KOMETER

KTR-550-F Series

Turbine Flow meter Reliable Measurement and Cost-effective

FEATURE

- CE - LVD(2014/35/EC), EMC(2014/30/EU), RoHS(2011/65/EU)
- Flange type or screw (male or female) type is selectively available.
- Relatively low cost
- DC / AC power type or battery type is selectively available
- Wide range of application to fluids at low temperature to high temperature
- Applicable to varied fluids such as liquids, gases, etc.
- Capable of providing outputs of varied signals outward
- Can be freely installed horizontally and vertically
- Can be manufactured from small to large diameter

APPLICATIONS

▶ General industry

- Utility Use : Auxiliary and supply lines used in energy distribution

▶ Chemical and Other Process industry

- Condensate and Coolant
- Batching and mixing in the reactor

▶ Machinery and Equipment (OEM industry)

- Coolant, Coolant, Lubricant, Air supply

▶ Paper and Pulp industries

▶ Iron and Metal Processing field

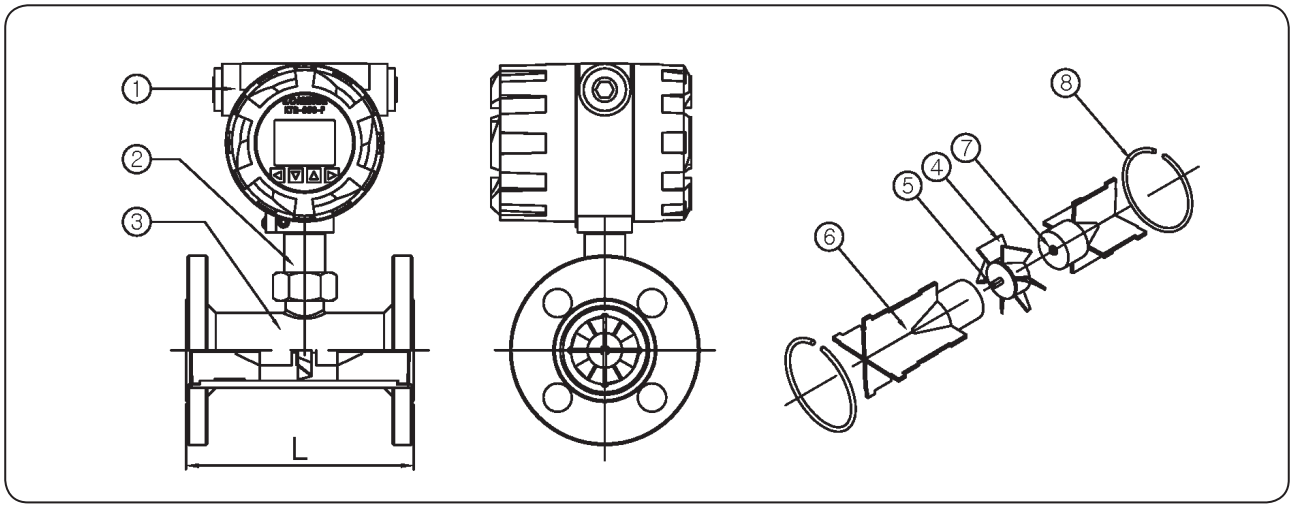
KTR-550-F Series General Specifications

Size	6A (1/4") - 250A (10")
Process Connection	Flange type - KS / JIS / ANSI / ASME / DIN Std. Taper Pipe Thread type (PT)
Measured Fluid	Gas and Liquid
Flow Ranges	Water - 0.04 ㎥/h ~ 1000 ㎥/h Air - 0.7 N㎥/h ~ 500 N㎥/h
Accuracy	±0.5 % F.S (Option ±0.2 % F.S)
Fluid Temperature	-20 ℃ ~ 120 ℃ (Option -200 ℃ ~ 450 ℃)
Ambient Temperature	-25 ℃ ~ 60 ℃
Max. Pressure	Under 1B - Max. 350 kgf/㎠.G More than 1-1/2B - Max. 60 kgf/㎠.G
Power Supply	AC 220 V / DC 24 V / 3.6 V battery
Display	3-1/2 LCD (Flow rate), 7 Digit LCD (Integration)
Output	DC 4-20 mA, Pulse RS-485, Contact 2P High, Low
Explosion Proof Class	Ex d IIC T5
Ingress Protection Grade	IP67

MODEL CODE

KTR-550	-	□	-	□	Specification
		S			Output DC 4-20 mA without Indicator
		F			AD 110/220V or DC 24V (4-Wire) type with Indicator
		MF			3.6 V battery type with Indicator
				F	Connection - Flange Type
				T	Connection - Screw Type (Male, Female)

STRUCTURAL DRAWING



FLOW RANGE & DIMENSIONS

Size		L (mm)	Flow ranges	
			Water(m^3/h)	Air(Nm^3/h)
6A	1/8B	150	0.04 – 0.4	–
8A	1/4B	150	0.06 – 0.6	–
10A	3/8B	150	0.12 – 1.2	–
15A	1/2B	150	0.3 – 4	0.7 – 7
20A	3/4B	150	0.6 – 6	–
25A	1B	150	0.6 – 10	4 – 40
32A	1-1/4B	150	1.5 – 15	–
40A	1-1/2B	150	1.5 – 20	8 – 80
50A	2B	150	2 – 40	16 – 160
65A	2-1/2B	200	5 – 60	–
80A	3B	200	5 – 100	34 – 340
100A	4B	220	15 – 200	50 – 500
125A	5B	250	25 - 250	–
150A	6B	300	30 – 300	–
200A	8B	360	50 – 500	–

STANDARD MATERIAL

No.	Description	Material	
		Normal	Option
1	Indicator	ADC12	
2	Pickup case	ADC12	
3	Body	304SS	316SS
4	Rotor	CD4MCH	
5	Rotor shaft	TUNGSTEN CARBIDE	316LSS
6	Support	304SS	316SS
7	Bushing	TUNGSTEN CARBIDE	HIGH DENSITY PLASTIC
8	Retaining ring	304SS	316SS

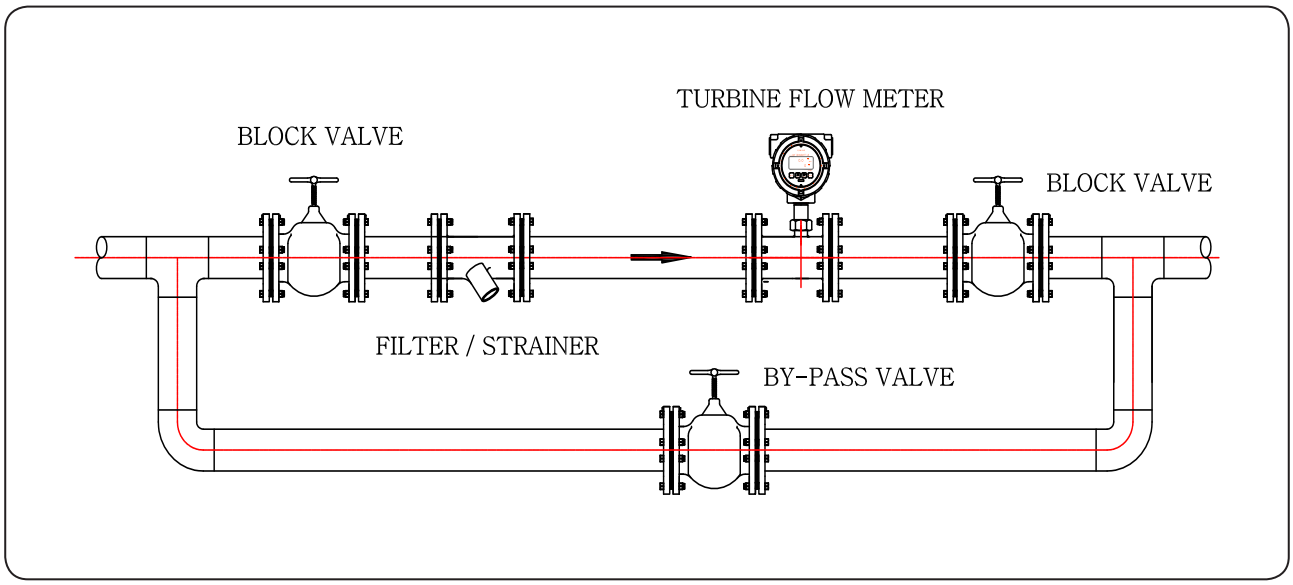
STRAINER

Turbine size	Strainer mesh	Clearance
3/8″	60	0.0092
1/2″	60	0.0092
1″	60	0.0092
1-1/2″	40	0.0340
2″	30	0.0650
2-1/2″	30	0.0650
3″	20	0.0900
4″	20	0.0900
6″	10	0.1875
8″	8	0.1875

CAUTION

This flowmeter should be checked for foreign objects before installation. If there is foreign material, you must install Strainer in order to rotate Turbine smoothly. The straight pipe sections maintain the front end 10D and the rear end 5D so that fluid can flow stably. Also, avoid excessive vibrations or shocks as this may deteriorate the life or performance of the instrument.

