

Axial Fan Glossary

Nominal Value

The average value of data based on actual measurements. Nominal values cannot be treated as rated values. Ask your OMRON representative for details on rated values.

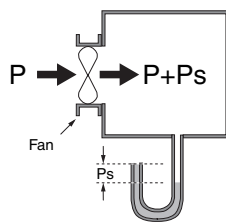
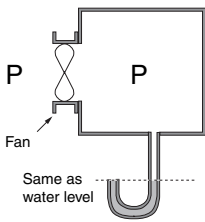
Flow Rate: Q (m³/min.)

The volume of air discharged by the Fan in a unit of time.

Static Pressure: Ps (Pa)

The pressure difference across the front to the back of the Fan generated by the discharged air, which is unaffected by air flow speed.

1. The air pressure across the front to the back of the Fan does not change when the Fan is stopped.
2. Static pressure (Ps) is generated at the front of the Fan when it rotates.

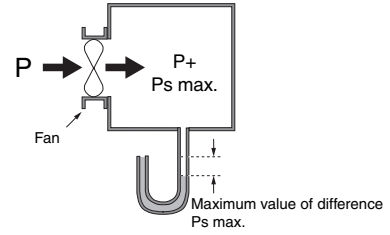


Maximum Flow Rate: Q max. (m³/min.)

The volume of air discharged by the Fan when the static pressure is adjusted to zero (Pa) at the flow measurement unit.

Maximum Static Pressure: Ps max. (Pa)

The pressure difference inside and outside the Unit when the flow rate is adjusted to zero (0 m³/min.) at the flow measurement unit. This would be the pressure in front of the Unit when the front of the fan was completely sealed.



System Impedance

The flow resistance inside a mounted Axial Fan caused by the density of parts and shape of the flow path.

Impedance Protection

A method of preventing burning damage when the motor is restricted from rotating by setting the motor winding impedance (AC resistance) to a value giving a temperature rise in the windings below the temperature at which burning occurs.

Thermal Protection

A method of preventing burning damage when the motor is restricted from rotating by setting a thermal element to interrupt operation before the motor reaches a temperature at which burning occurs.