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Model	Frame Material	Blade Material	Velocity (FPM)	Pressure (in. wg)	Counter Balance	Airflow Direction			Mounting Position	Submittal	Installation Instructions	Drawings	
						Vertical Up	Vertical Down	Horizontal				PDF	DWG
<b>Commercial Backdraft</b>													
BD-100	Galv. Steel	Aluminum	1500	2		✓			Horizontal		-		
BD-300	Galv. Steel	Aluminum	1500	2				✓	Vertical		-		
EM-1x Series	Aluminum	Aluminum	3500	10	✓	✓			Horizontal				
EM-3x Series	Aluminum	Aluminum	3500	10	✓			✓	Vertical				
EM-4x Series	Aluminum	Aluminum	3500	10	✓		✓		Horizontal				
WD-1xx Series	Galv. Steel	Aluminum	2500	1		✓			Horizontal		-		
WD-2xx Series	Galv. Steel	Aluminum	2500	1		✓	✓	✓	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		-		
<b>True Round Commercial Backdraft</b>													
WDR-53	Galv. Steel	Aluminum	2000	3		✓	○	○	Horizontal, Vertical				
<b>Heavy-Duty/Industrial Backdraft</b>													
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	5150	13.5	✓	○	○	✓	Horizontal, Vertical				
HB-330	Galv. Steel	Galv. Steel	6400	20	✓	○	○	✓	Horizontal, Vertical				
<b>True Round Heavy-Duty/Industrial Backdraft</b>													
HBR-050	Painted Steel	Painted Steel	3000	6	✓	○	○	✓	Horizontal, Vertical				
HBR-150	Painted Steel	Painted Steel	4000	6	✓	○	○	✓	Horizontal, Vertical				

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Model	Blade Type	Damper Maximum Size	Velocity (FPM)	Pressure (in. wg)	Operator	Submittal	Installation Instructions	Drawings	
								PDF	DWG
<b>Manual Balancing Dampers</b>									
MBD-10	Single Blade	36 x 12	2000	2	Manual Quadrant or Cable Operated				
MBD-15	3V	96 x 96	2000	4	Manual Quadrant or Cable Operated				
MBDR-50	True Round	24	2000	1	Manual Quadrant or Cable Operated		-		
<b>Bowtie Damper</b>									
BTDR-50	True Round	15	1600	1	Cable Operated			-	

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Model	Blade Type	Damper Maximum Size	Velocity (FPM)	Pressure (in. wg)	Leakage Class @ 1 in. wg	Submittal	Installation Instructions	Drawings		
								PDF	DWG	Revit
<b>Commercial Control Dampers</b>										
VCD-20	3V	Unlimited	3000	5	-					
VCD-23	3V	Unlimited	3000	5	1A					
VCD-33	Airfoil	Unlimited	4000	8	1A					
VCD-40	Airfoil	Unlimited	6000	6	1A					
VCD-42	Extruded Airfoil	Unlimited	6000	6	1A					
VCD-43	Extruded Airfoil	Unlimited	6000	8	1A					
<b>Vertical Blade Control Dampers</b>										
VCD-23V	3V	148 x 96	3000	5	1A					
VCD-33V	Airfoil	148 x 120	4000	8	1A					
<b>Insulated Thermally Broken Control Dampers</b>										
ICD-44	Extruded Aluminum	180 x 148	4000	8	1A					-
ICD-45	Extruded Aluminum - Thermally Broken	180 x 120	4000	8	1A					-
<b>True Round Control Dampers</b>										
VCDR-50	True Round	24	3000	4	-					-
VCDR-53	True Round	24	3000	4	1					-

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Model	Frame Material	Blade Material	Counter Balance	Velocity (FPM)	Back Pressure (in. wg)	Airflow Direction			Mounting Position	Submittal	Installation Instructions	Drawings	
						Vertical Up	Vertical Down	Horizontal				PDF	DWG
<b>Barometric Relief</b>													
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				
<b>Heavy-Duty/Industrial Pressure Relief</b>													
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				

