



Flow sensor

WFK5000 Series

(Standard type)

Flow rate range: 1.0 to 8.0, 3.0 to 27.0L/min.



Refer to Intro 32 for details.



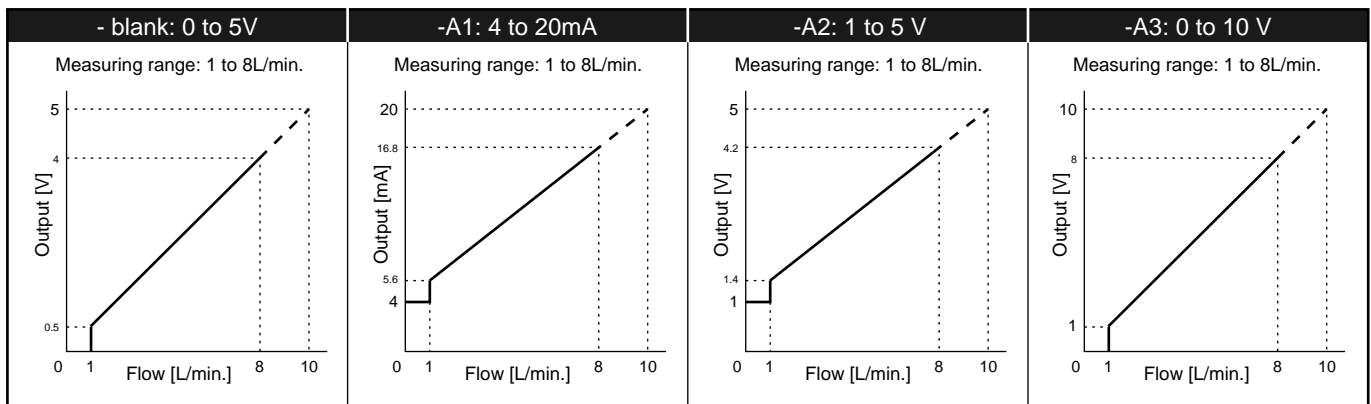
Specifications

Descriptions	WFK5008-10	WFK5008-15	WFK5008-20	WFK5027-10	WFK5027-15	WFK5027-20		
Specifications	Flow measuring range L/min	1.0 to 8.0			3.0 to 27.0			
	Port size Rc	3/8	1/2	3/4	3/8	1/2		
	Connection section material	Stainless steel: SCS13						
Working conditions	Pressure loss MPa	0.045 (8.0L/min)			0.04 (27.0L/min)			
	Working fluid	Clean water, industrial water						
	Max. working pressure MPa	1.0						
	Withstanding pressure MPa	1.5						
	Fluid temperature °C	1 to 70						
Indicator	Ambient temperature °C	0 to 50 (85%RH or less)						
	Indicator	5 digit LED display						
Integrated flow		Max.9 digit						
		H and L separately displayed						
		When power supply turns off, counter is reset						
Output	Alarm output	Point	1 point (NPN/PNP transistor open collector)					
		Rated	MAX 50mA					
		Internal voltage drop	2.0V or less					
	Analog output	0 to 5 VDC (linear output) standard						
Precision	± 2.5%F.S. ± 1 digit							
Alarm output response time sec	Approx. 1.0(Note)							
Power supply	12 to 24 VDC ±10% (Max. 100mA) 15 to 24 VDC for option A3							
Cable	Attachment (3m, 4 conductors, O.D. φ6, conductor 0.5mm ² , with connector)							
Installation attitude	Horizontal or vertical							
Protective structure	IP64 or equivalent							
Weight g	630	600	650	630	600	650		

Note: Time to reach 70% of the original output when flow rate is instantly set to zero from the normal (usage) flow rate.

