

# Repair Parts

MODEL



# SSV

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# SSV PRODUCT LINE NUMBERING SYSTEM

The various versions of the SSV line are identified by a product code number on the pump label. The number is also the catalog number for the pump. The meaning of each digit in the product code is shown below.

**2 SV A 1 D 2 B 0 H**

## OPTIONS

H = Horizontal Mounting  
Vic = Victaulic Connections

## MECHANICAL SEAL OPTIONS

Code No.	Rotary	Stationary	Elastomer	Metal Parts	Part Number		
					1SV/2SV	3SV/4SV	5SV/6SV
0	Silicon Carbide	Silicon Carbide	Viton	316 SS	10K78	10K79	10K80
1	Carbon		EPR				10L18
2	Tungsten Carbide	Carbon		18-8 SS	10L16	10L17	
3							10L19
5	Carbon	Silicon Carbide	Viton	316 SS	10K68	10K69	10K70

## NUMBER OF STAGES

B = 2    F = 6    K = 10    P = 14    V = 20  
C = 3    G = 7    L = 11    Q = 15    X = 22  
D = 4    H = 8    M = 12    R = 16    Z = 24  
E = 5    J = 9    N = 13    T = 18

## DRIVER

1 = 1 PH, ODP            5 = 3 PH, TEFC            9 = 3 PH, TEFC Premium Efficiency  
2 = 3 PH, ODP            6 = 575 V, TEFC            0 = 1 PH, XP  
3 = 575 V, ODP            7 = 3 PH, XP  
4 = 1 PH, TEFC            8 = 575 V, XP

## HP RATING

C = ½ HP                    H = 3 HP                    N = 20 HP  
D = ¾ HP                    J = 5 HP                    P = 25 HP  
E = 1 HP                    K = 7½ HP                  Q = 30 HP  
F = 1½ HP                  L = 10 HP                  R = 40 HP  
G = 2 HP                    M = 15 HP                  S = 50 HP

## HERTZ/RPM

1 = 60 HZ, 3450 RPM, 2 pole  
2 = 50 HZ, 2900 RPM, 2 pole

## MATERIAL AND SUCTION/DISCHARGE

A = 304 stainless steel, in-line NPT threaded oval flange connections.  
B = 304 stainless steel, in-line ANSI flange.  
C = 304 stainless steel, top/bottom ANSI flange connections.  
D = 316 stainless steel, in-line ANSI flange.

