WATER FLOW SENSOR

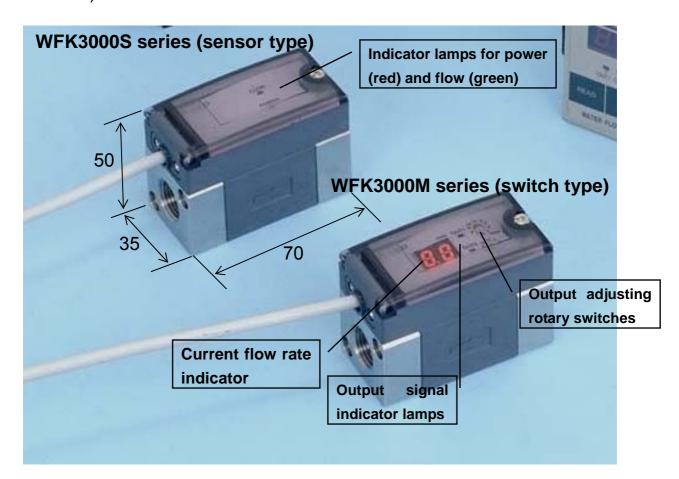
Karman vortex type

Expanded flow range and new function added!

WFK3000 Series

• Sensing flow rage 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 switchs
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)			

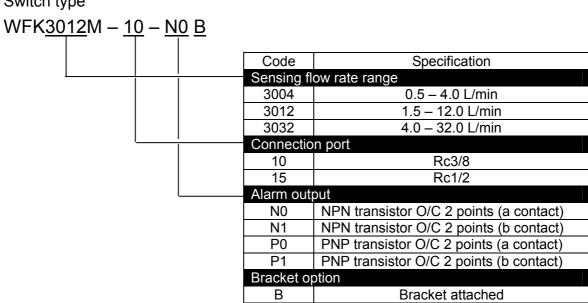
How to order

Sensor type

WFK<u>3012</u>S - <u>10</u> - <u>A0</u> <u>TB</u> 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 Rc1/2 15 Analogue output A0 0 ~ 5 VDC 4 ~ 20 mA DC A1 1 ~ 5 VDC A2 A3 0~10 VDC Bracket option

Temperature measuring function
Bracket attached

Switch type



^{*} Option T is not available for A1 analogue output.