

ME995-2 VARIABLE DOSERATE MILLILITRES Batch Controller (+ ME995-2H High Doserate version)

The **ME995-2** and **ME995-2H** VARIABLE DOSERATE MILLILITRES

FEATURES

- * Variable doserate selection in cubic metres
- * Display indication in total millilitres
- * LED display with status indicators
- * Preact function
- * Preset maximum limit
- * Missing pulse detection
- * **Optional PLC/computer interface**



CUBIC METRES preset batch controllers, are designed and used for dosing admixture to comply with quality assurance requirements for the concrete additives industry. It incorporates preact (overflow deduct) feature, allowing speed batching of admixtures with relatively no overruns.

The display indication is in total millilitres dispensed according to doserate and cubic metre quantity selected. With its rotary selector knobs and push toggle switches, command operations are user friendly. The batch operator has important visual batch quantity as selected, shown on the numbered selector dials.

With the ME995-2 models being of the same dimensions and using the 10-pin Weidmuller receptacle plug as previous models, replacement or upgrade is instant, with no rewiring required. Interfacing the ME995-2 models with PLCs is an easy procedure (with no special protocols, optionally fitted to all models), incorporating the safety features of the Manu controller and a backup preset batch facility.

The **ME995-2** calculates selected dosage rates for the batch operator. The two or three top selector knobs are for dosage selection of liquid admixture to be dispensed, marked DOSAGE MLS x 10 / CUBIC METRE. A maximum doserate of 99 x 10 mls per Cubic Metre is selectable. The two bottom selectors are used for selection of CUBIC METRE concrete quantity. Maximum load is 9.0 CUBIC METRES. The LED display digits count upwards and displays the total millilitres of dosed liquid, whilst dispensing the selected dosage rate per cubic metre ratio to the target setting. Upon completion of the batch, the alarm will sound momentarily.

A batch example would be: Selected dosage rate **22** x 10 mls/Cubic Metre
Selected Cubic Metre cement load of 5.5 cubic metres
Actual admixture dose volume received 220 mls. x 5.5 = 1210 millilitres.

The **ME995-2H** model calculates and dispenses in the same way, except a higher doserate is selectable via the extra doserate selector knob fitted. A maximum of 900 x 10 mls/Cubic Metre can be selected.

ME995-2 models are ideal for computer controlled plants as computer and ManuFlo controllers are compatible.

The controller operates from a standard 220 - 260 vac (or optional 24vac, 110vac or 12-24VDC) voltage supply. Contact output drive is via one or optional two relays. Standard controllers are in panel mount format or optionally housed in a metal housing box.

(This controller can only be used with ManuFlo MES20, MEA15, AMM & MM - 1 millilitre per 1 pulse flowmeters)

SAFETY FEATURES

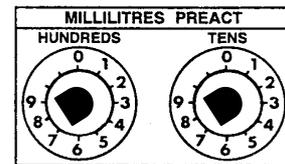
ME995-2 (-2H)

- * 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 are received within 1.5 seconds (variable) initial start time period, or if pulses are interrupted or intermittent during batch cycle and fall below (variable) pulse scanning time (typical 30Hz). The voltage contact drive to pump or solenoid is subsequently automatically shut off.
 - * LIMIT (LM) LED illuminates if the batch cycle reaches preset internal maximum limit, or if circuit diagnostics detect internal CMOS problem. The automatic voltage contact drive is subsequently shutoff.
 - * Audible ALARM sounds momentarily upon completion of batch cycle, and continuously if PULSE FAIL or LIMIT LEDs are activated or if overflow exceeds 1000 millilitres past selected batch quantity.
- Warning: If CD or FL LED indicators are on, but controller is not counting, discontinue use and call for service.**

OPERATING INSTRUCTIONS

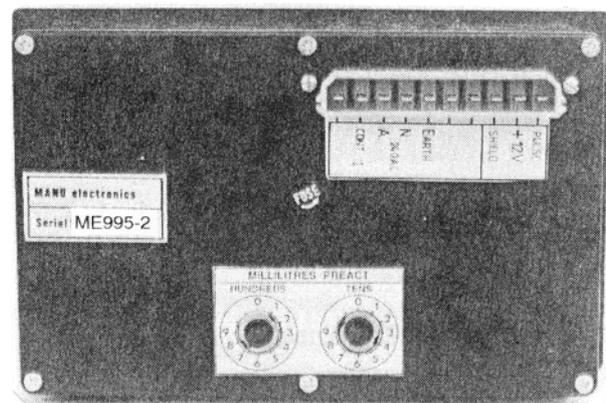
- * To operate, push (up or down) toggle switches marked ON-OFF, START-STOP, TEST-RESET to desired function.
- * Switch power ON to unit. Select desired dose rate and batch quantity using the rotary numbered selector switches.
- * RESET unit. Display shows zero, and all LED indicators and alarm sounds turn off. Unit is ready for batching.
- * START unit; voltage contact drive activates. CONTACT DRIVE LED goes on, indicating energised pump or solenoid, followed by FLOW LED illuminating, indicating pulsing and operation of flowmeter. The display digits begin counting upward in total millilitres of dose.
- * Upon display digits reaching selected batch quantity, alarm sounds (short beep) indicating completion of batch; CONTACT DRIVE and FLOW LEDs turn off. The display digits should correspond to the total dose required for the batch quantity according to the selected dose rate. If display digits overshoot target, use PREACT (inflight) overflow deduct dials (located at rear of controller) to set preact value.
- * To interrupt unit before completion of batch, push STOP toggle. Push START toggle to resume batch.
- * The TEST toggle is used to test digit counting, switch contacts, alarm conditions or generate output pulses for computer interface testing. Test does not activate the pump or solenoid.

