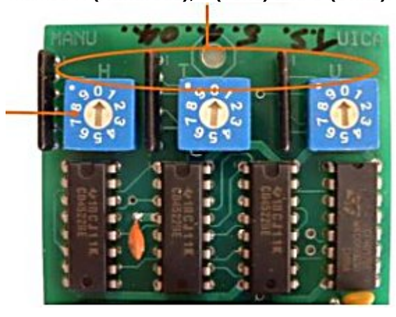
ManuFlo (R)TM
Flow Measurement Products
(A division of MANU ELECTRONICS PTY LTD)

Calibrating of UIC's pulse output signals
is via 3 rotary select switches (numbered 0-9)
marked **H (Hundreds), T (Tens) and U (Units).**



Use small flat-bladed screwdriver,
insert into switch slot and
turn arrow to desired number.

Formula to calculate HTU settings

UIC card with STANDARD x10 pulse input multiplier	UIC card with x50 pulse input multiplier
HTU = $\frac{\text{input pulses/Litre}}{\text{output pulses/Litre}}$ x 5	HTU = $\frac{\text{input pulses/Litre}}{\text{output pulses/Litre}}$ x 25
e.g. to convert 20 pulses/Litre to 1 pulse/Litre:	e.g. to convert 7.3 pulses/Litre to 1 pulse/2 Litres:
HTU = $\frac{\text{20 pulses/Litre}}{\text{1 pulse/Litre}}$ x 5	HTU = $\frac{\text{7.3 pulses/Litre}}{\text{0.5 pulse/Litre}}$ x 25
HTU = 100 (i.e. H=1 T=0 U=0)	HTU = 3 6 5 (i.e. H=3 T=6 U=5)

Admix batching with MES20 flowmeters and UIC

For batching with concrete admixtures, the MES20/MES20-S 20mm 1000 pulses/Litre flowmeters are primarily used.
For pulse scaling setpoint values, refer to the the following table (for a x10 input standard UIC card):

Rotary value H T U	UIC card pulse o/p rate	Volume per pulse
0 2 5	200 pulses/Litre	5 ml/pulse
0 5 0	100 pulses/Litre	10 ml/pulse
1 0 0	50 pulses/Litre	20 ml/pulse
1 5 0	33.3 pulses/Litre	30 ml/pulse
2 5 0	20 pulses/Litre	50 ml/pulse
5 0 0	10 pulses/Litre	100 ml/pulse
9 9 9	5 pulses/Litre	200 ml/pulse

Final Calibration:
If the liquid collected is **more** than pulse value shown on computer screen, then **decrease** the rotary decade set value by the same % difference.

If the liquid collected is **less** than pulse value shown on computer screen, then **increase** the rotary decade set value by the same % difference.

Note: Final calibration can also be performed via computer software scaling.

Water batching with RPFS flowsensors and UIC

Pipe size (mm)	UIC card with STANDARD x10 pulse input multiplier		UIC card with x50 pulse input multiplier	
	UIC Set Value H T U	Output pulses per Litre to PLC/computer	UIC Set Value H T U	Output pulses per Litre to PLC/computer
25	3 7 5	1 pulse per 1 Litre	1 8 5	10 pulses per 1 Litre
32	2 3 0	1 pulse per 1 Litre		
40	1 5 0	1 pulse per 1 Litre		
50	1 0 0	1 pulse per 1 Litre	5 0 0	1 pulse per 1 Litre
65	0 6 0	1 pulse per 1 Litre	3 0 0	1 pulse per 1 Litre
80	3 6 5	1 pulse per 10 Litre		
80	0 7 3	1 pulse per 2 Litre	3 6 5	1 pulse per 2 litres
100	0 9 2	1 pulse per 4 Litre	1 2 5	1 pulse per 1 Litre

All values are starting reference values for RPFS-P and are approximate only, due to possible variations in installation conditions e.g. due to pipe direction, water quality etc. Values could vary up to 10%.

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