

## 8" SUBMERSIBLE MOTORS

These motors are built for dependable operation in vertical 8" diameter or larger water wells.

### BASIC FEATURES

- Double flanged NEMA mounting design
- Stainless steel splined shaft
- StatorShield™ six feature encapsulation system
- High-capacity, Kingsbury-type, water lubricated thrust bearing
- Factory filled with Franklin's non-toxic water soluble fill solution
- Field replaceable lead using Franklin's exclusive Water Bloc™ technology
- Full 3,525 rpm 60 Hz design point
- External sand slinger on shaft
- Mechanical face seal at shaft exit
- Copper bar rotor
- All models are variable frequency drive (VFD) compatible
- Franklin's Exclusive on-winding SubTrol™ heat sensor for use with SubMonitor™

### SPECIAL FEATURES

- Sand Fighter™ and 316 stainless steel models are equipped with Franklin's exclusive Sand Fighter™ sealing system for sand or other abrasives

*Consult factory for other voltage, hertz and horsepower ratings not listed in this catalog; specifications are subject to change without notice; contact Franklin Electric if current materials are required for bid specifications*





## 8" SUBMERSIBLE MOTORS - SPECIFICATIONS AND MATERIALS

### THREE-PHASE MOTOR SPECIFICATIONS

Hz	Model	Phase	HP Range	kW Range	Poles	RPM	Max. Ambient Temp.	Duty Rating
50	Standard	3	40 - 200	30 - 150	2	2900	86 °F / 30 °C	Continuous*
	Hi-Temp 75		40 - 150	30 - 110			167 °F / 75 °C	
60	Standard		40 - 200	30 - 150		3525	86 °F / 30 °C	
	Hi-Temp 75		40 - 150	30 - 110			167 °F / 75 °C	

\* At 0.5 ft/sec flow past motor; Motors are also rated for continuous duty up to 86 °F (30 °C) water temperature with NO FLOW in lakes or in wells 12 inches or larger in diameter; Higher temperature ambient motors are available in the 8" Hi-Temp motor line

### CONSTRUCTION MATERIALS

Component	Construction Type				
	Std. Water Well (300 SS Shell)	Sand Fighter™ (300 SS Shell)	Corrosion Resistant (316 SS)	Hi-Temp 75 (300 SS Shell)	Hi-Temp 75 (316 SS)
UL Insulation Class Rating	-	-	-	Class F	Class F
Motor Ambient Temp. Rating	-	-	-	167 °F / 75 °C	167 °F / 75 °C
Stator Resin Type	FE Standard	Per standard water well	Per standard water well	FE Hi-Temp	FE Hi-Temp
Motor Fill Solution (Water Soluble/Non-Toxic)	FES91	Per standard water well	Per standard water well	FES92	FES92
Top End Bell & Thrust Housing	Epoxy-coated gray iron	Per standard water well	316 SS	Epoxy-coated gray iron	316 SS
SubTrol™ heat sensor (Mounted On Winding)	Yes	Per standard water well	Per standard water well	No	No
Stator Shell	300 series SS	Per standard water well	316 SS	300 series SS	316 SS
Stator Ends	Carbon Steel	Per standard water well	316 SS	Carbon Steel	316 SS
Shaft Extension	17-4 SS	Per standard water well	Per standard water well	17-4 SS	17-4 SS
Bushing	Bronze	Per standard water well	316 SS	Bronze	316 SS
Bushing Retainer	300 series SS	Per standard water well	316 SS	300 series SS	316 SS
Shaft Mechanical Seal	Carbon ceramic (40-125 hp) Sand Fighter™ Seal System (150-200 hp)	Sand Fighter™ Seal System	Sand Fighter™ Seal System	Sand Fighter™ Seal System	Sand Fighter™ Seal System
Mechanical Seal / Rubber Components	Nitrile	Per standard water well	Per standard water well	FKM	FKM
Diaphragm Material	Nitrile	Per standard water well	Per standard water well	FKM	FKM
Diaphragm Plate	300 SS	Per standard water well	316 SS	316 SS	316 SS
Diaphragm Spring	300 SS	Per standard water well	316 SS	316 SS	316 SS
Shaft Slinger	Nitrile	Per standard water well	Per standard water well	FKM	FKM
Lead Wire	XLPE (#8 AWG) / Hypalon (#4 & #2 AWG)	Per standard water well	Per standard water well	XLPO	XLPO
Lead Potting	Epoxy	Per standard water well	Per standard water well	Epoxy	Epoxy
Lead Jam Nut or Compression Plate	Brass jam nut (40-125 hp) 316 SS plate (150-200 hp)	Per standard water well	316 SS jam nut (40-125 hp) 316 SS plate (150-200 hp)	316 SS plate (150-200 hp)	316 SS plate (150-200 hp)
Thrust Bearing Rating (86 °F / 30 °C)	10,000 lbs	Per standard water well	Per standard water well	12,500 lbs (86 °F / 30 °C) 10,000 lbs (167 °F / 75 °C)	12,500 lbs (86 °F / 30 °C) 10,000 lbs (167 °F / 75 °C)
Method Of Connecting System Ground To Motor	Ground lug on top end bell	Per standard water well	Per standard water well	Ground lug on top end bell	Ground lug on top end bell

