

CONTOIL®

Fuel oil meters

Applications

- Flow measurement of mineral oils such as heating or propellant fuels
- In burners, on board ships, land vehicles and fixed installations
- Marine and metrological type approvals (optional)



Features

- The complete range of products offering the best solutions for the measurement of oil consumption
- State-of-the-art design with electronic counter, flow indication, analogue and digital output signals and limiting value switch
- Mounting on the pressure or suction side of a pump, with no straight inlets or outlets required
- Independent of viscosity and temperature
- High vibration resistance
- Classical version with mechanical display

Your benefits

- The reliable solution with everything from a single supplier
- Reliable monitoring and flexible control of the system. Simplifies burner settings and optimising consumption
- Highly flexible mounting with very small space requirements
- Accurate measurements
- Maximum safety in the shipbuilding and automobile industries
- Cost-effective metering point

The right product for every application

Range CONTOIL® Control VZF 15...50



with multifunctional display and parameterisable outputs

Electronic display of

- totaliser, total and resettable volume
- actual flow rate
- other flow parameters

Output signals for

- volume pulses
- actual flow rate
- limiting values (Q_{min} , Q_{max})

Simple to operate

Interactive parameter input

External power supply

Housing with threaded or flanged connections

Main characteristic data:

- flow range 10...30 000 l/h
- temperature ranges 130 and 180 °C
- nominal pressure PN 16 and 25 bar (PN 40 on request)

Page 5



Range CONTOIL® Classic VZO 4...50

total volume display and remote transmission

Total volume display on roller counter

Option: Reed pulser RE or RV for remote totalisation

Option: Inductive IN pulser for control purposes

Housing with threaded or flanged connections

Main characteristic data:

- flow range 0.5...30.000 l/h
- temperature ranges 60, 130 and 180 °C
- nominal pressure PN 16, PN 25 and PN 40 bar

Page 9



**Range CONTOIL®
VZFA / VZOA**



optimal solution for special applications such as:

- differential measurement (VZFA / VZOA 15...50)
- certification/official verification for commercial transactions (VZOA 4...50)
- engine test benches (VZFA / VZOA 15...50)

VZFA

Electronic display of

- totaliser, total and resettable volume
- actual flow rate
- other flow parameters

Output signals for

- volume pulses
- actual flow rate
- limiting values (Q_{min} , Q_{max})

Simple to operate

Interactive parameter input

External power supply

VZOA 4 and 8

- Volume display on roller counter

VZOA 15...50

- Volume display on roller counter

Option: IN inductive pulser for control purposes

Option: RV Reed pulser for remote totalisation, integrated into the roller counter

Housing with threaded or flanged connections

Main characteristic data:

- flow range 10...30,000 l/h
- temperature ranges 130 and 180 °C
- nominal pressure PN 16 and PN 25 bar (PN 40 on request)

with special pairing for minimum measurement variance.

Page 17

Accessories

Page 22

APPENDIX:

Meter data

Page 23

Selection of the optimal meter

Page 30

Fuel oils

Page 31

How to obtain an optimal measurement

Page 32

Application examples

Page 36



If flow meters are needed for hazardous areas, please contact your nearest sales office.

CONTOIL[®], the world's most frequently used oil consumption meter

Leading manufacturers of oil burners and operators of heating systems, ships or diesel engines rely on CONTOIL[®] fuel oil meters - and with good reasons.

The advantages of CONTOIL[®] fuel oil meters – your benefits

You can decide which of these many benefits are the most important for you:

- the optimal solution for every application
- simple burner setting with flow rate display (types VZF)
- simple consumption monitoring with limiting value switch Q_{min}/Q_{max} (types VZF)
- manual dosing feature, with a resettable counter (types VZF)
- can be mounted on the pressure or suction side of a pump
- space-saving installation, because no straight inlet/outlet sections are needed
- flexible mounting of the meter in horizontal, vertical or inclined positions
- accurate measurement result, since the reading is independent of the temperature and viscosity of the fluid
- minimum failure costs due to simple function monitoring, rapid fault analysis and the possibility of simple repairs on site

Areas of application

- to measure heating fuel consumption by oil burners (for example, in heating boilers, industrial furnaces, tar processing plants, ships boilers)
- to measure propellant fuel consumption by motors and engines (such as diesel locomotives, construction machinery and ships, or in emergency power units, combined heating and power stations)
- consumption monitoring and optimisation
- flow measurement for mineral oils
- optional remote processing and integration into superior systems
- manual dosing / batching
- flow measurement for machine and motor/engine oils
- engine test benches

Fuel types

- heating fuel extra light / light, medium, heavy
- naphtha
- diesel
- petrol
- and other lubricating liquids