



60 Hz LS EXTENSION 4" Submersible Pumps

MODEL LS

5LS, 7LS, 10LS,
13LS, 18LS, 25LS

SPECIFICATIONS

Model	Flow Range GPM	Horsepower Range	Best Eff. GPM	Discharge Connection	Minimum Well Size	Rotation ^①
5LS	1.2 – 7.5	½ – 2	5	1¼"	4"	CCW
7LS	1.5 – 10	½ – 3	7	1¼"	4"	CCW
10LS	3 – 16	½ – 5	10	1¼"	4"	CCW
13LS	4 – 20	½ – 3	13	1¼"	4"	CCW
18LS	6 – 28	¾ – 5	18	1¼"	4"	CCW
25LS	8 – 33	1 – 5	25	1¼"	4"	CCW

① Rotation is counterclockwise when observed from pump discharge end.

"LS" SERIES MATERIALS OF CONSTRUCTION

Part Name	Material
Discharge Head	Silicon Bronze
Check Valve Poppet	Ulathane
Check Valve O-ring	Ethylene Propylene
Check Valve Retaining Spring	AISI 302 SS
Bearing Spider – Upper	Glass Filled Engineered Composite
Bearing	Urethane, FDA compliant
Klipring	AISI 301 SS
Diffuser	Glass Filled Engineered Composite
Impeller	AISI 304 SS
Bowl	AISI 304 SS
Intermediate Sleeve ^②	AISI 304 SS, Powder Metal
Intermediate Shaft Coupling ^②	AISI 304 SS, Powder Metal
Intermediate Bearing Spider ^②	Glass Filled Engineered Composite
Intermediate Bearing Spider ^②	AISI 303 SS
Shim	AISI 304 SS
Spacer	AISI 304 SS, Powder Metal
Screws – Cable Guard	AISI 304 SS
Motor Adapter	Silicon Bronze
Suction Strainer	Engineered Composite
Casing	AISI 304 SS
Shaft	
Coupling	AISI 304 SS, Powder Metal
Cable Guard	AISI 304 SS

② See Repair Parts page for where used.

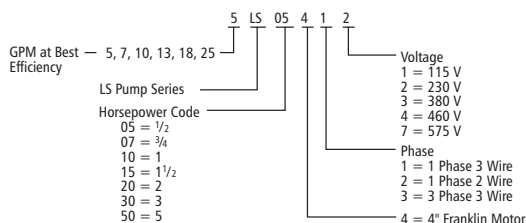
FEATURES

- **Powered for Continuous Operation:** All ratings are within the working limits of the motor as recommended by the motor manufacturer. Pump can be operated continuously without damage to the motor.
- **Field Serviceable:** Pump can be rebuilt in the field to like new condition with common tools and readily available spare parts.
- **NOTE: The Model LS has left hand casing threads.**
- **Sand Resistant Construction:** Field proven over almost four decades, face clearance design and floating impellers for an extremely abrasion resistant configuration.
- **Stainless Steel Metal Parts:** AISI types 302, 303 and 304 are corrosion resistant, non-toxic and non-leaching.
- **FDA Compliant Non-Metallic Parts:** Impellers, diffusers and upper bearing spiders are

- constructed of a glass filled engineered composite. This material is corrosion resistant and non-toxic.
- **Discharge Head:** High profile precision cast lead-free silicon bronze for superior strength and durability. Cast in loop for safety line.
- **Motor Adapter:** Cast lead-free silicon bronze is extremely rigid for accurate alignment of liquid end to motor. Generous space for removal of motor mounting nuts with regular open-end wrench.
- **Bowls:** Stainless steel for strength and abrasive resistance.
- **Check Valve:** Built-in check valve constructed of durable, abrasive resistant engineered composite. Positive sealing with Ethylene Propylene rubber o-ring.
- **Stainless Steel Casing:** Polished stainless steel is attractive and durable in the most corrosive water.
- **Hex Shaft Design:** Six sided shafts for positive impeller drive.

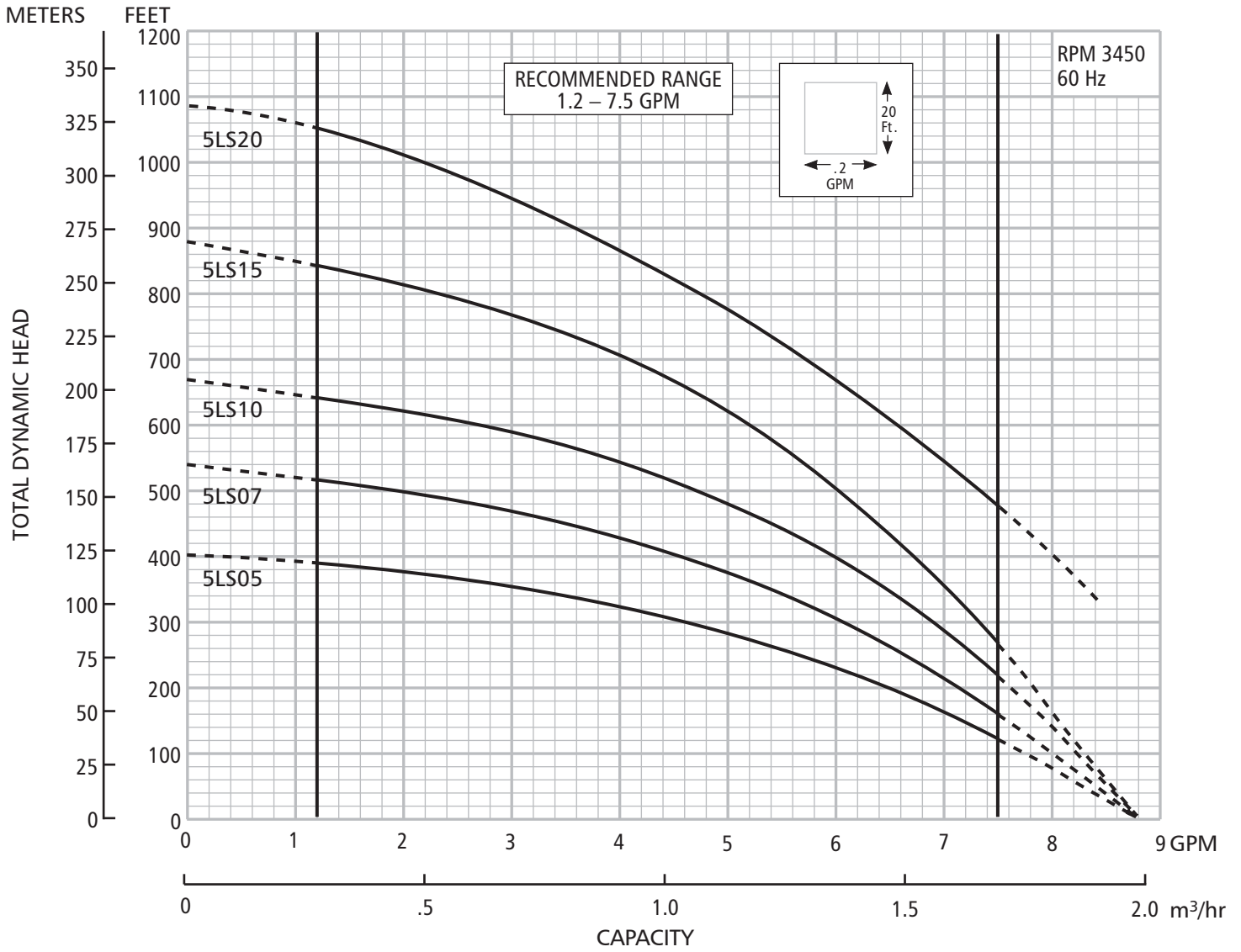
- **Shaft Coupling:** Exposed for ease of field alignment to motor shaft and to check pump rotation.
- **Urethane Upper and Middle Bearings:** Fluted design for free passage of abrasives and excellent resistance to sand damage.
- **Franklin Electric Motor:**
 - Corrosion resistant stainless steel construction through 10 HP.
 - Built-in surge arrestor is provided on single phase motors.
 - Stainless steel splined shaft.
 - Hermetically sealed windings.
 - Replaceable motor lead assembly.
 - UL 778 recognized.
 - NEMA mounting dimensions.
 - Control box is required with 3 wire single phase units.
 - Three phase units require a magnetic starter with three leg protection. Magnetic starter and heaters must be ordered separately.
 - Built-in auto reset overload protection in single phase up to 1½ HP – 2 wire and up to 1 HP – 3 wire.
- **Agency Listings:** All complete pump/motor assemblies are UL778 and CSA listed. All 4" Franklin Electric Motors are UL778 recognized.

ORDER NUMBER CODE



AGENCY LISTINGS

- Canadian Standards Association
 - Underwriters Laboratories
- Goolds Pumps is ISO 9001 Registered.

