

MEDICAL APPLICATIONS

Laparoscopic Surgery

PRODUCTS



AWM700 Series



AWM5000 Series



AWM40000 Series



AWM2000 Series

BENEFIT:

- The cost of using these sensors is lower than that of hotwire anemometers.

CONTACT US

For application assistance, current specifications or name of the nearest Authorized Distributor, check the Honeywell web site or call:

1-800-537-6945 USA
1-800-737-3360 Canada
1-815-235-6847 International

FAX 1-815-235-6545 USA

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BACKGROUND:

Laparoscopy is the examination of the interior of the body, usually the abdomen, using a laparoscope, a thin, fiber-optic tube with a lens at one end. A small incision is made in the abdomen and the laparoscope is inserted. The abdomen is then inflated with a gas to separate the organs to provide a better view of the interior.

SOLUTION:

AWM mass airflow sensors may be used to monitor inflation of the abdomen during laparoscopic surgeries. This sensor provides feedback to a valve for automatic control of the gas flow. Table 1 provides a comparison of the Honeywell AWM Series mass airflow sensors for use in this application.

Table 1: Comparison of the Honeywell AWM Mass Airflow Sensors

AWM Sensor Series	Flow Type	Advantage	Disadvantage
AWM700 AWM5000	Direct	<ul style="list-style-type: none"> • Flow type provides simplest approach • Flow type provides an exact measurement of the total breath • Sensor provides best zero flow accuracy and null stability • Sensor is rated for overpressures up to 4 bar (60 psi) 	<ul style="list-style-type: none"> • Sensor is large
AWM40000	Sampled	<ul style="list-style-type: none"> • Sensor is small • Sensor is rated for overpressures up to 10 bar (150 psi) allowing it to be located anywhere in the system • Sensor is easily mounted without tubing due to its manifold mounting capability (face sealed with o-rings) 	<ul style="list-style-type: none"> • System design is more complex because the customer must: <ul style="list-style-type: none"> - laminarize flow - design the bypass
AWM2000	Sampled	<ul style="list-style-type: none"> • Sensor has low cost • Sensor is rated for overpressures up to 1.5 bar (25 psi) 	<ul style="list-style-type: none"> • System design is more complex because the customer must: <ul style="list-style-type: none"> - laminarize flow - design the bypass

Additional Mass Airflow Sensor product information is available on the web at: <http://content.honeywell.com/sensing/prodinfo/massairflow/>