

# Material Conveying Vacuum Pumps

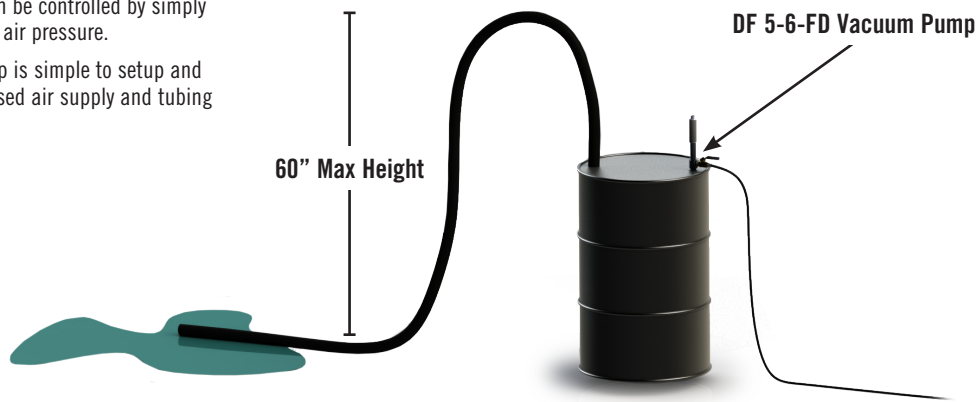
## DF 5-6-FD-ST8B Series



The DF 5-6 FD is a custom modified DF material conveying pump for field or mobile cleanup of liquid material spills. Designed to quickly clean up liquids, the DF 5-6 FD pump threads directly into a standard 55-gallon drum or other container with 3/4-14 NPS threaded ports. The custom pump is safe, using no electricity, and includes an overfill prevention device to seal off the DF pump when the container is filled. The transfer or collection speed can be controlled by simply adjusting the input air pressure.

The DF 5-6 FD pump is simple to setup and operate. A compressed air supply and tubing

(with 1/4 NPT male fitting) are the only items needed to run the DF 5-6 FD pump, along with a compatible hose to collect the liquid. The standard DF 5-6 FD pump is made of anodized aluminum, and is available in specialty materials such as stainless steel and PVC to meet chemical compatibility requirements. Consult factory for other materials.



### Ideal Applications

Cleanup of liquid material spills:

- Water
- Gasoline
- Oil
- Chemicals

### Features/Benefits

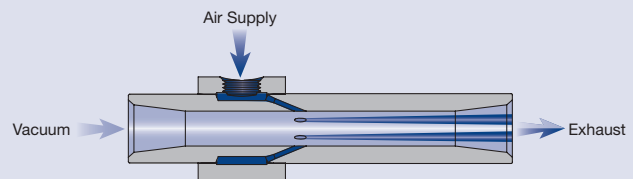
- Variety of specialty materials to accommodate chemical and environmental requirements:
  - ~ Stainless steel, PVC – consult factory for more
  - ~ Hardcoat and Teflon® coated anodizing
- Field adjustable transfer speed
- Safe operation – no electricity needed at the pump, automatic shutoff
- Easy to install, pump threads directly into containers with 3/4-14 NPS ports
- Efficient with fast response
- Reliable, durable, trouble-free operation:
  - ~ No moving parts to wear out
  - ~ Straight-through design, non-clogging
  - ~ No maintenance, no downtime

### Pump Options

- For chemical compatibility, heat and environmental requirements, custom materials and special coatings are available.

