

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 and MEA15 1 millilitre per 1 pulse output flowmeters.

SAFETY FEATURES

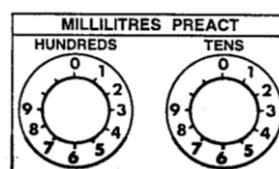
- * CONTACT DRIVE (CD) LED indicates voltage contact output drive when pump or solenoid are activated.
- * FLOW (FL) LED monitors and indicates incoming pulses from field flowmeter, or if TEST is used.
- * PULSE FAIL (PF) LED activates if no pulses arrive within 1.5 seconds (variable) initial start time 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.

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 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 PRACT (in flight, 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.

PRACT: Calibrating in flight 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 LED display (which is a true indication of overflow quantity).



SPECIFICATIONS

| | | | |
|----------------------------|----------------------------------|----------------------------|--|
| Output to flowmeter | 12 VDC upto 100mA | Power supply | 220-260 vac (optional 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 | 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.

ORDER CODES




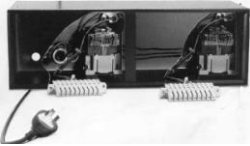

ME995-4 Batch Controller, 240 vac supply and output, with 12 VDC power to flowmeter (standard).

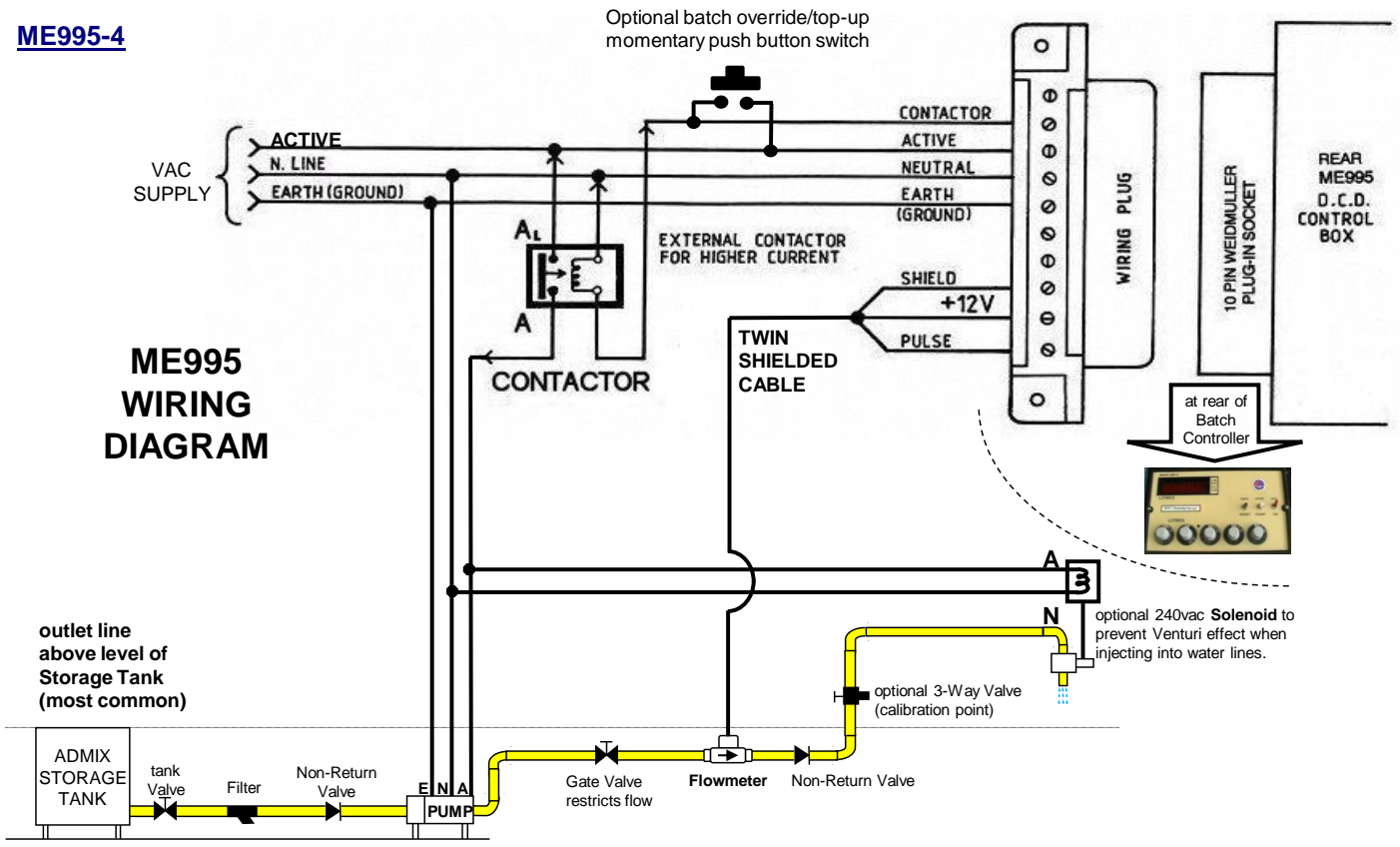
Options:

