

ProMinent®



INDUSTRIAL

PERISTALTIC & HOSE PUMPS



ProMinent®

WHY PERISTALTIC PUMPS?

The operating principle of a peristaltic pump is defined by its simplicity and advantages. A tubular element with accurate dimensions manufactured in different types of elastomer or thermoplastic is housed into the pump body.

When the hose is compressed by the rotor and its corresponding shoes or rollers this is called occlusion and restitution. This action creates a vacuum during the restitution stage and subsequently creates the flow of product on the suction side.

The Product fills the cavity between the shoes or rollers and is delivered towards the discharge.

This positive displacement pump offers a choice for transfer and dosing of abrasive, high viscosity, and harsh applications.

Feature:	Benefits:
Positive Displacement Pump Design (w/Hose, Shoe, & Rollers)	Self Priming up to 30 Feet of Water
	Dry Running
	Seal-Less
	Abrasion Resistant
	Excellent Accuracy to +/- 1%
Hose Pump Motor Design	Allows Reversible Operation
Pump Head Connection Design	Allows 4 Position Mounting for Application Process Improvement
Leak Detection Capable	Prevents Environmental Hazards
	Warning Alerts to Pump Performance Changes
Tubing / Hose is the Product Chamber	Easy to Clean
quick Hose Access and Automated Hose Change	Ease of In Place Maintenance
Multiple Tubing/Hose materials and Halar Coating	Corrosion Resistant
Common Controls (DFXa & DFYa)	Reduced Operator Training
	Ease of HMI Menu Selections

APPLICATION EXAMPLES:

WATER TREATMENT:

Sampling, Muds transfer, Abrasive products dosing: Lime slurry, Carbon slurry, Potassium Permanganate, etc... Chemicals dosing: Ferric Chloride, Sodium Hypochlorite, Sodium Bisulphite, Polymers, etc...

CHEMICAL INDUSTRY:

Dosing of all kinds of liquids in process, Dyes, Pigments, Paints, Detergents, Cosmetic creams, Gel, Resins, Latex, Corrosive acids, Inks, Anti-foaming, Glue, Oils, Peroxide, etc...

FOOD AND BEVERAGE:

Additives dosing in bakery, Beverages, Juices, Sauces, Enzymes, Syrup, Milk, Oils, Enology additives, Liquid egg, Jams, Marmalades, Meat products, Mayonnaise, etc...

OTHER:

Laboratory, Paper industry, Printing and packaging, Mortars, Ceramics, Agriculture, Mining, Pharmaceutical industry, Engineering, etc...

BREWERY LACTIDE ACID



EMULSIFIED SULFUR TRANSFER



DULCOFLEX (DFXa)

Intelligent peristaltic metering pump!



Capacity range 0.038 GPD (6 ml/h) to 17.7 gph (65 l/h)

The ProMinent® DULCOFLEX (DFXa) is an intelligent peristaltic metering pump that is valve-free and has the accuracy of a diaphragm pump. Applications include gaseous, highly viscous, abrasive, shear-sensitive and chemically aggressive fluids.

The liquid end of the pump is designed for a quick and simple replacement of the tubing, utilizing a unique exchange process. The pump display provides precise instructions on the steps required for the tube replacement. High-performance tubing consists of a TPV (Santoprene) or PUR (Polyurethane) material that provides excellent chemical resistance and a long service life.

The DULCOFLEX (DFXa) is powered by a DC motor and will provide continuous metering from 0.038 GPD (6 ml/h) to 17.7 gph (65 l/h). Additional features such as communication protocol includes PROFIBUS, CANbus, Modbus and PROFINET.

Features & Benefits

- NSF61 Approved
- Volume adjustment in GPH or LPH
- Manual, Analog, Contact and Batch modes optional
- High visibility of LED-indicator lights
- Large, illuminated display
- New configurable input/output port
- Pump is available as an FDA design
- CIP (cleaning in place) enabled system
- Turn down ratio up to 3,000:1
- Reverse flow is possible
- Dosing head can be aligned in four directions: Left, Right, Up, and Down
- Integrated 7-day timer
- Viscosities to 10,000 cPs
- Leak Detection

Application Examples:

- Drinking water and wastewater treatment
- Food and beverage industry
- Paper industry
- Chemical industry
- All industrial applications, either as a stand-alone unit or integrated in a complete system