## PRODUCT LINE

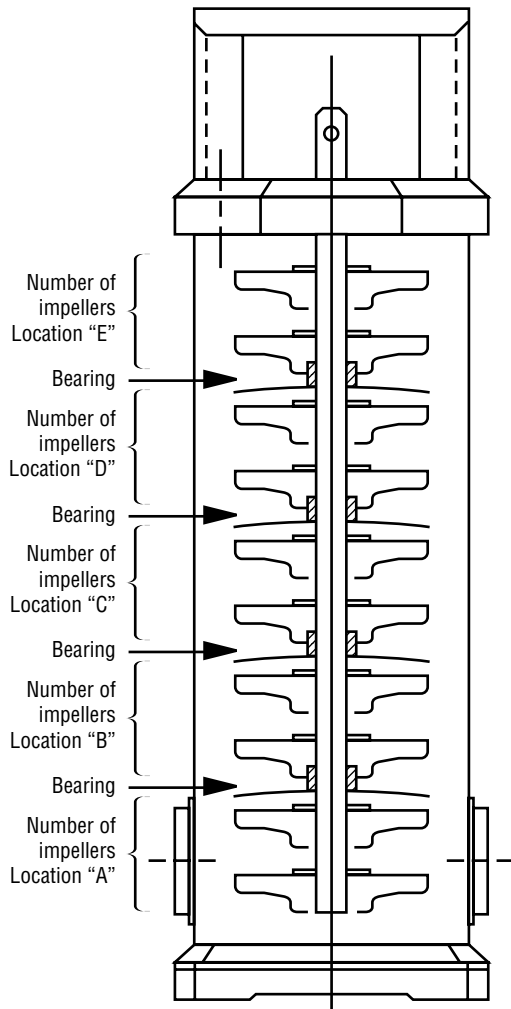
Stainless Steel Vertical

## NOMINAL FLOW

1 = 15 GPM    3 = 55 GPM    5 = 145 GPM  
2 = 28 GPM    4 = 86 GPM    6 = 290 GPM

# IMPELLERS AND INTERMEDIATE BEARINGS LAYOUT

Number of Stages	Number of Bearings	1SV Number of Impellers in Location					Number of Bearings	2SV Number of Impellers in Location					Number of Bearings	3SV Number of Impellers in Location				Number of Bearings	4SV Number of Impellers in Location				
		A	B	C	D	E		A	B	C	D	E		A	B	C	D		A	B	C	D	
2	1	1	1				1	1	1				1	1	1				1	1	1		
3	1	1	2				1	1	2				1	1	2				1	1	1		
4	1	2	2				1	2	2				1	2	2				1	1	1		
5	1	2	3				1	2	3				1	2	3				1	1	1		
6	1	2	4				1	2	4				1	2	4				1	1	1		
7	1	2	5				1	2	5				1	2	5				1	1	1		
8	1	2	6				1	2	6				2	2	3	3			2	2	3	3	
9	2	2	4	3			2	2	4	3			2	2	4	3							
10													2	2	4	4			2	2	4	4	
11	2	2	5	4			2	2	5	4			2	2	5	4							
12	2	2	5	5									2	2	5	5			2	2	5	5	
13	2	2	6	5			2	2	6	5			3	2	3	4	4						
14	2	2	6	6			2	6	6	6			3	2	4	4	4		3	2	4	4	4
15	2	2	7	6			2	2	7	6								3	2	4	4	5	
16	2	2	7	7			2	2	7	7			3	2	4	5	5						
18	3	2	5	6	5		3	2	5	6	5												
20	3	2	6	6	6		3	2	6	6	6												
22	4	7	5	5	5	5	4	2	5	5	5	5											
24	4	2	6	6	5	5	4	2	6	6	6	5	5										



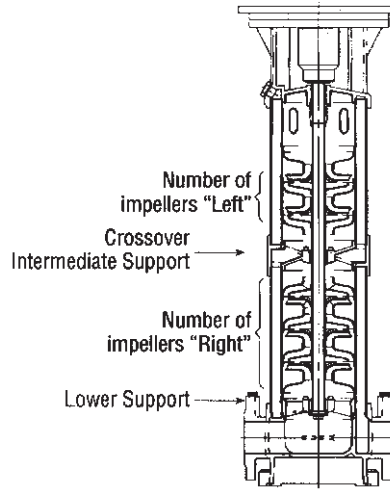
The chart on this page is used to locate the correct bearing position(s) on the impeller stack of the SSV series pumps. To use these charts:

1. Locate the number of stages in the left hand column of the above chart which corresponds to the pump you are working on.
2. Follow the selected row across to the pump size (1SV etc).
3. Under the "A" location, you will find the number of impellers on the bottom of the stack which come before the first bearing.
4. Under the "B" location, you will find the number of impellers which go above the first bearing and below the second bearing (if there is one)
5. Under the "C" location, you will find the number of impellers which go above the second bearing and below the third bearing (if there is one)
6. Under the "D" location, you will find the number of impellers which go above the third bearing.
7. Under the "E" location, you will find the number of impellers which go above the third bearing.

## 5SV AND 6SV WITH CROSSOVER

Number of Stages	Number of Impellers	
	Above Crossover (Left Hand)	Below Crossover (Right Hand)
5	2	3
6	2	4
7	3	4
8	3	5
9	4	5
10	4	6
11	5	6
12	5	7

