

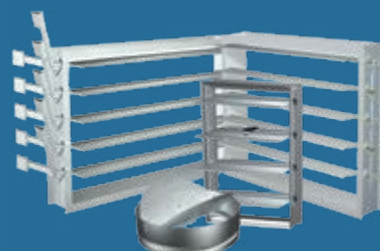
Damper Selection Guide



**Doors - Access &
Pressure Relief**



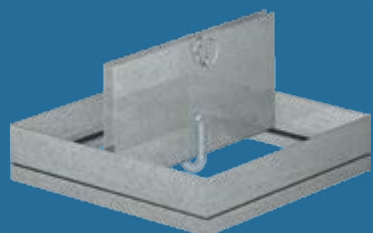
**Air Measuring
Dampers**



**Backdraft
Dampers**



Balancing Dampers



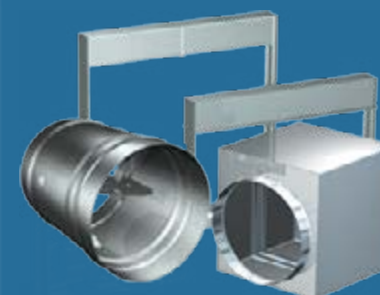
**Ceiling Radiation
Dampers**



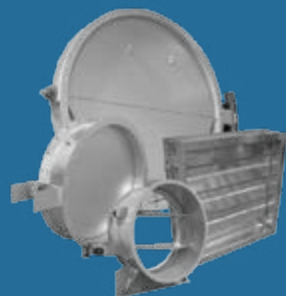
**Combination Fire
Smoke Dampers**



Control Dampers



Fire Dampers



**Heavy Duty/Industrial
Dampers**



Marine Dampers



Relief Dampers



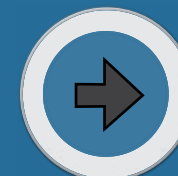
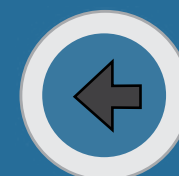
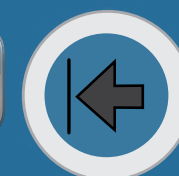
Smoke Dampers



Model	Door Type	Pressure Relief	Leakage Class	Door Maximum Size	Velocity (FPM)	Pressure (in. wg)	AMCA Listing	Submittal	Installation Instructions	CSI Specs	Drawings	
											PDF	DWG
Access Doors												
CAD	Cam	-	-	24 x 24	-	4½	-		-			
HAD	Hinged	-	-	24 x 24	-	4½	-		-			
RAD	Round	-	-	16 x 12	-	20	-		-	-		
Relief Doors												
PRAD	-	Positive	-	24 x 24	-	12	-			-		
VRAD	-	Negative	-	24 x 24	-	12	-			-		
Model	Blade Type	Blade Material	Leakage Class @ 1 in. wg	Damper Maximum Size*	Velocity Range (FPM)	Pressure (in. wg)	AMCA Listing	Submittal	Installation Instructions	CSI Specs	PDF	DWG
Air Measuring Station												
AMS	-	-	-	60 x 48	300 - 3000	-	-					
Air Measuring - Pressure Differential												
AMD-23	3V	Galvanized Steel	1A	144 x 148	300 - 2000	4	Air Performance/ Air Leakage					
AMD-33	Airfoil	Galvanized Steel	1A	144 x 148	300 - 3000	8	Air Performance/ Air Leakage					
AMD-42	Airfoil	Aluminum	1A	144 x 148	300 - 3000	6	-					
AMD-42V	Airfoil - Vertical	Aluminum	1A	74 x 48	300 - 3000	6	-					
Air Measuring - Thermal Dispersion												
AMD-23-TD	3V	Galvanized Steel	1A	120 x 120	100 - 2000	4	-					
AMD-33-TD	Airfoil	Galvanized Steel	1A	120 x 120	100 - 2000	4	-					
AMD-42-TD	Airfoil	Aluminum	1A	120 x 120	100 - 2000	4	-					
AMD-42V-TD	Airfoil - Vertical	Aluminum	1A	74 x 60	100 - 2000	4	-					

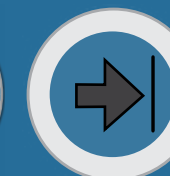
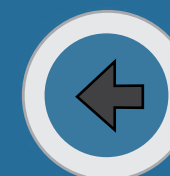
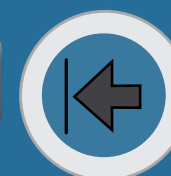
*Maximum size can be single or multiple sections.

