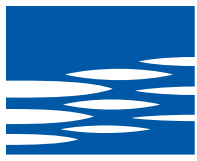


# Model DLFU, DLKFU, DDLFU

## Submersible Wastewater Sewage Pump

SUBMERSIBLE PUMPS





# Model DLFU, DLKFU



### K-Series, Model DLKFU Features:

Model DLKFU series pumps are designed to tackle clogging challenges with the enhanced passage capabilities for handling of fibrous waste. The design features address the most common reasons for clogging caused by fibrous materials:

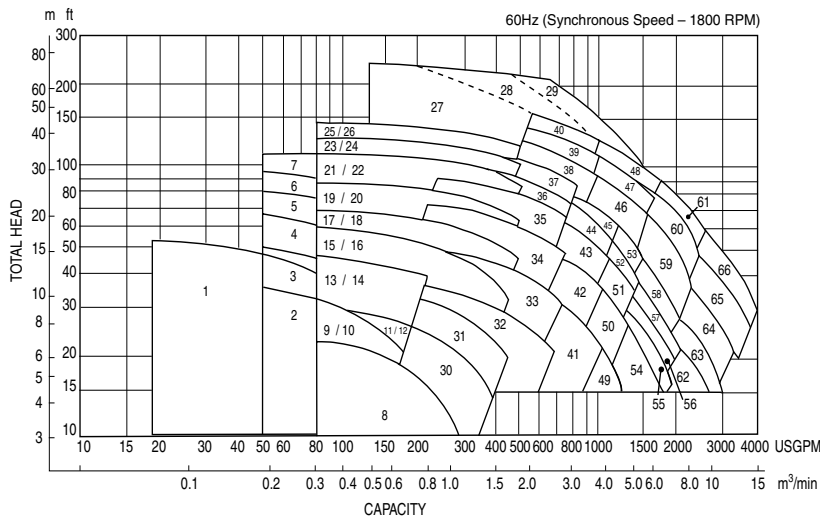
- Reduces material caught on the vane tips.
- Increases inlet pressure which keeps debris moving instead of recirculating.
- E-liminator groove disrupts the accumulation of fibrous debris.

### Specifications:

		DLFU	DLKFU
Design	Discharge	2 to 12 inch	
	Power	2 to 60 HP	2 to 30 HP
	Capacity	20 to 4732 GPM	20 TO 3363 GPM
	Total Head	7 to 254 FT	7 to 158 FT
	Max.Liquid temp.	104°F/ 40°C	
Speed		1800 RPM	
Materials	Casing	Cast Iron	
	Impeller	Cast Iron (2 to 60HP) Ductile Iron (150-300, 40 to 60HP)	Cast Iron
	Shaft	403 Stainless Steel, 2 to 5HP 420 Stainless Steel, 7½ to 60HP	403 Stainless Steel
	Motor Frame	Cast Iron	Cast Iron
	Fastener	304 Stainless Steel	304 Stainless Steel

### SELECTION CHART

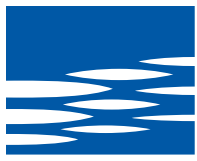
### DLFU



**Please note:** Overlap in coverage is designated by the two numbers; for example "9 / 10". Refer to the legend below for the specific model numbers.