Analog output

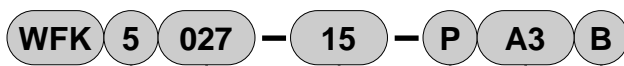
● WFK5008-**



Connecting load conditions

Descriptions	Blank [0 to 5]	-A1 [4 to 20 mA]	-A2 [1 to 5 V]	-A3 [0 to 10 V]
Allowable load	50k Ω and over	500k Ω or less	50k Ω and over	50k Ω and over

How to order



A Port shape, material

B Flow rate range

C Port size
Note 1

D Alarm output type

E Analog output

F Bracket
Note 5

⚠ Note on model no. selection

- Note 1: When using American taper pipe thread, add "N" to the port size.
- Note 2: If CKD monitor (WM10** [refer to page 1482]) is connected, select **E** analog output 0 to 5 VDC.
- Note 3: When selecting analog output A1: 4 to 20mA, alarm function can not be used.
- Note 4: When selecting analog output A5: 2 points alarm output, analog output can not be used.
- Note 5: For option B, a bracket and set screw are attached.
When ordering a bracket only, indicate part name: bracket assembly and model no. WF-FL-249969.

<Example of model number>

WFK5027-15-PA3B

Model: Flow rate sensor standard type

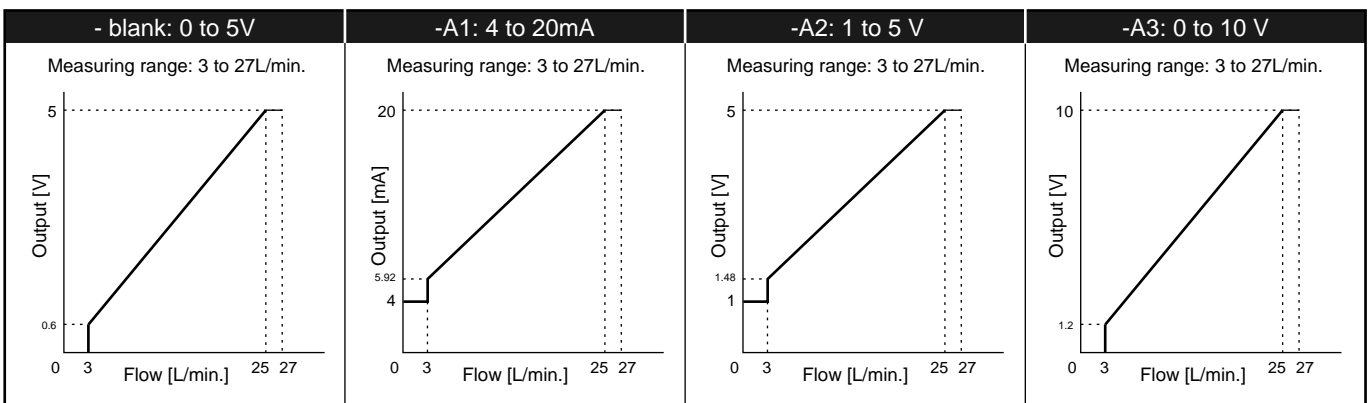
- A** Port shape, material: Shape: female thread, Material: stainless steel
- B** Flow rate range: 3 to 27L/min.
- C** Port size: Rc1/2
- D** Alarm output type: PNP transistor open collector
- E** Analog output: 0 to 10 VDC
- F** Bracket: With bracket

Symbol	Descriptions	
A Port shape, material		
5	Shape: female thread	Material: stainless steel (SCS13)
B Flow rate range		
008	1 to 8L/min.	
027	3 to 27L/min	
C Port size		
10	Rc3/8	
15	Rc1/2	
20	Rc3/4	
10N	3/8NPT	
15N	1/2NPT	
20N	3/4NPT	
D Alarm output type		
Blank	NPN transistor open collector	
P	PNP transistor open collector	
E Analog output		
Blank	0 to 5 VDC	Note 2
A1	4 to 20mA DC	Note 3
A2	1 to 5 VDC	
A3	0 to 10 VDC	
A4	Without analog output	
A5	2 points alarm output	Note 4
F Bracket		
Blank	None	
B	With bracket	

Refrigerating type dryer
Desiccant type dryer
High polymer membrane dryer
Air filter
Auto. drain / others
F.R.L. (Module unit)
F.R.L. (Separate)
Compact F.R.
Precise regulator
F.R.L. (Related products)
Clean F.R.
Electro pneumatic regulator
Air booster
Speed control valve
Silencer
Check valve / others
Joint / tube
Vacuum filter
Vacuum regulator
Suction plate
Magnetic spring buffer
Mechanical pressure SW
Electronic pressure SW
Contact / close contact cont. SW
Air sensor
Pressure SW for coolant
Small flow sensor
Small flow controller
Flow sensor for air
Flow sensor for water
Total air system
Total air system (Gamma)

