



SEWHA CNM

PRODUCTS CATALOG



Company Introduction

Since established in 2000, SEWHA CNM is the foregoing leader in weighing and automatic control system business in the Weighing Industry. With decades of experienced staffs, outstanding technology and services, we provide the best solution to users.

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

SEWHA CNM 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.

SEWHA CNM
WEIGHING SOLUTION

History

-
- 2015** -Developed new generation indicator SI500 Series (SI510, SI520, SI530, SI540, SI550)
-Developed new Automatic truck Scale controller for LPR (License Plate Recognition)
-Acquired CE Certification of Indicator SI400, SI410
- 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 Load cell SB210, Tension Load cell 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 SEWHA CNM corporation
-Developed relay type indicator



Global Network

As the world of business is being globalized, SEWHA CNM also extends its business field to the world.

From South-East Asia to Middle-East, Africa, Americas and Europe, SEWHA CNM has appointing potential partners to provide more convenience for local customers.

SEWHA CNM's technology is acknowledged internationally. SEWHA CNM will meet the world customers' demands through the continuing research and development.



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INDICATOR

Indicator Selection Guide

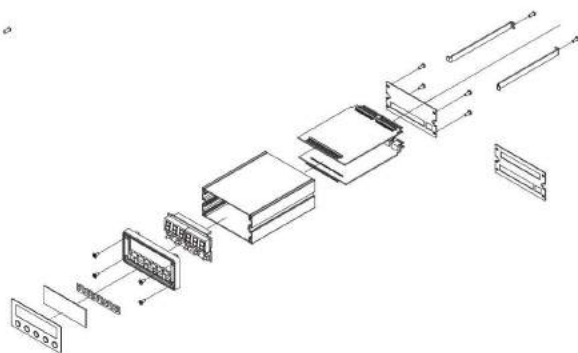
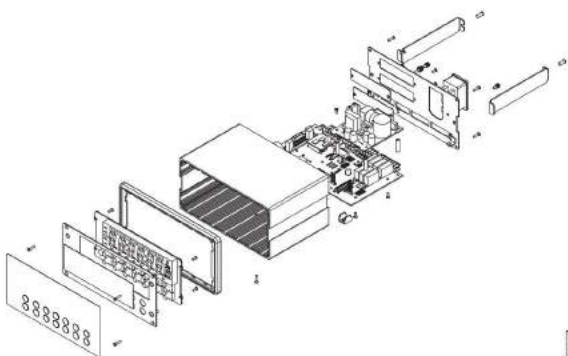
| | SI200 | SI250 | SI300 | SI400 | SI410 | SI4630E | SI460A SI480E | SI460C SI580E | SI 560A | SI510 | SI520 | SI530 | SI540 | SI550 |
|----------------------------|-------|-------|-------|-------|-------|---------|------------------|------------------|---------|-------|-------|-------|-------|-------|
| F UNCTION | | | | | | | | | | | | | | |
| Hold | ● | ● | ● | ● | ● | ● | ● | ● | ● | | ● | ● | | |
| Sub Display | | | | | | | | | ● | ● | ● | ● | ● | ● |
| Parts Number Memory(kinds) | | | | 50 | 50 | | | | | 50 | 50 | 50 | 50 | 50 |
| Control Method (step) | | | | | 4 | | | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
| Relay Output (pcs) | | | | | 7 | | | 4 | 4 | 7 | 7 | 7 | 7 | 7 |
| External Input (pcs) | | | | 2 | 6 | 6 | 2 | 4 | 4 | 6 | 6 | 6 | 6 | 6 |
| A PPPLICATION | | | | | | | | | | | | | | |
| Truck Scale | ● | ● | ● | ● | ● | ● | ● | | | | | | | |
| Animal Scale | ● | ● | ● | ● | ● | ● | ● | | | | | | | |
| Checkweigher | | | | | ● | | | ● | ● | | ● | ● | | |
| Packer | | | | | ● | | | ● | ● | ● | ● | | ● | |
| Filler | | | | | ● | | | ● | ● | ● | ● | | ● | |
| Tank Scale | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Tester | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | |
| W EIGHING MODE | | | | | | | | | | | | | | |
| Limit | | | | | ● | | | ● | ● | ● | ● | ● | ● | |
| Packer | | | | | ● | | | ● | ● | ● | ● | | ● | |
| Checker | | | | | ● | | | ● | ● | | | ● | | |
| Accumulator | | | | | ● | | | ● | | | | | | |
| User Choice | | | | | ● | | | ● | | | | | | |

INDICATOR

| INTERFACE & OPTION | SI200 | SI250 | SI300 | SI400 | SI410 | SI4630E | SI460A SI480E | SI460C SI580E | SI 560A | SI510 | SI520 | SI530 | SI540 | SI550 |
|-----------------------|-------|-------|-------|-------|-------|---------|------------------|------------------|---------|-------|-------|-------|-------|-------|
| Current Loop | | | ● | ● | ● | ● | | | | ● | ● | ● | ● | ● |
| RS232 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| RS485/RS422 | SELEC | | | | | | ● | ● | ● | | | | | |
| Analog Out 0-10V | | | | OP | OP | OP | | SELEC | SELEC | OP | OP | OP | OP | OP |
| Analog Out 4~20mA | | | | OP | OP | OP | | ● | ● | OP | OP | OP | OP | OP |
| Extention Serial Port | | | | OP | OP | | | | | OP | OP | OP | OP | OP |
| | | | | OP | OP | | | | | OP | OP | OP | OP | OP |
| | | | | OP | OP | | | | | OP | OP | OP | OP | OP |
| BCD IN | | | | OP | OP | | | | OP | OP | OP | OP | OP | OP |
| BCD OUT | | | | OP | OP | | | | | OP | OP | OP | OP | OP |
| Ethernet | | | | OP | OP | | | | | OP | OP | OP | OP | OP |
| SD MEMORY CARD | | | | OP | OP | | | | | OP | OP | OP | OP | OP |
| WIRELESS INTERFACE | | ● | ● | OP | OP | OP | | | | OP | OP | OP | OP | OP |

▶ SI 400 / SI 500 Series Explode

▶ SI 480E / SI 580E Series Explode



Simple Weighing Indicator

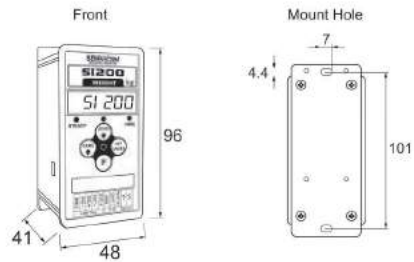
SI 200



Feature

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

Physical Dimension [Unit:mm]



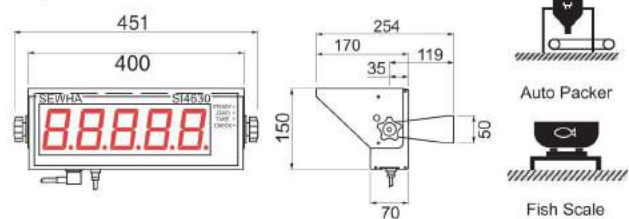
SI 4630E



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]



INDICATOR

| | SI 200 | SI 4630E |
|--------------|----------------------|----------------------------------------------------------------------------------------------------------|
| ANALOG PART | Input Sensitivity | Min. 0.1mV / 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 : 1/1,000,000 Display : 1/20,000 |
| DISPLAY PART | Main Display | 7 Segment, 6 Digit Red FND, H = 7.6 mm |
| | Under Zero | Minus(-) Display |
| | Φ2 LED | STEADY, ZERO, TARE, RTxD |
| GENERAL PART | Power Supply | DC12V 8W |
| | Operating Condition | Temperature : -10℃ ~ +40℃, Humidity : Under 85% RH |
| | Size/Weight | (W)48 x (H)96 x (D)41 mm / 140g |
| | Interface | RS232C / RS485 (User Selection) |
| | External Input | NONE |
| | Key pad | ZERO, TARE, F,NET/GROSS |
| | Relay Output | NONE |
| | Option | NONE |
| | | Free Voltage(AC100V ~ AC 240V, 50/60Hz) |
| | | 4 EA |
| | | Wired key pad |
| | | 4 EA (Option:4630EF) |
| | | Analog Output 4~20mA, 0~10V / Serial Interface RS422, RS485 Bluetooth (Wireless) / IR wireless keypad |

Simple Weighing Indicator

SI 300A / B

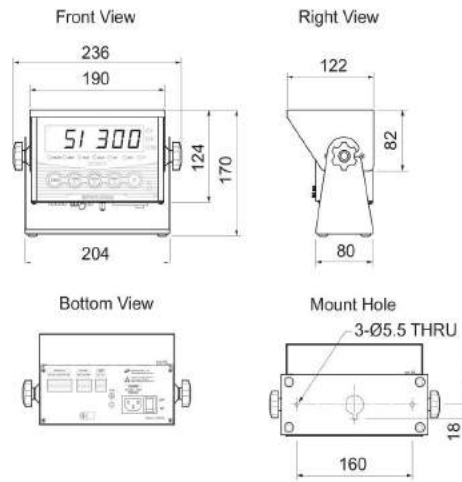
INDICATOR



Feature

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

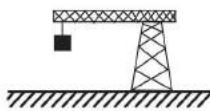
Physical Dimension [Unit:mm]



| | | SI 300A | SI 300B |
|--------------------------|-----------------------------------------------------------------|--------------------------------------------------------------------------|-------------------------|
| 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 | |
| Resolution | Internal : 1/2,000,000 (\pm 1,000,000) Display : 1/20,000 | | |
| DISPLAY PART | Main Display | 7 Segment, 6 Digit, H = 25.4 mm, RED Color FND | |
| | Under Zero | Minus (-) Display | |
| | "■" Status Lamp | STEADY, ZERO, TARE, HOLD, TxD, RxD, PRT, BAT Green Color | |
| | "▼" Status Lamp | 8 pcs, Green Color | |
| | "◀" Status Lamp | 4 pcs, Green Color | |
| FONT Red LED Status Lamp | g, kg, t, pcs, oz, lb | | |
| GENERAL PART | Power Supply | AC100~240V, 50/60Hz, About 20W | DC12V 3,300mA (Battery) |
| | Operating Condition | Temperature : -10° C ~ $+40^{\circ}$ C, Humidity : Under 85% RH | |
| | Size / Weight | (W)190 x (H)124 x (D)122 mm / Weight : 2kg | |
| | Interface | RS232C & Current Loop | |



Truck Scale



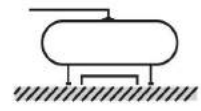
Crane Scale



Tester



Animal Scale



Tank Scale

Simple Weighing Indicator

SI 250

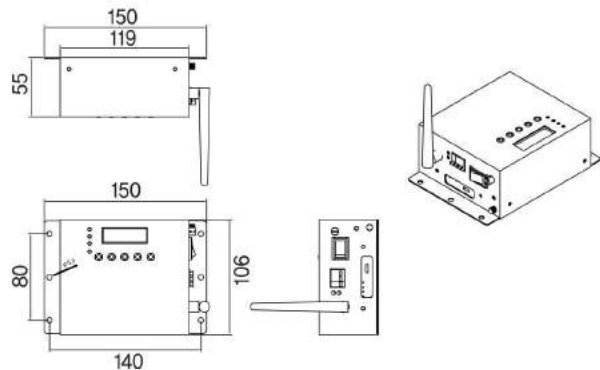
SI 300AW / BW



Feature

- Wireless indicator (SI250) & Display (SI300AW/BW) Combo
- Up to 100m range
- Application : Truck scale, Crane scale, Platform scale etc.

Physical Dimension [Unit:mm]



INDICATOR

| | | SI 250 | SI 300AW | SI 300BW |
|------------------------|--------------------------|--------------------------------------------------------------|----------------------------------------------------------|-------------------------|
| 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 | |
| Resolution | | Internal : 1/2,000,000 (\pm 1,000,000) Display : 1/20,000 | | |
| DISPLAY PART | Main Display | 7 Segment, 6 Digit Red FND, H = 9,1mm | 7 Segment, 6 Digit Red FND, H = 25,4mm | |
| | Under Zero | X | Minus (-) Display | |
| | "■" Status Lamp | X | STEADY, ZERO, TARE, HOLD, TxD, RxD, PRT, BAT Green Color | |
| | "▼" Status Lamp | X | 8 pcs, Green Color | |
| | "◀" Status Lamp | X | 4 pcs, Green Color | |
| | FONT Red LED Status Lamp | X | g, kg, t, pcs, oz, lb | |
| Ø2 Red LED Status Lamp | STEADY, ZERO, TARE, RTxD | X | | |
| GENERAL PART | Power Supply | DC12V 3,300mA (Battery) | AC100/240V, 50/60Hz, About 20W | DC12V 3,300mA (Battery) |
| | Operating Condition | Temperature : -10° C ~ +40° C, Humidity : Under 85% RH | | |
| | Size / Weight | (W)150 x (H)106 x (D)55 mm Weight = 1kg | (W)190 x (H)124 x (D)122 mm / Weight = 2kg | |
| | Interface | RS232C & 447MHz Wireless(RF Interface) | | |

Simple Weighing Indicator

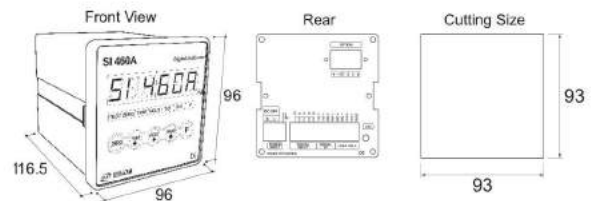
SI 460A



Feature

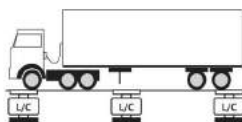
- Hold Function : Sample, Average, Peak
- Power Selectable : DC & AC Ordering Spec.
- MODBUS(RTU) protocol
- Option : Serial Comm, Analog Out.

