4" SUBMERSIBLE MOTORS

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; features 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)
- Three-wire motors through 1 hp use Franklin's exclusive three-wire QD (Quick Disconnect) Control Box with the patented QD Relay. This relay provides the ultimate in operational life
- Single-phase motors can be used with Pumptec products to protect against dry-run and other installation conditions that can damage motors and/or pumps; see single-phase protection devices for details

CONSTANT PRESSURE OPTION

- Use Franklin's MonoDrive controller with 1.5 hp three-wire, single-phase motors to provide constant water pressure
- Three-phase motors can be used with SubDrive controllers to provide constant water pressure

POLLUTION RECOVERY OPTION

- Pollution Recovery motors are equipped for use in monitoring and recovery wells in which hydrocarbons and other chemicals may be present
- Features nitrile rubber parts and other chemical-resistant materials as listed in the construction materials chart

4" SUBMERSIBLE MOTORS - SPECIFICATIONS AND MATERIALS

MOTOR SPECIFICATIONS

Hz	Model	Phase	HP Range	kW Range	Poles	RPM	Max. Ambient Temp.	Duty Rating
50	Super Stainless	1	0.5 - 1.5	0.37 - 1.1	2	2875	86 °F / 30 °C	Continuous
		1	0.3 - 3	0.25 - 2.2				Continuous*
		3	0.5 - 3	0.37 - 2.2				Continuous*
	Pollution Recovery	1	0.5 - 1.5	0.37 - 1.1				Continuous
		1	0.3 - 2	0.25 - 1.5				Continuous*
		3	0.5 - 2	0.37 - 1.5				Continuous*
	High Thrust	1	1.5 - 5	1.1 - 3.7				Continuous*
		3	1.5 - 10	1.1 - 7.5				Continuous*
60	Super Stainless	1	0.3 - 1.5	0.25 - 1.1		3450		Continuous
		1	0.3 - 3	0.25 - 2.2				Continuous*
		3	0.5 - 3	0.37 - 2.2				Continuous*
	Pollution Recovery	1	0.3 - 1.5	0.25 - 1.1				Continuous
		1	0.3 - 2	0.25 - 1.5				Continuous*
		3	0.5 - 2	0.37 - 1.5				Continuous*
	High Thrust	1	1.5 - 5	1.1 - 3.7				Continuous*
		3	1.5 - 10	1.1 - 7.5				Continuous*

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

CONSTRUCTION MATERIALS

Component	Model	Construction Type			
		Standard Water Well	Coalbed Methane	Sand Fighter™	Pollution Recovery
Castings	Super Stainless	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	-	-	ETFE
Seal		Nitrile Lip	-	-	FKM
Diaphragm		Nitrile	-	-	FKM
Slinger		Nitrile	-	-	FKM
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

Component	Model	Construction Type			
		Standard Water Well	Coalbed Methane	Sand Fighter™	Pollution Recovery
Top Castings	High Thrust	303 SS	303 SS	303 SS	-
Bottom Castings		303 SS over painted cast iron	303 SS over painted cast iron	303 SS over painted cast iron	-
Stator Shell		301 SS	301 SS	301 SS	-
Stator Ends		Low-carbon steel	Low-carbon steel	Low-carbon steel	-
Shaft Extension		17-4 SS	17-4 SS	17-4 SS	-
Fasteners		300 series SS	300 series SS	300 series SS	-
Seal Cover		Acetal	Sintered bronze	Sintered bronze	-
Seal		Nitrile lip	Sand Fighter™ SiC/ SiC mech. seal	Sintered bronze	-
Diaphragm		Nitrile	Nitrile	Nitrile	-
Diaphragm Cup		316 SS	316 SS	316 SS	-
Diaphragm Spring		316 SS	316 SS	316 SS	-
Diaphragm Cover		Gray iron	Gray iron	304 SS	-
Slinger		Nitrile	Nitrile	Nitrile	-
Lead Wire (or Cable)		XLPE*	XLPE*	XLPE*	-
Lead Potting		Epoxy	Epoxy	Epoxy	-
Lead Screws / Clamp		316 SS	316 SS	316 SS	-
Filter		Delrin/polyester	Delrin/polyester	Delrin/polyester	-



