

# Low Leakage



#### **HCDR-351**

- 2 cfm/ft<sup>2</sup> at 10 in. wg
- Heavy-duty round flanged frame
- Optional mounting holes on the flange
- Round butterfly style blade
- Silicone blade seal (field replaceable for easy maintenance)
- Wide variety of actuators available
- ASME AG-1 leakage class 1B



#### HBTR-151, 451, & 551

- Zero leakage up to 30 in. wg
- Heavy-duty flanged channel frame
- Optional mounting holes on the flange
- Round butterfly style blade
- Silicone blade seal (field) replaceable for easy maintenance)
- Wide variety of actuators available
- Bubble-tight leakage per AMCA 500D and ASME AG-1 leakage class OA



#### **HCD-221**

- $2\frac{1}{2}$  cfm/ft<sup>2</sup> at 10 in. wg
- Heavy-duty flanged channel frame
- Optional mounting holes on the flange
- Double skin blades
- Silicone blade seal
- Wide variety of actuators available
- ASME AG-1 leakage class 1B



#### **HBT-221**

- Zero leakage up to 10 in. wg
- Heavy-duty flanged channel frame
- Optional mounting holes on the flange
- Double skin blades
- Silicone blade seal
- Wide variety of actuators available
- Bubble tight leakage per AMCA 500D and ASME AG-1 leakage class OA

Zero Leakage

### ISOLATION DAMPERS



## Low and Zero Leakage

Venco has the largest offering of isolation dampers in the industry. These dampers are designed to provide tight shutoff with leakage as low as zero. Each is equipped with shaft seals to prevent leakage through the damper frame and silicone blade seals.

# Typical Applications

- Clean Rooms
- Chemical and Treatment Plants
- Data Centers
- Dust Collection
- Bag In Bag Out (BIBO) Filtration
  BSL3 and BSL4 laboratories
- Microelectronic Manufacturing
- Medical Facilities
- Nuclear Power Plants
- Manufacturing (Automotive, Solar Panel, Chemical, etc.)

**DAMPERS** 













		HCDR-351	HCD-221	HBT-221	HBTR-151	HBTR-451	HBTR-551
Pressure in. wg (kPa)	Maximum	20(5)	10(2.5)	10 (2.5)	10 (2.5)	30 (7.5)	30 (7.5)
Velocity ft./min. (m/s)	Maximum	6500(33)	4000(20.3)	4000 (20.3)	3900 (19.8)	6500 (33)	6500 (33)
Leakage* cfm/ft² (cmh/m²)	Maximum	Less than 1.5 at 10 in. wg (27.4 at 2.5 kPa)	Less than 1 at 1 in. wg (18.3 at .25 kPa)	0	0	0	0
Temperature °F (°C)	Maximum	400 (204)	400 (204)	250 (121)	250 (121)	250 (121)	250 (121)

<sup>\*</sup> Bubble tight leakage per AMCA 500D and ASME AG-1. For comparison, AMCA class 1A is 3 cfm/sq. ft. at 1in. wg. Consult factory for more information on bubble tight leakage test.

# Isolation Damper Comparative Leakage/Cost



