

**geotech**

Environmental Remediation Pump Systems

Electric Submersible Motors

For Sales & Service Contact

**geotech**

2650 E. 40th Ave. • Denver, CO 80205  
Phone 303-320-4764 • Fax 303-322-7242

**1-800-833-7958**

**[www.geotechenv.com](http://www.geotechenv.com)**

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**(800) 833-7958**

**Geotech Environmental Equipment, Inc.**

2650 East 40th Avenue • Denver, Colorado 80205

(303) 320-4764 • FAX (303) 322-7242

email: [sales@geotechenv.com](mailto:sales@geotechenv.com) • website: [www.geotechenv.com](http://www.geotechenv.com)



**Applications**

These motors are built for dependable operation in 4” diameter or larger water wells.

**Basic Features**

- Corrosion-resistant stainless steel exterior
- Stainless steel splined shaft
- Hermetically-sealed windings
- StatorShield™ resin system
- Filter check valve
- Water lubrication
- Kingsbury-type thrust bearing
- Pressure-equalizing diaphragm
- Built-in lightning arrestors (All single-phase; 200 & 300 V three-phase)
- Removable water bloc lead
- Franklin-manufactured control boxes available for single-phase motors
- UL 778 recognized (North American voltages)
- CSA certified
- ANSI/NSF 61 certified
- Industry standard NEMA mounting dimensions

**Special Features**

- Flow inducer sleeve not required in water up to 86 °F (30 °C) for motors through 2 hp.
- Two-wire motors are split-phase designs with integral starting components and do not require a control box. They feature Franklin’s patented 2-wire BIAC starting switch which provides Reverse Impact Torque to aid starting in adverse environments and prevents extreme fast cycling (e.g. water logged tank).

**Pollution Recovery Option**

- Pollution Recovery motors are equipped for use in monitoring and recovery wells in which hydrocarbons and other chemicals may be present.
- Special Viton® rubber parts and other chemical resistant materials as listed in Construction Materials chart.

### 4-Inch Super Stainless Motor Specifications

Hz	Ph	Hp Range	kW Range	Poles	RPM	Max. Ambient Temp.	Duty Rating
60	2-Wire	0.3 - 1.5	0.25 - 1.1	2	3450	86 °F / 30 °C	Continuous
50	2-Wire	0.5 - 1.5	0.37 - 1.1	2	2875	86 °F / 30 °C	Continuous
60	3-Wire	0.3 - 3	0.25 - 2.2	2	3450	86 °F / 30 °C	Continuous*
50	3-Wire	0.3 - 3	0.25 - 2.2	2	2875	86 °F / 30 °C	Continuous*
60	Three-Phase	0.5 - 3	0.37 - 2.2	2	3450	86 °F / 30 °C	Continuous*
50	Three-Phase	0.5 - 3	0.37 - 2.2	2	2875	86 °F / 30 °C	Continuous*

### 4 -Inch Pollution Recovery Motor Specifications

Hz	Ph	Hp Range	kW Range	Poles	RPM	Max. Ambient Temp.	Duty Rating
60	2-Wire	0.3 - 1.5	0.25 - 1.1	2	3450	86 °F / 30 °C	Continuous
50	2-Wire	0.5 - 1.5	0.37 - 1.1	2	2875	86 °F / 30 °C	Continuous
60	3-Wire	0.3 - 2	0.25 - 1.5	2	3450	86 °F / 30 °C	Continuous*
50	3-Wire	0.3 - 2	0.25 - 1.5	2	2875	86 °F / 30 °C	Continuous*
60	Three-Phase	0.5 - 2	0.37 - 1.5	2	3450	86 °F / 30 °C	Continuous*
50	Three-Phase	0.5 - 2	0.37 - 1.5	2	2875	86 °F / 30 °C	Continuous*

\* 3 hp motors require 0.25 ft/sec flow past motor.

