

Close-Coupled Turbine Pumps

Bronze and Cast Iron Models

Description

SherTech regenerative turbine pumps use impellers with many closely spaced blades to provide pressures to 130 PSI and up to 9 GPM. There is no metal-to-metal contact and pumps can handle liquids with entrapped air without vapor locking. Turbine pumps are used in many industrial and commercial applications such as boiler feed on steam process, condensation return, pressure booster service, water treatment, spray equipment, reverse osmosis filtration equipment and liquid transfer where no suction lift is required. Maximum liquid temperature is 160° F; minimum temperature is 40° F. Maximum viscosity is 100 SSU.

Corrosive (non-saline), abrasive or highly viscous liquids, or liquids with particles in suspension, should not be pumped with a turbine design pump. The Cast Iron models are suitable for general service with non-corrosive and nonflammable fluids and the Bronze models are designed for use with saltwater brine and other nonflammable liquids. Both Bronze and Cast Iron models have a bronze impeller and bronze shaft sleeve, mechanical seal with carbon on ceramic, and Buna-N construction is standard. An optional Viton mechanical seal is available (see parts table). The wetted surfaces on Cast Iron component models are nickel-plated for enhanced corrosion resistance.

Pumps are close-coupled to AC NEMA 56J frame, 3/4 - 1½ hp, 3450 RPM, ball bearing motors. Single-phase units have capacitor start, open drip-proof (ODP) motors with thermal overload protection. Three-phase units have totally enclosed fan cooled (TEFC) motors. Overload protection is not supplied on three-phase units and must be provided in starter units. Pump control box must be ordered separately.

REPAIR SEALS AND OPTIONS – Standard (Buna-N) and an upgraded (Viton) seal are available. Standard and upgraded seals are called out in the repair parts list pages in this manual.

PUMP HEADS AND PEDESTAL MOUNT BASE – Complete pump heads and pedestal base can be ordered. Pump head and pedestal model numbers are called out in the repair parts list pages in this manual.



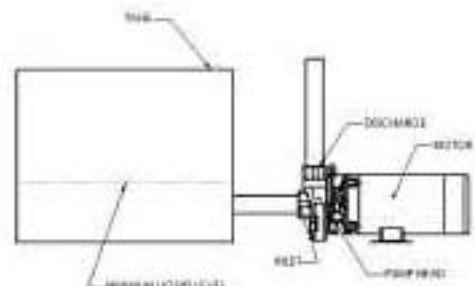
Do not use to pump flammable or explosive fluids such as gasoline, fuel oil, kerosene, etc. Do not use in flammable and/or explosive atmospheres. When pumping hazardous or dangerous materials, use only in room or area designated for that purpose. For your protection, always wear proper clothing, eye protection, etc. in case of any malfunction. For proper handling techniques and cautions, contact your chemical supplier, insurance company and local agencies (fire dept., etc.). Failure to comply with this warning could result in personal injury and/or property damage.

CAUTION

This pump is not suitable to be used pumping liquids that contain dirt, particles, shavings, chips, etc. The close tolerances of the impeller and housing will cause these particles to jam pump/motor. Failure to follow this warning can cause pump/motor to fail, which can result in property damage and/or personal injury and will void the product warranty.

CAUTION

Pumps are not self-priming and cannot suction lift, flooded inlet is required. If inlet is not flooded when the pump is running, seal failure will result and is not covered under the manufacturer's warranty.



CENTRIFUGAL PUMP WITH FLOODED SUCTION
NON-SELF PRIMING
DO NOT RUN DRY

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Bronze and Cast Iron Models

Performance – Standard Models (Water at 70°)

Model	Max. GPM**	GPM at total pressure (in PSI)*							Max. PSI
		10	20	40	60	80	100	120	
Bronze Models									
TXMBBX	5.6	5.2	4.9	4.3	3.8	3.3	2.8	2.2	120
TXMBB13	5.6	5.2	4.9	4.3	3.8	3.3	2.8	2.2	120
TXMBB133T	5.6	5.2	4.9	4.3	3.8	3.3	2.8	2.2	120
TXMBB2X	9	8.9	8.7	8.1	7.2	6.3	5.3	4.3	130
TXMBB25	9	8.9	8.7	8.1	7.2	6.3	5.3	4.3	130
TXMBB253T	9	8.9	8.7	8.1	7.2	6.3	5.3	4.3	130
Cast Iron Models									
TXMBC13	5.6	5.2	4.9	4.3	3.8	3.3	2.8	2.2	120
TXMBC1X	5.6	5.2	4.9	4.3	3.8	3.3	2.8	2.2	120
TXMBC133T	5.6	5.2	4.9	4.3	3.8	3.3	2.8	2.2	120
TXMBC2X	9	8.9	8.7	8.1	7.2	6.3	5.3	4.3	130
TXMBC25	9	8.9	8.7	8.1	7.2	6.3	5.3	4.3	130
TXMBC253T	9	8.9	8.7	8.1	7.2	6.3	5.3	4.3	130

(*) Test data is taken with water at 70°F for pumps with 60 Hz motors at 3450 RPM motors (to convert data to PSI, divide feet of head by 2.31). Pump performance when pump is new. As pump wears, the performance will decrease.

