

# Liquid Tank Level Gauge

Model : SLT

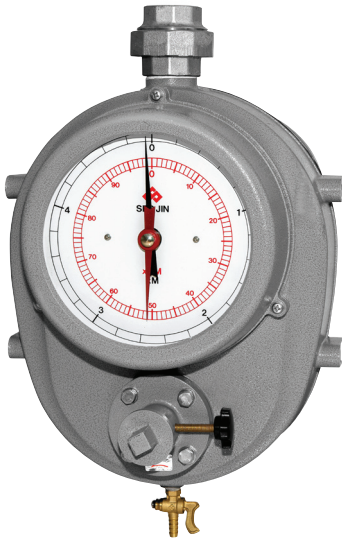


**SeoJin Instech Co., Ltd.**

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# SLT

## Liquid Tank Level Gauge



### Principle of Operation

The float connected to the measuring tape rises and falls according to the change of liquid level inside the tank.

When the float rises measuring tape is wound to the constant spring drum in proportion to the change in liquid level.

When the float falls, measuring tape is released by the weight of float, and this movement of float is transmitted to point-scale plate by the gear mechanism.

If remote indication is needed, the mechanical indication is converted to 4-20mA output signal by the potentiometer.

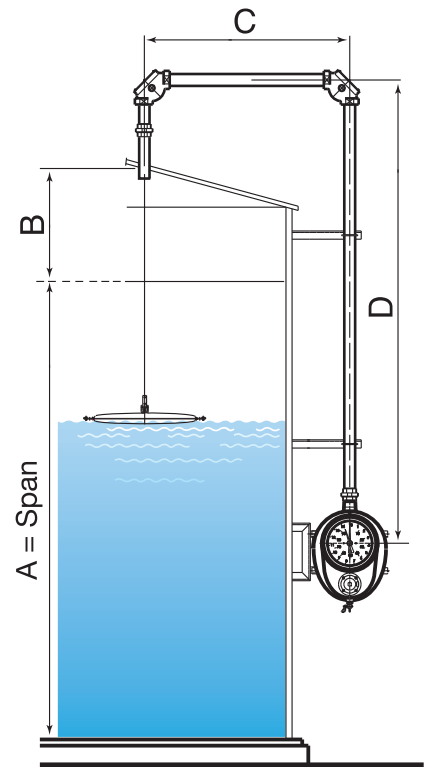
SLT

**Ideal for Huge Tanks**

**High Accuracy ( $\pm 2.0\text{mm}$  on S.G 1.0)**

(S.G : Specific Gravity)

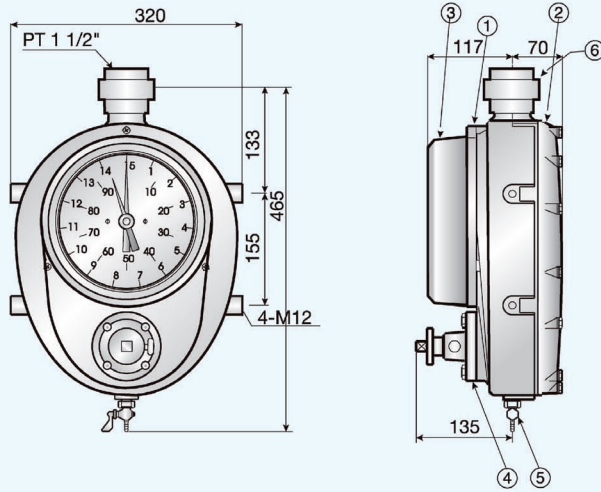
**Reliable Operation**



mm	A	B	C	D
Length				

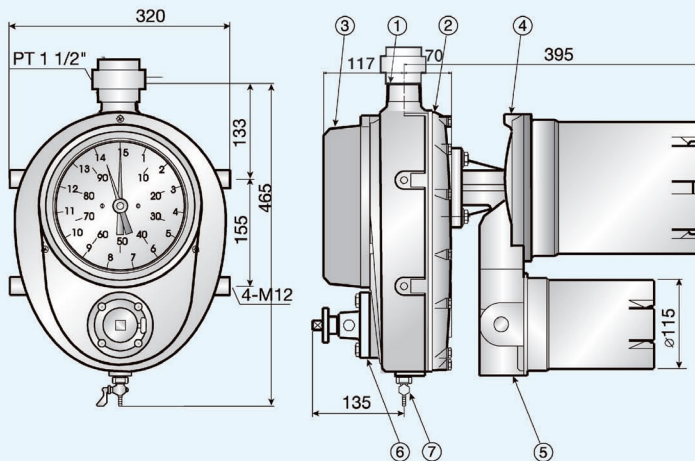
## Overall Dimension

### Weather proof type



P. No.	Name of part	Q'TY	Material
1	BODY	1	ADC
2	BACK COVER	1	ADC
3	SCALE COVER	1	ADC
4	HOIST GEAR ASS'Y	1	AC
5	DRAIN VALVE	1	Brass
6	UNION	1	304SS