NOTE: Specifications subject to change without notice; Contact Franklin Electric if current material types are required for bid specifications

## 8" SUBMERSIBLE MOTORS - ORDERING INFORMATION

### THREE-PHASE MODELS

HP	Description	Volts	Hz	S.F.	Motor Lead	Model No.	In Stock	Thrust Rating	Wt. (lbs)
40	Water Well	380	60	1.15	DOL (3)	2396606021	-	10000	320
		380	60	1.15	Y-Δ (6)	2396802021	-	10000	325
		460/380	60/50	1.15/1.0	DOL (3)	2396006021	Yes	10000	320
		460/380	60/50	1.15/1.0	Y-Δ (6)	2396202021	-	10000	325
		575	60	1.15	DOL (3)	2396106021	-	10000	320
	Sand Fighter™	380	60	1.15	DOL (3)	2396608521	-	10000	320
		460/380	60/50	1.15/1.0	DOL (3)	2396008521	Yes	10000	320
		460/380	60/50	1.15/1.0	Y-Δ (6)	2396208621	-	10000	325
		575	60	1.15	DOL (3)	2396108521	-	10000	320
		380	60	1.15	DOL (3)	2396606221	-	10000	320
	316 SS	460/380	60/50	1.15/1.0	DOL (3)	2396006221	-	10000	320
		460/380	60/50	1.15/1.0	Y-Δ (6)	2396202221	-	10000	325
		575	60	1.15	DOL (3)	2396106221	-	10000	320
		380	60	1.15	DOL (3)	2791609004	-	12500	400
	Hi-Temp 75°C	380	60	1.15	Y-Δ (6)	2791809004	-	12500	405
		460/380	60/50	1.15/1.0	DOL (3)	2791009004	-	12500	400
		460/380	60/50	1.15/1.0	Y-Δ (6)	2791209004	-	12500	405
		575	60	1.15	DOL (3)	2791109004	-	12500	400
		575	60	1.15	Y-Δ (6)	2791909004	-	12500	405
		Hi-Temp 75°C - 316 SS	460/380	60/50	1.15/1.0	DOL (3)	2791009204	-	12500
50	Water Well	380	60	1.15	DOL (3)	2396616021	-	10000	345
		380	60	1.15	Y-Δ (6)	2396812021	-	10000	350
		460/380	60/50	1.15/1.0	DOL (3)	2396016021	Yes	10000	345
		460/380	60/50	1.15/1.0	Y-Δ (6)	2396212021	-	10000	350
		575	60	1.15	DOL (3)	2396116021	-	10000	345
	Sand Fighter™	380	60	1.15	DOL (3)	2396618521	-	10000	345
		460/380	60/50	1.15/1.0	DOL (3)	2396018521	Yes	10000	345
		460/380	60/50	1.15/1.0	Y-Δ (6)	2396218621	-	10000	350
		575	60	1.15	DOL (3)	2396118521	-	10000	345
		380	60	1.15	DOL (3)	2396616221	-	10000	345
	316 SS	460/380	60/50	1.15/1.0	DOL (3)	2396016221	Yes	10000	345
		460/380	60/50	1.15/1.0	Y-Δ (6)	2396212221	-	10000	350
		575	60	1.15	DOL (3)	2396116221	-	10000	345
		380	60	1.15	DOL (3)	2791619004	-	12500	455
	Hi-Temp 75°C	380	60	1.15	Y-Δ (6)	2791819004	-	12500	450
		460/380	60/50	1.15/1.0	DOL (3)	2791019004	-	12500	455
		460/380	60/50	1.15/1.0	Y-Δ (6)	2791219004	-	12500	450
		575	60	1.15	DOL (3)	2791119004	-	12500	455
		575	60	1.15	Y-Δ (6)	2791919004	-	12500	450
		Hi-Temp 75°C - 316 SS	460/380	60/50	1.15/1.0	DOL (3)	2791019204	-	12500



