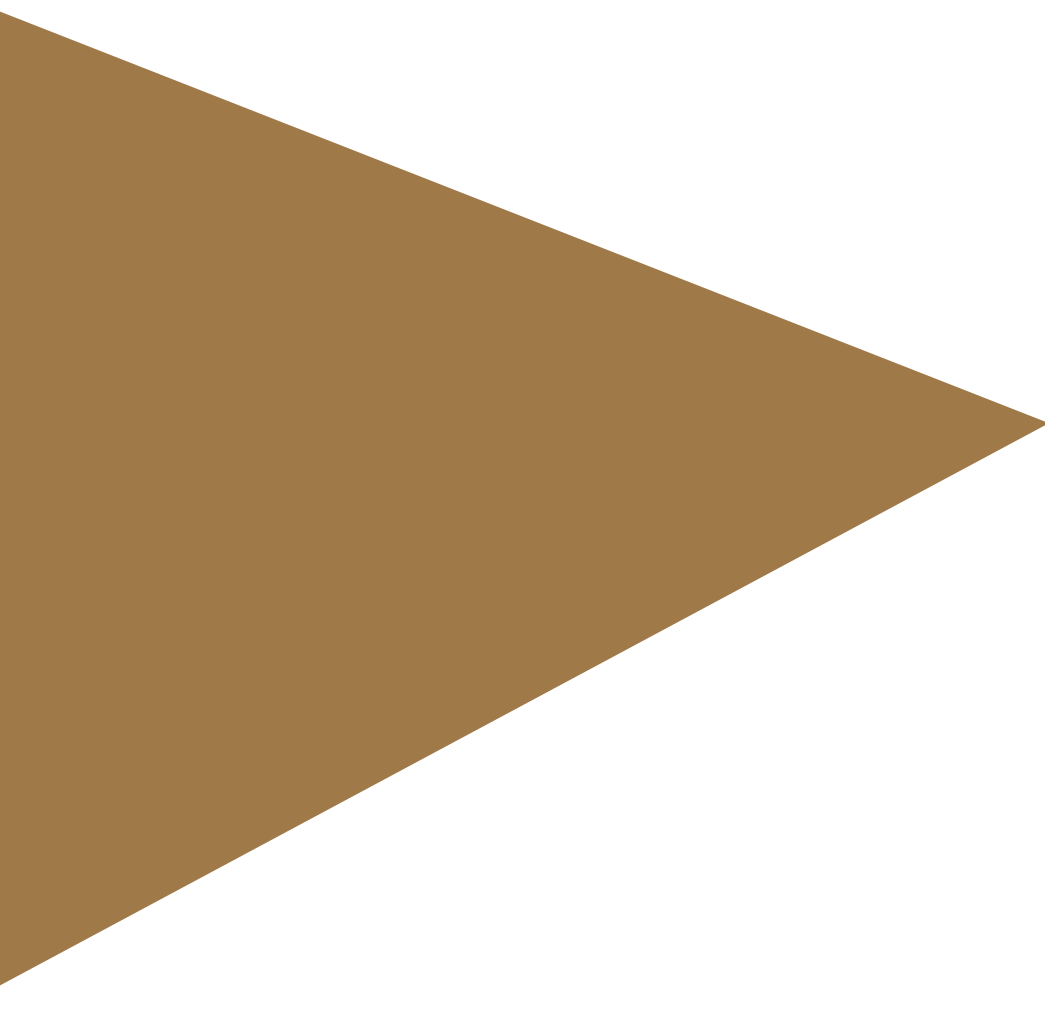




Vortex Flowmeter

볼텍스 유량계

KSF-V400, V450



볼텍스 유량계 KSF-V400

Vortex Flowmeter

KSF-V400

※ 측정원리

KSF-V400 Series는 와류를 이용한 측정방식에 온도, 압력 보정기능을 일체화하여 기존보다 더욱 높은 정밀도를 갖는 유량계이다. 온도, 압력, 유속을 함께 측정하므로 활용분야가 다양하며 액체, 가스, 스팀 등 광범위한 유체에 적용 가능하다. 순시, 적산 표시 및 외부 출력이 가능하다.

※ 주요특징

▶ 장점

- 구동부품이 없어 내구성이 우수하며 수명이 길다.
- 측정 유량범위가 높고 압력 손실이 비교적 적다.
- 광범위한 유체 (액체, 가스, 스팀)를 높은 정밀도로 측정할 수 있다.
- 소형으로 대용량의 유량의 측정이 가능하다.

