Electronic Preset Delivery System



Smith Meter AccuLoad® III

Technical Service Bulletin

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Programming the AccuLoad III for Mass Pulse Input

The purpose of this document is to identify the program mode parameters associated with mass pulse input feature on the AccuLoad III.

- System Directory, 305 Pulse In Type: This new parameter tells the AccuLoad that incoming meter pulses represent a quantity in volume (the default) or mass (the new option). To utilize mass pulse input, select mass.
- Meter Directory, 301 K Factor: When modifying the pulse input type, it is imperative that a new K factor be entered. Enter the number of pulses for one unit of mass registration (e.g., number of pulses per pound).
- Product Directory, 302-309, Meter Factor Curve: New meter factors.
- System Directory, 112 Flow Rate Descriptor: Verify that the flow rate descriptor is set to indicate a flow rate based on mass, rather than volume.
- System Directory, 332 Preset Type:
- System Directory, 333 Delivery Type: The preset and delivery types may be set to volume or mass, regardless of
 the pulse in type. However, if volume is selected here and mass pulse input was selected, then density must be
 available to the AccuLoad III. Otherwise, the AccuLoad will not have the means to calculate volume given mass (or
 vice versa). Therefore, verify that the preset and delivery types are set to mass if no density is available on the
 AccuLoad.
- System Directory, 802 Additive Pacing Units: The additive pacing units may be set to mass or volume, provided both are available on the AccuLoad III. Verify that the pacing for injectors is set to mass if no density is available on the AccuLoad for volume calculation.
- Flow Rates: All flow rates are based on the pulse input type. With mass selected as the pulse input type, the AccuLoad III interprets all flow rates in program mode as mass flow rates. This includes the following flow rates:
 - Arm Directory, 201 Low Flow Start Rate
 - Product Directory, 201 Minimum Flow Rate
 - Product Directory, 202 High Flow Rate
 - Product Directory, 203 Second High Flow Rate
 - Product Directory, 205 Flow Tolerance Rate
 - Product Directory, 210 Low Flow Alarm Limit
 - Arm Directory, 205 High Flow Rate (ratio blenders only)
 - Arm Directory, 206 Second High Flow Rate (ratio blenders only)
- Flow Control Parameters: The following flow control parameters will still be based on the preset type selected in system parameter 332: IV volume, GV volume, GST volume, GSV volume, or Mass, regardless if the pulse input type is volume or mass. So, if the preset type is one of the volume types, these parameters will be interpreted as volume. If the preset type is mass, these will be interpreted as mass.
 - Arm Directory, 202 Low Flow Start Amount
 - Product Directory, 206 1st Trip Amount
 - Product Directory, 207 2nd Trip Amount

The specifications contained herein are subject to change without notice and any user of said specifications should verify from the manufacturer that the specifications are currently in effect. Otherwise, the manufacturer assumes no responsibility for the use of specifications which may have been changed and are no longer in effect.

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