

**2020**

- Developed DIN Rail type SI240/SI240R
- Developed IoT Indicator SI400W/SI410W

**2019**

- Developed Truck scale indicator SI600TS

**2018**

- Upgrade SI200 Indicator
- Developed digital Load Cell & Indicator
- Developed Check weigher controller SC500A

**2017**

- Developed Explosion Indicator SI400Ex, SI500Ex
- LPR System Developed

**2016**

- Hoper controller SA330CV Series Developed (SA310CV, SA320CV, SA330CV)
- Load Cell SBW OIML acquired

**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

**2012**

- Acquired OIML certification of Shear beam Load cell SB210, Tension Load cell SS300

**2011**

- Acquired CE certification of Desk Mounting Type Weighing Indicator SI300

**1995**

- Founded Sewha Engineering
- Developed digital indicator

**2000**

- Founded SEWHACNM co.,Ltd
- Precision Indicator Developed

**2001**

- Load Cell, Auto truck scale developed

**2002**

- ISO9001/2000/KS A 9001:2001 acquired
- External Display developed

**2003**

- Acquired Patent of Auto screening system with angle meter by load cell

**2004**

- Technology innovation development business prize

**2005**

- Developed automatic truck weighing system controller

**2006**

- Acquired component and material reliability certification
- Acquired patent of Complex weighing management controller system

**2007**

- Acquired "CE" certification of SI4000 series
- Developed Hopper scale touch screen controller in R.P.C

**2008**

- Developed Double packer touch screen controller
- Acquired INNO-BIZ business certification

**2009**

- DIN size "CE" certification
- Appointed to export business partner (Korea Export Support Association)

**2010**

- Developed Tiny wall mount size weighing digital indicator SI200

# Company History

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# Indicator

# Indicator Selection Guide

INDICATOR

		SI240/ SI240R	SI400W	SI410W	SI200	SI300	SI400	SI400R	SI410	SI4630N	SI460A SI480E	SI480E	SI580E	SI560A	SI510	SI520	SI530	SI540	SI550
FUNCTION	Hold	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●
	Sub Display													●	●	●	●	●	●
	Parts Number Memory (kinds)	50	50	50			50	50	50						50	50	50	50	50
	Control Method (step)	7		7					4				2	2	3	3	3	3	3
	Relay Output (pcs)	7		7				3	7				4	4	7	7	7	7	7
	External Input (pcs)	6	6	6			6	4	6		2	2	4	4	6	6	6	6	6
APPLICATION	Truck Scale	●		●	●	●	●	●	●	●	●	●							
	Animal Scale	●		●	●	●	●	●	●	●	●	●							
	Checkweigher	●		●					●				●	●		●	●		
	Packer	●		●				●	●				●	●	●	●		●	
	Filler	●		●				●	●				●	●	●	●		●	
	Tank Scale	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Tester	●		●			●	●	●	●	●	●	●	●		●	●		
WEIGHING MODE	Limit Mode	●		●				●	●				●	●	●	●	●	●	
	Packer	●		●				●					●	●	●	●		●	
	Checker	●		●				●					●	●			●		
	Accumulate	●		●				●					●						
	Use choice	●		●				●					●						

Model Serial&Option	SI240/S I240R	SI400W	SI410W	SI200	SI300	SI400	SI400R	SI410	SI4630N	SI460A	SI480E	SI560A	SI580E	SI510	SI520	SI530	SI540	SI550
Current Loop	●	●	●		●	●	●	●	●					●	●	●	●	●
RS232C	●	●	●	●	●	●	●	●	●		○	●	●	●	●	●	●	●
RS485/RS422	●			○						●	●	●	●					
Analog Output	●	★	★			★	★	★	★	★		●	●	★	★	★	★	★
Serial Option	RS232C		★	★		★	★	★	★	★	★	●	●	★	★	★	★	★
	RS422		★	★		★	★	★						★	★	★	★	★
	RS485		★	★		★	★	★	★					★	★	★	★	★
BCD IN		★	★			★	★	★						★	★	★	★	★
BCD OUT		★	★			★	★	★						★	★	★	★	★
Ethernet	●	★	★			★	★	★						★	★	★	★	★
SD Memory						★	★	★						★	★	★	★	★
Wireless Interface		●	●															

● : Regular   ○ : Regular(Selectable)   ★ : Option

# New Generation – DIN Rail Mounting Indicator

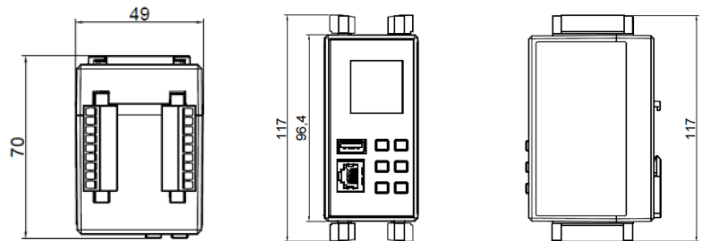
## SI240 / SI240R



### Feature

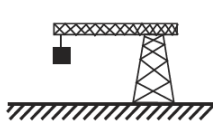
- DIN Rail Mounting Type
- 1.46"(128x128) OLED
- Weighing mode : Limit mode, Packer mode, Checker mode
- Support of USB Port for Data Storage
- Support of MODBUS(RTU) protocol
- Support of Ethernet, RS485, RS232C

### Dimension [unit : mm]



INDICATOR

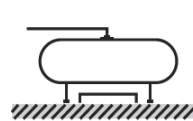
Feature		SI240	SI240R
Analog Part	Input Sensitivity	Min 0.1 $\mu$ V / Digit	
	Load Cell Excitation	DC 5V	
	Non-Linearity	0.001% of full scale	
	Input Signal	Max 3.0mV/V	
	A/D Sampling	Max 120time/sec, Sigma-Delta	
	Resolution	Internal : 1/2,000,000 External : 1/20,000	
Display Part	Main Display	1.46 Inch White OLED 128X128 Dot Matrix LCD	
	LED Display	RED 7EA	
	Under Zero	Minus(-) Display	
General Part	Power Supply	DC12~24V, 6W	
	Operating Condition	Temperature : -10°C ~ +40°C, Humidity : 85% RH Under	
	Size/Weight	49(W) x 96.5(H) x 70(D) / 220g	
	Interface	RS485, Ethernet	RS232C, RS485, Ethernet
	External Input	2EA	6EA
	Relay Output	None	7EA
	Analog Output	4-20mA 1 Port	
	USB Port	1 Port	



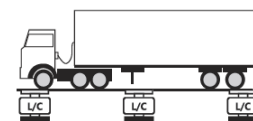
Crane Scale



Tester



Tank Scale



Truck Scale

# New Generation – Weighing Indicator for IoT

## SI400W / SI410W

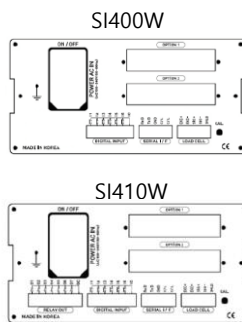
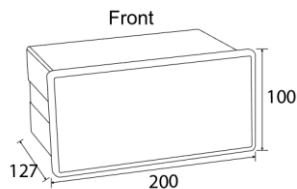
INDICATOR



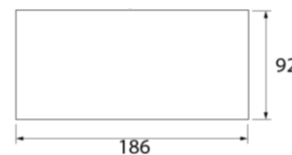
### Feature

- Support of Wifi (802.11g)
- Support of USB for Data Storage
- Support of MODBUS(RTU) protocol
- User Customized : External Input
- Hold Function : Sample, Average, Peak

### Dimension [unit : mm]



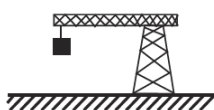
Cutting Size



### Feature

- Support of Wifi (802.11g)
- Support of USB for Data Storage
- Support of MODBUS(RTU) protocol
- Weighing mode : Limit Mode, Packer Mode

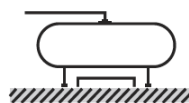
Feature		SI400W	SI410W
Analog Part	Input Sensitivity	Min 0.1 $\mu$ V / Digit	
	Load Cell Excitation	DC 5V	
	Non-Linearity	0.001% of full scale	
	Input Signal	Max 3.0mV/V	
	A/D Sampling	Max 120time/sec, Sigma-Delta	
Display Part	Resolution	Internal : 1/2,000,000 External : 1/20,000	
	Main Display	7Segment, Red FND / Letter Size : 25.4mm	
	LED Display	Word : 8digit, Green / Arrow : 12digit, Green	
General Part	Under Zero	Minus(-) Display	
	Power Supply	AC Free Voltage(AC100V~240V, 50/60Hz)	
	Operating Condition	Temperature : -10 $^{\circ}$ C ~ +40 $^{\circ}$ C, Humidity : 85% RH Under	
	Size/Weight	200(W) x 100(H) x 140(D) / About 1.2kg	
	Interface	USB, RS232C(Modbus RTU), Current Loop, Wifi (802.11g)	
	External Input	6EA, Dry contact	
	Relay Output	None	7EA
Option	Analog Output 0~10V, 4~20mA / Serial Interface RS232C, RS422, RS485 / BCD IN / BCD Out / Ethernet		



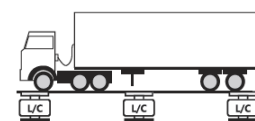
Crane Scale



Tester



Tank Scale



Truck Scale

# Simple Weighing Indicator

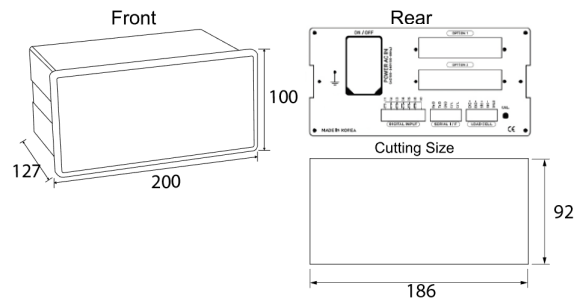
## SI400



### Feature

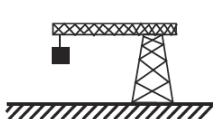
- User custom setting External input
- Hold Function : Sample, Average, Peak
- SD memory(Optional card)
- Support of MODBUS(RTU) protocol

### Dimension [unit : mm]



INDICATOR

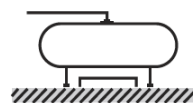
Feature		SI400
Analog Part	Input Sensitivity	Min 0.1 $\mu$ V / Digit
	Load Cell Excitation	DC 5V
	Non-Linearity	0.001% of full scale
	Input Signal	Max 3.0mV/V
	A/D Sampling	Max 120time/sec, Sigma-Delta
	Resolution	Internal : 1/2,000,000 External : 1/20,000
Display Part	Main Display	7Segment, 6 Digit Red FND, Letter Size : 25.4mm
	LED Display	Green (IN1~6)
	Under Zero	Minus(-) Display
General Part	Power Supply	AC Free Voltage(AC100V~240V, 50/60Hz)
	Operating Condition	Temperature : -10°C ~ +40°C, Humidity : 85% RH Under
	Size/Weight	200(W) x 100(H) x 127(D) / 1.23kg
	Interface	RS232C(Modbus RTU), Current Loop
	External Input	6EA
	Relay Output	None
	Option	Serial Interface(Modbus RTU) RS232C, RS422, RS485 / Ethernet /SD memory card Analog Output 0~10V, 4~20mA /BCD IN / BCD Out



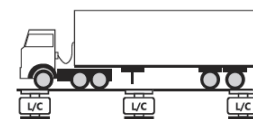
Crane Scale



Tester



Tank Scale



Truck Scale

# Simple Weighing Indicator

## SI460A

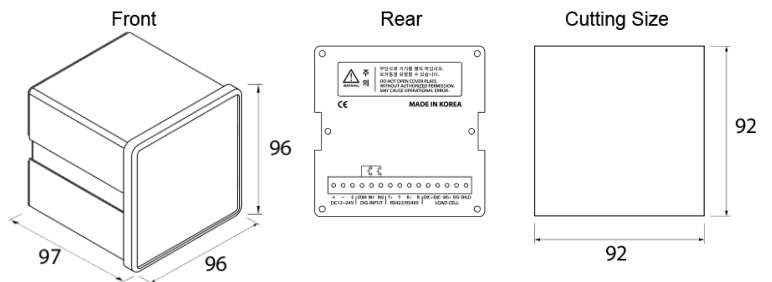
INDICATOR



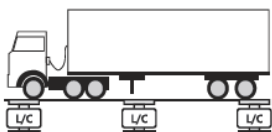
### Feature

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

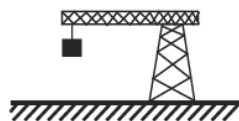
### Dimension [unit : mm]



Feature		SI460A
Analog Part	Input Sensitivity	Min 0.1 $\mu$ V / Digit
	Load Cell Excitation	DC 5V
	Non-Linearity	0.001% of full scale
	Input Signal	Max 3.0mV/V
	A/D Sampling	Max 120time/sec, Sigma-Delta
	Resolution	Internal : 1/2,000,000 External : 1/20,000
Display Part	Main Display	7Segment, 6 Digit Red FND, Letter Size : 15mm
	LED Display	Red LED (STEADY, ZERO, TARE, HOLD, TxD, RxD, F)
	Under Zero	Minus(-) Display
General Part	Power Supply	DC Type : DC12~24V, 12W
		AC type: AC Free Voltage(AC100V~240V, 50/60Hz)
	Operating Condition	Temperature : -10°C ~ +40°C, Humidity : 85% RH Under
	Size/Weight	96(W) x 96(H) x 97(D) / 0.5kg(DC), 0.7kg(AC)
	Interface	RS422 & RS485 (Modbus RTU)
	External Input	4EA
Option	Serial Interface RS232C	



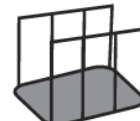
Truck Scale



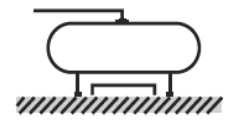
Crane Scale



Tester



Animal Scale



Tank Scale



# Simple Weighing Indicator

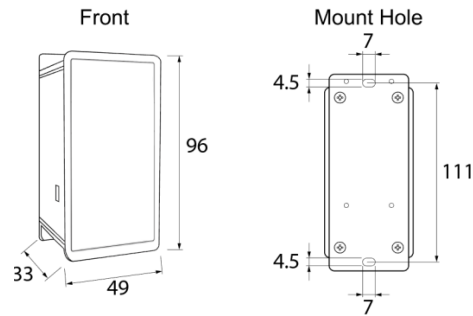
## SI200



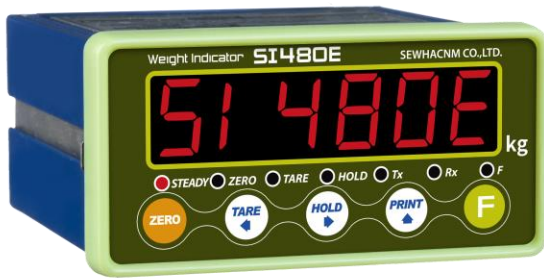
### Feature

- Wall mounting type indicator
- Hold Function : Sample, Average, Peak
- RS232C or RS485 Interface(Selectable)
- Support of MODBUS (RTU) Protocol

### Dimension [unit : mm]



## SI480E



### Feature

- Hold Function : Sample, Average, Peak
- Power Selectable : DC & AC Ordering Spec.
- Support of MODBUS(RTU) protocol

### Dimension [unit : mm]



Feature		SI200	SI480E
Analog Part	Input Sensitivity	Min 0.1 $\mu$ V / Digit	
	Load Cell Excitation	DC 5V	
	Non-Linearity	0.005% of full scale	
	Input Signal	Max 3.0mV/V	
	A/D Sampling	Max 120time/sec, Sigma-Delta	
	Resolution	Internal : 1/2,000,000 External : 1/20,000	
Display Part	Main Display	7Segment, 6 Digit Red FND, Letter Size : 7.6mm	7Segment, 6 Digit Red FND, Letter Size : 15mm
	LED Display	STEADY, ZERO, TARE, RTxD	STEADY, ZERO, TARE, HOLD, Tx, Rx, F
	Under Zero	Minus(-) Display	
General Part	Power Supply	DC12~24V, 8W(SMPS Adapter option)	DC12~24V, 12W(SMPS Adapter option) AC Free Voltage(AC100V~240V, 50/60Hz)
	Operating Condition	Temperature : -10°C ~ +40°C, Humidity : 85% RH Under	
	Size/Weight	49(W) x 111(H) x 32.7(D) / 160g	97(W) x 96.5(H) x 49(D) / 700g
	Interface	RS232C or RS485(Modbus RTU)	RS422, RS485(Modbus RTU)
	External Input	None	2EA
	Relay Output	None	
	Option	None	RS232C

# Simple Weighing Indicator

## SI300A / SI300B

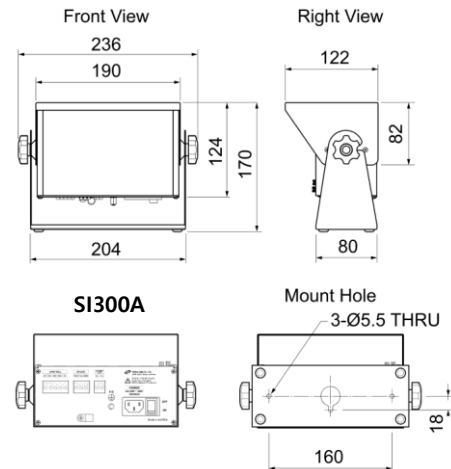
INDICATOR



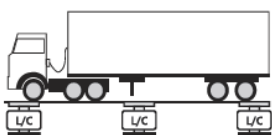
### Feature

- Wall mounting type
- Hold Function : Sample, Average, Peak
- Support of MODBUS(RTU) protocol

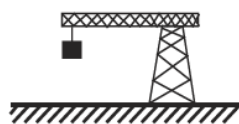
### SI 300A Dimension [unit : mm]



Feature		SI300A	SI300B
Analog Part	Input Sensitivity	Min 0.1 $\mu$ V / Digit	
	Load Cell Excitation	DC 5V	
	Non-Linearity	0.001% of full scale	
	Input Signal	Max 3.0mV/V	
	A/D Sampling	Max 120time/sec, Sigma-Delta	
	Resolution	Internal : 1/2,000,000 External : 1/20,000	
Display Part	Main Display	7Segment, 6 Digit Red FND, Letter Size : 25.4mm	
	LED Display	Green (STEADY, ZERO, TARE, HOLD, TxD, RxD, PRT, BAT) Red (g, kg, t pcs, oz, lb)	
	Under Zero	Minus(-) Display	
General Part	Power Supply	AC Free Voltage(AC100V~240V, 50/60Hz)	Charger input power : 100~240V, 50~60Hz, 1A Charger output power : DC4.2V, 2A
	Operating Condition	Temperature : -10°C ~ +40°C, Humidity : 85% RH Under	
	Size/Weight	236(W) x 170(H) x 122(D) / 2kg	
	Interface	RS232C(Modbus RTU), Current Loop	
	Battery	None	Li-ion, 3.7V, 5400mAh 350 $\Omega$ Load Cell 4EA, 18 hours can be used



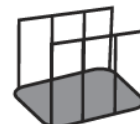
Truck Scale



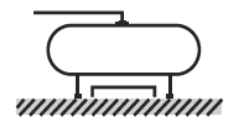
Crane Scale



Tester



Animal Scale



Tank Scale

# Simple Weighing Indicator

## SI4630N / SI4630NF

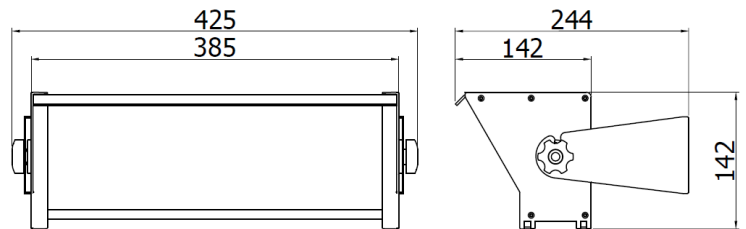


INDICATOR

### Feature

- Wall Mount Type, External Display Type Indicator
- Hold Function : Sample, Average, Peak

