

## Mini Pump Range

### Options

- Bareshaft or close-coupled to electric motor or gearbox (M501 bareshaft only)
- Bareshaft pumps – packed gland or mechanical seal.  
Close-coupled pumps – mechanical seal only (M501 mechanical seal only)
- Materials of construction:  
Orbidos M45, M83, M153 stainless steel only M501 cast iron only M701, M1001 and M1901 cast iron or stainless steel
- Stators available in nitrile, viton and EPDM rubber
- Orbidos M45, M83 and M153, dual rotation close-coupled or bareshaft.

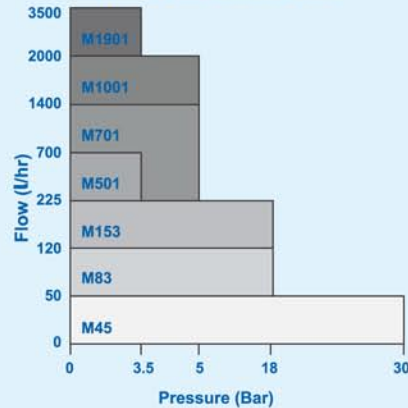
### Features

- Positive displacement progressing cavity principle
- Smooth, non-pulsating flow irrespective of rotational speed
- Excellent handling capabilities for high or low viscosity products
- Suction lift capabilities depend on altitude, temperature and product viscosity
- Orbidos variable speed options ideal for dosing applications
- Compact, reliable pumping for a multitude of commercial and domestic applications
- Sealed universal for longer life
- Inherently self-priming.

### Application

This self-priming range of positive displacement helical rotor pumps for small and medium size industrial applications offers smooth flow at all speeds and excellent handling of product regardless of viscosity.

Typical Performance Guide



# IN THE THICK OF THINGS



## INDUSTRIAL HELICAL ROTOR PUMPS

Orbit industrial helical rotor pumps are ideal for a wide variety of applications, ranging from water and wastewater to mining and chemicals.

Capacities up to 160m<sup>3</sup>/hr, pressures up to 80 bar.



**Service and Support** - Franklin Electric is the leading manufacturer of world-class pumping system solutions providing the highest quality, availability, service, innovation and value in the industry. Backed by unsurpassed expertise throughout Africa, these leading brands are ideal for various pumping applications.

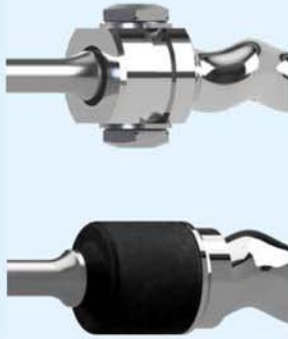


**QUALITY • AVAILABILITY • SERVICE • INNOVATION • VALUE**

# Orbit Industrial Pump Range

## Features

- Reversible, self-priming action with high suction capability
- Capacity proportional to speed and pressure independent of speed
- Uniform non-pulsating flow
- Ability to transfer, without damage, products containing hard or soft solids
- Ability to transfer highly viscous products
- Gentle, low-shear pumping action
- Available in cast iron or stainless steel
- Robust construction that is simple to maintain
- Stators come standard in a variety of chemical and abrasion-resistant rubber compounds
- Material of manufacture for rotors can be specified for maximum abrasion/corrosion resistance
- Rotor stator geometry optimised to perform under arduous conditions
- Improved hydraulic performance, efficiency and pressure breaks
- Higher flows at slower rotational speeds for low-shear applications.
- Excellent suction capabilities - inherently self-priming.



### Standard sealed Universal Joint-B Range

Standard O-ring or square seal ring designs provide adequate sealing protection against the ingress of foreign material into the universal joint. Standard seals are suitable for handling most products in industry.

### Fully Sealed Universal Joint-D Range

Where neither ingress of chemical product nor contamination of the product handled by the lubricant within the joint can be tolerated, the fully sealed universal joint provides complete sealing protection. Typical applications are foodstuffs and explosive slurries.