- 1 50DLFU61.5 2HP
- 2 80DLMFU61.5 2HP
- 3 80DLMFU62.2 3HP
- 4 80DLMFU63.7 5HP
- 5 80DLMFU65.5 7½HP
- 6 80DLCMFU67.5 10HP
- 7 80DLCMFU611 15HP
- 8 100DLFU61.5 2HP
- 9 80DLFU61.5 2HP
- 10 100DLMFU61.5 2HP
- 11 80DLFU62.2 3HP
- 12 100DLMFU62.2 5HP
- 13 80DLFU65.5 7½HP
- 14 100DLMFU63.7 5HP
- 15 80DLFU65.5 7½HP
- 16 100DLMFU65.5 7½HP
- 17 80DLFU67.5 10HP
- 18 100DLMFU67.5 10HP
- 19 80DLFU611 15HP
- 20 100DLMFU611 15HP
- 21 80DLFU615 20HP
- 22 100DLMFU615 20HP
- 23 80DLFU618 25HP
- 24 100DLMFU618 25HP
- 25 80DLFU622 30HP
- 26 100DLMFU622 30HP
- 27 100DLFU630 40HP
- 28 100DLFU637 50HP
- 29 100DLFU645 60HP
- 30 100DLFU62.2 3HP
- 31 100DLFU63.7 5HP
- 32 100DLFU65.5 7½HP
- 33 100DLFU67.5 10HP
- 34 100DLFU611 15HP
- 35 100DLFU615 20HP
- 36 100DLFU618 25HP
- 37 100DLFU622 30HP
- 38 150DLFU630 40HP
- 39 150DLFU637 50HP
- 40 150DLFU645 60HP
- 41 150DLFU67.5 10HP
- 42 150DLFU611 15HP
- 43 150DLFU615 20HP
- 44 150DLFU618 25HP
- 45 150DLFU622 30HP
- 46 200DLFU630 40HP
- 47 200DLFU637 50HP
- 48 200DLFU645 60HP
- 49 200DLFU67.5 10HP
- 50 200DLFU611 15HP
- 51 200DLFU615 20HP
- 52 200DLFU618 25HP
- 53 200DLFU622 30HP
- 54 250DLFU611 15HP
- 55 250DLBFU615 20HP
- 56 250DLFU615 20HP
- 57 250DLFU618 25HP
- 58 250DLFU622 30HP
- 59 250DLFU630 40HP
- 60 250DLFU637 50HP
- 61 250DLFU645 60HP
- 62 300DLFU618 25HP
- 63 300DLFU622 30HP
- 64 300DLFU630 40HP
- 65 300DLFU637 50HP
- 66 300DLFU645 60HP





## Model DDLFU

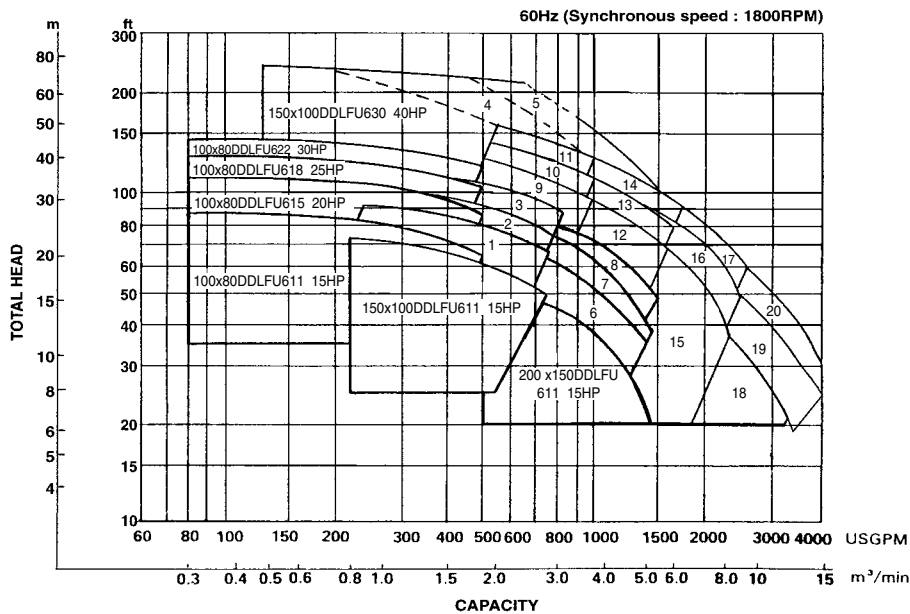


### Specifications:

Design	Discharge	3 to 12 inch
	Power	7 1/2 to 60 HP
	Capacity	80 to 4732 GPM
	Total Head	8 to 254 FT
	Max. Liquid temp.	104°F/ 40°C
Speed		1800 RPM
Materials	Casing	Cast Iron
	Impeller	Cast Iron
	Shaft	420 Stainless Steel
	Motor Frame	Cast Iron
	Fastener	304 Stainless Steel

