



V-Cone Installation Guide

Upstream and Downstream Minimum Straight Pipe Run Requirements

For Liquid Metering and Gases at a
Reynolds Number (Re) Value Less Than or Equal To 200,000

For β greater than or equal to 0.70 add 1D

Size Range	Obstruction	Up Stream	Down Stream
All Sizes	1 Elbow	0D	0D
	2 Elbows	0D	0D
	Tees	0D	0D
	Butterfly Valve (control valve)	Not Preferred Position	Valve Downstream 1D
	Butterfly Valve (shutoff valve)	2D	0D
	Full port Ballvalve (shutoff)	0D	0D
	Heat Exchanger (Depends on Type)	0D	0D
	Expander (0.67D to D) over a length of 2.5D	2D	1D
	Reducer (3D to D) over a length of 3.5D	0D	0D

Note: The meter and adjoining pipe should have equal IDs.