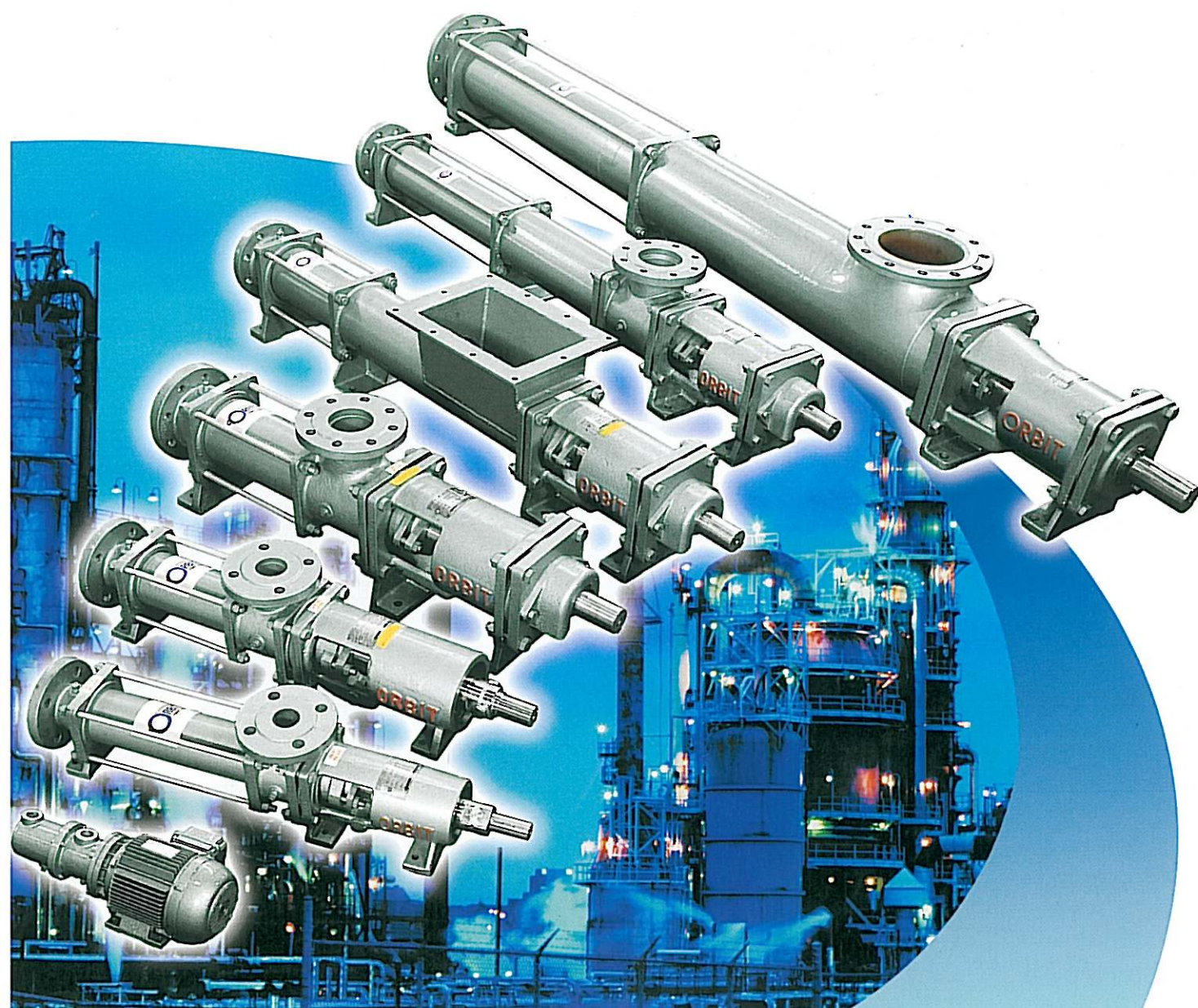




## Industrial Helical Rotor Pumps

The Orbit Industrial  
helical rotor pump is  
ideal for a wide variety  
of applications, ranging  
from water and waste-  
water to mining and  
chemicals

