

ME995-4 LITRES 99.990 PRESET BATCH CONTROLLER

FEATURES

- 5 Digit LED display
- Counts in 0.010 Litres (10 millilitres) increments upto 90.000
- 4 x LED status indicators
- Preact function
- Preset maximum limit
- Missing pulse detection
- Optional PLC and computer interface
- Interchangeable with earlier ME188 models



The ME995-4 LITRES 99.990 preset batch controller with added features complies with Quality Assurance requirements for the concrete additives/water industry. It incorporates a standard preact (overflow deduct) feature, and a contact drive LED indicator.

The ME995-4 controller can easily be interfaced with PLCs, thus incorporating its safety features and providing a backup batch facility and/or operate as a set point slave controller.

With 5 rotary selector switches and 1 fixed knob, batch quantities are easily selected. The batch operator can also visually refer to the numbered selector dials for the batch quantity selected. 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 (10 millilitres), since the first display digit and selector knob remain zeroed. The seven segment LEDs count upward, to a maximum of 90.000 litres (unless the over-ride limit is set to a lower fixed value).

The ME995-1 controller operates from standard 220 - 260 vac (other voltage options available). Contact output drive is via one (or optional two) relays. Controllers are in panel mount form and a range of field enclosures are available, in powder coated metal housing box or IP65 ABS wall mount enclosure.

The ME995-4 controller is compatible only with MES20, AMM15, AMM20 and any 1 millilitre per 1 pulse output flowmeters.

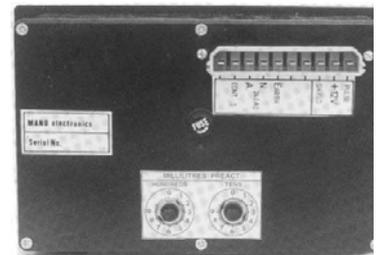
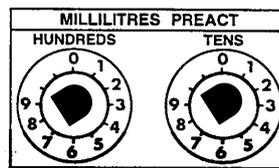
SAFETY FEATURES

- * CONTACT DRIVE (CD) LED indicates voltage contact output drive when pump or solenoid are activated.
- * FLOW (FL) LED monitors and indicates incoming pulses from field flowmeter, or if TEST is used.
- * PULSE FAIL (PF) LED activates if no pulses arrive within 1.5 seconds (variable) initial start time period, or if pulses are interrupted or intermittent during the batch cycle and fall below set (variable) pulse scanning time (typical 30Hz). The voltage contact drive is subsequently automatically shut off.
- * LIMIT LED (LM) illuminates if the batch cycle reaches the locked internal limit maximum, or if circuit diagnostics detect an internal chip problem. Automatic shutoff of voltage contract drive subsequently occurs.
- * Internal audible ALARM sounds momentarily during completion of batch cycle, and continuously if PULSE FAIL or LIMIT LEDs are activated, or if overflow runs 1000 millilitres (variable) past the selected batch quantity.

Warning: If CONTACT or FLOW LED indicators are on, but controller not counting, discontinue use and call for service.

- * 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 required batch quantity using rotary number dial selector switches.
- * RESET unit. The display shows zero, all LED indicators and alarm sounds turn off. The unit is ready for batching.
- * START unit; activates voltage contact drive. CONTACT DRIVE LED illuminates indicating pump or solenoid are energised, followed by FLOW LED illuminating, indicating pulsing and operation of flowmeter. The digits begin counting upward towards the selected batch quantity.
- * Upon digits reaching the selected batch quantity, the alarm sounds (short beep) indicating completion of batch; CONTACT DRIVE and FLOW LEDs turn off. LED display digits and selected batch quantity should correspond. If LED digits overshoot target, use Preact (inflight,freefall) overflow deduct dials (located at rear of controller unit) to scale back difference.
- * To interrupt unit before completion of batch, push STOP toggle; digit counting then stops. Push START toggle to resume 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 pump or solenoid.

PREACT: Calibrating inflight overflow deduct is via two rotary knobs marked "tens" and "hundreds" of millilitres located at rear. Simply set to same reading as overflow value indicated by the LED display (which is a true indication of overflow quantity).



SPECIFICATIONS

Output to flowmeter	12 VDC upto 100mA	Power supply	220-260 vac (optional 24vac, 110 vac or 12-24 VDC)
Mounting	Panel mount	Batch selection	Visual rotary select switches
Relay outputs	Max. 240 VAC, 30 VDC 1 Amp	Batch commands	Push toggle switches
Frequency input	5 KHz. Maximum. NPN input (fixed 1pulse/1ml. input)	Instrument housing	ABS hi-impact mould
Display	5 digits, 7 segment LED (14mm H)	External dimensions	206 L, 130 H, 95 D mm
Connection	10 pin mating plug & socket	Panel cutout	190 L, 122 H mm
Fuse	1 Amp (5 x 20mm case)	Weight	1 kg

- OPTIONS:**
- Your company name branded on face
 - PLC/computer interface options
 - Pulse output and alarm output options
 - Other control output options
 - Housing enclosures

Due to continuous product development, specifications are subject to change without notice.