Physical Dimension [Unit:mm]

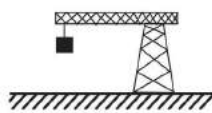


INDICATOR

| | | SI 460A |
|--------------|---------------------------------|----------------------------------------------------------------------------|
| 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 |
| | Resolution | Internal : 1/1,000,000 Display : 1/20,000 |
| DISPLAY PART | Main Display | 7 Segment, 6 Digit Red FND, Letter size : 16.2mm |
| | Under Zero | Minus(-) Display |
| | Φ 2 LED | STEADY, ZERO, TARE, HOLD, TxD, RxD, F |
| GENERAL PART | 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) |
| | Interface | RS422 & RS485 Modbus |
| | External Input | 4EA |
| | Option | RS232C, Analog output 4-20mA, 0-10V |



Truck Scale



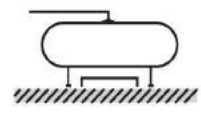
Crane Scale



Tester



Animal Scale



Tank Scale

Simple Control Indicator

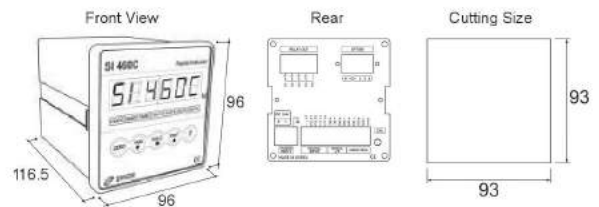
SI 460C



Feature

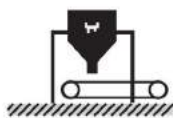
- Weighing mode : Limit mode, Packer mode, Checker mode, Accumulating mode
- User custom setting : External input, Relay output
- Power Selectable : DC & AC Ordering Spec.
- MODBUS(RTU) protocol
- Option : Serial Comm, Analog out

Physical Dimension [Unit:mm]

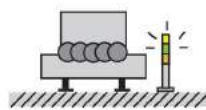


INDICATOR

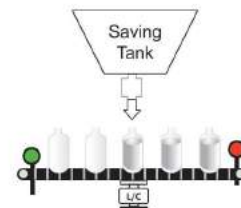
| | | SI 460C |
|--------------|-------------------------------------|----------------------------------------------------------------------------|
| ANALOG PART | Input Sensitivity | Min. 0.1 μ V / Digit |
| | Load Cell Excitation | DC 5V |
| | Non-Linearity | 0.001% of Full Scale |
| | Input Signal | Max 3.0 mV/V |
| | A/D Sampling | Max 60 time/sec, Sigma-Delta |
| | Resolution | Internal : 1/1,000,000 Display : 1/20,000 |
| DISPLAY PART | Main Display | 7 Segment, 6 Digit Red FND, Letter size : 16.2mm |
| | Under Zero | Minus(-) Display |
| | Φ 2 LED | STEADY, ZERO, TARE, HOLD, TxD, RxD, F |
| GENERAL PART | 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) |
| | Interface | RS422 & RS485, Modbus |
| | External Input | 4EA |
| | Relay Output | 4EA |
| Option | RS232C, Analog output 4-20mA, 0-10V | |



Auto Packer



Auto Checker



Filler Application

Simple Control Indicator

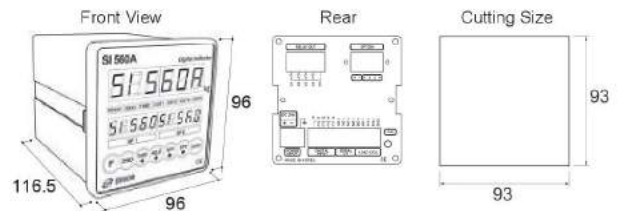
SI 560A



Feature

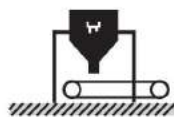
- Dual display(Main, P/N, SP1, SP2, SP3, SP4)
- Weighing mode : Limit mode, Packer mode, Checker mode
- User custom setting : External input, Relay output
- Power Selectable : DC & AC Ordering Spec.
- MODBUS(RTU) protocol

Physical Dimension [Unit:mm]

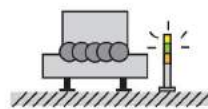


INDICATOR

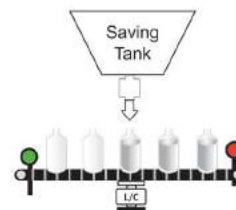
| | | SI 560A |
|--------------|---------------------------------|-----------------------------------------------------------------------------|
| ANALOG PART | Input Sensitivity | Min. 0.1 μ V / Digit |
| | Load Cell Excitation | DC 5V |
| | Non-Linearity | 0.001% of Full Scale |
| | Input Signal | Max 3.0 mV/V |
| | A/D Sampling | Max 60 time/sec, Sigma-Delta |
| | Resolution | Internal : 1/1,000,000 Display : 1/20,000 |
| DISPLAY PART | Main Display | 6 Digit Red FND, Letter size : 15mm / |
| | Sub Display | 10Digit Red FND, Letter size : 13.5 mm |
| | Under Zero | Minus(-) Display |
| | LED | STEADY, ZERO, TARE, OUT1, OUT2, OUT3, OUT4 |
| GENERAL PART | 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) |
| | Interface | RS422 & RS485, Modbus |
| | External Input | 4EA |
| | Relay Output | 4EA |
| | Option | RS232C, Analog output 4-20mA, 0-10V |



Auto Packer



Auto Checker



Filler Application

Simple Control Indicator

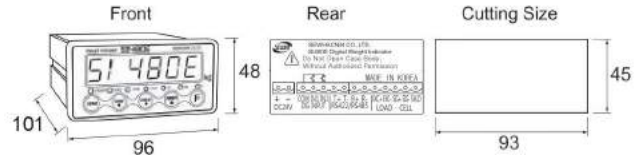
SI 480E



Feature

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

Physical Dimension [Unit:mm]



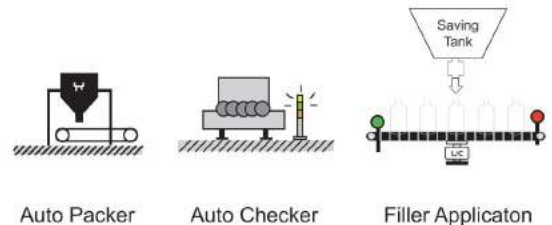
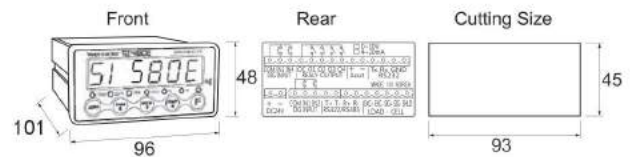
SI 580E



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]



INDICATOR

| | | SI 480E | SI 580E |
|--------------|-------------------------------------|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| 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, Display: 1/20,000 | |
| | Main Display | 7 Segment, 6 Digit Red FND, H = 16.2mm | |
| | Under Zero | Minus (-) Display | |
| GENERAL PART | \varnothing 2 Red LED Status Lamp | STEADY, ZERO, TARE, HOLD, Tx, Rx, F | STEADY, ZERO, TARE, OUT1, OUT2, OUT3, OUT4 |
| | 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 | |
| | Interface | Standard : RS422 & RS485, Special Order : RS232C | Slot 1 - Standard : RS422 & RS485 Special order : RS232C Slot 2 - Standard : RS232C Special order : RS422 & RS485 |
| | Analog Output | NONE | Analog Output 4-20mA, 0-10V (Option : SI4630EF) |
| | External Input | 2 EA | 4 EA |
| Relay Output | NONE | 4 EA | |

Simple Weighing Indicator

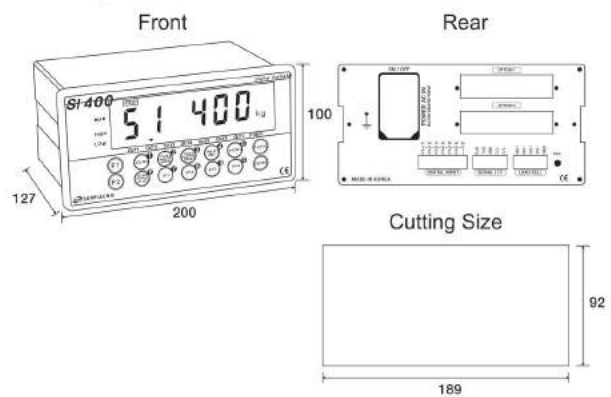
SI 400



Feature

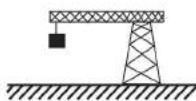
- Dual color display
- User custom setting : External input
- Hold Function : Sample, Average, Peak
- SD memory (Option card)
- MODBUS (RTU) protocol (Option card)

Physical Dimension [Unit:mm]



INDICATOR

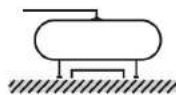
| | | SI 400 |
|--------------|----------------------|---------------------------------------------------------------------------------------------------------------------------|
| ANALOG PART | Input Sensitivity | Min. 0.1 μ V / Digit |
| | Load Cell Excitation | DC 5V |
| | Non-Linearity | 0,001% of Full Scale |
| | Input Signal | Max 3.0 mV/V |
| | A/D Sampling | Max 60 time/sec, Sigma-Delta |
| | Resolution | Internal : 1/2,000,000 Display: 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 | 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) / 1,23kg |
| | Interface | RS232C, Current loop Standard built in, Modbus (Option) |
| | External Input | 6EA |
| | Relay Output | None |
| | Option | Analog Output 0-10V, 4-20mA / Serial Interface RS232C, RS422, RS485 BCD Input / BCD Output / Ethernet / SD memory card |



Crane Scale



Tester



Tank Scale



Truck Scale

Simple Control Indicator

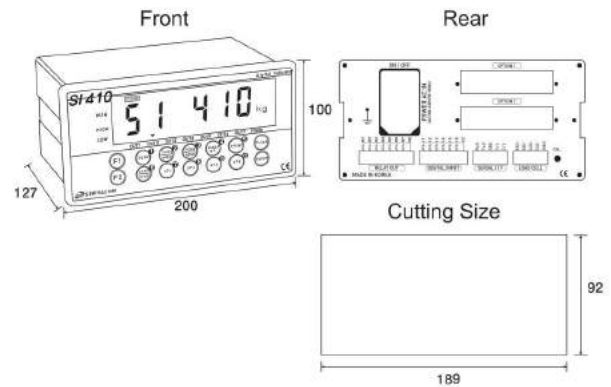
SI 410



Feature

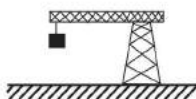
- Dual color display
- User custom setting : External input, Relay output
- Hold Function : Sample, Average, Peak
- SD memory(Optional card)
- MODBUS(RTU) protocol(Optional card)

Physical Dimension [Unit:mm]



INDICATOR

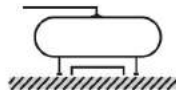
| | | SI 410 |
|--------------|----------------------|------------------------------------------------------------------------------------------------------------------------|
| ANALOG PART | Input Sensitivity | Min. 0.1 μ V / Digit |
| | Load Cell Excitation | DC 5V |
| | Non-Linearity | 0,001% of Full Scale |
| | Input Signal | Max 3.0 mV/V |
| | A/D Sampling | Max 60 time/sec, Sigma-Delta |
| | Resolution | Internal : 1/2,000,000 Display: 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 | 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 |
| | Interface | 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 |