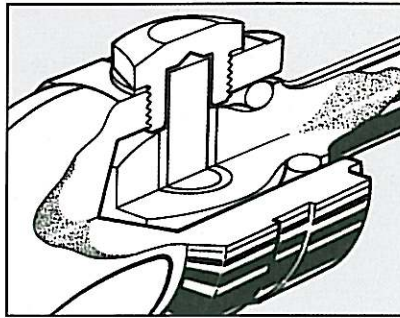


# Industrial Pump Range

## Features:

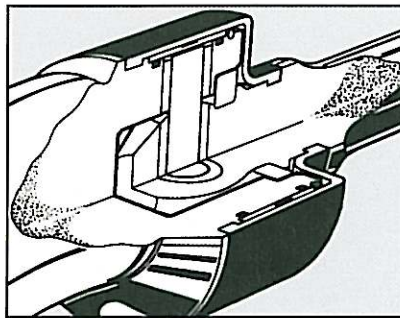
- Excellent suction capabilities – inherently self-priming
- Good solids handling capabilities including fibrous materials
- Reversible – pumps in either direction with equal efficiency
- Capacity is proportional to speed
- Pressure is independent of speed
- No valves
- Loose seal/gland arrangement
- Gentle handling of shear-sensitive products
- Ability to handle viscous products of over 1 million centipoise
- Solid or hollow shaft option
- Pulse-free flow
- Simple and robust construction
- Ability to handle products with a large percentage of entrained gas

## Standard Sealed Universal Joint-B Range



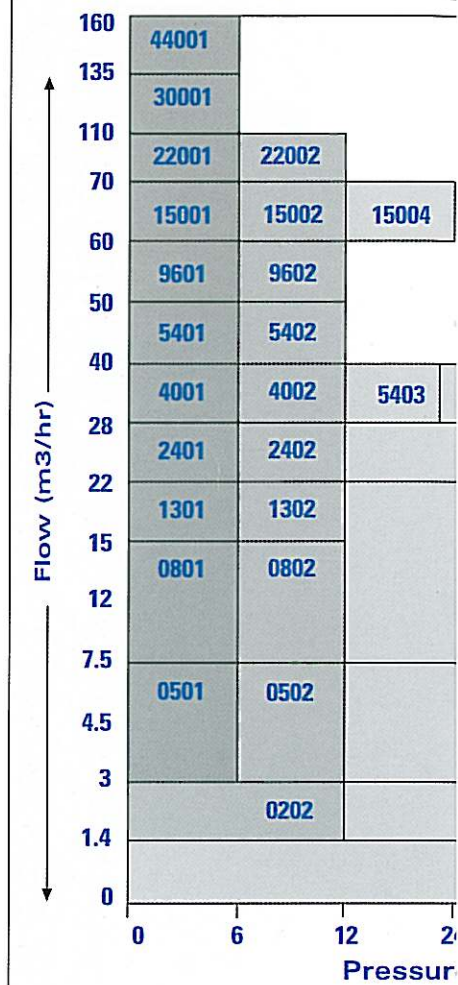
Standard O-ring or square seal ring designs provide adequate sealing protection against the ingress of foreign material into the universal joint. Standard seals are suitable for handling most products in industry.

## 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.

## Typical Performance



## Drive

Motor, geared motor, variable speed, petrol engine or air motor.

## Drive Shafts

Manufactured from various high quality steels, drive shafts are hard chrome-plated in the gland area for excellent wear resistance. Hollow or solid shaft designs are standard.

## Stuffing Box

These are manufactured as separate castings suitable for EuroDIN seals or braided packing of many different materials. Double and special chemical seals can be quickly and easily fitted.