INSTALLATION PRECAUTIONS



KOMETER

KTR-550-MF Series

Turbine Flow meter Reliable Measurement and Cost-effective

FEATURE

- Flange type or screw (male or female) type is selectively available.
- Relatively low cost
- Battery type (3.6 V)
- Wide range of application to fluids at low temperature to high temperature
- Applicable to varied fluids such as liquids, gases, etc.
- Capable of providing outputs of varied signals outward
- Can be freely installed horizontally and vertically
- Can be manufactured from small to large diameter

APPLICATIONS

▶ General industry

- Utility Use : Auxiliary and supply lines used in energy distribution

▶ Chemical and Other Process industry

- Condensate and Coolant
- Batching and mixing in the reactor

▶ Machinery and Equipment (OEM industry)

- Coolant, Coolant, Lubricant, Air supply

▶ Paper and Pulp industries

▶ Iron and Metal Processing field

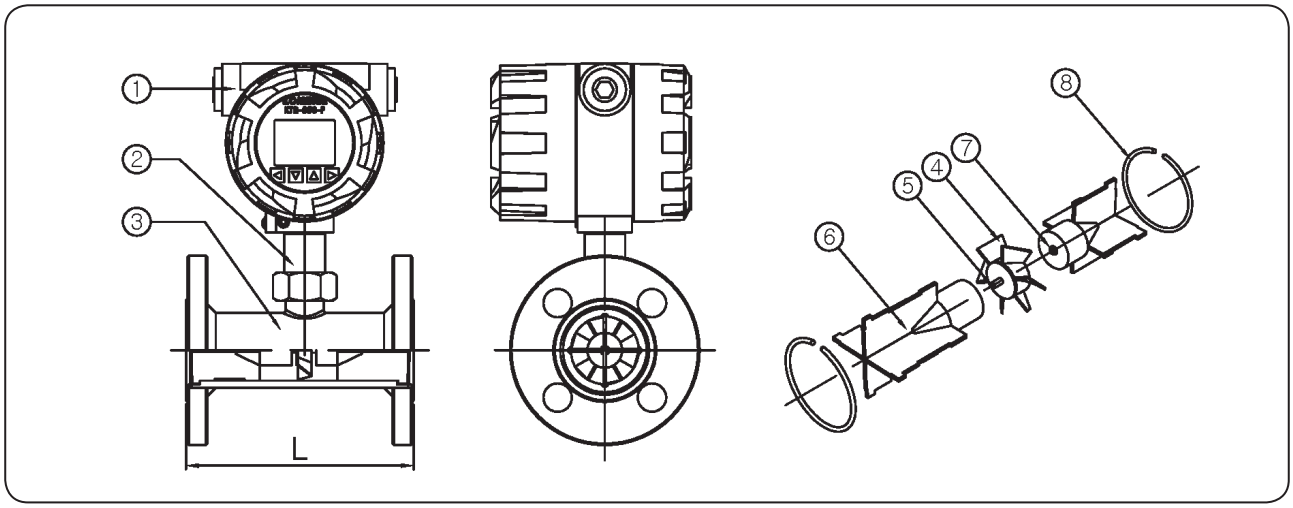
KTR-550-MF Series General Specifications

Size	6A (1/4") - 250A (10")
Process Connection	Flange type - KS / JIS / ANSI / ASME / DIN Std. Taper Pipe Thread type (PT)
Measured Fluid	Gas and Liquid
Flow Ranges	Water - 0.04 ㎥/h ~ 1000 ㎥/h Air - 0.7 N㎥/h ~ 500 N㎥/h
Accuracy	±0.5 % F.S (Option ±0.2 % F.S)
Fluid Temperature	-20 ℃ ~ 120 ℃ (Option -200 ℃ ~ 450 ℃)
Ambient Temperature	-25 ℃ ~ 60 ℃
Max. Pressure	Under 1B - Max. 350 kgf/㎠.G More than 1-1/2B - Max. 60 kgf/㎠.G
Power Supply	AC 220 V / DC 24 V / 3.6 V battery
Display	3-1/2 LCD (Flow rate), 7 Digit LCD (Integration)
Output	DC 4-20 mA, Pulse RS-485, Contact 2P High, Low
Explosion Proof Class	Ex d IIC T5
Ingress Protection Grade	IP67

MODEL CODE

KTR-550	-	□	-	□	Specification
		S			Output DC 4-20 mA without Indicator
		F			AD 110/220V or DC 24V (4-Wire) type with Indicator
		MF			3.6 V battery type with Indicator
				F	Connection - Flange Type
				T	Connection - Screw Type (Male, Female)

STRUCTURAL DRAWING



FLOW RANGE & DIMENSIONS

Size		L (mm)	Flow ranges	
			Water(m^3/h)	Air(Nm^3/h)
6A	1/8B	150	0.04 – 0.4	–
8A	1/4B	150	0.06 – 0.6	–
10A	3/8B	150	0.12 – 1.2	–
15A	1/2B	150	0.3 – 4	0.7 – 7
20A	3/4B	150	0.6 – 6	–
25A	1B	150	0.6 – 10	4 – 40
32A	1-1/4B	150	1.5 – 15	–
40A	1-1/2B	150	1.5 – 20	8 – 80
50A	2B	150	2 – 40	16 – 160
65A	2-1/2B	200	5 – 60	–
80A	3B	200	5 – 100	34 – 340
100A	4B	220	15 – 200	50 – 500
125A	5B	250	25 - 250	–
150A	6B	300	30 – 300	–
200A	8B	360	50 – 500	–

STANDARD MATERIAL

No.	Description	Material	
		Normal	Option
1	Indicator	ADC12	
2	Pickup case	ADC12	
3	Body	304SS	316SS
4	Rotor	CD4MCH	
5	Rotor shaft	TUNGSTEN CARBIDE	316LSS
6	Support	304SS	316SS
7	Bushing	TUNGSTEN CARBIDE	HIGH DENSITY PLASTIC
8	Retaining ring	304SS	316SS

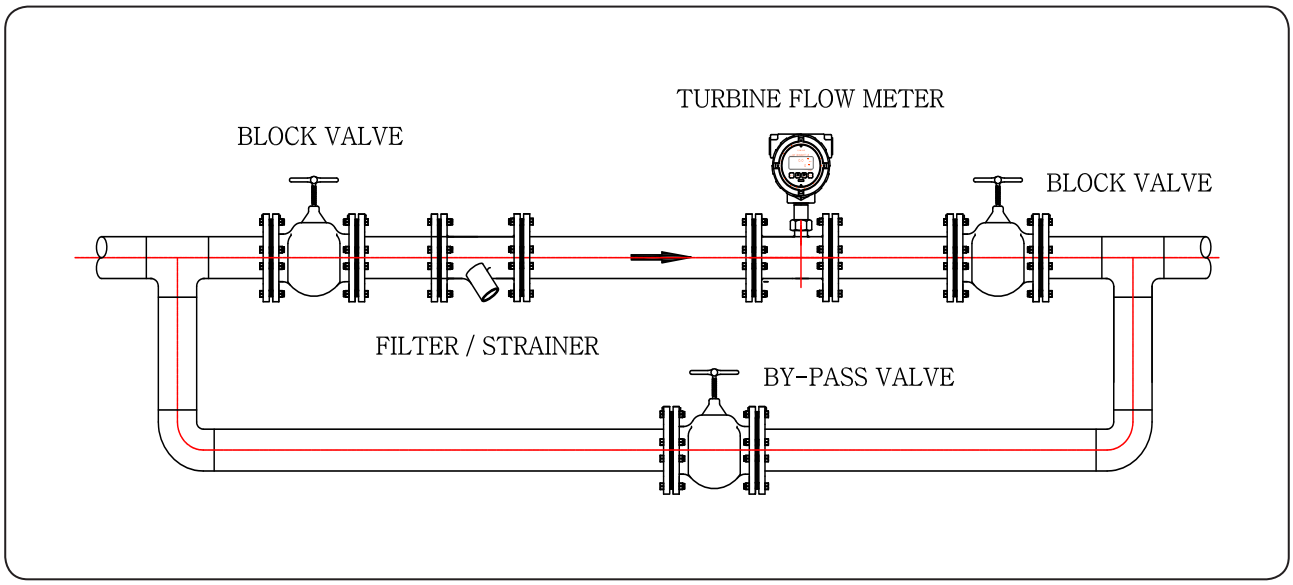
STRAINER

Turbine size	Strainer mesh	Clearance
3/8″	60	0.0092
1/2″	60	0.0092
1″	60	0.0092
1-1/2″	40	0.0340
2″	30	0.0650
2-1/2″	30	0.0650
3″	20	0.0900
4″	20	0.0900
6″	10	0.1875
8″	8	0.1875

CAUTION

This flowmeter should be checked for foreign objects before installation. If there is foreign material, you must install Strainer in order to rotate Turbine smoothly. The straight pipe sections maintain the front end 10D and the rear end 5D so that fluid can flow stably. Also, avoid excessive vibrations or shocks as this may deteriorate the life or performance of the instrument.

