



SEWHACNM

PRODUCTS CATALOG



Company Introduction

SEWHACNM is the foregoing leader in weighing and automatic control system business. Desperately contributing to the automatic control system at the factory with outgoing technology and service.

Our special Hi-Technology and experience accumulated from decades development & research can meet customer's various demands completely.

SEWHACNM's Controller is applicable to various customers factory condition, such as Hopper, Packer, Filler, Flecon, Conveyor and Auto Checker Scale with optimum performance, and three functions of controller, Operator and Displayer are integrated to maximize the user's convenience.

SEWHACNM has been focusing all R&D powers on developing Hi-Technology balanced between hardware and software.

Namely, hardware, high qualified digital weighing indicator featured with various external interfaces and software, easily usable to operators.

History

- 2014** - Developed new generation indicator SI400, SI410
- 2013** - Developed indicator SI460A, SI460C
- Acquired "CE" certification of indicator SI460C
- Designated as a Promising Export Firm
- 2012** - Acquired OIML certification of Shear beam Loadcell SB210, Tension Loadcell SS300
- 2011** - Developed Load Cell Transmitter wall mount type
- Acquired CE certification of Desk Mounting Type Weighing Indicator SI300
- 2010** - Developed Tiny wall mount size weighing digital indicator SI200
- 2009** - DIN size "CE" certification
- Appointed to export business partner (Korea Export Support Association)
- 2008** - Developed Double packer touch screen controller
- Acquired INNO-BIZ business certification
- 2007** - Acquired "CE" certification of SI4000 series
- Developed Hopper scale touch screen controller in R.P.C
- 2006** - Acquired component and material reliability certification
- Acquired patent of Complex weighing management controller system
- 2005** - Developed automatic truck weighing system controller
- 2004** - Technology innovation development business prize
- Acquired Patent of Auto screening system with angle meter by load cell
- 2003** - Acquired CLEAN BUSINESS PRIZE certification
- Developed external display
- 2002** - Acquired ISO9001 / KS A 9001:2001 certification
- 2001** - Developed weighing sensor (Load cell), Automatic truck scale system
- 2000** - Establish SEWHACNM corporation
- Developed relay type indicator
- 1995** - Establish SEWHA ENG.



SEWHACNM
WEIGHING SOLUTION

Global Network

As the world of business is being globalized, SEWHACNM also trying to wide its field to the world.

From South-East Asia to Middle-East Asia, even South-Africa, SEWHACNM has placed several agents to the world to cooperate with local businesses, and managed them by visiting and supporting consistently. SEWHACNM's technology is acknowledged internationally. SEWHACNM will meet the world customer's demands through the constant research and development.



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Indicator Selection Guide

	SI 4000	SI 4010	SI 4010R	SI 4100	SI 4630EF	SI 300	SI 200	SI 460A SI 480E	SI 460C SI 580E	SI 560A	SI 400	SI 410
F U N C T I O N												
Hold	●	●	●	●	●	●	●	●	●	●	●	●
Sub Display										●		
Parts Number Memory(kinds)	50	50	50	50						50	50	50
Control Method (step)			2	4					2	2		4
Relay Output (pcs)			3	6					4	4		7
External Input (pcs)	4	4	4	4			2	2	4	4	6	6
A P P L I C A T I O N												
Truck Scale	●	●			●	●	●	●			●	
Animal Scale	●	●			●	●	●	●			●	
Checkweigher			●	●	●	●	●	●				
Packer			●	●	●	●	●	●	●	●		●
Filler												
Tank Scale	●	●	●	●	●	●	●	●	●	●	●	●
Tester			●	●	●	●	●	●	●	●		●
W E I G H I N G F U N C T I O N												
Limit			●	●	●	●	●	●	●	●		●
Packer				●	●	●	●	●	●	●		●
Checker				●	●	●	●	●	●	●		●
Accumulator				●	●	●	●	●	●	●		●
User Choice				●	●	●	●	●	●	●		●

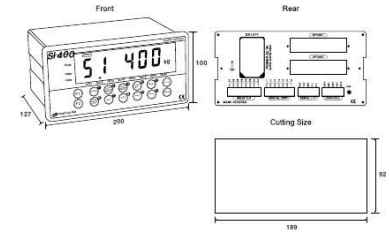
SI 400



Feature

- Dual color display
- User custom setting : External input, Relay output
- Hold Function : Sample, Average, Peak
- SD memory(option card)
- MODBUS(RTU) protocol(option card)

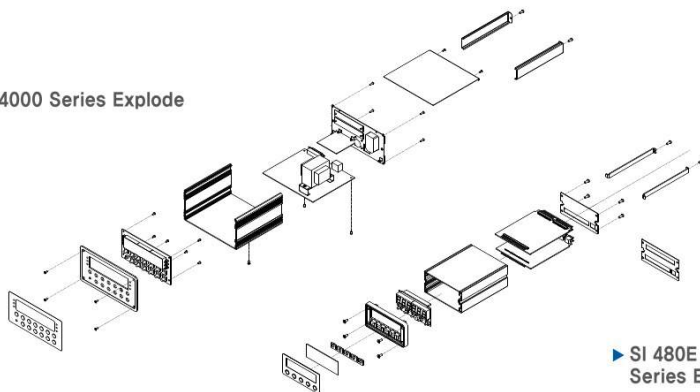
Physical Dimension [Unit:mm]



INTERFACE & OPTION	SI 4000	SI 4010	SI 4010R	SI 4100	SI 4200	SI 4300	SI 4400	SI 4410	SI 4500	SI 4630E	SI 200	SI 460A SI 480E	SI 460C SI 580E	SI 560A	SI 300	SI 400	SI 410
Current Loop	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RS232	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Parallel Print Interface	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Analog Out 0 ~ 10V	*	*	*	*	*	*	*	*	*	*	*	*	✓	*	*	*	*
Analog Out 4 ~ 20mA	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Extension serial Port	RS232C	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	RS422	*	*	*	*	*	*	*	*	*	✓	*	*	*	*	*	*
RS485	*	*	*	*	*	*	*	*	*	✓	✓	✓	✓	*	*	*	*
BCD In	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BCD Out	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ethernet	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

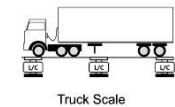
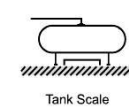
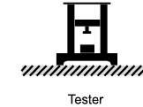
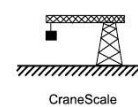
✓ Standard Installed ✓ Selectable * Additional order

▶ SI 4000 Series Explode



▶ SI 480E / SI 580E Series Explode

ANALOG PART	Input Sensitivity	Min. 0.1μV / Digit
	Load Cell Excitation	DC 5V
	Non-Linearity	0.001% of Full Scale
	Input Signal	Max 3.0 mV/V
DISPLAY PART	A/D Sampling	Max 60 time/sec, Sigma-Delta
	Resolution	Internal : 1/2,000,000 External : 1/20,000
	Main Display	7 Segment, 6 Digit Red FND, Letter size : 25.4mm
	State Alarm	Green LED, 8EA
GENERAL PART	Under Zero	Minus(-) Display
	Power Supply	AC Free Voltage(AC 100V ~ 240V, 50/60Hz)
	Operating Condition	Temperature : -10℃ ~ +40℃, Humidity : Under 85% RH
	Size/Weight	200(W)x100(H)x126.5(D) / 1.23kg
	Communication	RS232C, Current loop Standard built in, Modbus (Option)
	External Input	6EA
	Relay Output	None
	OPTION PART (Max 2EA)	Analog Output 0~10V, 4~20mA / Serial Interface RS232C, RS422, RS485 BCD Input / BCD Output / Ethernet / SD memory card



Simple Weighing Indicator

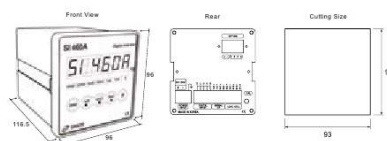
SI 460A



Feature

- Hold Function : Sample, Average, Peak
- Power Selectable : DC & AC Ordering Spec.
- MODBUS(RTU) protocol
- Option : Serial Comm, Analog Out.

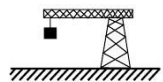
Physical Dimension [Unit:mm]



ANALOG PART	Input Sensitivity	Min. 0.1 μ V / Digit
	Load Cell Excitation	DC 5V
	Non-Linearity	0.001% of Full Scale
	Input Signal	Max 3.0 mV/V
	A/D Sampling	Max 60 time/sec, Sigma-Delta
DISPLAY PART	Resolution	Internal : 1/1,000,000 External : 1/20,000
	Main Display	7 Segment, 6 Digit Red FND, Letter size : 16.2mm
	Under Zero	Minus(-) Display
GENERAL PART	Φ 2 LED	STEADY, ZERO, TARE, HOLD, Tx, Rx, F
	Power Supply (Order Selectable)	DC 24V, 12W AC Free Voltage(AC 100V ~ 240V, 50/60Hz)
	Operating Condition	Temperature : -10°C ~ +40°C, Humidity : Under 85% RH
	Size/Weight	96(W) x 96(H) x 116.5(D) mm / 0.5kg(DC) 0.7kg(AC)
	Communication	RS422 & RS485 Mod bus
	External Input	4EA
	OPTION	RS232C, Analog output 4-20mA, 0-10V



Truck Scale



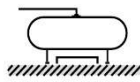
Crane Scale



Tester



Animal Scale



Tank Scale

Simple Weighing Indicator

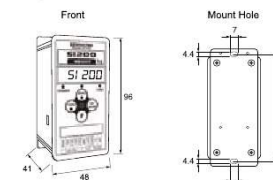
SI 200



Feature

- Wall & Rail Mounting Type
- Hold Function : Sample, Average, Peak
- RS232C & RS485 interface(User Selectable)

Physical Dimension [Unit:mm]



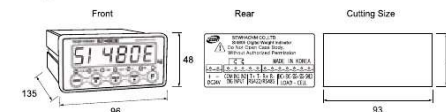
SI 480E



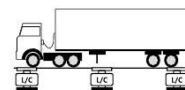
Feature

- User custom setting : External input
- Hold Function : Sample, Average, Peak
- MODBUS(RTU) protocol

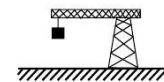
Physical Dimension [Unit:mm]



	SI 200	SI 480E	
ANALOG PART	Input Sensitivity	Min. 0.1 μ V / Digit	
	Load Cell Excitation	DC 5V	
	Non-Linearity	0.001% of Full Scale	
	Input Signal	Max 3.0 mV/V	
	A/D Sampling	Max 60 time/sec, Sigma-Delta	
DISPLAY PART	Resolution	Internal : 1/1,000,000 External : 1/20,000	
	Main Display	7 Segment, 6 Digit Red FND, Letter size : 7.6(H)mm	7 Segment, 6 Digit Red FND, H = 16.2mm
	Under Zero	Minus(-) Display	
	Φ 2 LED	STEADY, ZERO, TARE, RTxD	STEADY, ZERO, TARE, HOLD, Tx, Rx, F
GENERAL PART	Power Supply	DC12V, 8W	DC 24V, 8W
	Operating Condition	Temperature : -10°C ~ +40°C, Humidity : Under 85% RH	
	Size/Weight	(W)48 x (H)96 x (D)41 mm / 140g	(W)96 x (H)48 x (D)135 mm / 300g
	Communication	RS232C / RS485 (User Selection)	Standard : RS422 & RS485, Special Order : RS232C
	External Input	None	2EA
	OPTION	None	



Truck Scale



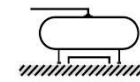
Crane Scale



Tester



Animal Scale



Tank Scale

Simple Weighing Indicator

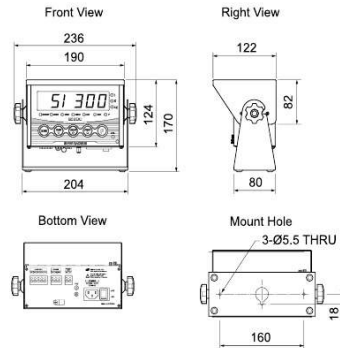
SI 300



Feature

- Wall & Rail Mounting Type
- Hold Function : Sample, Average, Peak

Physical Dimension [Unit:mm]



INDICATOR

Simple Weighing Indicator

SI 4000



Feature

- Hold Function : Sample, Average, Peak

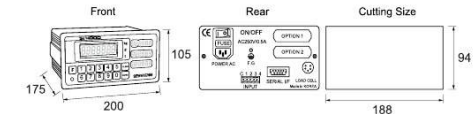
SI 4010



Feature

- Wide FND type(Display)
- Hold Function : Sample, Peak

Physical Dimension [Unit:mm]

