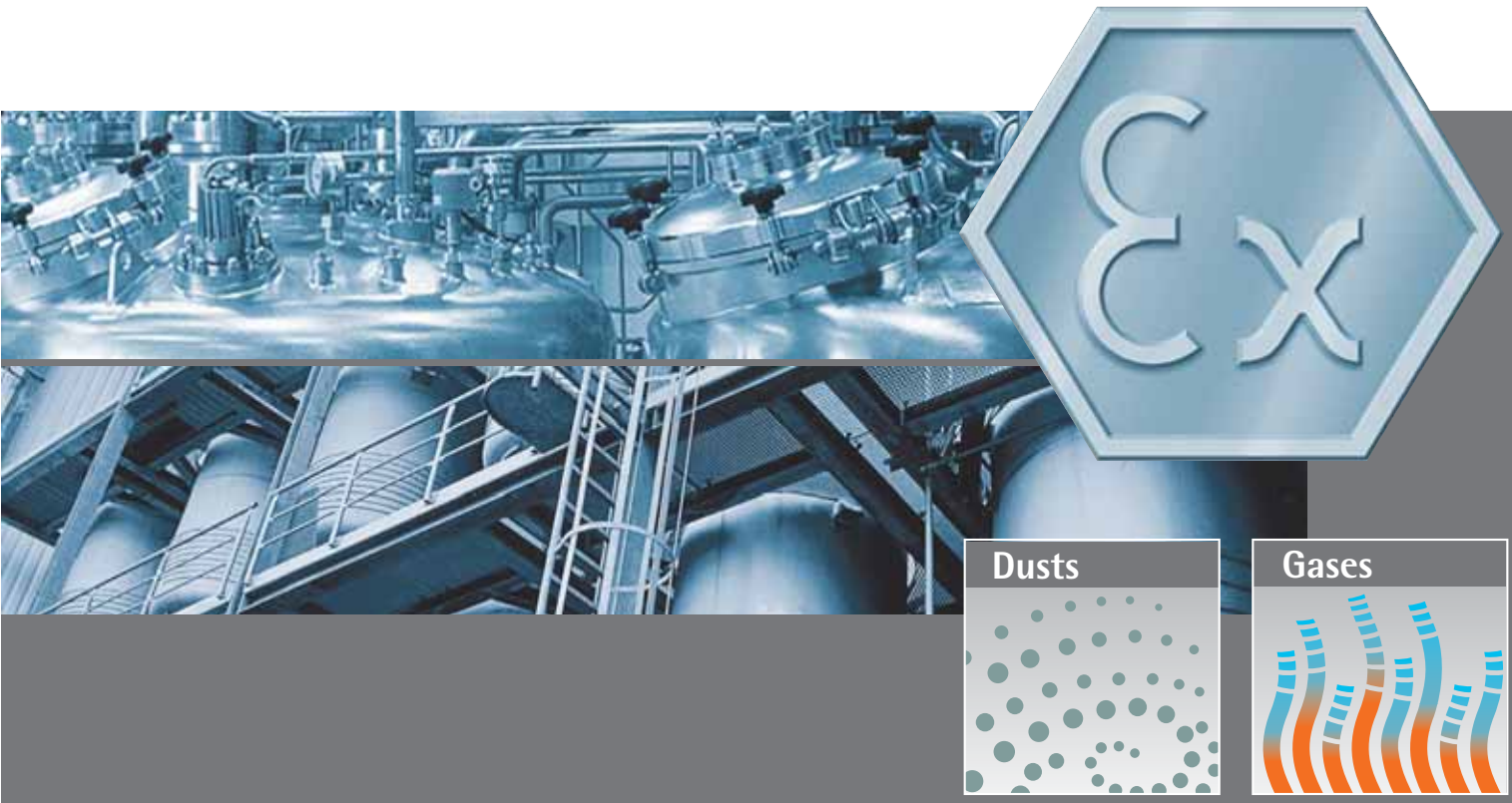
sartorius



Explosion-protected weighing equipment

for all areas of use

Competence for safety

A tradition of safety

Over many years, Sartorius has built up a wealth of experience in designing and manufacturing explosion-protected weighing equipment. This experience goes back to products ranging from the first explosion-proof mechanical product solutions to the world's first pressure-encapsulated electronic balance introduced in 1979, all the way to the first intrinsically safe scale that debuted in 1985. Today, Sartorius develops electronic and non-electrical equipment to meet the market requirements in compliance with the provisions governing the most diverse types of explosion protection. Sartorius was one of the first German companies to have passed the rigorous quality assurance system audit performed by the demanding German National Institute of Metrology, the PTB, in compliance with the European ATEX Directive. Already in 1997, Sartorius was authorized to put its ATEX-compliant weighing equipment on the market. Since then, we have been offering our customers a continuously growing range of explosion-protected weighing equipment, which meets automated production needs besides the requirements of the advanced types of explosion protection. As a globally operating group, we also offer EX weighing equipment internationally certified, for example, for compliance with FM (USA), CSA (Canada) and other national standards, such as those of Japan and China.

Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin

PTB

Mitteilung

über die Anerkennung der Qualitätssicherung Produktion

(2) Geräte oder Schutzsysteme oder Komponenten zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen - Richtlinie 94/9/EG

(3) Mitteilungsnummer: PTB 97 ATEX Q021-2

(4) Produktgruppe(n): Waagen, Wägezellen und Netzgeräte in den bestimmenden Zündschutzarten "Eigensicherheit" und "Druckfeste Kapselung" sowie den Zündschutzarten „Vergusskapselung" und „Erhöhte Sicherheit" und den Schutzprinzipien des Staubexplosionsschutzes