NOTE: Stages 9-12 are available on 5SV 50Hz units only

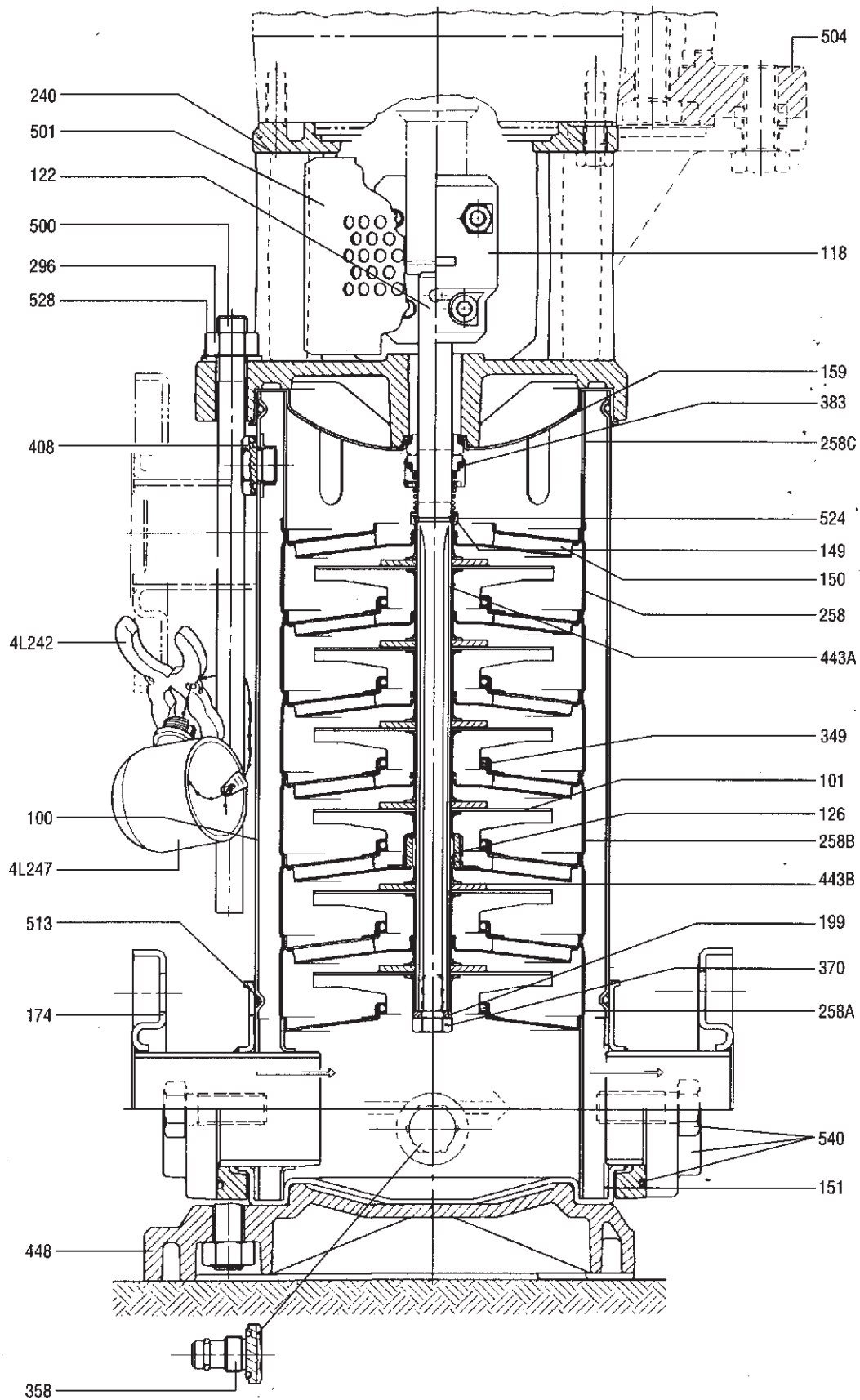


## COUPLING TABLE

Item No.	Pump size		Number of Stages																										
			2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	20	22	24								
118	1SV	60Hz	TEFC	4L188											4L189														
			ODP	4L188											4L189														
		50Hz	TEFC	4L188											4L188		4L189												
			ODP	4L188											4L188		4L189												
	2SV	60Hz	TEFC	4L188											4L189		4L189												
			ODP	4L188											4L189		4L189												
		50Hz	TEFC	4L188											4L188				4L189										
			ODP	4L188											4L188				4L189										
	3SV	60Hz	TEFC	4L190						4L191				4L192		4L193													
			ODP	4L190						4L191				4L192		4L193													
		50Hz	TEFC	4L190						4L191				4L192		4L193		4L192		4L192		4L192		4L192					
			ODP	4L190						4L191				4L192		4L193		4L192		4L192		4L192		4L192					
	4SV	60Hz	TEFC	4L191						4L192				4L193															
			ODP	4L191						4L192				4L193															
		50Hz	TEFC	4L191						4L192				4L193		4L193		4L193											
			ODP	4L191						4L192				4L193		4L193		4L193											
	5SV	60Hz	TEFC	4L312						4L313		4L314																	
			ODP	4L312						4L313		4L314																	
		50Hz	TEFC	4L312						4L313		4L314																	
			ODP	4L312						4L313		4L314																	
	6SV	60Hz	TEFC	4L312						4L313		4L314																	
			ODP	4L312						4L313		4L314																	
		50Hz	TEFC	4L312						4L313		4L314																	
			ODP	4L312						4L313		4L314																	

## COUPLING PIN SUPPLIED WITH COUPLING COMPLETE AND SHAFT ASSEMBLY

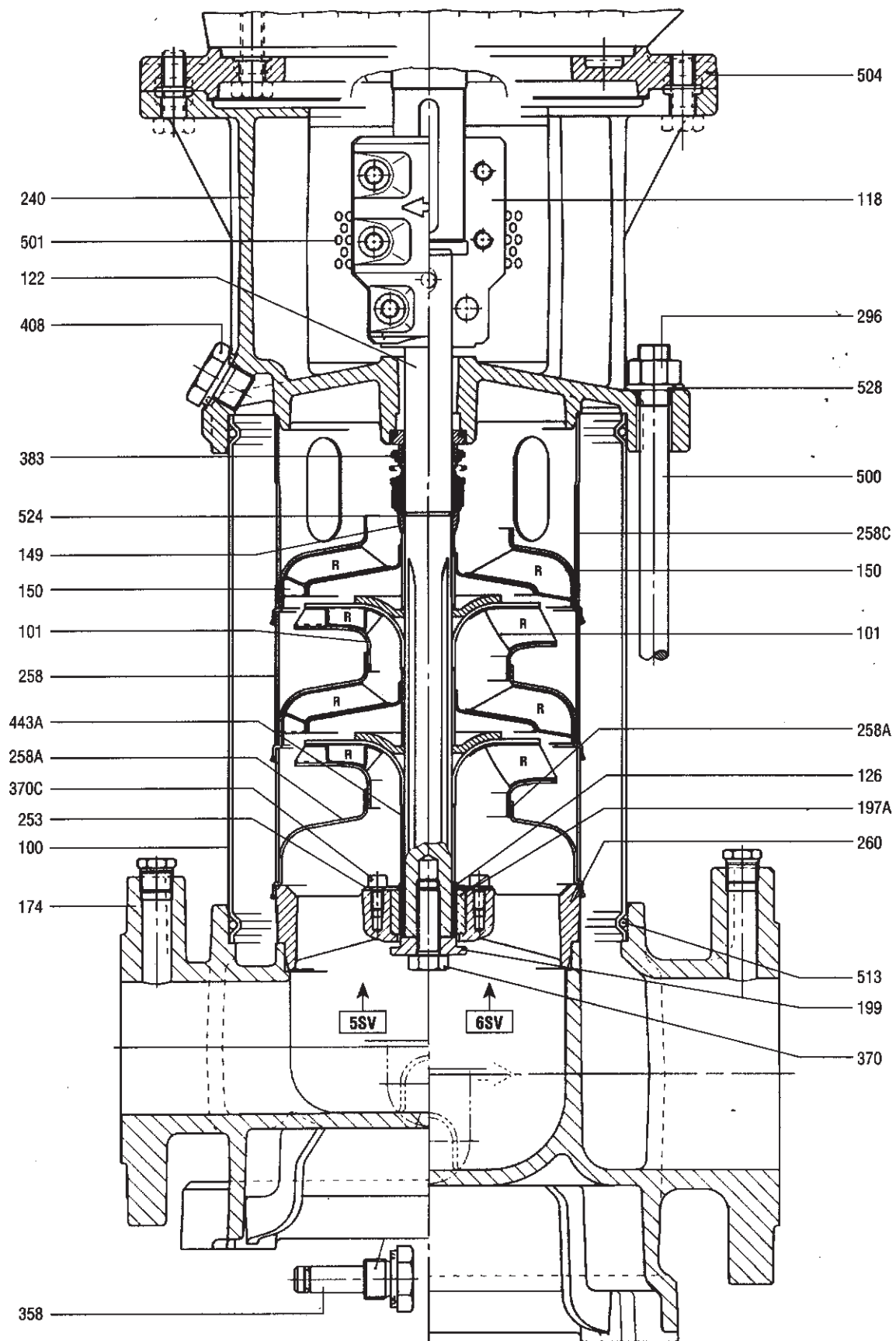
Size	Pin repair part number
1SV	4L170
2SV	
3SV	4L171
4SV	
5SV	4L283
6SV	