## 8" SUBMERSIBLE MOTORS - ORDERING INFORMATION

### THREE-PHASE MODELS

HP	Description	Volts	Hz	S.F.	Motor Lead	Model No.	In Stock	Thrust Rating	Wt. (lbs)
60	Water Well	380	60	1.15	DOL (3)	2396626021	-	10000	375
		380	60	1.15	Y-Δ (6)	2396822021	-	10000	380
		460/380	60/50	1.15/1.0	DOL (3)	2396026021	Yes	10000	375
		460/380	60/50	1.15/1.0	Y-Δ (6)	2396222021	Yes	10000	380
		575	60	1.15	DOL (3)	2396126021	Yes	10000	375
	Sand Fighter™	380	60	1.15	DOL (3)	2396628521	-	10000	375
		460/380	60/50	1.15/1.0	DOL (3)	2396028521	Yes	10000	375
		460/380	60/50	1.15/1.0	Y-Δ (6)	2396228621	-	10000	380
		575	60	1.15	DOL (3)	2396128521	-	10000	375
		380	60	1.15	DOL (3)	2396626221	-	10000	375
	316 SS	460/380	60/50	1.15/1.0	DOL (3)	2396026221	Yes	10000	375
		460/380	60/50	1.15/1.0	Y-Δ (6)	2396222221	-	10000	380
		575	60	1.15	DOL (3)	2396126221	-	10000	375
		380	60	1.15	DOL (3)	2791629004	-	12500	555
	Hi-Temp 75°C	380	60	1.15	Y-Δ (6)	2791829004	-	12500	560
		460/380	60/50	1.15/1.0	DOL (3)	2791029004	Yes	12500	555
		460/380	60/50	1.15/1.0	Y-Δ (6)	2791229004	-	12500	560
		575	60	1.15	DOL (3)	2791129004	-	12500	555
		575	60	1.15	Y-Δ (6)	2791929004	-	12500	560
		Hi-Temp 75°C - 316 SS	460/380	60/50	1.15/1.0	DOL (3)	2791029204	-	12500
	75	Water Well	380	60	1.15	DOL (3)	2396636041	Yes	10000
380			60	1.15	Y-Δ (6)	2396832041	-	10000	435
460/380			60/50	1.15/1.0	DOL (3)	2396036041	Yes	10000	430
460/380			60/50	1.15/1.0	Y-Δ (6)	2396232041	Yes	10000	435
575			60	1.15	DOL (3)	2396136041	Yes	10000	430
Sand Fighter™		380	60	1.15	DOL (3)	2396638541	-	10000	430
		460/380	60/50	1.15/1.0	DOL (3)	2396038541	Yes	10000	430
		460/380	60/50	1.15/1.0	Y-Δ (6)	2396238641	-	10000	435
		575	60	1.15	DOL (3)	2396138541	-	10000	430
		380	60	1.15	DOL (3)	2396636241	-	10000	430
316 SS		460/380	60/50	1.15/1.0	DOL (3)	2396036241	Yes	10000	430
		460/380	60/50	1.15/1.0	Y-Δ (6)	2396232241	-	10000	435
		575	60	1.15	DOL (3)	2396136241	-	10000	430
		380	60	1.15	DOL (3)	2791639004	-	12500	700
Hi-Temp 75°C		380	60	1.15	Y-Δ (6)	2791839004	-	12500	705
		460/380	60/50	1.15/1.0	DOL (3)	2791039004	Yes	12500	700
		460/380	60/50	1.15/1.0	Y-Δ (6)	2791239004	-	12500	705
		575	60	1.15	DOL (3)	2791139004	-	12500	700
		575	60	1.15	Y-Δ (6)	2791939004	-	12500	705
		Hi-Temp 75°C - 316 SS	460/380	60/50	1.15/1.0	DOL (3)	2791039204	-	12500