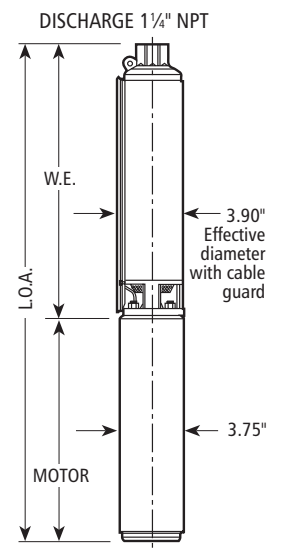


DIMENSIONS AND WEIGHTS

Model	HP	Phase	Stages	Length (inches)			Weight (lbs.)		
				W.E.②	Motor	L.O.A.③	W.E.	Motor	Total
5LS05412,22,11,21	½	1	12	14.5	9.5	24.0	8	19	27
5LS07412,22	¾	1	15	16.5	10.7	27.2	9	21	30
5LS10412,22	1	1	20	20.0	11.8	31.8	11	24	35
5LS15412	1½	1	26	25.3	13.6	38.9	14	28	42
5LS15422	1½	1	26	25.3	15.1	40.4	14	31	45
5LS15432,34	1½	3	26	25.3	11.8	37.1	14	24	38
5LS20412	2	1	33	30.1	15.1	45.2	17	33	50
5LS20432,34	2	3	33	30.1	13.6	43.7	17	28	45

② W.E. = water end or pump without motor.

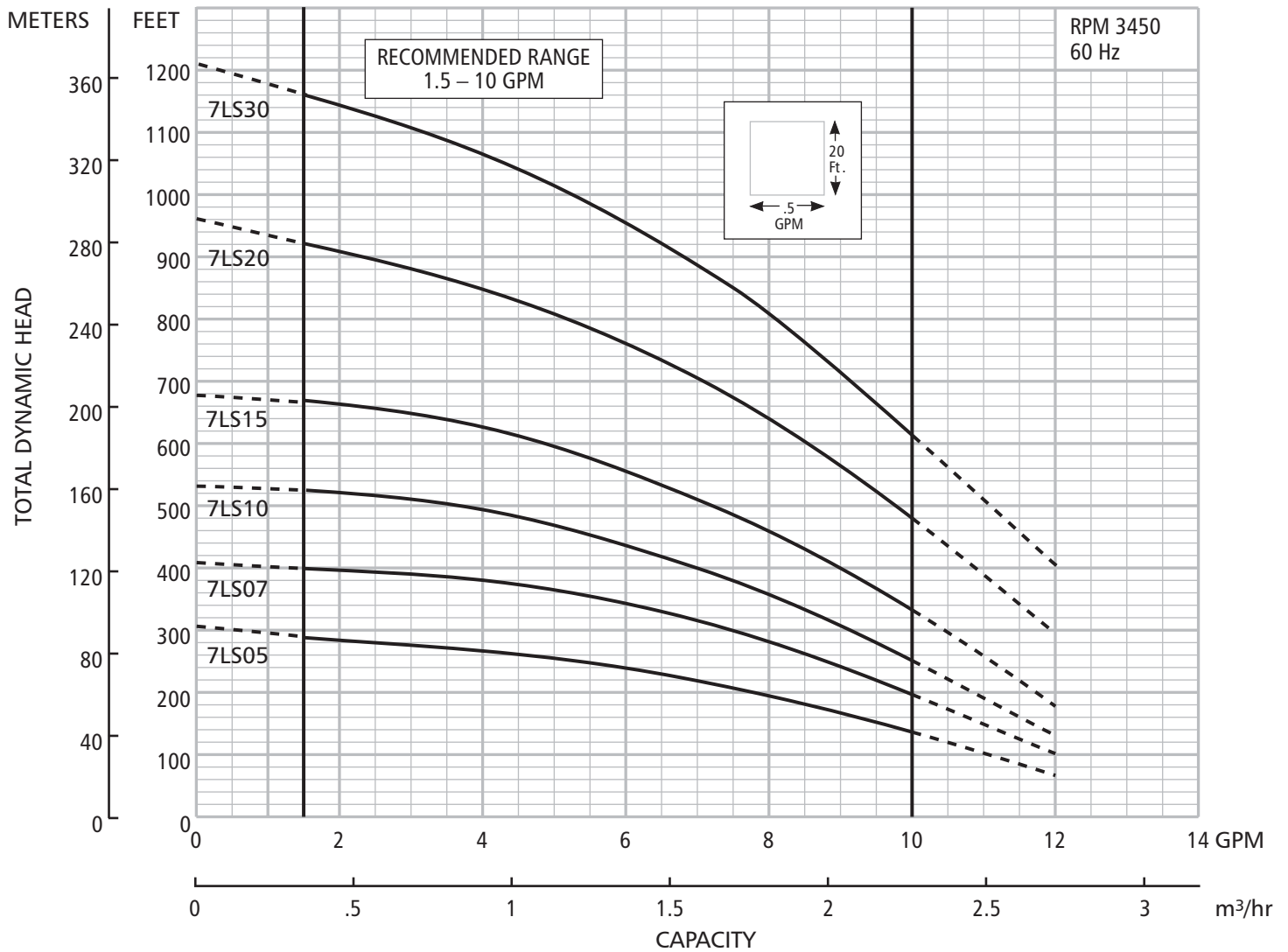
③ L.O.A. = length of assembly – complete pump – water end and motor.



SELECTION CHART

Horsepower Range ½ – 2, Recommended Range 1.2 – 7.5 GPM, 60 Hz, 3450 RPM

Pump Model	HP	PSI	Depth to Water in Feet/Ratings in GPM (Gallons per Minute)																																			
			20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	340	380	420	460	500	540	580	620	660	700	740	780	820	860	900	940	980	1020			
5LS05	½	0							7.4	7.2	6.9	6.6	6.3	5.9	5.4	5.0	4.5	3.4																				
		20					7.4	7.2	6.9	6.5	6.1	5.7	5.3	4.9	4.4	3.8	3.2	1.3																				
		30			7.7	7.4	7.1	6.8	6.4	6.0	5.6	5.2	4.8	4.3	3.7	3.1	2.2																					
		40			7.4	7.1	6.7	6.4	6.0	5.6	5.2	4.7	4.2	3.6	3.0	2.2																						
		50	7.6	7.3	7.0	6.7	6.3	6.0	5.5	5.1	4.6	4.1	3.5	2.9	2.0																							
		60	7.0	6.7	6.5	6.2	5.8	5.4	5.0	4.6	4.0	3.4	2.6	1.2																								
Shut-off PSI			166	156	147	139	130	121	113	104	95	87	78	69	61	52	43	26																				
5LS07	¾	0									7.5	7.3	7.1	6.9	6.7	6.4	6.1	5.6	5.0	4.2	3.3	2.0																
		20							7.5	7.3	7.1	6.8	6.6	6.4	6.1	5.8	5.5	4.8	4.1	3.1	1.8																	
		30					7.6	7.4	7.2	7.0	6.8	6.5	6.3	6.0	5.7	5.4	5.1	4.4	3.5	2.2																		
		40				7.6	7.4	7.2	7.0	6.8	6.5	6.3	6.0	5.7	5.4	5.1	4.7	3.9	2.9	1.6																		
		50			7.6	7.4	7.2	6.9	6.7	6.5	6.2	6.0	5.7	5.3	5.0	4.7	4.3	3.4	2.2																			
		60	7.5	7.3	7.1	6.9	6.8	6.5	6.3	6.1	5.8	5.5	5.2	4.9	4.5	4.1	3.7	2.6	1.2																			
Shut-off PSI			225	216	208	199	190	182	173	166	156	147	139	130	121	113	104	87	69	52	35	17																
5LS10	1	0											7.6	7.5	7.3	7.1	6.9	6.6	6.1	5.7	5.2	4.6	3.9	3.1	2.1													
		20										7.4	7.3	7.1	6.9	6.7	6.5	6.0	5.6	5.1	4.5	3.8	3.0	2.0														
		30									7.4	7.2	7.1	6.9	6.6	6.4	6.2	5.8	5.3	4.7	4.1	3.3	2.4															
		40								7.4	7.2	7.0	6.8	6.6	6.4	6.2	6.0	5.5	5.0	4.4	3.7	2.9	1.8															
		50						7.5	7.4	7.2	7.0	6.8	6.6	6.4	6.2	6.0	5.7	5.2	4.6	4.0	3.2	2.2																
		60				7.5	7.4	7.2	7.0	6.9	6.7	6.5	6.4	6.2	6.0	5.7	5.5	5.0	4.4	3.6	2.7	1.2																
Shut-off PSI						253	245	234	227	219	210	201	193	184	175	167	158	141	123	106	89	71	54	37	19													
5LS15	1½	0												7.5	7.3	7.2	6.9	6.7	6.5	6.2	5.9	5.5	5.1	4.7	4.3	3.8	3.3	2.6	1.7									
		20											7.4	7.3	7.1	7.0	6.9	6.7	6.4	6.1	5.8	5.4	5.1	4.7	4.2	3.7	3.2	2.5										
		30											7.4	7.2	7.1	7.0	6.9	6.8	6.5	6.3	6.0	5.6	5.2	4.8	4.4	4.0	3.4	2.8	2.0									
		40									7.5	7.4	7.2	7.1	7.0	6.9	6.8	6.7	6.4	6.1	5.8	5.4	5.0	4.6	4.2	3.7	3.1	2.4	1.4									
		50							7.5	7.3	7.2	7.1	7.0	6.9	6.8	6.6	6.5	6.2	5.9	5.5	5.2	4.8	4.3	3.9	3.4	2.7	1.8											
		60						7.5	7.3	7.2	7.1	7.0	6.8	6.7	6.6	6.5	6.3	6.0	5.7	5.3	4.9	4.5	4.1	3.6	3.0	2.2	1.2											
Shut-off PSI							325	317	308	299	291	282	273	265	256	247	230	213	195	178	161	143	126	109	91	74	57	39	22									
5LS20	2	0																			7.6	7.3	7	6.7	6.4	6.1	5.7	5.4	4.9	4.6	4.1	3.6	3.1	2.5	1.9			
		20																				7.5	7.2	7	6.7	6.3	6	5.7	5.3	4.9	4.5	4	3.6	3	2.4	1.7		
		30																				7.6	7.4	7.1	6.8	6.5	6.1	5.8	5.5	5.1	4.7	4.2	3.8	3.3	2.7	2.1	1.2	
		40																				7.5	7.2	6.9	6.6	6.3	6	5.6	5.2	4.8	4.5	4	3.5	3	2.3	1.6		
		50																				7.6	7.3	7	6.7	6.4	6.1	5.8	5.4	5	4.6	4.2	3.7	3.2	2.6	1.9		
		60																				7.4	7.2	6.9	6.6	6.2	5.9	5.5	5.2	4.8	4.4	3.9	3.4	2.9	2.2	1.5		
Shut-off PSI																					322	305	288	270	253	236	219	201	184	167	149	132	115	97	80	63	45	28