Capacity Data										
Pump Version	Capacity at Maximum Backpressure				Max. Speed	Connector Size	Suction Lift		Shipping Weight	
	psig	(bar)	gph	(l/h)			ft	(m)	lbs	(kg)
DULCOFLEX (DFXa)										
0518	73	(5)	4.75	(18)	100	1/2" x 3/8"	16.4	(5)	12.8	(5.8)
0530	73	(5)	8.00	(30)	100	1/2" x 3/8"	16.4	(5)	12.8	(5.8)
0730	100	(7)	8.00	(30)	100	1/2" x 3/8"	16.4	(5)	12.8	(5.8)
0565	73	(5)	17.17	(65)	100	1/2" x 3/8"	16.4	(5)	12.8	(5.8)

DULCOFLEX DFBu Series



INDUSTRIAL HOSE PUMPS

The DFBu Series hose pumps are industrial pumps for dosing or transfer fluids at low flow and low pressure. The hose element is easy to replace and is available in six different internal diameters for the same pump model. They are reversible, self-priming pumps and can pump fluids with small solids or particles in suspension, and are highly useful for pumping fluids in liquid status but which contain air or other gases or vapors.

The standard version is equipped with a Dual Roller Rotor. An optional Triple Roller Rotor is available for maximum accuracy and minimum pulsation.

Applications

Water treatment:

Sampling, feeding filtering membranes, metering of chemical products: iron chloride, sodium hypochlorite, iron sulphate, etc. Metering of products with solids in suspension: lime milk, potassium permanganate, active charcoal, etc., metering of polymers, etc.

Food & beverage:

Dosing of additives in bread- and pastry-making, drinks, juices, sauces, colorants, lactic ferments, etc.

Chemical industry:

Dosing of all kinds of fluids in processes, colorants, pigments, resins, latex, acids, inks, anti-foaming agents, etc.

Other sectors:

Laboratories, paper industry, printing and packing, ceramics, agriculture, mining, etc.