Die benannte Stelle führt eine Liste der EG-Baumusterprüfbescheinigungen, für die diese Mitteilung gilt.

(5) Antragsteller: Sartorius AG
Weender Landstraße 94-108, 37075 Göttingen, Deutschland

(6) Hersteller: Sartorius AG
Weender Landstraße 94-108 und August Spindler Straße 11
37075 Göttingen 37079 Göttingen

(7) Die Physikalisch-Technische Bundesanstalt (PTB), benannte Stelle Nr. 0102 für Anhang IV nach Artikel 9 der Richtlinie des Rates der Europäischen Gemeinschaften 94/9/EG vom 23. März 1994, teilt dem Antragsteller mit, daß der Hersteller ein Qualitätssicherungssystem für die Produktion unterhält, das dem Anhang IV dieser Richtlinie genügt.

(8) Diese Mitteilung basiert auf dem vertraulichen Auditbericht Nr. 04-23468, ausgestellt am 15. März 2004. Die Mitteilung ist gültig bis 18. Dezember 2006 und kann zurückgezogen werden, wenn der Hersteller die Anforderungen des Anhangs IV nicht mehr erfüllt.

Die Ergebnisse der regelmäßigen Begutachtung des Qualitätssicherungssystems sind Bestandteil dieser Mitteilung.

(9) Gemäß Artikel 10 (1) der Richtlinie 94/9/EG ist hinter der CE-Kennzeichnung die Kennnummer 0102 der PTB als der benannten Stelle anzugeben, die in der Produktionsüberwachungsphase tätig wird.

Zertifizierungsstelle Explosionsschutz
Im Auftrag
Dr.-Ing. U. Johannsmeyer
Regierungsdirektor

Braunschweig, 19. März 2004

Seite 1/1

KEMA

EC-TYPE EXAMINATION CERTIFICATE

Versatile products and verified safety

Despite the restrictive safety requirements in hazardous areas, explosion-protected weighing equipment from Sartorius lets you use all the advantages of cutting-edge scales:

- Best accuracy and filter algorithms for reliable weighing data
- User-friendliness for safe work sequences
- Advanced monolithic, 21st-century weighing technology for resolutions of up to 600,000 display digits
- GMP-compliant recording|printing
- Wide variety of interfaces
- Rugged design

