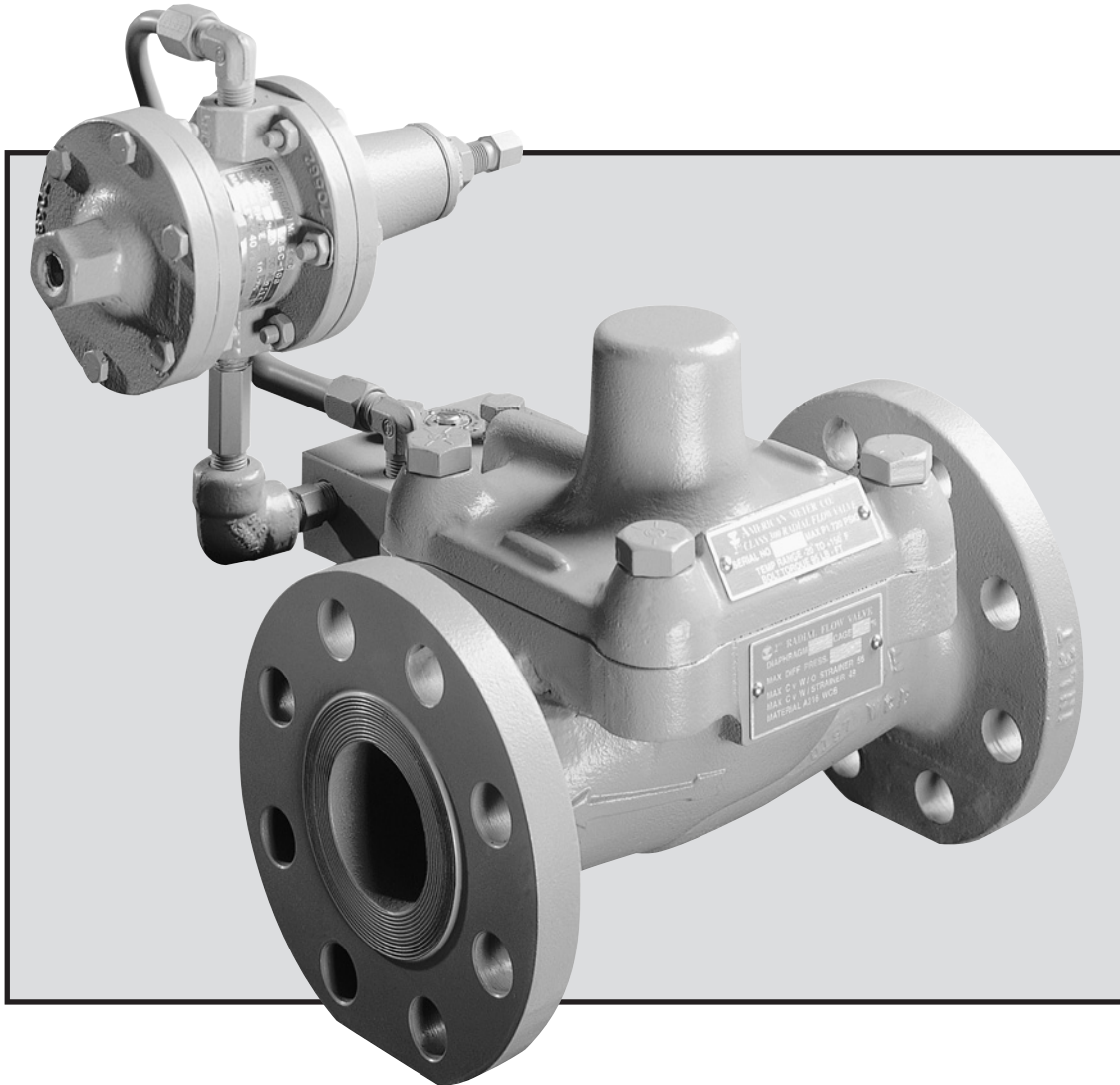


Radial Flow Valves

150, 300 & 600 Series Capacity Tables/Dimensions



GENERAL INFORMATION - Radial Flow Valve 150, 300, and 600 Series

NOTE: The capacities shown in this bulletin are the maximum capacities of the valve only in the full open condition, Actual capacities of the valve in the regulating or relief mode are a function of downstream piping, and the gas velocity. Good engineering practice suggests sizing the load below the maximum capacity of the valve. Recommended sizing is 50% to 80% of maximum capacity.

Operating Temperature Range: -20° F to +150° F (Based on Hydrin Diaphragm)

Rated Working Pressure: ANSI Class 150/300 LΔP=60 PSIG
 ANSI Class 150 = 285 PSIG
 ANSI Class 300 = 740 PSIG
 ANSI Class 600 = 1480 PSIG

Operating Differential Pressures (Table I)

RFV Series	Diaph. No.	Minimum Rest. Manifold		Minimum Insp. Manifold		Maximum (Valve)	
		Crack	Full	Crack	Full	Continuous	Intermittent
150/300	H5-L**	1.5 PSID	5 PSID	0.75 PSID	2.0 PSID	60 PSID	66 PSID
150/300	H5**	2.0 PSID	10 PSID	1.0 PSID	5.0 PSID	125 PSID	150 PSID
150/300	H7	2.5 PSID	20 PSID	1.5 PSID	12 PSID	500 PSID	600 PSID
150/300	H75	3.0 PSID	22 PSID	2.0 PSID	15 PSID	600 PSID	740 PSID
600	H8	6.0 PSID	40 PSID	4.0 PSID	25 PSID	1000 PSID	1480 PSID

** H5-L & H5 Diaphragms use a light weight spring to achieve differentials shown.

Valve Coefficients (Table II)

Series	Size	C _v	X _t	Strainer Multiplier
150/300/600	2R25	12.75	0.700	1.00
	2R50	25	0.800	1.00
	2R75	38	0.800	0.90
	2"	56	0.800	0.86
	3R50	55	0.700	0.91
	3"	110	0.800	0.91
	4R50	105	0.700	0.95
	4"	192	0.800	0.91
	6R50	160	0.700	0.94
	6"	303	0.700	0.91

** Note: These coefficients fit the ANSI/ISA S75.02 flow method.

FLOW EQUATIONS*:

Gaseous flow capacities at:
 Flowing Temperature = 60° F
 Base Pressure = 14.73 PSIA
 Base Temperature = 60° F
 Specific Gravity = 0.60

Subcritical: when $\Delta P < F_k X_t P_1$

$$(1) Q = 59.64 C_v Y F_g F_p \sqrt{P_1 \Delta P}$$

Critical: when $\Delta P \geq F_k X_t P_1$

$$(2) Q_c = 59.64 C_v Y F_g F_p P_1 \sqrt{X_t F_k}$$

Q= Flow rate, base cubic feet per hour

C_v= Valve Coefficient (See Table II)

F_g= Specific Gravity factor = $1/\sqrt{S.G.}$ (1.291 for natural gas)

F_p= Piping Geometry factor (1.00 for piping same size as valve)

P₂= Downstream Pressure, PSIA

ΔP= Differential Pressure = (P₁-P₂)

P₁= Upstream Pressure, PSIA

X_t= Critical Flow Factor (See Table II)

F_k= Ratio of specific Heats factor = k/1.40 (0.929 for natural gas)

and

$$(3) Y = 1 - [\Delta P / (3 F_k X_t P_1)] \text{ or } Y = 0.667 \text{ at a critical flow}$$

Where Y= Expansion factor

Temperature Conversion, for Inlet temperature other than 60° F

$$CFH (^{\circ}F) = SCFH \text{ (at } 60^{\circ}F) \times \sqrt{\frac{273}{T}}$$

Where T= Absolute Gas Temperature = °F + 460

* Complete formulas and detailed examples available upon request.

SIZING INSTALLATION PIPING

Good engineering practice suggests that gas velocity should be considered when sizing pipe in order to minimize noise and frictional pressure losses. In order to achieve the capacities listed in the proceeding tables, the inlet and outlet piping must be sized to limit the gas velocity to 500 ft./sec. When noise is a consideration, it is common to limit the gas velocity in the pipe to 200 ft./sec. Gas exit velocities can be reduced to an acceptable level by expanding the outlet piping via a 15 degree included angle cone.

When sizing the Radial Flow Valve for relief valve service, the inlet and outlet piping must be at least as large as the relief valve. When using outlet piping of the same size as the relief valve, the length of the outlet piping must not exceed 20 pipe diameters.

The following two equations may prove useful in determining gas velocity and pipe size.

Pipe Size Inches	Schedule Number	I.D. in Inches	Flow Area Square Inches
2	S40	2.067	3.36
	X80	1.939	2.95
3	S40	3.068	7.39
4	S40	4.026	12.73
	X80	3.826	11.50
6	S40	6.065	28.89
	X80	5.761	26.07
8	S40	7.981	50.03
	X80	7.625	45.66
12	S40	11.938	111.93

Key V= Velocity (ft./sec.)

P_2 = Downstream Pressure (PSIA)

A = Pipe Area, Cross Sectional (sq. in.)

Q = Flow (MSCFH)

D = Pipe Inside Diameter (in.)

$$\text{Gas Velocity } v = \frac{600 Q}{P_2 A}$$

Pipe Size (based on velocity limit of 200 ft./sec.)

$$D = 2 \sqrt{\frac{Q}{P_2}}$$

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150/300 SERIES 2R25 (25%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_t Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 12.75$

$F_p = 1.00$

$X_t = 0.700$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3.0	3.25	3.5	3.75	4.0	4.25	4.5	4.75
2	5.3																			
2.5	6.0	5.7	5.4																	
3	6.5	6.3	6.1	5.8	5.5															
4	7.6	7.4	7.2	7.0	6.8	6.5	6.3	6.0	5.7											
5	8.5	8.3	8.2	8.0	7.8	7.6	7.4	7.2	7.0	6.7	6.4	6.2	5.8							
7.5	10.5	10.4	10.3	10.2	10.0	9.9	9.8	9.6	9.5	9.3	9.2	9.0	8.8	8.6	8.4	8.2	8.0	7.7	7.5	7.2
10	12.2	12.2	12.1	12.0	11.9	11.8	11.7	11.6	11.5	11.4	11.3	11.2	11.0	10.9	10.8	10.6	10.5	10.3	10.1	10.0
12.5	13.8	13.8	13.7	13.7	13.6	13.5	13.5	13.4	13.3	13.2	13.1	13.1	13.0	12.9	12.8	12.7	12.5	12.4	12.3	12.2
15	15.4	15.3	15.3	15.2	15.2	15.1	15.1	15.0	15.0	14.9	14.8	14.8	14.7	14.6	14.6	14.5	14.4	14.3	14.2	14.1
20	18.2	18.2	18.2	18.2	18.1	18.1	18.1	18.1	18.0	18.0	17.9	17.9	17.9	17.8	17.8	17.7	17.7	17.6	17.6	17.5
25	21.0	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.8	20.8	20.8	20.8	20.8	20.7	20.7	20.7	20.6	20.6	20.6
30	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.5	23.5	23.5	23.5	23.5	23.5	23.4

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
5	7.8	7.0	5.8																	
7.5	10.0	9.5	8.8	8.0	6.9															
10	11.9	11.5	11.0	10.5	9.8	9.0	7.9	6.6												
12.5	13.6	13.3	13.0	12.5	12.0	11.5	10.8	9.9	9.0	7.7										
15	15.2	15.0	14.7	14.4	14.0	13.6	13.1	12.5	11.8	10.9	10.0	8.8	7.3							
20	18.1	18.0	17.9	17.7	17.4	17.2	16.9	16.5	16.1	15.6	15.0	14.4	13.7	12.9	12.0	10.9	9.6	7.9		
25	20.9	20.9	20.8	20.7	20.5	20.4	20.2	19.9	19.6	19.3	19.0	18.6	18.1	17.6	17.0	16.4	15.7	14.9	14.0	12.9
30	23.6	23.6	23.6	23.5	23.4	23.3	23.2	23.0	22.8	22.6	22.4	22.1	21.8	21.4	21.1	20.6	20.1	19.6	19.0	18.4
35	26.3	26.3	26.2	26.2	26.2	26.1	26.1	26.0	25.8	25.7	25.5	25.3	25.1	24.9	24.6	24.3	23.9	23.5	23.1	22.7
40	28.9	28.9	28.9	28.9	28.9	28.9	28.8	28.8	28.7	28.6	28.5	28.3	28.2	28.0	27.8	27.6	27.3	27.0	26.7	26.4
45	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.4	31.3	31.2	31.1	31.0	30.9	30.7	30.5	30.3	30.1	29.8
50	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.1	34.1	34.1	34.0	34.0	33.9	33.8	33.6	33.5	33.4	33.2	33.0
55	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.7	36.7	36.6	36.5	36.4	36.3	36.2	36.0
60	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.5	39.4	39.4	39.4	39.3	39.3	39.2	39.1	39.1	38.9
66	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.5	42.5	42.4	42.3

- Continuous Operation using H5-L Diaphragm within shaded region is not recommended.

