V2 SYSTEM FLOW METER
GENERAL SPECIFICATIONS:

MODELS: V2150 for 150 PSI Service
V2300 for 300 PSI Service

PART 1 GENERAL

1.1 SUMMARY

A. This section includes the McCrometer V2 System flow metering system, complete with integral secondary instrumentation, remote mounted indicator/totalizer with auxiliary alarm and 4-20 mAdc outputs.

1.2 SUBMITTALS

A. Drawings in accordance with General Provisions.

B. Configuration Sheet, or equivalent, which consists of manufacturer's data and descriptive literature for the equipment.

C. NIST traceable certified test report(s) as required for each flow meter.

D. Installation and Operation Manual

E. Warranty Statement

PART 2 PRODUCTS

2.1 GENERAL

A. The meters shall be of the innovative design as to deliver repeatable accuracy under the most difficult of flow conditions. The meter shall act as its own flow conditioner thereby virtually eliminating the need for upstream or downstream straight pipe runs or separate flow conditioners and be maintenance free.

2.2 MANUFACTURERS

A. The meter shall be manufactured by McCrometer, Inc. and shall be the V2 System flow metering system, Model _____.
(Model V2150 for 150 PSI flanged service or Model V2300 for 300 PSI flanged service.)

 

2.3 CONSTRUCTION

A. Body

1. The meter tube shall be fusion-bonded epoxy coated carbon steel for nominal line diameters of 6-inch and larger. Nominal line diameters of 3-inch and 4-inch shall be 304 stainless steel. The flowmeter shall be capable of operating pressures of up to 150 PSI (Model V2150) or 300 PSI (Model V2300.)

2. The end connections for nominal line diameters of 6-inch and larger shall be flanged carbon steel and meet the latest version of AWWA Class D Table 1 (Model V2150) or AWWA Class F (Model V2300) for plate flanges. Nominal line diameters of 3-inch and 4-inch shall be 304 stainless steel flanged to ANSI standard 150 (Model V2150) or 300 (Model V2300).

B. Remote-Mounted Flow Indicator/Totalizer

1. The meter shall include a transmitter that is capable of sending a linear 4-20 mAdc signal to the remote-mounted flow indicator/totalizer.

2. The flow indicator/totalizer shall be remote mounted and shall have an enclosure that has a NEMA 4X, (IP66) rating.

3. The flow indicator/totalizer shall be capable of indicating flowrate and total flow. The units of measurement for the flowrate indicator shall be_____, (GPM, CFS, LPS, etc.) and the flow totalizer shall be_____, (Gallons, Cubic Feet, Cubic Meters, etc.)

4. An auxiliary alarm and linear 4-20 mAdc output shall be available from the flow indicator/totalizer.

2.4 PERFORMANCE

A. Upstream and downstream straight pipe run requirements

1. The flow metering system shall be so designed that it can be installed with only 0 to 3 nominal pipe diameters upstream and 0 to 1 nominal pipe diameters downstream without the use of separate flow conditioners and meet the flow accuracy and turndown requirements stated in these specifications.

 

B. The flow metering system shall be capable of accuracies up to (+/-) 1% of flowrate.

C. Turndown based on the flow rates for the application, shall be 10:1

D. Maximum head loss at full scale shall not exceed 2 PSI.

PART 3 EXECUTION

3.1 INSTALLATION

A. Installation shall be based on manufacturer's recommendation. Typically a minimum of 0-3 pipe diameters of straight run upstream and 0-1 pipe diameters downstream, (to be determined by actual application).

B. The manufacturer or authorized factory representative shall provide a minimum of one (1) day training and startup service to ensure installation and operation as required.

END OF SECTION

 