

## 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 2000 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.

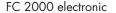
#### Accurate flow measurement and low maintenance costs

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 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. The rugged Flowcom 2000 flow processor provides an intuitive user interface and allows for easy operation.

#### **Components**







Meter section



Temp probe





2x DP transmitter, P transmitter



Large stainless steel housing for Flowcom 2000, printer and ex-barriers

Features	Benefits
No moving parts	<ul> <li>Lowest life cycle cost (30 % cost saving on 10 years or more)</li> <li>No replacement of meter section during the lifetime</li> <li>Life time warranty on the meter section</li> </ul>
Highest meter accuracy	<ul><li>Long term stability over years</li><li>No negative drift because of no wearing</li></ul>
FLOW processor	<ul> <li>Type approved for Germany (PTB)</li> <li>Parameters can be easely changed</li> <li>Easy to software update</li> </ul>
Integrated data logger	<ul> <li>More than 250 deliveries are stored</li> <li>Data can be transferred by Bluetooth or wire</li> </ul>
Soft key interface	Intuitive operation for diver and service people
Inputs and outputs	Valve shut-off can be controlled by the Flowcom
Monochrome display	<ul> <li>Easy and convenient handling during filling procedure</li> <li>All delivery parameters visible at a glance</li> </ul>
Aluminium housing	Minimum corrosion / long lifetime     Easy access to PC boards for calibration reasons
Ex-requirements large stainless steel housing	<ul> <li>To meet the Ex-requirements, this special housing is suitable to install FC-electronic, Ex-barriers and printer</li> <li>This housing has to be mounted outside the Ex-zone</li> </ul>

<b>Options</b>	
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Printer	Matrix printer including power supply and stainless steel housing
Bluetooth	External modul to transfer data for example to a handheld
Option boards	<ul> <li>Digital I/O-board with in- and outputs for controlling of delivery and bypass valve and remote START/STOP</li> </ul>

# 08-V1\_2-EN-FC2000-GH2

#### **Technical specifications**

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Measuring system	
DP-metering system	Flowcom 2000
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	No. PTB-1.42-4062609 / 7.543-14.14
Display units	"m3" or "kg"
Display quantity	with 2 decimals
Power supply	12 or 24 VDC
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 mus	st be mounted outside the classified area (Ex-Area).

#### Contact

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