

TECHNICAL DATASHEET



FLOWGENIX

VOTEX FLOWMETER

The **FLOWGEN-VFM Vortex Flowmeter** is a robust and versatile flow measuring instrument that operates on the principle of vortex shedding. When a fluid flows past a bluff body within the flow tube, alternating vortices are generated downstream. The frequency of these vortices is directly proportional to the flow velocity. Using advanced piezoelectric or capacitive sensors, these vortices are detected and converted into an electrical signal corresponding to flow rate.

Built for accuracy, reliability, and low maintenance, the FLOWGEN-VFM is suitable for measuring liquids, gases, and steam in a wide range of industrial applications including utilities, process plants, and HVAC systems.



Image is not real..Just for reference

KEY FEATURES

- **Multi-Media Measurement:** Suitable for liquids, gases, and steam.
- **High Accuracy:** $\pm 1.0\%$ of reading for liquids, $\pm 1.5\%$ for gases/steam.
- **No Moving Parts:** Maintenance-free design ensuring long life.
- **Wide Rangeability:** Up to 1:20 turndown ratio.
- **Digital Communication:** Supports 4–20mA, Pulse, and RS485 (Modbus-RTU).
- **Temperature & Pressure Compensation:** Optional integrated sensors for corrected mass flow.
- **Compact Design:** Available in wafer, flanged, and inline configurations.

USER BENEFIT

- **Universal Application:** One instrument for liquids, gases, and steam.
- **Low Maintenance:** No moving or wearing components.
- **Stable & Repeatable Output:** Immune to pressure and temperature fluctuations.
- **Easy Integration:** Works seamlessly with PLC, SCADA, and DCS systems.
- **Durable Construction:** Built from corrosion-resistant materials for harsh environments.

TECHNICAL SPECIFICATIONS

Parameter	Specification
Measuring Medium	Liquids, Gases, Steam
Line Size	DN15 to DN300 mm
Accuracy	±1.0% (Liquids), ±1.5% (Gases/Steam)
Repeatability	±0.2% of reading
Turndown Ratio	Up to 1:20
Pressure Rating	Up to 40 bar
Temperature Range	-40°C to +250°C (High-temp models up to 350°C)
Flow Velocity Range	0.5 – 80 m/s
Output Signal	4–20mA, Pulse, RS485 (Modbus-RTU)
Power Supply	24V DC or 230V AC
Protection Class	IP65 / IP67
Mounting Type	Inline / Wafer / Flanged
Display Type	Integral or Remote (Up to 50 m cable)
Material	SS304 / SS316
Communication Protocol	RS485 (Modbus-RTU)

MATERIAL OPTIONS

Component	Material Options
Flow Body	SS304 / SS316
Bluff Body	SS316
Sensor Element	Piezoelectric / Ceramic
Display Cover	Polycarbonate (IP67 rated)

TYPICAL APPLICATIONS

- Saturated steam measurement
- Compressed air and gas distribution monitoring
- Boiler efficiency measurement and energy audits
- Process steam and utility management
- HVAC and building automation systems

ELECTRICAL CONNECTIONS

- 4–20mA analog output (isolated)
- RS485 digital output (Modbus RTU)
- Pulse output for totalized flow
- Power: 24V DC or 230V AC
- Relay output for batching or alarm (optional)

COMMUNICATION PROTOCOL

- Modbus RTU – for PLC and SCADA integration
- HART – for diagnostics and configuration
- Pulse Output – for batch control or totalizing

ACCESSORIES OPTIONS

DISPLAY & INTERFACE

- Integral or remote LCD display showing:
- Flow Rate (m³/h, kg/h, etc.)
- Totalized Volume
- Backlit screen for outdoor use
- Password-protected configuration
- Compact electronic housing with easy wiring access

INSTALLATION GUIDELINES

- Maintain 10D upstream and 5D downstream straight pipe runs.
- Ensure clean liquid free of solid particles or gas bubbles.
- Install horizontally for best accuracy.
- Confirm flow direction using arrow
- Properly ground the system to prevent signal interference.

MAINTENANCE & WARRANTY

- Simple structure; easy inspection and cleaning.
- Regular calibration recommended annually.
- 12-month standard manufacturer warranty.

Accessory	Description
Remote Display Unit	Up to 50 m cable length
Flow Totalizer Panel	6-digit LED with relay output
Data Logger	RS485 / USB data recording
Mounting Kit	Includes flanges and fasteners
Cable Gland Set	IP68-rated, waterproof sealing

ORDERING INFORMATION

Code / Option	Description
Model	FLOWGEN – VFM
Line Size	Specify (DN15 to DN300 mm)
Material of Construction (MOC)	1 – SS304 / 2 – SS316
Protection Class	1 – IP65 / 2 – IP67
Pressure Rating	1 – Up to 16 bar / 2 – Up to 40 bar
Explosion Proof	1 – Yes / 2 – No
Mounting Type	1 – Flanged / 2 – Wafer / 3 – Inline
Output Signal	1 – 4–20mA / 2 – RS485 / 3 – Pulse / 4 – Combination
Operating Temperature	1 – Up to 120°C / 2 – Up to 250°C / 3 – Up to 350°C
Relay Option	1 – Alarm / 2 – Batching / 3 – NA
Power Supply	1 – 24V DC / 2 – 230V AC
Test Certificate	1 – Factory / 2 – NABL Calibration
Display Type	1 – Without / 2 – Integral / 3 – Remote
Special Requirements	Mention any customized requirements



abflowgenix.com



Pune



abflowgenix@gmail.com



8262026048



FLOWGENIX

Get a free trial now!!

Get a free one-week demo trial on any of our flowmeter solutions