### Principles of Operation:

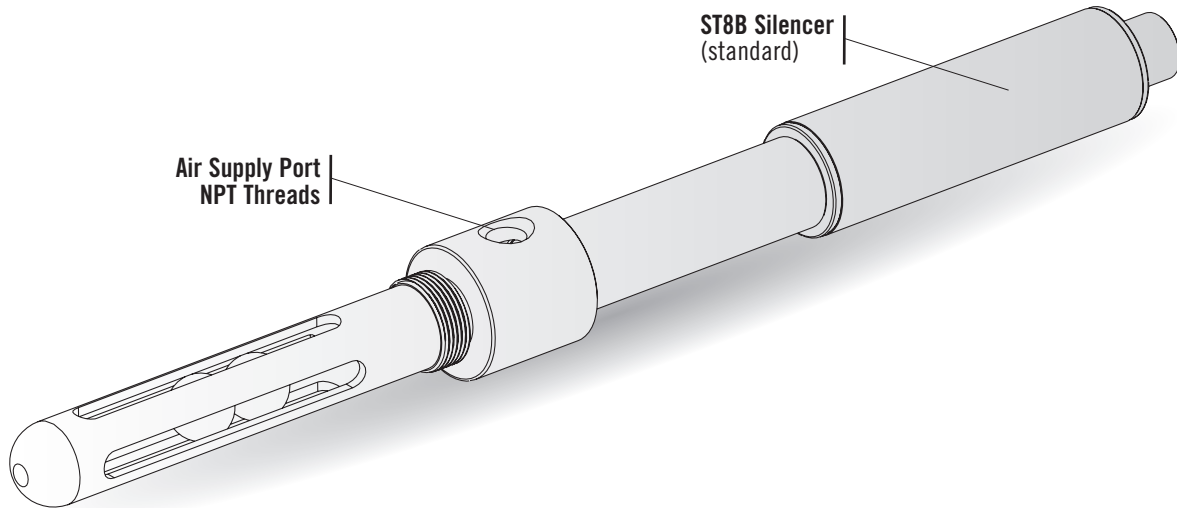
Compressed air is fed into an exterior annular ring that has a number of orifices leading into the main tube of a transducer. As the compressed air exits from the orifices, its velocity increases to supersonic speed. The air forced into the center of the tube rotates with a twisting motion similar to a worm screw. This cyclonic flow creates a powerful vacuum capable of drawing materials into and through the transducer. As a vacuum source, the DF Series are capable of rapid evacuation of a large volume of air to a low vacuum level.



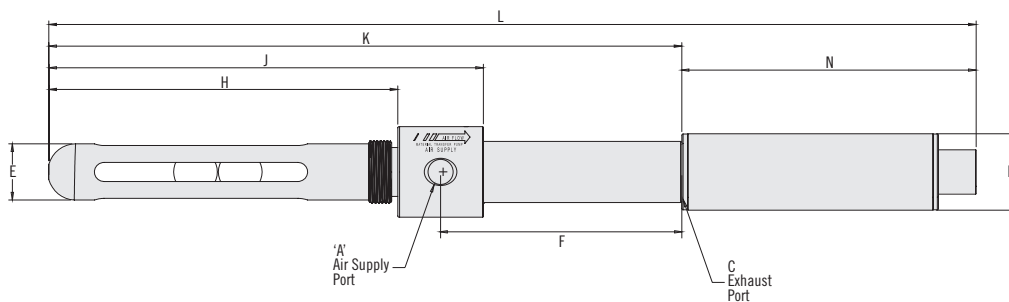
## DF 5-6-FD-ST8B Material Conveying Pumps Standard Specifications:

<b>Body Material:</b>	Anodized Aluminum Standard
<b>Operating Temperature:</b>	-100° to ~ 400° F [-73° to ~204°C]
<b>Operating Pressure:</b>	Input pressure of 50 PSI or more is sufficient to move most bulk materials and liquids
<b>Supply Pressure:</b>	Regulate the supply pressure to develop the necessary transfer speed for your application

## DF 5-6 FD-ST8B Material Conveying Pump Configuration:



## Standard Pump Dimensions: DF 5-6 FD-ST8B Material Conveying Pumps



Model #	Dimension Table (Imperial, Metric)											
	A	C	D Minimum Bore	E	F	H	J	K	L	M	N	Weight
DF 5-6 FD-ST8B	1/4 NPT F	1/4" NPT	0.50	0.92	3.87	5.71	7.11	10.35	1.25	15.25	4.90	11.0 oz.
			12.7	22.4	98.3	145.0	180.6	262.9	31.8	387.4	124.5	310.0 g