INSTALLATION PRECAUTIONS



KOMETER

KTR-550-F-T

Turbine Flow meter Reliable Measurement and Cost-effective

FEATURE

- CE - LVD(2014/35/EC), EMC(2014/30/EU), RoHS(2011/65/EU)
- Flange type or screw (male or female) type is selectively available.
- Relatively low cost
- DC / AC power type or battery type is selectively available
- Wide range of application to fluids at low temperature to high temperature
- Applicable to varied fluids such as liquids, gases, etc.
- Capable of providing outputs of varied signals outward
- Can be freely installed horizontally and vertically
- Can be manufactured from small to large diameter

APPLICATIONS

▶ General industry

- Utility Use : Auxiliary and supply lines used in energy distribution

▶ Chemical and Other Process industry

- Condensate and Coolant
- Batching and mixing in the reactor

▶ Machinery and Equipment (OEM industry)

- Coolant, Coolant, Lubricant, Air supply

▶ Paper and Pulp industries

▶ Iron and Metal Processing field

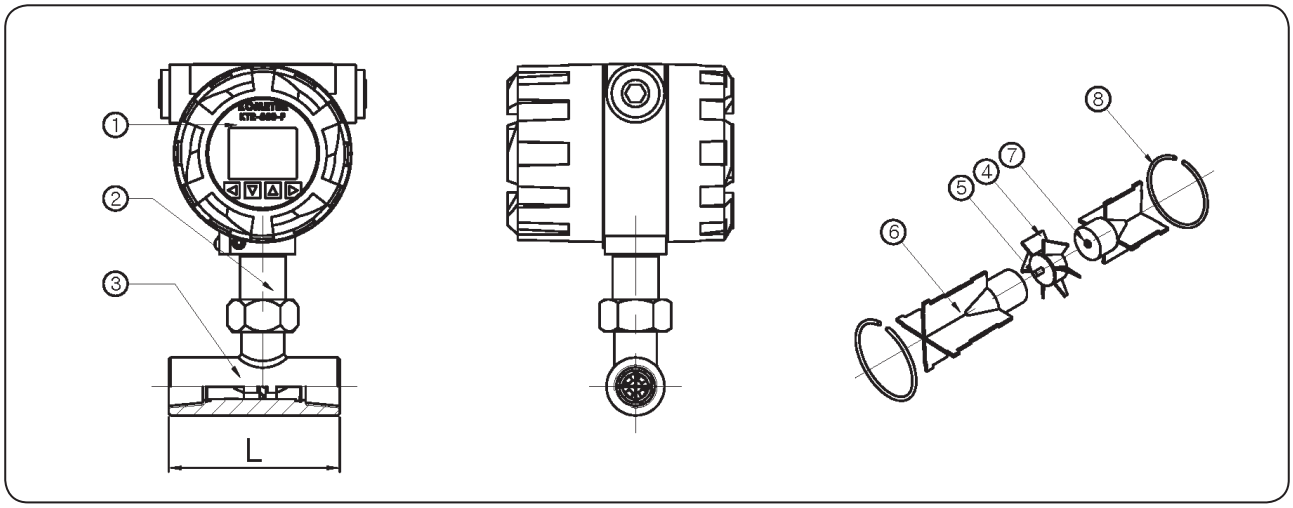
KTR-550-F-T General Specifications

Size	6A (1/4") - 25A (1")
Process Connection	Flange type - KS / JIS / ANSI / ASME / DIN Std. Taper Pipe Thread type (PT)
Measured Fluid	Liquid
Flow Ranges	Water - 0.06 ㎥/h ~ 10 ㎥/h
Accuracy	±0.5 % F.S (Option ±0.2 % F.S)
Fluid Temperature	-20 ℃ ~ 120 ℃ (Option -200 ℃ ~ 450 ℃)
Ambient Temperature	-25 ℃ ~ 60 ℃
Max. Pressure	Under 1B - Max. 350 kgf/㎠.G More than 1-1/2B - Max. 60 kgf/㎠.G
Power Supply	AC 220 V / DC 24 V / 3.6 V battery
Display	3-1/2 LCD (Flow rate), 7 Digit LCD (Integration)
Output	DC 4-20 mA, Pulse RS-485, Contact 2P High, Low
Explosion Proof Class	Ex d IIC T5
Ingress Protection Grade	IP67

MODEL CODE

KTR-550	-	□	-	□	Specification
		S			Output DC 4-20 mA without Indicator
		F			AD 110/220V or DC 24V (4-Wire) type with Indicator
		MF			3.6 V battery type with Indicator
				F	Connection - Flange Type
				T	Connection - Screw Type (Male, Female)

STRUCTURAL DRAWING



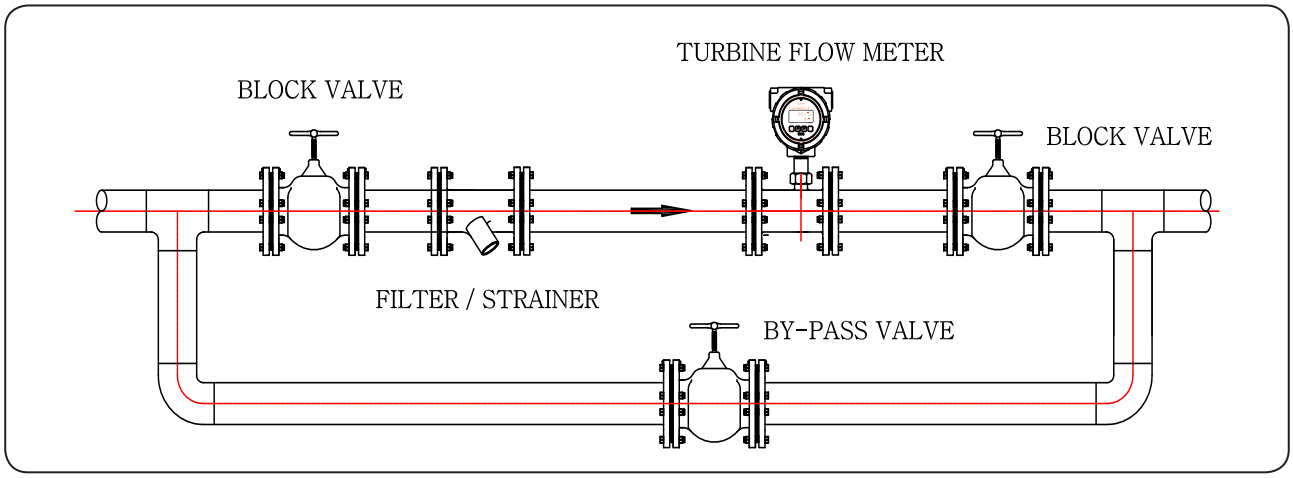
FLOW RANGE & DIMENSIONS

Size		L (mm)	Flow ranges (㎥/h)
Sensor	Connection		
6A	3/8B ~ 1/2B	80	0.06 ~ 0.6
10A			0.12 - 1.2
15A	1/2 B	130	0.4 - 4
	3/4 B	100	
20A	3/4 B	130	0.6 - 6
25A	1 B	140	1 - 10

STANDARD MATERIAL

No.	Description	Material	
		Normal	Option
1	Indicator	ADC12	
2	Pickup case	ADC12	
3	Body	304SS	316SS
4	Rotor	CD4MCH	
5	Support	304SS	316SS
6	Rotor Shaft	TUNGSTEN CARBIDE	316LSS