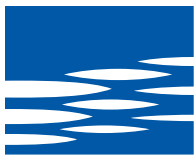
### SELECTION CHART

### DDLFU



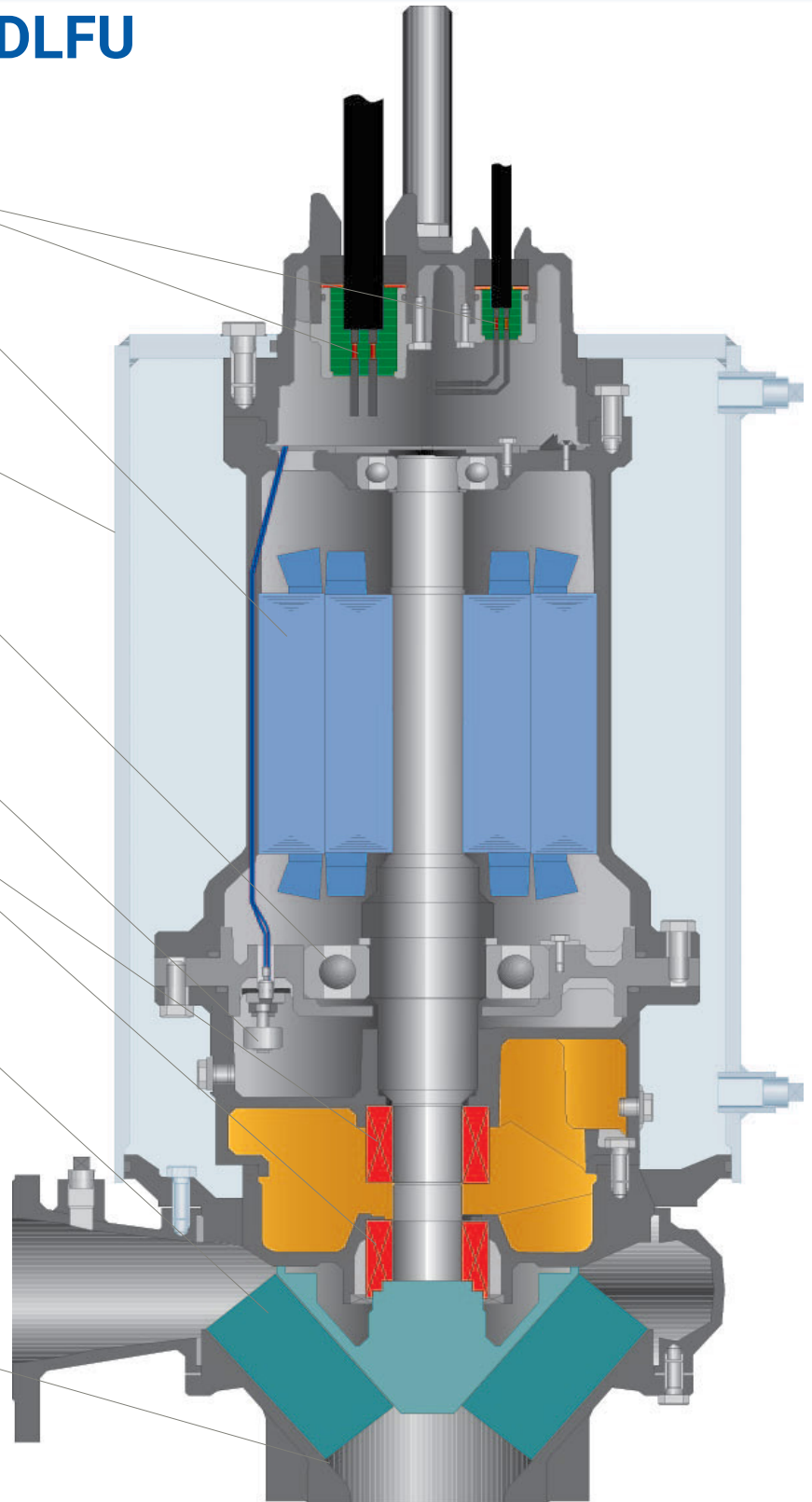
- 1 150x100DDLDFU615 20Hp
- 2 150x100DDLDFU618 25HP
- 3 150x100DDLDFU622 30HP
- 4 150x100DDLDFU637 50HP
- 5 150x100DDLDFU645 60HP
- 6 200x150DDLDFU615 20HP
- 7 200x150DDLDFU618 25HP
- 8 200x150DDLDFU622 30HP
- 9 200x150DDLDFU630 40HP
- 10 200x150DDLDFU637 50HP
- 11 200x150DDLDFU645 60HP
- 12 200x200DDLDFU630 40HP
- 13 200x200DDLDFU637 50HP
- 14 200x200DDLDFU645 60HP
- 15 250x250DDLDFU630 40HP
- 16 250x250DDLDFU637 50HP
- 17 250x250DDLDFU645 60HP
- 18 300x300DDLDFU630 40HP
- 19 300x300DDLDFU637 50HP
- 20 300x300DDLDFU645 60HP

