

# Microbridge Airflow Sensors

## Particle Contamination and Filter Manufacturers

### NOTICE

Dust particle contamination may be present in some applications. Appropriate measures should be taken to minimize the effect of particulate contamination.

The sensor design directs dust particles in the air stream flow past the sense element parallel to its surface. In addition, the microstructure IC produces a thermophoretic effect, which repels micrometer-sized dust particles away from the microbridge structure.

Dust adherence to chip edges and channel surfaces can be prevented using a simple filter. A disposable five-micron filter used in series on the upstream side of the airflow device will provide adequate filtering in most applications.

### CAUTION

#### PRODUCT DAMAGE

AWM Microbridge Mass Airflow Sensors are **NOT** designed to sense liquid flow and will be damaged by liquid flow through the sensor.

### U.S. Suppliers

#### Pall Corporation

2200 Northern Blvd.  
East Hills, NY 11548-1289  
Tel: (516) 484-5400  
1-800-645-6532 (USA Only)  
Fax: (516) 484-6164  
Internet: www.pall.com

#### Pall - DFFH200

These filters exhibit little lot-to-lot variation. Pressure drop at 1000 sccm mass flow is less than 0.010" H<sub>2</sub>O. They are relatively expensive and larger in size.

#### Pall Gelman Sciences

600 South Wagner Road  
Ann Arbor, MI 48103-9019  
Tel: (734) 665-0651  
1-800-521-1520 (USA Only)  
Fax: (734) 913-66114  
Internet: www.pal.com/gelman

#### Gelman Acrodisc - 4199

These filters exhibit roughly 25% lot-to-lot variation. Differential pressure drop is approximately 0.130" to 0.160" H<sub>2</sub>O at 100 sccm and 0.600" to 0.900" H<sub>2</sub>O at 500 sccm mass flow. These filters are considered medically sterile and are relatively small in size.

#### Gelman Acro - 50 4258

These filters are highly efficient and exhibit little lot-to-lot variation. Typical pressure drop across the filter is 0.030" H<sub>2</sub>O at 100 sccm mass flow. They are larger in size, medium priced and considered medically sterile.

#### Parker Hannifin Corp. - Filtration Group Finite Filter Company

500 Glaspie Street  
Oxford, MI 48371  
Tel: (810) 628-6400  
Fax: (810) 628-1850  
Internet: www.parker.com

#### Finite Filter - IDN-14G

Finite filters exhibit minor lot-to-lot variation. Differential pressure drop is less than 0.020" H<sub>2</sub>O at 100 sccm mass flow and less than 0.060" H<sub>2</sub>O at 500 sccm mass flow. These filters are smaller in size and made of transparent plastic for ease of inspection.

### International Suppliers

#### AUSTRALIA

Pall Gelman Sciences  
P.O. Box 4100  
Lane Cove DC, Sydney  
NSW 2066  
Tel: (61-29) 428-2333  
Fax: (61-29) 428-5610

#### FRANCE

Pall Gelman Sciences  
Cite Descartes - 10 allée  
Lorentz  
77420 Champs sur Marne  
Tel: (33-1) 6461-5252  
Fax: (33-1) 6461-5262

#### GERMANY

Pall Gelman Sciences  
Arheilger Weg 6  
D-64380 Roßdorf  
Tel: (49-6) 154-60220  
Fax: (49-6) 154-602260

#### JAPAN

Pall Gelman Sciences  
1-9-12 Kita-Ueno  
Taito-ku, Tokyo 110  
Tel: (81-3) 3844-5411  
Fax: (81-3) 3844-5433

#### UNITED KINGDOM

Gelman Sciences, Ltd.  
Brackmills Business Park  
Caswell Road  
Northampton NN4 7EZ  
Tel: (441-604) 70-4704  
Fax: (441-604) 70-4724

#### BRAZIL

Parker Hannifin Industria e Comercio Ltda.  
Irlimp Filter Division  
Via Anhanguera, KM, 25,5 - Trevo Perus  
05276-000 Sao Paulo, SP, Brazil  
Tel: (55) (11) 847-1222  
Fax: (55) (11) 847-1610

#### FINLAND

Parker Hannifin Corporation  
Finn Filter Division  
Fin-31700  
Urjala AS., Finland  
Tel: (358) 37-54100  
Fax: (358) 37-54100

#### UNITED KINGDOM

Parker Hannifin Corporation  
Filter Division Morley  
Peel Street  
Morley, Leeds  
LS27 8EL England  
Tel: (44) 113 253-7921  
Fax: (44) 113 252-7815