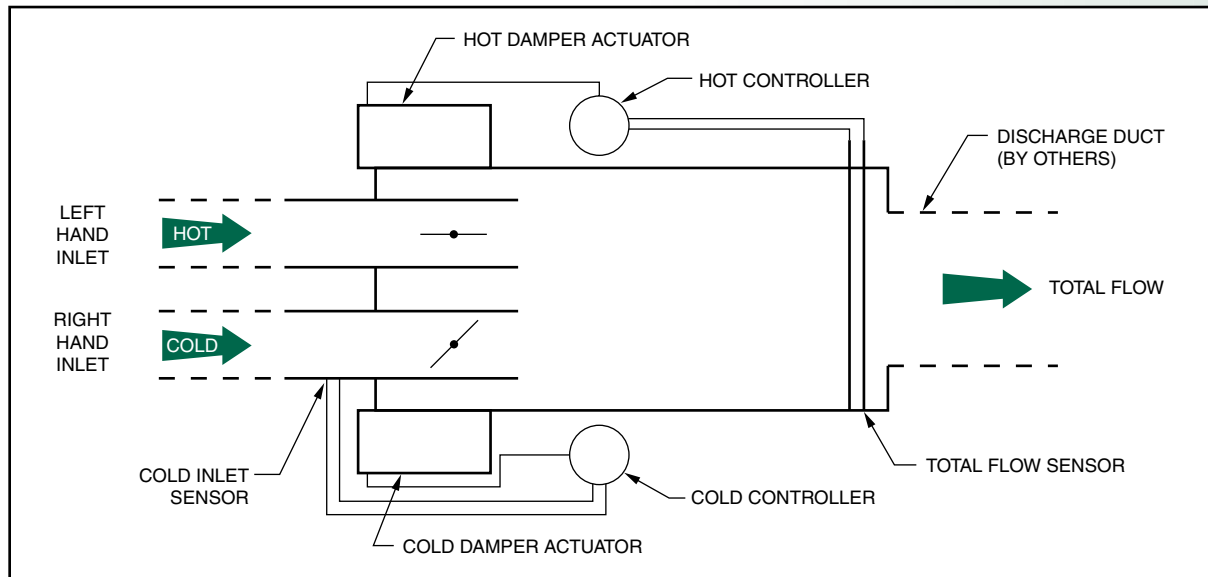


I-T MIXING SEQUENCES

- COMBINATION INLET & TOTAL (I-T) AIR FLOW SENSING
- VAV HOT & COLD PRIMARY AIR
- PRESSURE INDEPENDENT

Model DU, I-T Air Flow Control Sequences control both flow and temperature of the supply air to the conditioned space. Air flow control is maintained by two pressure independent velocity controllers, each responsible for the control of cold and hot air flow, respectively. The air flow sensors, one each for the "cold controller" and the "hot controller", are arranged in series. One of the flow sensors is located in either the cold or hot supply inlet of the air terminal, and the other sensor is located at the discharge end of the air terminal. The total sensor at the discharge measures the combined hot and cold or total flow to the space. This arrangement is ideal for mixing of hot and cold flow while maintaining a constant flow rate from the air terminal to the space. Variable discharge temperatures are obtained by hot and cold mixture ratios.

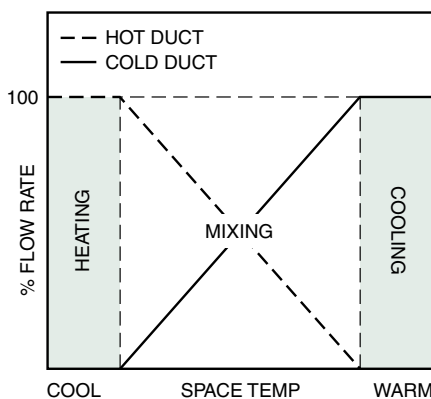
Figure 1: Example of Normally Closed Cold Damper with Inlet Sensor & Normally Open Hot Damper with Total Sensor



All I-T sequences are available with any combination of normally open or closed primary dampers (pneumatic) for use with direct or reverse action thermostats.