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### THREE-PHASE MODELS

HP	Description	Volts	Hz	S.F.	Motor Lead	Model No.	In Stock	Thrust Rating	Wt. (lbs)
100	Water Well	380	60	1.15	DOL (3)	2396646041	Yes	10000	530
		380	60	1.15	Y-Δ (6)	2396842041	-	10000	535
		460/380	60/50	1.15/1.0	DOL (3)	2396046041	Yes	10000	530
		460/380	60/50	1.15/1.0	Y-Δ (6)	2396242041	Yes	10000	535
		575	60	1.15	DOL (3)	2396146041	Yes	10000	530
	Sand Fighter™	380	60	1.15	DOL (3)	2396648541	-	10000	530
		460/380	60/50	1.15/1.0	DOL (3)	2396048541	Yes	10000	530
		460/380	60/50	1.15/1.0	Y-Δ (6)	2396248641	-	10000	535
		575	60	1.15	DOL (3)	2396148541	-	10000	530
		380	60	1.15	DOL (3)	2396646241	-	10000	530
	316 SS	460/380	60/50	1.15/1.0	DOL (3)	2396046241	Yes	10000	530
		460/380	60/50	1.15/1.0	Y-Δ (6)	2396242241	-	10000	535
		575	60	1.15	DOL (3)	2396146241	-	10000	530
		380	60	1.15	DOL (3)	2791649004	-	12500	840
	Hi-Temp 75°C	380	60	1.15	Y-Δ (6)	2791849004	-	12500	845
		460/380	60/50	1.15/1.0	DOL (3)	2791049004	Yes	12500	840
		460/380	60/50	1.15/1.0	Y-Δ (6)	2791249004	-	12500	845
		575	60	1.15	DOL (3)	2791149004	-	12500	840
		575	60	1.15	Y-Δ (6)	2791949004	-	12500	845
		460/380	60/50	1.15/1.0	DOL (3)	2791049204	Yes	12500	840
Hi-Temp 75°C - 316 SS	460/380	60/50	1.15/1.0	DOL (3)	2391656004	-	10000	700	
125	Water Well	380	60	1.15	DOL (3)	2391852004	-	10000	705
		380	60	1.15	Y-Δ (6)	2391056004	Yes	10000	700
		460/380	60/50	1.15/1.0	Y-Δ (6)	2391252004	Yes	10000	705
		575	60	1.15	DOL (3)	2391156004	Yes	10000	700
		380	60	1.15	DOL (3)	2391658504	-	10000	700
	Sand Fighter™	460/380	60/50	1.15/1.0	DOL (3)	2391058504	Yes	10000	700
		460/380	60/50	1.15/1.0	Y-Δ (6)	2391258604	-	10000	705
		575	60	1.15	DOL (3)	2391158504	-	10000	700
		380	60	1.15	DOL (3)	2391656204	-	10000	700
	316 SS	460/380	60/50	1.15/1.0	DOL (3)	2391056204	Yes	10000	700
		460/380	60/50	1.15/1.0	Y-Δ (6)	2391252204	-	10000	705
		575	60	1.15	DOL (3)	2391156204	-	10000	700
		380	60	1.15	DOL (3)	2791659004	-	12500	945
	Hi-Temp 75°C	380	60	1.15	Y-Δ (6)	2791859004	-	12500	950
		460/380	60/50	1.15/1.0	DOL (3)	2791059004	Yes	12500	945
		460/380	60/50	1.15/1.0	Y-Δ (6)	2791259004	-	12500	950
		575	60	1.15	DOL (3)	2791159004	-	12500	945
		575	60	1.15	Y-Δ (6)	2791959004	-	12500	950
	Hi-Temp 75°C - 316 SS	460/380	60/50	1.15/1.0	DOL (3)	2791059204	Yes	12500	945