▶ 온,압 보정 (KSF-V450)

- 온도, 압력, 유량센서의 일체화로 정밀도가 우수하며, 설치비용과 유지관리 비용이 획기적으로 줄어든다.
- 유량, 온도, 압력측정값을 동시에 확인할 수 있다.



KSF-V400 (Water type)

※ 주문정보

Product	Model	Connection	Pipe Size	Description
KSF				Vortex flowmeter
	V400			Display (without Temp./ Pressure Compensation)
	V450			Display + Pressure / Temperature Sensor
		A		ANSI Flange
		K		KS(JIS) Flange
		D		DIN Flange
			50	15A ~ 300A

FLOWMETER

BEST PRODUCT COLLECTION



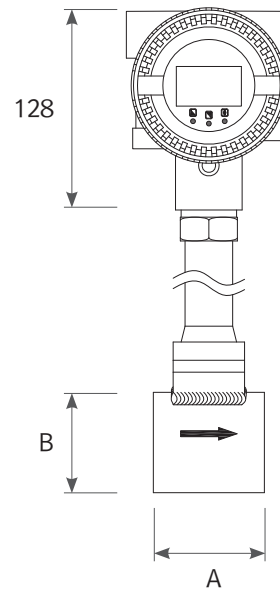
※ 일반사양

CONNECTION	KS/JIS/ASME/DIN Std. Flange
SIZE	15A ~ 300A
MEASUREED FLUID	Liquid, Gas, Steam
FLUID TEMP	-40 °C ~ 200 °C
AMBIENT TEMP	-25 °C ~ 60 °C
MAX. PRESSURE	(16 ~ 40) kg/cm ² .G
DISPLAY	Moment, F low rate, Totalizer LCD Display with Back light
POWER SUPPLY	DC 24 V (4-Wire)
OUTPUT	DC 4-20 mA
ACCURACY	± 1.0% of Full Scale
ANTI-EXPLOSION GRADE	Ex d IIB T4 (Option)

※ 치수

Size		A	B
mm	inch		
15	1/2"	70	48
20	3/4"	70	60
25	1"	70	71
32	1-1/4"	85	81
40	1-1/2"	85	86
50	2"	85	101
65	2-1/2"	100	121
80	3"	100	131
100	4"	120	156
150	6"	135	217
200	8"	200	267
250	10"	250	330

※ 도면



KOREA STANDARD FLOW / KSF-V400

볼텍스 유량계 KSF-V400

KSF-V400

※ 포화 증기 유량 범위

Size		Max. Flow ranges (kg/h)								
mm	inch	1 Bar	2 Bar	4 Bar	6 Bar	8 Bar	10 Bar	15 Bar	20 Bar	25 Bar
15	1/2"	24	45	87	127	165	206	302	407	501
20	3/4"	36	67	131	191	247	310	453	610	752
25	1"	60	112	219	318	412	516	755	1017	1253
40	1-1/2"	120	224	437	636	825	1032	1510	2034	2506
50	2"	239	449	874	1273	1649	2064	3020	4068	5012
80	3"	600	1120	2190	3180	4120	5160	7550	10170	12530
100	4"	1200	2240	4370	6360	8250	10320	15100	20340	25060
150	6"	2390	4490	8740	12730	16490	20640	30200	40680	50120
200	8"	4782	8976	17480	25456	32984	41280	60408	81360	100240
250	10"	6574.7	12342	24035	35002	45353	56760	83061	111870	137830
300	12"	9563	17952	34960	50912	65968	82560	120816	162720	200480

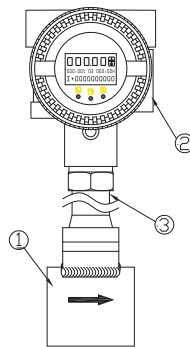
※ 가스 유량 범위

Size		Max. Flow ranges (m ³ /h) (1 atm/20 °C)								
mm	inch	1 Bar	2 Bar	4 Bar	6 Bar	8 Bar	10 Bar	15 Bar	20 Bar	25 Bar
15	1/2"	80	120	200	280	360	440	640	840	1040
20	3/4"	120	180	300	420	540	660	960	1260	1560
25	1"	200	300	500	700	900	1100	1600	2100	2600
40	1-1/2"	400	600	1000	1400	1800	2200	3200	4200	5200
50	2"	800	1200	2000	2800	3600	4400	6400	8400	10400
80	3"	2000	3000	5000	7000	9000	11000	16000	21000	26000
100	4"	4000	6000	10000	14000	18000	22000	32000	42000	52000
150	6"	8000	12000	20000	28000	36000	44000	64000	84000	104000
200	8"	16000	24000	40000	56000	72000	88000	128000	168000	208000
250	10"	22000	33000	55000	77000	99000	121000	176000	231000	286000
300	12"	32000	48000	80000	112000	144000	176000	256000	336000	416000

