



GENUINE MEGA

MEGA WATER PUMPS



No pump, no spray. It's that simple. Mega water pumps are not off-the-shelf irrigation pumps designed to run sprinklers; they are the product of over 35 years of experience and constant improvement. We know what works best, and we are continuing to develop our water pumps for the varied demands of heavy equipment use.

www.megacorpinc.com





GENUINE MEGA



MEGA WATER PUMPS

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MEGA WATER PUMPS



M4B Corrosion Resistant, CW
306201

WHEN YOU LOOK AT A GENUINE MEGA WATER PUMP YOU'LL SEE HEAVY DUTY.

The American-made Mega M series pumps are designed specifically for heavy equipment use. We have pumps designed for almost any water truck application, whether it's a 2,000 gallon on-highway tank or the largest tanks made on rigid frame trucks. Our pumps are made to provide the industry's best performance in the harshest conditions known.

All Mega M series pumps provide for direct drive motor mounting to eliminate coupling alignment failures and to provide the strongest, longest-lived motor-to-pump connection. If corrosive water is a problem, the Mega M4B corrosion resistant pump is the answer. All Mega M series pumps feature heavy dual bearings and heavy stress-proof shafts to withstand the shock loads of sudden start and stop water hammering that water tankers dish out.

M4B Mega Water Pump



M4B Standard, CW
306200



M4B Corrosion Resistant, CW
306201



M4 Complete Stainless Steel, CW
306647

The M4 series is a clockwise-rotation centrifugal pump with a 6 inch inlet, 4 inch outlet, and maximum speed of 2,400 RPM. Inlet and outlet connections are flanged to provide a solid, leak-proof mount to the tank plumbing. The heavy-duty stress-relieved cast iron frame and volute case provide solid mounting to the tank and more than 1,300 gpm flow (up to 140 psi max).

The enclosed drive motor mount reduces the potential for contamination of the coupling housing, and the threaded shaft-to-impeller connection allows for easier maintenance and increased durability under abrupt start/stop water hammering conditions. Additionally, the M4 series pump does not need to be removed from the tank for rope packing replacement, making service quick and simple. For all of these reasons and more, the M4 series is Mega's most robust and operator-friendly water pump to date.

- Rope-packing shaft seal
- Corrosion-resistant stainless steel, pressure balance impeller (improves rope seal and bearing life)
- Vented frame cavity (prevents damage from over-greasing and allows the use of an auto lubrication system)
- Engineered high-performance drive end bearing & roller impeller bearing
- Floating impeller-end bearing
- SAE 'C' fit four bolt direct motor mount
- Splined input shaft to splined drive motor coupling (allows for minor amounts of misalignment with reduced motor wear)
- Threaded shaft-to-impeller connection (for ease of maintenance and increased durability under start/stop and water hammer conditions)

The M4 series water pumps are available in both standard cast iron and corrosion resistant forms (look under optional features for corrosion options). As with all of our water pumps, the M4 series comes with complete replacement parts and Mega's product and technical support.

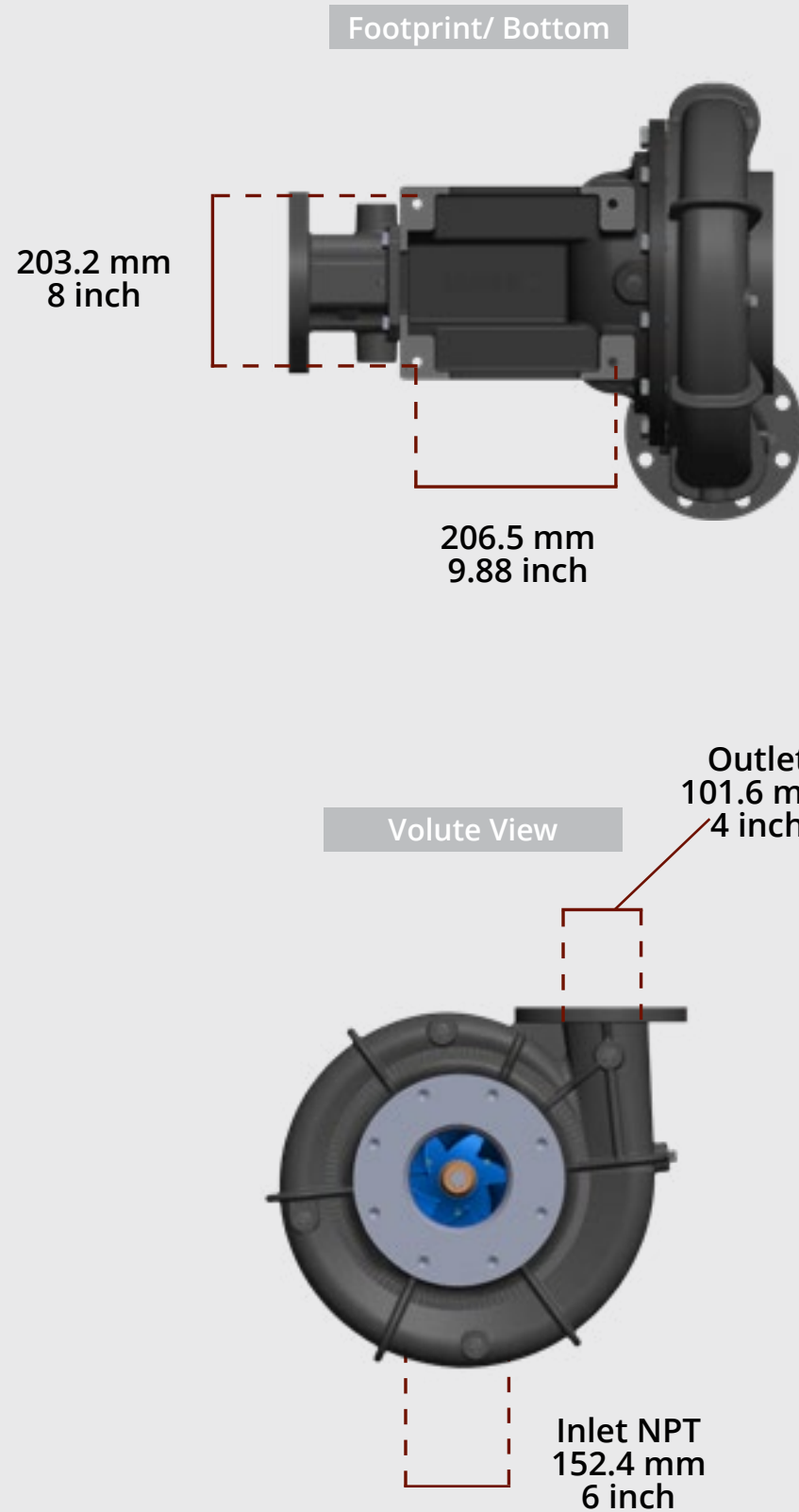
HAVE CORROSIVE WATER?

GET A MEGA STAINLESS STEEL **M4 WATER PUMP**

- 100% stainless steel
- Perfect for the most corrosive environments
- Clockwise centrifugal pump
- Rope packing and mechanical seals

M4B Basic Dimensions

Please contact Parts Sales at 1-800-345-8889 for more dimensional information on our M4B water pump.



M4B Performance Curve



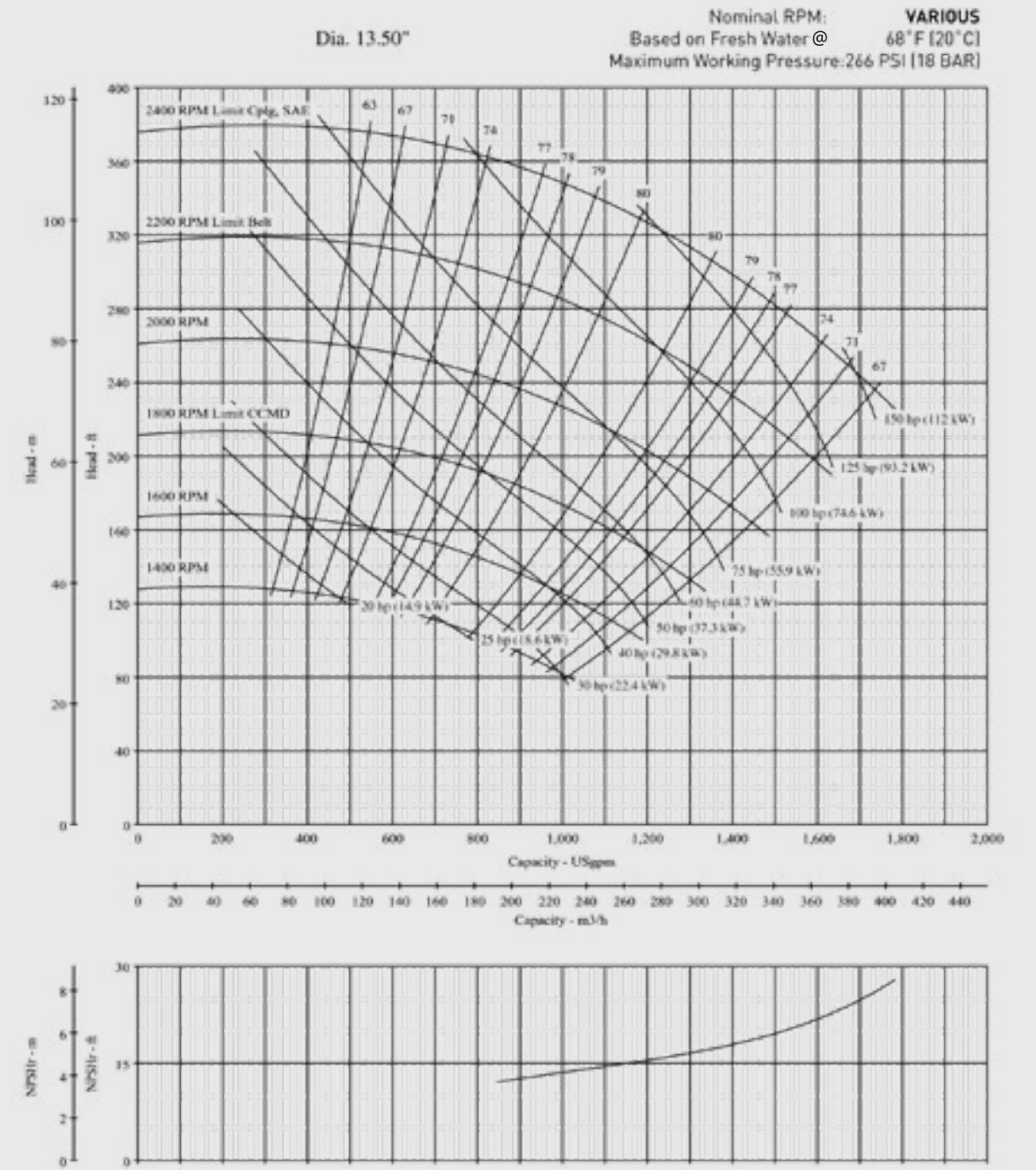
M4B Standard, CW
306200
M4B Standard,
Mechanical Seal, CW,
306670



M4B Corrosion Resistant, CW
306201
M4B Corrosion
Resistant, Mechanical Seal, CW,
306671



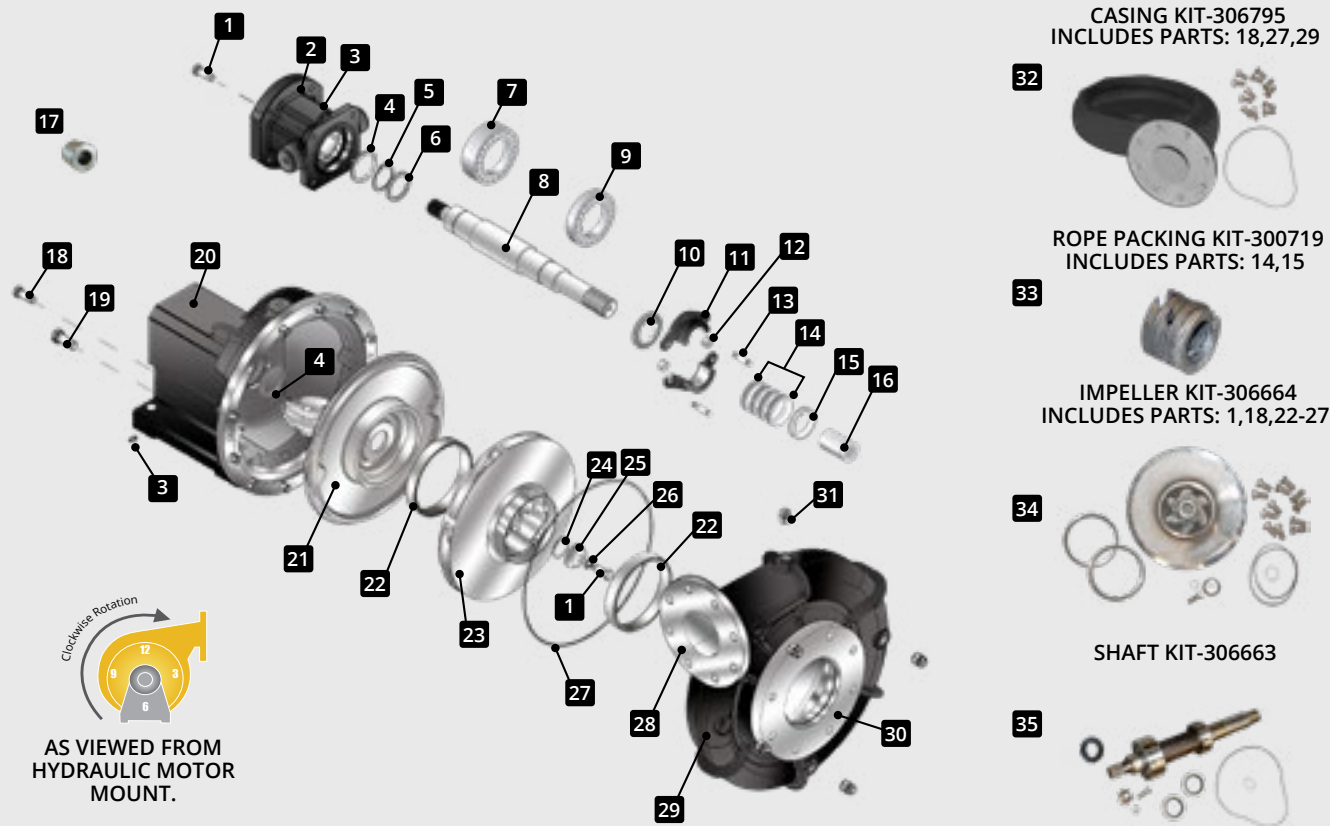
M4 Complete Stainless Steel, CW
306647



*NPSH data shown is at maximum speed

MEGA Standard M4B Rope Seal Water Pump, CW Part No. 306200

Mega cast iron frame (bracket) and packing mount. Stress-proof carbon steel shaft.
• Clockwise Rotation • 6 inch Inlet • 4 inch Discharge • Rope Packing Seal



AS VIEWED FROM
HYDRAULIC MOTOR
MOUNT.

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
	306200	M4B, CW, Rope Seal, Standard		19	306730	Capscrew, Hex HD 5/8 inch	12
1	306720	Cap Screw, Hex HD 1/2-13NC X 1-1/2L 316SS*	4	20	306716	Frame Mount Bracket	1
2	306736	Bearing Cap Motor Bracket	1	21	307128	Seal Plate	1
3	306697	Grease Fitting, 5/16 inch	2	22	306717	Wear Ring, Stainless Steel	2
4	302302	Oil Seal, Impeller Side*	2	23	306727	Impeller	1
5	300536	Snap Ring Retainer *	1	24	306729	O-Ring*	1
6	300542	Thrust Ring*	1	25	306719	Impeller Washer, Stainless Steel*	1
7	302296	Drive Side Bearing*	1	26	306721	Washer, External Tooth, Stainless Steel*	1
8	306718	Splined Shaft , 20.15 inch*	1	27	306698	O-Ring, Case*	1
9	302297	Impeller Side Bearing*	1	28	012930	Outlet Flange Gasket, 4 inch	1
10	300541	Water Slinger*	1	29	306798	Volute Case	1
11	300533	Slotted Split Gland	1	30	302527	Inlet Flange Gasket, 6 inch	1
12	306734	Nut, Hex 1/2-13NC 304SS	2	31	306724	Stainless Steel Pipe Plug	5
13	306723	Stud, 1/2-13NC X 2-1/2L 316SS	2	32	306795	Casing Kit	1
14	306699	Packing Ring	4	33	300719	Rope Packing Kit	1
15	306732	Metallic Ring	1	34	306664	Impeller Kit	1
16	306735	Shaft Sleeve	1	35	306663	Shaft Kit	1
17	301927	Spline Coupling, 1 1/4 inch†	1				
18	306722	Capscrew, Hex 1/4-20X1-1/2	2				

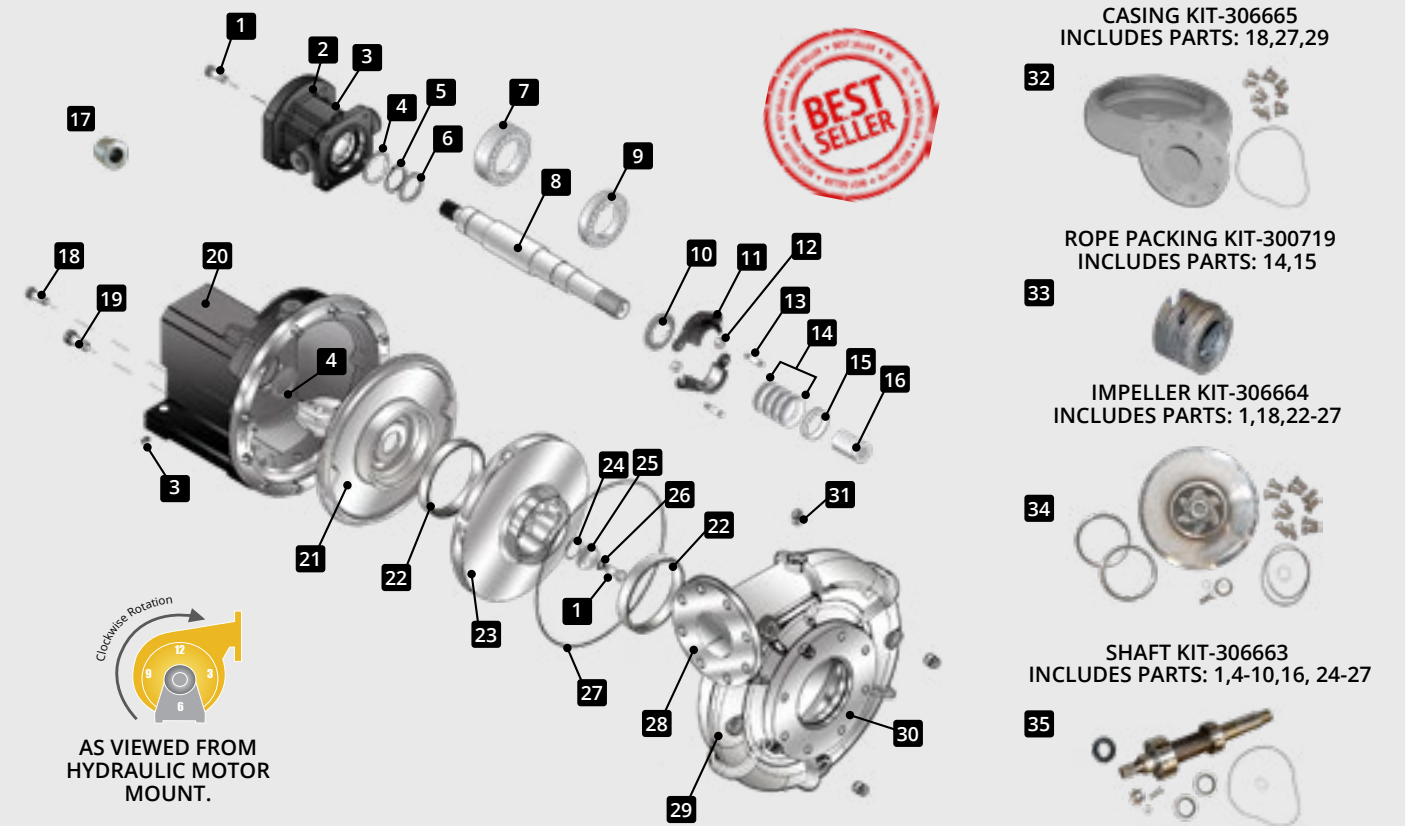
* These parts are included in the shaft kit. The shaft is not sold separately and is only sold as a shaft kit.

