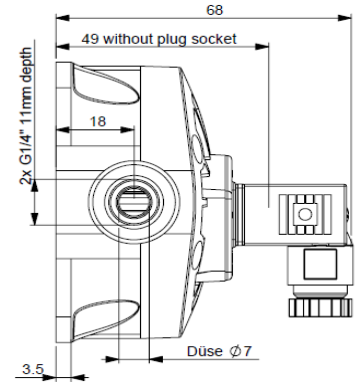
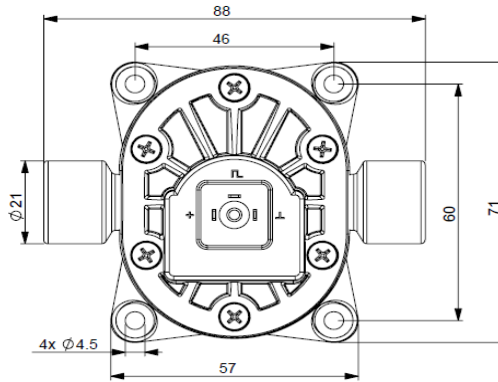


## OVAL GEARS FLOW SENSOR FOR VISCOUS LIQUIDS Serie EP-PBT



**PBT**



The EP flowmeter is specifically suitable for fluid flow rate measurement of highly viscose media such as syrup, oil or detergent concentrates. Thanks to its special design and the epicycloid wheels, the EP flowmeter is highly precise and allows extremely accurate flow measurement with minimal pressure loss.

**Specific applications:** Highly viscous media, high temperatures, high flow rates with low pressure loss and good chemical resistance.

**Material:**

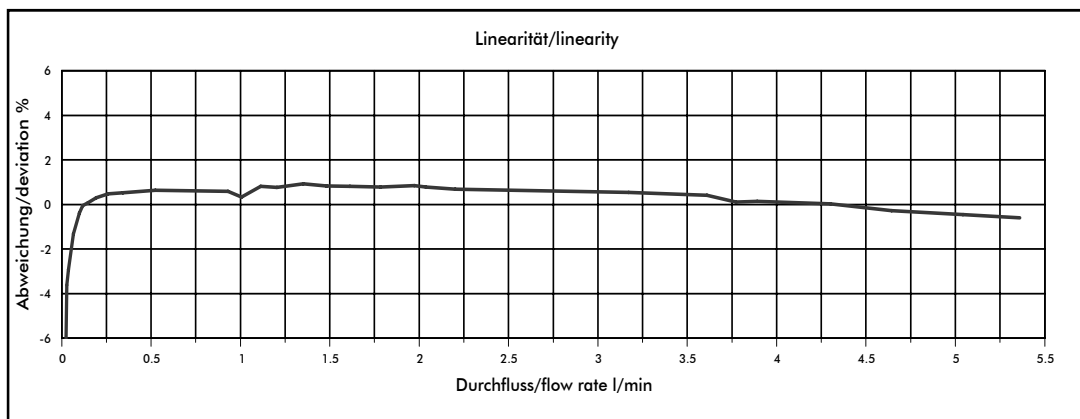
- Housing: PBT 35% GF (Arnite)
- Bearing pin: Inox 1.4435  
Aluminium oxide on request
- O-ring: FPM (Viton)  
EPDM on request
- Turbine: PEEK
- Magnets: NdFeB (Neodym)  
(not in contact with the medium)

**Technical data:**

- Flow rate: 0.06 - 6.0 l/min  
depending on viscosity
- Measuring accuracy: +/- 1.0%  
depending on viscosity
- Repetition: < +/- 0.25%
- Temperature range: -10°C to +65°C  
14°F to 149°F
- Pressure range: 10 bar at 20°C  
145 psi /68°F
- Mounting position: Horizontal recommended
- Nozzle size: Ø 7.0 mm
- Viscosity range: approx. 5 - 8000  
centistokes

**Electrical connection ratings:**

- Power supply: 4.5–24 V DC
- Consumption: 5 mA to max. 13 mA
- Signal connection: Open collector NPN
- Signal voltage: 0 V GND
- Signal load: max. 20 mA
- Leakage current: max. 10 µA
- Connections: 3-pin AMP 2.8 x 0.8 mm
- Signal: Square-wave output
- Duty Cycle: 50% / ±3%



Medium for these linearity and pressure loss curves: Cola syrup (approx. 24 centistokes).

Nozzle size	Pulses/litre	g/pulse	min. flow rate in litres/min at Linear start	max. flow rate in litres/min	Pressure loss
Ø 7.00 mm	462	2.166	0.0653	5.35	0.29

The min. and max. flow rate and the pressure loss may vary depending on viscosity.

**The values specified must be considered as approximate values.**

**The number of pulses per litre may differ depending on medium and installation.**

**We recommend to calibrate the number of pulses per litre in line with the complet installatione**

**Models**

**EP PBT 930-0501/V01**

- Housing: PBT 35% GF (Arnite)
- Bearing pin: Stainless Steel 1.4435

**EP PBT 930-0501/CV01**

- Housing: PBT 35% GF (Arnite)
- Bearing pin: Aluminium oxide (Al<sub>2</sub>O<sub>3</sub>)