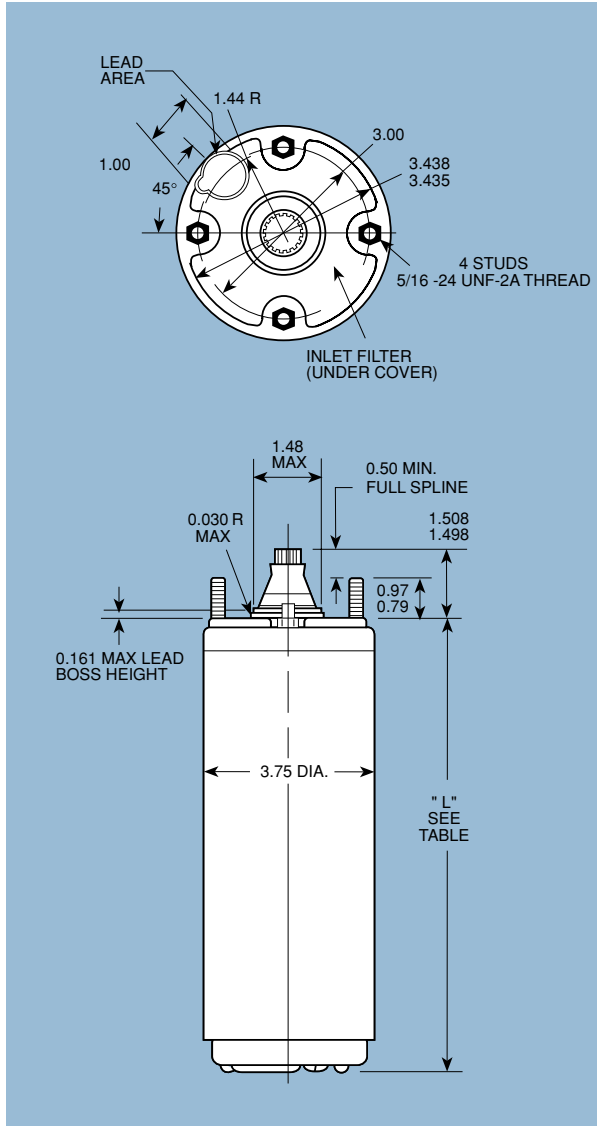
### Construction Materials 4, 6, 8 inch

Component	Construction Type	
	Standard Water Well	Pollution Recovery
Castings	304 SS over Iron	304 SS over Iron
Stator Shell	301 SS	301 SS
Shaft Extension	17-4 SS or 303 SS	303 SS
Fasteners	305 SS or 302 SS	316 SS
Seal Cover	Acetal	Tefzel®
Seal	Nitrile Rubber Lip	Viton®
Diaphragm	Nitrile Rubber	Viton®
Slinger	Nitrile Rubber	Viton®
Lead Wire (or Cable)	XLPE	Lead not furnished with motor
Lead Potting	Epoxy	Lead not furnished with motor
Lead Jam Nut	303 SS	Lead not furnished with motor

Viton® is a registered trademark of DuPont Dow Elastomers.

Tefzel® is a registered trademark of E.I. du Pont Nemours and Company.

**4-Inch Dimensions and Weights**



**Single-Phase Motors - 2-wire**

HP	KW	"L" (inches)	SHIPPING WEIGHT		MOTOR CARTON SIZE (in inches)
			LBS	KG	
1/3	0.25	8.78	16	7.3	4 x 4.375 x 16
0.5	0.37	9.53	18	8.2	4 x 4.375 x 16
0.75	0.55	10.66	21	9.5	4 x 4.375 x 19
1	0.75	11.75	24	10.9	4 x 4.375 x 19
1.5	1.1	15.12	31	14.1	4 x 4.375 x 21

**Single-Phase Motors - 3-wire**

HP	KW	"L" (inches)	SHIPPING WEIGHT		MOTOR CARTON SIZE (in inches)
			LBS	KG	
1/3	0.25	8.78	17	7.7	4 x 4.375 x 16
0.5	0.37	9.53	19	8.6	4 x 4.375 x 16
0.75	0.55	10.66	21	9.5	4 x 4.375 x 19
1	0.75	11.75	24	10.9	4 x 4.375 x 19
1.5	1.1	13.62	28	12.7	4 x 4.375 x 21
2	1.5	15.12	33	15.0	5 x 4.375 x 21
3	2.2	19.06	41	18.6	6 x 4.375 x 21

