

Capacity : 620g-300kg / Readability(d) : 0.001g-1g

LCD display

IP65

FZ series

Explosion-proof scale

Tuning-fork sensor

Correspond to the needs at explosion-proof workplace with 2 kinds of display and variety line-ups.



IEC 60079- 0: 2011 Ed6 EN60079- 0: 2012+A11
IEC 60079-11: 2011 Ed6 EN60079-11: 2012

Features

- Dust-proof/Water-proof structure compliant with IP65 standards.
- Panel angle can be adjusted in non-step.(excluding FZ-150KF, 300KF)

Common Specification

- Tare Zero to Full weighing range
- Span adjustment Manual operation Span Adjustment with external calibration weight
- ATEX approval II 1 G Ex ia II B T4 Ga
- Ingress Protection Rating IP65
- Over error "o-Err" showed when Full weight range + 9 more digits over
- Temperature and humidity range 5-40°C (Scale & display), 0-40°C (Power supply box), Up to 85% rh(without the dew condensation)
- Power source Power supply box attached as standard
- Output RS232C or option connector
- Indicator i02 or i03 selectable *2
model name with i02: FZ 623Ex-i02
model name with i03: FZ 623Ex-i03
- Scale cable length 5m for FZ 150K1GFEx and 300K1GFEx.
1m for all other models. *3
- Power supply cable 5m. *4

FZ 30K0.1GEx



FZ 60K0.1GEx
FZ 100K1GEx
FZ 200K1GEx

Model name	FZ 623Ex	FZ 3202Ex	FZ 6202Ex	FZ 15001Ex	FZ 30K0.1GEx
Capacity	620g	3200g	6200g	15000g	30kg
Readability (d)	0.001g	0.01g	0.01g	0.1g	0.1g
Verification intervals (e)	0.01g	0.1g	0.1g	1g	1g
Accuracy class	II	II	II	II	II
Repeatability	0.001g	0.01g	0.01g	0.1g	0.1g
Linearity	± 0.002g	± 0.02g	± 0.02g	± 0.2g	± 0.1g
Stabilization time	3.0 sec.	3.0 sec.	3.0 sec.	3.0 sec.	3.0 sec.
Pan size	140mm dia.	190 × 190 mm	190 × 190 mm	190 × 190 mm	310 × 330 mm
Dimensions(WDH)	294 x 352 x 570mm				310x444x672mm

Model name	FZ 60K0.1GEx	FZ 100K1GEx	FZ 200K1GEx	FZ 150K1GFEx	FZ 300K1GFEx
Capacity	60kg	100kg	200kg	150kg	300kg
Readability (d)	0.1g	1g	1g	1g	1g
Verification intervals (e)	1g	10g	10g	10g	10g
Accuracy class	II	II	II	II	II
Repeatability	0.1g	1g	1g	0.7g	0.8g
Linearity	± 0.2g	± 2g	± 2g	± 3g	± 5g
Stabilization time	2.5 sec.	2.5 sec.	2.0 sec.	2.0 sec.	2.0 sec.
Pan size	380 × 530 mm	380 × 530 mm	380 × 530 mm	800 × 600 mm	800 × 600 mm
Dimensions(WDH)	380x653x804mm			800x600x142mm	

Options

Models	Option name
FZ-RS	additional RS232C output
FZ-R4	RS422A output
FZ-LM	Relay contact
FZ-DS	Display stand
FZ-PK	Pole stand
FZ-PC	Extended power supply cable (per 5m, max.70m) *5
FZ-WS	Windshield for FZ623Ex (S, M, L. Three sizes selectable)
FZ-OX(M)	Communication option box (M)

* Some options are not available together at the same time. Please see PDF or contact distributor for data

Peripheral equipment

Models	Option name
CBM-910II	Standard Printer

*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

High Capacity and High Precision – Two in One

FZ series attains high capacity and high precision in single unit. With FZ 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.

2 kinds of display selectable for usage

Display i02: Convenient Key layout, and Display i02 for direct key, Display i03 with supplemental display is attached to indicate weighing status, selectable from 2 kinds of display .



Display Unit i03

Indicate weighing value
Tare / Upper Limit
Gross Weight / Lower Limit
Date / Time



Display Unit i02

Indicate weighing value



Shinko Denshi's explosion-proof scale is compliant for international standards' engineering criteria.

Intrinsically safe Explosion-proof Structure
Ex ia IIB T4 compliance

Temperature Class
Gas or Steam Explosion Class
Category of Explosion-proof structure
International criteria compliant

- **Category of Explosion-proof Structure (ia) *1**
Intrinsically Safe Explosion-proof Structure. The scale can be used at imminent dangerous location regardless the kinds of risk.
- **Explosion class for Gas or Steam**
Compliant for category B at factory or office
- **Temperature Class (T4) *2**
Maximum Surface Temperature (Ignition point) less than 135°C

* 1: Classification of dangerous point/ Explosion-proof criteria
Explosion-proof structure limits the usage dangerous points. Because of Shinko Denshi's explosion-proof scale is a intrinsic safe explosion-proof structure, scales can be used at any place including the most dangerous "Imminent Dangerous Location"
* 2: Hazardous characteristics of explosive dangerous gas.

High dangerous extent

High dangerous extent

Classification of dangerous area		Usage limitation for explosion-proof structure
		Technical Criteria
Imminent Dangerous area	Location where explosive atmosphere may exist continuously or for prolonged time period.	Intrinsical Safe Explosion-proof Structure (ia)
First Grade Dangerous area	Location where explosive atmosphere may bring up under normal status.	Intrinsically Safe Explosion-proof Structure (ia, ib) Pressure Tight Explosion-proof Structure Explosion-proof Increased Safety Structure
Second Grade Dangerous Area	Location where explosive atmosphere may bring up under the abnormal status.	Intrinsically Safe Explosion-proof Structure (ia, ib) Pressure Tight Explosion-proof Structure Explosion-proof Increased Safety Structure
Non-dangerous area	Location where no explosive atmosphere may bring up even under abnormal status.	

High dangerous extent			
	IIA	IIB	IIC
T1	acetone, 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	acetylene
T3	gasoline, hexane, pentane	acrylaldehyde, dimethyl ether	
T4	acetaldehyde, trimethylamine	ethyl methyl ether, diethyl ether	
T5			carbon disulfide
T6	ethyl nitrite		ethyl nitrite