TAWD 緯凡金屬股份有限公司 TRANSWORLD STEEL ENTERPRISE CO., LTD
412038 台中市大里區工業14路34號 T/ +886 4 2271 6107 F/ +886 4 2271 6127

Kv Value, Flow Coefficients

Kv = M^3 / hour = Cv * 0.85

15 deg. V Characterized Control Ball Valve Unit: M3 / hour

SIZE		1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	6"	8"
Close	0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open	15%	0.02	0.02	0.03	0.04	0.05	0.03	0.04	0.05	0.06	0.07	0.09	0.17	0.29
	20%	0.04	0.05	0.14	0.17	0.26	0.20	0.31	0.59	0.65	0.76	1.19	2.13	3.60
	30%	0.09	0.10	0.37	0.43	0.79	0.70	0.98	1.90	2.04	2.52	3.17	5.64	9.62
	40%	0.15	0.17	0.58	0.75	1.27	1.40	1.92	3.78	4.45	5.65	7.53	13.40	22.81
	50%	0.23	0.27	0.83	1.11	1.96	2.40	3.25	6.15	6.85	8.14	14.25	25.37	43.18
	60%	0.33	0.37	1.38	1.81	3.19	3.50	4.75	9.08	9.97	11.41	23.72	42.25	71.89
	70%	0.45	0.51	1.78	2.34	3.97	5.00	6.87	13.07	13.96	16.55	35.57	63.36	107.81
	80%	0.58	0.66	2.41	3.18	5.50	6.80	9.34	18.18	18.96	22.67	50.35	89.68	165.75
	90%	0.73	0.83	3.07	4.04	7.19	9.20	12.63	24.44	23.15	27.02	64.17	114.27	293.68
	100%	0.89	1.01	3.55	4.68	8.36	11.00	14.98	29.49	26.61	32.56	81.91	145.88	588.26

30 deg. V Characterized Control Ball Valve Unit: M3 / hour

SIZE		1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	6"	8"
Close	0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open	15%	0.02	0.02	0.09	0.09	0.09	0.17	0.26	0.34	0.34	0.43	0.51	0.77	0.85
	20%	0.04	0.05	0.09	0.17	0.26	0.34	0.51	1.02	0.85	1.02	1.70	2.72	4.51
	30%	0.09	0.10	0.17	0.43	0.68	0.94	1.36	3.23	3.40	3.40	5.10	11.90	20.40
	40%	0.15	0.17	0.26	0.60	1.11	1.70	2.55	5.10	6.80	6.80	12.75	28.05	48.45
	50%	0.23	0.27	0.43	0.94	1.96	3.15	4.25	8.50	10.20	11.90	24.65	51.00	91.80
	60%	0.33	0.37	0.68	1.53	2.98	4.68	6.38	12.75	15.30	19.55	40.80	87.55	151.30
	70%	0.45	0.51	0.94	2.04	4.34	6.80	9.35	19.55	23.80	28.05	60.35	131.75	226.95
	80%	0.58	0.66	1.36	2.81	8.33	8.50	11.90	26.35	31.45	39.10	85.00	187.00	320.45
	90%	0.73	0.83	1.87	3.83	7.23	11.05	14.45	36.55	52.70	55.25	110.50	238.00	408.85
	100%	0.89	1.01	2.21	4.59	8.50	12.75	17.00	51.00	63.75	69.70	135.15	297.50	506.60

60 deg. V Characterized Control Ball Valve Unit: M3 / hour

SIZE		1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	6"	8"
Close	0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open	15%	0.03	0.03	0.09	0.09	0.17	0.17	0.34	0.34	0.34	0.43	0.60	1.70	2.98
	20%	0.06	0.07	0.09	0.17	0.34	0.51	0.68	1.28	1.28	2.13	2.55	4.25	5.95
	30%	0.14	0.16	0.26	0.60	0.94	1.53	2.13	3.91	4.25	5.10	9.35	18.70	20.40
	40%	0.25	0.28	0.43	0.85	1.53	2.55	3.40	7.65	8.50	11.90	21.25	51.00	87.55
	50%	0.37	0.43	0.77	1.45	2.89	4.68	6.80	14.03	17.85	21.25	34.00	93.50	162.35
	60%	0.54	0.62	1.19	2.38	4.51	8.08	11.05	22.95	28.90	34.00	50.15	161.50	274.55
	70%	0.76	0.87	1.70	3.40	6.72	10.88	16.15	33.15	45.05	55.25	76.50	242.25	413.95
	80%	1.03	1.18	2.81	5.53	10.46	16.15	22.95	46.75	63.75	77.35	119.85	353.60	603.50
	90%	1.38	1.58	3.74	7.65	13.01	22.10	34.00	70.55	87.55	108.80	180.20	498.10	850.00
	100%	1.84	2.11	5.10	10.20	17.85	33.15	44.20	93.50	127.50	140.25	302.60	680.00	1127.10

90 deg. V Characterized Control Ball Valve Unit: M3 / hour

SIZE		1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	6"	8"
Close	0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open	15%	0.04	0.04	0.09	0.17	0.17	0.26	0.34	0.43	0.43	0.60	0.85	2.55	5.95
	20%	0.09	0.10	0.17	0.34	0.51	0.68	0.77	1.70	1.45	2.98	2.98	6.80	11.90
	30%	0.21	0.24	0.34	0.68	1.53	1.70	2.98	5.10	5.95	6.80	13.60	29.75	51.00
	40%	0.39	0.45	0.51	1.02	2.89	4.25	5.95	10.20	11.90	15.30	34.00	76.50	130.05
	50%	0.66	0.75	0.77	1.70	4.34	6.80	11.05	18.70	23.80	29.75	63.75	136.00	237.15
	60%	1.01	1.15	1.28	2.64	6.89	11.90	17.00	29.75	40.80	51.00	106.25	238.00	406.30
	70%	1.39	1.59	1.87	3.91	9.69	16.15	26.35	38.25	59.50	76.50	161.50	361.25	620.50
	80%	1.84	2.10	3.23	6.80	13.60	23.80	35.70	59.50	90.10	114.75	250.75	552.50	941.80
	90%	2.33	2.66	4.59	9.61	17.85	33.15	53.55	89.25	136.00	174.25	375.70	824.50	1408.45
	100%	3.01	3.44	5.87	11.90	24.65	46.75	66.30	114.75	185.30	263.50	569.50	1258.00	2142.00

REV 2.0

Remark：
Kv, the flow coefficient, is defined as the volume of water (in M3 / hour) per minute that will flow through a given opening with a pressure drop of one Bar at 16°C.