



General Information

HFV-Series

Differential Pressure Type
Venturi Cone Flowmeter



HFV-Series

HFV-Series

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HFV-Series

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(A-B)

가

(P) (Qv) Qv K

$\sqrt{P}$

HFV-Series

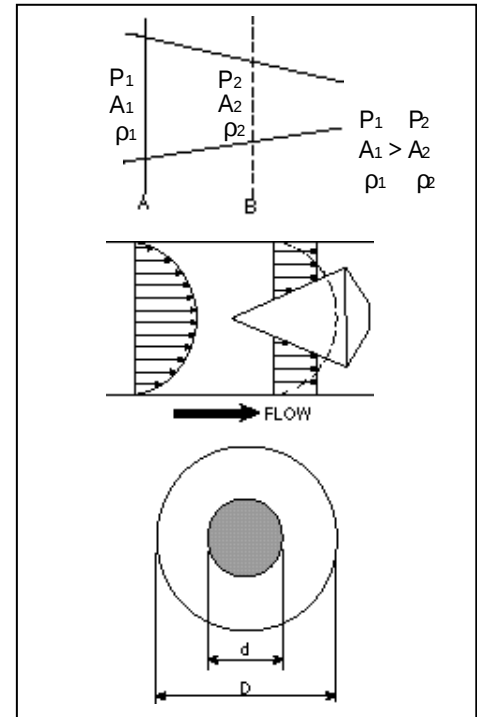
D :
d :
β :
cd :
m :
ε :
ρ :
P :
E :
A₂ :

가
(m)가

$$m = \frac{D^2 - d^2}{D^2}$$

$$\beta = \frac{\sqrt{D^2 - d^2}}{D}$$

$$Q_v = C_d \cdot A_2 \cdot E \cdot \varepsilon \cdot \sqrt{\frac{(Q)}{2} \frac{P}{\rho}}$$

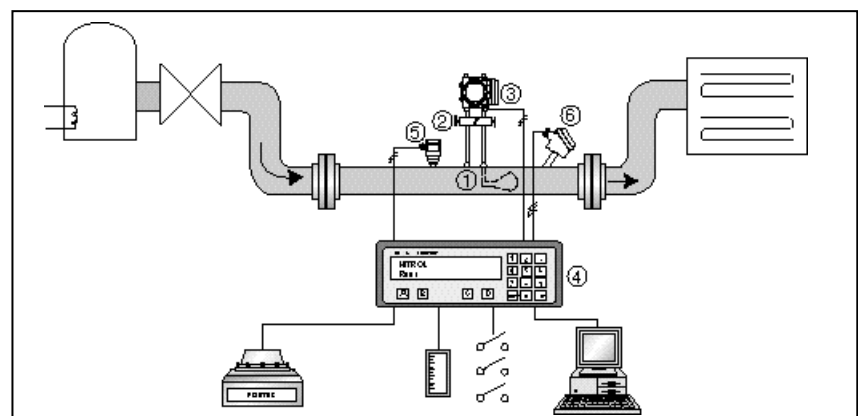


	STS 304(: STS 316 or PVC)
	10 kgf/cm ² (: 20 kgf/cm ²)
	350
	± 0.5 %
	± 0.1 %
Range ability	10 : 1(30 : 1)
	3D, 5D