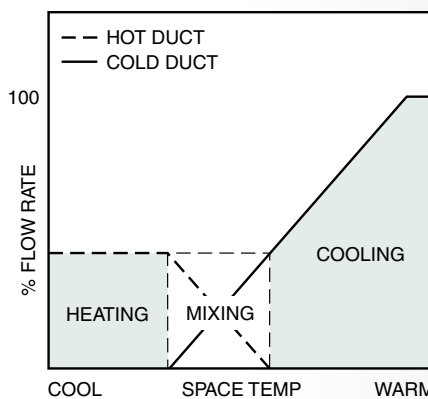
I-T1 SEQUENCE

- Constant Total Air Flow



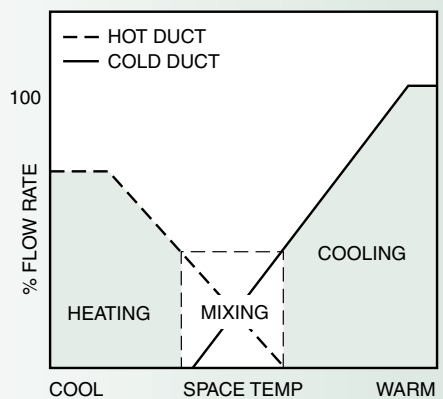
I-T2 SEQUENCE

- Variable Total Air Flow With Mixing At Minimum Flow



I-T3 SEQUENCE

- Dual Maximum Variable Total Air Flow With Mixing At Minimum Flow

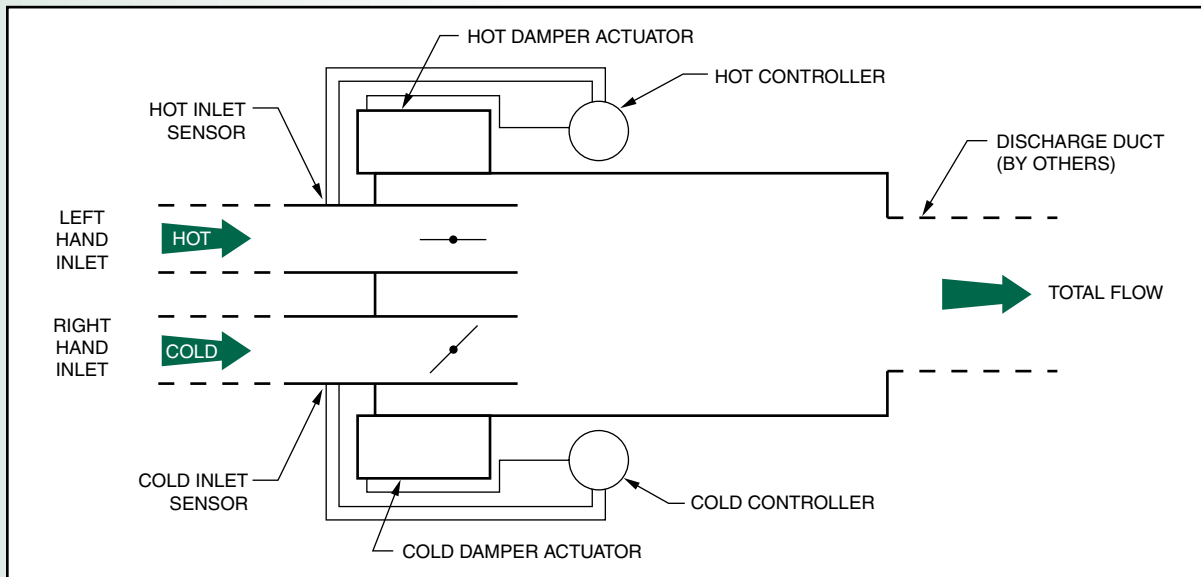


I SEQUENCES

- INLET (I) AIR FLOW SENSING
- VAV HOT & COLD PRIMARY AIR
- PRESSURE INDEPENDENT

Model DU, I Sequences control both flow and temperature of the supply air to the conditioned space. Air flow control is maintained by two pressure independent velocity controllers, each responsible for the control of cold and hot air flow, respectively. The air flow sensors, one each for the “cold controller” and the “hot controller”, are arranged in parallel. One of the flow sensors is located in the cold supply inlet of the air terminal, and the other sensor is located in the hot supply inlet. Although inlet sensing sequences typically provide no mixing of hot and cold air, variations of mixing may be achieved with pneumatic controllers by varying their reset range & start point. I sequences are often used with Direct Digital Controls.

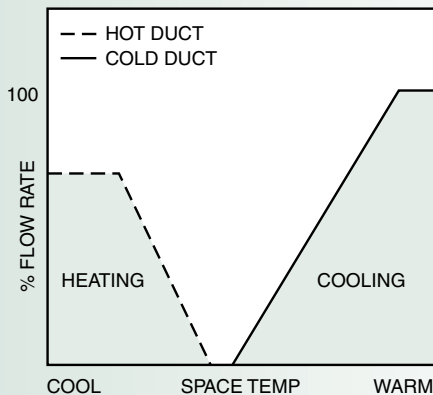
Figure 2: Example of Normally Closed Cold Damper with Inlet Sensor & Normally Open Hot Damper with Inlet Sensor



All I sequences are available with any combination of normally open or closed primary dampers (pneumatic) for use with direct or reverse action thermostats.

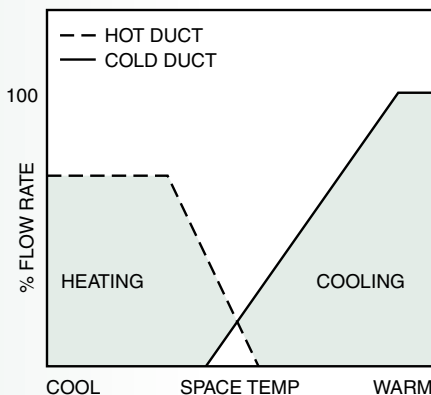
I-1 SEQUENCE

- Dual Maximum Flow With Zero Minimum - No Mixing



I-1A

- Dual Maximum Flow With Zero Minimum, & Adj. Mixing Overlap



I-2 SEQUENCE

- Dual Maximum & Dual Minimum Flow - No Mixing - N.C. Cold/N.O. Hot