† Replacement part only. Part sold separately and not included with the water pump.

If illustration does not match your configuration please call product support at 505-345-2661 or 1-800-345-8889.

MEGA Corrosion Resistant M4B Water Pump, Rope Seal, CW Part No. 306201

Mega cast iron frame (bracket) and stainless steel packing mount. Stress-proof carbon steel shaft.
• Clockwise Rotation • 6 inch Inlet • 4 inch Discharge • Rope Packing Seal



AS VIEWED FROM
HYDRAULIC MOTOR
MOUNT.

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
	306201	M4B, CW, Rope Seal, Corrosion Resistant		19	306730	Capscrew, Hex HD 5/8 inch	12
1	306720	Cap Screw, Hex HD 1/2-13NC X 1-1/2L 316SS*	4	20	306716	Frame Mount Bracket	1
2	306736	Bearing Cap Motor Bracket	1	21	306726	Seal Plate, Stainless Steel	1
3	306697	Grease Fitting, 5/16 inch	2	22	306717	Wear Ring, Stainless Steel	2
4	302302	Oil Seal, Impeller Side*	2	23	306727	Impeller	1
5	300536	Snap Ring Retainer *	1	24	306729	O-Ring*	1
6	300542	Thrust Ring*	1	25	306719	Impeller Washer, Stainless Steel*	1
7	302296	Drive Side Bearing*	1	26	306721	Washer, External Tooth, Stainless Steel*	1
8	306718	Splined Shaft , 20.15 inch*	1	27	306698	O-Ring, Case*	1
9	302297	Impeller Side Bearing*	1	28	012930	Outlet Flange Gasket, 4 inch	1
10	300541	Water Slinger*	1	29	306728	Volute Case, Stainless Steel	1
11	300533	Slotted Split Gland	1	30	302527	Inlet Flange Gasket, 6 inch	1
12	306734	Nut, Hex 1/2-13NC 304SS	2	31	306724	Stainless Steel Pipe Plug	5
13	306723	Stud, 1/2-13NC X 2-1/2L 316SS	2	32	306665	Casing Kit	1
14	306699	Packing Ring	4	33	300719	Rope Packing Kit	1
15	306732	Metallic Ring	1	34	306664	Impeller Kit	1
16	306735	Shaft Sleeve*	1	35	306663	Shaft Kit	1
17	301927	Spline Coupling, 1 1/4 inch†	1				
18	306722	Capscrew, Hex 1/4-20X1-1/2	2				

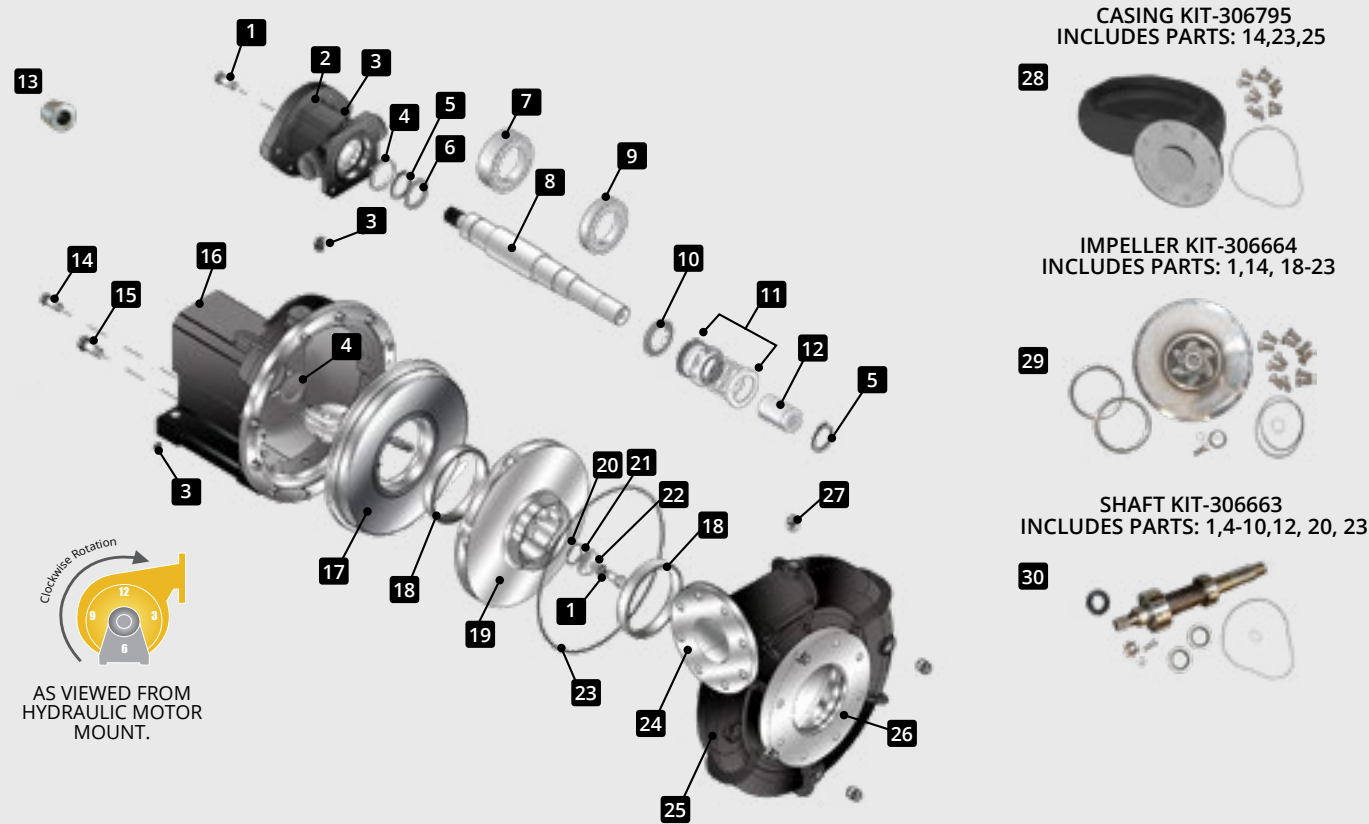
* These parts are included in the shaft kit. The shaft is not sold separately and is only sold as a shaft kit.

† Replacement part only. Part sold separately and not included with the water pump.

If illustration does not match your configuration please call product support at 505-345-2661 or 1-800-345-8889.

MEGA Mechanical Seal M4B Water Pump, CW Part No. 306670

Mega cast iron frame (bracket) and stainless steel packing mount. Stress-proof carbon steel shaft.
• Clockwise Rotation • 6 inch Inlet • 4 inch Discharge • Mechanical Shaft Seal



ITEM	PART NO.	DESCRIPTION	QTY
	306670	M4B, CW, Mechanical Seal	
1	306720	Capscrew, Hex HD ½-13NC X 1-1/2L 316SS*	4
2	306736	Bearing Cap Motor Bracket	1
3	306697	Grease Fitting, 5/16 inch	2
4	302302	Oil Seal, Impeller Side*	2
5	300536	Snap Ring Retainer *	1
6	300542	Thrust Ring*	1
7	302296	Drive Side Bearing*	1
8	306718	Splined Shaft , 20.15 inch*	1
9	302297	Impeller Side Bearing*	1
10	300541	Water Slinger*	1
11	302299	Seal, Mechanical Shaft	1
12	306735	Shaft Sleeve*	1
13	301927	Spline Coupling, 1 1/4 inch	1
14	306722	Capscrew, Hex ¼-20X1-1/2*	2
15	306730	Capscrew, Hex HD 5/8 inch*	12

If illustration does not match your configuration please call product support at 505-345-2661 or 1-800-345-8889.

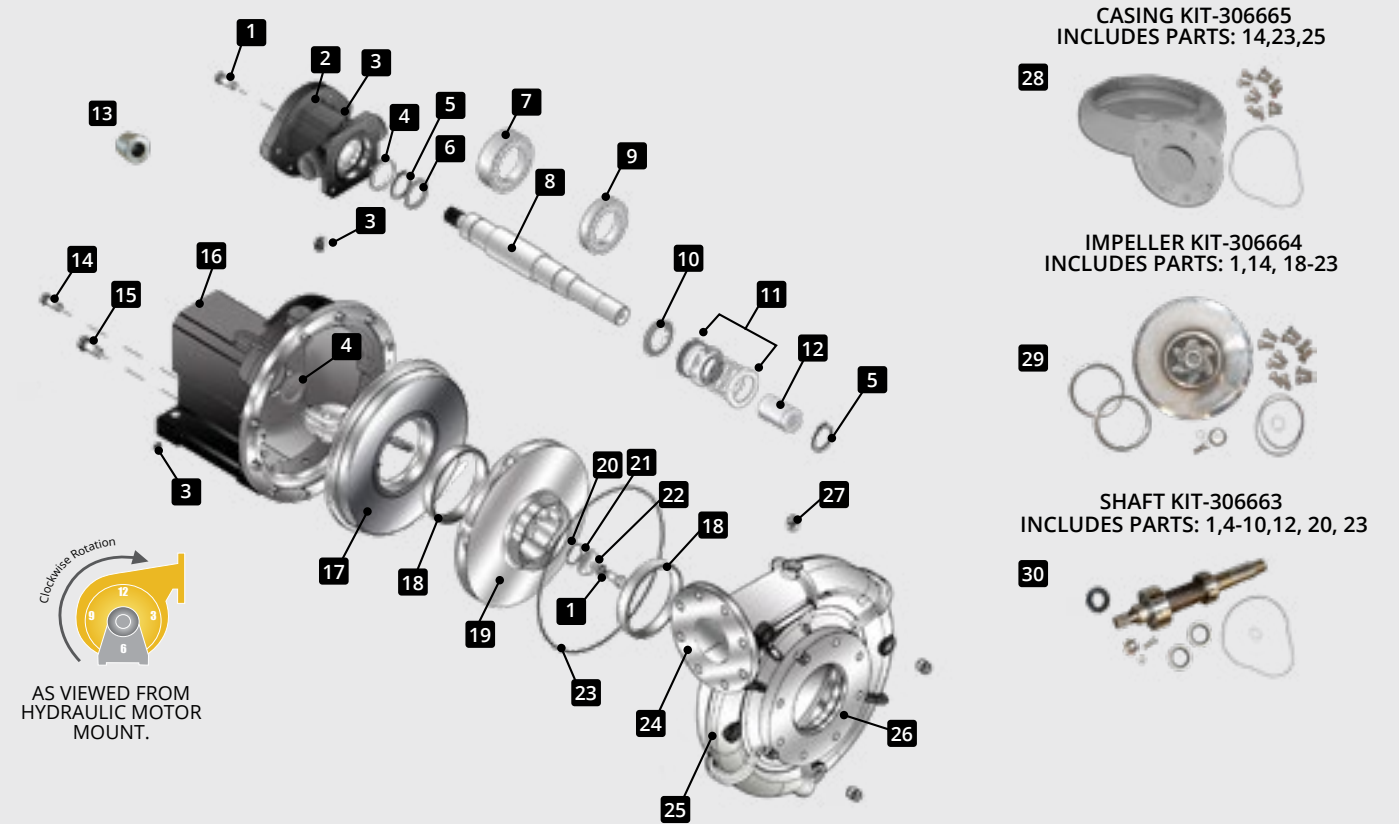
ITEM	PART NO.	DESCRIPTION	QTY
16	306716	Frame Mount Bracket*	2
17	307127	Seal Plate	1
18	306717	Wear Ring, Stainless Steel	2
19	306727	Impeller	1
20	306729	O-Ring*	1
21	306719	Impeller Washer, Stainless Steel*	1
22	306721	Washer, External Tooth, Stainless Steel*	1
23	306698	O-Ring, Case*	1
24	012930	Gasket, Outlet Flange, 4 inch*	1
25	306798	Volute Case*	1
26	302527	Inlet Flange Gasket, 6 inch*	1
27	306724	Stainless Steel Pipe Plug*	5
28	306795	Casing Kit	1
29	306664	Impeller Kit	1
30	306663	Shaft Kit	1

* These parts are included in the shaft kit. The shaft is not sold separately and is only sold as a shaft kit.

† Replacement part only. Part sold separately and not included with the water pump.

MEGA Corrosion Resistant Mechanical Seal M4B Water Pump, CW Part No. 306671

Mega cast iron frame (bracket) and stainless steel packing mount. Stress-proof carbon steel shaft.
• Clockwise Rotation • 6 inch Inlet • 4 inch Discharge • Mechanical Packing Seal



ITEM	PART NO.	DESCRIPTION	QTY
	306671	M4B, CW, Mechanical Seal	
1	306720	Capscrew, Hex HD ½-13NC X 1-1/2L 316SS*	4
2	306736	Bearing Cap Motor Bracket	1
3	306697	Grease Fitting, 5/16 inch	2
4	302302	Oil Seal, Impeller Side*	2
5	300536	Snap Ring Retainer *	1
6	300542	Thrust Ring*	1
7	302296	Drive Side Bearing*	1
8	306718	Splined Shaft , 20.15 inch*	1
9	302297	Impeller Side Bearing*	1
10	300541	Water Slinger*	1
11	302299	Seal, Mechanical Shaft	1
12	306735	Shaft Sleeve*	1
13	301927	Spline Coupling, 1 1/4 inch	1
14	306722	Capscrew, Hex ¼-20X1-1/2*	2
15	306730	Capscrew, Hex HD 5/8 inch	12

If illustration does not match your configuration please call product support at 505-345-2661 or 1-800-345-8889.

ITEM	PART NO.	DESCRIPTION	QTY
16	306716	Frame Mount Bracket	2
17	306726	Seal Plate, Stainless Steel	1
18	306717	Wear Ring, Stainless Steel	2
19	306727	Impeller	1
20	306729	O-Ring*	1
21	306719	Impeller Washer, Stainless Steel*	1
22	306721	Washer, External Tooth, Stainless Steel*	1
23	306698	O-Ring, Case*	1
24	012930	Gasket, Outlet Flange, 4 inch*	1
25	306798	Volute Case*	1
26	302527	Inlet Flange Gasket, 6 inch*	1
27	306724	Stainless Steel Pipe Plug*	5
28	306665	Casing Kit	1
29	306664	Impeller Kit	1
30	306663	Shaft Kit	1

* These parts are included in the shaft kit. The shaft is not sold separately and is only sold as a shaft kit.

† Replacement part only. Part sold separately and not included with the water pump.

HAVE CORROSIVE WATER?

GET A MEGA

COMPLETE Stainless Steel M4 WATER PUMP

- 100% stainless steel
- Perfect for the most corrosive environments

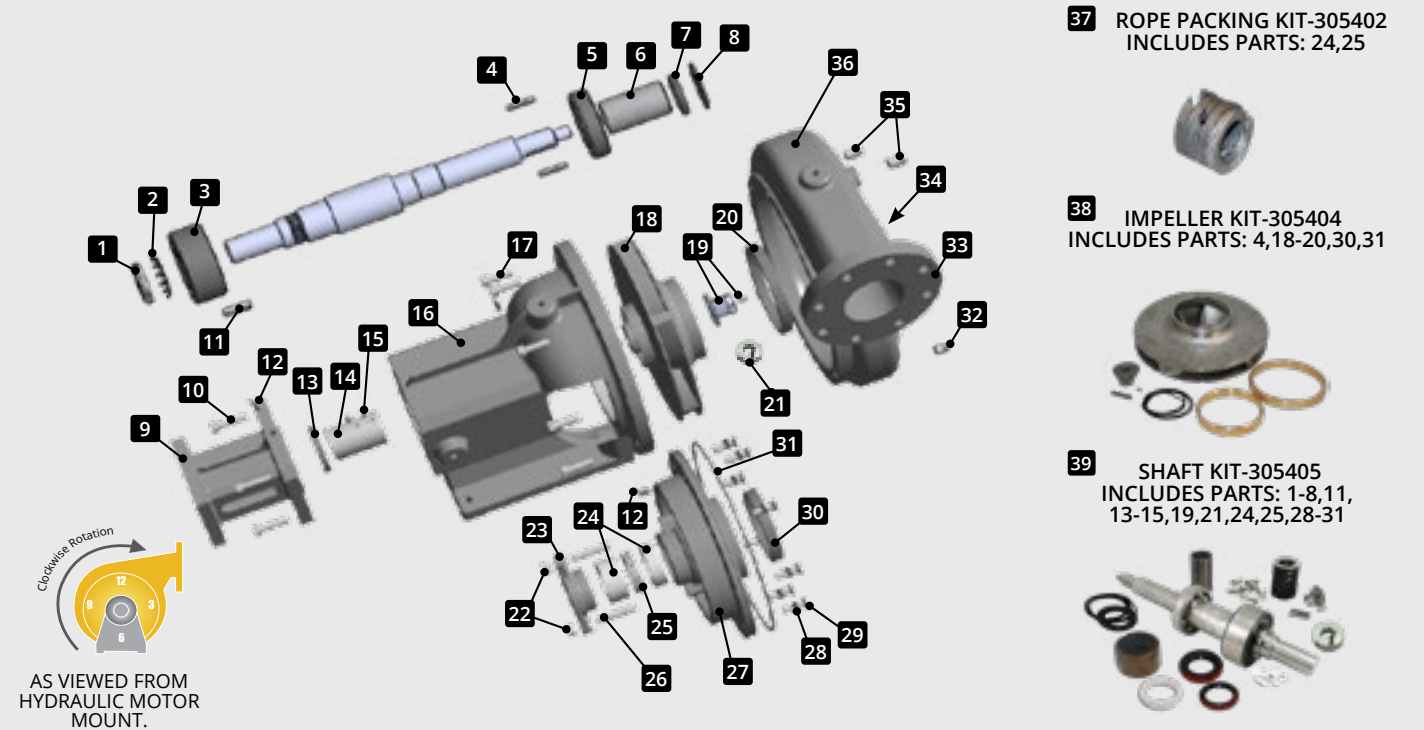
- Clockwise centrifugal pump
- Rope packing seal



To order this complete stainless steel Mega M4 water pump, please call Parts Sales at 1-800-345-8889 or purchase online on our website at www.megacorpinc.com

MEGA M4 Complete Stainless Steel Water Pump, CW Part No. 306647

Mega complete stainless steel which includes packing mount, shaft and 13 inch impeller.
• Clockwise Rotation • 6 inch Inlet • 4 inch Discharge • Rope Packing Seal



ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
	306647	M4, Water Pump, Complete Stainless Steel	1	22	305288	Nut, Packing Gland Flanged	2
1	305630	Nut, Drive Side, Shaft*	1	23	305098	Packing Gland (Pair)	1
2	305631	Washer, Tab, Bearing Retainer*	1	24	305114	Packing 3/8 inch, Set of 5 Rings*	1
3	305108	Drive Side Bearing*	1	25	305112	Lantern Ring*	1
4	305106	Impeller Key*	2	26	305105	Packing Gland Stud	2
5	304956	Impeller Side Bearing*	1	27	305118	Stainless Steel Packing Mount	1
6	305096	Wear Shaft Sleeve*	1	28	305626	Cap Screw Nytlite Seals*	8
7	304960	Grease Seal , Impeller Side*	1	29	305340	Packing Mount Bolt*	8
8	305100	Water Slinger*	1	30	305091	Wear Packing Ring Mount*	1
9	307064	Hydraulic Motor Mount	1	31	305111	Seal, O-Ring, Case*	1
10	350149	Caps Screw, 3/8 inch X 2 inch GR 8, Motor Mount	4	32	300460	Petcock Drain 1/2 inch	1
11	305101	Key, Shaft Drive End*	1	33	012930	Outlet Gasket, 4 inch	1
12	304968	Grease Fitting, 1/8 inch, NPT	3	34	302527	Inlet Flange Gasket, 6 inch	1
13	305113	Grease Seal , Drive Side*	1	35	350852	Pipe Plug, 1/2 inch	3
14	305102	Motor to Pump Coupling*	1	36	305115	Stainless Steel Volute Case	1
15	305107	Set Screw, Coupling*	2	37	305402	Rope Packing Kit	1
16	307063	Bracket	1	38	305404	Impeller Kit	1
17	350232	Bolt, 1/2 inch X 1 3/4 inch GR 8, Volute Case	8	39	305405	Shaft Kit, Stainless Steel	1
18	305075	Impeller 13 inch Diameter, Stainless Steel	1				
19	305627	Nut Impeller*	1				
20	305092	Volute Wear Ring	1				
21	044583	Drill Guide, Impeller Nut*	1				

* These parts are included in the shaft kit. The shaft is not sold separately and is only sold as a shaft kit.

