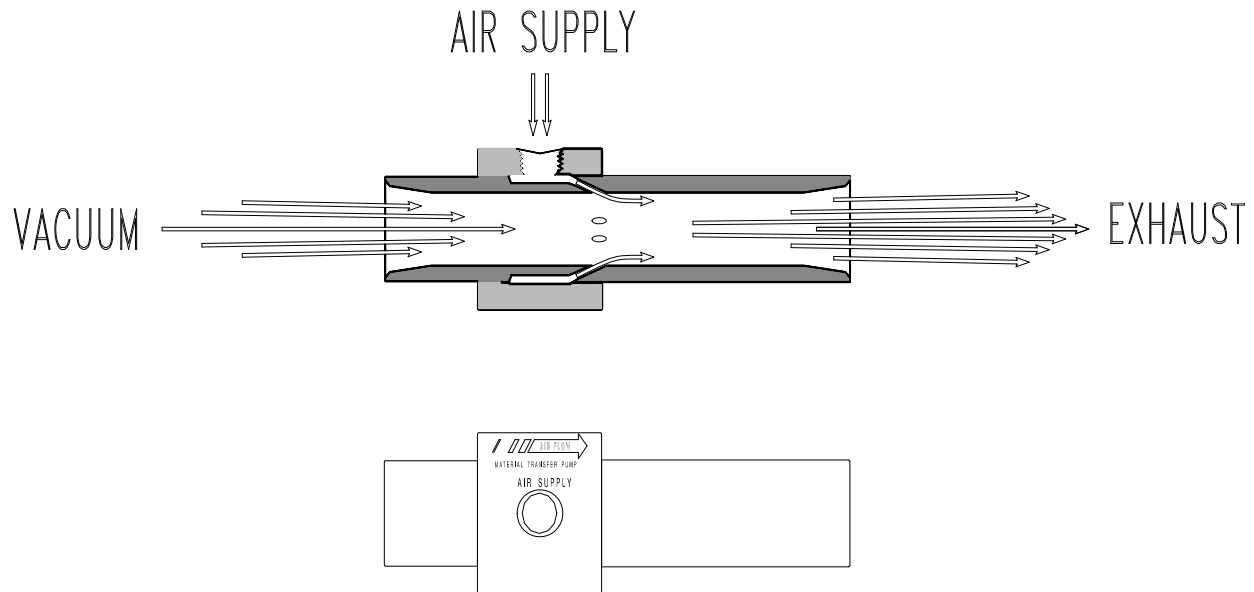
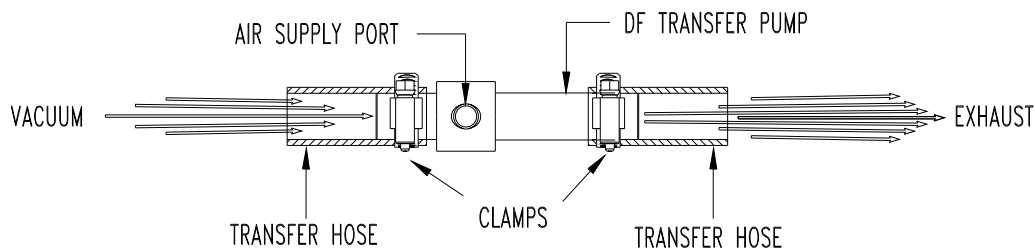


Operating Instructions for DF Series Material Transfer Pumps



How it works:

Compressed air is fed into an exterior annular ring that has a number of orifices leading into the main tube of the pump. As the compressed air exits the orifices, its velocity increases to supersonic speed. The air forced into the center of the tube rotates with a twisting motion similar to a worm screw. This cyclonic flow creates a powerful vacuum capable of drawing materials into and through the pump.



Installation:

Step 1: Slip transfer tube hosing over inlet and exhaust ports and secure with hose clamp. (See chart below for minimum recommended sizes.)

Step 2: Attach air line to air supply port. See chart below for minimum recommended sizes.