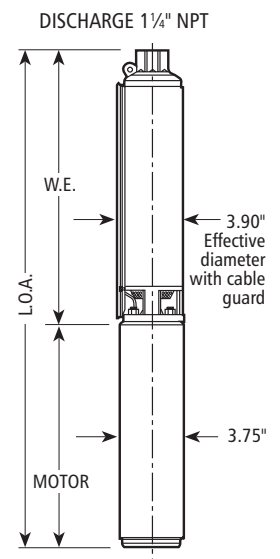


DIMENSIONS AND WEIGHTS

Model	HP	Phase	Stages	Length (inches)			Weight (lbs.)		
				W.E.②	Motor	L.O.A.③	W.E.	Motor	Total
7LS05412,22,11,21	½	1	10	13.3	9.5	22.8	7	19	26
7LS07412,22	¾	1	13	15.4	10.7	26.1	9	21	30
7LS10412,22	1	1	17	18.3	11.8	30.1	10	24	34
7LS15412	1½	1	22	21.9	13.6	35.5	12	28	40
7LS15422	1½	1	22	21.9	15.1	37.0	12	31	43
7LS15432,34	1½	3	22	21.9	11.8	33.7	12	24	36
7LS20412	2	1	27	26.6	15.1	41.7	15	33	48
7LS20432,34	2	3	27	26.6	13.6	40.2	15	28	43
7LS30412	3	1	34	31.6	19.1	50.7	18	41	59
7LS30432,34	3	3	34	31.6	16.1	47.7	18	35	53

② W.E. = water end or pump without motor.

③ L.O.A. = length of assembly – complete pump – water end and motor.



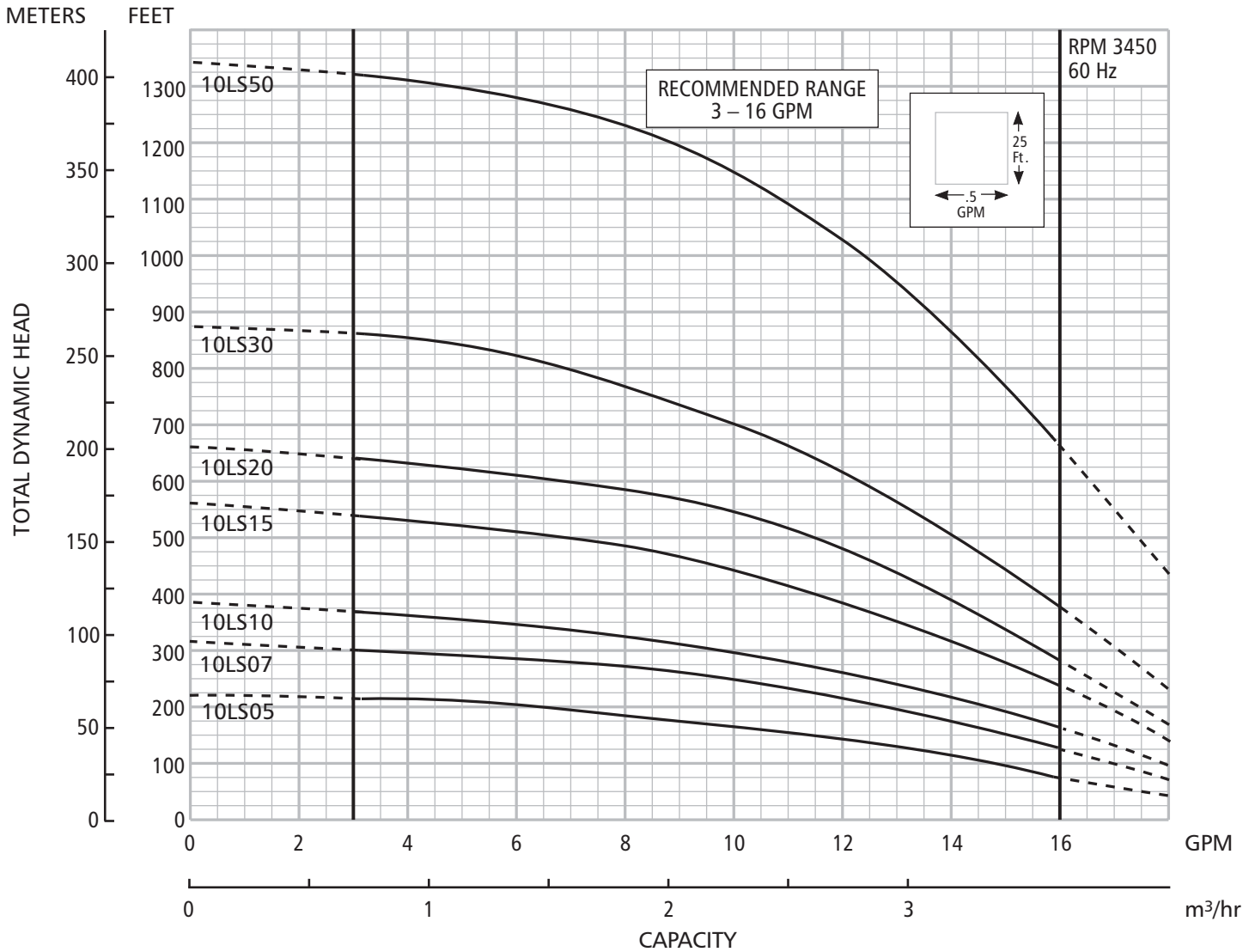
SELECTION CHART

Horsepower Range ½ – 1, Recommended Range 1.5 – 10 GPM, 60 Hz, 3450 RPM

Pump Model	HP	PSI	Depth to Water in Feet/Ratings in GPM (Gallons per Minute)																														
			20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	340	380	420	460	500	540	580	620	660	700	740	780	820			
7LS05	½	0								9.8	9.2	8.5	7.8	7.0	5.9	4.5	2.8																
		20					9.7	9.0	8.3	7.5	6.6	5.7	4.1	2.0																			
		30				9.5	8.9	8.2	7.3	6.4	5.4	4.0	1.5																				
		40		10.0	9.4	8.8	8.1	7.3	6.1	5.1	3.9	1.5																					
		50	10.0	9.3	8.6	8.0	7.1	6.0	4.8	3.3																							
		60	9.2	8.5	7.8	7.0	5.9	4.5	2.8																								
Shut-off PSI			121	113	104	95	87	78	69	61	52	43	35	26	17	9																	
7LS07	¾	0												9.8	9.4	8.8	8.4	7.9	7.4	5.8	3.8												
		20									9.7	9.3	8.8	8.3	7.8	7.3	6.5	5.7	3.0														
		30								9.6	9.3	8.7	8.2	7.7	7.0	6.3	5.5	4.5															
		40					10.1	9.5	9.1	8.7	8.2	7.7	6.9	6.2	5.4	4.5	2.7																
		50				10.0	9.4	9.0	8.5	8.0	7.6	6.8	6.0	5.2	4.0	2.5																	
		60			9.8	9.4	8.8	8.4	7.9	7.4	6.7	5.8	5.0	3.8	1.5																		
Shut-off PSI				148	140	131	123	114	105	97	88	79	71	62	53	45	27	10															
7LS10	1	0													9.7	9.4	9.1	8.2	7.4	6.5	5.2	3.5											
		20											9.7	9.3	8.9	8.5	8.1	7.3	6.3	5.0	3.0												
		30										10.0	9.6	9.2	8.8	8.4	8.1	7.7	6.7	5.6	4.0												
		40									9.9	9.5	9.2	8.7	8.4	8.0	7.7	7.2	6.1	4.8	2.5												
		50							9.8	9.4	9.1	8.7	8.3	7.8	7.5	7.1	6.2	5.4	3.9														
		60						9.7	9.4	9.1	8.6	8.2	7.8	7.4	7.0	6.5	5.8	4.4	2.0														
Shut-off PSI						177	168	159	151	142	133	125	116	107	99	81	64	47	29	12													