INSTALLATION PRECAUTIONS



KOMETER

KTR-550-S Series

Turbine Flow meter Reliable Measurement and Cost-effective

FEATURE

- Flange type or screw (male or female) type is selectively available.
- Can be used with driving part and indicating part separated
- Relatively low cost
- DC / AC power type or battery type is selectively available
- Wide range of application to fluids at low temperature to high temperature
- Applicable to varied fluids such as liquids, gases, etc.
- Capable of providing outputs of varied signals outward
- Can be freely installed horizontally and vertically
- Can be manufactured from small to large diameter

APPLICATIONS

▶ General industry

- Utility Use : Auxiliary and supply lines used in energy distribution

▶ Chemical and Other Process industry

- Condensate and Coolant
- Batching and mixing in the reactor

▶ Machinery and Equipment (OEM industry)

- Coolant, Coolant, Lubricant, Air supply

▶ Paper and Pulp industries

▶ Iron and Metal Processing field

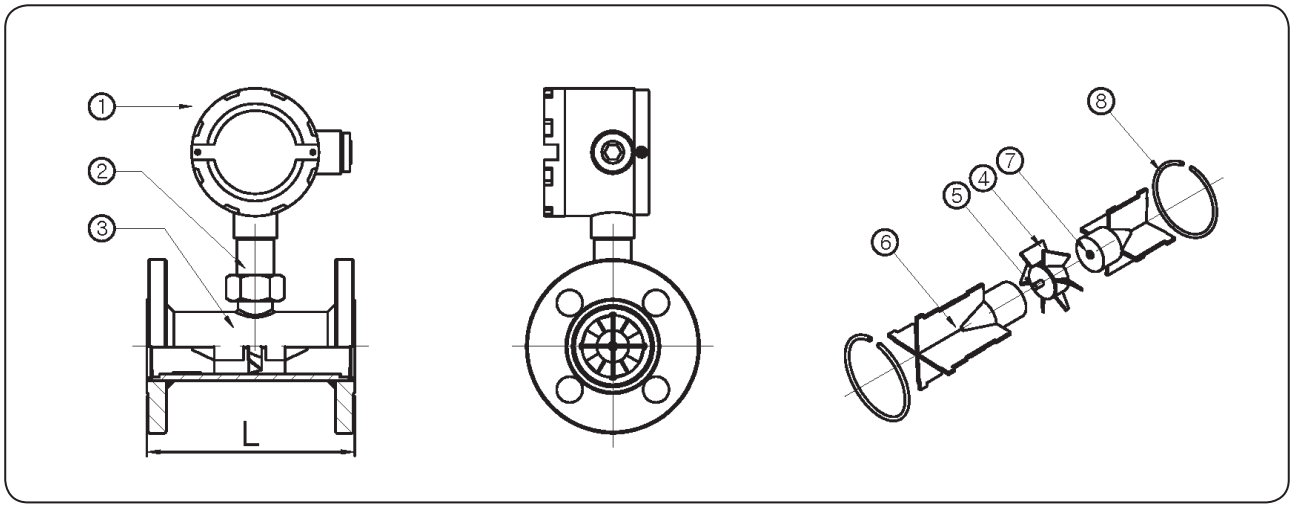
KTR-550-S Series General Specifications

Size	6A (1/4") - 250A (10")
Process Connection	Flange type - KS / JIS / ANSI / ASME / DIN Std. Taper Pipe Thread type (PT)
Measured Fluid	Gas and Liquid
Flow Ranges	Water - 0.04 ㎥/h ~ 1000 ㎥/h Air - 0.7 N㎥/h ~ 500 N㎥/h
Accuracy	±0.5 % F.S (Option ±0.2 % F.S)
Fluid Temperature	-20 ℃ ~ 120 ℃ (Option -200 ℃ ~ 450 ℃)
Ambient Temperature	-25 ℃ ~ 60 ℃
Max. Pressure	Under 1B - Max. 350 kgf/㎠.G More than 1-1/2B - Max. 60 kgf/㎠.G
Power Supply	AC 220 V / DC 24 V / 3.6 V battery
Display	With KTR-550B / KTR-550F
Output	DC 4-20 mA, Pulse RS-485, Contact 2P High, Low
Explosion Proof Class	Ex d IIC T5
Ingress Protection Grade	IP67

MODEL CODE

KTR-550	-	□	-	□	Specification
		S			Output DC 4-20 mA without Indicator
		F			AD 110/220V or DC 24V (4-Wire) type with Indicator
		MF			3.6 V battery type with Indicator
				F	Connection - Flange Type
				T	Connection - Screw Type (Male, Female)

STRUCTURAL DRAWING



FLOW RANGE & DIMENSIONS

Size		L (mm)	Flow ranges	
			Water(m^3/h)	Air(Nm^3/h)
6A	1/8B	150	0.04 – 0.4	–
8A	1/4B	150	0.06 – 0.6	–
10A	3/8B	150	0.12 – 1.2	–
15A	1/2B	150	0.3 – 4	0.7 – 7
20A	3/4B	150	0.6 – 6	–
25A	1B	150	0.6 – 10	4 – 40
32A	1-1/4B	150	1.5 – 15	–
40A	1-1/2B	150	1.5 – 20	8 – 80
50A	2B	150	2 – 40	16 – 160
65A	2-1/2B	200	5 – 60	–
80A	3B	200	5 – 100	34 – 340
100A	4B	220	15 – 200	50 – 500
125A	5B	250	25 - 250	–
150A	6B	300	30 – 300	–
200A	8B	360	50 – 500	–

STANDARD MATERIAL

No.	Description	Material	
		Normal	Option
1	Indicator	ADC12	
2	Pickup case	ADC12	
3	Body	304SS	316SS
4	Rotor	CD4MCH	
5	Rotor shaft	TUNGSTEN CARBIDE	316LSS
6	Support	304SS	316SS
7	Bushing	TUNGSTEN CARBIDE	HIGH DENSITY PLASTIC
8	Retaining ring	304SS	316SS

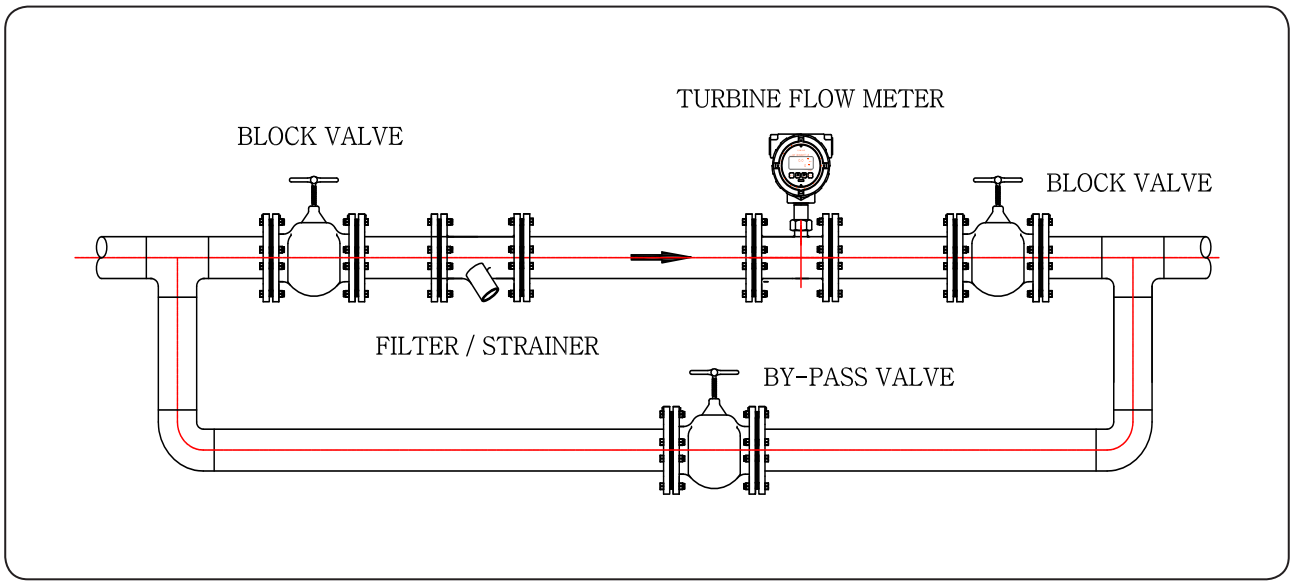
STRAINER

Turbine size	Strainer mesh	Clearance
3/8″	60	0.0092
1/2″	60	0.0092
1″	60	0.0092
1-1/2″	40	0.0340
2″	30	0.0650
2-1/2″	30	0.0650
3″	20	0.0900
4″	20	0.0900
6″	10	0.1875
8″	8	0.1875

CAUTION

This flowmeter should be checked for foreign objects before installation. If there is foreign material, you must install Strainer in order to rotate Turbine smoothly. The straight pipe sections maintain the front end 10D and the rear end 5D so that fluid can flow stably. Also, avoid excessive vibrations or shocks as this may deteriorate the life or performance of the instrument.