### Dimension [unit : mm]



Feature		SI4630N	SI4630NF
Analog Part	Input Sensitivity	Min 0.1 $\mu$ V / Digit	
	Load Cell Excitation	DC 5V	
	Non-Linearity	0.001% of full scale	
	Input Signal	Max 3.0mV/V	
	A/D Sampling	Max 120time/sec, Sigma-Delta	
	Resolution	Internal : 1/2,000,000 External : 1/20,000	
Display Part	Main Display	7Segment, 5 Digit Red FND, Letter Size : 76.2mm	
	LED Display	Red LED (STEADY, ZERO, TARE, CHECK)	
	Under Zero	Minus(-) Display	
General Part	Power Supply	AC Free Voltage(AC100V~240V, 50/60Hz)	
	Operating Condition	Temperature : -10°C ~ +40°C, Humidity : 85% RH Under	
	Size/Weight	385(W) x 142(H) x 142(D), 3.0kg	
	Interface	RS232C, Current Loop	
	Key pad	Wired key pad	
	Option	IR Wireless Key pad	Analog Output 0~10V, 4~20mA / Serial Interface RS422, RS485/ IR Wireless Key pad



Auto Packer

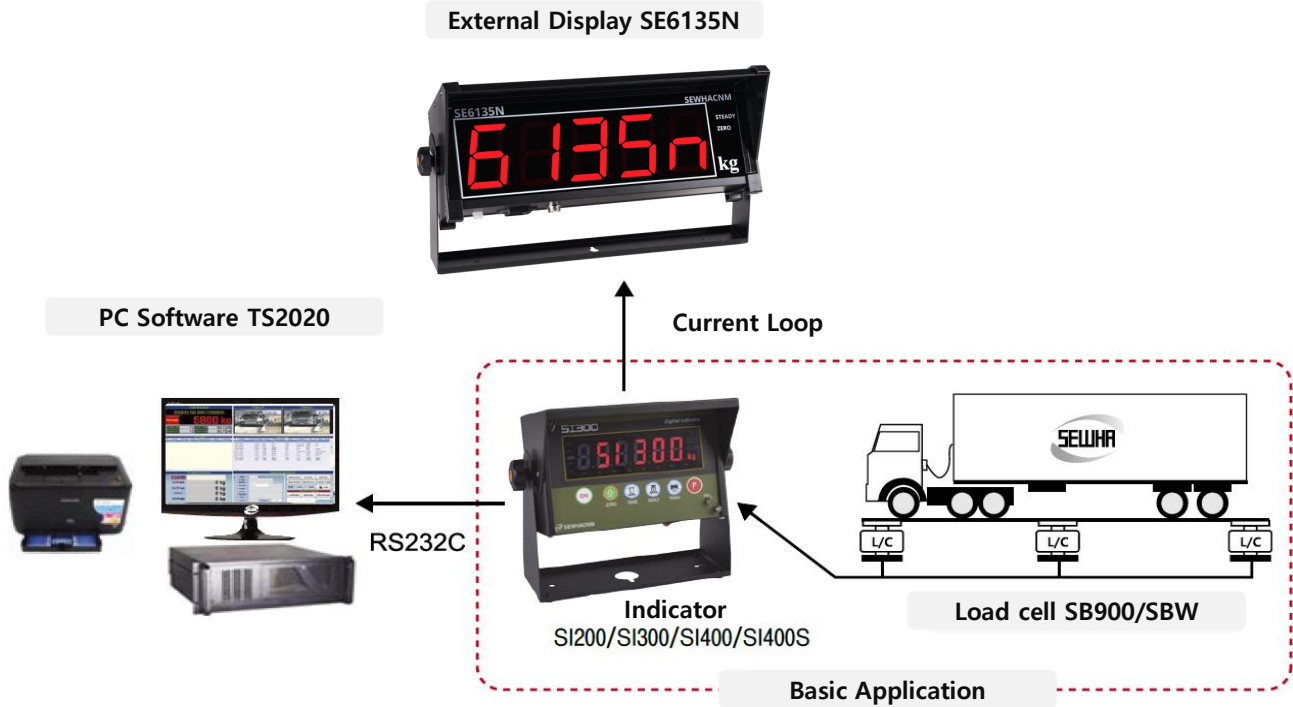


Fish Scale

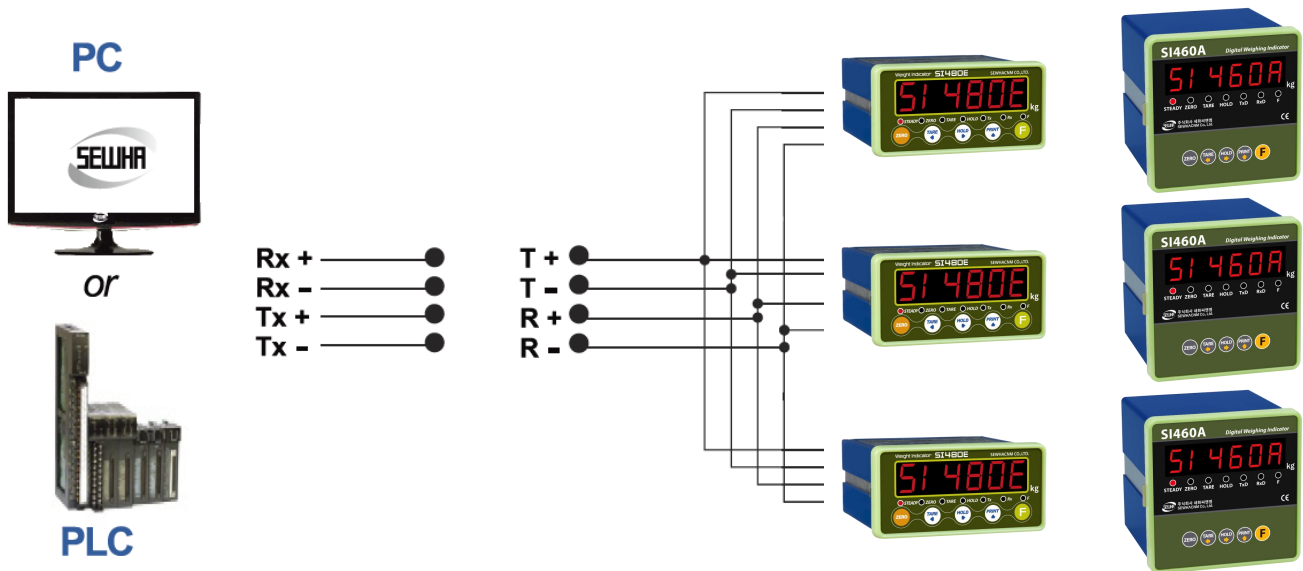
# System Application

## SI200, SI300, SI400

INDICATOR



## SI460A, SI480E Network Composition By RS422



Max 32EA Set of SI480E / SI460A are connectable

# Simple Control Indicator

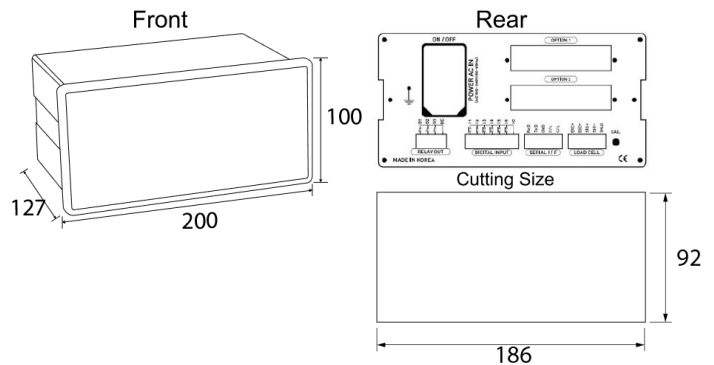
## SI400R



### Feature

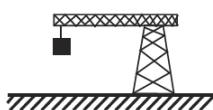
- Weighing mode : Limit mode
- Hold Function : Sample, Average, Peak
- SD memory(Optional card)
- Support of MODBUS(RTU) protocol

### Dimension [unit : mm]



INDICATOR

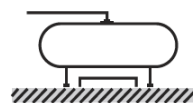
Feature		SI400R
Analog Part	Input Sensitivity	Min 0.1 $\mu$ V / Digit
	Load Cell Excitation	DC 5V
	Non-Linearity	0.001% of full scale
	Input Signal	Max 3.0mV/V
	A/D Sampling	Max 120time/sec, Sigma-Delta
	Resolution	Internal : 1/2,000,000 External : 1/20,000
Display Part	Main Display	7Segment, 5 Digit Red FND, Letter Size : 25.4mm
	LED Display	◀ : RUN, HIGH, LOW(Green) / ▼ : OUT1~7, FINISH(Green)
	Under Zero	Minus(-) Display
General Part	Power Supply	AC Free Voltage(AC100V~240V, 50/60Hz)
	Operating Condition	Temperature : -10°C ~ +40°C, Humidity : 85% RH Under
	Size/Weight	200(W) x 100(H) x 127(D) / 1.25kg
	Interface	RS232C(Modbus RTU), Current Loop
	External Input	4EA
	Relay Output	3EA
	Option	Serial Interface(Modbus RTU) RS232C, RS422, RS485 / Ethernet /SD memory card Analog Output 0~10V, 4~20mA /BCD IN / BCD Out



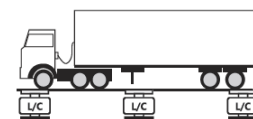
Crane Scale



Tester



Tank Scale



Truck Scale

# Simple Control Indicator

## SI410

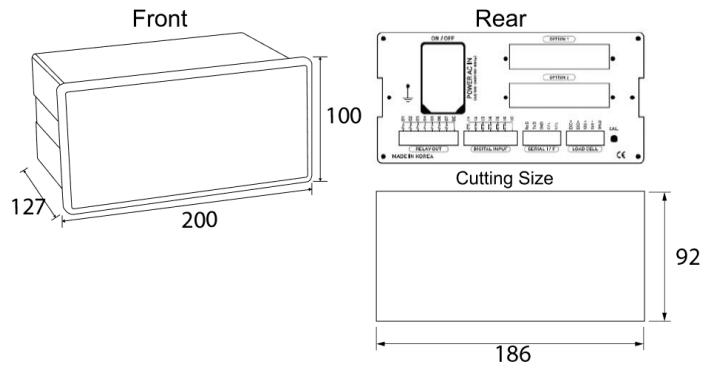
INDICATOR



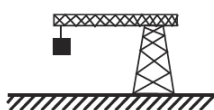
### Feature

- Weighing mode : Limit mode, Packer mode,
- Hold Function : Sample, Average, Peak
- SD memory(OPTION card)
- Support of MODBUS(RTU) protocol

### Dimension [unit : mm]



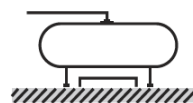
Feature		SI410
Analog Part	Input Sensitivity	Min 0.1 $\mu$ V / Digit
	Load Cell Excitation	DC 5V
	Non-Linearity	0.001% of full scale
	Input Signal	Max 3.0mV/V
	A/D Sampling	Max 120time/sec, Sigma-Delta
	Resolution	Internal : 1/2,000,000 External : 1/20,000
Display Part	Main Display	7Segment, 5 Digit Red FND, Letter Size : 25.4mm
	LED Display	◀ : RUN, HIGH, LOW(Green) / ▼ : OUT1~7, FINISH(Green)
	Under Zero	Minus(-) Display
General Part	Power Supply	AC Free Voltage(AC100V~240V, 50/60Hz)
	Operating Condition	Temperature : -10°C ~ +40°C, Humidity : 85% RH Under
	Size/Weight	200(W) x 100(H) x 127(D) / 1.25kg
	Interface	RS232C(Modbus RTU), Current Loop
	External Input	6EA
	Relay Output	7EA
	Option	Serial Interface(Modbus RTU) RS232C, RS422, RS485 / Ethernet /SD memory card Analog Output 0~10V, 4~20mA /BCD IN / BCD Out



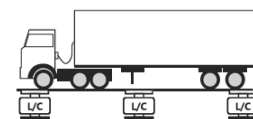
Crane Scale



Tester



Tank Scale



Truck Scale

# Simple Control Indicator

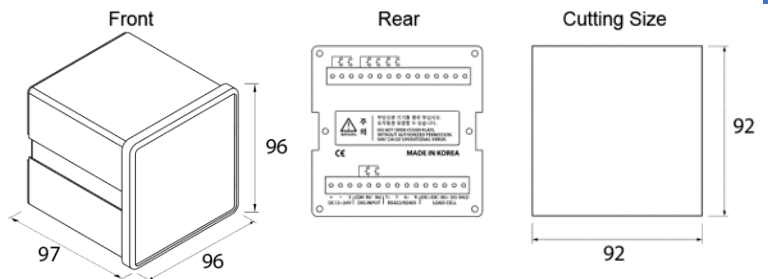
## SI560A



### Feature

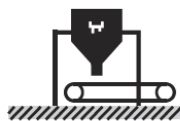
- Weighing mode : Limit mode, Packer mode, Checker mode
- Power Selectable : DC & AC Ordering Spec.
- Support of MODBUS(RTU) protocol
- Support of Sub display

### Dimension [unit : mm]

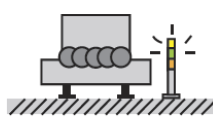


INDICATOR

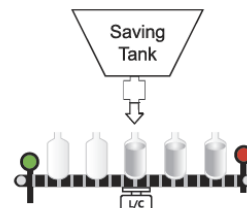
Feature		SI560A
Analog Part	Input Sensitivity	Min 0.1 $\mu$ V/V / Digit
	Load Cell Excitation	DC 5V
	Non-Linearity	0.001% of full scale
	Input Signal	Max 3.0mV/V
	A/D Sampling	Max 120time/sec, Sigma-Delta
	Resolution	Internal : 1/2,000,000 External : 1/20,000
Display Part	Main Display	7Segment, 6 Digit Red FND, Letter Size : 15mm
	Sub Display	7Segment, 10 Digit Red FND, Letter Size : 13.5mm
	LED Display	Red LED (STEADY, ZERO, TARE, OUT1~4)
	Under Zero	Minus(-) Display
General Part	Power Supply	DC Type : DC12~24V, 12W AC type: AC Free Voltage(AC100V~240V, 50/60Hz)
	Operating Condition	Temperature : -10°C ~ +40°C, Humidity : 85% RH Under
	Size/Weight	96(W) x 96(H) x 97(D) / 0.5kg(DC), 0.7kg(AC)
	Interface	RS422 & RS485 (Modbus RTU) & RS232C
	External Input	4EA
	Relay Output	4EA
	Analog Output	Analog Output 0~10V or 4~20mA (1 port)



Auto Packer



Auto Checker



Filler Application

# Simple Control Indicator

## SI580E / SI580EN

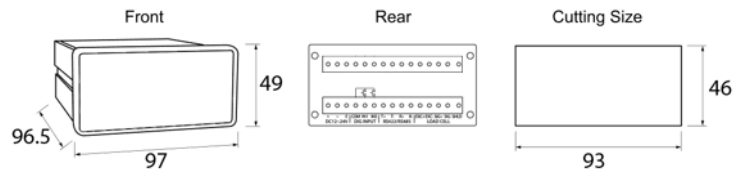
INDICATOR



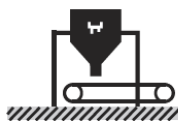
### Feature

- Weighing mode : Limit mode, Packer mode, Accumulating mode
- Power Selectable : DC & AC Ordering Spec.
- Support of MODBUS(RTU) protocol
- Option : Ethernet(Modbus TCP/IP)

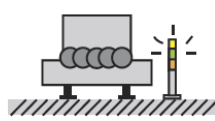
### Dimension [unit : mm]



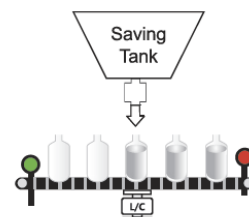
Feature		SI580E	SI580EN
Analog Part	Input Sensitivity	Min 0.1 $\mu$ V / Digit	
	Load Cell Excitation	DC 5V	
	Non-Linearity	0.001% of full scale	
	Input Signal	Max 3.0mV/V	
	A/D Sampling	Max 120time/sec, Sigma-Delta	
	Resolution	Internal : 1/2,000,000 External : 1/20,000	
Display Part	Main Display	7Segment, 6 Digit Red FND, Letter Size : 16.2mm	
	LED Display	STEADY, ZERO, TARE, OUT1~4	
	Under Zero	Minus(-) Display	
General Part	Power Supply	DC12~24V AC Free Voltage(AC100V~240V, 50/60Hz)	
	Operating Condition	Temperature : -10°C ~ +40°C, Humidity : 85% RH Under	
	Size/Weight	97(W) x 96.5(H) x 49(D) / 700g	
	Interface	Slot 1 – Standard : RS422, RS485 / Special order : RS232C Slot 2 – Standard : RS232C / Special order : RS422, RS485	
	Analog Output	Analog Output 0~10V or 4~20mA	
	External Input	4EA	
	Relay Output	4EA	
	Ethernet	None	Basic Interface



Auto Packer



Auto Checker



Filler Application



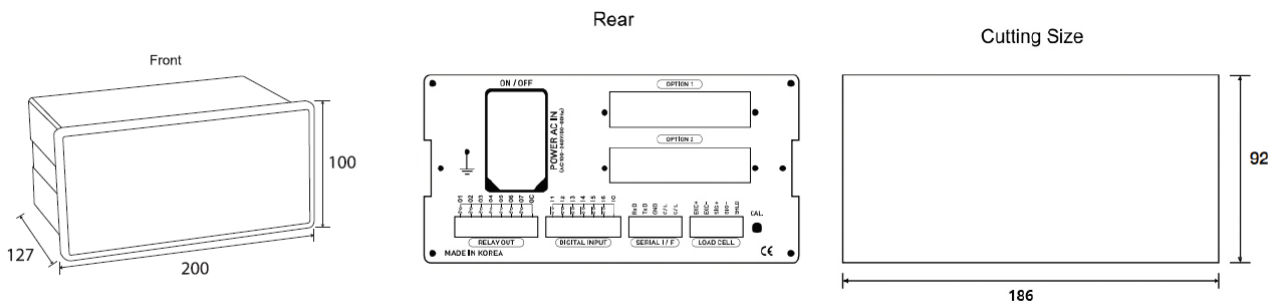
# Common Specification of Precision Control Indicator

## SI510, SI520, SI530, SI540, SI550

INDICATOR

MODEL		SI510	SI520	SI530	SI540	SI550
APPLICATION		Packer	Quantity Count	Checker	Loss in Weight mode	Accumulation weighing
WEIGHING MODE	Limit Mode	●	●		●	
	Packer Mode	●	●			
	Checker Mode			●		
	Loss in Weight				●	
	Batch Mode					●

### Dimension [unit : mm]



Feature		SI510 / SI520 / SI530 / SI540 / SI550
Analog Part	Input Sensitivity	Min 0.1 $\mu$ V / Digit
	Load Cell Excitation	DC 5V
	Non-Linearity	0.001% of full scale
	Input Signal	Max 3.0mV/V
	A/D Sampling	Max 120time/sec, Sigma-Delta
	Resolution	Internal : 1/2,000,000 External : 1/20,000
Display Part	Main Display	7Segment, 6 Digit Red FND, Letter Size : 20mm Red/ Green Dual Color
	Sub Display	7Segment, 15 Digit Red FND, Letter Size : 9mm
	LED Display	Red/Green Dual Color (STEADY, ZERO, TARE, HOLD, RUN, TxD, OUT1~7)
	Under Zero	Minus(-) Display
General Part	Power Supply	AC Free Voltage(AC100V~240V, 50/60Hz)
	Operating Condition	Temperature : -10°C ~ +40°C, Humidity : 85% RH Under
	Size/Weight	200(W) x 100(H) x 127(D) / 1.3kg
	Interface	RS232C(Modbus RTU) & Current Loop
	External Input	6EA
	Relay Output	7EA
	Option	Serial Interface(Modbus RTU) RS232C, RS422, RS485 / Ethernet /SD memory card Analog Output 0~10V, 4~20mA /BCD IN / BCD Out

# Precision Control Indicator

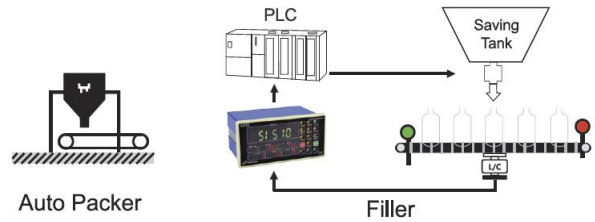
## SI510 Packaging control Indicator

INDICATOR



### Feature

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

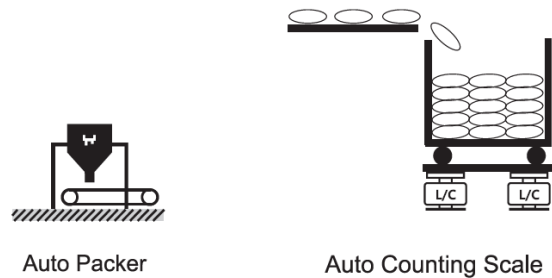


## SI520 Quantity control Indicator



### Feature

- Precise auto counting/unit weight
- Multi display(Main, P/N, Count, Unit weight)
- Weighing mode : Limit Mode, Packer Mode
- Support of MODBUS (RTU) Protocol

