

DREXELBROOK[®]

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

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

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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 20mA DC, limited to 30 mA DC

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.

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Model Numbering

Base Model	
LM	
Sensor Type	Sensor Model Number
5	575SB0006RLS
	575SB0015RLS
	575SB0030RLS
	575SB0060RLS
	575SB0100RLS
	575SB0150RLS
	575SB0200RLS
P	575PB0006RLS
	575PB0015RLS
	575PB0030RLS
	575PB0060RLS
	575PB0100RLS
	575PB0150RLS
	575PB0200RLS
6	675PB0006MLS
	675PB0015MLS
	675PB0030MLS
3	375SB0006RLSV
	375SB0015RLSV
	375SB0060RLSV
	375SB0150RLSV
S	SSTSB0006NLSV
	SSTSB0015NLSV
	SSTSB0030NLSV
	SSTSB0060NLSV
	SSTSB0100NLSV
D	SDTSB0006RLSV
	SDTSB0015RLSV
	SDTSB0030RLSV
	SDTSB0060RLSV
	SDTSB0100RLSV
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

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

* Consult factory for other cable options

Part Number

- K515076
- K515072
- K515136
- K554149
- K554167
- K554148
- LMA912
- LMA918
- LMA919
- K516131
- K234432
- K234436
- K740366
- K516132

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Dimensions

