HIGH FLOW
Gas Flow Controller | GFC™

EXCELLENCE IN FLOW CONTROL

Pivotal Systems' GFC™ paves the way for the future of gas flow control. The GFC™ combines Pivotal's patented, high accuracy GFM™ system with patented control valve technology. As such, it leapfrogs the current MFC technology by offering an order of magnitude improvement on key flow metrics, thereby enabling advanced wafer-manufacturing processes. At Pivotal Systems, we aim to significantly enhance fab productivity and capital efficiency by utilizing our innovative solutions.

Benefits of GFC™

- Highly accurate NIST traceable measurements run-to-run
- Significantly reduces downtime
- Widest flow range
- Industry's best flow accuracy for entire flow range
- Advanced flow monitoring/self-diagnosis

Key Features

- No calibration ever required
- Innovative control technology
- Unaffected by variations in the upstream or downstream pressure or temperature
- No fixed orifice

PIVOTAL
SYSTEMS

High Flow GFC Specifications (GFC5L™, GFC20L™, GFC50L™)

PERFORMANCE	Flow Range	100 sccm - 50000 sccm (3 part numbers cover this range)
	Flow Accuracy	±1% of setpoint for 10%-100% full scale: 0.5 slm - 5 slm (GFC-5L), 2.0 slm - 20 slm (GFC-20L), 5.0 slm to 50 slm (GFC-50L) ±0.25% of full scale for flows 2% to 10% full scale: 0.1 slm - 0.5 slm (GFC-5L), 0.4 slm - 2.0 slm (GFC-20L), 1.0 slm - 5.0 slm (GFC-50L)
	Repeatability	±0.25% of setpoint for 10% - 100% full scale
	Settling Time	≤300 ms 10% - 100% full scale, ≤ 500 ms 2% - 10% full scale
	Leak Integrity	≤ 1E-9 atm•cc/sec (He)
	Leak By Rate	2.5 sccm (GFC-5L), 10.0 sccm (GFC-20L), 25.0 sccm (GFC-50L)
OPERATING CONDITIONS	Supply Pressure	Standard: 276 - 448 kPaG (40 - 65 psig)
	Downstream Pressure	Vacuum to 101 kPa (0 - 760 Torr)
	Design Pressure (Burst Pressure)	2.07 MPaG (300 psig)
	Operating Temperature	15°C – 50°C
MATERIALS	Wetted Surface	316 SS per Semi F20
	Surface Finish	5 µin average Ra
	Seals	PCTFE
ELECTRICAL	DeviceNet	11 – 24 VDC, 5 W
	Analog and RS-485	±15 VDC; 150 mA
	In-Rush Current	<200 mA