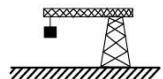


ANALOG PART	Input Sensitivity	Min. 0.1 μ V / Digit
	Load Cell Excitation	DC +5V
	Non-Linearity	0.001% of Full Scale
	Input Signal	Max 3.0 mV/V
	A/D Method & Sampling	Max 60 times / sec, Sigma-Delta
DISPLAY PART	Resolution	Internal : 1/1,000,000 External: 1/20,000
	Main Display	7 Segment, 6 Digit Red FND, Letter Size : H = 25.4 mm (1 inch)
	Under Zero	Minus (-) Display
GENERAL PART	Ø2 Red LED Status Lamp	STEADY, ZERO, TARE, HOLD, TxD, RxD, F
	Power Supply	AC Free Voltage (AC95 ~ 240V, 50/60Hz)
	Operating Condition	Temperature : -10°C ~ +40°C , Humidity : Under 85% RH
	Size/Weight	190(W) x 124(H) x 122(D) / 2kg
	Communication	RS232C & Current Loop
	External Input	None
	OPTION	None

	SI 4000	SI 4010	
ANALOG PART	Input Sensitivity	Min. 0.2 μ V / Digit	
	Load Cell Excitation	DC 10V (± 5V)	
	Non-Linearity	0.005% of Full Scale	
	Input Signal	Max 3.2 mV/V	
	A/D Method & Sampling	Max 500 time/sec, Sigma-Delta	
DISPLAY PART	Resolution	Internal : 1/520,000 (19 bit) , External : 1/20,000	
	Main Display	7 Segment, 7 Digit , Green VFD, H = 12.7mm	7 Segment, 6 Digit , Red FND, H = 25.4mm
	▼ Status Lamp	STEADY, ZERO , TARE, GROSS, AUTO, PRINT, HOLD	None
GENERAL PART	Ø2 Red LED Status Lamp	g, kg, t	STEADY , ZERO , TARE , g, kg, t
	Power Supply	AC Free Voltage (AC95 ~ 240V, 50/60Hz)	
	Operating Condition	Temperature : -10°C ~ +40°C , Humidity : Under 85% RH	
	Size/Weight	190(W) x 124(H) x 122(D) / 2kg	
	Communication	RS232C & Current Loop	
	External Input	4EA	
	Relay Output	NONE	
OPTION	Analog Output 0-10V, 4-20mA / Serial Interface RS232C, RS422, RS485 / BCD Input / BCD Output / Ethernet		



Truck Scale



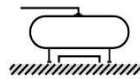
Crane Scale



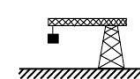
Tester



Animal Scale



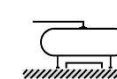
Tank Scale



CraneScale



Tester



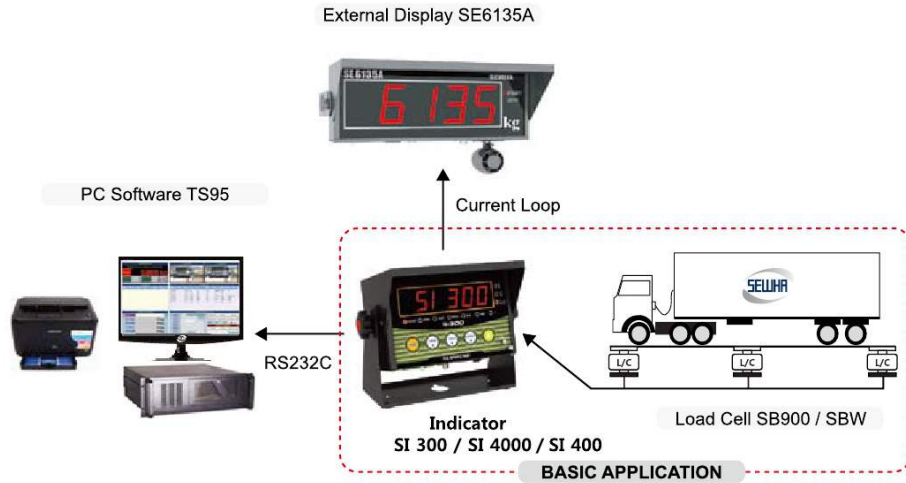
Tank Scale



Truck Scale

System Application

Industrial Scale - Using SI300 / SI4000 / SI400



Simple Control Indicator

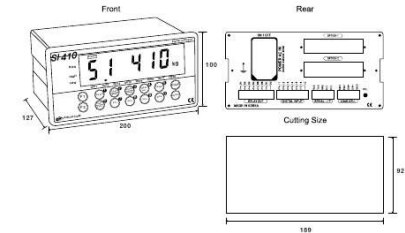
SI 410



Feature

- Dual color display
- User custom setting : External input, Relay output
- Hold Function : Sample, Average, Peak
- SD memory (Option card)
- MODBUS(RTU) protocol (Option card)

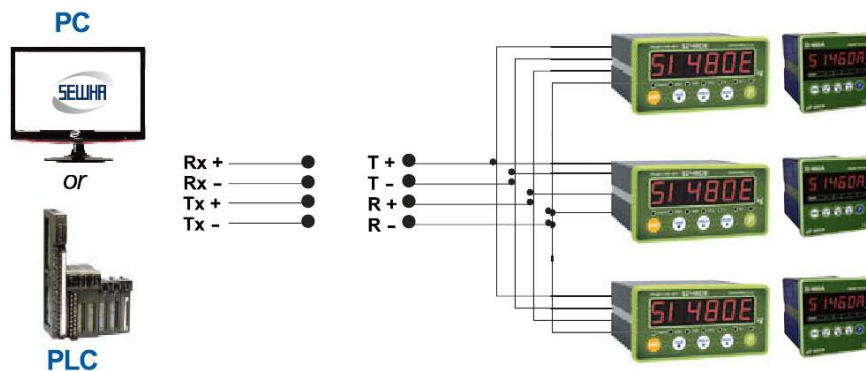
Physical Dimension [Unit:mm]



INDICATOR

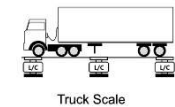
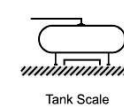
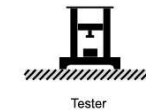
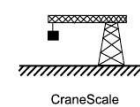
INDICATOR

SI460A, SI480E Network Composition By RS422



Max 32 Set of SI480E or SI460A are Connectable

ANALOG PART	Input Sensitivity	Min. 0.1 μ / Digit
	Load Cell Excitation	DC 5V
	Non-Linearity	0.001% of Full Scale
	Input Signal	Max 3.0 mV/V
	A/D Sampling	Max 60 time/sec, Sigma-Delta
	Resolution	Internal : 1/2,000,000 External : 1/20,000
DISPLAY PART	Main Display	7 Segment, 6 Digit Red FND, Letter size : 25.4mm
	State Alarm	Green LED, 8EA
	Under Zero	Minus(-) Display
GENERAL PART	Power Supply (Order Selectable)	AC Free Voltage(AC 100V ~ 240V, 50/60Hz)
	Operating Condition	Temperature : -10 $^{\circ}$ C ~ +40 $^{\circ}$ C, Humidity : Under 85% RH
	Size/Weight	200(W)x100(H)x126.5(D) / 1.25kg
	Communication	RS232C, Current loop, Modbus (Option)
	External Input	6EA
	Relay Output	7EA (User Selectable)
	OPTION	Analog Output 0~10V, 4~20mA / Serial Interface RS232C, RS422, RS485 BCD Input / BCD Output / Ethernet / SD memory card



Simple Control Indicator

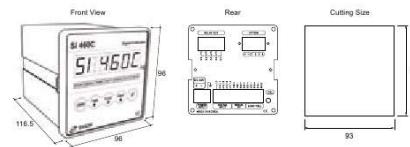
SI 460C



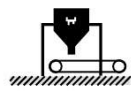
Feature

- Weighing mode : Limit mode, Packer mode, Checker mode, Accumulating mode
- User custom setting : External input, Relay output
- Power Selectable : DC & AC Ordering Spec.
- Option : Serial Comm, Analog out
- MODBUS(RTU) protocol

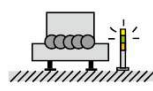
Physical Dimension [Unit:mm]



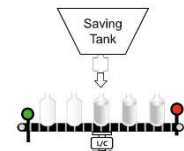
ANALOG PART	Input Sensitivity	Min. 0.1 μ V / Digit
	Load Cell Excitation	DC 5V
	Non-Linearity	0.001% of Full Scale
	Input Signal	Max 3.0 mV/V
	A/D Sampling	Max 60 time/sec, Sigma-Delta
DISPLAY PART	Resolution	Internal : 1/1,000,000 External : 1/20,000
	Main Display	7 Segment, 6 Digit Red FND, Letter size : 16.2mm
	Under Zero	Minus(-) Display
GENERAL PART	Φ 2 LED	STEADY, ZERO, TARE, HOLD, TxD, RxD, F
	Power Supply (Order Selectable)	DC 24V, 12W AC Free Voltage(AC 100V ~ 240V, 50/60Hz)
	Operating Condition	Temperature : -10 $^{\circ}$ C ~ +40 $^{\circ}$ C, Humidity : Under 85% RH
	Size/Weight	96(W) x 96(H) x 116.5(D) mm / 0.5kg(DC) 0.7kg(AC)
	Communication	RS422 & RS485, Mod bus
	External Input	4EA
	Relay Output	4EA
	OPTION	RS232C, Analog output 4-20mA, 0-10V



Auto Packer



Auto Checker



Filler Application

Simple Control Indicator

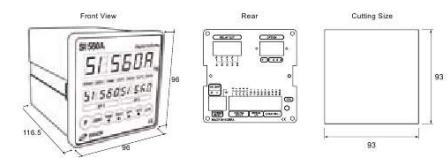
SI 560A



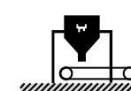
Feature

- Dual display(Main, P/N, SP1, SP2, SP3, SP4)
- Weighing mode : Limit mode, Packer mode, Checker mode
- User custom setting : External input, Relay output
- Power Selectable : DC & AC Ordering Spec.
- MODBUS(RTU) protocol

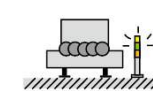
Physical Dimension [Unit:mm]



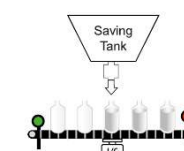
ANALOG PART	Input Sensitivity	Min. 0.1 μ V / Digit
	Load Cell Excitation	DC 5V
	Non-Linearity	0.001% of Full Scale
	Input Signal	Max 3.0 mV/V
	A/D Sampling	Max 60 time/sec, Sigma-Delta
DISPLAY PART	Resolution	Internal : 1/1,000,000 External : 1/20,000
	Main Display	6 Digit Red FND, Letter size : 15 mm /
	Sub Display	10 Digit Red FND, Letter size : 13.5 mm
GENERAL PART	Under Zero	Minus(-) Display
	LED	STEADY, ZERO, TARE, OUT1, OUT2, OUT3, OUT4
	Power Supply (Order Selectable)	DC 24V, 12W AC Free Voltage(AC 100V ~ 240V/50/60Hz)
	Operating Condition	Temperature : -10 $^{\circ}$ C ~ +40 $^{\circ}$ C, Humidity : Under 85% RH
	Size/Weight	96(W) x 96(H) x 116.5(D) mm / 0.5kg(DC) 0.7kg(AC)
	Communication	RS422 & RS485, Mod bus
	External Input	4EA
	Relay Output	4EA
OPTION	RS232C, Analog output 4-20mA, 0-10V	



Auto Packer



Auto Checker



Filler Application

Simple Control Indicator

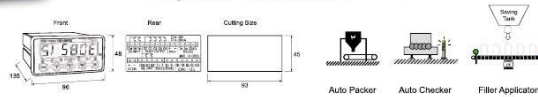
SI 580E



Feature

- Weighing mode : Limit mode, Packer mode, Checker mode, Accumulating mode
- User custom setting : External input, Relay output
- MODBUS(RTU) protocol

Physical Dimension [Unit:mm]



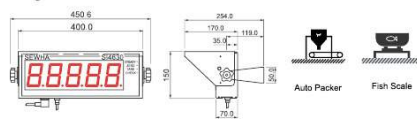
SI 4630E



Feature

- Wall Mount Type, External Display Type Indicator
- Hold Function : Sample, Average, Peak
- Option : Serial Comm, Analog out, Relay output
- Weighing mode(SI4630EF) : Limit mode, Packer mode, Accumulating mode