If illustration does not match your configuration please call product support at 505-345-2661 or 1-800-345-8889.

M3 Mega Water Pump



M3 Direct Motor Mount, CW
304954



M3 Direct Motor Mount, CCW
304985

The Mega M3 water pump is a cost effective open centrifugal water pump suitable for water tanker applications where up to 3 spray heads will be operated simultaneously. The low horse-power draw of this pump is well-suited for on-highway type tankers as well as for small articulated tractor type water tankers where available space is limited.

Pump construction of high quality gray cast iron gives good durability and long life. The heavy duty Stress-proof 1.875 inch diameter shaft and heavy twin bearings allow the M3 Pump to operate on higher drive RPM units (optimal range of 2,350 ± 50 RPM, maximum capability of 3,000 RPM).

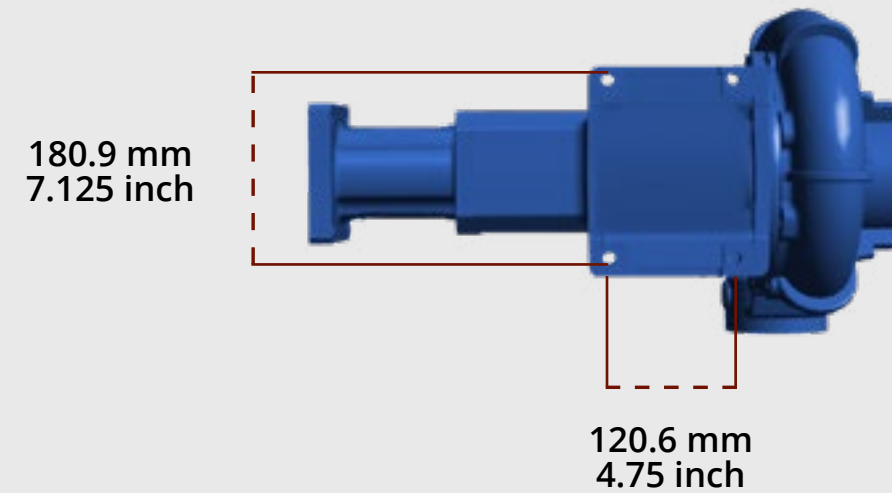
- Equipped with a rope-packing seal.
- Capable of over 800 gpm available flow, and over 80 psi available pressure.
- Mega M3 series water pumps feature a 4 inch NPT threaded inlet and a 3 inch NPT threaded outlet.
- Available in both clockwise and counterclockwise configuration.

The standard pump drive is configured for direct mount of a 'C' fit face hydraulic motor with splined shaft or with 'B' fit face direct motor mount. The pump can also be configured for plain-keyed shaft external coupling to a variety of drive motors.

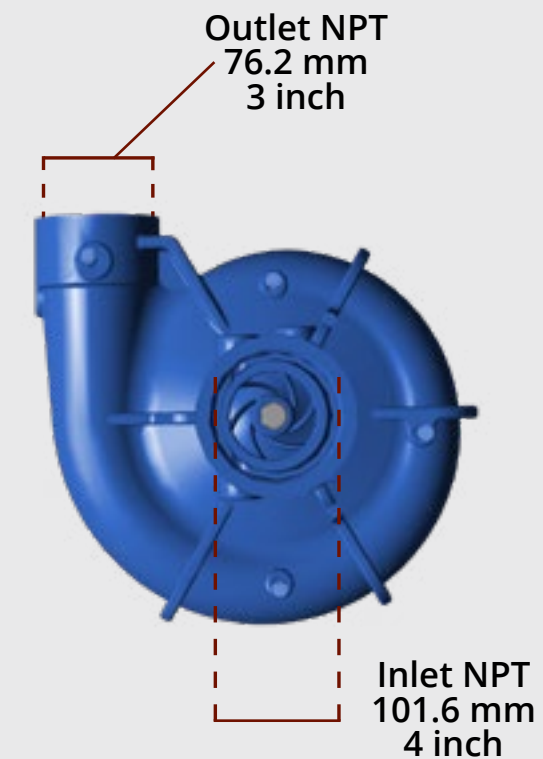
M3 Basic Dimensions

Please contact Parts Sales at 1-800-345-8889 for more dimensional information on our M3 water pump.

Footprint/ Bottom



Volute View



M3 Performance Curve



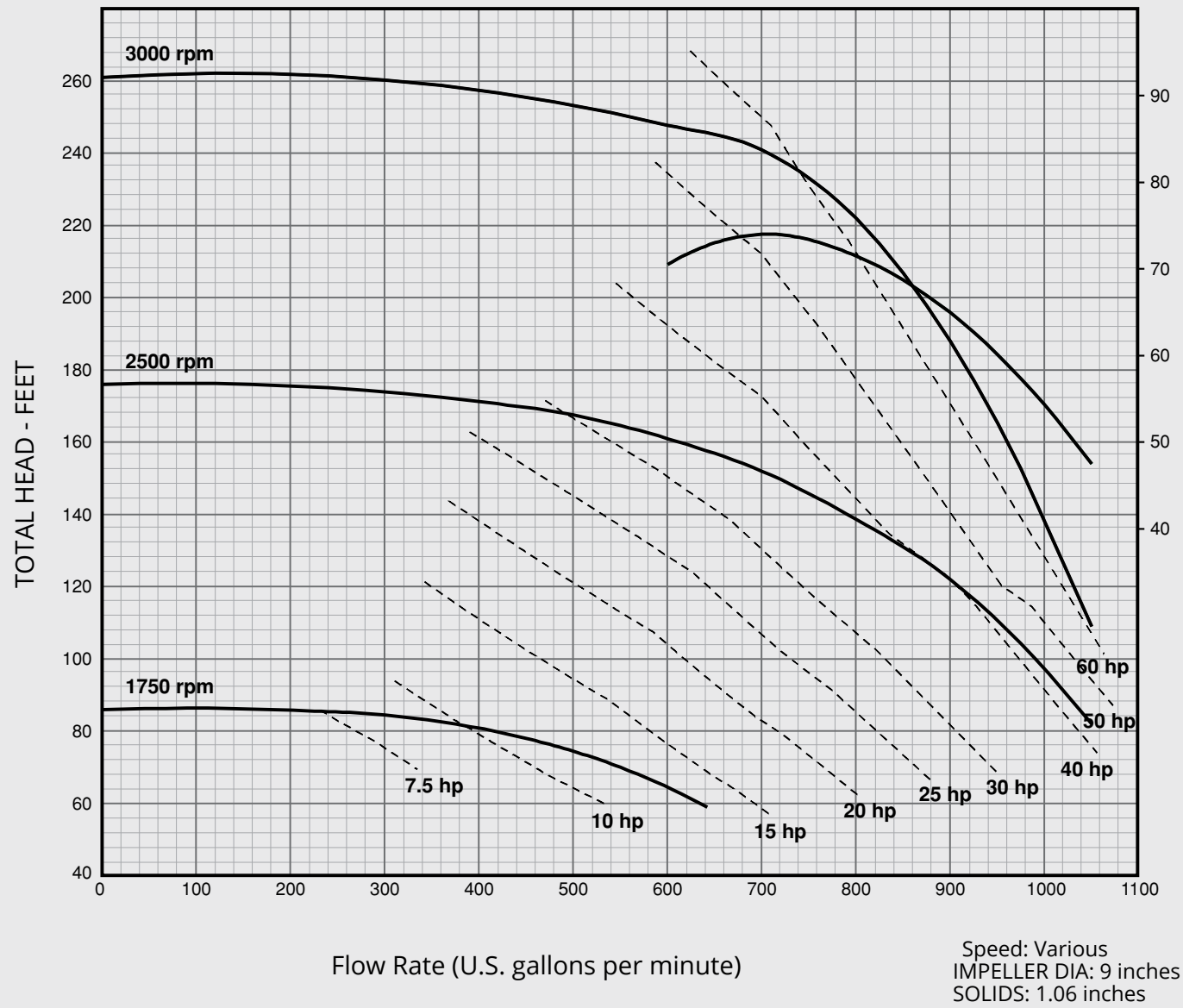
M3 Direct Motor Mount, CW
304954



M3 Direct Motor Mount, CW
304985

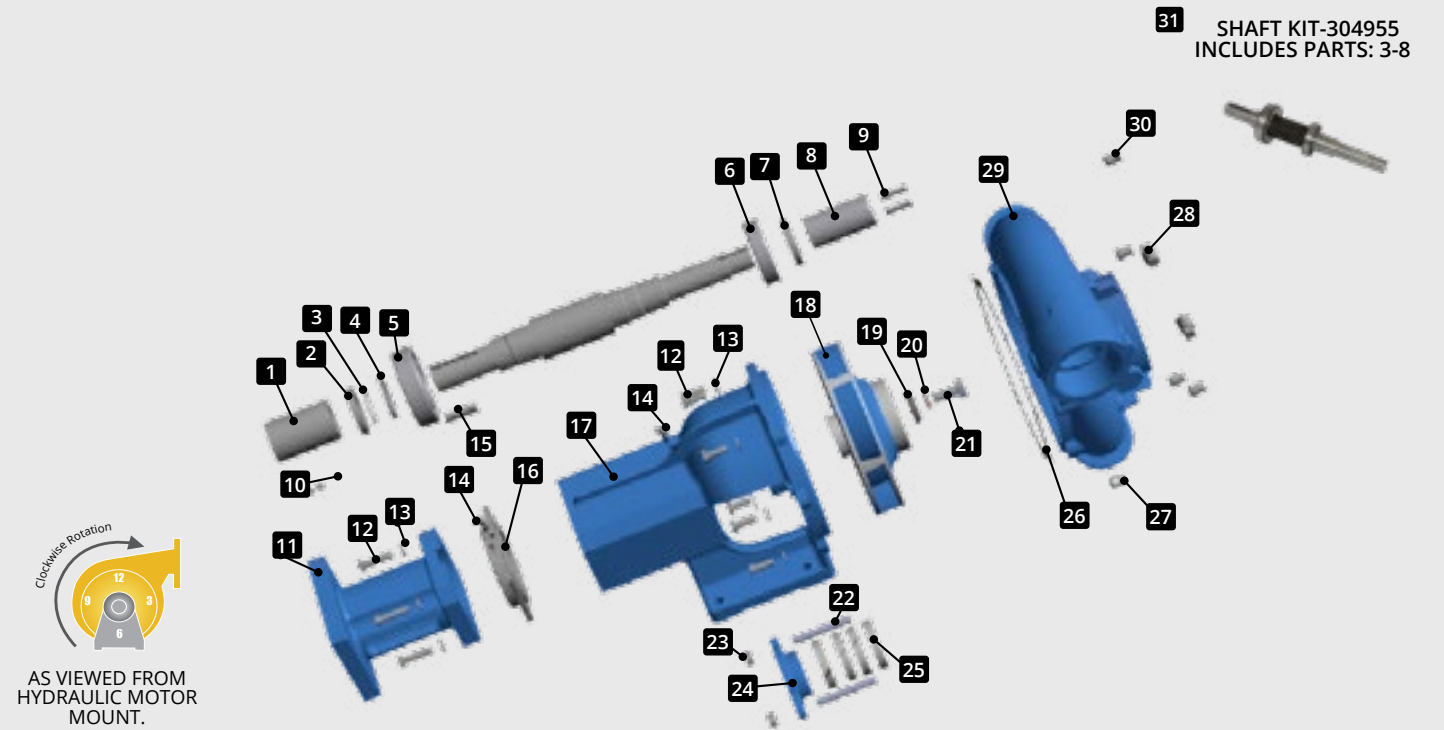


M3 inch Plain Keyed 1.5 Diamer, CCW
304977



MEGA M3 C-Fit Direct Motor Mount Water Pump, CW Part No. 304954

Mega M3 Water Pump configured for direct mount of "C" fit hydraulic motor.
 • Clockwise Rotation • 4 inch NPT inlet • 3 inch NPT outlet • 9 inch Impeller



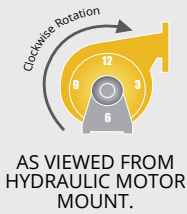
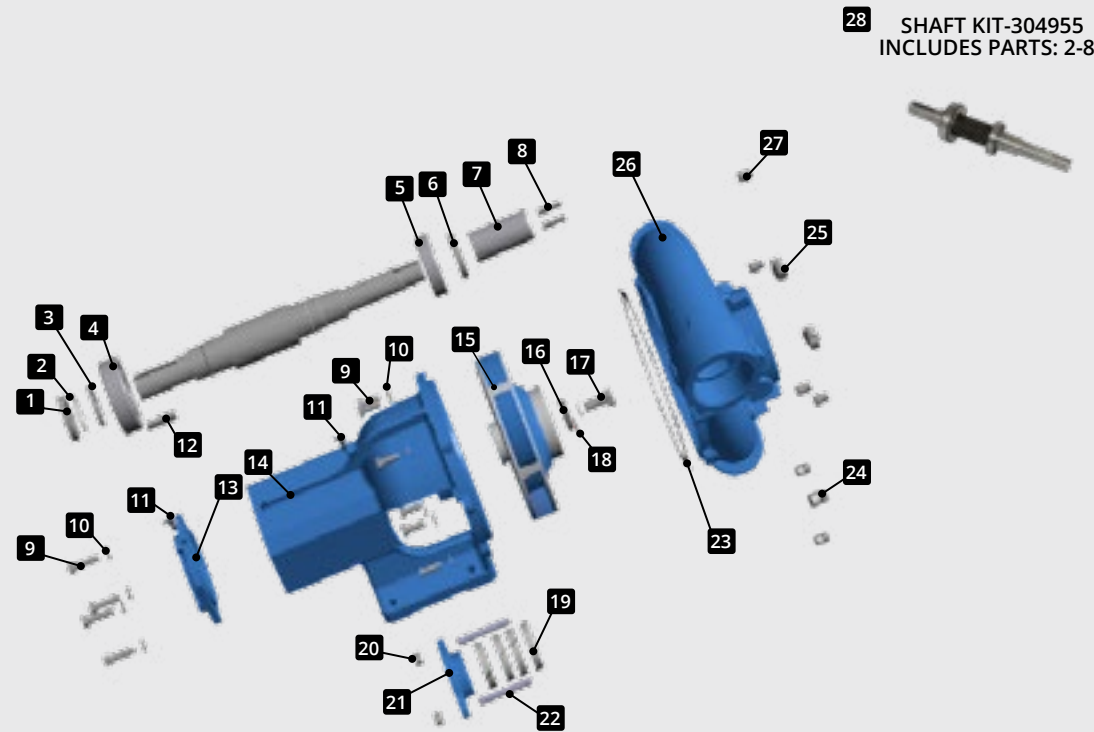
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
	304954	M3 Water Pump - CCW, Direct Motor Mount		16	304983	Bearing Cap	1
1	305102	Motor to Pump Coupling	1	17	304984	Bracket	1
2	308176	Grease Seal	1	18	304965	Impeller CW	1
3	304957	Snap Ring Retainer *	1	19	304971	Lock Impeller Washer	1
4	304958	Thrust Ring*	1	20	304970	Impeller Washer	1
5	304956	Drive Side Bearing *	1	21	304972	Impeller Bolt	1
6	304959	Impeller Side Bearing*	1	22	304966	Packing Gland Stud	2
7	304960	Grease Seal*	1	23	304757	Nut, Packing Gland, 3/8 inch-16	2
8	304961	Wear Shaft Sleeve*	1	24	304969	Packing Gland (Pair)	1
9	304962	Impeller Key	2	25	304967	Rope Packing 3/8 inch, Set of 4 Rings	1
10	305107	Set Screw, Coupling	2	26	304973	Volute Gasket Seal	1
11	304981	Hydraulic Motor Mount, C-Fit	1	27	300460	Petcock Drain 1/2 inch	1
12	350146	Bolt, 3/8 inch-16 inch x 1 1/4 inch	12	28	350852	Pipe Plug, 1/2 inch	2
13	350016	Washer, 3/8 inch	Package of 25	29	304963	Volute Case, CW	1
14	304968	Grease Fitting, 1/8 inch	2	30	305473	Pipe Plug, 1/4 inch	4
15	305101	Key, Coupling	1	31	304955	Shaft Kit Assembly*	1

* These parts are included in the shaft kit. The shaft is not sold separately and is only sold as a shaft kit.

If illustration does not match your configuration please call product support at 505-345-2661 or 1-800-345-8889.

Mega Plain Keyed 1.5 inch Diameter Shaft Water Pump, CW Part No. 304985

- Mega M3 Water Pump configured for direct mount of "C" fit hydraulic motor.
 • Counterclockwise Rotation • 4 inch NPT inlet • 3 inch NPT outlet • 9 inch Impeller



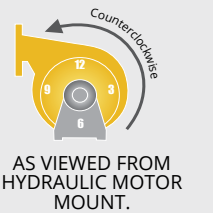
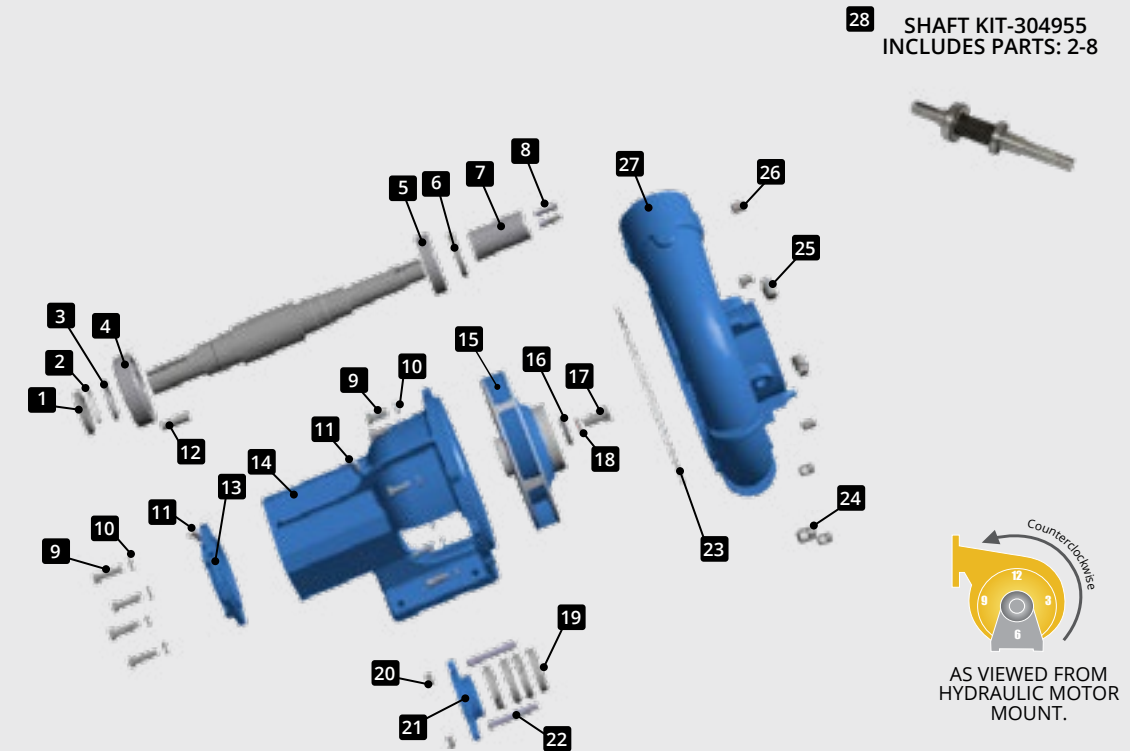
ITEM	PART NO.	DESCRIPTION	QTY
	304985	M3 Water Pump-CCW, Plain Keyed	1
1	308176	Grease Seal	1
2	304957	Snap Ring Retainer *	1
3	304958	Thrust Ring*	1
4	304956	Drive Side Bearing*	1
5	304959	Impeller Side Bearing*	1
6	304960	Grease Seal*	1
7	304961	Wear Shaft Sleeve*	1
8	304962	Impeller Key*	2
9	350146	Bolt, 3/8 inch-16 inch x 1 1/4 inch	12
10	350016	Washer, 3/8 inch	Package of 25
11	304968	Grease Fitting, 1/8 inch	2
12	305101	Key, Coupling	1
13	304983	Bearing Cap	1
14	304984	Bracket	1
15	304975	Impeller, CCW	

* These parts are included in the shaft kit. The shaft is not sold separately and is only sold as a shaft kit.