Horsepower Range 1½ – 3, Recommended Range 1.5 – 10 GPM, 60 Hz, 3450 RPM

Pump Model	HP	PSI	Depth to Water in Feet/Ratings in GPM (Gallons per Minute)																													
			200	220	240	260	280	300	340	380	420	460	500	540	580	620	660	700	740	780	820	860	900	940	980	1020	1060	1100	1140			
7LS15	1½	0								9.8	9.3	8.7	8.0	7.3	6.4	5.4	4.1	1.8														
		20					10.1	9.8	9.2	8.5	7.9	7.2	6.4	5.3	3.8	1.5																
		30				10.0	9.8	9.5	8.8	8.2	7.4	6.7	5.7	4.5	2.8																	
		40			10.0	9.7	9.5	9.1	8.4	7.8	7.0	6.2	5.2	3.4																		
		50		9.9	9.6	9.4	9.0	8.7	8.0	7.4	6.5	5.6	4.2	2.3																		
		60	9.8	9.6	9.3	9.0	8.7	8.3	7.6	6.9	6.0	4.9	3.1																			
Shut-off PSI			206	198	185	176	168	159	142	124	107	90	72	55	38	20																
7LS20	2	0												9.8	9.3	8.7	8.4	7.8	7.1	6.3	5.4	4.5	3.5	2.2								
		20												9.8	9.3	8.7	8.4	7.7	6.9	6.2	5.3	4.3	3.2	2.8								
		30											9.9	9.5	9.0	8.5	7.9	7.2	6.4	5.7	4.4	3.7										
		40										10.0	9.7	9.2	8.7	8.3	7.5	6.7	6.0	5.2	4.1	3.0										
		50										9.9	9.4	8.9	8.5	7.8	7.2	6.3	5.5	4.7	3.5											
		60							10.0	9.6	9.1	8.7	8.2	7.4	6.6	5.8	5.0	4.0														
Shut-off PSI							268	251	234	216	199	182	165	147	130	113	95	80	61													
7LS30	3	0														9.8	9.5	9.2	8.7	8.3	7.9	7.4	6.8	6.2	5.4	4.7	3.9	3.0	2.0			
		20														9.8	9.4	9.2	8.7	8.3	7.8	7.2	6.7	6.2	5.3	4.5	3.7	3.3	1.7			
		30														10.0	9.6	9.2	8.8	8.5	8.0	7.5	6.9	6.3	5.7	4.8	4.1	3.2	2.3			
		40													10.0	9.7	9.4	9.0	8.6	8.2	7.7	7.2	6.6	5.9	5.2	4.4	3.6	2.7	1.7			
		50													9.9	9.5	9.2	8.7	8.4	7.9	7.4	6.8	6.3	5.5	4.8	3.9	3.1	2.2				
		60											10.0	9.7	9.3	9.0	8.6	8.1	7.6	7.0	6.5	5.8	5.1	4.2	3.4	2.5	1.5					
Shut-off PSI											320	303	286	268	251	234	216	199	182	165	147	130	113	95	78	61	43	27				

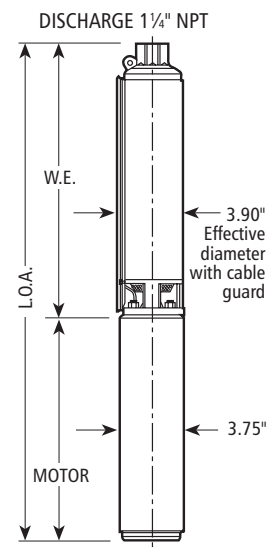


DIMENSIONS AND WEIGHTS

Model	HP	Phase	Stages	Length (inches)			Weight (lbs.)		
				W.E. ^②	Motor	L.O.A. ^③	W.E.	Motor	Total
10LS05412,22,11,21	½	1	7	11.0	9.5	20.5	7	19	26
10LS07412,22	¾	1	10	13.0	10.7	23.7	8	21	29
10LS10412,22	1	1	12	14.4	11.8	26.2	9	24	33
10LS15412	1½	1	17	17.9	13.6	31.5	11	28	39
10LS15422	1½	1	17	17.9	15.1	33.0	11	31	42
10LS15432	1½	3	17	17.9	11.8	29.7	11	24	35
10LS20412	2	1	20	20.0	15.1	35.1	12	33	45
10LS20432,34	2	3	20	20.0	13.6	33.6	12	28	40
10LS30412	3	1	27	26.0	19.1	45.1	15	41	56
10LS30432,34	3	3	27	26.0	16.1	42.1	15	35	50
10LS50142	5	1	42	36.3	28.2	64.5	20	70	90
10LS50432,34	5	3	42	36.3	22.2	58.5	20	55	75

② W.E. = water end or pump without motor.

③ L.O.A. = length of assembly – complete pump – water end and motor.



