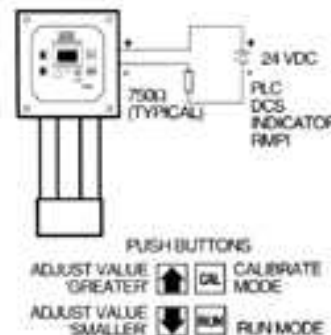


# SHICO.

## ULTRASONIC LEVEL MEASURING (Transmitter with display)

MODEL : SLP30/SLP20 Series

### 2-WIRE LOOP - POWERED LEVEL MEASURING



#### ■ FUNCTION

Continuous level measurement of liquids and solids to a maximum range of 40 feet (12m) in liquids (consult factory for max. range in solids).

#### ■ TYPICAL USES

- Continuous level measurement in sumps or tanks
- Profile monitoring on conveyor
- Open channel flow monitoring across v-notches, weirs and flumes.
- Remote location applications using battery/solar power

#### ■ PRIMARY AREAS OF APPLICATION

Any liquid, agitated or non-agitated, including most chemicals, acids, etc. Applications are found in chemical, food, paper, power generation, mining, water, sewerage industry, etc.

#### ■ PRINCIPLE OF OPERATION

The SLP20 and LP30 devices are ultrasonic level transmitters that have their transducer and associated electronics integral in one housing or mounted remotely.

The transmitter emits a pulse towards the product being measured, which is reflected back. Independent of current output, the transmitter takes samples at a the pulse is processed for speed of sound and compensated for temperature. This revolutionary sampling rate of the SLP20 and SLP30 is essential for high resolution in rapidly changing process measurement applications.

The display is then updated to read in feet, meters, percentage or to display a flow total/flow rate. At the same time the mA output is proportionally updated.

#### ■ FEATURES

- Low cost
- 2 wire loop powered, 12V to 30V.D.C supply
- Max. range 40 feet (12m)
- Choice of transducer frequencies (30 kHz/20 kHz)
- 4-20mA analog output, proportional or inverted
- -40°F to 140°F operating temperature range
- Available in remote mounting for high temperature service
- Eight digit alphanumeric display
- Non-intrusive, high-impact enclosure (sealing NEMA 4x) IP 67
- Easy calibration and installation
- Chemically resistant (acids, alkalis, hydrocarbons, oils, fats, detergents, etc)
- Meets 3-4 sanitary specifications
- Auto-compensation for temperature, steam, dust condensation. rain, wind, etc.
- Full open channel flow rate capability with 8 digit totalizer
- Adjustable fill follow rate
- Battery and solar panel capability for remote locations (12V-250 OHM)
- Auto internal high speed temperature compensation
- Agitator discrimination
- Operating performance diagnostics
- Transducer and electronics in same housing
- Automatic temperature compensation for speed-of-sound correction.
- Zero maintenance; zero drift
- Meets Class 1, Div. 1; intrinsically safe using standard barriers(consult factory)



