

# Level Mate III

## Level Measurement System



### Description

The AMETEK LEVEL MATE III Level System uses a stainless steel transmitter as standard. A series of perforations in the bottom of the unit protects the sensing port from either clogging or damage. The same snub-nosed end can also unscrew, allowing for easy calibration checks.

The customized LEVEL MATE III meter displays data from the transmitter, provides excitation voltage and transmits an analog signal for remote recording, alarm or control functions. It is easy to calibrate by front panel adjustments. Its programmable relay permits set and reset programming. The large, easy-to-read LED display gives local indication while the optional isolated analog output can interface with ancillary display, recording or control devices. Combined into one convenient package, the AMETEK LEVEL MATE III Level System provides

you with the most versatile level measurement system on the market!

### Features

- Two-year factory warranty on the system
- Intrinsically safe (Model 575S, 575P and 675)
- Solid-state silicon sensor with milliamp output
- Rugged stainless steel sensor housing – excellent environmental protection
- Excellent media compatibility
- Sensor vented to the atmosphere through the surface end of the cable
- Microprocessor-controlled meter for quick, easy setup and calibration
- Large dual line 6 digit display, 0.60" & 0.46"
- Selectable setup via front keys
- Programmable displays and function keys
- Meter can be calibrated for inches of water, feet of water, meters of water, or any desired engineering units
- Multi pump alternation control
- Options Include
  - Lightning and secondary surge protectors
  - 4 relay expansion module
  - Meter copy programming cable
  - 4-20 mA analog output from meter
  - USB serial communication kit for configuring, monitoring and datalogging from a PC using DDMC MeterView software (available for download at [ametekpmt.com](http://ametekpmt.com))

### Applications

- Complete easy-to-use system – all in one package
- Variety of reliable stainless steel sensors
- Microprocessor-controlled digital display
- Setpoints and signal outputs for remote monitoring, recording and control
- Continuous measurement and display
- Simple installation, virtually no maintenance
- Low system pricing

Tel: 215-355-6900

To view a video of the Level Mate III visit: [www.ametekpmt.com](http://www.ametekpmt.com)

# Level Mate III

## Specifications: for model 575 as standard sensor, see specific datasheets for other sensor specs.

### Ranges:

- **Feet of Water:** 0 to 14, 0 to 35, 0 to 69, 0 to 138, 0 to 230, 0 to 345, 0 to 460, 0 to 690
- **Meters of Water:** 0 to 4, 0 to 10, 0 to 21, 0 to 42, 0 to 70, 0 to 105, 0 to 140, 0 to 210

### Transmitter Temperature Ranges:

- **Max. Operating:** -40° to 82°C (-40° to 180°F); media must not freeze
- **Compensated:** -5° to 55° C (23° to 130°F)
- **Temp. Effects:** Typical  $\pm 1\%$  output change for  $\pm 25^\circ$  C temp. change within compensated range when calibrated at 25°C
- **Accuracy:**  $\pm 0.25\%$  full scale (including linearity, hysteresis, repeatability) B.F.S.L.

### Transmitter Output:

- 4 to 20mADC, limited to 30 mADC

### Transmitter Power Supply:

- 24 VDC from meter

### Transmitter Electrical Connection:

- Attached #20 AWG polypropylene insulated and shielded conductors in a black polyurethane jacket. Unspliced lengths to 3000 ft. (1622 m)

### Meter Housing Construction:

- Fiberglass reinforced polyester

### Transmitter Cable Color Code:

- RED (+) excitation
- BLACK (-) excitation,
- GREEN (caseground).

### Transmitter Construction

- **Diaphragm:** Type 316L stainless steel
- **Housing Type:** 316 stainless steel
- **Nut/Washer Type:** 316 stainless steel
- **Cable Grommet:** Viton

### Meter Display:

- LED Display
- Upper Display: 0.60" (15mm) high
- Lower Display: 0.46" (12mm) high
- Both displays 6 Digits (-99999 to 99999)

### Meter Input Voltage:

- 85 to 265 VAC @ 50/60 Hz, 90-265 VDC, 20 W max

### Meter Ranges:

- Calibrated to transmitter range in psi, inches, feet, meters of water, or other desired engineering units -9999 to 99999.

### Meter Temperature Ranges

- Operating: -40° to 65° C (-40° to 150°F)
- Storage: -40° to 85°C (-40° to 185°F)

### Meter Output:

- Isolated 4-20 mA.
- While the output is nominally 4-20 mA, the signal will accurately accommodate under and over ranges from 1 to 23 mA.

