

Parts list

APP pumps

APP 0.6-43 / APM 0.8-2.9 /
APP W 5.1-10.2



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1. General

This parts list provides an overview of the content of the various service sets as well as exploded views for both non ATEX and ATEX certified pumps.
ATEX certified pumps are indicated by Ex in the designation.

Non ATEX	ATEX
APP 0.6-1.0	APP 0.6-1.0 Ex
APM 0.8-1.2	N/A
APP 1.5-2.5	APP 1.5-2.5 Ex
APM 1.8-2.9	N/A
APP 3.0-3.5	APP 3.0-3.5 Ex
APP 5.1-10.2	APP 5.1-10.2 Ex
APP W 5.1-10.2	N/A
APP 11-13	APP 11-13 Ex
APP 16-19	APP 16-19 Ex
APP 22	APP 22 Ex
APP 21-26	APP 21-26 Ex
APP 30-43	APP 30-43 Ex

Parts list | APP 0.6-43 / APM 0.8-2.9 / APP (W) 5.1-10.2

2. Parts list APP 0.6-1.0 and APM 0.8-1.2

Note:
The parts listed are not sold separately, only in various kits.

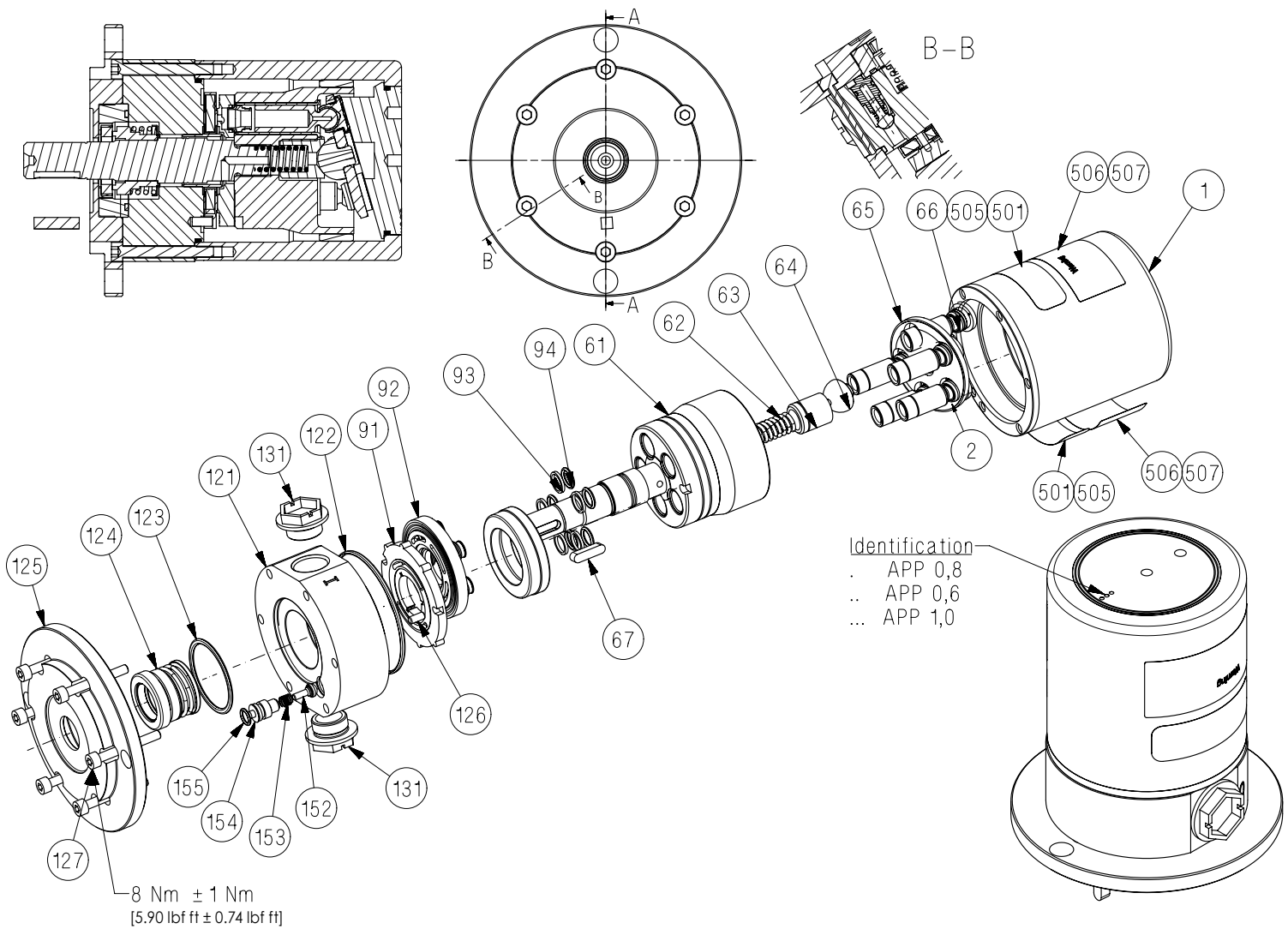
Parts for APM 0.8-1.2 are equivalent to the parts for APP 0.6-1.0 except for the valve plate sets.

Exploded view, see next page.