# 1SV AND 2SV

Item No.	Part Name	Number of Stages																						
		2	3	4	5	6	7	8	9	11	12	13	14	15	16	18	20	22	24					
240	Motor adapter	See motor adapter chart page 13																						
501	Coupling guard	1L182																						
122	Shaft assembly includes items 149,199,370,524 and coupling pin	Type A	4L206	4L207	4L208	4L209	4L210	4L211	4L212	4L213	4L214	4L215	4L215	4L416	4L416	4L217								
		Type B	4L206	4L207	4L208	4L209	4L210	4L211	4L212	4L213	4L214	4L215	4L215	4L416	4L416	4L217	4L431	4L432	4L433	4L434				
		Type C				4L209	4L210	4L211	4L212	4L213	4L214	4L215	4L215	4L416	4L416	4L217								
		Type D	4L218	4L219	4L220	4L221	4L222	4L223	4L224	4L225	4L226	4L227	4L227	4L228	4L228	4L272	4L435	4L436	4L437	4L438				
126	Shaft sleeve	4L180																						
		Type A	1L344	1L345	1L346	1L347	1L348	1L349	1L350	1L351	1L387	1L353	1L353	1L354	1L354	1L367								
		Type B	1L344	1L345	1L346	1L347	1L348	1L349	1L350	1L351	1L387	1L353	1L353	1L354	1L354	1L367	1L355	1L504	1L505	1L506				
		Type C				1L368	1L369	1L370	1L371	1L372	1L373	1L374	1L374	1L375	1L375	1L352								
100	Casing with fill plug	Type D	1L356	1L357	1L358	1L359	1L360	1L361	1L362	1L363	1L364	1L365	1L365	1L366	1L366	1L390	1L507	1L508	1L509	1L510				
		Type A	4L172																					
		Type B	4L172																					
		Type C					4L172																	
151	Casing spacer	Type D	4L250																					
		Type A	4L172																					
		Type B	4L172																					
		Type C					4L172																	
513	O-ring casing	5L93 Viton		5L88 EPR																				
174	Pump body includes item 151	Type A	1L338																					
		Type B	1L340																					
		Type C				1L342																		
		Type D	1L388																					
		Victaulic	1L500																					
448	Base plate	Type A	1L379																					
		Type B	1L380																					
		Type C				1L380																		
		Type D	1L380																					
159	Seal housing	Type A	1L377																					
		Type B	1L377																					
		Type C				1L377																		
		Type D	1L416																					
383	Mechanical seal with washer	See optional seal table on page 1																						
524	Split ring	4L245																						
149	Split ring cover	4L243																						
258C	Final spacer	Type A	4L174																					
		Type B	4L174																					
		Type C				4L174																		
		Type D	4L248																					
150	Final diffuser	Type A	3L26																					
		Type B	3L26																					
		Type C				3L26																		
		Type D	3L28																					
258A	1st stage bowl with impeller Viton O-ring	Type A	7L354																					
		Type B	7L354																					
		Type C				7L354																		
		Type D	7L363																					
258B	Bowl with bushing and impeller Viton O-ring	Type A	7L351																					
		Type B	7L351																					
		Type C				7L351																		
		Type D	7L357																					
258	Bowl with impeller Viton O-ring	Type A			7L348																			
		Type B			7L348																			
		Type C				7L348																		
		Type D			7L357																			
349	O-ring impeller	5L90 Viton		5L83 EPR																				
101	Impeller	1SV = 2L160 2SV = 2L170																						
443A	Impeller spacer	4L177																						
443B	Impeller spacer (intermediate)	4L176																						
199	Impeller fixing washer	13L105																						
370	Impeller fixing screw	13L95																						
500	Tie rod with nuts and washer	4L230	4L231	4L232	4L233	4L234	4L235	4L236	4L237	4L238	4L239	4L239	4L240	4L240	4L273	4L322	4L323	4L324	4L325					
296	Nut tie rod	13L98																						
528	Washer tie rod	13L100																						
540	Oval Flange assembly	Type A	1SV = 6L29 2SV = 6L30																					
118	Coupling complete	See coupling table on page 3																						
408	Fill plug with O-ring	6L19 Viton		6L25 EPR																				
358	Drain plug with O-ring	6L17 Viton		6L23 EPR																				
---	Motor assembly shim	4L242																						
---	Filling funnel	4L247																						