4" SUBMERSIBLE MOTORS - ORDERING INFORMATION

THREE-PHASE MODELS

HP	Description	Volts	Hz	S.F.	Motor Lead	Model No.	In Stock	Thrust	Wt. (Lbs)
1/2	Water Well	200	60	1.6	-	2345014116GS	-	300	18
		200	60	1.6	Yes	2345019204GS	-	300	19
		220	50	1.0	-	2345514116GS	-	300	18
		230	60	1.6	-	2345114116GS	-	300	18
		230	60	1.6	Yes	2345119204GS	-	300	19
		380-415	50	1.0	-	2345613116GS	Yes	300	18
		460	60	1.6	-	2345213116GS	-	300	18
		460	60	1.6	Yes	2345219404GS	Yes	300	19
	Pollution Recovery	200	60	1.6	-	2345014916GS	-	300	18
		230	60	1.6	-	2345114916GS	-	300	18
		460	60	1.6	-	2345214916GS	-	300	18
3/4	Water Well	200	60	1.5	-	2345024116GS	-	300	21
		200	60	1.5	Yes	2345029204GS	-	300	22
		220	50	1.0	-	2345524116GS	-	300	21
		230	60	1.5	-	2345124116GS	-	300	21
		230	60	1.5	Yes	2345129204GS	-	300	22
		380-415	50	1.0	-	2345623116GS	Yes	300	21
		460	60	1.5	-	2345223116GS	-	300	21
		460	60	1.5	Yes	2345229404GS	-	300	22
	Pollution Recovery	200	60	1.5	-	2345024916GS	-	300	21
		230	60	1.5	-	2345124916GS	-	300	21
		460	60	1.5	-	2345224916GS	-	300	21
	Series 600M	230	60	1.5	Yes	2345120600GS	Yes	300	22
		460	60	1.5	Yes	2345220600GS	-	300	22
1	Water Well	200	60	1.4	-	2345031903GS	-	650	24
		200	60	1.4	Yes	2345039203GS	-	650	25
		220	50	1.0	-	2345534116GS	-	650	24
		230	60	1.4	-	2345131903GS	-	650	24
		230	60	1.4	Yes	2345139203GS	Yes	650	25
		380-415	50	1.0	-	2345633116GS	Yes	650	24
		460	60	1.4	-	2345231603GS	-	650	24
		460	60	1.4	Yes	2345239403GS	Yes	650	25
	Pollution Recovery	200	60	1.4	-	2345032303GS	-	650	24
		230	60	1.4	-	2345132303GS	-	650	24
		460	60	1.4	-	2345232303GS	-	650	24
	Series 600M	230	60	1.4	Yes	2345130610GS	Yes	650	25
		460	60	1.4	Yes	2345230610GS	-	650	25
1.5	Water Well	200	60	1.3	-	2345041903GS	-	650	28
		200	60	1.3	Yes	2345049203GS	Yes	650	29
		200	60	1.3	-	2345048600	-	1500	33
		220	50	1.3	Yes	2345549003GS	-	650	28
		230	60	1.3	-	2345141903GS	-	650	28
		230	60	1.3	Yes	2345149203GS	Yes	650	29
		230	60	1.3	-	2345148600G	-	1500	33
		460/380	60/50	1.3/1.0	-	2345241603GS	-	650	28
		460/380	60/50	1.3/1.0	Yes	2345249403GS	Yes	650	28
		460/380	60/50	1.3/1.0	-	2345248600G	Yes	1500	28
		575	60	1.3	-	2345341603GS	-	650	28
		575	60	1.3	Yes	2345349403GS	Yes	650	29
		575	60	1.3	-	2345348600G	-	1500	33
	Pollution Recovery	200	60	1.3	-	2345042303GS	-	650	28
		230	60	1.3	-	2345142303GS	-	650	28
		460/380	60/50	1.3/1.0	-	2345242303GS	-	650	28
	Series 600M	230	60	1.3	Yes	2345140610GS	Yes	650	25
		460/380	60/50	1.3/1.0	Yes	2345240610GS	-	650	25
	316 SS	200	60	1.3	Yes	2345048502G	-	1500	40
		230	60	1.3	Yes	2345148502G	-	1500	40
		460/380	60/50	1.3/1.0	Yes	2345248502G	-	1500	40
		575	60	1.3	Yes	2345348502G	-	1500	40

