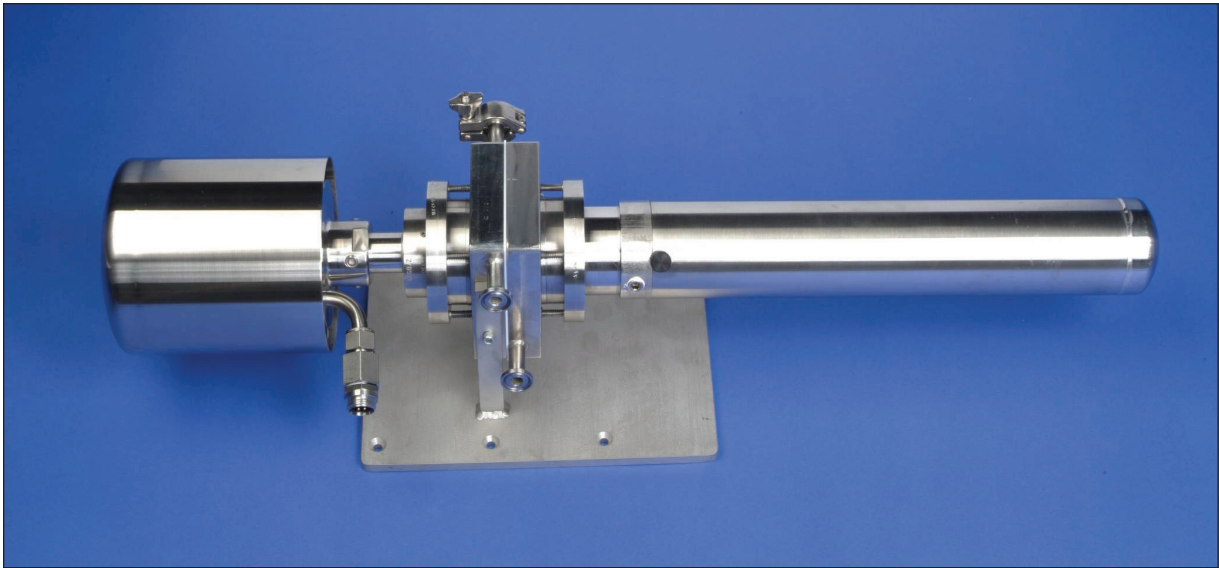


PROCESS TECHNOLOGY

MICROFLOW™ PARTICLE SIZING SYSTEM



THE CANTY ADVANTAGE

The Canty MICROFLOW™ has been engineered to offer the user a means by which a liquid is analyzed while under varying pressures, temperatures and flow rates. The MICROFLOW™ offers sample or continuous, microscopic, non-destructive viewing and provides particle size analysis with two dimensional results when used in conjunction with the Canty Vector System and CANTYVISIONCLIENT™ software. The vision system, with integral lighting, features precision optics designed to enhance the image prior to display or analysis. The image sensor is a high resolution / high speed CCD camera coupled to a microscopic lens system. The system offers zoom and focus ability, variable lighting, and multiple objective lens packages to cover a range of sizes. Our MICROFLOW™ features the FUSEVIEW™ window as the product contact barrier. Unique fused glass windows far exceed all other glass windows in safety and performance. The fused glass provides a flush finish, without the pocketing found in other mechanical seals which disturb the flow pattern and particle distribution and can damage or deform particles.

APPLICATIONS

- Bio-Tech Cell Growth, Count and Characterization
- Crystal Growth Analysis
- Polymer Bead Growth and Shape Analysis
- Mining and Aggregate Particle Size
- Centrifuge Effluent and Screen Break Detection
- In-Line Particle Size for Process Control
- Gel, Emulsion and Bubble Classifier
- Micro-Reactor Analysis- Dual Inputs and Flush Loop with Sanitary Connections
- Percent Solids / Turbidity
- End Product Quality Control and Lot Certification
- Replace Laser and Sieve with Two Dimensional Distribution by Shape

