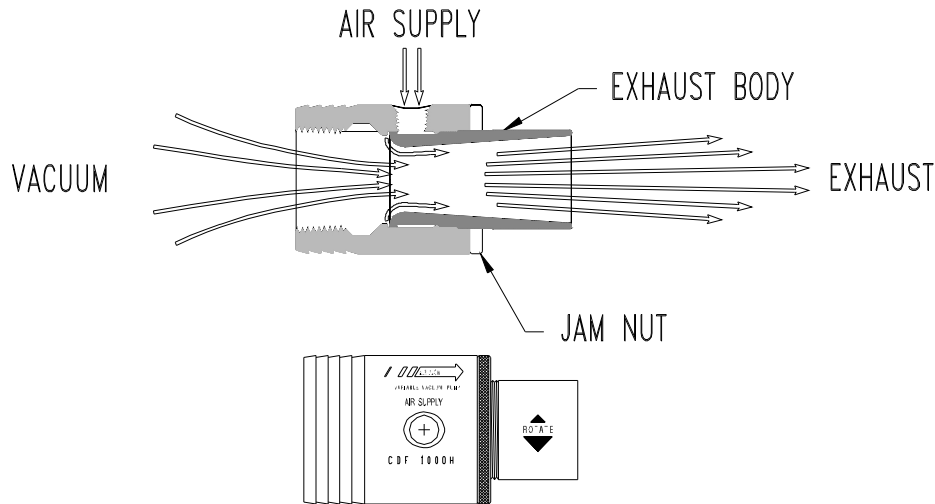


Operating Instructions for CDF Series Air Amplifiers



How it works:

CDF pumps operate on the “Coanda Effect” where a small volume of compressed air is converted into a large flow of ambient air. Compressed air is emitted from an annular gap and passes over a curved surface into the exhaust body of the amplifier. As the air passes over this curved surface, similar to an airfoil, a low pressure area is created inducing ambient air to flow into the exhaust body with the compressed air.

Installation:

Step 1: Loosen jam nut counter-clockwise and rotate exhaust body clockwise until closed, jam nut should be loose on exhaust body.

Step2: Attach air line to air supply port. See chart on reverse side for minimum recommended sizes.

Step 3: Rotate exhaust body counter-clockwise to the desired vacuum level or vacuum flow using rotation chart on reverse side. Charts are based on 80 and 60 PSI to provide a starting point. Pumps will achieve maximum vacuum levels at any pressure above 50 PSI (pressure regulator is not required).

Step 5: After setting desired vacuum level, tighten the jam nut by rotating clockwise. For CDF's with additional set screws for locking jam nut, tighten set screws evenly in a circular pattern.

Step 6: Attach vacuum line to vacuum port. See chart on reverse side for minimum recommended sizes.

Step 7: Install CDF.

Step 8: Turn on compressed air. CDF will generate vacuum flow.

Model No.	Supply Port Threads	Recommended Air Supply Line	Vacuum Port Threads	Line Size Using Vacuum Port Thread	Line Size Using Barb on Vacuum Port
CDF 100	1/8"NPT	3/8"	N/A	N/A	N/A
CDF 200	1/8"NPT	3/8"	N/A	N/A	N/A
CDF 200(H)	1/8"NPT	3/8"	3/8"	3/8"	1 1/4"
CDF 375H	1/8"NPT	3/8"	3/8"NPT	1/2"	1 1/4"
CDF 500H	1/8"NPT	3/8"	1/2"NPT	3/4"	1 1/2"
CDF 750H	3/8"NPT	1/2"	1"NPT	1"	2"
CDF 1000H	3/8"NPT	1/2"	1 1/4"NPT	1 1/4"	2 1/4"
CDF 1500H	1/2"NPT	3/4"	2"NPT	2"	2 3/4"
CDF 2000H	1/2"NPT	3/4"	2 1/2"NPT	2 1/2"	3 1/4"

Tubing size based on 0.062 wall polyethylene and polyurethane tubing.

Note: Vaccon discourages the use of quick disconnect fittings on all connections.

ROTATION CHARTS

	Degrees of Rotation vs Vacuum Level "Hg @ 80 PSI							
Model No.	0"	3"	6"	9"	12"	15"		
CDF 100	0	8	14	24	30	38		
CDF 200(H)	0	10	25	50				
	0"	1"	2"	3"	4"	5"	6"	7"
CDF 375H	0	30	60	90	135	180		
CDF 500H	0	10	20	30	40	55	70	100
CDF 750H	0	5	10	20	40	60		
CDF 1000H	0	10	15	25	40	60		
CDF 1500H	0	30	75	120				
	0"	0.2"	0.4"	0.6"	0.8"	1"		
CDF 2000H	0	15	40	70	80	90		

Ex: A CDF 200(H) to be set at 6" Hg at 80 PSI would be rotated approximately 25 degrees from the closed position.

	Degrees of Rotation vs Vacuum Level "Hg @ 60 PSI							
Model No.	0"	3"	6"	9"	12"	15"		
CDF 100	0	10	20	28	36	50		
CDF 200(H)	0	15	30	90				
	0"	1"	2"	3"	4"	5"	6"	7"
CDF 375H	0	30	60	90	160	240		
CDF 500H	0	15	30	45	60	85	110	160
CDF 750H	0	10	15	25	50	70		
CDF 1000H	0	15	20	35	55	85		
CDF 1500H	0	45	105	180				
	0"	0.2"	0.4"	0.6"	0.8"	1"		
CDF 2000H	0	20	45	80	90	105		

Ex: A CDF 200(H) to be set at 6" Hg at 60 PSI would be rotated approximately 30 degrees from the closed position