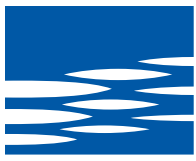




## Model DLFU, DLKFU, DDLFU

- **Watertight cable entry system** prevents capillary action and protects against moisture; reduces maintenance costs.
- **Heavy duty, high efficiency, air filled motor** dissipates heat easily; thermal protection in each phase of windings protects; operates cooler with higher efficiencies; longer service life with lower operating costs.
- **Self cooling jacket** (Model DDLFU) eliminates the need for external pumping devices or special heat transfer fluids; offers simplicity and high reliability by effectively dissipating heat in dry pit applications only.
- **Single and double row thrust bearings** carries thrust loads with L-10 life of 60,000 hours; ensures long, dependable operation and lowers maintenance costs.
- **Mechanically actuated float switch** provides early warning of mechanical seal failure; avoids costly motor repairs.
- **Double mechanical seals – silicon carbide lower seals, carbon/ceramic upper** – hard faced upper and lower seals operate in an oil bath; providing longer service life and lower maintenance costs.
- **High efficiency impellers** pass large solids with high outputs and reduces power consumption; impellers are optimized for hydraulic coverage; lowers operating costs.
- **Model DLKFU series pumps** are designed to tackle clogging challenges with enhanced passage capabilities for handling of fibrous waste. The design features address the most common reasons for clogging caused by fibrous materials: Reduces material caught on the vane tips, increases inlet pressure which keeps debris moving instead of recirculating and E-eliminators groove disrupts the accumulation of fibrous debris.
- **Replaceable wear components** maintains working clearances while reducing casing and volute costs.

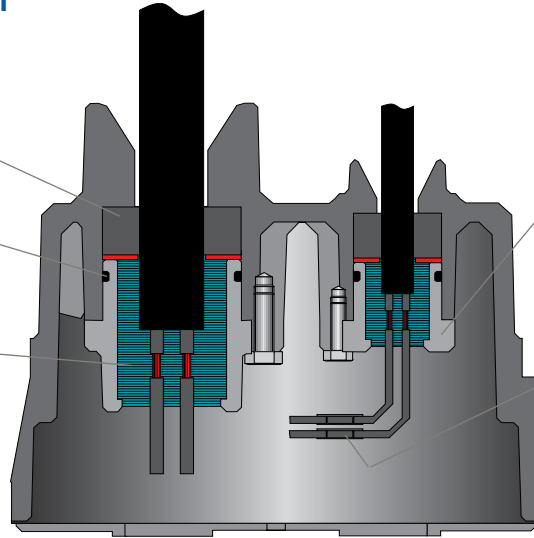




# Model DLFU, DLKFU, DDLFU

## Cable Entry System

- Primary seal-grommet (NBR)
- Secondary sealing-O-rings (NBR)
- Epoxy resin-prevents capillary action
- Solid joint butt connector (copper)

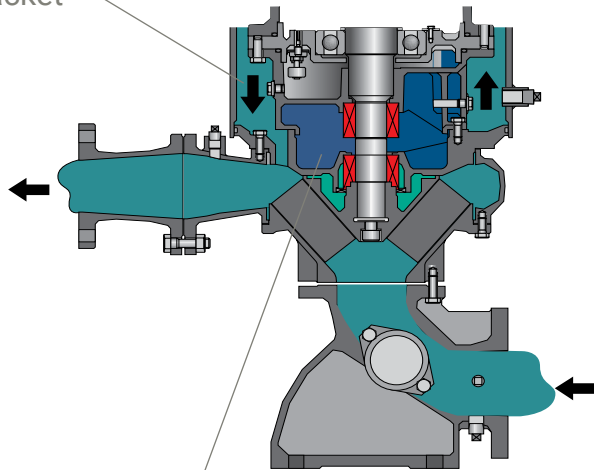


- Cable gland (grey cast iron)
- Solid joint butt connector (copper)

Note: Entry system is the same for both power and control cables.