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Model	Frame Material	Blade Material	Velocity (FPM)	Pressure (in. wg)	Counter Balance	Airflow Direction			Mounting Position	AMCA Listing	Submittal	Installation Instructions	CSI Specs	Drawings	
						Vertical Up	Vertical Down	Horizontal						PDF	DWG
Commercial Backdraft															
BD-100	Galv. Steel	Aluminum	1500	2		✓			Horizontal	Air Performance Air leakage		-			
BD-300	Galv. Steel	Aluminum	1500	2				✓	Vertical	Air Performance Air leakage		-			
EM-1x Series	Aluminum	Aluminum	3500	10	✓	✓			Horizontal						
EM-3x Series	Aluminum	Aluminum	3500	10	✓			✓	Vertical						
EM-4x Series	Aluminum	Aluminum	3500	10	✓		✓		Horizontal						
ES-1x Series	Aluminum	Aluminum	2500	2.5	✓	✓			Horizontal	Air Performance Air leakage				-	-
ES-3x Series	Aluminum	Aluminum	2500	2.5	✓			✓	Vertical	Air Performance Air leakage				-	-
ES-4x Series	Aluminum	Aluminum	2500	2.5	✓		✓		Horizontal					-	-
WD-1xx Series	Galv. Steel	Aluminum	2500	1		✓			Horizontal			-			
WD-2xx Series	Galv. Steel	Aluminum	2500	2		✓	✓	✓	Horizontal, Vertical			-			
WD-3xx Series	Galv. Steel	Aluminum	2500	2				✓	Vertical			-			
WD-400, 420, 430	Galv. Steel	Aluminum	2500	2				✓	Vertical			-			
WD-410	Galv. Steel	Aluminum	2500	2			✓		Horizontal			-			
True Round Commercial Backdraft															
WDR-53	Galv. Steel	Aluminum	2000	3		✓	○	○	Horizontal, Vertical			-			
SSWDR-53	304SS	304SS	2000	3		✓	○	○	Horizontal, Vertical			-			

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Model	Frame Material	Blade Material	Velocity (FPM)	Pressure (in. wg)	Counter Balance	Airflow Direction			Mounting Position	Submittal	Installation Instructions	CSI Specs	Drawings	
						Vertical Up	Vertical Down	Horizontal					PDF	DWG
True Round Commercial Backdraft														
WDR-53	Galv. Steel	Aluminum	2000	3		✓	○	○	Horizontal, Vertical		-			
SSWDR-53	304SS	304SS	2000	3		✓	○	○	Horizontal, Vertical		-			
Heavy Duty/Industrial Backdraft														
HB-110	Galv. Steel	Aluminum	3900	5	✓	○	○	✓	Horizontal, Vertical					
HB-120	Galv. Steel	Galv. Steel	5150	8.5	✓	○	○	✓	Horizontal, Vertical					
HB-230	Galv. Steel	Galv. Steel	5150	13.5	✓	○	○	✓	Horizontal, Vertical					
HB-240	Galv. Steel	Aluminum	6400	20	✓	○	○	✓	Horizontal, Vertical					
HB-330	Galv. Steel	Galv. Steel	6400	20	✓	○	○	✓	Horizontal, Vertical					
True Round Heavy Duty/Industrial Backdraft														
HBR-050	Painted Steel	Painted Steel	4000	5	✓	○	○	✓	Horizontal, Vertical		-			

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Model	Blade Type	Damper Maximum Size	Velocity (FPM)	Pressure (in. wg)	Operator	Submittal	Installation Instructions	CSI Specs	Drawings	
									PDF	DWG
Manual Balancing Dampers										
MBD-10	Single Blade	36 x 12	2000	1	Manual Quadrant					
MBD-10M	Single Blade	36 x 12	2000	1	Manual Quadrant					
MBD-15	3V	96 x 96	2000	4	Manual Quadrant					
MBDR-50	True Round	24	2000	1	Manual Quadrant		-			
Remote Balancing Dampers										
RBD-10	Single Blade	36 x 12	2000	1	Remote Control with 9 Volt Actuator					
RBDR-50	True Round	24	2000	1	Remote Control with 9 Volt Actuator					