Technical Data

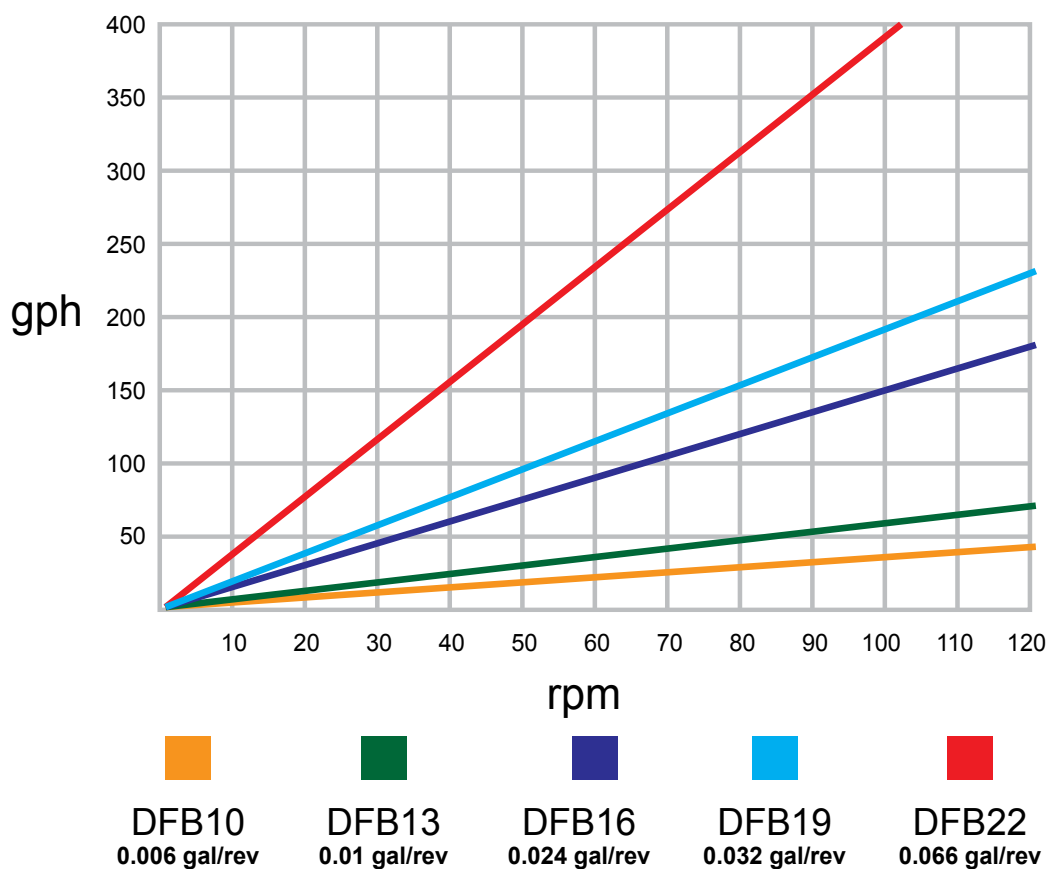
Capacity Data

	DFB10	DFB13	DFB16	DFB19*	DFB22
DFBu Series					
Compression	Roller	Roller	Roller	Roller	Roller
Connection	3/8"	3/8"	3/4"	1"	1"
Capacity gal/rev	0.006	0.01	0.024	0.032	0.066
Max. Flow gph	31	51	122	163	337
Max. Pressure Reinforced Hoses	116 psi	116 psi	116 psi	N/A	116 psi
Tubing	Norprene	Norprene	Norprene	Norprene	Norprene
Max. Pressure Tubing	30 psi	30 psi	30 psi	30 psi	30 psi

Models are available with one of the following reinforced hoses: Natural Rubber, Buna, EPDM, Hypalon

* DFB19 is not available with reinforced hoses

DFB Series Flow Rates



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DULCOFLEX DFCu Series



The DULCOFLEX DFCu is a hose pump designed for difficult pumping applications. Unlike typical shoe pumps, it incorporates a roller design, which eliminates the need for cumbersome lubricants. The DFC can reach pressures up to 116 psi and flow rates up to 106 gpm and is ideal for difficult industrial and municipal applications.

Features & Benefits

- Sizes: 30, 40, 50, 60, 70 mm
- Flows to 106 gpm
- Disaster proof hose connections
- Roller Technology - Lower hose stress
- Easy maintenance
- Reinforced hose
- Can run dry
- Self priming
- Great for solids handling
- Reversible
- No seals
- No valves
- Leak Detection

Application Examples:

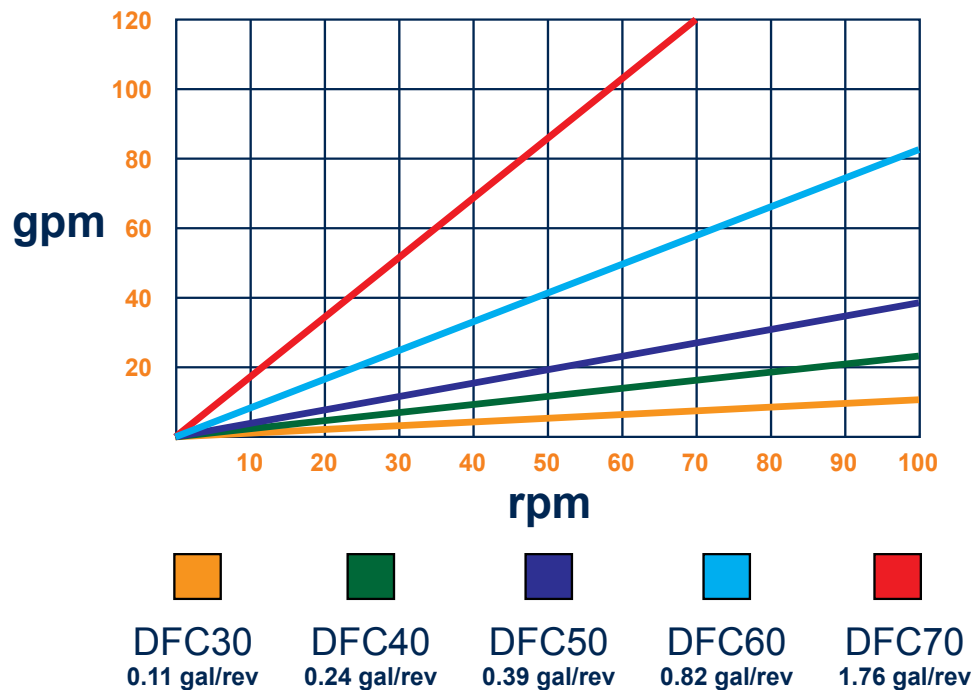
- Sludge transfer
- Lime slurry
- NaOCl transfer
- Inks
- Dyes
- Acids
- Caustics
- Wine barrel filling
- Water & Wastewater
- Chemicals
- Breweries & Wineries
- Pulp & Paper

