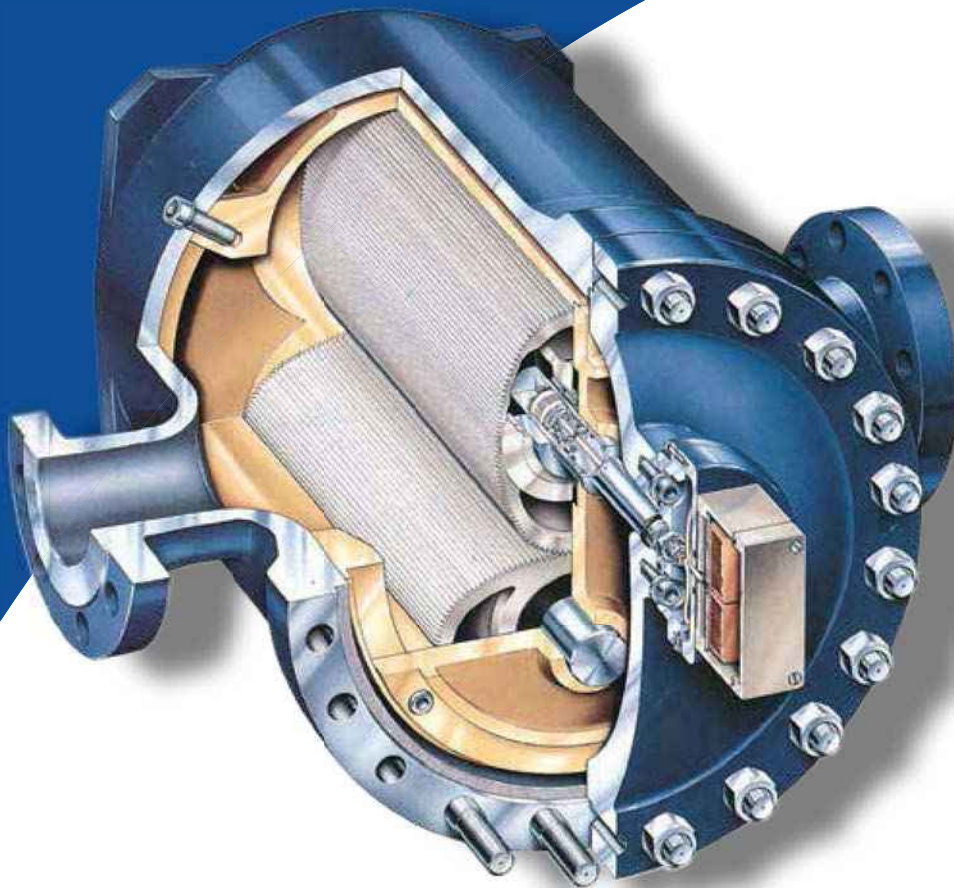


Loading Meters, Type OV

The Specialists for use in Loading Systems for Tank Trucks and Tank Cars

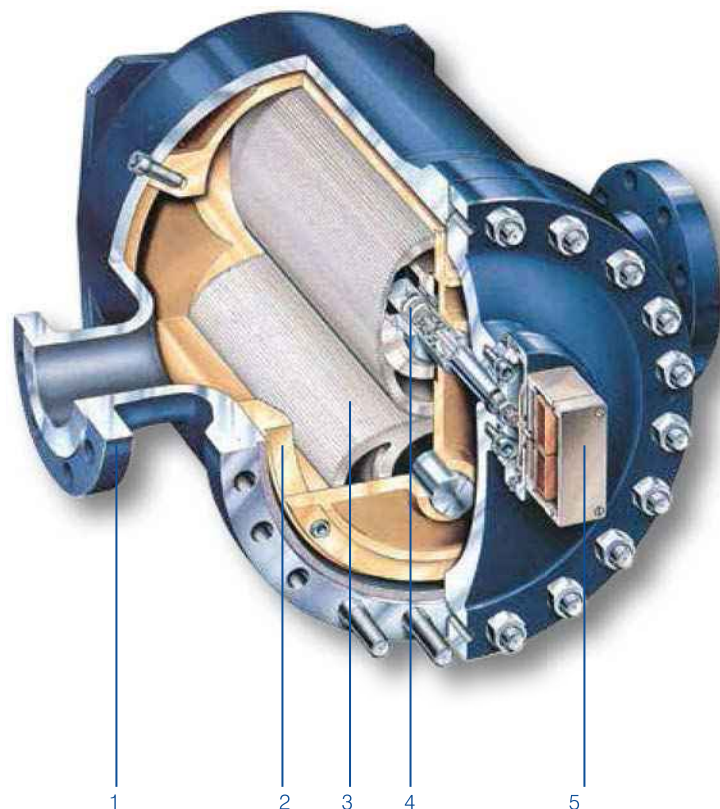


Features

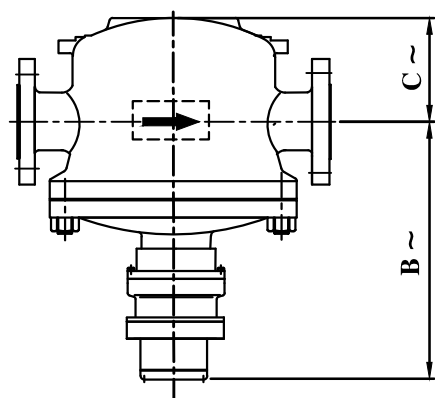
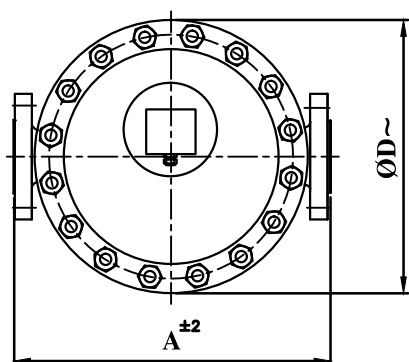
- Approved for custody transfer
- Dept. of legal metrology approval
- W & M certification
- Easy installation
- Non sensitive for vibrations, pulsations
and pressure changes
- High long term stability
- Models available in Digital &
Mechanical Display

The meters type OV have been developed especially for use in loading systems for tank trucks and tank cars. The sizes available and the materials selected are coordinated with the requirements placed on modern loading facilities for petroleum products (motor gasoline, diesel, fuel oil). The meters are suitable both for top loading and bottom loading facilities.

Aside from the oval wheels, the loading meter contains no moving and thus no wearing parts. It is designed as a volume transmitter. Thanks to its design, it has a long service life.



- Housing 1
- Measuring chamber 2
- Oval wheels 3
- Magnetic coupling 4
- Connector 5



DN	METER TYPE	A ^{±2}	B~	C~	ØD~	WT
50mm	OV50(D)Ag43.2/G2	325	305	102	260	45
80mm	OV1000Ag43.2/G2	550	410	176	405	110
100mm	OV1500Ag43.2/G2	650	480	255	405	155
100mm	OV2000Ag43.2/G2	650	480	255	480	285
150mm	OV2000Ag43.2/G2	650	480	255	480	290
150mm	OV3000Ag43.2/G2	800	475	280	615	385

* All dimension & weight are approximate for indication only

The loading meters type OV are equipped with a novel pulse generator which consists of two pick-up heads. These pick-up heads work independently from each other according to the Inductive principle and guarantee partial volume measurement. Every pulse generated determines a known precise volume displaced. Periodic system-related errors do not occur.