Model	Blade Type	Fire Resistance Rating*	Leakage Class	Damper Maximum Size (Inches)			Submittal	Installation Instructions	CSI Specs	Drawings	
				Roof/Floor Assembly	Wood Truss Assembly	Wood Joist Assembly				PDF	DWG
Ceiling Radiation Dampers											
CRD-1	Butterfly	3 Hour	-	24 x 24	-	-					
CRD-1LP	Low Profile Butterfly	3 Hour	-	24 x 24	-	-					
CRD-1WJ	Butterfly	1 Hour (UL Wood Joist)	-	-	-	16 x 12					
CRD-1WT	Butterfly	1 Hour (UL Wood Truss)	-	-	21 x 18	-					
CRD-2	Round Butterfly	3 Hour	-	24	-	-					
CRD-2WT	Butterfly	1 Hour (UL Wood Truss)	-	-	12 x 12	-					
CRD-60	Curtain	3 Hour	-	24 x 24	-	-					
Ceiling Radiation Dampers Leakage Rated											
CRD-501	True Round	3 Hour	I	12	-	-					

* Fire rated floor/ceiling assemblies.

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Model	Blade Type	Fire Resistance Rating	Leakage Class	Damper Maximum Size*		Velocity (FPM)	Pressure (in. wg)	AMCA Listing	FM Approval	Submittal	Installation Instructions	CSI Specs	Drawings		
				Horizontal	Vertical								PDF	DWG	Revit
Corridor Fire Smoke															
CFSD-211	3V	1 hour	I	24 x 24	24 x 24	2000	6	Air Performance							
CFSD-212	3V	1 hour	II	24 x 24	24 x 24	2000	6	Air Performance							
Traditional Combination Fire Smoke															
FSD-211	3V	1½ hour	I	144 x 96	128 x 100	2000	6	Air Performance	✓						
FSD-212	3V	1½ hour	II	144 x 96	128 x 100	2000	6	Air Performance	✓						
FSD-213	3V	1½ hour	III	144 x 96	128 x 100	2000	6	Air Performance							
FSD-311	Airfoil	1½ hour	I	144 x 96	128 x 100	4000	8	Air Performance	✓						
FSD-312	Airfoil	1½ hour	II	144 x 96	128 x 100	2000	4	Air Performance	✓						
FSD-331	Airfoil	3 hour	I	144 x 96	120 x 96	4000	8	Air Performance	✓						
SEFSD-211	3V	1½ hour	I	48 x 30	88 x 72	2000	6	Air Performance							
SSFSD-211	3V	1½ hour	I	48 x 30	88 x 72	2000	6	Air Performance							
Modulating Fire Smoke															
FSD-211M	3V	1½ hour	I	144 x 72	128 x 72	2000	4	Air Performance							
FSD-311M	Airfoil	1½ hour	I	128 x 96	128 x 100	2000	4	Air Performance							
FSD-312M	Airfoil	1½ hour	II	128 x 96	128 x 100	2000	4	Air Performance							
Vertical Blade Fire Smoke															
FSD-311V	Airfoil	1½ hour	I	-	100 x 32	4000	4	-							

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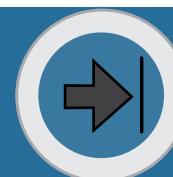
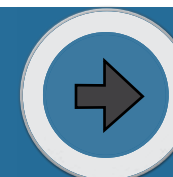
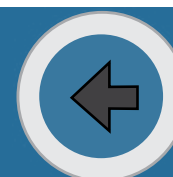
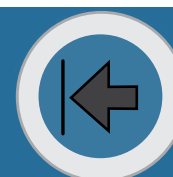
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Combination Fire Smoke Dampers cont....

