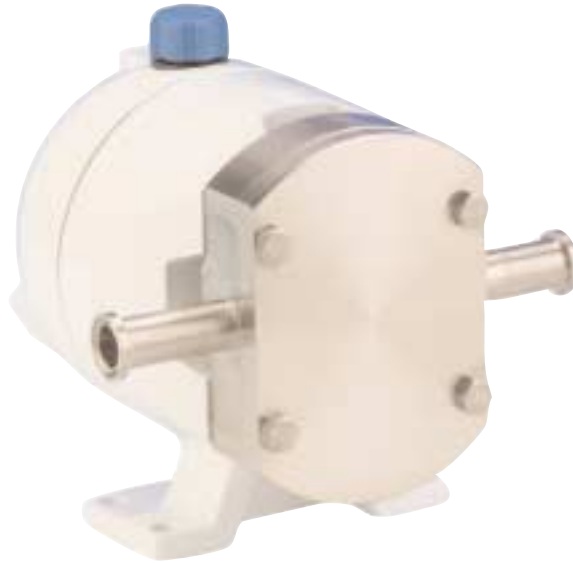


Spare Parts List

3 Size Pumps

Hy~Line

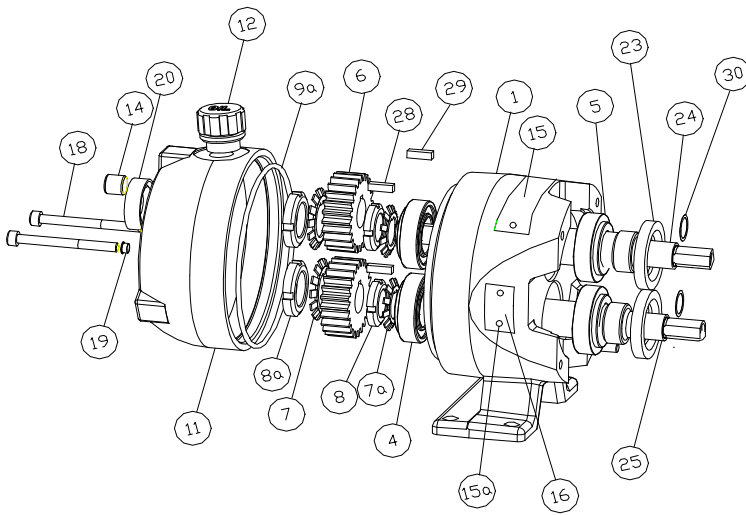


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Page 2 - Page 6	-	Wet End - Rotor Case & Rotors
Page 7	-	Single Mechanical Seal
Page 8	-	Flush For Single Mechanical Seal
Page 9	-	Relief Valves
Page 10	-	Thermal Jackets
Page 11	-	Tools