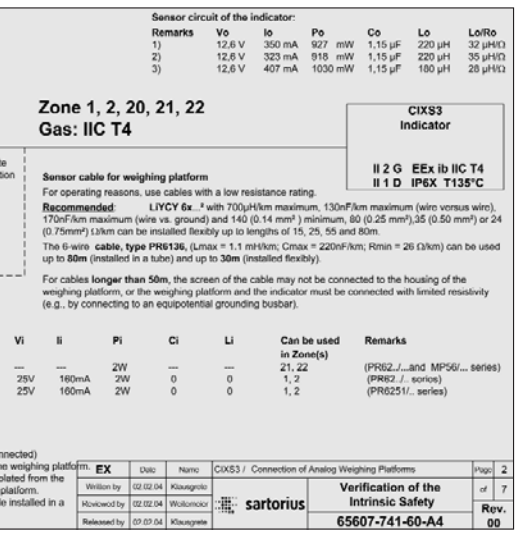
Considering all these features, Sartorius offers an array of products that enable you to easily implement the widest variety of complex weighing solutions. In this brochure, you will find examples of equipment combinations with Sartorius EX products for use in various hazardous areas.

The ATEX Directive stipulates that the operator of equipment in a hazardous area must supply written conformity assessment that verifies the safety of the equipment assembly. This must include the individual characteristic values of the equipment configuration including all connecting cables. Explosion risk assessment also covers non-electrical equipment (e.g., roller conveyors).

If only Sartorius components are used in your specific weighing equipment assembly, we have already tested their compatibility and describe this in the Verification of Intrinsic Safety diagrams that are automatically supplied with Sartorius explosion-protected equipment. These diagrams consider all combinations described for the approved equipment so that you can use the appropriate set of Verification of Intrinsic Safety diagrams and instructions as part of your own explosion protection documents.

You will also find this extra Sartorius "Verification of Intrinsic Safety" service useful if you combine Sartorius components with those of other manufacturers (e.g., load cells) or need to select the matching valves for a batching system. For every externally accessible intrinsically safe circuit, Sartorius Verification of Intrinsic Safety diagrams indicate the maximum permissible parameters, such as voltage, current, power, capacitance and inductance.

Advantage: you save time and money in preparing new explosion safety documents!



Sensor circuit of the indicator:

Remarks	Vo	Io	Po	Co	Lo	Lo/Ro
1)	12,6 V	350 mA	927 mW	1,15 µF	220 µH	32 µH/Ω
2)	12,6 V	323 mA	918 mW	1,15 µF	220 µH	35 µH/Ω
3)	12,6 V	407 mA	1030 mW	1,15 µF	180 µH	28 µH/Ω

Zone 1, 2, 20, 21, 22
Gas: IIC T4

CIXS3 Indicator

II 2 G EEx ib IIC T4
II 1 D IP6X T135°C

Sensor cable for weighing platform

For operating reasons, use cables with a low resistance rating.

Recommended: **LiYCY 6x..²** with 700µH/km maximum, 130nF/km maximum (wire versus wire), 170nF/km maximum (wire vs. ground) and 140 (0.14 mm²) minimum, 80 (0.25 mm²),35 (0.50 mm²) or 24 (0.75mm²) Ω/km can be installed flexibly up to lengths of 15, 25, 55 and 80m.

The 6-wire **cable, type PR6136,** (Lmax = 1.1 mH/km; Cmax = 220nF/km; Rmin = 26 Ω/km) can be used up to **80m** (installed in a tube) and up to **30m** (installed flexibly).

For cables **longer than 50m**, the screen of the cable may not be connected to the housing of the weighing platform, or the weighing platform and the indicator must be connected with limited resistivity (e.g., by connecting to an equipotential grounding busbar).

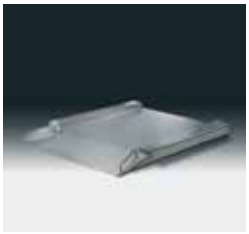
Vi	Ii	Pi	Ci	Li	Can be used in Zone(s)	Remarks
---	---	2W	---	---	21, 22	(PR62../...and MP56/... series)
25V	160mA	2W	0	0	1, 2	(PR62../.. series)
25V	160mA	2W	0	0	1, 2	(PR6251/.. series)

nnected)
e weighing platform. EX | Date | Name | CIXS3 / Connection of Analog Weighing Platforms | Page 2
plated from the | Written by 02.02.04 Klausgroto | of 7
platform. | Reviewed by 02.02.04 Wollomcior | sartorius | Verification of the Intrinsic Safety | Rev. 00
e installed in a | Released by 03.03.04 Klausgrete | 65607-741-60-A4