Analog output

● WFK5027-**



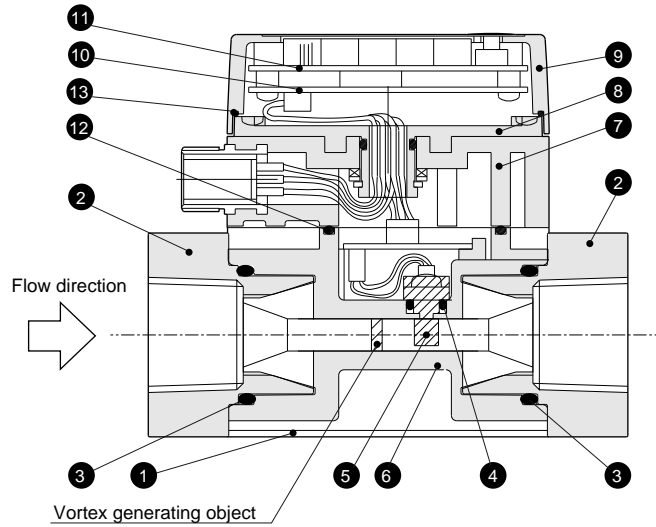
Connecting load conditions

Descriptions	Blank [0 to 5]	-A1 [4 to 20 mA]	-A2 [1 to 5 V]	-A3 [0 to 10 V]
Allowable load	50kΩ and over	500kΩ or less	50kΩ and over	50kΩ and over

Karman's vortex type for water Flow sensor

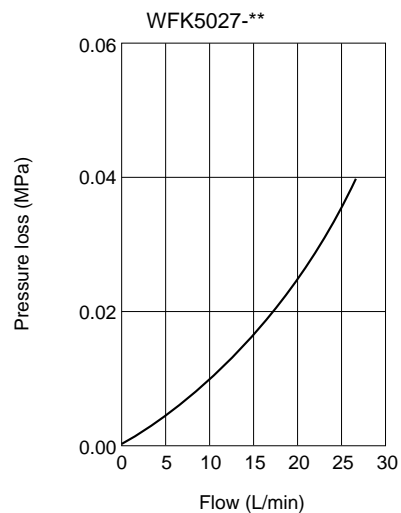
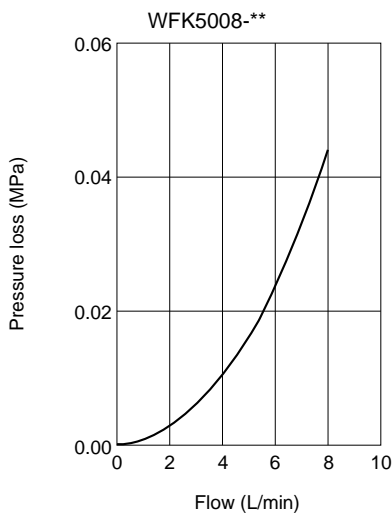
WFK5000 Series