If illustration does not match your configuration please call product support at 505-345-2661 or 1-800-345-8889.

Mega M3 Plain Keyed 1.5 inch Diameter Shaft Water Pump, CCW Part No. 304977

- Mega M3 Water Pump configured with plain input shaft, 1.5 inch, keyed.
 • Counterclockwise Rotation • 4 inch NPT inlet • 3 inch NPT outlet • 9 inch Impeller



ITEM	PART NO.	DESCRIPTION	QTY
	304977	M3 Water Pump-CCW, Plain Keyed	1
1	308176	Grease Seal	1
2	304957	Snap Ring Retainer *	1
3	304958	Thrust Ring*	1
4	304956	Drive Side Bearing*	1
5	304959	Impeller Side Bearing*	1
6	304960	Grease Seal*	1
7	304961	Wear Shaft Sleeve*	1
8	304962	Impeller Key*	2
9	350146	Bolt, 3/8 inch-16 inch x 1 1/4 inch	12
10	350016	Washer, 3/8 inch	Package of 25
11	304968	Grease Fitting, 1/8 inch	2
12	305101	Key, Coupling	1
13	304983	Bearing Cap	1
14	304984	Bracket	1
15	304975	Impeller, CCW	12

* These parts are included in the shaft kit. The shaft is not sold separately and is only sold as a shaft kit.

If illustration does not match your configuration please call product support at 505-345-2661 or 1-800-345-8889.

MEGA PUMPS HAVE MANY USES

Open Centrifugal pumps are used for...

IRRIGATION/AGRICULTURE



FIRE SUPPRESSION



DUST SUPPRESSION



MEGA HAS THE WATER PUMP FOR YOU.
Call a Mega sales rep today for more information.

WE ALSO CARRY BERKELEY WATER PUMPS!

In addition to our own Mega water pumps, we also offer several widely-used Berkeley water pumps and pump parts for the convenience of customers with existing fleet Berkeley pumps and parts. These include the B4J, B3Z, B6Z, and B4Z water pumps.

Berkeley Water Pumps



B4J Splined Shaft, CW
304755



B3 Splined Shaft, CW
302001



B4Z Splined Shaft, CW
302430



B6Z Keyed Shaft, CW
300048

B4J Water Pumps

The B4J water pump is widely-used and has a durable, proven design. Mega offers this water pump for the convenience of customers with existing fleet B4J parts commonality.

- Both plain keyed shaft and direct motor mount versions are available.
- Can be purchased with either a rope-packing seal or a mechanical seal.
- A trimmed impeller for low horsepower applications is available.

The B3 & B3Z Water Pumps

The Berkeley B3 and the B3Z frame water pump is likely the most commonly used water pump in the mobile water tank industry. Mega maintains a complete stock of replacement water pumps and repair parts. As a Berkeley dealer for over 30 years, we are well versed in all technical aspects of this and other Berkeley open centrifugal water pumps. Contact us today for more information.

B4Z Water Pumps

This clockwise-rotation water pump is self-priming and is used for the suction loading option on Mega's smaller water trucks. It is available in both plain-keyed shaft and direct motor mount versions.

B6Z Water Pumps

This inexpensive water pump is still commonly found in older machines. Mega offers this pump for the convenience of customers with existing B6Z stock parts. This pump is available in both direct motor mount and plain keyed shaft versions as well as either clockwise or counterclockwise configurations.

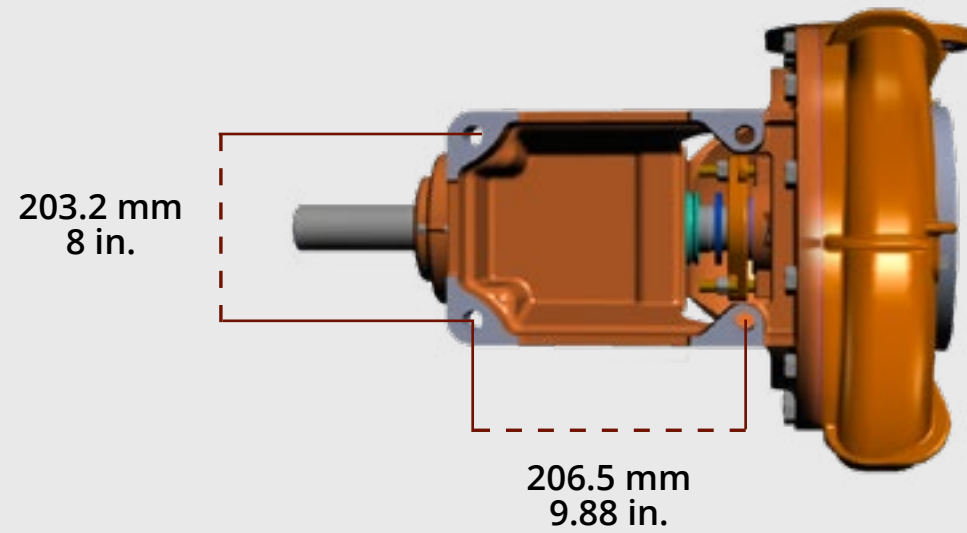
DON'T SEE THE BERKELEY PUMP YOU ARE LOOKING FOR?

Parts Sales would be happy to assist you! Give them a call @ 1-800-345-8889.

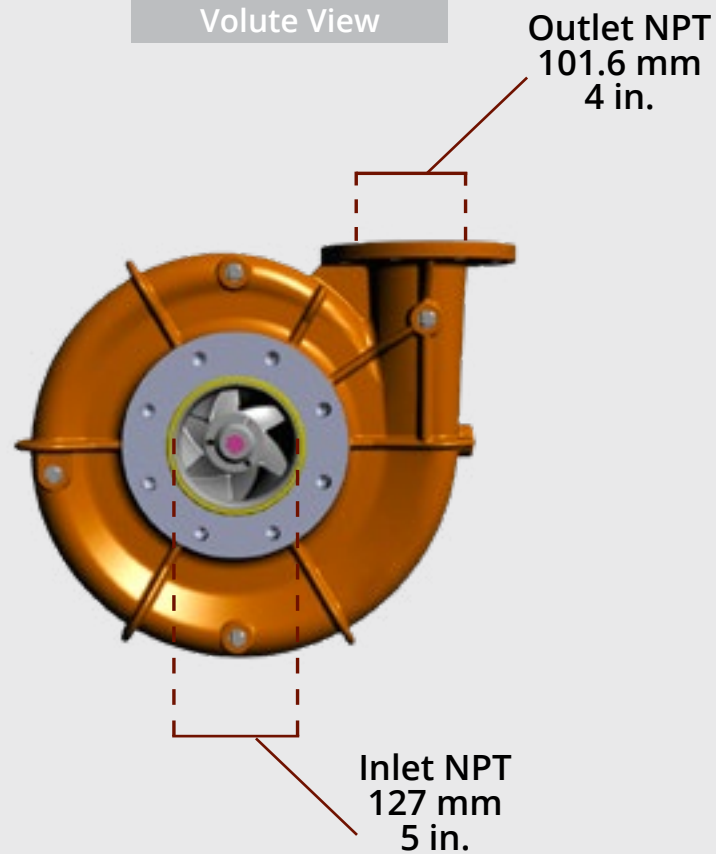
B4J Basic Dimensions

Please contact Parts Sales at 1-800-345-8889 for more dimensional information on our B4J water pump.

Footprint/ Bottom



Volute View



B4J Berkeley Pump Performance Curve



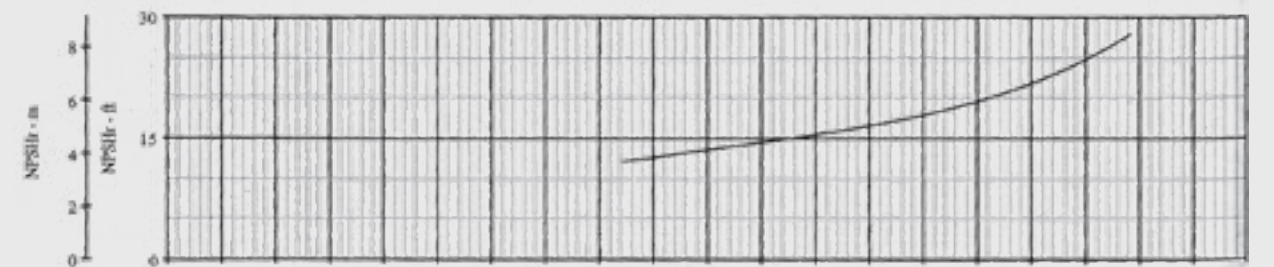
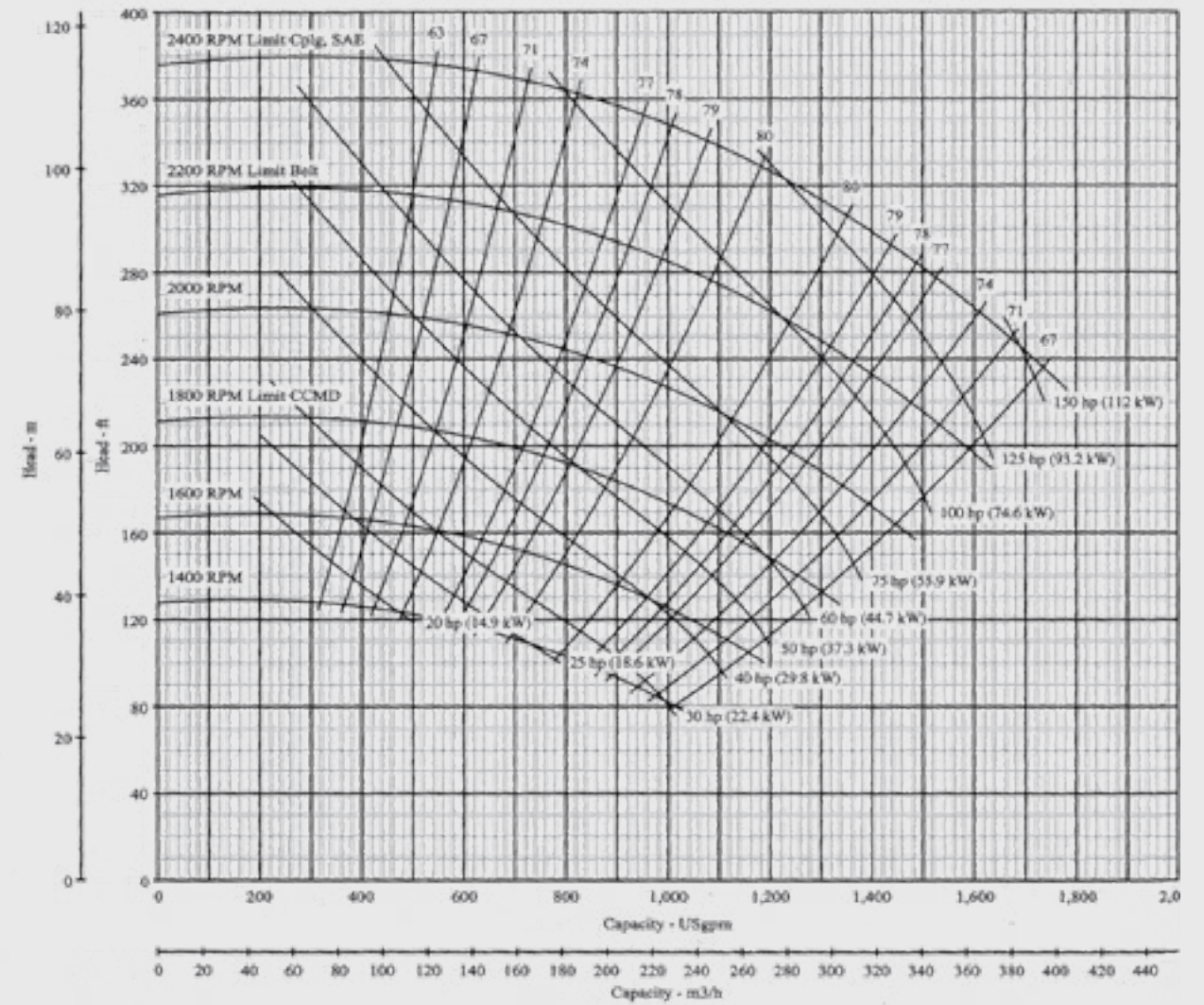
B4J Splined Shaft, CW
Applies to the following B4J water pumps:
304755, 305046, 301908, 304742



B4J Keyed Shaft, CW
301104

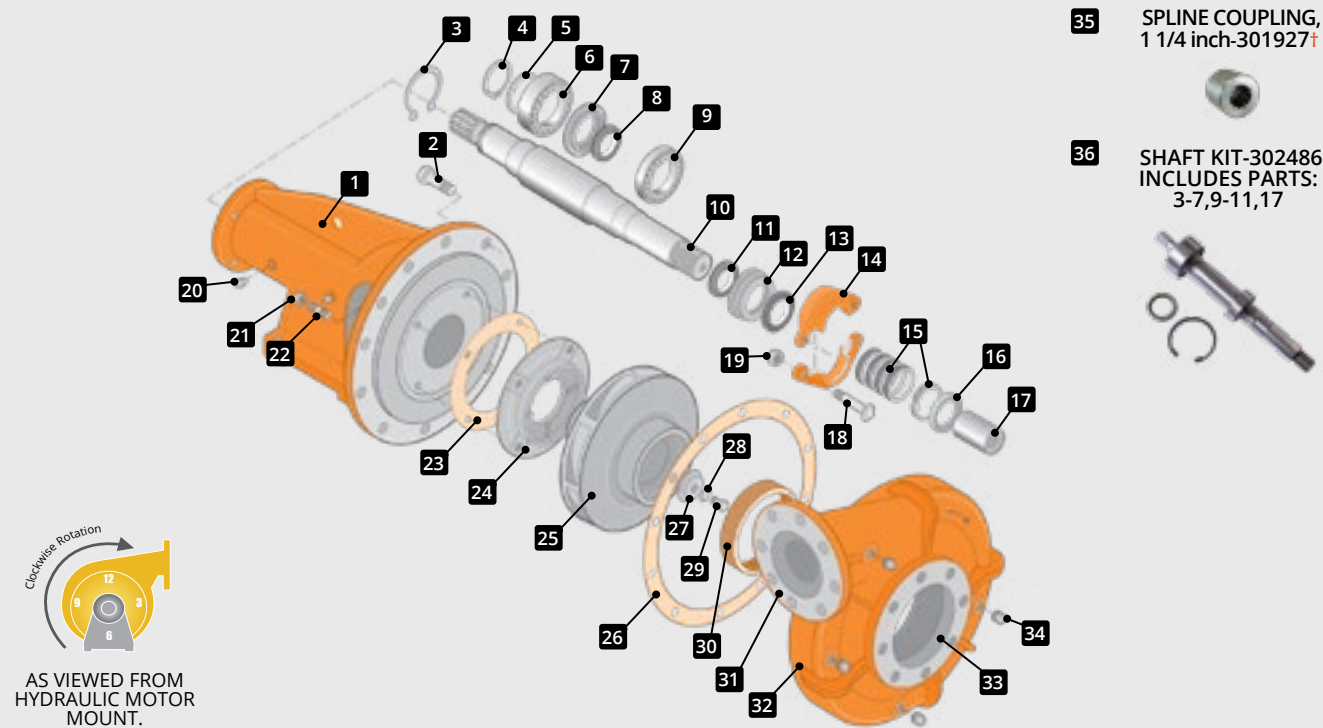
Dia. 13.50"

Nominal RPM: **VARIOUS**
Based on Fresh Water @ 68°F (20°C)
Maximum Working Pressure: 266 PSI (18 BAR)



Berkeley B4J Splined Shaft Water Pump, CW Part No. 304755

Berkeley standard high performance open centrifugal water pump. Rope packing shaft seal.
• Clockwise Rotation • Inlet 5 inch Flange Mount • Outlet 4 inch Flange Mount • 13 inch Impeller



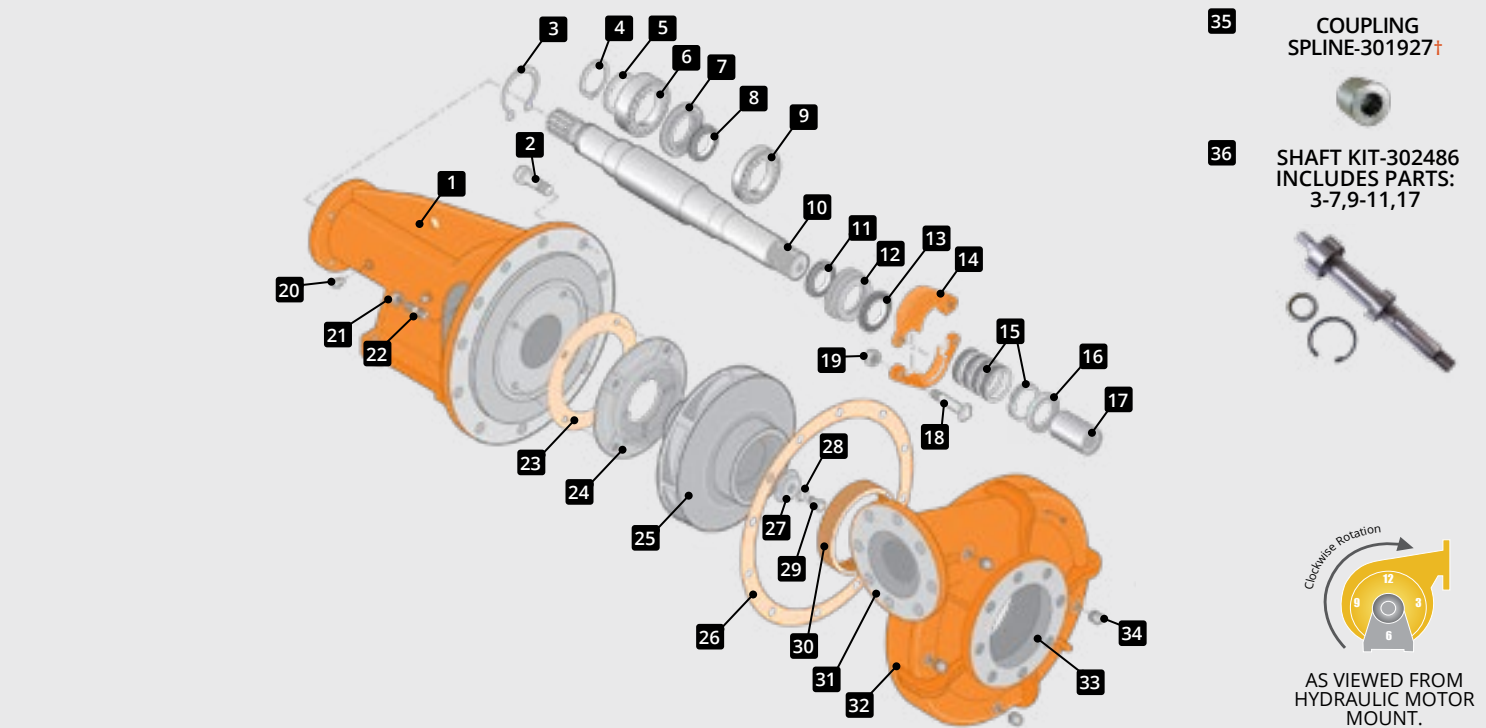
AS VIEWED FROM HYDRAULIC MOTOR MOUNT.

