

CONTOIL®

The oil meter for every application

Fuel consumption in industrial oil burners and boilers –
For buildings, industrial systems, power plants and ships.



VZO 4...50

The traditional and proven mechanical system

- Mechanical roller counter for easy on-site readings.
- Reed pulser versions for remote totalization.
- Metrological versions with EC/PTB approval.
- Cube-form or OEM versions for small domestic boilers.



New: VZF 15...50

The new subsystem equipped for the future

- Digital and analogue data on consumption and flowrate.
- Direct integration into higher systems without additional transmitters.
- All operating data read off at the push of a button.
- Complete transparency of fuel consumption with a simple readout.
- Ingress protection IP 66, ambient temperature up to +70 °C.

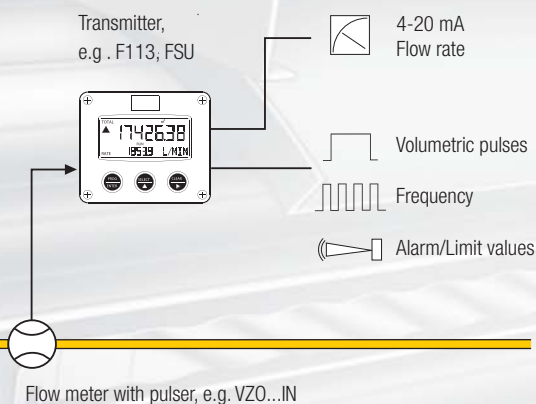


CONTOIL®-The oil meter for every application

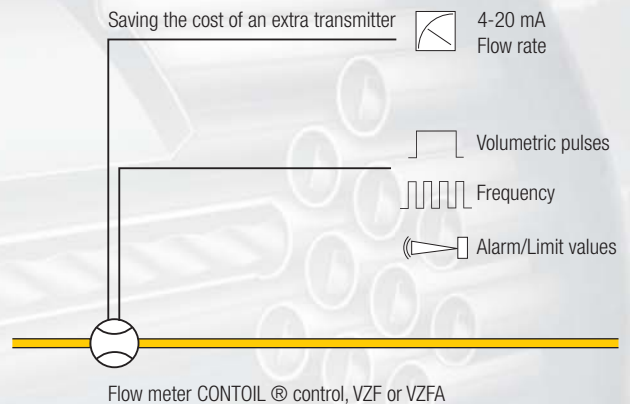
For wide burner performance range: Flow rates from 1 l/h up to 30'000 l/h.

- **Direct connection to burner or boiler control systems.**
- **Adjustable on-site output signals:**
 - Outputs for volumetric pulses.
 - Analogue output 4...20 mA or frequency output 0...100 Hz for flow rate.
 - Limit switch.
- **All output signals transmit calibrated measured values.**
No specific pulse adjustment required.
- Rugged design and reliable function. Long-term accuracy requiring no recalibration.
- For all types of fuel under difficult conditions and continuous operation.
- Meters withstand strong mechanical vibration and/or high ambient temperatures. Fulfilling railway requirements (diesel locomotives) and exceeding standards for shipbuilding.
- Horizontal or vertical mounting. For all flow directions without modification.
- Metrological type approval versions (e.g. EC, PTB) or with marine type approval to IACS (e.g. GL, DNV, LR).
- Versions for US gallons.
- Made in Switzerland to ISO 9001 and fulfilling the highest demands in design requirements for the most extensive range of applications.
- Replacement parts can be delivered from the factory within one working day.
- Meters for fuel consumption measurement in vehicles and ships with individual documentation.

The traditional installation



Direct connection to higher systems Simplify planning and wiring = Cost savings with CONTOIL® control



The principle of volumetric measurement

- Accuracy is not dependent on flow profile and allows space-saving installation without requiring straight inlet or outlet paths.
- Accuracy almost independent of viscosity and therefore ideal for a wide range of viscosity values.
- Low pressure loss when used with light heating fuels.
- Maintenance free without dynamic seals with an operating life greater than that of the burner.