4" SUBMERSIBLE MOTORS - ORDERING INFORMATION

THREE-PHASE MODELS

HP	Description	Volts	Hz	S.F.	Motor Lead	Model No.	In Stock	Thrust	Wt. (Lbs)
2	Water Well	200	60	1.25	-	2343051618GS	-	650	33
		200	60	1.25	Yes	2343059204GS	Yes	650	34
		200	60	1.25	-	2343058600G	-	1500	44
		220	50	1.0	-	2343551916GS	-	650	33
		230	60	1.25	-	2343151618GS	Yes	650	33
		230	60	1.25	Yes	2343159204GS	Yes	650	34
		230	60	1.25	-	2343158600G	-	1500	44
		460/380	60/50	1.25/1.0	-	2343251618GS	Yes	650	33
		460/380	60/50	1.25/1.0	Yes	2343259404GS	Yes	650	34
		460/380	60/50	1.25/1.0	-	2343258600G	-	1500	44
		460/380	60/50	1.25/1.0	Yes	2343258602G	-	1500	44
		575	60	1.25	-	2343351618GS	-	650	33
		575	60	1.25	Yes	2343359404GS	Yes	650	34
		575	60	1.25	-	2343358600G	-	1500	44
	Pollution Recovery	200	60	1.25	-	2343052318GS	-	650	33
		230	60	1.25	-	2343152318GS	-	650	33
		460/380	60/50	1.25/1.0	-	2343252318GS	-	650	33
	Series 600M	230	60	1.25	Yes	2343150610GS	Yes	650	29
		460/380	60/50	1.25/1.0	Yes	2343250610GS	-	650	29
	316 SS	200	60	1.25	Yes	2343058502G	-	1500	44
		230	60	1.25	Yes	2343158502G	-	1500	44
		460/380	60/50	1.25/1.0	Yes	2343258502G	-	1500	44
		575	60	1.25	Yes	2343358502G	-	1500	44
	Oil Stripper	230	60	1.25	Yes	2343158702G	-	1500	44
		460/380	60/50	1.25/1.0	Yes	2343258702G	-	1500	44
3	Water Well	200	60	1.15	-	2343062504G	-	900	41
		200	60	1.15	Yes	2343062604G	Yes	900	41
		200	60	1.15	-	2343068600G	-	1500	43
		200	60	1.15	Yes	2343068602G	Yes	1500	44
		220	50	1.0	-	2343562504G	-	900	41
		220	50	1.0	-	2343568600G	-	1500	43
		230	60	1.15	-	2343162504G	-	900	41
		230	60	1.15	Yes	2343162604G	Yes	900	41
		230	60	1.15	-	2343168600G	-	1500	43
		230	60	1.15	Yes	2343168602G	Yes	1500	44
		380	60	1.15	-	2343462504G	-	900	41
		380	60	1.15	Yes	2343462604G	Yes	900	41
		380	60	1.15	-	2343468600G	-	1500	43
		380	60	1.15	Yes	2343468602G	Yes	1500	44
		460/380	60/50	1.15/1.0	-	2343262504G	-	900	41
		460/380	60/50	1.15/1.0	Yes	2343262604G	Yes	900	41
		460/380	60/50	1.15/1.0	-	2343268600G	-	1500	43
		460/380	60/50	1.15/1.0	Yes	2343268602G	Yes	1500	44
		575	60	1.15	-	2343362504G	-	900	41
		575	60	1.15	Yes	2343362604G	Yes	900	41
		575	60	1.15	-	2343368600G	-	1500	43
		575	60	1.15	Yes	2343368602G	Yes	1500	44
	Series 600M	230	60	1.15	Yes	2343160620G	-	900	35
		230	60	1.15	Yes	2343160630G	Yes	1500	44
		460/380	60/50	1.15	Yes	2343260620G	-	900	35
		460/380	60/50	1.15	Yes	2343260630G	-	1500	44
	Sand Fighter™	200	60	1.15	Yes	2343068802G	-	1500	44
		230	60	1.15	Yes	2343168802G	Yes	1500	44
		380	60	1.15	Yes	2343468802G	-	1500	44
		460/380	60/50	1.15/1.0	Yes	2343268802G	Yes	1500	44
		575	60	1.15	Yes	2343368802G	-	1500	44
	316 SS	200	60	1.15	Yes	2343068502G	-	1500	44
		230	60	1.15	Yes	2343168502G	-	1500	44
		460/380	60/50	1.15/1.0	Yes	2343268502G	-	1500	44
		575	60	1.15	Yes	2343368502G	-	1500	44
	Oil Stripper	230	60	1.15	Yes	2343168702G	-	1500	44
		460/380	60/50	1.15/1.0	Yes	2343268702G	-	1500	44



