

Mikro-Charge™ LeakGauge

An easy to use, ultra reliable leak detector for bag houses, cartridge collectors, bin vents, and cyclones.

The Mikro-Charge LeakGauge does its job without need for baseline data and without signal tuning. Simply apply power and the general condition of the filter is instantly indicated by the Leak Gauge.

Operation

The Mikro-Charge LeakGauge features an easy to read display showing leak status:

- **Low** reading means there are no leaks.
- **Midrange** reading indicates developing leaks are present.
- **High** reading means the filter is leaking.

An alarm point can be set by moving an indicator up or down the gauge with the lockable key pad. For more detailed monitoring and precise alarm point control, the LeakGauge includes an absolute digital readout corresponding to the analog gauge.

To handle the very wide signal variations caused by filter cleaning cycles and developing leaks, gauge scaling is logarithmic. The log scale enables monitoring both low baseline levels (cleaning cycle off) and high peak signals (cleaning cycle on). To take advantage of the fact that cleaning cycles amplify the existence of developing leaks, a peak-trac function is available to capture peak readings and detect leaks well before emissions are visible.

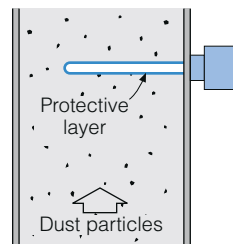
The informative operator interface combined with the field-proven reliability of Mikro-Charge technology, have made the LeakGauge



the device of choice for basic leak detection. For advanced leak detection, locating leaks, and continuous mass monitoring, refer to our Mikro-Charge Continuous DustGauge.

Operating Principle

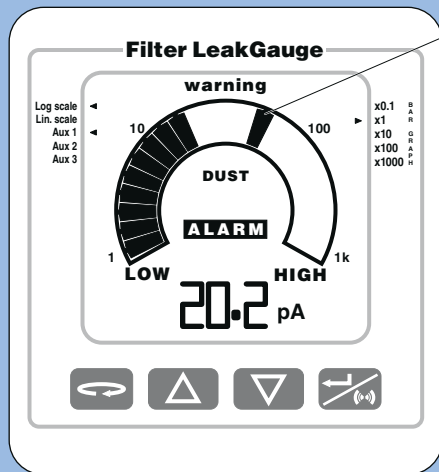
The Mikro-Charge LeakGauge utilizes a combination of induction-sensing and protected-probe technologies. As dust particles escape a filter and flow near a probe placed downstream of the dust source, small signals are induced into the probe by particle electrons (charge). A digital signal processor converts the induced signal into an absolute output proportional to leakage. The probe's protective layer, in combination with induction sensing, ensures reliable operation even with condensate or conductive dust on the probe.



Benefits

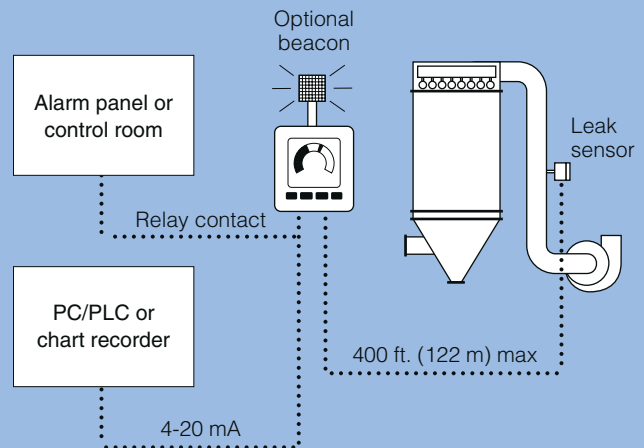
- Eliminates unplanned shutdowns and manual inspections.
- Protects downstream blowers, oxidizers, HEPAs, etc.
- Reliable in tough applications (dryers, smelters, carbon, etc.).
- Easy to use, informative and virtually maintenance-free.
- Prevents the escape of valuable powders to atmosphere.
- Meets EPA regulations for basic fabric filter leak detection.
- Helps you keep a clean workplace and be a good neighbor.

Control Unit



Alarm point indicator

Example Baghouse Installation



LeakGauge Specifications

Control Unit

| | |
|----------------------|--|
| General | Conformal coated; temperature tested. |
| Display | Custom analog/digital LCD. |
| Keypad | 4 button membrane; lockable via secret code. |
| Electronics accuracy | +/-5% of output range. |
| Calibration | Absolute; proportional to leakage. |
| Supply | 115/230 VAC 50/60 Hz std. 24 VDC opt.. |
| Consumption | 5 watts max. |
| Temperature | -13 to 160°F (-25 to 70°C). |
| Relay | SPST, 5A at 240 VAC. |
| 4-20mA option | 500 Ohms, isolated available. |
| Enclosure | NEMA 4X aluminum std. NEMA 4/7/9 opt. |
| Backlight option | 10 yr. life, fiber optic LED. |
| Beacon option | 10 yr. LED, tower style, red. |
| Approvals | CE approved; FM, CSA consult factory. |

Sensor

| | |
|-----------------|---|
| General | Not affected by vibration, temperature or alignment. |
| Probe length | 3", 5", 10" std. 15", 20", 30", 36" opt. |
| Sensor cable | Coaxial; 400 ft. (122m) max. |
| Mount | ½" NPT std. Quick Clamp opt. |
| Materials | 304SS, polymer/conductive core |
| Enclosure | NEMA 4X aluminum std. NEMA 4/7/9 opt. |
| Max temperature | 250°F (120°C) std. 450°F (232°C) opt. Higher avail. |
| Pressure | Full vacuum to 30 psig (12 bar) std. Higher pressures opt. |

Operating and Application Ranges

| | |
|----------------|--|
| 5.0 pA unit | At least 5.0 to 5,000 mg/m ³ (0.002 to 2.0 gr/cf)*; barely visible to visible. |
| 0.5 pA unit | At least 0.5 to 5,000 mg/m ³ (0.0002 to 2.0 gr/cf)*; invisible to barely visible. |
| Fluid velocity | 300 ft. (91m) per min. & higher std. Lower velocities opt. |
| Particles | Any type >0.3 micron. For <10 micron, 0.5 pA unit recommended. |

* Approximate guide. For correlation to mass, the Mikro-Charge Continuous DustGauge must be used.

Specifications subject to change



A member of Beacon Industrial Group

United States
Menardi
One Maxwell Drive
Trenton, SC 29847
www.menardifilters.com
Tel: 800-321-3218
803-663-6551
Fax: 803-663-4029
info@menardifilters.com

United Kingdom
Menardi
Chadwick House
Birchwood Park
Warrington, Cheshire WA3 6AE
England
Tel: +44-01925 849220
Fax: +44-01925 849221
menardi@uk.mikropul.com

France
Filter-Media
15 Quai Tilsitt
69002 Lyon
France
Tel: +33 472 56 9010
Fax: +33 478 37 6448
info@menardifilters.com

South American Representative
Seventy-A Consultoria S/C Ltda.
Rue Comendador Francisco Pettinati,
389-cj 04
São Paulo—SP Brazil
Tel: 55 11 3743 6228
Fax: 55 11 3742 5512
info@menardifilters.com