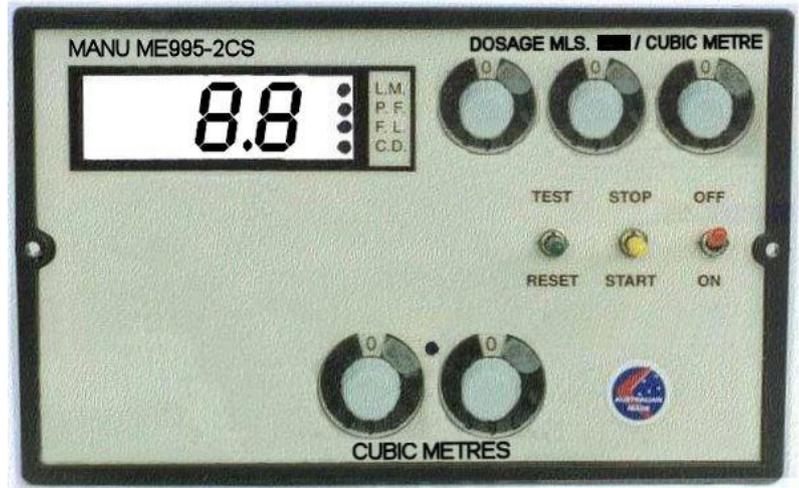


ME995-2CS VARIABLE DOSERATE PRESET CONTROLLER

(Direct: MLS / CUBIC METRE m3 Dosage version)

FEATURES

- * Variable doserate selection in direct Millilitres / Cubic Metre
- * Display indication in selected predosed cubic metres of concrete
- * LED display with status indicators
- * Preact function in Cubic Metres
- * Preset maximum limit
- * Missing pulse detection
- * Optional PLC/computer interface
- * Interchangeable with earlier ME188 models



The **ME995-2CS** VARIABLE DOSERATE CUBIC METRES preset batch controllers comply with quality assurance requirements for the concrete additives industry. They incorporate a preact (overflow deduct in CUBIC METRES) feature, allowing speed batching of admixtures with near no overrun.

The display counting is indicated in total Cubic Metres load selected, and dispensed at the selected MLS doserate per cubic metre. With its rotary selector knobs and push toggle switches, command operations are user friendly. The batch operator has important visual indication of the batch quantity selected, as shown on the numbered selector dials.

With the **ME995-2CS** being of the same dimensions and using the 10-pin Weidmuller receptacle plug as previous models, replacement or upgrade is instant, with no re-wiring required. Interfacing the ME995-2C with PLCs is an easy procedure, to incorporate the safety features of the Manu controller which is also effectively a backup preset batch facility.

The **ME995-2CS** calculates selected dosage rates for the batch operator. The three top selector knobs are for dosage selection of liquid admixture to be dispensed, marked DOSAGE MLS / CUBIC METRE. A maximum doserate of 990 millilitres per Cubic Metre is selectable (Note: The first selector knob is stationary and is locked at zero (0). The two bottom selectors are used for selection of CUBIC METRE concrete quantity. Maximum load is 9.0 CUBIC METRES (minimum is 0.1). The LED display digits count upward to the selected load in cubic metres, while dispensing the selected dosage rate ratio.

WARNING: With the **ME995-2CS** model dosage is selected in direct Millilitres (MLS) as opposed to the standard ME995-2C where the dosage is selected in Millilitres (MLS) x 10 mls /Cubic Metre.

A batch example would be:

- Selected dosage rate **250 mls/cubic metre**
- Selected Cubic metre cement load of **2.0 cubic metres**
- Actual admixture volume received 250 mls x 2.0 = 500 millilitres.
- Display counts upward in 0.1 Cubic metre increments to set point of final 2.0

The controller operates from a standard 220 - 260 vac (or optional 24ac, 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.

These controllers can only be used with Manu MES20, MEA15, 1 millilitre per 1 pulse flowmeters.

SAFETY FEATURES

ME995-2CS

- * 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) with subsequent automatic shutoff of voltage contact drive to pump or solenoid.
- * LIMIT (LM) LED illuminates if batch cycle reaches preset internal maximum limit, or if circuit diagnostics detect internal CMOS problem, with subsequent automatic voltage contact drive shutoff.
- * Audible ALARM sounds momentarily upon completion of batch cycle, and continuous 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.