4" SUBMERSIBLE MOTORS - ORDERING INFORMATION

THREE-PHASE MODELS

HP	Description	Volts	Hz	S.F.	Motor Lead	Model No.	In Stock	Thrust	Wt. (Lbs)
4	Water Well	380	50	1.0	-	2343958600G	-	1500	49
		380	50	1.0	Yes	2343958602G	-	1500	50
5	Water Well	200	60	1.15	-	2343078600G	-	1500	55
		200	60	1.15	Yes	2343078602G	Yes	1500	56
		220	50	1.0	-	2343578600G	-	1500	55
		230	60	1.15	-	2343178600G	-	1500	55
		230	60	1.15	Yes	2343178602G	Yes	1500	56
		380	60	1.15	-	2343478600G	-	1500	55
		380	60	1.15	Yes	2343478602G	Yes	1500	56
		460/380	60/50	1.15/1.0	-	2343278600G	-	1500	55
		460/380	60/50	1.15/1.0	Yes	2343278602G	Yes	1500	56
		575	60	1.15	-	2343378600G	-	1500	55
		575	60	1.15	Yes	2343378602G	Yes	1500	56
	Series 600M	230	60	1.15	Yes	2343170630G	Yes	1500	56
		460/380	60/50	1.15	Yes	2343270630G	-	1500	56
	Sand Fighter™	200	60	1.15	Yes	2343078802G	-	1500	56
		230	60	1.15	Yes	2343178802G	Yes	1500	56
		380	60	1.15	Yes	2343478802G	-	1500	56
		460/380	60/50	1.15/1.0	Yes	2343278802G	Yes	1500	56
		575	60	1.15	Yes	2343378802G	-	1500	56
	316 SS	200	60	1.15	Yes	2343078502G	-	1500	56
		230	60	1.15	Yes	2343178502G	-	1500	56
		460/380	60/50	1.15/1.0	Yes	2343278502G	-	1500	56
		575	60	1.15	Yes	2343378502G	-	1500	56
	Oil Stripper	230	60	1.15	Yes	2343178702G	-	1500	58
		460/380	60/50	1.15/1.0	Yes	2343278702G	-	1500	58
5.5	Water Well	460/380	60/50	1.0	-	2343978600G	-	1500	60
		460/380	60/50	1.0	Yes	2343978602G	-	1500	61
7.5	Water Well	200	60	1.15	-	2343088600G	-	1500	70
		200	60	1.15	Yes	2343088602G	Yes	1500	71
		220	50	1	-	2343588600G	-	1500	70
		230	60	1.15	-	2343188600G	-	1500	70
		230	60	1.15	Yes	2343188602G	Yes	1500	71
		380	60	1.15		2343488600G	-	1500	70
		380	60	1.15	Yes	2343488602G	Yes	1500	71
		460/380	60/50	1.15/1.0		2343288600G	Yes	1500	70
		460/380	60/50	1.15/1.0	Yes	2343288602G	Yes	1500	71
		575	60	1.15		2343388600G	-	1500	70
		575	60	1.15	Yes	2343388602G	Yes	1500	71
	Sand Fighter™	200	60	1.15	Yes	2343088802G	-	1500	71
		230	60	1.15	Yes	2343188802G	Yes	1500	71
		380	60	1.15	Yes	2343488802G	-	1500	71
		460/380	60/50	1.15/1.0	Yes	2343288802G	Yes	1500	71
		575	60	1.15	Yes	2343388802G	-	1500	71
	316 SS	200	60	1.15	Yes	2343088502G	-	1500	71
		230	60	1.15	Yes	2343188502G	-	1500	71
		460/380	60/50	1.15/1.0	Yes	2343288502G	-	1500	71
		575	60	1.15	Yes	2343388502G	-	1500	71
	Oil Stripper	230	60	1.15	Yes	2343188702G	-	1500	71
		460/380	60/50	1.15/1.0	Yes	2343288702G	-	1500	71
10	Water Well	380	60	1.15	Yes	2345498602G	-	1500	77
		460/380	60/50	1.15/1.0	Yes	2345958602G	Yes	1500	77
		575	60	1.15	Yes	2345988602G	-	1500	77
	Sand Fighter™	380	60	1.15	Yes	2345498802G	-	1500	77
		460/380	60/50	1.15/1.0	Yes	2345958802G	Yes	1500	77
		575	60	1.15	Yes	2345988802G	-	1500	77
	316 SS	460/380	60/50	1.15	Yes	2345958502G	-	1500	77
	Oil Stripper	460/380	60/50	1.15	Yes	2345958702G	-	1500	77

