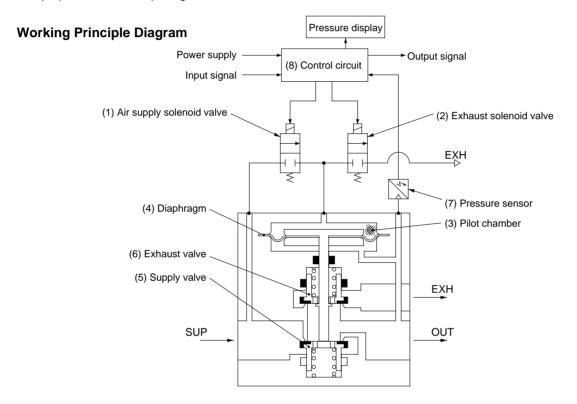
## Electro-Pneumatic Regulator Series ITV2000/3000

## **Working Principles**

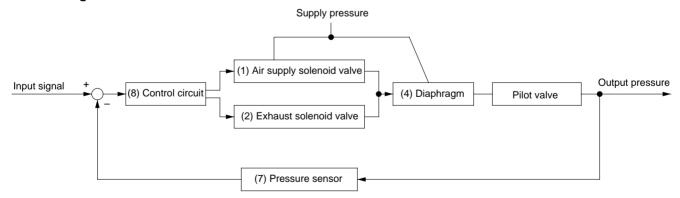
When the input signal rises, the air supply solenoid valve (1) turns ON, and the exhaust solenoid valve (2) turns OFF. Therefore, supply pressure passes through the air supply solenoid valve (1) and is applied to the pilot chamber (3). The pressure in the pilot chamber (3) increases and operates on the upper surface of the diaphragm (4).

As a result, the air supply valve (5) linked to the diaphragm (4) opens, and a portion of the supply pressure becomes output pressure.

This output pressure feeds back to the control circuit (8) via the pressure sensor (7). Here, a correct operation functions until the output pressure is proportional to the input signal, making it possible to always obtain output pressure proportional to the input signal.



## **Block diagram**



AC

ΑV

ΑU

AF

AR

IR

VEX

AW

AMR

AWM

AWD

1 I V

VBA

VΕ

۷Y

G

AL