Auxiliary Equipment for Pnumatic Control Valve Model IL100-02, IL201-02/IL211-02

Volume Booster, Air Lock Valve

OVERVIEW

Valve operations can be set and speeds regulated by installing auxiliary equipment in pneumatic control valve air pipes. Here, specifications of typical auxiliary equipment used widely for control valves are presented.

Volume Booster

Model IL100-02

(Manufactured by SMC Co., Ltd.)

A volume booster increases the speed of the pneumatic actuator to improve the operation delay performance of the control valve. A volume booster is used when the transmission distance of pneumatic pressure signals emitted from the instrument is large or when the capacity of the actuator is large.

SPECIFICATIONS

Connection port diameter

Rc1/4

Inlet and outlet air pressure ratio

1:1

Supply air pressure

Max. 890 kPa {9 kgf/cm²}

Inlet and outlet air pressure

Max. 690 kPa {7 kgf/cm²}

Outlet flow rate

600 L/min [N] (when the supply is 490 kPa {5 kgf/cm²})

Ambient temperature range

-5 to 60 °C

Main material

Diecast aluminum



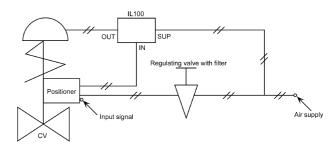


Figure 1. Model IL 100 installation example

Air Lock Valve

Model IL201-02, IL211-02 (Manufactured by SMC Co., Ltd.)

If air supply to a control valve is stopped due to an abnormal pressure drop, the air pressure to the actuator becomes abnormal.

An air lock valve is used to keep the valve position normal by maintaining normal air pressure. It maintains air pressure until the supply air pressure recovers to the normal level. After the air supply pressure recovers, the control valve is controlled by the normal method.

SPECIFICATIONS

Application

Model IL201-02 used for HA, VA, and spring GOM, etc., for single-action actuator

Model IL211-02 used for VP and springless GOM, etc. for double-action actuator

Connection port diameter

Rc1/4

Signal pressure

Max. 970 kPa {9.9 kgf/cm²}

Pressure setting range

140 to 690 kPa {1.4 - 7 kgf/cm²}

Cutoff pneumatic circuit pressure

Max. 690 kPa {7 kgf/cm²}

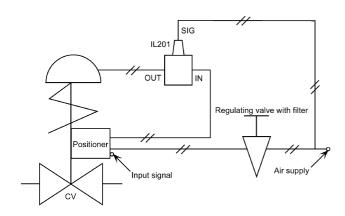
Ambient temperature

-5 to 60 °C

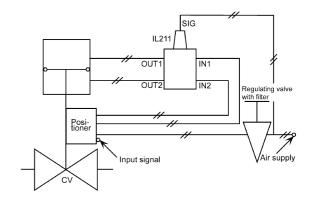
Main material

Diecast aluminum





Model IL201 installation example



Model IL211 installation example

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