Pos.	Qty.	Designation	Material	180B4141 – Seal / Flushing valve set (APP 0.6-1.0)	180B4140 – Cylinder barrel set (APP 0.6)	180B4139 – Valve plate set (APP 0.6-1.0)	180F4100 – Valve plate set (APM 0.8 - 1.2)	180B4138 – Retainer set (APP 0.6-1.0)	180B4137 – Piston set (APP 0.6-1.0)
1	1	Housing	Duplex / PEEK						
2	1	Pin (Ø4x14)	AISI 316	x					
61	1	Cylinder barrel	Super Duplex / PEEK		x				
62	1	Spring	Duplex					x	
63	1	Spring guide	PEEK					x	
64	1	Retainer ball	Super Duplex					x	
65	1	Retainer plate	Super Duplex					x	
66	5	Piston	Super Duplex / PEEK						x
67	1	Key (5x5x20)	AISI 316	x					
91	1	Port plate	Super Duplex / PEEK			x	x		
92	1	Valve plate	Super Duplex			x	x		
93	5	Back-up ring	PTFE	x		x	x		
94	5	O-ring (Ø8.73x1.78)	NBR	x		x	x		
121	1	Port flange	Duplex						
122	1	O-ring (Ø68x2)	NBR	x					
123	1	O-ring (Ø40x2)	NBR	x					
124	1	Shaft seal	AISI 316 / NBR	x					
125	1	Mounting flange	Wetted part: PP Dry parts: AISI 316						
126	1	Pin (Ø4x9)	PEEK	x					
127	6	Screw (M6x40)	AISI 316	x					
152	1	Valve cone	PEEK	x					
153	1	Spring	Duplex	x					
154	1	Plug/guide	Duplex	x					
155	1	O-ring (Ø7.0x1.5)	NBR	x					
	1	Instruction		x	x	x	x	x	x

Parts list | APP 0.6-43 / APM 0.8-2.9 / APP (W) 5.1-10.2

3. Exploded view
APP 0.6-1.0 and APM 0.8-1.2



Parts list | APP 0.6-43 / APM 0.8-2.9 / APP (W) 5.1-10.2

4. Parts list APP 1.5-2.5 and APM 1.8-2.9

Note:
The parts listed are not sold separately, only in various kits

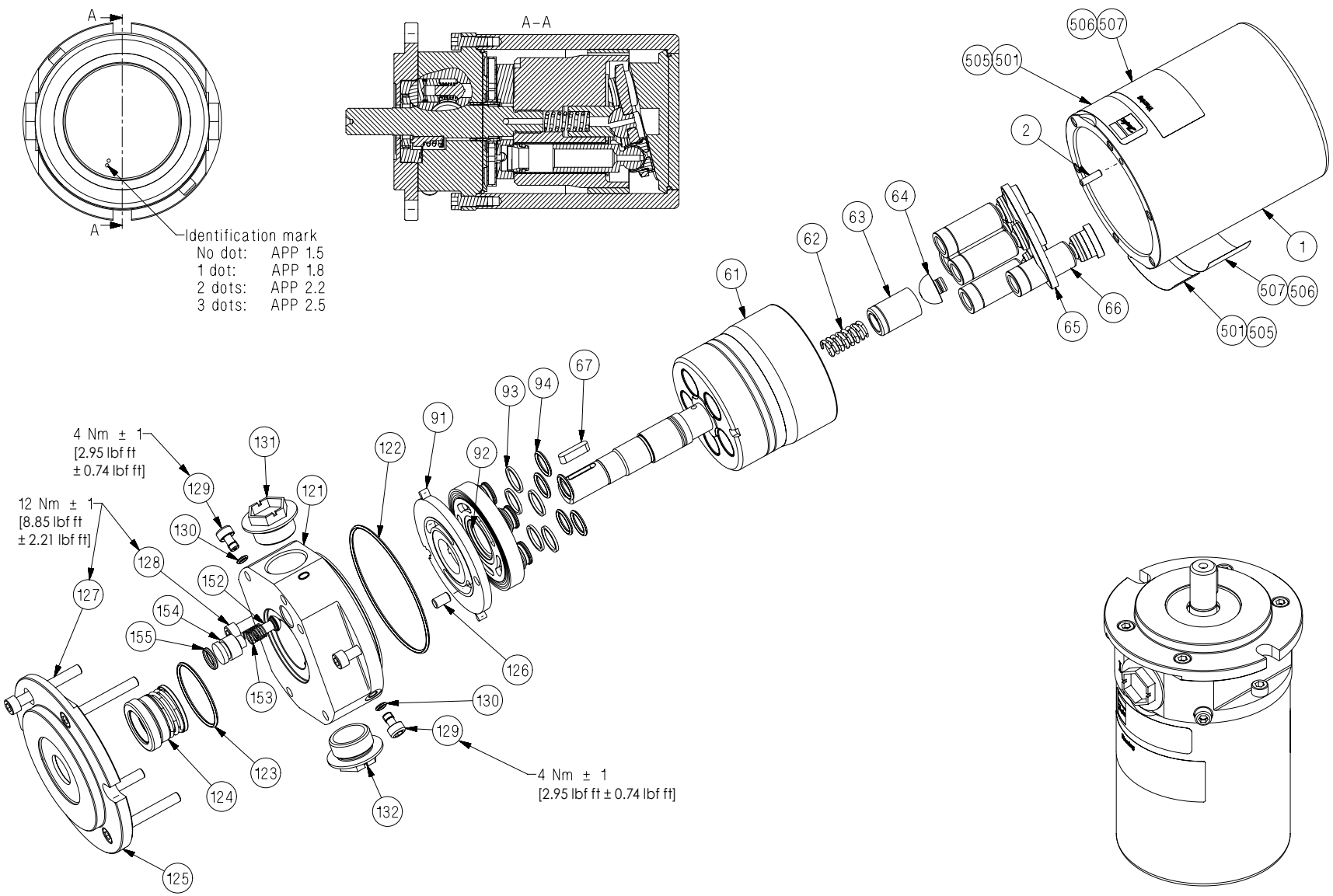
Parts for APM 1.8-2.9 are equivalent to the parts for APP 1.5-2.5 except for the valve plate sets.