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
	304755	Berkeley, B4J Water Pump-CW (Splined Shaft)	1	19	300363	Gland Nut	2
1	302292	Bracket	1	20	303812	Grease Fitting, 0.25 inch	2
2	350283	Bolt, 5/8 x 1 1/2 inch	12	21	350025	Nut, 3/8 inch	4
3	300536	Snap Ring Retainer *	1	22	302298	Stud, 3/8-16 X 1 3/8 inch	4
4	300524	Impeller Lock Washer*	1	23	300545	Gasket Balance Ring**	1
5	302301	Snap Ring Retainer *	1	24	301099	Balance Ring Gasket	1
6	302296	Drive Side Bearing*	1	25	301097	13 inch Impeller, Clockwise Rotation	1
7	302305	Bearing Cap, Drive Side*	1	26	300552	Volute Case Gasket**	1
8	302304	Motor Side Oil Seal	1	27	301103	Impeller Washer	1
9	302297	Impeller Side Bearing*	1	28	300551	Lock Impeller Washer	1
10	302293	Shaft, Clockwise Rotation*	1	29	300549	Impeller Bolt	1
11	302302	Oil Seal, Impeller Side**	1	30	301101	Wear Ring	1
12	302294	Bearing Cap, Impeller Side	1	31	012930	Outlet Gasket, 4 inch	1
13	300541	Water Slinger**	1	32	301098	Volute Case, CW	1
14	300533	Split Gland	1	33	012929	Inlet Gasket, 5 inch	1
15	300719	Rope Packing**	1	34	350852	Pipe Plug, 1/2 inch	4
16	300540	Throat Bushing	1	35	301927	Spline Coupling, 1 1/4 inch†	1
17	300535	Wear Shaft Sleeve*	1	36	302486	Shaft Kit	1
18	354187	Bold, Gland	2				

* These parts are included in the shaft kit. The shaft is not sold separately and is only sold as a shaft kit.
** Gasket and seals required for pump rebuild assembly.
† Replacement parts only. Parts sold separately and not included with the water pump.

Berkeley B4J Trimmed Impeller Water Pump, CW Part No. 305046

Berkeley standard high performance open centrifugal water pump. Rope packing shaft seal.
• Clockwise Rotation • Inlet 5 inch Flange Mount • Outlet 4 inch Flange Mount • 12 inch Impeller



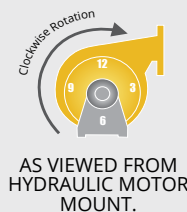
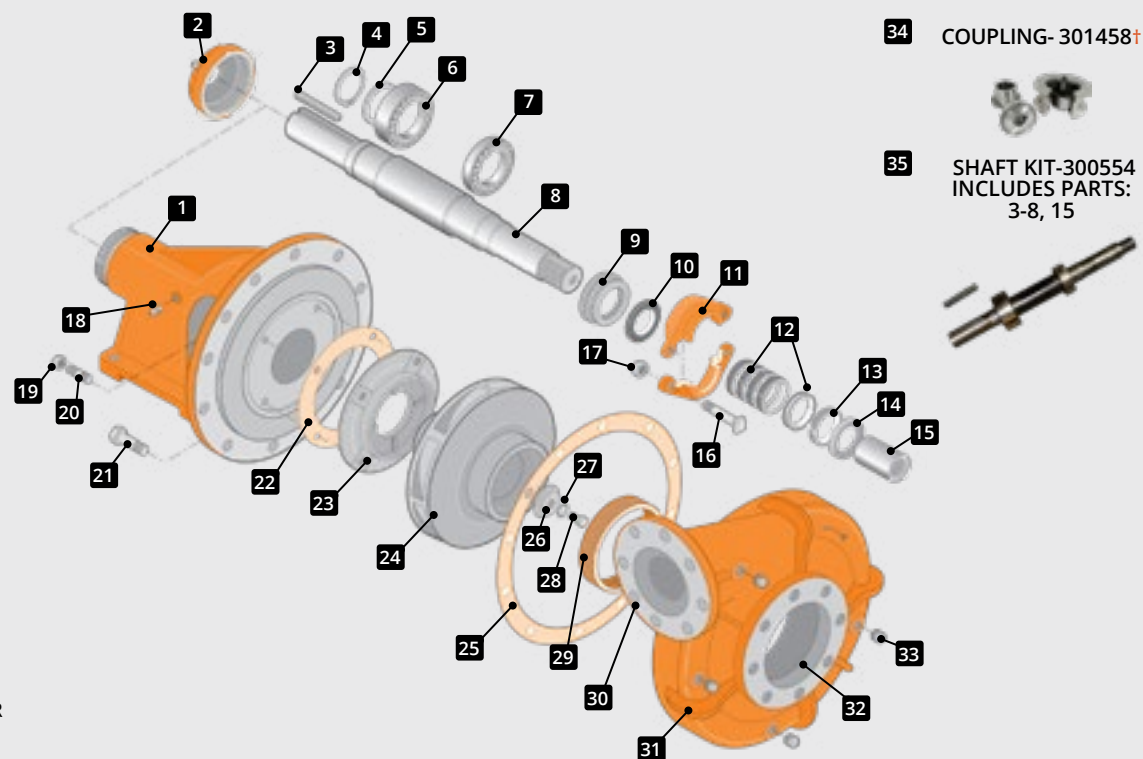
AS VIEWED FROM HYDRAULIC MOTOR MOUNT.

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
	305046	Berkeley, B4J Water Pump-CW (Splined Shaft)	1	19	300363	Gland Nut	2
1	302292	Bracket	1	20	303812	Grease Fitting, 0.25 inch	2
2	350283	Bolt, 5/8 x 1 1/2 inch	12	21	350025	Nut, 3/8 inch	4
3	300536	Snap Ring Retainer *	1	22	302298	Stud, 3/8-16 X 1 3/8 inch	4
4	300524	Impeller Lock Washer*	1	23	300545	Gasket, Balance Ring**	1
5	302301	Snap Ring Retainer *	1	24	301099	Balance Ring	1
6	302296	Drive Side Bearing*	1	25	034451	12 inch Impeller, Clockwise	1
7	302305	Bearing Cap, Drive Side*	1	26	300552	Volute Case Gasket**	1
8	302304	Motor Side Oil Seal	1	27	301103	Impeller Washer	1
9	302297	Impeller Side Bearing*	1	28	300551	Lock Impeller Washer	1
10	302293	Shaft, Clockwise Rotation*	1	29	300549	Impeller Bolt	1
11	302302	Oil Seal, Impeller Side**	1	30	301101	Wear Ring	1
12	302294	Bearing Cap, Impeller Side	1	31	012930	Outlet Gasket, 4 inch	1
13	300541	Water Slinger	1	32	301098	Volute Case, CW	1
14	300533	Split Gland	1	33	012929	Inlet Gasket, 5 inch	1
15	300719	Rope Packing**	1	34	350852	Pipe Plug, 1/2 inch	4
16	300540	Throat Bushing	1	35	301927	Coupling Spline†	1
17	300535	Wear Shaft Sleeve*	1	36	302486	Shaft Kit	1
18	354187	Bold, Gland	2				

* These parts are included in the shaft kit. The shaft is not sold separately and is only sold as a shaft kit.
** Gasket and seals required for pump rebuild assembly.
† Replacement parts only. Parts sold separately and not included with the water pump.

Berkeley B4J Keyed Shaft Water Pump, CW Part No. 301104

Berkeley standard high performance open centrifugal water pump. Rope packing shaft seal.
 • Clockwise Rotation • Inlet 5 inch Flange Mount • Outlet 4 inch Flange Mount • 13 inch Impeller



ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
	301104	Berkeley, B4J Water Pump-CW (Keyed Shaft)	1	18	303812	Grease Fitting, 0.25 inch	2
1	300531	Bracket	1	19	350025	Nut, 3/8 inch	4
2	300532	Outer Bearing Cap	1	20	302298	Stud, 3/8-16 X 1 3/8 inch	4
3	301687	Shaft Key*	1	21	350283	Bolt, 5/8 x 1 1/2 inch	12
4	300536	Snap Ring Retainer *	1	22	300545	Gasket, Balance Ring**	1
5	300542	Thrust Ring*	1	23	301099	Balance Ring	1
6	300538	Ball Bearing, Outer*	1	24	301097	13 inch Impeller, Clockwise Rotation	1
7	300537	Impeller Side Bearing*	1	25	300552	Volute Case Gasket**	1
8	300534	Keyed Shaft, Clockwise Rotation*	1	26	301103	Impeller Washer	1
9	300539	Bearing Cap, Impeller Side	1	27	300551	Lock Impeller Washer	1
10	300541	Water Slinger**	1	28	300549	Impeller Bolt	1
11	300533	Split Gland	1	29	301101	Wear Ring	1
12	300719	Rope Packing**	1	30	012930	Outlet Gasket, 4 inch	1
13	300540	Throat Bushing	1	31	301098	Volute Case, CW	1
14	300543	Lantern Ring	1	32	012929	Inlet Gasket, 5 inch	1
15	300535	Wear Shaft Sleeve*	1	33	350852	Pipe Plug, 1/2 inch, Volute	4
16	354187	Bolt, Gland	2	34	301458	Coupling†	1
17	300363	Gland Nut	2	35	300554	Shaft Kit	1

* These parts are included in the shaft kit. The shaft is not sold separately and is only sold as a shaft kit.

** Gasket and seals required for pump rebuild assembly.

† Replacement parts only. Parts sold separately and not included with the water pump.

If illustration does not match your configuration please call product support at 505-345-2661 or 1-800-345-8889.

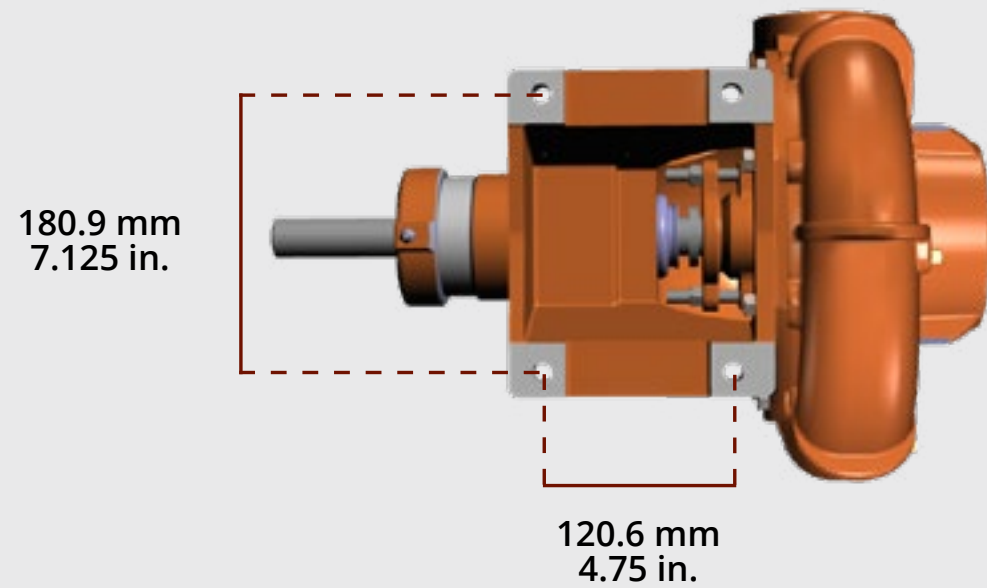


DEPENDABILITY

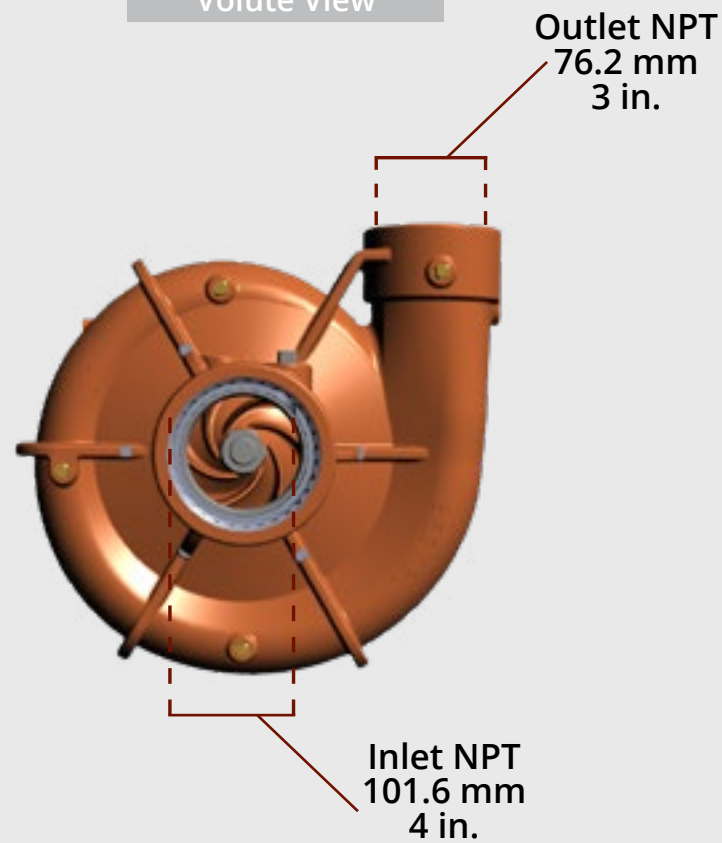
B3 & B3Z Basic Dimensions

Please contact Parts Sales at 1-800-345-8889 for more dimensional information on our B3 & B3Z water pumps.

Footprint/ Bottom



Volute View



B3 & B3Z Berkeley Pump Performance Curve



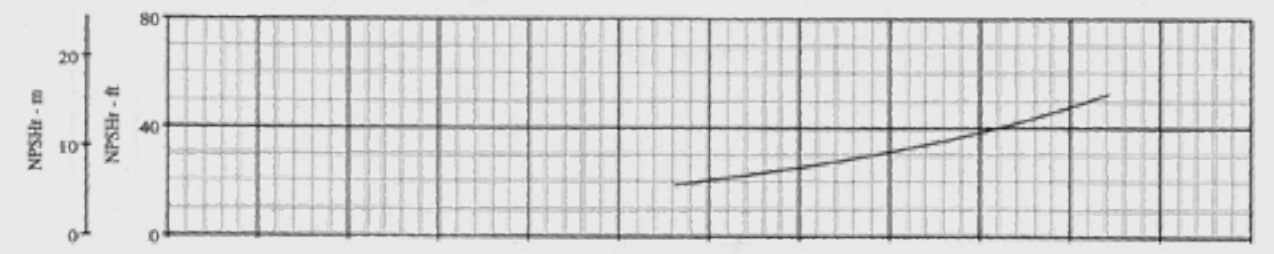
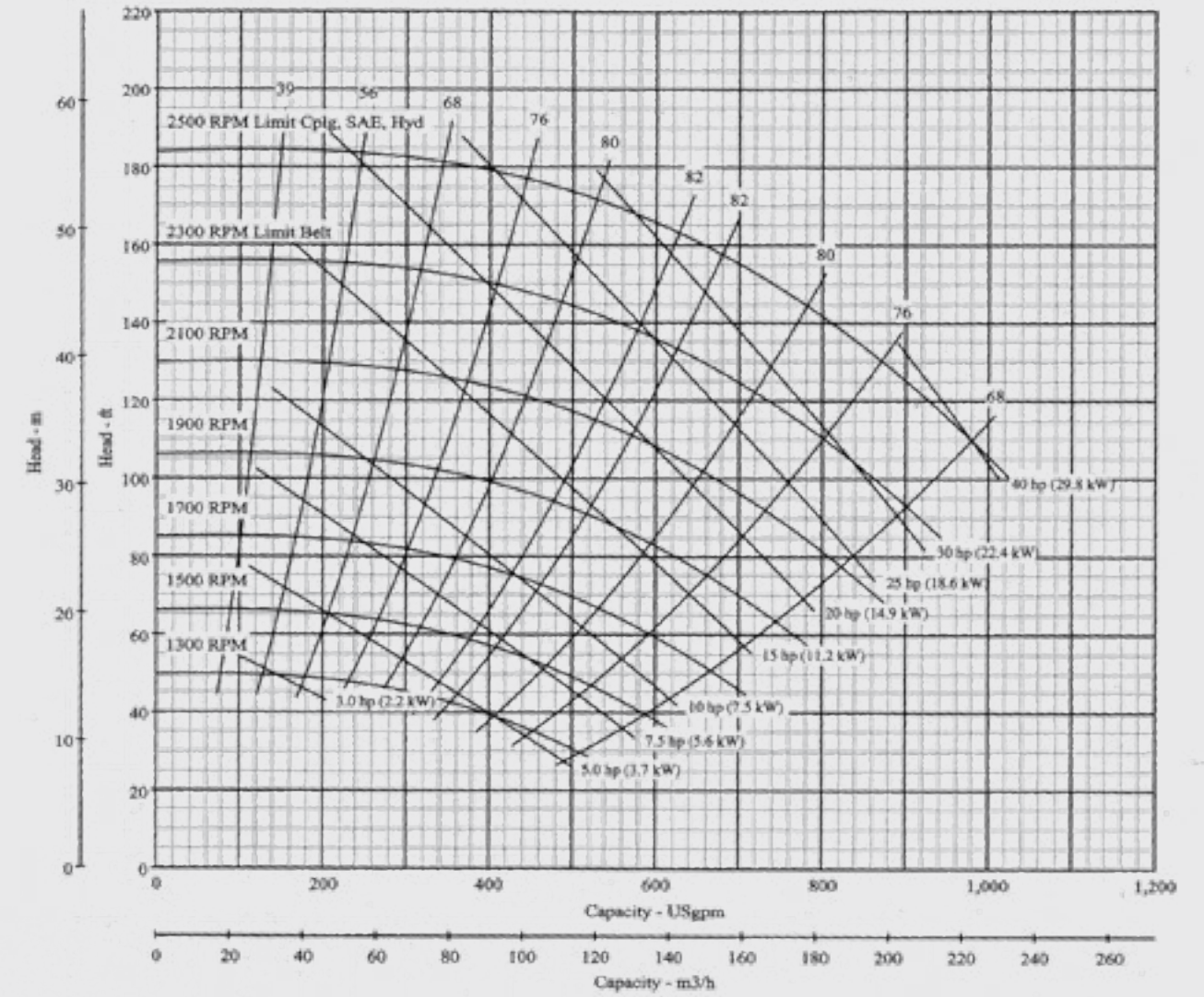
B3Z Keyed Shaft, CW
300049



