

Identification

- Supplier / Manufacturer vemm tec Messtechnik GmbH
- Product Type Oval Gear Meter

Application

Measurement of flow and volume of all kinds of liquids like Oil, liquid hydrocarbons, liquid food, LPG, Lubricants, lyes, acids, paint and lacquer, solvents and other chemical products.

Design and operation

Measuring principle
positive displacement meter

Input

Metering: Volume and/or flow

Metering range: 1:10 / Flow range from 0,05 to 150 m³/h (as a function of viscosity and nominal size)

Output

Output signal

1- or 2-chanal Impulse output acc. to DIN 19234 (NAMUR) or PNP (if Oval gear meter is equipped with impulse generator).

Characteristic values

Accuracy: Standard +/-0,3% at metering range 1:10; in restrained metering range +/-0,1% (Pre test limits)

Repeatability: < 0,05%

Application conditions

acc. to manual

Installation instruction

Camber cover perpendicular, upstream and down stream flow sections not necessary;
Oval gear meter should always be filled with liquid.

Environmental condition

acc. to manual

Environmental temperature: -25 to +70°C

Protection: IP 65 acc. to DIN 40050

Electro-magnetic compatibility: acc. to CE-requirements

Process conditions

Process temperature: -40 to +270°C function of material
(DTmax. = 60 K / 2h)

Density: no limit

Viscosity: 0,3 to 300.000 mPa s

Pressure loss: 0,01 to max. 1 bar function of viscosity and flow rate

Process pressure limit: 40 bar

Construction

Construction units.

Oval gear meter consists of measuring chamber, transmission unit and read out / impulse generator.

Process connection: Flanges acc. to DIN / ANSI or customers request

Materials: cast iron, steel, stainless steel

Read out and Man machine Interface

Read outs

- mechanical analog or digital, re settable and non re settable with counter
- electronic with 1 or 2 LCD display, Ex-version available

Auxiliary power

Just for impulse generator max. 30 V DC / 100 mA

Certificats and approvals

PTB-approval, Ex-Protection- Conformity certificate, CE

External Standards and Guidelines

- vemm tec Messtechnik documentation
- ISO 9001