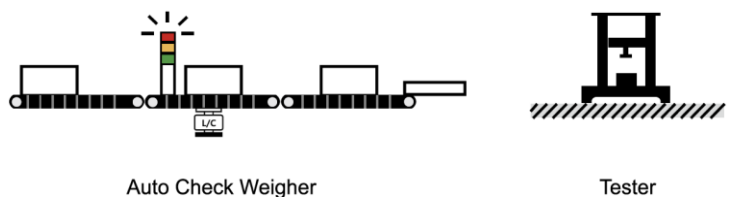


## SI530 Weight check control Indicator



### Feature

- Low-end type checkweigher, Laboratory tester
- Mutil display(Main, P/N, Count, Over, Under, Pass)
- Weighing mode : Checker Mode
- Support of MODBUS (RTU) Protocol



# Precision Control Indicator

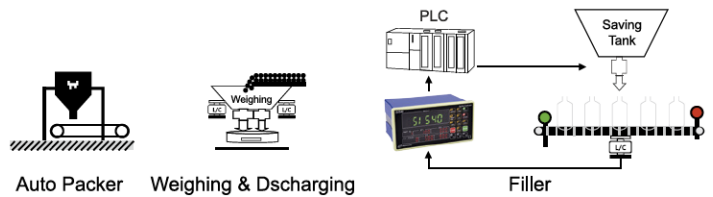
## SI540 Packaging control Indicator(Loss in weight)

INDICATOR



### Feature

- Multi display(Main, P/N, Free fall, Final, Pre2, Pre1)
- Weighing mode : Limit mode, Packer mode, Loss in Weighing mode
- Support of MODBUS (RTU) Protocol

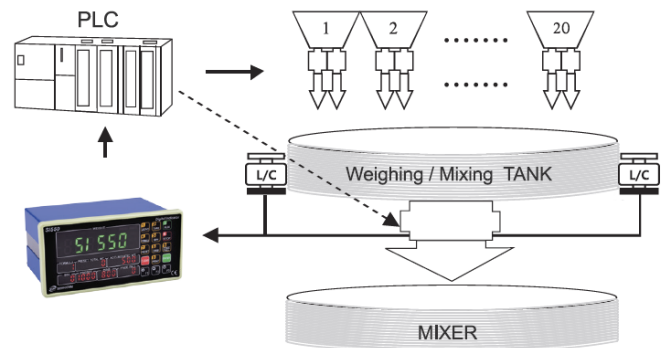


## SI550 Multiple mixture control Indicator



### Feature

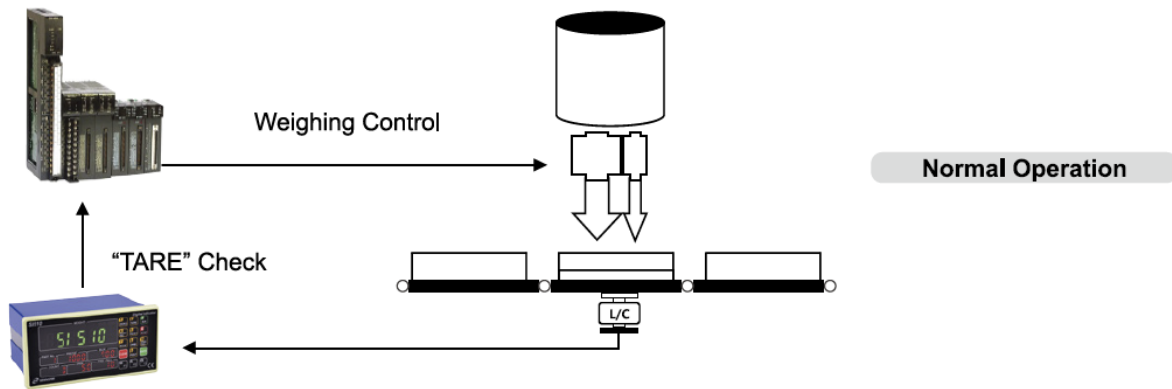
- Mutil display(Main, Formula, Bin no., Free fall, Pre1, Final, Pre1,Operating)
- 50 kinds formula(Max. 20 kinds material)
- Auto batch accumulation mode with PLC
- Support of MODBUS (RTU) Protocol



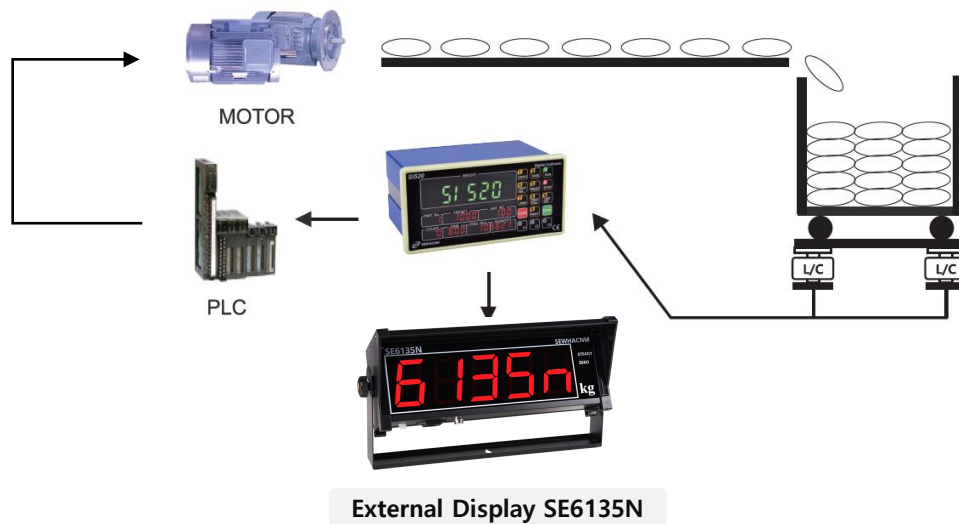
## System Application

# Auto Packer Using SI 510

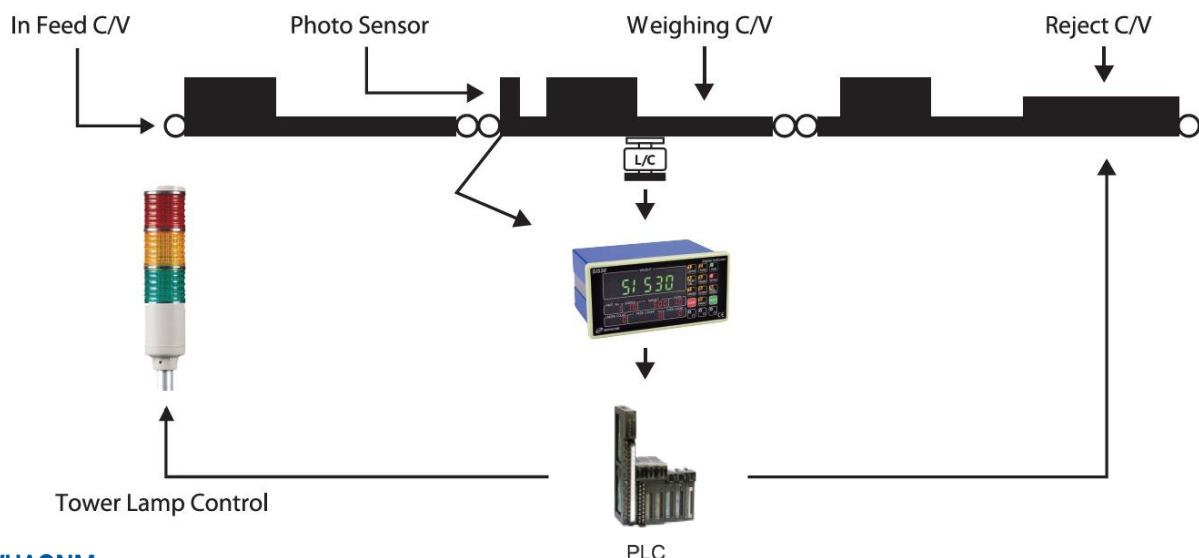
INDICATOR



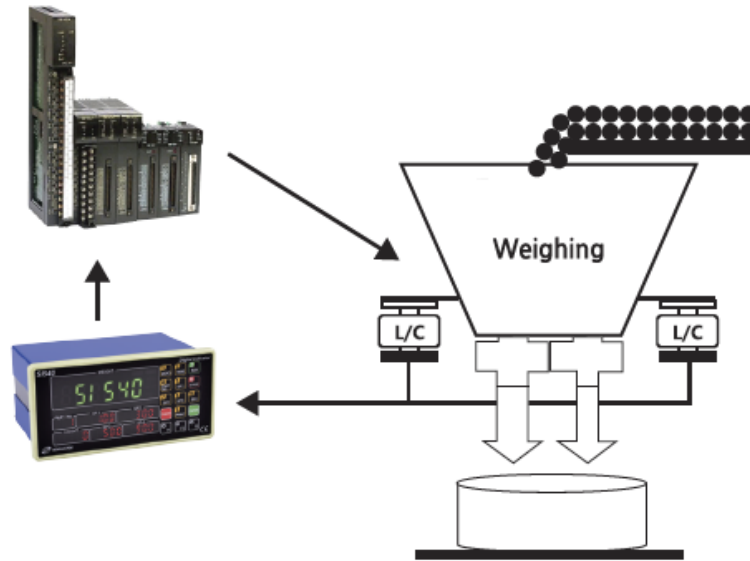
# Quantity Control Application Using SI 520



# Auto Check Weighing Application Using SI 530



## Loss In Weight Application Using SI540



INDICATOR

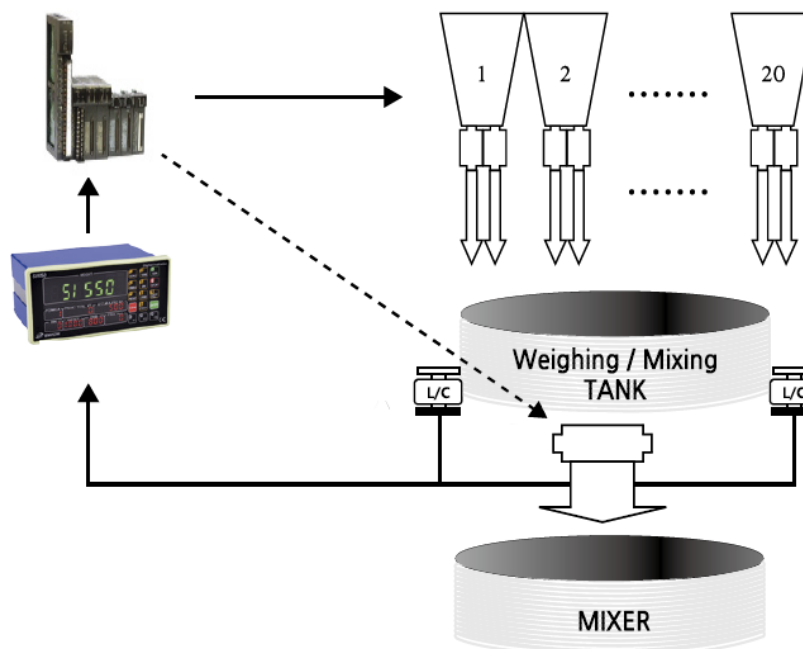
### 3 Step Discharge Mode

- SP 1 : Bulk Discharge
- SP 2 : Drib Discharge
- SP 3 : Set point

### 2 Step Feeding / 2 Step Discharge Mode

- SP 1 : Bulk Feeding
- SP 2 : Set point for Feeding
- SP 3 : Bulk Discharge
- SP 4 : Set point Discharge

## Accumulating Mixing Application Using SI 550



# Explosion Indicator

## SI400Ex / SI500Ex

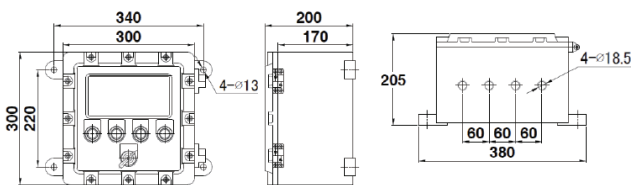
INDICATOR



### Feature

- User Customized : External Input
- Hold Function : Sample, Average, Peak
- MODBUS (RTU) Protocol

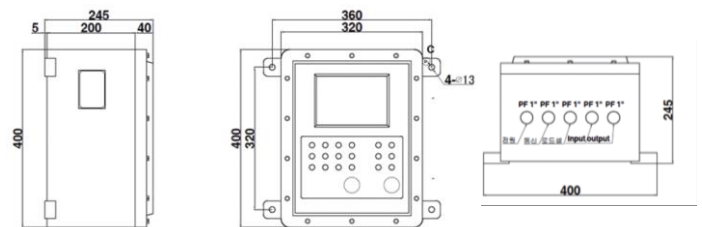
### Dimension [unit : mm]



### Feature

- Multi Display(Main, P/N, Free Fall, Pre1)
- Weighing mode : Limit Mode, Packer Mode
- Auto Free Fall
- MODBUS (RTU) Protocol

### Dimension [unit : mm]



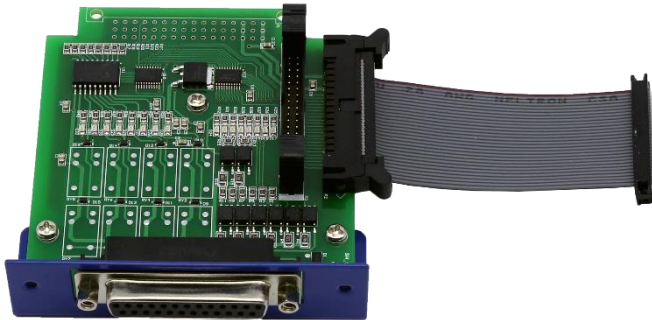
Feature		SI400Ex	SI500Ex
Analog Part	Input Sensitivity	Min 0.1 $\mu$ V / Digit	
	Load Cell Excitation	DC 5V	
	Non-Linearity	0.001% of full scale	
	Input Signal	Max 3.0mV/V	
	A/D Sampling	Max 120time/sec, Sigma-Delta	
	Resolution	Internal : 1/2,000,000 External : 1/20,000	
Display Part	Main Display	7Segment, 6 Digit Red FND, Letter Size : 25.4mm	Main : 7Segment, 6 Digit Red FND, Height : 20mm Red/ Green Dual Color Sub : 7Segment, 15 Digit Red FND, Height : 9mm
	LED Display	Word : 8digit, Green Arrow : 12digit, Green	Word : 8digit, Green/Red
	Under Zero	Minus(-) Display	
General Part	Power Supply	AC Free Voltage(AC100V~240V, 50/60Hz)	
	Operating Condition	Temperature : -10 $^{\circ}$ C ~ +40 $^{\circ}$ C, Humidity : 85% RH Under	
	Size/Weight	380(W) x 300(H) x 200(D) / About 20kg	400(W) x 400(H) x 254(D) / About 20kg
	Interface	RS232C(Modbus RTU), Current Loop	
	External Input	2EA, Dry contact	6EA, Dry contact
	Relay Output	None	7EA
	Option	Analog Output 0~10V, 4~20mA / Serial Interface RS232C, RS422, RS485 / BCD IN / BCD Out / Ethernet / SC memory card / Wireless Interface	
	Explosion Accuracy Class	Ex d IIB+H2 T6	Ex d IIB T6

# Option Card

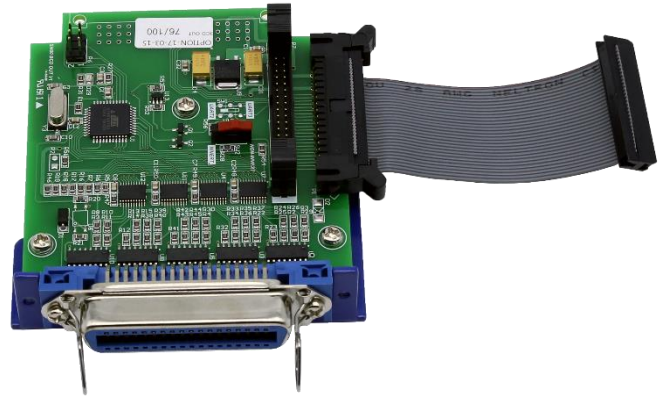
## SI400 / SI500 Series Option Card

INDICATOR

BCD IN



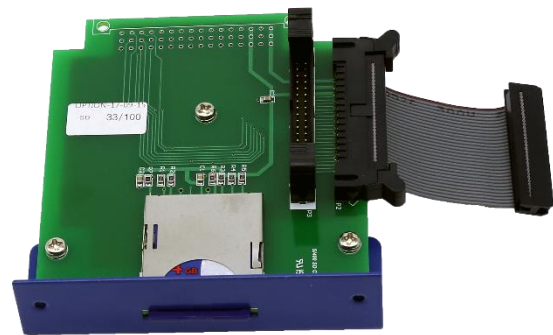
BCD OUT



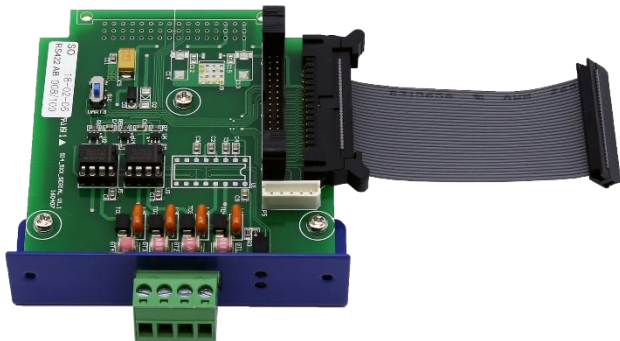
Ethernet(Modbus TCP/IP)



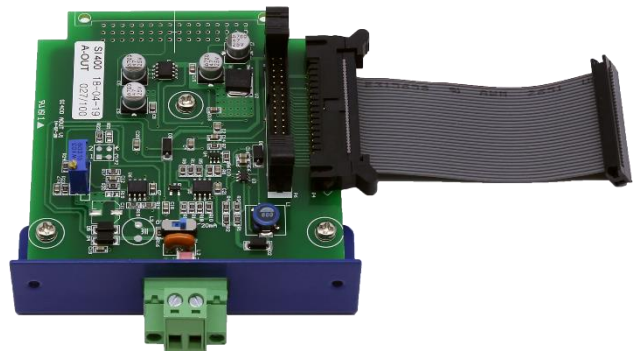
SD Memory Card



Serial Communication(Modbus RTU)  
(RS232C, RS422, RS485)



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



# Housing & Printer

## Indicator Box & Printer

INDICATOR

### 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

SE4010	SE4020	SE4021
		
POWER, ZERO, TARE	POWER, ZERO, TARE, PRINT	POWER, PRINT
280(W)x240(H)x300(D) (mm)	400(W)x260(H)x330(D) (mm)	250(W)x260(H)x270(D) (mm)



### Printer

	SE7200(Desk Type)	SE7300(Panel Type)
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#### SE 7300 S / D

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



Size / Weight	110(W)x165(L)x85(D) / 1.5kg		120(W)x130(L)x90(D) / 1.5kg	
Cutting Size	None		107(W)x113(H)	
Power Supply	Basic : DC 12V, 1.5A, Option : Adapter AC 110V/220V			
Operating Condition	Temperature : 0°C~50°C			
Printing Method	Dot 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		60mm/sec	
Dot/Line	240		384	
Paper Info	57(W) x ø50mm Dot Type		57(W) x ø50mm Thermal Roll Paper	
Cartridge	ERC - 09			
Interface	RS232C Serial Interface			
Supplies	Cartridge : ERC-09 		Roll paper : 57(W) x ø50mm Dot/Thermal Type 	



# External Display

## SE6125N/SE6135N/SE6145A/SE6165A

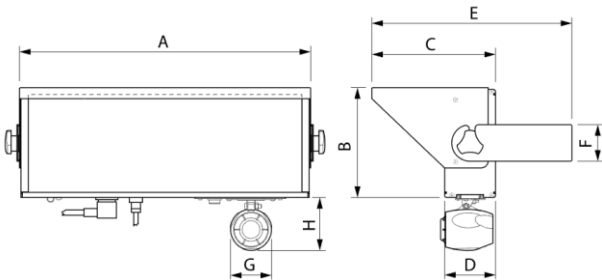
EXTERNAL DISPLAY



### Feature

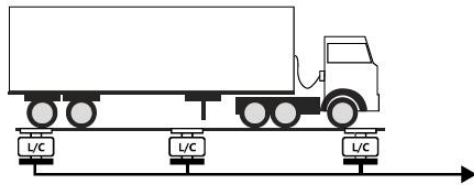
- Wall Mounting Type
- RS232C / RS485, Current Loop Auto detection
- Connectable to Other Brand's Indicators
- Communication Speed Auto Setting (2,400 ~ 115,200 bps)
- Buzzer Option(SE6145A, SE6165A)