INSTALLATION PRECAUTIONS



KOMETER

KTR-550-S-T

Turbine Flow meter Reliable Measurement and Cost-effective

FEATURE

- Flange type or screw (male or female) type is selectively available.
- Can be used with driving part and indicating part separated
- Relatively low cost
- DC / AC power type or battery type is selectively available
- Wide range of application to fluids at low temperature to high temperature
- Applicable to varied fluids such as liquids, gases, etc.
- Capable of providing outputs of varied signals outward
- Can be freely installed horizontally and vertically
- Can be manufactured from small to large diameter

APPLICATIONS

▶ General industry

- Utility Use : Auxiliary and supply lines used in energy distribution

▶ Chemical and Other Process industry

- Condensate and Coolant
- Batching and mixing in the reactor

▶ Machinery and Equipment (OEM industry)

- Coolant, Coolant, Lubricant, Air supply

▶ Paper and Pulp industries

▶ Iron and Metal Processing field

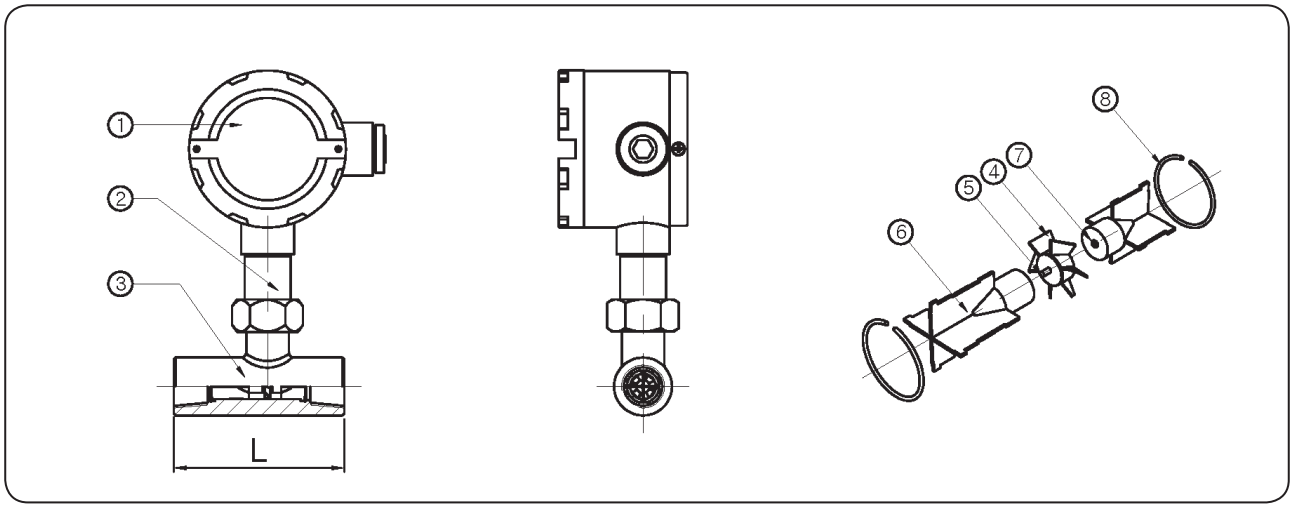
KTR-550-S-T General Specifications

Size	6A (1/4") - 25A (1")
Process Connection	Flange type - KS / JIS / ANSI / ASME / DIN Std. Taper Pipe Thread type (PT)
Measured Fluid	Liquid
Flow Ranges	Water - 0.06 ㎥/h ~ 10 ㎥/h
Accuracy	±0.5 % F.S (Option ±0.2 % F.S)
Fluid Temperature	-20 ℃ ~ 120 ℃ (Option -200 ℃ ~ 450 ℃)
Ambient Temperature	-25 ℃ ~ 60 ℃
Max. Pressure	Under 1B - Max. 350 kgf/㎠.G More than 1-1/2B - Max. 60 kgf/㎠.G
Power Supply	AC 220 V / DC 24 V / 3.6 V battery
Display	With KTR-550B / KTR-550F
Output	DC 4-20 mA, Pulse RS-485, Contact 2P High, Low
Explosion Proof Class	Ex d IIC T5
Ingress Protection Grade	IP67

MODEL CODE

KTR-550	-	□	-	□	Specification
		S			Output DC 4-20 mA without Indicator
		F			AD 110/220V or DC 24V (4-Wire) type with Indicator
		MF			3.6 V battery type with Indicator
				F	Connection - Flange Type
				T	Connection - Screw Type (Male, Female)

STRUCTURAL DRAWING



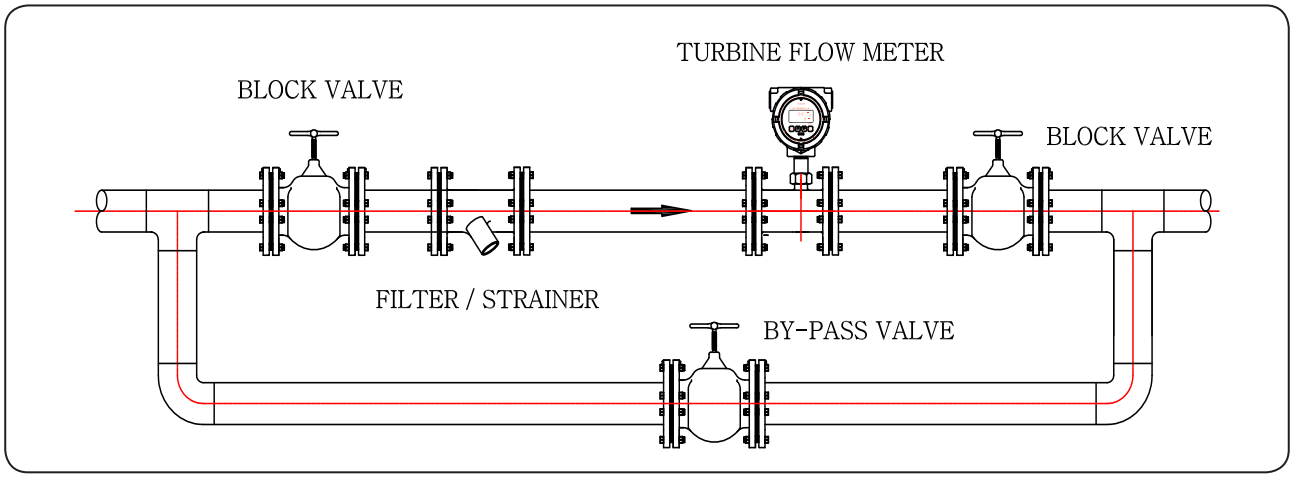
FLOW RANGE & DIMENSIONS

Size		L (mm)	Flow ranges (㎥/h)
Sensor	Connection		
6A	3/8B ~ 1/2B	80	0.06 ~ 0.6
10A			0.12 - 1.2
15A	1/2 B	130	0.4 - 4
	3/4 B	100	
20A	3/4 B	130	0.6 - 6
25A	1 B	140	1 - 10

STANDARD MATERIAL

No.	Description	Material	
		Normal	Option
1	Indicator	ADC12	
2	Pickup case	ADC12	
3	Body	304SS	316SS
4	Rotor	CD4MCH	
5	Support	304SS	316SS
6	Rotor Shaft	TUNGSTEN CARBIDE	316LSS

INSTALLATION PRECAUTIONS



KOMETER

KTR-550-F-SA

Turbine Flow meter Reliable Measurement and Cost-effective

FEATURE

- CE - LVD(2014/35/EC), EMC(2014/30/EU), RoHS(2011/65/EU)
- Specific installation length and various sanitary connection options available
- Selectable Sanitary Clamp or Sanitary Male type
- Relatively low cost
- DC / AC power type or battery type is selectively available
- Wide range of application to fluids at low temperature to high temperature
- Capable of providing outputs of varied signals outward
- Can be freely installed horizontally and vertically
- Can be manufactured from small to large diameter