### Explosion proof type

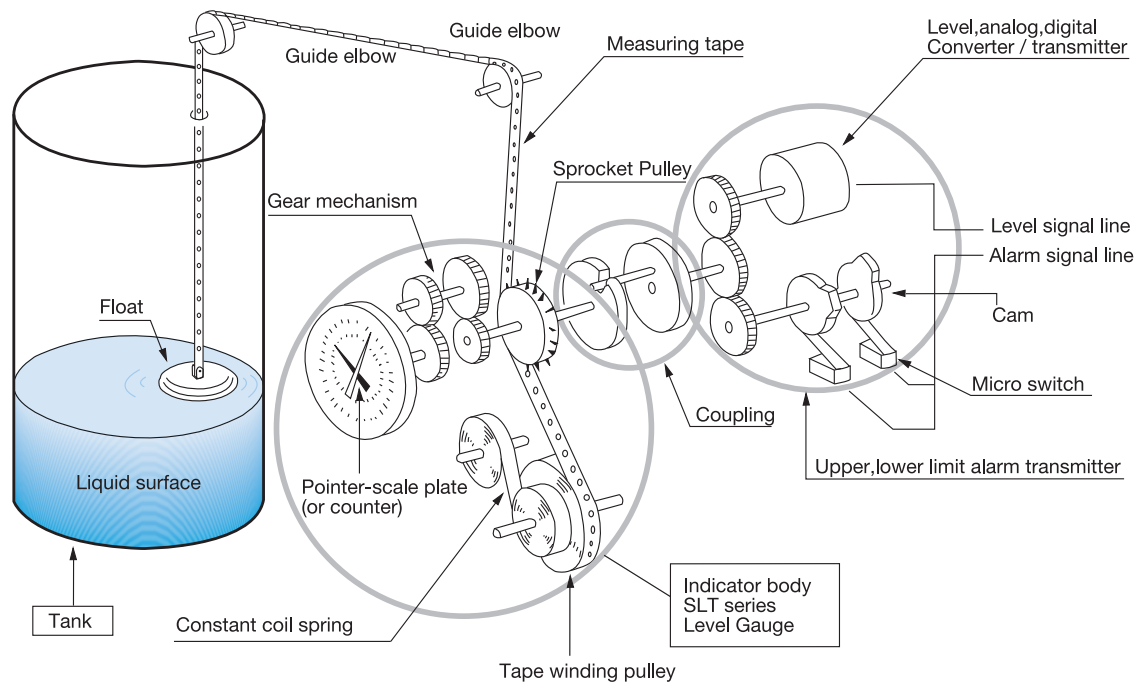


P. No.	Name of part	Q'TY	Material
1	BODY	1	ADC
2	BACK COVER	1	ADC
3	SCALE COVER	1	ADC
4	TRANSMITTER ASS'Y	1	ADC
5	Ex. Proof Terminal Box	1	ADC
6	HOIST GEAR ASS'Y	1	AC
7	DRAIN VALVE		Brass

## Specifications

DESCRIPTION	Type	SLT - Serise	SLT - Seal Pipe Type (Only Top Mount)
Measuring Method		Measuring Displacement by Float	→
Power Supply		15 ~ 32VDC (2-Wire) : Transmitter type only	→
Output Signal		Local Dial Indicator, 1 ~ 8 Point alarm, 4 ~ 20mA Analog	→
Measuring Range		0 ~ 2m, 3m, 5m, 6m, 8m, 10m, 12m, 15m, 20m, 25(Max)	→ 15m(Max.)
Accuracy		± 2.0mm	→
Specific Gravity		0.65 Min.	→
Process Pressure		0.2Kg/cm <sup>2</sup>	Nor. 1Kg/cm <sup>2</sup> , 5Kg/cm <sup>2</sup> (Option)
Process Temperature		60°C	150°C
Contact Rating		SPDT, 6A, 250VAC	→
Enclosure		Weather proof or Explosion proof (Ex d IIC T6, IP65)	→

## Operating structure of tank level gauge



SLT

### ● Application (Low pressure)

Gasoline, Heavy oil, Lamp oil, Naphtha, Asphalt, Benzol, Thorium, Caustic soda, Industrial water, Distilled water, Beer, Refined rice wine, Whisky, Soy, Molasses, Etc.