Exploded view, see next page.

Pos.	Qnt.	Designation	Material	180B4147 – Seal set (APP 1.5-2.5)	180B4146 – Cylinder barrel set (APP 1.5-2.5)	180B4145 – Valve plate set (APP 1.5-2.5)	180F4007 – Valve plate set (APM 1.8 - 2.9)	180B4177 – Retainer set (APP 1.5-1.8 - APM 1.8-2.0)	180B4144 – Retainer set (APP 2.2-2.5 - APM 2.5-2.9)	180B4143 – Piston set (APP 1.5-2.5)	180B4136 – Flushing valve set (APP 1.5 - 3.5)
1	1	Housing	Duplex / PEEK								
2	1	Pin (Ø4x14)	AISI 316	x							
61	1	Cylinder barrel	Super Duplex / PEEK		x						
62	1	Spring	Duplex					x	x		
63	1	Spring guide	PEEK					x	x		
64	1	Retainer ball	Super Duplex					x	x		
65	1	Retainer plate	Super Duplex					x	x		
66	5	Piston	Super Duplex / PEEK							x	
67	1	Key (5x5x20)	AISI 316	x							
91	1	Port plate	Super Duplex / PEEK			x	x				
92	1	Valve plate	Super Duplex			x	x				
93	5	Back-up ring	PTFE	x		x	x				
94	5	O-ring (Ø13x2)	NBR	x		x	x				
121	1	Port flange	Duplex								
122	1	O-ring (Ø83x2)	NBR	x							
123	1	O-ring (Ø40x2)	NBR	x							
124	1	Shaft seal	AISI 316 / NBR	x							
125	1	Mounting flange	Wetted part: PP Dry part: AISI 316								
126	1	Pin (Ø6x10)	PEEK	x							
127	4	Screw (M6x45)	AISI 316	x							
128	2	Screw (M6x16)	AISI 316	x							
129	2	Bleeding plug	Duplex	x							
152	1	Valve cone	PEEK								x
153	1	Spring	Duplex								x
154	1	Plug/guide	Duplex								x
155	1	O-ring (Ø11.11x1.78)	NBR	x							x
	1	Instruction		x	x	x	x	x	x	x	x

Parts list | APP 0.6-4.3 / APM 0.8-2.9 / APP (W) 5.1-10.2

5. Exploded view
APP 1.5-2.5 and APM 1.8-2.9



Parts list | APP 0.6-43 / APM 0.8-2.9 / APP (W) 5.1-10.2

6. Parts list APP 3.0-3.5

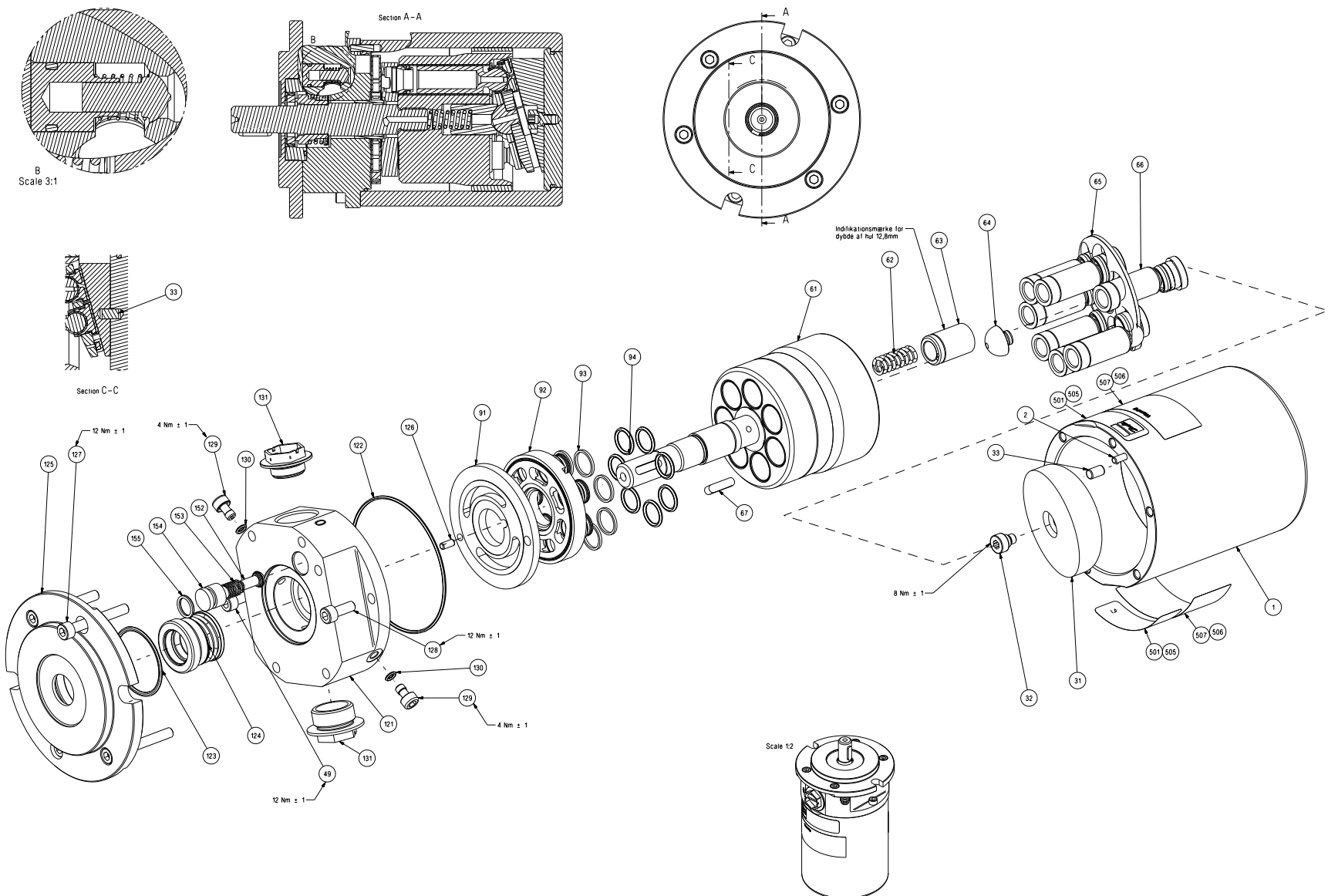
Note:
The parts listed are not sold separately, only in various kits.