System

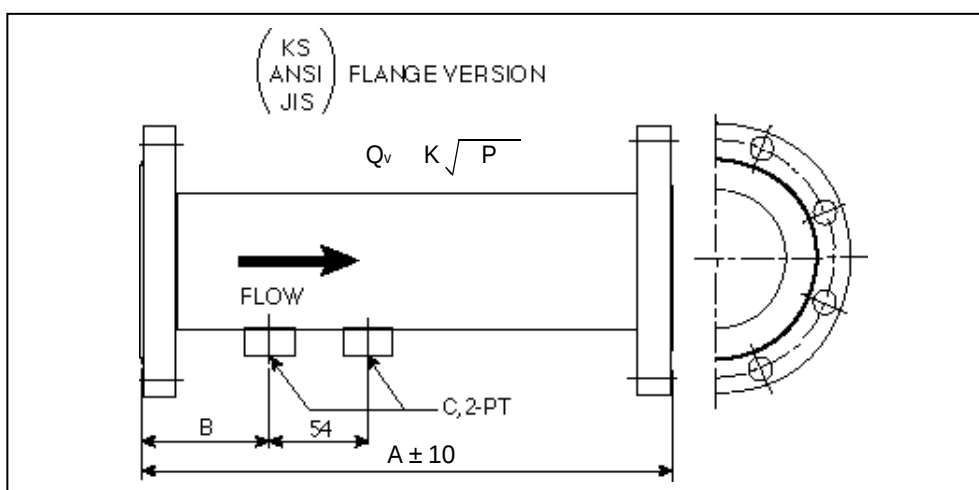
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HFV-Series
3-Way 5-Way Valve

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HFV-Series
3-Way 5-Way Valve



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* : Gas,
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Model	Size	A(mm)	B(mm)	C(PT)
HFV-0015	15A	200	65	1/4
HFV-0020	20A	200	65	1/4
HFV-0025	25A	200	65	1/4
HFV-0040	40A	260	75	1/4
HFV-0050	50A	300	90	1/2
HFV-0065	65A	300	90	1/2
HFV-0080	80A	360	90	1/2
HFV-0100	100A	400	100	1/2
HFV-0125	125A	560	110	1/2
HFV-0150	150A	560	110	1/2
HFV-0200	200A	660	130	1/2
HFV-0250	250A	710	130	1/2
HFV-0300	300A	760	130	1/2
HFV-0350	350A	760	150	1/2
HFV-0400	400A	760	150	1/2
HFV-0450	450A	920	150	1/2
HFV-0500	500A	920	150	1/2
HFV-0600	600A	1220	150	1/2
HFV-0700	700A	1220	150	1/2
HFV-0750	750A	1525	150	1/2
HFV-0800	800A	1525	150	1/2
HFV-0900	900A	1525	150	1/2
HFV-1000	1000A	2030	150	1/2
HFV-1200	1200A	2030	150	1/2
HFV-1500	1500A	2540	150	1/2
HFV-2000	2000A	3050	150	1/2

