KOMETER

KTM-900 Series

Electromagnetic Flow meter Separated with Indicator and Body

FEATURE

- Capable of measuring flows in both directions
- Can be used as a Calorimeter when combined with thermometers.
- No maintenance is necessary because no driving parts, mpediments, or wear.
- PFA or PTFE liners with high chemically durability is used
- High durability to most of corrosive or abrasive fluids
- Able to apply various electrodes to the sensor
- Provides superb stability and accuracy for a long time
- Housing material can be chosen
- Maintains a stable accuracy even at a site with a high level of noise and vibration

APPLICATIONS

▶ Chemical and Other Process Industries
- Injecting fibric products with adhesiveness
- Emulsified liquid including latex and emulsion.

▶ Food and Beverage
- Hygienic blending, injection, and quantitative distribution
- Cream and dairy products (e.g. fat, milk, cheese, yogurt with particles of fruit)

▶ Mineral and Mining
- Similar in use to a cement

▶ Water resources
- Water mixed with fat, oil, and grease

▶ Paper business
- Fibric products in chemically aggressive nature

▶ Pharmaceutical Industry

KTM-900 General Specifications

Size	10A (3/8") - 2000A (80")
Process Connection	Flange type - Standard JIS10K RF (Option. ANSI 150#, DIN 16 bar)
Measuring Range	0.028 m^3/h – 113040.0 m^3/h
Flow Velocity	0.1 m/s – 10 m/s
Accuracy	±0.5 % R.D (0.3 m/s ~ 10 m/s) ±1.0 % R.D (0.01 m/s ~ 0.3 m/s)
Fluid Temperature	PTFE (-10 ℃ ~ 160 ℃) Hard rubber (-10 ℃ ~ 70 ℃) CR (-10 ℃ ~ 150 ℃) - Option
Ambient Temperature	-10 ℃ ~ 60 ℃
Conductivity	Over 5 *μs / ㎝*
Power Supply	AC 85-250 V (50~60) Hz DC 24 V – (Option) Battery (Option), Battery Life 2 year
Power Consumption	15 VA
Display	LCD Display Flowrate : 5-digit Display Total : 9-digit Display / With Back light
Output	Analog : DC 4-20 mA Pulse : DC (8~30) V (Open collector pulse)
	Digital : RS-485
Electrode Signal Cable	Standard length 10 m (Max. 30 m)

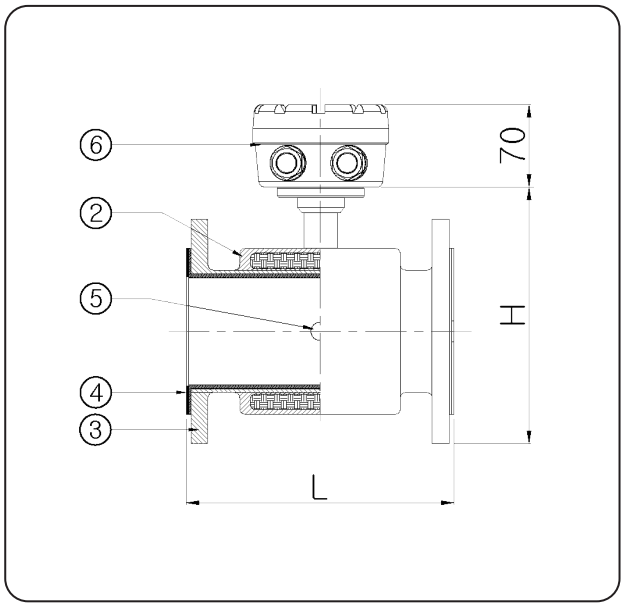
Temperature Sensor Specifications (For Calorimeter)

Type of Measuring Element	Pt1000
Reference Resistance	1000Ω
Grade	ClassAA, ClassA, ClassB
Temperature	T1 - (0 ℃ ~ 105 ℃) T2 - (0 ℃ ~ 150 ℃) T3 - (0 ℃ ~ 180 ℃)
Wiring	3-Wire

TYPE SPECIFICATION CODE

KTM - 900	-	□□□□	-	□	-	□	-	□	Specification
		0006 ~ 2000							Meter size - Catalog Reference
									<Electrode Material>
				S					316L Stainless Steel
				T					Ti (Titanium)
				P					Pt-Ir (Platinum / Iridium)
				A					Ta (Tantalum)
				H					Hastelloy-C
									<Lining & Sealing Material>
						T			PTFE PFA
						H			Hard rubber
						C			Ceramic
									<For Calorimeter>
								B	Two Temperature sensor and Cables

STRUCTURAL DRAWING



STANDARD MATERIAL

No.	Description	Material	
		Normal	Option
1	Indicator	CAST ALUMINUM	
2	Housing	CARBON STEEL	SUS304 / 316L
3	Flange	CARBON STEEL	SUS304 / 316L
4	Lining	PFA(PTFE), Hard Rubber	
5	Electrode	SUS316L	Platinum Titanium Tantalum Hasteloy-C
6	Signal Box	CAST ALUMINUM	