Physical Dimension [Unit:mm]



Simple Control Indicator

SI 4010R



Feature

- Wide FND display type
- Weighing mode : Limit mode(Low, High)

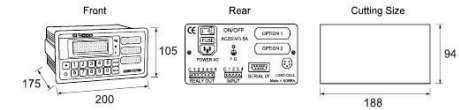
SI 4100



Feature

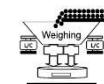
- Weighing mode : Limit mode, Packer mode, Checker mode, Accumulating mode

Physical Dimension [Unit:mm]

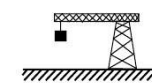


	SI 580E	SI 4630E
ANALOG PART	Input Sensitivity	Min. 0.1 μV / Digit
	Load Cell Excitation	DC 5V
	Non-Linearity	0.001% of Full Scale
	Input Signal	Max 3.0 mV/V
	A/D Method & Sampling	Max 60 times / sec, Sigma-Delta
DISPLAY PART	Main Display	7 Segment, 6 Digit Red FND, H = 16.2mm
	Under Zero	Minus (-) Display
	\emptyset 2 Red LED Status Lamp	STEADY, ZERO, TARE, OUT1, OUT2, OUT3, OUT4
GENERAL PART	Power Supply	DC 24V, 8W (SMPS)
	Operating Condition	Temperature : -10°C ~ +40°C, Humidity : Under 85% RH
	Size / Weight	(W)96 x (H)48 x (D)135 mm / Gross 0.9 kg
	Communication	Slot 1 - Standard : RS422 & RS485 Special order : RS232C Slot 2 - Standard : RS232C Special order : RS422 & RS485
	Analog Output	Basic : 4 ~ 20mA (0~10V : User Selection)
	External Input	4 EA
	Key pad	NONE
	Relay Output	4 EA
	Print	RS232C Serial Print Mode
	OPTION	NONE

	SI 4010R	SI 4100
ANALOG PART	Input Sensitivity	Min. 0.2 μV / Digit
	Load Cell Excitation	DC 10V ($\pm 5V$)
	Non-Linearity	0.005% of Full Scale
	Input Signal	Max 3.2 mV/V
	A/D Method & Sampling	Max 500 times / sec, Sigma-Delta
DISPLAY PART	Main Display	7 Segment, 6 Digit Red FND, H = 25.4mm
	Sub Display	NONE
	" \blacktriangledown " Status Lamp	NONE
GENERAL PART	Power Supply	AC 110/220V, 50/60Hz, About 30W
	Operating Condition	Temperature : -10°C ~ +40°C, Humidity : Under 85% RH
	Size / Weight	(W)200 x (H)105 x (D)175 mm / Gross 4.0 kg
	Communication	RS232C & Current Loop
	External Input	4 EA
	Relay Output	3 EA
	OPTION	Analog Output 0~10V, 4~20mA / Serial Interface RS232C, RS422, RS485 / BCD Input / BCD Output / Ethernet



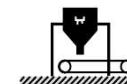
Auto Packer



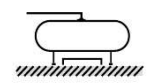
Crane Scale



Tester



Conveyor Scale



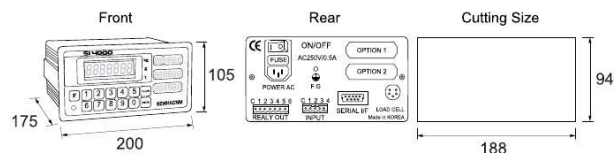
Tank Scale

Common Specification of Precision Control Indicator

SI 4200, SI 4300, SI 4400, SI 4410, SI 4500

Model	SI 4200	SI 4300	SI 4400	SI 4410	SI 4500
Application	Quantity count	Checker	Packer	Loss-in weight weighing	Accumulation weighing
WEIGHING MODE	Limit Mode	●	●	●	
	Packer Mode	●		●	●
	Checker Mode	●	●		
	Loss-in weight Mode				●
	Batch Mode				

Physical Dimension [Unit:mm]



	SI 4200	SI 4300	SI 4400	SI 4410	SI 4500
ANALOG PART	Input Sensitivity	Min. 0.2 μ V / Digit			
	Load Cell Excitation	DC 10V (\pm 5V)			
	Non-Linearity	0.005% of Full Scale			
	Input Signal	Max 3.2 mV/V			
	A/D Method & Sampling	Max 500 times / sec, Sigma-Delta			
DISPLAY PART	Resolution	Internal : 1/520,000 (19 bit), External: 1/20,000			
	Main Display	7 Segment, 7 Digit Green VFD, H = 12.7mm			
	Sub Display	7 Segment, 6 Digit Red FND 3 Lines, H = 9.2mm	7 Segment, 6 Digit Red FND 4 Lines, H = 9.2mm		
GENERAL PART	" \heartsuit " Status Lamp	STEADY, ZERO, TARE, GROSS, AUTO, PRINT, COMM			
	\varnothing 2 Red LED Status Lamp	g, kg, t			
	Power Supply	AC 110/220V, 50/60Hz, About 30W			
	Operating Condition	Temperature : -10°C ~ +40°C, Humidity : Under 85% RH			
	Size / Weight	(W)200 x(H)105 x(D)175 mm / Gross 4.0 kg			
	Communication	RS232C & Current Loop			
	External Input	4 EA			
Relay Output	6 EA	5 EA	6 EA	6 EA	6 EA
OPTION PART	Analog Output 0-10V, 4-20mA / Serial Interface RS232C, RS422, RS485 / BCD Input / BCD Output / Ethernet				

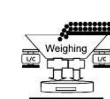
Precision Control Indicator

SI 4200

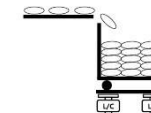


Feature

- Multi display(Main, P/N, Count, Unit weight)
- Precise auto counting/unit weight
- Weighing mode : Limit mode, Packer mode, Checker mode



Auto Packer



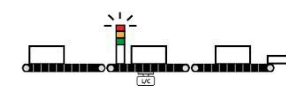
Auto Counting Scale

SI 4300

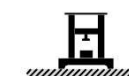


Feature

- Multi display(Main, P/N, Count, Over, Under, Pass)
- Low-end type checkweigher, Laboratory tester
- Weighing mode : Photo Sensing mode, Peak Hold mode Normal checker mode



Auto Check Weigher



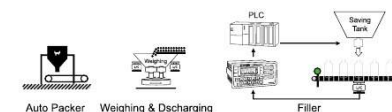
Tester

SI 4400



Feature

- Multi display(Main, P/N, Free fall, Final, Pre1)
- Weighing mode : Limit mode, Packer mode
- Automatic free fall compensation function



Auto Packer Weighing & Discharging

Filler

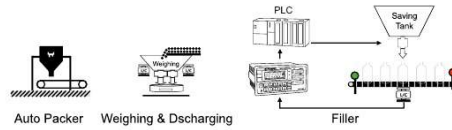
Precision Control Indicator

SI 4410



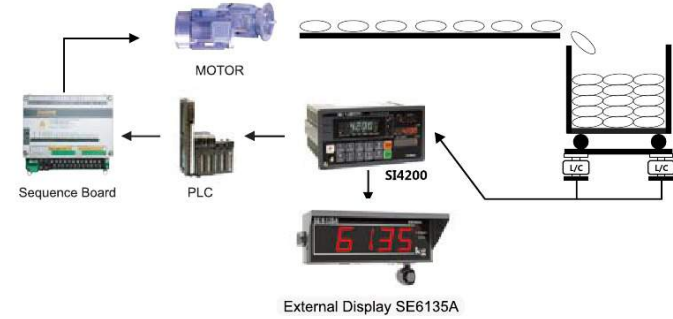
Feature

- Multi display(Main, P/N, Free fall, Final, Pre2, Pre1)
- Weighing mode : Limit mode, Packer mode, Loss in Weighing mode
- 3 Step control for each material

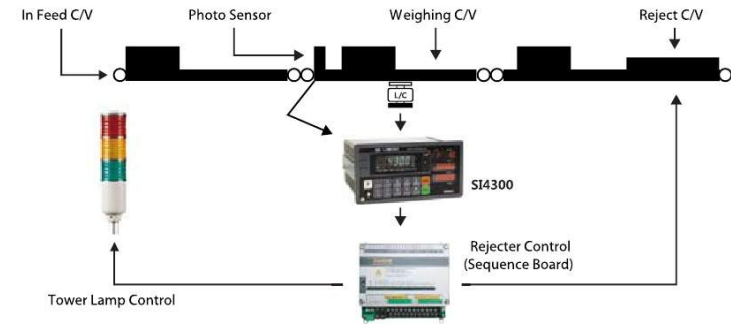


System Application

Quantity Control Application Using SI 4200



Auto Check Weighing Application Using SI 4200

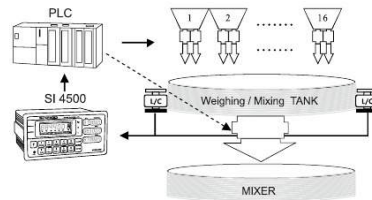


SI 4500

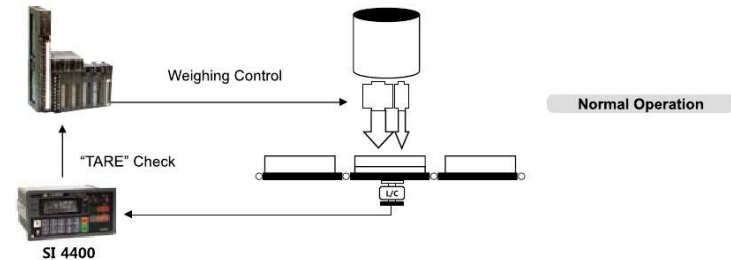


Feature

- Multi display(Main, Formula, Bin no., Free fall, Pre1, Final, Pre1, Operating)
- 50 kinds formula(Max, 16 kinds material)
- Auto batch accumulation mode with PLC(BCD input, BIN output)
- 2 Step control for each material(Bin)



Auto Packer Using SI 4200

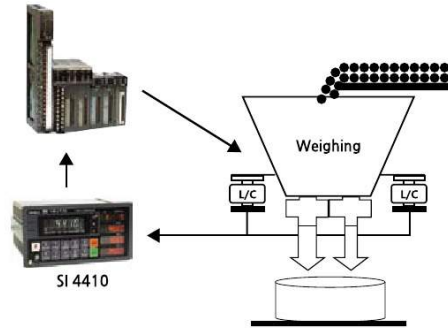


INDICATOR

INDICATOR

System Application

Loss In Weight Application Using SI 4410



1) 1 Step Feeding / 2 Step Discharge Mode

PRE 1 : Feeding Limit (ON : Stop Feeding / OFF : Start Feeding)
 PRE 2 : Bulk Discharge
 FREE FALL

1) 2 Step Feeding / 1 Step Discharge Mode

PRE 1 : Under Limit of Feeding
 PRE 2 : Over Under Limit of Feeding
 FREE FALL

Option Card

SI 400 Series Option



BCD IN



BCD OUT



Ethernet



SD Memory Card



Serial Communication
(RS232C, RS422, RS485)

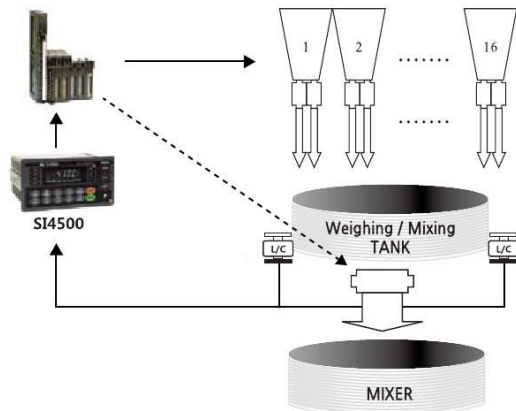


Analog Output
(4-20mA, 0-10V)

INDICATOR

INDICATOR

Accumulating Mixing Application Using SI 4500



SI 4000 Series Option



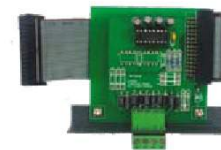
Analog Output
(4-20mA, 0-10V)



BCD IN



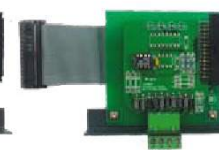
BCD OUT



Serial Interface
RS232C



Serial Interface
RS422



Serial Interface
RS485



Ethernet

External Display

SE 6125A, SE 6135A, SE 6145A, SE 6165A

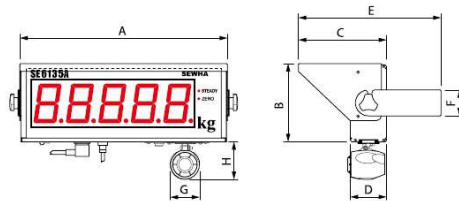


Feature

- Wall Mounting Type
- RS232C / RS485, Current Loop Auto detection
- Connectable to Other Brand's Indicators.
- Auto Recovery Function
- Communication Speed Auto Setting (2,400 ~ 115,200 bps)
- Buzzer Option