B3 Splined Shaft, CW
302001

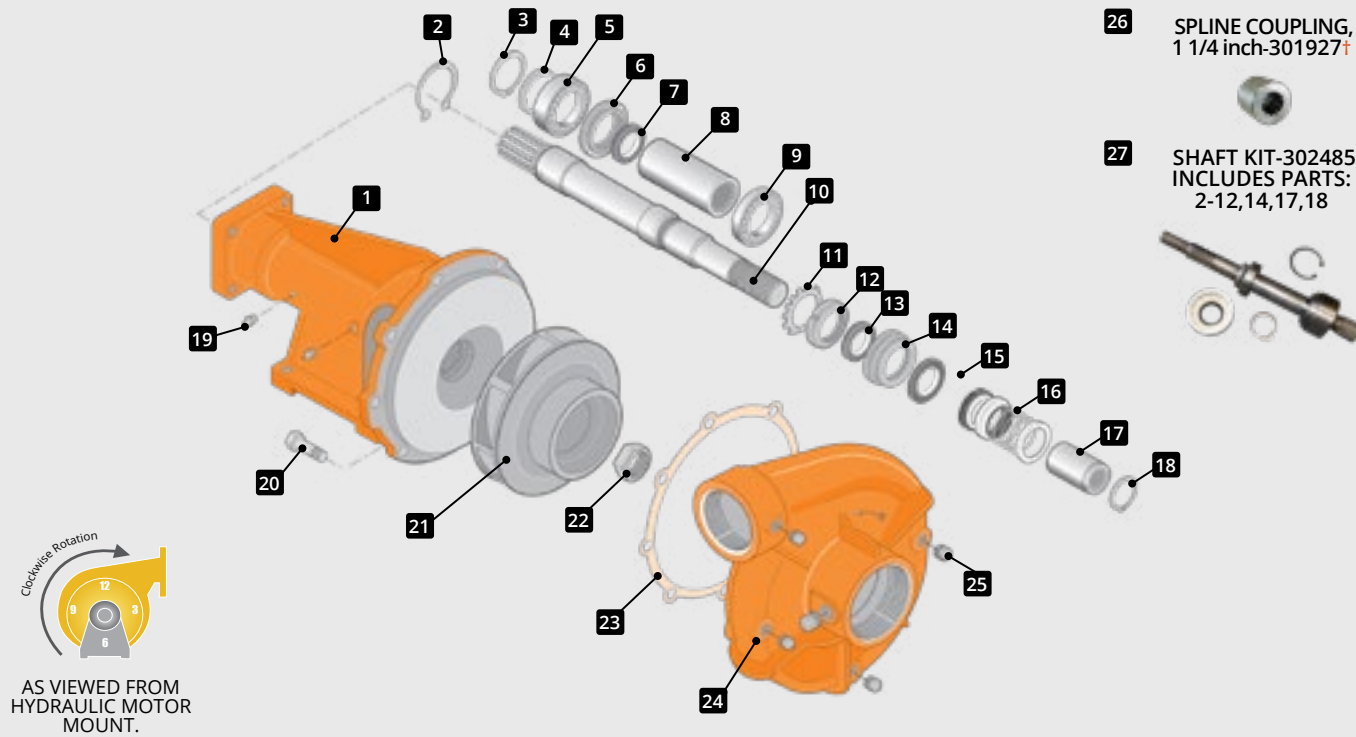
Dia. 9.00"

Nominal RPM: **VARIOUS**
Based on Fresh Water @ 68°F (20°C)
Maximum Working Pressure: 266 PSI (18 BAR)



Berkeley B3 Splined Shaft/Direct Motor Mount Water Pump, CW Part No. 302001

Berkeley standard open centrifugal water pump with direct motor mount. Mechanical shaft seal.
• Clockwise Rotation • Inlet 4 inch NPT • Outlet 3 inch NPT • 9 inch Impeller



ITEM	PART NO.	DESCRIPTION	QTY
	302001	Berkeley, B3 Berkeley-CW (Splined Shaft)	1
1	302004	Bracket	1
2	302483	Retaining Ring*	1
3	302482	Retainer Ring*	1
4	302009	Thrust Washer*	1
5	302450	Drive Side Bearing *	1
6	302453	Bearing Cap, Drive Side*	1
7	302446	Motor Side Oil Seal *	1
8	302448	Spacer Sleeve*	1
9	302449	Impeller Side Bearing*	1
10	302006	Shaft, CW*	1
11	300379	Bearing Lock Washer*	1
12	300378	Lock Nut Bearing *	1
13	302447	Oil Seal, Impeller Side**	1

If illustration does not match your configuration please call product support at 505-345-2661 or 1-800-345-8889.

ITEM	PART NO.	DESCRIPTION	QTY
14	302451	Bearing Cap, Impeller Side*	1
15	300558	Water Slinger	1
16	302452	Mechanical Shaft Seal**	1
17	303952	Wear Shaft Sleeve*	1
18	302484	Retaining Ring*	1
19	300519	Grease Fitting, 1/4 inch	2
20	350145	Cap Screw, 3/18 - 16 GR8	8
21	300389	9 inch Impeller	1
22	302480	Locknut, Impeller	1
23	300385	Volute Case Gasket**	1
24	300391	Volute Case	1
25	305473	Pipe Plug, 1/4 inch	4
26	301927	Spline Coupling, 1 1/4 inch†	1
27	302485	Shaft Kit	1

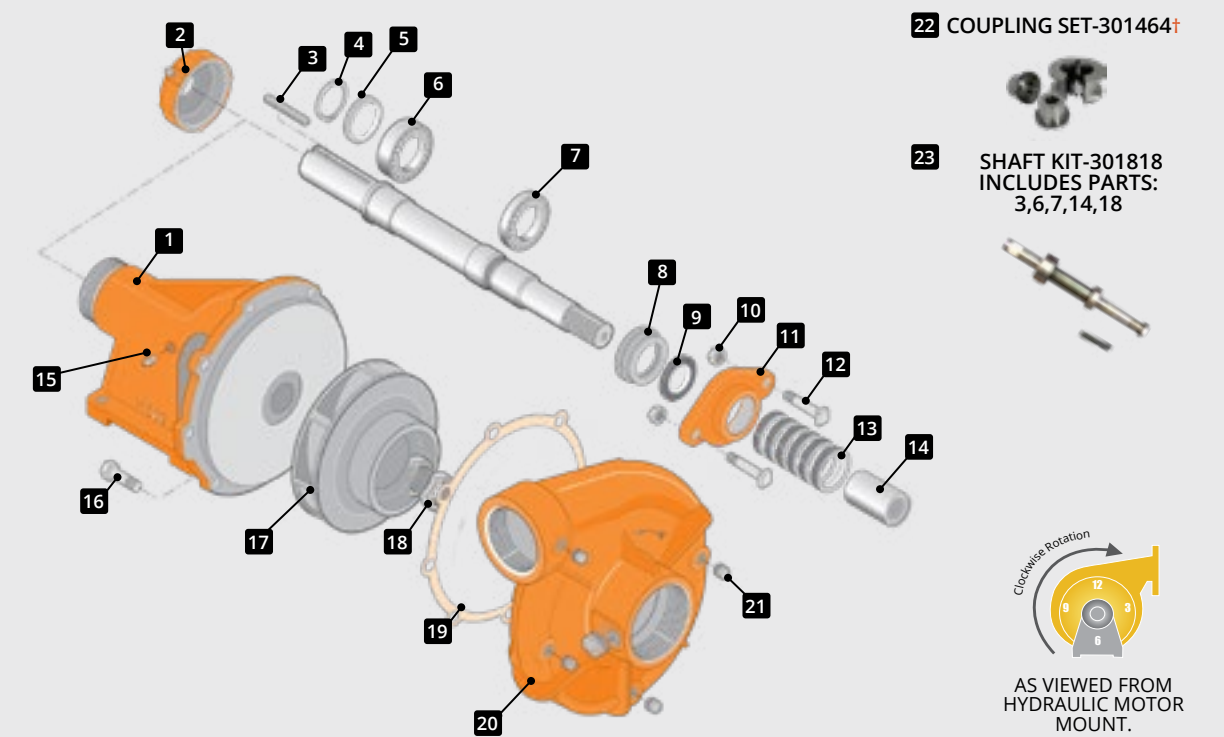
* These parts are included in the shaft kit. The shaft is not sold separately and is only sold as a shaft kit.

** Gasket and seals required for pump rebuild assembly.

† Replacement parts only. Parts sold separately and not included with the water pump.

Berkeley B3Z Keyed Shaft Water Pump, CW Part No. 300049

Berkeley standard open centrifugal water pump with direct motor mount. Rope packing shaft seal.
• Clockwise Rotation • Inlet 4 inch NPT • Outlet 3 inch NPT • 9 inch Impeller



ITEM	PART NO.	DESCRIPTION	QTY
	300049	Berkeley, B3Z Water Pump (Keyed Shaft)	1
1	300390	Bracket	1
2	301831	Outer Bearing Cap	1
3	301008	Key, 1/4 inch X 2 1/8 inch*	1
4	302482	Retaining Ring	1
5	307077	Thrust Ring	1
6	300383	Ball Bearing*	1
7	300384	Ball Bearing*	1
8	300374	Bearing Drip Cap	1
9	300558	Water Slinger**	1
10	300518	Nut, Hex, 3/8 inch-16 inch	2
11	300372	Split Gland	1
12	300517	Bolt, SQ Head 3/8-16 X 2 1/2	2

* These parts are included in the shaft kit. The shaft is not sold separately and is only sold as a shaft kit.

** Gasket and seals required for pump rebuild assembly.

† Replacement parts only. Parts sold separately and not included with the water pump.

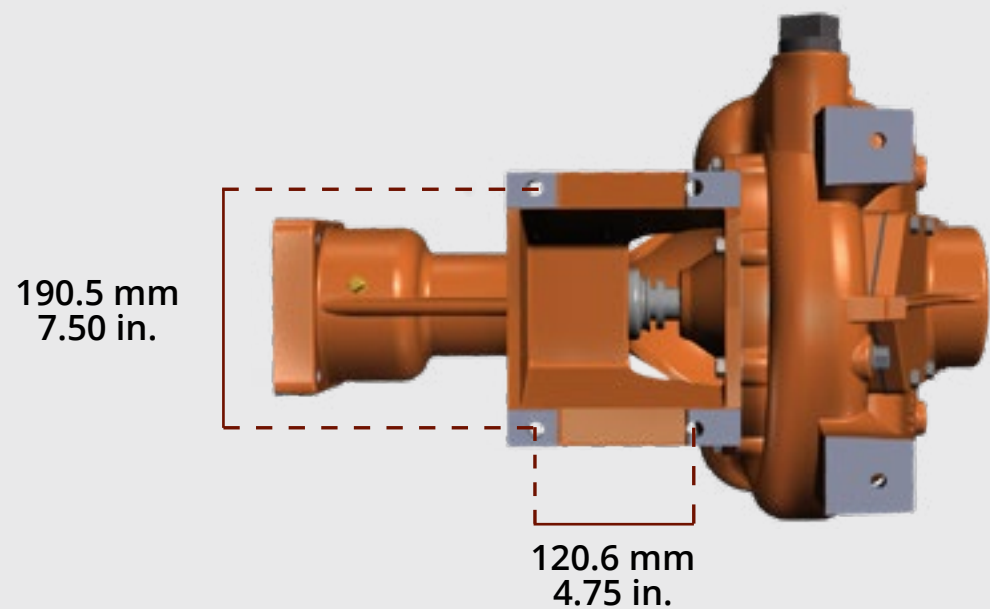
ITEM	PART NO.	DESCRIPTION	QTY
13	300380	Packing Ring, Set of 6	1
14	300373	Shaft Sleeve*	1
15	300519	Grease Fitting, 1/4 inch	1
16	350145	Cap Screw, 3/18 - 16 GR8	8
17	300389	9 inch Impeller	1
18	300524	Impeller Lock Washer*	1
19	300385	Volute Case Gasket**	1
20	300391	Volute Case	1
21	305473	Pipe Plug, 1/4 inch	4
22	301464	Coupling Set, 1-1/8 inch X 1-1/4 inch†	1
23	301818	Shaft Kit	1

If illustration does not match your configuration please call product support at 505-345-2661 or 1-800-345-8889.

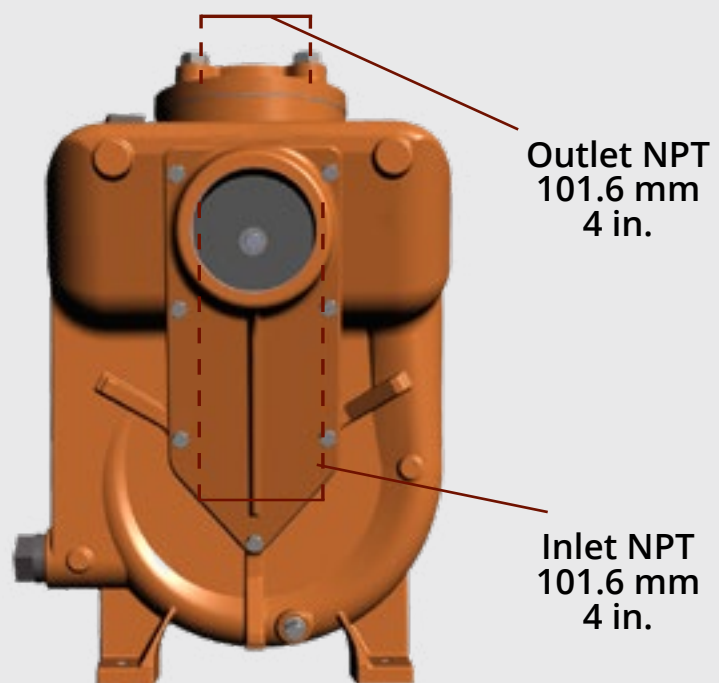
B4Z Basic Dimensions

Please contact Parts Sales at 1-800-345-8889 for more dimensional information on our B4Z water pump.

Footprint/ Bottom



Volute View



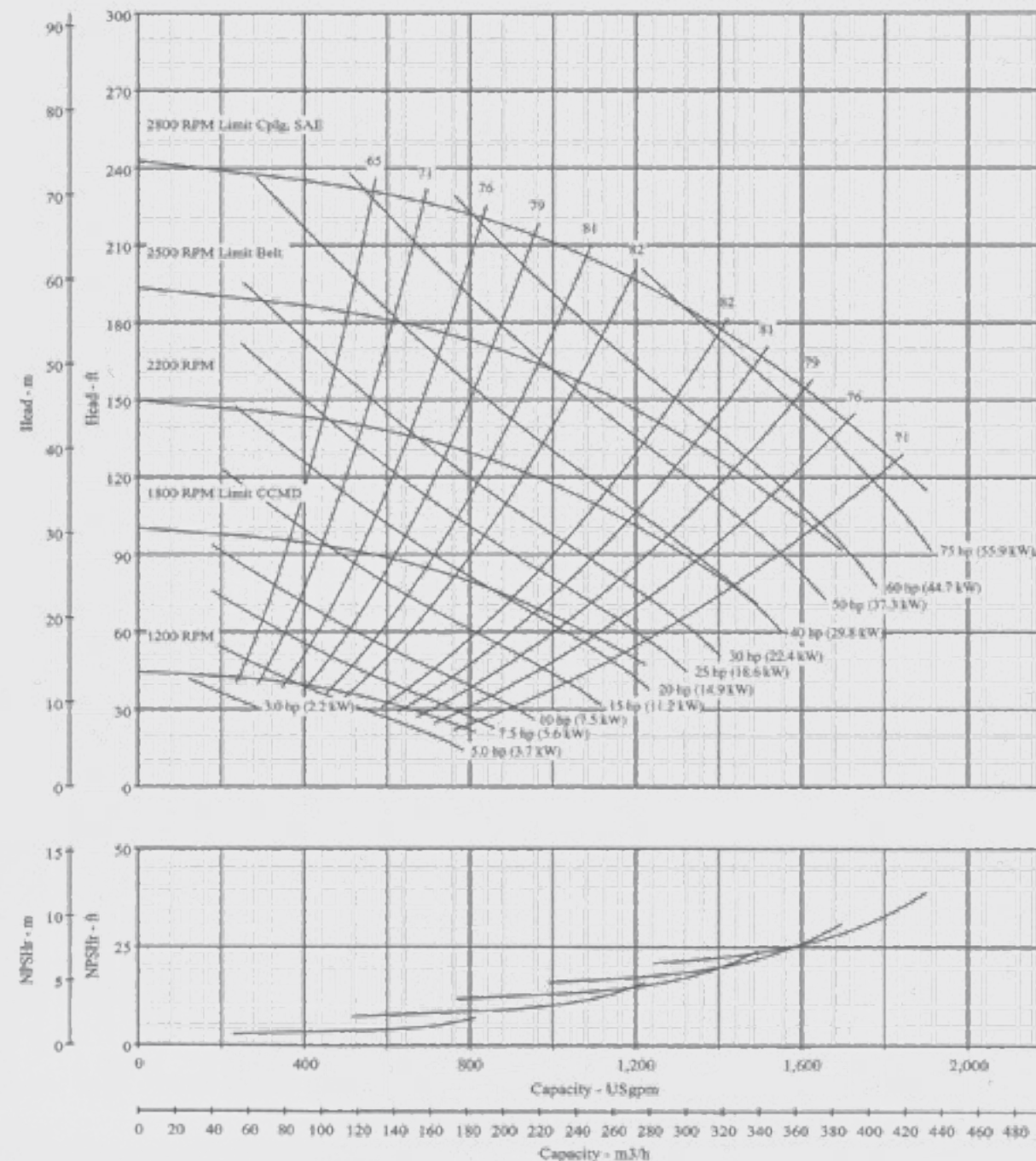
B4Z Berkeley Pump Performance Curve



B4Z Splined Shaft, CW
302430

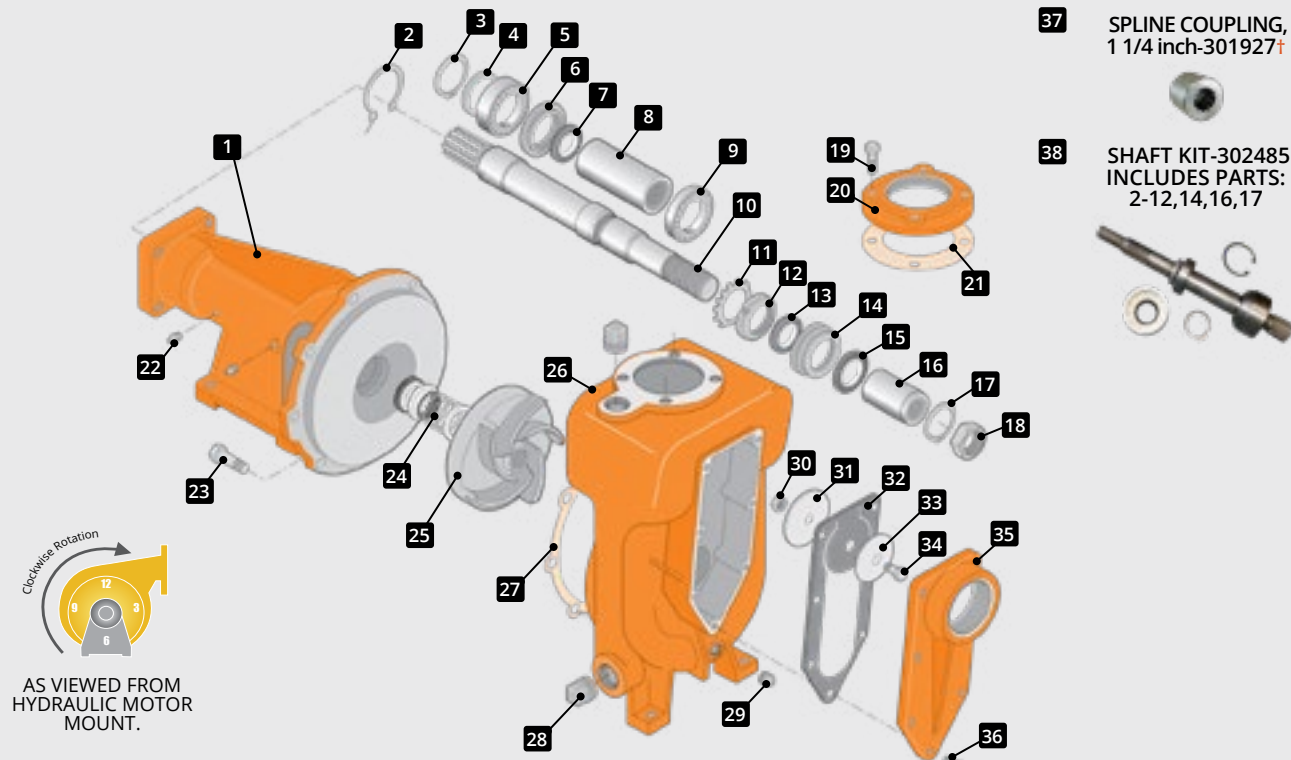
Dia. 9.50"

Nominal RPM: **VARIOUS**
Based on Fresh Water @ 68°F (20°C)
Maximum Working Pressure: 175 PSI (12 BAR)



Berkeley B4Z Splined Shaft Self Priming Water Pump, CW Part No. 302430

Berkeley standard open centrifugal water pump with direct motor mount. Mechanical shaft seal.
• Clockwise Rotation • Inlet 4 inch NPT • Outlet 4 inch NPT • 9 inch Impeller



ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
	302430	Berkeley, B4Z Water Pump-CW (Splined Shaft)	1	20	300581	Companion Flange	1
1	302004	Bracket	1	21	300582	Companion Flange Gasket	1
2	302483	Retainer Ring*	1	22	300519	Grease Fitting, 1/4 inch	2
3	302482	Retaining Ring*	1	23	350144	Cap Screw 3/8-16 X 0.85 inch	8
4	302009	Thrust Washer*	1	24	302452	Mechanical Shaft Seal**	1
5	302450	Drive Side Bearing*	1	25	300575	Impeller, 9 inch, CW	1
6	302453	Bearing Cap, Drive Side*	1	26	300556	Volute Case	1
7	302446	Motor Side Oil Seal *	1	27	300385	Gasket, Case	1
8	302448	Spacer Sleeve*	1	28	350856	Pipe Plug, 1 1/2 inch	2
9	300384	Ball Bearing*	1	29	350852	Pipe Plug, 1/2 inch	1
10	302006	Spline Shaft *	1	30	350025	Nut, 3/8 inch	1
11	300379	Bearing Lock Washer*	1	31	300580	Clack Weight	1
12	300378	Lock Nut Bearing *	1	32	300576	Check Valve, Gasket	1
13	302447	Oil Seal, Impeller Side**	1	33	300578	Clack Weight	1
14	302451	Bearing Cap, Impeller Side*	1	34	350143	CS 3/8-16 X 3/4	1
15	300558	Water Slinger**	1	35	300579	Suction, Cover	1
16	303952	Wear Shaft Sleeve*	1	36	350146	Bolt, 3/8 inch-16 inch x 1 1/4 inch	7
17	302484	Retaining Ring*	1	37	301927	Spline Coupling, 1 1/4 inch†	1
18	302480	Locknut, Impeller	1	38	302485	Shaft Kit	1
19	350284	Cap Screw 5/8-11 X 1 3/4 inch	4				

* These parts are included in the shaft kit. The shaft is not sold separately and is only sold as a shaft kit.