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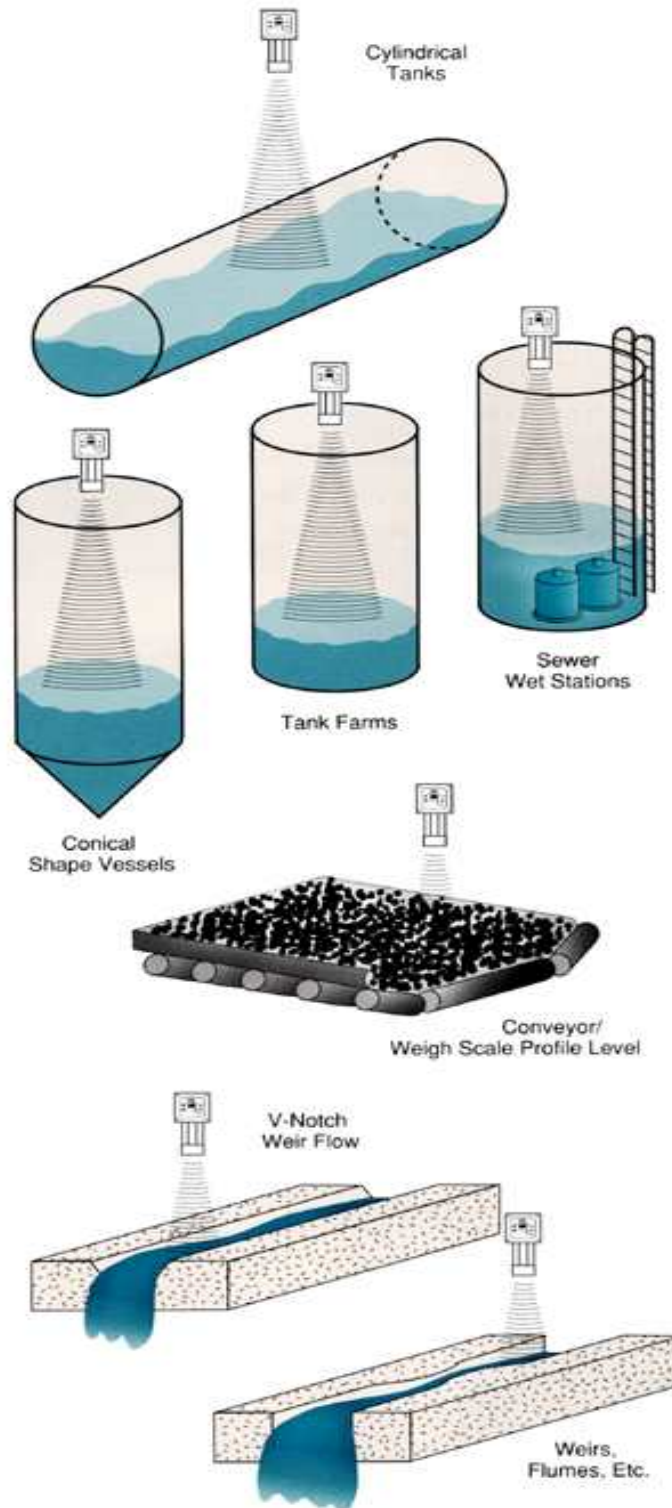
# 61-14 CHARYOUNG-DONG CHANGWON-CITY KYUNGNAM, KOREA

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SHICO.

ULTRASONIC LEVEL MEASURING (Transmitter with display)

MODEL : SLP30/SLP20 Series



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# SHICO. MODEL : SLP30/SLP20 Series

## ULTRASONIC LEVEL MEASURING (Transmitter with display)

### ■ SPECIFICATIONS

#### INPUT VOLTAGE

- 12V to 30V.D.C  
(12V-250ohm) (24V-750ohm)

#### MEASURING RANGE

- SLP30-max. range 7.6m,  
min. range 300mm
- SLP20-max. range 12m  
min. range 380mm

#### RESOLUTION

- 1MM

#### ELECTRONIC ACCURACY

- $\pm 0.255$  of measuring range

#### OPERATING TEMPERATURE

- Max. continuous = 140°F (60°C)  
Min. continuous = -40°F (-40°C)  
(110°C) for a max. of 30 minutes

- \* For higher temperatures consult the factory

#### TRANSDUCER/AMPLIFIER SEPARATION

- 10m

#### OPERATING PRESSURE

- Max. 30 P.S.I (2 Bar)

#### BEAM. ANGLE

- 7.5 (can be reduced using option focalizes)

#### ANALOG OUTPUT

- 4-20mA (Max. 750ohms) proportional or inverted

#### DISPLAY

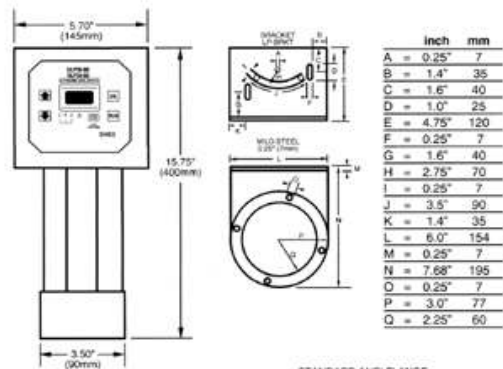
- 8 digit alphanumeric (feet, meters, percentages, flow totalize, flow rate)