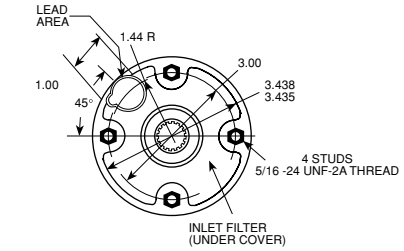
NOTE: Pack Designation (--S) = Single Pack, available in any quantity; All 3 hp motors are single-packed; Contact factory for lead time for non-stocked items; Pallet packs available but not shown; Contact customer service for availability

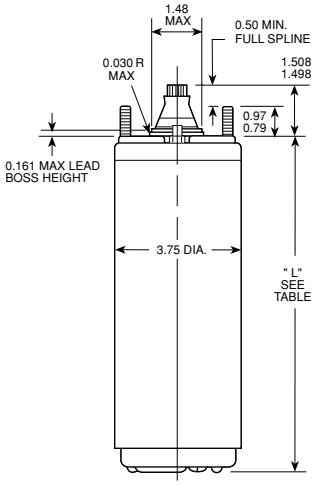
4" SUBMERSIBLE MOTORS - DIMENSIONS AND WEIGHTS

SUPER STAINLESS

HP / kW	Phase	L (in)	Motor Carton Size (in)			Shipping Wt.	
			W	H	L	lbs	kg
0.333 / 0.25	1	8.76	4.25	4.38	16.00	16	7.3
	1	8.76	4.25	4.38	16.00	17	7.7
0.5 / 0.37	1	9.51	4.25	4.38	16.00	18	8.2
	1	9.51	4.25	4.38	16.00	19	8.6
	3	9.51	4.25	4.38	16.00	18	8.2
0.75 / 0.55	1	10.64	4.25	4.38	19.00	21	9.5
	1	10.64	4.25	4.38	19.00	21	9.5
	3	10.64	4.25	4.38	16.00	21	9.5
1 / 0.75	1	11.73	4.25	4.38	19.00	24	10.9
	1	11.73	4.25	4.38	19.00	24	10.9
	3	11.73	4.25	4.38	19.00	24	10.9
1.5 / 1.1	1	15.1	4.25	4.38	21.25	31	14.1
	1	13.6	4.25	4.38	21.25	28	12.7
	3	11.73	4.25	4.38	19.00	24	10.9
2 / 1.5	1	15.1	4.25	4.38	21.25	33	15
	3	13.6	4.25	4.38	21.25	28	12.7
3 / 2.2	1	19.04	4.25	4.38	21.25	41	18.6
	3	16.04	4.25	4.38	21.25	35	15.9

NOTE: All dimensions listed above are for models supplied with lead; consult factory for other models

