

# For serious cost-cutting and quality assurance: the Factory Series.



Sartorius AG, Weighing Technology

**sartorius**

# We have the best solution for your weighing tasks.

## Your requirements:

You want a scale that exactly meets your needs. One that's fast, durable and delivers the highest accuracy to ensure the reliability of your weighing data in the long run.

## Our solutions:

The Sartorius Factory scale series featuring weighing capacities from 600 g with a readability of 0.001 g to 300 kg with a readability of 2 g. All of these scales are verifiable for use in legal metrology (some are already factory-verified by the manufacturer) and come with numerous built-in application programs. Plus, they're manufactured to ISO 9001 so your production will comply with this standard as well. The scales incorporate the most advanced monolithic technology for decisive advantages in weighing, for example, better long-term stability, enhanced response even when exposed to strong changes in temperature, exceptionally high mechanical ruggedness, and preload option for 20% of the weighing range.

In addition to providing precise weighing results and practical operator guidance features, Factory scales offer a wide variety of options for integration into complex manufacturing sequences. These include, for example:

### SartoConnect

for transferring weighing data to a PC for further processing in application programs;

### Sartorius WinScale

driver software with verifiable PC Alibi memory and scale display emulation on your PC – it's like having a second indicator;

### Networking options

for centralized control of up to 31 scales that can be addressed;

### Profibus adapter

for Profibus DP; designed to connect scales to process logic controllers, such as the Siemens S7;

### Sartorius NICE Label Express

the software for customizing printouts.

Meet the "family" of Sartorius Factory scales:

### FB scales

for standard applications up to a weighing capacity of 64 kg.

### FC scales

with sophisticated, but easy-to-run applications, product data memory and data logging capability; for applications up to a weighing capacity of 64 kg. Ports for connecting a bar code scanner and a PC keyboard for especially convenient input of product data. The easy-to-read, graphical user display can also be used as a remote indicator for individual operator guidance (XBPI protocol functions).

### FD scales

for easy, heavy-duty weighing or running standard applications in a range up to 300 kg. Wide selection of user-installable accessories to set up FDs as floor platform scales.



Lower the cost of your materials by optimizing checkweighing of expensive products.



Assure the quality of your products by accurate components sorting.



Improve your operating results by precisely counting your high-cost components.

# The Factory Product Family at a glance.

Weighing capacity kg	Readability g	Load plate W×D (mm)	IP protection	Design	Order no. of standard models
<b>FB models</b>					
0.62	0.001	Ø 130	54	b	FB06BBE-S
2.2	0.01	216×200	54	a	FB2CCE-S
6.2	0.01	216×200	54	a	FB6CCE-H
6.2	0.1	216×200	54	a	FB6CCE-S
6/12	0.1/0.2	400×300	65	c	FBG12EDE-P
12	0.1	216×200	54	a	FB12CCE-S
16	0.1	400×300	65	c	FBG16EDE-H
8/16/34	0.1/0.2/0.5	400×300	65	c	FBG34EDE-P
8/16/34	0.1/0.2/0.5	400×300	65	*	FBG34EDE-P0000B
34	0.1	400×300	65	c	FBG34EDE-H
64	1	400×300	65	c	FBG64EDE-S
64	1	400×300	65	*	FBG64EDE-S0000B
64	0.1	400×300	44	c	FBG64EDE-H
<b>FC models</b>					
0.62	0.001	Ø 130	54	b	FC06BBE-S
2.2	0.01	216×200	54	a	FC2CCE-S
6.2	0.01	216×200	54	a	FC6CCE-H
6.2	0.1	216×200	54	a	FC6CCE-S
6/12	0.1/0.2	400×300	65	c	FCG12EDE-P
12	0.1	216×200	54	a	FC12CCE-S
16	0.1	400×300	65	c	FCG16EDE-H
8/16/34	0.1/0.2/0.5	400×300	65	c	FCG34EDE-P
34	0.1	400×300	65	c	FCG34EDE-H
64	1	400×300	65	c	FCG64EDE-S
64	0.1	400×300	44	c	FCG64EDE-H
<b>FD models</b>					
64	1	560×450	65	d	FD64FEG-S
64	1	560×450	65	d	FD64FEG-S000U
150	1	800×600	65	d	FD150IGG-S
150	1	800×600	65	d	FD150IGG-S000U
300	2 (20 for verif.)	800×600	65	d	FD300IGG-S
300	2 (20 for verif.)	800×600	65	d	FD300IGG-S000U