### ● Application (Medium / Pressure)

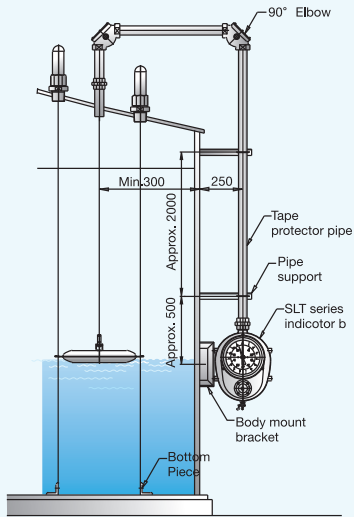
LPG, Ammonia, Liquid oxygen, Liquid nitrogen, Liquid carbonic acid, Ethylene, Chlorite vinyl, Acetylene, Butanol, Etc.

## Specification sheet of inquiry form

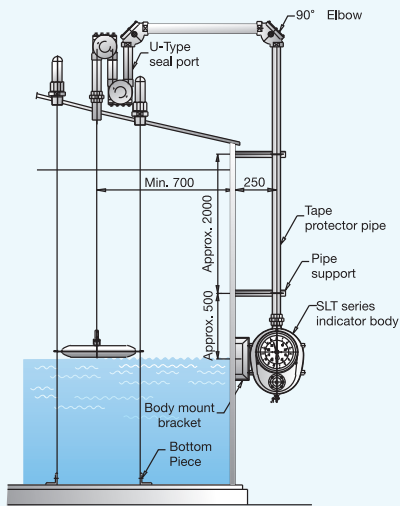
1	Name of liquid		7	Location of local indicator	Tank top	Tank side
2	Viscosity	cP	8	Connection	Union	Flange
3	Inside temperature of tank	°C	9	Construction of transmitter case	Weather proof	Explosion proof
4	Type of tank		10	Accessories		
5	Tank height	m	11	Spare parts		
6	Pressure of tank inside	kgf/cm <sup>2</sup>	±25°	12	Type of transmitter	

## Installation of the SLT level gauge on a tank

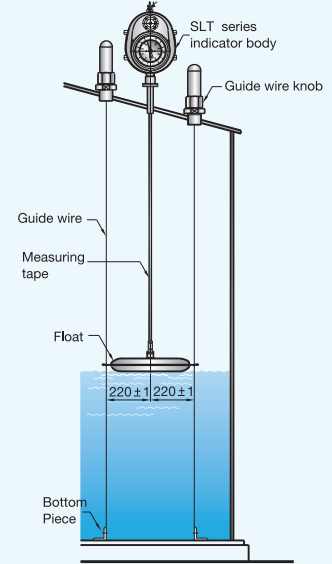
### Installation to the side of tank



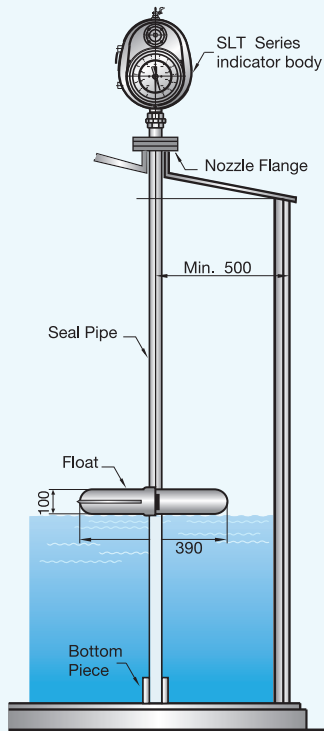
### Installation of the U-Type seal port