Technical Data

Capacity Data					
	DFC30	DFC40	DFC50	DFC60	DFC70
DFCu Series					
Compression	Roller	Roller	Roller	Roller	Roller
Connection	1 1/4"	1 1/2"	1 1/2"	2"	2 1/2"
Capacity gal/rev	0.11	0.24	0.39	0.82	1.76
Max. Flow gpm	7.4	14.4	23.2	41.2	106.4
Max. Pressure Reinforced Hoses	116 psi	116 psi	116 psi	116 psi	116 psi
Tubing	N/A	Norprene	N/A	N/A	N/A
Max. Pressure Tubing	N/A	30 psi	N/A	N/A	N/A

All models are available with one of the following reinforced hoses: Natural Rubber, Buna, EPDM, Hypalon

DFC Series Flow Rates



DULCOFLEX DFDu Series



The DULCOFLEX DFDu is a hose pump designed for pressures up to 232 psi and flow rates up to 160 gpm. Ask about our Duplex Design to reach 360 gpm. The unique shoe design is made of steel for smoother and cooler compression. The DFD uses safe DulcoLube oil for the shoe lubrication. With suction lifts up to 29 feet, the DULCOFLEX DFDu is a great choice for difficult pumping applications.

Features & Benefits

- Sizes: 25, 32, 40, 70, 80, 100mm.
- Flows to 160 gpm
- Suction lifts up to 29 ft.
- Disaster proof hose connections
- DulcoLube food grade glycerin lubricant
- Designed heat sink fins for cooler operation
- Steel shoes for a smoother and cooler compression
- Run dry capabilities
- Leak Detection

Application Examples:

- Sludge transfer
- Lime slurry
- NaOCl transfer
- Inks
- Dyes
- Acids
- Caustics
- Wine barrel filling
- Water & Waste water
- Chemicals
- Breweries & Wineries
- Pulp & Paper

