# **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		800×6	00 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									

#### Common specifications

IP prototion 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

Output 2: RS232C or IR (selectable in function setting)
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

RS422A output : Relay contact TCP/IP output

FS-DS: display stand FS-PK: Pole stand

FS-SC: Extended scale cable (per 5m. max.30m)

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		800×6	00 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									

#### Common specifications

II 1 G Ex ia IIB T4 Ga ATEX approval

IP prototion 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

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

Extended scale cable (per 5m, max.30m)

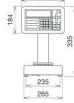
FZ-PC: Extended power supply cable (per 5m, max.70m) \*5 FS-WS: Windshield for FZ 623Ex (S, M, L. Three sizes selectable)



## **Dimensions**

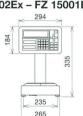
# FZ 623Ex

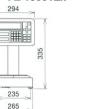
FS 623

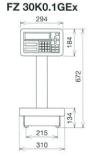


FS 3202Ex - FZ 15001Ex

FS 3202 - FS 15001

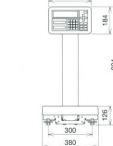






FS 30K0.1G



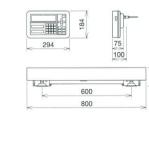


■FS 60K0.1G - FS 200K1G

FZ 60K0.1GEx - FZ 200K1GEx



# ■FS 150K1GF、 FS300K1GF FZ 150K1GFEx, FZ300K1GFEx



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.

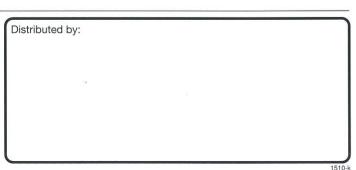
# SHINKO DENSHI CO., LTD.

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5 Series **High Precision Industrial Balance** 



**High Precision Weighing for Every Process in Manufacturing** 



Ex ia IIB T4 Ga

SHINKO DENSHI CO., LTD.

# Sophisticated weighing solution for lab professionals



# 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

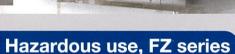
You can choose one of two indicators, i02 type and i03 type. i03 type has two sub-displays in which two additional information can be indicated (tare weight, gross weight, lower and upper limit, etc..) It make weighing operation easier and more comfortable.

# 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.

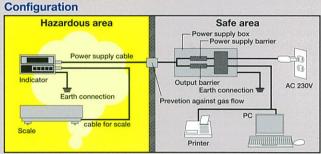




# II 1 G Ex ia IIB T4 Ga

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.



#### 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
тз	gasoline, hexane, pentane	acrylaldehyde, dimethyl ether	
T4	acetaldehyde, trimethylamine	ethyl methyl ether, diethyl ether	
T5			carbon disulfide
T6	ethyl nitrite		ethyl nitrite

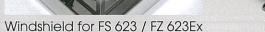


# Options – for more efficient and useful operation –

We supply options like communication output, windshield, display stands, etc... Please contact local partners for detail (one output of RS232C is available as standard).









Floor Stand

Signal output