Unit (mm)	A	B	C	D	E	F	G	H
SE 6125A	330	131	150	70	255	50		
SE 6135A	400	151	170	70	275	50	57	73
SE 6145A	545	183	185	70	290	50		
SE 6165A	720	247	210	70	325	70		

Physical Dimension [Unit:mm]



	DIGIT HEIGHT	WEIGHT	POWER	OPERATING CONDITION	DIMENSION A x B x C (mm)
SE 6125A	2.3 inch	2.5 kg	AC95 ~ 240V 50/60 Hz	- 10°C ~ + 40°C Under 85% RH	330 x 131 x 150
SE 6135A	3 inch	4.5 kg			400 x 151 x 170
SE 6145A	4 inch	7.0 kg			545 x 183 x 185
SE 6165A	6 inch	9.0 kg			720 x 247 x 210



System Application

Indicator Box & Printer

Indicator Box

- Material : Polyester Coating Steel
- Gross Weight : 3~7kg
- External Input (Switch) Wire Connecting Standard Finished
- Switch Can be Changeable
- Customized : SUS Type

SE4010	SE4011	SE4020	SE4021
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POWER, ZERO, TARE (W)280 x(H)240 x(D)300mm	AC IN, Load cell Connector (W)230 x(H)120 x(D)250mm	POWER, ZERO, TARE, PRINT (W)400 x(H)260 x(D)330mm	POWER, PRINT (W)250 x(H)260 x(D)270mm
---	--	--	--

Printer

MODEL	SE7200 (Desk Type)	SE7300 (Panel Type)
-------	--------------------	---------------------

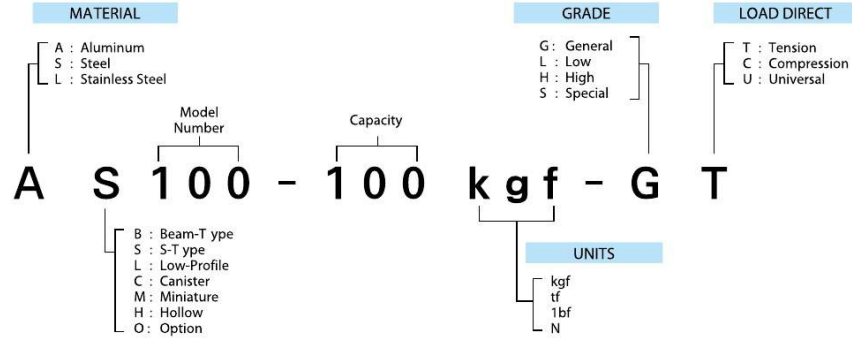
SE 7300 S / D

- D : Dot Impact Type
- T : Thermal Type
- S : Serial Type
- P : Parallel Type
- 7200 : Desk Type
- 7300 : Panel Type



DIMENSION / WEIGHT	(W)110 x(L)165 x(D)85mm / 1.5kg	(W)120 x(L)130 x(D)90mm / 1.5kg
CUTTING SIZE	NONE	(W)107 x(H)113mm
POWER	Standard : DC 12V, 1.5A, Option : Adapter AC 110V/220V	
OPERATING CONDITION	Temperature: 0°C ~ 50°C	
PRINTING METHOD	Dot Impact Type	Thermal Type
COLUMNS	24/30	40
FONT SIZE	Eng: 8x14, Kor: 16x14	Eng: 6x12, Kor: 12x12
SPEED	1.6 line/sec.	60 mm/sec.
PAPER INFO	(W)57mm x Ø50 Roll Paper	(W)57mm x Ø50 Thermal Roll Paper
CARTRIDGE	ERC - 09	
INTERFACE	RS232C Serial / Centronics Parallel	
SUPPLIES	Cartridge : ERC-09	Roll Paper : (W)57mm x Ø50 (Dot / Thermal)

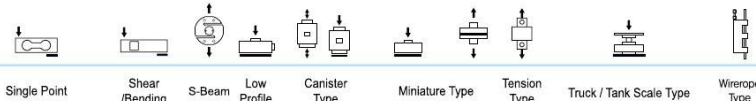
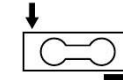
LOAD CELL



AB 120, 130, 140

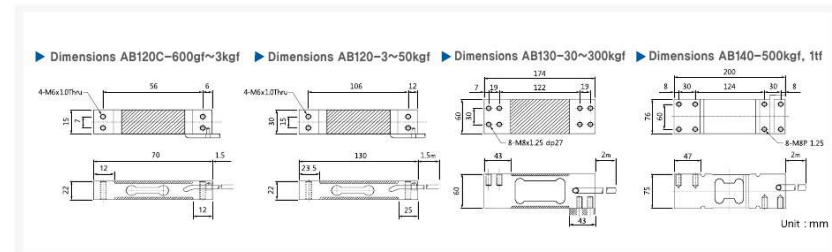
Feature

- Material : Aluminum
- Protection Class IP65
- Off Center Compensated



MODEL	AB	LBB	SB	SS	SL	SC	SM	ST	SB	SBW	SWL						
Capacity	120	130	140	200	210	300	410	520	530	600E	601E	603E	800E	900	910	920	100
1kgf	•										•						
2kgf	•										•						
3kgf	•										•						
5kgf	•										•						
10kgf	•										•						
15kgf	•										•						
20kgf	•		•								•						
30kgf	•	•									•						
50kgf	•	•	•								•	•					
60kgf	•	•									•						
100kgf	•	•	•								•	•	1bf				
150kgf	•	•	•								•	•	1bf				
200kgf	•	•	•	•							•	•	•				
250kgf	•	•	•	•							•	•	•				
300kgf	•	•	•	•	•						•	•	•				
500kgf	•	•	•	•	•	•					•	•	•				•
1tf	•	•	•	•	•	•					•	•	•				•
1.5tf																	•
2tf				•	•	•					•	•					
3tf				•	•	•					•	•					
4tf				•	•	•					•	•					•
5tf				•	•	•					•	•					
8tf				•	•	•					•	•					•
10tf				•	•	•					•	•	•				•
15tf													•				
20tf											•	•	•				•
25tf											•	•	•	•			•
30tf											•	•	•	•			•
50tf											•	•	•	•			•
70tf											•	•	•	•			•
100tf											•	•	•	•			•
200tf											•	•	•	•			•
500tf											•	•	•	•			•
800tf											•	•	•	•			•

Rated Capacity (R.C)	kgf / tf	AB120C	AB120	AB130	AB140
		600gf, 1, 2, 3kgf	3, 5, 10, 15, 20, 30, 50kgf	30, 50, 60, 100, 150, 300kgf	500kgf, 1tf
Rated Output (R.O)	mV/V	1.0 ± 10%		2.0 ± 10%	
Zero Balance	mV/V			0 ± 0.1	
Combined Error	%			0.03	
Repeatability	%			0.01	
Creep (30min)	%			0.03	
Temperature Effect on					
Zero Value	% / °C	0.028		0.03	
Output Value	% / °C	0.014		0.02	
Excitation					
Recommended	V			10	
Maximum	V			15	
Resistance					
Input	Ω	400 ± 20		400 ± 30	
Output	Ω			350 ± 3.5	
Insulation	MΩ			>2,000	
Compensated Temp Range	°C			-10 ~ +40	
Operating Temp Range	°C			-30 ~ +80	
Physical Weight	kg		0.3	1.5	2.5



CABLE COLOR CODE

EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHIELD	(YELLOW)

Shear Beam Load Cell 150kgf~10tf

SB 210



Feature

- Compact Design
- Compression Type
- Protection Class IP66
- Nickel Plated Steel
- Braided Shield 4-Wire Round Cable

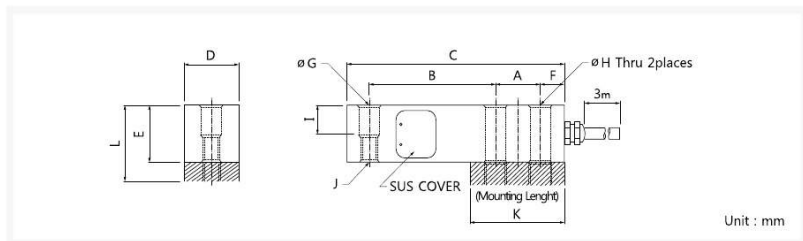
Option

- Stainless Steel - LB210 (MOQ Base)



Rated Capacity (R.C)	kgf / tf	150, 200, 250, 500kgf, 1, 2, 3, 5, 10tf
Rated Output (R.O)	mV/V	2.0 ± 0.005
Zero Balance	mV/V	0 ± 0.02
Combined Error	%	0.03
Repeatability	%	0.01
Creep (30min)	%	0.03
Temperature Effect on		
Zero Value	% / 10°C	0.03
Output Value	% / 10°C	0.02
Excitation		
Recommended	V	10
Maximum	V	15
Resistance		
Input	Ω	400 ± 30
Output	Ω	350 ± 3.5
Insulation	MΩ	> 2,000
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-30 ~ +80

Model	Capacity	A	B	C	D	E	F	ØG	ØH	I	J	K	L	Weight
SB210 - 150kgf	150kgf	25.4	76.2	130	31.8	32	15.8	13.5	13.5	16	M12xP1.75	57	38	1.0kg
SB210 - 200kgf	200kgf													
SB210 - 250kgf	250kgf													
SB210 - 500kgf	500kgf													
SB210 - 1tf	1tf													
SB210 - 2tf	2tf	38.1	95.3	171.5	38	38	19	20	20	19	M18xP1.5	76	44.5	2.0kg
SB210 - 3tf	3tf													
SB210 - 5tf	5tf													
SB210 - 10tf	10tf	50.8	120.4	222	50.8	50.8	25.4	26.2	26.2	25.4	M24xP2.0	100	57.2	4.3kg



CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHLD	(YELLOW)

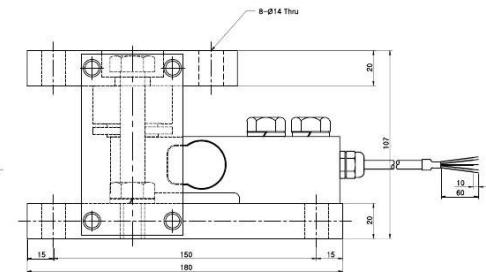
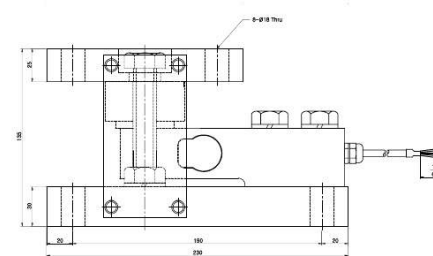
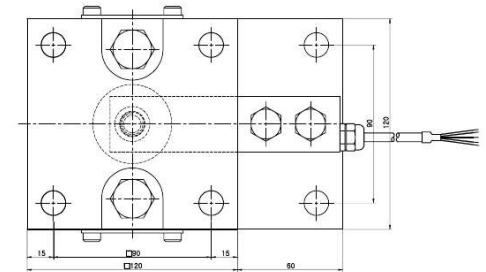
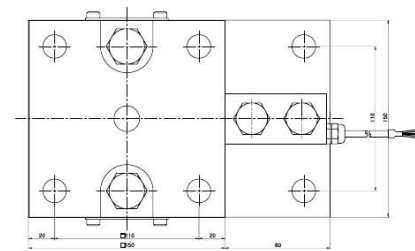
Shear Beam Load Cell 150kgf~10tf

SB 210 TW Accessory



150kg~3tf ▼

5tf ▼



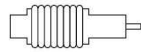
Bending Beam Load Cell 20~500kgf

LBB 200

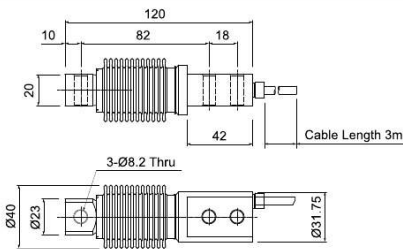


Feature

- All Stainless Steel Construction
- Protection Class IP67
- Braided Shield 4-Wire Round Cable