** Gasket and seals required for pump rebuild assembly.

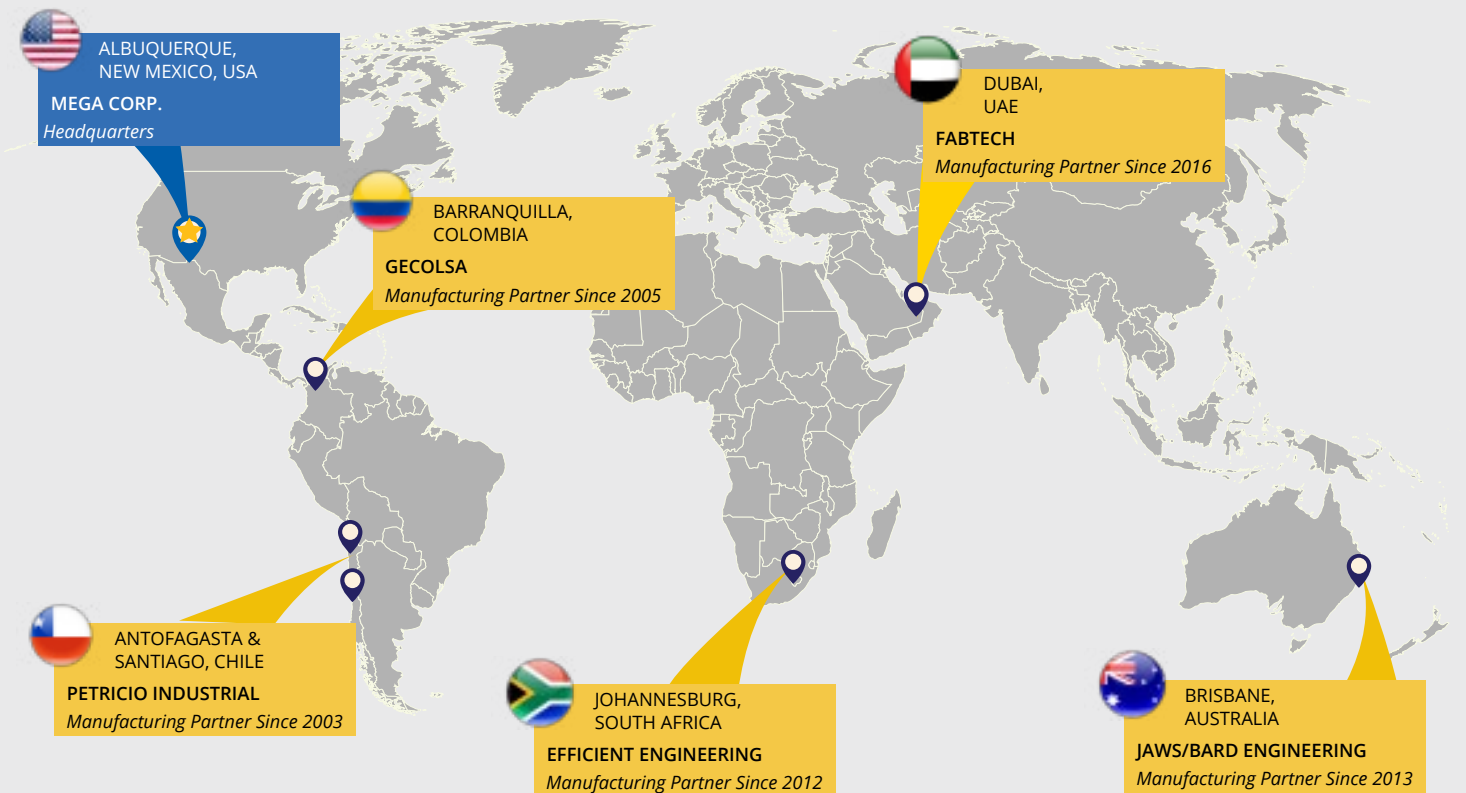
† Replacement parts only. Parts sold separately and not included with the water pump.

If illustration does not match your configuration please call product support at 505-345-2661 or 1-800-345-8889.

We reach out **GLOBALLY** to take care of **YOU**

Wherever you are in the world, we're here to ensure you get the highest quality, most effective and durable specialty haulage products in the industry. Mega is responsible for the design, development, manufacture, marketing, and sale of products used in surface mining and construction projects worldwide.

Mega's products include all varieties of water haulage equipment, elevating scrapers, coal haulers, bottom-dump trailers, equipment transports, specialty dumper bodies, mobile pumps, and stand tanks, as well as parts, service and technical support. Mega's products are manufactured at its headquarters in Albuquerque, New Mexico, U.S.A. as well as by its partners in Chile, Colombia, South Africa, Dubai, and Australia.



Parts and Product Support available 24 hours a day, seven days a week.

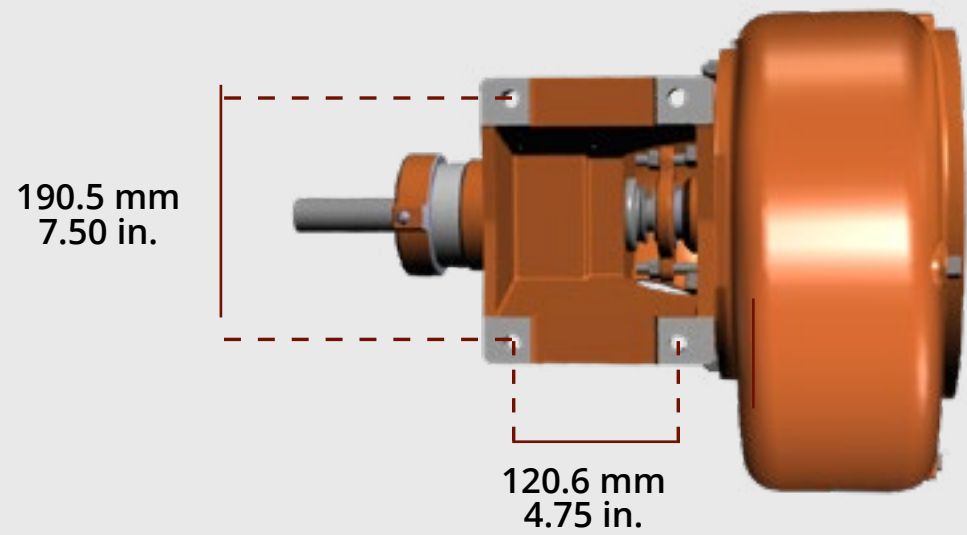
Product Support 505.345.2661 • U.S. 1.800.345.8889 • After Hours & Weekend 505.918.7271

www.megacorpinc.com

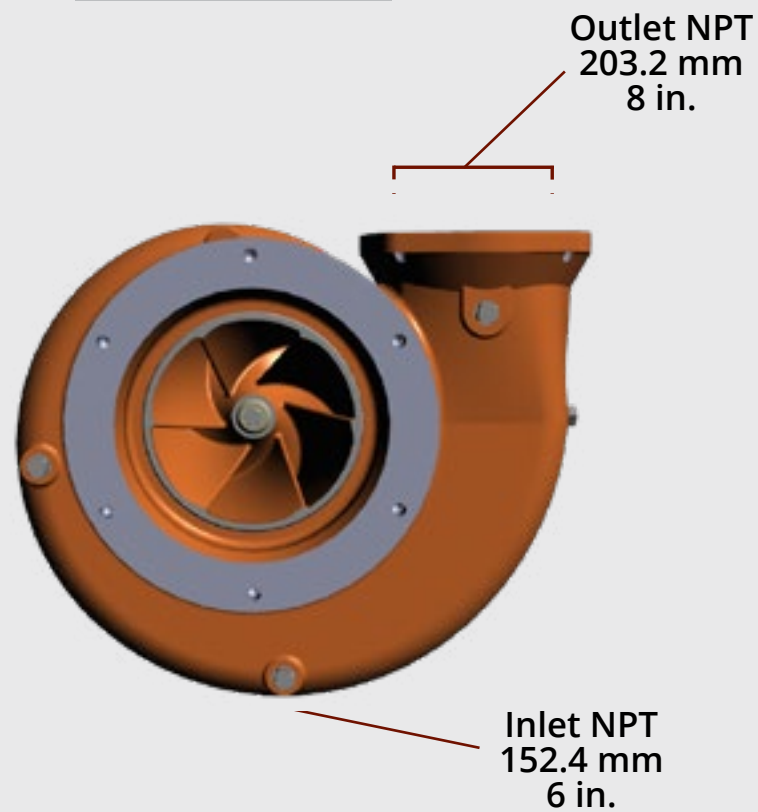
B6Z Basic Dimensions

Please contact Parts Sales at 1-800-345-8889 for more dimensional information on our B6Z water pump.

Footprint/ Bottom



Volute View

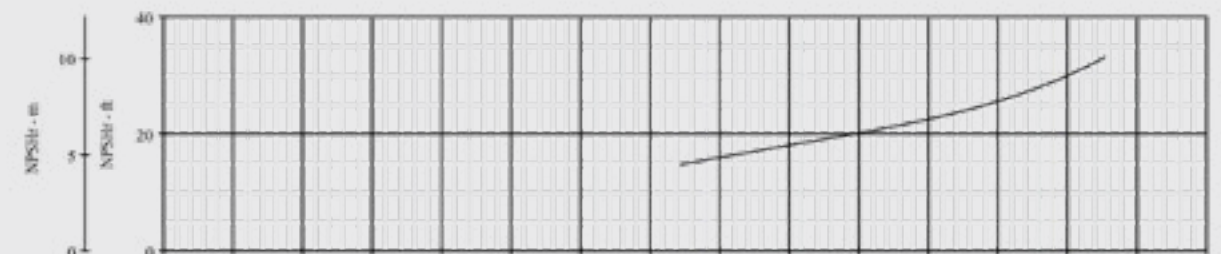
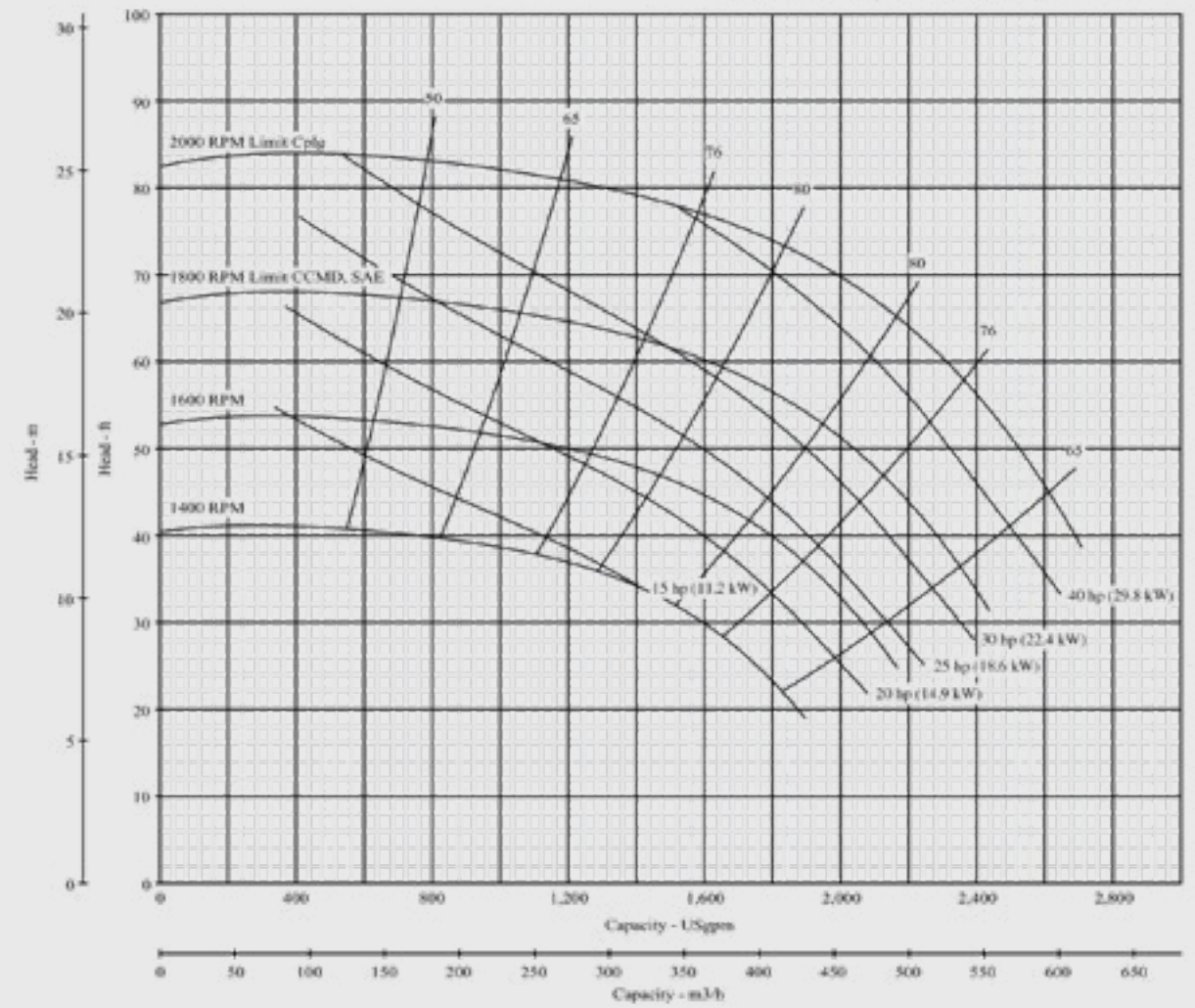


B6Z Berkeley Pump Performance Curve



Dia. 9.00"

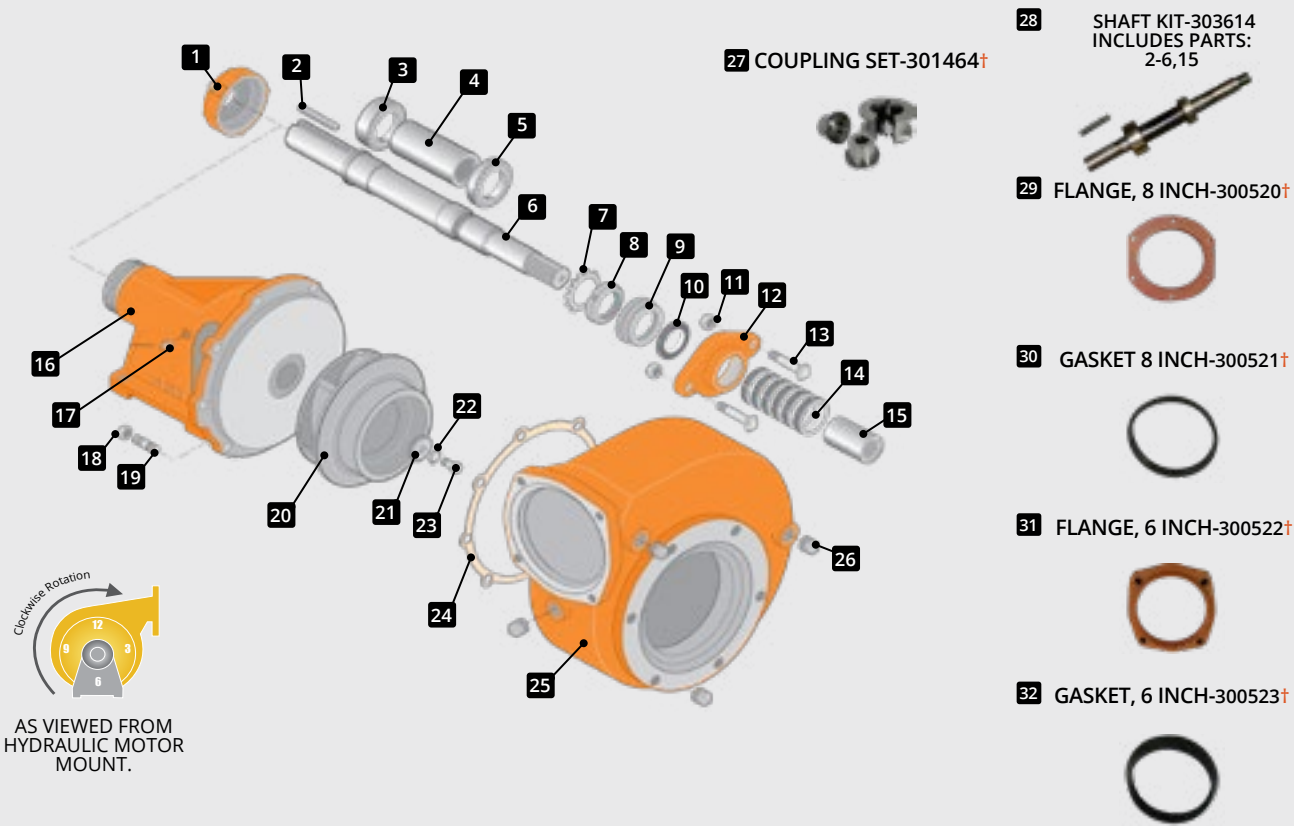
Nominal RPM: **VARIOUS**
Based on Fresh Water @ 88°F (20°C)
Maximum Working Pressure: 266 PSI (18 BAR)