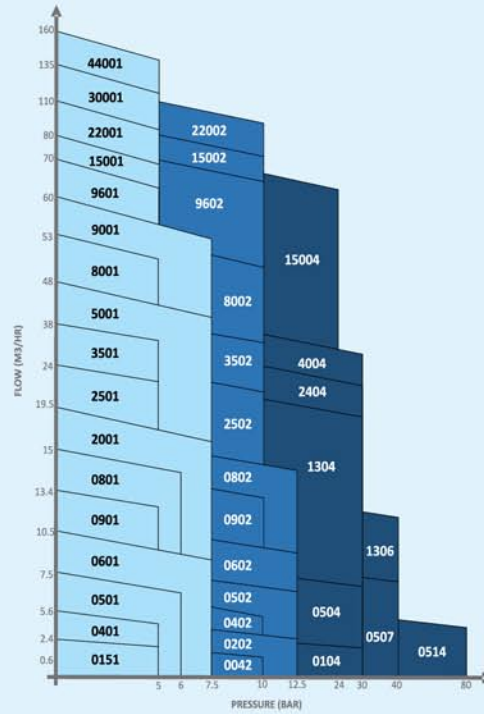
### Drive

Electric motor, hydraulic motor, diesel engine, petrol engine or air motor. Speed reduction can be by V-drive, geared motor or variable speed gearbox.

### Installation

Installed horizontally, vertically or in any other position, the pumps may also be skid-mounted or mounted on a portable trolley base.

Typical Average Performance Guide



		Cast Iron	Stainless Steel
Mining	Dewatering	✓	✓
	Coal Washing	✓	✓
	Gland Service	✓	✓
	Sludges	✓	✓
Water & Waste	Flocculants	✓	✓
	Lime Dosing	✓	✓
	Sludge Transfer	✓	✓
	Filter Press Feed	✓	✓
	Abattoir Waste	✓	✓
Pharmaceutical	Raw Materials	✓	✓
	Shampoos	✓	✓
	Lotions	✓	✓
	Soaps	✓	✓
	Detergents	✓	✓
Food	Fruit Pulp	✓	✓
	Confectionery	✓	✓
	Edible Oils	✓	✓
Beverage	Kieselguhr	✓	✓
	Spent Grains	✓	✓
	Yeasts	✓	✓
	Wines	✓	✓
	Fruit Juices	✓	✓
	Coffee	✓	✓
Agriculture	Liquid Fertiliser	✓	✓
	Molasses	✓	✓
	Liquid Manure	✓	✓
	Produce Washing	✓	✓
Petrochemical	Acids	✓	✓
	Alkalis	✓	✓
	Polymers	✓	✓
	Adhesives	✓	✓
	Effluent Treatment	✓	✓
	Lubricants	✓	✓
General	Clay Slip	✓	✓
	Tannery Effluent	✓	✓
	Galvanising	✓	✓
	Construction	✓	✓
Pulp & Paper	Stock Transfer	✓	✓
	Starches	✓	✓
	Dyes	✓	✓
	Coatings	✓	✓
	Waste	✓	✓

**Flanged Ports**  
Castings are machined to BS4504 as standard. Other options available on request.

**Rotor**  
Hard chrome-plated rotors in either EN8 or heat-treated tool steel, as well as stainless steel plated or unplated.

**Stator**  
Nitrile, natural, hyalon or viton rubber are the standard stator options.

**Stator Housing**  
High pumping pressures are attainable from stators bonded to housings manufactured from thick-wall steel tubing.

**Castings**  
Cast iron and 316 stainless steel are standard casting materials. High pressure units utilise cast steel.

**Stuffing Box**  
These are manufactured as separate castings suitable for a variety of single or double mechanical seals or braided gland packing.

**Bearings**  
High thrust taper-roller bearings result in high flow and high pressure capabilities.

**Mainshaft**  
Manufactured from EN8 or 316 stainless steel, mainshafts are hard chrome-plated in the gland area for excellent wear resistance.

