

ME995-3KS

VARIABLE DOSERATE KILOGRAMS OF CEMENT PRESET CONTROLLER (Direct: MLS / 100KG Dosage version)

FEATURES

- Variable doserate selection in direct Millilitres / 100KG
- 4 Digit LED display
- 4 x LED status indicators
- Initial start safety
- Missing pulse detection
- Preact function & preset maximum limit
- Display counts in total kilograms of cement
- Optional PLC & computer interface



The **ME995-3KS** VARIABLE DOSERATE KILOGRAMS OF CEMENT preset batch controller with new added features complies with Quality Assurance requirements for the concrete additives industry. The controller's most significant new feature is variable doserate calculation selectable in direct MILLILITRES per 100KG OF CEMENT (prior ME995-3K units required a MLS X10 calculation factor). This feature simplifies the dosage calculation selection feature. All other features are retained. The preact function which compensates for excessive overflows, is ideal in speed batching operations and in many cases eliminates the need for solenoid valves. With the ME995 batch controllers using the same 10-pin Weidmuller receptacle plug as the previous models, changeover and replacement is instant with no rewiring necessary. Interfacing with PLCs is an easy procedure (with optional interface fitted), to incorporate safety features and to provide a backup batch facility.

The **ME995-3KS** is a ratio blending controller which calculates and dispenses selected ratios for the batch operator. The top **three** selectors are for dosage selection of liquid admixture content, marked DOSAGE MLS / 100 KG. A maximum doserate of 990 MLS per 100 KGs of cement is selectable. Note: the first selector knob is fixed and stationary being locked at zero (0). The bottom four selectors are used for selection of cement content per truck load. A maximum of 9000 KILOGRAMS OF CEMENT load is selectable in minimum increments of 10. The display counts upwards in 10 kg lots, up to the batch quantity of kilograms of cement selected and dispensing at the selected doserate.

WARNING: With the ME995-3KS model, dosage is selected in direct Millilitres (MLS) as opposed to the standard ME995-3K where the dosage is selected in Millilitres (MLS) x 10 / 100KG.

A batch example would be:

- Selected dosage rate 250 MLS / 100 KG.
- Selected cement content 1500 KILOGRAMS OF CEMENT
- Actual admixture volume received $250 \text{ MLS} \times 15 \times (100 \text{ kg}) = 3750 \text{ millilitres.}$
- Final batch complete display reading 1500 kgs

The controller operates from standard 220 - 260 vac (or optional 24vac, 110 vac or 12 - 24 VDC) voltage supplies (this must be specified when ordering). Contact output drive is via a relay. Standard controllers are in panel mount format or can be optionally housed in a metal housing box or IP65 ABS wall mount enclosure.

This controller can only be used with Manu MES20, MEA15 1 millilitre per 1 pulse flowmeters.

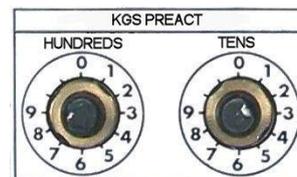
SAFETY FEATURES

- * 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 batch cycle and fall below (variable) pulse scanning time (typical 30 Hz). The voltage contact drive is subsequently automatically shut off.
- * LIMIT (LM) LED illuminates if batch cycle reaches locked internal maximum limit (upto 9000 kg) or if the circuit diagnostics detect an internal chip problem. The voltage contact drive is subsequently automatically shut off.
- * LIMIT (LM) LED illuminates after 1 second if DOSERATE selection is set to ZERO, hence shutting down controller.
- * Audible ALARM sounds momentarily upon completion of batch cycle, and continuously if PULSE FAIL or LIMIT LEDs are activated or if overflow runs 1000 millilitres (variable) past 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 toggle switches marked ON-OFF, START-STOP, TEST-RESET to desired function.
- * Switch power ON to unit. Select desired doserate and cement load batch quantity using 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 pump or solenoid energised, followed by FLOW LED illuminating, indicating pulsing and operation of flowmeter. The digits begin counting upward in total kilograms of cement towards the selected batch quantity.
- * Upon 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 PREACT (inflight) overflow deduct dials (located at rear of controller) 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.