(**) Intake at top of pump. With 1 PSI, positive suction head (flooded suction).

NOTES: A suitable relief valve, should be installed to ensure that maximum PSI is not exceeded. Otherwise, electric motor may be overloaded.

Max. Viscosity = 100 SSU Max. Specific Gravity = 1.1 Max. Torque = 65 in.-lbs. Max. Speed = 3600 RPM
Manufacturer reserves the right to change performance without notification.

Price List and Specifications – Standard Models

List Price	DRIVER										PUMP CONSTRUCTION (Wet End)					Ship Wt. (lbs.)		
	Pump Model	AC Motor HP	NEMA Type	Motor Frame	Motor Voltage	Full Load Amps	Service Factor	Amps**	Hertz	Phase	RPM	Overload Protection	Port Size NPT	Shaft	Cover & Body		Impeller	Seals*
Bronze Models																		
\$	TXMBB1X	3/4	-	56J	Pump Head only - No motor			-	-	-	-	-	1" x 1"	Bronze	Bronze	Bronze	Buna-N	14
\$	TXMBB13	3/4	ODP	56J	115/208-230	13.00/7.20-6.50	15.30/8.45-7.65	60	1	3450	Yes	1" x 1"	Bronze	Bronze	Bronze	Buna-N	32	
\$	TXMBB133T	3/4	TEFC	56J	208-230/460	2.50-2.30/1.15	2.60/1.30	60	3	3450	No	1" x 1"	Bronze	Bronze	Bronze	Buna-N	38	
\$					190/380	2.70/1.35	**	50	3	2830	No							
\$	TXMBB2X	1 1/2	-	56J	Pump Head only - No motor			-	-	-	-	-	1" x 1"	Bronze	Bronze	Bronze	Buna-N	16
\$	TXMBB25	1 1/2	ODP	56J	115/208-230	17.00/9.35-8.50	21.00/10.40-10.50	60	1	3450	Yes	1" x 1"	Bronze	Bronze	Bronze	Buna-N	40	
\$	TXMBB253T	1 1/2	TEFC	56J	208-230/460	4.63-4.20/2.10	4.70/2.35	60	3	3450	No	1" x 1"	Bronze	Bronze	Bronze	Buna-N	43	
\$					190/380	4.90/2.45	**	50	3	2830	No							
Cast Iron Models																		
NA	TXMCB1X	3/4	-	56J	Pump Head only - No motor			-	-	-	-	-	1" x 1"	Bronze	Cast Iron	Bronze	Buna-N	12
NA	TXMCB13	3/4	ODP	56J	115/208-230	13.00/7.20-6.50	15.30/8.45-7.65	60	1	3450	Yes	1" x 1"	Bronze	Cast Iron	Bronze	Buna-N	30	
NA	TXMCB133T	3/4	TEFC	56J	208-230/460	2.50-2.30/1.15	2.60/1.30	60	3	3450	No	1" x 1"	Bronze	Cast Iron	Bronze	Buna-N	36	
NA					190/380	2.70/1.35	**	50	3	2830	No							
NA	TXMCB2X	1 1/2	-	56J	Pump Head only - No motor			-	-	-	-	-	1" x 1"	Bronze	Cast Iron	Bronze	Buna-N	14
NA	TXMCB25	1 1/2	ODP	56J	115/208-230	17.00/9.35-8.50	21.00/10.40-10.50	60	1	3450	Yes	1" x 1"	Bronze	Cast Iron	Bronze	Buna-N	38	
NA	TXMCB253T	1 1/2	TEFC	56J	208-230/460	4.63-4.20/2.10	4.70/2.35	60	3	3450	No	1" x 1"	Bronze	Cast Iron	Bronze	Buna-N	41	
NA					190/380	4.90/2.45	**	50	3	2830	No							

ODP = Open Drip-Proof TEFC = Totally-Enclosed Fan-Cooled

(*) Shaft Seal also contains stainless steel, ceramic and carbon components.

(**) At 208 volts or 50 hertz, the Service Factor Amps are the same as the Full Load Amps.

NOTES: Driver data is subject to change without notice, see label on driver for actual specifications.

All motors include a base (the base may be removable, movable or welded). Motors are not supplied with power cords.

Manufacturer reserves the right to change specifications without notification.

Standard motors listed above are not wash-down or explosion-proof (manufacturer does not stock wash-down or explosion-proof motors).

Thermal overload protection is standard on all single-phase motors (overload protector may have automatic or manual reset); three-phase motors are not provided with thermal overload protection.

Manufacturer does not specify regulatory compliance for UL, UR, CSA or CE; however most models do comply to UL, UR, CSA and CE.

To Order Optional Motors: For custom applications or configurations, select a pump head from above and a 56J Frame motor or pedestal mount from the motor section of this catalog.

Source: Owner's Manual L-4069 (11/07)