3 Size Pumps

Gearbox and Bearing Housing

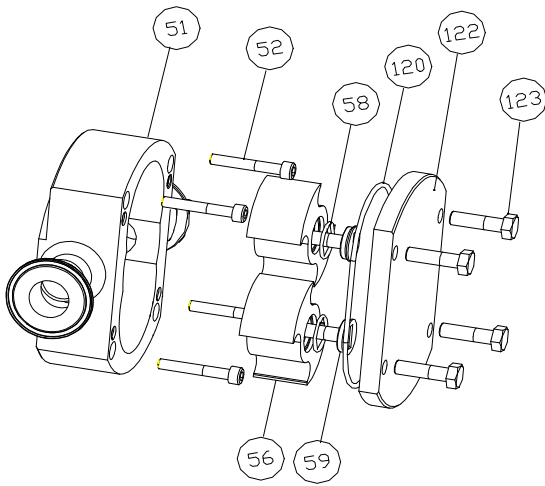


Key No.	Description	Where used	Part No.	Qty Req.
1	Bearing Carrier Housing (Aluminium)	32 & 34 Size	54305-0000	1
4	Bearing - Rear	32 & 34 Size	92601-6002	2
5	Bearing - Front	32 & 34 Size	92601-6002	2
6	Timing Gear Set (2 gears per set)	32 & 34 Size	54308-0000	1
7	Tab Washer - Gear Nut	32 & 34 Size	91602-6001	2
7a	Tab Washer - Bearing Nut	32 & 34 Size	91613-6006	2
8	Bearing Nut	32 & 34 Size	91085-6002	2
8a	Gear Nut	32 & 34 Size	91085-6001	2
9a	O-Ring - Gear Cover	32 & 34 Size	SP2000-03	1
11	Gear Cover - Aluminium - Aluminium, Vertical Ports	32 & 34 Size	54306-0000 54306-1000	1
12	Plug - Oil Filler/Breather	32 & 34 Size	24020-0002	1
14	Drain Plug	32 & 34 Size	SP2650-0220	1
15	Label - Hy~Line/Ultima	32 & 34 Size	23005-1390	1
15a	Rivets	32 & 34 Size	X3058-022F	2
16	Label - Model no., Spec	32 & 34 Size	23005-1919	1
18	Screw - Gear Cover	32 & 34 Size	X3007-195F	2
19	Washer, Gear Cover. Nylite	32 & 34 Size	SP1613-1389	1
20	Lip Seal Rear - Gear Cover	32 & 34 Size	92701-6004	1
23	Lip Seal Front - Bearing Carrier Housing (Silicone)	32 & 34 Size	92701-6066	2
24	Shaft - Driving	32 Size 34 Size	54327-0000 54347-0000	1
25	Shaft - Driven	32 Size 34 Size	54328-0000 54348-0000	1
28	Key - Timing Gear Drive	32 & 34 Size	X4000-109A	2
29	Key - Drive Shaft	32 & 34 Size	X4000-109A	2
30	Shim Kit - Rotor Clearance	32 & 34 Size	55371-0000B	1

	Gearbox Service Kit Consists of : 2 x Front Oil Seal for bearing housing (23) 2 x Rear Oil Seal for gear cover (20) 1 x Gasket - Gear cover (9a) 2 x Washer for sealing gear cover screws (19)	32 & 34 Size	54385-0000B	1
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3 Size Pumps

Wet End -
Rotor Case & Rotors



Key No.	Description	Where used	Part No.	Qty Req.
51	Rotor Case with welded ports & :- All Mech Seals - Tri - Clamp (BS4825 part 3) - Standard Standard Machined Finish	32 Size 34 Size	54323-1000 54343-1100	1
	Electro-Polish Finish	32 Size 34 Size	54323-1090 54343-1190	
	0.5 Micron & Electro-Polish Finish	32 Size 34 Size	54323-1010 54343-1110	
	All Mech Seals - Tri - Clamp (BS4825 part 3) - Enlarged Standard Machined Finish	32 Size 34 Size	54323-1100 54343-1150	
	Electro-Polish Finish	32 Size 34 Size	54323-1190 34343-1159	
	0.5 Micron & Electro-Polish Finish	32 Size 34 Size	34323-1110 34343-1151	
	All Mech Seals - BSP (BS2779) - Standard Standard Machined Finish	32 Size 34 Size	54323-2000 54343-2100	
	Electro-Polish Finish	32 Size 34 Size	54323-2090 54343-2190	
	0.5 Micron & Electro-Polish Finish	32 Size 34 Size	54323-2010 54343-2110	
	All Mech Seals - BSP (BS2779) - Enlarged Standard Machined Finish	32 Size 34 Size	54323-2100 54343-2150	
	Electro-Polish Finish	32 Size 34 Size	54323-2190 34343-2159	
	0.5 Micron & Electro-Polish Finish	32 Size 34 Size	34323-2110 34343-2151	
	All Mech Seals - IDF (ISO 2853) - Standard Standard Machined Finish	32 Size 34 Size	54323-3000 54343-3100	
	Electro-Polish Finish	32 Size 34 Size	54323-3090 54343-3190	
	0.5 Micron & Electro-Polish Finish	32 Size 34 Size	54323-3010 54343-3110	
	All Mech Seals - IDF (ISO 2853) - Enlarged Standard Machined Finish	32 Size 34 Size	54323-3100 54343-3150	
	Electro-Polish Finish	32 Size 34 Size	54323-3190 34343-3159	
	0.5 Micron & Electro-Polish Finish	32 Size 34 Size	34323-3110 34343-3151	

