

# Gravity Metering Group

TYPE SBM150 3" DEP

Data sheet: DS/CO/0002/EN Ed. September 2014



## Overall System Description

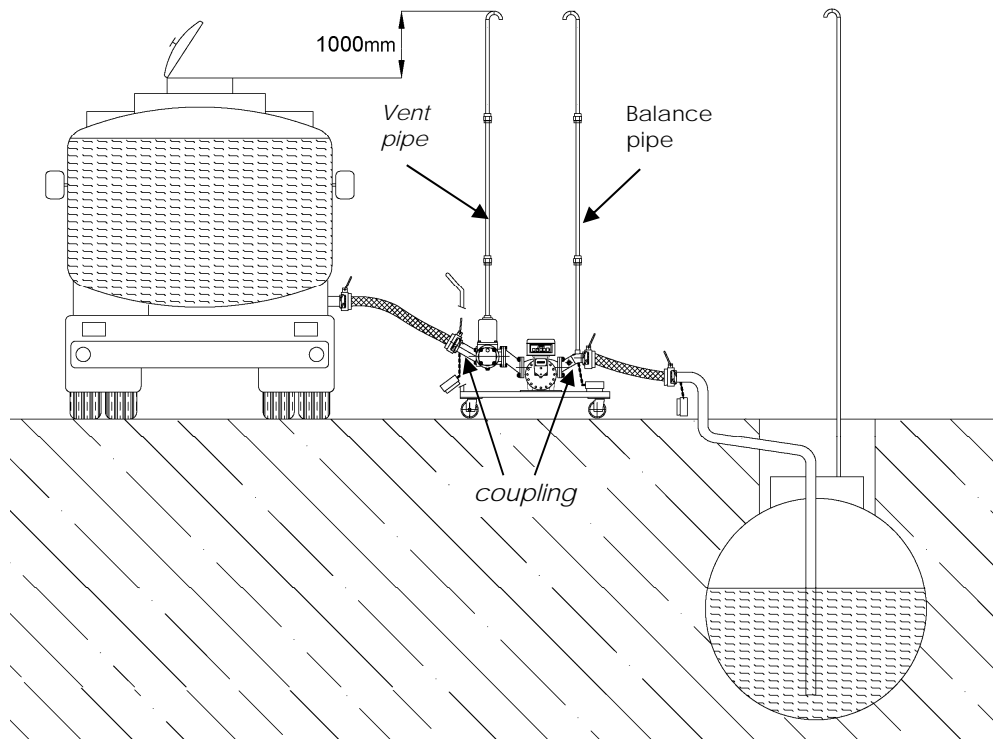
The system is composed by the PD meter type SBM 150 with strainer, a balance pipe, a vent pipe for air eliminator, mounted on a 4 wheels trolley according.

The meter will be connected via the two quick couplings, on one side to the tank truck via a flexible hose, and on the other side to the underground tank via another flexible hose. To avoid air measurement during transfer is foreseen the balance pipe. It has a length roughly 1 meter higher than the highest level of the liquid inside the tank truck. Two sight glasses installed on inlet strainer and on output collector, permit to verify liquid presence in the meter after and before the discharge procedure.

Once the tank truck discharge valve is open, the liquid will flow by gravity through the meter, which shall start measuring, and both the vent pipe and the balance pipe will be filled of liquid till the level of the liquid inside the tank truck. The more the tank truck is emptying, the lower the level will be, but the meter manifold design is such that the meter will always remain full of liquid at all time, even at the end of the unloading. At delivery end, liquid inside the hose downstream the meter will be empty thanks to air flowing from the balance pipe.



www.isoilmeter.com



### Working conditions

Flow rate:	depending on the height of the column of liquid; around 650 l/min maximum
Max working pressure:	100kPa
Working temperature:	[-10; +50] °C

### Technical characteristics PD meter SBM 150

Inlet/outlet:	3" ANSI 150 FF
Manifold and body:	Aluminium
Covers:	Carbon Steel
Rotor:	Aluminium
Gaskets:	Nitrile
Ball Bearings:	Stainless steel
Coupling:	Viton lip seal
Vanes:	Graphite
V/R7887 mechanical register:	5 zeroing – 8 non zeroing digits

### Performance

Accuracy:	± 0.1%
Repeatability:	± 0.01%

### Strainer

Body:	Aluminum
Strainer basket:	AISI 304
Mesh size:	Recommended: 60 mesh for diesel oil, 100 mesh for gasoline

### Pipes

Inlet/outlet connection:	Carbon steel pipe with 3" quick disconnect coupling
Balance/vent:	Carbon steel divided in three parts for easy installation
Approx. dimension:	Height 3990 mm from ground (without trolley)

### Trolley

Material:	Carbon steel
Wheels:	4 (2 steering)
Approx. dimension:	1,300 x 700 mm