Submersible Deep-Well Pump Motors

- 4" body dia.
- Max. ambient temp.: 86°F

Deep-well pump motors can help draw water up from groundwater sources as deep as 400 ft. below the surface. They have a stainless steel shell with encapsulated, hermetically sealed stator and a splined stainless steel shaft. Lubricant-replenishing, filtered check valve and pressure-equalizing diaphragm. Replaceable lead wire assemblies include ground wire. Motors have hydrodynamic thrust bearings and CCWSE rotation. Continuous duty in 86°F water at ¼ ft. per sec. ½-HP to 2-HP models include 48" lead length; 3-HP to 7½-HP models include 100" lead length.

1-Phase—For water systems that utilize a pressure switch. Built-in lightning protection. Capacitor-start motors require a control box, sold separately on page 2654. Automatic thermal protection on motors up to 1 HP; manual (in control box) 2 HP and higher.

3-Phase—Require motor starter and overload relay, sold separately on page 170.

422X50

HP	Voltage	No. of Wires	RPM Range	Motor Service Factor	Motor Design	Full Load Amps	Max. SF Amps	Thrust Rating	Control Box Req.	Brand	Mfr. Model	Item No.
Single-Phase												
½	115V AC	2	3,001-3,600	1.6	Split-Phase	10.0	12.0	700 lb	—	Flint & Walling	137412	**422X50**
½	115V AC	3	3,001-3,600	1.6	Split-Phase	10.0	12.0	700 lb	—	Flint & Walling	137426	**422X55**
½	230V AC	2	3,001-3,600	1.6	Split-Phase	5.0	6.0	700 lb	—	Flint & Walling	137414	**422X51**
½	230V AC	3	3,001-3,600	1.6	Split-Phase	5.0	6.0	700 lb	—	Flint & Walling	137428	**422X56**
1	230V AC	2	3,001-3,600	1.4	Split-Phase	8.2	9.8	650 lb	No	Franklin Electric	558762	**1CXB6**
2	230V AC	3	3,001-3,600	1.25	Capacitor-Start	10.0	13.2	650 lb	1LZW4	Franklin Electric	558769	**1CXB9**
3	230V AC	3	3,001-3,600	1.15	Capacitor-Start	14.0	17.0	900 lb	1LZW3	Franklin Electric	558773	**1CXC1**
5	230V AC	3	3,001-3,600	1.15	Capacitor-Start	23.0	27.5	1,500 lb	1LZW8	Franklin Electric	558778	**1CXC2**

1CXC3

HP	Voltage	No. of Wires	RPM Range	Motor Service Factor	Full Load Amps	Max. SF Amps	Thrust Rating	Starter Req.	Overload Relay Req.	Overload Relay Amp Setting	Overload Relay Max. Amp Setting	Mfr. Model	Item No.
Three-Phase													
1 ½	200V AC	3	3,001-3,600	1.3	5.8	6.8	650 lb	3DY20	Yes	6.3	6.8 A	558763	**1CXC3**
1 ½	230V AC	3	3,001-3,600	1.3	5.0	5.9	650 lb	3DY20	Yes	5.5	5.9 A	558766	**1CXC4**
1 ½	460V AC	3	3,001-3,600	1.3	2.5	3.0	650 lb	3DY20	Yes	2.8	3 A	558767	**1CXC5**
2	200V AC	3	3,001-3,600	1.25	7.7	9.3	650 lb	3DY28	Yes	8.6	9.3 A	558768	**1CXC6**
3	230V AC	3	3,001-3,600	1.15	9.5	10.9	900 lb	3DY28	Yes	10.1	10.9 A	558774	**1CXD1**
3	460V AC	3	3,001-3,600	1.15	4.8	5.5	900 lb	3DY20	Yes	5.1	5.5 A	558775	**1CXD2**
5	460/380V AC	3	3,001-3,600	1.15	8.0	8.9	1,500 lb	3DY20	Yes	8.3	8.9 A	558782	**1CXD5**
5	230V AC	3	3,001-3,600	1.15	15.9	17.8	1,500 lb	3DY36	Yes	16.6	17.8 A	558780	**1CXD4**
7 ½	460/380V AC	3	3,001-3,600	1.15	11.5	13.2	1,500 lb	3DY36	Yes	12.3	13.2 A	558787	**1CXD7**

Submersible Deep-Well Pumps and Control Panel Kits

- 3-wire
- Max. operating temp.: 86°F, except 7YT16 to 7YT30 are 130°F

Control panel kits regulate the start/stop operation of submersible deep-well pumps that are buried within a well deep in the ground and push water up through a pipe that is joined to one end of the pump. The long, cylinder-shaped pumps can provide a constant supply of water even during dry seasons. They don't require priming since they are submerged in water and are connected to a tank to keep water pressure more consistent. Pumps are more effective for deep wells and can go down several hundred feet compared to jet pumps that have a depth of up to 120 ft.

3-Phase—Require motor starter and overload relay, sold separately on page 170.