Crane Scale



Tester



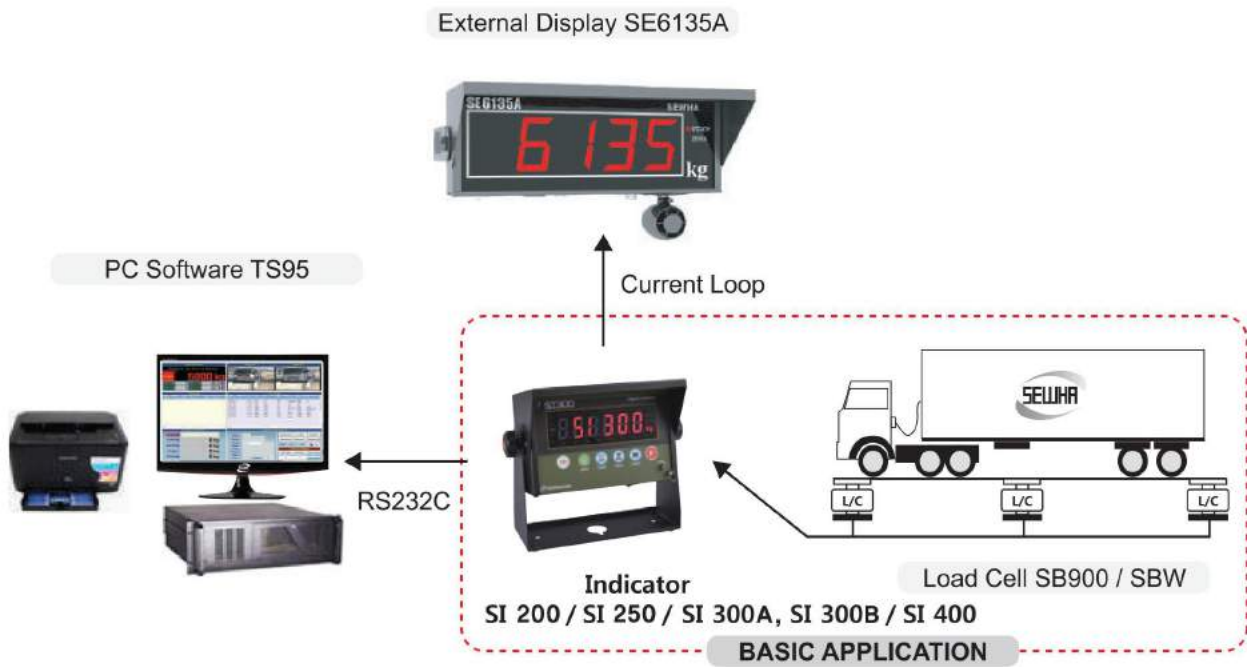
Tank Scale



Truck Scale

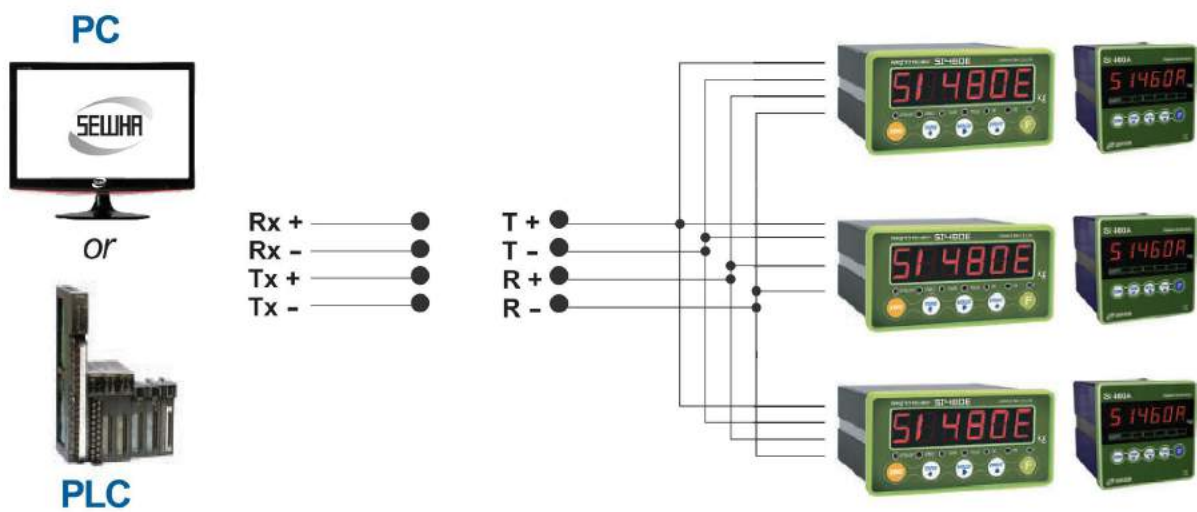
System Application

Industrial Scale - Using SI200 / SI250 / SI300 / SI400



INDICATOR

SI460A, SI480E Network Composition By RS422



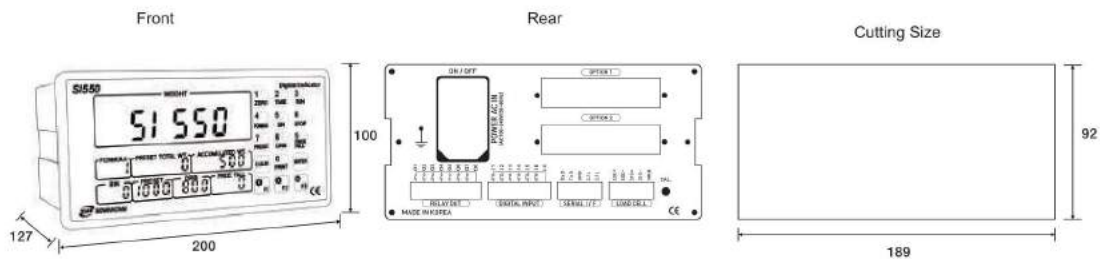
Max 32 Set of SI480E or SI460A are Connectable

Common Specification of Precision Control Indicator

SI 510 / SI 520 / SI 530 / SI 540 / SI 550

| MODEL | | SI510 | SI520 | SI530 | SI540 | SI550 |
|-------------|---------------------|--------|----------------|---------|-------------------------|-----------------------|
| Application | | Packer | Quantity Count | Checker | Loss-in Weight weighing | Accumulation weighing |
| WEIGHT MODE | Limit Mode | ● | ● | | ● | |
| | Packer Mode | ● | ● | | ● | |
| | Checker Mode | ● | ● | ● | | |
| | Loss-in Weight Mode | | | | ● | |
| | Batch Mode | | | | | ● |

Physical Dimension [Unit:mm]



INDICATOR

| | SI 510 | SI 520 | SI 530 | SI 540 | SI 550 |
|--------------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|--------|--------|--------|
| 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 | | | |
| Resolution | Internal : 1/2,000,000 (\pm 1,000,000) Display : 1/20,000 | | | | |
| DISPLAY PART | Main Display | "7 Segment, 6 Digit, H = 20 mm, Minus(-) Display RED / GREEN Dual Color FND" | | | |
| | Sub Display | 7 Segment, 15 Digit Red FND 2 Lines, H = 9.0 mm | | | |
| | "■" Status Lamp | "STEADY, ZERO, TARE, HOLD, RUN, TxD, RxD, OUT1~OUT7(16pcs RED/GREEN Dual Color), Spare 2 pcs" | | | |
| FONT Red LED Status Lamp | g, kg, t, pcs, oz, lb | | | | |
| GENERAL PART | Power Supply | AC100/240V, 50/60Hz, About 20W | | | |
| | Operating Condition | Temperature : -10° C \sim $+40^{\circ}$ C, Humidity : Under 85% RH | | | |
| | Size / Weight | (W)200 x (H)100 x (D)127 mm / Weight : 1.25kg | | | |
| | Interface | RS232C & Current Loop | | | |
| | External Input | 6 EA | | | |
| | Relay Output | 7 EA (user selectable) | | | |
| | Option | Analog Output 0~10V / 4~20mA / RS232C / RS485 / RS422 / BCD IN / BCD OUT / Ethernet / SD Memory Card / Wireless Interface | | | |

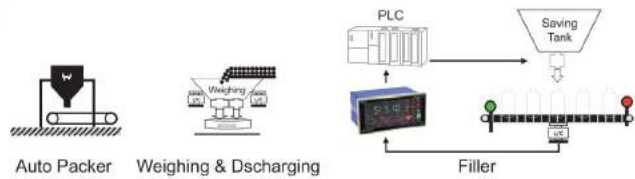
Precision Control Indicator

SI 510



Feature

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



SI 520

INDICATOR



Feature

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

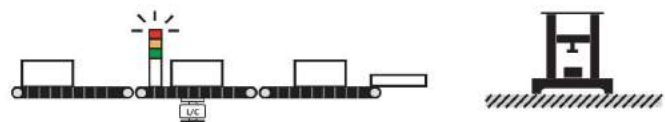


SI 530



Feature

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



Auto Check Weigher

Tester

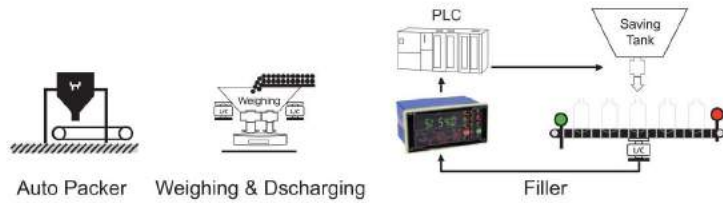
Precision Control Indicator

SI 540



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

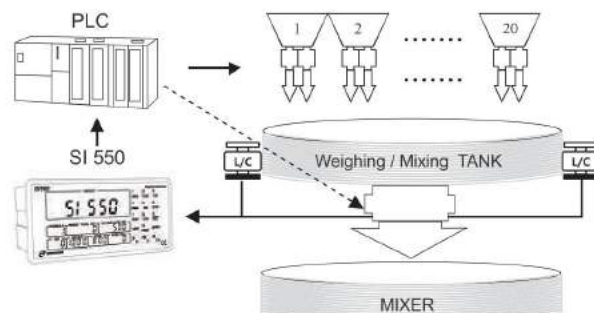


SI 550



Feature

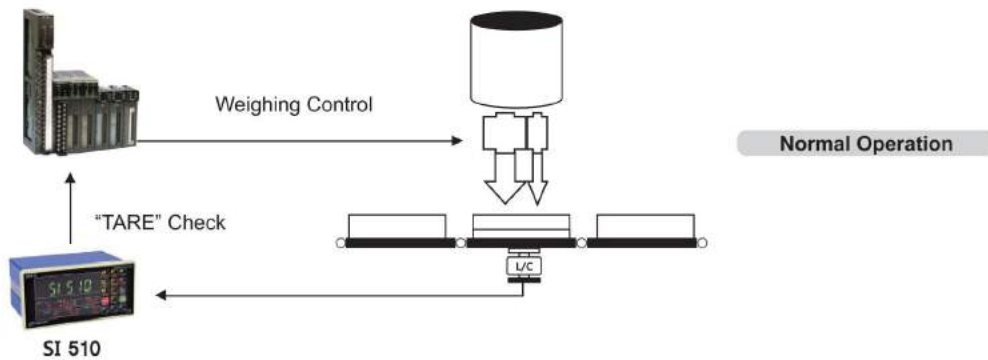
- Multi display(Main, Formula, Bin no., Free fall, Pre1, Final, Pre1, Operating)
- 50 kinds formula(Max. 20 kinds material)
- Auto batch accumulation mode with PLC(BCD input, BIN output)
- 2 Step control for each material(Bin)