Exploded view, see next page.

Pos.	Qnt.	Designation	Material	180B4153 – Seal set (APP 3.0-3.5)	180B4152 – Cylinder barrel set (APP 3.0-3.5)	180B4151 – Valve plate set (APP 3.0-3.5)	180B4150 – Retainer set (APP 3.0-3.5)	180B4149 – Piston set (APP 3.0-3.5)	180B4134 – Swash plate set (APP 3.0)	180B4135 – Swash plate set (APP 3.5)	180B4136 – Flushing valve set (APP 3.5)
1	1	Housing	Duplex / PEEK								
2	1	Pin (Ø4x14)	AISI 316	x							
31	1	Swash plate	Super Duplex						x	x	
32	1	Centre bolt	Duplex						x	x	
33	1	Pin (Ø6x10)	PEEK	x					x	x	
61	1	Cylinder barrel	Super Duplex / PEEK		x						
62	1	Spring	Duplex				x				
63	1	Spring guide	PEEK				x				
64	1	Retainer ball	Super Duplex				x				
65	1	Retainer plate	Super Duplex				x				
66	7	Piston	Super Duplex / PEEK					x			
67	1	Key (5x5x20)	AISI 316	x							
91	1	Port plate	Super Duplex / PEEK			x					
92	1	Valve plate	Super Duplex			x					
93	7	Back-up ring	PTFE	x		x					
94	7	O-ring (Ø13x2.0)	NBR	x		x					
121	1	Port flange	Duplex								
122	1	O-ring (Ø83x2)	NBR	x							
123	1	O-ring (Ø40x2)	NBR	x							
124	1	Shaft seal	AISI 316 / NBR	x							
125	1	Mounting flange	Wetted parts: PP Dry parts: AISI 316L								
126	1	Pin (Ø4x9)	PEEK	x							
127	4	Screw (M6x45)	AISI 316	x							
128	2	Screw (M6x16)	AISI 316	x							
129	2	Bleeding plug	Duplex	x							
130	2	O-ring (Ø4.5x1.5)	NBR	x							
152	1	Valve cone	PEEK								x
153	1	Spring	Duplex								x
154	1	Plug/guide	Duplex								x
155	1	O-ring (Ø11.11x1.78)	NBR	x							x
		Instruction		x	x	x	x	x	x	x	x

