

# MODEL 562 HEAD PRESSURE LEVEL TRANSMITTER TOP INSERTED SENSOR TYPE

## FEATURES

- Two wire loop powered 4-20 mADC signal
- Suitable for clean or dirty liquids with solids
- Integral or remoted electronic module
- Oil filled sensor isolating diaphragm
- Ranges from 12 inches to 36 feet H<sub>2</sub>O
- Zero & span pots for field recalibration
- Optional LCD display and alarm
- Optional 20-4 mADC reverse calibration
- Optional isolation bladder for vent tube
- Optional second loop for liquid temperature
- Technology used does not require a ground reference rod when used on concrete, plastic or fiberglass vessels
- Not affected by product coating, or algae buildup
- Maintenance free operation

## DESCRIPTION

The Model 562 level transmitter consists of a potted electronic module and a pressure sensing probe. The probe consists of a head pressure sensor protected by a stainless steel body and supported by a 3/4" size pipe. The electronics housing can be mounted directly on the probe head. It can also be remoted for convenience or safety. The user normally supplies the pipe. Process fittings and/or mounting adapters can be supplied by Delta Controls or by the user.

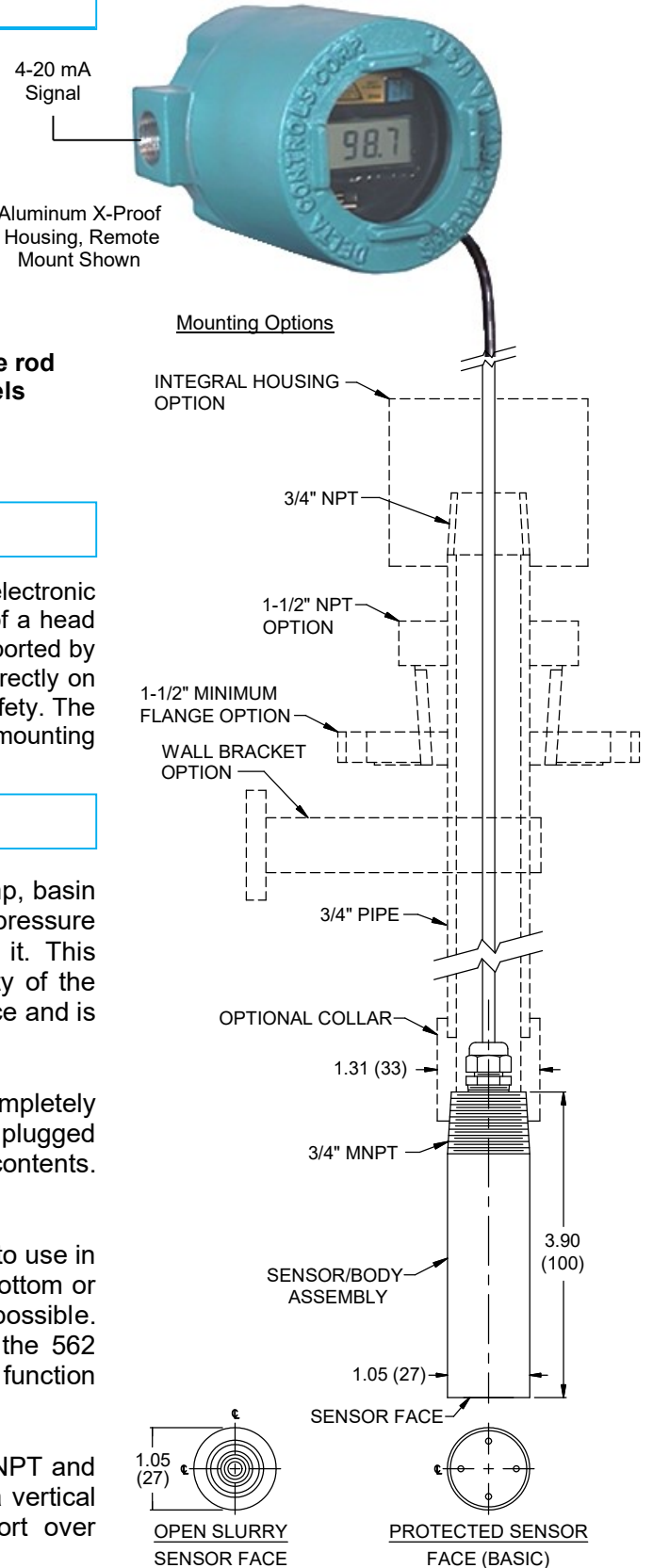
## TYPICAL INSTALLATIONS

The Model 562 is installed near the bottom of a tank, sump, basin or other containment. The strain gage sensor detects the pressure exerted on it by the water or other liquid surrounding it. This pressure is linearly proportional to the height and density of the liquid above the sensor. The basic unit has a protected face and is suitable for clean liquids.

The optional sludge face allows the diaphragm to be completely open to the liquid being measured. The sensor cannot be plugged and rendered inoperable by liquids with high solids contents. Waste liquids and slurries are easily handled.

The top mounting feature of the Model 562 makes it easy to use in concrete basins, sumps and other containments where bottom or side mounting of a sensor would be difficult or impossible. Compared to a capacitance or radar probe transmitter, the 562 requires neither reference ground nor periodic cleaning to function accurately and reliably.

