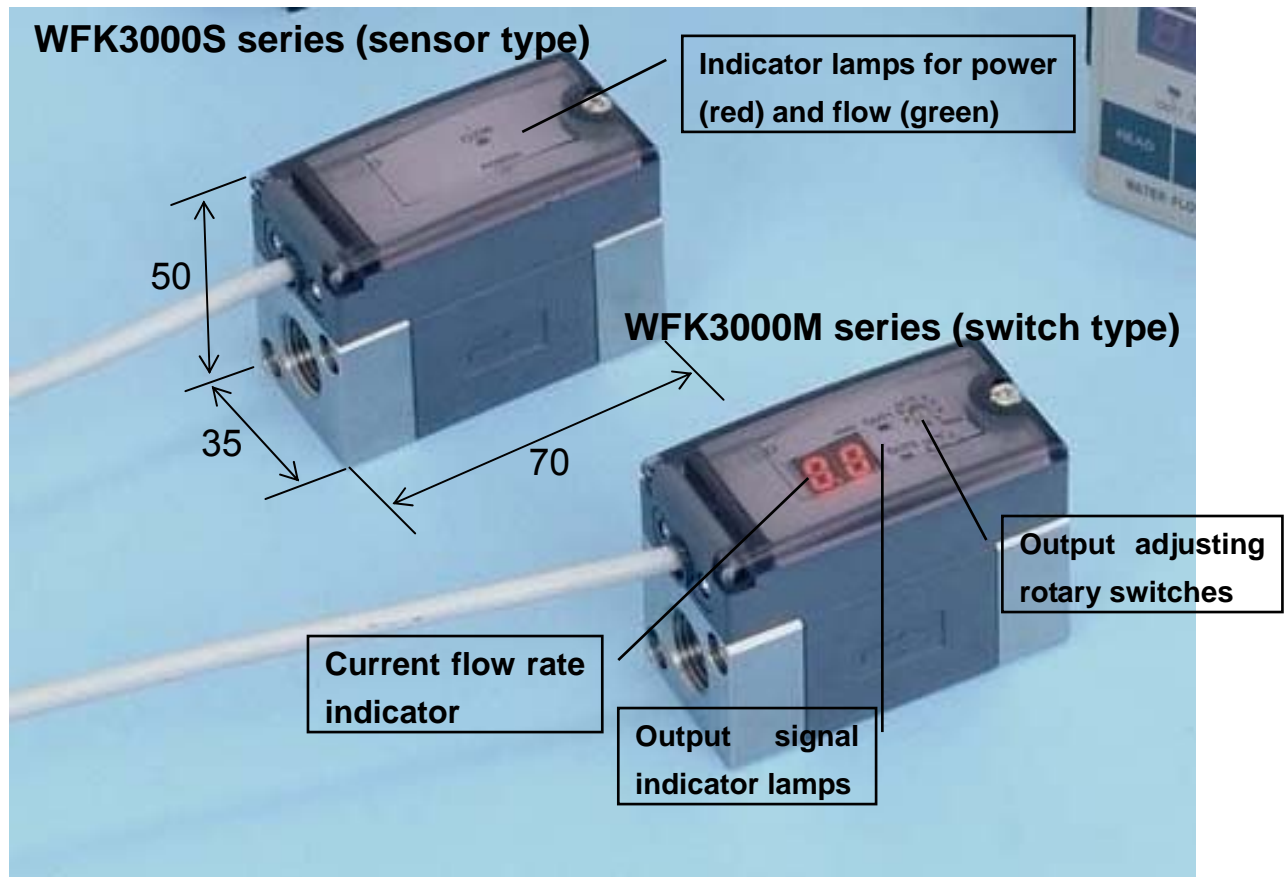


WATER FLOW SENSOR Karman vortex type

WFK3000 Series

**Expanded flow range and
new function added!**

- Sensing flow range 0.5 - 4.0 l/min and 4.0-32 l/min are newly added.
- Water temperature measuring function is newly available. (WFK3000S series.)