Parts list | APP 0.6-43 / APM 0.8-2.9 / APP (W) 5.1-10.2

7. Exploded view
APP 3.0-3.5



Parts list | APP 0.6-43 / APM 0.8-2.9 / APP (W) 5.1-10.2

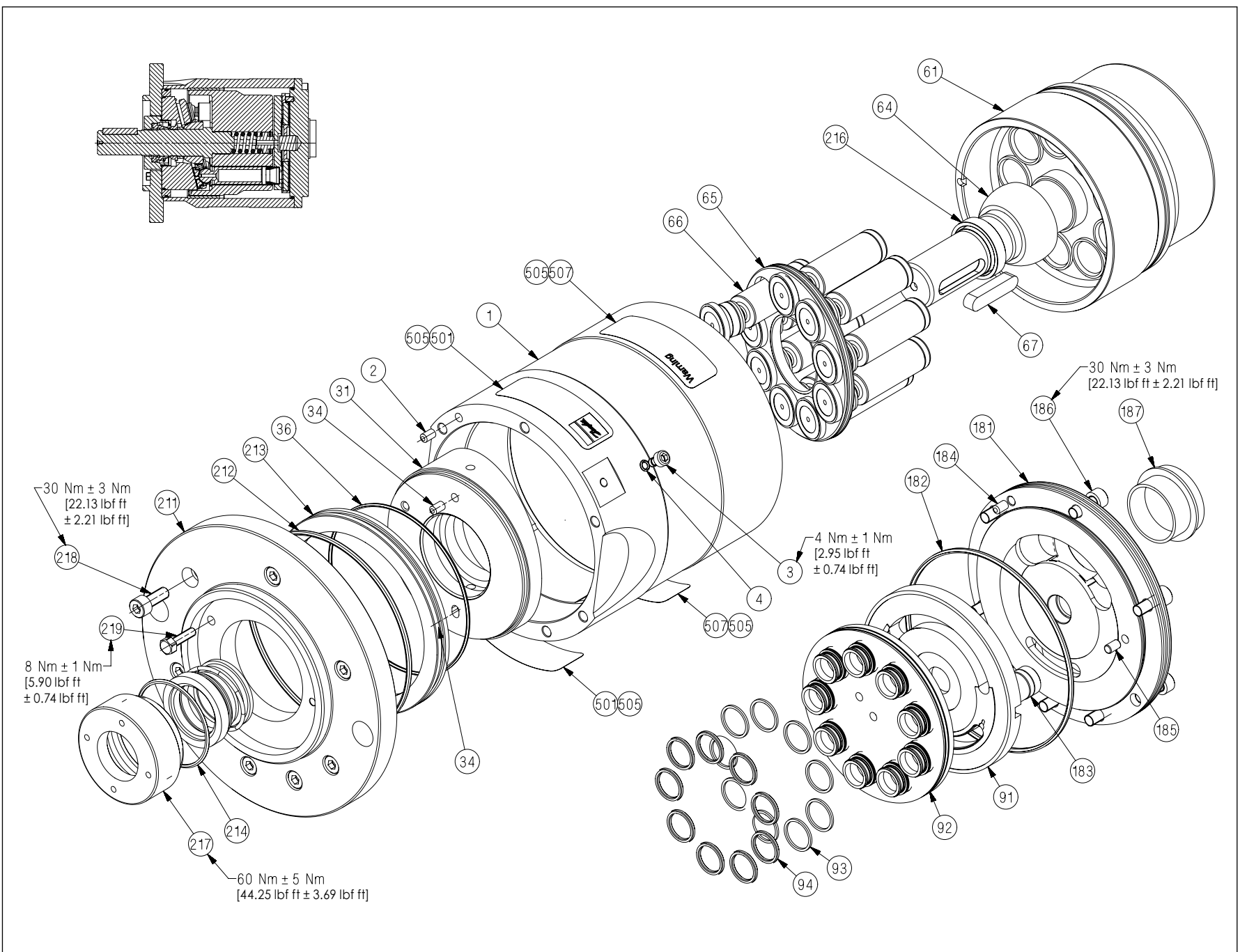
8. Parts list APP 5.1-10.2

Note:
The parts listed are not sold
separately, only in various kits.

Exploded view, see next page.

Pos.	Qnt.	Designation	Material	180B4161 – Seal set (APP 5.1-10.2)	180B4160 – Cylinder barrel (APP 5.1-10.2)	180B4158 – Valve plate set (APP 5.1-8.2)	180B4159 – Valve plate set (APP 10.2)	180B4156 – Retainer set (APP 5.1-8.2)	180B4157 – Retainer set (APP 10.2)	180B4154 – Piston set (APP 5.1-8.2)	180B4155 – Piston set (APP 10.2)	180B4129 – Swash plate set (APP 5.1)	180B4130 – Swash plate set (APP 6.5)	180B4131 – Swash plate set (APP 7.2)	180B4132 – Swash plate set (APP 8.2)	180B4133 – Swash plate set (APP 10.2)
1	1	Housing	Duplex / PEEK													
2	1	Pin (Ø6x10)	AISI 316	x												
3	2	Bleeding plug	Duplex	x												
4	2	O-ring (Ø4.5x1.5)	NBR	x												
31	1	Swash plate	Super Duplex									x	x	x	x	x
34	2	Pin (Ø6x10)	AISI 316	x								x	x	x	x	x
36	1	O-ring (Ø117x2.5)	NBR	x						x	x					
61	1	Cylinder barrel	Super Duplex / PEEK		x											
64	1	Retainer ball	Super Duplex					x	x							
65	1	Retainer plate	Super Duplex					x	x							
66	9	Piston	Super Duplex / PEEK							x	x					
67	1	Key (10x8x45)	AISI 316	x												
91	1	Port plate	Super Duplex / PEEK			x	x									
92	1	Valve plate	Super Duplex			x	x									
93	9	Back-up ring	PTFE	x		x	x									
94	9	O-ring (Ø18.3x2.4)	NBR	x		x	x									
181	1	Port flange	Super Duplex													
182	1	O-ring (Ø135x3)	NBR	x												
183	1	Guide pin	Super Duplex													
184	1	Pin (Ø6x10)	AISI 316	x												
185	1	Pin (Ø6x10)	PEEK	x		x	x									
186	8	Screw (M8x20)	AISI 316	x												
211	1	Mounting flange	AISI 316													
212	1	O-ring (Ø135x3)	NBR	x						x	x					
213	1	Sealing ring	PEHD									x	x	x	x	x
214	1	O-ring (Ø58x2)	NBR	x												
215	1	Shaft seal	Hastelloy / NBR	x												
216	1	Stop bush	PEEK	x												
217	1	Bush	Super Duplex													
218	8	Screw (M8x20)	AISI 316	x						x	x					
219	1	Screw (M6x22)	AISI 316	x								x	x	x	x	x
		Instruction		x	x	x	x	x	x	x	x	x	x	x	x	x