APPLICATIONS

▶ General industry

- Utility Use : Auxiliary and supply lines used in energy distribution

▶ Food and Beverage

- Precise mixing, dosing and dispensing (Batching)
- Beverages (soft drinks, beer, wine, fruit juice, etc.)
- Milk and other dairy products
- Demi Water

▶ Machinery and Equipment (OEM industry)

- Coolant, Coolant, Lubricant, Air supply

▶ Paper and Pulp industries

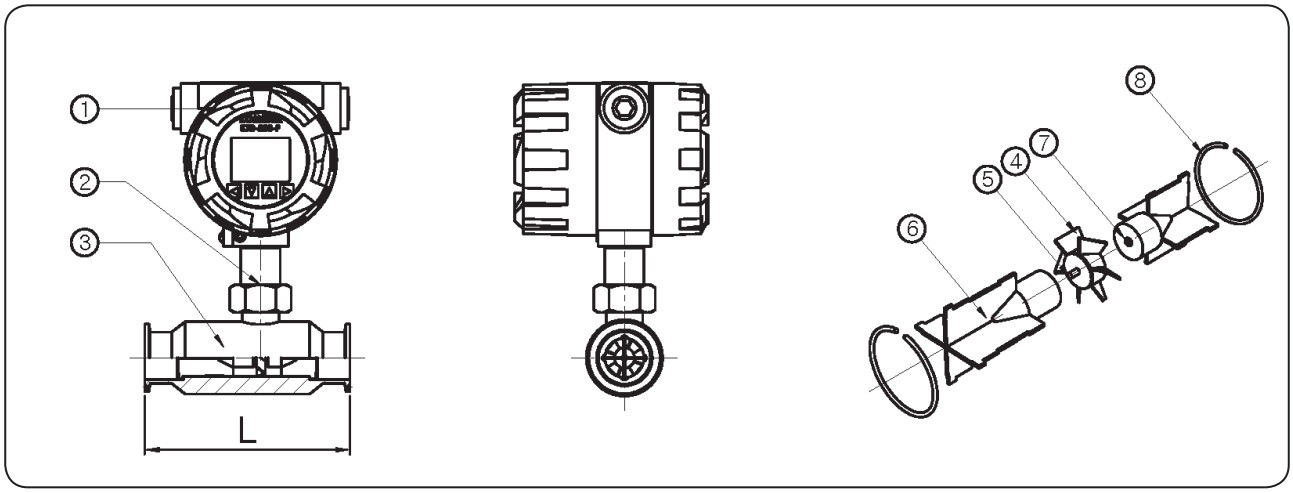
KTR-550-F-SA General Specifications

Size	10A (0.5S) - 80A (3S)
Process Connection	Tri-Clamp Ferrule
Flow Ranges	Water - 0.04 ㎥/h ~ 100 ㎥/h
Accuracy	±0.5 % F.S (Option ±0.2 % F.S)
Fluid Temperature	-20 ℃ ~ 120 ℃ (Option -200 ℃ ~ 450 ℃)
Ambient Temperature	-25 ℃ ~ 60 ℃
Max. Pressure	Under 1S - Max. 350 kgf/㎠.G More than 1-1/2S - Max. 60 kgf/㎠.G
Power Supply	AC 220 V / DC 24 V / 3.6 V battery
Display	3-1/2 LCD (Flow rate), 7 Digit LCD (Integration)
Output	DC 4-20 mA, Pulse RS-485, Contact 2P High, Low
Protection Class	Ex d IIC T5 / IP67

MODEL CODE

KTR-550	-	□	-	□	Specification
		S			Output DC 4-20 mA without Indicator
		F			AD 110/220V or DC 24V (4-Wire) type with Indicator
		MF			3.6 V battery type with Indicator
				SA	Connection - Sanitary Clamp
				ST	Connection - Sanitary Male

STRUCTURAL DRAWING



FLOW RANGE & DIMENSIONS

Size		L (mm)	Flow ranges (m^3/h)
10A	0.5S ~ 1S	100	0.12 – 1.2
15A	1S ~ 1-1/2S	80	0.3 – 4
20A		90	0.6 – 6
25A		110	0.6 – 10
32A	1-1/2S	140	1.5 – 15
40A	2S	140	1.5 – 20
50A	2S-1/2S	150	2 – 40
65A	3S	200	5 – 60
80A			5 – 100

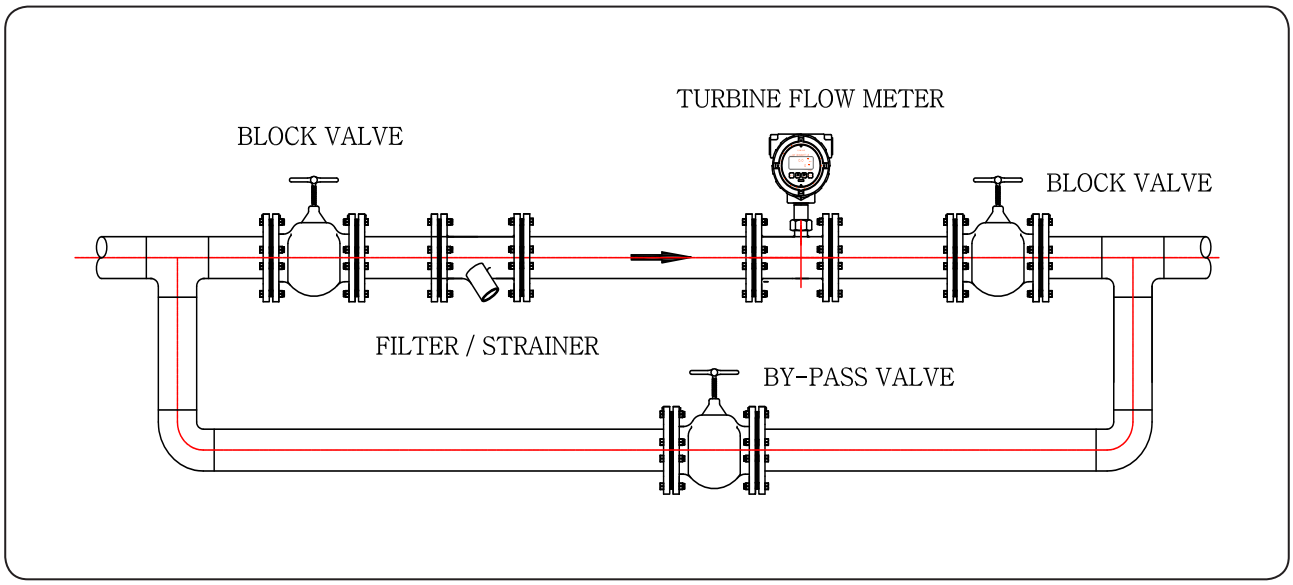
STANDARD MATERIAL

No.	Description	Material	
		Normal	Option
1	Indicator	ADC12	
2	Pickup case	ADC12	
3	Body	304SS	316SS
4	Rotor	CD4MCH	
5	Rotor shaft	TUNGSTEN CARBIDE	316LSS
6	Support	304SS	316SS
7	Bushing	TUNGSTEN CARBIDE	HIGH DENSITY PLASTIC
8	Retaining ring	304SS	316SS

CAUTION

This flowmeter should be checked for foreign objects before installation. If there is foreign material, you must install Strainer in order to rotate Turbine smoothly. The straight pipe sections maintain the front end 10D and the rear end 5D so that fluid can flow stably. Also, avoid excessive vibrations or shocks as this may deteriorate the life or performance of the instrument.