Model	Blade Type	Fire Resistance Rating	Leakage Class	Damper Maximum Size*		Velocity (FPM)	Pressure (in. wg)	AMCA Listing	FM Approval	Submittal	Installation Instructions	CSI Specs	Drawings		
				Horizontal	Vertical								PDF	DWG	Revit
Out of Wall Fire Smoke															
GFSD-211	3V	1½ hour	I	48 x 48	48 x 48	2000	4	-							
GFSD-212	3V	1½ hour	II	48 x 48	48 x 48	2000	4	-							
OFSD-211	3V	1½ hour	I	36 x 36	36 x 36	2000	6	Air Performance							
OFSD-212	3V	1½ hour	II	36 x 36	36 x 36	2000	6	Air Performance							
OFSD-311	Airfoil	1½ hour	I	36 x 36	36 x 36	4000	4	Air Performance							
OFSD-312	Airfoil	1½ hour	II	36 x 36	36 x 36	4000	4	Air Performance							
True Round Fire Smoke															
FSDR-511	True Round	11/2 hour	I	24	24	3000	4	-							
FSDR-512	True Round	11/2 hour	II	24	24	3000	4	-							
SEFSDR-511	True Round	11/2 hour	I	24	24	3000	4	-							
SSFSDR-511	True Round	11/2 hour	I	24	24	3000	4	-							

*Maximum size can be single or multiple sections.

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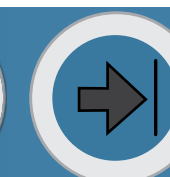
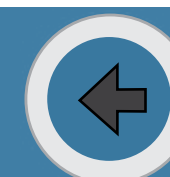
Model	Blade Type	Damper Maximum Size	Velocity (FPM)	Pressure (in. wg)	Leakage Class @ 1 in. wg	AMCA Listing	Submittal	Installation Instructions	CSI Specs	Drawings		
										PDF	DWG	Revit
Commercial Control Dampers												
VCD-20	3V	Unlimited	3000	5	-	Air Performance						
VCD-23	3V	Unlimited	3000	5	1A	Air Performance Air Leakage						
VCD-33	Airfoil	Unlimited	4000	10	1A	Air Performance Air Leakage						
VCD-34	Insulated Airfoil	Unlimited	4000	10	1A	Air Performance Air Leakage						
VCD-40	Airfoil	Unlimited	6000	6	1A	Air Performance						
VCD-42	Extruded Airfoil	Unlimited	6000	6	1A	-						
VCD-43	Extruded Airfoil	Unlimited	6000	10	1A	Air Performance Air Leakage						
SEVCD-23	3V	Unlimited	3000	5	1A	Air Performance Air Leakage						
SEVCD-33	Airfoil	Unlimited	4000	10	1A	Air Performance Air Leakage						
Face & Bypass Control Dampers												
FBH-23	3V	96 x 74	3000	5	1A	-						
FBV-23	3V	96 x 74	3000	5	1A	-						
FBH-33	Airfoil	96 x 74	4000	10	1A	-						
FBV-33	Airfoil	96 x 74	4000	10	1A	-						
FBH-43	Extruded Aluminum	96 x 74	6000	6	1A	-						
FBV-43	Extruded Aluminum	96 x 74	6000	6	1A	-						

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Control Dampers cont....

Model	Blade Type	Damper Maximum Size	Velocity (FPM)	Pressure (in. wg)	Leakage Class @ 1 in. wg	AMCA Listing	Submittal	Installation Instructions	CSI Specs	Drawings		
										PDF	DWG	Revit
Vertical Blade Control Dampers												
VCD-20V	3V	148 x 96	3000	5		-						
VCD-23V	3V	148 x 96	3000	5	1A	-						
VCD-33V	Airfoil	148 x 96	4000	10	1A	-						
VCD-34V	Insulated Airfoil	148 x 96	4000	10	1A	-						
VCD-42V	Extruded Airfoil	148 x 96	6000	6	1A	-						
VCD-43V	Extruded Airfoil	120 x 60	6000	6	1A	-						
Insulated Thermally Broken Control Dampers												
ICD-44	Extruded Aluminum	144 x 148	4000	8	1A	Air Performance/ Air Leakage/ Efficiency						
ICD-45	Extruded Aluminum - Thermally Broken	144 x 120	4000	8	1A	Air Performance/ Air Leakage/ Efficiency						
True Round Control Dampers												
VCDR-50	True Round	24	3000	4	-	-						
VCDR-53	True Round	24	3000	4	1	-						
True Round Multi-Blade Control Dampers												
VCDRM-50	Single Thickness	48	2500	5	-	-						
VCDRM-53	Single Thickness	48	2500	5	1	-						