All Mech Seals - RJT (BS1864) - Standard Standard Machined Finish	32 Size	54323-4000
	34 Size	54343-4100
Electro-Polish Finish	32 Size	54323-4090
	34 Size	54343-4190
0.5 Micron & Electro-Polish Finish	32 Size	54323-4010
	34 Size	54343-4110
All Mech Seals - RJT (BS1864) - Enlarged Standard Machined Finish	32 Size	54323-4100
	34 Size	54343-4150
Electro-Polish Finish	32 Size	54323-4190
	34 Size	34343-4159
0.5 Micron & Electro-Polish Finish	32 Size	34323-4110
	34 Size	34343-4151
All Mech Seals - 3A ACME (BS3581) - Standard Standard Machined Finish	32 Size	54323-5000
	34 Size	54343-5100
Electro-Polish Finish	32 Size	54323-5090
	34 Size	54343-5190
0.5 Micron & Electro-Polish Finish	32 Size	54323-5010
	34 Size	54343-5110
All Mech Seals - 3A ACME (BS3581) - Enlarged Standard Machined Finish	32 Size	54323-5100
	34 Size	54343-5150
Electro-Polish Finish	32 Size	54323-5190
	34 Size	34343-5159
0.5 Micron & Electro-Polish Finish	32 Size	34323-5110
	34 Size	34343-5151
All Mech Seals - DIN 11851 - Standard Standard Machined Finish	32 Size	54323-6000
	34 Size	54343-6100
Electro-Polish Finish	32 Size	54323-6090
	34 Size	54343-6190
0.5 Micron & Electro-Polish Finish	32 Size	54323-6010
	34 Size	54343-6110
All Mech Seals - DIN 11851 - Enlarged Standard Machined Finish	32 Size	54323-6100
	34 Size	54343-6150
Electro-Polish Finish	32 Size	54323-6190
	34 Size	34343-6159
0.5 Micron & Electro-Polish Finish	32 Size	34323-6110
	34 Size	34343-6151
All Mech Seals - SMS 1146 - Standard Standard Machined Finish	32 Size	54323-7000
	34 Size	54343-7100
Electro-Polish Finish	32 Size	54323-7090
	34 Size	54343-7190
0.5 Micron & Electro-Polish Finish	32 Size	54323-7010
	34 Size	54343-7110
All Mech Seals - SMS 1146 - Enlarged Standard Machined Finish	32 Size	54323-7100
	34 Size	54343-7150
Electro-Polish Finish	32 Size	54323-7190
	34 Size	34343-7159
0.5 Micron & Electro-Polish Finish	32 Size	34323-7110
	34 Size	34343-7151

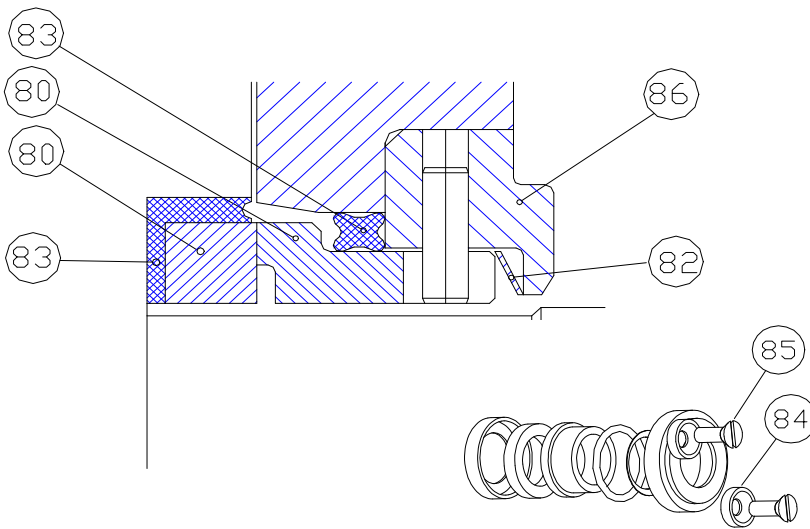
	All Mech Seals - NPT - Standard Standard Machined Finish	32 Size 34 Size	54323-9000 54343-9100		
	Electro-Polish Finish	32 Size 34 Size	54323-9090 54343-9190		
	0.5 Micron & Electro-Polish Finish	32 Size 34 Size	54323-9010 54343-9110		
	All Mech Seals - NPT - Enlarged Standard Machined Finish	32 Size 34 Size	54323-9100 54343-9150		
	Electro-Polish Finish	32 Size 34 Size	54323-9190 34343-9159		
	0.5 Micron & Electro-Polish Finish	32 Size 34 Size	34323-9110 34343-9151		
51	Rotor Case with welded ports, Flush & :- All Mech Seals - Tri - Clamp (BS4825 part 3) - Standard Standard Machined Finish	32 Size 34 Size	54323-1000F 54343-1100F	1	
	Electro-Polish Finish	32 Size 34 Size	54323-1090F 54343-1190F		
	0.5 Micron & Electro-Polish Finish	32 Size 34 Size	54323-1010F 54343-1110F		
	All Mech Seals - Tri - Clamp (BS4825 part 3) - Enlarged Standard Machined Finish	32 Size 34 Size	54323-1100F 54343-1150F		
	Electro-Polish Finish	32 Size 34 Size	54323-1190F 34343-1159F		
	0.5 Micron & Electro-Polish Finish	32 Size 34 Size	34323-1110F 34343-1151F		
	All Mech Seals - BSP (BS2779) - Standard Standard Machined Finish	32 Size 34 Size	54323-2000F 54343-2100F		
	Electro-Polish Finish	32 Size 34 Size	54323-2090F 54343-2190F		
	0.5 Micron & Electro-Polish Finish	32 Size 34 Size	54323-2010F 54343-2110F		
	All Mech Seals - BSP (BS2779) - Enlarged Standard Machined Finish	32 Size 34 Size	54323-2100F 54343-2150F		
	Electro-Polish Finish	32 Size 34 Size	54323-2190F 34343-2159F		
	0.5 Micron & Electro-Polish Finish	32 Size 34 Size	34323-2110F 34343-2151F		
	All Mech Seals - IDF (ISO 2853) - Standard Standard Machined Finish	32 Size 34 Size	54323-3000F 54343-3100F		
	Electro-Polish Finish	32 Size 34 Size	54323-3090F 54343-3190F		
	0.5 Micron & Electro-Polish Finish	32 Size 34 Size	54323-3010F 54343-3110F		
	All Mech Seals - IDF (ISO 2853) - Enlarged Standard Machined Finish	32 Size 34 Size	54323-3100F 54343-3150F		
	Electro-Polish Finish	32 Size 34 Size	54323-3190F 34343-3159F		
	0.5 Micron & Electro-Polish Finish	32 Size 34 Size	34323-3110F 34343-3151F		

