Wall console made from natural stone	1	YWT04

## Printer and Accessories for Data Communication

Item	Quantity	Order number
Thermal transfer printer (USB-B, RS232)	1	YDP30
Thermal printer (USB-B)	1	YDP40
Dot matrix printer (USB-B, RS232)	1	YDP50
Dot matrix printer (RS232)*	1	YDP20-0CE
Data cable USB-C > USB-B (>YDP30, YDP40, YDP50), 1.5 m	1	YCC-USB-C-B
Data cable USB-C > USB-A (>PC), 1.5 m	1	YCC-USB-C-A
Data cable RS232 (9-pin) > USB-A (>PC), 1.5 m	1	YCC-D09M-USB-A
Data cable RS232 (9-pin) male > RS232 (9-pin) male (>YDP30), 1.5 m	1	YCC-D09MM
Data cable RS232 (9-pin) male > RS232 (9-pin) female (>YDP20-0CE, YSD01), 1.5 m	1	YCC-D09MF
Y-adaptor RS232 (9-pin) male > 2× RS232 (9-pin) female, 0.15 m	1	YCC-D09M-2D09F

\*additional power supply e.g. YEPS01-PS4 or YEPS01-PS5 is required

## External Calibration and Adjustment Weights

QTX model	Weight	Accuracy class	Order number
324   224	200 g	E2	YCW522-AC-02
124	100 g	E2	YCW512-AC-02
1503   1203	1,000 g	E2	YCW612-AC-02
623	500 g	F1	YCW553-AC-02
423   323	200 g	F1	YCW523-AC-02
6202	5,000 g	F1	YCW653-AC-02
4202   3202   2202	2,000 g	F1	YCW623-AC-02
1202	1,000 g	F1	YCW613-AC-02
12201   10201	10,000 g	F2	YCW714-AC-02
8201   6201	5,000 g	F2	YCW654-AC-02
3201	2,000 g	F2	YCW624-AC-02
2201	2,000 g	F2	YCW624-AC-02

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