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Model	Blade Type	Damper Maximum Size	Velocity (FPM)	Pressure (in. wg)	Leakage Class @ 1 in. wg	AMCA Listing	Submittal	Installation Instructions	CSI Specs	Drawings	
										PDF	DWG
Heavy Duty/Industrial Control Dampers											
HCD-120	3V	96 x 96	3000	8.5	See Submittal	-					
HCD-130	Airfoil	120 x 96	4000	8.5	See Submittal	-					
HCD-135	Insulated Airfoil	120 x 96	4000	8.5	See Submittal	-					
HCD-140	Extruded Airfoil	120 x 96	6000	6	See Submittal	-					
HCD-220	3V	96 x 96	4000	15	See Submittal	-					
HCD-230	Airfoil	120 x 96	5000	15	See Submittal	-					
HCD-240	Extruded Airfoil	120 x 96	5000	15	See Submittal	-					
HCD-330	Airfoil	120 x 96	5000	25	See Submittal	-					
HCD-430	Airfoil	120 x 96	6000	35	See Submittal	-					
HCD-530	Airfoil	120 x 96	6000	45	See Submittal	-					
True Round Heavy Duty/Industrial Control Dampers											
HCDR-050	True Round	24	3000	6	See Submittal	-					
HCDR-150	True Round	48	4000	6	See Submittal	-					
HCDR-250	True Round	72	5150	13.5	See Submittal	-					
HCDR-350	True Round	72	6400	20	See Submittal	-					
HCDR-351	True Round	48	6500	20	See Submittal	-					

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Model	Blade Type	Fire Resistance Rating	Closure Rating	Damper Maximum Size*		Velocity (FPM)	Pressure (in. wg)	FM Approval	AMCA	Submittal	Installation Instructions	CSI Specs	Drawings	
				Horizontal	Vertical								PDF	DWG
Multi-Blade Fire														
DFD-210	3-V	11/2 hour	Dynamic	128 x 96	128 x 100	4000	10	✓	Air Performance					
DFDAF-310	Airfoil	11/2 hour	Dynamic	144 x 96	128 x 100	4000	8	✓	Air Performance					
DFDAF-330	Airfoil	3 hour	Dynamic	144 x 96	120 x 96	4000	8		Air Performance					
SEDFD-210	3-V	11/2 hour	Dynamic	48 x 30	48 x 30	2000	4		Air Performance					
Out of Wall Fire														
ODFD-150	Curtain	11/2 hour	Dynamic	36 x 36	36 x 36	4000	4		-					
OFD-150	Curtain	11/2 hour	Static	36 x 36	36 x 36	-	-		-					
True Round Fire														
DFDR-510	True Round	11/2 hour	Dynamic	24	24	2000	4		-					
FDR-510	True Round	11/2 hour	Static	24	24	-	-		-					
SSDFDR-510	True Round	11/2 hour	Dynamic	24	24	2000	4		-					
SSFDR-510	True Round	11/2 hour	Static	24	24	-	-		-					
Traditional Curtain Fire														
DFD-110	Curtain	1½ hour	Dynamic	48 x 36	72 x 48	4000	4		-					
DFD-150	Curtain	1½ hour	Dynamic	48 x 36	72 x 48 or 60 x 60 or 120 x 30	4000	4	✓						
DFD-310	Curtain	3 hour	Dynamic	40 x 36	48 x 48	4000	4							
DFD-350	Curtain	3 hour	Dynamic	40 x 36	48 x 48	4000	4	✓						

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*Maximum size can be single or multiple sections.

Fire dampers cont...