All Mech Seals - RJT (BS1864) - Standard Standard Machined Finish	32 Size	54323-4000F	
	34 Size	54343-4100F	
Electro-Polish Finish	32 Size	54323-4090F	
	34 Size	54343-4190F	
0.5 Micron & Electro-Polish Finish	32 Size	54323-4010F	
	34 Size	54343-4110F	
All Mech Seals - RJT (BS1864) - Enlarged Standard Machined Finish	32 Size	54323-4100F	
	34 Size	54343-4150F	
Electro-Polish Finish	32 Size	54323-4190F	
	34 Size	34343-4159F	
0.5 Micron & Electro-Polish Finish	32 Size	34323-4110F	
	34 Size	34343-4151F	
All Mech Seals - 3A ACME (BS3581) - Standard Standard Machined Finish	32 Size	54323-5000F	
	34 Size	54343-5100F	
Electro-Polish Finish	32 Size	54323-5090F	
	34 Size	54343-5190F	
0.5 Micron & Electro-Polish Finish	32 Size	54323-5010F	
	34 Size	54343-5110F	
All Mech Seals - 3A ACME (BS3581) - Enlarged Standard Machined Finish	32 Size	54323-5100F	
	34 Size	54343-5150F	
Electro-Polish Finish	32 Size	54323-5190F	
	34 Size	34343-5159F	
0.5 Micron & Electro-Polish Finish	32 Size	34323-5110F	
	34 Size	34343-5151F	
All Mech Seals - DIN 11851 - Standard Standard Machined Finish	32 Size	54323-6000F	
	34 Size	54343-6100F	
Electro-Polish Finish	32 Size	54323-6090F	
	34 Size	54343-6190F	
0.5 Micron & Electro-Polish Finish	32 Size	54323-6010F	
	34 Size	54343-6110F	
All Mech Seals - DIN 11851 - Enlarged Standard Machined Finish	32 Size	54323-6100F	
	34 Size	54343-6150F	
Electro-Polish Finish	32 Size	54323-6190F	
	34 Size	34343-6159F	
0.5 Micron & Electro-Polish Finish	32 Size	34323-6110F	
	34 Size	34343-6151F	
All Mech Seals - SMS 1146 - Standard Standard Machined Finish	32 Size	54323-7000F	
	34 Size	54343-7100F	
Electro-Polish Finish	32 Size	54323-7090F	
	34 Size	54343-7190F	
0.5 Micron & Electro-Polish Finish	32 Size	54323-7010F	
	34 Size	54343-7110F	
All Mech Seals - SMS 1146 - Enlarged Standard Machined Finish	32 Size	54323-7100F	
	34 Size	54343-7150F	
Electro-Polish Finish	32 Size	54323-7190F	
	34 Size	34343-7159F	
0.5 Micron & Electro-Polish Finish	32 Size	34323-7110F	
	34 Size	34343-7151F	