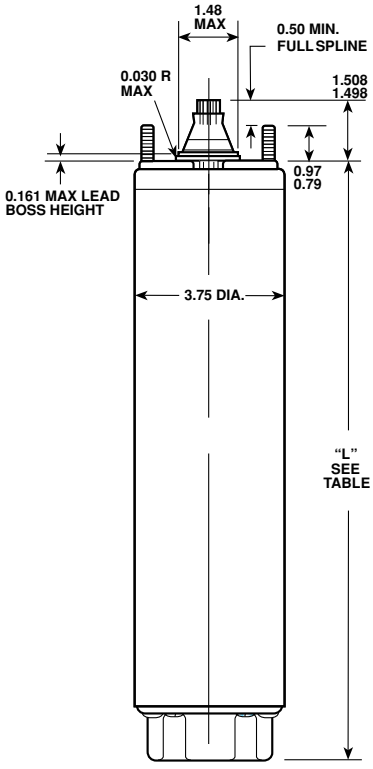




HIGH THRUST

HP / kW	Model	Phase	L (in)	Motor Carton Size (in)			Shipping Wt.	
				W	H	L	lbs	kg
1.5 / 1.1	Standard, Sand Fighter™	1	19.1	6.50	6.25	21.50	35	15.9
	Standard, Sand Fighter™	3	17.98	6.50	6.25	21.50	37	16.8
2 / 1.5	Standard, Sand Fighter™	1	20.6	6.50	6.25	24.25	43	19.5
	Oil Stripper	1	22.85	6.50	6.25	25.75	46	20.9
	Standard, Sand Fighter™	3	19.1	6.50	6.25	24.25	44	20
	Oil Stripper	3	21.35	6.50	6.25	25.75	42	19.1
3 / 2.2	Standard, Sand Fighter™	1	23.18	6.50	6.25	27.25	56	25.4
	Oil Stripper	1	23.18	6.50	6.25	33.25	56	25.4
	Standard, Sand Fighter™	3	20.18	6.50	6.25	24.25	44	20
	Oil Stripper	3	20.18	6.50	6.25	25.75	44	20
5 / 3.7	Standard, Sand Fighter™	1	29.18	6.50	6.25	33.25	71	32.2
	Oil Stripper	1	29.18	6.50	6.25	34.75	71	32.2
	Standard, Sand Fighter™	3	23.18	6.50	6.25	27.25	56	25.4
	Oil Stripper	3	25.66	6.50	6.25	28.75	63	28.6
5.5 / 4	Standard, Sand Fighter™	3	25.66	6.50	6.25	33.25	63	28.6
7.5 / 5.5	Standard, Sand Fighter™	3	29.18	6.50	6.25	33.25	71	32.2
	Oil Stripper	3	29.18	6.50	6.25	34.75	71	32.2
10 / 7.5	Standard, Sand Fighter™	3	32.18	6.50	6.25	36.25	77	34.9