### Meter Relay Outputs:

- N.O.
- Form C (SPDT) relays rated 3 A @ 30 VDC and 125 / 250 VAC resistive load.

**Specifications subject to change without notice.**

# Level Mate III

## Model Numbering

Base Model			
LM			
Sensor Type	Sensor Model Number	Display Range	
5	575SB006RLS	0 to 13.8ft (0 to 4.2m)	
	575SB015RLS	0 to 34.6ft (0 to 10.5m)	
	575SB030RLS	0 to 69.2ft (0 to 21.1m)	
	575SB060RLS	0 to 138.4ft (0 to 42.2m)	
	575SB100RLS	0 to 230.7ft (0 to 70.3m)	
	575SB0150RLS	0 to 346.0ft (0 to 105.4m)	
	575SB0200RLS	0 to 461.3ft (0 to 140.5m)	
	575SB0300RLS	0 to 692.0ft (0 to 211.0m)	
P	575PB006RLS	0 to 13.8ft (0 to 4.2m)	
	575PB015RLS	0 to 34.6ft (0 to 10.5m)	
	575PB030RLS	0 to 69.2ft (0 to 21.1m)	
	575PB060RLS	0 to 138.4ft (0 to 42.2m)	
	575PB100RLS	0 to 230.7ft (0 to 70.3m)	
	575PB0150RLS	0 to 346.0ft (0 to 105.4m)	
	575PB0200RLS	0 to 461.3ft (0 to 140.5m)	
	575PB0300RLS	0 to 692.0ft (0 to 211.0m)	
6	675PB006MLS	0 to 13.8ft (0 to 4.2m)	
	675PB015MLS	0 to 34.6ft (0 to 10.5m)	
	675PB030MLS	0 to 69.2ft (0 to 21.1m)	
3	375SB006RLSV	0 to 13.8ft (0 to 4.2m)	
	375SB015RLSV	0 to 34.6ft (0 to 10.5m)	
	375SB060RLSV	0 to 138.4ft (0 to 42.2m)	
	375SB0100RLSV	0 to 230.7ft (0 to 70.3m)	
S	SSTSB006NLSV	0 to 13.8ft (0 to 4.2m)	
	SSTSB015NLSV	0 to 34.6ft (0 to 10.5m)	
	SSTSB030NLSV	0 to 69.2ft (0 to 21.1m)	
	SSTSB060NLSV	0 to 138.4ft (0 to 42.2m)	
	SSTSB0100NLSV	0 to 230.7ft (0 to 70.3m)	
D	SDTSB006RLSV	0 to 13.8ft (0 to 4.2m)	
	SDTSB015RLSV	0 to 34.6ft (0 to 10.5m)	
	SDTSB030RLSV	0 to 69.2ft (0 to 21.1m)	
	SDTSB060RLSV	0 to 138.4ft (0 to 42.2m)	
	SDTSB0100RLSV	0 to 230.7ft (0 to 70.3m)	
	SDTSB0150RLSV	0 to 346.0ft (0 to 105.4m)	

Meter Output	other power & relay options available, consult factory
A	2 relays
B	2 relays, 4-20mA output (specify output & calibrated range)

DC Surge Protection	
0	No DC surge protection
1	Surge protection for signal line between meter and transmitter (LM912)
2	Surge protection for signal line between meter and customer equipment (LM912)
3	Surge protection for signal lines between meter & transmitter and meter and customer equipment (LM912 X 2)

AC Surge Protection	
0	No AC surge protection
1	115 VAC surge protection for input line to the meter (LM918)
2	230 VAC surge protection for input line to the meter (LM919)