	All Mech Seals - NPT - Standard Standard Machined Finish	32 Size 34 Size	54323-9000F 54343-9100F		
	Electro-Polish Finish	32 Size 34 Size	54323-9090F 54343-9190F		
	0.5 Micron & Electro-Polish Finish	32 Size 34 Size	54323-9010F 54343-9110F		
	All Mech Seals - NPT - Enlarged Standard Machined Finish	32 Size 34 Size	54323-9100F 54343-9150F		
	Electro-Polish Finish	32 Size 34 Size	54323-9190F 34343-9159F		
	0.5 Micron & Electro-Polish Finish	32 Size 34 Size	34323-9110F 34343-9151F		
52	Screw - Rotor Case	32 & 34 Size	X3007-186F	4	
56	Rotor Kit (Includes 2 x rotors) High Pressure (316L SS) - Standard Machined	32 Size 34 Size	54322-0009B 54342-0009B	1	
	High Pressure (316L SS) - Electro-Polish	32 Size 34 Size	54322-0099B 54342-0099B		
	High Pressure (316L SS) - 0.5 Micron & Electro-Polish	32 Size 34 Size	54322-0019B 54342-0019B		
	High Efficiency (316L SS) - Standard Machined	32 Size	54322-0008B		
	High Efficiency (316L SS) - Electro-Polish	32 Size	54322-0098B		
	High Efficiency (316L SS) - 0.5 Micron & Electro-Polish	32 Size	54322-0019B		
58	O-Ring - Rotor Retainer - Nitrile - EPDM - Viton - PTFE	32 & 34 Size 32 & 34 Size 32 & 34 Size 32 & 34 Size	92000-6047 92000-6058 92000-6057 92000-6059	2	
59	Rotor Retaining Screw	32 & 34 Size	54325-0000	2	
120	O-Ring - End Cover - Nitrile - EPDM - Viton - PTFE	32 & 34 Size 32 & 34 Size 32 & 34 Size 32 & 34 Size	92000-6049 92000-6055 92000-6054 92000-6056	1	
122	End Cover - Plain O-Ring Joint 316 SS Standard Machined Finish Electro-Polish Finish 0.5 Micron & Electro-Polish Finish	32 & 34 Size 32 & 34 Size 32 & 34 Size	54309-0000 54309-0090 54309-0010	1	
123	Bolt - End Cover	32 & 34 Size	X3001-209F	4	

3 Size Pumps

Single Mechanical Seals



Key No.	Description	Where used	Part No.	Qty Req.
80	Primary Seal Face Kit (Includes both faces) - Carbon/Stainless Steel - Carbon/Silicon Carbide - Silicon Carbide/Silicon Carbide	32 & 34 Size 32 & 34 Size 32 & 34 Size	96080-6007 SP6080-0528 SP6080-0527	2
82	Wave Spring - Mechanical Seal	32 & 34 Size	X5250-005	2
83	Single Seal Trim Kit - Nitrile - EPDM - Viton - PTFE / Kalrez	32 & 34 Size 32 & 34 Size 32 & 34 Size 32 & 34 Size	96080-6008 SP6080-0545 96080-0619 SP6080-0547	2
84	Clamp Plate	32 & 34 Size	55043-0000	4
85	Screw - Seal Housing	32 & 34 Size	X3005-178F	4
86	Seal Housing Kit (includes wave spring)	32 & 34 Size	SP6080-0538	2

