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High Speed Batch Controller - Model 414H

Introduction

Occasionally there is a requirement for the batch controller to react very quickly at the end of a batch, such as in bottle filling applications where the batch time may only be a few seconds. The Model 414H will meet this application with a response time of less than 20mSec.

By response time, we are referring to the time at the end of the batch when the flowmeter has output a pulse, to the time when the relays close. In most applications, batch times are relatively long and this response time is not relevant. However, for batches of less than 15 seconds it is recommended to use the Model 414H.

In designing a high speed batching system, consideration must also be given to:

- I. The response and resolution of the flowmeter.
- 2. The response of the control valve.
- 3. The back pressure on the control valve since the change in pressure may affect the response time of the valve.

The Model 414H is identical in all respects to the Model 414D and uses the same hardware. The only changes relate to the following software modifications:

- I. The K-factor is limited to 4000.
- 2. The Total Conversion Factor is removed.
- 3. The Maximum Input Frequency is 9kHz.