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
5																				
7.5																				
10																				
12.5																				
15																				
20																				
25	11.7	10.3	8.5																	
30	17.7	16.9	16.0	15.0	13.8	12.5	11.0	9.1												
35	22.2	21.6	21.0	20.4	19.6	18.8	18.0	17.0	15.9	14.7	13.3	11.6	9.6							
40	26.0	25.6	25.2	24.7	24.2	23.6	23.0	22.3	21.6	20.8	20.0	19.0	18.0	16.8	15.5	14.0	12.2	10.1		
45	29.5	29.2	28.9	28.5	28.1	27.7	27.2	26.7	26.2	25.6	25.0	24.3	23.6	22.8	21.9	21.0	20.0	18.9	17.6	16.2
50	32.8	32.5	32.3	32.0	31.7	31.3	31.0	30.6	30.2	29.7	29.2	28.7	28.2	27.6	27.0	26.3	25.5	24.8	23.9	23.0
55	35.8	35.7	35.5	35.2	35.0	34.7	34.4	34.1	33.8	33.5	33.1	32.7	32.2	31.8	31.3	30.7	30.2	29.6	28.9	28.2
60	38.8	38.7	38.5	38.3	38.1	37.9	37.7	37.5	37.2	36.9	36.6	36.3	35.9	35.6	35.2	34.7	34.3	33.8	33.3	32.7
66	42.3	42.2	42.0	41.9	41.8	41.6	41.4	41.2	41.0	40.8	40.6	40.3	40.0	39.8	39.4	39.1	38.7	38.4	38.0	37.5

150/300 SERIES 2R50 (50%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_1 Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 25$

$F_p = 1.00$

$X_1 = 0.800$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3.0	3.25	3.5	3.75	4.0	4.25	4.5	4.75
2	10.5																			
2.5	11.8	11.3	10.7																	
3	13.0	12.5	12.0	11.5	10.9															
4	15.1	14.7	14.3	13.8	13.4	12.9	12.4	11.8	11.2											
5	16.9	16.6	16.3	15.9	15.5	15.1	14.7	14.3	13.8	13.3	12.8	12.2	11.5							
7.5	21.1	20.9	20.6	20.4	20.1	19.8	19.5	19.2	18.9	18.6	18.2	17.9	17.5	17.1	16.7	16.2	15.8	15.3	14.8	14.2
10	24.8	24.6	24.4	24.2	24.0	23.8	23.6	23.4	23.1	22.9	22.6	22.4	22.1	21.8	21.5	21.2	20.9	20.6	20.2	19.8
12.5	28.2	28.1	27.9	27.8	27.6	27.4	27.3	27.1	26.9	26.7	26.5	26.3	26.1	25.9	25.7	25.4	25.2	24.9	24.7	24.4
15	31.4	31.3	31.2	31.1	31.0	30.8	30.7	30.6	30.4	30.3	30.1	29.9	29.8	29.6	29.4	29.2	29.0	28.8	28.6	28.4
20	37.6	37.5	37.5	37.4	37.3	37.2	37.1	37.0	36.9	36.8	36.7	36.6	36.5	36.4	36.3	36.1	36.0	35.9	35.7	35.6
25	43.5	43.5	43.4	43.4	43.3	43.3	43.2	43.1	43.1	43.0	42.9	42.8	42.8	42.7	42.6	42.5	42.4	42.3	42.2	42.1
30	49.3	49.3	49.2	49.2	49.2	49.1	49.1	49.0	49.0	48.9	48.9	48.8	48.8	48.7	48.7	48.6	48.5	48.5	48.4	48.3

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
5	15.5	13.8	11.5																	
7.5	20.1	18.9	17.5	15.8	13.6															
10	24.0	23.1	22.1	20.9	19.5	17.8	15.7	13.0												
12.5	27.6	26.9	26.1	25.2	24.1	22.9	21.4	19.7	17.7	15.2										
15	31.0	30.4	29.8	29.0	28.2	27.2	26.1	24.8	23.4	21.7	19.7	17.4	14.4							
20	37.3	36.9	36.5	36.0	35.4	34.8	34.0	33.2	32.3	31.2	30.1	28.8	27.3	25.6	23.7	21.5	18.9	15.6		
25	43.3	43.1	42.8	42.4	42.0	41.5	41.0	40.4	39.8	39.0	38.2	37.3	36.3	35.2	34.0	32.7	31.2	29.6	27.7	25.6
30	49.2	49.0	48.8	48.5	48.2	47.9	47.5	47.1	46.6	46.0	45.4	44.8	44.0	43.2	42.4	41.4	40.4	39.2	38.0	36.6
35	54.9	54.8	54.6	54.4	54.2	54.0	53.7	53.3	53.0	52.6	52.1	51.6	51.0	50.4	49.8	49.0	48.2	47.4	46.5	45.5
40	60.5	60.4	60.3	60.2	60.1	59.9	59.7	59.4	59.1	58.8	58.5	58.1	57.6	57.1	56.6	56.0	55.4	54.7	54.0	53.2
45	66.1	66.0	66.0	65.9	65.8	65.7	65.5	65.3	65.1	64.9	64.6	64.3	63.9	63.5	63.1	62.7	62.2	61.6	61.0	60.4
50	71.6	71.6	71.6	71.5	71.5	71.4	71.3	71.1	71.0	70.8	70.6	70.3	70.0	69.7	69.4	69.0	68.6	68.2	67.7	67.2
55	77.2	77.2	77.2	77.1	77.1	77.0	77.0	76.9	76.7	76.6	76.4	76.2	76.0	75.8	75.5	75.2	74.9	74.5	74.1	73.7
60	82.7	82.7	82.7	82.7	82.7	82.6	82.6	82.5	82.4	82.3	82.2	82.1	81.9	81.7	81.5	81.2	80.9	80.6	80.3	80.0
66	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.2	89.1	89.1	88.9	88.8	88.7	88.5	88.3	88.1	87.9	87.6	87.3

- Continuous Operation using H5-L Diaphragm within shaded region is not recommended.

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
5																				
7.5																				
10																				
12.5																				
15																				
20																				
25	23.2	20.3	16.8																	
30	35.1	33.5	31.7	29.6	27.3	24.7	21.6	17.8												
35	44.4	43.2	41.9	40.6	39.1	37.4	35.6	33.6	31.4	29.0	26.2	22.9	18.9							
40	52.4	51.5	50.5	49.5	48.4	47.2	45.9	44.5	43.0	41.3	39.6	37.6	35.5	33.2	30.5	27.5	24.1	19.8		
45	59.7	59.0	58.2	57.4	56.5	55.6	54.6	53.5	52.4	51.1	49.8	48.4	46.9	45.3	43.5	41.6	39.5	37.3	34.8	32.0
50	66.6	66.0	65.4	64.7	64.0	63.2	62.4	61.6	60.6	59.7	58.6	57.5	56.3	55.1	53.7	52.3	50.8	49.2	47.4	45.6
55	73.2	72.7	72.2	71.6	71.0	70.4	69.7	69.0	68.2	67.4	66.6	65.7	64.7	63.7	62.6	61.5	60.3	59.0	57.7	56.2
60	79.6	79.2	78.7	78.3	77.8	77.2	76.6	76.0	75.4	74.7	74.0	73.2	72.4	71.6	70.7	69.8	68.8	67.7	66.6	65.5
66	87.0	86.7	86.3	85.9	85.5	85.1	84.6	84.1	83.6	83.0	82.4	81.8	81.1	80.4	79.7	78.9	78.1	77.3	76.4	75.4

150/300 SERIES 2R75 (75%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_t Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 38$

$F_p = 1.00$

$X_t = 0.800$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3.0	3.25	3.5	3.75	4.0	4.25	4.5	4.75
2	16.0																			
2.5	18.0	17.1	16.3																	
3	19.7	19.0	18.2	17.4	16.5															
4	22.9	22.3	21.7	21.1	20.4	19.6	18.8	18.0	17.0											
5	25.8	25.3	24.7	24.2	23.6	23.0	22.4	21.7	21.0	20.2	19.4	18.5	17.5							
7.5	32.1	31.7	31.3	31.0	30.6	30.1	29.7	29.2	28.8	28.3	27.7	27.2	26.6	26.0	25.4	24.7	24.0	23.2	22.4	21.6
10	37.7	37.4	37.1	36.8	36.5	36.2	35.9	35.5	35.2	34.8	34.4	34.0	33.6	33.2	32.7	32.2	31.8	31.2	30.7	30.2
12.5	42.9	42.6	42.4	42.2	42.0	41.7	41.5	41.2	40.9	40.6	40.3	40.0	39.7	39.4	39.0	38.7	38.3	37.9	37.5	37.1
15	47.8	47.6	47.5	47.3	47.1	46.9	46.7	46.5	46.2	46.0	45.8	45.5	45.3	45.0	44.7	44.4	44.1	43.8	43.5	43.2
20	57.2	57.1	57.0	56.8	56.7	56.6	56.4	56.3	56.1	56.0	55.8	55.7	55.5	55.3	55.1	54.9	54.7	54.5	54.3	54.1
25	66.2	66.1	66.0	65.9	65.9	65.8	65.7	65.6	65.5	65.4	65.2	65.1	65.0	64.9	64.7	64.6	64.5	64.3	64.2	64.0
30	74.9	74.9	74.8	74.8	74.7	74.7	74.6	74.5	74.5	74.4	74.3	74.2	74.1	74.0	74.0	73.9	73.8	73.6	73.5	73.4

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
5	23.6	21.0	17.5																	
7.5	30.6	28.8	26.6	24.0	20.7															
10	36.5	35.2	33.6	31.8	29.6	27.0	23.8	19.8												
12.5	42.0	40.9	39.7	38.3	36.6	34.8	32.6	30.0	26.9	23.1										
15	47.1	46.2	45.3	44.1	42.8	41.4	39.7	37.7	35.5	33.0	30.0	26.4	21.9							
20	56.7	56.1	55.5	54.7	53.8	52.8	51.7	50.5	49.1	47.5	45.7	43.7	41.5	39.0	36.1	32.7	28.7	23.8		
25	65.9	65.5	65.0	64.5	63.8	63.1	62.3	61.4	60.4	59.3	58.1	56.7	55.2	53.6	51.7	49.7	47.4	44.9	42.1	38.9
30	74.7	74.5	74.1	73.8	73.3	72.8	72.2	71.5	70.8	70.0	69.0	68.0	66.9	65.7	64.4	62.9	61.4	59.6	57.7	55.7
35	83.4	83.2	83.0	82.7	82.4	82.0	81.6	81.1	80.5	79.9	79.2	78.4	77.6	76.6	75.6	74.5	73.3	72.0	70.6	69.1
40	92.0	91.9	91.7	91.5	91.3	91.0	90.7	90.3	89.9	89.4	88.8	88.2	87.6	86.8	86.0	85.2	84.2	83.2	82.1	80.9
45	100	100	100	100	100	99.8	99.6	99.3	99.0	98.6	98.2	97.7	97.2	96.6	95.9	95.2	94.5	93.7	92.8	91.8
50	109	109	109	109	109	109	109	108	108	108	108	107	107	106	106	105	105	104	104	103
55	117	117	117	117	117	117	117	117	117	116	116	116	116	115	115	114	114	113	113	112
60	126	126	126	126	126	126	126	125	125	125	125	125	124	124	124	123	123	123	122	122
66	136	136	136	136	136	136	136	136	136	136	135	135	135	135	135	134	134	134	133	133

 - Continuous Operation using H5-L Diaphragm within shaded region is not recommended.

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
5																				
7.5																				
10																				
12.5																				
15																				
20																				
25	35.2	30.9	25.5																	
30	53.4	50.9	48.1	45.0	41.6	37.6	32.9	27.1												
35	67.4	65.7	63.7	61.6	59.4	56.9	54.1	51.1	47.8	44.1	39.8	34.8	28.7							
40	79.7	78.3	76.8	75.2	73.5	71.7	69.7	67.6	65.3	62.8	60.1	57.2	54.0	50.4	46.4	41.9	36.6	30.1		
45	90.8	89.7	88.5	87.3	85.9	84.5	83.0	81.3	79.6	77.7	75.7	73.6	71.3	68.8	66.1	63.2	60.1	56.7	52.9	48.7
50	101	100	99.4	98.4	97.3	96.1	94.9	93.6	92.2	90.7	89.1	87.4	85.6	83.7	81.7	79.5	77.2	74.8	72.1	69.3
55	111	111	110	109	108	107	106	105	104	103	101	99.8	98.4	96.8	95.2	93.5	91.6	89.7	87.7	85.5
60	121	120	120	119	118	117	117	116	115	114	112	111	110	109	107	106	105	103	101	99.5
66	132	132	131	131	130	129	129	128	127	126	125	124	123	122	121	120	119	117	116	115

150/300 SERIES 2" (100%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_i Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 56$

$F_p = 1.00$

$X_i = 0.800$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3.0	3.25	3.5	3.75	4.0	4.25	4.5	4.75
2	23.6																			
2.5	26.5	25.3	24.0																	
3	29.1	28.0	26.9	25.7	24.4															
4	33.7	32.9	32.0	31.0	30.0	28.9	27.7	26.5	25.1											
5	38.0	37.2	36.5	35.7	34.8	33.9	33.0	32.0	30.9	29.8	28.6	27.3	25.9							
7.5	47.2	46.7	46.2	45.6	45.0	44.4	43.8	43.1	42.4	41.6	40.9	40.1	39.2	38.3	37.4	36.4	35.3	34.2	33.1	31.8
10	55.5	55.1	54.7	54.3	53.8	53.4	52.9	52.4	51.8	51.3	50.7	50.1	49.5	48.9	48.2	47.5	46.8	46.1	45.3	44.4
12.5	63.2	62.9	62.5	62.2	61.8	61.5	61.1	60.7	60.3	59.9	59.4	59.0	58.5	58.0	57.5	57.0	56.4	55.8	55.2	54.6
15	70.4	70.2	69.9	69.7	69.4	69.1	68.8	68.5	68.1	67.8	67.4	67.1	66.7	66.3	65.9	65.5	65.0	64.6	64.1	63.6
20	84.3	84.1	83.9	83.8	83.6	83.4	83.2	83.0	82.7	82.5	82.3	82.0	81.8	81.5	81.2	80.9	80.6	80.3	80.0	79.7
25	97.5	97.4	97.3	97.2	97.1	96.9	96.8	96.6	96.5	96.3	96.2	96.0	95.8	95.6	95.4	95.2	95.0	94.8	94.6	94.3
30	110	110	110	110	110	110	110	110	110	110	110	109	109	109	109	109	109	109	108	108