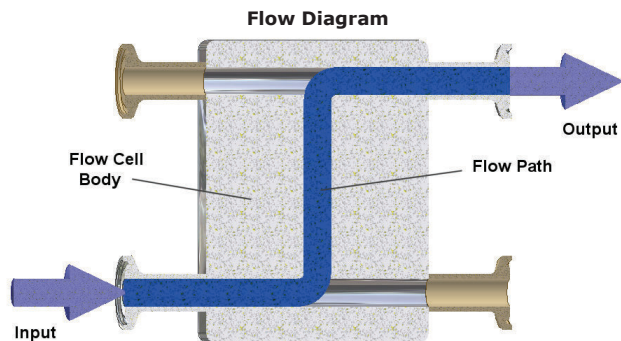
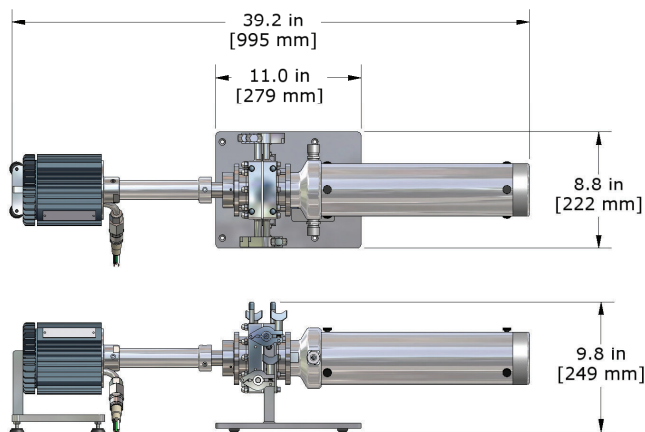
FEATURES

- Particle Size, Shape and Distribution with Real Time Analysis
- Fused Glass Pressure Barrier Standard
- Rated 150 PSI @ 500 Deg. F., Options through 6,000 PSI.
- On-Line or Lab Plus (remote control)
- Adjustable Gap Option
- Seamless Design. Unit Can Be Orientated Horizontal or Vertical
- On-Line Dilution Port
- Instantaneous Mixing Port
- Regulated Temperature Option
- Bypass Loop Option Available for Flow Control
- ½ Inch Sanitary Connections Standard

PARTICLE SIZE ANALYSIS

- Replaces and Correlates to Screen Analysis
- Distribution By Major, Minor Diameter
- Visually Verifiable Results Via Live Images
- Particle Area
- Histogram Distributions - Bin Size
- Percent Passing by Volume vs. Size
- Particle Perimeter
- Full EXCEL datalogging
- Many Library Functions

DIMENSIONAL INFORMATION



Ordering Information

HOW TO ORDER: Select the appropriate symbols and build a part number as shown:

EXAMPLE:

MIC-L A 1 K 5 A 1 3 1 A Z

| CONNECTION TYPE L - Laminar Flow with 1/2" Sanitary Connections T - Laminar Flow with 1/2" Tube Connections | INTERNAL SEAL MATERIAL A - VITON® D - SILICONE B - BUNA E - KALREZ® C - EPDM F - CHEMRAZ® | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|-----------------|---------------------|-------------|-----|------------------|---------------|-------------|-----|------------------|---------------|-------------|-----|------------------|---------------|-----------|-----|------------------|-----------------|-----------|-----|------------------|-----------------|---------------------|-----|------------------|-----------------|---------------------|--|
| VIDEO SYSTEM FORMAT A - EIA (U.S. B&W) 640 x 480 B - NTSC (U.S. Color) 640 x 480 C - CCIR (European B&W) 768 x 576 D - PAL (European Color) 768 x 576 E - Ethernet (Color) 650 x 490 F - Ethernet (B&W) 650 x 490 G - Gigabit Ethernet (B&W) 1600 x 1200 H - Gigabit Ethernet (Color) 1600 x 1200 | THERMAL REGULATION 1 - NONE 2 - Internal Thermal Heat Exchange Flow Path 3/8" O.D. Tubing Connection 3 - Thermal Well for 3/16" Diameter Rod Heating Elements (Elements not Included) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ENVIRONMENTAL RATING 1 - Lab Unit (General Purpose Enclosure) 2 - NEMA 4 Weatherproof, IP 66 3 - Lab Plus (Ethernet Remote Control) 4 - Explosion Proof (U.S. 120V) or Flame Proof (Europe 230V) | FLOW PATH SPACING CONTROL (GASKET TEFLON®) 1 - Variable Gap (5µm-3,175µm), Adjustable with Sample Present 2 - Fixed Gap (3,175µm), 2" Wide Cell Width 3 - Fixed Gap (3,175 µm), Venturi Shape Centering Cell Width 4 - Fixed Gap (3,175 µm), 1/2" Wide Cell Width For options 2, 3 & 4 - 100µm, 200µm, 500µm, 1000µm & 1500µm thick gaskets are also available. Consult factory for part numbers. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SYSTEM ILLUMINATION K - Backlight L - Darkfield M - Cross Polarized N - Amplified / Focused P - Phase Contrast Q - Front & Backlight When picking options K, L, or M, all three are included and the selected option will be factory installed. | WETTED METAL MATERIAL 1 - 316L Stainless Steel 2 - Hastelloy® C276 or equal 3 - Hastelloy® C-22® or equal | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PARTICLE SIZE RANGE <table border="1"> <thead> <tr> <th></th> <th>P.S. View</th> <th>P.S. Measure</th> <th>Pixel Array</th> </tr> </thead> <tbody> <tr> <td>1 -</td> <td>(.2µm* - 2400µm)</td> <td>(.4µm*-480µm)</td> <td>@ 1600x1200</td> </tr> <tr> <td>2 -</td> <td>(.3µm* - 3400µm)</td> <td>(.6µm*-680µm)</td> <td>@ 1600x1200</td> </tr> <tr> <td>3 -</td> <td>(.4µm*- 2,175µm)</td> <td>(1µm - 435µm)</td> <td>@ 650x490</td> </tr> <tr> <td>4 -</td> <td>(.6µm*- 3,075µm)</td> <td>(1.5µm - 615µm)</td> <td>@ 650x490</td> </tr> <tr> <td>5 -</td> <td>(.5µm*- 2,175µm)</td> <td>(1.5µm - 435µm)</td> <td>@ 640x480/768 x 576</td> </tr> <tr> <td>6 -</td> <td>(.8µm - 3,075µm)</td> <td>(2.0µm - 615µm)</td> <td>@ 640x480/768 x 576</td> </tr> </tbody> </table> When picking options [1 or 2], [3 or 4], [5 or 6], the system includes a second lens for the other range in the bracket as well. The selected option will be factory installed. For larger sizes, please refer to the MACROFLOW™ sheet, TA10491-100. | | P.S. View | P.S. Measure | Pixel Array | 1 - | (.2µm* - 2400µm) | (.4µm*-480µm) | @ 1600x1200 | 2 - | (.3µm* - 3400µm) | (.6µm*-680µm) | @ 1600x1200 | 3 - | (.4µm*- 2,175µm) | (1µm - 435µm) | @ 650x490 | 4 - | (.6µm*- 3,075µm) | (1.5µm - 615µm) | @ 650x490 | 5 - | (.5µm*- 2,175µm) | (1.5µm - 435µm) | @ 640x480/768 x 576 | 6 - | (.8µm - 3,075µm) | (2.0µm - 615µm) | @ 640x480/768 x 576 | INPUT POWER A - 120 V AC / 60Hz / 250W B - 230 V AC / 50Hz / 250W |
| | P.S. View | P.S. Measure | Pixel Array | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 - | (.2µm* - 2400µm) | (.4µm*-480µm) | @ 1600x1200 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 - | (.3µm* - 3400µm) | (.6µm*-680µm) | @ 1600x1200 | | | | | | | | | | | | | | | | | | | | | | | | | | |
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SPECIFICATIONS

- Shutter Speed: Variable Up To 1/100,000 sec
 - Weatherproof Seals on Camera and Light Source
 - * Verify Required Wavelength of Light for Application.
- Visible Light Allows for Particles .7 Micron(µm) and Larger.

- 1/2 inch flow connections (two in and two out, with two plugs)
- Optional Laboratory Flow Loop Steel Sample Feed

CANTY

JM Canty Inc
JM Canty Intl Ltd

Buffalo, NY USA
Dublin, Ireland

Ph: (716) 625 4227
Ph: +353 (01) 882 9621

Fax: (716) 625 4228
Fax: +353 (01) 882 9622