Model	Blade Type	Fire Resistance Rating	Closure Rating	Damper Maximum Size*		Velocity (FPM)	Pressure (in. wg)	FM Approval	AMCA	Submittal	Installation Instructions	CSI Specs	Drawings	
				Horizontal	Vertical								PDF	DWG
Traditional Curtain Fire cont...														
FD-100	Curtain	1½ hour	Static	-	48 x 48	-	-		-					
FD-110	Curtain	1½ hour	Static	48 x 48	48 x 48	-	-		-					
FD-150	Curtain	1½ hour	Static	96 x 48 or 120 x 40	96 x 48 or 120 x 40 pr 74 x 74	-	-		-					
FD-300	Curtain	3 hour	Static	-	48 x 48	-	-		-					
FD-310	Curtain	3 hour	Static	-	48 x 48	-	-		-					
FD-350	Curtain	3 hour	Static	80 x 40	48 x 48	-	-		-					
SSDFD-150	Curtain	1½ hour	Dynamic	-	30 x 30	2000	4		-					
SSDFD-350	Curtain	3 hour	Dynamic	-	30 x 30	2000	4		-					
SSFD-150	Curtain	1½ hour	Static	36 x 36	96 x 48 or 120 x 40	-	-		-					
SSFD-350	Curtain	3 hour	Static	-	48 x 48	-	-		-					
Curtain Fire - Integral Sleeve														
DFD-150X10	Curtain	1½ hour	Dynamic	30 x 30	36 x 36	4000	4		-					
DFD-150X12	Curtain	1½ hour	Dynamic	30 x 30	36 x 36	4000	4		-					
DFD-150X14	Curtain	1½ hour	Dynamic	30 x 30	36 x 36	4000	4		-					
DFD-150X16	Curtain	1½ hour	Dynamic	30 x 30	36 x 36	4000	4		-					
FD-150X10	Curtain	1½ hour	Static	48 x 48	48 x 48	-	-		-					
FD-150X12	Curtain	1½ hour	Static	48 x 48	48 x 48	-	-		-					
FD-150X14	Curtain	1½ hour	Static	48 x 48	48 x 48	-	-		-					
FD-150X16	Curtain	1½ hour	Static	48 x 48	48 x 48	-	-		-					

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Model	Blade Type	Damper Maximum Size	Velocity (FPM)	Pressure (in. wg)	Maximum Temperature	Submittal	Installation Instructions	CSI Specs	Drawings	
									PDF	DWG
Heavy Duty Industrial Control Dampers										
HCD-120	3V	96 x 96	3000	8.5	400°F					
HCD-130	Airfoil	120 x 96	4000	8.5	400°F					
HCD-135	Insulated Airfoil	120 x 96	4000	8.5	250°F					
HCD-140	Extruded Airfoil	120 x 96	6000	6	250°F					
HCD-220	3V	96 x 96	4000	15	600°F					
HCD-230	Airfoil	120 x 96	5000	15	600°F					
HCD-240	Extruded Airfoil	120 x 96	5000	15	250°F					
HCD-330	Airfoil	120 x 96	5000	25	600°F					
HCD-430	Airfoil	120 x 96	6000	35	600°F					
HCD-530	Airfoil	120 x 96	6000	45	600°F					
Heavy Duty/Industrial Round Control Dampers										
HCDR-050	True Round	24	3000	6	250°F					
HCDR-150	True Round	48	4000	6	400°F					
HCDR-250	True Round	72	5150	13.5	600°F					
HCDR-350	True Round	72	6400	20	1000°F					
HCDR-351	True Round	48	6500	20	400°F					

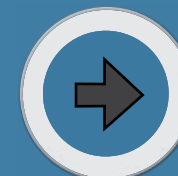
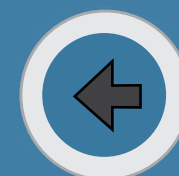
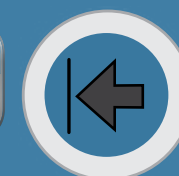
Model	Frame Material	Blade Material	Counter Balance	Velocity (FPM)	Back Pressure (in. wg)	Airflow Direction			Mounting Position	Submittal	Installation Instructions	CSI Specs	Drawings	
						Vertical Up	Vertical Down	Horizontal					PDF	DWG
Heavy Duty/Industrial Pressure Relief														
HPR-120	Galv. Steel	Galv. Steel	✓	5150	8.5	O	O	✓	Horizontal, Vertical					
HPR-230	Galv. Steel	Galv. Steel	✓	5150	13.5	O	O	✓	Horizontal, Vertical					
HPR-330	Galv. Steel	Galv. Steel	✓	6400	20	O	O	✓	Horizontal, Vertical					