	Pump Head Trim Kit - Nitrile - EPDM - Viton - PTFE	32 & 34 Size 32 & 34 Size 32 & 34 Size 32 & 34 Size	54384-9070B 54384-9077B 54384-9074B 54384-9072B	1
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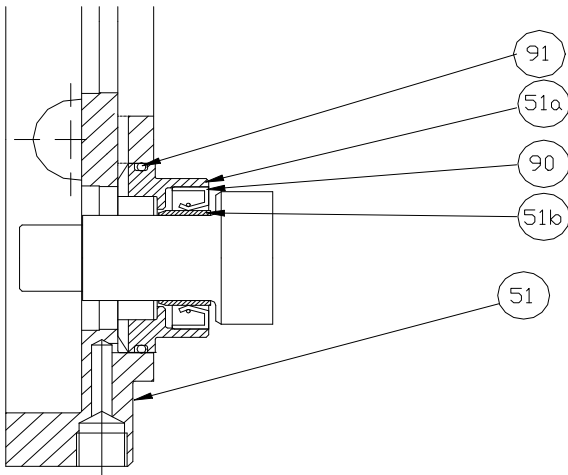
Consists of: 2 x Single seal trim kit (83), 2 x O-Ring rotor retainer (58), 1 x End cover o-ring (120), 2 x O-Ring shim retention (30)

	Seal Service Kit Carbon/Stainless - Nitrile - EPDM - Viton - PTFE Carbon/Silicon Carbide - Nitrile - EPDM - Viton - PTFE Silicon Carbide/Silicon Carbide - Nitrile - EPDM - Viton - PTFE	32 & 34 Size	54399-0001 54399-0003 54399-0005 54399-0007 54399-0009 54399-0011 54399-0013 54399-0015 54399-0017 54399-0019 54399-0021 54399-0023	1
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Consists of: 2 x Primary seal face kit (80), 1 x Pump head trim kit, 2 x Seal housing kit (86), 1 x Shim kit (30)

3 Size Pumps

Flush for Single Mechanical Seals



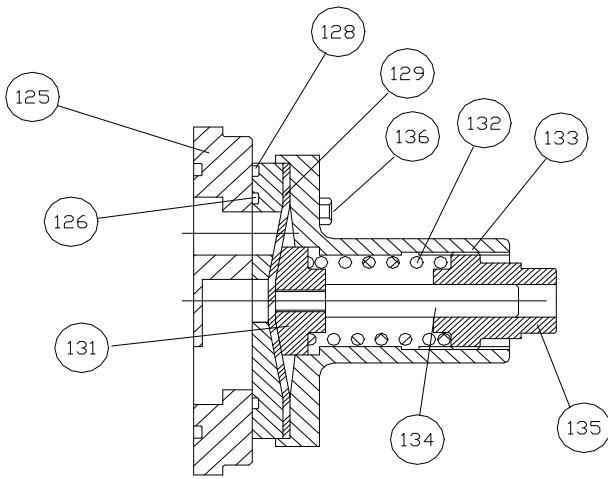
Key No.	Description	Where used	Part No.	Qty Req.	
51	Rotor Case - Flushed	32 Size 34 Size	See Rotor Case Part No.'s	1	
51a	Housing - Flushed Seal	32 & 34 Size	54344-0000	2	
51b	Sleeve	32 & 34 Size	54351-0011	2	
90	Lip Seal - Viton - Nitrile	32 & 34 Size 32 & 34 Size	92700-1050 92701-1035	2	
91	O-Ring - Nitrile	32 & 34 Size	92000-6034	2	

	Flushed Seal Housing Kit - Viton - Nitrile Consists of: 2 x Housing - Flushed Seal 2 x O-Ring - Nitrile 2 x Lip Seal - Viton 2 x Sleeve	32 & 34 Size	54345-0001 54345-0000	1	
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	Flushed Seal Conversion:- Order Flush rotor case (51) & Flushed seal housing kit				
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3 Size Pumps