HP	Amps	No. of Stages	Flow Rate @ 100 Ft. @ 50 psi	Nominal Flow Rate	Max. Head (ft.)	Item No.
110V AC, Single-Phase						
½ hp	12.0 A	7	7.0 gpm	8 gpm	290	**2EHR4**
220V AC, 3 Phase (Control Box Required)						
2 hp	6.7 A	10	25.0 gpm	35 gpm	470	**7YT16**
3 hp	9.5 A	11	41.0 gpm	45 gpm	630	**7YT19**
5 hp	15.9 A	12	60.0 gpm	85 gpm	425	**7YT21**
	15.9 A	13	60.0 gpm	60 gpm	375	**7YT28**
220V AC, Single-Phase						
½ hp	6.0 A	6	6.0 gpm	10 gpm	245	**2EHP9**
	6.0 A	7	7.0 gpm	8 gpm	290	**2EHL7**
	6.0 A	8	5.0 gpm	6 gpm	364	**2EHP7**
¾ hp	8.0 A	8	10.0 gpm	12 gpm	339	**2EHR1**
	8.0 A	10	9.0 gpm	9 gpm	378	**2EHL8**
	8.0 A	12	7.0 gpm	8 gpm	528	**2EHP8**
1 hp	9.8 A	7	17.0 gpm	20 gpm	273	**2EHR3**
	9.8 A	11	12.0 gpm	13 gpm	427	**2EHR2**
2 hp	10 A	10	25 gpm	33 gpm	288	**7YT22**
	10 A	10	28 gpm	32 gpm	288	**7YT24**
3 hp	14 A	8	32 gpm	60 gpm	630	**7YT20**
	14 A	11	41 gpm	48 gpm	350	**7YT18**
5 hp	23 A	12	60 gpm	90 gpm	390	**7YT30**
	23 A	13	60 gpm	60 gpm	375	**7YT27**
	23 A	18	52 gpm	45 gpm	283	**7YT26**
480V AC, 3 Phase (Control Box Required)						
2 hp	3.4 A	10	25.0 gpm	35 gpm	470	**7YT17**
3 hp	4.8 A	11	41.0 gpm	45 gpm	283	**7YT25**
5 hp	8.0 A	13	60.0 gpm	60 gpm	390	**7YT29**

2EHR4

7YT24

Spring Check and Foot Valves

Prevent backflow or loss of prime.

Ductile-Iron—For use with high-flow submersible well pumps and have no leaded components.

Lead-Free and Low-Lead—Stainless steel spring and screen; nitrile seal. Lead-Free Brass Check Valves have a nonspin acetal poppet. Lead-Free Bronze Foot Valves have an Enviro-Check body. Low-Lead Brass Check and Foot Valves have bronze seat.

PVC—Stainless steel spring and raised-radius valve seat for positive seal.

Acetal Resin Copolymer—Convert to check valves by removing the strainer; convert to check/foot valves by removing the spring. Lead-free components.

Material of Construc.	Size	Connec. Type	Max. Temp.	L	Brand	Item No.
Spring Check Valve						
Ductile Iron	2 in	MNPT x FNPT	180 °F	—	Dayton	**4RK71**
	3 in	MNPT x FNPT	180 °F	—	Dayton	**4RK70**
Lead-Free Brass	¾ in	FNPT	180 °F	3 in	Campbell	**5YM04**
	1 in	FNPT	180 °F	3 ½ in	Campbell	**5YM05**
	1¼ in	FNPT	180 °F	3 ¾ in	Campbell	**5YM06**
	1½ in	FNPT	180 °F	4 in	Campbell	**5YM07**
	2 in	FNPT	180 °F	5 in	Campbell	**5YM08**
Low-Lead Brass	¾ in	FNPT	158 °F	3 in	Campbell	**36Y047**
	1 in	FNPT	158 °F	3 ½ in	Campbell	**36Y048**
	1¼ in	FNPT	158 °F	3 ¾ in	Campbell	**36Y049**
	1½ in	FNPT	158 °F	4 in	Campbell	**36Y050**
	2 in	FNPT	158 °F	5 in	Campbell	**36Y051**
PVC	½ in	FNPT	120 °F	4 13/32 in	Dayton	**4RG64**
	¾ in	FIPT	120 °F	4 19/32 in	Dayton	**4RG65**
	¾ in	SLIP	120 °F	4 19/32 in	Dayton	**4RG71**
	1 in	FIPT	120 °F	5 ¾ in	Dayton	**4RG66**
	1 in	SLIP	120 °F	5 ¾ in	Dayton	**4RG72**
	1¼ in	SLIP	120 °F	6 ⅜ in	Dayton	**4RG73**
	1½ in	FIPT	120 °F	6 ¾ in	Dayton	**4RG68**
	1½ in	SLIP	120 °F	6 ¾ in	Dayton	**4RG74**
	2 in	FIPT	120 °F	7 15/16 in	Dayton	**4RG69**
	2 in	SLIP	120 °F	7 15/16 in	Dayton	**4RG75**

PVC
4RG64

Low-Lead Brass
36Y052

Material of Construc.	Size	Connec. Type	Max. Temp.	L	Brand	Item No.
Spring Foot Valve						
Acetal Resin Copolymer	¾ in	FNPT	180 °F	4 29/32 in	Brady	**2A646**
	1 in	FNPT	180 °F	5 ⅜ in	Brady	**2A647**
	1¼ in	FNPT	180 °F	6 ⅛ in	Brady	**2A648**
	1½ in	FNPT	180 °F	7 3/16 in	Brady	**2A649**
Lead-Free Bronze	¾ in	FNPT	180 °F	3 35/64 in	Campbell	**5YM09**
	1 in	FNPT	180 °F	4 ¾ in	Campbell	**5YM10**
	1¼ in	FNPT	180 °F	4 ¾ in	Campbell	**5YM11**
	1½ in	FNPT	180 °F	2 ½ in	Campbell	**5YM12**
	2 in	FNPT	180 °F	3 in	Campbell	**5YM13**
Low-Lead Brass	¾ in	FNPT	158 °F	3 ¾ in	Campbell	**36Y052**
	1 in	FNPT	158 °F	4 ¾ in	Campbell	**36Y053**
	1¼ in	FNPT	158 °F	4 ¾ in	Campbell	**36Y054**
	1½ in	FNPT	158 °F	2 ½ in	Campbell	**36Y055**
	2 in	FNPT	158 °F	3 in	Campbell	**36Y056**