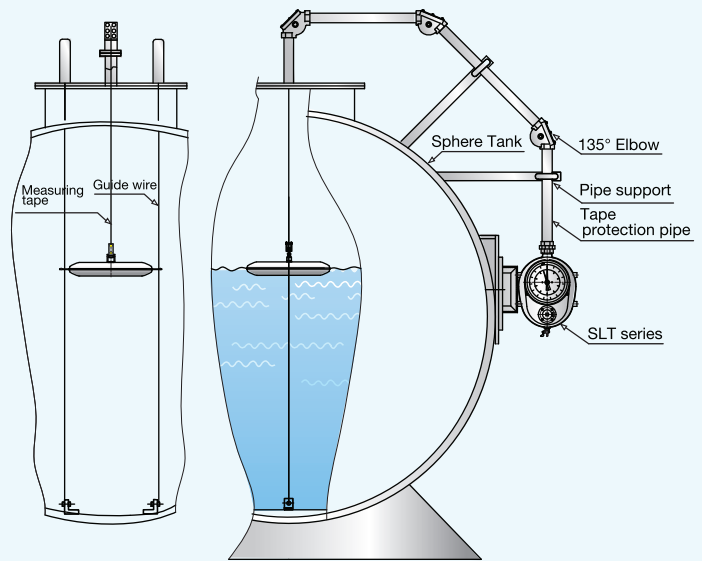
### Installation to the top of tank



### Installation Seal Pipe & top of tank



### Installation to the top of sphere tank

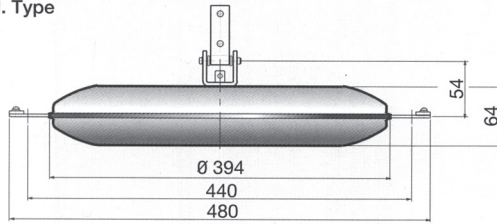




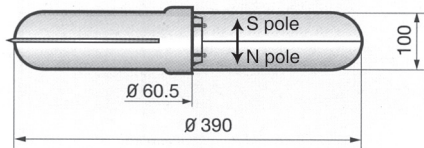
## Dimensions Basic parts

### Float

Std. Type

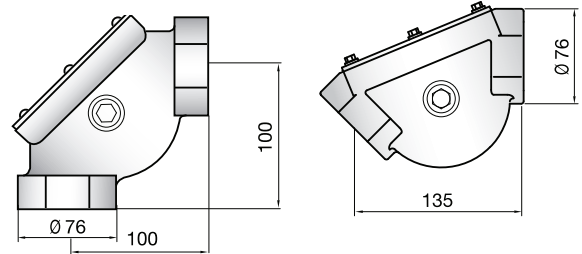


Seal Pipe Type



MAT'L	304SS
	316LSS

### Guide elbow

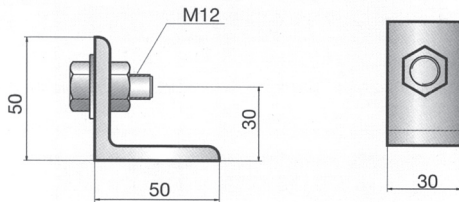


90° Elbow

135° Elbow

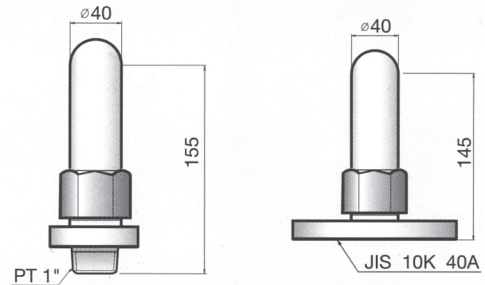
MAT'L	AC2B (only 90°)
	304SS
	316LSS

### Bottom piece



MAT'L	304SS
	316LSS

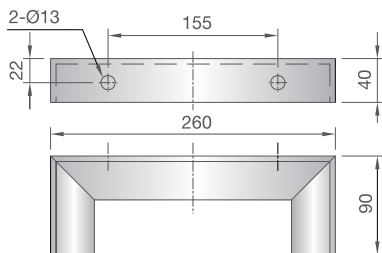
### Guide wire knob



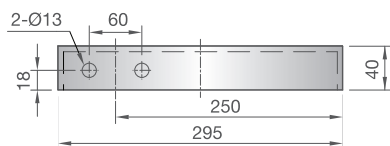
MAT'L	AC2B & 304SS
	ALL 304SS
	ALL 316LSS

