

EPS5000 Series

Exhaust Pressure Controller

This exhaust pressure controller is an equipment to prevent fluctuation of the manufacturing process by the pressure of the exhaust duct line including the single wafer cleaning device.

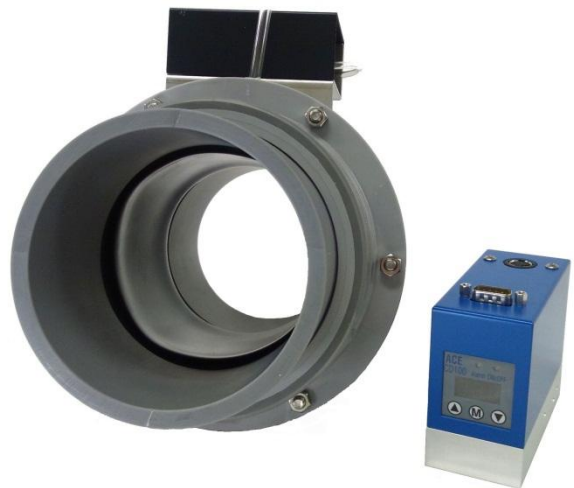
The pressure controller was developed a pneumatic rubber expansion valve with high speed, small and an ultra disadvantageous low pressure.

Main applications

1. Chamber pressure control of single wafer cleaning device
2. Clean Draft chamber and chamber pressure control of clean track
3. Equipment and process where pressure fluctuation of exhaust line is received.

Main Specifications

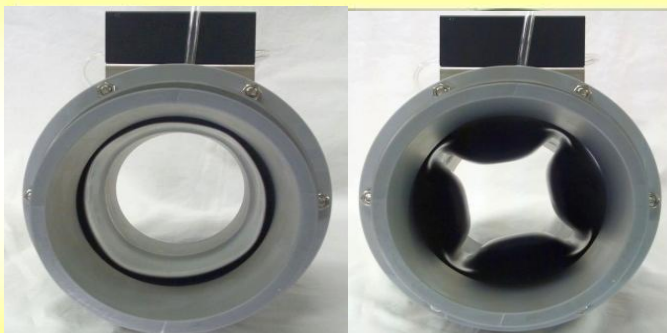
1. Exhaust piping: 50A, 100A, 150A, and 200A.
2. Adjustment pressure (primary): $-50 \sim -999\text{Pa}$
3. Flow rate: $10\text{m}^3/\text{min}$. based on 150A
4. Response Speed: Within 2 sec.
5. Pressure loss: 10Pa or below with maximum flow



Patent Pending

(Pneumatic rubber expansion valve)

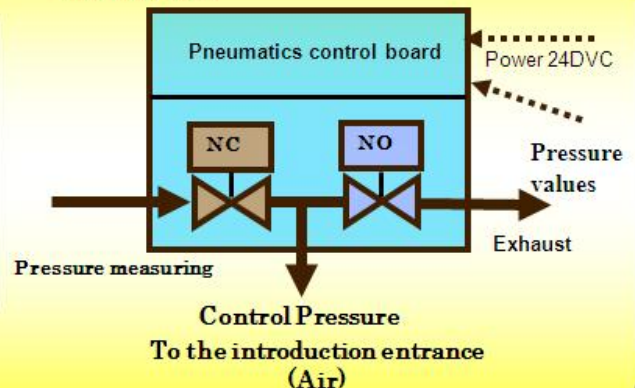
* Simple structure, No sliding surface



Open angle by expansion

(Electro-pneumatic transducer system)

* Pressure measuring control with exhaust control solenoid valve



EPS 500Series

Exhaust Pressure Controller Specification

Model	EPS-5200	EPS-5150	EPS-5100
Connection pie dia.	200A	150A	100A
Flow rate range: Primary Note * 1	0.5~15 Nm ³ /min	0.5~10 Nm ³ /min	0.3~5 Nm ³ /min
Pressure loss	15 Nm ³ /min (air at below 50 Pa)	10 Nm ³ /min (air at below 20 Pa)	5 Nm ³ /min (air at below 20 Pa)
Connection of control Valve	200A piping	150A piping	100A piping
Pressure range adjustment {primary pressure}	-50~-999 Pa (note *2)		
Secondary pressure	-1kPa or below (note *2)		
Pressure accuracy	+/- 2% full scale		
Ripple control (Stationary control fluctuation)	+/- 1% full scale		
Withstanding pressure (primary pressure)	50kPa (note *2)		
Responsiveness	Within two(2) seconds for 98% of the setting (Typical)		
Fluid Temperature	10~50°C		
Ambient Temperature (accuracy assurance temp.)	15~35°C		
Power-supply voltage	24V DC +/- 10%		
Exterior output	Pressure signal: 1~5V DC: Alarm: NPM, Transistor open connector: DC 30 V <100 mA		
Controller (CD-100)	Switchable site and/or outside setting		
Exterior setting signal	Pressure set signal:4~20mA		
Alarm signal	Pressure difference (arbitrary setting)		
Serial signal	RS485		
Supply ari (N2) pressure	0.3 +/- 0.1 MPaG		
Each port	φ6 mm one touch : Pressure instrumentation fixed 3 m long tube (option) Valve gas supply: 2m		
Wetted gas material	PVC, EPDM		
Mounting position	Free-mounting position		
Control Valve position	Power off for keeping valve control position		

Note:

*1: It is likely not to reach the set pressure when flowing quantity doesn't come up to the lowest pressure.

*2: Differential pressure with an atmospheric pressure

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