ME995-4 Batch Controller, 240 vac supply and output, with 12 VDC power to flowmeter (standard).

Options:

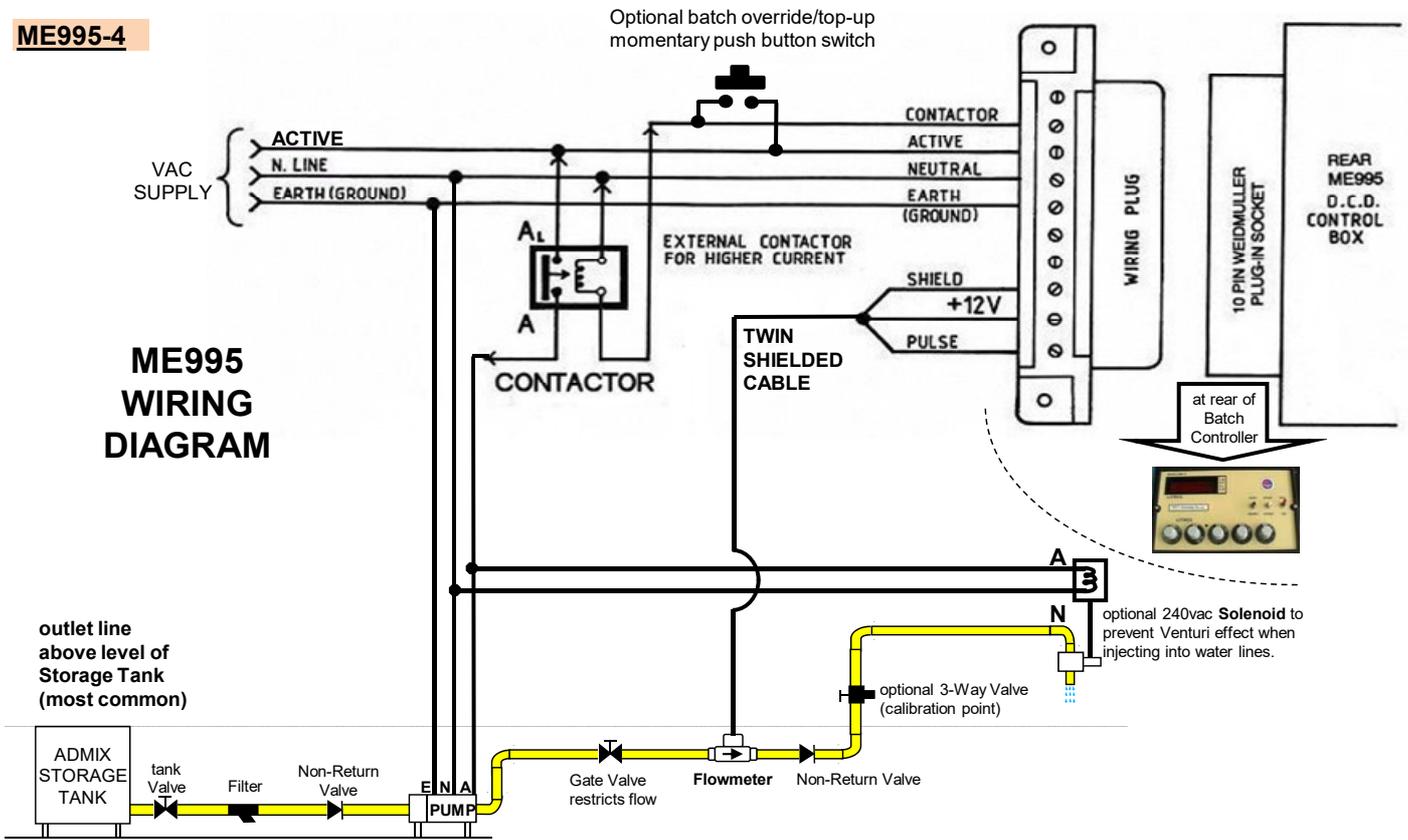
Code	Description	Code	Description
-DC-OC	12-24 VDC power supply input/output drive, with Open Contact output drive (5 A) which is via external voltages	-5P	5-pin computer interface plug (start, stop, reset, pulse,+12V) for use with ME5IC interface card for Jonel, COMMANDbatch etc PLCs.
-24VAC	24 vac powered and output.	-MC	4-pin PLC/Computer Command (Start/Stop/Reset) interface plug.
-110	110 vac powered and output.	-MC2	<ul style="list-style-type: none"> • 2-pin plug for scaled 4N33 open collector pulse output (1 pulse/ 1 ml). • Includes 4-pin external command (Start/Stop/Reset) interface plug.
-Sn	Combined with MC2 or MC2-C, for 10, 20, 50 or 100 ml / pulse output (where 'n' is the pulse value required i.e. 10, 20, 50 or 100).	-MC2-C	Compubatch interface: 2-pin plug with OPTO 4N33 pulse output. Includes 4-pin external command (Start/Stop/Reset) plug.
-OC	Open Contact pump/valve output, for use with any driving voltage (maximum 5A current).	-SSRBC	External command: Start/Stop/Reset, for connection to HB2500-SSR housing box, or for remote control facility.
-A0	Contact output: alarm/batch-complete voltage relay or logic state	-S12	switch: two product changeover output drive. Allows 2 flowmeter-inputs/pump-drives.

e.g. "ME995-4" is the standard Batch Controller, 240vac powered, without any of the options, whereas "ME995-4-MC2" is an ME995-4 Batch Controller with a scaled open collector pulse output, and a Start/Stop/Reset computer interface.