Potentially explosive atmosphere — **Zone classification for use**

		Risk present continuously or for long periods or frequently	Risk likely to occur in normal operation occasionally	Risk unlikely to occur and, if so, for a short period of time only
Safety measure (category acc. to Directive 94/9/EC (ATEX)		Very high (Category 1)	High (Category 2)	Normal (Category 3)
IEC| CENELEC	Gases Dusts	Zone 0 (II 1 G) Zone 20 (II 1 D)	Zone 1 (II 2 G) Zone 21 (II 2 D)	Zone 2 (II 3 G) Zone 22 (II 3 D)
US	NEC 505 NEC 500	Zone 0 Division 1	Zone 1	Zone 2 Division2

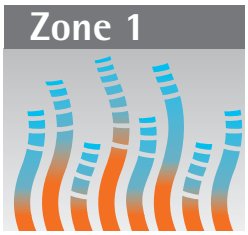
Category 2 equipment also offers a considerably higher level of protection in category 3 as well.



IFX flat-bed scale

IUX pallet scale

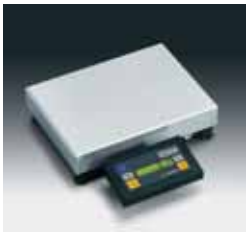
EX load cell



Factory EX series

Factory series indicator

Factory series, digital
IS-X precision platforms



Economy series

Combics EX indicator

Zone 1 (according to CENELEC, IEC)
Division of hazardous areas according to the Directive 1999/92/EC, ATEX 137:

A place in which an explosive atmosphere consisting of a mixture with air or flammable substances in the form of gas, vapor or mist is likely to occur in normal operation occasionally.

This zone requires equipment group **2G** (1G is also possible).

Factory series:
Compact FC-X and FCA-X precision scales
- Weighing capacity from 0.001 g to 300 kg, also factory-verified for legal metrology
- Type of ignition protection: intrinsically safe, ATEX: II 2 G EEx ib IIC T4
- With monolithic weigh cell (metrological advantages; built-in, motorized calibration weight, advantageous for use in quality systems)
- RS-232C data interface standard (other optional data interfaces can be installed)
- Combinable application programs and product data memory
- Backlit graphical display for menu-driven prompts in plain text (industrial-grade plastic or stainless steel)
- Can be networked with up to 8 client devices

Factory series: FCT-X indicator
- With built-in A/D converter for analog platforms or load cells up to 120 t
- Type of ignition protection: intrinsically safe, ATEX: II 2 G EEx ib IIC T4
- Data interface standard (other optional data interfaces can be installed)
- Combinable application programs and product data memory
- Backlit graphical display for menu-driven prompts in plain text for configuration of the A/D converter
- Can be networked with up to 8 client devices

Factory series:
IS-X digital precision platforms
- Weighing capacity from 0.001 g to 300 kg, also factory-verified for legal metrology
- Type of ignition protection: intrinsically safe, ATEX: II 2 G EEx ib IIC T4, from 16 kg and up: II 2G 1D EEx ib IIC T4 T135°C
- With monolithic weigh cell (metrological advantages; built-in, motorized calibration weight, advantageous for use in quality systems)
- RS-232C data interface standard (other optional data interfaces can be installed)
- For use as a digital, explosion-protected "weighing sensor" connected to PLCs, or a max. of 2 platforms can be connected to the Combics indicator (in a hazardous area) or to a series X5 controller (in the non-hazardous area and connected via converter|barrier)
- Can be networked with up to 8 client devices

Economy*|PMA series, EB-X, or
Economy "stainless steel", EC1XS
- Economy (aluminum die-cast): Weighing capacity from 0.1 g to 150 kg
- Economy (stainless steel): capacity from 0.1 g to 3 t, also verifiable for legal metrology
- Type of ignition protection (aluminum die-cast enclosure): intrinsically safe, ATEX: II 2 G EEx ib IIC T4
- Type of ignition protection (stainless steel): Intrinsically safe II 2 GD EEx ib IIB T4 T155°C
- RS-232C data interface standard (optional RS-422 data interface)