### Mount bracket, Pipe support

#### ■ BODY MOUNT BRACKET

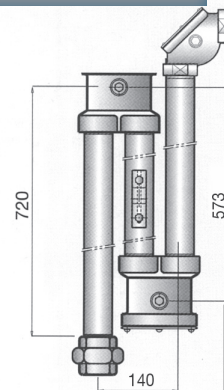


#### ■ PIPE SUPPORTER



## Option Part

### U -Type seal port



MAT'L	AC2B & 304SS
	ALL 304SS
	ALL 316LSS

## Ordering Information

### ■ Liquid Tank Level Gauge

SLT - 2200 A 1 A 1 A 1 A

#### CONDUIT CONNECTION

A = PF 3/4" (Std.)  
 B = PT 3/4"  
 C = PF 1/2"  
 D = PT 1/2"  
 E = None (1100 Type)  
 OP = etc.

#### ENCLOSURE

1 = Weather proof (Std.)  
 2 = Explosion proof (Ex d IIC T6 IP65)

#### MOUNTING METHOD

A = Side mount (Std.)  
 B = Top mount  
 C = U-Seal Pot type

#### MEASURING PART LENGTH

1 = 3 M  
 2 = 5 M (Std.)  
 3 = 6 M  
 4 = 10M  
 5 = 12M  
 6 = 15M  
 7 = 20M  
 8 = 25M (Max)

#### MOUNTING SIZE

A = PT 1 1/2" Socket (Std.)  
 B = NPT 1 1/2" Socket  
 C = JIS 10K 40A FF 304SS Flange (7EA)  
 D = ANSI 1-1/2" 150#  
 E = ANSI 2" 150#  
 F = ANSI 3" 150#  
 G = ANSI 4" 150#  
 OP = etc.

#### WET PART MATERIAL (Include in Float, Bottom piece, Guide wire)

1 = 304SS (Std.)  
 2 = 316LSS

#### ALARM CONTACT

A = None  
 B = 2 Point  
 C = 4 Point  
 D = 6 Point  
 E = 8 Point

#### OUT PUT

1100 = Local dial indicator (NO transmitter)  
 2200 = 4 ~ 20mA DC output (Transmitter)  
 3300 = 1 ~ 8 point Alarm output (Switch)  
 4400 = Alarm & 4 ~ 20mADC output (Transmitter with Switch)  
 11SP = Local dial indicator (NO Transmitter) Seal Pipe Option Type  
 22SP = 4 ~ 20mA DC output (Transmitter) Seal Pipe Option Type  
 33SP = H/L point Alarm Output (Switch) Seal Pipe Option Type  
 44SP = H/L Alarm & 4 ~ 20mA Output (Transmitter with Switch)

\* Seal pipe type is only available with Top Mount.

■ When placing an order, selected ordering number should be indicated on the purchase order sheet.

# SLT-6000

## Scale Board Type Tank Level Indicator

### Application & Feature

- Crude oil storage tanks
- Storage tanks in petrochemical plants
- Bulk storage tanks
- Direct reading level indicator
- Mechanically operated Float & Weight Balance
- Excellent Visibility(Range of sight : more than 100m)
- High reliability of measuring
- Long life-time
- Various materials are selectable
- Easy to maintenance