9. Exploded view
APP 5.1-10.2



Parts list | APP 0.6-43 / APM 0.8-2.9 / APP (W) 5.1-10.2

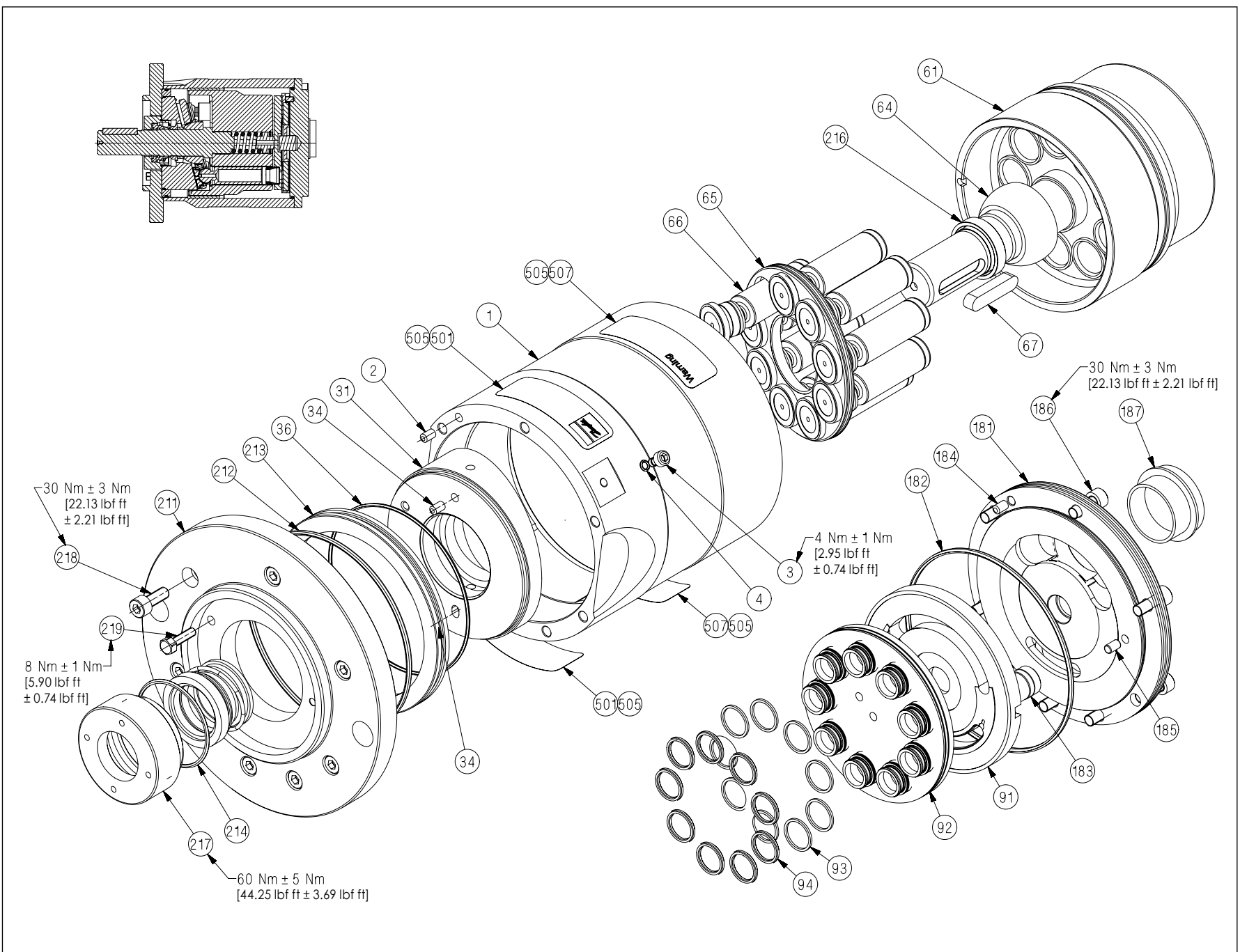
10. Parts list APP W 5.1-10.2

Note:
The parts listed are not sold separately, only in various kits.

Exploded view, see next page.

Pos.	Qnt.	Designation	Material	180B4161 – Seal set (APP 5.1-10.2)	180B4160 – Cylinder barrel (APP 5.1-10.2)	180B4158 – Valve plate set (APP 5.1-8.2)	180B4159 – Valve plate set (APP 10.2)	180B4086 – Retainer set (APP W 5.1-8.2)	180B4087 – Retainer set (APP W 10.2)	180B4154 – Piston set (APP 5.1-8.2)	180B4155 – Piston set (APP 10.2)	180B4129 – Swash plate set (APP 5.1)	180B4130 – Swash plate set (APP 6.5)	180B4131 – Swash plate set (APP 7.2)	180B4132 – Swash plate set (APP 8.2)	180B4133 – Swash plate set (APP 10.2)
1	1	Housing	Duplex / PEEK													
2	1	Pin (Ø6x10)	AISI 316	x												
3	2	Bleeding plug	Duplex	x												
4	2	O-ring (Ø4.5x1.5)	NBR	x												
31	1	Swash plate	Super Duplex									x	x	x	x	x
34	2	Pin (Ø6x10)	AISI 316	x								x	x	x	x	x
36	1	O-ring (Ø117x2.5)	NBR	x						x	x					
61	1	Cylinder barrel	Super Duplex / PEEK		x											
64	1	Retainer ball	Super Duplex / DLC					x	x							
65	1	Retainer plate	Super Duplex / DLC					x	x							
66	9	Piston	Super Duplex / PEEK							x	x					
67	1	Key (10x8x45)	AISI 316	x												
91	1	Port plate	Super Duplex / PEEK			x	x									
92	1	Valve plate	Super Duplex			x	x									
93	9	Back-up ring	PTFE	x		x	x									
94	9	O-ring (Ø18.3x2.4)	NBR	x		x	x									
181	1	Port flange	Super Duplex													
182	1	O-ring (Ø135x3)	NBR	x												
183	1	Guide pin	Super Duplex													
184	1	Pin (Ø6x10)	AISI 316	x												
185	1	Pin (Ø6x10)	PEEK	x		x	x									
186	8	Screw (M8x20)	AISI 316	x												
211	1	Mounting flange	AISI 316													
212	1	O-ring (Ø135x3)	NBR	x						x	x					
213	1	Sealing ring	PEHD									x	x	x	x	x
214	1	O-ring (Ø58x2)	NBR	x												
215	1	Shaft seal	Hastelloy / NBR	x												
216	1	Stop bush	PEEK	x												
217	1	Bush	Super Duplex													
218	8	Screw (M8x20)	AISI 316	x						x	x					
219	1	Screw (M6x22)	AISI 316	x								x	x	x	x	x
		Instruction		x	x	x	x	x	x	x	x	x	x	x	x	x