| 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/Litre). • 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. |

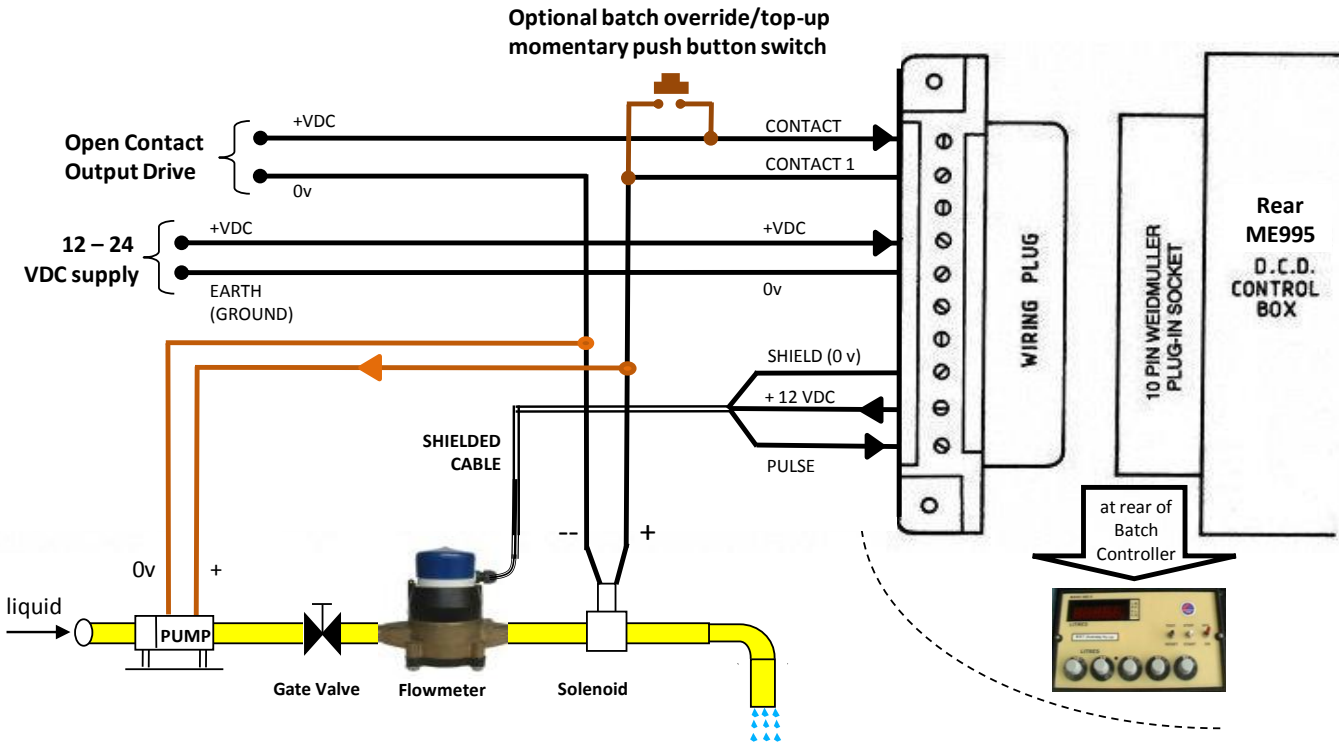
e.g. "ME995-4" is the standard Batch Controller, 240vac powered, without any of the options, whereas "ME995-4-MC2" is an ME995-4 Batch Controller with a scaled open collector pulse output, and a Start/Stop/Reset computer interface.

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). | | |



Standard AC Wiring for Pump and optional Solenoid



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