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
5	34.8	30.9	25.9																	
7.5	45.0	42.4	39.2	35.3	30.5															
10	53.8	51.8	49.5	46.8	43.6	39.8	35.1	29.2												
12.5	61.8	60.3	58.5	56.4	54.0	51.2	48.0	44.2	39.7	34.1										
15	69.4	68.1	66.7	65.0	63.1	60.9	58.5	55.6	52.4	48.6	44.2	38.9	32.2							
20	83.6	82.7	81.8	80.6	79.3	77.9	76.2	74.4	72.3	70.0	67.4	64.4	61.1	57.4	53.1	48.2	42.3	35.0		
25	97.1	96.5	95.8	95.0	94.1	93.0	91.9	90.5	89.1	87.4	85.6	83.6	81.4	78.9	76.2	73.2	69.9	66.2	62.1	57.3
30	110	110	109	109	108	107	106	105	104	103	102	100	98.6	96.8	94.9	92.7	90.4	87.9	85.1	82.0
35	123	123	122	122	121	121	120	120	119	118	117	116	114	113	111	110	108	106	104	102
40	136	135	135	135	135	134	134	133	132	132	131	130	129	128	127	126	124	123	121	119
45	148	148	148	148	147	147	147	146	146	145	145	144	143	142	141	140	139	138	137	135
50	160	160	160	160	160	160	160	159	159	159	158	158	157	156	155	155	154	153	152	150
55	173	173	173	173	173	173	172	172	172	172	171	171	170	170	169	168	168	167	166	165
60	185	185	185	185	185	185	185	185	185	184	184	184	183	183	182	182	181	181	180	179
66	200	200	200	200	200	200	200	200	200	200	199	199	199	199	198	198	197	197	196	196

- Continuous Operation using H5-L Diaphragm within shaded region is not recommended.

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
5																				
7.5																				
10																				
12.5																				
15																				
20																				
25	51.9	45.5	37.6																	
30	78.7	75.0	70.9	66.4	61.2	55.4	48.4	40.0												
35	99.4	96.8	93.9	90.8	87.5	83.8	79.8	75.4	70.4	64.9	58.6	51.2	42.2							
40	117	115	113	111	108	106	103	100	96.3	92.6	88.6	84.3	79.6	74.3	68.4	61.7	53.9	44.4		
45	134	132	130	129	127	125	122	120	117	115	112	108	105	101	97.5	93.2	88.6	83.5	77.9	71.7
50	149	148	147	145	143	142	140	138	136	134	131	129	126	123	120	117	114	110	106	102
55	164	163	162	160	159	158	156	155	153	151	149	147	145	143	140	138	135	132	129	126
60	178	177	176	175	174	173	172	170	169	167	166	164	162	160	158	156	154	152	149	147
66	195	194	193	192	192	191	189	188	187	186	185	183	182	180	179	177	175	173	171	169

150/300 SERIES 3R50 (50%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_t Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 55$

$F_p = 1.00$

$X_t = 0.700$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3.0	3.25	3.5	3.75	4.0	4.25	4.5	4.75
2	23.0																			
2.5	25.7	24.6	23.4																	
3	28.2	27.2	26.2	25.0	23.8															
4	32.6	31.8	31.0	30.1	29.1	28.1	27.0	25.8	24.5											
5	36.6	35.9	35.2	34.5	33.7	32.9	32.0	31.0	30.0	29.0	27.8	26.6	25.2							
7.5	45.2	44.8	44.3	43.8	43.3	42.7	42.1	41.5	40.9	40.2	39.5	38.7	38.0	37.1	36.2	35.3	34.3	33.3	32.2	31.0
10	52.8	52.5	52.1	51.8	51.4	51.0	50.6	50.1	49.7	49.2	48.7	48.2	47.6	47.1	46.5	45.8	45.2	44.5	43.8	43.0
12.5	59.7	59.5	59.2	59.0	58.7	58.4	58.1	57.8	57.4	57.1	56.7	56.3	55.9	55.5	55.1	54.6	54.1	53.6	53.1	52.5
15	66.3	66.1	65.9	65.7	65.5	65.3	65.1	64.8	64.6	64.3	64.0	63.7	63.4	63.1	62.8	62.4	62.1	61.7	61.3	60.9
20	78.6	78.6	78.5	78.4	78.3	78.1	78.0	77.9	77.7	77.6	77.4	77.2	77.1	76.9	76.7	76.5	76.2	76.0	75.8	75.5
25	90.4	90.4	90.3	90.3	90.3	90.2	90.1	90.1	90.0	89.9	89.8	89.7	89.6	89.5	89.4	89.3	89.2	89.0	88.9	88.7
30	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	101	101	101	101	101

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
5	33.7	30.0	25.2																	
7.5	43.3	40.9	38.0	34.3	29.7															
10	51.4	49.7	47.6	45.2	42.2	38.6	34.2	28.5												
12.5	58.7	57.4	55.9	54.1	52.0	49.4	46.5	42.9	38.6	33.3										
15	65.5	64.6	63.4	62.1	60.4	58.5	56.3	53.7	50.7	47.2	43.0	37.9	31.5							
20	78.3	77.7	77.1	76.2	75.2	74.1	72.7	71.1	69.3	67.3	64.9	62.2	59.2	55.7	51.7	47.0	41.3	34.3		
25	90.3	90.0	89.6	89.2	88.6	87.8	86.9	85.9	84.7	83.4	81.8	80.1	78.1	76.0	73.5	70.8	67.7	64.2	60.3	55.8
30	102	102	102	101	101	101	100	99.3	98.5	97.6	96.6	95.4	94.0	92.5	90.8	89.0	86.9	84.6	82.1	79.3
35	113	113	113	113	113	113	112	112	111	111	110	109	108	107	106	105	103	102	99.7	97.8
40	125	125	125	125	125	124	124	124	124	123	123	122	122	121	120	119	118	117	115	114
45	136	136	136	136	136	136	136	136	136	135	135	135	134	134	133	132	132	131	130	129
50	147	147	147	147	147	147	147	147	147	147	147	147	146	146	146	145	145	144	143	142
55	159	159	159	159	159	159	159	159	159	159	159	159	158	158	158	157	157	157	156	155
60	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	169	169	168	168
66	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	183	183	183	183

 - Continuous Operation using H5-L Diaphragm within shaded region is not recommended.

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
5																				
7.5																				
10																				
12.5																				
15																				
20																				
25	50.6	44.4	36.8																	
30	76.2	72.8	68.9	64.6	59.7	54.0	47.4	39.1												
35	95.6	93.2	90.6	87.8	84.7	81.3	77.5	73.3	68.6	63.3	57.3	50.1	41.4							
40	112	110	109	107	104	102	99.2	96.3	93.2	89.8	86.1	82.0	77.5	72.4	66.8	60.3	52.7	43.5		
45	127	126	125	123	121	119	117	115	113	110	108	105	102	98.3	94.6	90.6	86.2	81.4	76.0	70.0
50	141	140	139	138	137	135	134	132	130	128	126	124	122	119	116	113	110	107	103	99.2
55	155	154	153	152	151	150	149	147	146	144	143	141	139	137	135	133	130	128	125	122
60	167	167	166	165	165	164	163	162	160	159	158	156	155	153	152	150	148	146	144	141
66	182	182	181	181	180	179	179	178	177	176	175	174	173	171	170	169	167	166	164	162

150/300 SERIES 3" (100%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_t Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 110$

$F_p = 1.00$

$X_t = 0.800$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3.0	3.25	3.5	3.75	4.0	4.25	4.5	4.75
2	46.4																			
2.5	52.0	49.6	47.1																	
3	57.1	55.0	52.8	50.4	47.9															
4	66.3	64.6	62.8	60.9	58.9	56.8	54.5	52.0	49.4											
5	74.6	73.1	71.6	70.1	68.4	66.6	64.8	62.8	60.7	58.5	56.1	53.5	50.8							
7.5	92.8	91.8	90.7	89.6	88.5	87.2	86.0	84.6	83.3	81.8	80.3	78.7	77.0	75.3	73.4	71.5	69.4	67.3	65.0	62.5
10	109	108	107	107	106	105	104	103	102	101	99.6	98.5	97.3	96.0	94.7	93.4	91.9	90.5	88.9	87.3
12.5	124	123	123	122	121	121	120	119	118	118	117	116	115	114	113	112	111	110	109	107
15	138	138	137	137	136	136	135	134	134	133	132	132	131	130	129	129	128	127	126	125
20	166	165	165	165	164	164	163	163	163	162	162	161	161	160	160	159	158	158	157	157
25	192	191	191	191	191	190	190	190	190	189	189	189	188	188	187	187	187	186	186	185
30	217	217	217	216	216	216	216	216	216	215	215	215	215	214	214	214	213	213	213	213

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
5	68.4	60.7	50.8																	
7.5	88.5	83.3	77.0	69.4	60.0															
10	106	102	97.3	91.9	85.6	78.1	69.0	57.4												
12.5	121	118	115	111	106	101	94.3	86.8	77.9	67.0										
15	136	134	131	128	124	120	115	109	103	95.5	86.8	76.4	63.3							
20	164	163	161	158	156	153	150	146	142	137	132	127	120	113	104	94.7	83.1	68.8		
25	191	190	188	187	185	183	180	178	175	172	168	164	160	155	150	144	137	130	122	113
30	216	216	215	213	212	211	209	207	205	202	200	197	194	190	186	182	178	173	167	161
35	241	241	240	240	239	237	236	235	233	231	229	227	225	222	219	216	212	208	204	200
40	266	266	266	265	264	264	263	261	260	259	257	255	254	251	249	247	244	241	238	234
45	291	291	290	290	290	289	288	287	287	285	284	283	281	280	278	276	274	271	269	266
50	315	315	315	315	315	314	314	313	312	311	310	309	308	307	305	304	302	300	298	296
55	340	340	340	339	339	339	339	338	338	337	336	335	334	333	332	331	329	328	326	324
60	364	364	364	364	364	364	363	363	363	362	362	361	360	359	358	357	356	355	353	352
66	393	393	393	393	393	393	393	393	393	392	392	391	391	390	389	389	388	387	385	384

- Continuous Operation using H5-L Diaphragm within shaded region is not recommended.

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
5																				
7.5																				
10																				
12.5																				
15																				
20																				
25	102	89.3	73.8																	
30	155	147	139	130	120	109	95.2	78.5												
35	195	190	184	178	172	165	157	148	138	128	115	101	82.9							
40	231	227	222	218	213	208	202	196	189	182	174	166	156	146	134	121	106	87.2		
45	263	260	256	253	249	245	240	235	230	225	219	213	206	199	191	183	174	164	153	141
50	293	291	288	285	282	278	275	271	267	262	258	253	248	242	236	230	224	216	209	201
55	322	320	318	315	313	310	307	304	300	297	293	289	285	280	276	271	265	260	254	247
60	350	348	346	344	342	340	337	335	332	329	326	322	319	315	311	307	303	298	293	288
66	383	381	380	378	376	374	372	370	368	365	363	360	357	354	351	347	344	340	336	332

150/300 SERIES 4R50 (50%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_t Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 105$

$F_p = 1.00$

$X_t = 0.700$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3.0	3.25	3.5	3.75	4.0	4.25	4.5	4.75
2	43.9																			
2.5	49.1	47.0	44.6																	
3	53.8	52.0	49.9	47.7	45.4															
4	62.3	60.8	59.2	57.5	55.6	53.7	51.5	49.2	46.8											
5	69.9	68.6	67.3	65.9	64.4	62.8	61.1	59.3	57.3	55.3	53.1	50.7	48.1							
7.5	86.3	85.5	84.6	83.6	82.6	81.6	80.4	79.3	78.1	76.8	75.4	74.0	72.5	70.9	69.2	67.4	65.6	63.6	61.5	59.2
10	101	100	99.5	98.8	98.1	97.3	96.6	95.7	94.8	93.9	93.0	92.0	90.9	89.8	88.7	87.5	86.2	84.9	83.5	82.1
12.5	114	114	113	113	112	112	111	110	110	109	108	108	107	106	105	104	103	102	101	100
15	127	126	126	125	125	125	124	124	123	123	122	122	121	120	120	119	118	118	117	116
20	150	150	150	150	149	149	149	149	148	148	148	147	147	147	146	146	146	145	145	144
25	173	173	172	172	172	172	172	172	172	172	172	171	171	171	171	170	170	170	170	169
30	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194	193	193	193

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
5	64.4	57.3	48.1																	
7.5	82.6	78.1	72.5	65.6	56.8															
10	98.1	94.8	90.9	86.2	80.6	73.7	65.3	54.5												
12.5	112	110	107	103	99.2	94.4	88.7	81.9	73.7	63.6										
15	125	123	121	118	115	112	107	103	96.8	90.1	82.1	72.4	60.2							
20	149	148	147	146	144	141	139	136	132	128	124	119	113	106	98.7	89.7	78.9	65.4		
25	172	172	171	170	169	168	166	164	162	159	156	153	149	145	140	135	129	123	115	107
30	194	194	194	194	193	192	191	190	188	186	184	182	179	177	173	170	166	162	157	151
35	216	216	216	216	216	215	215	214	213	212	210	209	207	205	202	200	197	194	190	187
40	238	238	238	238	238	238	237	237	236	236	235	233	232	231	229	227	225	223	220	217
45	260	260	260	260	260	260	259	259	259	259	258	257	256	255	254	253	251	249	247	245
50	281	281	281	281	281	281	281	281	281	281	281	280	280	279	278	277	276	275	273	272
55	303	303	303	303	303	303	303	303	303	303	303	303	302	302	301	301	300	299	298	297
60	325	325	325	325	325	325	325	325	325	325	325	325	325	324	324	324	323	322	322	321
66	351	351	351	351	351	351	351	351	351	351	351	351	351	351	351	350	350	350	349	349

 - Continuous Operation using H5-L Diaphragm within shaded region is not recommended.