\* Modifications to standard scales: front-mounted, tiltable display holder; 2.7 m cable between platform and display; additional base cover plate to cover cable channel; interface port: 25-contact D-Sub female connector



Design a



Design b



Design c



Design d

Verification scale interval/g	Minimum capacity acc. to CD***	Order no. of models verifiable for legal metrology
0.01**	0.02	FB06BBE-SOCE
0.1**	0.5	FB2CCE-SOCE
0.1**	0.5	FB6CCE-HOCE
1**	5	FB6CCE-SOCE
1**	5	FBG12EDE-POCE
1**	5	FB12CCE-SOCE
1**	5	FBG16EDE-HOCE
1**	5	FBG34EDE-POCE
–	–	–
1**	5	FBG34EDE-HOCE
10**	50	FBG64EDE-SOCE
–	–	–
–	–	–
0.01**	0.02	FC06BBE-SOCE
0.1**	0.5	FC2CCE-SOCE
0.1**	0.5	FC6CCE-HOCE
1**	5	FC6CCE-SOCE
1**	5	FCG12EDE-POCE
1**	5	FC12CCE-SOCE
1**	5	FCG16EDE-HOCE
1**	5	FCG34EDE-POCE
1**	5	FCG34EDE-HOCE
10**	50	FCG64EDE-SOCE
–	–	–
10	50	FD64FEG-SOCE
10	50	FD64FEG-SOCEU
10	50	FD150IGG-SOCE
10	50	FD150IGG-SOCEU
20	1,000	FD300IGG-SOCE
20	1,000	FD300IGG-SOCEU

\*\* Models verified at the factory by the manufacturer for legal metrology

\*\*\* Complies with Council Directive 90/384/EEC on non-automatic weighing instruments in the European Union and Signatories of the Agreement on the European Economic Area

## FB application programs:

Counting  
Weighing in percent  
Averaging (animal weighing)  
Recalculation  
Nettotal manual formulation  
Density determination  
Checkweighing

## FC application programs:

Toggle between weight units  
Counting  
Weighing in percent  
Averaging (animal weighing)  
Recalculation  
Calculation of weight values  
Density determination  
Checkweighing  
Time-controlled functions  
Totalizing  
Nettotal manual formulation  
Statistics  
Differential weighing

## FD "Weighing" application programs:

Toggle between weight units

## FD "Multiple" application programs:

Toggle between weight units  
Counting  
Checkweighing  
Nettotal formulation

The letter "U" in the order no. stands for "multiple applications."



FB display



FC "Multiple Application" display



FD "Weighing" display



FD "Multiple Application" display

# Convincing quality standards.



## Built-in isoTEST function.

At the touch of the unique isoTEST key, the Factory Series scale calibrates and adjusts itself automatically using a built-in calibration weight. The scale also outputs a test record via its standard interface port.

### Your advantages:

- No more pain with having to handle heavy external test weights; and you won't have to spend time and money on purchasing and upkeeping expensive test weights.
- This function assures ISO-compliant manufacturing operations by recording and documenting calibration and adjustment procedures.
- This function helps you control the accuracy of your inspection, measuring and test equipment, without any extra effort or cost.

0.001

## High resolution.

High internal resolution guarantees reliable weight readouts.

### Your advantages:

- The weighing data that you transmit to QA control systems has greater accuracy.
- Reference weights are precisely determined, e.g., in counting applications.

## High manufacturing quality.

All Sartorius scales are manufactured in compliance with ISO 9001 and feature advanced, high-performance technology and premium-grade materials.

### Your advantages:

- Low maintenance
- Long service life
- Reliable weighing data over the long term

PCS

+ - KG  
COMP

## Practical application programs.

Factory Series scales come "loaded" with numerous built-in application programs that can be individually configured.

### Your advantage:

- You obtain exactly the right scale you need for your application.



## Ease of operation.

The scales' display prompts are in plain English for easy operator guidance. The maximum weighing capacity and the resolution are continuously shown on the high-contrast, backlit display.

### Your advantages:

- No more long-drawn-out training for the operator
- Excellent readability even under adverse lighting conditions



## Fast weighing results.

Enhanced technology allows fast weighing – even under tough environmental conditions.

### Your advantage:

- You can be productive at a fast pace while obtaining reliable, "rock-steady" weighing data.



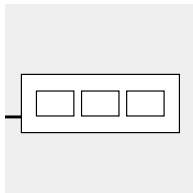
## Choice of installation options.

The variety of designs offers a wide selection of installation options.