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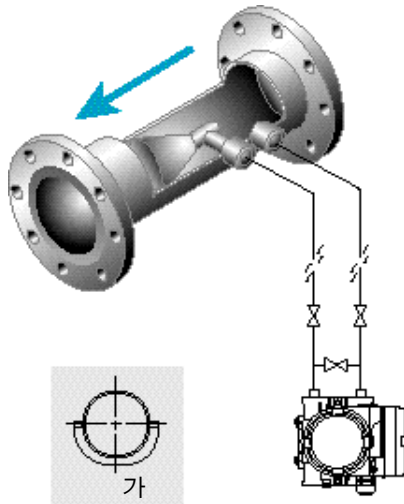
Model		(m³/h)				
	(mm H ₂ O)	β=0.4	β=0.5	β=0.6	β=0.7	β=0.8
HFV-0015	250	0.241	0.384	0.573	0.835	1.237
	5000	1.077	1.715	2.564	3.734	5.533
HFV-0020	250	0.426	0.678	1.013	1.476	2.187
	5000	1.903	3.031	4.530	6.599	9.778
HFV-0025	250	0.677	1.087	1.611	2.347	3.478
	5000	3.027	4.822	7.206	10.498	15.555
HFV-0040	250	1.567	2.496	3.730	5.434	8.051
	5000	7.007	11.162	16.681	24.299	36.007
HFV-0050	250	2.471	3.936	5.883	8.570	12.699
	5000	11.051	17.604	26.309	38.325	56.790
HFV-0065	250	4.146	6.605	9.871	14.279	21.307
	5000	18.543	29.538	44.144	64.305	95.286
HFV-0080	250	5.679	9.046	13.518	19.639	29.180
	5000	25.395	40.453	60.456	88.068	130.499
HFV-0100	250	9.756	15.540	23.225	33.832	50.132
	5000	43.629	69.499	103.865	151.301	224.198
HFV-0150	250	20.796	33.127	49.507	72.118	106.864
	5000	93.002	148.148	221.403	322.522	477.912
HFV-0200	250	35.684	56.842	84.949	123.747	183.368
	5000	159.582	254.207	379.905	553.414	820.048
HFV-0250	250	55.876	89.008	133.021	193.774	287.133
	5000	249.887	398.058	594.888	866.582	1284.100
HFV-0300	250	80.578	128.357	191.826	279.436	414.068
	5000	360.356	574.030	857.873	1249.678	1851.770
HFV-0350	250	99.688	158.798	237.319	345.706	512.267
	5000	445.816	710.164	1061.323	1546.046	2290.927
HFV-0400	250	131.722	209.827	313.581	456.799	676.884
	5000	589.079	938.375	1402.379	2042.867	3027.116
HFV-0500	250	209.159	333.181	497.931	725.344	1074.813
	5000	935.389	1490.031	2226.814	3243.836	4806.708
HFV-0600	250	310.811	495.108	739.926	1077.862	1597.173
	5000	1389.990	2214.189	3309.050	4820.345	7142.776
HFV-0700	250	423.049	673.897	1007.122	1467.090	2173.930
	5000	1891.931	3013.757	4503.985	6561.025	9722.112
HFV-0750	250	485.642	773.606	1156.134	1684.159	2495.583
	5000	2171.859	3459.670	5170.390	7531.789	11160.588
HFV-0800	250	552.553	880.191	1315.424	1916.199	2839.419
	5000	2471.093	3936.335	5882.755	8569.502	12698.269
HFV-0900	250	699.325	1113.992	1664.834	2425.189	3593.640
	5000	3127.477	4981.925	7445.362	10845.776	16071.247