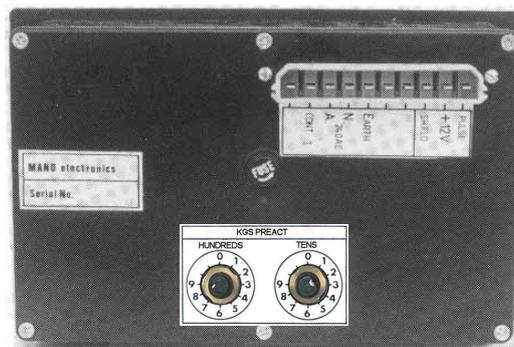
PREACT: Calibrating inflight overflow deduct is via two rotary knobs marked "tens" and "hundreds" of KG's located at rear. As the batch display will indicate total kilograms of cement at the selected doserate, whatever overbatch value of KG's is indicated on the display this is what should be selected at the rear TENS and HUNDREDS dials of the preact.



Example: 1000 Kilograms of Cement selected (KG'S), but at completion of batch displays 1020 KG's. Then set the preact knobs to hundreds=0 & tens=2.

SPECIFICATIONS

Power supply	220-260 vac 50-60Hz.(optional 24vac, 110 vac or 12-24 VDC)
Output to flowmeter	12 VDC upto 100mA
Relay outputs	Max. 240 VAC, 30 VDC 1 Amp (standard)
Frequency input	5 KHz. maximum, NPN input
Display	4 digits, 7 segment LED (14mm H)
Connection	10 pin weidmuller mating plug & socket
Fuse	1 Amp (5 x 20mm case)
Mounting	Panel mount
Batch selection	Visual rotary select switches
Batch commands	Push toggles
Instrument housing	ABS hi-impact mould
External dimensions	206 L, 130 H, 90 D mm
Panel cutout	190 L, 122 H mm
Weight	1 kg



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

ORDER CODES

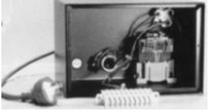
ME995-3KS Batch Controller, 240 vac supply and output, with 12 VDC power to flowmeter (standard).

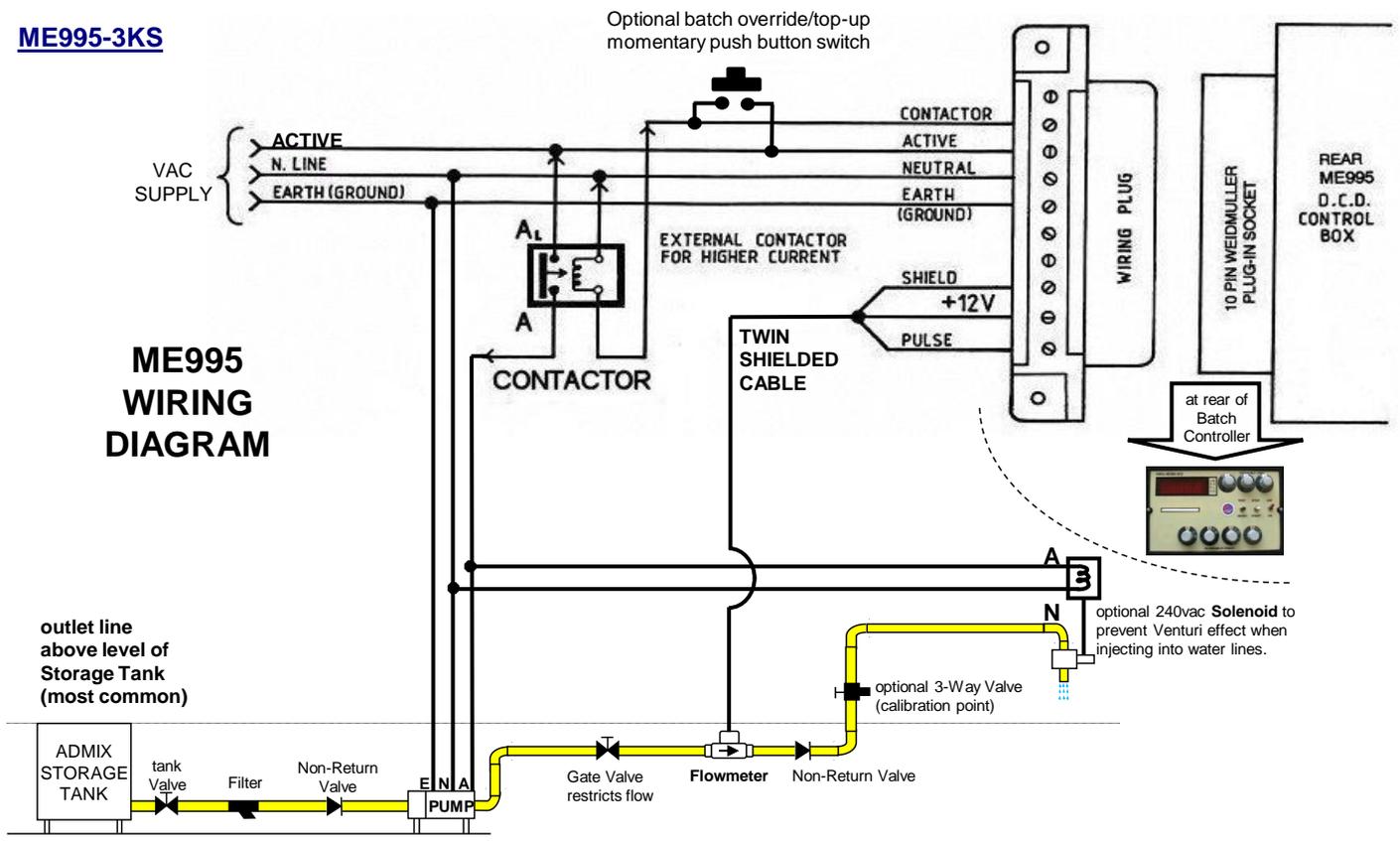
Options:

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.

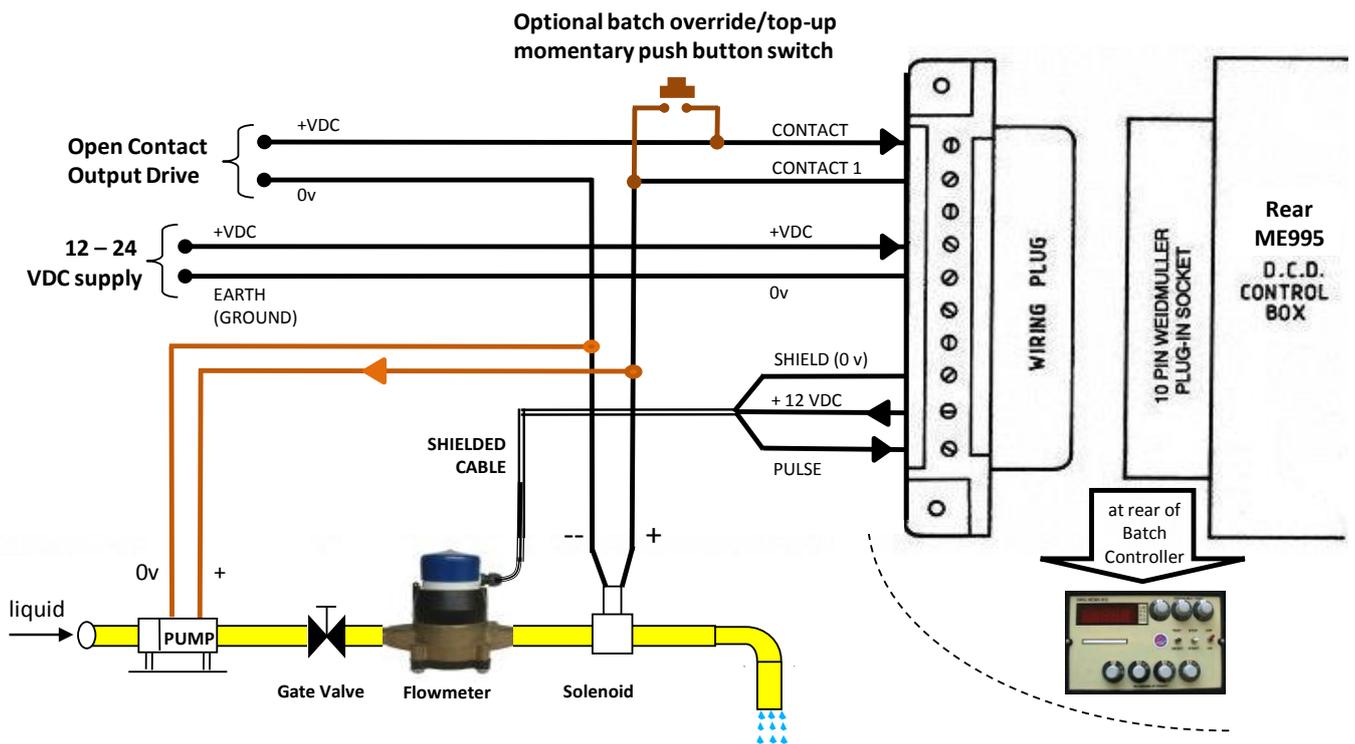
e.g. "ME995-3KS" is the standard Batch Controller, 240vac powered, without any of the options, whereas "ME995-3KS-MC2" is an ME995-3KS Batch Controller with a scaled open collector pulse output, and a Start/Stop/Reset computer interface.

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