Rated Capacity (R.C)	kgf / tf	20, 50, 100, 200, 500kgf
Rated Output (R.O)	mV/V	2.0 ± 0.005
Zero Balance	mV/V	0 ± 0.2
Combined Error	%	0.03
Repeatability	%	0.01
Creep (30min)	%	0.03
Temperature Effect on		
Zero Value	% / 10°C	0.028
Output Value	% / 10°C	0.015
Excitation		
Recommended	V	10
Maximum	V	15
Resistance		
Input	Ω	400 ± 50
Output	Ω	350 ± 3.5
Insulation	M Ω	> 2,000
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-20 ~ +70



Unit : mm

CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHLD	(YELLOW)

SS Beam Load Cell 50kgf~10tf

SS 300

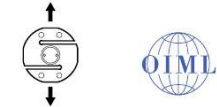


Feature

- Compact Design
- Tension Application
- Protection Class IP66
- Nickel Plated Steel
- Braided Shield 4-Wire Round Cable

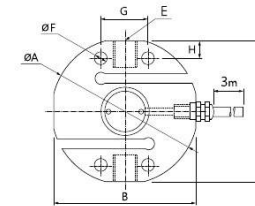
Option

- Stainless Steel - LS300 (MOQ Base)
- Aluminium 2, 5, 10, 20kg (MOQ Base)



Rated Capacity (R.C)	kgf / tf	50, 100, 150, 200, 300, 500kgf, 1, 2, 3, 5, 10tf
Rated Output (R.O)	mV/V	2.0 ± 0.005
Zero Balance	mV/V	0 ± 0.02
Combined Error	%	0.03
Repeatability	%	0.01
Creep (30min)	%	0.03
Temperature Effect on		
Zero Value	% / 10°C	0.03
Output Value	% / 10°C	0.02
Excitation		
Recommended	V	10
Maximum	V	15
Resistance		
Input	Ω	400 ± 30
Output	Ω	350 ± 3.5
Insulation	M Ω	> 2,000
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-30 ~ +80

Model	Capacity	ØA	B	C	D	E	ØF	G	H	Weight							
SS300 - 50/100kgf	50/100kgf	80	74	76	19	M12xP1.75	-	-	-	1.0kg							
SS300 - 150kgf	150kgf				26												
SS300 - 200kgf	200kgf																
SS300 - 300kgf	300kgf																
SS300 - 500kgf	500kgf																
SS300 - 1tf	1tf				30	M20xP1.5					-	-	-	-	1.8kg		
SS300 - 2tf	2tf																
SS300 - 3tf	3tf	115	90	110													
SS300 - 5tf	5tf	125	123	120			36	M24xP2.0	13	42						18	2.7kg
SS300 - 10tf	10tf	175	172	168			50	M30xP2.0	21	64						29	7.5kg



Unit : mm

CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHLD	(YELLOW)

Pan Cake Load Cell 1~200tf

SL 410



Feature

- Compression / Tension Application
- Hermetically Sealed
- High Reliability Against Fatigue & Force
- Fully Environmental Protection IP67
- Paint Finished Steel
- Braided Shield 4-Wire Round Cable with PVC-Jacket

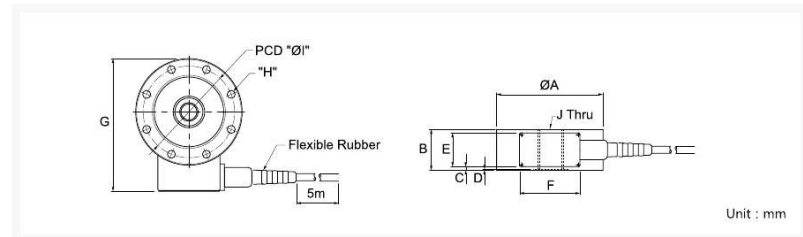
Option

- Stainless Steel – LL410 (MOQ Base)



Rated Capacity (R.C)	tf	1, 2, 3, 5, 10, 20, 30, 50, 100, 200tf	
Rated Output (R.O)	mV/V	2.0 ± 0.005	
Zero Balance	mV/V	0 ± 0.02	
Accuracy Class		A	B
Combined Error	%	0.02	0.05
Repeatability	%	0.01	0.02
Creep (30min)	%	0.03	0.03
Temperature Effect on			
Zero Value	% / 10°C	0.03	0.03
Output Value	% / 10°C	0.03	0.03
Excitation			
Recommended	V	10	
Maximum	V	15	
Resistance			
Input	Ω	350 ± 3.5	
Output	Ω	350 ± 3.5	
Insulation	MΩ	> 2,000@ DC 50V	
Compensated Temp Range	°C	-10 ~ +40	
Operating Temp Range	°C	-20 ~ +80	

Model	Capacity	ØA	B	C	D	E	F	G	ØH	ØI	J	Weight
SL410 - 1tf	1tf	110	46	4	1	38	68	139.5	8-Ø6.6	97.2	M16xP2.0	1.8kg
SL410 - 2tf	2tf											2.3kg
SL410 - 3tf	3tf	2.8kg										
SL410 - 5tf	5tf	3.2kg										
SL410 - 10tf	10tf	138	60	11				167.5	8-Ø11	117.6	M24xP2.0	5.1kg
SL410 - 20/30tf	20/30tf	184	80	21				213.5	8-Ø14	157.6	M39xP2.0	12.0kg
SL410 - 50tf	50tf	200	60	11				229.5	12-Ø14.3	170	M45xP3.0	15.0kg
SL410 - 100tf	100tf	278	90	26				307.5	16-Ø16.3	229	M70xP3.0	28.0kg
SL410 - 200tf	200tf	335	108	35				384.5	12-Ø26	298	M90xP3.0	37.0kg

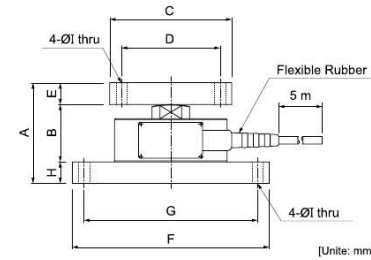


CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHLD	(YELLOW)

Pan Cake Load Cell 1~200tf

SL410 Compression Accessory (Load Button / Balltype)

▶ INSTALLATION AS COMPRESSION APPLICATION



Accessory Features

- High Durability Appropriate for Tank and Hopper Application Design with Safety Coefficient Considerations.

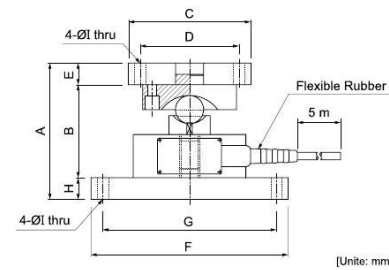
Manual

- Load cell connection with the Mounting Plate Fix the Mounting Plate on the Surface Check the level of the Mounting Plate Place the Loading Plate over the Load cell Check the value with a Display System.



Capacity	A	B	C	D	E	F	G	H	I
1tf, 2tf, 3tf	105	59	130x130	105x105	23	210x130	185x105	23	12
5tf	107	61	130x130	105x105	23	210x130	185x105	23	12
10tf	140	80	160x160	125x125	30	160x160	125x125	30	14
20tf, 30tf	175	115	200x200	150x150	30	200x200	160x160	30	14
50tf	225	105	260x260	200x200	60	260x260	200x200	60	23
100tf	275	155	360x360	280x280	30	360x360	280x280	60	27

▶ INSTALLATION AS BALL TYPE APPLICATION



Accessory Features

- High Durability Appropriate for Tank and Hopper Application Design with Safety Coefficient Considerations.

Manual

- Load cell connection with the Mounting Plate Fix the Mounting Plate on the Surface Check the level of the Mounting Plate Place the Loading Plate over the Load cell Check the value with a Display System.



Capacity	A	B	C	D	E	F	G	H	I
1tf, 2tf, 3tf	136	90	130x130	105x105	23	210x130	185x105	23	12
5tf	145	99			23	210x130	185x105	23	12
10tf	166	106			30	160x160	125x125	30	14
20tf, 30tf	196	136			30	200x200	160x160	30	14

Canister Load Cell 200kgf~20tf

SC 520



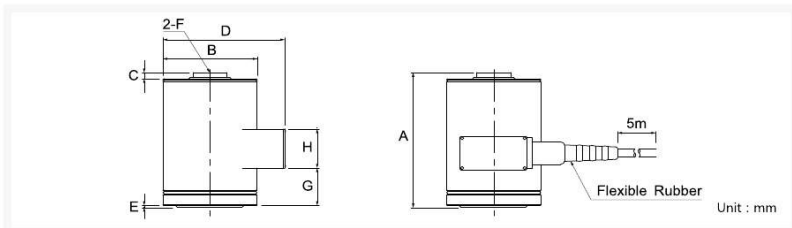
Feature

- Hermetically Sealed High Accuracy C
- Robust Design
- Compression / Tension Type
- Fully Environmental Protection IP67
- Paint Finished Steel
- Braided Shield 4-Wire Round Cable with PVC-Jacket



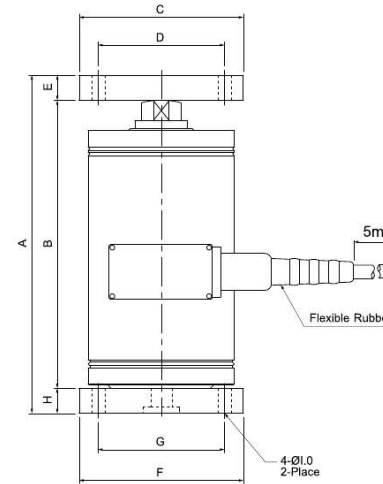
Rated Capacity (R.C)	kgf / tf	200, 300, 500kgf, 1, 2, 3, 5, 10, 20tf	
Rated Output (R.O)	mV/V	3.0 ± 0.003	
Zero Balance	mV/V	0 ± 0.02	
Accuracy Class		A	B
Combined Error	%	0.02	0.05
Repeatability	%	0.01	0.02
Creep (30min)	%	0.03	0.03
Temperature Effect on			
Zero Value	% / 10°C	0.03	0.03
Output Value	% / 10°C	0.03	0.03
Excitation			
Recommended	V	10	
Maximum	V	15	
Resistance			
Input	Ω	350 ± 3.5	
Output	Ω	350 ± 3.5	
Insulation	MΩ	> 2,000 @ DC 50V	
Compensated Temp Range	°C	-10 ~ +40	
Operating Temp Range	°C	-30 ~ +80	

Model	Capacity	A	ØB	C	D	E	F	G	H	Weight
SC520 - 200kgf	200kgf	115	89	6	115	2	M12xP1.25	34	38	4.0kg
SC520 - 300kgf	300kgf									
SC520 - 500kgf	500kgf									
SC520 - 1tf	1tf	148	89	9	115	2	M24xP2.0	55	38	5.0kg
SC520 - 2tf	2tf									
SC520 - 3tf	3tf									
SC520 - 5tf	5tf	215	127	12	152	2	M39xP2.0	75	38	8.0kg
SC520 - 10tf	10tf									
SC520 - 20tf	20tf									



Canister Load Cell 200kgf~20tf

SC 520 Compression / Tension Accessory

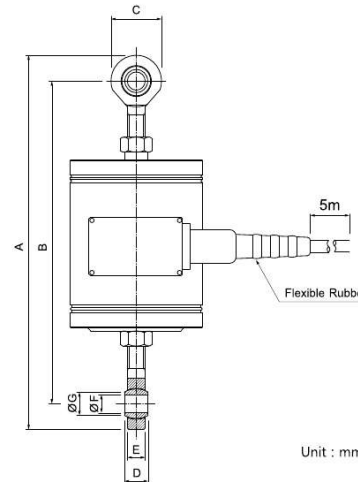


Unit : mm



Installation as Compression Application

Capacity	A	B	C	D	E	F	G	H	I
200kgf	153.7	123.7	100	77	15	100	77	15	8
300kgf									
500kgf									
1tf	210.3	164.3	130	105	23	130	105	23	12
2tf									
3tf									
5tf	303	243	160	125	30	160	125	30	14
10tf									
20tf									



Unit : mm



Installation as Tension Application

Capacity	A	B	C	D	E	F	G
200kgf	255 ~ 260	221 ~ 216	34	16	12	12	15.4
300kgf							
500kgf							
1tf	525 ~ 530	423 ~ 428	102	28	27	22	25.8
2tf							
3tf							
5tf	680 ~ 685	545 ~ 550	135	40	38	39.0	45.0
10tf							
20tf							

Rod End (200kgf~1tf: M12 x P1.25)
Rod End (2tf~5tf: M24 x P2.0)

