

SROBOT PUMPS



RT - TURBOTEX PUMPS

RT- Turbotex pumps

The Robot submersible Turbotex pumps form the ultimate solution in today's pumping technology. The self cleaning blade leading edge effectively deals with fibrous materials and other materials that are found in waste water. The smooth passage of water and solids trough the Turbotex impeller makes them first choice for product pumping or wherever flow disturbance is unacceptable including activated sludge.

The closed design of the impeller guarantees constant high performance with a minimum of maintenance and maximum reliability. No impeller to volute adjustments are necessary to keep efficiencies at design level and maintaining low energy consumption.

Features

Self cleaning impeller

The Turbotex impeller effectively deals with one of the major problems in waste water pumping, fibrous materials. At the suction side, the impeller blade is extended in such a way that the inlet is almost paralel with the direction of flow. Fibrous materials are pushed along the blade into the wide impeller passage by the main flow. The impeller passage is designed with equal cross section, avoiding dead corners where clogging might start.

No adjustments - low maintenance

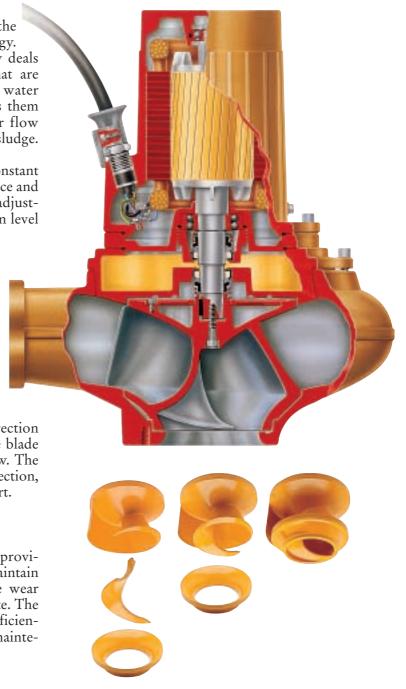
At the suction side, two wear rings in series are provided that do not require re-adjustments to maintain performance at design level. Provisions in the wear rings avoid jamming on the impeller in the volute. The risk for pumps running at reduced output and efficiencies is greatly eliminated with only minimum maintenance.

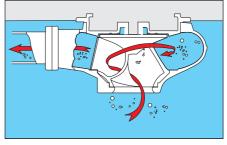
Low turbulence - low product damage

The favourable shape of the impeller inlet ensures smooth passage of water and solids, avoiding excessive turbulence and preventing damage to the pumped particles. This makes Turbotex pumps first choice for product pumping, i.e. in food processing or where flow disturbance is unacceptable as for instance in pumping activated sludge.

High efficiency - adjustable flow

The Turbotex pumps not only show high efficiencies over a broad operating range, but moreover the design of the impeller outlet allows impeller trim. This feature, not commonly available in traditional spiral vane pumps enhances energy saving as pumps do not run unnecessarily above the required capacity.

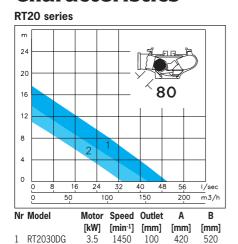




Low wear-constant high performance

The closed design of Turbotex impellers ensures that abrasives have limited or no effect on the impeller to volute clearance and hence efficiency. The risk for sudden drops in performance has been significantly reduced.

Characteristics



1450

100

420

520

2 RT2031DD

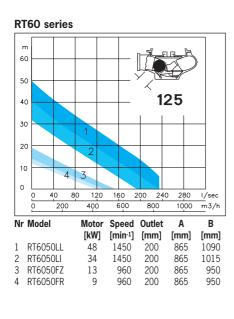
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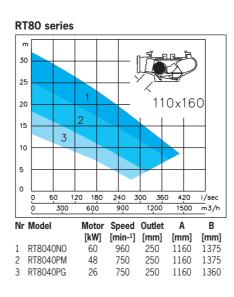
RT40 series | March | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | B | Motor | Speed Outlet | A | Motor | Speed Outle

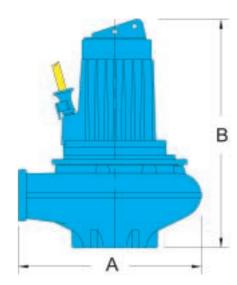
RT60 series							
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30							,
25				-			,
20			1		^ 11	10	
15			2			+	+
10							
		3					
5							
	0 2	0 4	0 60	80	100 120	140	I/sec
	0	100	200	300	400	500	m3/h
Nr I	/lodel		Motor [kW]	Speed [min-1]	Outlet [mm]	A [mm]	B [mm]

Nr	Model	Motor	Speed	Outlet	Α	В
		[kW]	[min-1]	[mm]	[mm]	[mm]
1	RT4042DZ	12	1450	150	665	773
2	RT4042DU	9.5	1450	150	665	773
3	RT4040D0	7.5	1450	100	495	620
4	RT4040DL	6	1450	100	495	620
5	RT4040DJ	5	1450	100	495	620
6	RT4042FH	4	960	150	665	708
7	RT4040FE	2.4	960	100	495	620

Nr	Model		Speed [min-1]		A [mm]	B [mm]
1	RT6040LF	22	1450	150	705	950
2	RT6040LD	16	1450	150	705	950
3	RT6040FR	9	960	150	705	950







Design Features

Motor: class F (155°F/311°F).