※ 일반유량범위

Size		Flow ranges (m ³ /h)	
mm	inch	Water	Air
20	3/4"	0.3 - 10	3 - 40
25	1"	0.4 - 16	4 - 80
40	1-1/2"	0.6 - 30	7 - 250
50	2"	1 - 50	10 - 400
80	3"	2 - 130	20 - 1000
100	4"	3 - 200	35 - 1500
150	6"	8 - 450	50 - 3500
200	8"	15 - 800	120 - 6500
250	10"	25 - 1200	150 - 8000
300	12"	40 - 2000	200 - 12000

※ 도면



※ 재질

No.	Description	Material
1	Body (Sensor)	304SS (Option. 316SS)
2	Indicator (Transmitter)	CAST ALUMINUM
3	Bar	304SS

□ Air는 1 atm/20 °C 기준임.

KSF-V450

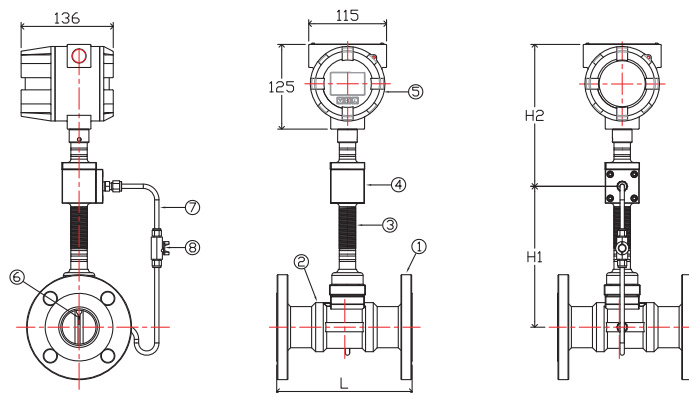
※ 일반사항

CONNECTION	KS/JIS/ASME/DIN Std. Flange
SIZE	15A ~ 300A
MEASUREED FLUID	Liquid, Gas, Steam
FLUID TEMP	-40 °C ~ 250 °C (Option. 350 °C)
AMBIENT TEMP	-25 °C ~ 60 °C
MAX. PRESSURE	20 kgf/cm ² .G (Op. 40 kgf/cm ² .G)
DISPLAY	Flow rate, Totalizer, Temp', Press'
POWER SUPPLY	DC 24 V (2-Wire)
OUTPUT	DC 4~20 mA, Pulse (Op. RS-485)
ACCURACY	± 1.0% of Full Scale



KSF-V450-K

※ 구조 및 도면



※ 치수

Size		L	H1	H2
mm	inch			
15	1/2"	200	200	195
20	3/4"	200		
25	1"	200		
40	1-1/2"	200		
50	2"	200		
65	2-1/2"	200		
80	3"	200	220	
100	4"	250	240	
125	5"	250	250	
150	6"	300	260	
200	8"	350	300	
250	10"	400	320	
300	12"	500	340	

※ 재질

No.	Description	Material	
		A	B
1	Flange	304SS	316SS
2	Body	304SS	316SS
3	bar	304SS	
4	Press' sensor Housing	304SS	316SS
5	Indicator (Transmitter)	CAST ALUMINUM	
6	Flow & Temp' Sensor	304SS	316SS
7	Press' tube	316SS	
8	Valve	304SS	

□ Height (H1, H2)는 사양에 따라 변경될 수 있음.

볼텍스 유량계 KSF-V450

※ 일반유량범위

Size		Water (m ³ /h)	Gas (Nm ³ /h)
mm	inch		
15	1/2"	0.7 - 7	3.5 - 35
20	3/4"	1 - 10	5 - 50
25	1"	1.6 - 16	7 - 70
40	1-1/2"	2.5 - 25	22 - 220
50	2"	3.5 - 35	32 - 320
65	2-1/2"	6.8 - 68	48 - 480
80	3"	10 - 100	64 - 640
100	4"	15 - 150	110 - 1100
125	5"	27.5 - 275	170 - 1700
150	6"	40 - 400	224 - 2240
200	8"	80 - 800	496 - 4960
250	10"	120 - 1,200	800 - 8000
300	12"	180 - 1,800	1100 - 11000

□ Gas는 1 atm/20 °C 기준임.