* Known as the Express series in North America

Combics series: CIXS3 indicator
- With built-in A/D converter for analog platforms or load cells up to 32 t; optional interface for digital platform
- Type of ignition protection: intrinsically safe, ATEX: II 2G 1D EEx ib IIC T4 T135°C
- Stainless steel housing with cable glands
- 2 interface ports (1 RS-232C|RS-422|RS-485 configurable by software) standard
- 2 application kits for automatic single-component filling up to a target weight
- Can be networked with up to 8 client devices

Combics series: CAPXS platforms
- Weighing capacity from 0.1 g to 3 t, also factory-verified for legal metrology
- Type of ignition protection: intrinsically safe, ATEX: II 2 GD EEx ib IIC T4..T6 T135°...155°C
- 11 different sizes
- Low-profile, stainless steel design
- Other materials optional for the load plate, underframe, and lift-deck system

PR62..|6. load cells
- Wide capacity range up to 300 t
- Type of ignition protection: intrinsically safe, ATEX: II 1G (also 2G depending on the type) 1D EEx ib IIC T4 T85°C IP65
- Completely hermetically encapsulated, IP68
- Various designs, mounting kits and accessories
- Tension and bending beam load cells made of special high-strength steel or stainless steel for platform, hybrid, tank, hopper scales and suspended vessels
- Compression load cells made of highly corrosion-resistant stainless steel for precision weighing in tank, vessel and silo scales
- PanCake® level cells, ultra-low profile design (25|35 mm), for level-by-weight measurements of liquids and bulk solids
- Specialty load cells for trucks and freight cars

IFXS flat-bed scales
- Weighing capacity from 0.1 g to 3 t, also factory-verified for legal metrology (1 × 3000e|2 × 3000e; class III)
- Type of ignition protection: intrinsically safe, ATEX: II 2G 1D EEx ib IIC T4 T135°C
- High-grade material and outstanding workmanship – design ideal for use in the pharmaceutical industry
- Easy to clean thanks to load plate lifting mechanism
- Exceptionally low-profile design for especially easy loading
- High protection rating: IP68

IUXS pallet scales
- Weighing capacity from 0.1 g to 1.5 t, also factory-verified for legal metrology (1 × 3000e|2 × 3000e; class III)
- Type of ignition protection: intrinsically safe, ATEX: II 2G 1D EEx ib IIC T4 T135°C
- High protection rating: IP68

Combics EX series indicator

Combics EX series – analog platforms

EX load cells

IFX flat-bed scale

IUX pallet scale

Zone 21

Zone 21 (acc. to CENELEC, IEC)
Division of hazardous areas according to the Directive 1999/92/EC, ATEX 137:

A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is likely to occur in normal operation occasionally.

This zone requires equipment group **2D** (1D is also possible).

Combics series: CIXS3 indicator
- With built-in A/D converter for analog platforms for load cells up to 32 t; optional interface for digital platform
- Type of ignition protection: intrinsically safe, ATEX: II 2G 1D EEx ib IIC T4 T1 35°C
- Stainless steel housing with cable glands
- 2 interface ports (1 RS-232C|RS-422|RS-485 configurable by software) standard
- 2 application kits for automatic single-component filling up to a target weight
- Can be networked with up to 8 client devices

Combics series: CAPXS platforms
- Weighing capacity from 0.1 g to 3 t, also factory-verified for legal metrology
- Type of ignition protection: intrinsically safe, ATEX: II 2 GD EEx ib IIC T4..T6 T135°...155°C
- 11 different sizes
- Low-profile, stainless steel design
- Other materials optional for the load plate, underframe, and lift-deck system
- Can be used with Combics CIXS3 indicator also in zone 20

Economy EC1XS stainless steel series
- Weighing capacity from 0.1 g to 3 t
- Type of ignition protection: intrinsically safe II 2 GD EEx ib IIB T4 T155°C
- Housing, display unit and platforms made of stainless steel
- RS-232C data interface standard (optional RS-422 data interface)

