

LEVEL TRANSMITTERS

BULLETIN DB-575
PART #K796422

Model 575 Submersible Level Transmitter

FEATURES

- ◆ Solid state semiconductor sensor for accuracy and reliability
- ◆ Rugged 316 stainless steel housing with excellent environmental protection
- ◆ Easy to install and use
- ◆ Removable, nonclogging snub nose end protects sensing elements
- ◆ 2 wire 4-20 mA output
- ◆ Vented to the atmosphere through the surface end of the cable
- ◆ Reverse polarity and surge protected
- ◆ Lightning protectors available

APPLICATIONS

- ◆ Tanks
- ◆ Ponds
- ◆ Rivers
- ◆ Lakes
- ◆ Water wells
- ◆ Landfills
- ◆ Flood channels



MODEL 575 TRANSMITTER

DESCRIPTION

The Model 575 Submersible Level Transmitter is specially designed to provide the convenience of direct submergence in many type of liquid for quick, accurate and reliable level measurement. The simple design and rugged construction of this solid state instrument provide long lasting service with virtually no maintenance.

The Model 575 Transmitter indicates the level of liquid by continuously measuring hydrostatic pressure via its sensing element, an ion implanted silicon semiconductor chip with integral

Wheatstone Bridge circuit. Once the sensor measures the pressure, the data is transmitted by a 4 to 20 mA output signal. This design provides for excellent linearity and repeatability, low hysteresis and long term stability.

The Model 575 is easy to install, too. Simply lower the transmitter into a vessel or well. It's that easy. All the electronics are mounted in a submersible 316 stainless steel housing. A special cable support bracket is also available. This gives extra stability to the transmitter when used with longer

lengths of cable or when used in an agitated liquid.

The transmitter is available calibrated for any span needed, from 0 to 3 psi or 0 to 0.2 bar (0 to 7 feet or 0 to 2.1 meters of water) to 0 to 300 psi or 0 to 20 bar (0 to 690 feet or 0 to 211 meters of water).

To complete your liquid level measurement and control system, use the AMETEK Model DMC Digital Meter/Controller with the Model 575 Submersible Transmitter.

Model 575 Submersible Level Transmitter

SPECIFICATIONS

FEET OF WATER: 0/14, 0/35, 0/69, 0/138, 0/230, 0/345, 0/460, 0/690

METERS OF WATER: 0/4, 0/10, 0/21, 0/42, 0/70, 0/105, 0/140, 0/210

BAR: 0/0.4, 0/1, 0/2, 0/4, 0/7, 0/10, 0/14, 0/20

PSI: 0/6, 0/15, 0/30, 0/60, 0/100, 0/150, 0/200, 0/300

OUTPUT: 4-20 mA, 2 wire, current limited to 30 mA DC

POWER SUPPLY: 12 to 40 VDC with reverse polarity surge protection; Limit to 28 VDC for CSA I.S.

LOOP RESISTANCE: 1400 ohms maximum at 40 volts

TEMPERATURE RANGE:

Ambient Operating: CSA intrinsically safe T3C

= 32° to 104° F (0° to 40° C)

Storage: -40° to 176° F (-40° to 80° C)

OVERRANGE EFFECT: ±0.15% full scale at 300% of maximum range

ACCURACY: ±0.25% full scale, BFSL (including linearity, hysteresis and repeatability); ±0.50% full scale (6 psi range only)

ZERO OFFSET: ±0.50% full scale set at 25° C

SPAN: ±0.50% full scale set at 25° C

TEMPERATURE EFFECTS:

Compensated: 32° to 122° F (0° to 50° C); Maximum ±1% URL output change for ±25° C temperature change within compensated range when calibrated at 25° C

POWER SUPPLY EFFECT: ±0.005% full scale per volt

CONSTRUCTION:

Diaphragm: Type 316L stainless steel

Housing Type: 316 stainless steel

Nut/Washer Type: 316 stainless steel

Cable Grommet: Viton

Housing O Ring: Viton

Cable Jacket: Polyurethane

Snub Nose: Nylon 6/6, removeable (1/2 inch NPT)

MEDIA COMPATIBILITY: Reference materials of construction

ELECTRICAL CONNECTION: Attached 20 gauge polyurethane shielded cable. Unspliced lengths available up to 5000 ft. (1662 m)