#### ENCLOSURE SEALING

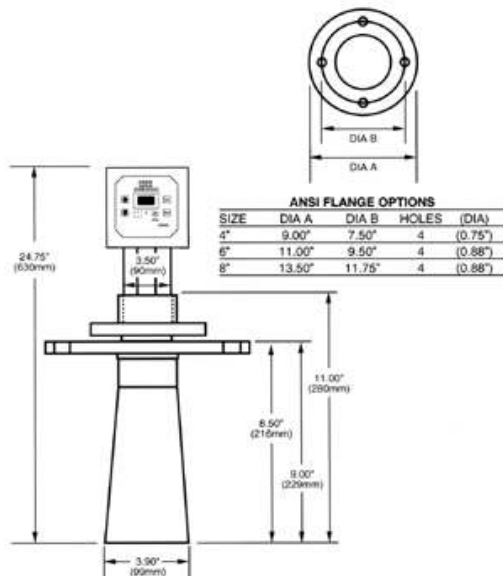
- Valor P.B.T 'Valox' is a registered trademark of the general electric company

#### OPEN CHANNEL FLOW ALGORITHMS

- V-notch, flumes & weirs



STANDARD ANSI FLANGE



#### CABLE ENTRY

- 22mm

#### MOUNTING

- Angle mounting bracket ( )-Brkt.  
Flange:4.00 inch to 12 inch ANSI  
(DIN, JIS). Tri-clamp ladyish

#### CABLE

- Single twisted pair, screened type balden  
9462 or equivalent

#### WEIGHT

- Max. 6.6 lb. (3Kg)

#### SANITARY

- Meets 3-A sanitary spec.



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#### ■ PART NUMBER

##### LOOP POWERED ULTRASONIC LEVEL TRANSMITTER

CODE	Loop Powered
SLP	12V to 30VDC Two-Wire Transmitter
CODE	Transducer Frequency
20	20kHz
30	30kHz
CODE	Housing Type
I	Integral
R	Remote
CODE	Facing Material
0	Polypropylene
3	Titanium
6	Teflon
7	Nylon
CODE	Mounting Accessories
F	Flange
C	Focalized Cone
A	ANSI
D	DIN
J	JIS
4	4.00 Inch
↓	↓
12.00	12.00 Inch
CODE	Material of Construction
0	U. P.V.C
1	Mild Steel
2	Stainless Steel
3	C.P.V.C
4	Polypropylene
5	P.V.D.F, (KYNAR)

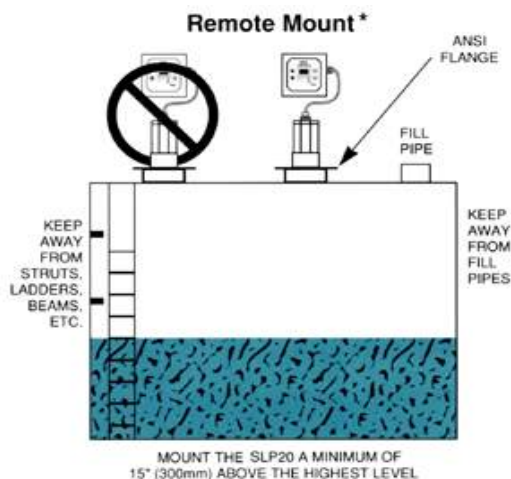
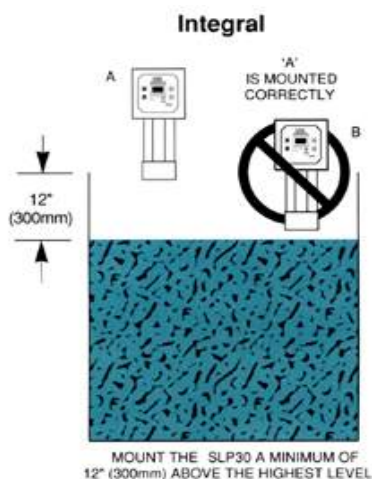
SLP [ ] [ ] [ ] [ ] [ ]

##### OPTIONAL PANEL INDICATOR (SMPI)

CODE	PANEL INDICATOR MODEL
SRMPI	
CODE	Input
1	115VAC
2	240VAC
3	Both voltage have 12~27VDC
CODE	Relays
R	2x Form C (10 AMPS) Relay
O	Non Relays (2 open collector outputs standard)
CODE	Outputs
A	Re-transmit 4~20mA
B	RS232 Serial Interface
C	RS422 Serial Interface
D	100mA output

SRMPI - [ ] [ ] [ ]

#### ■ MOUNTING INFORMATION



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