### Your advantage:

- You can be flexible in choosing the place in which to set up your scale.

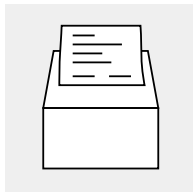




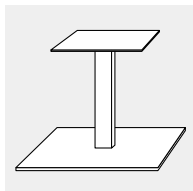
Red/green/red display



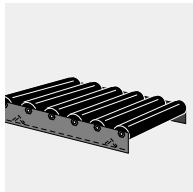
Adapter cable



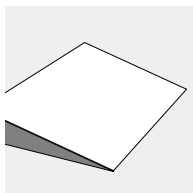
Data printer



Floor stand



Roller conveyor



Drive-on ramp

FB/FC/FD	Order No.
Strip/label printer verifiable for legal metrology, with thermal print head, connecting cable and external power supply, 120 volts	YDP02IS-OCEV120
Strip/label printer verifiable for legal metrology, with thermal print head, connecting cable and external power supply, 220 volts	YDP02IS-OCEV220
Round male connector for customizing own cables	69QC0010
"Sartorius NICE Label Express" configuration software for creating customer-specific printouts (not for FB scales)	YAD02IS
Sartorius serial Profibus interface for RS-232	YSPI3-232
Sartorius serial Profibus interface for RS-485	YSPI3-485
SartoConnect PC program set (for transferring weights to a PC running the Windows® 95/98/NT operating system and for further processing in applications (Excel, Access); incl. cable for connecting the scale to the PC (12/9-pin)	YSC011
Sartorius WinScale (scale driver software for use under Windows® 95/98/2000/NT; displays current readouts on the PC monitor and provides secure memory (verifiable) for storing data that is subject to legal control	YSW03
RS-232 interface cable required; RS-485 interface cable available on request	YCC01-09ISM5
Configuration software (PC, DOS) for backing up and restoring scale settings	YAD01IS
FB/FC	Order No.
Data printer, verifiable for use in legal metrology; with date, time and statistics functions	YDP03-OCE
5 rolls of printer paper, each 50 m for YDP03-OCE	6906937
Interface cable, for direct connection to data printer YDP03-OCE	YCC01-0019M3
External rechargeable battery pack	YRB06Z
External checkweighing display (red/green/red) with angular bracket for fastening to a column	YRD14Z
RS-485 interface port (XBPI protocol) for FBG/FCG models	YDO01FG
RS-485 interface port (XBPI protocol) for FB/FC-CCE/BBE models	YDO02F
Dual data interface for FB/FC-CCE/BBE models	YDO03F
Dual data interface for FBG/FCG models	YDO04FG
Hanger for under-scale weighing, M6	69EA0040
FB/FC display holder, front-mounted (continuously adjustable; can also be used as a wall-mounting bracket)	YDH01F
Spare dust cover for use during operation	6960FB02
Bar code scanner (with YDO03F or YDO04FG interface)	YBR02FC
Roller conveyor (stainless steel) for FBG/FCG models	YRC01EDS
Roller conveyor (aluminum) for FBG/FCG models	YRC01EDA
Cable for connecting the weighing platform to the display and control unit, 2.7 m (for FB/FC up to 12 kg)	YCC01-19M3
Cable for connecting the weighing platform to the display and control unit, 2.7 m (for FB/FC from 16 kg to 34 kg)	YCC01-18M3
Cable for connecting a CP balance as a reference scale	YCC01-02ISM3
Flow rate controller for pumps and feed units with analog or pulse interfaces (can be connected using adapter cable YCC01-0016M3)	YFC02Z
Wrap-around load plate for models FB6CCE-S, FB6CCE-S0CE, FC6CCE-S, FC6CCE-S0CE, FB12CCE-S, FB12CCE-S0CE, FC12CCE-S, FC12CCE-S0CE	YLP01
Benchtop AC adapter (power supply), IP65, 3-m primary cable, 1.5-m secondary cable	6971899
FD	Order No.
Roller conveyor (stainless steel) for FD-FEG models	YRC01FES
Roller conveyor (stainless steel) for FD-IGG models	YRC01IGS
Display unit dust cover for use during operation	YDC01IS
Floor stand (stainless steel) for display unit and 120V/220V printer, YDP02IS-OCEV and external power supply	YDH04IS
Floor stand (stainless steel) for display unit, with holder for external power supply	YDH03IS
Stainless steel benchtop holder (column) for display unit	YDH01IS

Additional accessories available on request (for example, paper rolls/labels for printers)