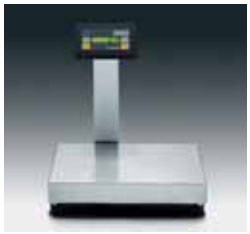
PR62..|6 load cells
- Wide capacity range up to 300 t
- Type of ignition protection: intrinsically safe, ATEX: II 1G (also 2G depending on the type) 1D EEx ib IIC T4 T85°C IP65
- Completely hermetically encapsulated, IP68
- Various designs, mounting kits and accessories:
  - Tension and bending beam load cells made of special high-strength steel or stainless steel for platform, hybrid, tank, hopper scales and suspended vessels
  - Compression load cells made of highly corrosion-resistant stainless steel for precision weighing in tank, vessel and silo scales
  - PanCake®, level cells, ultra-low profile design (25|35 mm), for level-by-weight measurements of liquids and bulk solids
  - Specialty load cells for trucks and freight cars

IFXS flat-bed scales
- Weighing capacity from 0.1 g to 3 t, also factory-verified for legal metrology (1 × 3000e|2 × 3000e; class (III))
- Type of ignition protection: intrinsically safe, ATEX: II 2G 1D EEx ib IIC T4 T135°C
- High-grade material and outstanding workmanship – design ideal for use in the pharmaceutical industry
- Easy to clean thanks to load plate lifting mechanism
- Exceptionally low-profile design for especially easy loading
- High protection rating: IP68

IUXS pallet scales
- Weighing capacity from 0.1 g to 1.5 t, also factory-verified for legal metrology (1 × 3000e|2 × 3000e ; class (III))
- Type of ignition protection: intrinsically safe, ATEX: II 2G 1D EEx ib IIC T4 T135°C
- High protection rating: IP68

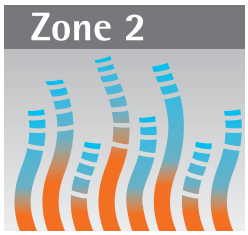
Factory series:
IS-X digital precision platforms
- Weighing capacity from 0.001 g to 300 kg, also factory-verified for legal metrology
- Type of ignition protection: intrinsically safe, ATEX: II 2 G EEx ib IIC T4; from 16 kg and up: II2G 1D EEx ib IIC T4 T135°C
- With monolithic weigh cell (metrological advantages; built-in, motorized calibration weight, advantageous for use in quality systems)
- RS-232C data interface standard (other optional data interfaces can be installed)
- For use as a digital, explosion-protected "weighing sensor" connected to PLCs, or a max. of 2 platforms can be connected to the Combics indicator (in a hazardous area) or to a series X5 controller (in the non-hazardous area and connected via converter|barrier)
- Can be networked with up to 8 client devices

Modular series
isi indicator



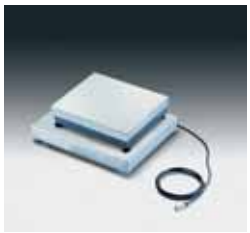
Economy series E

Quality series Q



Combics series

Flat-bed scale



Factory series
IS digital precision platform

Pallet scale

X5 controller

Zone 2 (acc. to CENELEC, IEC)
Division of hazardous areas according to the Directive 1999/92/EC, ATEX 137:

A place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapor or mist is not likely to occur in normal operation but, if it does occur, will persist for a short period only.

This zone requires equipment group **3G** (1G or 2G is also possible).

Combics series: CIS. indicator + Option Y2
- With built-in A/D converter for analog platforms or load cells up to 32 t
- Type of ignition protection: "restricted breathing enclosure" (non-breathing), ATEX: II 3GD EEx nR II T6 T80°C
- In 4 versions featuring different levels of applications
- Stainless steel housing with cable glands
- 3 interface ports standard
- Can be networked with up to 8 "clients"

Combics series:
CAPx platforms + Option Y2
- Weighing capacity from 0.1 g to 3 t, also factory-verified for legal metrology
- Type of ignition protection: "non-sparking," ATEX: II 3 GD EEx nA II T6 T80°C
- Low-profile, stainless steel design
- Other materials optional for the load plate, underframe and lift-deck system

Combics series:
CW.S. complete scale + Option Y2
- Weighing capacity from 0.1 g to 3 t, also factory-verified for legal metrology
- Type of ignition protection: "non-sparking, restricted breathing enclosure," ATEX: II 3 GD EEx nAR II T6 T80°C
- 4 display unit versions featuring different levels of applications
- Stainless steel material, 11 different sizes
- Customized equipment and features (interfaces, materials, ...) optionally available