NOTE: Consult factory for Coalbed Methane and 316 SS weights and dimensions

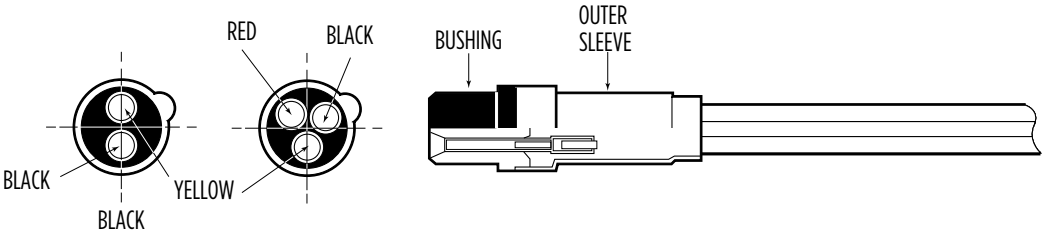


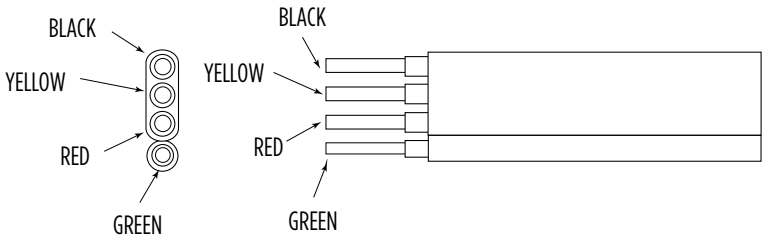
4" SUBMERSIBLE MOTORS - LEADS AND ACCESSORIES

MOTOR LEADS AND CABLES

HP	Wire	Description	Wire AWG	Model No.	Wt. (lbs)
All	2	Lead, Individual XLPE, 303 SS, 48 in, Ground	14	152552905	1
		Lead, Individual XLPE, 303 SS, 100 in, Ground		152552906	1
		Lead, Individual Nitrile, 316 SS, 48 in, No Ground		152328905*	1
		Lead, Individual Nitrile, 316 SS, 100 in, No Ground		152328906*	1
	3 (Jam-Nut Style)	Lead, Individual XLPE, 303 SS, 48 in, Ground		152553905	< 1
		Lead, Individual XLPE, 303 SS, 100 in, Ground		152553906	< 1
		Lead, Individual Nitrile, 316 SS, 48 in, No Ground *		152255901	< 1
		Lead, Individual Nitrile, 316 SS, 100 in, No Ground *		152255902	< 1
		Lead, Individual Nitrile, 316 SS, 160 in, No Ground *		152255904	< 1
		Lead, Individual Nitrile, 316 SS, 30 ft, No Ground *		152255906	5
		Lead, Individual Nitrile, 316 SS, 50 ft, No Ground *		152255907	5
		Lead, Individual Nitrile, 316 SS, 100 ft, No Ground *		152255910	9
		Lead, Individual Nitrile, 316 SS, 150 ft, No Ground *		152255912	14
	3 (Clamp Style)	Lead, Individual XLPE, 316 SS, 48 in, Ground		152735911	< 1
		Lead, Individual XLPE, 316 SS, 100 in, Ground		152735941	1
		Lead, Individual Nitrile, 316 SS, 100 in, No Ground *		152744902	< 1
		Lead, Individual Nitrile, 316 SS, 160 in, No Ground *		152744904	< 1
		Lead, Individual Nitrile, 316 SS, 50 ft, No Ground *		152744907	5
		Lead, Individual Nitrile, 316 SS, 100 ft, No Ground *		152744910	9

NOTE: Refer to Franklin Application Installation Maintenance (AIM) Manual for accurate cable sizing; MOTOR WARRANTY IS VOID if Franklin-supplied leads are not used
** Nitrile not for use in potable water*





MOTOR ACCESSORIES

HP	Description	Model No.	Wt. (lbs)
All	Coupling, 4-inch, #416 SS, 3/16 x 1/8 x 1 3/8 Key	151551911	1