



Loading Meter also available with DN 80 (3") size, 90 m³/h

Oval Wheel Meter OV 800

- only two moving parts
- excellent metrological characteristics
- no inlet or outlet section required
- robust design
- wear-resistant proximity switches with NAMUR power supply
acc. to DIN EN 60947-5-6 for simple and reliable signal processing
- optional with installed Pt 100 for electronic temperature compensation

Sensors



Measuring principle

Oval wheel meters are positive displacement flow meters. The measuring element consists of two precision oval wheels, driven by the fluid. Each revolution of the oval wheels displaces a precisely known volume of liquid through the meter.



The number of revolutions therefore is directly proportional to the measured volume.

Loading meter type OV 800 (1) in a loading skid for lubricating oil with strainer (2) and centrifugal gas separator (3)



Technical Data

accuracy	± 0,3% to ± 0,1% (depending from flow range and liquid)
liquid temperature	-10°C bis +60 °C
nominal size	DN 80 (3")
nominal pressure	PN 16 ANSI 150
process connection	DIN EN 1092-1, ANSI 150 RF
overall length	550 mm
outputs	NAMUR pulses (4 pulses per liter)
safety class	II 2 G EEx ia II C T6
degree of protection	IP 67
EG declaration of conformity	NAMUR DIN EN 60947-5-6 ATEX 100; Pressure Equipment Directive Approvals for custody transfer available (Z 5.241 / 01.55)

Measuring range

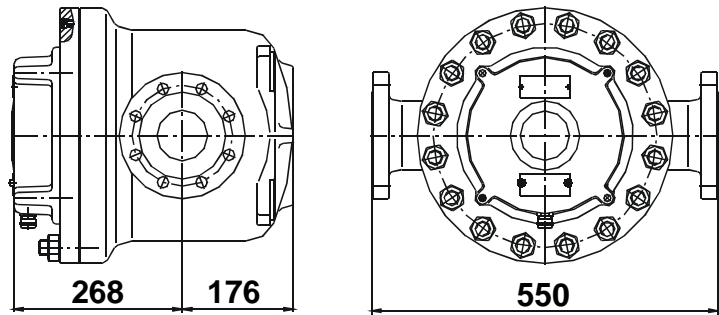
Measuring range	40 to 1500 l/min viscosity related
Viscosity ranges	0,3 to 17 mPas ; 3,5 to 120 mPas

The arguments for Oval Wheel Meter Series OV

... based on the proven Oval Wheel Meter principle

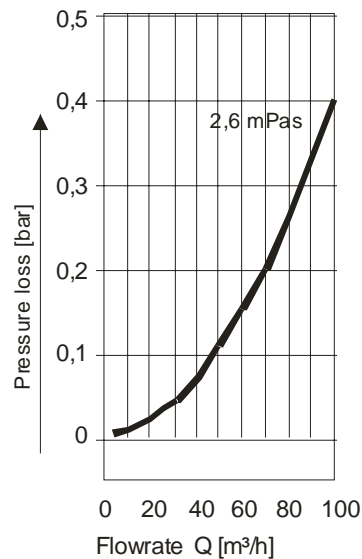
- direct measurement of volume and flowrate
- approval for custody transfer
- no inlet or outlet section required
- robust design
- long meter life and reliability
- high long term stability
- highest accuracy/repeatability
- easy installation
- no influence of flow profile
- non-sensitive for vibration, pulsation, viscosity and pressure changes

Main dimensions



Dimensions in mm

Pressure loss



... combined with a modern pulse pick-up AG 54

- wear-resistant sensor
- inductive pulse pick-up acc. NAMUR
- for hazardous area
- dual pulse pick-up
- bidirectional metering possible
- phase shifted pulses for return flow detection

Connection terminal pulse pick-up type AG54

1	2	3	4	5	6	7	8	9	10	11	12
□	□	□	□	□	□	□	□	□	□	□	□
not connected	white	white	red	red	not connected	not connected	blue	brown	blue	brown	not connected
	-I	-U	+U	+I			L-	L+	L-	L+	
	Resistance thermometer Pt100						Sensor Nr. 1		Sensor Nr.2		

Subject to changes without notice