

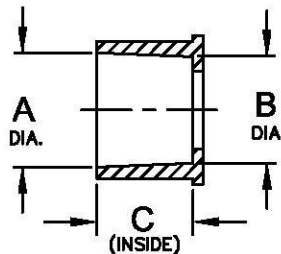


PLASTIC DIAPHRAGM VALVES (531 THRU 537)

SERIES	PIPE SIZE	SEAT		DIAPHRAGM AREA	TOTAL STROKE	DIAPHRAGM CHAMBER (VOLUME)	* Cv	** Kv	FLOW RATE		PRESSURE DROP	
		DIAMETER	AREA						@ 10 FT./SEC. (3 M./SEC.)	@ 20 FT./SEC. (6 M./SEC.)	@ 10 FT./SEC. (3 M./SEC.)	@ 20 FT./SEC. (6 M./SEC.)
		IN. CM.	SQ. IN. SQ. CM.	SQ. IN. SQ. CM.	IN. CM.	CUBIC IN. CUBIC CM.	GAL./MIN. CU.M/HR	GAL./MIN. CU.M/HR	P.S.I. bar	P.S.I. bar		
531	3/4", 1"	1.062	.89	3.43	.86	6.21	18.0	16.0	27.7	55.3	2.3	9.4
		2.70	5.73	22.1	2.18	102.0			6.3	12.6	0.16	0.65
534	1-1/2"	1.562	1.92	6.06	1.33	10.4	42.0	36.0	60	120	2.04	8.16
		3.97	12.4	39.1	3.38	170.0			13.6	27.2	0.14	0.56
535	2"	2.062	3.34	8.82	1.75	25.3	84.0	72.0	104	208	1.53	6.13
		5.24	21.5	56.9	4.45	414.0			23.4	46.8	0.11	0.42
537	3"	3.062	7.36	15.6	2.50	65.3	200.0	172.0	230	460	1.32	5.3
		7.78	47.5	101.0	6.35	1070			52.2	104.4	0.09	0.36

* Cv - FLOWRATE (GAL./MIN.) OF WATER AT 60° F. AT 1 P.S.I. PRESSURE DROP
 ** Kv - FLOWRATE (CU. M./HR) OF WATER AT 15.5° C. AT 1 BAR PRESSURE DROP

NOTE 1: MAXIMUM CONTINUOUS VELOCITY THROUGH THE VALVE.
 NOTE 2: MAXIMUM CONTINUOUS VELOCITY. EXTENDED SERVICE AT THIS VELOCITY MAY CAUSE CAVITATION.



FEMALE SOCKET WELD END CONNECTOR KITS

VALVE SERIES	STANDARD	PART NO.	DIAMETER A	DIAMETER B	DEPTH C
531	A.S.T.M. 3/4"	1070411 (K531-577)	1.062"	1.050"	1.18"
	A.S.T.M. 1"	1070412 (K531-060)	1.330"	1.312"	1.18"
	J.I.S. 25MM	1070413 (K531-061)	1.282"	1.234"	1.18"
	I.S.O. 25MM	1070414 (K531-062)	1.269"	1.269"	1.18"
534	A.S.T.M. 1-1/2"	1070419 (K534-080)	1.920"	1.81"	1.37"
	J.I.S. 40MM	1070420 (K534-061)	1.895"	1.829"	1.36"
	I.S.O. 40MM	1070421 (K534-082)	1.978"	1.955"	1.36"
535	A.S.T.M. 2"	1070425 (K535-060)	2.393"	2.341"	1.50"
	J.I.S. 50MM	1070426 (K535-061)	2.392"	2.274"	1.50"
	I.S.O. 50MM	1070427 (K535-062)	2.493"	1.931"	1.50"
537	A.S.T.M. 3"	1070431 (K537-080)	3.522"	3.492"	1.95"
	J.I.S. 80MM	1070432 (K537-061)	3.537"	3.470"	1.95"
	I.S.O. 75MM	1070433 (K537-082)	3.557"	3.535"	1.95"

NOTE: ALL CONNECTOR KITS CONTAIN (2) CONNECTORS, (ONE KIT REQ'D PER VALVE)

TO DETERMINE FLOWRATE AT ANY GIVEN PRESSURE DROP, THE FOLLOWING FORMULAS CAN BE USED.

FOR WATER AND LIQUIDS:

$$Q = \frac{Cv \sqrt{\Delta P}}{\sqrt{e}}$$

FOR AIR AND GAS:

$$\begin{aligned} \text{WHEN } P2 < .5P1 & \quad \text{WHEN } P2 > .5P1 \\ C_v = \frac{CFM \sqrt{e}}{.5P1} & \quad C_v = \frac{CFM \sqrt{e}}{\sqrt{\Delta P P2}} \end{aligned}$$

Q - FLOWRATE IN GAL./MIN.
 ΔP - PRESSURE DROP (LB./SQ. IN.)
 e - SPECIFIC GRAVITY (WATER = 1.00)

CFM - CU. FT./MIN. FLOW
 e - SPECIFIC GRAVITY (AIR = 1.00)
 P1 - INLET PRESSURE (LB./SQ. IN.)
 P2 - OUTLET PRESSURE (LB./SQ. IN.)

THE DATA PRESENTED HERE IS BELIEVED TO BE RELIABLE AND OFFERED AS SUGGESTION ONLY. ACTUAL RESULTS MAY VARY DEPENDING UPON APPLICATION.

FORM NO. 1078165

B	NUMBER	CONVERSION	1588	MSM	27NOV02	SCALE	DRAWN	DATE	DWG. NO.
REV	DESCRIPTION		ECO	DWN	DATE	N/A	JWB	14JUN01	1084006



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SERIES 530 DIAPHRAGM VALVES

DIAPHRAGM VALVE INFORMATION - STANDARD MODEL