Canister Type Compression Load Cell 20~800tf

SC 530



Feature

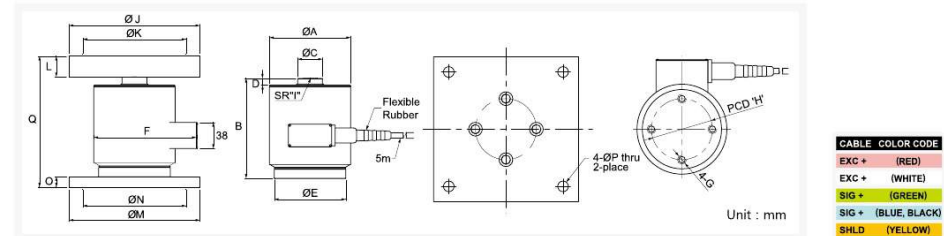
- Hermetically Sealed High Accuracy Grade
- Robust Design
- Compression Type
- Fully Environmental Protection IP67
- Paint Finished Steel
- Braided Shield 4-Wire Round Cable with PVC-Jacke



Rated Capacity (R.C)	tf	20, 30, 50, 100, 200, 500, 800tf
Rated Output (R.O)	mV/V	2.0 ± 0.005
Zero Balance	mV/V	0 ± 0.03
Accuracy Class		
Combined Error	%	0.15
Repeatability	%	0.10
Creep (30min)	%	0.03
Temperature Effect on		
Zero Value	% / 10°C	0.03
Output Value	% / 10°C	0.03
Excitation		
Recommended	V	10
Maximum	V	15
Resistance		
Input	Ω	350 ± 3.5
Output	Ω	350 ± 3.5
Insulation	MΩ	> 2,000@ DC 50V
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-20 ~ +80

Model	Capacity	ØA	B	ØC	D	E	F	G	H	I	ØJ	ØK	L	M	N	O	P	Q	Weight
SC530 - 20tf	20tf	118	145	36	10	104	150	M12xP1.75	80	150	200	150	30	200	150	15	14	190	7.5kg
SC530 - 30tf	30tf	118	145	36	10	104	150	M12xP1.75	80	150	200	150	30	200	150	15	14	190	7.5kg
SC530 - 50tf	50tf	118	160	50	20	104	170	M12xP1.75	80	200	220	160	40	220	160	20	19	220	10.0kg
SC530 - 100tf	100tf	158	190	70	20	144	190	M16xP2.0	100	200	260	200	60	260	200	30	23	280	13.0kg
SC530 - 200tf	200tf	214	230	95	30	188	249	M16xP2.0	130	300	280	200	80	280	200	40	27	350	13.0kg
★ SC530 - 500tf	500tf	214	280	140	30	188	249	M16xP2.0	130	800									
★ SC530 - 800tf	800tf	260	360	180	30	228	295	M20xP2.5	160	720									

★ Special Order



Load Cell for Wire rope 500kgf ~ 10tf

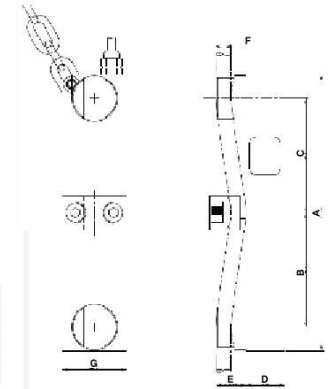
SWL100



Feature

- Tension of Wire rope
- Nickel Plated Steel

Safety Chain



CABLE COLOR CODE
EXC + (RED)
EXC - (WHITE)
SIG + (GREEN)
SIG - (BLUE, BLACK)
SHLD (YELLOW)

Capacity	tf	500kgf, 1.5tf, 4tf, 8tf, 10tf
Rated Output	mV/V	1.0 Nominal
Zero Balance	mV/V	0.0±0.1
Combined Error	%	2.0
Repeatability	%	1.0
Creep (30min)	%	1.0
Temperature Effect on		
Zero Value	% / °C	0.1
Output Value	% / °C	0.2
Excitation		
Recommended	V	10
Maximum	V	15
Resistance		
Input	Ω	400 ± 50
Output	Ω	350 ± 3.5
Insulation	MΩ	> 2,000 @50V DC
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-20 ~ +80

Model	Capacity	A	B	C	D	E	F (Wire rope)	G
SWL100-500kgf	500kgf							
SWL100-1tf	1tf	145	60	60	20	15.5	Ø6~8	34
SWL100-1.5tf	1.5tf	167	70	70	22	21	Ø10~Ø4	42
SWL100-4tf	4tf	215	90	90	25	35	18~Ø28	62
SWL100-8tf	8tf	250	100	100	35	45	25~35.5	80
SWL100-10tf	10tf							

Miniature Load Cell 50kgf~20tf

SM 600E



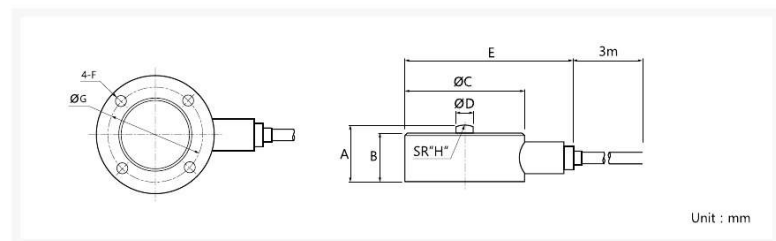
Feature

- Compression Application
- Application for Limited space
- Protection Class IP67
- Braided shield 4-wire round cable with PVC-Jacket
- Stainless steel (50kgf-2tf)
- Paint finished steel (5kgf-2tf)



Rated Capacity (R.C)	kgf / tf	50, 100, 200, 500kgf, 1, 2, 5, 10, 20tf
Rated Output (R.O)	mV/V	2.0 ± 0.02
Zero Balance	mV/V	0.0 ± 0.1
Combined Error	%	0.15
Repeatability	%	0.05
Creep (30min)	%	0.03
Temperature Effect on		
Zero Value	% / 10°C	0.05
Output Value	% / 10°C	0.10
Excitation		
Recommended	V	10
Maximum	V	15
Resistance		
Input	Ω	420 ± 50
Output	Ω	350 ± 3.5
Insulation	MΩ	> 2,000@50V DC
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-20 ~ +80

Model	Capacity	A	B	C	D	E	F	G	H
SM600E-50kgf	50kgf	25	21	50	10	65	M5x0.8	42	50
SM600E-100kgf	100kgf								
SM600E-200kgf	200kgf								
SM600E-500kgf	500kgf								
SM600E-1tf	1tf								
SM600E-2tf	2tf	40	35	98	20	113	M6x1.0	72	150
SM600E-5tf	5tf								
SM600E-10tf	10tf								
SM600E-20tf	20tf								



CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHEILD	(YELLOW)

Miniature Load Cell 10kgf~2tf

SM 601E



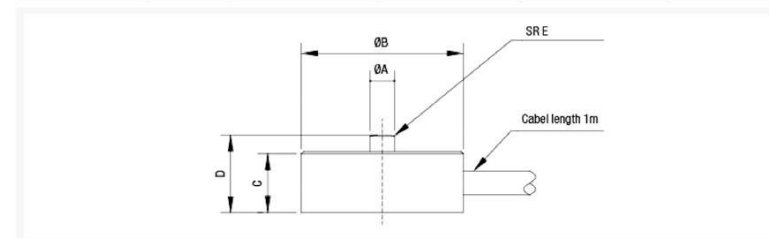
Feature

- Compression Application
- Application for Limited space
- Protection Class IP66
- Braided shield 4-wire round cable with PVC-Jacket
- Anodized Aluminum (1kgf~10kgf)
- Stainless steel (20kgf-2tf)



Max. Capacity	kgf / tf	1, 2, 5 kgf	10, 20, 30, 50, 100, 200, 300, 500kgf, 1tf, 2tf
Rated Output (R.O)	mV/V	0.5 (Approx)	1.0 (Approx)
Zero Balance	mV/V		0.0 ± 0.1
Combined Error	%		2.0
Repeatability	%		1.0
Creep (30min)	%		1.0
Temperature Effect on			
Zero Value	% / 10°C		0.03
Output Value	% / 10°C		0.05
Excitation			
Recommended	V		5
Maximum	V		10
Resistance			
Input	Ω		350 ± 20
Output	Ω		350 ± 3.5
Insulation	MΩ		> 2,000@50V DC
Compensated Temp Range	°C		-10 ~ +40
Operating Temp Range	°C		-20 ~ +80

Model	Capacity	A	B	C	D	E
SM601E-1kgf	1kgf	3	20	7.5	9.5	30
SM601E-2kgf	2kgf					
SM601E-5kgf	5kgf					
SM601E-10kgf	10kgf					
SM601E-20kgf	20kgf					
SM601E-30kgf	30kgf					
SM601E-50kgf	50kgf					
SM601E-100kgf	100kgf					
SM601E-200kgf	200kgf					
SM601E-300kgf	300kgf					
SM601E-500kgf	500kgf	4	20	13.3	14	30
SM601E-1tf	1tf					
SM601E-2tf	2tf					



CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHEILD	(YELLOW)

LOAD CELL

LOAD CELL

Miniature Load Cell 50~500kgf

SM 603E

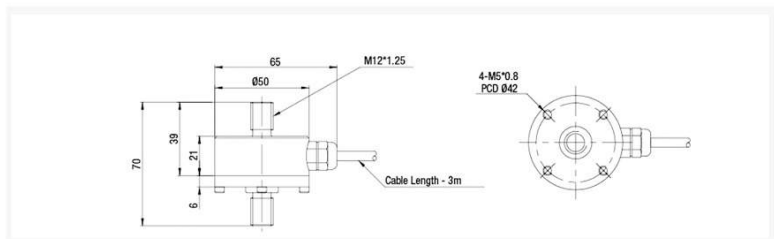


Feature

- Stainless Steel
- Tension Application
- Application for Limited Space
- Protection Class IP67
- Braided shield 4-wire round cable with PVC-Jacket
- Stainless steel
- Option : Tension Accessory



Max. Capacity	kgf	50, 100, 200, 500 kgf
Rated Output (R.O)	mV/V	2.0 ± 0.02
Zero Balance	mV/V	0.0 ± 0.1
Combined Error	%	0.15
Repeatability	%	0.05
Creep (30min)	%	0.03
Temperature Effect on		
Zero Value	% / 10°C	0.05
Output Value	% / 10°C	0.10
Excitation		
Recommended	V	10
Maximum	V	15
Resistance		
Input	Ω	420 ± 50
Output	Ω	350 ± 3.5
Insulation	MΩ	> 2,000@50V DC
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-20 ~ +80



CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHIELD	(YELLOW)

Tension Meter Load Cell 10~50tf

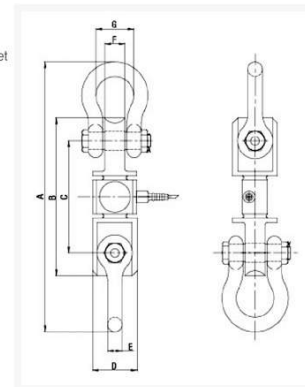
ST 800E



Feature

- Steel
- Tension Application
- Convenient assembly of shackle and Loadcell
- Braided shield 4-wire round cable with PVC-Jacket
- Option : Shackle

DIMENSIONS



CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHIELD	(YELLOW)

Rated Capacity (R.C)	kgf / tf	10, 20, 30, 50tf
Rated Output (R.O)	mV/V	2.0 Nominal
Zero Balance	mV/V	0 ± 0.2
Combined Error	%	0.03
Repeatability	%	0.02
Creep (30min)	%	0.03
Temperature Effect on		
Zero Value	% / 10°C	0.03
Output Value	% / 10°C	0.03
Excitation		
Recommended	V	10
Maximum	V	15
Resistance		
Input	Ω	760 ± 40
Output	Ω	700 ± 7
Insulation	MΩ	> 2,000
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-20 ~ +80

Model	A	B	C	D	E	F	G	SHACKLE(option)
ST800E - 10tf	522	310	220	87	28	40	74	B.B(1-1/8")
ST800E - 20tf	796	400	285	120	45	70	127	B.B(1-3/4")
ST800E - 30tf	868	428	288	120	50	75	146	B.B(2")
ST800E - 50tf	1106	508	342	145	67	98	184	B.B(2-1/2")

*Special Order Made : 70tf~200tf

Truck Weighing Load Cell 10~30tf

SB 900



Feature

- Robust Design and Easy Installation
- Strong Against Shock or Side Force
- Protection Class IP67
- Paint Finished Steel
- Braided Shield 4-Wire Round Cable