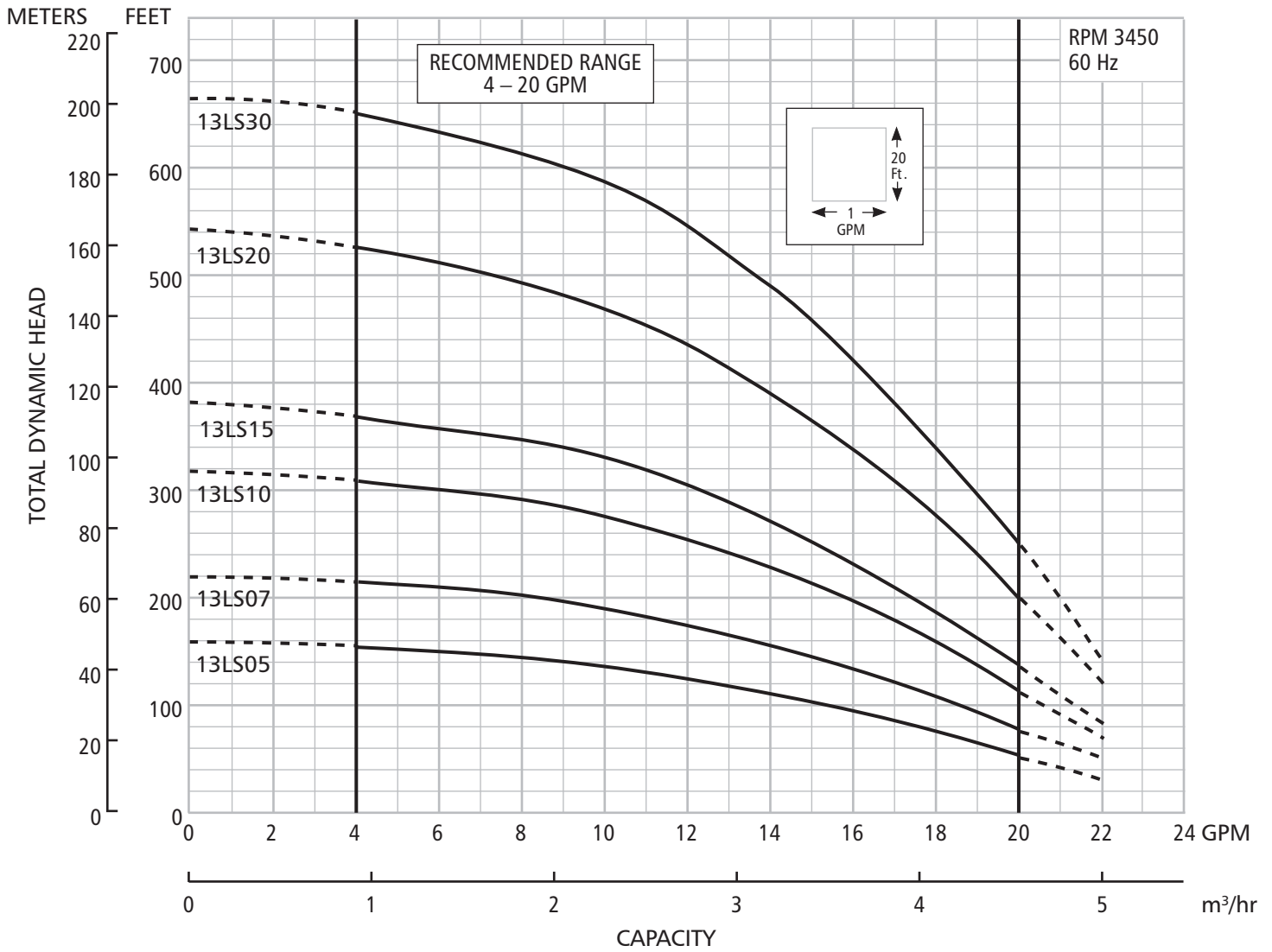
SELECTION CHART

Horsepower Range ½ – 3, Recommended Range 3 – 16 GPM, 60 Hz, 3450 RPM

Pump Model	HP	PSI	Depth to Water in Feet/Ratings in GPM (Gallons per Minute)																														
			20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	340	380	420	460	500	540	580	620	660	700	740	780	820			
10LS05	½	0				16.0	15.3	14.3	12.8	11.3	9.0	6.4																					
		20		15.9	14.9	13.8	12.5	10.8	8.3	4.8																							
		30	15.7	14.6	13.5	12.3	10.5	7.8	4.0																								
		40	14.5	13.4	12.0	10.3	7.5	3.0																									
		50	13.0	11.5	9.8	7.2																											
		60	11.3	9.0	6.4																												
Shut-off PSI			89	81	72	63	55	46	37	29	20	11																					
10LS07	¾	0					16.0	15.2	14.3	13.4	12.5	11.5	10.3	9.0	7.0	4.0																	
		20				15.8	15.0	14.0	13.0	12.3	11.2	10.2	8.5	6.0																			
		30			15.7	14.8	13.9	12.8	12.0	11.0	9.8	8.2	5.5																				
		40		15.6	14.7	13.8	12.7	11.9	10.8	9.7	8.1	5.2																					
		50	15.3	14.4	13.5	12.6	11.6	10.5	9.4	7.5	4.8																						
		60	14.3	13.4	12.5	11.5	10.3	9.0	7.0	4.0																							
Shut-off PSI			130	121	113	104	95	87	78	69	61	52	43	35	26	17	9																
10LS10	1	0								15.8	15.2	14.5	13.7	12.8	12.0	11.0	10.0	6.7															
		20						15.7	14.9	14.3	13.5	12.7	11.7	10.6	9.6	8.1	6.5																
		30				16.0	15.6	14.8	14.2	13.3	12.5	11.6	10.4	9.4	7.8	5.5	3.0																
		40			16.0	15.5	14.7	14.1	13.2	12.4	11.5	10.3	9.1	7.4	5.0	3.0																	
		50			15.3	14.6	13.9	13.0	12.3	11.3	10.1	8.9	7.0	4.3																			
		60	15.8	15.2	14.5	13.7	12.8	12.0	11.0	10.0	8.6	6.7	4.0																				
Shut-off PSI			158	150	141	132	124	115	106	98	89	81	72	63	55	46	37	20															
10LS15	1½	0												15.7	15.3	14.8	14.4	13.3	12.2	10.9	9.3	7.1	3.0										
		20												16.0	15.6	15.2	14.7	14.3	13.7	13.2	11.9	10.6	9.0	6.5									
		30												15.9	15.5	15.2	14.6	14.2	13.5	13.1	12.6	11.3	9.7	7.6	4.0								
		40									15.8	15.5	15.1	14.6	14.2	13.5	13.0	12.5	11.8	10.3	8.8	6.0											
		50						15.7	15.4	14.9	14.5	14.0	13.4	12.8	12.3	11.7	11.0	9.4	7.4	3.4													
		60					15.7	15.3	14.8	14.4	13.9	13.3	12.8	12.2	11.6	10.9	10.1	8.1	5.6														
Shut-off PSI						197	188	180	171	162	154	144	136	128	119	110	93	76	58	41	24	6											
10LS20	2	0														16.0	15.7	14.9	14.2	13.4	12.4	11.4	10.0	8.2	5.8								
		20													15.9	15.5	15.3	14.8	14.1	13.2	12.2	11.0	9.9	8.0	5.2								
		30													15.8	15.4	15.1	14.7	14.4	13.5	12.7	11.7	10.3	8.8	6.5								
		40													15.8	15.4	15.1	14.7	14.4	14.0	12.9	12.2	10.9	9.5	7.8	3.9							
		50									16.1	15.7	15.3	15.0	14.6	14.2	14.0	13.4	12.5	11.5	10.1	8.5	6.0										
		60						16.0	15.7	15.3	14.9	14.5	14.2	13.8	13.4	12.8	11.8	10.7	9.1	7.2	3.4												
Shut-off PSI									225	216	208	199	190	182	173	164	156	139	121	104	87	69	52	35	17								
10LS30	3	0																	15.8	15.2	14.6	14.0	13.3	12.6	11.9	11.0	10.0	9.0	7.5	5.8			
		20																		15.7	15.1	14.5	13.9	13.2	12.5	11.8	10.9	9.9	8.8	7.2	5.4		
		30																			15.9	15.4	14.8	14.2	13.4	12.8	12.0	11.3	10.3	9.3	8.1	6.2	3.8
		40																			15.9	15.6	15.0	14.4	13.8	13.1	12.4	11.5	10.8	9.7	8.6	7.1	4.7
		50															16.0	15.8	15.6	15.3	14.7	14.1	13.3	12.7	11.9	11.0	10.2	9.1	7.8	6.0	3.0		
		60															16.0	15.8	15.5	15.2	14.8	14.3	13.7	12.9	12.3	11.4	10.6	9.6	8.3	6.8	4.5		
Shut-off PSI															284	275	267	258	249	232	215	197	180	163	145	128	111	94	76	59	42	24	

Horsepower Range 5, Recommended Range 3 – 16 GPM, 60 Hz, 3450 RPM

Pump Model	HP	PSI	Depth to Water in Feet/Ratings in GPM (Gallons per Minute)																											
			440	480	520	560	600	640	680	720	760	800	840	880	920	960	1000	1040	1080	1120	1160	1200	1240	1280	1320					
10LS50	5	0						16	15.5	15.2	14.9	14.5	14	13.5	13	12.5	12	11.5	10.8	10.2	9.5	8.5	7	5.2						
		20						15.9	15.4	15.1	14.8	14.5	13.9	13.4	12.9	12.4	11.9	11.3	10.7	10.1	9.4	8.2	6.8	4.3						
		30						15.6	15.2	14.9	14.6	14.2	13.7	13.1	12.6	12.1	11.6	11.0	10.4	9.8	8.8	7.5	6.0	3.0						
		40					15.8	15.3	15.1	14.7	14.4	14.2	13.8	13.3	12.8	12.3	11.8	11.2	10.6	10.0	9.2	7.9	6.6	4.1						
		50					15.5	15.2	14.9	14.6	14.1	13.6	13.0	12.5	12.1	11.5	10.9	10.3	9.7	8.6	7.3	5.6								
		60					15.7	15.3	15.0	14.7	14.3	13.7	13.2	12.7	12.2	11.7	11.1	10.5	9.9	9.0	7.7	6.5	3.2							
Shut-off PSI					346	329	312	294	277	260	242	225	208	191	173	156	139	121	104	87	69	52	35	17						

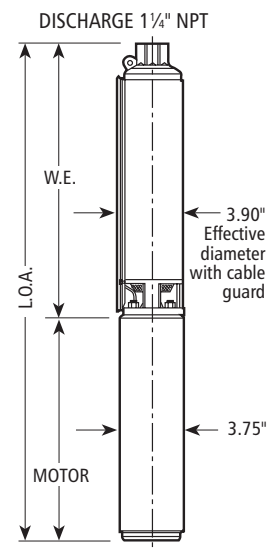


DIMENSIONS AND WEIGHTS

Model	HP	Phase	Stages	Length (inches)			Weight (lbs.)		
				W.E.②	Motor	L.O.A.③	W.E.	Motor	Total
13LS05412,22,11,21	1/2	1	5	9.6	9.5	19.1	6	19	25
13LS07412,22	3/4	1	7	11.0	10.7	21.7	6	21	27
13LS10412,22	1	1	10	13.0	11.8	24.8	7	24	31
13LS15412	1 1/2	1	12	14.4	13.6	28.0	8	28	36
13LS15422	1 1/2	1	12	14.4	15.1	29.5	8	31	39
13LS15432,34	1 1/2	3	12	14.4	11.8	26.2	8	24	32
13LS20412	2	1	17	17.9	15.1	33.0	10	33	43
13LS20432,34	2	3	17	17.9	13.6	31.5	10	28	38
13LS30412	3	1	21	20.6	19.1	39.7	12	41	53
13LS30432,34	3	3	21	20.6	16.1	36.7	12	35	47

② W.E. = water end or pump without motor.