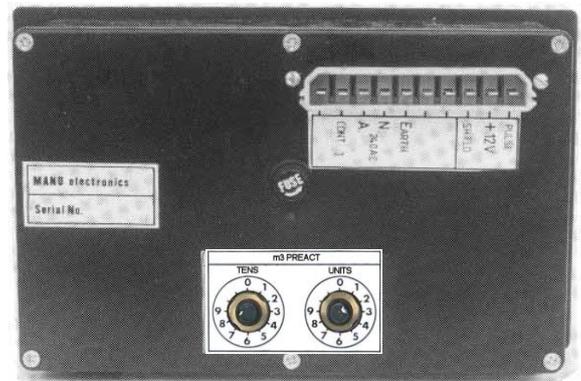
OPERATING INSTRUCTIONS

- * 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 doserate and batch quantity using the rotary numbered selector switches.
- * RESET unit. Display digits zero and all LED indicators and alarm sounds turn off. Unit is ready for batching.
- * START unit; voltage contact drive activates. CONTACT DRIVE LED on indicates energised pump or solenoid, followed by FLOW LED illuminating, indicating pulsing and operation of flowmeter. The digits begin counting upward towards the selected batch quantity.
- * Upon display digits reaching selected batch quantity, alarm sounds (short beep) indicating completion of batch; CONTACT DRIVE and FLOW LEDs turn off. Display digits and selected batch quantity should correspond. If display digits overshoot target, use PRACT (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 or complete batch.
- * TEST toggle is used to test digit counting, switch contacts, alarm conditions or generate output pulses for computer interface testing. TEST does not activate pump or solenoid.

ME995-2CS PRACT: With this model, the final batch display will indicate total cubic metres. A calculation must be performed to convert the overrun displayed in cubic metres to actual millilitres quantity for selection of preact knobs. For example, doserate was 250 ml/Cubic Metre, and the total cubic metre load selected was 2.0. The display will count up to the 2.0 cubic metres selected, batching the selected doserate ratio. But say the display overrun to 2.1 cubic metres (0.1 cubic metres over). Therefore, the calculation is: $m^3 \text{ preact} \times \text{TENS} = 0, \text{ UNITS} = 1$.

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 input 1ml/1pulse from MES20 meters only)
Display	2 or 5 digits, 7 segment LED (14mm H)
Connection	10-pin Weidmuller mating plug & 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



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

ORDER CODES

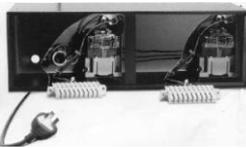
ME995-2CS Batch Controller, 240 vac supply and output, with 12 VDC power to flowmeter (standard).

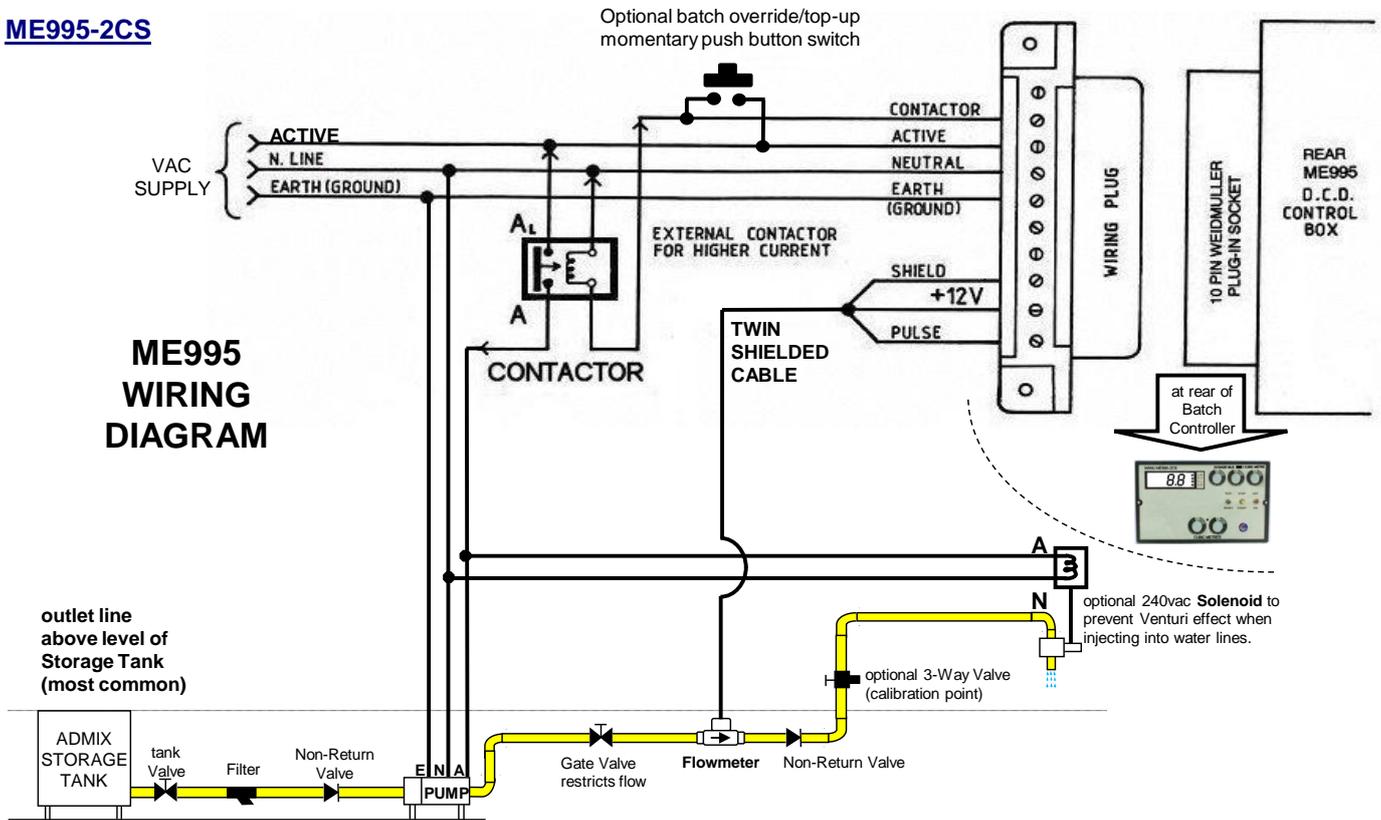
Options:

