ISO PD meter series SBM sizes 2” and 3” offers high accuracy +/- 0.1% (SBM 75) and +/- 0.15% (SBM 150) with a repeatability better than +/- 0.02%, over a large range of flow rate. This accuracy remains constant during long periods of use. Visual indication of the flow rate measured can be obtained when associated with mechanical register or electronic flow computer directly mounted on the meter or remotely by means of a pulses emitter (see VEGA II or VEGA T leaflet).

Applications

- Calibration of other meters or tanks (Master Meters)
- Loading terminals and pipelines
- Petrol and petrochemical products transfer in refineries,
- Aircraft refuelling
- Biofuel Blending
- Tank trucks loading and unloading

Operation

While rotating, the vanes are driven by the internal surface of the single body. This means that the self-lubricating and though high accuracy is granted. It is not necessary to change gears.

The calibration mechanism allows micrometric adjustment.

Fiber and air elimination

To assure a measuring accuracy and preserve the meter from damage, the fluid under measurement must be properly filtered and air or gas must be eliminated. Isoil produces a wide range of strainers and air check valves.

Accessories

- With VEGA II or VEGA T, compensation is achieved by an algorithm based on "alfa" coefficient or density incorporated in Veeder Root 7887 register.
- Instant flow rate indicator: Mechanical needle indicator
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<tbody>
<tr>
<td>Flow Rate</td>
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</tr>
<tr>
<td>Pressure</td>
<td>1,700 KPa</td>
</tr>
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Viscosity at 15°C: 2 cSt

Density: 795 Kg/m3

Pressure drop curves

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P.D. meter weight with accessories

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<tr>
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<th>GPP</th>
<th>CS</th>
<th>CPPs</th>
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<tr>
<td>SBM 75</td>
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<td>55 Kg</td>
<td>47 Kg</td>
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<tr>
<td>SBM 150</td>
<td>62 Kg</td>
<td>75 Kg</td>
<td>87 Kg</td>
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ISO PD meter series SBM ranges from 2” to 3” offers high accuracy +/- 0.1% (SBM 75) and +/- 0.15% (SBM 150) with a repeatability better than +/- 0.02%, over a large range of flow rate. This accuracy remains constant during long periods of use. Visual indication of the flow rate measured can be obtained when associated with mechanical register or electronic flow computer directly mounted on the meter or remotely by means of a pulses emitter (see VEGA II or VEGA T leaflet).

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Positive displacement meters series SBM 75 - SBM 150

ISO/OF PD meter series SBM sizes 2” and 3” offers high accuracy +/- 0.15% (SBM 75) and +/- 0.1% (SBM 150) with a repeatability better than +/- 0.02%, over a large range of flow rate. This accuracy remains constant during long periods of use. Visual indication of the flow rate measured can be obtained when associated with mechanical register or electronic flow computer directly mounted on the meter or remotely by means of a pulses emitter (see VEGA II or VEGA I leaflets).

**Applications**
- Calibration of other meters or tanks (Master Meters)
- Loading terminals and pipelines
- Petrochemical products transfer in refineries,
- Aircraft refuelling
- Biofuel Blending

**Fitting and air elimination**
To ensure measuring accuracy and the flow rate from drainages, the first level meter must be properly fitted and air or gas must be eliminated. Tool provides a wide range of strainers and air – separators.

**Operation**
When an electronic counter is used, the calibration mechanism allows micrometric adjustment. The calibration mechanism is substituted with a 90° driving gear, if the electronic counter is remote, the meter mounts a pulses emitter or encoder (see Encoder Isoil 6422 data sheet).

**Processing**
Electronic counter is remote, the meter mounts a pulses emitter directly mounted on the meter. If the mechanism is substituted with a 90° driving gear, if the electronic counter is remote, the meter mounts a pulses emitter or encoder (see Encoder 6422 data sheet).

