



A Chart Industries Company

Metering Systems GH2



For consistent accuracy and lowest life-cycle costs, FLOW Instruments' metering systems for Hydrogen Gas are the market's unrivalled choice.

Obtain the best solution from Flow Instruments.

Flow Instruments sets a new standard in the field of flow measurement by introducing the Flowcom 3000 FLOW Metering system for high pressure gaseous hydrogen – currently the only metering solution for mobile equipment available on the market. The system is based on a high precision metering section (orifice) with no moving parts and accurate density compensation using temperature and pressure.

Application specific and according to your needs

FLOW Metering systems are engineered for the specific needs of measuring Hydrogen Gas. Our metering system is approved by the German PTB.

Accurate flow measurement and low maintenance costs

Our FLOW Metering system for Hydrogen Gas covers a flow rate of 1 to 20 kg/min (2.2 to 44 lb/min), pressure range 30 to 210 bar absolute.

Flowcom 3000 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. The rugged Flowcom 3000 flow processor provides an intuitive user interface and allows for easy operation.

Components



FC 3000 electronic



Meter section



Temp probe



2x DP-transmitter, P-transmitter

Options



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
- No negative drift because of no wearing

FLOW processor

- Type approved for Germany (PTB)
- Parameters can be easily 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 diver and service people

Inputs and outputs

- Valve shut-off can be controlled by the Flowcom

Multi color display

- Easy and convenient handling during filling procedure
- All delivery parameters visible at a glance
- Clear error messages visible by red indication or flashing display.

Stainless steel housing

- Zero corrosion/long lifetime
- Easy access to pc-boards for calibration reasons

Ex requirements Large stainless steel housing

- To meet the ex-requirements, this special housing is suitable to install Flowcom 3000 electronic, ex-barriers and printer
- This housing has to be mounted outside the ex-zone.

Options

Printer

- Matrix printer including power supply and stainless steel housing

Bluetooth

- External modul to transfer data for example to a handheld

Option boards

- Analog output board - 2 outputs with 4-20 mA

Technical specifications

Measuring system

DP-metering system	Flowcom 3000
Metering section	SWM 21.4 x 3.73-9-4192
Length	approx. 900 mm (inlet 40 x D, outlet 20 x D)
Inner diameter	13.9 mm
Material	Stainless steel
Flow range	1-20 kg/min (11.89-237.8 m3/h)
Extended range	1:20 with 2nd DP-transmitter
Pressure range	30 - 210 bar absolute (optional higher range available)
Accuracy class	1.5 % / 2.5 %
Smallest delivery quantity	10 kg
Pattern approval for Germany	DE-19-M-PTB-0023
Display units	„kg“
Display quantity	with 2 decimals
Power supply	12 or 24VDC
Dimensions stainless steel housing	approx. width: 650 mm / height: 450 mm / depth: 290 mm
Total weight of the system	approx. 41 kg

Operating conditions

Temperature range medium	-40 to +40 °C
Temperature range ambient	-25 to +55 °C
Mechanical ambient conditions during transport	M3
Electro magnetically ambient conditions	E3

Note: The electronic, printer and the Ex-barriers must be mounted outside the classified area (Ex-Area).

Contact

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