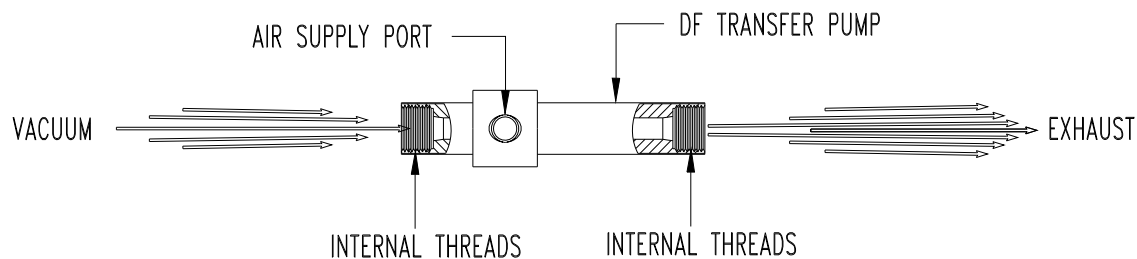
Step 3: Turn on compressed air, DF will generate vacuum.

Note: A pressure regulator will enable you to change vacuum levels, vacuum flows and air velocity.

Standard DF Series

Model No.	Material Transfer Bore Diameter	Supply Port Thread	Air Supply Line	Transfer Hose
DF 1-3	0.15"	1/8"NPT	1/4"	3/4 I.D.
DF 2-3	0.25"	1/8"NPT	1/4"	3/4 I.D.
DF 3-3	0.37"	1/8"NPT	1/4"	3/4 I.D.
DF 3-6	0.37"	1/8"NPT	1/4"	3/4 I.D.
DF 5-3	0.50"	1/4"NPT	3/8"	1" I.D.
DF 5-6	0.50"	1/4"NPT	3/8"	1" I.D.
DF 7-3	0.75"	3/8"NPT	1/2"	1 1/4" I.D.
DF 7-6	0.75"	3/8"NPT	1/2"	1 1/4" I.D.
DF 10-3	1.00"	3/8"NPT	1/2"	1 1/2" I.D.
DF 10-6	1.00"	3/8"NPT	1/2"	1 1/2" I.D.
DF 12-3	1.25"	3/8"NPT	1/2"	1 3/4" I.D.
DF 12-6	1.25"	3/8"NPT	1/2"	1 3/4" I.D.
DF 15-3	1.50"	3/8"NPT	1/2"	2" I.D.
DF 15-6	1.50"	3/8"NPT	1/2"	2" I.D.
DF 20-3	2.00"	3/8"NPT	1/2"	2 1/2" I.D.
DF 20-6	2.00"	3/8"NPT	1/2"	2 1/2" I.D.
DF 30-6	3.00"	1/2"NPT	3/4"	3 1/2" I.D.
DF 40-12	4.00"	1/2"NPT	3/4"	5" I.D.

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



Step 1: Attach threaded fitting of transfer tube hosing into inlet and exhaust ports. (See chart below for minimum recommended sizes.)

Step 2: Attach air line to air supply port. See chart below for minimum recommended sizes.

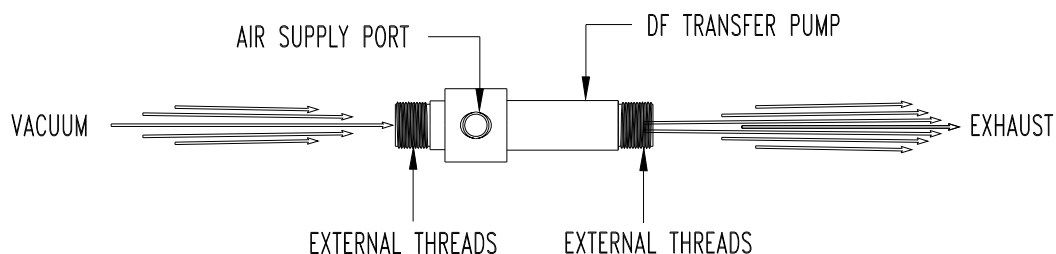
Step 3: Turn on compressed air, DF will generate vacuum.

Note: A pressure regulator will enable you to change vacuum levels, vacuum flows and air velocity.