### Dimension [unit : mm]



Unit(mm)	A	B	C	D	E	F	G	H
SE6125N	315	142	142	-	245	50	-	-
SE6135N	385	142	142	-	245	50	-	-
SE6145A	545	183	185	70	290	50	57	73
SE6165A	720	247	210	70	325	70	57	73

Feature	Letter Size	Weight	Power Supply	Operating Condition	Size(mm)
SE6125N	58.4mm	2.0kg	AC Free Voltage (AC100V~240V, 50/60Hz)	Temperature : -10°C ~ +40°C, Humidity : 85% RH Under	315x142x142
SE6135N	76.2mm	3.0kg			385x142x142
SE6145A	101.6mm	7.0kg			545x183x185
SE6165A	152.4mm	9.0kg			720x247x210



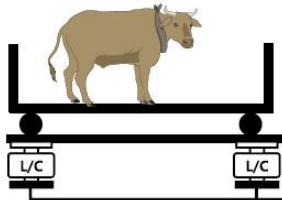
Truck Scale



Indicator



SE6125N/SE6135N/SE6145A/SE6165A



Animal Scale



Indicator

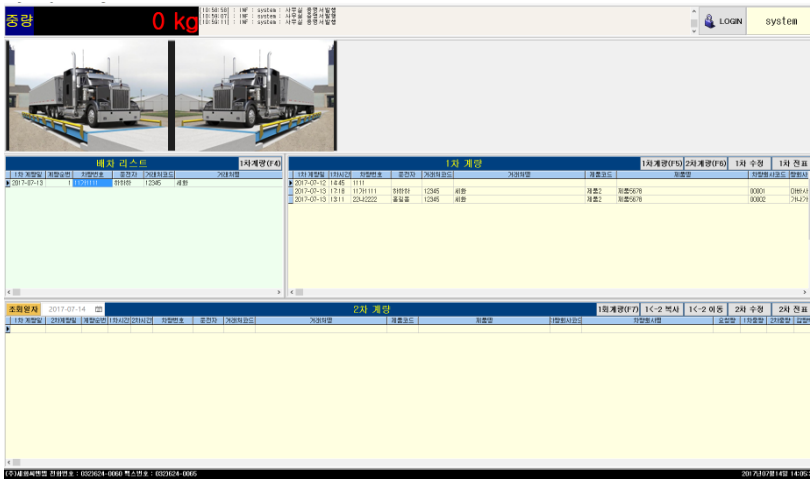


SE6125N/SE6135N/SE6145A/SE6165A

# Truck Scale Program

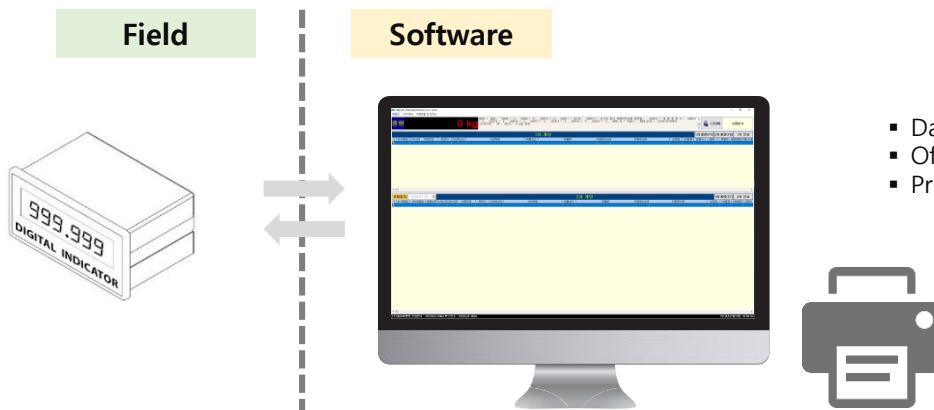
## TS2020

CONTROLLER



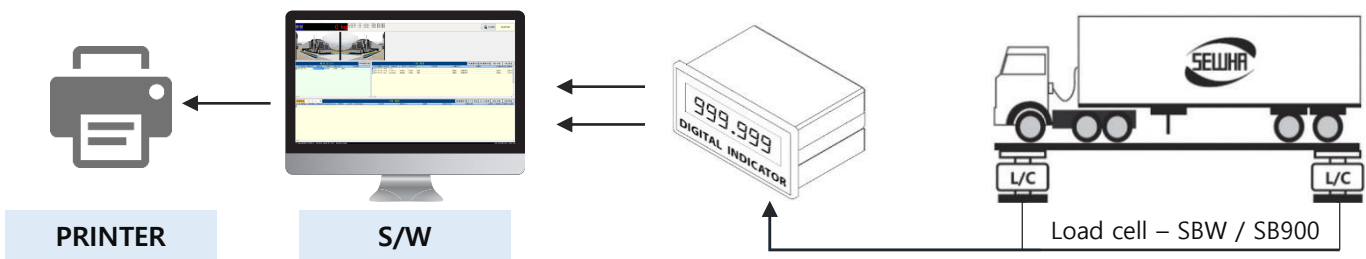
### Feature

- No need to install USB Lock Key
- Program to use IP Camera
- Not related with OS



- Data can be saved and storage
- Office can control data
- Print out with different format

### Truck Scale Program Basic Application



Inquiry	<ul style="list-style-type: none"> <li>▪ User can make copy of main program.</li> <li>▪ User can check weighing data's real time.</li> <li>▪ Data can be saved and printed.</li> <li>▪ Main program can be customized developing.</li> </ul>
IP Camera	<ul style="list-style-type: none"> <li>▪ Only can use Hanhwa Techwin co's IP Camera.</li> <li>▪ User can check SMART VIEWER, memory card doesn't need.</li> <li>▪ Water proof housing is available.</li> </ul>

# Automatic Truck Scale Controller

## SA600FM

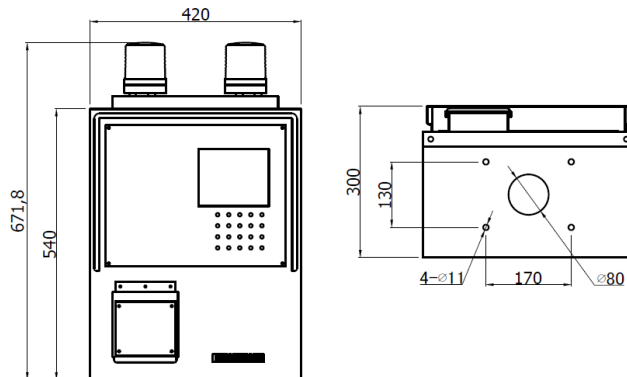
CONTROLLER



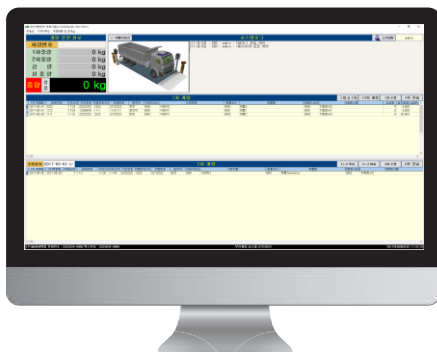
### Feature

Type	RFID card, Key pad
Interface	PC : RS422(Using converter) Indicator RS232
Display	Current/Vehicle/Net(6 Digit Red FND)
Printer	Direct Thermal Printing, Auto Cutting
Paper	Thermal Roll Paper : 79(W) x ø70mm
RFID reader	Maximum : 20mm
Speaker	5W Speaker Built-in
Temperature control	Fan/Heater Built-in
Power	AC 220V / 60Hz
Size/Weight	420(W) x 672(H) x 300(D) mm / 25kg ※Lamp height is included
Option	PC / CCTV / Inter-Phone

### Dimension [unit : mm]



### Automatic Truck Scale PC Software ATS2020



- Using MS SQL Database
- Easily to use and can measure weight
- Basic information Registrations & Management
- All date can be converted to excel file
- IP Camera accepted and Window10 version program

### Weighing Bill Sample

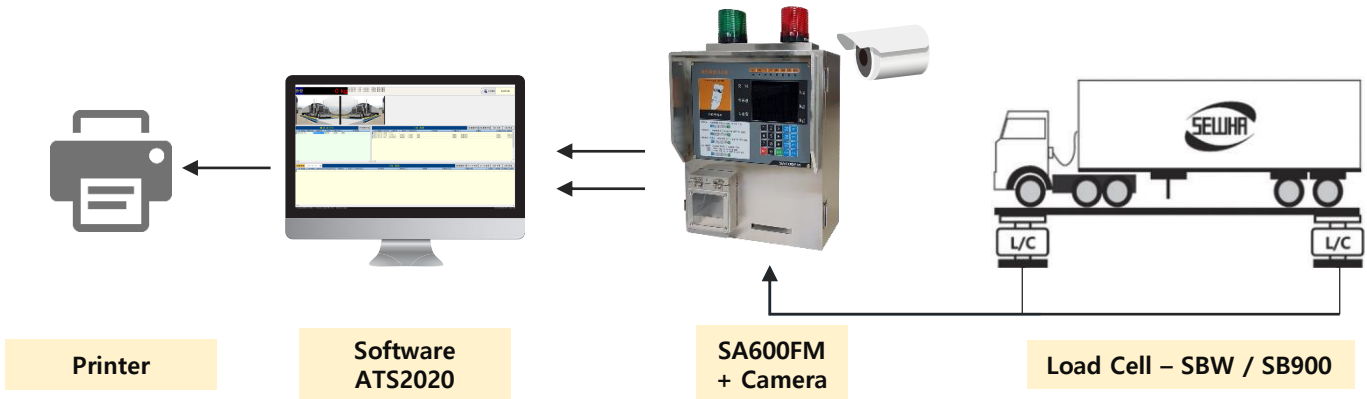
Date	No.	Time1	Time2	Customer	Item	Owner	Car No	1st Wt	End Wt	Reduce	Reduce	Net Wt	In/Out	Operato																																																																																																																																																																																																																																																															
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<table border="1" style="width: 100%;"> <tr> <th colspan="15">WEIGHING TICKET</th> </tr> <tr> <td>Date</td> <td colspan="2">2000-10-10</td> <td colspan="2">0001</td> <td colspan="10"></td> </tr> <tr> <td>Car No</td> <td colspan="14">11A1234</td> </tr> <tr> <td>Car Owner</td> <td colspan="14">Car owner</td> </tr> <tr> <td>Customer</td> <td colspan="14">Customer</td> </tr> <tr> <td>Item</td> <td colspan="14">Item</td> </tr> <tr> <td>Gross Wt</td> <td>10:10</td> <td colspan="13">5,000 kg</td> </tr> <tr> <td>Tear Wt</td> <td>20:20</td> <td colspan="13">2,000 kg</td> </tr> <tr> <td>Reduce</td> <td>0 %</td> <td colspan="13">0 kg</td> </tr> <tr> <td>Net Wt</td> <td>In</td> <td colspan="13">3,000 kg</td> </tr> <tr> <td>Unit</td> <td colspan="14">200 \$</td> </tr> <tr> <td>Price</td> <td colspan="14">600,000 \$</td> </tr> <tr> <td>Remark</td> <td colspan="14">Remark</td> </tr> <tr> <td colspan="15">It is thereby certified that measurement had been done as above.</td> </tr> <tr> <td colspan="15" style="text-align: center;">                     COMPANY <span style="float: right;">Operator</span> </td> </tr> <tr> <td colspan="15" style="text-align: center;">                     ADD 12312312 OWNER <span style="float: right;">Operato</span> </td> </tr> <tr> <td colspan="15" style="text-align: center;">Scale 1</td> </tr> </table>															WEIGHING TICKET															Date	2000-10-10		0001												Car No	11A1234														Car Owner	Car owner														Customer	Customer														Item	Item														Gross Wt	10:10	5,000 kg													Tear Wt	20:20	2,000 kg													Reduce	0 %	0 kg													Net Wt	In	3,000 kg													Unit	200 \$														Price	600,000 \$														Remark	Remark														It is thereby certified that measurement had been done as above.															COMPANY <span style="float: right;">Operator</span>															ADD 12312312 OWNER <span style="float: right;">Operato</span>															Scale 1														
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# Automatic Truck Scale Controller

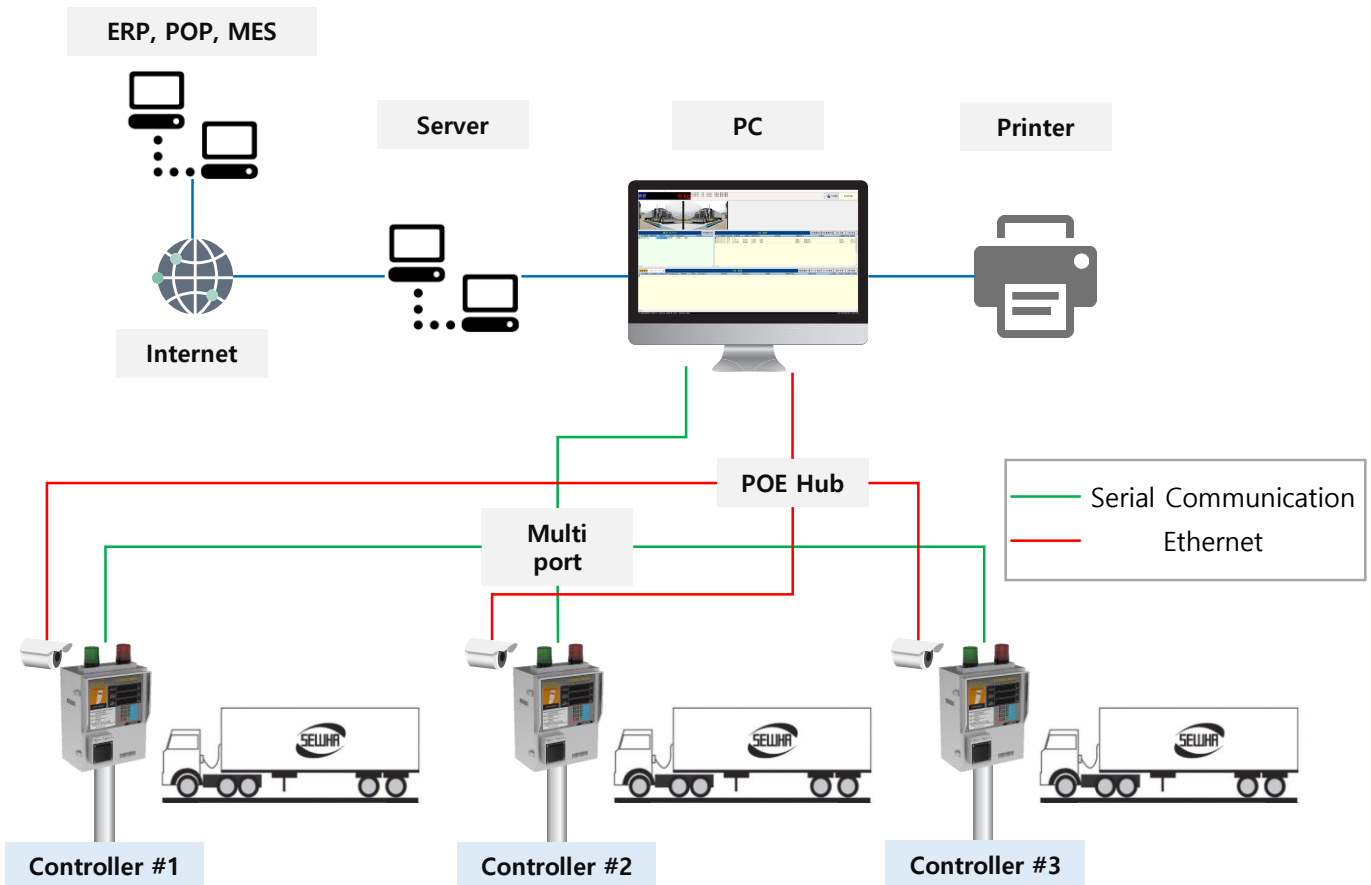
## SA600FM + ATS2020

CONTROLLER

### Automatic Truck Scale Application



### Network Composition



# Truck Scale Indicator

## SI600TS



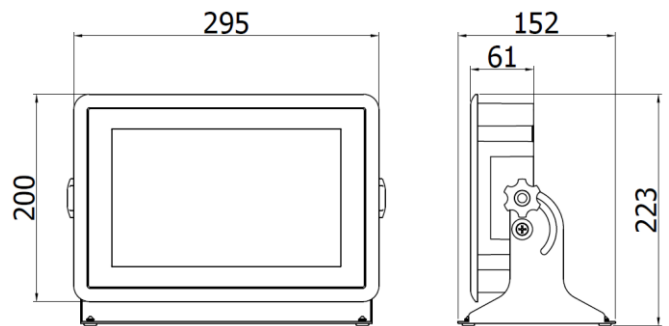
\* Printer(Optional)

CONTROLLER

### Feature

Resolution	1/20,000
Input Signal	Max 3.2mV/V
Load Cell Excitation	+5V DC
Operating Condition	-10°C ~ +40°C [14°F ~ 104°F]
Operation Humidity	40% ~ 85% RH, Non-condensing
Display size	10.2Inch TFT WIDE (800X480)
Color / Luminance	260,000 Color / 400 cd/m <sup>2</sup>
Touch	Four wire reduced pressure resistance
Serial port	RS-485 1EA RS-232 2EA Current Loop 1EA
Ethernet / USB port	10/100 Mbps 1EA / USB 2.0 2EA
Relay output	4EA, Contact Rate 5A 250V AC
External Input	4EA

### Dimension [unit : mm]



### Printer(Optional)

Size / Weight	130(W) x 140(D) x 154(H) mm / 1.7 kg
Power Supply	AC 95-240V Free Voltage
Printing Method	Direct line thermal printing
Print speed	220mm/sec
Dot density(Hor. / Ver.)	180 DPI X 180 DPI
Printing Width	Max 72mm (512 dots/Line)
Print Columns	Font "A"(42 columns), Font "B"(56 columns)
Paper Info	Paper width : Default 79.5 ±0.5mm Roll diameter : Max. ø83mm

### Serial print format

```

=====
                        Weighing slip
=====
Date                   : 2020-02-06           4
Vehicle                : 222222             TEST
Client                 :
Product                :
Total weight           : 15:38                0
Empty weight           : 15:38             1539
Reduce                 :                    0
Net weight             : OUT                1539
Specific gravity       :                    1
Equiv. weight          :                    1539
Unit cost              :                    0
Price                  :                    0
Operator               :
ETC                    :
                        It is certified that
                        the goods are measured as above.
    
```

# Auto Packer Controller

## SA410/420DS

CONTROLLER

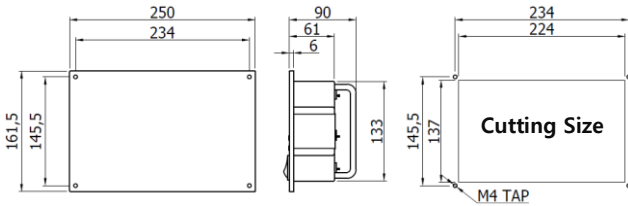


### Feature

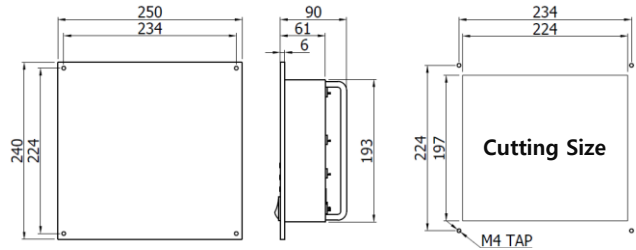
Display type	FND(7 Segment, Red FND)
Size(mm)	SA410DS(Single) : 250(W) x 161.5(H) x 90(D) SA420DS(Double) : 250(W) x 240(H) x 90(D)
Composition	Single(SA410DS) Double(SA420DS)

### Dimension [unit : mm]

- SA410DS



- SA420DS



## SA510A Series



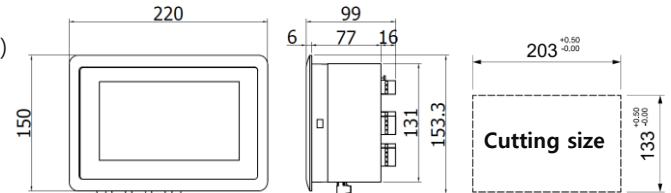
### Feature

Display type	TFT LDC(260,000 color, 4wire system, 300cd)
Size(mm)	220(W) x 150(H) x 83(D)