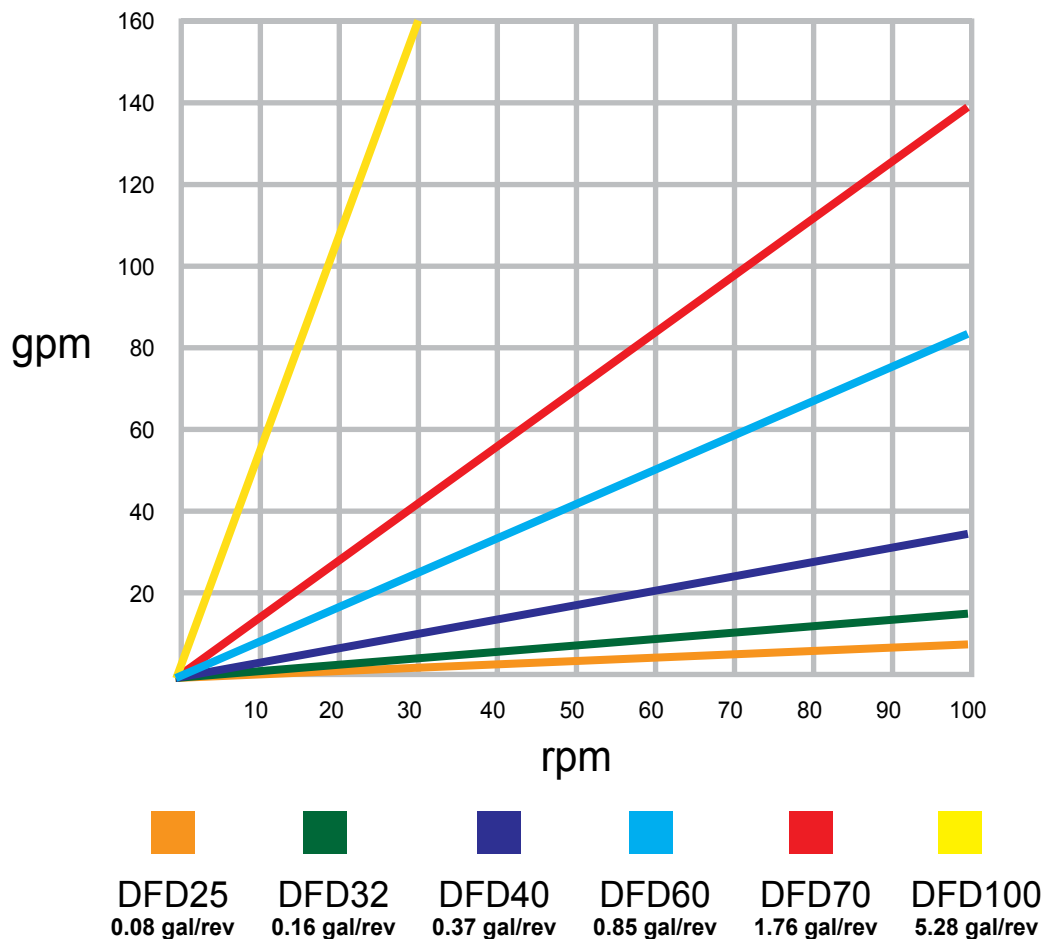
Technical Data

Capacity Data

	DFD25	DFD32	DFD40	DFD60	DFD70	DFD100
DFDu Series						
Compression	Shoe	Shoe	Shoe	Shoe	Shoe	Shoe
Connection	1"	1 1/2"	1 1/2"	2 1/2"	2 1/2"	4"
Capacity gal/rev	0.08	0.16	0.37	0.85	1.76	5.28
Max Flow gpm	5.2	9.6	20.4	42.4	88	160
Max. Pressure Reinforced Hose	232 psi	232 psi	232 psi	232 psi	232 psi	232 psi

All models are available with one of the following reinforced hoses: Natural Rubber, Buna, EPDM, Hypalon

DFD Series Flow Rates



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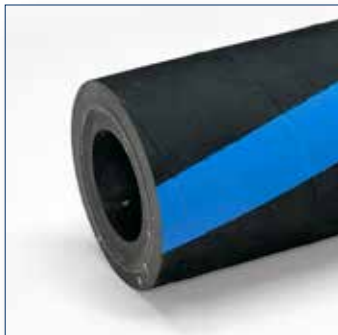
DULCOFLEX Hoses



**Black = Natural Rubber (NR)
No Color Marking**



Red = Natural Buna Rubber (Reinforced)



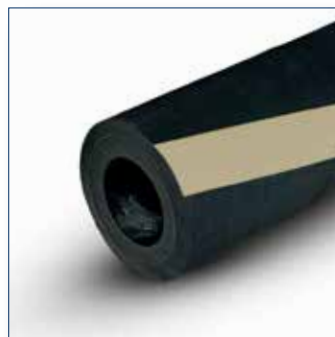
**Blue = EPDM
Ethylene Propylene Diene Monomer**



**Green = Hypalon
or CMS (Reinforced)**



**Beige = Neoprene
“Tubing”**



Beige Stripe = Food Grade NBR known as NBR-A (The “A” is for Alimento” which translated is food.

PUMP MODEL MATERIALS		ProMinent Fluid Controls, Inc. Pittsburgh PA USA Facility
DFB-13	NR, NBR, EPDM, Hypalon NBR-A	
DFB-16	NR, NBR, EPDM, Hypalon NBR-A	
DFB-22	NR, NBR, EPDM, Hypalon NBR-A	
DFC-30	NR, NBR, EPDM, Hypalon NBR-A	
DFC-40	NR, NBR, EPDM, Hypalon NBR-A	
DFC-50	NR, NBR, EPDM, Hypalon NBR-A	
DFC-60	NR, NBR, EPDM, Hypalon NBR-A	
DFC-70	NR, NBR, EPDM, Hypalon NBR-A	
DFD-25	NR, NBR, EPDM, Hypalon NBR-A	
DFD-32	NR, NBR, EPDM, Hypalon NBR-A	
DFD-40	NR, NBR, EPDM, Hypalon NBR-A	
DFD-60	NR, NBR, EPDM, Hypalon NBR-A	
DFD-70	NR, NBR, EPDM, Hypalon NBR-A	
DFD-80	NR, NBR, EPDM, Hypalon NBR-A	
DFD-10	NR, NBR, EPDM, Hypalon NBR-A	



**Manufacturing, Engineering & Design, Fabrication, Integration,
and System Certified Testing done in Pittsburgh, PA**

ProMinent Industrial Hose Pump Product Line



ProMinent®

ProMinent Fluid Controls, Inc. (USA)
136 Industry Drive • Pittsburgh, PA 15275
Ph: (412) 787-2484 • email: prominentcsd-us@prominent.com
www.prominent.us

ProMinent Fluid Controls, Ltd. (Canada)
490 Southgate Drive • Guelph, N1G 4P5
(519) 836-5692 • Fax: (519) 836-5226 • Toll Free 1-888-709-9933
email: sales-can@prominent.com • www.prominent.ca