**Three-Phase Motors**

HP	KW	"L" (inches)	SHIPPING WEIGHT		MOTOR CARTON SIZE (in inches)
			LBS	KG	
0.5	0.37	9.53	18	8.2	4 x 4.375 x 16
0.75	0.55	10.66	21	9.5	4 x 4.375 x 16
1	0.75	11.75	24	10.9	4 x 4.375 x 19
1.5	1.1	11.75	24	10.9	4 x 4.375 x 19
2	1.5	13.62	28	12.7	4 x 4.375 x 21
3	2.2	16.06	35	15.9	4 x 4.375 x 21

### 4-Inch 2-wire Models

HP (kW)	DESCRIPTION						MODEL	STOCK STATUS	DOWNWARD THRUST RATING	
	W/PH	CONSTRUCTION	VOLTS	HZ	S.F.	LEAD IN MTR				
<b>1/3 hp 0.25 kW</b>	2-WIRE	WATER WELL	115	60	1.75		244 502 01--S		300 LBS (1500 N)	
			115	60	1.75	YES	244 502 90--S	YES		
			230	60	1.75		244 503 01--S			
		230	60	1.75	YES	244 503 90--S	YES			
		POLLUTION RECOVERY	115	60	1.75		244 502 09--S			
			230	60	1.75		244 503 09--S			
<b>1/2 hp 0.37 kW</b>	2-WIRE	WATER WELL	115	60	1.60		244 504 01--S		300 LBS (1500 N)	
			115	60	1.60	YES	244 504 90--S	YES		
			220	50	1.00		244 555 01--S			
			230	60	1.60		244 505 01--S			
		230	60	1.60	YES	244 505 90--S	YES			
		POLLUTION RECOVERY	115	60	1.60		244 504 09--S			
230	60		1.60		244 505 09--S					
<b>3/4 hp 0.55 kW</b>	2-WIRE	WATER WELL	220	50	1.00		244 557 01--S		300 LBS (1500 N)	
			230	60	1.50		244 507 01--S			
			230	60	1.50	YES	244 507 90--S	YES		
		POLLUTION RECOVERY	230	60	1.50		244 507 09--S			
<b>1 hp 0.75 kW</b>	2-WIRE	WATER WELL	220	50	1.00		244 558 12--S		650 LBS (3000 N)	
			230	60	1.40		244 508 12--S			
			230	60	1.40	YES	244 508 90--S	YES		
		POLLUTION RECOVERY	230	60	1.40		244 508 23--S			
<b>1.5 hp 1.1 kW</b>	2-WIRE	WATER WELL	220	50	1.00		244 359 12--S		650 LBS (3000 N)	
			230	60	1.30		244 309 12--S			
			230	60	1.30	YES	244 309 90--S	YES		
		POLLUTION RECOVERY	230	60	1.30		244 309 23--S			

