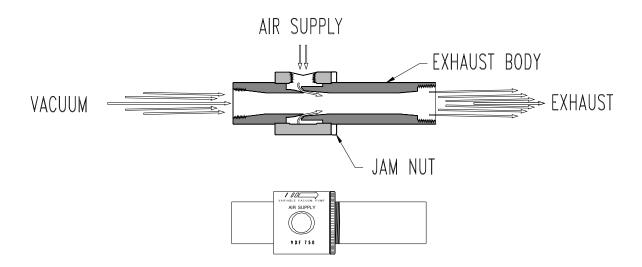


Operating Instructions for VDF Series Variable Flow Vacuum Pumps



How it works:

The variable performance of the VDF pump is achieved by increasing the annular gap between the venturi nozzle and the exhaust body. Rotating the exhaust body section counter-clockwise will increase the gap, allowing more compressed air to flow through the pump and increase both the vacuum flow and the vacuum level. The result is a variable vacuum pump that can be adjusted to meet an application's exact requirements.

Installation:

- Step 1: Loosen jam nut by rotating counter-clockwise. Rotate exhaust body clockwise until closed, jam nut should be loose on exhaust body.
- Step 2: Attach air line to air supply port. Vacuum line to vacuum port (when not directly attaching cup to pump). See chart on reverse side for minimum recommended sizes.
- Step 3: Rotate exhaust body counter-clockwise to the desired vacuum level 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 4: After achieving desired vacuum level, tighten jam nut by rotating clockwise.
- Step 5: Turn on compressed air regulated at 80 PSI. VDF will generate vacuum.

Note: VDF 375 and larger, it may be necessary to turn compressed air off while making adjustments to relieve pressure on threads and make rotating easier.

Model No.	Supply Port Threads	Recommended Air Supply Line	Vacuum Port Thread	Recommended Vacuum Line
VDF 100	1/8"NPT	3/8"	1/4"NPT	3/8"
VDF 150	1/8" NPT	3/8"	1/4"NPT	3/8"
VDF 200	1/8"NPT	3/8"	1/4"NPT	3/8"
VDF 250	1/8"NPT	3/8"	1/4"NPT	3/8"
VDF 375	3/8" NPT	1/2"	1/2"NPT	5/8"
VDF 500	3/8" NPT	1/2"	1/2"NPT	3/4" Hose
VDF 750	1/2"NPT	5/8"	3/4" NPT	1" Hose

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"	18"	21"	24"	25"
VDF 100	0	30	60	100	115	120	125	130	134	135
VDF 150	0	80	90	105	120	135	145	150	160	165
VDF 200	0	90	105	120	150	160	170	175	185	190
VDF 250	0	100	140	180	195	210	250	275	340	355
VDF 375	0	60	90	100	125	155	180	195	220	230
VDF 500	0	80	130	170	200	260	340	390	460	490
VDF 750	0	95	170	260	350	450	540	630	710	730

Ex: A VDF 200 to be set at 21" Hg operating at 80 PSI would be rotated approximately 175 degrees from the closed position.

	Degrees of Rotation vs Vacuum Level ("Hg) @ 60 PSI									
Model No.	0"	3"	6"	9"	12"	15"	18"	21"	24"	25"
VDF 100	0	60	70	80	90	110	120	140	160	170
VDF 150	0	90	100	110	120	130	145	165	190	195
VDF 200	0	100	135	165	175	185	200	215	235	240
VDF 250	0	145	180	205	260	320	370	440	510	530
VDF 375	0	65	90	115	165	190	210	255	290	300
VDF 500	0	100	170	190	260	360	420	480	560	600
VDF 750	0	145	260	350	475	610	730	1080	1370	1440

Ex: A VDF 200 to be set at 21" Hg operating at 60 PSI would be rotated approximately 215 degrees from the closed position.