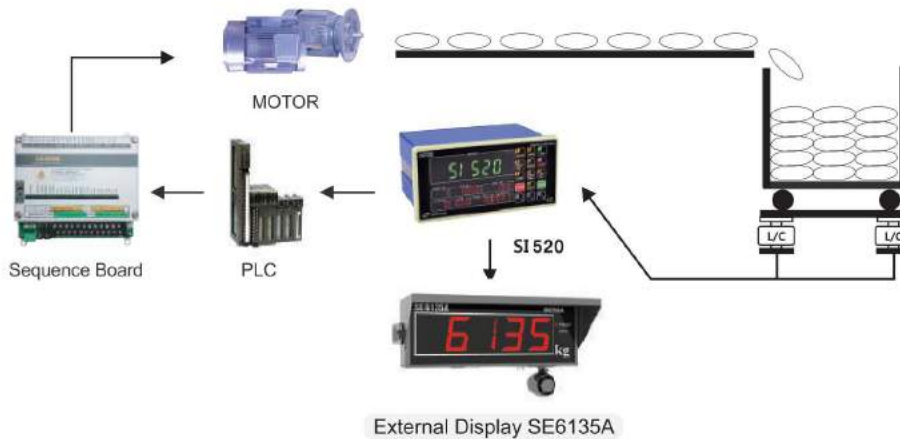
INDICATOR

System Application

Auto Packer Using SI 510

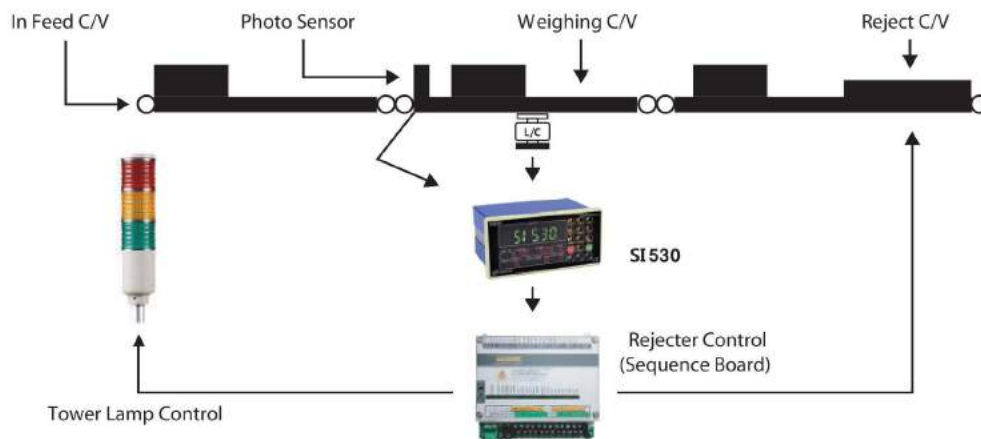


Quantity Control Application Using SI 520

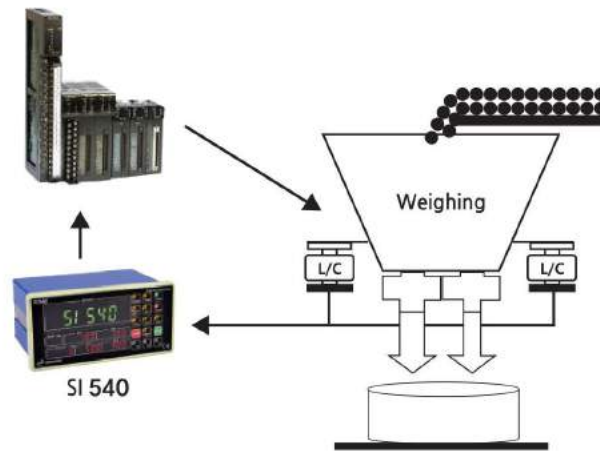


INDICATOR

Auto Check Weighing Application Using SI 530



Loss In Weight Application Using SI 540



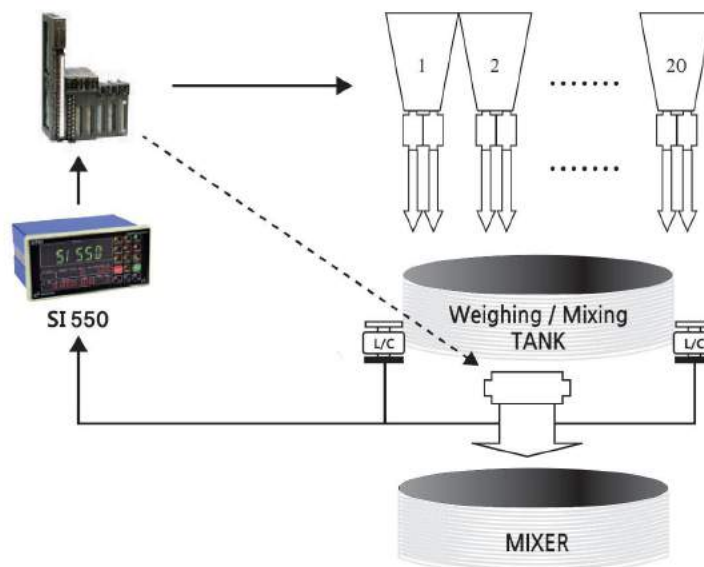
1) 1 Step Feeding / 2 Step Discharge Mode

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

Accumulating Mixing Application Using SI 550



Option Cards

SI 400 / SI 500 Series Option Cards



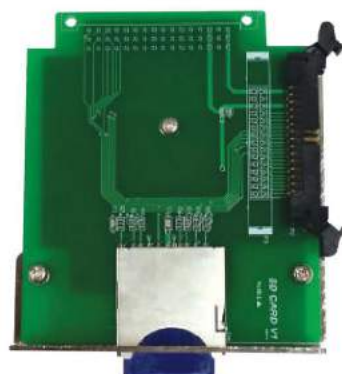
BCD IN



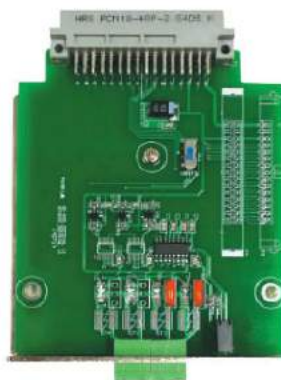
BCD OUT



Ethernet



SD Memory Card



Serial Communication
(RS232C, RS422, RS485)



Analog Output
(4–20mA, 0–10V)

External Display

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

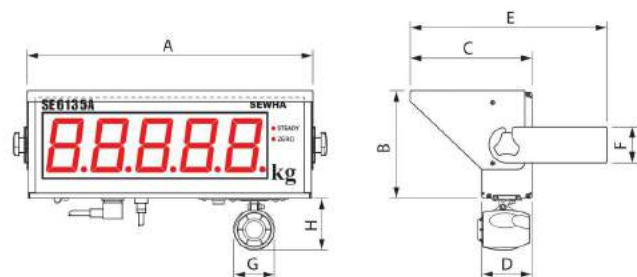


Feature

- 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

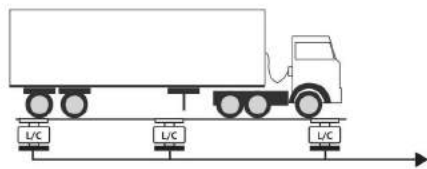
| Unit (mm) | A | B | C | D | E | F | G | H |
|-----------|-----|-----|-----|----|-----|----|----|----|
| SE 6125A | 330 | 131 | 150 | 70 | 255 | 50 | | |
| SE 6135A | 400 | 151 | 170 | 70 | 275 | 50 | 57 | 73 |
| SE 6145A | 545 | 183 | 185 | 70 | 290 | 50 | | |
| SE 6165A | 720 | 247 | 210 | 70 | 325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

Physical Dimension [Unit:mm]



EXTERNAL DISPLAY

| | 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 |



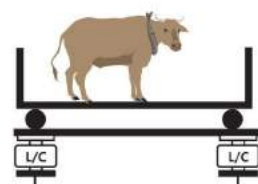
Truck Scale



Indicator



SE6125A / SE6135A / SE6145A / SE6165A



Animal Scale



Indicator



SE6125A / SE6135A / SE6145A / SE6165A

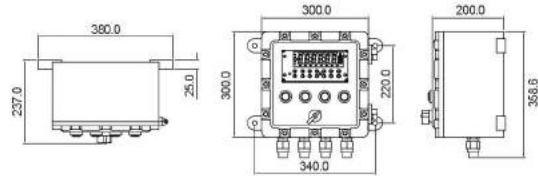
Housing & Printer

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 : Stainless steel Type

[SE400EX] Physical Dimension [Unit:mm]



| SE4010 | SE4020 | SE4021 | SE400EX (Explosion proof Ex d IIB T6) |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |
| POWER, ZERO, TARE (W)280 x(H)240 x(D)300mm | POWER, ZERO, TARE, PRINT (W)400 x(H)260 x(D)330mm | POWER, PRINT (W)250 x(H)260 x(D)270mm | POWER, ZERO, TARE (W)300 x(H)300 x(D)200mm |

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 | 24/32 36/42 |
| FONT SIZE | Eng: 8x14, Kor: 16x14 Eng: 6x12, Kor: 12x12 | Eng: 12x24, Kor: 24x24 Eng: 9x24, Kor: 18x24 |
| SPEED | 1.6 line/sec. | |
| DOT / LINE | 240 | 384 |
| 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) |

Digital Load Limiter

SOC - 200



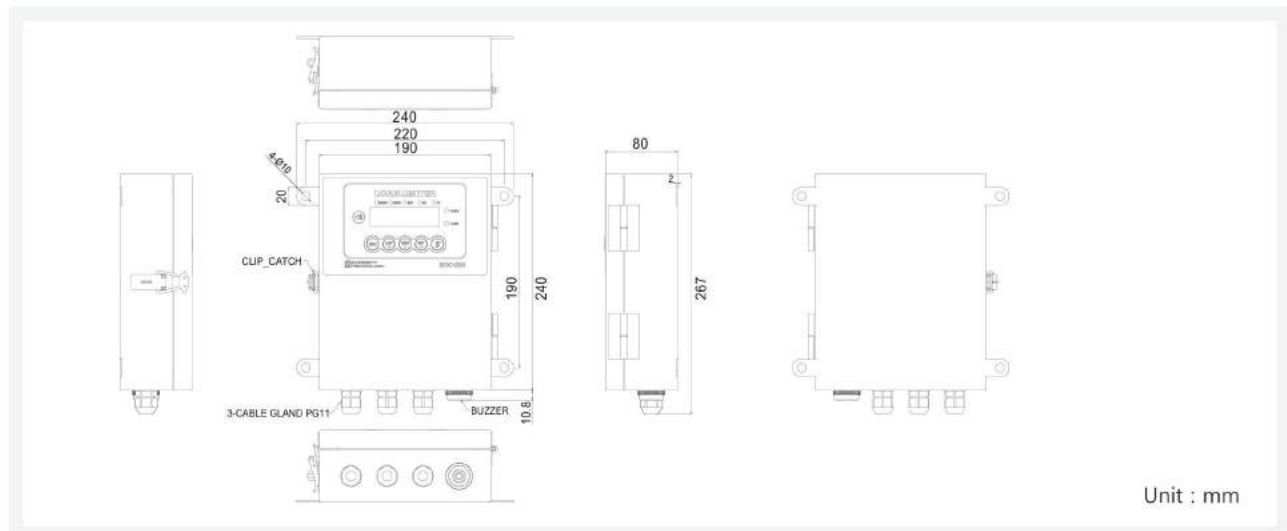
Feature

- RS232C & Current Loop Standard
- Wall Mounting Type

System Application

- Load Limit Controller Purpose
- Overload limiting Application

| | | SOC - 200 |
|--------------|-------------------------------------|-----------------------------------------------------|
| 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 \pm 3.0 mV/V |
| | A/D Method & Sampling | Maximum 60 times / sec, Sigma- Delta |
| DISPLAY PART | Resolution | Internal : 1/2000,000, Display : 1/20,000 |
| | Main Display | 7 Segment, 5 digits RED FND, Letter Size 0.6 Inch |
| | Under Zero | Minus Display |
| | \varnothing 2 Red LED Status Lamp | STEADY, ZERO, SET, RX, TX, HIGH, LOW |
| GENERAL PART | 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 |
| | Interface | RS232C |
| | Analogue output (2 Port) | Port 1 : 4~20mA Port 2 : 0~10V |
| | Relay output (2EA) | HIGH, LOW (Operating with Buzzer) |



Unit : mm

Automatic 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 |



CONTROLLER

► Automatic Truck Scale PC Software ATS2010



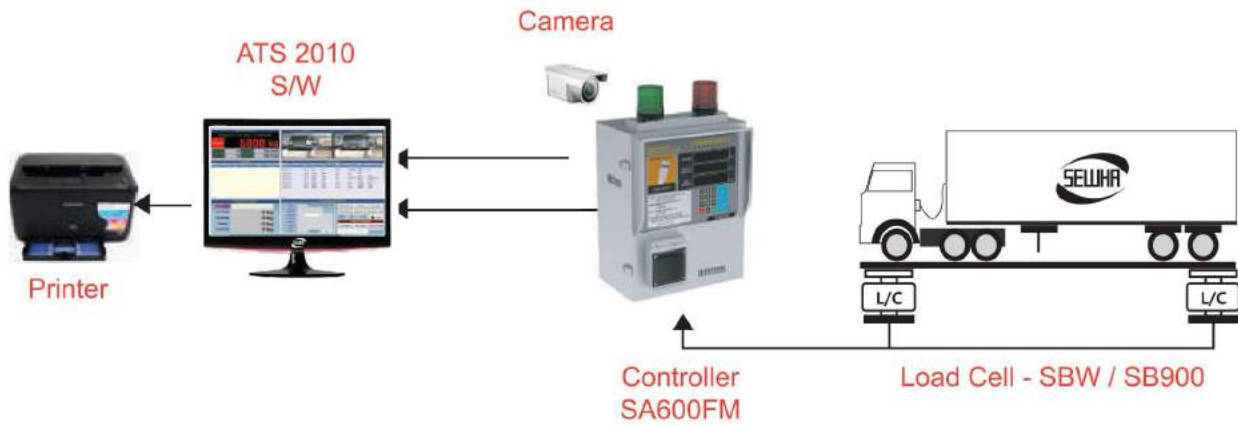
► Weighing Bill Sample



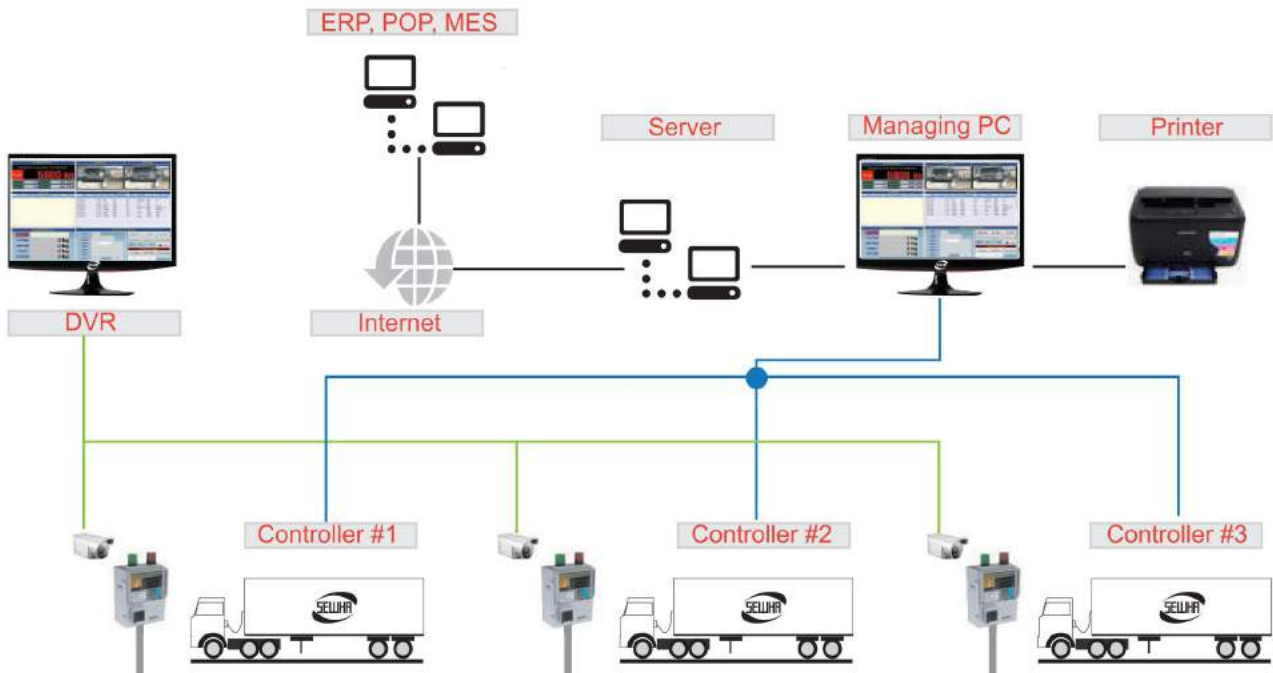
Basic Information Registrations & Management (User, Product, Truck, Transport, Customer)
 1st & 2nd Weighing Data / Material Code / Truck No. / Net Weight ..etc. All Weighing Data Will be Normalized In
 Data Base and Operator Can Make Weighing Report Daily / Weekly / Monthly / Annually.
 Various Kinds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

