

# Pressure Drop Data

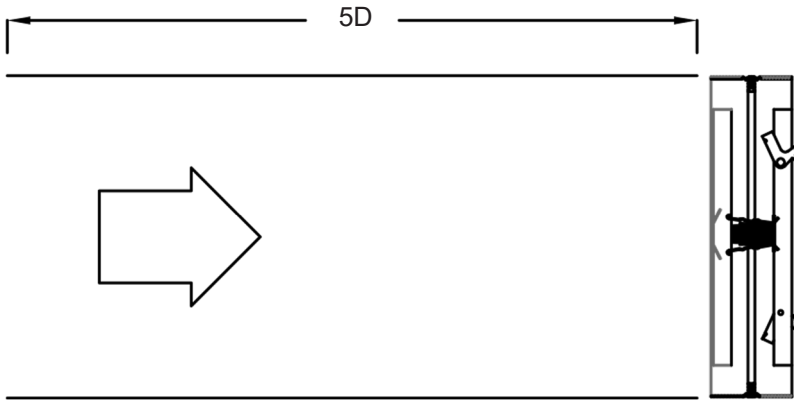
For True Round Curtain Fire Dampers: R17, R19, S3, S3

The following air performance data is collected from testing conducted in accordance with AMCA Standard 500-D for Figures 5.2, 5.3, and 5.5. All data has been corrected to represent standard air density at 0.075 lbs/ft<sup>3</sup> (1.201 kg/m<sup>3</sup>).

## AMCA 500-D, Figure 5.2

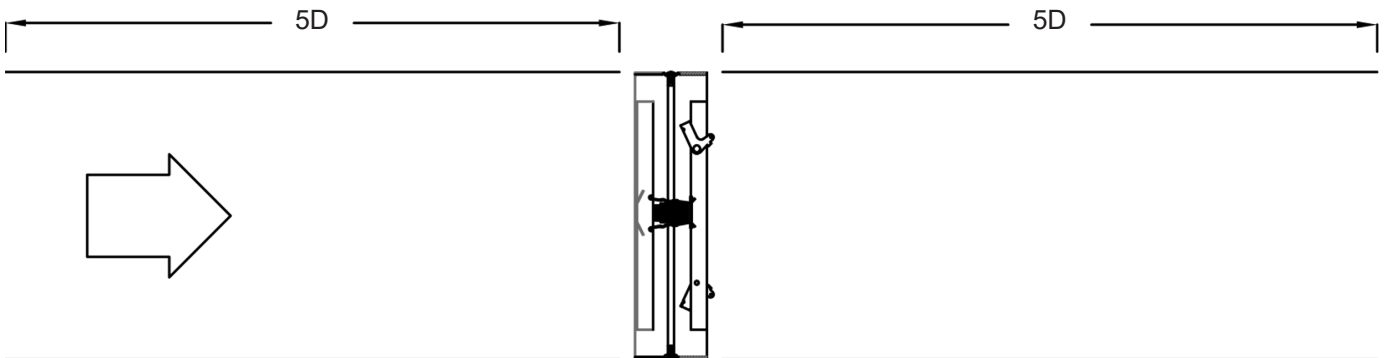
Ducted damper exhausting air to atmosphere.

$$\text{Where } D = \sqrt{\frac{4(\text{Width})(\text{Height})}{3.14}}$$



## AMCA 500-D, Figure 5.3

Fully ducted damper (upstream & downstream).



## AMCA 500-D, Figure 5.5

Plenum mounted damper.



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For True Round Curtain Fire Dampers: R17, R19, S3, S3

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Figure 5.2	Damper Size (Dia.)							
FPM	4"	6"	8"	10"	12"	16"	20"	24"
500	0.05	0.03	0.01	0.01	0.01	0.02	0.02	0.02
1000	0.20	0.10	0.05	0.06	0.04	0.06	0.07	0.07
1500	0.46	0.23	0.12	0.13	0.10	0.14	0.16	0.17
2000	0.81	0.41	0.21	0.23	0.18	0.26	0.29	0.30
2500	1.27	0.64	0.33	0.36	0.28	0.40	0.45	0.47
3000	1.83	0.93	0.48	0.51	0.40	0.57	0.65	0.67

Figure 5.3	Damper Size (Dia.)							
FPM	4"	6"	8"	10"	12"	16"	20"	24"
500	0.05	0.03	0.01	0.01	0.01	0.01	0.01	0.01
1000	0.20	0.10	0.06	0.05	0.04	0.05	0.05	0.06
1500	0.45	0.23	0.13	0.11	0.09	0.12	0.10	0.13
2000	0.80	0.41	0.22	0.19	0.17	0.21	0.18	0.23
2500	1.25	0.65	0.35	0.30	0.26	0.32	0.29	0.36
3000	1.80	0.93	0.50	0.43	0.38	0.46	0.42	0.52

Figure 5.5	Damper Size (Dia.)							
FPM	4"	6"	8"	10"	12"	16"	20"	24"
500	0.10	0.06	0.04	0.04	0.04	0.04	0.05	0.04
1000	0.41	0.25	0.17	0.14	0.14	0.17	0.18	0.17
1500	0.91	0.56	0.39	0.33	0.32	0.38	0.41	0.39
2000	1.63	0.99	0.69	0.58	0.56	0.68	0.72	0.69
2500	2.54	1.55	1.08	0.90	0.88	1.06	1.13	1.07
3000	3.66	2.23	1.55	1.30	1.27	1.52	1.63	1.55