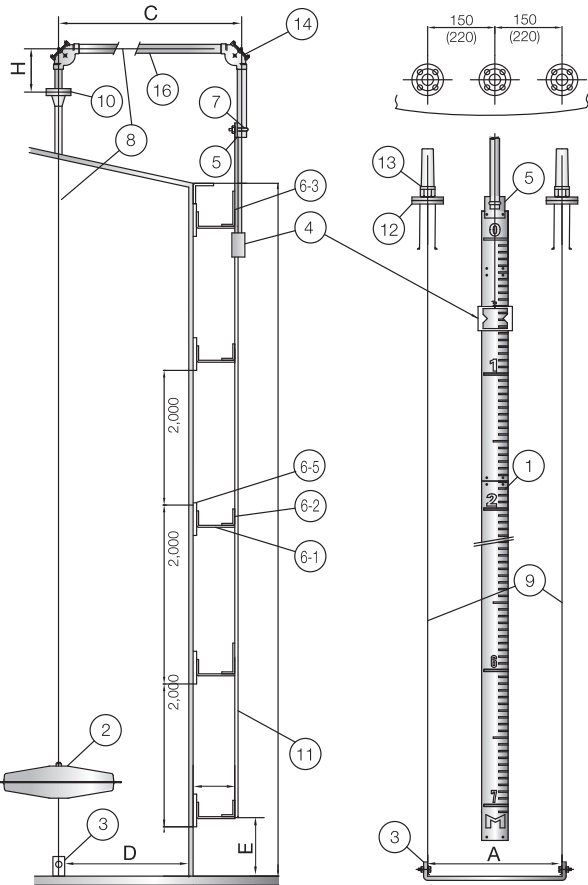
### Specifications

Power Supply	N. A
Output Signal	N. A
Contact Rating	N. A
Measuring Range	50m Max.(General)
Accuracy	Scale $\pm$ 5mm(Visual Error)
Resolution	Scale Spaces 50mm
Specific Gravity	0.5 Min.
Viscosity	Max. 8,000 cP
Process Pressure	Atm.
Process Temperature	Unlimited
Ambient Temperature	Unlimited
Float C to C	300 or 440mm (Guide Wire Knob C to C Distance)
Measuring Rope	$\varnothing$ 1.5 316LSS Wire
Material	304SS+Aluminum Cast or All 316LSS
Surface Treatment	N.A, Pickling & Passivation, Painting(Optional)



## Overall Dimension

### 90° Elbow Type



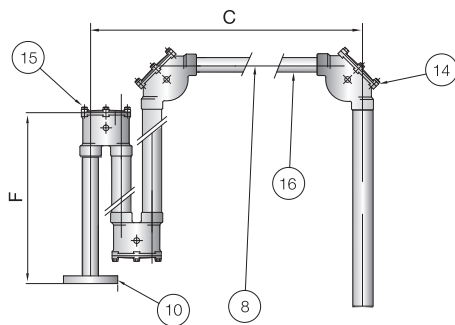
No.	Description	Material	Q'ty	Remarks
1	Scale	304, 316L	n	
2	Float	304, 316L	1	
3	Bottom Piece	304, 316L	1	Option (Tank builder)
4	Weight(Indicator)	304, 316L	1	
5	Pipe Support	304, 316L	1	
6-1	Welding Bracket	304, 316L	n	Option (Tank builder)
6-2	Scale Bracket	304, 316L	n	
6-3	0m Scale Bracket	304, 316L	1	
6-4	Optional Scale Bracket	304, 316L	1	
6-5	Reinforce Pad	304, 316L	n	Option (Tank builder)
7	U-Bolt	304, 316L	1	
8	Measuring Wire	316L	1	∅ 1.5
9	Guide Wire	316L	2	∅ 3.0
10	Connection Flange	304, 316L	1	
11	Scale Mounter	304, 316L	n	
12	Knob Flange	304, 316L	2	
13	Guide Wire Knob	AC, 304, 316L	2	
14	Elbow(1-1/2")	AC, 304, 316L	2	
15	U-Seal Pot(1-1/2")	AC, 304, 316L	1	Option
16	1-1/2" Guide Pipe	304, 316L	n	
17	Elbow Flange	304, 316L	n	Option
101	Smart Transmitter Ass'y	AC	1	Option
102	Terminal Housing Ass'y	AC	1	Option
103	Special Elbow	AC, 304, 316L	1	Option
104	Transmitter Sunshade	304, 316L	1	Option
105	Measuring Tape	316L	1	Option
	Bolt, Nut, Screw, Washer	304, 316	Lot	

### Standard Dimensions(Requirement)

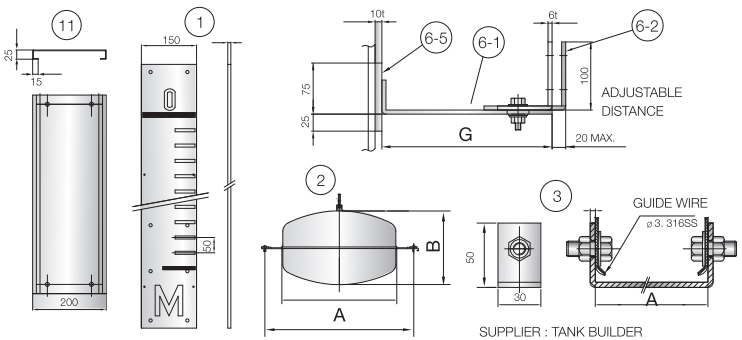
(Unit : mm)

A	300/440	B	160/64	C	790	D	500
E	200	F	918	G	250	H	200

### U-Seal Pot Type(Optional)



### Parts Drawing



## Ordering Information

### Scale Board Type Tank Level Indicator



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■ Specifications subject to change without notice