Automatic Truck Scale Controller

► Automatic Truck Scale System Basic Composition



► Automatic Truck Scale System Network Composition



CONTROLLER

Auto Packer Controller

SA 320DS, SA 4120 Series

SA320DS (FND Type)

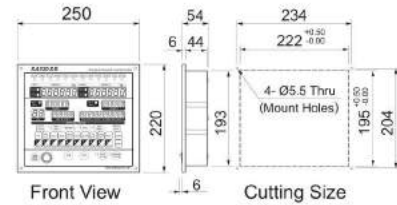
| | |
|--------------|-----------------------------|
| Display Type | FND |
| Display Size | 250 x220 x50mm(Double Type) |
| Digit | 7 Segment Red FND |

Feature

- Easy to Install & Set up
- Convenient for user
- Accurate to weigh & Peak
- Stable and Proven to Specialists
- Single (SA310DS) / Double (SA320DS)
- Double type (SA320DS)



Physical Dimension [Unit:mm]



SA4120 (LCD Touch Type)

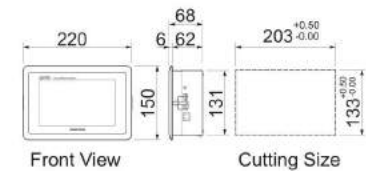
| | |
|---------------|-------------------------------------|
| Display Type | TFT LCD |
| Display Size | 7(inch) TFT Wide Screen (800 x480) |
| Color & Touch | 260,000 Color, 4wire system, 300 cd |

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)



Physical Dimension [Unit:mm]



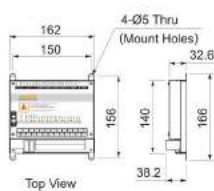
SA300E Controller



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.

Physical Dimension [Unit:mm]



| | | |
|--------------|----------------------|----------------------------------------------------------------------------|
| ANALOG PART | Input Sensitivity | Min. 0.1 μ N / Digit |
| | Load Cell Excitation | DC +5V |
| | Non-Linearity | 0.001% of Full Scale |
| | Input Signal | Max \pm 3.0 mV/V |
| | A/D & Sampling | Max 60 times / sec, Sigma-Delta |
| | Resolution | Internal : 1/1,000,000 Display : 1/20,000 |
| | Drift | ZERO 10 PPM / $^{\circ}$ C SPAN 10 PPM / $^{\circ}$ C |
| GENERAL PART | Power Supply | Free Voltage (AC95 ~ 240V, 50/60 Hz) |
| | Operating Condition | Temperature : -10 $^{\circ}$ C ~ +40 $^{\circ}$ 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

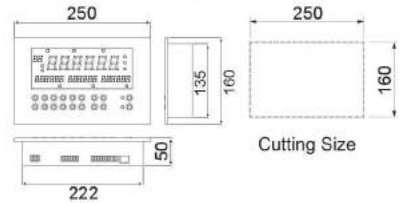
SC 400A & SC 400F



SC 400F



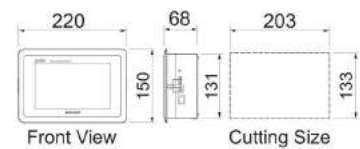
Physical Dimension [Unit:mm]



SC 400A



Physical Dimension [Unit:mm]



Feature

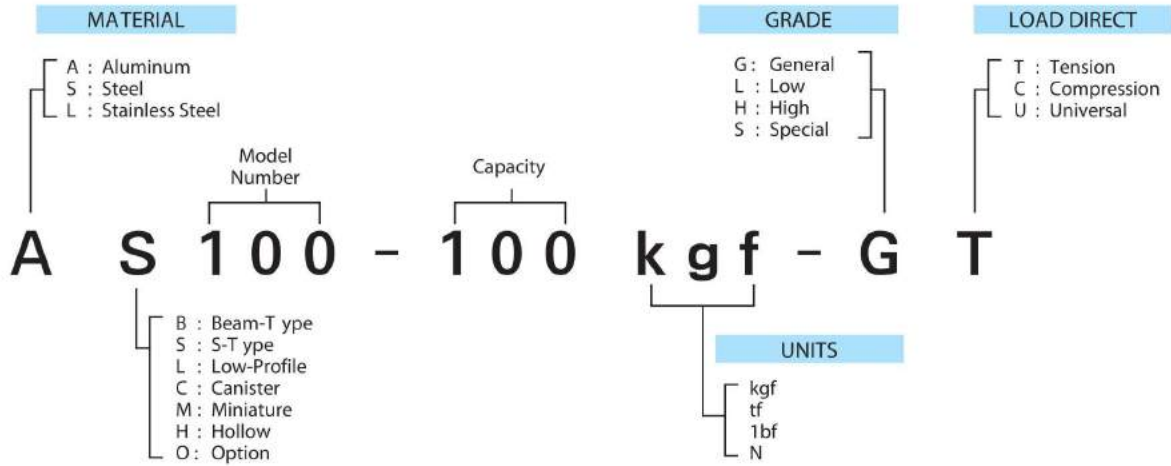
- Various Weighing mode (Current Weight, Deviation, Count)
- Maximum 180times Weighing per 1 Min,
- Relay output's function is selectable (Total 14 kinds / Relay Output : 8EA)
- High speed judgment & 50 P/N's set value is able to save
- [Option] Various external device is able to connect (Metal detector,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

CONTROLLER

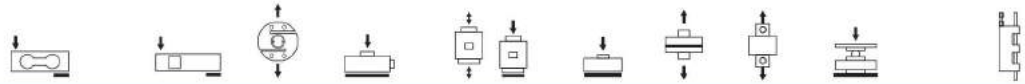
| Contents | | SC 400A | SC 400F | |
|----------------|--------------------------|------------------------------|-----------------------------------------------|--|
| A/D Conversion | Display resolution | 1/20,000 | | |
| | Internal resolution | 1/2,097,152 (±1,048,576) | | |
| | Input sensitivity | Minimum 0.1 μ V/V | | |
| | Maximum input signal(mV) | ± 3.0 mV/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 | | |

Load Cell

LOAD CELL SELECTION GUIDE



LOAD CELL



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

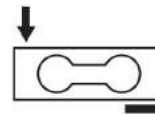
Single Point Load Cell 600gf~1tf

AB 120, 130, 140



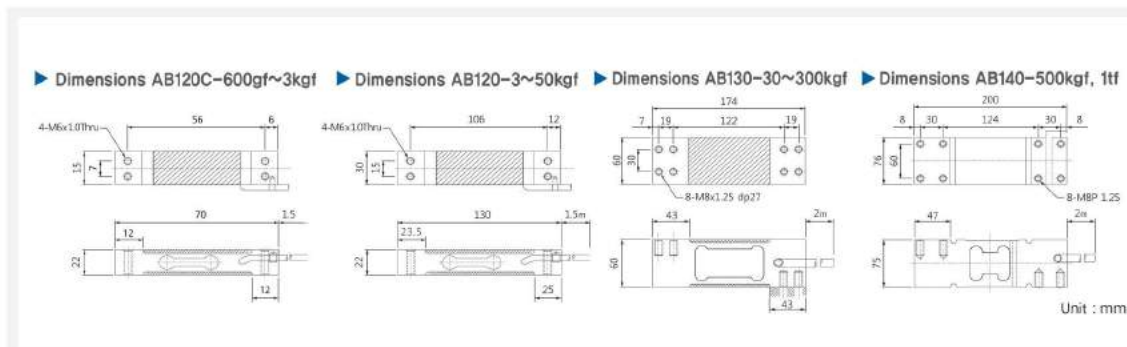
Feature

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



LOAD CELL

| 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 | -20 ~ +80 | | -30 ~ +80 | |
| Physical Weight | kg | 0.3 | | 1.5 | 2.5 |



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

Shear Beam Load Cell 150kgf~10tf

SB 210

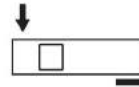


Feature

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

Option

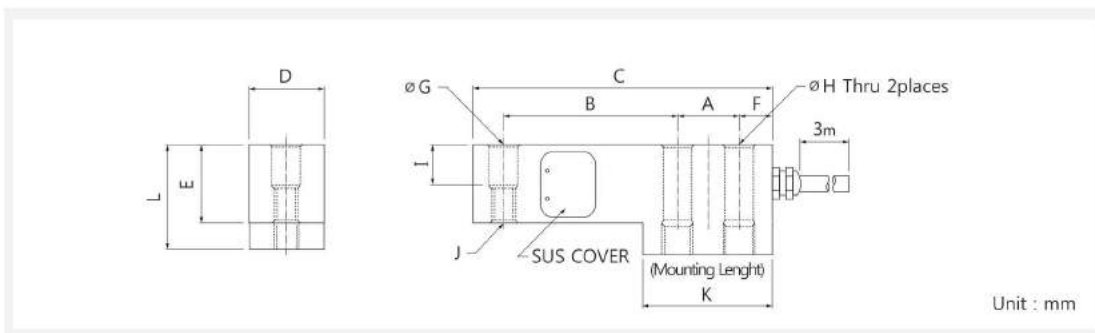
- Stainless Steel – LB210 (MOQ Base)



LOAD CELL

| 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 | | | | | | | | | | | | | |
| SB210 - 3tf | 3tf | 38.1 | 95.3 | 171.5 | 38 | 38 | 19 | 20 | 20 | 19 | M18xP1.5 | 76 | 44.5 | 2.0kg |
| 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) |

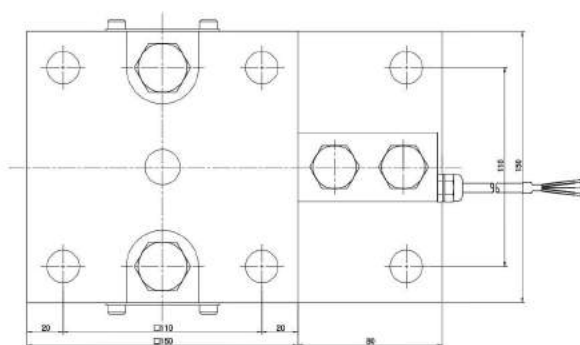
Unit : mm

Shear Beam Load Cell 150kgf~10tf

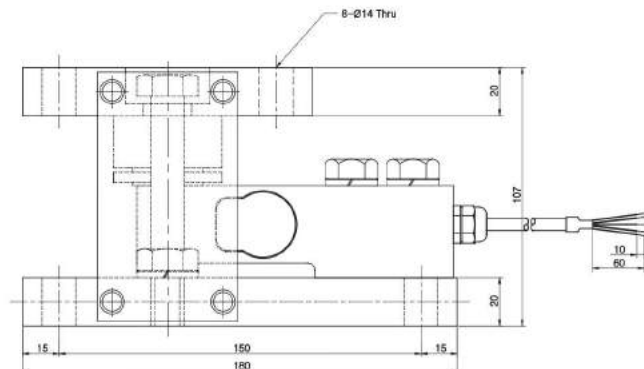
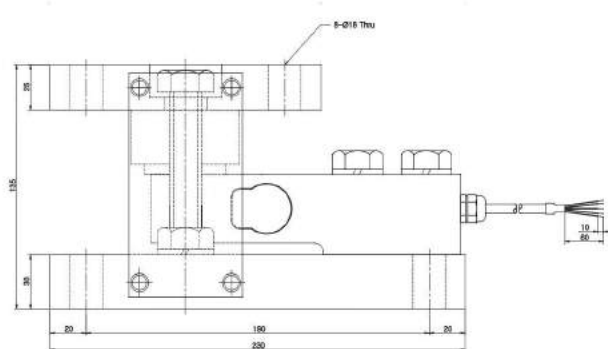
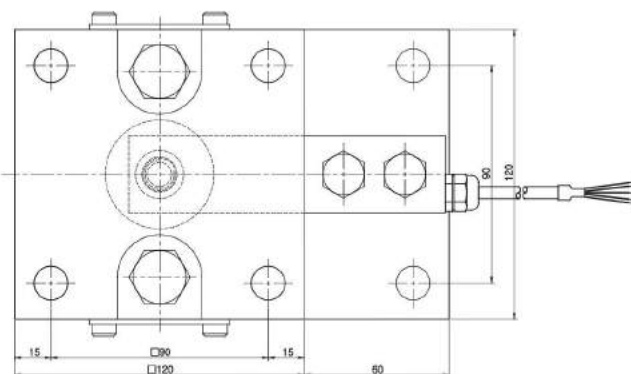
SB 210 TW Accessory