Product overview

- Compact design (70X35X50) and light weight(380g)
- Easy usage thanks to adopting rotary adjusting switches
- IP65 protection, suitable for food industry
- High reliability thanks to karman vortex sensor
- Water temperature measuring function available as an option

WFK3000S (sensor type) specification

Model	WFK3004S	WFK3012S	WFK3022S
Flow rate range	0.5 – 4.0 L/min	1.5 – 12 L/min	4.0 – 32 L/min
Connection port size	Rc3/8 or Rc1/2		
Connection part material			
Using conditions			
Applicable medium	Filtrated water, industrial water		
Max. pressure	1.0 MPa		
Proof pressure	1.5 MPa		
Ambient temperature	0 – 50 °C		
Water temperature	1 – 70 °C		
Function			
Accuracy	±2.5% F.S.		
Temperature characteristic	±5% F.S. (10 - 50°C, 20°C standard)		
Pressure drop	0.06MPa (at 4.0 L/min)	0.05MPa (at 12 L/min)	0.06MPa (at 32 L/min)
Response time	1 sec (time to reach to 70% of previous value when it shuts off.)		
Indication	Power lamp in red / flow lamp in green		
Analogue output	0 – 5DCV as standard (DC4 – 20mA, 1-5V or 0 -10V as option)		
Installation			
Power source	12 – 24VDC±10%(Max. 80mA) / 15 – 24VCD for option A3		
Cable	O.D.4.8mm, 3m, 4 wires		
Mounting attitude	Free		
Straight piping into inlet/outlet	Not required		
Protection class	IP65		
Weight	380g (Rc3/8) / 410g (Rc1/2)		
Water temperature measuring option (Notice : this option is not available for A1 analogue output model)			
Measuring temperature range	10 – 70 °C		
Analogue output	DC1 – 7 V		
Accuracy	±2°C (less than 50 °C) / ±3°C (50 °C or higher)		

WFK3000M (switch type) specification

Model	WFK3004M	WFK3012M	WFK3022M
Flow rate range	0.5 – 4.0 L/min	1.5 – 12 L/min	4.0 – 32 L/min
Connection port size	Rc3/8 or Rc1/2		
Connection part material	Stainless steel SCS13		
Using conditions			
Applicable medium	Filtrated water, industrial water		
Max. pressure	1.0 MPa		
Proof pressure	1.5 MPa		
Ambient temperature	0 – 50 °C		
Water temperature	1 – 70 °C		
Function			
Accuracy	±2.5% F.S. ±1 digit		
Temperature characteristic	±5% F.S. (10 - 50°C, 20°C standard)		
Pressure drop	0.06MPa (at 4.0 L/min)	0.05MPa (at 12 L/min)	0.06MPa (at 32 L/min)
Response time	1 sec (time to reach to 70% of previous value when it shuts off.)		
Indication	Current flow rate by 2 digits LED		
Switch output	2 points transistor output (NPN or PNP), Max. DC50mA		
Installation			
Power source	12 – 24VDC±10%(Max. 80mA)		
Cable	O.D.4.8mm, 3m, 4 wires		
Mounting attitude	Free		
Straight piping into inlet/outlet	Not required		
Protection class	IP65		
Weight	380g (Rc3/8) / 410g (Rc1/2)		

How to order

Sensor type

WFK3012S – 10 – A0 TB

Code	Specification
Sensing flow rate range	
3004	0.5 – 4.0 L/min
3012	1.5 – 12.0 L/min
3032	4.0 – 32.0 L/min
Connection port	
10	Rc3/8
15	Rc1/2
Analogue output	
A0	0 ~ 5 VDC
A1	4 ~ 20 mA DC
A2	1 ~ 5 VDC
A3	0 ~ 10 VDC
Bracket option	
T	Temperature measuring function
B	Bracket attached

* Option T is not available for A1 analogue output.

Switch type

WFK3012M – 10 – N0 B

Code	Specification
Sensing flow rate range	
3004	0.5 – 4.0 L/min
3012	1.5 – 12.0 L/min
3032	4.0 – 32.0 L/min
Connection port	
10	Rc3/8
15	Rc1/2
Alarm output	
N0	NPN transistor O/C 2 points (a contact)
N1	NPN transistor O/C 2 points (b contact)
P0	PNP transistor O/C 2 points (a contact)
P1	PNP transistor O/C 2 points (b contact)
Bracket option	
B	Bracket attached