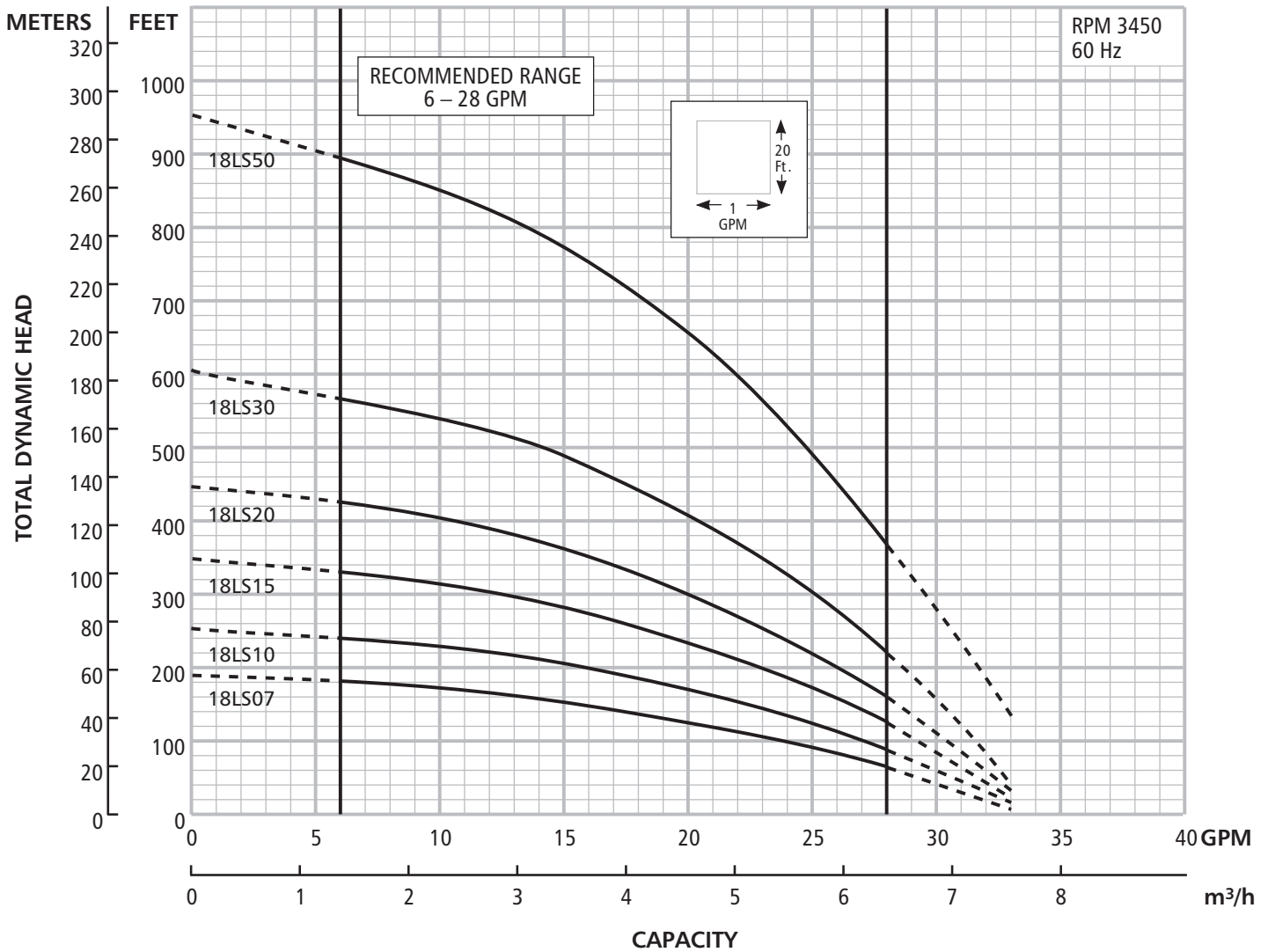
③ L.O.A. = length of assembly – complete pump – water end and motor.



SELECTION CHART

Horsepower Range ½ – 3, Recommended Range 4 – 20 GPM, 60 Hz, 3450 RPM

Pump Model	HP	PSI	Depth to Water in Feet/Ratings in GPM (Gallons per Minute)																													
			20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	340	380	420	460	500	540	580	620	660	700	740	780	820		
13LS05	½	0			19.0	17.5	15.3	12.5	8.2																							
		20	18.8	16.5	14.5	12.0	8.0																									
		30	16.0	13.4	11.0	4.1																										
		40	13.3	10.6	4.0																											
		50	9.8																													
		60																														
Shut-off PSI			60	52	43	35	26	17	9																							
13LS07	¾	0				19.7	18.5	17.0	15.0	13.2	11.5	8.5																				
		20		19.4	18.0	16.4	14.8	12.9	10.5	6.0																						
		30	18.9	17.5	16.0	14.6	12.5	10.0	5.0																							
		40	17.4	15.9	14.4	12.4	9.7	4.0																								
		50	15.4	13.8	12.0	9.5																										
		60	13.2	11.5	8.5																											
Shut-off PSI			86	78	69	61	52	43	35	26	17	8																				
13LS10	1	0						19.6	18.4	17.6	16.6	15.4	14.1	12.8	11.4	9.5	6.0															
		20			20.0	19.4	18.5	17.2	16.3	15.0	13.8	12.5	11.0	8.5	4.0																	
		30		20.0	19.2	18.2	17.1	15.8	14.7	13.6	12.2	10.5	7.5																			
		40	19.9	19.0	18.0	17.0	15.7	14.6	13.5	12.0	10.1	7.3																				
		50	18.8	17.8	16.8	15.5	14.5	13.0	11.6	9.9	7.0																					
		60	17.6	16.6	15.4	14.1	12.8	11.4	9.5	6.0																						
Shut-off PSI			128	119	110	102	93	84	76	67	58	50	41	32	24	15	6															
13LS15	1½	0							19.7	18.9	18.2	17.3	16.3	15.2	14.2	13.2	12.1	8.7														
		20					19.5	18.4	17.9	17.0	16.0	15.1	14.1	12.9	11.8	10.2	8.8															
		30			20.2	19.4	18.6	17.6	16.8	15.8	14.9	14.0	12.6	11.5	9.9	7.9	4.0															
		40		20.0	19.3	18.5	17.5	16.6	15.7	14.8	13.9	12.5	11.4	9.5	7.3	4.0																
		50	20.0	19.1	18.3	17.4	16.4	15.5	14.5	13.6	12.3	11.0	9.2	6.3																		
		60	18.9	18.2	17.3	16.3	15.2	14.2	13.3	12.1	11.0	8.7	5.6																			
Shut-off PSI			156	147	139	130	121	113	104	95	87	78	69	61	52	43	35	17														
13LS20	2	0										20.0	19.5	19.0	18.3	17.9	17.2	15.8	14.4	12.6	10.5	7.7										
		20									19.8	19.4	18.8	18.2	17.6	17.0	16.3	15.6	14.1	12.4	10.2	6.8										
		30								19.7	19.3	18.7	18.2	17.4	16.8	16.2	15.5	14.8	13.1	11.1	8.8											
		40						19.6	19.2	18.6	18.1	17.3	16.7	16.1	15.4	14.7	13.8	12.0	9.8	6.0												
		50				20.1	19.5	19.1	18.4	18.0	17.2	16.6	16.0	15.2	14.6	13.7	12.9	10.8	8.5													
		60			20.0	19.5	19.0	18.3	17.9	17.2	16.5	15.8	15.1	14.4	13.6	12.6	11.5	9.2	5.0													
Shut-off PSI					206	198	189	180	172	163	155	146	137	129	120	111	103	85	68	51	33	16										
13LS30	3	0													19.8	19.4	18.9	18.0	17.1	16.0	14.6	13.5	11.9	10.0	7.3							
		20												19.6	19.2	18.9	18.3	17.9	17.0	15.9	14.7	13.3	11.8	9.7	6.9							
		30											20.0	19.5	19.1	18.8	18.2	17.8	17.4	16.4	15.2	13.9	12.3	10.5	8.3	4.0						
		40									20.0	19.4	19.1	18.7	18.2	17.8	17.3	16.8	15.6	14.5	13.0	11.4	9.5	6.0								
		50								19.9	19.5	19.0	18.6	18.1	17.7	17.2	16.7	16.1	14.9	13.7	12.0	10.1	7.9									
		60						19.8	19.4	18.9	18.5	18.0	17.5	17.1	16.6	16.0	15.4	14.2	12.9	11.0	9.0	5.0										
Shut-off PSI							235	226	217	209	200	191	183	174	165	157	139	122	104	87	70	53	35	18								

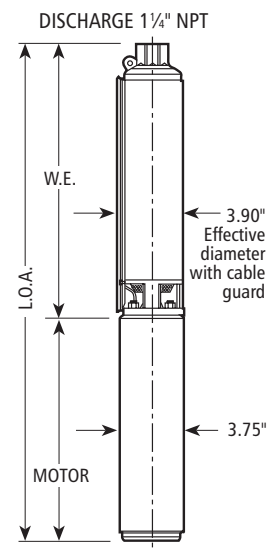


DIMENSIONS AND WEIGHTS

Model	HP	Phase	Stages	Length (inches)			Weight (lbs.)		
				W.E.②	Motor	L.O.A.③	W.E.	Motor	Total
18LS07412,22	¾	1	6	11.3	10.7	22.0	6	21	27
18LS10412,22	1	1	8	13.0	11.8	24.8	7	24	31
18LS15412	1½	1	11	15.5	13.6	29.1	9	28	37
18LS15422	1½	1	11	15.5	15.1	30.6	9	31	40
18LS15432,34	1½	3	11	15.5	11.8	27.3	9	24	33
18LS20412	2	1	14	18.1	15.1	33.2	10	33	43
18LS20432,34	2	3	14	18.1	13.6	31.7	10	28	38
18LS30412	3	1	19	22.4	19.1	41.5	12	41	53
18LS30432,34	3	3	19	22.4	16.1	38.5	12	35	47
18LS50412	5	1	30	32.9	28.2	61.1	17	70	87
18LS50432,34	5	3	30	32.9	22.2	55.1	17	55	72

② W.E. = water end or pump without motor.