## 8" SUBMERSIBLE MOTORS - ORDERING INFORMATION

### THREE-PHASE MODELS

HP	Description	Volts	Hz	S.F.	Motor Lead	Model No.	In Stock	Thrust Rating	Wt. (lbs)
150	Sand Fighter™	380	60	1.15	DOL (3)	2391668504	-	10000	840
		380	60	1.15	Y-Δ (6)	2391868604	-	10000	845
		460/380	60/50	1.15/1.0	DOL (3)	2391068504	Yes	10000	840
		460/380	60/50	1.15/1.0	Y-Δ (6)	2391268604	Yes	10000	845
		575	60	1.15	DOL (3)	2391168504	Yes	10000	840
	316 SS	380	60	1.15	DOL (3)	2391666204	-	10000	840
		460/380	60/50	1.15/1.0	DOL (3)	2391066204	Yes	10000	840
		460/380	60/50	1.15/1.0	Y-Δ (6)	2391262204	-	10000	845
		575	60	1.15	DOL (3)	2391166204	-	10000	840
	Hi-Temp 75°C	380	60	1.15	DOL (3)	2791669004	-	12500	1040
		380	60	1.15	Y-Δ (6)	2791869004	-	12500	1045
		460/380	60/50	1.15/1.0	DOL (3)	2791069004	-	12500	1040
		460/380	60/50	1.15/1.0	Y-Δ (6)	2791269004	-	12500	1045
		575	60	1.15	DOL (3)	2791169004	-	12500	1040
		575	60	1.15	Y-Δ (6)	2791969004	-	12500	1045
	Hi-Temp 75°C - 316 SS	460/380	60/50	1.15/1.0	DOL (3)	2791069204	-	12500	1040
175	Sand Fighter™	380	60	1.15	DOL (3)	2391678504	-	10000	945
		380	60	1.15	Y-Δ (6)	2391878604	-	10000	950
		460/380	60/50	1.15/1.0	DOL (3)	2391078504	Yes	10000	945
		460/380	60/50	1.15/1.0	Y-Δ (6)	2391278604	-	10000	950
		575	60	1.15	DOL (3)	2391178504	-	10000	945
	316 SS	380	60	1.15	DOL (3)	2391676204	-	10000	945
		460/380	60/50	1.15/1.0	DOL (3)	2391076204	-	10000	945
		460/380	60/50	1.15/1.0	Y-Δ (6)	2391272204	-	10000	950
		575	60	1.15	DOL (3)	2391176204	-	10000	945
		200	Sand Fighter™	380	60	1.15	DOL (3)	2391688504	-
380	60			1.15	Y-Δ (6)	2391888604	-	10000	1045
460/380	60/50			1.15/1.0	DOL (3)	2391088504	Yes	10000	1040
460/380	60/50			1.15/1.0	Y-Δ (6)	2391288604	-	10000	1045
575	60			1.15	DOL (3)	2391188504	-	10000	1040
316 SS	380		60	1.15	DOL (3)	2391686204	-	10000	1040
	460/380		60/50	1.15/1.0	DOL (3)	2391086204	-	10000	1040
	460/380		60/50	1.15/1.0	Y-Δ (6)	2391282204	-	10000	1045
575	60	1.15	DOL (3)	2391186204	-	10000	1040		

NOTE: Models designated above as Sand Fighter™ are water well construction; all 316 SS models are equipped with Sand Fighter™ sealing system; all models listed above include factory installed leads (13 ft); motor leads do not include ground

## 8" SUBMERSIBLE MOTORS - DIMENSIONS AND WEIGHTS

### STANDARD

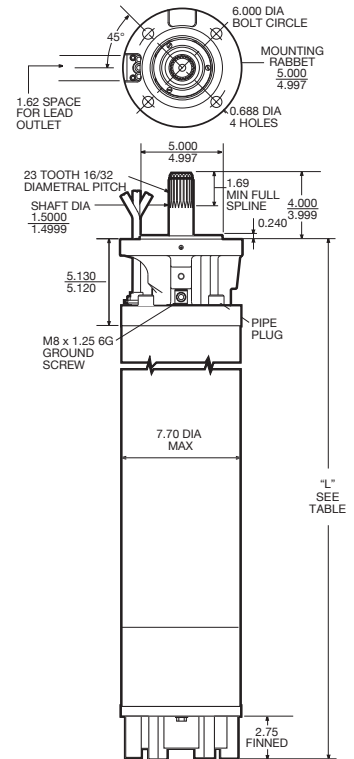
HP / kW	Phase	L (in)	Motor Carton Size (in)			Shipping Wt.	
			W	H	L	lbs	kg
40 / 30	3 (3-Lead)	36.4	9	17	51	320	146
50 / 37		39.4	9	17	51	345	157
60 / 45		42.4	9	17	51	375	171
75 / 55		47.4	9	17	64	430	196
100 / 75		54.9	9	17	64	530	241
125 / 93		68.8	9	17	79	700	318
150 - 110		77.8	9	17	96	840	382
175 - 130		85.8	9	17	96	945	430
200 / 150		94.8	9	17	108	1040	473

NOTE: 6-Lead Y-Δ models available (add 5 lbs to shipping weight)

