Specifications

FS series

Model name	FS 623	FS 3202	FS 6202	FS 15001	FS 30K0.1G	FS 60K0.1G	FS 100K1G	FS 200K1G	FS 150K1GF	FS 300K1GF
Capacity	620g	3200g	6200g	15000g	30kg	60kg	100kg	200kg	150kg	300kg
Readability (d)	0.001g	0.01g	0.01g	0.1g	0.1g	0.1g	1g	1g	1g	1g
Verification intervals (e)	0.01g	0.1g	0.1g	1g	1g	1g	10g	10g	10g	10g
Pan size	140mm dia	190×190 mm			310×330 mm	380×530 mm			800×600 mm	
Repeatability	0.001g	0.01g	0.01g	0.1g	0.1g	0.1g	1g	1g	0.7g	0.8g
Non-Linearity	±0.002g	±0.02g	±0.02g	±0.2g	±0.1g	±0.2g	±2g	±2g	±3g	±5g
Calibration	by external weight	by external weight	by external weight	by external weight	by external weight	by external weight	by external weight	by external weight	by external weight	by external weight

Common specifications
IP protction rating 65
OIML & EC approval class 2
Measuring system : tuning-fork frequency system
Power supply : AC adaptor and dry-cell battery *1
Output1 : RS232C or option connector
Output2 : RS232C
Indicator : i02 or i03 selectable *2   model name with i02: FS 623-i02
model name with i03: FS 623-i03
Display :   Back-lit LCD
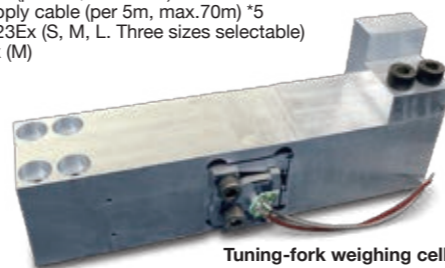Scale cable length : 5m for FS 150K1GF and 300K1GF. 1m for all other models. *3

Options *Some options are not available together at the same time. Please see our website or contact distributor for detail.
FS-RS : additional RS232C output
FS-R4 : RS422A output
FS-LM : Relay contact
FS-DS : display stand
FS-PK : Pole stand
FS-SC : Extended scale cable (per 5m, max.30m)
FS-WS : Windshield for FS 623 (S, M, L. Three sizes selectable)
FS-OX(S) : Communication option box (S)
FS-OX(M) : Communication option box (M)

FZ series ⟨Ex⟩

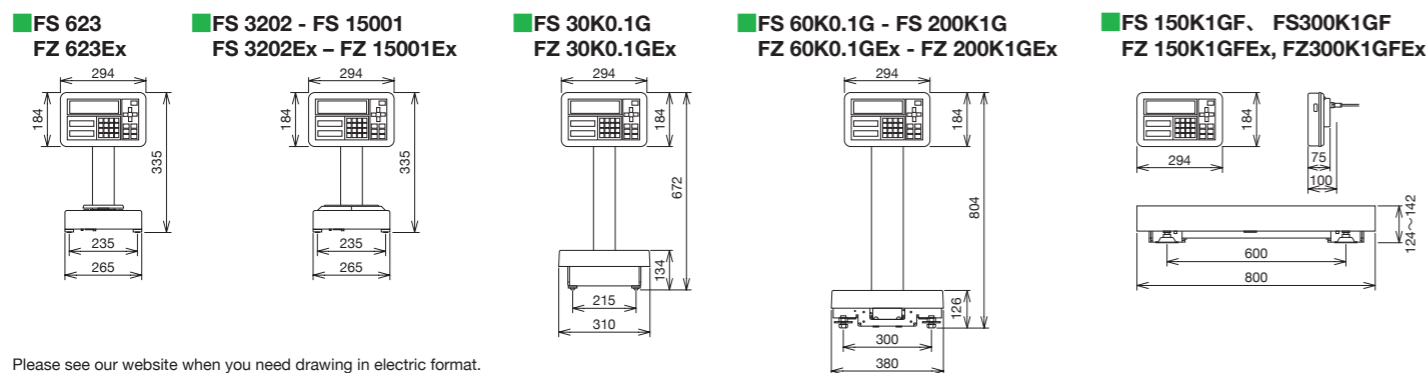| Model name	FZ 623Ex	FZ 3202Ex	FZ 6202Ex	FZ 15001Ex	FZ 30K0.1GEx	FZ 60K0.1GEx	FZ 100K1GEx	FZ 200K1GEx	FZ 150K1GFEx	FZ 300K1GFEx
Capacity	620g	3200g	6200g	15000g	30kg	60kg	100kg	200kg	150kg	300kg
Readability (d)	0.001g	0.01g	0.01g	0.1g	0.1g	0.1g	1g	1g	1g	1g
Verification intervals (e)	0.01g	0.1g	0.1g	1g	1g	1g	10g	10g	10g	10g
Pan size	140mm dia	190×190 mm			310×330 mm	380×530 mm			800×600 mm	
Repeatability	0.001g	0.01g	0.01g	0.1g	0.1g	0.1g	1g	1g	0.7g	0.8g
Non-Linearity	±0.002g	±0.02g	±0.02g	±0.2g	±0.1g	±0.2g	±2g	±2g	±3g	±5g
Calibration	by external weight	by external weight	by external weight	by external weight	by external weight	by external weight	by external weight	by external weight	by external weight	by external weight