11. Exploded view
APP W 5.1-10.2



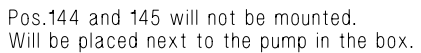
Parts list | APP 0.6-43 / APM 0.8-2.9 / APP (W) 5.1-10.2

12. Parts list APP 11-13

Note:
The parts listed are not sold
separately, only in various kits.

Exploded view, see next page.

Pos.	Qnt.	Designation	Material	180B4229 – Seal set (APP 11-13)	180B4228 – Cylinder barrel set (APP 11-13)	180B4204 – Valve plate set (APP 11-13)	180B4201 – Retainer set (APP 11-13)	180B4221 – Piston set (APP 11-13)	180B4226 – Swash plate set (APP 11 / 1500 rpm)	180B4223 – Swash plate set (APP 11 / 1200 rpm, APP 13 / 1500 rpm)	180B4216 – Swash plate set (APP 13 / 1200 rpm)	180B4227 – Flushing valve set (APP 11-13)
1	1	Housing	Duplex / PEEK									
2	2	Pin (Ø6x10)	AISI 316	x								
3	2	Bleeding plug	Super Duplex	x								
4	2	O-ring (Ø11x2)	NBR	x								
5	12	Screw (M8x30)	AISI 316	x				x				
9	1	O-ring (Ø182x4)	NBR	x				x				
10	2	O-ring (Ø9.19x2.62)	NBR	x					x	x	x	
11	1	End flange	Duplex									
12	1	Lifting eye	AISI 316									
31	1	Swash plate	Super Duplex / PEEK						x	x	x	
34	2	Pin (Ø10.5x20)	Super Duplex	x					x	x	x	
61	1	Cylinder barrel	Super Duplex / Duplex / PEEK		x							
62	7	Spring	Duplex				x					
63	1	Spring guide	PP				x					
64	1	Retainer ball	Super Duplex / DLC				x					
65	1	Retainer plate	Super Duplex				x					
66	7	Piston	Super Duplex / PEEK					x				
67	1	Key (10x8x45)	AISI 316	x								
81	3	Pin (Ø6.4x40)	Duplex				x					
91	1	Port plate	Super Duplex / PEEK			x						
92	1	Valve plate	Super Duplex			x						
93	7	Back-up ring	PTFE	x		x						
94	7	O-ring (30.2x3.0)	NBR	x		x						
121	1	Port flange	Duplex / PEEK									
122	1	O-ring (Ø68x2)	NBR	x								
123	1	O-ring (Ø182x4)	NBR	x								
124	1	Shaft seal (Ø35)	Hastelloy / NBR	x								
125	1	Cover for shaft seal	Super Duplex									
126	2	Pin (Ø10.5x20)	Duplex	x		x						
127	4	Screws (M6x16)	AISI 316	x								
128	10	Screws (M8x65)	AISI 316	x								
129	1	Lifting eye	AISI 316									
142	1	Stop for shaft seal	PP	x								
144	4	Tailstock screw (M12x60)	AISI 316									
145	4	Check nut (M12)	AISI 316	x								
151	1	O-ring (Ø29x3)	FPM 75	x								x
152	1	Valve cone	Super Duplex									x
153	1	Spring (Ø1.9xØ25x33.7)	Duplex									x
154	1	Plug/guide	Super Duplex									x
155	1	O-ring (Ø38x3.7)	NBR	x								x
		Instruction		x	x	x	x	x	x	x	x	x



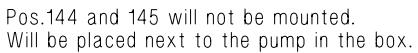
Parts list | APP 0.6-43 / APM 0.8-2.9 / APP (W) 5.1-10.2

14. Parts list APP 16-19

Note:
The parts listed are not sold separately, only in various kits

Exploded view, see next page.

