

Engineering Specification

Flow Indicating Transmitter/Batch Controller (Mettler-Toledo Thornton 200FLOW Instrument)

The flow indicating transmitter shall provide flow and totalized flow indication, alarm and output signals for up to four flow measurements from compatible pulse type (paddle wheel, impeller, turbine or vortex) flow sensors. The transmitter shall be capable of computing percent recovery from one or two pairs of flow signals of a reverse osmosis system, with the same indication, alarm and output capability.

The transmitter shall operate from 90-130 or 180-250 VAC or 24 VDC 4-wire power, as specified. It shall provide an illuminated alphanumeric display, readable in direct sunlight or darkness and a sealed keypad. Instrument security shall include a user set security code and allow selection of function menus to be locked. The transmitter shall be provided with hardware for panel mounting or with optional kits for wall or pipe mounting, with NEMA 4X, IP65 rating, as specified.

The indicating transmitter shall be provided with eight alarm setpoints, assignable to two SPDT mechanical relays and optionally two additional solid state AC relays, as specified. The relays shall have individually set time delay, activation state and hysteresis settings. When operating on total flow measurements, these settings shall permit multiple batch control action. Total flow reset shall be accessible from the keypad or from remote contacts or TTL logic signal.

Optional analog outputs shall consist of two isolated, powered 0/4-20 mA circuits, individually assignable to any flow, total flow or percent recovery channel. The transmitter shall allow field configuration to multiplex four signals to the two analog output circuits. The multiplexing shall be controlled by an external contact closure or TTL logic signal to select the first or second pair of output channels. (The external contact/TTL signal may be used for either total flow reset or output multiplexing, not both.) A selectable RS232 or RS422 output shall also be provided.

The instrument shall be ISO9001 factory calibrated to NIST-traceable standards and be provided with a certificate of calibration.

The instrument shall be Mettler-Toledo Thornton model 200FLOW or approved equal.

For the most current product information visit:

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