150kg~3tf ▼



5tf ▼



LOAD CELL

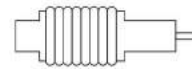
Bending Beam Load Cell 20~500kgf

LBB 200



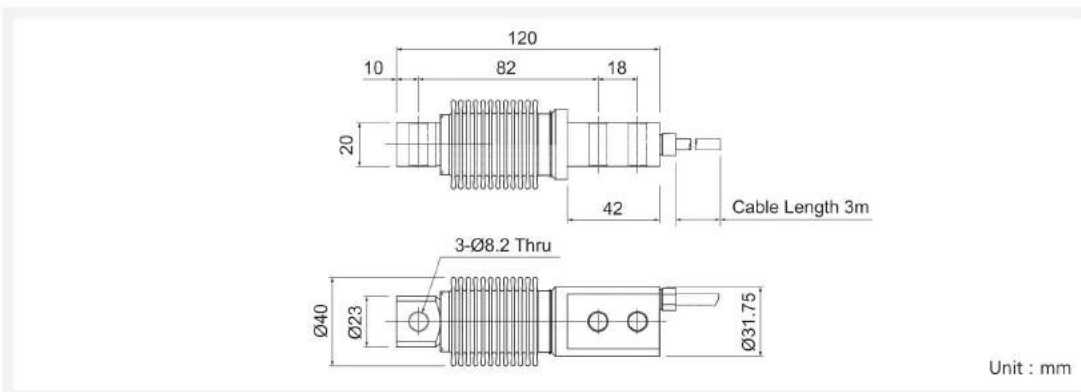
Feature

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



LOAD CELL

| 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 | | 400 ± 50 |
| Output | | 350 ± 3.5 |
| Insulation | M | >2,000 |
| Compensated Temp Range | °C | -10 ~ +40 |
| Operating Temp Range | °C | -20 ~ +70 |



| 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

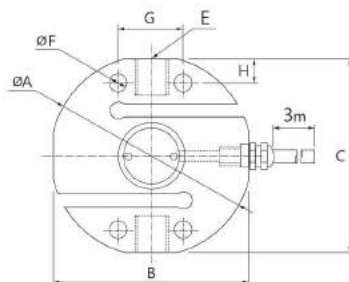
Option

- 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 | | | | M18xP1.5 | | | | | | | | |
| SS300 - 1tf | 1tf | | | | | | | | | | | | |
| SS300 - 2tf | 2tf | 115 | 90 | 110 | 30 | M20xP1.5 | 13 | 42 | 18 | 1.8kg | | | |
| SS300 - 3tf | 3tf | 125 | 123 | 120 | 36 | M24xP2.0 | | | | | | | |
| SS300 - 5tf | 5tf | 175 | 172 | 168 | 50 | M30xP2.0 | | | | 21 | 64 | 29 | 2.7kg |
| SS300 - 10tf | 10tf | | | | | | | | | | | | 7.5kg |



Unit : mm

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

LOAD CELL

Pan Cake Load Cell 1~200tf

SL 410

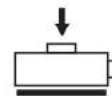


Feature

- 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

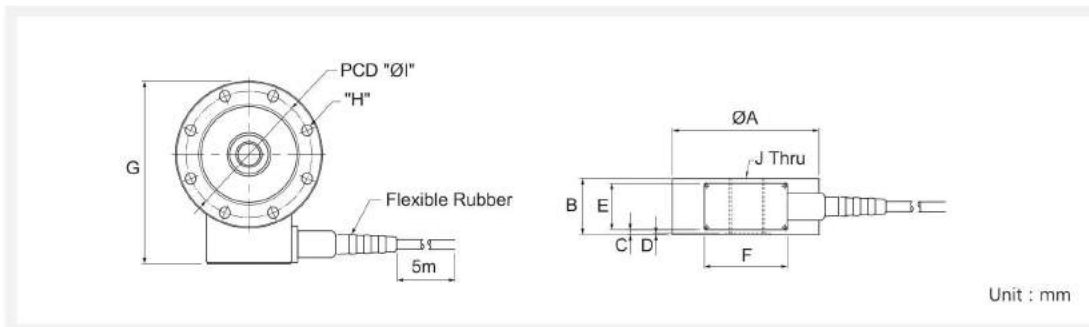
- Stainless Steel – LL410 (MOQ Base)



LOAD CELL

| Rated Capacity (R.C) | tf | 1, 2, 3, 5, 10, 15, 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 | 112 | 46 | 4 | 1 | 38 | 68 | 139.5 | 8-Ø6.6 | 97.2 | M16xP2.0 | 1.8kg |
| SL410 - 2tf | 2tf | | | | | | | | | | M18xP1.5 | 2.3kg |
| SL410 - 3tf | 3tf | | | | | | | | | | M24xP2.0 | 2.8kg |
| SL410 - 5tf | 5tf | 120 | 46 | 4 | | | | 149.5 | 8-Ø9 | 103.2 | M18xP1.5 | 3.2kg |
| SL410 - 10/15tf | 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 | 355 | 108 | 35 | 384.5 | 12-Ø26 | 298 | M90xP3.0 | 37.0kg | | | |



Explosion Proof Pan Cake Load Cell 1~30tf

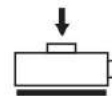
CLS / SLS (Explosion Proof : Ex d IIB T6)



Feature

- Compression / Tension Application
- Hermetically Sealed
- High Reliability Against Fatigue & Force
- Fully Environmental Protection IP67
- Paint Finished Steel (CLS)
- Braided Shield 4-Wire Round Cable with PVC-Jacket
- Stainless Steel - LL410 (SLS)

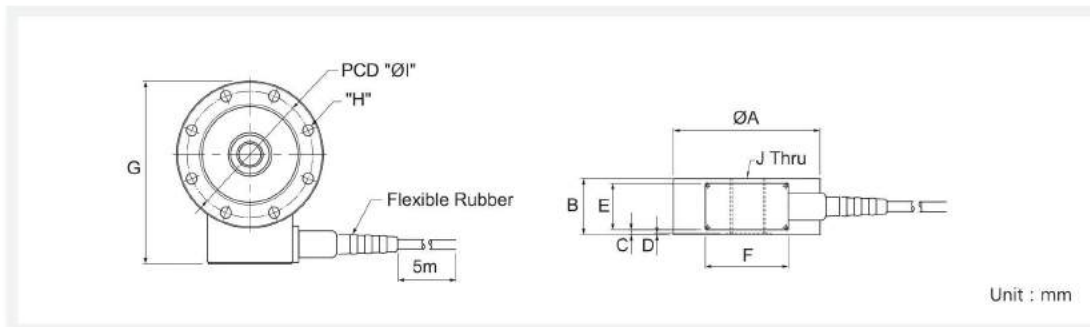
Option



LOAD CELL

| Rated Capacity (R.C) | tf | 1, 2, 3, 5, 10, 15, 20, 30 | |
|------------------------|----------|----------------------------|------|
| 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 | 112 | 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 | 120 | 46 | 4 | | | | 149.5 | 8-Ø9 | 103.2 | M18xP1.5 | 3.2kg |
| SL410 - 10/15tf | 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 |

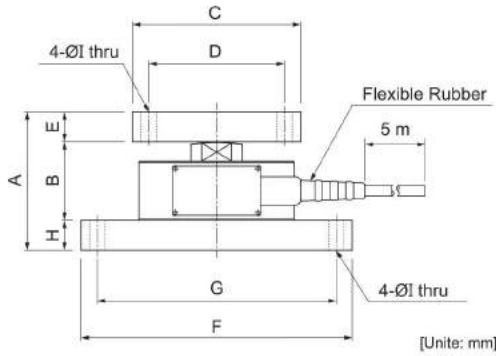


| CABLE | COLOR CODE |
|-------|---------------|
| EXC + | (RED) |
| EXC - | (WHITE) |
| SIG + | (GREEN) |
| SIG - | (BLUE, BLACK) |
| SHLD | (YELLOW) |

Pan Cake Load Cell 1~200tf

SL410 Compression Accessory (Load Button / Balltype)

▶ INSTALLATION AS COMPRESSION APPLICATION

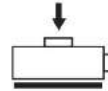


Accessory Features

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

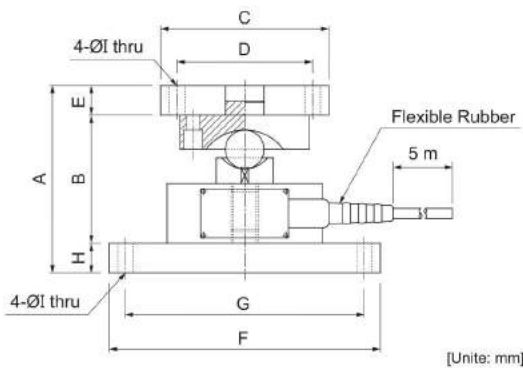
Manual

- 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

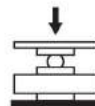


Accessory Features

- 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 |

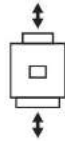
Canister Load Cell 200kgf~20tf

SC 520



Feature

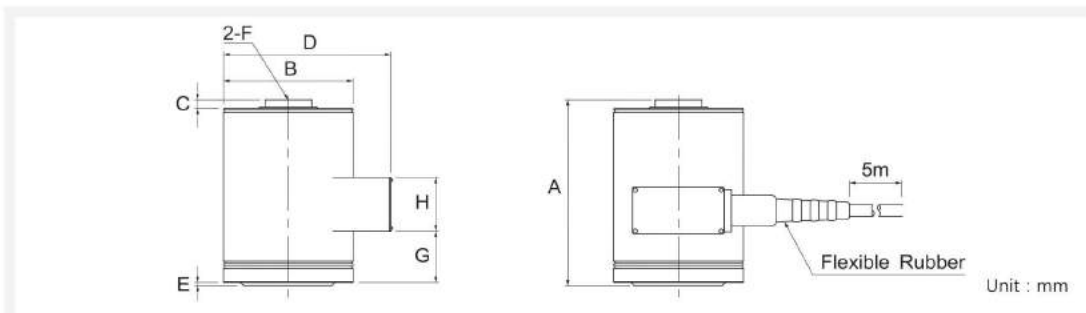
- Hermetically Sealed High Accuracy C
- Robust Design
- Compression / Tension Type
- Fully Environmental Protection IP67
- Paint Finished Steel
- Braided Shield 4-Wire Round Cable with PVC-Jacket



LOAD CELL

| 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 | | | | | | | | | |

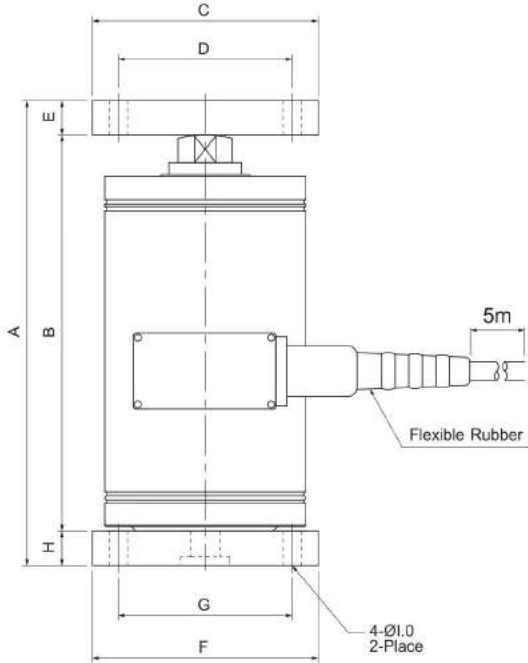


| CABLE | COLOR CODE |
|-------|---------------|
| EXC + | (RED) |
| EXC - | (WHITE) |
| SIG + | (GREEN) |
| SIG - | (BLUE, BLACK) |
| SHLD | (YELLOW) |