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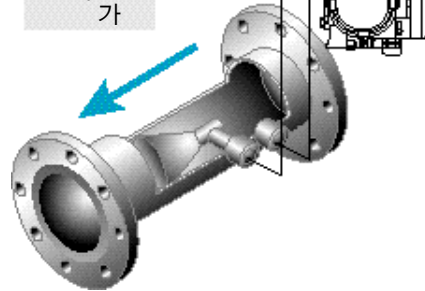
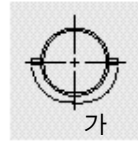
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Model	(kgf/cm ²)	(mm H ₂ O)	(dm ³ /s)	(m ³ /h)				
				β=0.4	β=0.5	β=0.6	β=0.7	β=0.8
HFV-0015	0	100	2.00	3.68	5.84	8.68	12.51	18.09
	10	1250	18.00	35.32	56.08	83.26	119.72	172.49
	20	3000	38.00	81.94	130.00	192.72	276.26	395.48
HFV-0020	0	100	2.67	6.50	10.32	15.34	22.10	31.96
	10	1250	24.00	62.41	99.09	147.13	211.57	304.82
	20	3000	50.67	144.80	229.73	340.56	488.20	698.88
HFV-0025	0	100	3.36	10.34	16.42	24.41	35.16	50.84
	10	1250	30.25	99.28	157.64	234.06	336.56	484.89
	20	3000	63.86	230.34	365.45	541.75	776.62	1111.76
HFV-0040	0	100	5.11	23.93	38.01	56.49	81.38	117.69
	10	1250	46.00	229.80	364.88	541.78	779.06	1122.41
	20	3000	97.11	533.18	845.92	1254.02	1797.67	2573.44
HFV-0050	0	100	6.42	37.74	59.95	89.10	128.35	185.62
	10	1250	57.75	362.44	575.50	854.50	1228.74	1770.27
	20	3000	121.92	840.94	1334.20	1977.85	2385.29	4058.84
HFV-0065	0	100	8.33	63.33	100.60	149.50	215.36	311.44
	10	1250	75.00	608.14	965.61	1433.73	2061.66	2970.28
	20	3000	158.33	1410.99	2238.61	3318.58	4757.25	6810.22
HFV-0080	0	100	9.72	86.73	137.77	204.75	294.95	426.53
	10	1250	87.50	832.87	1322.45	1963.56	2823.53	4067.93
	20	3000	184.72	1932.41	3065.87	4544.93	6515.26	9326.88
HFV-0100	0	100	12.75	149.00	236.69	351.76	506.72	732.78
	10	1250	114.75	1430.87	2271.97	3373.41	4850.85	6988.72
	20	3000	242.25	3319.89	5267.18	7808.22	11193.26	16032.64
HFV-0150	0	100	18.61	317.61	504.54	749.82	1080.15	1562.04
	10	1250	167.50	3050.12	4843.06	7109.94	10340.33	14897.55
	20	3000	353.61	7076.85	11227.82	16644.44	23860.16	34156.88
HFV-0200	0	100	24.36	544.99	865.74	1286.62	1853.43	2680.29
	10	1250	219.25	5233.70	8310.20	12338.91	17742.95	25562.66
	20	3000	462.86	12143.15	19265.79	28560.15	40941.58	58609.70
HFV-0250	0	100	30.56	853.39	1355.65	2014.70	2902.25	4197.03
	10	1250	275.00	8195.37	13012.81	19321.29	27783.40	40028.15
	20	3000	580.56	19014.76	30167.98	44721.87	64109.75	91775.96
HFV-0300	0	100	54.92	1230.65	1954.95	2905.35	4185.27	6052.43
	10	1250	494.25	11818.34	18765.46	27862.78	40065.78	57723.64
	20	3000	1043.42	27420.73	43504.52	64492.34	92451.15	132347.93
HFV-0350	0	100	61.11	1522.51	2418.58	3594.36	5177.83	7487.80
	10	1250	550.00	14621.13	23215.79	34470.59	49567.60	71413.13
	20	3000	1161.11	33923.72	53821.86	79787.06	114376.46	163734.99
HFV-0400	0	100	93.61	2011.77	3195.79	4749.41	6841.72	9894.00
	10	1250	842.50	19319.62	30676.17	45547.70	65496.13	94361.71
	20	3000	1778.61	44825.09	71117.50	105426.60	151131.28	216351.15
HFV-0500	0	100	176.94	3194.45	5074.54	7541.51	10863.86	15710.52
	10	1250	1592.50	30677.32	48710.20	72324.46	104000.25	149835.43
	20	3000	3361.94	71177.03	112926.32	167405.20	239978.93	343540.51
HFV-0600	0	100	215.56	4746.96	7540.78	11206.70	16143.71	23345.86
	10	1250	1940.00	45586.55	72383.44	107474.27	154544.53	222655.70
	20	3000	4095.56	105769.19	167808.70	248764.40	356609.07	510501.75
HFV-0700	0	100	333.33	6461.14	10263.84	15253.57	21973.38	31776.31
	10	1250	3000.00	62048.36	98521.90	146284.42	210352.28	303059.14
	20	3000	6333.33	143963.61	228406.29	338595.99	485384.57	694849.61
HFV-0750	0	100	361.11	7417.12	11782.47	17510.47	25224.55	36477.91
	10	1250	3250.00	71228.98	113099.12	167928.54	241475.83	347899.52
	20	3000	6861.11	165264.35	262201.10	388694.37	557201.67	797658.99
HFV-0800	0	100	388.89	8439.04	13405.83	19923.02	28699.93	41503.75
	10	1250	3500.00	81042.75	12861.67	191065.36	274745.84	395832.35
	20	3000	7388.89	188034.11	298326.58	442247.82	633971.68	907558.67
HFV-0900	0	100	430.56	10680.66	16966.75	25215.08	37.39.45	52528.18
	10	1250	3875.00	102569.73	162862.74	241817.10	355701.53	500975.31
	20	3000	8180.56	237980.67	377569.58	559719.90	825293.06	1148628.95