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Model	Frame Material	Blade Material	Velocity (FPM)	Pressure (in. wg)	Airflow Direction					Mounting Position	Submittal	Installation Instructions	CSI Specs	Drawings	
					Vertical Up	Vertical Down	Horizontal	Angular Up	Angular Down					PDF	DWG
Heavy Duty/Industrial Backdraft															
HB-110	Galv. Steel	Aluminum	3900	5	O	O	✓	O	O	Horizontal, Vertical					
HB-120	Galv. Steel	Galv. Steel	5150	8.5	O	O	✓	O	O	Horizontal, Vertical					
HB-230	Galv. Steel	Galv. Steel	5150	13.5	O	O	✓	O	O	Horizontal, Vertical					
HB-240	Galv. Steel	Aluminum	6400	20	O	O	✓	O	O	Horizontal, Vertical					
HB-330	Galv. Steel	Galv. Steel	6400	20	O	O	✓	O	O	Horizontal, Vertical					
True Round Heavy Duty/Industrial Backdraft															
HBR-050	Painted Steel	Painted Steel	4000	5	O	O	✓			Horizontal, Vertical		-			

Model	Blast Direction	Velocity (FPM)	Pressure (in. wg)	Maximum Temperature	Submittal	Installation Instructions	CSI Specs	Drawings	
								PDF	DWG
Blast Damper									
HBS-330	Same as Normal Airflow	500-6400	160 (5.77 psi)	250°F					
HBS-331	Opposite Normal Airflow	500-6400	160 (5.77 psi)	250°F					
HBS-430	Same as Normal Airflow	500-4000	415 (15 psi)	250°F					
HBS-431	Opposite Normal Airflow	500-6400	415 (15 psi)	250°F					
Tornado Damper									
HTOD-330	Same as Normal Airflow	500-6400	83	250°F					
HTOD-331	Opposite Normal Airflow	500-6400	83	250°F					

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Model	Blade Type	Velocity (FPM)	Pressure (in. wg)	Maximum Temperature	Submittal	Installation Instructions	CSI Specs	Drawings	
								PDF	DWG
True Round Bubble Tight Damper									
HBTR-151	True Round	3900	10	250°F					
HBTR-451	True Round	6500	30	250°F					
HBTR-551	True Round	6500	30	250°F					
Rectangular Bubble Tight Damper									
HBT-221	Rectangular	3900	10	250°F					

Model	Blade Type	Leakage Class	Damper Maximum Size	Velocity (FPM)	Pressure (in. wg)	Submittal	Installation Instructions	CSI Specs	Drawings	
									PDF	DWG
Heavy Duty/Industrial Smoke										
HSD-401	Extruded Airfoil	I	120 x 60 or 48 x 120	3000	8					

Model	Blade Type	Damper Maximum Size	Velocity (FPM)	Maximum Temperature	Pressure (in. wg)	NFPA 130	NFPA 502	BS476	Submittal	Installation Instructions	CSI Specs	Drawings	
												PDF	DWG
Tunnel Transit													
HTD-630	Airfoil	120 x 60 or 48 x 120	4000	250°F continuous; 482°F for 2 hours	24	✓	✓				-	Consult Factory	
HTD-636	Airfoil	48 x 96	4000	482°F for 2 hours	24	✓	✓	✓			-	Consult Factory	
HTD-640	Extruded Airfoil	48 x 96	4000	250°F continuous; 482°F for 1 hour	24	✓					-	Consult Factory	

