



SPECIFICATION

Model PE 1000 / PE1500 / PE 1000S / PE 1500S

Max. Supply Pressure 150 psig

Signal Pressure 100 psig

Output Pressure 100 psig

Input Signal Connection 1/4" NPT

Supply & Out-Put Connections 1/2" NPT or 3/4" NPT

Flow Capacity 115 NM 3 HR at 50 psig

Pressure Ratio 1:1

Dead band +/-5%

Temperature -40°C to +80°C

Body Aluminum /SS

SALIENT FEATURES

High Accuracy • Quick Response • Greater Stability • Low Air Consumption • Large Flow Maintains Correct Actuator Position at High Stroking Speeds • Trouble free service • Economically

PRODUCT DESCRIPTION

The Philair volume booster is used to speed up the normal stroking time of actuator, when the piping between instrumentation and operational area is long or when operational area has large capacity.

PRODUCT OPERATION

The volume booster is used along with positioner for throttling operation of control valve to obtain high operating speeds. The positioner output is connected to signal port, line pressure to IN port and OUT port to the actuator. Increase of signal pressure causes movement of upper diaphragm along with lower diaphragm S/A, resulting in closing of exhaust port and opening of inlet port. When the outlet pressure equals the signal pressure, forces acting on both the diaphragm come to equilibrium and both inlet and outlet ports are closed. With the decrease of signal pressure the upward movement of diaphragm causes opening of exhaust port and closing of inlet port, thereby vending connected between signal and output ports acts as a damping device and permits adjustment of unit to obtain stability with maximum operating speed