Relief Valves

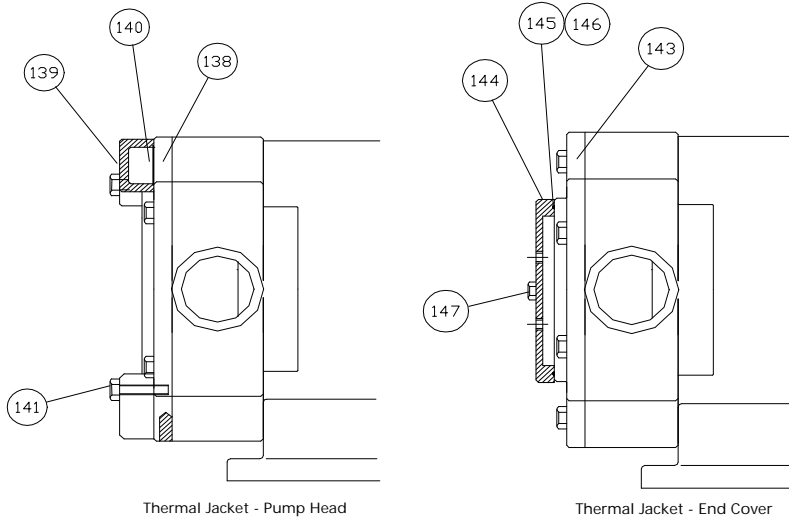


Key No.	Description	Where used	Part No.	Qty Req.	
Relief Valve					
125	End Cover	32 & 34 Size	54309-0001	1	
126	O-Ring - Relief Valve - Nitrile - PTFE - Viton	32 & 34 Size	X1990-119 X1990-123 92000-6068	1	
128	Seat - Relief valve	32 & 34 Size	54372-0000	1	
129	Diaphragm - Relief Valve - Nitrile - PTFE	32 & 34 Size	54373-0000 54373-0001	1	
131	Plunger	32 & 34 Size	24074-0000	1	
132	Spring - Relief Valve	32 & 34 Size	24075-0000	1	
133	Housing	32 & 34 Size	54382-0000	1	
134	Valve Guide	32 & 34 Size	24072-0000	1	
135	Adjusting Screw	32 & 34 Size	24078-0000	1	
136	Bolt - Relief Valve	32 & 34 Size	X3001-184F	4	

	Relief Valve Kit (includes all of the components above)	32 & 34 Size	54381-0000B	1	
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3 Size Pumps

Thermal Jackets



Key No.	Description	Where used	Part No.	Qty Req.
Thermal Jacket - Pump Head				
138	End Cover	32 & 34 Size	54309-0003	1
139	Jacket	32 & 34 Size	54301-0001	2
140	O-Ring	32 & 34 Size	92000-1457	2
141	Screws	32 & 34 Size	X3001-213F	4

Pump Head Jacket Kit (Includes all of the components above)	32 & 34 Size	54380-0003B	1
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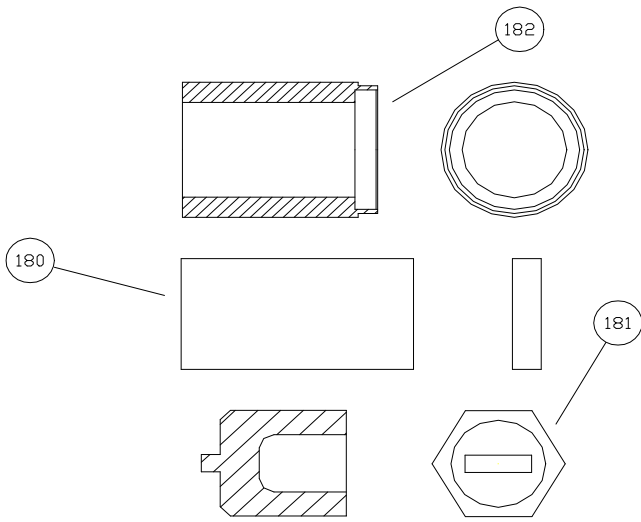
Thermal Jacket - End Cover				
143	End Cover	32 & 34 Size	54309-0004	1
144	Jacket	32 & 34 Size	54379-0000	1
145	O-Ring - Outer	32 & 34 Size	X4020-374B	1
146	O-Ring - Inner	32 & 34 Size	X4020-112B	1
147	Screws	32 & 34 Size	X3007-178F	1

End Cover Jacket Kit (Includes all of the components above)	32 & 34 Size	54380-0004B	1
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Relief Valve with Thermal Jacket - End Cover	32 & 34 Size	54380-0009B	1
Consists of: 1 x End cover (138), 1 x O-Ring - valve (126), 1 x Seat - valve (128) 1 x Diaphragm (129), 1 x Plunger (131), 1 x Spring (132), 1 x Housing (133) 1 x Valve guide (134), 1 x Adjusting screw (135), 2 x bolts (136) 2 x Jacket (139), 2 x O-ring (140) & 4 x Screws (141)			

3 Size Pumps

Tools



Key No.	Description	Where used	Part No.	Qty Req.	
180	Tool - Rotor Locking Pad	32 & 34 Size	55027-0000	1	
181	Socket Tool - Rotor Retainer	32 & 34 Size	54376-0000	1	
182	Tool - Seal Seat Removal	32 & 34 Size	55274-0000	1	