Factory series:
IS digital precision platforms
- Weighing capacity from 0.1 g to 300 kg, also factory-verified for legal metrology
- Type of ignition protection (150, 300 kg): "restricted breathing enclosure" ATEX: II 3 GD EEx nR II T6 T80 °C
- Type of ignition protection (16...64 kg): "non-sparking," ATEX: II 3 GD EEx nA II T4 T80°C IP65 (without built-in, motorized calibration weight)
- RS-232C data interface standard (other optional data interfaces can be installed)
- Can be networked with up to 8 client devices

Modular series: isi terminal|indicator
- Terminal (or with built-in A/D converter as an indicator)
- 3 platforms max. can be connected
- Type of ignition protection: "energy limited," ATEX: II 3 G EEx nL IIB T5
- With numerous applications programs that can be combined with one another
- Wide variety of interfaces

IFS and IFP flat-bed scales with Option Y2
- Weighing capacity 0.1 g to 3 t, also factory verified for legal metrology
- IFS material: stainless steel; IFP material: painted steel; other materials optional
- Type of ignition protection: "non-sparking," ATEX: II 3GD EEx nA II T6 T80°C
- High-grade material and outstanding workmanship – design ideal for use in the pharmaceutical industry
- Easy to clean thanks to load plate lifting mechanism
- Exceptionally low-profile design for especially easy loading
- High protection rating: IP68

IUS and IUG pallet scales with Option Y2
- Weighing capacity from 0.1 g to 1.5 t, also factory-verified for legal metrology (1 × 3000e|2 × 3000e ; class (III))
- IUS material: stainless steel; IUG material: galvanized steel
- Type of ignition protection: "non-sparking," ATEX: II 3GD EEx nA II T6 T80°C
- High protection rating: IP68

Quality series: QA and QC
compact scales and QCT indicator
- Weighing capacity from 0.1 g to 150 kg, also factory-verified for legal metrology
- Type of ignition protection: "non-sparking, non-incendive circuits," ATEX: II 3 G Ex nAC IIB T4
- Combinable application programs and product memory
- Numeric keypad
- Type of protection rating: IP65

Factory series: compact FD
- Weighing capacity from 1 g to 300 kg, also factory-verified for legal metrology
- Type of ignition protection: "restricted breathing enclosure," ATEX: II 3 G EEx nR II T6
- With monolithic weigh cell (metrological advantages; built-in, motorized calibration weight)
- RS-232C data interface standard
- Practical application programs

Economy EA, EB series, PMA
- Economy (aluminum die-cast): weighing capacity 0.1 g to 150 kg, also factory-verified for legal metrology, depending on the model
- Type of ignition protection: "non-sparking, non-incendive circuits," ATEX: II 3 G Ex nAC IIB T4
- RS-232C data interface standard (optional RS-422 data interface)
- Backlit LCD

PR17... transmitters
- Modern field instrumentation for tank and hopper scales
- Type of ignition protection (PR171x digital transmitters): "non-sparking," ATEX: II 3 G Ex nA II T4
- Type of ignition protection (PR1720 fieldbus transmitters): "non-sparking," ATEX: II 3 GD EEx nA II T4 T100°C IP65
- Intrinsically safe load cell power supply
- With or without weight display
- "Smart calibration" via load cell data
- Field housing: IP65 or 19'' Euroformat

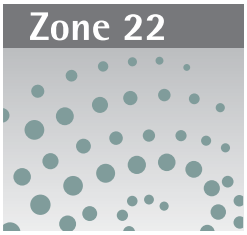
X5 controllers
- Pre-programmed applications
- Type of ignition protection: "non-sparking, hermetically sealed device, energy limited," ATEX: II 3 G Ex nACL II T4
- Easy menu-guided operation, integrated PLC function
- Option cards already installed

Load cells
- Wide capacity range up to 300 t
- Various designs (tension and bending beam load cells, compression load cells, PanCake® level cells, specialty load cells)

EX load cells

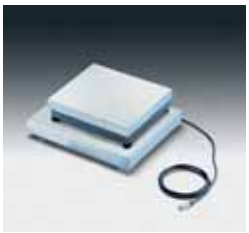
PR1720 fieldbus transmitter

Discovery metal detector



Combics indicator

Combics platform



IS weighing platform

IFX flat-bed scale

IUX pallet scale

Zone 22 (acc. to CENELEC, IEC)
Division of hazardous areas according to the Directive 1999/92/EC, ATEX 137:

A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is not likely to occur in normal operation but, if it does occur, will persist for a short period only.