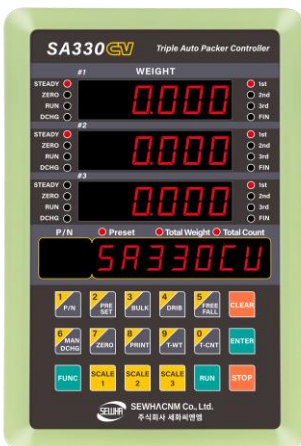
### Composition

- Single (SA511A)
- Double (SA512A)
- Triple (SA513A)
- Quad (SA514A)

### Dimension [unit : mm]



## SA300CV Series



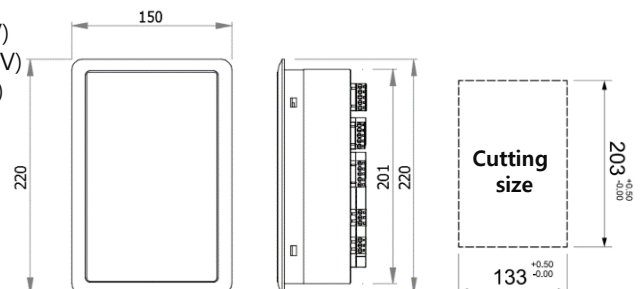
### Feature

Display type	FND
Size(mm)	150(W) x 220(H) x 83(D)

### Composition

- Single (SA310CV)
- Double (SA320CV)
- Triple (SA330CV)

### Dimension [unit : mm]

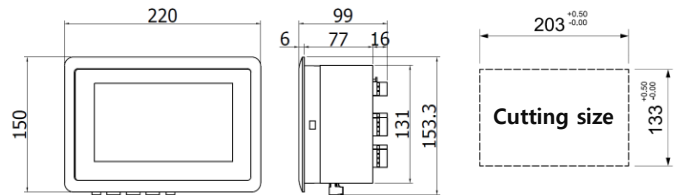


# Checkweigher Controller

## SC500A



### Dimension [unit : mm]



### Feature

- Various Weighing mode (Current Weight, Deviation)
- 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)

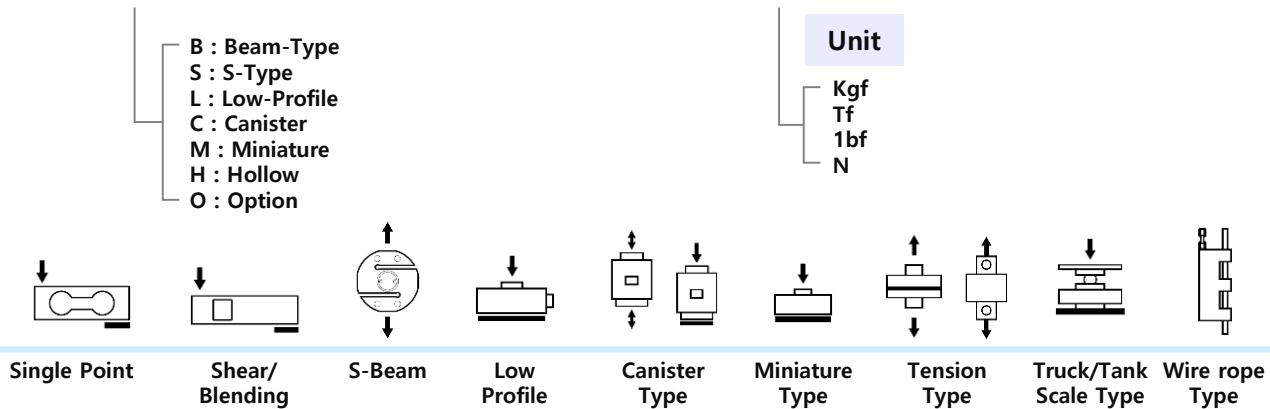
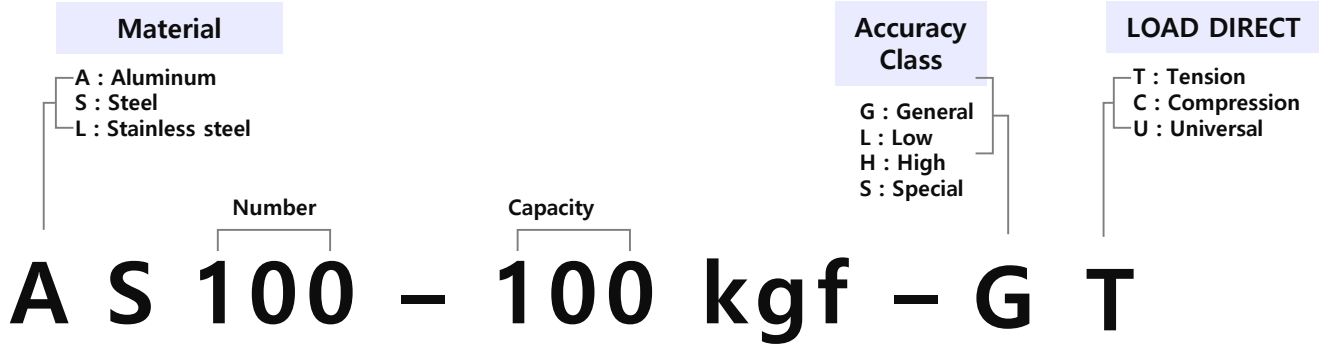
CONTROLLER

Feature		SC500A(LCD Touch Type)
Analog Part	Input Sensitivity	Min 0.1 $\mu$ V / Digit
	Load Cell Excitation	DC 5V
	Non-Linearity	0.001% of full scale
	Input Signal	Max 3.0mV/V
	A/D Sampling	Max 240time/sec, Sigma-Delta
	Resolution	Internal : 1/2,000,000( $\pm$ 1,000,000) External : 1/20,000
Display Part	Main Display	7" TIFT Wide Touch Screen LCD(800x400)
	LED Display	260,000 color, 4 lines system, 300cd
General Part	Power Supply	AC Free Voltage(AC95V~240V, 50/60Hz)
	Operating Condition	Temperature : -10°C ~ +40°C, Humidity : 85% RH Under
	Size/Weight	220(W) x 150(H) x 83(D) / About 1.8kg

# Load Cell Selection Guide

## LOAD CELL

LOAD CELL

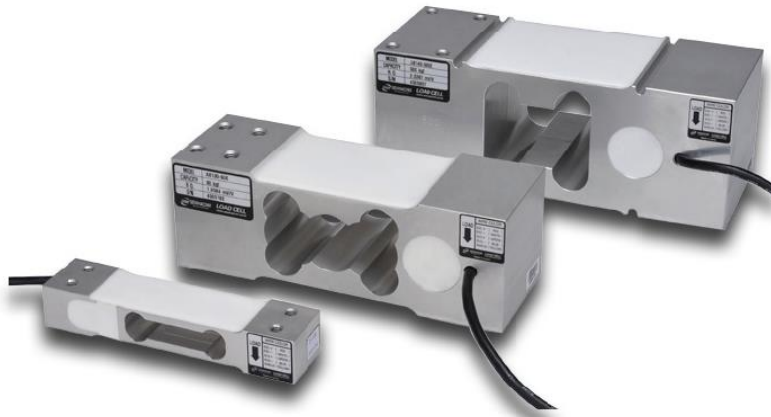


	AB					ABH	LBB	SB	SS		SL		SC		SM			ST	SB			SBW	SWL
Capacity	120C	120	130	140	150	100	200	210	300	310	410	420	520	530	600E	601E	603E	800E	900	910	920		100
300gf	●																						
600gf	●																						
1kgf	●															●							
2kgf	●									●						●							
3kgf	●	●				●										●							
5kgf		●			●	●				●						●							
10kgf		●			●	●				●						●							
15kgf		●			●	●										●							
20kgf		●			●	●	●			●						●							
30kgf		●	●		●	●										●							
50kgf		●	●		●	●	●			●					●	●	●						
60kgf			●																				
75kgf					●																		
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														●									●



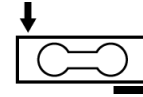
# Single Point Load Cell 300gf~1tf

## AB120C, 120, 130, 140



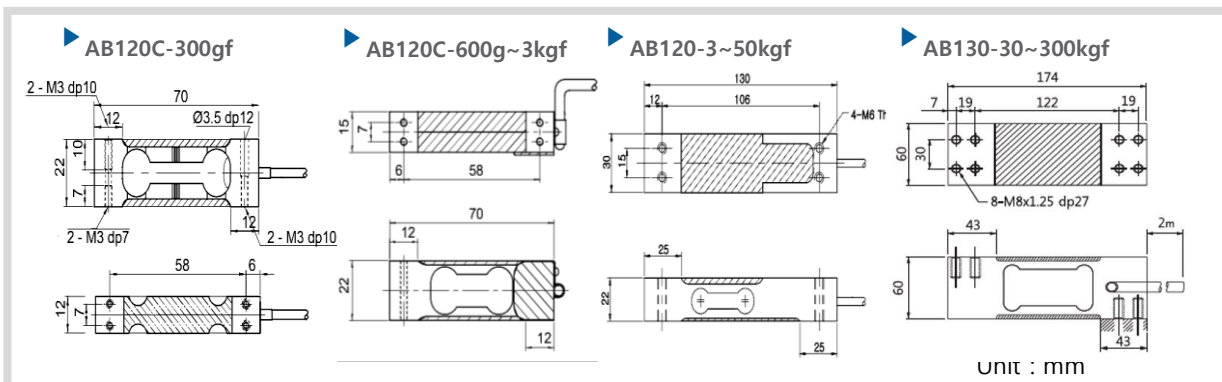
### Feature

- Compression Application
- Aluminum
- Protection Class IP65



LOAD CELL

Rated Capacity (R.C)	Unit	AB120C	AB120	AB130	AB140
		300, 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%			
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			
Output Value	%/°C	0.014			
Excitation					
Recommended	V	10			
Maximum	V	15			
Resistance					
Input	Ω	400 ± 30			
Output	Ω	350 ± 3.5			
Insulation	MΩ	>2,000@DC 50V			
Compensated Temp Range	°C	-10 ~ +40			
Operating Temp Range	°C	-20 ~ +80			



STANDARD CABLE LENGTH	
AB120C, AB120	1.5M
AB130, AB140	2M

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

# Single Point Load Cell 5~100kgf

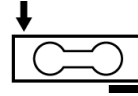
## AB150

LOAD CELL

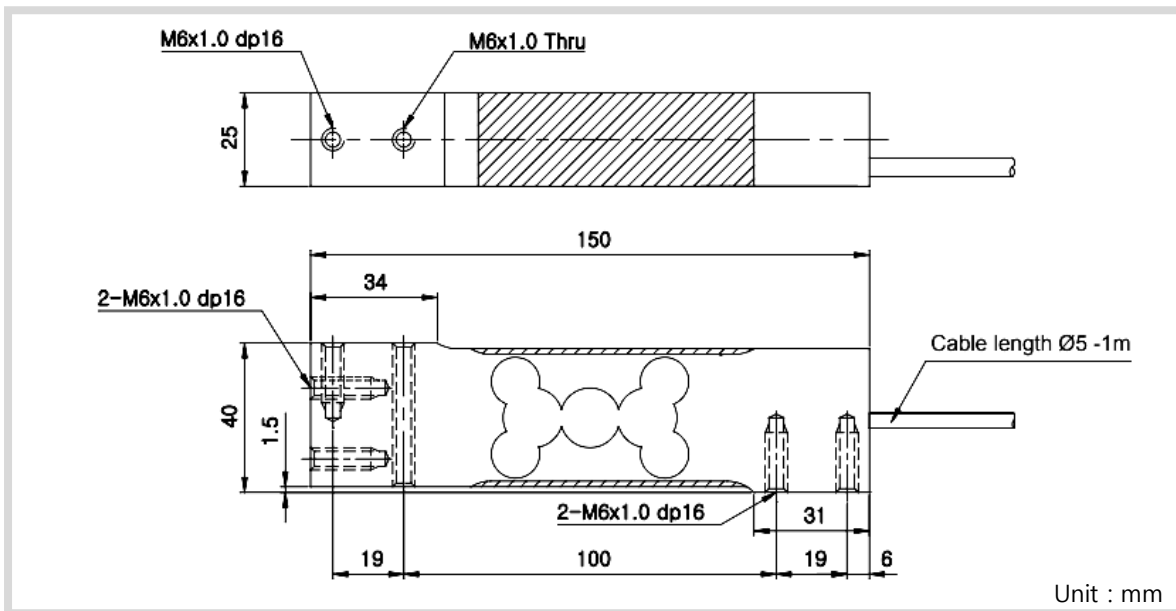


### Feature

- Compression Application
- Aluminum
- Protection Class IP65



Rated Capacity (R.C)	kgf / tf	5, 10, 15, 20, 30, 50, 75, 100 kgf
Rated Output (R.O)	mV/V	2.0 ± 0.2
Zero Balance	mV/V	0 ± 0.1
Combined Error	%	0.03
Repeatability	%	0.01
Creep (30min)	%	0.017
Temperature Effect on		
Zero Value	%/10°C	0.014
Output Value	%/10°C	0.011
Excitation		
Recommended	V	10
Maximum	V	15
Resistance		
Input	Ω	400 ± 20
Output	Ω	350 ± 3.5
Insulation	MΩ	>2,000@DC 50V
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-20 ~ +80



### STANDARD CABLE LENGTH

1M

### CABLE COLOR CODE

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

Unit : mm

# Single Point Load Cell 3~15kgf

## ABH100

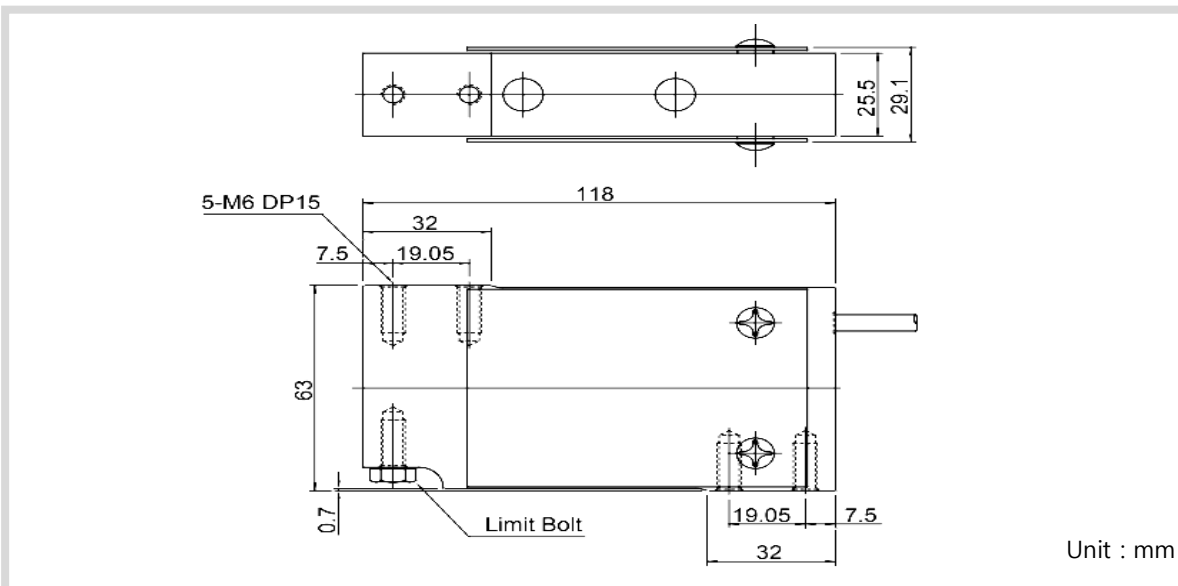


### Feature

- Compression Application
- Protection Class IP65
- Aluminum
- For Checkweigher

LOAD CELL

Rated Capacity (R.C)	kgf / tf	3, 5, 7, 10, 15kgf
Rated Output (R.O)	mV/V	2.0 ± 0.2
Zero Balance	mV/V	0 ± 0.1
Combined Error	%	0.02
Repeatability	%	0.01
Creep (30min)	%	0.017
Temperature Effect on		
Zero Value	%/10°C	0.014
Output Value	%/10°C	0.014
Excitation		
Recommended	V	10
Maximum	V	15
Resistance		
Input	Ω	400 ± 20
Output	Ω	350 ± 3.5
Insulation	MΩ	>2,000@DC 50V
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-20 ~ +80



Unit : mm

<b>STANDARD CABLE LENGTH</b>	
1M	
<b>CABLE COLOR CODE</b>	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHLD	(YELLOW)

# Shear Beam Load Cell 150kgf~10tf

## SB210

LOAD CELL

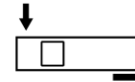


### Feature

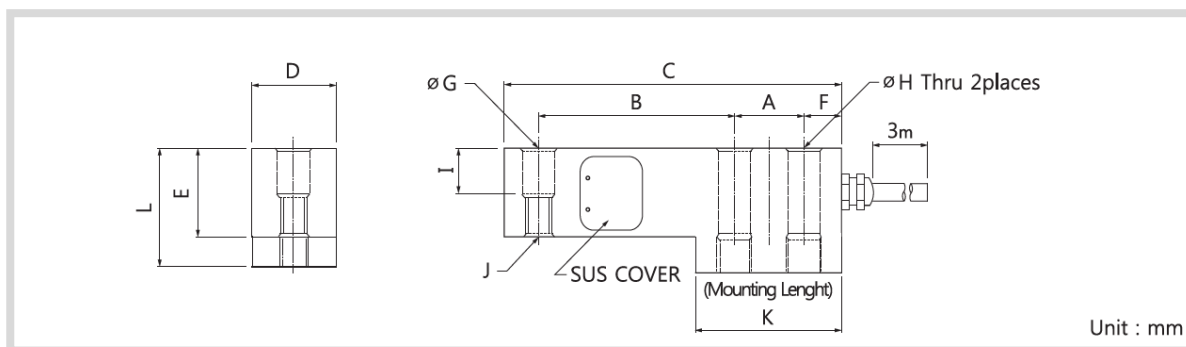
- Compression Application
- Protection Class IP66
- Compact Design
- Nickel Plated Steel

### Option

- Stainless steel : LB210 (MOQ Base)



Rated Capacity (R.C)	Unit	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 ± 50
Output	Ω	350 ± 3.5
Insulation	MΩ	>2,000@DC 50V
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-30 ~ +80



### STANDARD CABLE LENGTH

3M

### CABLE COLOR CODE

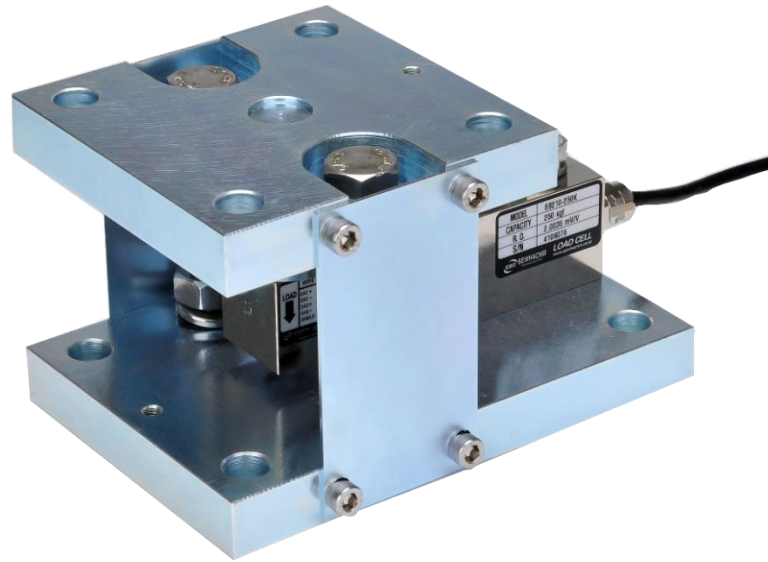
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHLD	(YELLOW)