LM 5 A 0 0

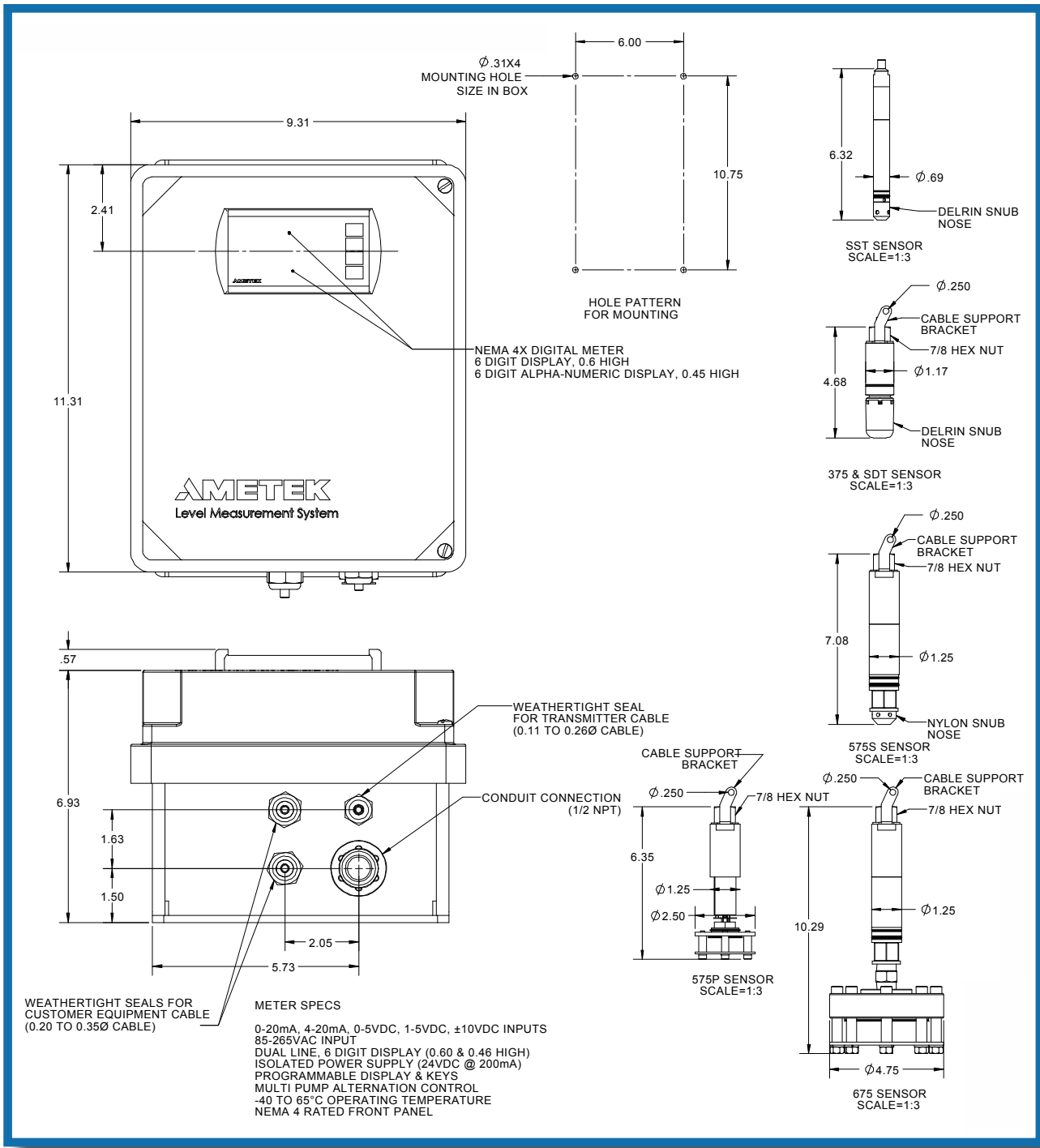
Accessories	Part Number
* Length of model 575 / 575P, standard, factory installed, non vent tube, polyurethane, waterproof cable (4 cond / 22AWG)	K515076
* Length of model 675 / 375 / SST, standard, factory installed, vent tube, polyurethane, waterproof cable (3 cond / 22AWG)	K515072
* Length of model SDT, standard, factory installed, non vented tube, polyurethane, waterproof cable (6 cond / 24 AWG)	K515136
Metal conduit connector for NEMA 4X weathertight housing (0.11 to 0.26 cable Ø range )	K554149
Cable strain relief cord grip for NEMA 4X weathertight housing (0.16 to 0.31 cable Ø range )	K554167
Cable strain relief cord grip for NEMA 4X weathertight housing (0.20 to 0.35 cable Ø range )	K554148
Surge protector for excitation & signal lines between meter and transmitter	LMA912
Surge protector for 115 VAC line to the meter	LMA918
Surge protector for 230 VAC line to the meter	LMA919
USB serial communications adaptor kit (for programming meter & software download)	K516131
Reusable desiccant for Level Mate box	K234432
8" desiccant for transmitter with vented cable	K234436
4 relay expansion module (see DDMC manual for details)	K740366
Meter copy cable (see DDMC manual for details)	K516132

\* Consult factory for other cable options

# Level Mate III

## Dimensions



820 Pennsylvania Boulevard • Feasterville, PA 19053 • U.S.A.  
 Tel: 215-355-6900 • Fax: 215-354-1802 • www.ametekpmt.com