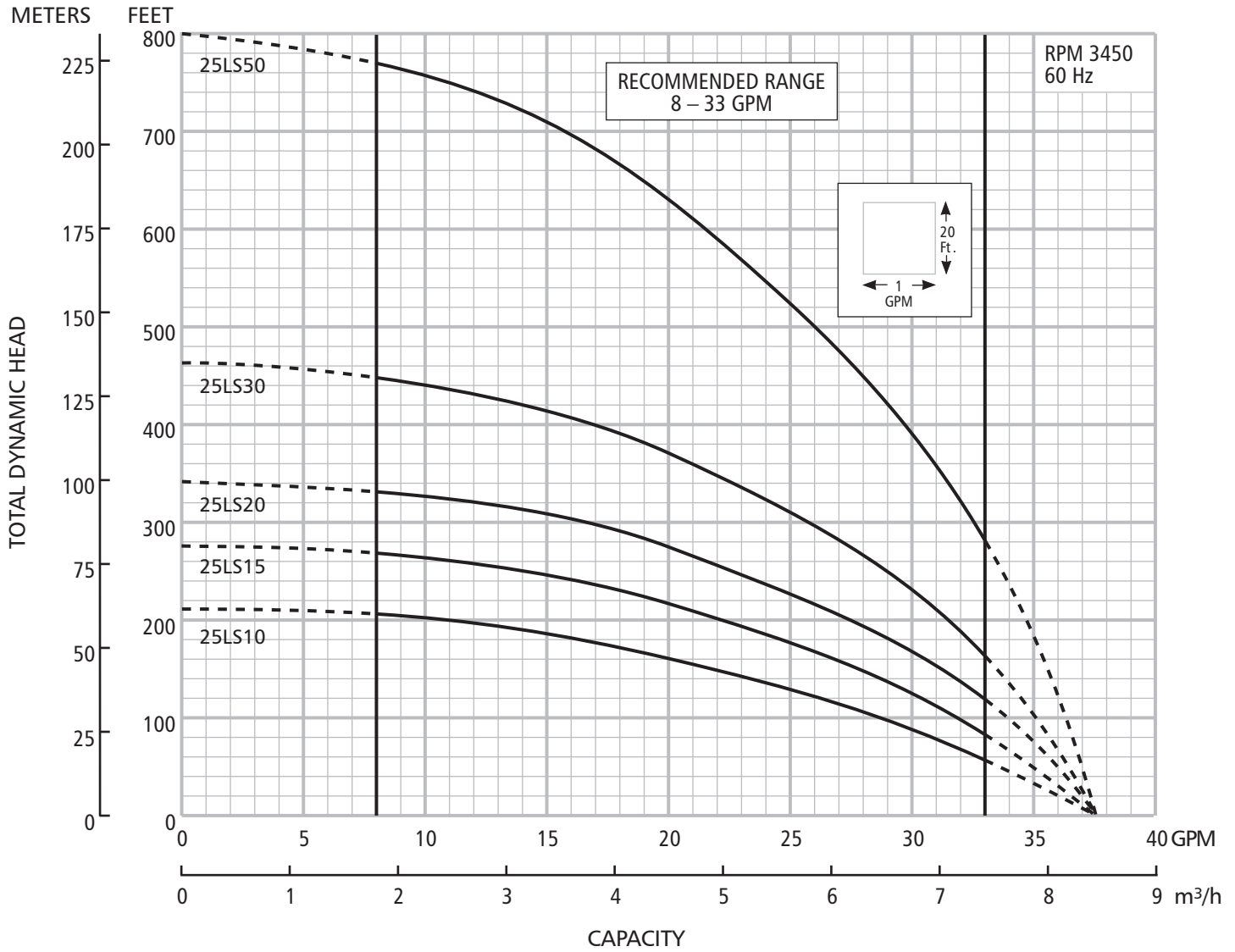
③ L.O.A. = length of assembly – complete pump – water end and motor.



SELECTION CHART

Horsepower Range ¾ – 5, Recommended Range 6 – 28 GPM, 60 Hz, 3450 RPM

Pump Model	HP	PSI	Depth to Water in Feet/Ratings in GPM (Gallons per Minute)																																		
			20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	340	380	420	460	500	540	580	620	660	700	740	780	820	860						
18LS07	¾	0			28.2	26.5	24.0	21.0	17.9	13.5																											
		20	27.7	25.9	23.0	20.0	16.5	10.8																													
		30	25.0	22.0	18.8	15.7	9.5																														
		40	22.2	18.9	15.1	9.0																															
		50	18.4	15.0	7.5																																
		60	13.5	5.0																																	
Shut-off PSI			74	66	58	49	40	32	23	14																											
18LS10	1	0					27.0	25.5	23.6	21.2	18.8	15.9	12.0																								
		20		28.0	26.6	25.1	22.7	20.0	17.6	14.0	10.0																										
		30	27.9	26.1	24.3	22.2	19.8	17.1	13.8	8.3																											
		40	26.0	24.1	22.0	19.7	17.0	13.1	8.0																												
		50	24.0	22.0	19.1	16.5	13.0	7.1																													
		60	21.0	18.6	15.8	12.0																															
Shut-off PSI			103	94	86	77	68	60	51	42	34	25	16																								
18LS15	1½	0						28.4	27.2	26.0	24.8	23.0	21.4	19.6	17.5	15.0	12.1																				
		20				27.8	26.8	25.4	24.0	22.2	20.6	18.8	16.7	14.0	10.0																						
		30			27.7	26.5	25.3	23.8	22.0	20.2	18.5	16.1	13.5	10.0																							
		40		27.5	26.3	25.0	23.6	22.0	20.1	18.1	16.0	13.1	9.5																								
		50	27.6	26.4	25.0	23.4	21.8	20.0	18.0	15.5	13.0	9.2																									
		60	26.0	24.6	23.0	21.2	19.5	17.5	15.0	12.0	7.9																										
Shut-off PSI			143	134	126	117	108	100	91	82	74	65	56	48	39	30	22																				
18LS20	2	0								28.0	27.1	26.2	25.1	24.0	22.9	21.4	20.0	16.8	12.8																		
		20						27.8	26.8	25.8	24.6	23.7	22.6	21.0	19.5	18.0	16.0	11.6																			
		30					27.5	26.5	25.5	24.5	23.3	22.1	20.6	19.0	17.5	15.8	13.6	6.5																			
		40			28.5	27.4	26.4	25.4	24.4	23.2	22.0	20.5	18.9	17.4	15.7	13.5	11.0																				
		50		28.0	27.2	26.2	25.3	24.3	23.0	21.8	20.3	18.7	17.0	15.3	13.1	10.5	6.0																				
		60	28.0	27.1	26.2	25.1	24.0	22.9	21.4	20.0	18.3	16.8	14.8	12.8	9.5																						
Shut-off PSI			183	174	165	157	148	139	131	122	113	105	96	87	79	70	61	44	27																		
18LS30	3	0											28.0	27.4	26.7	26.0	25.0	23.5	21.5	19.2	16.9	14.2	10.5														
		20										27.7	27.0	26.3	25.8	24.9	24.0	23.0	21.0	18.9	16.5	13.5	9.0														
		30										27.6	26.9	26.2	25.5	24.8	23.9	22.9	21.9	19.8	17.5	14.9	11.2														
		40										27.5	26.9	26.2	25.4	24.6	23.8	22.8	21.8	20.9	18.5	16.0	13.3	8.0													
		50							27.4	26.8	26.0	25.2	24.5	23.6	22.6	21.7	20.6	19.5	17.3	14.5	11.0																
		60				28.0	27.4	26.7	26.0	25.0	24.3	23.5	22.5	21.5	20.5	19.2	18.0	15.7	12.8	7.0																	
Shut-off PSI					225	216	208	199	190	182	173	164	156	147	139	130	113	95	78	61	43	26															
18LS50	5	0																	27.9	26.8	25.8	24.8	23.7	22.6	21.2	19.9	18.4	16.8	14.8	12.4	9.7						
		20																		27.5	26.6	25.6	24.5	23.3	22.2	21.0	19.8	18.0	16.2	14.3	12.0	8.8					
		30																			28.0	26.9	26.0	25.0	23.9	22.9	21.6	20.3	18.6	17.0	15.0	13.0	10.2	6.2			
		40																				28.0	27.4	26.3	25.3	24.4	23.2	22.1	20.1	19.4	17.9	16.0	14.0	11.6	8.0		
		50																				27.9	27.3	26.8	25.9	24.9	23.8	22.7	21.3	20.1	18.5	16.9	14.9	12.8	10.0	6.0	
		60																				27.9	27.2	26.8	26.2	25.2	24.1	23.0	21.9	20.7	19.2	17.5	15.8	13.6	11.0	7.8	
Shut-off PSI																				307	298	290	281	264	246	229	212	195	177	160	143	125	108	91	73	56	39

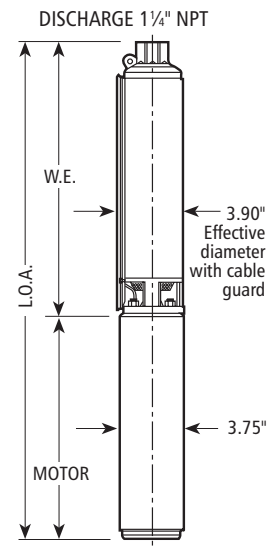


DIMENSIONS AND WEIGHTS

Model	HP	Phase	Stages	Length (inches)			Weight (lbs.)		
				W.E.②	Motor	L.O.A.③	W.E.	Motor	Total
25LS10412,22	1	1	7	12.7	11.8	24.5	7	24	31
25LS15412	1½	1	9	14.6	13.6	28.2	8	28	36
25LS15422	1½	1	9	14.6	15.1	29.7	8	31	39
25LS15432,34	1½	3	9	14.6	11.8	26.4	8	24	32
25LS20412	2	1	11	16.5	15.1	31.6	9	33	42
25LS20432,34	2	3	11	16.5	13.6	30.1	9	28	37
25LS30412	3	1	15	20.2	19.1	39.3	11	41	52
25LS30432,34	3	3	15	20.2	16.1	36.3	11	35	46
25LS50412	5	1	26	31.8	28.2	60.0	17	70	87
25LS50432,34	5	3	26	31.8	22.2	54.0	17	55	72

② W.E. = water end or pump without motor.