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Model	Frame Material	Blade Material	Counter Balance	Velocity (FPM)	Back Pressure (in. wg)	Airflow Direction			Mounting Position	Submittal	Installation Instructions	CSI Specs	Drawings	
						Vertical Up	Vertical Down	Horizontal					PDF	DWG
Barometric Relief														
BR-1x Series	Galv. Steel	Aluminum	✓	2000	2	✓			Horizontal					
BR-3x Series	Galv. Steel	Aluminum	✓	2000	2			✓	Vertical					
BR-4x Series	Galv. Steel	Aluminum	✓	2000	2		✓		Horizontal					
SEBR-1x Series	316SS	316SS	✓	2000	2	✓			Horizontal					
SEBR-3x Series	316SS	316SS	✓	2000	2			✓	Vertical					
SEBR-4x Series	316SS	316SS	✓	2000	2		✓		Horizontal					
Heavy Duty/Industrial Pressure Relief														
HPR-120	Galv. Steel	Galv. Steel	✓	5150	8.5	✓	✓	✓	Horizontal, Vertical					
HPR-230	Galv. Steel	Galv. Steel	✓	5150	13.5	✓	✓	✓	Horizontal, Vertical					
HPR-330	Galv. Steel	Galv. Steel	✓	6400	20	✓	✓	✓	Horizontal, Vertical					

Model	Blade Type	USCG Fire Rating	Leakage Class	Damper Maximum Size*		Velocity (FPM)	Pressure (in. wg)	MRA Listed	ABS Approval	Submittal	Installation Instructions	CSI Specs	Drawings	
				Horizontal	Vertical								PDF	DWG
Marine Fire Damper														
IMO-310	Airfoil	A60	-	64 x 32	64 x 32	2000	4	✓	✓					
SSIMO-310	Airfoil	A60	-	64 x 32	64 x 32	2000	4	✓	✓					
Marine Fire Smoke Damper														
IMO-311	Airfoil	A60/A30	3 cfm/ft²	64 x 32	64 x 32	4000	4	✓	✓					
SSIMO-311	Airfoil	A60	3 cfm/ft²	64 x 32	64 x 32	4000	4	✓	✓					

*Maximum size can be single or multiple sections.

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Model	Blade Type	Leakage Class	Damper Maximum Size*		Velocity (FPM)	Pressure (in. wg)	AMCA Listing	FM Approval	Submittal	Installation Instructions	CSI Specs	Drawings		
			Horizontal	Vertical								PDF	DWG	Revit
Traditional Smoke														
SMD-201	3V	I	144 x 100 or 288 x 50	144 x 100 or 288 x 50	2000	6	Air Performance	✓						
SMD-201M	3V	I	144 x 72	144 x 72	2000	4	Air Performance							
SMD-202	3V	II	144 x 100 or 288 x 50	144 x 100 or 288 x 50	2000	6	Air Performance	✓						
SMD-203	3V	III	144 x 100 or 288 x 50	144 x 100 or 288 x 50	2000	6	Air Performance	✓						
SMD-301	Airfoil	I	192 x 100	192 x 100	4000	8	Air Performance	✓						
SMD-301M	Airfoil	I	128 x 100	128 x 100	2000	4	Air Performance							
SMD-302	Airfoil	II	192 x 100	192 x 100	4000	8	Air Performance	✓						
SMD-302M	Airfoil	II	128 x 100	128 x 100	2000	4	Air Performance							
SMD-401	Extruded Airfoil	I	192 x 120	192 x 120	3000	6	-	✓						
SMD-401EF	Extruded Airfoil	I	192 x 120	192 x 120	3000	6	-							
SMD-401M	Extruded Airfoil	I	144 x 72	144 x 72	2000	4	-							
SESMD-201	3V	I	88 x 72	88 x 72	2000	6	Air Performance							
SSSMD-201	3V	I	88 x 72	88 x 72	2000	6	Air Performance							
Vertical Blade Smoke														
SMD-301V	Airfoil	I	100 x 32	100 x 32	4000	8	-							
True Round Smoke														
SMDR-501	True Round	I	24	24	3000	4	-							
SMDR-502	True Round	II	24	24	3000	4	-							
SESMDR-501	True Round	I	24	24	3000	4	-							
SSSMDR-501	True Round	I	24	24	3000	4	-							
Heavy Duty/Industrial Smoke														
HSD-401	Extruded Airfoil	I	120 x 60 or 48 x 120	120 x 60 or 48 x 120	3000	8								

*Maximum size can be single or multiple sections.

DWG files will open with AutoCAD or DWG Viewer.