ME995-2 PREACT: Calibrating inflight overflow is performed by two rotary knobs marked "tens" and "hundreds" of millilitres located at rear. Simply set to same overflow value as indicated by the LED display (which is a true indication of quantity received), or to the same overflow quantity as collected in your calibration verification vessel. The preact feature is ideal in situations where speed batching is required.



SPECIFICATIONS

Power supply	220-260 vac (optional 110 vac or 12-24 VDC) 50-60Hz
Output to flowmeter	12 VDC upto 100mA
Relay outputs	Max. 240 VAC, 30 VDC 1 Amp
Frequency input	5 KHz. max. NPN input (fixed for 1ml./1pulse flowmeters)
Display	5 digits, 7 segment LED (14mm H)
Connection	10 pin mating plug and socket
Fuse	1 Amp. (5 x 20mm case)
Mounting	Panel mount (2 screws)
Batch selection	Visual rotary select switches
Batch commands	Push lever toggle switches
Instrument housing	ABS hi-impact mould case
External dimensions	206 L, 130 H, 90 D mm
Panel cutout	190 L, 122 H mm
Weight	1 kg.



Note: Controller can be branded with your company name.

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

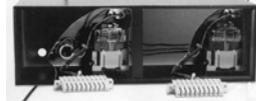
ME995-2 Batch Controller, 240 vac supply and output, with 12 VDC power to flowmeter (standard).

Options:

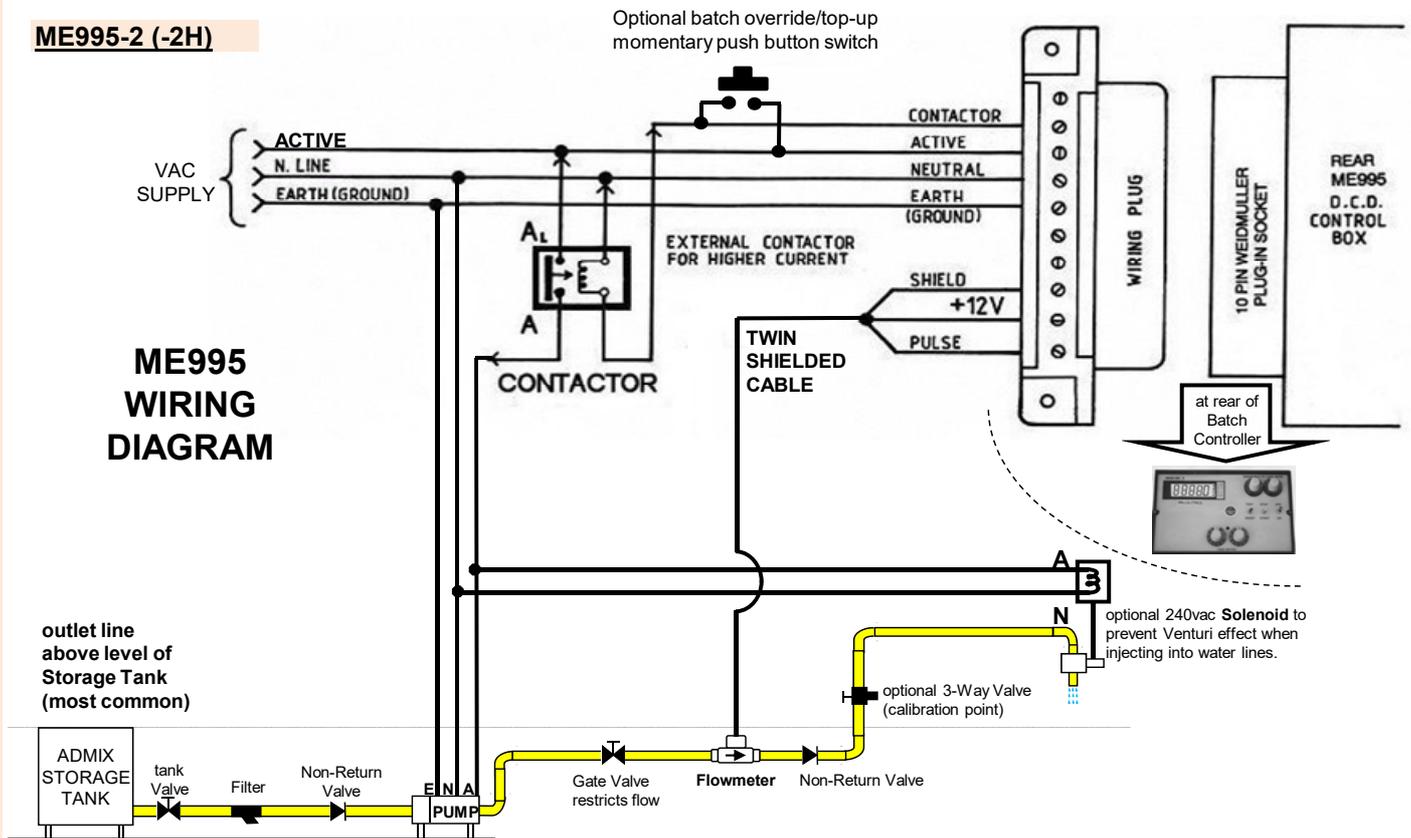
Code	Description	Code	Description
-DC-OC	12-24 VDC power supply input/output drive, with Open Contact output drive (5 A) which is via external voltages	-5P	5-pin computer interface plug (start, stop, reset, pulse,+12V) for use with ME5IC interface card for JoneI, COMMANDbatch etc PLCs.
-24VAC	24 vac 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. "ME995-2" is the standard Batch Controller, 240vac powered, without any of the options, whereas "ME995-2-MC2" is an ME995-2 Batch Controller with a scaled open collector pulse output, and a Start/Stop/Reset computer interface.

