

## 2.1. ELECTROMAGNETIC FLOW METER

- .1 The liquid flow meter shall be AMF Series electromagnetic induction type, as manufactured by Armstrong International.
- .2 The flow meter will measure volumetric flowrates of conductive liquid mediums without internal moving parts and no pressure loss and be available in sizes ½" - 80" Ø.
- .3 Flow meter will comprise of a flanged tube sensor body complete with integral LCD display -or- remote mount display.
- .4 Flow meter sensor body will be standard Class IP65 (outdoor) and comprise of:
  - .1 Stainless steel inner tube lined with PTFE, rubber, Polyurethane, PFA.
  - .2 Epoxy coated carbon steel (standard) or stainless steel outer tube.
  - .3 ASME ANSI Class 150# or 300# flanged pipe connections.
  - .4 316SS (standard), Hastelloy B or C, Titanium, or Tantalum electrodes
  - .5 Standard IP65 (outdoor) integral junction box on sensor body or IP68 (submersible) integral junction box on sensor body (for remote mount).
- .5 Integral display unit will have a 2-line LCD backlit, mounted in a Class IP65 (outdoor) housing complete with the following:

-OR-

Remote mount display unit will have a 2-line LCD backlit, mounted in a Class IP65 (outdoor) enclosure box complete with the following:
  - .1 16 – 32 VDC -or- 85 – 250 VDC input power.
  - .2 Pulse & 4-20 mA, Pulse 4-20 mA & MODBUS, HART, BACNET MSTP/IP outputs
  - .3 Display of instantaneous flow, total flow and alarm.
  - .4 Built-in totalizers, forward flow, reverse flow and net.
- .6 Flow meter will be capable of the following:
  - .1 Accuracy of ±0.5% of reading with repeatability of 0.2%, .3% optional.
  - .2 Operational measuring range of -39 to 39 ft/sec.
  - .3 Measuring liquid medium conductivity of ≥ 5µs/cm.
  - .4 Capable of bi-directional flow measurement.
  - .5 Operational with minimum 5D upstream, 2D downstream straight runs.
- .7 Flow meter parameters will be factory pre-configured.
- .8 Flowmeters will be wet calibrated at factory complete with certificate of calibration.
- .9 Flowmeter will be complete with a 2(two) year warranty.