



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.

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 an RTU.



APPLICATIONS:

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

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:

$\pm 0.25\%$ output span within compensated range.

Accuracy:

$\pm 0.2\%$ 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:

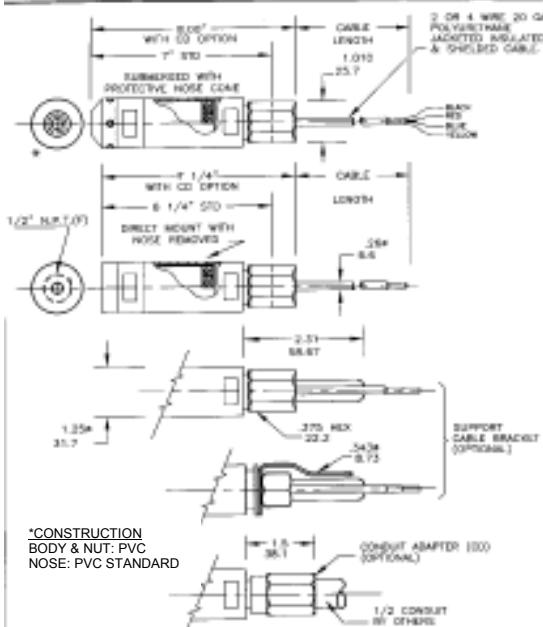
PVC body, Buna N 'O' Ring, Neoprene Grommet, Teflon Diaphragm, Polyurethane jacketed cable.

Weight:

(without cable) 8 oz.

®MODBUS is a registered trademark of Schneider Inc.

DIMENSIONS



SIGMA		MODEL 7000MP SENSOR	
Controls, Inc.			
Design No. 05-26	Date: 3-18-00	Model No. 7000	Outline Drawing with Options
Scale: MTS	Revision: C	217 S. Fifth Street, Philadelphia, PA 19104	(215) 257-3412

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)



217 S. Fifth Street, Philadelphia, PA 19104
PH: 215-257-3412 FAX: 215-257-3416

VISIT OUR WEBSITE SIGMACONTROLS.COM