*NPSH data shown is at maximum speed

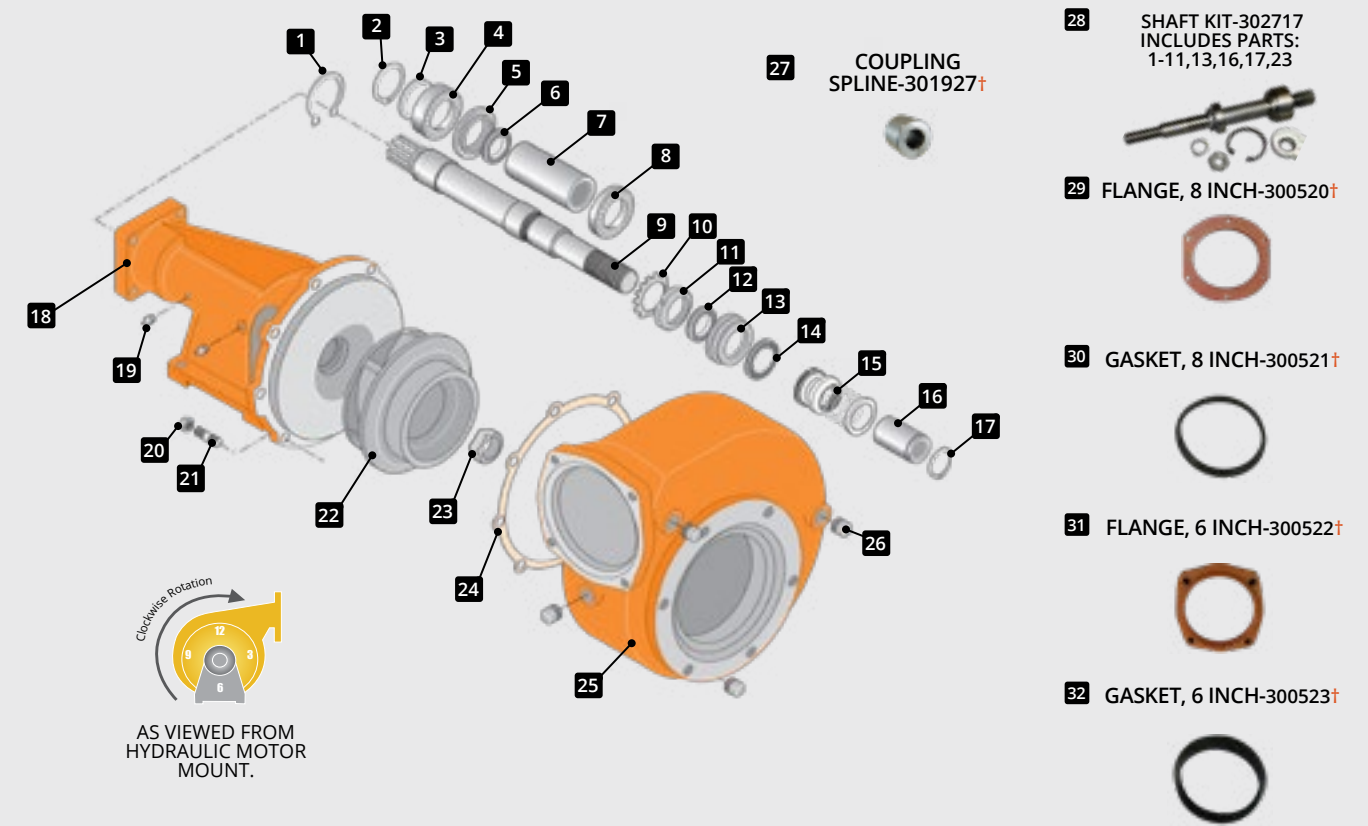
Berkeley B6Z Keyed Shaft Water Pump, CW Part No. 300048

Berkeley standard open centrifugal water pump with rope packing shaft seal.
• Clockwise Rotation • Inlet 6 inch • Outlet 8 inch • 9 inch Impeller



Berkeley B6Z Splined Shaft Water Pump, CW Part No. 302565

Berkeley standard open centrifugal water pump with direct motor mount. Mechanical shaft seal.
• Clockwise Rotation • Inlet 6 inch • Outlet 8 inch • 9 inch Impeller



ITEM	PART NO.	DESCRIPTION	QTY
	300048	Berkeley, B6Z Water Pump-CW (Keyed Shaft)	1
1	301831	Outer Bearing Cap	1
2	301008	Key, 1/4 inch X 2 1/8 inch*	1
3	300383	Ball Bearing*	1
4	300381	Spacer, Bearing*	1
5	300384	Ball Bearing*	1
6	300516	Shaft, CW*	1
7	300379	Bearing Lock Washer	1
8	300378	Lock Nut Bearing	1
9	300374	Bearing Drip Cap	1
10	300558	Water Slinger	1
11	300518	Nut, Gland	2
12	300372	Split Gland	1
13	300517	Bolt, Gland	2
14	300380	Ring Packing	1
15	300373	Shaft Sleeve*	1
16	300390	Bracket	1

ITEM	PART NO.	DESCRIPTION	QTY
17	306697	Grease Fitting, 5/16 inch	1
18	350025	Nut, 3/8 inch	8
19	302298	Stud, 3/8-16 X 1 3/8 inch	8
20	300388	Impeller	1
21	300524	Impeller Lock Washer	1
22	300526	Lock Washer	1
23	300525	Cap Screw, Impeller	1
24	300385	Case, Gasket	1
25	300392	Volute Case	1
26	350852	Pipe Plug, 1/2 inch	4
27	301464	Coupling Set, 1-1/8 inch X 1-1/4 inch†	1
28	303614	Shaft Kit	1
29	300521	Flange, 8 inch†	1
30	300520	Gasket, 8 inch†	1
31	300522	Flange, 6 inch†	1
32	300523	Gasket, 6 inch†	1

* These parts are included in the shaft kit. The shaft is not sold separately and is only sold as a shaft kit.

** Gasket and seals required for pump rebuild assembly.

† Replacement parts only. Parts sold separately and not included with the water pump.

ITEM	PART NO.	DESCRIPTION	QTY
	302565	Berkeley, B6Z Water Pump-CW (Splined Shaft)	1
1	302483	Ring, Retaining*	1
2	302482	Ring, External, Retaining*	1
3	302009	Thrust Washer*	1
4	302450	Ball Bearing*	1
5	302453	Cap, Outer Bearing*	1
6	302446	Seal, Oil*	1
7	302448	Sleeve, Spacer*	1
8	300384	Ball Bearing*	1
9	303190	Shaft*	1
10	300379	Bearing Lock Washer*	1
11	300378	Lock Nut Bearing*	1
12	302447	Seal, Oil	1
13	302451	Cap Drip, Bearing*	1
14	300558	Water Slinger	1
15	302452	Mechanical Seal	1

ITEM	PART NO.	DESCRIPTION	QTY
16	303952	Shaft Sleeve*	1
17	302484	Ring, External, Retaining*	1
18	302004	Bracket	1
19	300519	Grease Fitting, 1/4 inch	2
20	350025	Nut, 3/8 inch	8
21	302298	Stud, 3/8-16 X 1 3/8 inch	8
22	300388	Impeller, CW	1
23	302480	Impeller Nut*	1
24	300385	Gasket, Case	1
25	300392	Volute Case	1
26	350852	Pipe Plug, 1/2 inch	4
27	301927	Spline Coupling, 1 1/4 inch†	1
28	302717	Shaft Kit	1
29	300521	Flange, 8 inch†	1
30	300520	Gasket, 8 inch†	1
31	300522	Flange, 6 inch†	1
32	300523	Gasket, 6 inch†	1

* These parts are included in the shaft kit. The shaft is not sold separately and is only sold as a shaft kit.

** Gasket and seals required for pump rebuild assembly.

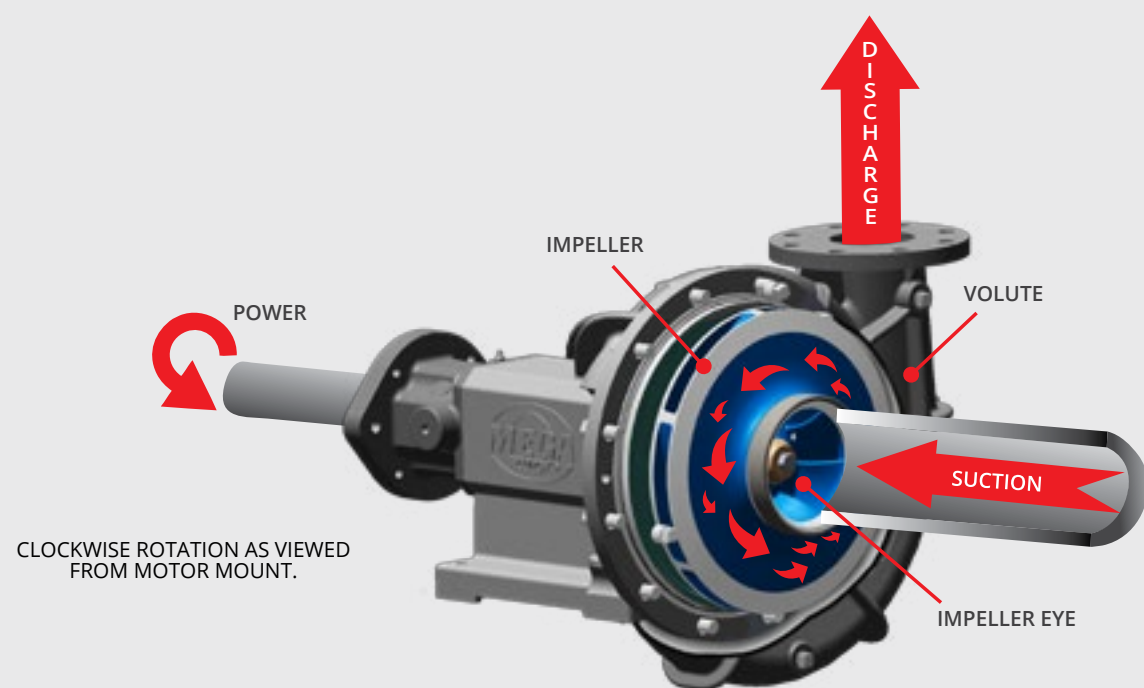
† Replacement parts only. Parts sold separately and not included with the water pump.

If illustration does not match your configuration please call product support at 505-345-2661 or 1-800-345-8889.

Mega Water Pump Frequently Asked Questions

What is an open centrifugal pump?

Centrifugal water pumps use centrifugal force to pressurize and move water from the inlet to the outlet. A rotating set of vanes (called an impeller) is spun by the pump shaft. As water is forced through the impeller, rotational energy is transferred from the impeller to the water, which gains velocity and pressure through the centrifugal force applied and is flung from the impeller. The volute (a spiral-shaped case) funnels the now-pressurized water to the outlet.



Pressure and Flow, and what causes water pressure.

Pressure and flow are inversely related—that is, if pressure is increased, then flow decreases, and vice versa. "Pressure" is the amount of force per area, and "flow" is the volume of material moving through a given area per second (not the same as velocity, which is the distance traveled per time).

Water pressure is caused by resistance to flow. If a force tries to move water and there is resistance to that movement, then the water becomes pressurized. Consider a standard garden hose; when the end of the hose is unrestricted, water flows out of the hose in large quantities, but without much force. If you press your thumb over the opening, however, the stream of water that shoots out from around your thumb will be much more forceful and will travel further, but there will also be less water per second leaving the hose.

What happens when an open centrifugal pump is "Dead-headed"?

A centrifugal pump is "dead-headed" when it is operated without an open discharge outlet (no water flow). In a no-flow condition very little horsepower input is required to spin the impeller, so the water pump drive motor input pressure will be low and the pump will not stall. Therefore, a dead-headed pump will convert the rotational energy of the shaft and impeller into heat. The heat will boil the water inside the volute, causing severe damage to grease and bearings.

When should I replace gaskets?

Any time that the water pump is serviced and the gaskets are removed, replace the gaskets. Gaskets are inexpensive, and a faulty gasket will cause the pump to leak.

Is my water pump supposed to leak water from around the shaft seal?

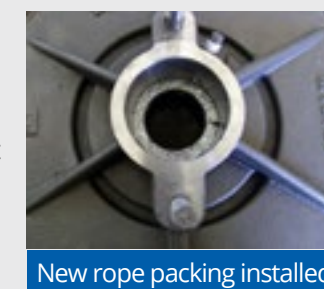
Yes. A small amount of water leaking through the shaft seal is necessary to lubricate and cool the rope packing and shaft sleeve. The recommended leakage rate is between 60 and 120 drops per minute, which will result in a small trickle of water. If water leakage is excessive, simply adjust the packing glands to compress the rope packing until leakage is within the recommended parameters.

How do I adjust the packing, and when should I adjust it?

Different types of packing are designed to leak at certain rates. If the packing begins to leak at a greater rate than the allowed amount, tighten the packing gland with a wrench until the leakage is reduced to within the specified parameters. Additionally, the stuffing box temperature should be checked regularly. If the temperature becomes too high, loosen the packing gland until the temperature drops to a consistently safe level.

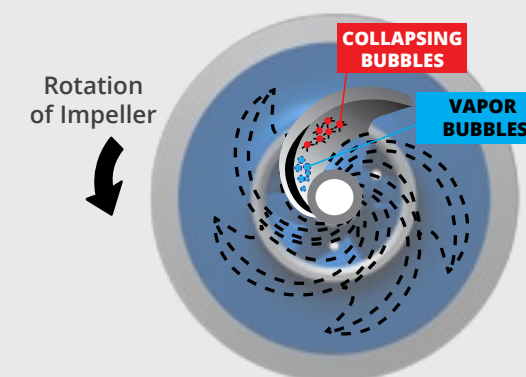
When should I replace the packing?

Over time as the packing is subjected to continual heat and pressure through normal use, lubricant will be forced out of the packing material. The life of the packing material can be extended by periodically tightening the packing gland whenever there is packing leakage greater than the specified amount (Mega's rope packing seals are designed to leak approximately 60 drops per minute). Eventually, all of the lubricant will have been squeezed out of the packing material, and tightening the packing gland will no longer prevent leakage. When this happens, it is time to replace the packing.



What causes pump cavitation?

When the inlet pressure of a water pump falls below pump design specifications, tiny vapor bubbles can form in the water around the eye of the impeller. When the water containing these bubbles is forced into a high pressure environment on the other side of the impeller, these bubbles collapse, thereby creating tiny shock waves and points of high temperature. These shock waves can actually corrode the surface of the impeller. To prevent cavitation, always be sure to operate your water pump within its pressure and flow specifications.



Is it ok to run the pump dry?

No. The water pump shaft and impeller are rotating at high RPMs. Without water to transfer the heat created by rotational energy, the moving parts become extremely hot, causing severe damage to the pump and significantly limiting service life.

Does Mega have a pump that will lift water vertically?

Mega offers a self-priming centrifugal pump for suction loading applications. The B4Z pump lifts water a vertical distance of 7-10 feet.

Why is there little or no water pressure even though the water pump is spinning?

Good spray performance requires high water pressure. Some pumps are designed to move a high volume of water (high flow), and as a result the pressure of the moving water is low. In this case, try limiting the number of spray heads open at a time. Limiting the flow of water leaving the spray system should increase the water pressure. A water pump with high flow may perform poorly with four spray heads open simultaneously, but may work very well if only two spray heads are open. If the problem persists, check to see if the pump impeller or shaft bearings are worn or damaged.

Why isn't my pump pumping?

There could be several factors behind this:

- Check to ensure that there is enough water present in the tank to allow safe pumping. The Mega Digital Spray Control System will shut the water pump off when the water level is too low.
- Beware of air locks. If there is too little water in the tank, the pump may have drawn in a large air pocket that is preventing the flow of water (see "What is an air lock?").
- Is the lift displacement too great? If you are operating a suction lift pump, be sure that the water reservoir you are drawing from is no more than seven feet below the pump, otherwise the resistance to flow may be too great.
- Are supply and discharge pipes configured correctly? Using pipes that are too small in diameter or that have too many elbows will increase flow resistance and decrease pump performance.

What is an air lock?

An air lock occurs when large pockets of air are drawn into the inlet side of the water pump. This creates a void and prevents the pump from drawing in water which decreases, or can stop pump performance. If the air pocket is drawn through the impeller and into an area of high water pressure, the bubbles will collapse and create large shock waves that will severely damage the pump.

Why did the pump shaft break?

Water pump shaft failures can be caused by several factors:

- Sudden start or stop of the pump - rpm should be ramped up and down over a minimum of 2 seconds.
- Engaging a water pump abruptly can twist the impeller off of the shaft and damage the shaft bearings.
- Water hammer caused by the sudden shut-off of water flow can cause the impeller to break the pump shaft and damage shaft bearings over time.
- An unbalanced or damaged impeller can cause shaft failure and bearing damage over time.

Does Mega offer a corrosion-resistant or stainless steel water pump?

Yes, we do. Our Mega M4B water pump P/N 306201 is available in a corrosion-resistant form where all parts that come in contact with water are stainless steel. For the most corrosive environments, we offer a fully stainless steel Mega M4 water pump P/N 306647. Please call Parts Sales at 505-345-2661 for more information.

Does Mega offer a water pump with a mechanical shaft seal?

Yes. Mega offers several different pumps with mechanical shaft seals. P/N 301908 and P/N 304742.

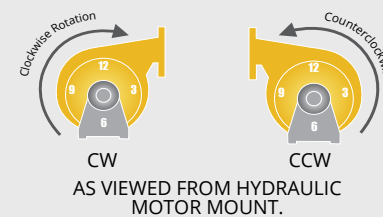
What type of materials are Mega water pumps constructed?

Mega water pumps are constructed of cast carbon steel and 300 series stainless steel.

How do I identify what water pump I have?

Your pump should have a metal identification tag on the frame. If the tag cannot be located, compare your pump with the photos on our website, or send us a photo of your pump and we can assist with identification. Call our Product Support Team or Parts Sales Team for assistance at 505-345-2661. We'd be happy to help!

Which direction should my pump be spinning?



Water pumps rotate either clockwise or counterclockwise as viewed from the drive shaft end of the pump. To determine rotation direction position the pump with the shaft end facing yourself. If the outlet of the pump is facing 90 degrees to the right, straight down on the right side of the pump center line, or straight up on the left side of the pump center line, then it is a clockwise rotation pump. If the outlet of the pump is facing 90 degrees to the left, straight down on the left side of the pump center line, or straight up on the right side of the pump center line, it is a counterclockwise pump.

Can Mega water pumps be damaged by freezing?

Yes. If a pump is allowed to freeze with water in it, cracking of the volute case as well as damage to the shaft and bearings may occur. Thoroughly drain the water from your pump and tank in freezing weather. If the pump has been frozen, disassemble and inspect it for damage before returning it to service.

How often should my water pump's bearings be greased? Can an auto-lube be used?

Exact intervals and grease amounts vary depending upon the type of water pump. Refer to Mega's Schedule of Inspections Manual or the Mega Maintenance Manuals for exact instructions and details. Most Mega water pumps should be manually greased. The exception is Mega's M4B pump, which can be greased with an auto-lube system or connected to a prime mover's auto-lubing system. Over-greasing can damage bearings, and high pressure grease guns can blow out the pump's grease seals, resulting in bearing failure. Refer to Mega's Maintenance Manuals for full details.

Should I be concerned if my pump is noisy?

While most water pumps are fairly quiet during operation, hydraulic drive motors can be quite noisy. Confirm that the noise you are hearing is coming from the water pump. If the pump is making a growling, grinding, squealing, or popping noise, it should be disassembled and inspected for damage.

How much water pressure should my pump develop?

Refer to the water pump performance curve chart for your pump. Water pressure should be checked with water in the tank, spray heads closed, and the tractor engine at high idle. To obtain acceptable spray performance, a minimum of 85 psi water pressure under static conditions (no water flowing) is required. A static water pressure exceeding 125 psi can cause damage to water lines, connections and spray heads.

Thank You

For Your Business



GENUINE MEGA

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