## Castings

Grey cast iron and 316 stainless steel casting materials. The design is as a hopper with an auxiliary port for poor flow characteristics.

## Bearings

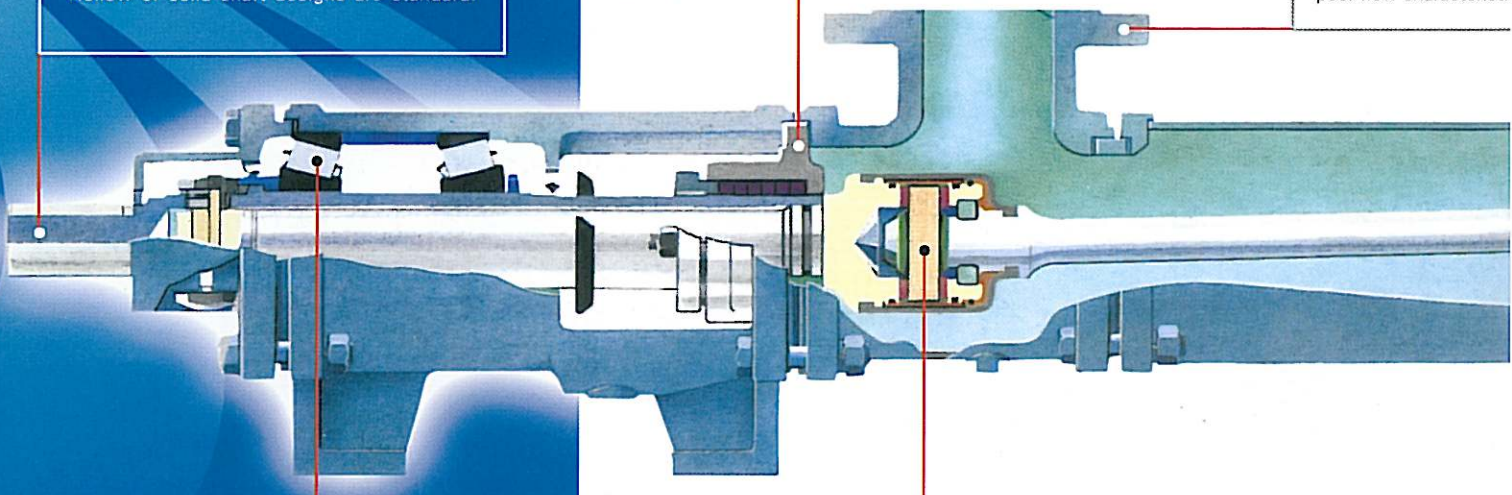
High thrust taper-roller or ball bearings of adequate proportions result in high flow and high pressure capabilities.

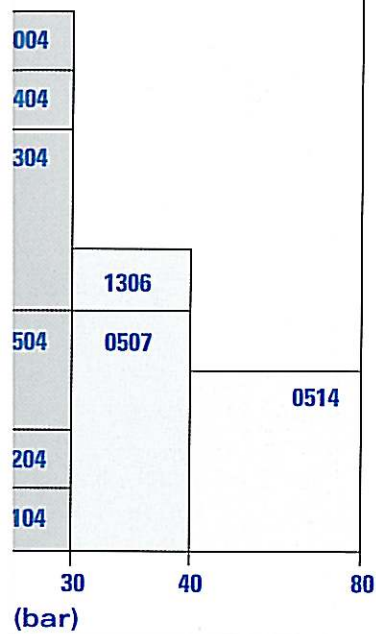
## Universal Joints

Grease lubricated pin-type joints are either single or fully sealed.

## Couplings

Coupling rods are designed to handle rotor load and





## Applications

### Agriculture

Liquid manure, feedstuffs, irrigation, fertilizer, herbicides and pesticides.

### Brewing and Beverages

Yeast, spent grains, kieselguhr, glucose, wine, coffee, fruit juices and pulp.

