
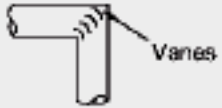
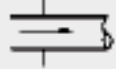
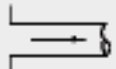

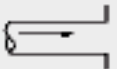
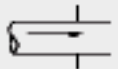
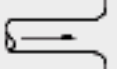
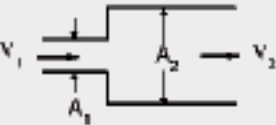
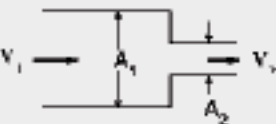


LAMPIRAN 5

Tabel koefisien kerugian *head* untuk beberapa macam *fitting* ^[2]

Miter bends		No vanes K=1.1		Vanes K=0.2								
Pipe entrances		Inward projecting K=0.78		Sharp-edged K=0.5								
			Round entrance:									
			r/D	0.02 0.04 0.06 0.10 >0.15								
			K	0.28 0.24 0.15 0.09 0.04								
Pipe exits		Sharp-edged K=1.0		Projecting K=1.0								
				Round-edged K=1.0								
Sudden expansion			$h_{T_e} = \frac{(V_1 - V_2)^2}{2g} = \left(1 - \frac{A_1}{A_2}\right)^2 \frac{V_1^2}{2g}$									
Sudden contraction			$h_{T_c} = \left(\frac{1}{C_c} - 1\right)^2 \frac{V_2^2}{2g}$									
	A_2/A_1	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.0
	C_c	0.585	0.624	0.632	0.643	0.659	0.681	0.712	0.755	0.813	0.892	1.0

Fitting	K Value	Fitting	K Value
Check valves		Standard T	
Ball type	70	Side outlet	1.8
Disc type	10	Straight-through flow	0.4
Swing type	2		
Other valves		Elbows (90°)	
Foot valve	10	Regular	1.0
Globe valve	8	Long radius	0.4
Angle valve	3	Elbows (45°)	
Diaphragm valve	2	Regular	0.3
Gate valve	1.5	Long radius	0.2
Butterfly valve	0.2		
Full-bore ball valve	Negligible (<0.1)	Return bend	2.2

Note: All the K values given for valves are for fully open valves. For a given type of fitting, the K value may differ considerably for products of different manufacturers. It also depends on other factors such as whether the fittings are flanged, threaded, or welded to the pipe. Values given in this table should be considered approximate typical values. In practice, one should use test values supplied by manufacturers.