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

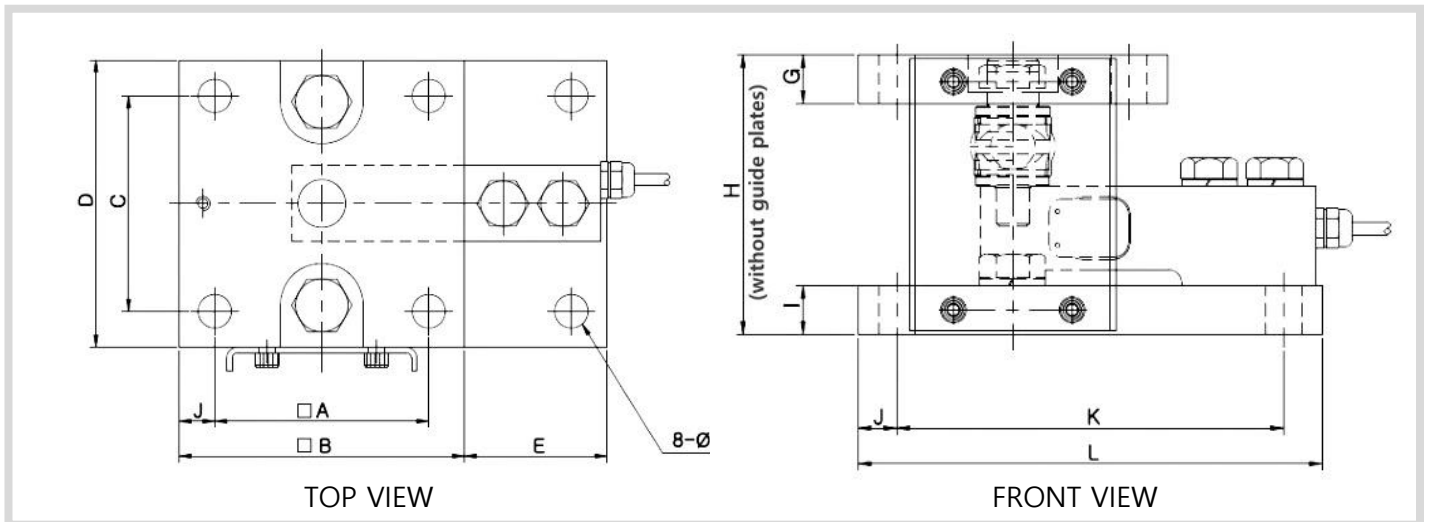
# Shear Beam Load Cell 150kgf~5tf

## SB210 TW Accessory

LOAD CELL



■ Dimension [unit : mm]



Capacity	A	B	C	D	E	F	G	H	I	J	K	L
250kgf	90	120	90	120	60	14	19	107	19	15	150	180
500kgf												
1tf												
2tf												
3tf	110	150	110	150	80	20	25	135	30	20	190	230
5tf												

# Bending Beam Load Cell 10~500kgf

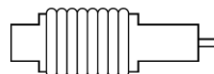
## LBB200

LOAD CELL

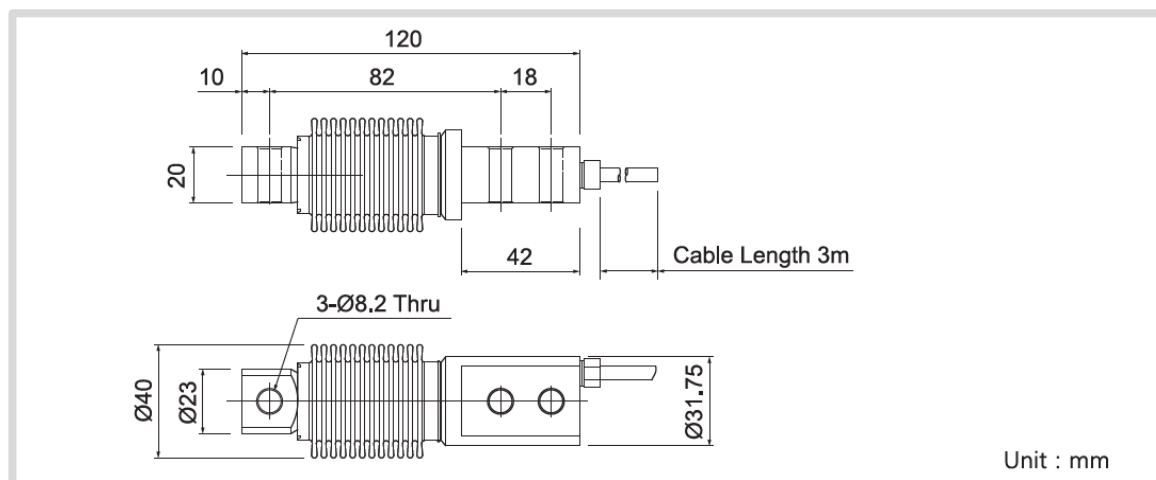


### Feature

- Compression Application
- Stainless steel
- Protection Class IP67



Rated Capacity (R.C)	Unit	10, 20, 50, 100, 200, 300, 500kgf
Rated Output (R.O)	mV/V	2.0 ± 0.005
Zero Balance	mV/V	0 ± 0.2
Combined Error	%	0.03
Repeatability	%	0.01
Creep (30min)	%	0.03
Temperature Effect on		
Zero Value	%/10°C	0.028
Output Value	%/10°C	0.015
Excitation		
Recommended	V	10
Maximum	V	15
Resistance		
Input	Ω	400 ± 50
Output	Ω	350 ± 3.5
Insulation	MΩ	>2,000@DC 50V
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-20 ~ +80



### STANDARD CABLE LENGTH

3M

### CABLE COLOR CODE

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

Unit : mm

# SS Beam Load Cell 2kgf~10tf

## SS300

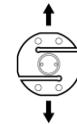


### Feature

- Compact Design
- Compression / Tension Application
- Nickel Plated Steel
- Protection Class IP66

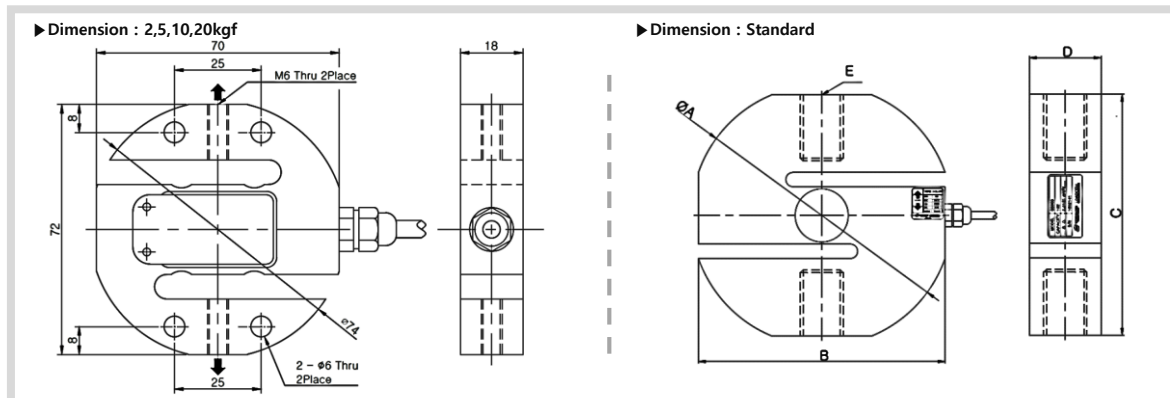
### Option

- Stainless steel : LS300 (MOQ Base)
- Aluminum 2, 5, 10, 20kg (MOQ Base)



LOAD CELL

Rated Capacity (R.C)	Unit	2,5,10,20kgf	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 ± 50	
Output	Ω	350 ± 3.5	
Insulation	MΩ	>2,000@DC 50V	
Compensated Temp Range	°C	-10 ~ +40	
Operating Temp Range	°C	-30 ~ +80	
Material		Aluminum	Stainless steel



STANDARD CABLE LENGTH	
3M	
CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHLD	(YELLOW)

Capacity	øA	B	C	D	E
50/100kgf	79	74	76	19	M12xP1.75
150/200/300/500kgf				26	M18xP1.5
1/2tf	109	90	107	30	M20xP1.5
3tf	119	117	116	36	M24xP2.0
5tf	169	166	165	50	M30xP2.0

# Tension Load Cell 500kgf~5tf

## SS310

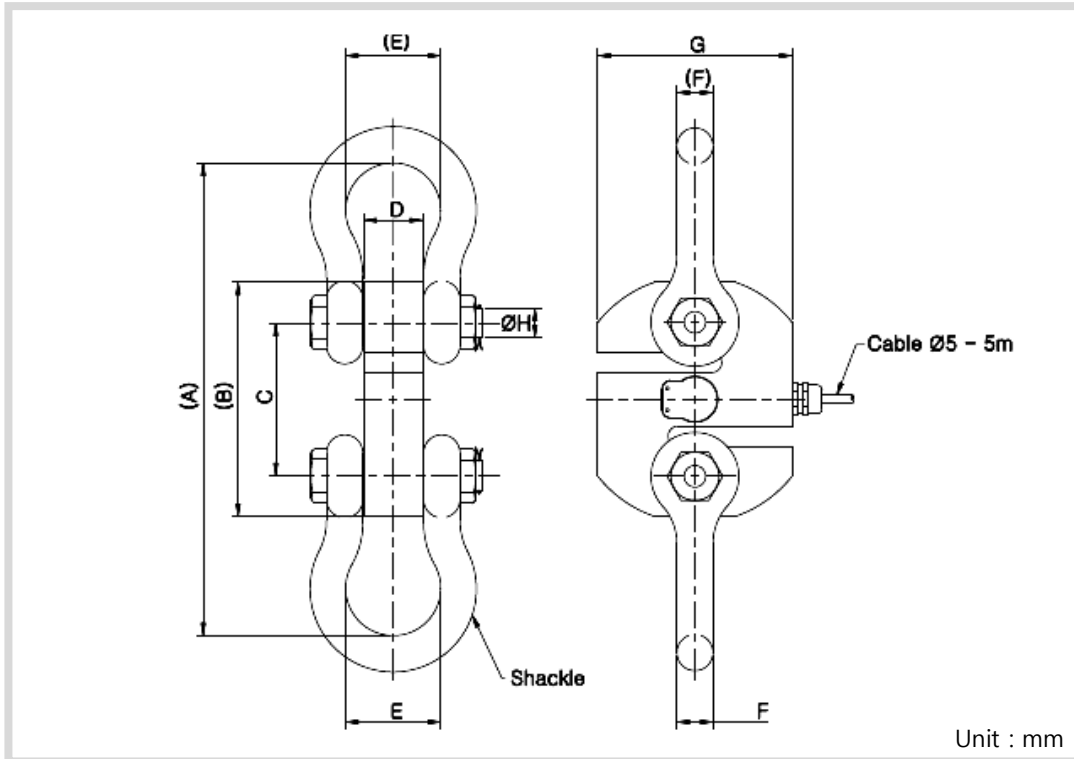
LOAD CELL



### Feature

- Tension Application
- Nickel Plated Steel
- Protection Class IP67

Rated Capacity (R.C)	kgf / tf	500kgf, 1, 2, 3, 5tf
Rated Output (R.O)	mV/V	2.0 nominal
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	0.014
Excitation		
Recommended	V	10
Maximum	V	15
Resistance		
Input	Ω	400 ± 50
Output	Ω	350 ± 3.5
Insulation	MΩ	>2,000@DC 50V
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-20 ~ +80



STANDARD CABLE LENGTH	
5M	
CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHLD	(YELLOW)

Capacity	A	B	C	D	E	F	G	H	SHACKLE
500kgf, 1tf	224	120	85	25	43	16	78	ø19	B.B(5/8")
2, 3, 5tf	287	140	92	35	58	22	116	ø25	B.B(7/8")



# Pan Cake Load Cell 1~200tf

## SL410



### Feature

- Compression / Tension Application
- Paint Finished Steel
- Protection Class IP67
- Hermetically Sealed

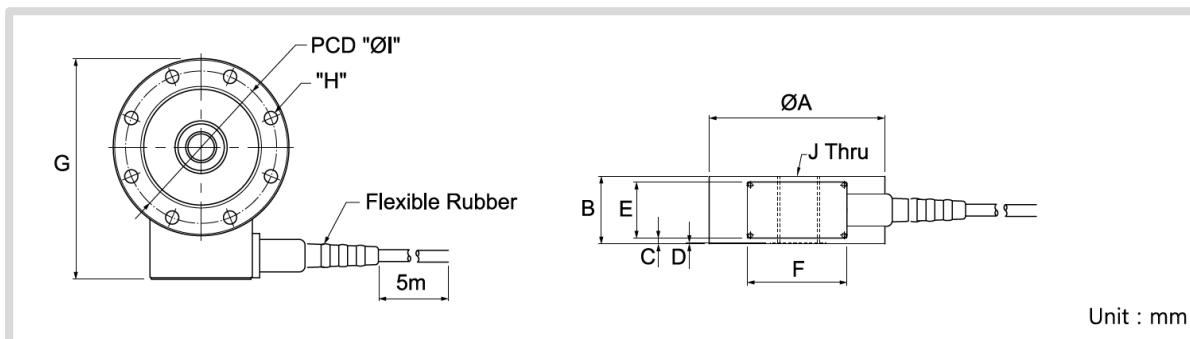
### Option

- Stainless steel : LL410 (MOQ Base)



LOAD CELL

Rated Capacity (R.C)	Unit	1, 2, 3, 5, 10, 20, 30, 50, 100, 200tf
Rated Output (R.O)	mV/V	2.0 ± 0.005
Zero Balance	mV/V	0 ± 0.02
Combined Error	%	0.05
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	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



STANDARD CABLE LENGTH	
5M	
CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHLD	(YELLOW)

Capacity	øA	B	C	D	E	F	G	øH	øI	J
1tf	112	46	4	1	38	68	139.5	8-ø6.6	97.2	M16xP2.0
2tf										
3tf										
5tf	120	46	4				149.5	8-ø9	103.2	M18xP1.5
10tf	138	60	11							
20/30tf	184	80	21							
50tf	200	60	11				229.5	8-ø14.3	170	M45xP3.0
100tf	278	90	26							
200tf	335	108	35	307.5	16-ø16.3	229				
							384.5	12-ø26	298	M90xP3.0

# Explosion Proof Pan Cake Load Cell 1~30tf

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

LOAD CELL



### Feature

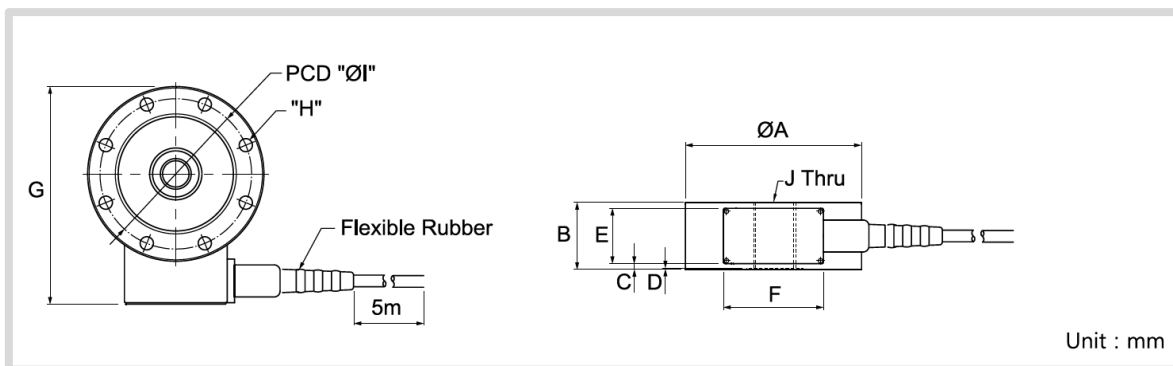
- Compression / Tension Application
- Paint Finished Steel
- Protection Class IP67
- Hermetically Sealed

### Option

- Stainless steel – LS410 (MOQ Base)



Rated Capacity (R.C)	Unit	1, 2, 3, 5, 10, 20, 30tf
Rated Output (R.O)	mV/V	2.0 ± 0.005
Zero Balance	mV/V	0 ± 0.02
Accuracy Class		B
Combined Error	%	0.05
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	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



STANDARD CABLE LENGTH	
5M	
CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHLD	(YELLOW)

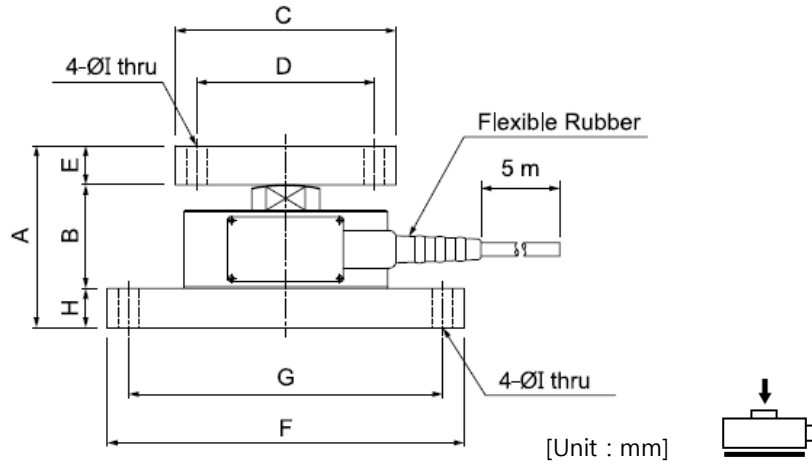
Capacity	øA	B	C	D	E	F	G	øH	øI	J
1tf	110	46	4	1	38	68	139.5	8-ø6.6	97.2	M16xP2.0
2tf							149.5			
3tf							167.5			
5tf	120	46	4	1	38	68	149.5	8-ø9	103.2	M18xP1.5
10tf	138	60	11				167.5	8-ø11	117.6	M24xP2.0
20/30tf	184	80	21				213.5	8-ø14	157.6	M39xP2.0

# Pan Cake Load Cell 1~100tf

## SL410 Accessory (Compression/Ball)

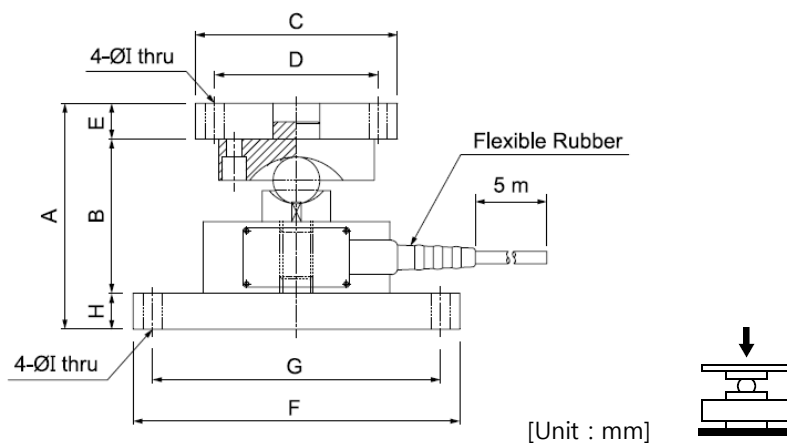
LOAD CELL

### Compression Accessory Dimension



Capacity	A	B	C	D	E	F	G	H	I
1, 2, 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
20, 30tf	175	115	200x200	150x150	30	200x200	160x160	30	14
50tf	195	107	260x260	200x200	58	260x260	200x200	30	23
100tf	245	157	360x360	280x280	58	360x360	280x280	30	27

### Ball Accessory Dimension



Capacity	A	B	C	D	E	F	G	H	I
1, 2, 3tf	136	90	130x130	105x105	23	210x130	185x105	23	12
5tf	145	99			23	210x130	185x105	23	12
10, 15tf	166	106			30	160x160	125x125	30	14
20, 30tf	196	136			30	200x200	160x160	30	14

# Pan Cake Load Cell 2~100tf

## SL420

LOAD CELL

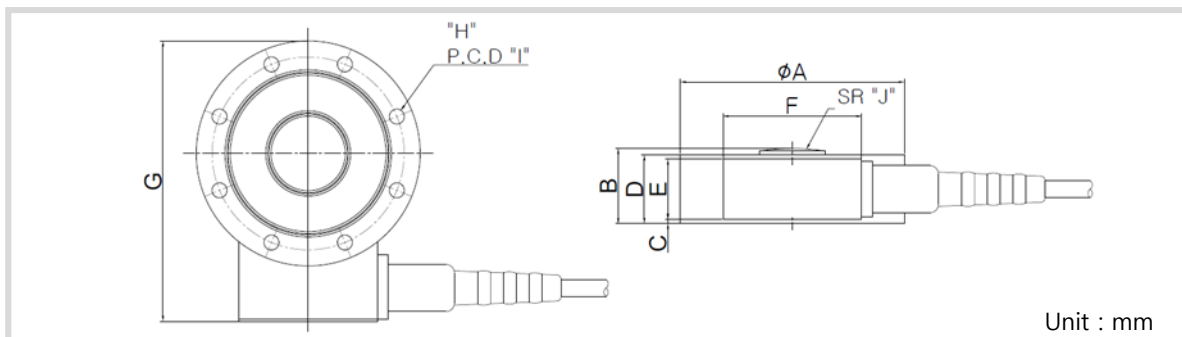


### Feature

- Compression / Tension Application
- Paint Finished Steel
- Protection Class IP67
- Hermetically Sealed