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
5																				
7.5																				
10																				
12.5																				
15																				
20																				
25	96.7	84.8	70.2																	
30	145	139	132	123	114	103	90.4	74.7												
35	183	178	173	168	162	155	148	140	131	121	109	95.7	79.0							
40	214	211	207	203	199	194	189	184	178	171	164	156	148	138	127	115	101	83.0		
45	243	240	238	235	231	228	224	220	216	211	206	200	194	188	181	173	165	155	145	134
50	270	268	266	263	261	258	255	252	248	245	241	237	232	227	222	216	210	204	197	189
55	295	294	292	290	288	286	284	281	278	275	272	269	265	262	258	253	249	244	238	233
60	320	318	317	316	314	312	311	309	306	304	301	299	296	293	289	286	282	278	274	270
66	348	347	346	345	344	343	341	340	338	336	334	332	330	327	325	322	319	316	313	309

150/300 SERIES 4" (100%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_t Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 192$

$F_p = 1.00$

$X_t = 0.800$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3.0	3.25	3.5	3.75	4.0	4.25	4.5	4.75
2	80.9																			
2.5	90.7	86.7	82.3																	
3	99.6	96.0	92.2	88.1	83.6															
4	116	113	110	106	103	99.1	95.1	90.8	86.1											
5	130	128	125	122	119	116	113	110	106	102	97.9	93.5	88.6							
7.5	162	160	158	156	154	152	150	148	145	143	140	137	134	131	128	125	121	117	113	109
10	190	189	188	186	185	183	181	180	178	176	174	172	170	168	165	163	160	158	155	152
12.5	217	215	214	213	212	211	209	208	207	205	204	202	201	199	197	195	193	191	189	187
15	242	241	240	239	238	237	236	235	234	232	231	230	229	227	226	224	223	221	220	218
20	289	288	288	287	287	286	285	284	284	283	282	281	280	279	278	277	276	275	274	273
25	334	334	334	333	333	332	332	331	331	330	330	329	328	328	327	326	326	325	324	323
30	379	378	378	378	378	377	377	377	376	376	375	375	375	374	374	373	373	372	372	371

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
5	119	106	89																	
7.5	154	145	134	121	105															
10	185	178	170	160	149	136	120	100												
12.5	212	207	201	193	185	176	165	152	136	117										
15	238	234	229	223	216	209	200	191	180	167	151	133	111							
20	287	284	280	276	272	267	261	255	248	240	231	221	210	197	182	165	145	120		
25	333	331	328	326	323	319	315	310	305	300	294	287	279	271	261	251	240	227	213	197
30	378	376	375	373	370	368	365	361	358	353	349	344	338	332	325	318	310	301	292	281
35	421	421	419	418	416	414	412	410	407	404	400	396	392	387	382	377	370	364	357	349
40	465	464	463	463	461	460	458	456	454	452	449	446	442	439	435	430	426	420	415	409
45	507	507	507	506	505	504	503	502	500	498	496	494	491	488	485	481	477	473	469	464
50	550	550	550	549	549	548	547	546	545	544	542	540	538	536	533	530	527	524	520	516
55	593	593	593	592	592	592	591	590	589	588	587	585	584	582	580	577	575	572	569	566
60	635	635	635	635	635	635	634	634	633	632	631	630	629	627	626	624	622	619	617	614
66	686	686	686	686	686	686	686	685	685	685	684	683	682	681	680	678	677	675	673	671

- Continuous Operation using H5-L Diaphragm within shaded region is not recommended.

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
5																				
7.5																				
10																				
12.5																				
15																				
20																				
25	178	156	129																	
30	270	257	243	228	210	190	166	137												
35	341	332	322	311	300	287	274	258	242	223	201	176	145							
40	402	396	388	380	371	362	352	342	330	317	304	289	273	255	235	212	185	152		
45	459	453	447	441	434	427	419	411	402	393	383	372	360	348	334	320	304	286	267	246
50	512	507	502	497	492	486	479	473	466	458	450	442	433	423	413	402	390	378	364	350
55	562	559	555	550	546	541	536	530	524	518	511	504	497	489	481	472	463	453	443	432
60	611	608	605	601	597	593	589	584	579	574	568	563	556	550	543	536	528	520	512	503
66	668	666	663	660	657	653	650	646	642	637	633	628	623	618	612	606	600	593	587	579

150/300 SERIES 6R50 (50%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_t Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 160$

$F_p = 1.00$

$X_t = 0.700$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3.0	3.25	3.5	3.75	4.0	4.25	4.5	4.75
2	66.9																			
2.5	74.8	71.6	68.0																	
3	82.0	79.2	76.1	72.7	69.1															
4	95.0	92.6	90.2	87.6	84.8	81.8	78.5	75.0	71.3											
5	106	105	103	100	98.1	95.6	93.1	90.3	87.4	84.3	80.9	77.3	73.4							
7.5	132	130	129	127	126	124	123	121	119	117	115	113	110	108	105	103	99.9	96.9	93.6	90.2
10	154	153	152	151	149	148	147	146	145	143	142	140	139	137	135	133	131	129	127	125
12.5	174	173	172	172	171	170	169	168	167	166	165	164	163	161	160	159	157	156	154	153
15	193	192	192	191	191	190	189	189	188	187	186	185	185	184	183	182	181	179	178	177
20	229	229	228	228	228	227	227	227	226	226	225	225	224	224	223	222	222	221	220	220
25	263	263	263	263	263	262	262	262	262	262	261	261	261	260	260	260	259	259	259	258
30	296	296	296	296	296	296	296	296	296	296	296	296	296	295	295	295	295	295	294	294

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
5	98.1	87.4	73.4																	
7.5	126	119	110	100	86.5															
10	149	145	139	131	123	112	100	83.0												
12.5	171	167	163	157	151	144	135	125	112	96.9										
15	191	188	185	181	176	170	164	156	148	137	125	110	91.7							
20	228	226	224	222	219	215	212	207	202	196	189	181	172	162	150	137	120	100		
25	263	262	261	259	258	255	253	250	246	243	238	233	227	221	214	206	197	187	175	162
30	296	296	296	295	294	293	291	289	287	284	281	277	273	269	264	259	253	246	239	231
35	329	329	329	329	329	328	327	326	324	322	320	318	315	312	308	304	300	295	290	284
40	363	363	363	363	362	362	362	361	360	359	357	356	354	351	349	346	343	339	335	331
45	396	396	396	396	396	396	395	395	395	394	393	392	391	389	387	385	383	380	377	374
50	429	429	429	429	429	429	429	429	428	428	428	427	426	425	424	422	421	419	416	414
55	462	462	462	462	462	462	462	462	462	462	462	461	461	460	459	458	457	455	454	452
60	495	495	495	495	495	495	495	495	495	495	495	495	495	494	494	493	492	491	490	489
66	535	535	535	535	535	535	535	535	535	535	535	535	535	535	534	534	534	533	532	531

- Continuous Operation using H5-L Diaphragm within shaded region is not recommended.

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
5																				
7.5																				
10																				
12.5																				
15																				
20																				
25	147	129	107																	
30	222	212	200	188	174	157	138	114												
35	278	271	264	255	246	236	225	213	200	184	167	146	120							
40	327	321	316	310	303	296	289	280	271	261	250	238	225	211	194	175	153	126		
45	370	366	362	358	353	347	342	335	329	321	313	305	296	286	275	264	251	237	221	204
50	411	408	405	401	397	393	389	384	379	373	367	361	354	346	338	330	321	311	300	289
55	450	448	445	442	439	436	432	428	424	420	415	410	404	399	392	386	379	371	363	354
60	487	485	483	481	479	476	473	470	467	463	459	455	451	446	441	436	430	424	418	411
66	530	529	528	526	524	522	520	518	515	512	509	506	503	499	495	491	486	482	477	471

150/300 SERIES 6" (100%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_t Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 303$

$F_p = 1.00$

$X_t = 0.700$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3.0	3.25	3.5	3.75	4.0	4.25	4.5	4.75
2	127																			
2.5	142	136	129																	
3	155	150	144	138	131															
4	180	175	171	166	161	155	149	142	135											
5	202	198	194	190	186	181	176	171	165	160	153	146	139							
7.5	249	247	244	241	238	235	232	229	225	222	218	213	209	205	200	195	189	183	177	171
10	291	289	287	285	283	281	279	276	274	271	268	265	262	259	256	252	249	245	241	237
12.5	329	328	326	325	323	322	320	318	316	315	312	310	308	306	303	301	298	295	292	289
15	365	364	363	362	361	360	359	357	356	354	353	351	349	348	346	344	342	340	338	335
20	433	433	432	432	431	431	430	429	428	427	427	426	425	424	422	421	420	419	417	416
25	498	498	498	497	497	497	497	496	496	495	495	494	494	493	493	492	491	490	490	489
30	561	561	561	561	561	561	561	561	561	560	560	560	560	559	559	559	558	558	558	557

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
5	186	165	139																	
7.5	238	225	209	189	164															
10	283	274	262	249	233	213	188	157												
12.5	323	316	308	298	286	272	256	236	213	183										
15	361	356	349	342	333	322	310	296	279	260	237	209	174							
20	431	428	425	420	415	408	401	392	382	371	358	343	326	307	285	259	228	189		
25	497	496	494	491	488	484	479	473	467	459	451	441	430	418	405	390	373	354	332	308
30	561	561	560	558	557	554	551	547	543	538	532	525	518	510	500	490	479	466	452	437
35	624	624	624	623	622	621	619	617	614	611	607	602	597	591	584	577	568	559	549	539
40	687	687	687	687	686	686	685	684	682	680	677	674	670	666	661	655	649	643	635	627
45	749	749	749	749	749	749	749	748	747	746	744	742	740	737	733	729	725	720	714	708
50	812	812	812	812	812	812	812	812	811	811	810	809	807	805	803	800	796	793	788	784
55	875	875	875	875	875	875	875	875	875	874	874	873	873	871	870	868	865	863	859	856
60	938	938	938	938	938	938	938	938	938	938	938	937	937	936	935	934	932	930	928	925
66	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1012	1012	1011	1011	1009	1008	1006

- Continuous Operation using H5-L Diaphragm within shaded region is not recommended.

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
5																				
7.5																				
10																				
12.5																				
15																				
20																				
25	279	245	203																	
30	420	401	380	356	329	298	261	216												
35	527	514	499	484	467	448	427	404	378	349	315	276	228							
40	618	609	598	587	574	561	546	531	513	495	474	452	427	399	368	332	291	240		
45	701	694	686	677	668	658	647	635	622	608	594	578	560	542	521	499	475	448	419	386
50	779	773	767	760	753	745	736	727	717	706	695	683	670	656	641	624	607	588	568	547
55	852	848	843	837	832	825	819	811	803	795	786	776	766	755	743	731	717	703	688	671
60	922	919	915	911	907	902	896	890	884	877	870	862	854	845	835	825	815	803	791	778
66	1004	1002	999	996	993	989	985	980	975	970	964	958	952	945	937	929	921	912	902	892

150/300 SERIES 2R25 (25%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_t Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 12.75$

$F_p = 1.00$

$X_t = 0.700$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	5	10	15	20	30	40	50	60	70	80	90	100	125	150	175	200	225	250	275
20	18.2	17.4	15.6	12.0																
25	21.0	20.5	19.3	17.0	12.9															
30	23.6	23.4	22.6	21.1	18.4															
35	26.3	26.2	25.7	24.6	22.7	14.7														
40	28.9	28.9	28.6	27.8	26.4	20.8														
45	31.5	31.5	31.4	30.9	29.8	25.6	16.2													
50	34.2	34.2	34.1	33.8	33.0	29.7	23.0													
60	39.5	39.5	39.5	39.3	38.9	36.9	32.7	25.0												
66	42.6	42.6	42.6	42.6	42.3	40.8	37.5	31.7	20.8											
70	44.7	44.7	44.7	44.7	44.6	43.3	40.5	35.5	26.8											
80	50.0	50.0	50.0	50.0	50.0	49.3	47.3	43.8	38.1	28.6										
90	55.3	55.3	55.3	55.3	55.3	55.0	53.6	51.1	46.9	40.5	30.2									
100	60.6	60.6	60.6	60.6	60.6	60.4	59.6	57.7	54.6	49.9	42.8	31.8								
125	73.8	73.8	73.8	73.8	73.8	73.8	73.6	72.8	71.2	68.7	65.0	59.8	52.7							
150	87.0	87.0	87.0	87.0	87.0	87.0	87.0	86.8	86.0	84.6	82.4	79.4	75.2	58.1						
175	100	100	100	100	100	100	100	100	99.9	99.2	98.0	96.0	93.4	82.7	63.0					
200	113	113	113	113	113	113	113	113	113	113	112	111	109	102	89.6	67.6				
225	127	127	127	127	127	127	127	127	127	126	126	126	124	119	111	96.0	71.9			
250	140	140	140	140	140	140	140	140	140	140	140	139	139	135	129	118	102	76.0		
275	153	153	153	153	153	153	153	153	153	153	153	153	153	150	145	138	126	108	79.9	
285	158	158	158	158	158	158	158	158	158	158	158	158	158	156	152	145	134	118	94.5	52.8

300 SERIES 2R50 (50%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	10	20	30	50	75	100	125	150	175	200	250	300	350	400	450	500	550	600	650
300	166	166	166	166	166	166	166	165	161	155	146	113								
325	179	179	179	179	179	179	179	179	176	171	164	139	87							
350	193	193	193	193	193	193	193	192	191	187	181	161	123							
375	206	206	206	206	206	206	206	206	205	202	197	181	151	94						
400	219	219	219	219	219	219	219	219	218	216	213	199	175	133						
425	232	232	232	232	232	232	232	232	232	231	228	217	197	163	100					
450	245	245	245	245	245	245	245	245	245	244	242	233	216	188	141					
475	259	259	259	259	259	259	259	259	259	258	257	249	235	211	173	106				
500	272	272	272	272	272	272	272	272	272	272	270	264	252	232	201	150				
525	285	285	285	285	285	285	285	285	285	285	284	279	269	252	225	183	111			
550	298	298	298	298	298	298	298	298	298	298	298	294	285	270	247	212	157			
575	311	311	311	311	311	311	311	311	311	311	311	308	301	288	267	238	193	117		
600	325	325	325	325	325	325	325	325	325	325	325	322	316	305	287	261	223	165		
625	338	338	338	338	338	338	338	338	338	338	338	336	331	321	305	282	250	202	122	
650	351	351	351	351	351	351	351	351	351	351	351	350	346	337	323	303	274	234	172	
675	364	364	364	364	364	364	364	364	364	364	364	364	360	352	340	322	297	261	211	127
700	377	377	377	377	377	377	377	377	377	377	377	377	374	368	357	341	318	287	244	179
725	391	391	391	391	391	391	391	391	391	391	391	390	388	383	373	358	338	310	273	219
740	398	398	398	398	398	398	398	398	398	398	398	398	397	391	382	369	350	324	289	240

 - Continuous Operation using H7 Diaphragm within shaded region is not recommended.