### 4-Inch 3-wire Models

HP (KW)	DESCRIPTION						MOTOR MODEL	CONTROL BOX MODEL	STOCK STATUS	DOWNWARD THRUST RATING
	W/PH	CONSTRUCTION	VOLTS	HZ	S.F.	LEAD IN MTR				
<b>1/3 hp</b> 0.25 kW	3-WIRE	WATER WELL	115	60	1.75		214 502 44--S	280 102 49		300 LBS (1500 N)
			115	60	1.75	YES	214 502 90--S	280 102 49	YES	
			220	50	1.00		214 553 41--S	280 353 01		
			230	60	1.75		214 503 44--S	280 103 49		
			230	60	1.75	YES	214 503 90--S	280 103 49	YES	
		POLLUTION RECOVERY	115	60	1.75		214 502 49--S	280 102 49		
			230	60	1.75		214 503 49--S	280 103 49		
<b>1/2 hp</b> 0.37 kW	3-WIRE	WATER WELL	115	60	1.60		214 504 44--S	280 104 49		300 LBS (1500 N)
			115	60	1.60	YES	214 504 90--S	280 104 49	YES	
			220	50	1.00		214 555 41--S	280 355 01	YES	
			230	60	1.60		214 505 44--S	280 105 49		
			230	60	1.60	YES	214 505 90--S	280 105 49	YES	
		POLLUTION RECOVERY	115	60	1.60		214 504 49--S	280 104 49		
			230	60	1.60		214 505 49--S	280 105 49		
<b>3/4 hp</b> 0.55 kW	3-WIRE	WATER WELL	220	50	1.00		214 557 41--S	280 357 01	YES	300 LBS (1500 N)
			230	60	1.50		214 507 44--S	280 107 49		
			230	60	1.50	YES	214 507 90--S	280 107 49	YES	
		POLLUTION RECOVERY	230	60	1.50		214 507 49--S	280 107 49		
		FOUNTAIN DUTY	230	60	1.50	YES	214 507 0600		YES	
<b>1 hp</b> 0.75 kW	3-WIRE	WATER WELL	220	50	1.00		214 558 19--S	280 358 01	YES	650 LBS (3000 N)
			230	60	1.40		214 508 12--S	280 108 49		
			230	60	1.40	YES	214 508 90--S	280 108 49	YES	
		POLLUTION RECOVERY	230	60	1.40		214 508 23--S	280 108 49		
		FOUNTAIN DUTY	230	60	1.40	YES	214 508 0610		YES	
<b>1.5 hp</b> 1.1 kW	3-WIRE	WATER WELL	220	50	1.00		224 350 19--S	282 350 81	YES	650 LBS (3000 N)
			230	60	1.30		224 300 19--S	282 300 81	YES	
			230	60	1.30	YES	224 300 92--S	282 300 81	YES	
		POLLUTION RECOVERY	230	60	1.30		224 300 23--S	282 300 81		
		FOUNTAIN DUTY	230	60	1.30	YES	224 300 0610		YES	
<b>2 hp</b> 1.5 kW	3-WIRE	WATER WELL	220	50	1.00		224 351 19--S	282 351 81	YES	650 LBS (3000 N)
			230	60	1.25		224 301 19--S	282 301 81	YES	
			230	60	1.25	YES	224 301 92--S	282 301 81	YES	
		POLLUTION RECOVERY	230	60	1.25		224 301 23--S	282 301 81		
		FOUNTAIN DUTY	230	60	1.25	YES	224 301 0610		YES	
<b>3 hp</b> 2.2 kW	3-WIRE	WATER WELL	220	50	1.00		224 352 25	282 352 81	YES	900 LBS (4000 N)
			230	60	1.15		224 302 25	282 302 81		
			230	60	1.15	YES	224 302 26	282 302 81	YES	
		FOUNTAIN DUTY	230	60	1.15	YES	224 302 0620		YES	

### 4-Inch Three-Phase Models

HP (KW)	DESCRIPTION						MODEL	STOCK STATUS	DOWNWARD THRUST RATING	
	W/PH	CONSTRUCTION	VOLTS	HZ	S.F.	LEAD IN MTR				
<b>1/2 hp</b> 0.37 kW	3-PHASE	WATER WELL	200	60	1.60		234 501 41--S		300 LBS (1500 N)	
			200	60	1.60	YES	234 501 92--S			
			220	50	1.00		234 551 41--S			
			230	60	1.60		234 511 41--S			
			230	60	1.60	YES	234 511 92--S			
			380/415	50	1.00		234 561 31--S	YES		
			460	60	1.60		234 521 31--S			
		460	60	1.60	YES	234 521 94--S				
		POLLUTION RECOVERY	200	60	1.60		234 501 49--S			
			230	60	1.60		234 511 49--S			
460	60		1.60		234 521 49--S					
<b>3/4 hp</b> 0.55 kW	3-PHASE	WATER WELL	200	60	1.50		234 502 41--S		300 LBS (1500 N)	
			200	60	1.50	YES	234 502 92--S			
			220	50	1.00		234 552 41--S			
			230	60	1.50		234 512 41--S			
			230	60	1.50	YES	234 512 92--S			
			380/415	50	1.00		234 562 31--S	YES		
			460	60	1.50		234 522 31--S			
		460	60	1.50	YES	234 522 94--S				
		POLLUTION RECOVERY	200	60	1.50		234 502 49--S			
			230	60	1.50		234 512 49--S			
			460	60	1.50		234 522 49--S			
		FOUNTAIN DUTY	230	60	1.50	YES	234 512 0600	YES		
			460	60	1.50	YES	234 522 0600			
<b>1 hp</b> 0.75 kW	3-PHASE	WATER WELL	200	60	1.40		234 503 19--S		650 LBS (3000 N)	
			200	60	1.40	YES	234 503 92--S			
			220	50	1.00		234 553 41--S			
			230	60	1.40		234 513 19--S			
			230	60	1.40	YES	234 513 92--S	YES		
			380/415	50	1.00		234 563 31--S	YES		
			460	60	1.40		234 523 16--S			
		460	60	1.40	YES	234 523 94--S	YES			
		POLLUTION RECOVERY	200	60	1.40		234 503 23--S			
			230	60	1.40		234 513 23--S			
			460	60	1.40		234 523 23--S			
		FOUNTAIN DUTY	230	60	1.40	YES	234 513 0610	YES		
			460	60	1.40	YES	234 523 0610			