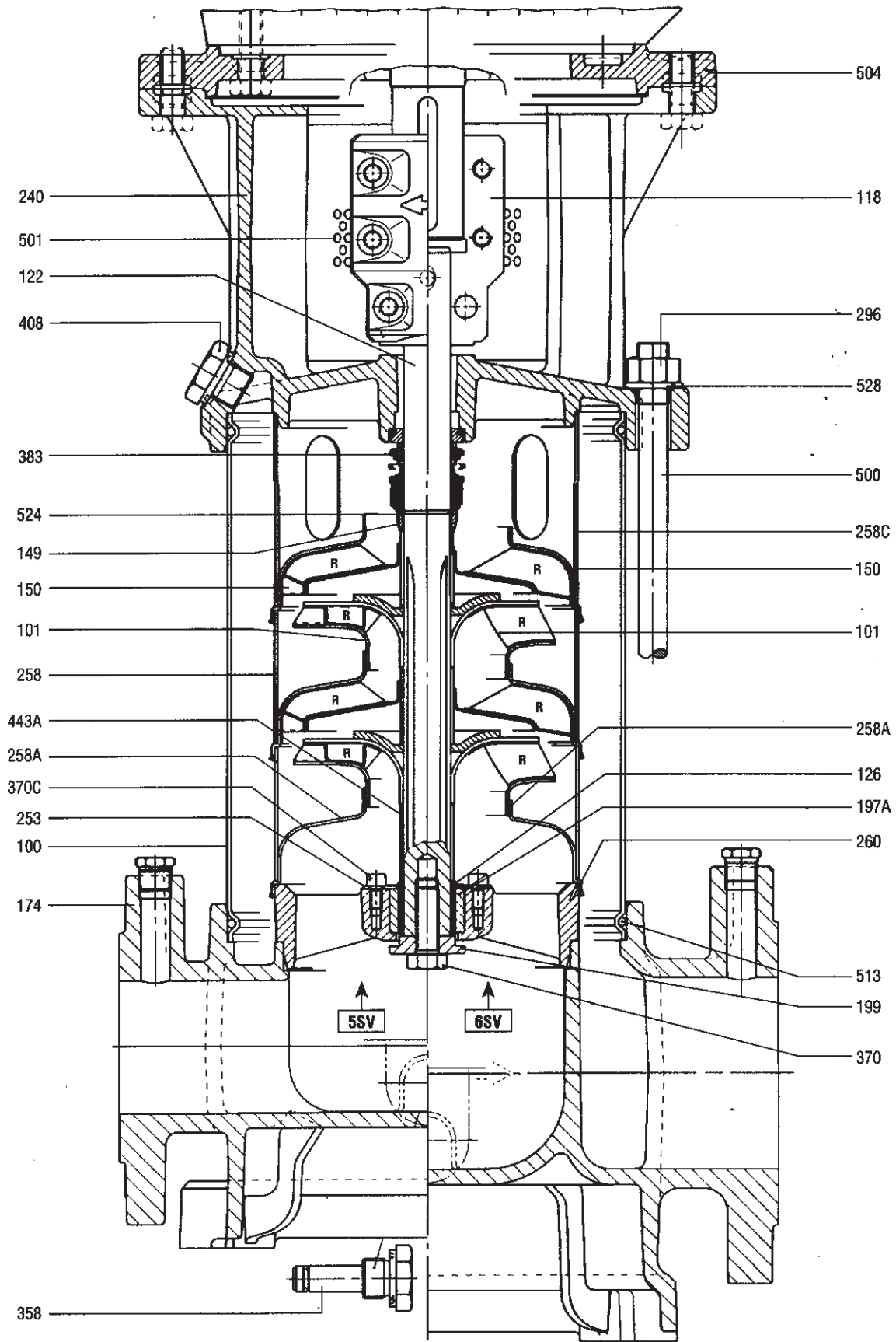
**NOTE: Stages 18-24 are available 50Hz only.**



