ME995-7G - 99.99 LITRES BATCH CONTROLLER

FEATURES

- * 4 Digit LED display.
- * Counts in 0.01 litre increments upto 99.99
- * 4 x LED status indicators.
- * Preact function and preset maximum limit.
- * Missing pulse detection 50/100 Hz selection.
- * 5-pin PLC and computer interface.
- * Side 1-2 product and central computer hold function.
- * Interchangeable with earlier ME188 models and suits MES20/KGG20/MEK20 20mm Admix meters.



The **ME995-7G** 99.99 LITRES panel mount preset Batch Controller incorporates a range of features that make it suitable for batching of up to 2 admixture products in sequential order, by manual or computer-controlled functions. This model uses the same 10-pin receptacle plug as previous ME995 or ME188 controllers (with 1mls/1pulse input), making changeover a simple plug-out/plug-in procedure.

The ME995-7G controller can easily be interfaced with PLC/Computer systems via the rear 5-pin plug, by connecting to the **ME5IC interface card**, thus incorporating the controller's safety features and providing a backup batch facility. With 4 rotary selector switches, batch quantities are easily selected. The batch operator can also refer to the selector switches to easily read the quantity set to be batched. Command operations are by user-friendly toggle switches, and four LEDs indicate operational status conditions.

Batch counting and selection is in increments of 0.01 Litres. The LED display (seven-segment digits) counts upward, to a maximum of 99.99 Litres (usually limited by factory to 90.00 litres via internal adjustment). The Batch Controller operates from 220 - 260 vac supply as standard, or optionally from 110vac or 12-24 VDC. Contact output drive (220-260vac standard) is via two relays. Standard controllers are in panel mount form, and metal housing boxes or IP65 ABS wall mount enclosures are also available.

The ME995-7G controller is designed for compatibility with MES20, MEA15, MEK20 and KGG20 1 millilitre per 1 pulse output flowmeters.

SAFETY FEATURES

- * CONTACT DRIVE (CD) LED: indicates voltage contact output drive when pump or solenoid is activated.
- * FLOW (FL) LED: monitors and indicates incoming pulses from the field flowmeter, or if test is used.
- * PULSE FAIL (PF) LED: activates if no pulses arrive within the first 1.5 seconds (internally modifyable) of the start time period, and then if pulses are interrupted or are intermittant during the batch cycle and fall below the set pulse scanning time (50 or 100Hz, 50 or 100 mls minimum flowrate selectable via switch). Subsequent to pulse fail, there is automatic shutoff of voltage contact drive.
- * LIMIT LED (LM): illuminates if the batch cycle reaches the internally-set limit maximum, or if circuit diagnostics detect an internal chip problem. Automatic shutoff of voltage contract drive occurs.
- * Internal audible ALARM: sounds momentarily during completion of batch cycle, and continuously if PULSE FAIL or LIMIT LEDs are activated or if there is overflow of 1 Litre past the selected batch quantity.

Warning

If CONTACT (CD) or FLOW (FL) LED indicators are on, but controller is not counting, then discontinue use and call for service.

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OPERATING INSTRUCTIONS

- * To operate, push each of the toggle switches ON-OFF, START-STOP and TEST-RESET to the desired function.
- * Switch the power ON to unit. Select the required batch quantity using the rotary numbered dial selector switches.
- * Select the desired chemical required via the two way product selector switch marked 1-C-2: 1 for product one or 2 for product two.
- * RESET unit. The 4 digit LED displays zero, and all LED indicators and alarm sounds are off. The unit is ready for batching.
- * START unit. It activates the voltage contact drive. CONTACT DRIVE LED illuminates indicating pump or solenoid is energised. FLOW LED then illuminates, indicating pulsing and operation of flowmeter. The LED digits begin counting upward in 00.01 Litre increments toward the selected batch quantity.
- * Upon digits reaching the selected batch quantity, the alarm sounds (short beep) indicating batch completion; CONTACT DRIVE and FLOW LEDs turn off. The LED display and the selected batch quantity should correspond. If digits overshoot target, use PREACT (inflight, freefall) overflow deduct dials (located at rear of controller) to scale back the difference.
- * To interrupt unit before completion of batch, push STOP toggle, and digit counting then stops. Push START toggle to resume or complete batch cycle.
- * TEST toggle is used to test digit counting, switch contacts, alarm conditions or generate output pulses for computer interfacing. Test does not activate the pump or solenoid.

PLC/Computer control

- For PLC/Computer control, switch product selector 1-C-2 to central position 'C'. Computer will then control batches.
- Computer/PLC provides momentary volt-free start command to start chemical 1.
- To start Chemical 2, provide a contact closure across the pins of the 2-pin rear plug (side 2 is then selected). Then Computer/PLC provides momentary volt-free start command to start chemical 2. Note: Only one chemical can be batched at one time.
- The same volt-free contact is used to stop and reset the controller. The pulse output value is 1 pulse per 1 millilitre 12VDC sinkingmaximum current of 8mA between pulse and 0V.
- ME5IC interface cards are required for start/stop/reset commands and pulse output isolation when controlled by PLC/computer systems with other voltages e.g. Jonel/Eagle outputs with 110vac/240vac or with inputs of 5VDC or 110/240vac. Refer to ME5IC Data Sheet.









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PREACT: Calibrating inflight overflow deduct is via two rotary knobs. Simply set the value according to the overflow indicated on the LED display (which is a true indication of the overflow quantity).



e.g. if knobs set to **HUNDREDS = 5 and TENS = 2**, then PREACT = (5 x 100) + (2 x 10) = 500 + 20 **= 520 ml**

SPECIFICATIONS

Power supply	220-260vac 50-60Hz (optional 110 vac or 12-24 VE	DC).	
Output to flowmeters	12 VDC upto 100mA for two 20mm flowmeters (MES20/MEK20),		
	Voltage is supplied individually when switched from	side 1 to 2.	
Relay outputs	Max. 240vac, 30 VDC 1 Amp (Contactor must be in	nstalled when driving pumps).	
Frequency input	2 KHz maximum, NPN input.		
Display	4 digits, 7 segment LED, to 99.99 litres (14mm H).	Power output for	
Connection	10 pin Weidmuller mating plug and socket.	pump motors	
Fuse	1 Amp (5 x 20mm case).		
Mounting	Panel mount.		7
Batch selection	4x rotary select switches.	• ME CONTROLLER	
Batch commands	Push toggle switches, 3-way switch: for side 1-2 two	 	
	product / two flowmeter batching, central computer hold	SS <u>≯</u> ∠₽₽ <u></u> \$\$ <u></u> ₽	
	position for computer control via 2-pin plug.	NT. 1 240V	
	5pin interface plug for computer control VIa MESIC.		0
Preact function	00.01 to 00.99 litres selection.	FUSE 1A O V (shielded)	
PulseFail	50Hz (50 mls/sec minimum flowrate).	MILLEITRES PREACT	
Instrument housing	ABS hi-impact mould.		
External dimensions	206 L, 130 H, 95 D mm.	and a second sec	
Panel cutout	190 L, 122 H mm.		
Weight	1 kg		

For all wiring and electrical connection information, refer to the relevant wiring diagrams. *Due to continuous product development, specifications may change without notice.*

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