Common specifications
ATEX approval   II 1 G Ex ia IIB T4 Ga
IP protction rating 65
OIML & EC approval class 2
Measuring system : tuning-fork frequency system
Power supply : Power supply box attached as standard
Output1 : RS232C or option connector
Output2 : N/A
Indicator : i02 or i03 selectable *2   model name with i02: FZ 623Ex-i02
model name with i03: FZ 623Ex-i03
Display :   LCD without back-lit
Scale cable length : 5m for FZ 150K1GFEx and 300K1GFEx.
1m for all other models. *3
Power supply cable : 5m. *4
*1 D type (USA), R20 and LR20 (IEC category) are available.
*2 Not changeable after delivery
*3 "scale cable" is cable between platform and indicator.
*4 "power supply cable" is cable between indicator and power supply box.
*5 Please contact local distributor in case you need more than 70m length.

Options *Some options are not available together at the same time. Please see our website or contact distributor for detail.
FS-RS : additional RS232C output
FS-R4 : RS422A output
FS-LM : Relay contact
FS-DS : display stand
FS-PK : Pole stand
FS-SC : Extended scale cable (per 5m, max.30m)
FZ-PC : Extended power supply cable (per 5m, max.70m) *5
FS-WS : Windshield for FZ 623Ex (S, M, L. Three sizes selectable)
FZ-PX(M) : Power supply box (M)

Tuning-fork weighing cell

Dimensions

■FS 623
FZ 623Ex
294 / 184 / 335 / 235 / 265

■FS 3202 - FS 15001
FS 3202Ex – FZ 15001Ex
294 / 184 / 335 / 235 / 265

■FS 30K0.1G
FZ 30K0.1GEx
294 / 184 / 672 / 134 / 215 / 310

■FS 60K0.1G - FS 200K1G
FZ 60K0.1GEx - FZ 200K1GEx
294 / 184 / 804 / 126 / 300 / 380

■FS 150K1GF、FS300K1GF
FZ 150K1GFEx, FZ300K1GFEx
294 / 184 / 75 / 100 / 124~142 / 600 / 800

Please see our website when you need drawing in electric format.
The contents of this catalogue are subject to change due to modifications and/or other reasons.

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SHINKO DENSHI CO., LTD.
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3B.2107

JQA-2834
TSUKUBA
ISO 9001

FS Series
High Precision Industrial Balance

High Precision Weighing for Every Process in Manufacturing

FZ series ⟨Ex⟩
For hazardous area
Intrinsical Safety
Ex ia IIB T4 Ga

SHINKO DENSHI CO., LTD.

Sophisticated weighing solution for lab professionals

FS Series
High Precision Industrial Balance

Large capacity, max. 300kg
High resolution up to 620,000 divisions
IP protection 65

FS 150K1GF & 300K1GF
(Platform size 800 x 600mm)

High Capacity and High Precision – Two in One

FS series attains high capacity and high precision in single unit. With FS 300K1GF model, you can measure up to 300KG with 1g readability, which satisfies two demands in single unit, high capacity and high resolution.
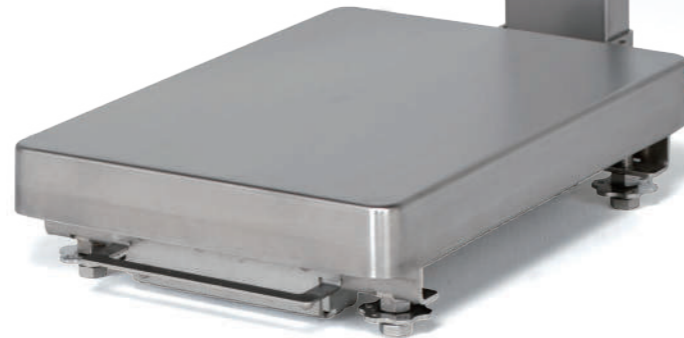
Unique technology "tuning-fork" sensor enables "two-in-one" feature. This unique technology also ensures excellent weighing performance and long-term stability even in tough condition.