### Building and Construction

Cement slurries, paint, aerated grout, bitumen, mortar and waste products.

### Ceramics

Clay slip, glazes and waste products.

### Chemicals

Acids and alkalis, emulsions, petrochemicals, effluents, sludges and explosives.

### Food, Dairy and Confectionery

Fat, conserves, preserves, processed foods, soups, dairy products, whey, oils, glucose, jams, molasses, sugar, syrups, confectionery and waste products.

### Mining

Explosives, dewatering, flocculants, grouting, dust suppression, gland service, backfilling and sludges.

### Paper and Pulp

Paper stock, coatings, dyestuffs, adhesives, starches and waste.

### Pharmaceuticals and Cosmetics

Soap, ointments, creams, toothpaste, raw materials, pastes, shampoo and detergents.

### Water and Wastewater Industry

Belt and filter press feed, flocculants, activated carbon and lime dosing, acids and alkalis for pH control, all sludges including those with high gaseous content and macerated sewage.

carbox, hydraulic motor, diesel engine,

## Installation

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

stainless steel are standard  
trial port can be manufactured  
feed to handle products with  
E Range).

### Stators Housing

High pumping pressures are obtainable from stators bonded to housings of thick-wall steel tubing.

### Rotors

Standard options are specially hardened and hard chrome-plated rotors in either EN8 or tool steel, as well as stainless steel plated or unplated. Special alloys are available.

### Shods

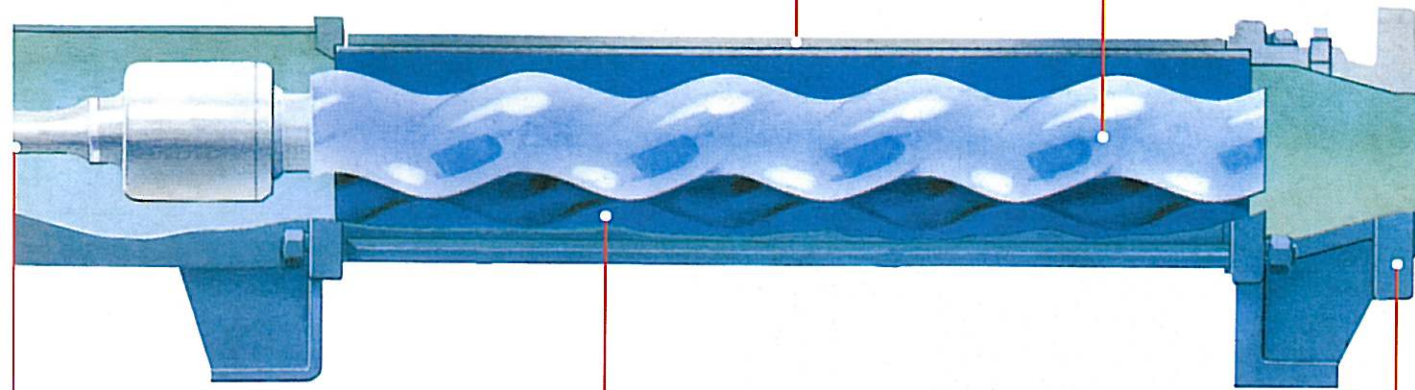
proportioned to handle  
entricty.

### Stators

Natural, nitrile, EPDM, hypalon or viton rubber are the standard stator options.

### Flanged Ports

Castings are machined to BS4504 as standard. Options available include ASA and DIN.



