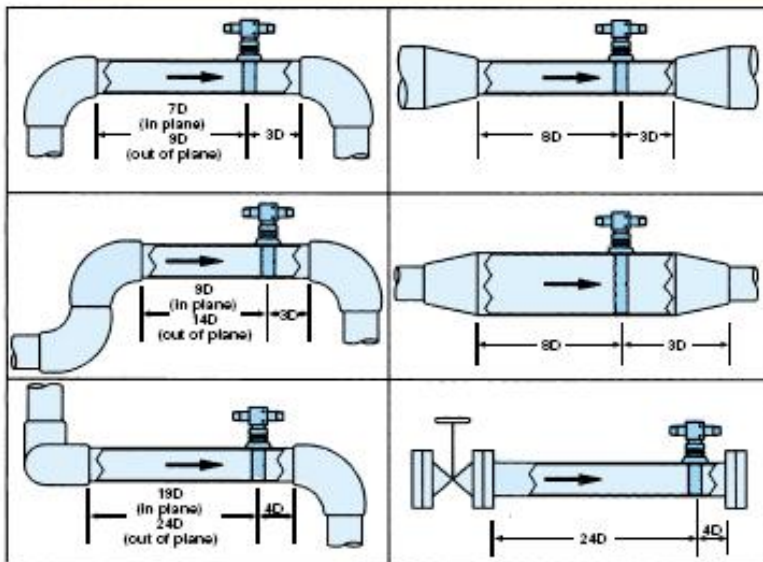


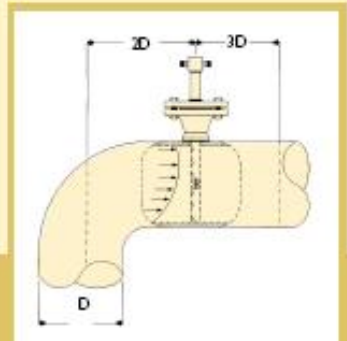
INSTALLATION & LOCATION

Recommended Upstream and Downstream Distances



Correct location of the **TORBAR** in the piping system is important in order to optimise performance. Flow that is disturbed by upstream configurations such as elbows, T's and valves may have an adverse effect on accuracy unless the **TORBAR** is located at recommended positions shown in the table opposite. The diagrams illustrate the distances in multiples of pipe bore 'D' between the **TORBAR** and the upstream and downstream disturbances. If the **TORBAR** is fitted within distances less than those shown, then absolute accuracy may be downgraded BUT repeatability of measurement will still be excellent due to inherent averaging characteristics.

Where it is not possible to provide the specified distances and maximum accuracy is required, the use of a flow straightening spool piece allows for shorter distances.



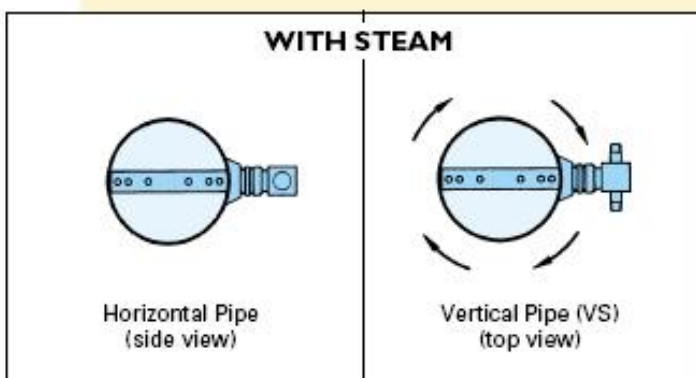
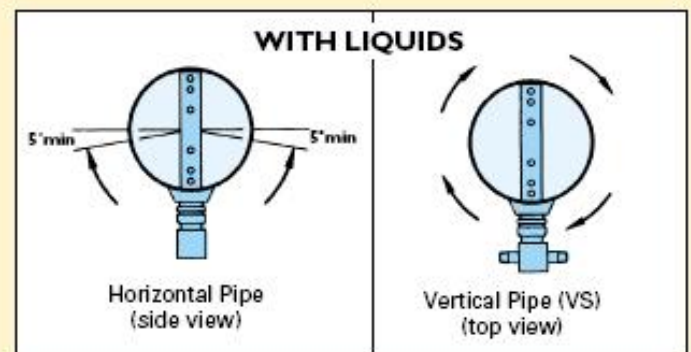
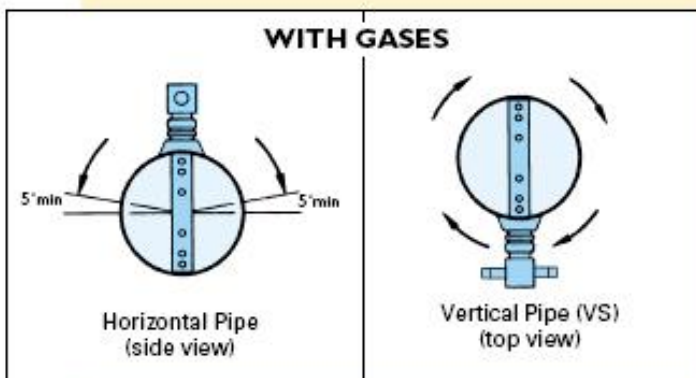
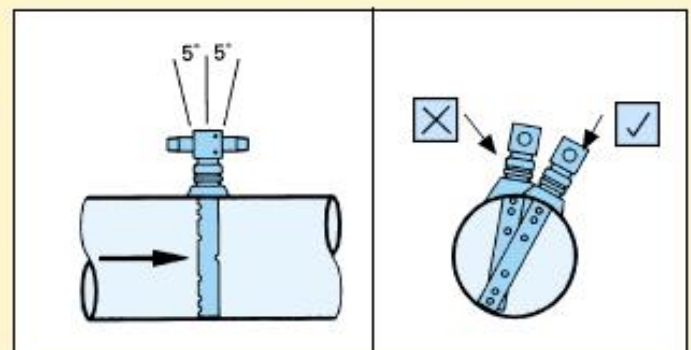
ELBOW INSTALLATION (Right)

The **TORBAR** can be installed 2 diameters downstream of a 90° elbow at the exit of the elbow to give an accuracy of +/-3% to +/-5%.

Orientation in Pipe

The **TORBAR** must be installed at right angles to the pipe run and across a pipe diameter within the tolerances shown in the diagrams opposite.

To avoid 'noisy' signal outputs, do not locate the **TORBAR** in a pulsating flow. A vibrating pipe can also distort the output signal and affect the structural limits of the **TORBAR**. This limitation particularly applies to the integrally mounted transmitter option DM3V and to the **TRIBAR** configuration



For vertical pipe applications, the 'head' of the **TORBAR** is repositioned to ensure that DP connections are at the same vertical level. This is option VS. **IT IS NECESSARY TO SPECIFY THIS OPTION WHEN ORDERING THE TORBAR.**

IT IS ESSENTIAL THAT IN ALL STEAM INSTALLATIONS THE ENTIRE TORBAR HEAD AND FITTING ASSEMBLY ARE WELL LAGGED TO PREVENT THE FORMATION OF CONDENSATE IN THE TORBAR HEAD. THE TORBAR WILL NOT FUNCTION CORRECTLY WITH CONDENSATE IN THE HEAD. FILLING T'S OR CONDENSATE POTS SHOULD BE FITTED AS APPROPRIATE.

Before installation or removal of a **TORBAR** it is imperative that careful reference is made to the appropriate installation instructions that are supplied with each **TORBAR** shipment. The installation instructions are