# 3SV AND 4SV

Item No.	Part Name	Number of Stages														
		2	3	4	5	6	7	8	9	10	11	12	13	14	16	
240	Motor adapter	See motor adapter chart page 13														
504	Adapter flange (motor mounting)	See motor adapter chart page 13														
501	Coupling guard	1L184			3SV=1L184			4SV=4L183			4L183					
122	Shaft assembly includes items 149,199,370,524 and coupling pin	Type A	4L254	4L255	4L256	4L257	4L258	4L258	4L259	4L260	4L260	4L261				
		Type B	4L254	4L255	4L256	4L257	4L258	4L258	4L259	4L260	4L260	4L261	4L262	4L262	4L439	4L440
		Type C				4L256	4L257	4L258	4L258	4L259	4L260	4L260	4L261	4L262	4L262	
		Type D	4L263	4L264	4L265	4L266	4L267	4L267	4L268	4L269	4L269	4L270	4L271	4L271	4L441	4L442
126	Shaft sleeve	4L181														
100	Casing with fill plug	Type A	1L391	1L392	1L393	1L394	1L395	1L395	1L396	1L397	1L397	1L398				
		Type B	1L391	1L392	1L393	1L394	1L395	1L395	1L396	1L397	1L397	1L398	1L399	1L399	1L515	1L516
		Type C				1L409	1L410	1L411	1L411	1L412	1L413	1L413	1L414	1L415	1L415	
		Type D	1L400	1L401	1L402	1L403	1L404	1L404	1L405	1L406	1L406	1L407	1L408	1L408	1L517	1L518
151	Casing spacer	Type A	4L173													
		Type B	4L173													
		Type C				4L173										
		Type D	4L251													
513	O-ring casing	5L94 Viton			5L89 EPR											
174	Pump body includes item 151	Type A	1L339													
		Type B	1L341													
		Type C				1L243										
		Type D	1L389													
		Victaulic	1L501													
448	Base plate	Type A	1L381													
		Type B	1L382													
		Type C				1L382										
		Type D	1L382													
159	Seal housing	Type A	1L378													
		Type B	1L378													
		Type C				1L378										
		Type D	1L417													
383	Mechanical seal with washer	See optional seal table on page 1														
524	Split ring	4L246														
149	Split ring cover	4L244														
258C	Final spacer	Type A	4L175													
		Type B	4L175													
		Type C				4L175										
		Type D	4L249													
150	Final diffuser	Type A	3L27													
		Type B	3L27													
		Type C				3L27										
		Type D	3L29													
258A	1st stage bowl with impeller Viton O-ring	Type A	7L355													
		Type B	3SV=7L355			4SV=7L356										
		Type C				3SV=7L355				4SV=7L356						
		Type D	3SV=7L364			4SV=7L365										
258B	Bowl with bushing and impeller Viton O-ring	Type A	7L352													
		Type B	3SV=7L352			4SV=7L353										
		Type C				3SV=7L352				4SV=7L353						
		Type D	3SV=7L361			4SV=7L362										
258	Bowl with impeller Viton O-ring	Type A	7L349													
		Type B	3SV=7L349			4SV=7L350										
		Type C				3SV=7L349				4SV=7L350						
		Type D	3SV=7L358			4SV=7L359										
158D	Final Diffuser Flange						4L200				4L200					
157	Stage spacer						4L252				4L252					
101	Impeller	3SV=2L180			4SV=2L190											
443A	Impeller spacer	4L179														
443B	Impeller spacer (intermediate)	4L178														
199	Impeller fixing washer	13L106														
370	Impeller fixing screw	13L96														
349	O-ring impeller	3SV=5L91 Viton			3SV=5L84 EPR			4SV=5L92 Viton			4SV=5L85 EPR					
500	Tie rod with nuts and washer	4L274	4L275	4L276	4L277	4L278	4L279	4L279	4L280	4L280	4L281	4L282	4L282	4L326	4L327	
296	Nut tie rod	13L99														
528	Washer tie rod	13L101														
540	Oval Flange assembly 3SV Type A only	4L187														
118	Coupling complete	See coupling table on page 3														
408	Fill plug with O-ring	6L19 Viton					6L25 EPR									
358	Drain plug with O-ring	6L18 Viton					6L24 EPR									
---	Motor assembly shim	4L242														
---	Filling funnel	4L247														