Rated Capacity (R.C)	Unit	2, 5, 10, 20, 50, 100tf
Rated Output (R.O)	mV/V	3.0 ± 0.0075
Zero Balance	mV/V	0 ± 0.03
Combined Error	%	0.05
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	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



STANDARD CABLE LENGTH	
5M	
CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHLD	(YELLOW)

Capacity	øA	B	C	D	E	F	G	øH	øI	J
2tf	105	35	2	32	30	65	131	8-ø7.0	90	100
5tf										
10tf	120	45	2	42	38	68	150.4	4-ø9.0	104.5	100
20tf										
50tf	190.5	57.2	6.4	50.8	38	68	225.2	12-ø13.5	159	200
100tf	209.2	82.6	19.1	76.2	38	68	244.5	4-ø18.0	171.5	200

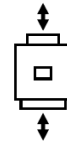
# Canister Load Cell 200kgf~20tf

## SC520



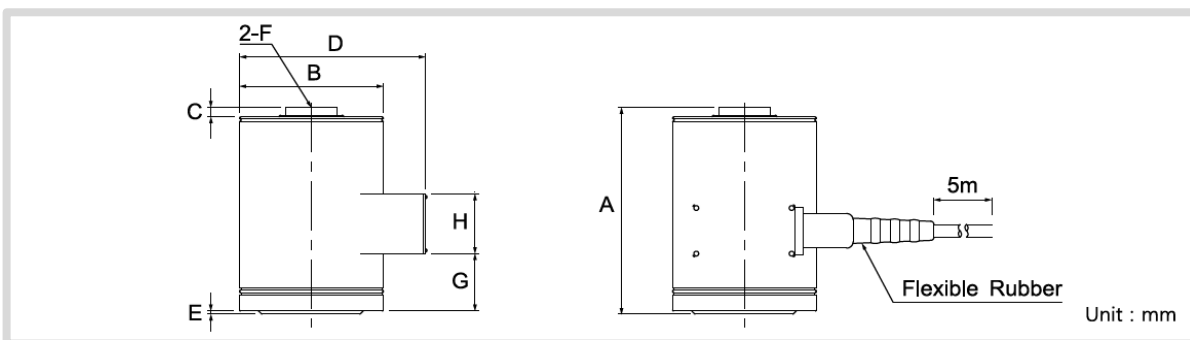
### Feature

- Compression / Tension Application
- Paint Finished Steel
- Protection Class IP67



LOAD CELL

Rated Capacity (R.C)	Unit	200, 300, 500kgf, 1, 2, 3, 5, 10, 20tf
Rated Output (R.O)	mV/V	3.0 ± 0.003
Zero Balance	mV/V	0 ± 0.03
Combined Error	%	0.05
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	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



### STANDARD CABLE LENGTH

5M

### CABLE COLOR CODE

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

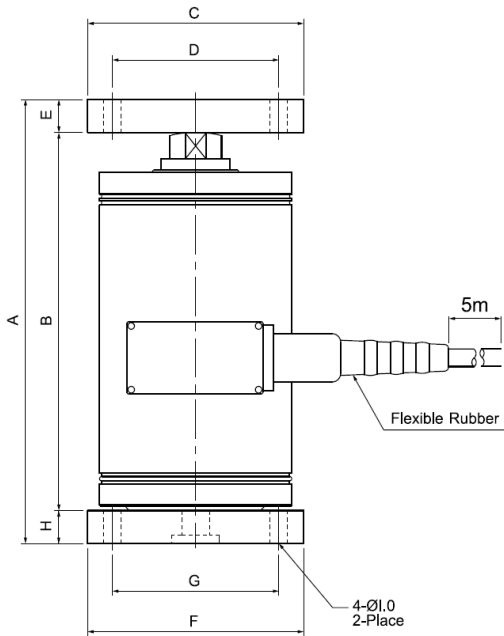
Capacity	A	øB	C	D	E	F	G	H
200kgf	115	89	4.1	115	2.4	M12x1.25	34	38
300kgf								
500kgf								
1tf	148	89	6	115	2	M24x2.0	55	38
2tf								
3tf								
5tf	215	127	12	152	2	M39x2.0	75	38
10tf								
20tf								
	290	165	15	193	2	M50x2.0	80	38

# Canister Load Cell 200kgf~20tf

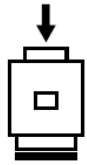
## SC520 Accessory (Compression/Tension)

LOAD CELL

### Installation as Compression Application

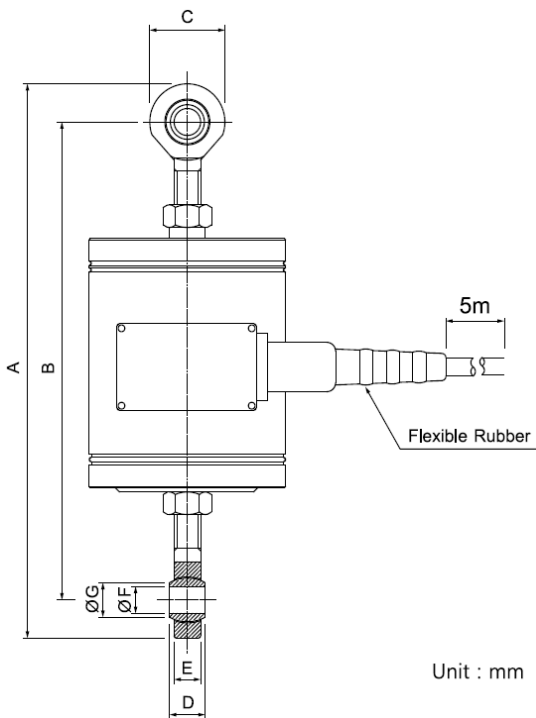


Unit : mm



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

### Installation as Tension Application



Unit : mm



Capacity	A	B	C	D	E	F	G
200kgf	255~260	221~216	30	16	12	12	15.4
300kgf							
500kgf							
1tf	525~530	423~428	64	28	20	22	26.1
2tf							
3tf							
5tf	680~685	545~550	135	40	38	39	45
10tf							
20tf							

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

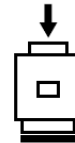
# Canister Type Compression Load Cell 20~800tf

## SC530



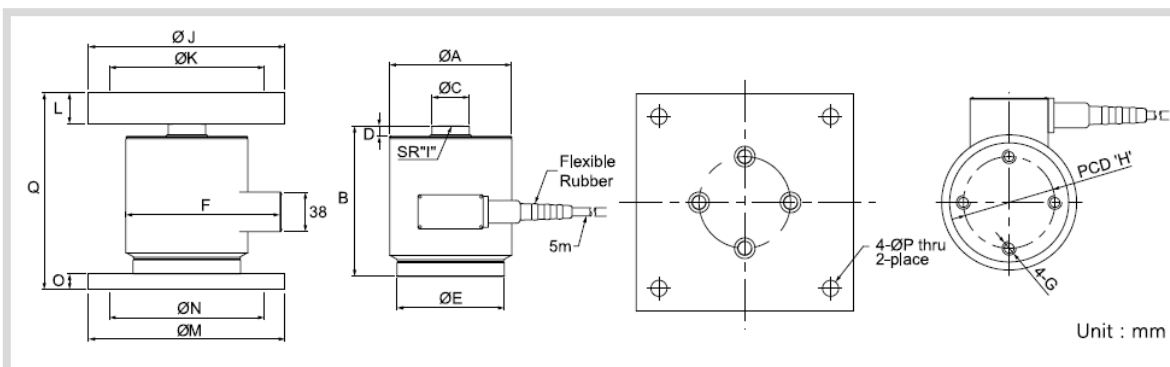
### Feature

- Compression / Tension Application
- Paint Finished Steel
- Protection Class IP67



LOAD CELL

Rated Capacity (R.C)	Unit	20, 30, 50, 100, 200, 500, 800tf
Rated Output (R.O)	mV/V	2.0 ± 0.005
Zero Balance	mV/V	0 ± 0.03
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



### STANDARD CABLE LENGTH

5M

### CABLE COLOR CODE

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

Capacity	øA	B	øC	D	E	F	G	H	I	øJ	øK	L	M	N	O	P	Q
20tf	118	145	36	10	104	150	M12x1.75	80	150	200	150	30	200	150	15	14	190
30tf	118	145	36	10	104	150	M12x1.75	80	150	200	150	30	200	150	15	14	190
50tf	138	160	50	20	104	170	M12x1.75	80	200	220	160	40	220	160	20	19	220
100tf	158	190	70	20	144	190	M16x2.0	100	200	260	200	60	260	200	30	23	280
200tf	214	230	95	30	188	249	M16x2.0	130	300	280	200	80	280	200	40	27	350
★500tf	210	285	140	30	182	249	M16x2.0	130	800								
★800tf	260	360	180	30	228	295	M20x2.5	160	720								

★ Customized product

# Load Cell for Wire rope 500kgf ~ 10tf

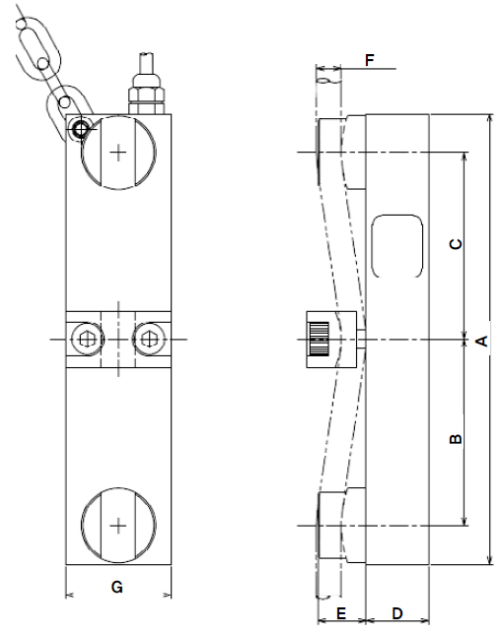
## SWL100

LOAD CELL



- Feature**
- Tension of Wire rope
  - Nickel Plated Steel

**Chain**



STANDARD CABLE LENGTH	
10M	
CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHLD	(YELLOW)



Rated Capacity (R.C)	Unit	500kgf, 1, 1.5, 4, 8, 10tf
Rated Output (R.O)	mV/V	0.7 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	%/10°C	0.1
Output Value	%/10°C	0.2
Excitation		
Recommended	V	10
Maximum	V	15
Resistance		
Input	Ω	400 ± 50
Output	Ω	350 ± 3.5
Insulation	MΩ	>2,000@DC 50V
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-20 ~ +80

Capacity	A	B	C	D	E	øF(Wire rope)	G
500kgf	145	60	60	20	15.5	6~8	34
1tf							
1.5tf	167	70	70	22	21	10~14	42
4tf	215	90	90	25	35	18~28	62
8tf	250	100	100	35	45	25~35.5	80
10tf							



# Miniature Load Cell 50kgf~20kgf

## SM600E



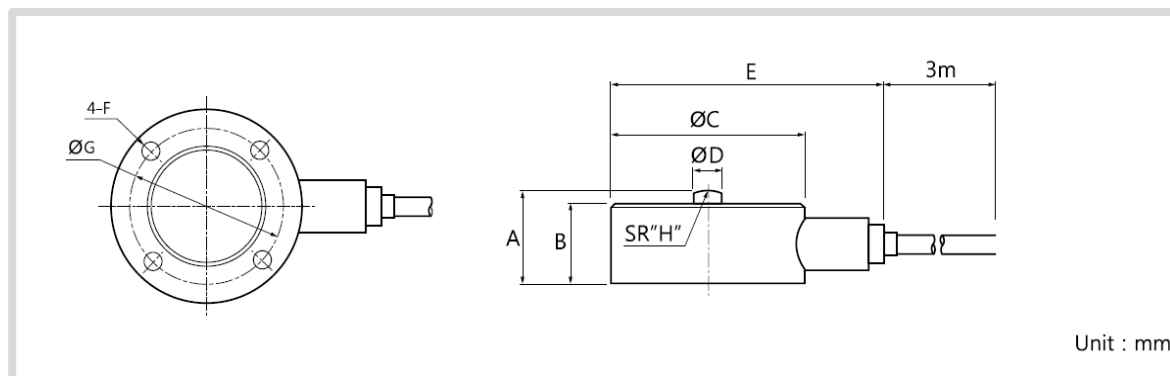
### Feature

- Compression Type
- Application for Limited space
- Stainless steel (50kgf~2tf)  
Paint Finished Steel(5tf~20tf)
- Protection Class IP67



LOAD CELL

Rated Capacity (R.C)	Unit	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@DC 50V
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-20 ~ +80



Unit : mm

STANDARD CABLE LENGTH	
3M	
CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHLD	(YELLOW)

Capacity	A	B	C	D	E	F	G
50kgf	25	21	50	10	65	M5x0.8 dp7	42
100kgf							
200kgf							
500kgf							
1tf	40	35	98	20	113	M6x1.0 dp8	72
2tf							
5tf							
10tf							
20tf	50	45	118	20	132	M8x1.25 dp15	90

# Miniature Load Cell 1kgf~2tf

## SM601E

LOAD CELL

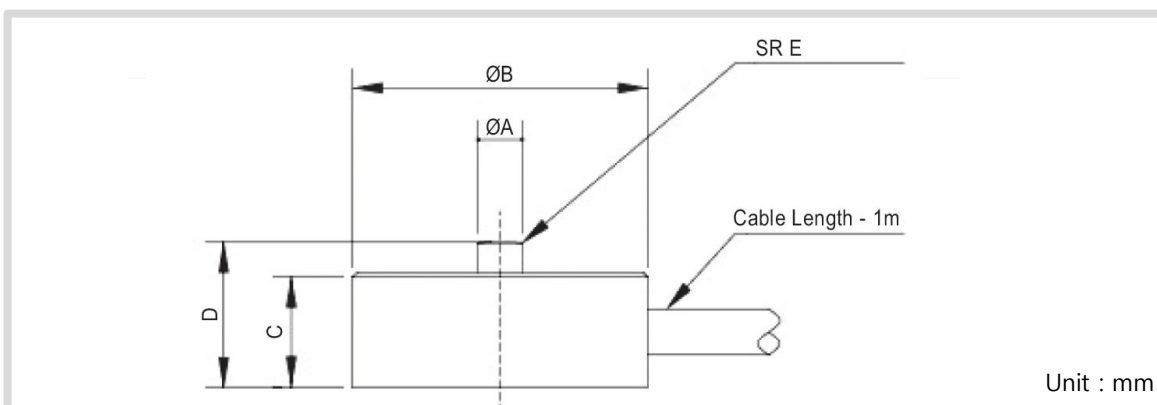


### Feature

- Compression Type
- Application for Limited space
- Aluminum (1kgf~10kgf)
- Stainless steel(20kgf~2tf)
- Protection Class IP66



Rated Capacity (R.C)	Unit	1, 2, 5 kgf	10, 20, 30, 50, 100, 200, 300, 500kgf, 1, 2tf
Rated Output (R.O)	mV/V	About 0.5	About 1.0
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		300 ± 20
Output	Ω		350 ± 3.5
Insulation	MΩ		>2,000@DC 50V
Compensated Temp Range	°C		-10 ~ +40
Operating Temp Range	°C		-20 ~ +80



STANDARD CABLE LENGTH	
3M	
CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHLD	(YELLOW)

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

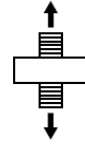
# Miniature Load Cell 50~500kgf

## SM603E



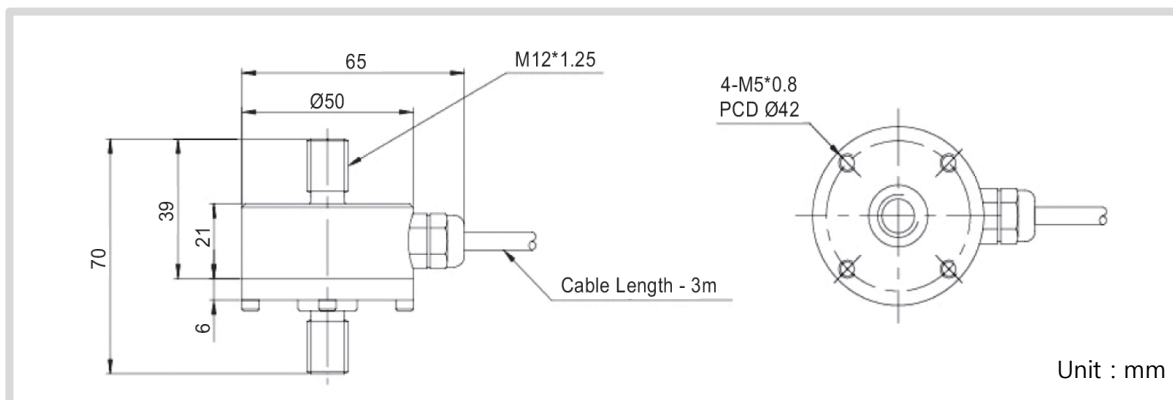
### Feature

- Tension Application
- Application for Limited space
- Stainless steel
- Protection Class IP67
- Option : Tension Accessory



LOAD CELL

Rated Capacity (R.C)	Unit	50, 100, 200, 500kgf, 1, 2tf
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@DC 50V
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-20 ~ +80



<b>STANDARD CABLE LENGTH</b>	
3M	
<b>CABLE COLOR CODE</b>	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHLD	(YELLOW)

# Tension Meter Load Cell 10~50tf

## ST800E

LOAD CELL

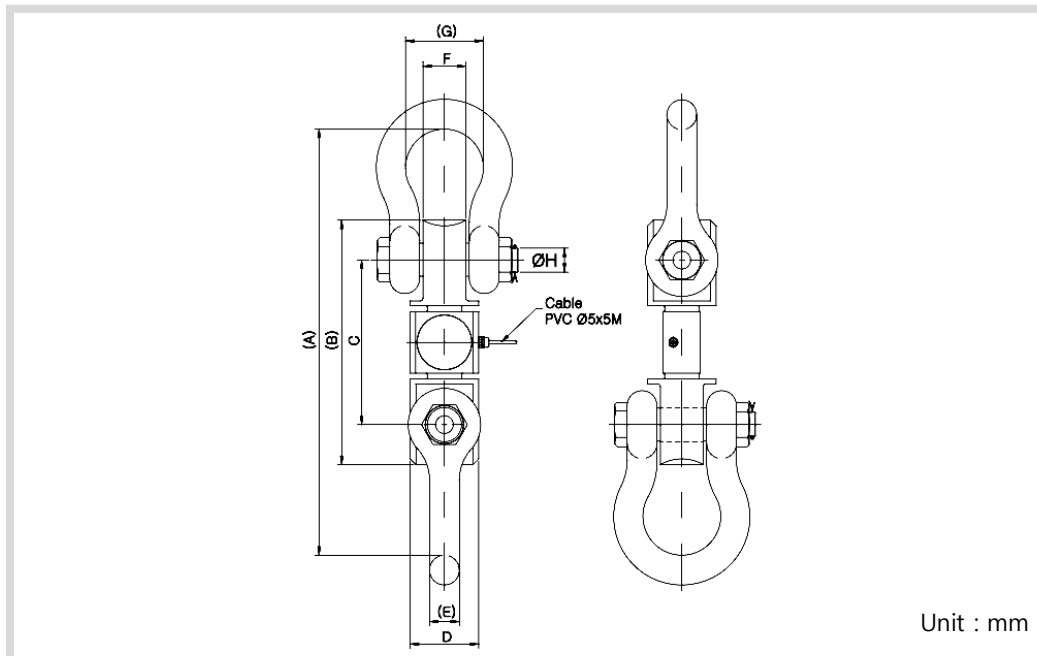


### Feature

- Tension Application
- Convent assembly of shackle and Load cell
- Steel
- Option : Shackle



Rated Capacity (R.C)	Unit	10, 20, 30, 50tf
Rated Output (R.O)	mV/V	2.0 Nominal
Zero Balance	mV/V	0.0 ± 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@DC 50V
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-20 ~ +80



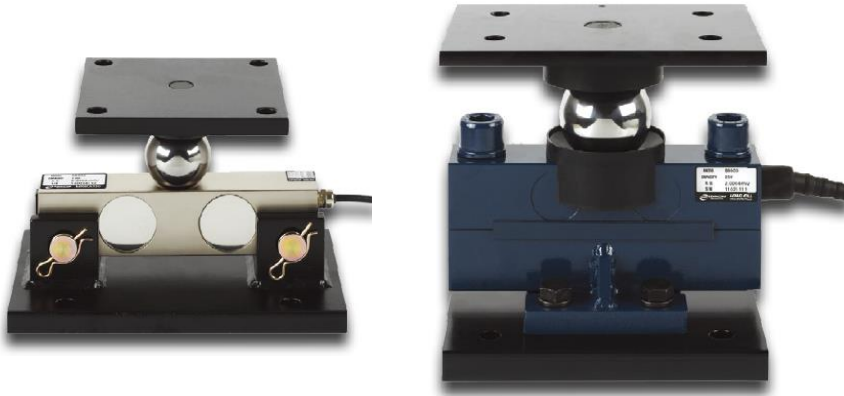
STANDARD CABLE LENGTH	
5M	
CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHLD	(YELLOW)