150/300 SERIES 2R50 (50%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_t Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 25$

$F_p = 1.00$

$X_t = 0.800$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	5	10	15	20	30	40	50	60	70	80	90	100	125	150	175	200	225	250	275
20	37.6	35.4	31.2	23.7																
25	43.5	42.0	39.0	34.0	25.6															
30	49.3	48.2	46.0	42.4	36.6															
35	54.9	54.2	52.6	49.8	45.5	29.0														
40	60.5	60.1	58.8	56.6	53.2	41.3														
45	66.1	65.8	64.9	63.1	60.4	51.1	32.0													
50	71.6	71.5	70.8	69.4	67.2	59.7	45.6													
60	82.7	82.7	82.3	81.5	80.0	74.7	65.5	49.5												
66	89.3	89.3	89.1	88.5	87.3	83.0	75.4	63.0	41.0											
70	93.8	93.8	93.6	93.1	92.1	88.3	81.6	70.8	53.1											
80	105	105	105	105	104	101	96.0	88.0	75.8	56.4										
90	116	116	116	116	115	113	109	103	94.0	80.5	59.6									
100	127	127	127	127	127	125	122	117	110	99.7	85.0	62.6								
125	155	155	155	155	155	154	153	150	145	139	131	119	105							
150	182	182	182	182	182	182	181	180	177	173	167	160	151	115						
175	210	210	210	210	210	210	210	209	207	204	200	195	189	165	125					
200	238	238	238	238	238	238	238	237	236	234	232	228	223	206	179	134				
225	265	265	265	265	265	265	265	265	265	263	261	259	255	242	222	191	142			
250	293	293	293	293	293	293	293	293	293	292	291	289	286	276	260	237	203	150		
275	321	321	321	321	321	321	321	321	320	320	319	318	316	308	295	277	251	214	157	
285	332	332	332	332	332	332	332	332	332	332	331	331	330	328	309	292	268	235	187	104

300 SERIES 2R50 (50%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																				
	0	10	20	30	50	75	100	125	150	175	200	250	300	350	400	450	500	550	600	650	
300	348	348	348	348	348	348	345	339	329	314	293	224									
325	376	376	376	376	376	376	374	369	361	348	331	277	172								
350	404	404	404	404	404	404	402	399	392	382	367	322	244								
375	431	431	431	431	431	431	431	428	422	414	401	364	301	185							
400	459	459	459	459	459	459	459	457	452	445	434	402	350	262							
425	487	487	487	487	487	487	486	485	482	475	466	439	394	323	197						
450	514	514	514	514	514	514	514	513	511	505	498	474	435	375	279						
475	542	542	542	542	542	542	542	541	539	535	528	507	473	422	344	208					
500	570	570	570	570	570	570	570	569	568	564	559	540	510	465	399	295					
525	597	597	597	597	597	597	597	597	596	593	588	572	545	506	448	363	219				
550	625	625	625	625	625	625	625	625	624	622	618	603	580	544	493	421	311				
575	653	653	653	653	653	653	653	653	652	650	647	634	613	581	536	473	382	229			
600	680	680	680	680	680	680	680	680	680	679	676	665	646	617	576	521	442	325			
625	708	708	708	708	708	708	708	708	708	707	704	695	678	652	615	565	497	399	239		
650	736	736	736	736	736	736	736	736	736	736	735	733	725	709	686	652	607	546	463	339	
675	763	763	763	763	763	763	763	763	763	763	761	754	740	719	688	647	593	519	416	249	
700	791	791	791	791	791	791	791	791	791	791	790	789	783	771	751	723	686	636	571	482	352
725	819	819	819	819	819	819	819	819	819	819	819	818	812	801	783	758	723	678	619	541	433
740	835	835	835	835	835	835	835	835	835	835	835	834	830	819	802	778	745	702	647	574	475

 - Continuous Operation using H7 Diaphragm within shaded region is not recommended.

150/300 SERIES 2R75 (75%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_t Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 38$

$F_p = 1.00$

$X_t = 0.800$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	5	10	15	20	30	40	50	60	70	80	90	100	125	150	175	200	225	250	275
20	57.2	53.8	47.5	36.1																
25	66.2	63.8	59.3	51.7	38.9															
30	74.9	73.3	70.0	64.4	55.7															
35	83.5	82.4	79.9	75.6	69.1	44.1														
40	92.0	91.3	89.4	86.0	80.9	62.8														
45	100	100	98.6	95.9	91.8	77.7	48.7													
50	109	109	108	105	102	90.7	69.3													
60	126	126	125	124	122	114	99.5	75.2												
66	136	136	135	135	133	126	115	95.8	62.2											
70	143	143	142	142	140	134	124	108	80.7											
80	159	159	159	159	158	154	146	134	115	85.8										
90	176	176	176	176	175	172	166	157	143	122	90.6									
100	193	193	193	193	193	190	186	178	167	152	129	95.2								
125	235	235	235	235	235	234	232	227	221	211	198	182	159							
150	277	277	277	277	277	277	276	273	269	263	254	243	229	175						
175	319	319	319	319	319	319	319	317	315	310	305	297	287	251	190					
200	361	361	361	361	361	361	361	361	359	356	352	346	339	313	271	203				
225	403	403	403	403	403	403	403	403	402	400	397	393	388	368	337	290	216			

300 SERIES 2R75 (75%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	10	20	30	50	75	100	125	150	175	200	250	300	350	400	450	500	550	600	650
300	529	529	529	529	529	529	525	515	500	477	445	341								
325	571	571	571	571	571	571	569	561	549	530	503	421	261							
350	613	613	613	613	613	613	612	606	596	580	558	490	371							
375	656	656	656	656	656	656	655	650	642	629	610	553	457	280						
400	698	698	698	698	698	698	697	694	687	676	660	611	531	399						
425	740	740	740	740	740	740	739	737	732	723	709	667	598	491	299					
450	782	782	782	782	782	782	782	780	776	768	757	720	661	570	424					
475	824	824	824	824	824	824	824	823	820	813	803	771	719	641	522	316				
500	866	866	866	866	866	866	866	865	863	858	849	821	775	707	606	449				
525	908	908	908	908	908	908	908	907	906	902	894	869	829	768	681	552	333			
550	950	950	950	950	950	950	950	950	949	945	939	917	881	827	750	640	472			
575	992	992	992	992	992	992	992	992	991	989	983	964	932	883	815	719	580	348		
600	1034	1034	1034	1034	1034	1034	1034	1034	1033	1032	1027	1010	981	938	876	791	672	494		
625	1076	1076	1076	1076	1076	1076	1076	1076	1075	1074	1071	1056	1030	990	935	859	755	607	364	
650	1118	1118	1118	1118	1118	1118	1118	1118	1118	1117	1114	1101	1078	1042	991	923	830	703	515	
675	1160	1160	1160	1160	1160	1160	1160	1160	1160	1159	1157	1146	1125	1092	1046	984	901	789	633	378
700	1202	1202	1202	1202	1202	1202	1202	1202	1202	1202	1200	1191	1172	1142	1100	1043	967	868	733	536
725	1244	1244	1244	1244	1244	1244	1244	1244	1244	1244	1243	1235	1218	1190	1152	1099	1031	941	822	658
740	1269	1269	1269	1269	1269	1269	1269	1269	1269	1269	1268	1261	1245	1219	1183	1133	1068	983	872	722

 - Continuous Operation using H7 Diaphragm within shaded region is not recommended.

150/300 SERIES 2" (100%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_t Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 56$

$F_p = 1.00$

$X_t = 0.800$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	5	10	15	20	30	40	50	60	70	80	90	100	125	150	175	200	225	250	275
20	84.3	79.3	70.0	53.1																
25	97.5	94.1	87.4	76.2	57.3															
30	110	108	103	94.9	82.0															
35	123	121	118	111	102	64.9														
40	136	135	132	127	119	92.6														
45	148	147	145	141	135	115	71.7													
50	160	160	159	155	150	134	102													
60	185	185	184	182	179	167	147	111												
66	200	200	200	198	196	186	169	141	91.7											
70	210	210	210	209	206	198	183	159	119											
80	235	235	235	234	233	226	215	197	170	126										
90	260	260	260	259	258	254	245	231	211	180	134									
100	284	284	284	284	284	281	274	263	246	223	190	140								
125	346	346	346	346	346	345	342	335	325	311	292	268	234							
150	408	408	408	408	408	408	406	403	396	387	375	359	338	258						
175	470	470	470	470	470	470	470	468	464	457	449	437	423	370	279					
200	532	532	532	532	532	532	532	531	529	525	519	510	500	461	400	299				
225	594	594	594	594	594	594	594	594	593	590	586	580	572	543	497	428	318			
250	656	656	656	656	656	656	656	656	656	654	651	647	641	618	583	530	454	336		
275	718	718	718	718	718	718	718	718	718	717	715	712	708	690	662	620	562	479	353	
285	743	743	743	743	743	743	743	743	743	742	741	738	734	718	692	654	601	526	418	233

300 SERIES 2" (100%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																				
	0	10	20	30	50	75	100	125	150	175	200	250	300	350	400	450	500	550	600	650	
300	780	780	780	780	780	779	773	759	736	703	656	502									
325	842	842	842	842	842	842	838	827	808	780	742	620	384								
350	904	904	904	904	904	904	902	893	878	855	822	722	546								
375	966	966	966	966	966	966	965	958	946	927	899	815	674	413							
400	1028	1028	1028	1028	1028	1028	1027	1023	1013	996	973	901	783	587							
425	1090	1090	1090	1090	1090	1090	1089	1087	1079	1065	1045	982	882	723	441						
450	1152	1152	1152	1152	1152	1152	1152	1150	1144	1132	1115	1061	974	840	626						
475	1214	1214	1214	1214	1214	1214	1214	1213	1208	1198	1184	1136	1060	945	770	466					
500	1276	1276	1276	1276	1276	1276	1276	1275	1272	1264	1251	1210	1142	1041	893	662					
525	1338	1338	1338	1338	1338	1338	1338	1337	1335	1329	1318	1281	1221	1132	1004	813	490				
550	1400	1400	1400	1400	1400	1400	1400	1400	1398	1393	1384	1352	1298	1219	1105	943	696				
575	1462	1462	1462	1462	1462	1462	1462	1462	1461	1457	1449	1421	1373	1302	1201	1059	855	514			
600	1524	1524	1524	1524	1524	1524	1524	1524	1523	1520	1514	1489	1446	1382	1291	1166	991	728			
625	1586	1586	1586	1586	1586	1586	1586	1586	1585	1583	1578	1556	1518	1460	1378	1266	1112	895	536		
650	1648	1648	1648	1648	1648	1648	1648	1648	1648	1646	1642	1623	1588	1536	1461	1360	1224	1037	760		
675	1710	1710	1710	1710	1710	1710	1710	1710	1710	1708	1705	1689	1658	1610	1542	1450	1327	1163	933	557	
700	1772	1772	1772	1772	1772	1772	1772	1772	1772	1772	1771	1768	1754	1726	1683	1621	1537	1425	1279	1080	790
725	1834	1834	1834	1834	1834	1834	1834	1834	1834	1834	1834	1831	1819	1794	1754	1697	1620	1519	1387	1212	969
740	1871	1871	1871	1871	1871	1871	1871	1871	1871	1871	1871	1869	1858	1835	1797	1743	1669	1573	1448	1285	1064

 - Continuous Operation using H7 Diaphragm within shaded region is not recommended.

