

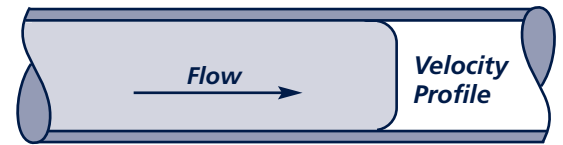
# Installation Guidelines



Digiflow® FlowX3 flow meters measure liquids only. No air bubbles should be present and the pipe must always be full. The sensors will not work properly in laminar or transitional flow applications. Minimum Reynolds number required is 4500.

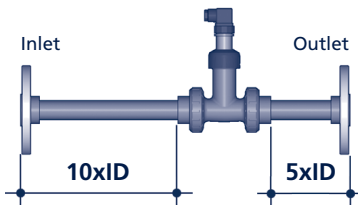
For accurate flow measurement there must be a developed turbulent velocity profile at the sensor location. This requires a straight run pipe with a minimum number of pipe diameters distance upstream and downstream of the flow sensor. These distances depend on the type of piping element (i.e. valves, elbows, reducers etc.) causing the disturbance.

To ensure maximum accuracy, the following guidelines should be observed when installing.

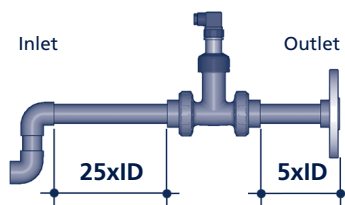


**Developed Turbulent Flow**

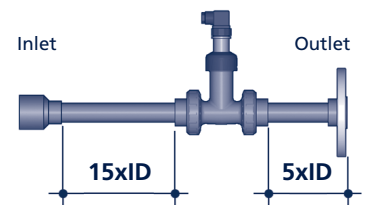
### Socket Flange



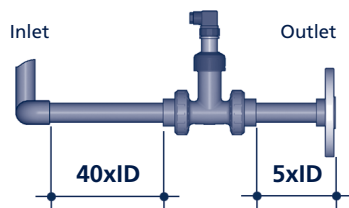
### 2 x 90° Elbow



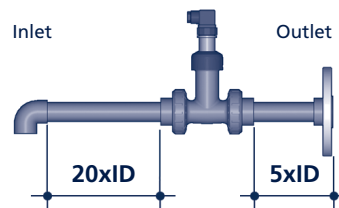
### Reducer



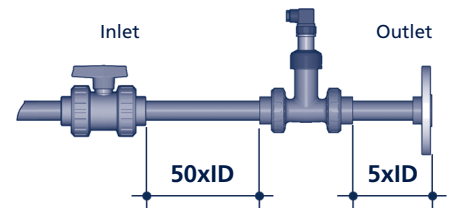
### 2 x 90° Elbow - 3 Dimensional



### 90° Elbow

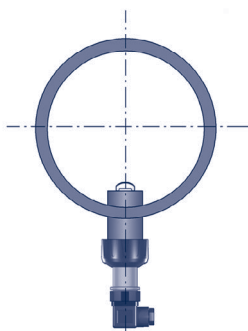


### Valve



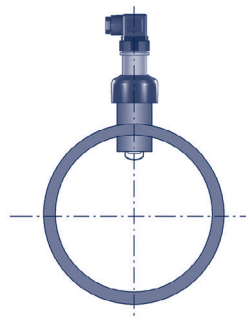
## ■ Installation Positions

**Figure 1**



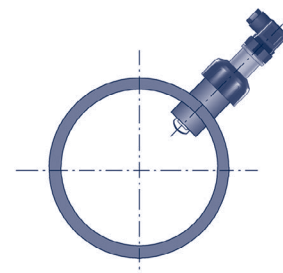
OK if no sediments are present

**Figure 2**



OK if no air bubbles are present

**Figure 3**



Preferred installation if sediments\* or air bubbles may be present

\* Maximum % Solids: 10% with particle size not exceeding 0.5 mm cross section or length.