



CASTLE PUMPS LTD

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Datasheet



Model is ideal for **heavier pressure** requirements

Reversible operation allows flexible installation, tank to tank transfer and fluid recovery from dispensing hose

Suction lift and self-priming ability enables pump to dry run without damage and low moisture content fluid handling

Simple, low cost maintenance due to the hose being the only wearing part; and with the absence of valves and mechanical seals cleaning and replacing is easy



Motor and gear reducer shaft aren't needed to support internal axial loads, due to **heavy duty internal ball bearing box** - increasing strength and life span

Wrapped inner and outer hose, reinforced with high density pressed Nylon for **longer lifespan**.

Proportional motor speed to flow - ideal for **accurate dosing without slippage** - due to rollers clamping hose in opposing locations

Handles solids and shear sensitive fluids due to **gentle pumping motion and low rpm** preventing change to fluid structure

Leak free connection due to double conical hose clamp, making it one of the safest systems available and easily adaptable to any connections



Series **RBT** Self Priming Peristaltic Pump

RBT Peristaltic Pump



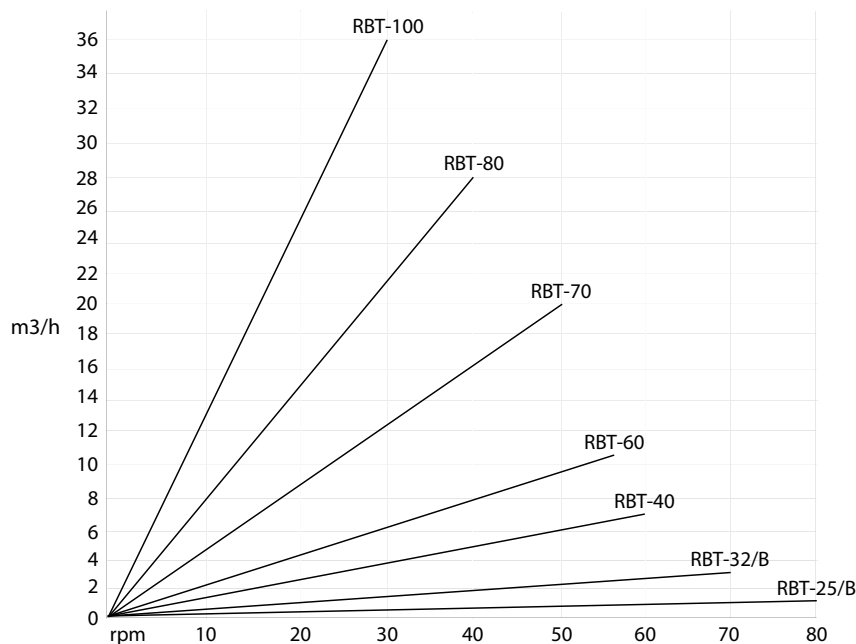
Drive Options

- Geared Motor
- Motor variator with gear reducer
- Geared motor with integrated inverter

Performance Tables

	RBT-25/B	RBT-32/B	RBT-40	RBT-60	RBT-70	RBT-80	RBT-100
Max Flow rate	0.3 L/rev	0.625 L/rev	1.33 L/rev	3.61 L/rev	6.7 L/rev	11.7 L/rev	20.0 L/rev
Connections	DN25	DN32	DN40	DN 50	DN 65	DN 80	DN 100
Max Pressure	15 bar	15 bar	15 bar	15 bar	15 bar	15 bar	15 bar
Hose Tightening System	Shoes	Shoes	Shoes	Shoes	Shoes	Shoes	Shoes
Hoses Available	NR, NBR, EPDM, NR-A, NBR-A, HYPALON	NR, NBR, EPDM, NR-A, NBR-A, HYPALON	NR, NBR, EPDM, NR-A, NBR-A, HYPALON	NR, NBR, EPDM, NR-A, NBR-A, HYPALON	NR, NBR, EPDM, NR-A, NBR-A, HYPALON	NR, NBR, EPDM	NR,NBR, EPDM

Performance Curve



Typical Applications

Ideal for highly viscous and solid laden mediums. The wide variety of materials that the inner tube is available in and the seal-less design, makes them also suitable for chemicals and aggressive fluids.

- Food and drink manufacturing
- Oil sludge, clay, lime slurries, cement
- Paint, ink, glue, pigment and dye
- Sewage and waste water
- Chemical and corrosive fluid dosing
- Pulp and paper slurries

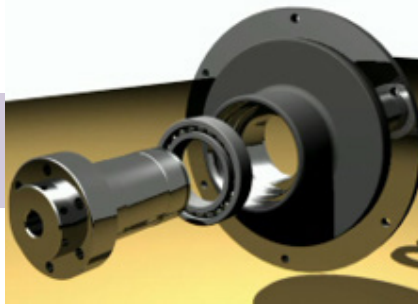


Double Conical Ring Design



Design Benefits

- Patented double conical hose clamp design ensures leak free connection, making it one of the safest systems available and easy to adapt to any connections on the market.
- Heavy duty, internal ball bearing box that means that the motor and gear reducer shaft do not have to support all the internal axial loads, adding strength and increasing life span.
- Wrapped inner and outer hose, reinforced with high density pressed Nylon for longer life.
- Simple and low cost maintenance compared to other pump technologies due to the hose being the only wearing part which is easy to clean and replace, thanks to the absence of valves that can clog and mechanical seals that can wear.
- Good suction lift and self-priming capabilities, meaning that the pump can dry run without damage and handle fluids with low moisture content.
- Reversible operation allowing the flexibility of installations, tank to tank transfer and the recovery of fluid from the dispensing hoses if required at the end of transfer.
- Motor speed is proportional to flow, makes it ideal for dosing applications. Dosing is accurate without slippage due to rollers/shoes clamping hose in opposing locations.
- Ability to handle solids as well as shear sensitive fluids thanks to its gentle pumping motion and low rpm preventing change to a fluid's structure.



Heavy Duty Ball Bearing Box

Shoe Operation

Fluid is moved along inner tube by shoes compressing against it as they rotate.

Ideal for more heavy duty, higher pressure requirements from 5-15 bar, where roller models can't efficiently handle the application.





Trolley Mounted with Control Panel



Accessories Available

Inline Pulsation Dampener –

Ensures a continuous, smooth flow for the accurate use of flow meters and pressure switches. By eliminating vibrations and hammering, operation is relatively quiet and working life is increased.

Hose Leakage Sensor –

Should the only wearing part of the pump (the hose) fail, the sensor can shut off the pump or activate an alarm to allow the situation to be addressed quickly. This makes the pump ideal for remote installations or where hazardous fluids are handled.

Vacuum Assisted Priming –

Improves the pump's self-priming capability in installations involving particularly viscous fluids or difficult suction conditions.

Halar (ECTFE) Coating –

Improves the corrosion resistance of the pump in chemical or other hazardous applications.

PP/PDV Connections –

As standard, connections are Stainless Steel, but for chemical applications they can be supplied in alternative materials.

Integrated Control Panel –

Can be configured as per the user requirements with features such as on/off, speed control, reversing switch, flow and pressure display, leakage warning.

Trolley or Base Plate –

For the flexibility of installation and enhanced mobility where required.

Inverter –

Pump speed can be slowed down to the required flow, extending the life span of the motor by not making it unnecessarily work to full capacity, and reducing wasted energy costs.

Feed Screw and Hopper –

For the pumping of highly viscous fluids that don't flow with ease and are prone to bridging.



Vacuum Priming Device

Hopper Feed