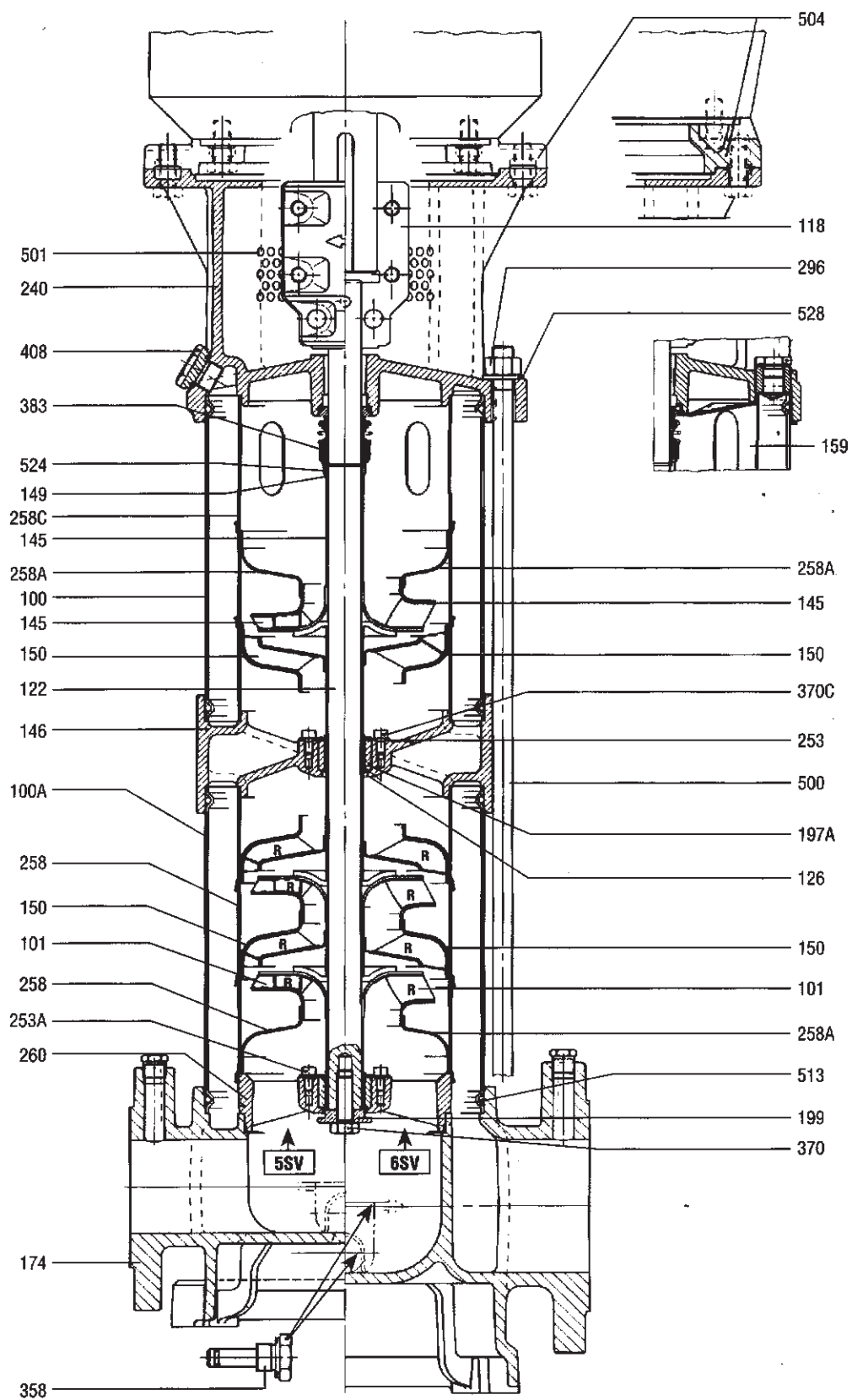
**NOTE: Stages 12-16 are available 50Hz only.**



159 Seal Housing Type D is not shown.

# 5SV AND 6SV WITHOUT CROSSOVER

Item No.	Part Name	Number of Stages			
		2	3	4	
240	Motor adapter	See motor adapter chart page 13			
504	Adapting flange (motor mounting)	See motor adapter chart page 13			
501	Coupling guard	4L289			
122	Shaft assembly includes items 149,199,370,524 and coupling pin	Type B	4L290	4L291	4L292
		Type C	4L297	4L298	4L299
126	Shaft sleeve	4L287			
100	Casing upper	Type B	1L424	1L425	1L426
		Type D	1L430	1L431	1L432
513	O-ring casing	5L42 Viton	5L95 EPR		
174	Pump body	5SV Type B	1L418		
		5SV Type D	1L421		
		6SV Type B	1L420		
		6SV Type D	1L423		
197A	Bushing	7L366			
253	Bearing retainer	4L319			
370C	Bearing fixing screw	13L65			
260	Lower support	Type B	4L318		
		Type D	4L317		
159	Seal housing (Type D only)	1L436			
383	Mechanical seal with washer	See optional seal table on page 1			
524	Split ring	4L311			
149	Split ring cover	4L288			
258	Final spacer	4L285			
258	Stage spacer	4L286			
150	Right hand diffuser	5SV	3L30		
		6SV	3L31		
258A	1st stage bowl	5SV	7L367		
		6SV	7L368		
101	Impeller right hand	5SV	2L240		
		6SV	2L260		
443A	Impeller spacer	4L284			
199	Impeller fixing washer	13L112			
370	Impeller fixing screw	13L109			
500	Tie rod with nuts and washer	4L304	4L305	4L306	
296	Nut tie rod	13L110			
528	Washer tie rod	13L111			
118	Coupling complete	See coupling chart on page 3			
408	Fill plug with O-ring	Type B	6L22 Viton	6L28 EPR	
		Type D	6L19 Viton	6L25 EPR	
358	Drain plug with O-ring	Type B	6L21 Viton	6L27 EPR	
		Type D	6L21 Viton	6L27 EPR	
---	Motor assembly shim	4L242			
---	Filling funnel	4L247			