HOUSING ENCLOSURES

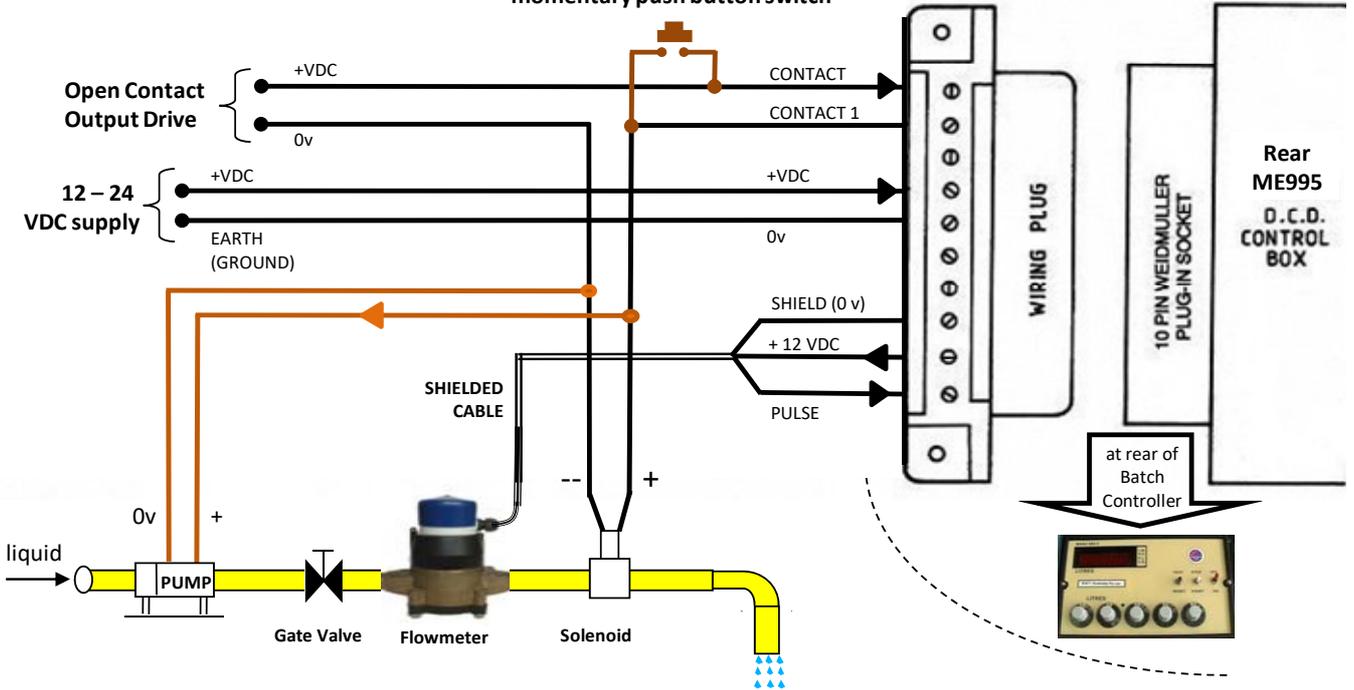
SHB	Single enclosure. Powder coated metal.		
SHB1	Single enclosure. Powder coated metal. Wired with 240vac contactor (for 1 hp pump), plug-in 240 vac pump outlet and plug.	<i>SHB</i>	<i>SHB1</i>
SHB1-T	as for SHB1 above, but with terminal wiring entry connection instead of 240vac pump outlet		
DHB	Dual enclosure. Powder coated metal.		
DHB2	Dual enclosure. Powder coated metal. Wired with 2x 240vac contactors, 2x pump outlets, and 2x plugs for Batch Controllers.	<i>DHB</i>	<i>DHB2</i>
DHB2-T	as for DHB2, but with terminal wiring entry connections (instead of mains lead and pump outlets).		
HB2510	IP65 waterproof single enclosure.		<i>HB2510-SSR IP65 enclosure shown with ME3000 Batch Controller</i>
-SSR	External commands: Start/Stop/Reset. IP65 rated (option fitted to HB2510).		

Optional batch override/top-up momentary push button switch



Standard AC Wiring for Pump and optional Solenoid

Optional batch override/top-up momentary push button switch



Wiring for DC-powered Batch Controller with DC Open Contact Output Drive to Pump and/or Solenoid

NOTE: if current draw of solenoid is > 0.5 Amps, or if using a pump, then install a contactor