150/300 SERIES 3R50 (50%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_t Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 55$

$F_p = 1.00$

$X_t = 0.700$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	5	10	15	20	30	40	50	60	70	80	90	100	125	150	175	200	225	250	275
20	78.6	75.2	67.3	51.7																
25	90.4	88.6	83.4	73.5	55.8															
30	102	101	97.6	90.8	79.3															
35	113	113	111	106	97.8	63.3														
40	125	125	123	120	114	89.8														
45	136	136	135	133	129	110	70.0													
50	147	147	147	146	142	128	99.2													
60	170	170	170	170	168	159	141	108												
66	184	184	184	184	183	176	162	137	89.6											
70	193	193	193	193	192	187	175	153	116											
80	216	216	216	216	216	213	204	189	164	123										
90	238	238	238	238	238	237	231	220	202	175	130									
100	261	261	261	261	261	261	257	249	236	215	185	137								
125	318	318	318	318	318	318	318	314	307	296	280	258	227							
150	375	375	375	375	375	375	375	374	371	365	356	342	325	251						
175	432	432	432	432	432	432	432	432	431	428	423	414	403	357	272					
200	489	489	489	489	489	489	489	489	489	488	485	480	472	441	386	292				
225	546	546	546	546	546	546	546	546	546	546	545	542	537	515	477	414	310			
250	603	603	603	603	603	603	603	603	603	603	603	601	599	584	556	510	440	328		
275	660	660	660	660	660	660	660	660	660	660	660	659	658	648	628	593	541	465	344	
285	683	683	683	683	683	683	683	683	683	683	683	683	682	673	655	624	578	510	408	228

300 SERIES 3R50 (50%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	10	20	30	50	75	100	125	150	175	200	250	300	350	400	450	500	550	600	650
300	717	717	717	717	717	717	716	710	695	669	629	488								
325	774	774	774	774	774	774	774	771	760	740	708	599	376							
350	831	831	831	831	831	831	831	829	822	807	782	695	532							
375	888	888	888	888	888	888	888	887	883	871	851	781	653	404						
400	944	944	944	944	944	944	944	944	942	934	918	860	756	572						
425	1001	1001	1001	1001	1001	1001	1001	1001	1000	995	982	935	848	702	431					
450	1058	1058	1058	1058	1058	1058	1058	1058	1058	1054	1045	1006	933	812	610					
475	1115	1115	1115	1115	1115	1115	1115	1115	1115	1113	1107	1075	1013	911	748	456				
500	1172	1172	1172	1172	1172	1172	1172	1172	1172	1171	1167	1141	1088	1001	865	646				
525	1229	1229	1229	1229	1229	1229	1229	1229	1229	1228	1226	1205	1160	1085	969	791	480			
550	1286	1286	1286	1286	1286	1286	1286	1286	1286	1286	1284	1268	1230	1165	1065	915	679			
575	1343	1343	1343	1343	1343	1343	1343	1343	1343	1343	1342	1330	1298	1241	1153	1025	833	503		
600	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1391	1363	1314	1237	1125	962	711		
625	1457	1457	1457	1457	1457	1457	1457	1457	1457	1457	1457	1451	1428	1385	1317	1218	1078	872	525	
650	1514	1514	1514	1514	1514	1514	1514	1514	1514	1514	1514	1510	1491	1453	1393	1306	1182	1008	742	
675	1571	1571	1571	1571	1571	1571	1571	1571	1571	1571	1571	1568	1553	1520	1467	1389	1280	1128	909	546
700	1628	1628	1628	1628	1628	1628	1628	1628	1628	1628	1628	1626	1614	1586	1539	1469	1371	1237	1051	772
725	1685	1685	1685	1685	1685	1685	1685	1685	1685	1685	1685	1684	1675	1651	1609	1546	1458	1339	1176	946
740	1719	1719	1719	1719	1719	1719	1719	1719	1719	1719	1719	1718	1711	1689	1650	1591	1508	1397	1246	1036

 - Continuous Operation using H7 Diaphragm within shaded region is not recommended.

150/300 SERIES 3" (100%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - $C_v = 110$ Gas - .60 Specific Gravity Critical Flow Factor, $X_t = 0.800$ Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 110$

$F_p = 1.00$

$X_t = 0.800$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	5	10	15	20	30	40	50	60	70	80	90	100	125	150	175	200	225	250	275
20	166	156	137	104																
25	192	185	172	150	113															
30	217	212	202	186	161															
35	242	239	231	219	200	128														
40	266	264	259	249	234	182														
45	291	290	285	278	266	225	141													
50	315	315	311	305	296	262	201													
60	364	364	362	358	352	329	288	218												
66	393	393	392	389	384	365	332	277	180											
70	413	413	412	410	405	389	359	312	233											
80	461	461	461	460	457	445	423	387	334	248										
90	510	510	510	509	508	499	482	454	414	354	262									
100	559	559	559	558	558	551	538	516	484	439	374	276								
125	680	680	680	680	680	678	671	658	639	611	575	526	460							
150	802	802	802	802	802	802	798	791	778	760	736	704	664	507						
175	924	924	924	924	924	924	923	919	911	899	882	859	831	727	549					
200	1046	1046	1046	1046	1046	1046	1046	1044	1039	1031	1019	1002	982	906	786	588				
225	1167	1167	1167	1167	1167	1167	1167	1167	1164	1159	1150	1139	1123	1066	976	840	625			
250	1289	1289	1289	1289	1289	1289	1289	1289	1288	1285	1279	1270	1259	1214	1144	1042	892	660		
275	1411	1411	1411	1411	1411	1411	1411	1411	1410	1409	1405	1399	1390	1355	1300	1218	1103	940	693	
285	1459	1459	1459	1459	1459	1459	1459	1459	1459	1458	1455	1450	1442	1410	1359	1285	1180	1034	822	457

300 SERIES 3" (100%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	10	20	30	50	75	100	125	150	175	200	250	300	350	400	450	500	550	600	650
300	1532	1532	1532	1532	1532	1531	1519	1492	1447	1381	1288	987								
325	1654	1654	1654	1654	1654	1653	1646	1624	1588	1533	1457	1218	755							
350	1776	1776	1776	1776	1776	1776	1771	1755	1725	1679	1615	1418	1073							
375	1898	1898	1898	1898	1898	1898	1895	1883	1858	1820	1766	1600	1323	812						
400	2019	2019	2019	2019	2019	2019	2018	2009	1989	1957	1911	1770	1538	1154						
425	2141	2141	2141	2141	2141	2141	2140	2134	2119	2092	2052	1930	1732	1420	865					
450	2263	2263	2263	2263	2263	2263	2263	2259	2246	2224	2190	2083	1912	1650	1229					
475	2384	2384	2384	2384	2384	2384	2384	2382	2373	2354	2325	2232	2082	1855	1512	916				
500	2506	2506	2506	2506	2506	2506	2506	2505	2498	2483	2458	2376	2244	2046	1754	1299				
525	2628	2628	2628	2628	2628	2628	2628	2627	2622	2610	2589	2517	2399	2224	1971	1598	963			
550	2750	2750	2750	2750	2750	2750	2750	2750	2746	2736	2718	2655	2550	2394	2171	1853	1367			
575	2871	2871	2871	2871	2871	2871	2871	2871	2869	2862	2846	2791	2697	2557	2359	2081	1680	1009		
600	2993	2993	2993	2993	2993	2993	2993	2993	2991	2986	2974	2925	2841	2714	2536	2290	1947	1431		
625	3115	3115	3115	3115	3115	3115	3115	3115	3113	3110	3100	3057	2981	2867	2706	2486	2185	1758	1052	
650	3237	3237	3237	3237	3237	3237	3237	3237	3237	3233	3225	3188	3120	3016	2870	2671	2404	2036	1492	
675	3358	3358	3358	3358	3358	3358	3358	3358	3358	3356	3350	3318	3257	3162	3029	2848	2607	2285	1832	1094
700	3480	3480	3480	3480	3480	3480	3480	3480	3480	3478	3474	3446	3391	3305	3183	3018	2800	2512	2122	1551
725	3602	3602	3602	3602	3602	3602	3602	3602	3602	3602	3597	3574	3525	3446	3334	3183	2984	2724	2380	1904
740	3675	3675	3675	3675	3675	3675	3675	3675	3675	3675	3671	3650	3604	3530	3423	3279	3090	2845	2524	2089

- Continuous Operation using H7 Diaphragm within shaded region is not recommended.

150/300 SERIES 4R50 (50%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_t Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 105$

$F_p = 1.00$

$X_t = 0.700$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	5	10	15	20	30	40	50	60	70	80	90	100	125	150	175	200	225	250	270
20	150	144	128	99																
25	173	169	159	140	107															
30	194	193	186	173	151															
35	216	216	212	202	187	121														
40	238	238	236	229	217	171														
45	260	260	259	254	245	211	134													
50	281	281	281	278	272	245	189													
60	325	325	325	324	321	304	270	206												
66	351	351	351	351	349	336	309	261	171											
70	368	368	368	368	367	357	334	293	221											
80	412	412	412	412	412	406	390	361	314	235										
90	455	455	455	455	455	453	442	421	387	334	249									
100	499	499	499	499	499	498	491	475	450	411	353	262								
125	607	607	607	607	607	607	606	600	587	566	535	493	434							
150	716	716	716	716	716	716	716	715	709	697	679	654	620	478						
175	825	825	825	825	825	825	825	825	823	817	807	791	769	681	519					
200	934	934	934	934	934	934	934	934	934	931	926	916	902	842	738	557				
225	1042	1042	1042	1042	1042	1042	1042	1042	1042	1042	1040	1034	1025	984	910	790	592			
250	1151	1151	1151	1151	1151	1151	1151	1151	1151	1151	1150	1148	1143	1115	1061	974	840	626		
275	1260	1260	1260	1260	1260	1260	1260	1260	1260	1260	1260	1259	1257	1238	1198	1133	1034	887	658	
285	1303	1303	1303	1303	1303	1303	1303	1303	1303	1303	1303	1303	1301	1286	1251	1192	1103	973	778	435

300 SERIES 4R50 (50%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	10	20	30	50	75	100	125	150	175	200	250	300	350	400	450	500	550	600	650
300	1368	1368	1368	1368	1368	1368	1367	1356	1327	1277	1201	932								
325	1477	1477	1477	1477	1477	1477	1477	1471	1451	1412	1352	1144	717							
350	1586	1586	1586	1586	1586	1586	1586	1583	1569	1540	1492	1327	1015							
375	1694	1694	1694	1694	1694	1694	1694	1693	1685	1663	1625	1491	1246	772						
400	1803	1803	1803	1803	1803	1803	1803	1803	1798	1783	1753	1642	1443	1092						
425	1912	1912	1912	1912	1912	1912	1912	1912	1910	1899	1876	1785	1619	1340	823					
450	2020	2020	2020	2020	2020	2020	2020	2020	2019	2013	1995	1921	1781	1551	1164					
475	2129	2129	2129	2129	2129	2129	2129	2129	2129	2125	2112	2051	1933	1738	1428	871				
500	2238	2238	2238	2238	2238	2238	2238	2238	2238	2236	2227	2178	2077	1911	1651	1232				
525	2346	2346	2346	2346	2346	2346	2346	2346	2346	2345	2340	2301	2215	2071	1850	1511	917			
550	2455	2455	2455	2455	2455	2455	2455	2455	2455	2455	2452	2421	2348	2224	2032	1747	1297			
575	2564	2564	2564	2564	2564	2564	2564	2564	2564	2564	2562	2539	2477	2369	2202	1956	1589	960		
600	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2655	2603	2508	2362	2148	1837	1358		
625	2781	2781	2781	2781	2781	2781	2781	2781	2781	2781	2781	2769	2726	2643	2514	2326	2057	1664	1002	
650	2890	2890	2890	2890	2890	2890	2890	2890	2890	2890	2890	2882	2847	2775	2660	2493	2257	1924	1417	
675	2999	2999	2999	2999	2999	2999	2999	2999	2999	2999	2999	2994	2965	2903	2801	2652	2443	2153	1736	1042
700	3107	3107	3107	3107	3107	3107	3107	3107	3107	3107	3107	3105	3082	3028	2938	2804	2618	2362	2006	1473
725	3216	3216	3216	3216	3216	3216	3216	3216	3216	3216	3216	3214	3197	3151	3071	2951	2784	2556	2245	1805
740	3281	3281	3281	3281	3281	3281	3281	3281	3281	3281	3281	3280	3266	3224	3149	3037	2880	2666	2378	1978

 - Continuous Operation using H7 Diaphragm within shaded region is not recommended.