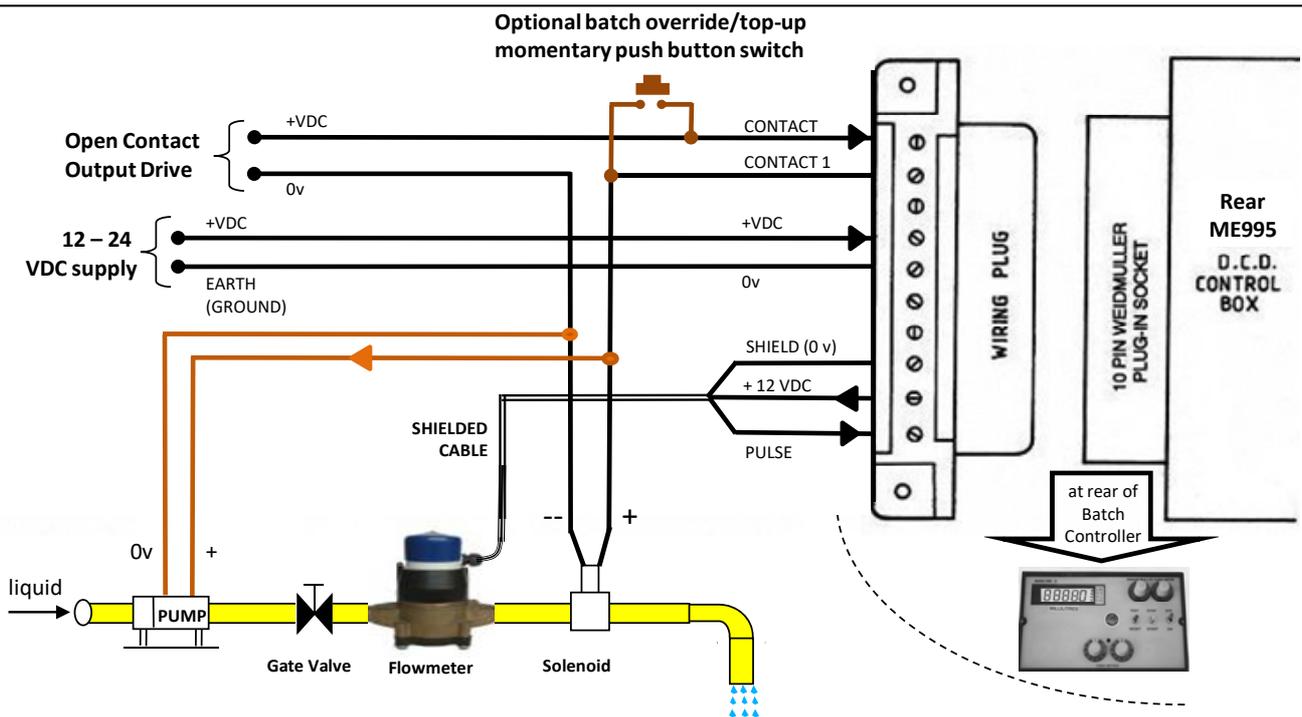
HOUSING ENCLOSURES

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).		

ME995-2 (-2H)



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