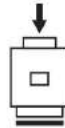
Canister Load Cell 200kgf~20tf

SC 520 Compression / Tension Accessory

LOAD CELL

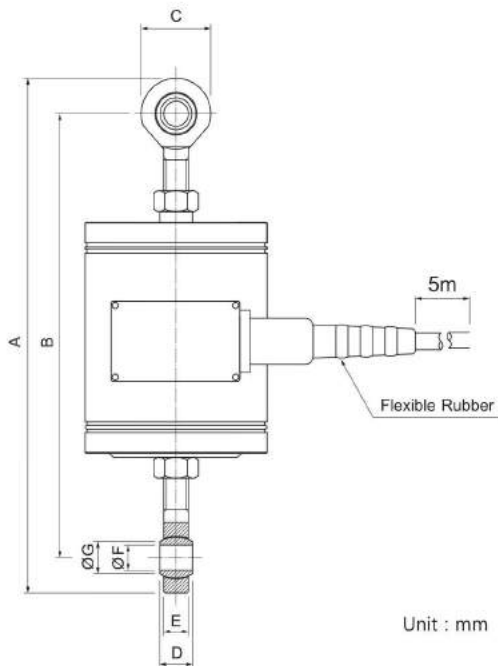


Unit : mm



► Installation as Compression Application

| Capacity | A | B | C | D | E | F | G | H | I |
|----------|-------|-------|-----|-----|----|-----|-----|----|----|
| 200kgf | | | | | | | | | |
| 300kgf | 153.7 | 123.7 | 100 | 77 | 15 | 100 | 77 | 15 | 8 |
| 500kgf | | | | | | | | | |
| 1tf | | | | | | | | | |
| 2tf | | | | | | | | | |
| 3tf | 210.3 | 164.3 | 130 | 105 | 23 | 130 | 105 | 23 | 12 |
| 5tf | | | | | | | | | |
| 10tf | 303 | 243 | 160 | 125 | 30 | 160 | 125 | 30 | 14 |
| 20tf | 375.5 | 315.5 | 200 | 150 | 30 | 200 | 150 | 30 | 14 |



Unit : mm



► Installation as Tension Application

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

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

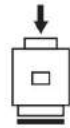
Canister Type Compression Load Cell 20~800tf

SC 530



Feature

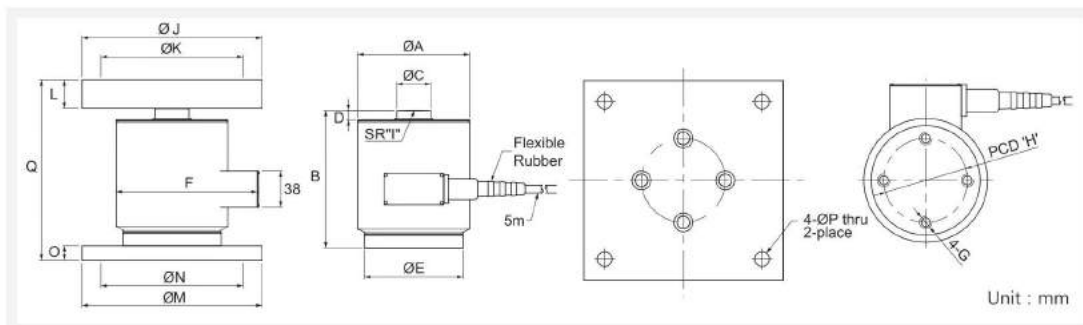
- Hermetically Sealed High Accuracy Grade
- Robust Design
- Compression Type
- Fully Environmental Protection IP67
- Paint Finished Steel
- Braided Shield 4-Wire Round Cable with PVC-Jacke



| 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



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

LOAD CELL

Load Cell for Wire rope 500kgf ~ 10tf

SWL100

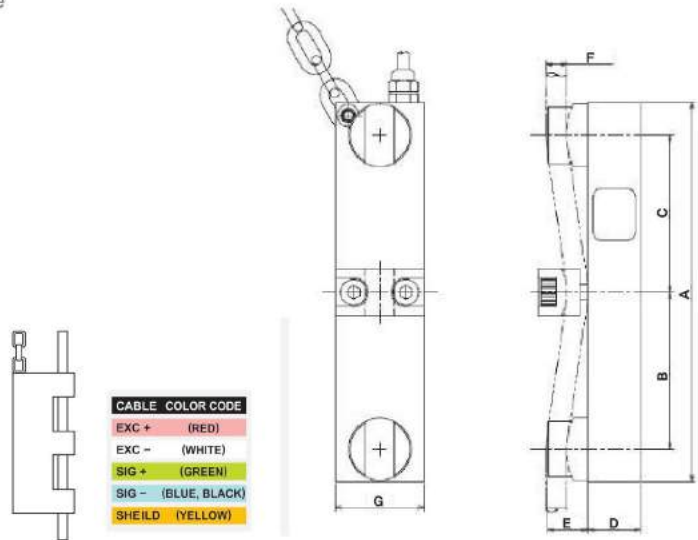
LOAD CELL



Feature

- Tension of Wire rope
- Nickel Plated Steel

Safety Chain



| 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 | 145 | 60 | 60 | 20 | 15,5 | Ø6~8 | 34 |
| SWL100-1tf | 1tf | | | | | | | |
| SWL100-1,5tf | 1,5tf | 167 | 70 | 70 | 22 | 21 | Ø10~Ø 4 | 42 |
| SWL100-4tf | 4tf | 215 | 90 | 90 | 25 | 35 | 18~Ø 28 | 62 |
| SWL100-8tf | 8tf | 250 | 100 | 100 | 35 | 45 | 25~35,5 | 80 |
| SWL100-10tf | 10tf | | | | | | | |

Miniature Load Cell 50kgf~20tf

SM 600E



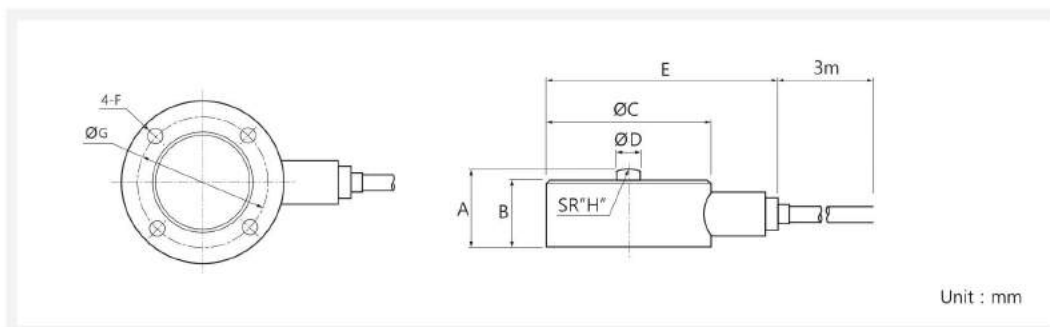
Feature

- 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 | 40 | 35 | 98 | 20 | 113 | M6x1.0 | 72 | 150 | | | | | | | | |
| SM600E-2tf | 2tf | | | | | | | | | | | | | | | | |
| SM600E-5tf | 5tf | | | | | | | | | | | | | | | | |
| SM600E-10tf | 10tf | | | | | | | | | | | | | | | | |
| SM600E-20tf | 20tf | | | | | | | | | 45 | 40 | 98 | 20 | 113 | M6x1.0 | 72 | 150 |
| | | | | | | | | | | 50 | 45 | 118 | 20 | 132 | M8x1.25 | 90 | 250 |



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

LOAD CELL

Miniature Load Cell 10kgf~2tf

SM 601E



Feature

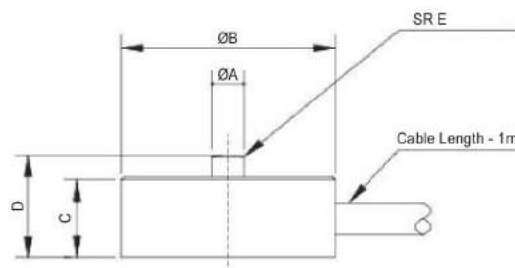
- Compression Application
- Application for Limited space
- Protection Class IP66
- Braided shield 4-wire round cable with PVC-Jacket
- Anodized Aluminum (1kgf~10kgf)
Stainless steel (20kgf~2tf)



LOAD CELL

| 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 | | | | | |
| SM601E-2kgf | 2kgf | | | | | |
| SM601E-5kgf | 5kgf | | | | | |
| SM601E-10kgf | 10kgf | 3 | 20 | 7.5 | 9.5 | 30 |
| 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) |

Miniature Load Cell 50~500kgf

SM 603E



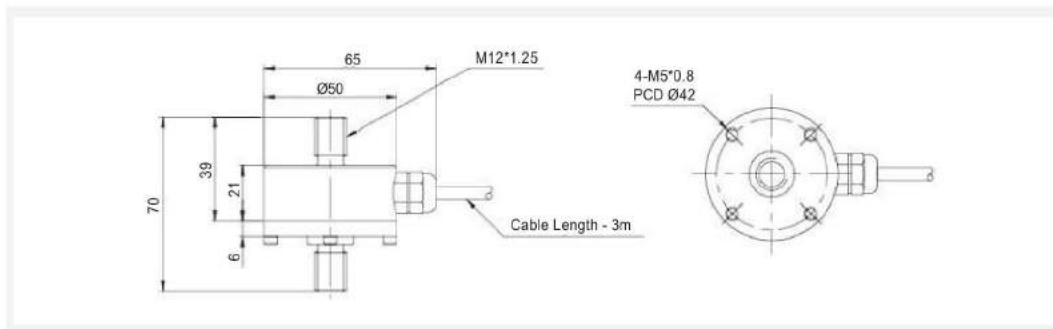
Feature

- 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



LOAD CELL

| 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) |
| SHEILD | (YELLOW) |

Tension Meter Load Cell 10~50tf

ST 800E

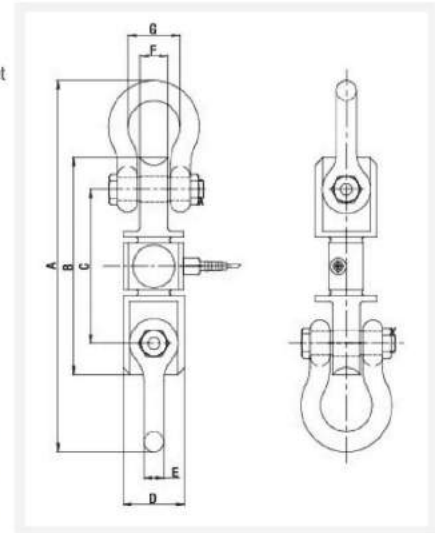
LOAD CELL



Feature

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

DIMENSIONS



| 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

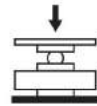
Truck Weighing Load Cell 10~30tf

SB 900



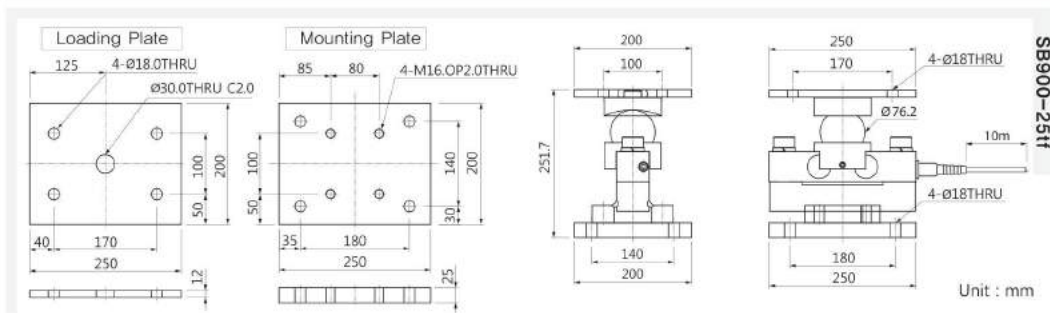
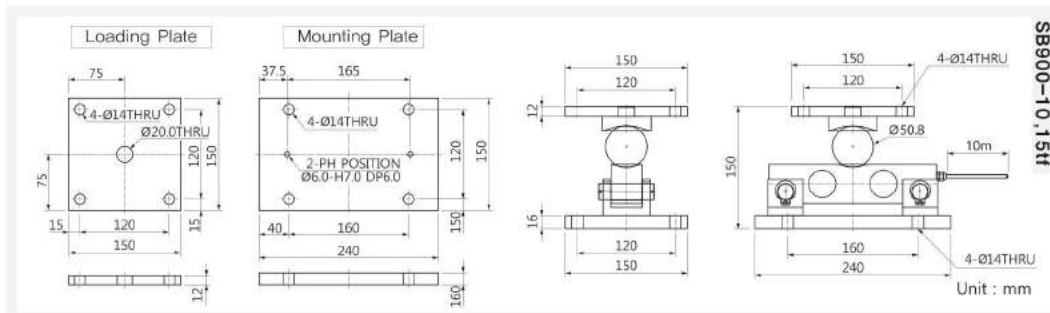
Feature