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Model	Blade Type	Damper Maximum Size	Velocity (FPM)	Pressure (in. wg)	Maximum Temperature	Submittal	Installation Instructions	Drawings	
								PDF	DWG
<b>Heavy-Duty/Industrial Control Dampers</b>									
HCD-120	3V	96 x 96	3000	8.5	400°F				
HCD-130	Airfoil	120 x 96	4000	8.5	400°F				
HCD-130-LE	Airfoil	120 x 96	4000	8.5	400°F			-	-
HCD-135	Insulated Airfoil	120 x 96	4000	8.5	250°F				
HCD-220	3V	96 x 96	4000	15	600°F				
HCD-221	Flat Dual Skin w/ Perimeter Seal	96 x 60	4000	10	400°F				
HCD-230	Airfoil	120 x 96	5000	15	600°F				
HCD-230-LE	Airfoil	120 x 96	5000	15	600°F			-	-
HCD-240	Extruded Airfoil	120 x 96	5000	15	250°F				
HCD-324	High Temp Airfoil	48 x 60	5000	25	1000°F				
HCD-330	Airfoil	120 x 96	5000	25	600°F				
HCD-430	Airfoil	120 x 96	6000	35	600°F				
HCD-524	High Temp Airfoil	60 x 60	5000	45	1000°F				
HCD-530	Airfoil	120 x 96	6000	45	600°F				
<b>Heavy-Duty/Industrial Round Control Dampers</b>									
HCDR-050	True Round	24	3000	6	250°F				
HCDR-150	True Round	48	4000	6	400°F				
HCDR-152	Two-Blade	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				
HCDR-450	True Round	60	7000	30	400°F				













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Heavy-Duty Dampers cont...



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Model	Frame Material	Blade Material	Counter Balance	Velocity (FPM)	Back Pressure (in. wg)	Airflow Direction			Mounting Position	Submittal	Installation Instructions	Drawings	
						Vertical Up	Vertical Down	Horizontal				PDF	DWG
<b>Heavy-Duty/Industrial Pressure Relief</b>													
HPR-120	Galv. Steel	Galv. Steel	✓	5150	8.5	0	0	✓	Horizontal, Vertical				
HPR-230	Galv. Steel	Galv. Steel	✓	5150	13.5	0	0	✓	Horizontal, Vertical				
HPR-330	Galv. Steel	Galv. Steel	✓	6400	20	0	0	✓	Horizontal, Vertical				

Model	Frame Material	Blade Material	Velocity (FPM)	Pressure (in. wg)	Airflow Direction					Mounting Position	Submittal	Installation Instructions	Drawings	
					Vertical Up	Vertical Down	Horizontal	Angular Up	Angular Down				PDF	DWG
<b>Heavy-Duty/Industrial Backdraft</b>														
HB-110	Galv. Steel	Aluminum	3900	5	0	0	✓	0	0	Horizontal, Vertical				
HB-120	Galv. Steel	Galv. Steel	5150	8.5	0	0	✓	0	0	Horizontal, Vertical				
HB-230	Galv. Steel	Galv. Steel	5150	13.5	0	0	✓	0	0	Horizontal, Vertical				
HB-240	Galv. Steel	Aluminum	5150	13.5	0	0	✓	0	0	Horizontal, Vertical				
HB-330	Galv. Steel	Galv. Steel	6400	20	0	0	✓	0	0	Horizontal, Vertical				
<b>True Round Heavy-Duty/Industrial Backdraft</b>														
HBR-050	Galv. Steel	Galv. Steel	3000	6	0	0	✓			Horizontal, Vertical				
HBR-150	Painted Steel	Painted Steel	4000	6	0	0	✓			Horizontal, Vertical				

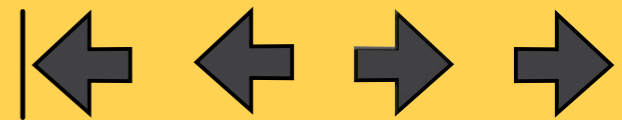
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Specialty Application HD Dampers								
Model	Blast Direction	Velocity (FPM)	Pressure (in. wg)	Maximum Temperature	Submittal	Installation Instructions	Drawings	
							PDF	DWG
<b>Blast Damper</b>								
HBS-330	Same as Normal Airflow	500-6400	160 (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	500-4000	415 (15 psi)	250°F				
<b>Tornado Damper</b>								
HTOD-330	Same as Normal Airflow	500-6400	83	250°F				
HTOD-331	Opposite Normal Airflow	500-6400	83	250°F				

Model	Blade Type	Velocity (FPM)	Pressure (in. wg)	Maximum Temperature	Submittal	Installation Instructions	Drawings	
							PDF	DWG
<b>True Round Bubble-Tight Damper</b>								
HBTR-151	True Round	3900	10	250°F				
HBTR-451	True Round	6500	30	250°F				
HBTR-551	True Round	6500	40	250°F				
<b>Rectangular Bubble-Tight Damper</b>								
HBT-221	Rectangular	3900	10	250°F				

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