

Level MateTM II

Level Measurement System



Description

The AMETEK LEVEL MATE II Level System uses a Model 575 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 II 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 dual-programmable setpoints permit high-high, low-low, or high-low control with adjustable

hysteresis. 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 II 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 and 575P)
- · 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
- Selectable setup via 2 front keys or via a PC with optional Infrared LED pen
- · Programmable dual setpoints
- Meter can be calibrated for inches of water, feet of water, meters of water, or any desired engineering units
- Easily programmed to read "Drawdown"
- Compact NEMA 4X weathertight housing
- Large, easy-to-read 4 digit LED display
- Optional lightning and secondary surge protection

Advantages

- 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

• 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 (Model 575):
 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 ±1% output change for ±25° C temp. change within compensated range when calibrated at 25°C

Accuracy: ±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 with a transparent polycarbonate hinged cover

- Transmitter Cable Color Code: RED (+) excitation, BLACK (-) excitation, GREEN (caseground).
- Transmitter Construction (Model 575)

Diaphragm: Type 316L stainless steel Housing Type: 316 stainless steel Nut/Washer Type: 316 stainless steel

Cable Grommet: Viton

See other data sheets for other models.

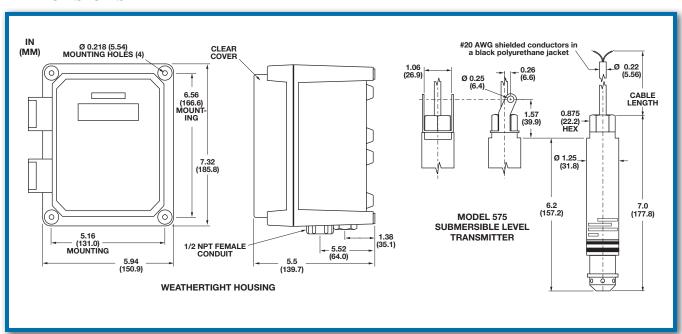
- Meter Display: 4 digit, 0.56 inch high (13 mm), LED display
- Meter Input Voltage: 90 to 264 VAC at 47 to 70 Hz
- Meter Power Consumption: 4 VA
- Meter Ranges: Calibrated to transmitter range in psi, inches, feet, meters of water, or other desired engineering units -1999 to 9999.
- Meter Temperature Ranges Operating: -10° to 60° C (14° to 140°F)

Storage: -40° to 85°C (-40° to 185°F)

- Meter Output: 0 to 20 mA, 4 to 20 mA or 0 to 10 V, 1 to 5 V selectable. Adjustable over a user-defined part of the reading via keypad setup.
- Meter Relay Outputs: N.O.; 250 VAC at 5A, 24 VAC at 1A

Specifications subject to change without notice

Dimensions



Model Numbering:

•	LMT L	evel Mate II					
	LMT	Level	Level measurement system				
	•	● Transmitter with cable¹					
		100 200 300 400 500 600 700 800	200 0 to 35 ft. (0 to 10.5 m), 75 ft. (24.3 m) cable 300 0 to 69 ft. (0 to 21.1 m), 100 ft. (32.4 m) cable 400 0 to 138 ft. (0 to 42.2 m), 200 ft. (64.9 m) cable 500 0 to 230 ft. (0 to 70.3 m), 300 ft. (97.5 m) cable 600 0 to 345 ft. (0 to 105.4 m), 425 ft. (137.8 m) cable 700 0 to 460 ft. (0 to 140.5 m), 550 ft. (178.4 m) cable				
		•	Meter output				
			A B C	Two Two	relays relays analog output (specify output and calibrated range²) relays, RS232		
			9	Ligh	tning protection on signal/output lines		
				0 1 2	No lightning protection Lightning and surge protector (1) for excitation/signal line only between meter and level transmitter. Lightning and surge protector (1) for analog output line		
				3	only between meter and receiving instruments. Lightning and surge protectors (2) for excitation/signal and analog output lines.		
					Lightning protection on AC power line		
					 No lightning protection for input line to meter Lightning and surge protector for 115 VAC input line to the meter Lightning and surge protector for 230 VAC input line to the meter 		
					(1) Additional length of factory installed cable is available. Specify part #K515076 and additional length (feet) of cable required.		
\	\	\	· \	′ \	(2) Analog output from Type B meter will be set up and calibrated 4/20 mA for zero to full scale unless otherwise specified.		
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Accessories & Replacement Parts						
K515076	Additional factory-installed waterproof cable					
K554149	Metal conduit connector for NEMA 4x weathertight housing					
K554127	Cable strain relief cord grip for NEMA 4x weathertight housing 0.11 in. to 0.26 in.					
K574533	Analog output circuit board					
K574534	RS232 output circuit board					
K554148	Cable strain relief cord grip for NEMA 4x weathertight housing 0.20 in. to 0.35 in.					
LMA912	Lightning and surge protector for excitation and signal lines between meter and milliamp transmitter					
LMA918	Lightning and surge protector for 115 VAC input line to the meter.					
LMA919	Lightning and surge protector for 230 VAC input line to the meter					

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