

MODULAR CABLE SUSPENDED LEVEL TRANSMITTER

MODEL 592 HEAD PRESSURE TYPE SENSOR

FEATURES

- 4-20 mADC Signal, 2 Wire Loop
- Small 0.85" (22mm) O.D. Is Easy To Install
- Enters A 3/4" MPT Hole, Slides Easily Down A 1" Guide Pipe
- Ranges From 1 To 2500 Feet (750 Meters)
- Can Transmit Level In Pressurized Tanks
- Lighting & Voltage Surge Protection
- Sensor Is At Bottom Of Tank Or Well
- Electronics Are In A Remoted Housing
- Zero And Span Pots Allow Recalibration
- Second 4-20 mA Loop Can Transmit Liquid Temperature At The Sensor
- Kalrez® Seals For Difficult Services
- Sludge Nose Optional For Dirty Liquids
- Test Tubing Checks Down Hole Seals
- Maintenance Free Operation

TYPICAL APPLICATIONS

Industrial Chemicals
Water Wells
Treatment Chemicals
Landfill Leachate Wells

Various Acids
Remediation
Storage Tanks
Zeolite Solutions

Reservoirs
Hydrocarbons
Resin Blends
Fuel Oil

DESCRIPTION

The Model 592 electronics unit is separated from the sensor and mounted above ground for ease of testing, reranging, and inspection. The sensor is mounted in a heavy 316 SS body. A rugged signal cable interconnects them and supports the sensor body. Both modules are potted for maximum reliability.

The sensor measures the pressure of the liquid above it. This pressure is linearly proportional to the height of the liquid above it. The Model 592 converts this pressure into a 4-20 mADC level signal.

Unlike "Capacitance" and "Admittance" type devices, the Model 592 is unaffected by algae and sludge coating. Also, it's calibration can be checked or changed without having to install the unit in a well or pit. The Model 592 is also very useful for measuring levels in tanks. The flexible cable is easy to install, even when head room above a tank is minimal. The small body diameter allows it to be installed through a 3/4" NPT hole. Use the TPC corrector option when the tank is pressurized.



Optional SS Support
With 3/4" Conduit
Connection

Submerged Pressure
Sensor



DELTA CONTROLS
CORPORATION

MODEL NUMBERING SYSTEM

BASIC TYPE - TYPE NOSE - RANGE & SENSOR - HOUSING & RATING - FEET OF CABLE - OPTIONS

MODEL EXAMPLE 592Y - CN - G4Y - 4X - 40V - SCI

M/N	BODY MATERIAL
592Y	316 SS
592Z	OTHER

M/N	DESCRIPTION
CN	CONICAL, BASIC
SN	PERFORATED, SLUDGE

M/N*	FULL SCALE RANGE (H ₂ O)	
	FEET	METERS
G1 Y	3.5	1.0
G2 Y	7.0	2.0
G3 Y	17.5	5.0
G4 Y	35.0	10.0
G5 Y	70.0	20.0
G6 Y	125.0	40.0
G7 Y	250.0	80.0

C/F FOR RANGES TO 2500 FEET (750 M)
 * "Y" = 316L SS FACE AND SHELL IS BASIC,
 "G" = HASTELLOY "C" (OPTIONAL)

M/N	DESCRIPTION
4X*	ENVIRONMENT PROOF; 4X; PVC CONSTRUCTION; SS TRIM; INTRINSICALLY SAFE, CLASSES 1 & 2, DIVISION 1 & 2, GROUPS ABCD, EFG
7W*	EXPLOSION PROOF; CLASSES 1 & 2; DIVISIONS 1 & 2; GROUPS BCD, EFG; 4X; ALUMINUM CONSTRUCTION
7T*	EXPROOF, SAME AS ABOVE EXCEPT ALL 300 STAINLESS STEEL CONSTRUCTION

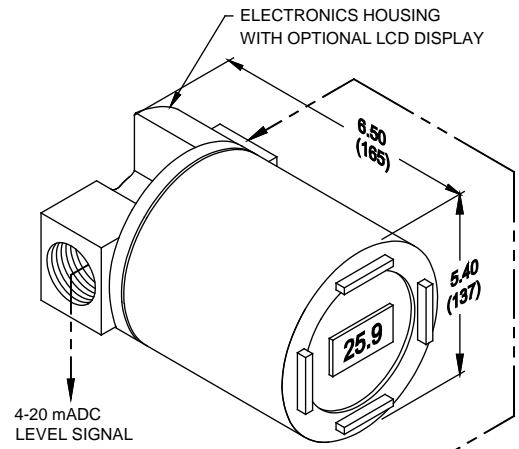
* Add 1 for integral or R for remote mounting