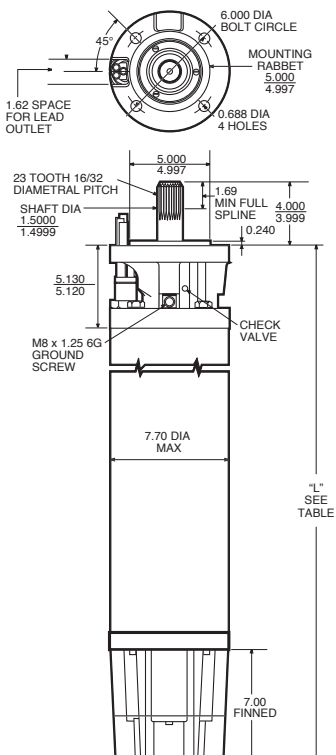
### HI-TEMP 75

HP / kW	Phase	L (in)	Motor Carton Size (in)			Shipping Wt.	
			W	H	L	lbs	kg
40 / 30	3	44.8	9	17	64	400	181
50 / 37		49.8	9	17	64	455	206
60 / 45		57.3	9	17	79	555	252
75 / 55		68.8	9	17	79	700	318
100 / 75		77.8	9	17	96	840	382
125 / 93		85.8	9	17	96	945	430
150 - 110		94.8	9	17	108	1040	473

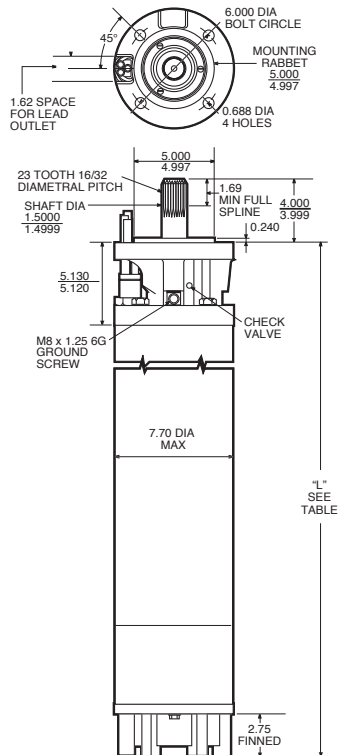
Type 1.0 (40-150 hp)



Type 2.1 (40-100 hp)



Type 1.0 (125-200 hp)





## 8" SUBMERSIBLE MOTORS - LEADS AND ACCESSORIES

### MOTOR LEADS AND CABLES

HP	Model	Description	Wire AWG	Model No.	Wt. (lbs)
40 - 60	Standard	Lead, Brass, 13 ft, No Ground	8	305516901	4
		Lead, Brass, 26 ft, No Ground	8	305516902	9
		Lead, 316 SS, 13 ft, No Ground	8	305516950	4
		Lead, 316 SS, 26 ft, No Ground	8	305516951	9
75-125 DOL / 75-200 Y-D		Lead, Brass, 13 ft, No Ground	4	305310903	9
		Lead, Brass, 26 ft, No Ground	4	305310901	17
		Lead, 316 SS, 13 ft, No Ground	4	305310953	9
75-200 Y-D Only			Lead, 316 SS, 26 ft, No Ground	4	305310951
150-200 DOL Only	All Hi-Temp	Lead, XLPO, 316 SS, 13 ft, No Ground	2	305315901	12
		Lead, XLPO, 316 SS, 26 ft, No Ground	2	305315902	23

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

### MOTOR ACCESSORIES

HP	Description	Model No.	Wt. (lbs)
All	Coupling, 8-inch, #416 SS, 1" Pump Shaft, 1/4 x 1/4 x 2 Key	156563901	5
	Coupling, 8-inch, #416 SS, 1-3/16" Pump Shaft, 1/4 x 1/4 x 2 Key	156563906	5
	Coupling, 8-inch, #416 SS, 1-3/16" Pump Shaft, 5/16 x 5/16 x 2 Key	156563902	5
	Coupling, 8-inch, #416 SS, 1-1/4" Pump Shaft, 5/16 x 5/16 x 2 Key	156563903	5
	Coupling, 8-inch, #416 SS, 1-1/2" Pump Shaft, 3/8 x 3/8 x 2 Key	156563904	5
	Surge Arrestor - Three-Phase - Up to 650 V to Ground	155440902	2
	PT 100 Sensor, 8-inch 40 - 100 HP	305326902	<1
	PT 100 Sensor, 8-inch 125 - 200 HP	305326901	<1