MEASURING RANGE

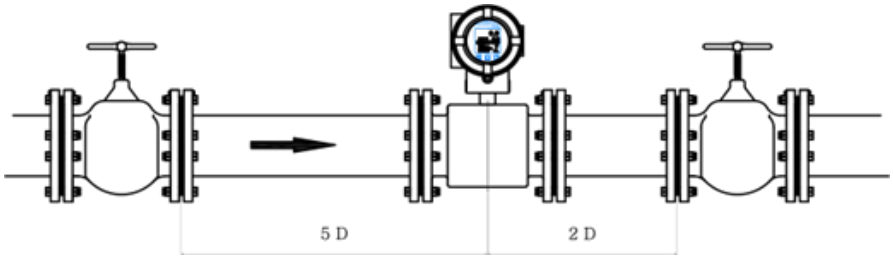
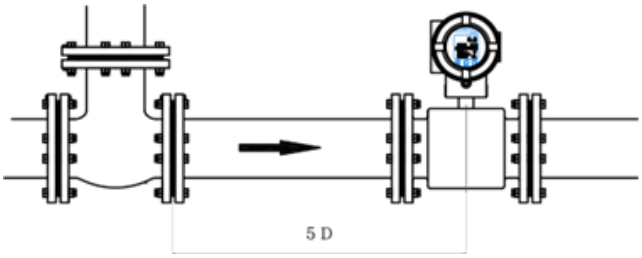
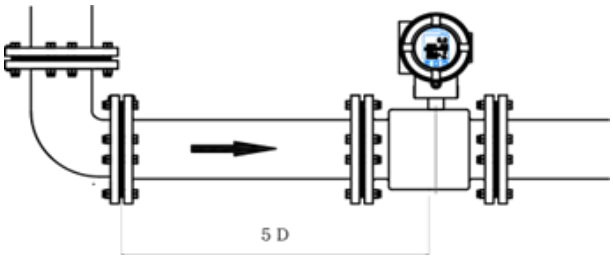
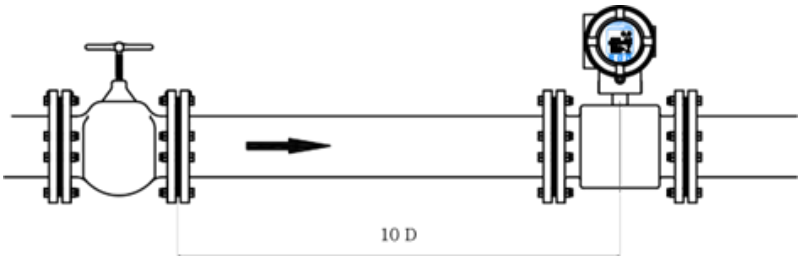
Size		Flow range			
		Minimum		Maximum	
		Velocity (m/s)	Flow rate (㎥/h)	Velocity (m/s)	Flow rate (㎥/h)
6A	1/4B	0.1	10 (L/h)	10.0	1000 (L/h)
8A			18 (L/h)		1800 (L/h)
10A	3/8B		0.028		2.826
15A	1/2B		0.063		6.358
20A	3/4B		0.113		11.304
25A	1B		0.176		17.662
32A	1-1/4B		0.289		28.938
40A	1-1/2B		0.452		45.216
50A	2B		0.706		70.650
65A	2-1/2B		1.194		119.398
80A	3B		1.808		180.864
100A	4B		2.82		282.60
125A	5B		4.41		441.56
150A	6B		6.35		635.85
200A	8B		11.30		1130.40
250A	10B		17.66		1766.25
300A	12B		25.43		2543.40
350A	14B		34.61		3461.85
400A	16B		45.21		4521.60
450A	18B		57.22		5722.65
500A	20B		70.6		7065.0
600A	24B		101.7		10173.6
700A	28B		138.4		13847.4
800A	32B		180.8		18086.4
1000A	40B		282.6		28260.0
1200A	48B		406.9		40964.4
1400A	56B		553.8		55389.6
1600A	64B		723.4		72345.6
1800A	72B		915.6		92562.4
2000A	80B		1130.4		113040.0

FLOW RANGES & DIMENSIONS

Size		Working Pressure (Bar)	Dimensions (mm)		n-ØA	Weight (kg)
			L	H		
6A	1/4B	16	200	130	4-Ø12	5
8A			200	130		5
10A	3/8B	40	200	130	4-Ø15	6
15A	1/2B		200	132.5		6
20A	3/4B		200	137.5		6
25A	1B		200	145	4-Ø19	7
32A	1-1/4B		200	162.5		9
40A	1-1/2B		200	172.5		10
50A	2B		200	187.5		12
65A	2-1/2B		200	202.5		17
80A	3B		200	220	8-Ø19	17
100A	4B	16	250	230		22
125A	5B		250	270	8-Ø23	24
150A	6B		300	302.5		35
200A	8B	10	350	352.5	12-Ø23	45
250A	10B		400	407.5	12-Ø25	84
300A	12B		500	460	16-Ø25	102
350A	14B		500	517.5		123
400A	16B		600	572.5	16-Ø27	147
450A	18B		600	622.5	20-Ø27	212
500A	20B		600	675		229
600A	24B		600	745	24-Ø33	252
700A	28B		700	892		352
800A	32B		800	1002.5	28-Ø33	462
1000A	40B	6	1000	1182.5	28-Ø39	690
1200A	48B		1200	1397.5	-	787
1400A	56B		1400	1610	-	1260
1600A	64B		1600	1810	-	1500
1800A	72B		1800	2017.5	-	1700
2000A	80B		2000	2227.5	-	2000

DRAWING OF INSTALLATION

√ In order to measure the flow accurately, it is necessary to have more than 5D in the front end and 3D in the rear end.

By pass	
Tee	
90˚ Bend	
horizontality	
Reducer/Expansion pipe