# 5SV AND 6SV WITH CROSSOVER

Item No.	Part Name	Number of Stages								
		5	6	7	8	9	10	11	12	
240	Motor adapter	See motor adapter chart page 13								
504	Adapting flange (motor mounting)	See motor adapter chart page 13								
501	Coupling guard	4L289								
122	Shaft assembly includes items 149,199,370,524 and coupling pin	Type B	4L293	4L294	4L295	4L296	4L345	4L346	4L347	4L348
		Type D	4L300	4L301	4L302	4L303	4L349	4L350	4L351	4L352
126	Shaft sleeve	4L287								
100	Casing upper	Type B	1L427	1L427	1L428	1L428	1L429	1L429	1L521	1L521
		Type D	1L433	1L433	1L434	1L434	1L435	1L435	1L523	1L523
	Casing lower	Type B	1L427	1L428	1L428	1L429	1L429	1L521	1L521	1L522
		Type D	1L433	1L434	1L434	1L435	1L435	1L523	1L523	1L524
146	Intermediate support	Type B	4L315							
		Type D	4L316							
513	O-ring casing	5L42 Viton	5L95 EPR							
174	Pump body	5SV Type B	1L419							
		5SV Type D	1L422							
		6SV Type B	1L420	1L419						
		6SV Type D	1L423	1L422						
197A	Bushing	7L366								
253	Bearing retainer	4L319								
370C	Bearing fixing screw	13L65								
260	Lower support	Type B	4L318							
		Type D	4L317							
159	Seal housing (Type D only)	1L436								
383	Mechanical seal with washer	See optional seal table on page 1								
524	Split ring	4L311								
149	Split ring cover	4L288								
258	Final spacer	4L285								
258	Stage spacer	4L286								
150	Right hand diffuser	5SV	3L30							
		6SV	3L31							
150	Left hand diffuser	5SV	3L32							
		6SV	3L33							
258A	1st stage bowl	5SV	7L367							
		6SV	7L368							
101	Impeller right hand	5SV	2L240							
		6SV	2L260							
145	Impeller left hand	5SV	2L250							
		6SV	2L270							
443A	Impeller spacer	4L284								
199	Impeller fixing washer	13L112								
370	Impeller fixing screw	13L109								
500	Tie rod with nuts and washer	4L307	4L308	4L309	4L310	4L328	4L329	4L330	4L331	
296	Nut tie rod	13L110								
528	Washer tie rod	13L111								
118	Coupling complete	See coupling chart on page 3								
408	Fill plug with O-ring	Type B	6L22 Viton	6L28 EPR						
		Type D	6L19 Viton	6L25 EPR						
358	Drain plug with O-ring	Type B	6L21 Viton	6L27 EPR						
		Type D	6L21 Viton	6L27 EPR						
---	Motor assembly shim	4L242								
---	Filling funnel	4L247								

**NOTE: Stages 9-12 are available on 5SV 50Hz only.**

## OPTIONAL VICTAULIC MATING COMPONENTS

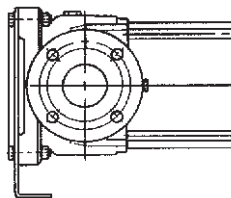
Size	Victaulic Coupling	Victaulic Threaded Connection
1SV	4L194	4L196
2SV		
3SV	4L195	4L197
4SV		
5SV	Not Available	
6SV		

## REPLACEMENT O-RING FOR OVAL FLANGE ASSEMBLY

Size	O-Ring repair part number
1SV	4L170
2SV	
3SV	4L171
4SV	

## OPTIONAL HORIZONTAL MOUNTING FOOT

Size	Inlet Location	Part Number
1SV	When inlet flange is horizontal	9L92
1SV	When inlet flange is vertical	9L93
2SV	When inlet flange is horizontal	9L92
2SV	When inlet flange is vertical	9L93
3SV	When inlet flange is horizontal	9L90
3SV	When inlet flange is vertical	9L91
3SV	When inlet flange is horizontal	9L90
3SV	When inlet flange is vertical	9L91
5SV	When inlet flange is horizontal	9L91
6SV	When inlet flange is horizontal	9L91



# MOTOR ADAPTER AND ADAPTER RINGS TABLE

PUMP	ODP-TEFC	ODP-TEFC	ODP-TEFC	ODP	ODP	TEFC	ODP	TEFC	ODP	TEFC	TEFC	ODP	TEFC	ODP	TEFC	ODP		
	56C	184TCH	184TC	213TC	215TC		254TC		256TC		284TC				286TC			
	HP 0.5 to 3	HP 5 to 7.5	HP 5 to 7.5	HP 10	HP 15	HP 10	HP 20	HP 15	HP 25	HP 20	HP 25	HP 30	HP 30	HP 40	HP 40	HP 50		
1SV	Motor Adapter 1L383		Motor Adapter 1K327															
2SV																		
3SV	Motor Adapter 1L384		Motor Adapter 1K328	Adapter Flange 1L386					Moter Adapter 1L385									
4SV																		
5SV				Adapter Flange 1L386					Horizontal Mounted Iron= 1L525 Stainless= 1L526					Adapter Flange 1L439 Horizontal Mounted Iron= 1L525 Stainless= 1L526				
6SV																		