The use of the two independently working pick-up heads does not only fulfill the redundancy requirement for custody transfer applications; by using downstream electronic devices, it is also possible to provide for reverse flow detection and monitoring.

Approval for use in hazardous areas
(zone 1)
Class : Exib.IICT6

Approved by Chief Controller of Explosives, India

Temperature range
-10 up to + 110°C

Phase angle between the two channels adjustable
from 0° to 180°

Technical Description of the Meters Type OV

Nominal sizes (mm)	: 50/80/100/150
Nominal pressure (bar)	: 16/25/40
Flanges according to	: ANSI Class 150/300
Preset function	: Available in all versions

Operating data

Liquids to be measured	: gasolines/diesel/fuel oil/ crude oil/mineral oils ATF etc
Viscosity ranges	: 0.3 - 17 mPa . s 3.5 - 120 mPa . s
Max. operating pressure	: according to PN or flange rating
Operating temperature	: -10 up to + 60°C (standard) -10 up to + 110°C (special version)
Flow rate	: Refer Table
Accuracy	: see error curve ($\pm 0.1\%$ to $\pm 0.3\%$) depending on range & properties of liquid
Pulse generator	: AG series (inductive, Reed, Encoder) Phase Shift Dual Pulse Pickup Direct Dual Pulse Pickup for Measurement

Materials

Code	G1*	G2	Al	F2	F5
Body/Cover	CS	CS	CS	CS	SS
Measuring chamber/ Cover	CS	CS	Al	CS	SS
Oval wheels	CI	Al	Al	SS	SS

*only for OV 50

CI- Cast Iron Al- Anodised Aluminium
CS-Cast Steel SS- Stainless Steel

Housing seal	: Graphite
O-rings / Gaskets	: Buna-N / Viton
Bearing	: Carbon bushes / Stainless steel
Hollow shaft	: Stainless steel
Secondary wheel shaft	: Stainless steel



