

Metering Systems

AdBlue/DEF







For consistent accuracy and lowest life-cycle costs, FLOW Instruments' metering systems for AdBlue/DEF (Diesel Exhaust Fluid) are the market's unrivalled choice.

Application specific and according to your needs

FLOW metering systems are engineered for the specific needs of measuring AdBlue.

Our metering systems meet a variety of approvals including European Measurements Instrument Directive (MID), CE and OIML (International Organization of Legal Metrology), PTB Germany and other country specific approvals.

Accurate flow measurement and low maintenance costs

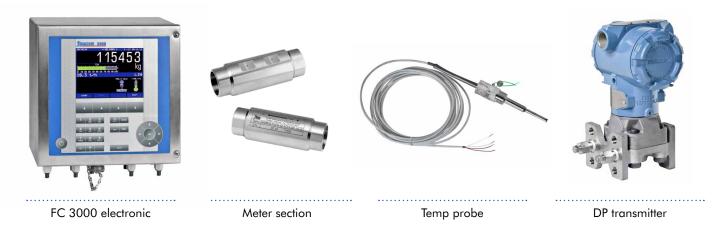
Our standard FLOW Metering systems cover flow rates from 20,000 to 100,000 kg/h (44,000 to 220,000 lb/h) with further sizes available upon request.

Flowcom 2000 is at the heart of our metering system. This electronic device combines the best components for temperature and differential pressure measuring, offers very high durability and diagnostics without any additional tools.

Gas detection

To fulfill the requirements of AdBlue/DEF measuring application, the system is equipped with a gas sensor and automatic shut-off valve to ensure the accurate measuring of liquid.

Components



Options



Gas bubble sensor



Large stainless steel housing for Flowcom 3000, printer and Ex-Barriers

Features	Benefits	
No moving parts	 Lowest life cycle cost (30 % cost saving on 10 years or more) No replacement of meter section during the lifetime Life time warranty on the meter section 	
Highest meter accuracy	 Long term stability over years. Accuracy better than +/- 0.5% No negative drift because of no wearing 	
FLOW processor	 Type approved for Europe (MID) Parameters can be easely changed Easy to software update 	
Integrated type approved Data logger	 No ticket printer needed More than 4000 deliveries are stored Every delivery including all parameters Data can be transferred by Bluetooth or wire 	
SD card slot	 Easy download of configuration data for service issues Easy data upload without direct impact of type approval Data changes without braking seals, no recalibration needed 	
Soft key interface	Intuitive operation for driver and service people	
Inputs and outputs	Pump shut-off can be controlled by the Flowcom	
Pump smart	 Massive cost reduction on pump maintenance. Pump operation shut-down if the tank runs dry. 	
Pump hour counter	Service warning – temporarely locks out pump if ignored	
Pulse output	Counted quantity can be transmitted to a PLC-system	
Multi color display	Easy and convenient handling during filling procedure	
Stainless steel housing	Zero corrosion/long lifetime Easy access to pc-boards for calibration reasons	

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Printer	Matrix printer including power supply and stainless steel housing
	Portable Bluetooth printer
Bluetooth	 External modul to transfer data for example to a handheld
Option boards	Analog output board – 2 outputs with 4 - 20 mA

Technical specifications

Metering section	
Measuring range	1,000 to 70,000 kg/h (2,200 to 154,000 lb/h) Standard ratio 1 to 5
Sizes	DN 12 - DN 80 / ½ " - 3" (other sizes on request)
Material	Aluminium IP 65
Flowcom 3000 electronic	
Dimension of the electronic	250 x 250 x 160 mm/9,85 x 9,85 x 6,3 lnch
Water/Dust protection	IP 65
Coloured display-size	5,7"
Data logger	Approved storage of 4000 delivery strings
Digital inputs	4, electrical isolated (9-36 Volt DC)
Digital outputs	5, type transistor PNP (Max 1,5 A)
Serial interfaces	3 x RS232 (electrical isolated with overvoltage protection)
Analog inputs	5 inputs, actively powered, Range 0,1-25mA
Cable glands	9 x M16 x 1.5
Weight	4.5 kilograms
Back-up battery	Battery – lithium button 3V Type 2032
Languages	English, German, Chinese, Spanish, French,
Operation conditions	
Temperature	-25 °C up to 55 °C // -13 °F up to 131 °F
Voltage	9-36 VDC
Power consumption without printer	max. 10 Watt
Power consumption printer	max. 50 Watt/2 A at 24 Volt

Contact

Flow Instruments & Engineering GmbH Siemensstrasse 19 40789 Monheim am Rhein Germany

Tel.: +49 217<mark>3-</mark>9605 9-0 Fax: +49 217<mark>3-</mark>9605 9-55 flow.sales@chartindustries.com www.flow-instruments.com