Rated Capacity (R.C)	tf	10, 15tf	25tf, 30tf
Rated Output (R.O)	mV/V		2.0 ± 0.004
Zero Balance	mV/V		0 ± 0.03
Combined Error	%		0.03
Repeatability	%		0.02
Creep (30min)	%		0.03
Temperature Effect on			
Zero Value	% / 10°C		0.03
Output Value	% / 10°C		0.015
Excitation			
Recommended	V		10
Maximum	V		15
Resistance			
Input	Ω		800 ± 50
Output	Ω		700 ± 7
Insulation	M Ω		>2,000
Compensated Temp Range	°C		-10 ~ +40
Operating Temp Range	°C		-20 ~ +80
Physical Weight	kg	12.5	18.0

Truck Weighing Load Cell 10~25tf

SB 910



Feature

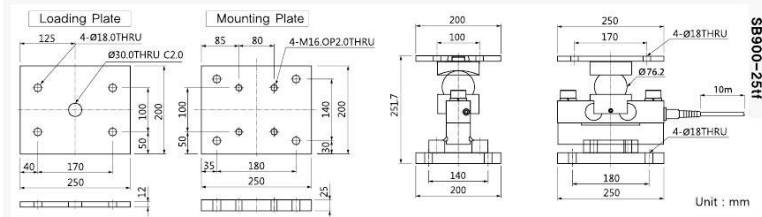
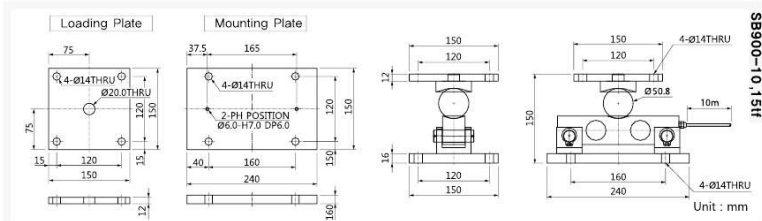
- Robust Design and Easy Installation
- Strong Against Shock or Side Force
- Nickel Plated Steel
- Braided Shield 4-Wire Round Cable



Rated Capacity (R.C)	tf	10tf	25tf
Rated Output (R.O)	mV/V		3.0 ± 0.006
Zero Balance	mV/V		0 ± 0.03
Combined Error	%		0.03
Repeatability	%		0.02
Creep (30min)	%		0.03
Temperature Effect on			
Zero Value	% / 10°C		0.03
Output Value	% / 10°C		0.015
Excitation			
Recommended	V		10
Maximum	V		15
Resistance			
Input	Ω		800 ± 50
Output	Ω		700 ± 7
Insulation	M Ω		>2,000
Compensated Temp Range	°C		-10 ~ +40
Operating Temp Range	°C		-20 ~ +80
Physical Weight	kg	8.0	23.0

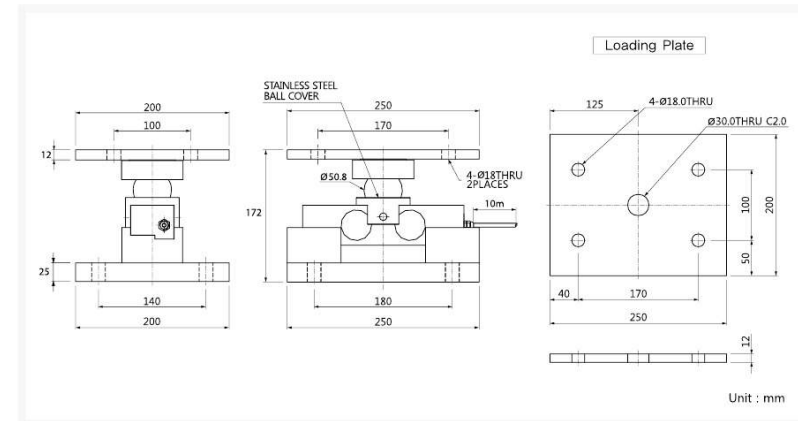
LOAD CELL

LOAD CELL



CABLE COLOR CODE

EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHIELD	(YELLOW)



CABLE COLOR CODE

EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHIELD	(YELLOW)

Truck and Tank Weight Load Cell 25~30tf

SB 920



Feature

- Robust Design and Easy Installation
- Strong Against Shock or Side Force
- Protection Class IP67
- Suitable for Moisture Environment
- Paint Finished Steel
- Braided Shield 4-Wire Round Cable
- Special order : 50tf, 100tf



Truck and Tank Weight Load Cell 25~30tf

SBW



Feature

- Robust Design and Easy Installation
- Strong Against Shock or Side Force
- Protection Class IP68
- Suitable for Moisture Environment
- Paint Finished Steel
- Braided Shield 4-Wire Round Cable
- Special order : 50tf

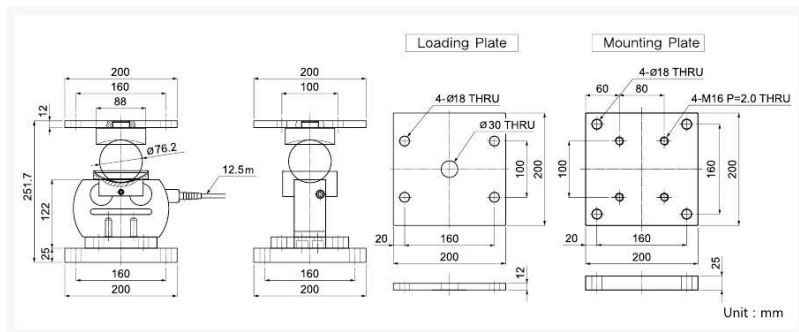


LOAD CELL

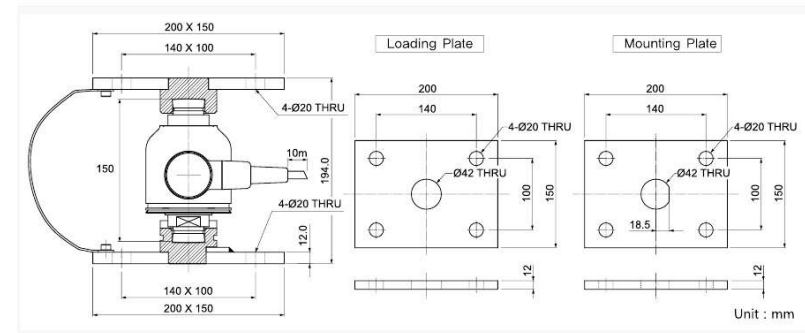
Rated Capacity (R.C)	tf	25tf, 30tf
Rated Output (R.O)	mV/V	2.0 ± 0.004
Zero Balance	mV/V	0 ± 0.02
Combined Error	%	0.03
Repeatability	%	0.02
Creep (30min)	%	0.03
Temperature Effect on		
Zero Value	% / 10°C	0.03
Output Value	% / 10°C	0.015
Excitation		
Recommended	V	10
Maximum	V	5
Resistance		
Input	Ω	800 ± 50
Output	Ω	700 ± 7
Insulation	M Ω	> 2,000
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-20 ~ +80
Physical Weight	kg	21.0

Rated Capacity (R.C)	tf	25, 30tf
Rated Output (R.O)	mV/V	2.0 ± 0.006
Zero Balance	mV/V	0 ± 0.03
Combined Error	%	0.02
Repeatability	%	0.01
Creep (30min)	%	0.017
Temperature Effect on		
Zero Value	% / 10°C	0.03
Output Value	% / 10°C	0.03
Excitation		
Recommended	V	10
Maximum	V	15
Resistance		
Input	Ω	800 ± 40
Output	Ω	700 ± 7
Insulation	M Ω	> 2,000
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-20 ~ +80
Physical Weight	kg	12.0

LOAD CELL



CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHEILD	(YELLOW)



CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHEILD	(YELLOW)

Load Cell Transmitter

ST SERIES



Feature

- The Transducer Amplifier of Strain Gauge (Load Cell, Pressure Sensor, Torque)
- Various Voltage, Current Output (0~10V, 0~40mA)
- Adjustable Sensor Input (0.5mV/V~4mV/V)
- Adjustable Filter Frequency (1Hz~5Hz)
- Light Weight, Easy to Mount

System Application

Long Distance Signal Transmission
 Various Controller Input Signal
 (PLC, Current Indicator A/D Board, X-T Recorder)

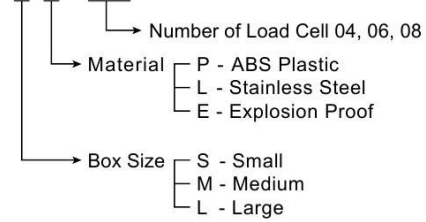
	Voltage Output Transmitter	Current Output Transmitter
MODEL	ST-V05, ST-V15, ST-V010	ST-I420, ST-I020, ST-I040
OUTPUT	0~5V, 1~5V, 0~10V	4~20mA, 0~20mA, 0~40mA
POWER (Constant Voltage)	+12/24V, +12/24V, +17~24V	+12/24V, +12/24V, +17~24V
Analogue Signal Input	1.2, 2.0, 3.0mV/V (0.5 ~ 4.0 mV/V DIP)	1.2, 2.0, 3.0mV/V (0.5 ~ 4.0 mV/V DIP)
Impedance Input	≤ 1010 Ω	≤ 1010 Ω
Transducer Affirmation Voltage	5V / 10 V Constant Voltage (Remote Sense type 5V / 10V)	5V / 10 V Constant Voltage (Remote Sense type 5V / 10V)
Zero Balance	±30% (R.O)	±30% (R.O)
Span Balance	±10% (R.O)	±10% (R.O)
Linearity Error Rate	0.02% (F.S)	0.025% (F.S)
Accuracy Rate	0.02% (F.S)	0.025% (F.S)
Temperature Range & Humidity	Within -25 ~ +85°C, 85% R.H	Within -25 ~ +85°C, 85% R.H
Load Resistance	Over 1.7 KΩ	0~500Ω



Load Cell Summing Box & Accessories

SUMMING BOX

SB - S P - XX



Feature

- Excitation Trimming
- Easy to Wire with Each Terminals
- 4~8 Load Cells Summing
- Protection Class IP67
- Polyimide Cable Gland
 - Input Cable : Ø5~ Ø8mm
 - Output Cable : Ø5~ Ø 10mm
- Material : ABS Plastic / Stainless Steel Housing

	ABS Size	Loadcell Quantity
Small	130(L)x80(D)x35(H)	4EA
Medium	130(L)x130(D)x60(H)	4EA, 6EA
Large	180(L)x130(D)x60(H)	6EA, 8EA