Female Vacuum and Exhaust Port Threads

Model No.	Material Transfer Bore Diameter	Supply Port Thread	Vacuum Port Thread	Exhaust Port Thread
DF 1-3 TV-25/TE-25	0.15"	1/8"NPT	1/4" NPT	1/4" NPT
DF 2-3 TV-25/TE-25	0.25"	1/8"NPT	1/4" NPT	1/4" NPT
DF 3-3 TV-25/TE-25	0.37"	1/8"NPT	1/4" NPT	1/4" NPT
DF 3-6 TV-25/TE-25	0.37"	1/8"NPT	1/4" NPT	1/4" NPT
DF 5-3 TV-50/TE-50	0.50"	1/4"NPT	1/2" NPT	1/2" NPT
DF 5-6 TV-50/TE-50	0.50"	1/4"NPT	1/2" NPT	1/2" NPT
DF 7-3 TV-75/TE-75	0.75"	3/8"NPT	3/4" NPT	3/4" NPT
DF 7-6 TV-75/TE-75	0.75"	3/8"NPT	3/4" NPT	3/4" NPT
DF 10-3 TV-100/TE-100	1.00"	3/8"NPT	1" NPT	1" NPT
DF 10-6 TV-100/TE-100	1.00"	3/8"NPT	1" NPT	1" NPT
DF 12-3	1.25"	3/8"NPT	Consult Factory	Consult Factory
DF 12-6	1.25"	3/8"NPT	Consult Factory	Consult Factory
DF 15-3 TV-125/TE-125	1.50"	3/8"NPT	1 1/4" NPT	1 1/4" NPT
DF 15-6 TV-125/TE-125	1.50"	3/8"NPT	1 1/4" NPT	1 1/4" NPT
DF 20-3 TV-200/TE-200	2.00"	3/8"NPT	2" NPT	2" NPT
DF 20-6 TV-200/TE-200	2.00"	3/8"NPT	2" NPT	2" NPT
DF 30-6	3.00"	1/2"NPT	Consult Factory	Consult Factory
DF 40-12	4.00"	1/2"NPT	Consult Factory	Consult Factory

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



Step 1: Attach threaded fitting of transfer tube hosing onto inlet and exhaust ports. (See chart below for minimum recommended sizes.)

Step 2: Attach air line to air supply port. See chart below for minimum recommended sizes.

Step 3: Turn on compressed air, DF will generate vacuum.

Note: A pressure regulator will enable you to change vacuum levels, vacuum flows and air velocity.

Male Vacuum and Exhaust Threads

Model No.	Material Transfer Bore Diameter	Supply Port Thread	Vacuum Port Thread	Exhaust Port Thread
DF 1-3 MTV-38/MTE-38	0.15"	1/8"NPT	3/8" NPT	3/8" NPT
DF 2-3 MTV-38/MTE-38	0.25"	1/8"NPT	3/8" NPT	3/8" NPT
DF 3-3 MTV-38/MTE-38	0.37"	1/8"NPT	3/8" NPT	3/8" NPT
DF 3-6 MTV-38/MTE-38	0.37"	1/8"NPT	3/8" NPT	3/8" NPT
DF 5-3 MTV-75/MTE-75	0.50"	1/4"NPT	3/4" NPT	3/4" NPT
DF 5-6 MTV-75/MTE-75	0.50"	1/4"NPT	3/4" NPT	3/4" NPT
DF 7-3 MTV-100/MTE-100	0.75"	3/8"NPT	1" NPT	1" NPT
DF 7-6 MTV-100/MTE-100	0.75"	3/8"NPT	1" NPT	1" NPT
DF 10-3 MTV-125/MTE-125	1.00"	3/8"NPT	1 1/4" NPT	1 1/4" NPT
DF 10-6 MTV-125/MTE-125	1.00"	3/8"NPT	1 1/4" NPT	1 1/4" NPT
DF 12-3	1.25"	3/8"NPT	Consult Factory	Consult Factory
DF 12-6	1.25"	3/8"NPT	Consult Factory	Consult Factory
DF 15-3 MTV-150/MTE-150	1.50"	3/8"NPT	1 1/2" NPT	1 1/2" NPT
DF 15-6 MTV-150/MTE-150	1.50"	3/8"NPT	1 1/2" NPT	1 1/2" NPT
DF 20-3 MTV-200/MTE-200	2.00"	3/8"NPT	2" NPT	2" NPT
DF 20-6 MTV-200/MTE-200	2.00"	3/8"NPT	2" NPT	2" NPT
DF 30-6	3.00"	1/2"NPT	Consult Factory	Consult Factory
DF 40-12	4.00"	1/2"NPT	Consult Factory	Consult Factory

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