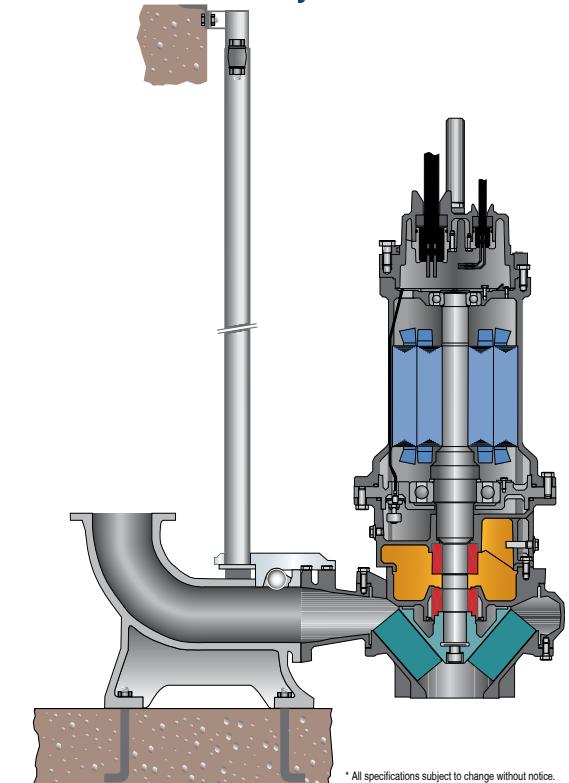
## DDLFU Dry Pit Design

- Motor cooling is provided by internal re-circulation of pumpage through the water jacket



- Mechanical seal oil chamber

## QDC & Slide Rail System



\* All specifications subject to change without notice.



# Model DLFU, DLKFU, DDLFU

## EBARA K-Series

An increased frequency of submersible wastewater pumps clogging due to an abundance of improperly disposed materials entering the waste streams have plagued pump manufacturers and municipal wastewater facilities over the past decade. Efforts by municipalities to restrict occurrences of such materials entering the system are not always successful.

Ebara DLKF series pumps are designed to tackle these challenges. The Ebara K-series submersible sewage pump maintains the same quality and durability of the Ebara DLF line but with enhanced passage capabilities for handling of fibrous waste.



Adjustable wear plate with an E-eliminators groove.

Modified vane profiles.

The Ebara K-series design features address the most common reasons for clogging caused by fibrous materials. This design:

- Reduces material caught on the vane tips
- Increases inlet pressure which keeps debris moving instead of recirculating
- E-eliminators groove disrupts the accumulation of fibrous debris.

When applied as designed, Ebara submersible DLF-series pumps continue to offer superior solids handling for up to three-inch spherical solids. In most applications the standard D-series design can sufficiently handle your pumping requirements, but when the situation calls for something more, choose Ebara K-series.

K-series pumps are available for new equipment sales and as a conversion kit for installed Ebara pumps.

### Field Trials

have shown that the Ebara K-series pumps have dramatically reduced and in some cases eliminated clogging pumps.

#### South Carolina Municipality:

80DLMF (3 HP), multiple clogging occurrences per week pumps converted to 80DLMKF 9/24/09 - **no clogs as of 9/2/2010**

#### South Carolina Municipality:

80DLCMF (10 HP), two clogging occurrences per week pumps converted to 80DLCMKF 7/23/09 - **no clogs as of 9/2/2010**

#### South Carolina Municipality:

80DLMF (7 1/2 HP), multiple clogging occurrences per week pumps converted to 80DLMKF 11/17/09 - **no clogs as of 9/2/2010**

#### Ohio Municipality:

100DLMF (15 HP), daily clogging occurrences upgraded to 100DLMKF 10/23/09 - **no clogs as of 9/2/2010**

#### Iowa Municipality:

100DLMF (10 HP), multiple clogging occurrences per week upgraded to 100DLMKF 11/12/09 - **no clogs as of 9/2/2010**

#### Florida Municipality:

150DLFU618 (25 HP), 11/5/09 two clogging occurrences per week, upgraded to 150DLKFU618 - **no clogs as of 9/2/2010**