150/300 SERIES 4" (100%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_t Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 192$

$F_p = 1.00$

$X_t = 0.800$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																				
	0	5	10	15	20	30	40	50	60	70	80	90	100	125	150	175	200	225	250	270	
20	289	272	240	182																	
25	334	323	300	261	197																
30	379	370	353	325	281																
35	422	416	404	382	349	223															
40	465	461	452	435	409	317															
45	508	505	498	485	464	393	246														
50	550	549	544	533	516	458	350														
60	635	635	632	626	614	574	503	380													
66	686	686	685	680	671	637	579	484	315												
70	720	720	719	715	707	678	627	544	408												
80	805	805	805	803	798	776	738	676	583	433											
90	890	890	890	889	886	871	841	793	722	619	458										
100	975	975	975	975	973	962	939	901	845	766	653	481									
125	1187	1187	1187	1187	1187	1184	1171	1149	1115	1067	1003	918	804								
150	1400	1400	1400	1400	1400	1399	1394	1381	1359	1327	1285	1229	1159	884							
175	1612	1612	1612	1612	1612	1612	1611	1604	1590	1568	1539	1500	1451	1270	958						
200	1825	1825	1825	1825	1825	1825	1825	1821	1813	1799	1778	1750	1714	1582	1372	1027					
225	2037	2037	2037	2037	2037	2037	2037	2036	2032	2023	2008	1987	1960	1860	1704	1467	1091				
250	2250	2250	2250	2250	2250	2250	2250	2250	2248	2242	2232	2217	2197	2119	1998	1818	1557	1152			
275	2462	2462	2462	2462	2462	2462	2462	2462	2462	2461	2459	2453	2442	2427	2366	2269	2127	1926	1641	1209	
285	2547	2547	2547	2547	2547	2547	2547	2547	2547	2547	2545	2540	2531	2517	2462	2373	2242	2059	1804	1435	797

300 SERIES 4" (100%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	10	20	30	50	75	100	125	150	175	200	250	300	350	400	450	500	550	600	650
300	2675	2675	2675	2675	2675	2672	2651	2604	2525	2410	2249	1722								
325	2887	2887	2887	2887	2887	2886	2873	2835	2771	2676	2543	2126	1317							
350	3100	3100	3100	3100	3100	3100	3091	3063	3010	2931	2820	2476	1874							
375	3312	3312	3312	3312	3312	3312	3307	3286	3244	3177	3083	2793	2309	1417						
400	3525	3525	3525	3525	3525	3525	3522	3507	3473	3416	3336	3089	2685	2014						
425	3737	3737	3737	3737	3737	3737	3735	3726	3698	3651	3582	3369	3024	2479	1510					
450	3950	3950	3950	3950	3950	3950	3950	3942	3921	3882	3823	3637	3338	2879	2145					
475	4162	4162	4162	4162	4162	4162	4162	4158	4141	4109	4058	3896	3634	3239	2638	1598				
500	4374	4374	4374	4374	4374	4374	4374	4372	4360	4333	4290	4147	3916	3571	3062	2268				
525	4587	4587	4587	4587	4587	4587	4587	4585	4577	4556	4519	4393	4188	3882	3441	2789	1682			
550	4799	4799	4799	4799	4799	4799	4799	4799	4793	4776	4745	4634	4451	4179	3790	3234	2385			
575	5012	5012	5012	5012	5012	5012	5012	5012	5008	4995	4968	4871	4708	4463	4117	3632	2932	1761		
600	5224	5224	5224	5224	5224	5224	5224	5224	5221	5212	5190	5105	4958	4738	4427	3998	3398	2497		
625	5437	5437	5437	5437	5437	5437	5437	5437	5434	5428	5410	5336	5204	5005	4723	4339	3814	3068	1837	
650	5649	5649	5649	5649	5649	5649	5649	5649	5649	5643	5629	5565	5446	5265	5009	4662	4195	3554	2604	
675	5862	5862	5862	5862	5862	5862	5862	5862	5862	5857	5847	5791	5684	5519	5286	4971	4551	3988	3198	1910
700	6074	6074	6074	6074	6074	6074	6074	6074	6074	6071	6063	6015	5919	5769	5556	5268	4887	4385	3704	2707
725	6287	6287	6287	6287	6287	6287	6287	6287	6287	6287	6287	6238	6152	6015	5819	5555	5208	4754	4154	3324
740	6414	6414	6414	6414	6414	6414	6414	6414	6414	6414	6408	6371	6290	6161	5975	5724	5394	4966	4405	3647

 - Continuous Operation using H7 Diaphragm within shaded region is not recommended.

150/300 SERIES 6R50 (50%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_1 Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 160$

$F_p = 1.00$

$X_1 = 0.700$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																				
	0	5	10	15	20	30	40	50	60	70	80	90	100	125	150	175	200	225	250	270	
20	229	219	196	150																	
25	263	258	243	214	162																
30	296	294	284	264	231																
35	329	329	322	308	284	184															
40	363	362	359	349	331	261															
45	396	396	394	387	374	321	204														
50	429	429	428	424	414	373	289														
60	495	495	495	494	489	463	411	314													
66	535	535	535	534	531	512	471	398	261												
70	561	561	561	561	559	544	508	446	337												
80	628	628	628	628	627	618	594	550	478	359											
90	694	694	694	694	694	690	673	641	589	509	379										
100	760	760	760	760	760	759	748	725	685	626	537	399									
125	926	926	926	926	926	926	924	914	894	862	816	751	661								
150	1091	1091	1091	1091	1091	1091	1091	1089	1080	1062	1035	996	944	729							
175	1257	1257	1257	1257	1257	1257	1257	1257	1254	1245	1229	1205	1172	1038	791						
200	1423	1423	1423	1423	1423	1423	1423	1423	1423	1419	1411	1396	1374	1283	1124	849					
225	1588	1588	1588	1588	1588	1588	1588	1588	1588	1587	1584	1576	1562	1499	1387	1204	903				
250	1754	1754	1754	1754	1754	1754	1754	1754	1754	1754	1753	1750	1742	1698	1616	1484	1280	954			
275	1919	1919	1919	1919	1919	1919	1919	1919	1919	1919	1919	1918	1915	1886	1826	1726	1575	1352	1002		
285	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1986	1983	1959	1906	1816	1680	1482	1186	663

300 SERIES 6R50 (50%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	10	20	30	50	75	100	125	150	175	200	250	300	350	400	450	500	550	600	650
300	2085	2085	2085	2085	2085	2085	2084	2067	2022	1946	1829	1419								
325	2251	2251	2251	2251	2251	2251	2251	2242	2210	2151	2060	1744	1092							
350	2416	2416	2416	2416	2416	2416	2416	2413	2392	2347	2274	2022	1547							
375	2582	2582	2582	2582	2582	2582	2582	2580	2568	2534	2476	2272	1898	1176						
400	2747	2747	2747	2747	2747	2747	2747	2747	2741	2716	2671	2503	2199	1664						
425	2913	2913	2913	2913	2913	2913	2913	2913	2910	2894	2858	2720	2467	2042	1254					
450	3079	3079	3079	3079	3079	3079	3079	3079	3077	3068	3041	2927	2714	2363	1774					
475	3244	3244	3244	3244	3244	3244	3244	3244	3244	3239	3219	3126	2946	2649	2176	1327				
500	3410	3410	3410	3410	3410	3410	3410	3410	3410	3407	3394	3318	3165	2912	2516	1878				
525	3576	3576	3576	3576	3576	3576	3576	3576	3576	3574	3566	3506	3375	3157	2820	2302	1397			
550	3741	3741	3741	3741	3741	3741	3741	3741	3741	3741	3736	3689	3578	3388	3097	2662	1976			
575	3907	3907	3907	3907	3907	3907	3907	3907	3907	3907	3904	3869	3775	3609	3355	2981	2422	1463		
600	4072	4072	4072	4072	4072	4072	4072	4072	4072	4072	4072	4046	3966	3822	3599	3273	2800	2070		
625	4238	4238	4238	4238	4238	4238	4238	4238	4238	4238	4238	4220	4154	4028	3831	3544	3135	2536	1527	
650	4404	4404	4404	4404	4404	4404	4404	4404	4404	4404	4404	4392	4338	4228	4053	3799	3440	2931	2159	
675	4569	4569	4569	4569	4569	4569	4569	4569	4569	4569	4569	4562	4518	4423	4268	4041	3723	3281	2646	1588
700	4735	4735	4735	4735	4735	4735	4735	4735	4735	4735	4735	4731	4696	4614	4477	4273	3989	3600	3057	2245
725	4900	4900	4900	4900	4900	4900	4900	4900	4900	4900	4900	4898	4872	4802	4679	4497	4242	3895	3421	2751
740	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	4997	4977	4912	4799	4628	4388	4063	3624	3014

- Continuous Operation using H7 Diaphragm within shaded region is not recommended.

150/300 SERIES 6" (100%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_t Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 303$

$F_p = 1.00$

$X_t = 0.700$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	5	10	15	20	30	40	50	60	70	80	90	100	125	150	175	200	225	250	270
20	433	415	371	285																
25	498	488	459	405	308															
30	561	557	538	500	437															
35	624	622	611	584	539	349														
40	687	686	680	661	627	495														
45	749	749	746	733	708	608	386													
50	812	812	811	803	784	706	547													
60	938	938	938	935	925	877	778	594												
66	1013	1013	1013	1012	1006	970	892	753	494											
70	1063	1063	1063	1062	1059	1029	963	844	638											
80	1188	1188	1188	1188	1188	1171	1125	1042	906	679										
90	1314	1314	1314	1314	1314	1306	1275	1214	1116	963	718									
100	1439	1439	1439	1439	1439	1437	1417	1372	1298	1185	1018	755								
125	1753	1753	1753	1753	1753	1753	1749	1731	1693	1632	1544	1422	1252							
150	2067	2067	2067	2067	2067	2067	2067	2062	2045	2011	1959	1886	1788	1381						
175	2380	2380	2380	2380	2380	2380	2380	2380	2375	2358	2328	2282	2219	1965	1498					
200	2694	2694	2694	2694	2694	2694	2694	2694	2694	2688	2672	2644	2602	2430	2129	1607				
225	3008	3008	3008	3008	3008	3008	3008	3008	3008	3006	3000	2985	2959	2839	2626	2281	1709			
250	3321	3321	3321	3321	3321	3321	3321	3321	3321	3321	3319	3313	3298	3216	3061	2810	2424	1806		
275	3635	3635	3635	3635	3635	3635	3635	3635	3635	3635	3635	3633	3626	3572	3457	3268	2982	2559	1898	
285	3760	3760	3760	3760	3760	3760	3760	3760	3760	3760	3760	3760	3755	3710	3609	3439	3182	2807	2246	1255

300 SERIES 6" (100%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	10	20	30	50	75	100	125	150	175	200	250	300	350	400	450	500	550	600	650
300	3948	3948	3948	3948	3948	3948	3946	3914	3830	3685	3464	2688								
325	4262	4262	4262	4262	4262	4262	4262	4245	4186	4074	3900	3302	2069							
350	4576	4576	4576	4576	4576	4576	4576	4569	4529	4444	4306	3829	2929							
375	4889	4889	4889	4889	4889	4889	4889	4887	4863	4799	4690	4302	3595	2227						
400	5203	5203	5203	5203	5203	5203	5203	5203	5190	5144	5057	4740	4164	3152						
425	5517	5517	5517	5517	5517	5517	5517	5517	5511	5480	5413	5151	4672	3866	2375					
450	5830	5830	5830	5830	5830	5830	5830	5830	5827	5809	5758	5543	5140	4474	3360					
475	6144	6144	6144	6144	6144	6144	6144	6144	6144	6133	6096	5920	5578	5017	4120	2514				
500	6458	6458	6458	6458	6458	6458	6458	6458	6458	6452	6428	6284	5994	5514	4766	3556				
525	6771	6771	6771	6771	6771	6771	6771	6771	6771	6768	6754	6639	6392	5978	5340	4359	2646			
550	7085	7085	7085	7085	7085	7085	7085	7085	7085	7085	7075	6987	6776	6416	5865	5041	3742			
575	7398	7398	7398	7398	7398	7398	7398	7398	7398	7398	7393	7327	7148	6835	6354	5646	4586	2771		
600	7712	7712	7712	7712	7712	7712	7712	7712	7712	7712	7712	7662	7511	7238	6815	6198	5302	3919		
625	8026	8026	8026	8026	8026	8026	8026	8026	8026	8026	8026	7992	7866	7628	7255	6711	5936	4803	2891	
650	8339	8339	8339	8339	8339	8339	8339	8339	8339	8339	8339	8318	8214	8007	7676	7194	6514	5551	4089	
675	8653	8653	8653	8653	8653	8653	8653	8653	8653	8653	8653	8640	8557	8376	8083	7653	7051	6213	5010	3007
700	8967	8967	8967	8967	8967	8967	8967	8967	8967	8967	8967	8959	8894	8738	8477	8093	7555	6817	5789	4252
725	9280	9280	9280	9280	9280	9280	9280	9280	9280	9280	9280	9275	9227	9093	8862	8516	8033	7375	6479	5209
740	9468	9468	9468	9468	9468	9468	9468	9468	9468	9468	9468	9464	9425	9303	9088	8764	8310	7694	6862	5708

 - Continuous Operation using H7 Diaphragm within shaded region is not recommended.

600 SERIES 2R25 (25%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_t Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 12.75$ $F_p = 1.00$ $X_t = 0.700$ $F_g = 1.291$ $F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	50	100	150	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200	1300	1400
100	60.6	57.7																		
200	113	113	109	89.6																
300	166	166	166	161	146	113														
400	219	219	219	218	213	199	175	133												
500	272	272	272	272	270	264	252	232	201	150										
600	325	325	325	325	325	322	316	305	287	261	223									
700	377	377	377	377	377	377	374	368	357	341	318	244								
800	430	430	430	430	430	430	429	426	419	409	394	346	263							
900	483	483	483	483	483	483	483	482	478	471	461	428	373	280						
950	509	509	509	509	509	509	509	509	506	501	492	464	418	344	210					
1000	536	536	536	536	536	536	536	535	534	530	523	499	460	398	297					
1050	562	562	562	562	562	562	562	562	561	558	552	532	498	445	364	221				
1100	588	588	588	588	588	588	588	588	588	586	581	564	535	489	421	313				
1150	615	615	615	615	615	615	615	615	615	613	610	595	570	530	471	383	232			
1200	641	641	641	641	641	641	641	641	641	640	638	626	604	569	518	443	328			
1250	668	668	668	668	668	668	668	668	668	667	665	655	636	605	560	496	402	242		
1300	694	694	694	694	694	694	694	694	694	694	693	685	668	641	601	544	464	342		
1350	720	720	720	720	720	720	720	720	720	720	720	713	699	675	639	589	520	419	252	
1400	747	747	747	747	747	747	747	747	747	747	746	742	729	708	676	631	570	484	356	
1450	773	773	773	773	773	773	773	773	773	773	773	769	759	740	711	671	617	542	436	261
1480	789	789	789	789	789	789	789	789	789	789	789	786	776	759	732	695	643	574	478	330

- Continuous Operation using H8 Diaphragm within shaded region is not recommended.