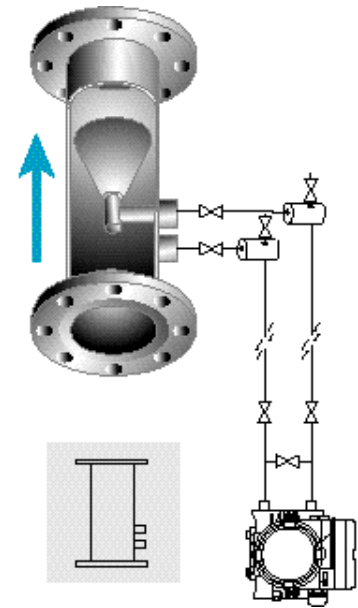
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a)



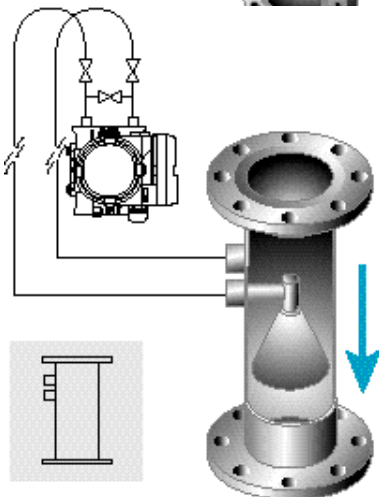
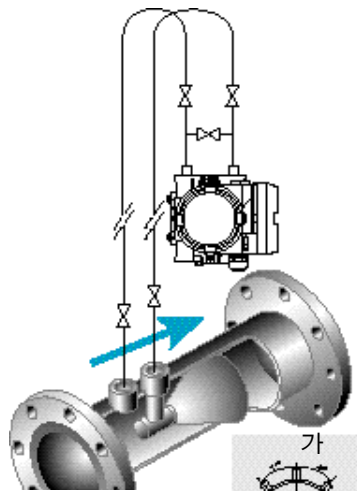
b)



c)

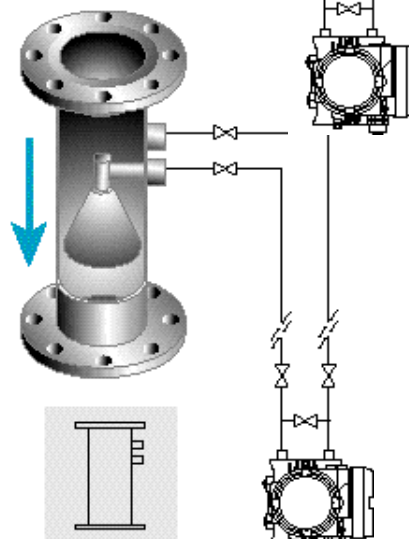
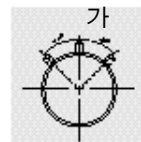
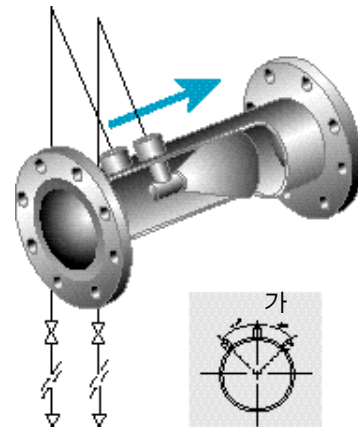
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a)