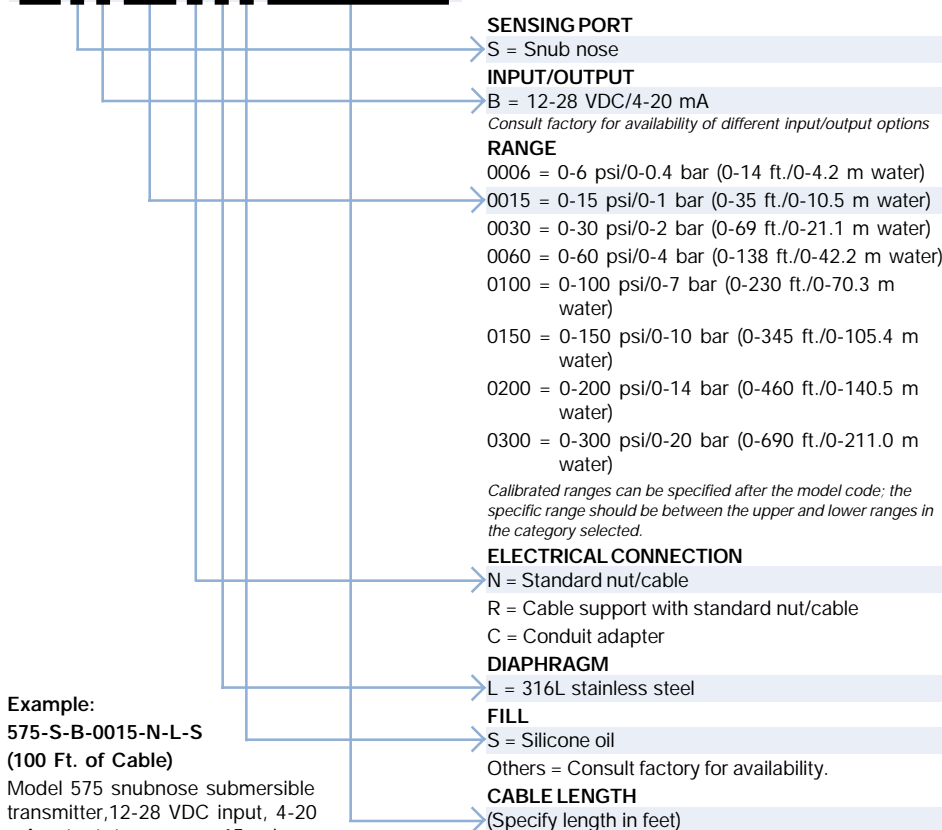
WEIGHT: 1.0 lb. (454 g)

APPROVALS: Meets CSA requirements for intrinsically safe operation in hazardous locations as designated by Class I, Div 1, Groups A, B, C & D and Class II, Groups E, F & G. Temperature Code T3C (when used with approved barrier)

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ORDERING INFORMATION

MODEL NUMBER
575-S-B-0015-N-L-S (100 Ft. of Cable)

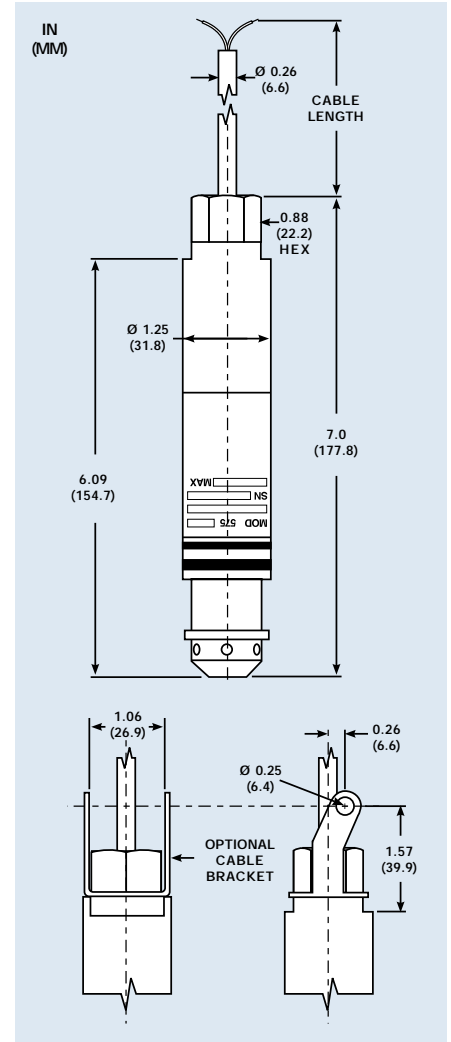


Example:
575-S-B-0015-N-L-S
(100 Ft. of Cable)

Model 575 snubnose submersible transmitter, 12-28 VDC input, 4-20 mA output, to measure 15 psi, standard nut, cable electrical connection, 316L stainless steel diaphragm, silicone fill, 100 ft. of cable

NOTE: For maximum reliability and long term performance, AMETEK recommends the use of a lightning protector with this level transmitter. For ordering information consult factory.

DIMENSIONS



AMETEK®

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ISO 9001 REGISTERED MANUFACTURER

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