Bearings: heavy duty (thrust) bearings, greased for life.

Shaft: stainless steel.

Shaft sealing: Two independent mechanical seals, run in oil. At the pump side silicon carbide runs on ceramic, at the motor side carbon on ceramic.

Oil housing: with flexible rubber bellows.

Back vanes: with spiral groove in the seal housing. Prevent solids entering the seal area and reduce the pressure on the seals for longer seal life.

Impeller: self cleaning, effectively deals with fibrous materials. No flow disturbance and low product damages.RT 80 with twin blades for optimum hydraulic balance and smooth vibration free running

No adjustments: closed impeller to minimise the effects of wear. Two wear rings in series that do not require re-adjustments for contstant long term high performance with minimum maintenance.

Bolts & Nuts: stainless steel.

Options available

	Vers	sions	Impeller materials		
	Flame- proof	Cooling- system	Wear resistant	Stainless steel	
RT2030	•	•	•		
RT2031	•	•	•	•	
RT4040	•	•	•		
RT4042	•	•	•		
RT6040	•	•	•		
RT6050	•	•	•		
RT8040		•	•		

Options

Flame proof motors: certified to European standards EN 50014/18/19 (BS 5501), class EEx de IIB T3 or T4, and to American FMRC standard, class 1, division 1, groups C&D T4.

Cooling jacket: for continious dry running at full load, with internal water circulation or for external water supply. Available for larger pumps. Seal flushing is optional.

Seal leak monitor:

detects water ingress in both motor- and oil housing.

Thermostats: standard for all flameproof pumps and units with cooling system and optional for all other pumps.

Special materials: many components are available in non standard materials like stainless steel, bronze, hardened sg cast iron etc.

Renewable wear rings: available upon demand.

Products from Robot Pumps B.V.:

Submersible pumps



RW Vortex Pumps

RT Turbotex Pumps

RS Grinder Pumps

RC Channel Pumps

RD Slurry Pumps

RV Heavy Duty

Slurry Pumps

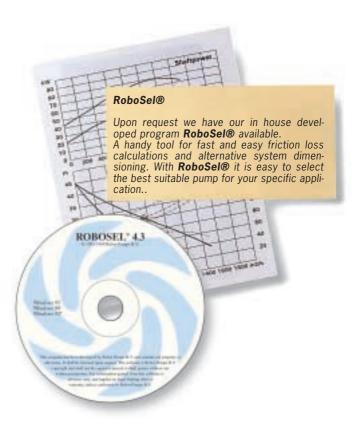
Pumps for dry installation



BW Vortex Pumps

BT Turbotex Pumps

BD Slurry Pumps



Typical applications

Sewage

Sewage treatment plants, sewage pumping stations, shopping malls, hotels, restaurants, high rise buildings etc.

Sewage, sewage by-pass, liquid manure, activated sludge, heavy-, primary- and digester sludge, sludge circulation, effluent.

Food processing

Food and pet food factories, abbatoir's, canneries, breweries and distilleries, sugar factories, meat and fish industrie, dairies.

Food and food waste, vegetable waste, slaughter waste, wash water.

General industry

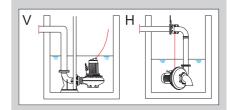
Car and motor industry, paper mills, power plants, rubber industry, offshore and shipbuilding, leather and textile industry, steel works. Paper pulp, process and cooling water, viscous liquids, latex, cellulose, bilge water, raw water.

Water Control

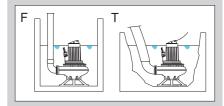
Storm water pumping stations, storm water overflow collecting sumps, irrigation pumps, land drainage pumps, tunnel drainage, quarry and mine de-watering, land reclamation.



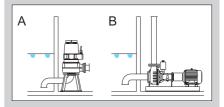
Options available



Pumps are available for permanent fixed installation, using the guide rail coupling V or the header coupling H, that is installed above the water level.



All pumps can be delivered with stand and discharge adapter for semi permanent free-standing installation F or for transportable use T.



Pumps with cooling system can be used in permanent dry flood-proof immersible installation A. For conventional dry installation B refer to the BT series brochure.