Options on local display

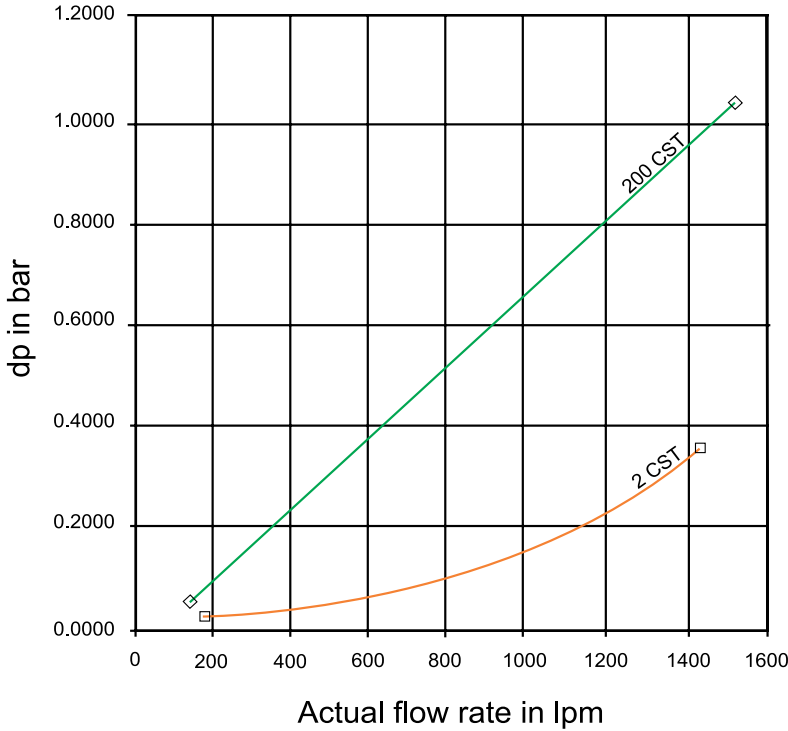


The loading meters type OV are characterized by a very wide measuring range and extreme accuracy. The linearity of $\pm 0.3\%$, which is prescribed for official calibration, is observed throughout the operating range.

In the flow range of min. to cont. linearity is $\pm 0.1\%$

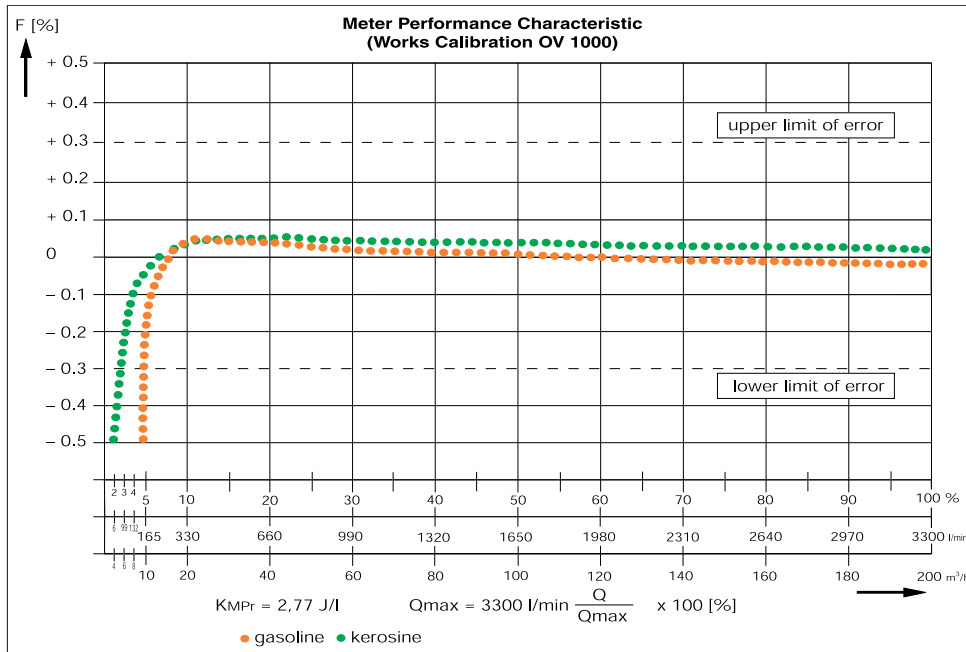
Performance Data Type OV

Differential pressure across the flow meter for OV1000



MODEL NO	SIZE DN	03~17 (mPas) M ³ /Hr	3.5~120 (mPas) M ³ /Hr
OV 50	50	Min 2.1 Max 21 Cont. 16.8	2.1 21 16.8
OV 1000	80	Min 10 Max 100 Cont. 80	5 100 80
OV 1500	100	Min 15 Max 150 Cont. 120	10 150 120
OV 2000	100	Min 20 Max 200 Cont. 160	15 200 160
OV 2000	150	Min 20 Max 200 Cont. 160	15 200 160
OV 3000	150	Min 30 Max 300 Cont. 240	20 300 240

* Larger sizes also available upon request
* Specifications subject to changes.



TOSHNIWAL HYVAC PVT. LTD.

Chennai : 267, Kilpauk Garden Road, Chennai - 600 010, India. Tel: +91 44 26448983 / 26448558
Email: sales@toshniwal.net / www.toshniwal.net

Singapore Sales Enquiry:
Email: sales@pipeline.com.sg
Tel: (65) 6570 0310

Myanmar Sales Enquiry:
Email: sales@pipeline-mm.com
Tel: (95) 9509 5758