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 Jone1, 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.

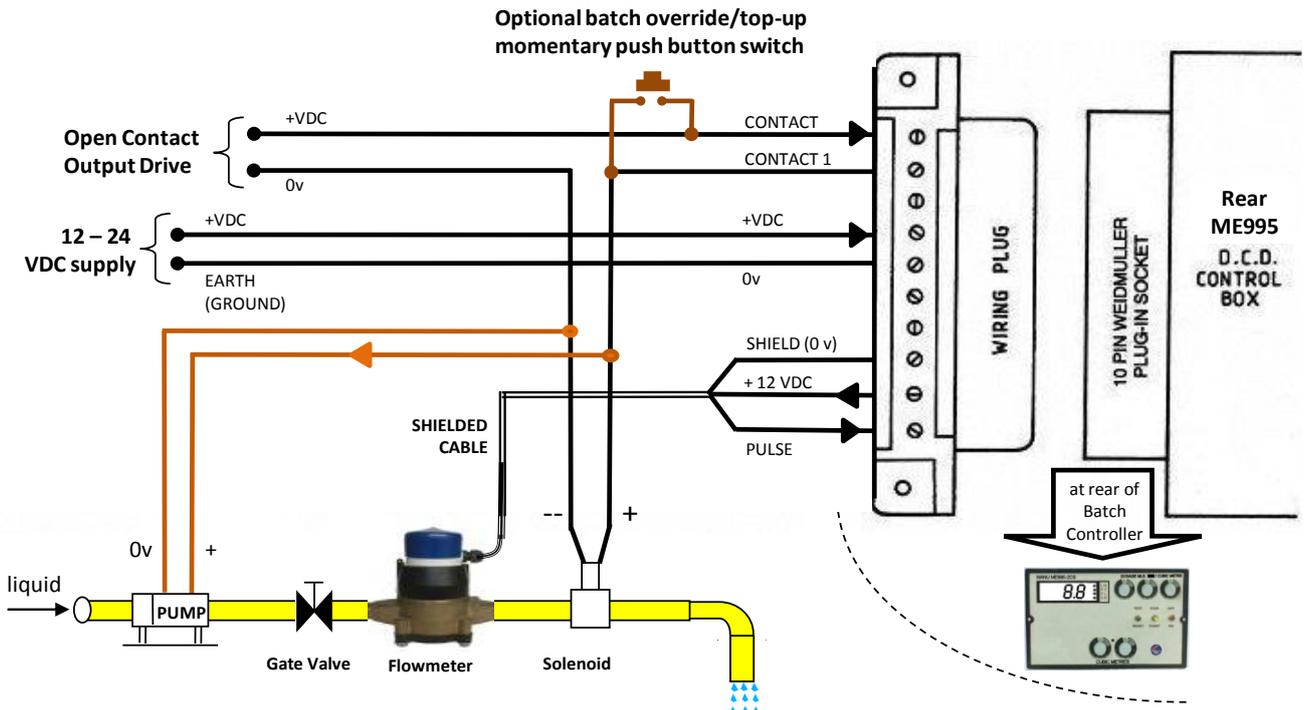
e.g. "ME995-2CS" is the standard Batch Controller, 240vac powered, without any of the options, whereas "ME995-2CS-MC2" is an ME995-2CS Batch Controller with a scaled open collector pulse output, and a Start/Stop/Reset computer interface.

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