



Hydrogen Gas Calibration Service

Calibration of flowmeters from other manufacturers is also available.

For hydrogen flowmeter calibration, leave it to OVAL.

Drawing on the reliable technology we have developed as a dedicated flowmeter manufacturer, OVAL has opened OVAL H₂ Lab, a hydrogen gas calibration facility.



OVAL H₂ Lab

■ Equipment Specifications

Item	Description
Applicable fluid	Hydrogen
Nominal size range for calibration	10 to 100mm
Calibratable flow rate range	0.18 to 650m³/h
Maximum calibration pressure	0.97MPa*
Calibration temperature	Room temperature*

* Calibration is performed at atmospheric pressure and room temperature.
Please contact us regarding pressurized calibration.

● Requesting Calibration

Acceptable signals	• Voltage pulse: 3-wire system, trigger level 3.5 V, supply voltage 12 V, max. 10 kHz • Current pulse: 2-wire system, trigger level 6 mA, supply voltage 24 V, max. 10 kHz • Reed switch / open collector pulse: 3-wire system, trigger level 9.7 V, supply voltage 24 V, pull-up voltage 24 V, max. 10 kHz • Active 4–20 mA analog signal
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Measurement principle	☐ Positive displacement ☐ Coriolis ☐ Vortex ☐ Turbine ☐ Ultrasonic ☐ Thermal ☐ Other []
Manufacturer	
Flowmeter / sensor model	
Connection	Nominal size [] mm Flange standard: ☐ JIS [] K ☐ Other []
Power supply	
Output signal	☐ Analog 4–20 mA ☐ Open collector pulse ☐ Current pulse ☐ Voltage pulse ☐ Other []
Flow rate range	Minimum [] Normal [] Maximum [] ☐ m³/h [normal] ☐ L/h [normal] ☐ kg/h ☐ Other []
Temperature range	Minimum [] Normal [] Maximum [] ☐ °C ☐ Other []
Pressure range	Minimum [] Normal [] Maximum [] ☐ MPa [gauge] ☐ Kpa [gauge] ☐ Other []
Test points	☐ OVAL standard points ☐ Specified points []

Notes

Conditions for Calibration Service for Flowmeters from Other Manufacturers

1. Flowmeter and accessories

The flowmeter and its accessories must be installable on our test equipment, and the electrical output signal must be receivable.
The specified conditions must be compatible with the flow rates available on our test equipment.
Other requirements, including pressure loss conditions and flow straightening conditions, must be satisfied.

2. Application of the flowmeter

The calibration results must not be used for applications that directly affect human life.
The flowmeter must not be subject to certification or inspection by public authorities.

3. Other conditions

The flowmeter must not contain hazardous, highly toxic, or difficult-to-remove fluids.
As a general rule, requests for internal cleaning after calibration cannot be accepted.
However, we may be able to accommodate such requests in some cases. Please feel free to contact us.

The specification as of July, 2026 is stated in this catalog. Specifications and design are subject to change without notice.



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