The 562's probe can be mounted using a wide range of NPT and flanged connections. It can also be supplied with either a vertical wall or a horizontal ledge mounting bracket for support over basins, open tanks, pits, and similar installations.



# MODEL NUMBERING SYSTEM

## LIQUID HEAD PRESSURE LEVEL TRANSMITTER

BASIC TYPE - RANGE & SENSOR - FACE GUARD - HOUSING & RATING - FEET OF CABLE - MOUNTING & TYPE - OPTIONS

MODEL EXAMPLE 562Y - G4Y - P - 4XI - 12V - 1.5"MPST - AA

| BASIC TYPE |             |
|------------|-------------|
| M/N        | BODY / FACE |
| 562Y       | 316 S.S.    |

| FULL SCALE RANGE (H <sub>2</sub> O) |      |        |
|-------------------------------------|------|--------|
| M/N                                 | FEET | METERS |
| G1Y                                 | 3.5  | 1.0    |
| G2Y                                 | 7.0  | 2.0    |
| G3Y                                 | 17.5 | 5.0    |
| G4Y                                 | 35.0 | 10.0   |

FOR HASTELLOY "C"

| FACE GUARD |                              |
|------------|------------------------------|
| M/N        | DESCRIPTION                  |
| P          | PROTECTED, FOR CLEAN LIQUIDS |
| S          | OPEN, FOR ENTRAINED SOLIDS   |

| HOUSING & RATING |   |   |   |
|------------------|---|---|---|
| M/N              | DESCRIPTION (ALL 4X)  | T | R |
| 4X*              | ENVIRONMENT PROOF: 4X; S.S. TRIM: PVC; INTRINSICALLY SAFE, CLASSES 1 & 2, DIVISIONS 1 & 2, GROUPS ABCD, EFG |   |   |
| 7W*              | EXPLOSION PROOF: CLASSES 1 & 2; DIVISIONS 1 & 2; DIVISIONS BCD, EFG; 4X; ALUMINUM CONSTRUCTION              |   |   |
| 7T*              | EXPROOF, SAME EXCEPT ALL SS CONSTRUCTION  |   |   |

\* REPLACE " WITH "T" FOR INTERGRAL MOUNTED OR "R" FOR REMOTELY MOUNTED CONDUIT SUPPORTED HOUSING

| FEET OF CABLE |          |               |
|---------------|----------|---------------|
| M/N           | MATERIAL | MAX TEMP      |
| "V            | PVC      | 220°F (105°C) |
| "R            | TEF      | 220°F (105°C) |