# Mini Pump Range

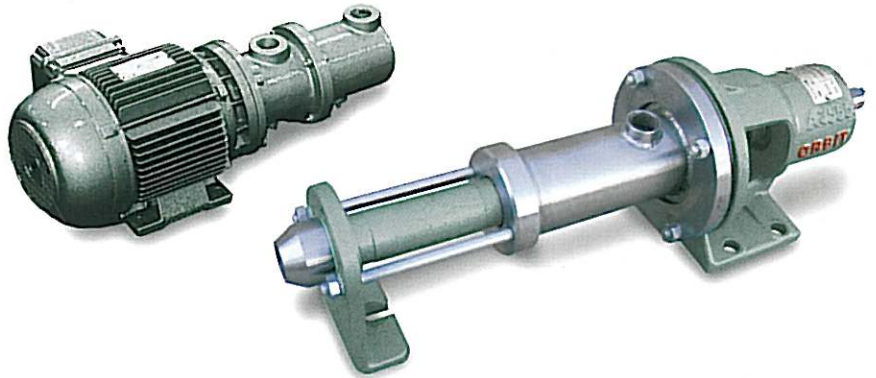
## Options

- 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

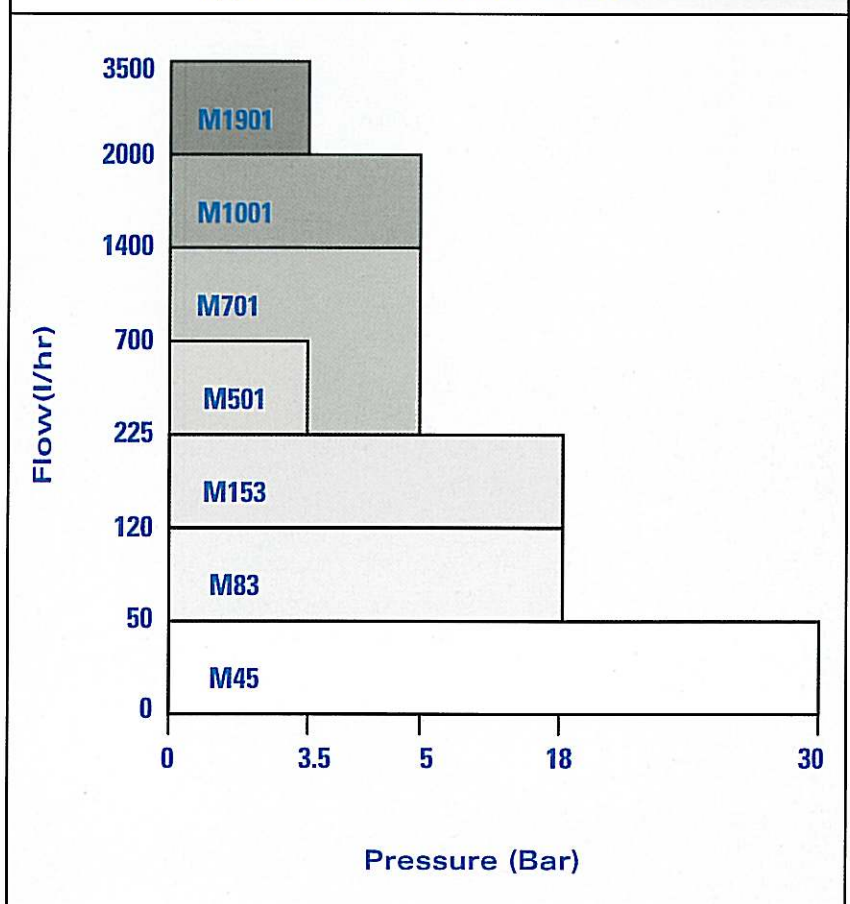
## Features

- Positive displacement progressing cavity principle
- Smooth, non-pulsating flow irrespective of rotational speed
- Excellent handling capabilities for low and high viscosity products
- Suction lift capability dependent 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

This self priming range of positive displacement progressing cavity 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



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Approved Distributor



**DENORCO**  
engineered pumping solutions

## Service and Support

Denorco offers the most comprehensive distribution and support network in Southern Africa. From our SGS ISO 9001:2000 accredited manufacturing facilities in Edenvale to our team of product specialists capable of delivering turnkey solutions, our engineered pumping solutions compete with the best in the world.