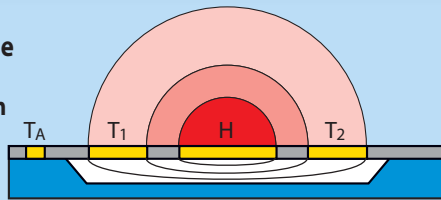


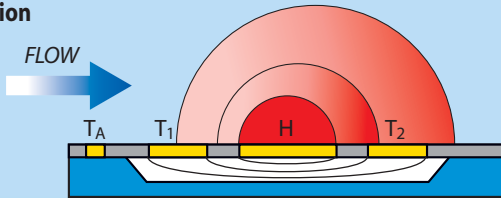
Porter MPC incorporates a fast response, high accuracy MicroFlow sensor unaffected by pressure and temperature fluctuations.

Temperature Distribution Profile

A) No Flow Situation



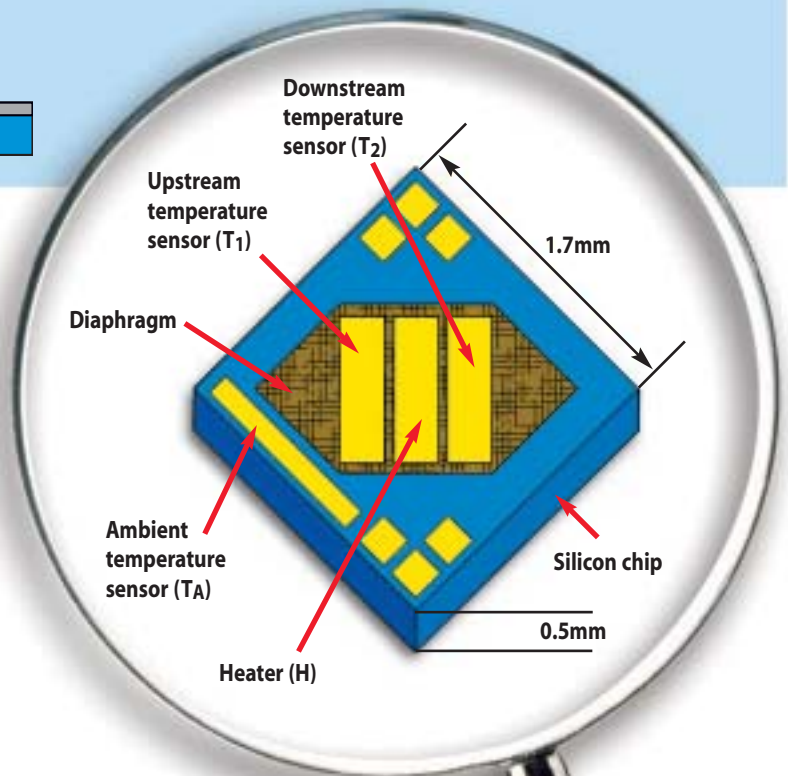
B) Flow Situation



Measurement principle of the MicroFlow sensor

With no gas flow (A) the temperature distribution around the heater (H) is symmetrical. With gas flow (B) there is a distortion of the symmetry in the temperature distribution as the temperature at sensor T₁ begins to decrease, while the temperature at sensor T₂ increases. This temperature difference is used to calculate the mass flow rate.

The MicroFlow silicon micro-machined sensor is manufactured utilizing MEMS and thin film technologies. This results in an extremely fast, accurate and reliable thermal mass flow sensor that is unaffected by pressure and temperature fluctuations. The MicroFlow sensor chip measures 1.7 mm x 1.7 mm, with a thickness of 0.5 mm.



Ordering Information

MODEL NUMBER	NITROGEN EQUIVALENT FLOW RANGE
MPC95-BBNSP1	0.02 to 0.5 SLPM
MPC02-BBNSP1	0.08 to 2.0 SLPM
MPC05-BBNSP1	0.1 to 5.0 SLPM
MPC20-BBNSP1	0.4 to 20 SLPM

One accurate compact unit replaces both gas mass flow controller and interface module.