A range of meters for all applications

- All versions are ideal for mounting on the positive or negative pressure side:
- For domestic boilers (DN 4 and 8) as well as industrial burners and boilers (DN 15...50).
 - For all types of fuel from extra light heating oil to heavy fuel oil.
 - Mechanical or electronic counters for readings on site or for remote transmission.
 - Threaded or flanged connections DIN, optional drillings for JIS or ANSI.
 - Temperatures up to 180 °C and nominal pressures up to 40 bar.

The product range for domestic boilers

- The compact cube-form design of the oil meter VZO 4 and 8 mm is a space-saving unit for measuring light and extra light heating oil.
- Standard version with optional reed pulser or OEM version for burner manufacturers.
- Simply mount and read as required. Maintenance-free.



Nominal diameter		DN 4	DN 8
Minimum flowrate	l/h	1	4
Nominal flowrate	l/h	50	135
Maximum flowrate	l/h	80	200
Temperature	°C	60	60
Nominal pressure	bar	25	25
Nominal pressure for OEM version	bar	32	25
Internal thread		G 1/8"	G 1/4"

The product range for industrial burners and boilers

- Meters with threaded or flanged connections. Drillings to DIN, optional to JIS or ANSI.
- Fluid temperature up to 180 °C, nominal pressure up to 40 bar.
- Special products for differential measurement for heavy fuel oil burners.
- Versions with type approval for the shipbuilding sector (GL, DNV, LR).
- Stainless steel versions for special burners on request (DOMINO ARD).
- The output signals transmit calibrated values.
No adjustment to individual pulse values required.



Nominal diameter		DN 15	DN 20	DN 25	DN 40	DN 50
Minimum flowrate	l/h	10	30	75	225	750
Nominal flowrate	l/h	400	1000	2000	6000	20000
Maximum flowrate	l/h	600	1500	3000	9000	30000
Temperature	°C	130/180	130/180	130/180	130/180	130/180
Nominal pressure	bar	16/25/40	16/25/40	16/25/40	16/25/40	16/25/40
Connection		threaded/ flanged	threaded/ flanged	threaded/ flanged	threaded/ flanged	flanged

VZO 4 and VZO 8



VZO 4 OEM and VZO 8 OEM



CONTOIL® classic VZO / VZOA

- Mechanical counter.
With pulser as option
- On-site display of total consumption
- Types VZOA available with metrological versions with EC/PTB approval.



VZO / VZOA

CONTOIL® control VZF / VZFA

- Multifunctional electronic counter with integral and on-site adjustable analogue and pulse output.
- Display of total consumption in litres, m³ or US gallons.
- Two totalizers, one with reset.
- Flow rate in l/h, l/min, US gallons/min or US gallons/h
- With limit switches



VZF / VZFA

The add-on savings
lower the price even further!

The easy way to select the right CONTOIL® oil meter for your specific requirements

Use the "Applicator" software tool on our Website and you have the complete product description immediately:
http://www.aquametro.ch/english/applicator_input.html



The product range for measuring consumption in vehicles and ships or for measuring lubricating oils

Just ask for the brochure you need or visit our website on oil / products for oil.

At http://www.aquametro.ch/english/oel_e.html you will find a complete summary of all systems for measuring mineral oil consumption along with the option to download other brochures you may require.



Quality throughout

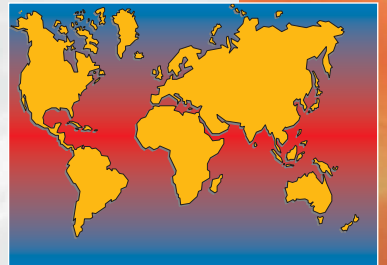
The ideal product range stamped with reliability and quality.

- Over 30 years in the oil measurement sector.
- Each individual product is calibrated and checked on state controlled test benches.
- Manufactured to ISO 9001 and the latest standards and regulations covering measuring instrumentations (e.g. OIML, MID, PTB).



Worldwide Sales and Service Network

- Our worldwide sales and service partner network provides specific local support whenever required.
- Replacement parts can be delivered from the factory within one working day.



Calibration and custody transfer

- Aquametro is an authorized calibration centre certified by Swiss and German authorities for measurement applications including the flow measurement of mineral oil.
- An independent calibration centre is also run to ISO/IEC 17025 standards, whose certificates are legally recognized throughout Europe.
- Most types and brands of oil meters can be calibrated on our high accuracy test benches.



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