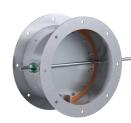


Greenheck has the largest offering of isolation dampers in the industry. These dampers are designed to provide tight shutoff with leakage as low as zero. Each is equipped with shaft seals to prevent leakage through the damper frame and silicone blade seals.



HCDR-351

- Less than 1 cfm/ft² at 10 in. wg
- Maximum pressure up to 20 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 (optional 1A)

HBTR-151, 451, & 551

- Zero leakage up to 40 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 0A



Low Leakage

HCD-221

- 2.5 cfm/ft² 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 (optional 1A)

HBT-221 & HBT-321

- Zero leakage up to 20 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 0A



Zero Leakage

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 | Manufacturing (Automotive, Solar Panel, etc.) |
Nuclear Power Plants



PERFORMANCE





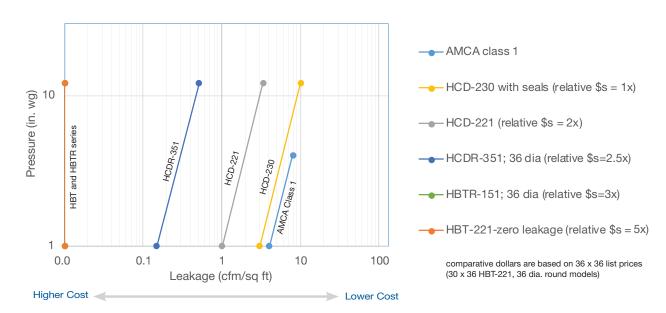




		HCDR-351	HCD-221	HBT-221	HBT-321	HBTR-151	HBTR-451	HBTR-551
Pressure in. wg (kPa)	Maximum	20 (5)	10 (2.5)	10 (2.5)	20 (5)	10 (2.5)	30 (7.5)	40 (10)
Velocity	Maximum	6500	4000	4000	4000	3900	6500	6500
ft./min. (m/s)		(33)	(20.3)	(20.3)	(20.3)	(19.8)	(33)	(33)
Leakage* cfm/ft² (cmh/m²)	Maximum	Less than 1 at 10 in. wg (18.3 at 2.5 kPa)	Less than 1 at 1 in. wg (18.3 at .25 kPa)	Bubble Tight	Bubble Tight	Bubble Tight	Bubble Tight	Bubble Tight
Temperature °F (°C)	Maximum	400 (204)	400 (204)	250 (121)	250 (121)	250 (121)	250 (121)	250 (121)

^{*} Bubble tight leakage per AMCA 500D and ASME AG-1. For comparison, AMCA class 1A is 3 cfm/sq. ft. at 1 in. wg. For more information on the bubble tight leakage test, go to www.greenheck.com.

Isolation Damper Comparative Leakage/Cost



Specify with Confidence. Specify Greenheck.Connect with your local mechanical representative to learn more.