- 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 |

LOAD CELL



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

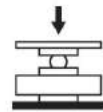
Truck and Tank Weight Load Cell 25~30tf

SB 920



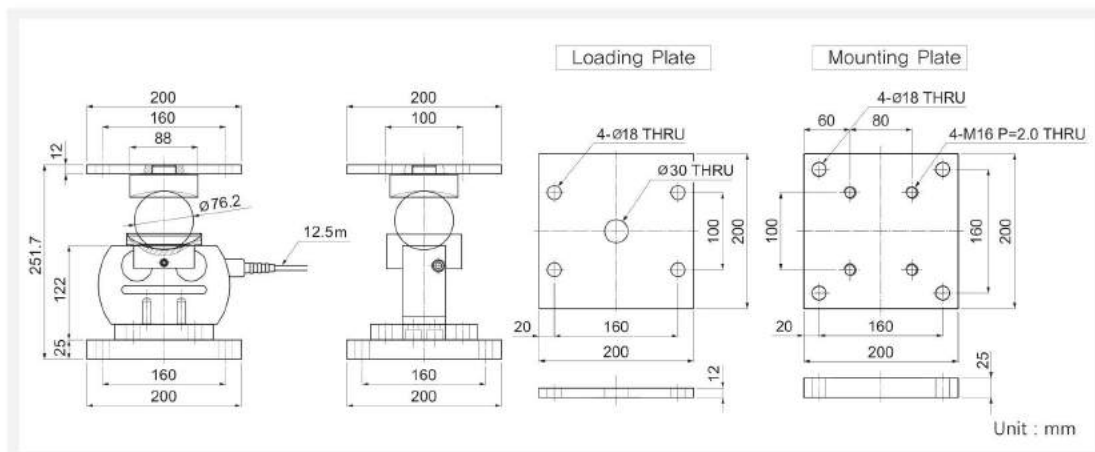
Feature

- 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



LOAD CELL

| Rated Capacity (R.C) | tf | 25tf |
|------------------------|----------|-------------|
| 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 ± 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 | 21.0 |



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

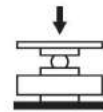
Truck and Tank Weight Load Cell 25~30tf

SBW



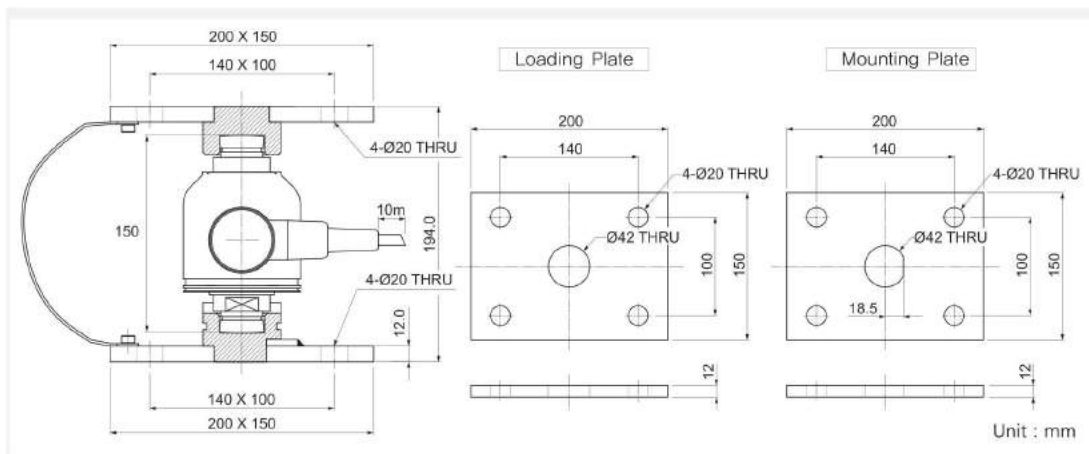
Feature

- 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



| 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 | 350 ± 3.5 |
| Output | Ω | 350 ± 3.5 |
| 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) |

Unit : mm

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)

LOAD CELL

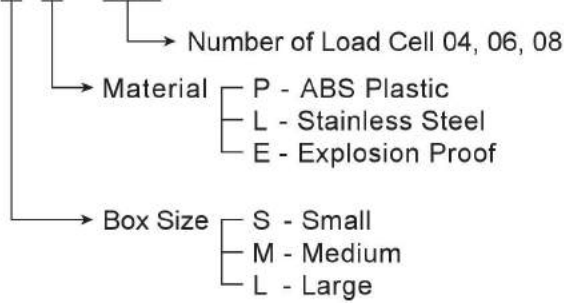
| | Voltage Output Transmitter | Current Output Transmitter |
|--------------------------------|---------------------------------------------------------|---------------------------------------------------------|
| MODEL | ST-V05, ST-V15, ST-V010 | ST-I420, ST-I020, ST-I040 |
| OUTPUT | 0~5V, 1~5V, 0~10V | 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 : $\varnothing 5 \sim \varnothing 8 \text{mm}$
 - Output Cable : $\varnothing 5 \sim \varnothing 10 \text{mm}$
- 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



SB-ME-04 (Explosion proof)



SB-ML-04 (Stainless steel)



SB-ML-06 (Stainless steel)

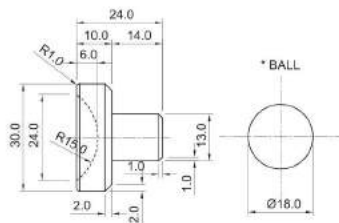


LOAD CELL

► Load cell Accessories



Ball & Ball Cup

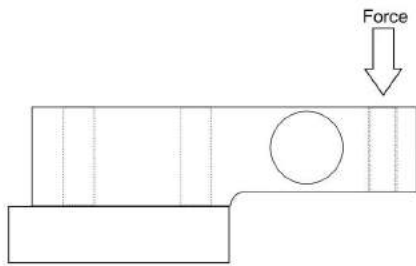


Foot



RodEndBearing

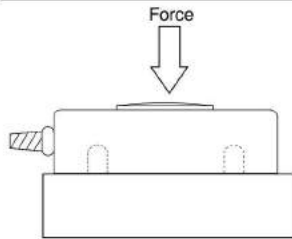
Load Cell Type



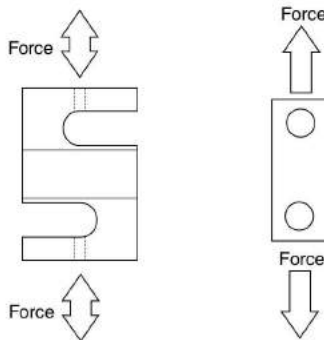
Shear beam - the shear beam load cell is fixed rigidly at one end with the force being applied to the other end. These can be used singly or in groups e.g. a platform scale using one cell in each corner.

Double ended shear beam type cells are of different construction and are fixed rigidly at each end with the force being applied to the centre of the beam.

Single point load cells are of similar design but are intended for use in single cell applications only.



Compression - the compression load cell is designed to operate in compression only. Some designs require load to be applied at one end only, other designs can be compressed by force at both ends.



S type - the S type load cell can be used in tension and compression. The signal voltage output will reverse in polarity when the force changes from tension to compression i.e. the display value may change from positive to negative or vice versa.

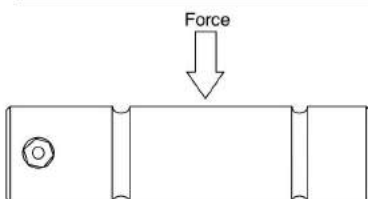
Tension load cells and Load links are designed to operate under tension only.



Rope clamp - the rope clamp load cell is popular in hoist and crane applications due to its ease of installation. The rope passes through the cell and when tension is applied to the rope due to a weight being lifted the tension produces a bending force on the cell.

The mounting position of this type of load cell is very important. Most of these type of cells are mounted at the dead end of the rope allowing enough rope at each end for flexing i.e. ensure that the attachment is not so close to the dead end that the rope is rigid and cannot flex.

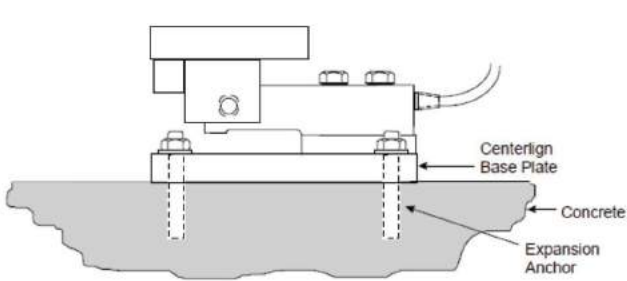
Since these cells are designed to operate over a very wide range of loads and rope sizes and because the rope system often goes through a series of "drops" it is often the case that the mV output from these cells is at the low end of the range. The sensitivity of the monitor may need to be increased by lowering the mV range to compensate.



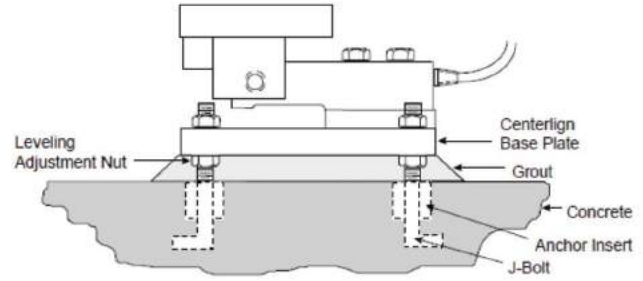
Load pin - load pin cells are designed to be installed in the axis of a sheave, shackle etc. through which force is applied. Most common load pins will measure force in one direction only. The direction of force is often marked with an arrow at one end of the pin or instructions for alignment may be given in the load cell certificate. If the load is off axis the output will be reduced. At 90 degrees off axis the output will not change with a change in load.

Load Cell Installation Guide

► Flexmount Weigh Modules Installation

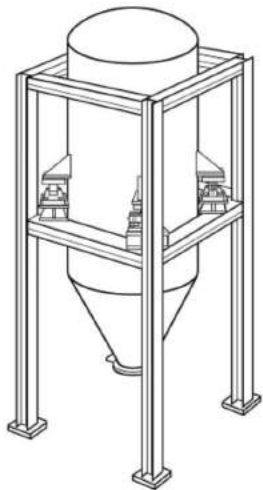


Base Plate Bolted to Level Concrete Floor

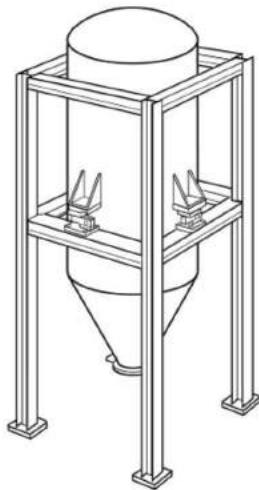


Base Plate Bolted to Unlevel Concrete Floor

► General Installation Guidelines Structural Beam Support

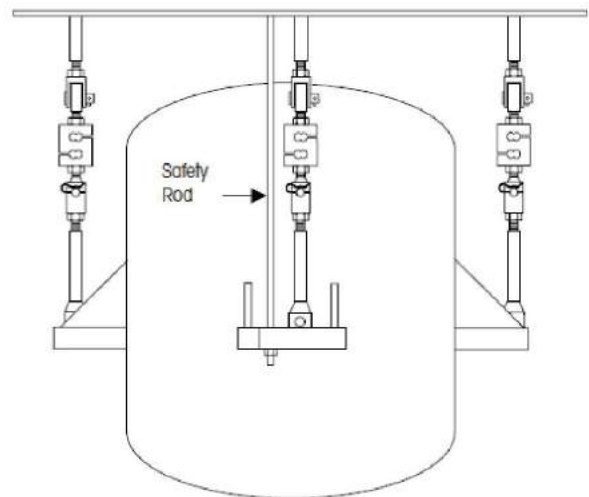


Recommended Figure



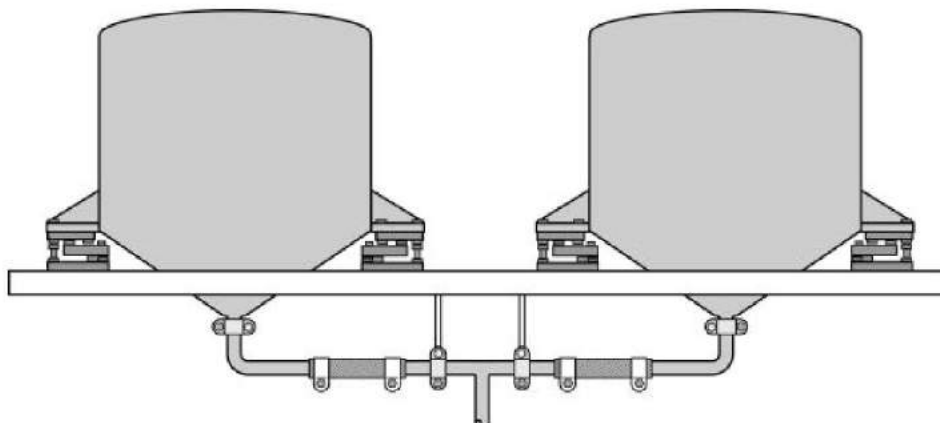
Not Recommended

► Tension Weigh Module Installation



LOAD CELL

► General Installation Guidelines Piping Design



Design for Single Discharge Pipe

Overseas Agent Information

- Syria
- IRAQ
- Jordan
- Saudi Arabia
- Yemen
- United Arab Emir
- Armenia
- Iran
- Egypt

■ China

- Bangladesh
- India
- Pakistan

■ Republic of South Africa

■ Mauritius





- Vietnam
- Thailand

- Malaysia
- Indonesia
- Singapore

- Australia
- Newzealand

- Mexico
- Colombia



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2016E-03



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