INSTALLATION PRECAUTIONS



KOMETER

KTR-550-S-SA

Turbine Flow meter Reliable Measurement and Cost-effective

FEATURE

- Specific installation length and various sanitary connection options available
- Selectable Sanitary Clamp or Sanitary Male type
- Can be used with driving part and indicating part separated
- Relatively low cost
- DC / AC power type or battery type is selectively available
- Wide range of application to fluids at low temperature to high temperature
- Capable of providing outputs of varied signals outward
- Can be freely installed horizontally and vertically
- Can be manufactured from small to large diameter

APPLICATIONS

▶ General industry

- Utility Use : Auxiliary and supply lines used in energy distribution

▶ Food and Beverage

- Precise mixing, dosing and dispensing (Batching)
- Beverages (soft drinks, beer, wine, fruit juice, etc.)
- Milk and other dairy products
- Demi Water

▶ Machinery and Equipment (OEM industry)

- Coolant, Coolant, Lubricant, Air supply

▶ Paper and Pulp industries

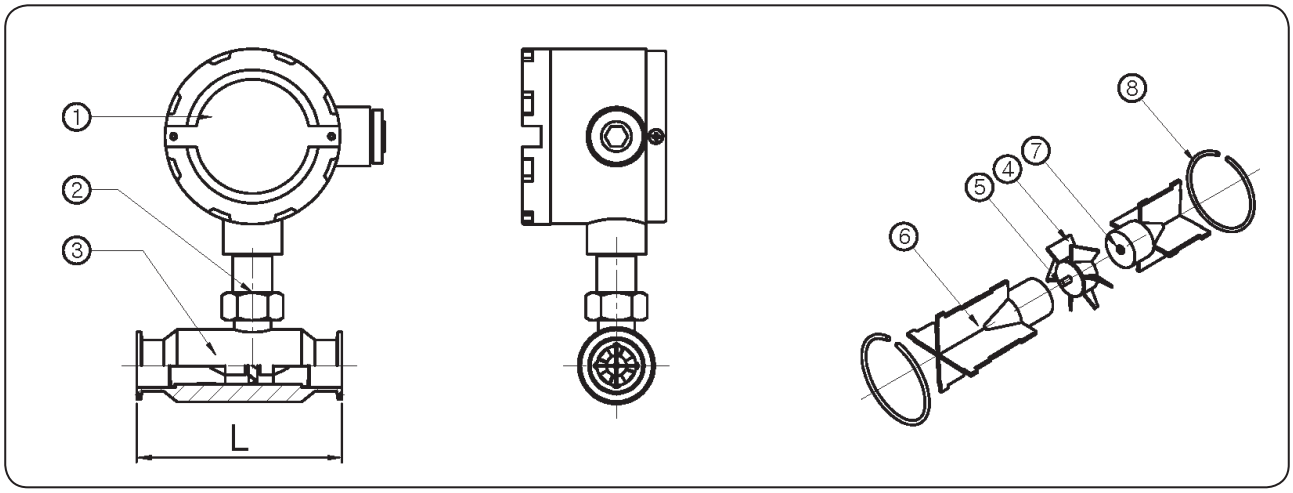
KTR-550-S-SA General Specifications

Size	10A (0.5S) - 80A (3S)
Process Connection	Tri-Clamp Ferrule
Flow Ranges	Water - 0.04 ㎥/h ~ 100 ㎥/h
Accuracy	±0.5 % F.S (Option ±0.2 % F.S)
Fluid Temperature	-20 ℃ ~ 120 ℃ (Option -200 ℃ ~ 450 ℃)
Ambient Temperature	-25 ℃ ~ 60 ℃
Max. Pressure	Under 1S - Max. 350 kgf/㎠.G More than 1-1/2S - Max. 60 kgf/㎠.G
Power Supply	AC 220 V / DC 24 V / 3.6 V battery
Display	With KTR-550B / KTR-550F
Output	DC 4-20 mA, Pulse RS-485, Contact 2P High, Low
Protection Class	Ex d IIC T5 / IP67

MODEL CODE

KTR-550	-	□	-	□	Specification
		S			Output DC 4-20 mA without Indicator
		F			AD 110/220V or DC 24V (4-Wire) type with Indicator
		MF			3.6 V battery type with Indicator
				SA	Connection - Sanitary Clamp
				ST	Connection - Sanitary Male

STRUCTURAL DRAWING



FLOW RANGE & DIMENSIONS

Size		L (mm)	Flow ranges (m^3/h)
10A	0.5S ~ 1S	100	0.12 – 1.2
15A	1S ~ 1-1/2S	80	0.3 – 4
20A		90	0.6 – 6
25A		110	0.6 – 10
32A	1-1/2S	140	1.5 – 15
40A	2S	140	1.5 – 20
50A	2S-1/2S	150	2 – 40
65A	3S	200	5 – 60
80A			5 – 100

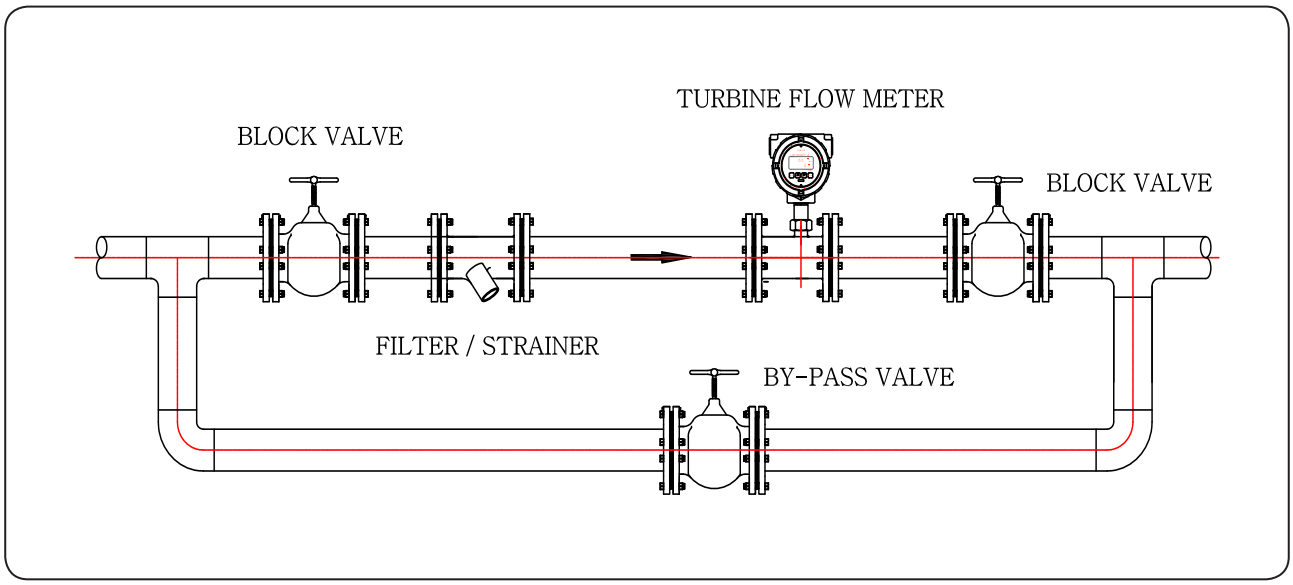
STANDARD MATERIAL

No.	Description	Material	
		Normal	Option
1	Indicator	ADC12	
2	Pickup case	ADC12	
3	Body	304SS	316SS
4	Rotor	CD4MCH	
5	Rotor shaft	TUNGSTEN CARBIDE	316LSS
6	Support	304SS	316SS
7	Bushing	TUNGSTEN CARBIDE	HIGH DENSITY PLASTIC
8	Retaining ring	304SS	316SS

CAUTION

This flowmeter should be checked for foreign objects before installation. If there is foreign material, you must install Strainer in order to rotate Turbine smoothly. The straight pipe sections maintain the front end 10D and the rear end 5D so that fluid can flow stably. Also, avoid excessive vibrations or shocks as this may deteriorate the life or performance of the instrument.

INSTALLATION PRECAUTIONS



KOMETER

NK-250 Series

Turbine Flow meter Reliable Measurement and Cost-effective

FEATURE

- Flange type or screw (male or female) type is selectively available.
- Relatively low cost
- DC / AC power type or battery type is selectively available
- Wide range of application to fluids at low temperature to high temperature
- Can be used with driving part and indicating part separated
- Capable of providing outputs of varied signals outward
- Can be freely installed horizontally and vertically
- Capable of measuring fluids with low flow rate and low flow speed
- Has high accuracy and excellent reproducibility.

APPLICATIONS

▶ General industry

- Utility Use : Auxiliary and supply lines used in energy distribution

▶ Chemical and Other Process industry

- Condensate and Coolant
- Batching and mixing in the reactor

▶ Machinery and Equipment (OEM industry)

- Coolant, Coolant, Lubricant, Air supply

▶ Food and Beverage

- Precise mixing, dosing and dispensing (Batching)
- Beverages (soft drinks, beer, wine, fruit juice, etc.)

