

PHOTON CONTROL INC.

The Focus[®] Wafer optical flow meter (OFM) has been specifically developed for gas flow applications. The OFM accurately measures gas flow at any pressure and any flow rate.

The Focus[®] OFM uses laser beams to measure the gas flow by sensing the velocity of microscopic particulates naturally occurring in the gas.

Advantages of using the Focus[®] Wafer OFM:

- non-intrusive
- no moving parts
- easy flanged installation
- high turn-down ratio (1000:1)
- no pressure drop and operates from atmospheric pressure to 1500 psi
- repeatable measurement throughout product life
- high accuracy not affected by gas composition or quality
- immune to pipe vibration and acoustic noise
- intrinsically safe optical measurement

FOCUS[®] WAFER OPTICAL GAS FLOW METER



PHOTON CONTROL Inc.

Burnaby Head Office

PHOTON CONTROL Inc.

8540 Baxter Place
Burnaby, BC V5A 4T8
Canada

Phone: (604) 422-8408
Fax: (604) 422-8409

Calgary Sales Office:

PHOTON CONTROL Inc.
210, 600 - 6th Ave SW
Calgary, Alberta T2P 0S5
CANADA

Phone: (403) 249-6228
Fax: (403) 249-6229

E-mail:

sales@photon-control.com

Website:

www.photon-control.com

PERFORMANCE SPECIFICATIONS

- Velocity Measurement Range • 0.1 m/s to 100 m/s
- Flow Measurement Accuracy • Typically 2% of reading
- Measurement Update Rate • 1 s

OPERATING SPECIFICATIONS

- Ambient Temperature • Powerup: -20°C to +40°C
• Operating: -40°C to +60°C
- Process Temperature • -40°C to +100°C
- Maximum Process Pressure • 1500 psig

ELECTRICAL SPECIFICATIONS

- Power Requirements • 10 - 30 VDC
• 150 mA @ 24 VDC or 300 mA @ 12 VDC typical
- Analog Input Interface • Pressure and Temperature Transmitter (4 - 20 mA)
- Analog Output Signal • Frequency/Pulse
• Current Loop (4 - 20 mA)
- Digital Output Signal • RS-232 (proprietary protocol)
• RS-485 (Modbus)
- System Diagnostics • Low particle signal level alarm

PHYSICAL SPECIFICATIONS

| Pipe Diameter | Flange Class | Pressure Rating | Wafer Dimensions |
|---------------|------------------|-----------------|---------------------------------|
| 2 in/Sch 40 | ANSI 150/300/600 | 1500 psig | 53 mm ID x 200 mm OD x 32 mm W |
| 2 in/Sch 80 | ANSI 150/300/600 | 1500 psig | 49 mm ID x 200 mm OD x 32 mm W |
| 4 in/Sch 40 | ANSI 150 | 1240 psig | 102 mm ID x 228 mm OD x 38 mm W |
| 4 in/Sch 80 | ANSI 150 | 1240 psig | 97 mm ID x 228 mm OD x 38 mm W |
| 4 in/Sch 40 | ANSI 600 | 1500 psig | 102 mm ID x 265 mm OD x 38 mm W |
| 4 in/Sch 80 | ANSI 600 | 1500 psig | 97 mm ID x 265 mm OD x 38 mm W |

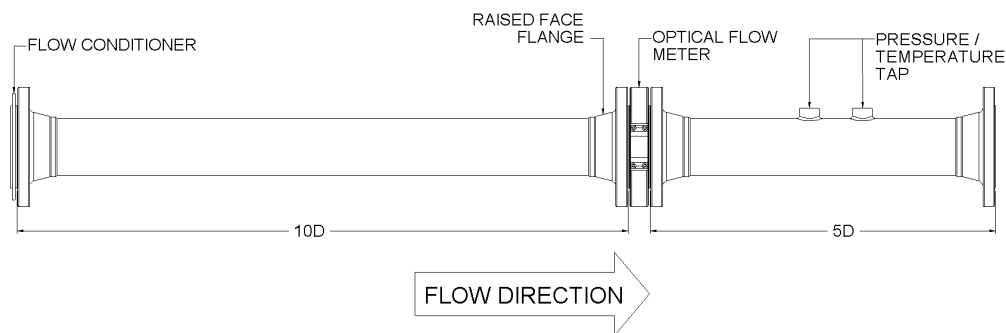
- Wetted Materials • Meter Body: 316L stainless steel
• Optical Windows: Synthetic sapphire

- Fiber-Optic Extension Cable • 3/8in detachable flexible armoured cable

PRODUCT OPTIONS

- Electronics Enclosure • DIN rail
• NEMA 4X (Class 1 Zone 2)
• Explosion-proof (Class 1 Zone 1)
- Data Logging • Display and Totalizer
- Sensors • Integrated Pressure and Temperature Sensors

TYPICAL METER INSTALLATION



SPECIFICATIONS ARE SUBJECT
TO CHANGE WITHOUT NOTICE!

November 7, 2005