### 4-Inch Three-Phase Models

HP (KW)	DESCRIPTION						MODEL	STOCK STATUS	DOWNWARD THRUST RATING
	W/PH	CONSTRUCTION	VOLTS	HZ	S.F.	LEAD IN MTR			
<b>1.5 hp 1.1 kW</b>	3-PHASE	WATER WELL	200	60	1.30		234 504 19--S		650 LBS (3000 N)
			200	60	1.30	YES	234 504 92--S	YES	
			220	50	1.00		234 554 19--S		
			230	60	1.30		234 514 19--S		
			230	60	1.30	YES	234 514 92--S	YES	
			460/380	60/50	1.30/1.00		234 524 16--S		
			460/380	60/50	1.30/1.00	YES	234 524 94--S	YES	
			575	60	1.30		234 534 16--S		
			575	60	1.30	YES	234 534 94--S	YES	
		POLLUTION RECOVERY	200	60	1.30		234 504 23--S		
			230	60	1.30		234 514 23--S		
			460/380	60/50	1.30/1.00		234 524 23--S		
		FOUNTAIN DUTY	230	60	1.30	YES	234 514 0610	YES	
			460/380	60	1.30/1.00	YES	234 524 0610		
<b>2 hp 1.5 kW</b>	3-PHASE	WATER WELL	200	60	1.25		234 305 16--S		650 LBS (3000 N)
			200	60	1.25	YES	234 305 92--S	YES	
			220	50	1.00		234 355 19--S		
			230	60	1.25		234 315 16--S	YES	
			230	60	1.25	YES	234 315 92--S	YES	
			460/380	60/50	1.25/1.00		234 325 16--S	YES	
			460/380	60/50	1.25/1.00	YES	234 325 94--S	YES	
			575	60	1.25		234 335 16--S		
			575	60	1.25	YES	234 335 94--S	YES	
		POLLUTION RECOVERY	200	60	1.25		234 305 23--S		
			230	60	1.25		234 315 23--S		
			460/380	60/50	1.25/1.00		234 325 23--S		
		FOUNTAIN DUTY	230	60	1.25	YES	234 315 0610	YES	
			460/380	60	1.25/1.00	YES	234 325 0610		
<b>3 hp 2.2 kW</b>	3-PHASE	WATER WELL	200	60	1.15		234 306 25--S		900 LBS (4000 N)
			200	60	1.15	YES	234 306 26--S	YES	
			220	50	1.00		234 356 25--S		
			230	60	1.15		234 316 25--S		
			230	60	1.15	YES	234 316 26--S	YES	
			380	60	1.15		234 346 25--S		
			380	60	1.15	YES	234 346 26--S	YES	
			460/380	60/50	1.15/1.00		234 326 25--S		
			460/380	60/50	1.15/1.00	YES	234 326 26--S	YES	
			575	60	1.15		234 336 25--S		
			575	60	1.15	YES	234 336 26--S	YES	
		FOUNTAIN DUTY	230	60	1.15	YES	234 316 0620		
			460/380	60	1.15/1.00	YES	234 326 0620		

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