600 SERIES 2R50 (50%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_t Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 25$ $F_p = 1.00$ $X_t = 0.800$ $K = 1491$ $F_g = 1.291$ $F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	50	100	150	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200	1300	1400
100	127	117																		
200	238	237	223	179																
300	348	348	345	329	293	224														
400	459	459	459	452	434	402	350	262												
500	570	570	570	568	559	540	510	465	399	295										
600	680	680	680	680	676	665	646	617	576	521	442									
700	791	791	791	791	789	783	771	751	723	686	636	482								
800	902	902	902	902	901	898	890	877	857	830	794	691	519							
900	1012	1012	1012	1012	1012	1011	1006	997	982	962	936	860	743	554						
950	1068	1068	1068	1068	1068	1067	1063	1056	1043	1026	1003	936	835	681	413					
1000	1123	1123	1123	1123	1123	1122	1120	1114	1103	1088	1068	1009	921	790	586					
1050	1178	1178	1178	1178	1178	1178	1176	1172	1163	1149	1132	1080	1002	888	721	435				
1100	1234	1234	1234	1234	1234	1234	1232	1229	1221	1210	1194	1148	1078	979	836	617				
1150	1289	1289	1289	1289	1289	1289	1288	1285	1279	1269	1255	1214	1152	1063	939	758	456			
1200	1344	1344	1344	1344	1344	1344	1344	1342	1337	1328	1316	1279	1223	1143	1033	879	646			
1250	1400	1400	1400	1400	1400	1400	1400	1398	1394	1387	1376	1343	1292	1220	1122	986	794	475		
1300	1455	1455	1455	1455	1455	1455	1455	1454	1451	1445	1435	1405	1360	1294	1205	1085	920	674		
1350	1510	1510	1510	1510	1510	1510	1510	1509	1507	1502	1494	1467	1425	1366	1285	1177	1032	828	495	
1400	1566	1566	1566	1566	1566	1566	1566	1565	1563	1559	1552	1528	1490	1436	1362	1264	1135	959	701	
1450	1621	1621	1621	1621	1621	1621	1621	1621	1619	1616	1610	1589	1554	1504	1437	1347	1230	1076	861	513
1480	1654	1654	1654	1654	1654	1654	1654	1654	1653	1650	1644	1624	1592	1544	1480	1395	1285	1141	944	650

- Continuous Operation using H8 Diaphragm within shaded region is not recommended.

600 SERIES 2R75 (75%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_1 Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 38$

$F_p = 1.00$

$X_1 = 0.800$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	50	100	150	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200	1300	1400
100	193	178																		
200	361	361	339	271																
300	529	529	525	500	445	341														
400	698	698	697	687	660	611	531	399												
500	866	866	866	863	849	821	775	707	606	449										
600	1034	1034	1034	1033	1027	1010	981	938	876	791	672									
700	1202	1202	1202	1202	1200	1191	1172	1142	1100	1043	967	733								
800	1370	1370	1370	1370	1370	1365	1353	1302	1261	1207	1051	789								
900	1539	1539	1539	1539	1539	1537	1530	1515	1493	1463	1423	1307	1129	841						
950	1623	1623	1623	1623	1623	1622	1616	1605	1586	1559	1524	1423	1270	1035	628					
1000	1707	1707	1707	1707	1707	1706	1703	1693	1677	1654	1623	1534	1400	1201	891					
1050	1791	1791	1791	1791	1791	1791	1788	1781	1767	1747	1720	1641	1523	1350	1095	661				
1100	1875	1875	1875	1875	1875	1875	1873	1868	1856	1839	1815	1745	1639	1488	1270	938				
1150	1959	1959	1959	1959	1959	1959	1958	1954	1944	1929	1908	1846	1751	1616	1427	1152	692			
1200	2043	2043	2043	2043	2043	2043	2042	2040	2032	2019	2000	1944	1859	1738	1570	1336	982			
1250	2127	2127	2127	2127	2127	2127	2127	2125	2119	2108	2091	2041	1964	1855	1705	1499	1207	723		
1300	2211	2211	2211	2211	2211	2211	2211	2210	2205	2196	2181	2136	2066	1967	1832	1649	1398	1025		
1350	2295	2295	2295	2295	2295	2295	2295	2294	2291	2283	2271	2230	2167	2076	1954	1789	1569	1258	752	
1400	2380	2380	2380	2380	2380	2380	2380	2378	2376	2370	2359	2323	2265	2183	2071	1922	1725	1458	1066	
1450	2464	2464	2464	2464	2464	2464	2464	2464	2461	2456	2447	2415	2362	2286	2184	2048	1870	1635	1308	780
1480	2514	2514	2514	2514	2514	2514	2514	2514	2512	2508	2499	2469	2419	2348	2250	2121	1954	1734	1436	987

 - Continuous Operation using H8 Diaphragm within shaded region is not recommended.

600 SERIES 2" (100%) RADIAL FLOW VALVE CAPACITY TABLE - ISA METHOD - (MSCFH)

Valve Coefficient - C_v Gas - .60 Specific Gravity Critical Flow Factor, X_1 Base Pressure - 14.73 psig Base Temperature - 60 Deg. F

$C_v = 56$

$F_p = 1.00$

$X_1 = 0.800$

$K = 3340$

$F_g = 1.291$

$F_k = 0.929$

Inlet Pressure PSIG	OUTLET PRESSURE - PSIG																			
	0	50	100	150	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200	1300	1400
100	284	263																		
200	532	531	500	400																
300	780	780	773	736	656	502														
400	1028	1028	1027	1013	973	901	783	587												
500	1276	1276	1276	1272	1251	1210	1142	1041	893	662										
600	1524	1524	1524	1523	1514	1489	1446	1382	1291	1166	991									
700	1772	1772	1772	1772	1768	1754	1726	1683	1621	1537	1425	1080								
800	2019	2019	2019	2019	2018	2012	1994	1964	1919	1859	1779	1549	1163							
900	2267	2267	2267	2267	2267	2265	2254	2233	2201	2156	2096	1926	1663	1240						
950	2391	2391	2391	2391	2391	2390	2382	2365	2337	2298	2246	2098	1871	1526	925					
1000	2515	2515	2515	2515	2515	2514	2509	2495	2472	2438	2392	2261	2063	1771	1313					
1050	2639	2639	2639	2639	2639	2639	2635	2624	2604	2575	2535	2419	2244	1990	1614	974				
1100	2763	2763	2763	2763	2763	2763	2761	2752	2736	2710	2675	2571	2416	2192	1872	1382				
1150	2887	2887	2887	2887	2887	2887	2885	2879	2865	2843	2812	2720	2580	2382	2103	1698	1020			
1200	3011	3011	3011	3011	3011	3011	3009	3006	2994	2975	2948	2865	2740	2561	2314	1968	1447			
1250	3135	3135	3135	3135	3135	3135	3135	3131	3122	3106	3082	3008	2894	2733	2512	2209	1778	1065		
1300	3259	3259	3259	3259	3259	3259	3259	3256	3249	3236	3215	3148	3045	2899	2700	2431	2060	1510		
1350	3383	3383	3383	3383	3383	3383	3383	3381	3376	3364	3346	3286	3193	3060	2879	2637	2311	1855	1108	
1400	3507	3507	3507	3507	3507	3507	3507	3505	3502	3492	3476	3423	3338	3217	3051	2832	2542	2148	1570	
1450	3631	3631	3631	3631	3631	3631	3631	3631	3627	3620	3606	3558	3481	3369	3218	3018	2756	2409	1928	1149
1480	3705	3705	3705	3705	3705	3705	3705	3705	3702	3696	3683	3639	3565	3460	3316	3126	2879	2555	2116	1455

 - Continuous Operation using H8 Diaphragm within shaded region is not recommended.

Radial Flow Valve Dimensions and Weights

Model	'A'	'B'	'C'	'D'	'E'	'F'	'G'	'H' - Bolt Circle	Shipping Weights
2" - 150	10.00	0.75	6.50	3.62	0.06	6.47	8.32	(4) 0.75 Dia, 4.75 Dia B.C.	34 Lbs.
2" - 150 screwed	10.50	-	-	-	-	5.34	-	-	TBA
3" - 150	11.75	0.94	7.88	5.00	0.06	7.70	10.96	(4) 0.75 Dia, 6.00 Dia B.C.	65 Lbs.
4" - 150	13.88	0.94	9.00	6.19	0.06	10.10	12.88	(8) 0.75 Dia, 7.50 Dia B.C.	101 Lbs.
6" - 150	17.75	1.00	11.22	8.50	0.06	13.24	15.26	(8) 0.88 Dia, 9.50 Dia B.C.	TBD
2" - 300	10.50	0.88	6.50	3.62	0.06	6.76	8.41	(8) 0.75 Dia, 5.00 Dia B.C.	41 Lbs.
3" - 300	12.50	1.12	8.25	5.00	0.06	8.00	11.30	(8) 0.88 Dia, 6.62 Dia B.C.	74 Lbs.
4" - 300	14.50	1.25	10.00	6.19	0.06	10.28	13.17	(8) 0.88 Dia, 7.88 Dia B.C.	124 Lbs.
6" - 300	18.63	1.44	12.50	8.50	0.06	13.64	15.95	(12) 0.88 Dia, 10.62 Dia B.C.	TBA
2" - 600 weld-end	10.00	-	-	-	-	5.22	-	-	TBA
2" - 600 weld-end	10.50	-	-	-	-	5.22	-	-	TBA
2" - 600 weld-end	11.25	-	-	-	-	5.22	-	-	TBA
2" - 600 weld-end	special length	-	-	-	-	5.22	-	-	TBA

Figure 1

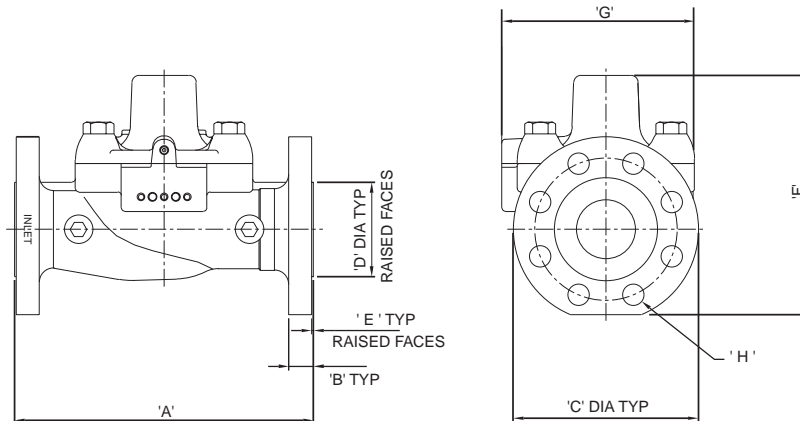
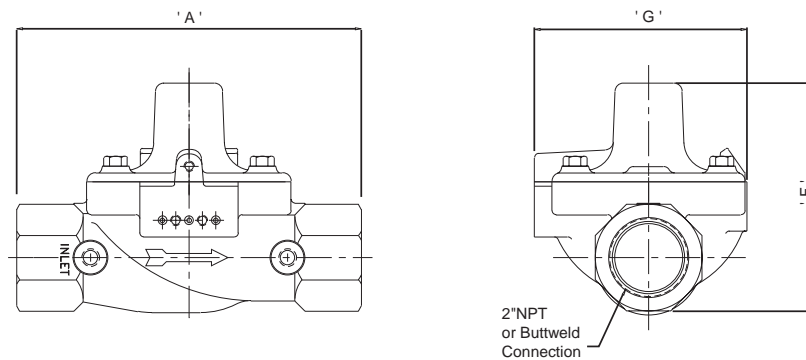


Figure 2



A Complete Family of Gas Measurement, Pressure Regulation, and Filtration Systems



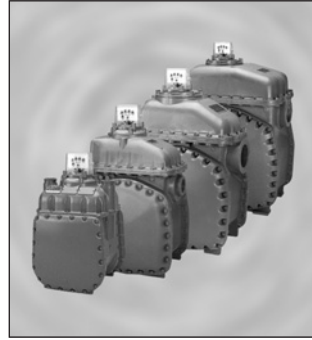
Rotary Gas Meters

RPM Series Rotary Meters are designed for commercial and industrial loads to provide accurate flow measurement and outstanding performance in the most adverse conditions. See bulletin SB 5500 for more information.



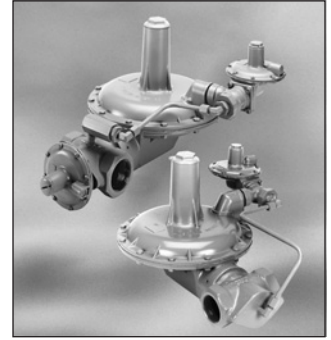
Rotary Meter with Integral Mercury Corrector

A new generation of Mercury Mini-Max and Mini-AT Correctors now mount integrally to American Meter's RPM® Series Rotary Meters. See bulletin SB 5510 for more information.



Diaphragm Meters

American Meter's compact, lightweight, aluminum case meters are designed to provide positive displacement accuracy for industrial or commercial loads. See bulletin SB 3510 for more information.



Pilot-Loaded Regulators

1800 PFM industrial regulators are designed for applications requiring medium-to-high capacity, extremely precise outlet pressure control, and fast response to changing loads. See bulletin SB 8551 for more information.



Turbine Gas Meters

High performance meters provide accurate measurement of high volume gas flow. Turbines are available from 3" to 12" line sizes and line pressure up to 1440 psig. See bulletin SB 4510 for more information.


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