National Oilwell Varco has produced this brochure for general information only, and it is not intended for design purposes. Although every effort has been made to maintain the accuracy and reliability of its contents, National Oilwell Varco in no way assumes responsibility for liability for any loss, damage or injury resulting from the use of information and data herein. All applications for the material described are at the user's risk and are the user's responsibility.

©2019 National Oilwell Varco. All rights reserved. 6567

industrial@nov.com



Hygienic Pump

 \mathcal{O}

Ir

Corporate Headquarters 7909 Parkwood Circle Drive Houston, Texas 77036 USA

Completion and Production Solutions Headquarters 10353 Richmond Avenue Houston, Texas 77042 USA

NOY

NOY

Hygienic pump

Progressive cavity pumps provide the gentlest pumping action on the market for solids handling, offering minimal product degradation in shear-sensitive applications such as salad dressings and salsas while being able to move suspended solids with minimal damage to products such as diced fruits, vegetables, and soups. The robust nature of the pump also allows it to handle varying viscosities with ease, including viscous slurries (even over 1,000,000 cps) like peanut butter, candies, and jam. The positive displacement action of the pump allows for variable speed control for efficient, slow-speed pumping and process control for accurate dosing.

Features and Benefits

- EHEDG and 3-A certifications.
- Quick disassembly design for easy cleaning.
- Non-pulsating, metered flow—ideal for batching processes.
- No valves to clog, stick, or vapor lock.
- Transfer solids up to 1 in. (25 mm) in diameter.
- Capable of pumping products at temperatures up to 100°C or 212°F
- Easy, on-site maintenance as the pump is offered with a detachable titanium flexishaft which allows for easy maintenance and dismantling for cleaning out of place if required.

- Cost-effectively handles thin liquids like soups and juices.
- Handles corrosive applications like citric acid and vinegar.
- Provide long service life in abrasive applications like soybean slurries.
- Consistently handles entrained air and gases in applications like yeast and nougat.
- Reduced the cost of ownership over the pump's life as you no longer have to replace a complete drive train when a single component is worn. Instead, you can replace the rotor and flexishaft independently when required.

As the original innovator in flexishaft technology we can warrant this design and component for 5 years. The flexishaft eliminates wearing components between the drive end and the pumping element. No lubrication is needed, therefore product contamination is eliminated.

Applications

Bakery	Beer and wine	Dairy	Meat, fish, and poultry	Fruit and vegetables
Batter	Beer	Milk	Sausage meat	Potatoes
Butter	Brewers yeast	Cottage cheese	Pork fat slurry	Mashed potatoes
Egg	Wine, lees, must	Cream	Animal fat	Fruit purée
Dough		Peanut butter	Pet food	
Glazes		Yogurt	Fish	
Frosting		Coffee whitener		
Yeast slurry		lce cream		
Cake mix		Custard		

		Model size	Single stage
Capacity m³/hr (USGPM)	92 (406)	F178K	
	66 (290)	F165K	
	30 (132)	F150K	
	11.4 (50.1)	F137K	
	6.21 (27.3)	F130K	
	2.87 (12.6)	F123K	
	1.11 (4.87)	F117K	

Pre-Selection Tables

-01

Differential pressure Bar (PSI)

Confectionery	Sugar and starch molasses	Fats and oils	Sauces and preserves	Beverages
Chocolate	Glucose syrup	Cod oil	Mayonnaise	Fruit concentrate
Cocoa butter	Corn starch	Corn oil	Ketchup	
Liquor	Sugar starch	Lard	Apple sauce	
Caramel		Linseed oil	Honey	
Liquorice		Peanut oil	Jam	
Marzipan		Vegetable oil	Golden syrup	
Nougat		Rapeseed	Horseradish	
		Coconut oil	Mustard	
		Soy bean oil	Salad cream	



Bar (PSI)



industrial@nov.com



- 1. DIN 11851, DIN 11864/53-1 fittings, SMS, and Tri-Clamp hygienic connections are available on all sizes and are eccentric to ensure self-draining.
- 2. Abrasion-resistant, FDA and CE1935-2004 compliant elastomers for all stators.
- 3. Mounted and locked in place by a stainless-steel foot.
- 4. CIP ports can be added to any pump and positioned to suit your process.
- 5. The pump is mounted from the geared motor with superior paint for protection from spray down and available with covers if required.
- 6. Various drive options are available and 316 stainless-steel drive covers can be provided.
- 7. The mechanical seal is located under the inlet and suction area for optimized cleaning.
- 8. One piece suction chamber made from 316 stainless-steel with a finish of 0.8 μ m Ra or better.
- 9. Proven flexishaft technology made from titanium to keep footprint to a minimum.
- 10. Tiebar-free design to aid with strip down and maintenance.