REPLACE "" WITH NUMBER OF FEET REQUIRED. REQUIRED LENGTH IS CABLE RUN DISTANCE FROM BOTTOM OF SENSOR TO ELECTRONICS HOUSING

| MOUNTING & TYPE |  |              |
|-----------------|--|--------------|
| M/N             | PROCESS CONN. & BRACKET DESCRIPTION                | STEEL 316 SS |
| AA              | NONE, FURNISHED BY USER                            |              |
| 1.5" MPT*       | 1-1/2" MPT, 3/4" STEM ADAPTOR ▲                    |              |
| 1.5" 150R*      | 1-1/2" 150# R.F. WITH ADAPTOR                      |              |
| 2" 150R*        | 2" 150# R.F. WITH ADAPTOR                          |              |
| 3" 150R*        | 3" 150# R.F. WITH ADAPTOR                          |              |
| 4" 150R*        | 4" 150# R.F. WITH ADAPTOR                          |              |
| ZZ              | ANY STYLE, ANY MATERIAL - ANSI, JIS, DIN, BP, ETC. |              |

REPLACE " WITH "S" FOR STEEL OR "Y" FOR 316 S.S.

▲ 2" & 2-1/2" SIZES AVAILABLE AT THE SAME PRICE.

\* PROCESS CONNECTION PROVIDES 3/4" FNPT FOR CONNECTION OF THE PIPE STEM & 3/4" MNPT FOR MOUNTING OF THE HOUSING OR CONDUIT.

| OPTIONS |  |    |    |
|---------|--|----|----|
| M/N     | DESCRIPTION  | 4X | 7W |
| AA      | NONE   |    |    |
| 328     | DIRECT READING LCD DISPLAY   |    |    |
| RT      | 2 WIRE, 4-20 mADC BUILT-IN LIQUID TEMPERATURE TRANSMITTER                                |    |    |
| SCI     | VENT TUBE DESSICANT BLADDER  |    |    |
| TPC     | TANK PRESSURE CORRECTOR, SELECT FROM TPC PRICE LIST AND ADD TO PRICE OF THIS TRANSMITTER |    |    |
| PSM     | 2" PIPE STAND MOUNTING BRACKET FOR REMOTED HOUSING                                       |    |    |
| CTV     | STEM TO CABLE SEAL FOR USE WITH REMOTED HOUSING, NYLON                                   |    |    |
| RC      | 20-4 mADC REVERSED SIGNAL  |    |    |
| ZZ      | OTHER CONFIGURATIONS AND MATERIALS   |    |    |
| VBKT    | PIPE SUPPORT ARM BRACKET, VERTICAL WALL ATTACHMENT, STEEL                                |    |    |
| HBKT    | PIPE SUPPORT ARM BRACKET, HORIZONTAL WALL ATTACHMENT, STEEL                              |    |    |

### SPECIFICATIONS

**Technology:** Silicon strain gage.  
**Output:** 4-20 mADC isolated, Intrinsically Safe  
**Supply Power:** 13 to 35 VDC, 2 wire loop powered  
**Loop Impedance:** 550Ω @ 24 VDC, 1100Ω @ 35 VDC  
**Adjustments:** Zero to 30% suppression basic; 80% optionally. Span from 30% to 100% of sensor range.  
**Calibration:** Done in accordance with customer specifications. Note: Span and Zero offsets can be adjusted out and are not inherent in the design. Also, they are not interactive.  
**Protective Devices:** Transient suppressors for voltage surge and spark protection are built-in.  
**Cable Jacket:** PVC 120°F (70°C) basic, TEFZEL@ 200°F (105°C) optional  
**Temperature Range:** -20 to +220°F (-30 to 105°C) Operating 30 to +130°F (-1 to 55°C) Fully compensated  
**Accuracy:** ±0.25% F.S. or better  
**Thermal Error:** ±0.02% F.S. /°F maximum  
**Over Pressure:** 2X Range (35 PSI min) without damage  
**Barometric Effect:** None  
**NOTE** - Use "TPC" Corrector for unvented or pressurized tanks and vessels.

### OPTIONAL FEATURES

**Condensation Protection:** Isolation Bladder on vent tube  
**Indicator:** Large LCD display (in engineering units)  
**DC Power Supply:** 120 VAC to 24 VDC  
**Alarm Module(s):** 5 amp SPDT outputs

### LIQUID TEMPERATURE OPTION

A separate 2-wire 4-20 mADC loop transmitter can be included in the Model 562. A precision temperature sensor is included in the level sensor body. Range: Any 50 to 250°F span between -50 and +250°F (-45 to 120°C). Accuracy is ± 0.5°F (0.3°C).



**Engineered  
Reliability**

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