Brief Installation Guidance

This is a brief introduction for installation of our ultrasonic flow meter with clamp-on type transducers. We hope it can guide you to know installation and operation of ultrasonic flow meters in short time.

Installation Procedure -- Three Steps:

1. Set parameters in transmitter

Set parameters from M11 to M24. M25 will show transducer installation distance. Do not forget to store parameters in M26.

2. Install transducers

M25 will show an indicating distance value between two transducers. You can first install and fasten one of the transducers, then move slightly one of the other transducers in order to get good result.

Please note that:

- (1). Transducer installation point should be far from pump, valves or bent in order to assure liquid flow rate in pipe is steady. Generally, make sure there is at least 10D straight pipe length (D means diameter) in upstream pipe and at least 5D in downstream pipe.
- (2). Make sure there is no rust, dust or corrosion in both outside and inner pipe. If there is paint on pipe surface, please polish pipe surface until you can see metallic luster.
- (3). Make sure pipe is always full of liquid; flow rate in pipe is steady and will not change suddenly.
- (4). Z installation method is generally used for less than DN50mm pipes. V method is generally used for DN50-DN300mm pipes.
- (5).On horizontal pipes, the transducers should be mounted in the 3 o'clock and 9 o'clock positions of the pipe section to avoid air bubbles inside the top portion of the pipe. Two transducers should be in same sides with V installation method, while they should be in opposite sides with Z method.
- (6). Apply adequate coupling compound to transducer bottom and the spot where the transducers will be installed.

3. Check if installation is correct and if flow meter can work well

At last, please check if M90 Q value more than 65, (it will be better if more than 80); And check if M91 value between 97 and 103.

If two values are all within the range, it means installation is successful.