Capacity	A	B	C	D	E	F	G	Shackle(option)
10tf	493	310	220	87	32	40	83	B.B(1-1/4")
20tf	691	400	285	120	45	70	127	B.B(1-3/4")
30tf	739	428	288	120	50	75	146	B.B(2")
50tf	946	508	342	148	67	98	184	B.B(2-1/2")

※ 70tf~200tf Customized order

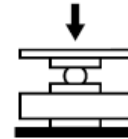
# Truck Weighing Load Cell 10~30tf

## SB900



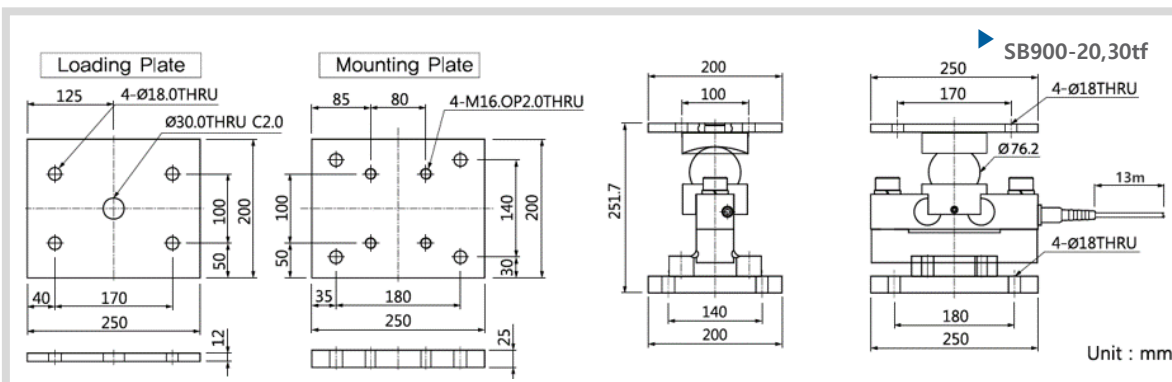
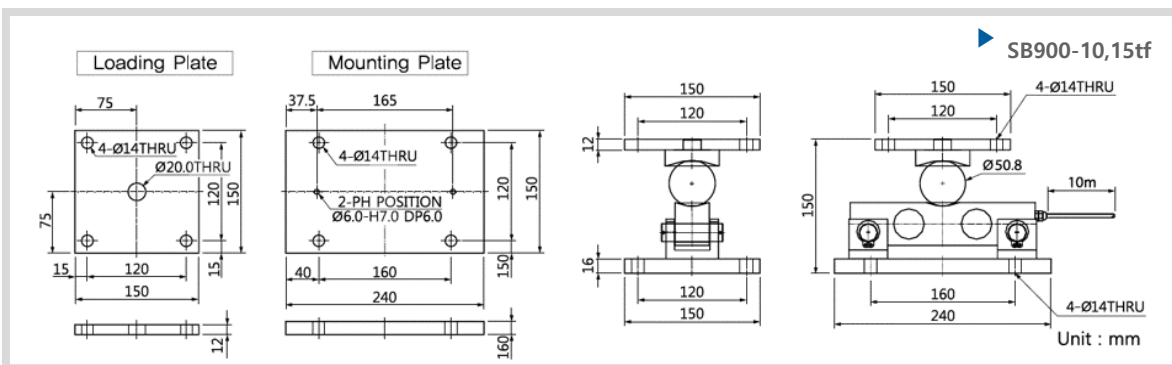
### Feature

- Robust Design and Easy Installation
- Strong Against Shock or Side Force
- Paint Finished Steel
- Protection Class IP67



LOAD CELL

Rated Capacity (R.C)	Unit	10, 15tf	20, 30tf
Rated Output (R.O)	mV/V	2.0 ± 0.004	
Zero Balance	mV/V	0.0 ± 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	MΩ	>2,000@DC 50V	
Compensated Temp Range	°C	-10 ~ +40	
Operating Temp Range	°C	-20 ~ +80	
Weight	kg	12.5	18.0



STANDARD CABLE LENGTH	
SB900-10, 15tf	SB900-20, 30tf
10M	13M
CABLE COLOR CODE	
EXC +	(RED)
EXC -	(WHITE)
SIG +	(GREEN)
SIG -	(BLUE, BLACK)
SHLD	(YELLOW)

# Truck and Tank Weight Load Cell 25~30tf

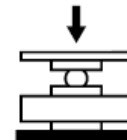
## SB920

LOAD CELL

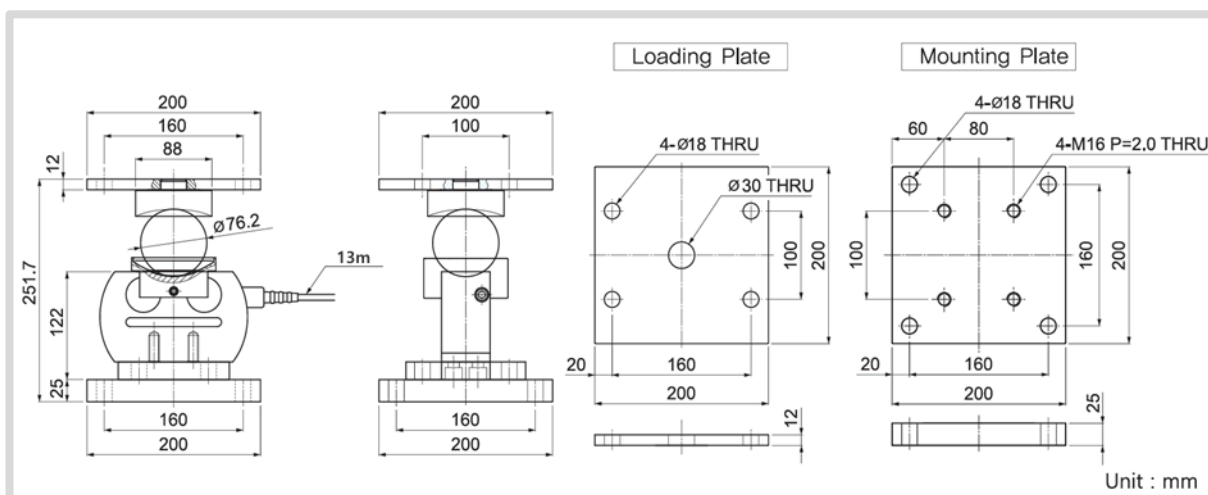


### Feature

- Robust Design and Easy Installation
- Strong Against Shock or Side Force
- Paint Finished Steel
- Protection Class IP67
- Special order: 50tf, 100tf



Rated Capacity (R.C)	Unit	25, 30tf
Rated Output (R.O)	mV/V	2.0 ± 0.004
Zero Balance	mV/V	0.0 ± 0.02
Combined Error	%	0.02
Repeatability	%	0.015
Creep (30min)	%	0.02
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	MΩ	>2,000@DC 50V
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-20 ~ +80
Weight	kg	21.0



### STANDARD CABLE LENGTH

13M

### CABLE COLOR CODE

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

Unit : mm

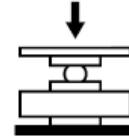
# Truck and Tank Weight Load Cell 25,30, 50tf

## SBW



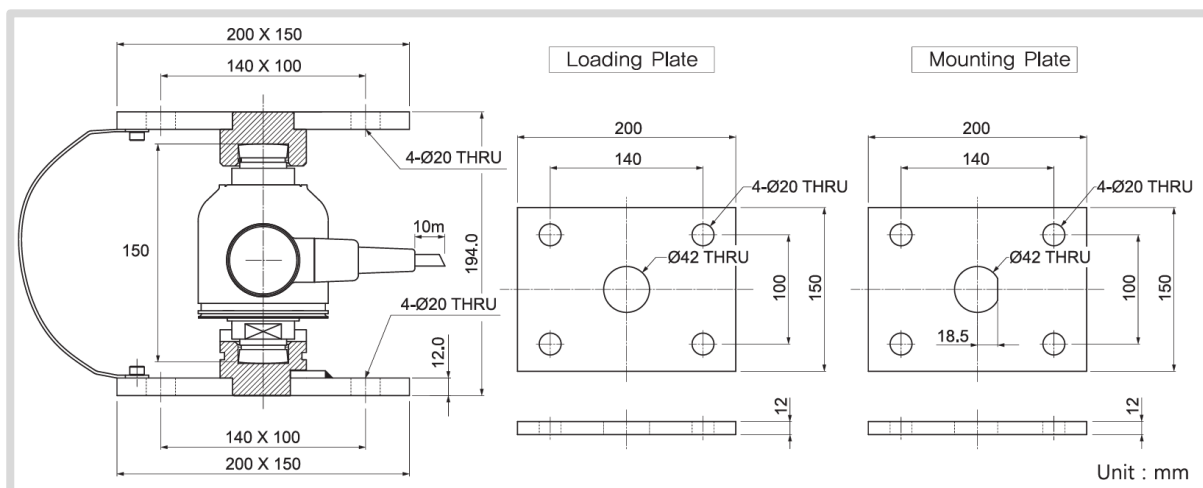
### Feature

- Robust Design and Easy Installation
- Strong against shock of side force
- Surge protected
- Stainless Steel
- Protection Class IP68
- Special order: 50tf



LOAD CELL

Rated Capacity (R.C)	Unit	25, 30tf
Rated Output (R.O)	mV/V	2.0 ± 0.006
Zero Balance	mV/V	0.0 ± 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	MΩ	>2,000@DC 50V
Compensated Temp Range	°C	-10 ~ +40
Operating Temp Range	°C	-20 ~ +80
Weight	kg	12.0



### STANDARD CABLE LENGTH

10M

### CABLE COLOR CODE

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

# Load Cell Transmitter

## ST Series

LOAD CELL



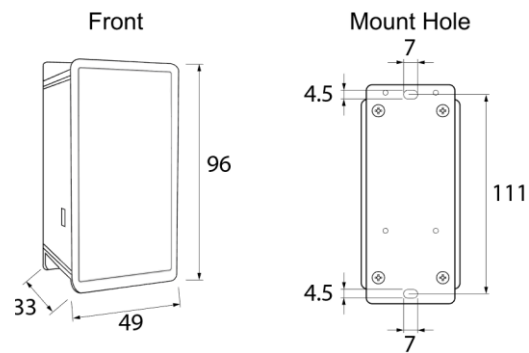
### Feature

- The Transducer Amplifier of Strain Gauge
- 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)

### Dimension [unit : mm]

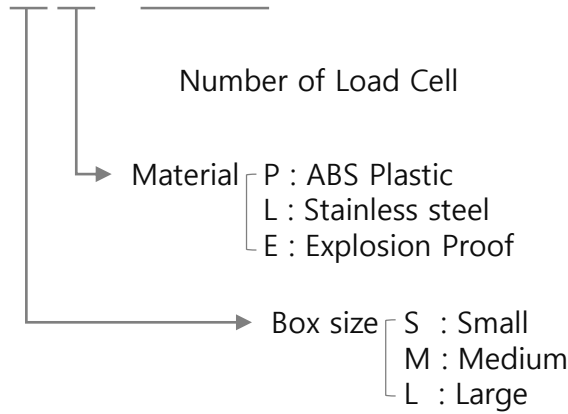


Feature	Excitation Output	Current Output
Model	ST-V05, ST-V15, ST-V010	ST-I420, ST-I020, ST-I040
Output	0~5V, 1~5V, 0~10V	4~20mA, 0~20mA, 0~40mA
Power(Constant Voltage)	+12~24V, +17~24V	
Analog Signal Input	1.2, 2.0, 3.0mV/V(0.5~4.0 mV/V DIP)	
Impedance Input	≤1010Ω	
Transducer Affirmation Voltage	5V/10V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



# Summing Box

## SB-SP-XX



### Feature

- Easy to Wire with Each Terminals
- 4~8 Load Cells Summing
- Material : ABS Plastic / Stainless Steel Housing

	Size(mm)	Load Cell Quantity
S	130(W)x80(D)x35(H)	4EA
M	130(W)x130(D)x60(H)	4EA, 6EA
L	180(W)x130(D)x60(H)	6EA, 8EA

SB-SP-04



SB-MP-06



SB-LP-08



SB-ME-04(Explosion)



SB-ML-04(Stainless steel)



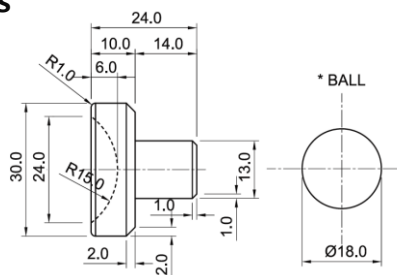
SB-ML-06(Stainless steel)



### Load Cell Accessories



Ball & Cup

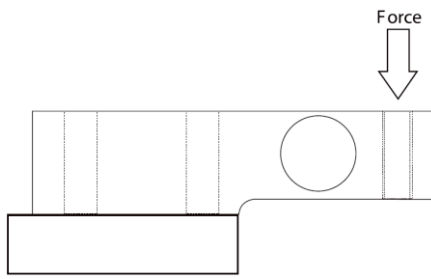


Load Cell Foot



Rod End bearing

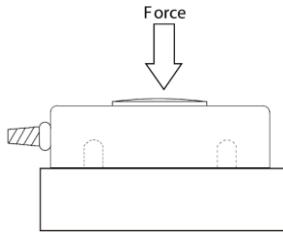
# Load Cell Type



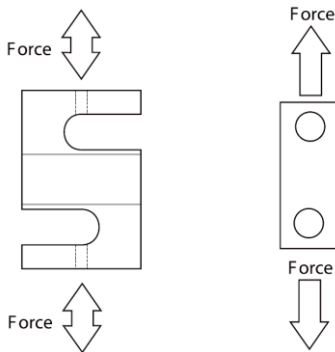
**Shear beam** – the shear beam load cell is fixed rigidly at one end and the force is applied to the other end. These can be used singly or in groups e.g. a platform scale using one cell in each corner.

**Double ended** – It is a shear beam type cell which has different construction. It is fixed rigidly at each end force is applied to the center of the beam.

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

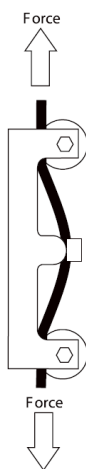


**Compression** – the compression load cell is designed to operate in compression only. Some designs require load to be applied at one end only, other designs can be compressed by force at both ends.



**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 of vice versa.

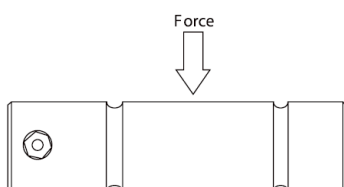
Tension load cells are load links are designed to operate under tension only.



**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.

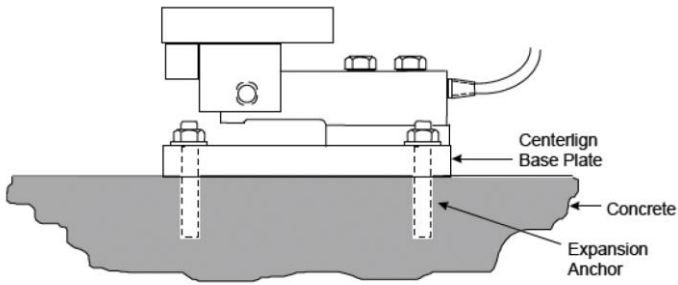
Since these cells are designed to operate over a very wide range of loads and rope sizes, and the rope system often goes through a series of "drops", it is often the case that the mV output from these cells is at the low end of the range. The sensitivity of the monitor may need to be increased by lowering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



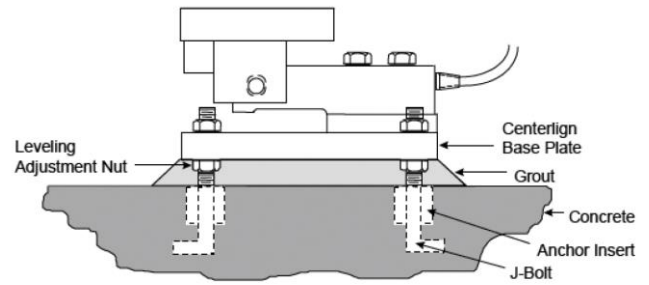
**Load pin** – load pin cells are designed to be installed in the axis of a sheave, shackle etc. through which force is applied. Most common load pins will measure force in one direction only. The direction of force is often marked with an arrow at one end of the pin or instructions for alignment may be given in the load cell certificate. The output will be reduced 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 Install Guide

## Flexmount Weigh Modules Installation

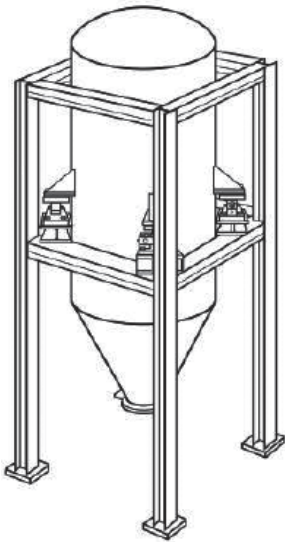


Base Plate Bolted to Level Concrete Floor

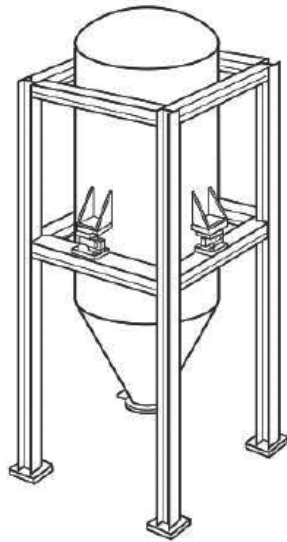


Base Plate Bolted to Unlevel Concrete Floor

## General Installation Guidelines Structural Beam Support

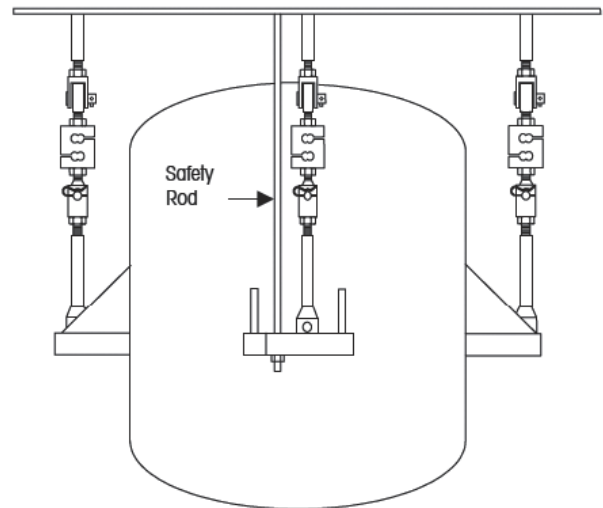


Recommended Figure

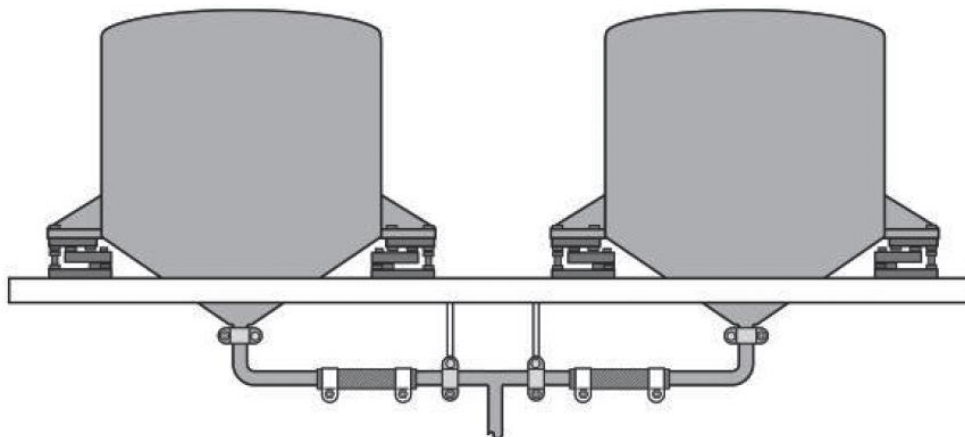


Not Recommended

## Tension Weigh Module Installation



## 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