This zone requires equipment group **3D** (1D and 2D are also possible).

Combics series: CIS indicator + Option Y2
- Can be used with Option Y2 in zones 2 and 22
- With built-in A/D converter for analog platforms for load cells up to 32 t
- Type of ignition protection: "restricted breathing enclosure," ATEX: II 3GD EEx nR II T6 T80°C
- Stainless steel housing with cable glands
- 3 data interfaces standard
- Can be networked with up to 8 client devices

Combics series:
CAPx platforms + Option Y2
- Weighing capacity from 0.1 g to 3 t, also factory-verified for legal metrology
- Type of ignition protection: "non-sparking," ATEX: II 3 GD EEx nA II T6 T80°C
- Low-profile, stainless steel design
- Other materials optional for the load plate, underframe, and lift-deck system

Combics series:
CW.S. complete scale + Option Y2
- Weighing capacity from 0.1 g to 3 t, also factory-verified for legal metrology
- Type of ignition protection: "non-sparking, restricted breathing enclosure," ATEX: II 3 GD EEx nAR II T6 T80°C
- 4 display unit versions featuring different levels of applications
- Stainless steel material, 11 different sizes
- Customized equipment and features (interfaces, materials...) optionally available

IFS and IFP flat-bed scales with Option Y2
- Weighing capacity from 0.1 g to 3 t, also factory-verified for legal metrology (1 ×3000e|2 × 3000e ; class (III))
- IFS material: stainless steel; IFP material: painted steel; other materials optional
- Type of ignition protection: "non-sparking," ATEX: II 3GD EEx nA II T6 T80°C
- High-grade material and outstanding workmanship – design ideal for use in the pharmaceutical industry
- Easy to clean thanks to load plate lifting mechanism
- Exceptionally low-profile design for especially easy loading
- High protection rating: IP68

IUS and IUG pallet scales with Option Y2
- Weighing capacity from 0.1 g to 1.5 t, also factory-verified for legal metrology (1 × 3000e|2 × 3000e ; class (III))
- IUS material: stainless steel; IUG material: galvanized steel
- Type of ignition protection: "non-sparking", ATEX: II 3GD EEx nA II T6 T80°C
- High protection rating: IP68

Factory series:
IS digital precision platforms
- Weighing capacity from 0.1 g to 300 kg, also factory-verified for legal metrology
- Type of ignition protection (150, 300 kg): "restricted breathing enclosure," ATEX: II 3 GD EEx nR II T6 T80°C
- Type of ignition protection (16...64 kg): "non-sparking," ATEX: II 3 GD EEx nA II T4 T80°C IP65 (without built-in motorized calibration weight)
- RS-232C data interface standard (other optional data interfaces can be installed)
- For use as a digital, explosion-protected "weighing sensor" connected to PLCs, or a max. of 2 platforms can be connected to the Combics indicator (in a hazardous area) or to a series X5 controller (in the non-hazardous area)
- Can be networked with up to 8 client devices
- PR1720 fieldbus transmitter

PR1720 transmitters
- Modern field instrumentation for tank and hopper scales
- Type of ignition protection (PR1720 fieldbus transmitters): "non-sparking," ATEX: II 3 GD EEx nA II T4 T100°C IP65
- Intrinsically safe load cell power supply
- Fieldbus protocols, interface (also analog output)
- "Smart calibration" via load cell data
- Field housing: IP65

Discovery metal detector:
- For detection of metal particles
- Type of ignition protection, ATEX: II 3 D T80 °C IP5X
- Safeguards against machine damage and downtimes
- Optimal compliance with legal requirements, e.g., HACCP
- Assures product quality in compliance with ISO9001

Load cells
- Wide capacity range up to 300 t
- Various designs (tension and bending beam load cells, compression load cells, PanCake® level cells, specialty load cells)

Sartorius AG
Weender Landstrasse 94–108
37075 Goettingen, Germany

Phone +49.551.308.0
Fax +49.551.308.3289

www.sartorius.com