③ L.O.A. = length of assembly – complete pump – water end and motor.



SELECTION CHART

Horsepower Range 1 – 5, Recommended Range 8 – 33 GPM, 60 Hz, 3450 RPM

Pump Model	HP	PSI	Depth to Water in Feet/Ratings in GPM (Gallons per Minute)																											
			20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	340	380	420	460	500	540	580	620	660	700	740		
25LS10	1	0			32.8	30.8	28.6	26.2	23.5	20.0	16.2	11.0																		
		20	31.8	30.0	27.5	25.2	22.0	19.0	15.0	8.0																				
		30	29.6	27.2	25.0	21.6	18.0	14.0																						
		40	27.1	24.9	21.5	17.9	13.9																							
		50	24.3	21.0	17.5	13.0																								
		60	20.0	16.2	11.0																									
Shut-off PSI			82	74	65	56	48	39	30	22	13	4																		
25LS15	1½	0				33.0	31.8	30.3	28.8	26.9	24.8	22.0	19.8	16.5	11.0															
		20		32.6	31.2	29.6	28.0	26.0	23.8	21.0	18.1	14.8	8.0																	
		30	32.5	31.0	29.5	27.6	25.6	23.2	20.9	17.9	14.0																			
		40	30.9	29.4	27.5	25.5	23.1	20.8	17.7	13.6																				
		50	29.0	27.2	25.1	22.9	20.4	17.2	13.0																					
		60	26.9	24.8	22.0	19.8	16.5	11.0																						
Shut-off PSI			111	103	94	85	77	68	59	51	42	33	25	16	7															
25LS20	2	0					33.0	31.8	30.4	29.0	27.4	25.7	22.6	21.5	19.3	15.4														
		20				32.7	31.3	30.0	28.6	26.8	25.0	22.9	20.9	18.3	14.3	9.0														
		30			32.3	31.0	29.6	28.5	26.4	24.5	22.6	20.5	18.0	14.0	8.0															
		40			30.9	29.5	28.2	26.3	24.3	22.4	20.4	17.8	13.6	8.0																
		50		30.5	29.4	28.0	26.0	24.1	22.1	20.0	17.2	13.2																		
		60	30.4	29.0	27.4	25.7	22.6	21.5	19.3	15.4	12.2																			
Shut-off PSI			139	130	121	113	104	95	87	78	69	61	52	43	35	26	17													
25LS30	3	0							33.0	32.2	31.5	30.5	29.6	28.3	27.1	25.8	22.6	19.0	14.0											
		20						32.8	32.0	31.0	30.0	29.0	27.9	26.6	25.0	23.8	21.9	20.0	12.6											
		30					32.6	31.8	30.9	30.0	28.8	27.6	26.5	24.9	23.4	21.6	19.9	15.2	8.0											
		40				32.5	31.7	30.9	29.9	28.8	27.5	26.2	24.7	23.3	21.5	19.9	17.8	11.9												
		50			32.3	31.6	30.8	29.8	28.5	27.3	26.0	24.5	23.0	21.2	19.5	17.4	11.5													
		60	33.0	32.2	31.5	30.5	29.6	28.3	27.1	25.8	24.1	22.6	20.9	19.0	16.9	14.0	10.0													
Shut-off PSI			191	183	174	165	157	148	139	131	122	113	105	96	87	79	70	53	35	18										
25LS50	5	0														33.0	32.5	31.5	30.2	29.0	27.6	26.0	24.2	22.4	20.5	18.3	15.8	12.0		
		20														32.9	32.3	31.8	31.3	30.0	28.8	27.2	25.8	23.9	22.0	20.0	17.8	15.0	11.0	
		30														32.8	32.2	31.8	31.2	30.5	29.3	27.9	26.4	24.8	22.9	21.0	18.9	16.2	13.0	8.0
		40														32.7	32.1	31.7	31.1	30.4	29.9	28.5	27.1	25.4	23.7	21.9	19.9	17.5	14.5	10.5
		50														32.6	32.1	31.6	31.0	30.3	29.9	29.2	27.8	26.3	24.5	22.6	21.8	18.7	16.0	12.7
		60									33.0	32.5	32.0	31.5	30.8	30.2	29.8	29.0	28.3	26.9	25.1	23.3	21.5	19.5	17.0	14.0	9.5			
Shut-off PSI									286	277	268	260	251	242	234	225	216	199	182	165	147	130	113	95	78	61	43	26		

Item No.	Description	Current Models ^③								
		HP	5LS	7LS	10LS	13LS	18LS	25LS		
	NUMBER OF STAGES	1/2	12	10	7	5	–	–		
		3/4	15	13	10	7	6	–		
		1	20	17	12	10	8	7		
		1 1/2	26 ^①	22	17	12	11	9		
		2	33 ^②	27 ^{①④}	20	17	14	11		
		3	–	34 ^{②④}	28 ^②	21	19	15		
		5	–	–	42 ^②	–	30 ^②	26 ^②		
1-4	Discharge head/ check valve assembly	7K744								
2	Check valve poppet	7K1559								
3	Check valve o-ring	5K254								
4	Check valve spring	7K1746								
5	Bearing spider (upper)	7K1372								
5A	Inter. bearing spider ^①	7K1371	7K1371	–	–	–	–			
5B	Inter. bearing spider ^②	7K1989	7K1989	7K1989	–	7K1989	7K1989			
6	Bearing	7K1740								
7	Retaining ring	7K817								
8	Diffuser	7K1750	7K995	7K17	7K17	7K20	7K20			
9	Impeller (Ⓞ7LS)	7K1837	7K1343	7K35	7K16	7K1334	7K1914			
10	Bowl	7K1838	7K478	7K478	7K478	7K858	7K1886			
11	Shim	7K155								
12	Shaft sleeve	7K1336								
12A	Intermediate shaft sleeve	7K209	–	7K209	–	7K209	7K209			
13	Suction strainer	7K1637								
14	Cable guard screws	13K91								
15	Hex nut	13K114								
16	Motor adapter	7K1745								
17	Casings	1/2	7K1938	7K1936	7K1905	7K1902	–	–		
		3/4	7K1941	7K1939	7K1935	7K1905	7K1964	–		
		1	7K1949	7K1973	7K1938	7K1935	7K1935	7K1914		
		Upper	1 1/2	7K1954	7K1951	7K1944	7K1938	7K1939	7K1943	
			Lower	–	–	–	–	–	–	
		Upper	2	7K1453	7K1958	7K1949	7K1944	7K1945	7K1941	
			Lower	7K1452	–	–	–	–	–	
		Upper	3	–	7K1973	7K1946	7K1950	7K1952	7K1479	
			Lower	–	7K1453	7K1943	–	–	–	
		Upper	5	–	–	7K1971	–	7K1948	7K1947	
			Lower	–	–	7K1636	–	7K1738	7K1453	
		18	Shaft and coupling assemblies	1/2	7K1377	7K1376	7K1360	7K1358	–	–
				3/4	7K1381	7K1380	7K1375	7K1360	7K1359	–
				1	7K1458	7K1384	7K1377	7K1375	7K1375	7K1374
Upper	1 1/2			7K1839	7K1839	7K1457	7K1377	7K1380	7K1378	
	Lower			–	–	–	–	–	–	
Upper	2			7K1877	7K1391	7K1458	7K1457	7K1382	7K1381	
	Lower			7K1879	–	–	–	–	–	
Upper	3			–	7K1462	7K1878	7K1386	7K1387	7K1385	
	Lower			–	7K1213	7K1880	–	–	–	
Upper	5			–	–	7K1393	–	7K1736	7K2212	
	Lower			–	–	7K1221	–	7K1737	7K2211	
19	Cable guards			1/2	7K1888	7K1886	7K1883	7K1881	–	–
				3/4	7K1890	7K1889	7K1886	7K1883	7K1883	–
				1	7K1917	7K1916	7K1888	7K1886	7K1886	7K1886
		1 1/2	7K1922	7K1919	7K1916	7K1888	7K1889	7K1888		
		2	7K1927	7K1924	7K1917	7K1916	7K1916	7K1890		
		3	–	7K1929	7K1923	7K1918	7K1920	7K1917		
		5	–	–	7K1931	–	7K1930	7K1929		

- ① Model has one intermediate bearing spider, order bearing and spider separately.
 ② Model has one intermediate bearing spider, a split case design and upper and lower shaft assemblies.
 ③ Current LS pumps are identified by 4 cable guard screws.
 ④ 7LS20 and 7LS30 impeller is 7K994.

Repair Parts

MODEL LS

5LS, 7LS, 10LS,
13LS, 18LS, 25LS

