# **Measuring system SBM75** LPG tank truck application





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## LPG truck system

Specifically studied for LPG (Liquefied petroleum gas) truck, they offer huge advantages like: » simplicity of installation

- » compact size
- » low mounting cost
- » safety in unloading operation

» automatically air elimination.

Like all SBM ISOIL meters, the SBM75/LPG, by virtue of its design, is noted for its exceptional accurancy that persists during long periods of use.

Simplicity is a noteworthy feature: rotor and vanes, constantly immersed in liquid, are the only moving parts.

#### Meter features

- » high accurancy
- » excellent repeatability
- » constant performance during long period
- » low pressure drop
- » simple construction
- » easy calibration

#### **Electronic counter**

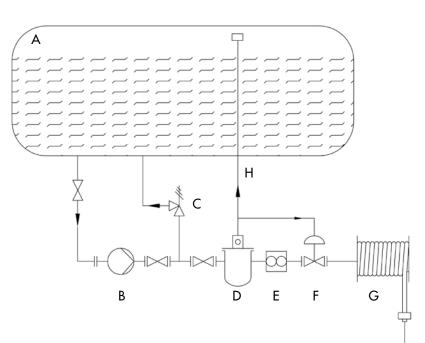
The use of electronic counter, instead of the mechanical one, allows additional features often required, as the temperature compensation at  $15^{\circ}$ C. In this case, on the system is mounted a pt100 for detecting the temperature which, connected to the electronic counter VEGAT, and knowing the density of LPG, allows to obtain the reading of the compensate volume at 15°C.

#### Accessories

» Electronic printer mod. ST100 - ST201 to be placed in the cab of truck

#### Example of installation on a tank truck

- A = Storage tank
- B = Pump
- C = Pump bypass valve
- D = Strainer air separator
- E = PD Meter
- F = Differential valve
- G = Hose reel
- H = Vapor return line





## PD meter

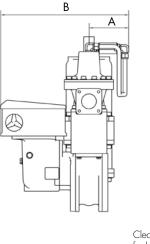
All solution adopted for this meter were designed to have the maximum performances with the LPG (Liquefied petroleum gas)

- » graphite vanes guarantee accuracy and constant performances in the time
- » graphite bush: especially adapted to "dry" and low lubricity liquids as the LPG, instead of stainless steel ball bearing
- » mechanical seal: guarantee a perfect seal with low density fluids too.

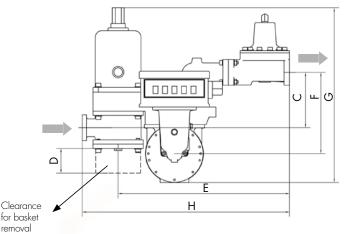
### Differential valve mod. VDP 6301

The ultimate goal of this diaphragm control valve is to avoid measuring either air or gas.

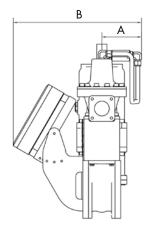
When the air-vent valve vents gas, it activates a differential valve first to limit the flow rate, then to stop it altogether in order to eliminate all the air. After elimination of the air pocket, the valve opens automatically to restore flow. Inside the body of the valve there is also a check valve.

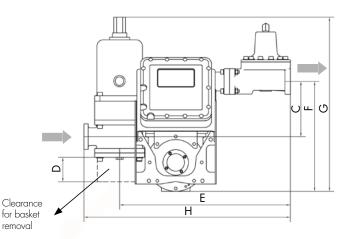






### SBM75/LPG with electronic counter VEGA T





Dimension									
Туре	А	В	С	D	E	F	G	Н	Weight
Mechanical counter	120 cm	430 cm	200 cm	110 cm	600 cm	390 cm	610 cm	726 cm	49 Kg
Counter VEGA T	120 cm	465 cm	200 cm	110 cm	600 cm	390 cm	610 cm	726 cm	42 Kg





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# **Technical features**

EU Directives compliance	ATEX, PED and MID				
	SBM 75 LPG	UPON REQUEST			
Working conditions	· · · · · · · · · · · · · · · · · · ·				
Flow rate:	76 ÷ 380 l/min				
Working pressure:	2000 kPa				
Test pressure:	3000 kPa				
Working temperature:	(-20 ÷ +40 °C) o (-10 ÷ +50 °C)				
PD meter construction					
Manifold and flanges:	Aluminium				
Body:	Aluminium				
Covers:	Aluminium/Carbon steel				
Rotor:	Aluminium				
Vanes:	Graphite				
Gaskets:	FKM (Viton)				
Bushes:	Graphite				
Seal:	Mechanical				
Flanged:	Square 90x90 mm				
Counter:	Mechanical or electronic				
Readout (with mechanical register)	litres				
Volume per revolution:	0.625 litres				
Flow direction:	Right	Left			
Performances					
Accuracy:	± 0.15%				
Differential valve construction					
Gasket	FKM (Viton)				
Diaphragm	Nitrile				
Body and cover	Aluminium				
Flanged	90x90 mm				



SBM 75/LPG with mechanical counter



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