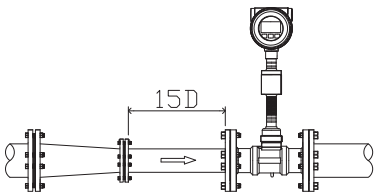
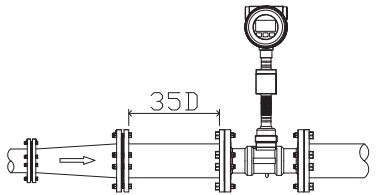
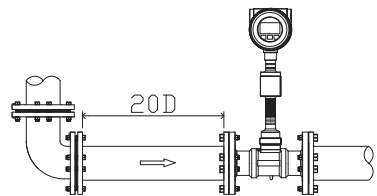
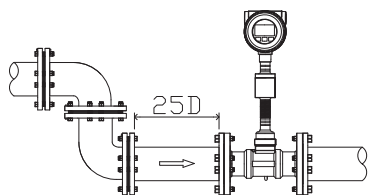
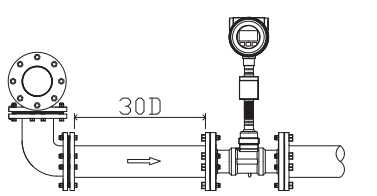
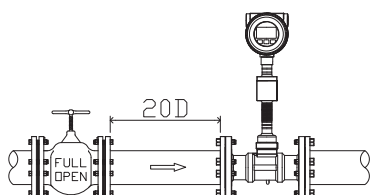
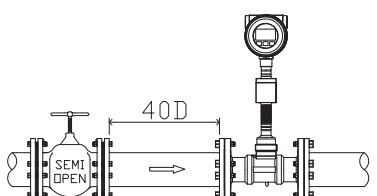
※ 가스유량범위

Size		Max. Flow ranges (Nm ³ /h) (1 atm/20 °C)					
mm	inch	1 kg/cm ² .G	2 kg/cm ² .G	4 kg/cm ² .G	6 kg/cm ² .G	8 kg/cm ² .G	10 kg/cm ² .G
15	1/2"	80	110	180	250	310	380
20	3/4"	110	150	250	350	440	540
25	1"	150	210	350	480	620	760
40	1-1/2"	440	650	1080	1510	1930	2360
50	2"	630	950	1570	2190	2810	3420
65	2-1/2"	950	1420	2350	3270	4200	5130
80	3"	1270	1890	3130	4360	5600	6840
100	4"	2170	3240	5370	7500	9620	11750
125	5"	3350	5000	8290	11580	14870	18160
150	6"	4420	6580	10920	15260	19590	23930
200	8"	9770	14570	24170	33770	43370	52970
250	10"	15750	23490	38980	54470	69950	85440
300	12"	21650	32300	53590	74890	96180	117470

※ 포화증기유량범위

Size		Max. Flow ranges (kg/h)					
mm	inch	1 kg/cm ² .G	2 kg/cm ² .G	4 kg/cm ² .G	6 kg/cm ² .G	8 kg/cm ² .G	10 kg/cm ² .G
15	1/2"	39	57	92	126	160	194
20	3/4"	55	81	131	180	229	277
25	1"	78	113	183	252	320	387
40	1-1/2"	244	357	577	792	1005	1217
50	2"	355	519	839	1152	1462	1771
65	2-1/2"	532	778	1258	1728	2194	2656
80	3"	710	1037	1677	2304	2925	3542
100	4"	1220	1783	2883	3960	5027	6087
125	5"	1885	2756	4456	6120	7769	9408
150	6"	2484	3631	5871	8064	10237	12396
200	8"	5501	8040	13000	17856	22667	27449
250	10"	8872	12968	20968	28800	36560	44272
300	12"	12199	17831	28831	39600	50270	60874

※ 직관부

Classification	Upstream Pipe style	Length of straight Pipeline Inlet	Length of straight Pipeline Outlet
Reduction		15D	7D
Expansion		35D	17D
Elbow		20D	10D
Two same Plane elbow		25D	12D
Two different Plane elbow		30D	15D
Full open Valve		20D	10D
Semi open Valve		40D	20D

KOREA STANDARD FLOW / KSF-V400, V450