FS 60K0.1G, 100K1G & 200K1G

FS 623
(optional windshield)

FS 3202, 6202 & 15001

Reliable measurement for every process in manufacturing

FS series helps your daily weighing operation in every process in manufacturing line. With weighing range from 620g to 300kg and minimum read-out 1mg, FS can cover every process, in-bound material control, production, inspection and out-bound control, etc...
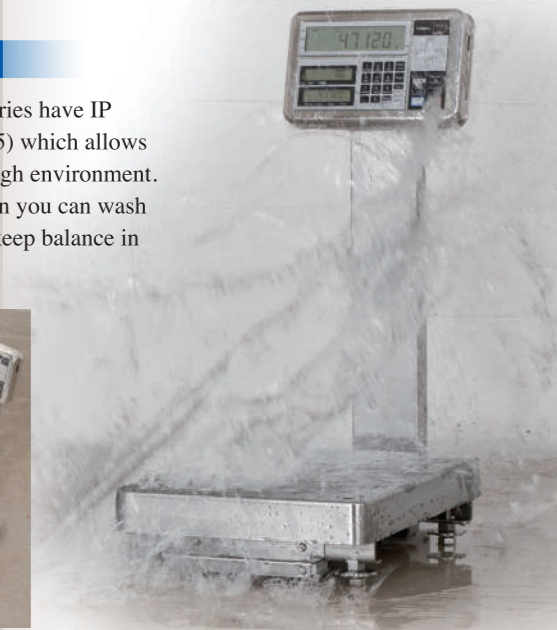

Selectable indicator

You can choose one of two indicators, i02 type and i03 type. i03 type has two sub-displays in which two additional information can be indicated (tare weight, gross weight, lower and upper limit, etc..) It make weighing operation easier and more comfortable.

i02   i03

IP protection, easy to clean

All models in FS series have IP protection (rating 65) which allows FS to be used in tough environment. After daily operation you can wash FS with water and keep balance in clean condition.
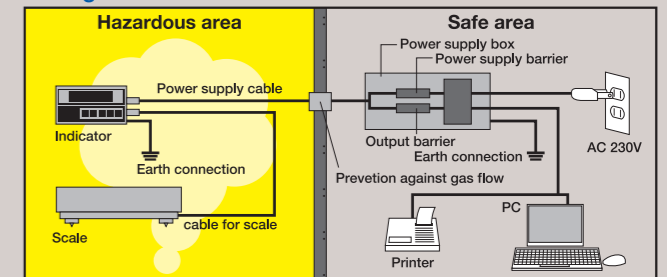
Hazardous use, FZ series

Ex   II 1 G Ex ia IIB T4 Ga

Weighing operation must be often carried out in hazardous area in industry like pharmaceutical, aloma-chemicals, etc...We offer Ex models as FZ series with category 1G (zone 0, 1 and 2). All advantages such as "two-in-one", IP protection, excellent weighing performance are available in FZ series.

Configuration

Hazardous area — Indicator — Power supply cable — Earth connection — Scale — cable for scale

Safe area — Power supply box — Power supply barrier — Output barrier — Earth connection — Prevetion against gas flow — AC 230V — PC — Printer

Operation area

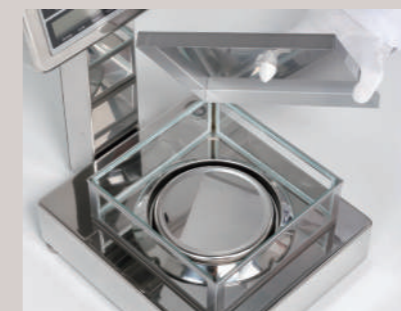|	II A	II B	II C
T1	aceton, benzene, ammonia, methanol, ethane, toluene, propane, methane, acetic acid	coke-oven gas, acrylonitrile, hydrocyanic acid, cyclopropane	hydrogen
T2	ethanol, butanol, butane, methyl methacrylate	ethylene, ethylene oxide, ethyl acrylate	acethylene
T3	gasoline, hexane, pentane	acrylaldehyde, dimethyl ether	
T4	acetaldehyde, trimethylamine	ethyl methyl ether, diethyl ether	
T5			carbon disulfide
T6	ethyl nitrite		ethyl nitrite

Options – for more efficient and useful operation –

We supply options like communication output, windshield, display stands, etc... Please contact local partners for detail (one output of RS232C is available as standard).
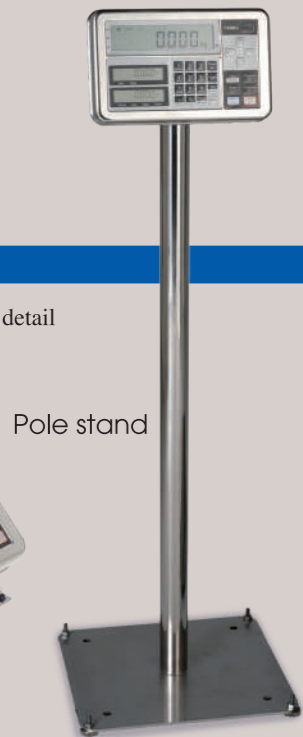
Signal output   Windshield for FS 623 / FZ 623Ex   Floor Stand   Pole stand