Unit : mm

SB-SP-04



SB-MP-06



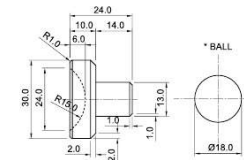
SB-LP-08



► Load cell Accessories



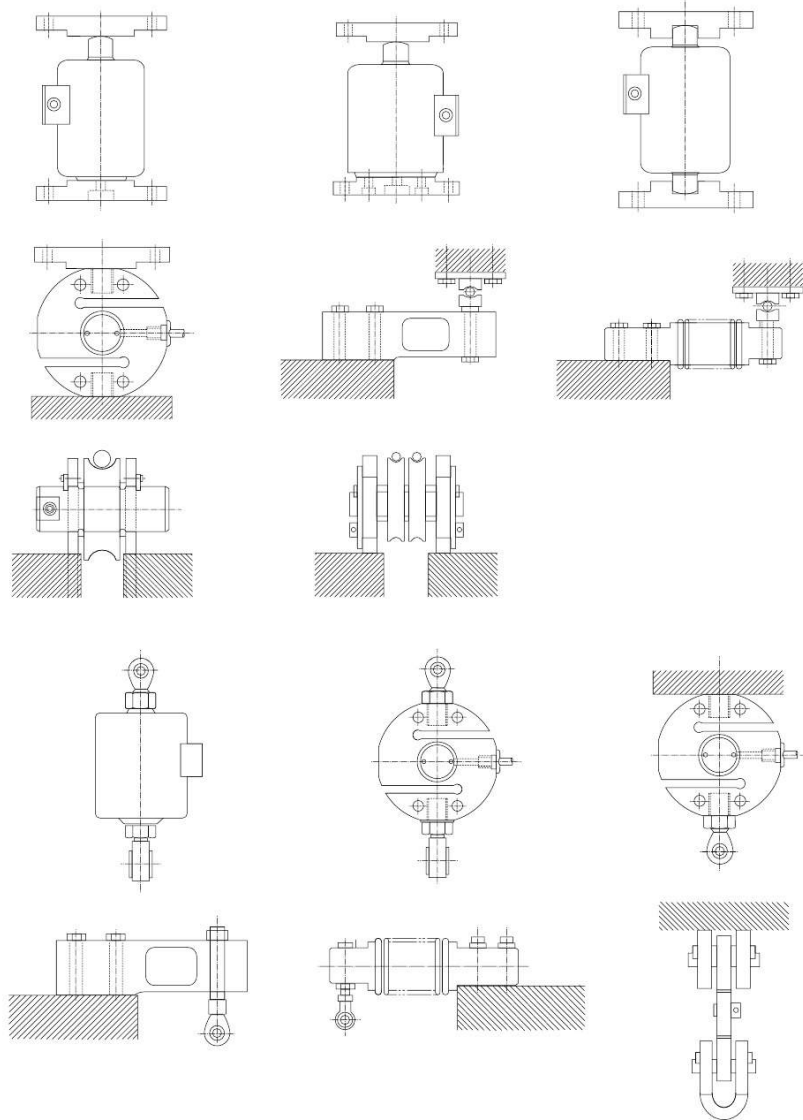
Ball & Ball Cup



Foot

Load Cell Installation Guide

LOAD CELL



SOC - 200



Feature

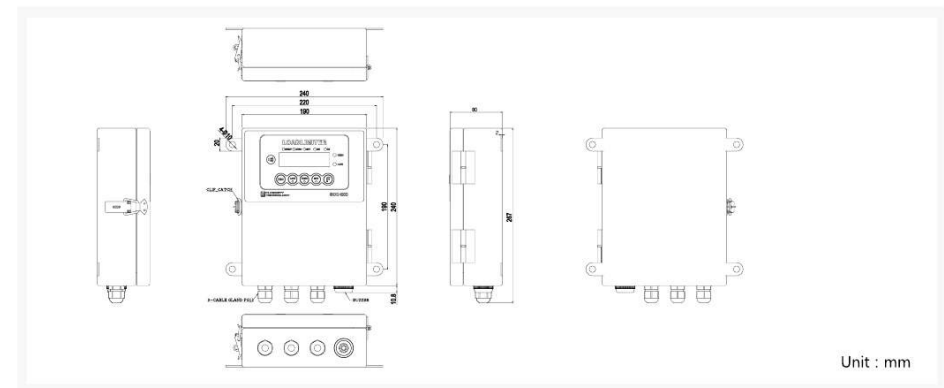
- RS232C & Current Loop Standard
- Wall Mounting Type

System Application

- Load Limit Controller Purpose
- Overload limiting Application

ANALOG PART	Input Sensitivity	Minimum 0.1 μ V/Digit
	Load Cell Excitation	DC +5V
	Non-Linearity	0.001 % of Full Scale
	Input Signal	Maximum ± 3.2 mV/V
DISPLAY PART	A/D Method & Sampling	Maximum 60 times / sec, Sigma- Delta
	Resolution	Internal : 1/2000,000, External: 1/20,000
	Main Display	7 Segment, 5 digits RED FND, Letter Size 0.6 Inch
	Under Zero	Minus Display
GENERAL PART	$\varnothing 2$ Red LED Status Lamp	STEADY, ZERO, SET, RX, TX, HIGH, LOW
	Power supply	AC 220V, 8W
	Operating Condition	Temperature: -10°C ~ +40°C, Humidity : Under 85% RH
	Size / Weight	(W)20 x (H)270 x (D)80 mm / About 3kg
	Serial Interface	RS232C
	Analogue output (2 Port)	Port 1 : 4~20mA Port 2 : 0~10V
Relay output (2EA)	HIGH, LOW (Operating with Buzzer)	

LOAD CELL



Unit : mm

Automation Truck Scale Controller

SA 600FM

► Automatic Truck Scale Controller SA600FM



RECOGNITION TYPE	RFID Card, Key-Pad(Vehicle Number)
COMMUNICATION	RS422 (Converting RS232 by Converter)
DISPLAY OF WEIGHT	Current / Vehicle / NET (6 Digit)
PRINTER	Direct Thermal Printing, Auto Cutting
PAPER	Thermal Roll Paper: 78 x Ø70 (mm)
RFID CARD DISTANCE	Maximum : 200mm
SPEAKER	5W Speaker Built-in
TEMPERATURE CONTROL	Fan / Heater Built-in
POWER SUPPLY	AC220V / 60Hz
R-PANEL SIZE / WEIGHT	(W)420 x(H)671 x(D)301 (mm) / 25kg (xH: Including Lamp)
OPTION	PC / Camera / Inter-Phone



► Automatic Truck Scale PC Software ATS2010



► Weighing Bill Sample



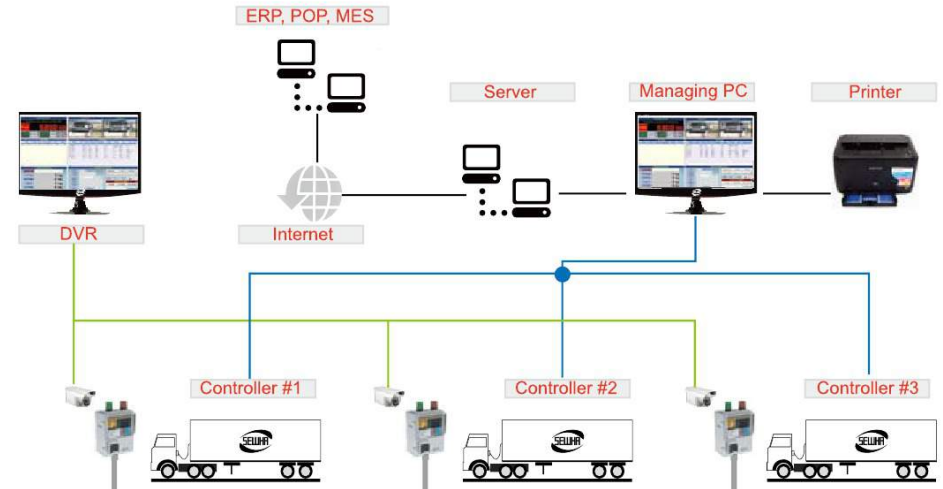
Basic Information Registrations & Management (User, Product, Truck, Transport, Customer)
 1st & 2nd Weighing Data / Material Code / Truck No. / Net Weight ..etc. All Weighing Data Will be Normalized In Data Base and Operator Can Make Weighing Report Daily / Weekly / Monthly / Annually.
 Various Kinds of Sorting Tools for Report. (Product, Customer, Truck, Date)

Automation Truck Scale Controller

► Automatic Truck Scale System Basic Composition



► Automatic Truck Scale System Network Composition



CONTROLLER

CONTROLLER

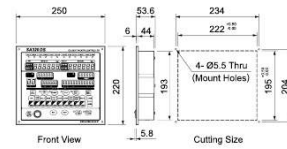
Auto Packer Controller

SA 320DS, SA 4120 Series

SA320DS (FND Type)	
Display Type	FND
Display Size	250 x220 x50mm(Double Type)
Digit	7 Segment Red FND



Physical Dimension [Unit:mm]



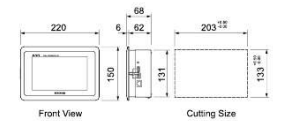
Feature

- Easy to Install & Set up
- Convenient for user
- Accurate to weigh & Peak
- Stable and Proven to Specialists
- Single / Double (SA320DS)
- Double type (SA320DS)

SA4120 (LCD Touch Type)	
Display Type	TFT LCD
Display Size	7(inch) TFT Wide Screen (800 x480)
Color & Touch	260,000 Color, 4wire system, 300 cd



Physical Dimension [Unit:mm]



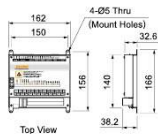
Feature

- Easy to Install & Set up
- Convenient for user
- Accurate to weigh & Peak
- Stable and Proven to Specialists
- Single type (SA4110)
- Double type (SA4120)
- Triple type (SA4130)
- Quad type (SA4140)

SA300E Controller



Physical Dimension [Unit:mm]



Feature

- PLC and input / output terminal combined type
- 3 PCS stable relay output – SP1, SP2, SP3.
- Automatic free fall compensation function.
- High resolution & performance A/D conversion
- Each type of display can be connectable.
- WATCH-DOG system can recover automatically when the MICOM has malfunction due to abnormal various from environment or noise.
- All in / output signal is composed by "Photo-coupled" to cover all noise from external environment and protected by data back-up function when the power input.
- Single / Double / Triple / Quad type are applied.

	ANALOG PART	GENERAL PART
Input Sensitivity	Min. 0.1 μ V / Digit	
Load Cell Excitation	DC +5V	
Non-Linearity	0.001% of Full Scale	
Input Signal	Max \pm 3.2 mV/V	
A/D & Sampling	Max 60 times / sec, Sigma-Delta	
Resolution	Internal : 1/1,000,000 External: 1/20,000	
Drift	ZERO 10 PPM / °C SPAN 10 PPM / °C	
Power Supply	Free Voltage (AC95 ~ 240V, 50/60 Hz)	
Operating Condition	Temperature : -10°C ~ +40°C, Humidity : Under 85% RH	
Size / Weight	(W)236 x(H)170 x(D)122 mm / Gross 0.8kg	
Serial Interface	RS485(1 EA), RS232C (3 EA)	

Checkweigher Controller

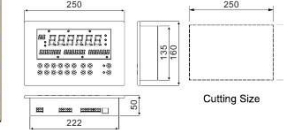
SC 400A & SC 400F



SC 400F



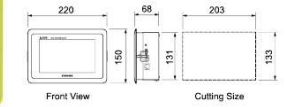
Physical Dimension [Unit:mm]



SC 400A



Physical Dimension [Unit:mm]



Feature

- Various Weighing mode (Current Weight, Deviation, Count)
- Maximum 180times Weighing per 1 Min.
- Relay output' s function is selectable (Total 14 kinds / Relay Output : 8EA)
- High speed judgment & 50 P/N' s set value is able to save
- [Option] Various external device is able to connect (Metal detector, Printer, PC)

Contents		SC 400A	SC 400F	
A/D Conversion	Display resolution	1/20,000		
	Internal resolution	1/2,097,152 (\pm 1,048,576)		
	Input sensitivity	Minimum 0.1 μ V/V		
	Maximum input signal(mV)	-3.00mV/V to +3.00mV/V		
	Load cell excitation	+5V DC		
	Conversion method	Sigma-Delta		
	Decimal setup	0, 0.0, 0.00, 0.000		
	DRIFT	ZERO	10PPM/°C	
		SPAN	10PPM/°C	
	Non Linearity	0.001% of Full Scale		
A/D sampling	Maximum 120times / 1sec			
Environment	Temperature range	-10°C ~ +40°C [14°F ~ 104°F]		
	Humidity range	40% ~ 85% RH, Non-condensing		
Display	Type	7 Inch TFT WIDE (800X480)LCD	1inch 6digit Red FND / 0.8inch 6digit Red FND	
	Control	MAX Process speed	MAX 180EA/min	MAX 120EA/min
Communication	Serial interface	RS 232C		
Relay output	Terminal	Total 8 point relay output		

Overseas Agent Information

- Syria : Akeel Industrial Electric Co.
- IRAQ : Ali Sadek Office
Almutajaj company
- Jordan : Allidaa
- Saudi Arabia : Dash Control System
- Yemen : Al-ashwal for Electric Trading & Agencies
- United Arab Emir : Arpi Industrial Equipment
- Armenia : Bright Industry LLC
- Iran : Eamen Tablo ENG Co.
- Egypt : Electro Hydraulic Automation

- China : Modern Hero Technologies Co., Ltd

- Vietnam : ANS Vietnam
- Thailand : Compomax Co., Ltd
Widsawanich Engineering Co., Ltd

- Mexico : AMV Automation
- Colombia : Impomark SAS

- Bangladesh : System ENG
- India : TIA Technology india Pvt.Ltd
- Pakistan : Axis International

- Malaysia : HI-Scale Trading SDN BHD
VK Power Automation SDN BHD
- Indonszia : P.T Sarana Trimitra Solusindo
- Singapore : YT Automation

- Republic of South Africa :
Weighing Instrument Services (PTY) Ltd
East Rand Scales

- Mauritius : VM Automation

- Australia : PHE Solutions Pty, Ltd
- Newzealand : Fresco systems Pty,Ltd



2014E-2



Total Solution For Industrial Weighing

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