**Applications**
- link tools loading and unloading
- re-circulation
- automatic products transfer in refineries, loading terminals and pipelines
- calibration of other meters or tanks (Master Meters)

**Technical specifications**

<table>
<thead>
<tr>
<th>SBM 75</th>
<th>STANDARD</th>
<th>SBM 150</th>
<th>UPON REQUEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>SBM 75</td>
<td>SBM 150</td>
<td>SBM 75</td>
</tr>
<tr>
<td>Reducer (AS 2792/80)</td>
<td>Non electrical equipment, compliant directive 97/21/EC, suitable for installation in Zone 2G, working 6-500°C – 65°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working conditions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td>ATEX (dir. 94/9/CE)</td>
<td>Non electrical equipment, compliant directive 94/9/CE, suitable for installation in hazardous area II 2G, marking Ex II 2 G c T1 … T6</td>
<td></td>
</tr>
<tr>
<td>Test pressure</td>
<td>1,700 KPa</td>
<td>1,700 KPa</td>
<td>Higher values</td>
</tr>
<tr>
<td>Viscosity at 15°C: 2 cSt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>795 Kg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flow rate</td>
<td>1,000 l/min</td>
<td>2,000 l/min</td>
<td></td>
</tr>
<tr>
<td>Flow direction</td>
<td>Left (IN) to right (OUT)</td>
<td>Right (IN) to left (OUT)</td>
<td></td>
</tr>
<tr>
<td>Pressure drop</td>
<td>Refer to the diagram attached</td>
<td>Refer to the diagram attached</td>
<td></td>
</tr>
<tr>
<td>Volumetric accuracy</td>
<td>± 0.15%</td>
<td>± 0.15%</td>
<td></td>
</tr>
<tr>
<td>Pressure drop</td>
<td>± 0.15%</td>
<td>± 0.15%</td>
<td></td>
</tr>
<tr>
<td>Accuracy</td>
<td>± 0.02%</td>
<td>± 0.02%</td>
<td></td>
</tr>
<tr>
<td>Mass</td>
<td>38 Kg</td>
<td>44 Kg</td>
<td>62 Kg</td>
</tr>
<tr>
<td>Volume per revolution</td>
<td>101 litres</td>
<td>162 litres</td>
<td>350 litres</td>
</tr>
<tr>
<td>Flange size (ANSI)</td>
<td>100 200 500</td>
<td>100 200 500</td>
<td>350 litres</td>
</tr>
<tr>
<td>Flow meter (mechanical register)</td>
<td>2.2797 litres</td>
<td>3.7297 litres</td>
<td>2.2797 litres</td>
</tr>
<tr>
<td>Flow rate</td>
<td>1,400 l/min</td>
<td>3,000 l/min</td>
<td>600 l/min</td>
</tr>
<tr>
<td>Pressure drop</td>
<td>Refer to the diagram attached</td>
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<td></td>
</tr>
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Positive displacement meters series
SBM 75 - SBM 150

Tank truck version

SBM 75 CEE

1) MOD: CF + check
2) MOD: CFP + check
3) MOD: CFpV + check
4) MOD: CFpVp + check
5) MOD: CPVp
6) MOD: CFS + check
7) MOD: CVm
8) MOD: CPVpS
9) MOD: BARE SHAFT

SBM 150 CEE

1) MOD: CF + check
2) MOD: CFP + check
3) MOD: CFpV + check
4) MOD: CFpVp + check
5) MOD: CPVp
6) MOD: CFS + check
7) MOD: CVm
8) MOD: CPVpS
9) MOD: BARE SHAFT

Terminal version

SBM 75

1) MOD: C
2) MOD: CF + check
3) MOD: CFp
4) MOD: CFpVp
5) MOD: CFpVpS
6) MOD: CFpV
7) MOD: CFm
8) MOD: CFpVm
9) MOD: BARE SHAFT

SBM 150

1) MOD: C
2) MOD: CF + check
3) MOD: CFp
4) MOD: CFpVp
5) MOD: CFpVpS
6) MOD: CFpV
7) MOD: CFm
8) MOD: CFpVm
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C = "Counter" V/R 7887
F = Strainer-airseparator
P = Preset
Vp = Preset valve
S = Printer V/R
Check = Check valve

Positive displacement meters series
SBM 75 - SBM 150

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1) MOD: CFPVpS + check
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Vis. inclination of the flow rate measured can be obtained when associated with mechanical register or electronic flow computer directly mounted on the meter or remote by means of a pulses emitter (see VEGA II or VEGA T leaflets).

Operation

While rotating, the vane is driven by the internal surface of the single body. This means that the self-lubricating vanes are always in contact with the internal surface of the measuring chamber, therefore product leakage is avoided.

Fibering and air elimination

To assure a measuring accuracy and preserve the meter from damage, sealing treatment is provided.

Accessories

- pulse encoder Encoder 6422 Ex-d
- Electronic counter is remote, the meter mounts a pulses emitter or encoder (see Encoder Isoil 6422 data sheet).
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Pressure drop curves

Viscosity at 15°C: 2 cSt
Density: 795 Kg/m³

ISOFL PD meter series SBM 75 - SBM 150

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