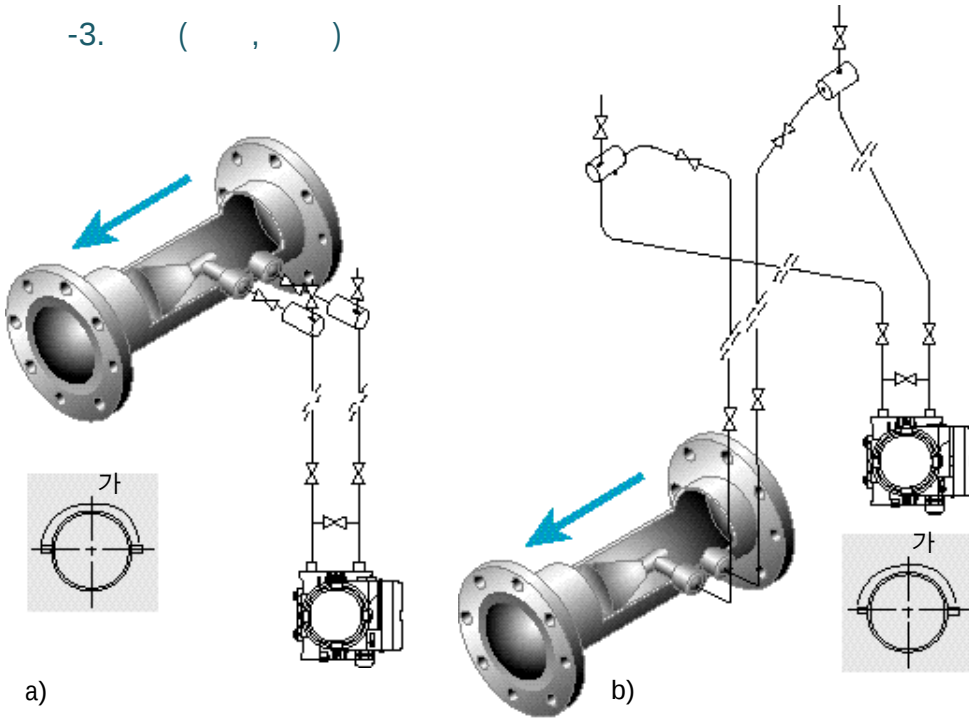
c)

b)



d)

-3. (,)



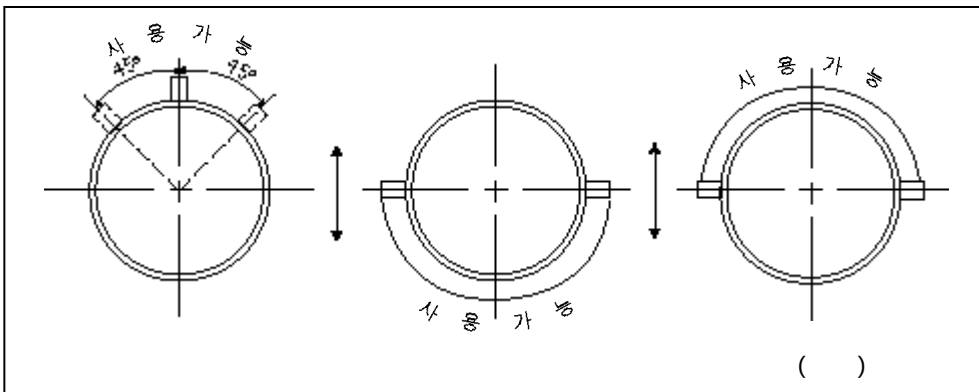
HFV-Series

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1/10
Gas Drain

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Gas Drain

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(PT 1/4)

(3-Way valve)

