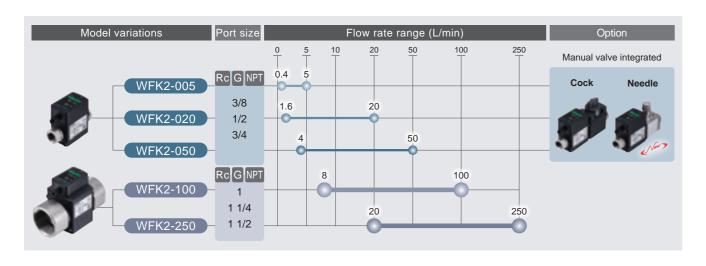
Diversified



Karman Vortex Flow Sensor FLUEREX

Received the 2018 Good Design Award



Supports fluorine liquids



Supports fluorine liquids with excellent electrical insulation. Ideal for controlling coolant in semiconductor manufacturing equipment. Fluids with low global warming potential are also supported.

Fluorinert™	Galden [®]
=0	

Novec™

Opteon™

FC-3283

FC-40

HT135

HT200

Novec7300

SF10

Compatible with flow rates of 0.4 to 250 L/min

Compatible with a wide range of flow rates.

All models equipped as standard with fluid temperature measuring function

Saves space and wiring time with no need for a separately installed temperature sensor. As the temperature sensor is inside the product, it is not easily affected by ambient temperatures.



Easy flow rate adjustment (Option)

Needle: Fine adjustment is possible with the manual valve. Cock: Valve can be easily opened and closed.









Needle type

Cock type

Various output functions available

OUT2 OUT1 Switch Output NPN/PNP can be switched Switch Output **Analog Output Analog Output** NPN/PNP can be switched > Instantaneous flow rate > Instant flow rate1/2 > Temp1/2 > Instantaneous flow rate Instant flow 1/2 Temp1/2 > Accumulated flow Accumulated flow > Temperature > Temperature **IO-Link** Pulse Output External Input Pulse Output Accumulated flow > Accumulated flow > Accumulated flow reset

- * Fluorinerts ™ and Novec™ are trademarks of 3M Corporation.
- * Galden®is a registered trademark of Solvay Special Polymers Japan.

> Peak hold reset

* Opteon ™ is a trademark of Chemours-Mitsui Fluoroproducts Co., Ltd.

^{*} Compatible models: WFK2-005, WFK2-020, WFK2-050

Easier to use

Easy to read 2-screen color LCD

The temperature, accumulated flow, set value, etc., can be displayed simultaneously. The display color can be selected from white, green, and red.



Upper: Instantaneous flow rate Lower: fluid temperature



(areen) Lower: Fluid temperature (red)



Upper: Accumulated flow Lower: Instantaneous flow rate



Upper: Instantaneous flow rate Lower: OUT1 output set value

Display screen rotation

The liquid crystal display can be rotated 90° at a time without moving the body.

There is no interference even when installing in parallel.





Easy setting function

Frequently used settings can be set from the normal screen using shortcut operations.

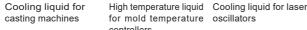
Example: The output threshold can be changed while viewing the current flow rate value.



Supports fluid temperatures up to 95°C

Ideal for detection of return flow of cooling liquid which tends to become hot.







ATEX compliant

Compliant with ATEX Directive. Refer to "Option (ATEX compatible)" on page 18 for details on the specifications.



Examples of applications

Semiconductor

Etching, grinder, dicer, CVD.

Cooling and temperature control of

semiconductor manufacturing equipment.

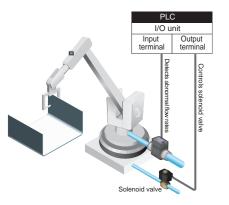
Semicon manufacturing equipment

Hardening Induction hardening device

Quantitative management of coolant.

Welding Spot welding machine

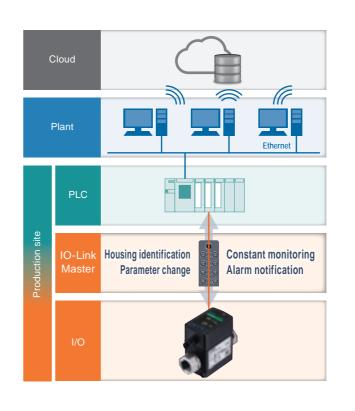
Spot welding machine coolant control and flow rate abnormality detection for chip fallout.



Supports IO-Link



IO-Link is a digital communication standard for sensors/actuators at factory sites. (IEC 61131-9) Unlike analog communication, it enables the transmission of parameters and event data.



Features of IO-Link

Constant monitoring with digital data is possible.



Parameters can be set and changed via the network, enabling remote equipment operation.



Models, serial numbers, etc., can be confirmed on the network.



The settings can be copied from the master (scanner), making parameter reconfiguration after maintenance obsolete.



Device failure and disconnection can be confirmed.



It can also be converted to Ethernet networks and connected, enabling devices to be IoT-ready.



Contact CKD for support of food manufacturing processes FP series.

^{*} Refer to page 12 for details.