Internal structure and parts list

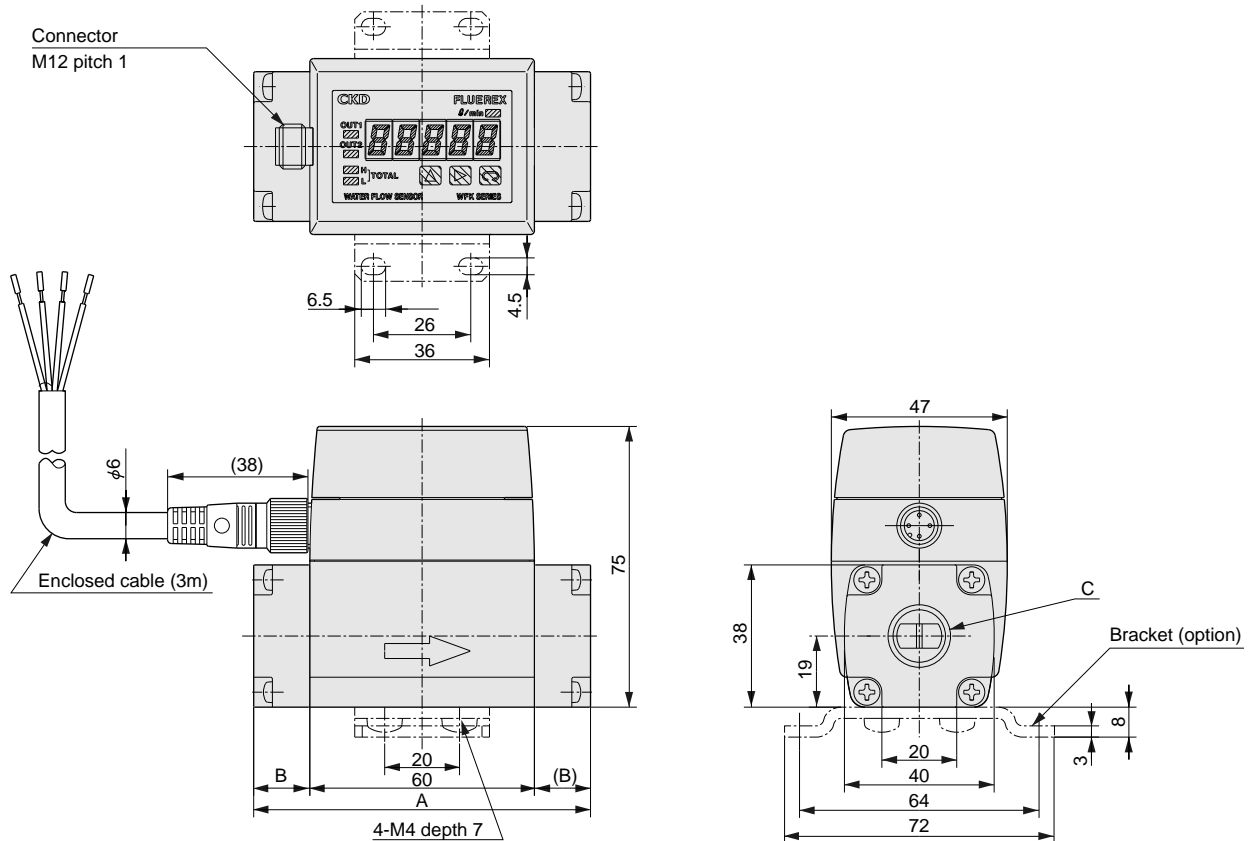


No.	Parts name	Material	Quantity
1	Body	SCS13 Stainless steel casting	1
2	Attachment	SCS13 Stainless steel casting	2
3	O ring	NBR Nitrile rubber	2
4	O ring	NBR Nitrile rubber	1
5	Vortex street detecting element	PPS Polyphenylene sulfide	1
6	Sleeve	PPS Polyphenylene sulfide	1
7	Connector case	ABS ABS resin	1
8	Case B	ABS + PC ABS + PC alloy	1
9	Case A	ABS ABS resin	1
10	CPU circuit board	-	1
11	Display circuit board	-	1
12	Sleeve packing seal	NBR Nitrile rubber	1
13	Case packing seal	NBR Nitrile rubber	1

Pressure loss



Dimensions



Model no.	A	B	C
WFK50**-10	90	15	Rc3/8
WFK50**-15	90	15	Rc1/2
WFK50**-20	105	22.5	Rc3/4
WFK50**-10N	90	15	3/8NPT
WFK50**-15N	90	15	1/2NPT
WFK50**-20N	105	22.5	3/4NPT

- Refrigerating type dryer
- Desiccant type dryer
- High polymer membrane dryer
- Air filter
- Auto. drain / others
- F.R.L. (Module unit)
- F.R.L. (Separate)
- Compact F.R.
- Precise regulator
- F.R.L. (Related products)
- Clean F.R.
- Electro pneumatic regulator
- Air booster
- Speed control valve
- Silencer
- Check valve / others
- Joint / tube
- Vacuum filter
- Vacuum regulator
- Suction plate
- Magnetic spring buffer
- Mechanical pressure SW
- Electronic pressure SW
- Contact / close contact cont. SW
- Air sensor
- Pressure SW for coolant
- Small flow sensor
- Small flow controller
- Flow sensor for air
- Flow sensor for water
- Total air system
- Total air system (Gamma)

Ending

Karman's vortex type for water Flow sensor