Oval Flange

PT 1/2

Process

PT 1/2

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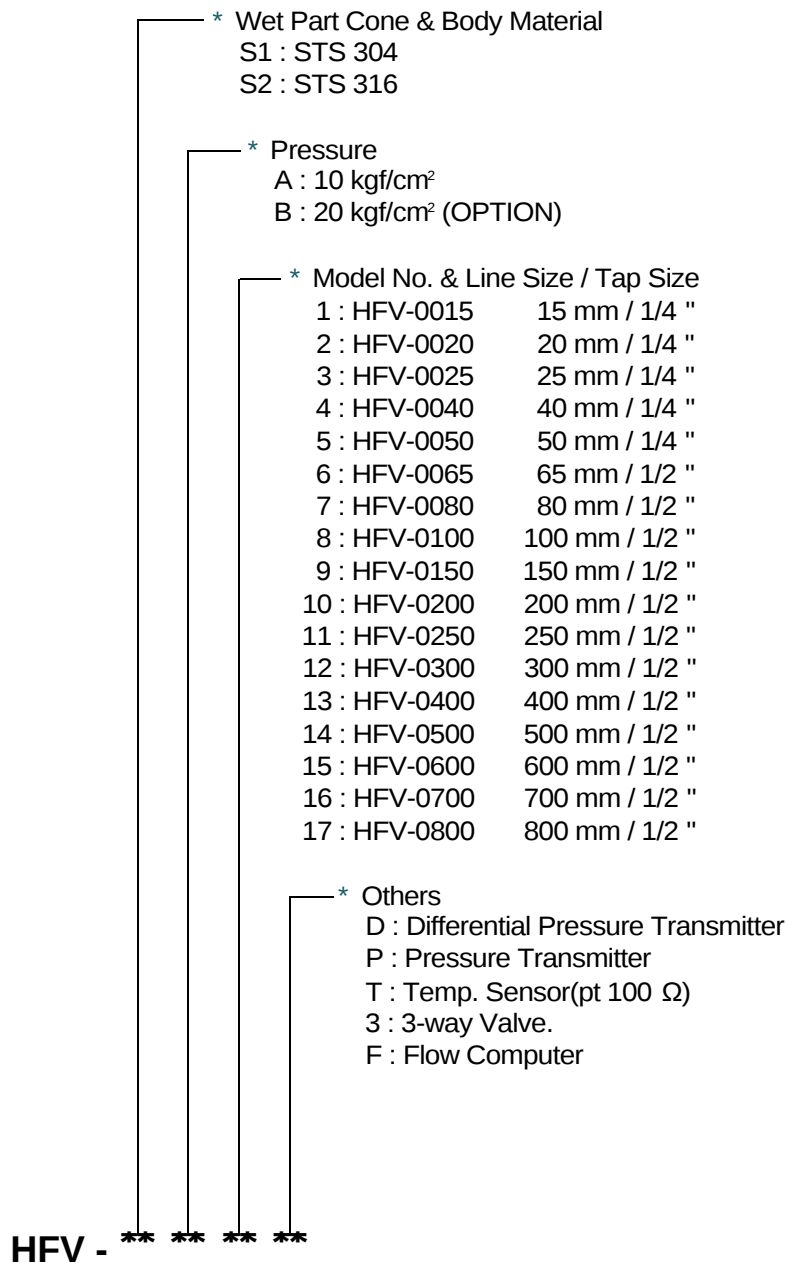
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VENTURI CONE FLOW SENSOR (HFV-Series)

- * Type : Venturi Cone
- * Installation : Local Mounting
- * Mounting Method : Flange
- * Repeatability : $\pm 0.1 \%$
- * Accuracy : $\pm 0.5 \%$ F. S
- * Turn Down Ratio : 10 : 1
- * Normal Pressure : Max. 10 kgf/cm²
- * Temperature : Max. 350

ORDER CODES

MODEL : HFV-Series (Material STS 304 / Pressure 10 kg/cm²)



SYSTEM ARRANGEMENT

- 1) Liquid Flow
Sensor = HFV-1000 / HFV-2000
Manifold = 3-Way V/V & 5-Way V/V
Differential Pressure Transmitter
Flow Computer & Display For Flowrate
- 2) Mass Flowrate (Gas, Steam Liquid) :
Sensor = HFV-1000 / HFV-2000
Manifold = 3-Way V/V & 5-Way V/V
Differential Pressure Transmitter
Flow Computer & Display For Flowrate
Pressure Sensor
Temperature Sensor