▶ Paper and Pulp industries

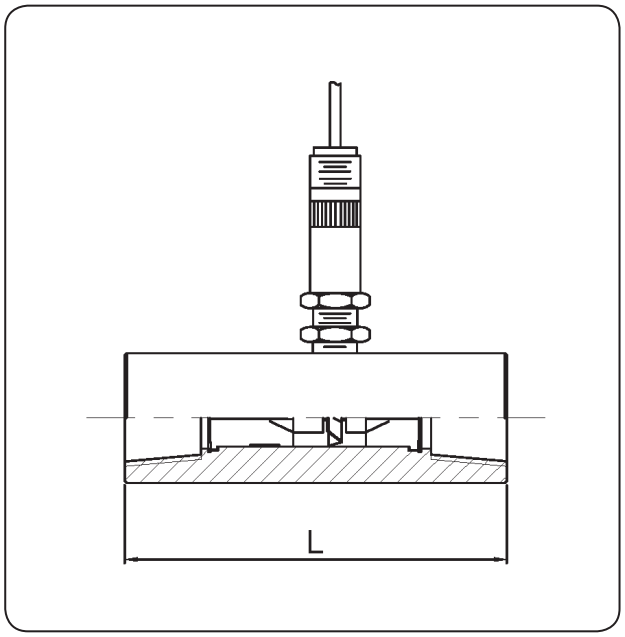
NK-250 General Specifications

Size	10A (3/8") - 25A (1")
Process Connection	PT (M or F)
Flow Ranges	Water - 1 L/min ~ 150 L/min
Accuracy	±0.5 % F.S
Fluid Temperature	-20 ℃ ~ 120 ℃ (Option -120 ℃ ~ 250 ℃)
Ambient Temperature	-25 ℃ ~ 60 ℃
Max. Pressure	Max. 50 kgf/㎠.G (Option Max. 350 kgf/㎠.G)
Viscosity	Under 30 cSt
Power Supply	AC 220 V / DC 24 V
Output	DC 4-20 mA, DC 0-5 V

MODEL CODE

N K - 2 5 0	-	□	Specification
		2	Output DC 0-5 V (With Signal Converter)
		4	Output DC 4-20 mA (With Signal Converter)

STRUCTURAL DRAWING



STANDARD MATERIAL

No.	Description	Material	
		Nomal	Option
1	Body	304SS	316SS
2	Rotor	CD4MCH	
3	Rotor shaft	Tungsten carbide	316LSS
4	Rotor supports	304SS	316SS
5	Bushing	Tungsten carbide	HIgh density plastic
6	Thrust ball	Tungsten carbide	316SS
7	Retaining ring	304SS	316SS

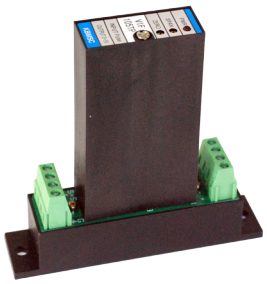
FLOW RANGE & DIMENSIONS

Size		L (mm)	Flow ranges (㎥/h)	Flow ranges (L/min)
Sensor	Connection			
6A	3/8B ~ 1/2B	80	0.06 ~ 0.6	1 ~ 10
10A			0.12 - 1.2	2 ~ 20
15A	1/2 B	130	0.4 - 4	6 ~ 60
	3/4 B	100		
20A	3/4 B	130	0.6 - 6	10 ~100
25A	1 B	140	1 - 10	15 ~ 150

FREQUENCY TO DC SIGNAL CONVERTER

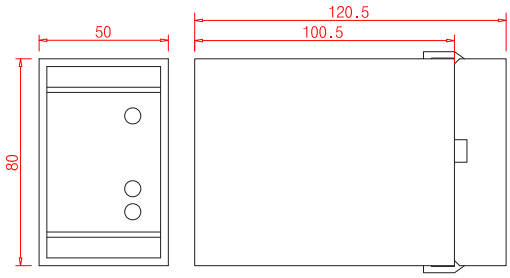
①

②

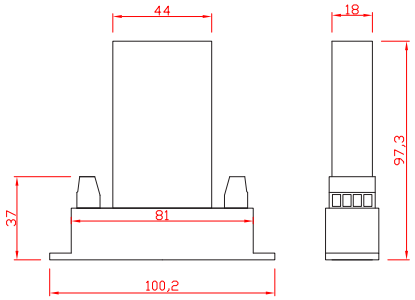


CONVERTER DRAWING

①



②



KOMETER

KPP-1000 Series

Turbine Flow meter Reliable Measurement and Cost-effective

FEATURE

- Simple in structure with no pressure loss.
- Relatively low cost
- DC / AC power type or battery type is selectively available
- Wide range of application to fluids at low temperature to high temperature
- Made of synthetic resin material excellent in chemical resistance, weatherproof
- Can be freely installed horizontally and vertically
- Capable of measuring fluids with low flow rate and low flow speed
- Easy in installation, removal, and maintenance
- Has high accuracy and excellent reproducibility.

APPLICATIONS

▶ General industry

- Utility Use : Auxiliary and supply lines used in energy distribution

▶ Chemical and Other Process industry

- Condensate and Coolant
- Batching and mixing in the reactor

▶ Machinery and Equipment (OEM industry)

- Coolant, Coolant, Lubricant, Air supply

▶ Food and Beverage

- Precise mixing, dosing and dispensing (Batching)
- Beverages (soft drinks, beer, wine, fruit juice, etc.)

▶ Paper and Pulp industries

KPP-1000 General Specifications

Size	10A (3/8") - 50A (2")
Process Connection	Flange type - KS / JIS / ANSI / ASME / DIN Std. Taper Pipe Thread type (PF)
Measured Fluid	Liquid
Flow Ranges	Water - 0.1 ㎥/h ~ 40 ㎥/h
Accuracy	±1.5 % F.S
Fluid Temperature	-10 ℃ ~ 85 ℃
Ambient Temperature	0 ℃ ~ 40 ℃
Max. Pressure	Max. 10 kgf/㎠.G
Viscosity	Under 30 cSt
Power Supply	AC 220 V / DC 24 V / 3.6 V battery
Display (Option)	3-1/2 LCD (Flow rate), 7 Digit LCD (Integration)
Output	DC 4-20 mA, Pulse

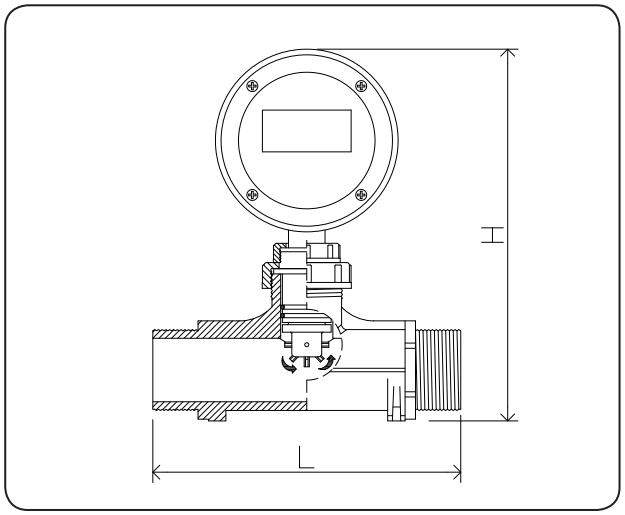
MODEL CODE

KPP-1000	-	□	-	□	Specification
		S			Open Collector Pulse without Indicator
		F			AD 110/220V or DC 24V (4-Wire) type with Indicator
		MF			3.6 V battery type with Indicator
				F	Connection - Flange Type
				T	Connection - Screw Type (Male, Female)

CAUTION

This flowmeter should be checked for foreign objects before installation. If there is foreign material, you must install Strainer in order to rotate Turbine smoothly. The straight pipe sections maintain the front end 10D and the rear end 5D so that fluid can flow stably. Also, avoid excessive vibrations or shocks as this may deteriorate the life or performance of the instrument.

STRUCTURAL DRAWING



STANDARD MATERIAL

No.	Description	Material
1	Meter body	POLYPROPYLENE, PVDF
2	Indicator	ABS
3	Sensor body	PVDF
4	Paddle assembly	PVDF
5	Axle	CERAMICS
6	Union nut	PVC
7	O-rings	FPM, EPDM

FLOW RANGE & DIMENSIONS

Size		L (mm)	H (mm)	Flow ranges	
				Water(m^3/h) ≤80 ℃	압력 (kgf/cm^2.G)
10A	3/8B	121	215	0.1 - 1.8	10
15A	1/2B	130	215	0.2 - 4	
20A	3/4B	142	220	0.3 - 6	
25A	1B	141	220	0.5 - 12	8
40A	1-1/2B	175	230	1.5 - 24	
50A	2B	175	245	2 - 40	

INSTALLATION PRECAUTIONS