M/N	DESCRIPTION
AA	NONE
SU	4.0 mA ADJUSTABLE UP TO 30% OF RANGE ABOVE SENSOR
RC	20-4 mADC REVERSE CALIBRATION
SCI	INTEGRAL VENT TUBE ISOLATION BLADDER; PERMANENT, NO REFILLING OR MAINTENANCE
DDI	CONVENTIONAL REFILLABLE DESSICANT DRYER FOR VENT TUBE, FOR MOUNTING IN ENCLOSURE BY OTHERS
328	DIRECT READING LCD DISPLAY
TPC	TANK PRESSURE CORRECTOR, SELECT AND PRICE FROM TPC PRICE LIST
LT	4-20 mA LIQUID TEMPERATURE
CCY*	316 SS CABLE CLAMP WITH A 3/4" CONDUIT CONNECTION INSTEAD OF NYLON TOP STRAIN RELIEF
PSM	2" PIPE STAND HOUSING MOUNTING BRACKET (ALSO REQUIRED FOR SURFACE MOUNTING 7W & 7T)
VBKT	CABLE CLAMP SUPPORT ARM FOR VERTICAL WALL, STEEL
HBKT	DITTO, EXCEPT HORIZONTAL LEDGE
KZ	KALREZ SEALS
ZA	OTHER CONFIGURATIONS

▲ BASIC HOUSING MATERIAL IS PVC FOR 4X, AND ALUMINUM FOR 7W

M/N	DESCRIPTION
* V	PVC OUTER JACKET
* R	TEFZEL OUTER JACKET

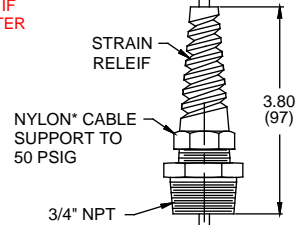
REPLACE "*" WITH NUMBER OF FEET REQUIRED, 3/4" NPT NYLON SUPPORT PROVIDED. C/F IF LENGTH IS OVER 2500 FEET (750 M).



4-20 mADC LEVEL SIGNAL

INTERCONNECTING CABLE TO ELECTRONICS

*CCY OPTION REQUIRED IF CABLE LENGTH IS GREATER THAN 150 FEET



SPECIFICATIONS

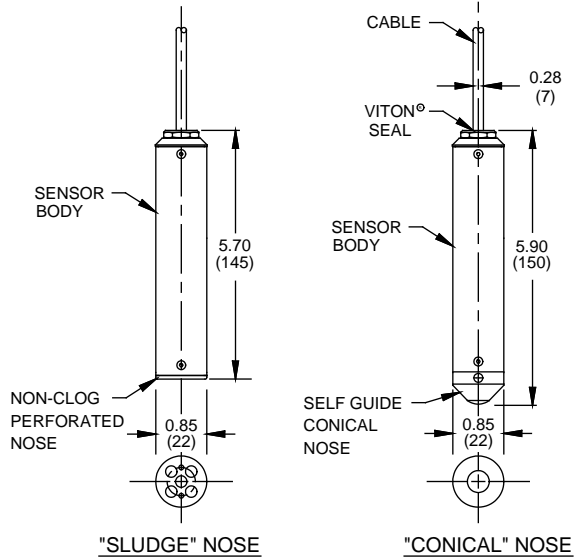
Technology: Silicon strain gage
 Wetted Materials: 316 SS, Nylon® nose, Viton® seals
 Supply Power: 13 to 35 VDC, 2 Wire Loop Powered
 Output Signal: 4-20 mADC isolated, Intrinsically Safe
 Adjustments: Span, from 30% to 100% of sensor range, Zero; non-interactive.

Range: Calibrated to users specifications
 Temperature Range:
 -40 to +220°F (-30 to +85°C) Sensor
 30 to +130°F (-1 to +55°C) Compensated
 -20 to +180°F (40 to 105°C) Electronics Module

Accuracy: ±0.25% F.S. or better
 Thermal Error: ±0.02% F.S./°F maximum
 Barometric Effect: None
 Weight: Sensor, less than 1 pound
 Cable, 1 pound per 25 feet

Auxiliary Equipment:
 DC Power Supply: 120 VAC to 24 VDC
 Alarm Module(s): 5 amp, SPDT output
 Liquid Temperature: Is sensed and transmitted as a 4-20 mADC signal over a second 2 wire loop.
 Pump Control: One to four pumps

Made in the USA by Delta Controls



*Note: "CCY" SS Version Of Cable Support Allows Integral Mounting Of The Electronics Housing.



Engineered Sensors - For Difficult Services

585 Fortson Street
 Shreveport, La. 71107 - USA
 Ph: +1(318) 424-8471
 Fax: +1(318) 425-2421
 E-mail: sales@deltacnt.com
 Web: www.deltacnt.com