



**SERIES 7000MP PVC  
 MICROPROCESSOR BASED LEVEL TRANSMITTER**



**FEATURES**

- Small 1.25" Diameter
- Analog/Digital Output
- Ultra Stable/High 0.2% Accuracy
- Non Metallic PVC Construction
- Active Temperature Compensation
- Integral Surge Protection
- No Vent Tubes or Desiccants
- Fully Repairable
- RS485 MODBUS® Outputs
- Field Calibrateable

Sigma Controls, Inc. introduces a new era of accuracy to its time proven Series 7000MP non metallic submersible level transmitter. Utilizing a state of the art Piezo resistive media isolated sensor and active temperature compensated microprocessor based electronics, the 7000MP offers significant accuracy and stability gains over more traditional analog designs.

Industry standard 4/20MA output is common to all units as is a variety of digital data outputs including MVNET, which includes temperature data along with level measurement, Sigma Controls proprietary RS485 MODBUS® protocol with the optional MV131 protocol converter.



**APPLICATIONS:**

- WELL LEVEL MONITORING
- CLEAR WELL LEVELS
- POND AND DAM DEPTH
- COOLING TOWERS
- RESERVOIR LEVEL
- CHEMICAL TANK LEVEL
- CHEMICAL DRUMS

Digital data transmission offers the ability to link or 'daisy chain' up to 256 transmitters on a single cable 'run' over a distance of up to 4000 feet offering significant cable and installation cost savings.

Sigma's MVNET Protocol is digitally compatible with all Myriad monitors and control devices and permits the direct connection of the transmitter to our spread spectrum radio modem for long distance transmission of level signals without the need for and RTU.

# SERIES 7000MP MICROPROCESSOR BASED LEVEL TRANSMITTER

## SPECIFICATIONS

**Ranges:**

Ft. Water: 0/5, 0/12, 0/16, 0/35, 0/70, 0/115, 0/160, (Custom calibration at no charge.)

**Pressure (PSIG):**

2, 5, 7, 15, 30, 50, 70 other ranges available, consult factory.

**Thermal Limits:**

Maximum Operating:  
-40°C/85°C (-40°F/185°F)

**Compensated:**

0°C/50°C (±32°F/122°F)

**Temperature Effects:**

±0.25% output span within compensated range.

**Accuracy:**

±0.2% FS

**Input/Output:**

7.8 – 36 VDC/4-20MADC/  
Digital

**Electrical Connection:**

Attached four wire 20GA direct burial polyurethane jacketed shielded cable.

**Cable Color Code:**

Black (-)  
Red (+) Power  
Blue Digital Output 'B'  
Yellow Digital Output 'A'

**Process Connection:**

Protective nose cone for direct submergence in liquids. Removing nose cone provides 1/2" NPT (F) process connection.

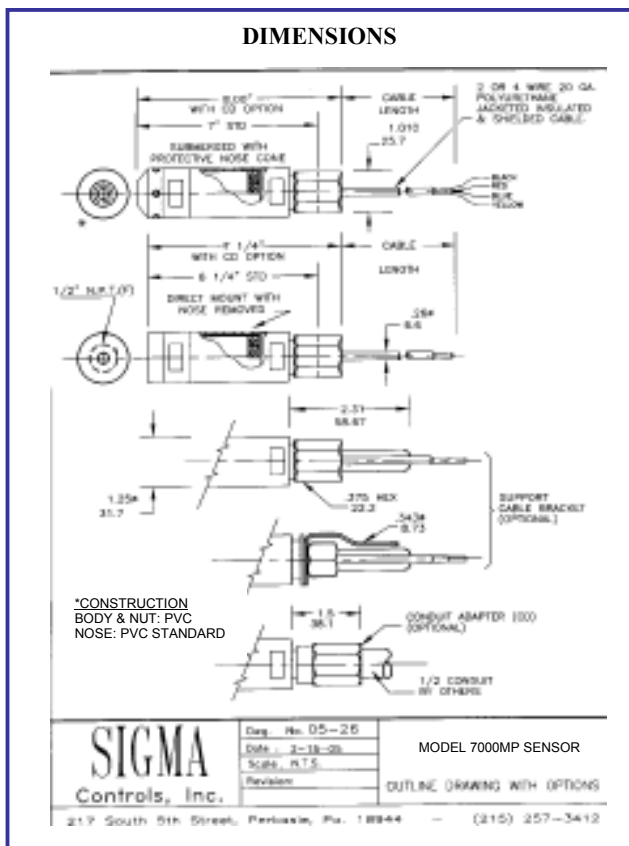
**Materials of Construction:**

PVC body, Buna N 'O' Ring, Neoprene Grommet, Teflon Diaphragm, Polyurethane jacketed cable.

**Weight:**

(without cable) 8 oz.

®MODBUS is a registered trademark of Schneider Inc.



MODEL	RANGE	I/O	FILL	OPTIONS	CABLE LENGTH
7000MP	*	*	*	*	SPECIFY

**MODEL**  
7000MP = PVC Body

**RANGES**  
 002 = 0/2 = 0/5 FT WC  
 005 = 0/5 = 0/12 FT WC  
 007 = 0/7 = 0/16 FT WC  
 015 = 0/15 = 0/35 FT WC  
 030 = 0/30 = 0/70 FT WC  
 050 = 0/50 = 0/115 FT WC  
 070 = 0/70 = 0/160 FT WC  
 Higher ranges available\*  
 \*Consult Factory

**OUTPUT**  
1 = 4/20MA and MODBUS®

**MATERIALS OF CONSTRUCTION**  
 PVC Body, Buna N 'O' Rings  
 \*Teflon Coated Polyimide Diaphragm

**FILL LIQUID**  
DS = Silicone 200 Fill Liquid

**OPTIONS**  
 CD = 1/2" Conduit Adapter  
 AC = TVSS 120VAC Surge Protection DIN Mt  
 DC = TVSS 4/20 Surge Protection DIN Mt

**CABLE LENGTH**  
Specify Length in Feet

**EXAMPLE: 7000MP-030-1-DS-(50)**



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