Pos.	Qnt.	Designation	Material	180B4206 – Seal set (APP 16-19)	180B4205 – Cylinder barrel set (APP 16-19)	180B4204 – Valve plate set (APP 16-19)	180B4201 – Retainer set (APP 16-19)	180B4221 – Piston set (APP 16-19)	180B4219 – Swash plate set (APP 16 / 1200 rpm)	180B4215 – Swash plate set (APP 16 / 1500 rpm)	180B4218 – Swash plate set (APP 17 / 1200 rpm)	180B4216 – Swash plate set (APP 17 / 1500 rpm)	180B4220 – Swash plate set (APP 19 / 1200 rpm)	180B4217 – Swash plate set (APP 19 / 1500 rpm)	180B4203 – Flushing valve set (APP 16-19)
1	1	Housing	Duplex / PEEK												
2	1	Pin (Ø6x10)	AISI 316	x											
3	2	Bleeding plug	Super Duplex	x											
4	2	O-ring (Ø11x2)	NBR	x											
5	12	Screw (M8x30)	AISI 316	x				x							
9	1	O-ring (Ø182x4)	NBR	x				x							
10	2	O-ring (Ø9.19x2.62)	NBR	x					x	x	x	x	x	x	
11	1	End flange	Duplex												
12	1	Lifting eye	AISI 316												
31	1	Swash plate	Super Duplex / PEEK						x	x	x	x	x	x	
34	2	Pin (Ø10.5x20)	Duplex	x					x	x	x	x	x	x	
61	1	Cylinder barrel	Super Duplex / Duplex / PEEK		x										
62	7	Spring	Duplex				x								
63	1	Spring guide	PP				x								
64	1	Retainer ball	Super Duplex / DLC				x								
65	1	Retainer plate	Super Duplex				x								
66	7	Piston	Super Duplex / PEEK					x							
67	1	Key (12x8x70)	AISI 316	x											
81	3	Pin (Ø6.4x40)	Duplex				x								
91	1	Port plate	Super Duplex / PEEK			x									
92	1	Valve plate	Super Duplex			x									
93	7	Back-up ring	PTFE	x		x									
94	7	O-ring (Ø30.2x3)	NBR	x		x									
121	1	Port flange	Duplex / PEEK												
122	1	O-ring (Ø68x2)	NBR	x											
123	1	O-ring (Ø182x4)	NBR	x											
124	1	Shaft seal (Ø45)	Hastelloy / NBR	x											
125	1	Cover for shaft seal	Super Duplex												
126	2	Pin (Ø10.5x20)	Duplex	x											
127	4	Screw (M6x16)	AISI 316	x											
128	10	Screw (M8x75)	AISI 316	x											
129	1	Lifting eye	AISI 316												
142	1	Stop for shaft seal	PP	x											
144	4	Tailstock screw (M12x60)	AISI 316												
145	4	Check nut (M12)	AISI 316	x											
151	1	O-ring (Ø35x3)	FPM 75	x											x
152	1	Valve cone	Super Duplex												x
153	1	Spring (Ø1.9xØ25x33.7)	Duplex												x
154	1	Plug/guide	Super Duplex												x
155	1	O-ring (Ø47.22x3.53)	NBR	x											x
		Instruction		x	x	x	x	x	x	x	x	x	x	x	x



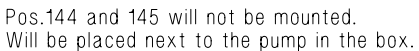
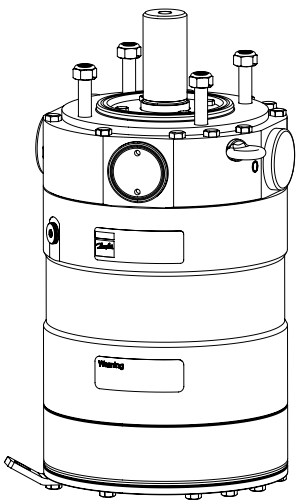
Parts list | APP 0.6-43 / APM 0.8-2.9 / APP (W) 5.1-10.2

16. Parts list APP 22

Note:
The parts listed are not sold
separately, only in various kits

Exploded view, see next page.

Pos.	Qty.	Designation	Material	180B4206 – Seal set (APP 22)	180B4205 – Cylinder barrel set (APP 22)	180B4204 – Valve plate set (APP 22)	180B4201 – Retainer set (APP 22)	180B4200 – Piston set (APP 22)	180B4202 – Swash plate set (APP 22 / 1200 rpm)	180B4218 – Swash plate set (APP 22 / 1500 rpm)	180B4203 – Flushing valve set (APP 22)
1	1	Housing	Duplex / PEEK								
2	2	Pin (Ø6x10)	AISI 316	x							
3	2	Bleeding plug	Super Duplex	x							
4	2	O-ring (Ø11.0x2)	NBR	x							
5	12	Screw (M8x30)	AISI 316	x				x			
9	1	O-ring (Ø182x4)	NBR	x				x			
10	2	O-ring (Ø9.19x2.62)	NBR	x					x	x	
11	1	End flange	Duplex								
12	1	Lifting eye	AISI 316								
31	1	Swash plate	Super Duplex / PEEK						x	x	
34	2	Pin (Ø10.5x20)	Duplex	x					x	x	
61	1	Cylinder barrel	Super Duplex / Duplex / PEEK		x						
62	7	Spring	Duplex				x				
63	1	Spring guide	PP				x				
64	1	Retainer ball	Super Duplex / DLC				x				
65	1	Retainer plate	Super Duplex				x				
66	7	Piston	Super Duplex / PEEK					x			
67	1	Key (12x8x70)	AISI 316	x							
81	3	Pin (Ø6.4x40)	Duplex				x				
91	1	Port plate	Super Duplex / PEEK			x					
92	1	Valve plate	Super Duplex			x					
93	7	Back-up ring	PTFE	x		x					
94	7	O-ring (Ø30.2x3)	NBR	x		x					
121	1	Port flange	Duplex / PEEK								
122	1	O-ring (Ø68x2)	NBR	x							
123	1	O-ring (Ø182x4)	NBR	x							
124	1	Shaft seal	Hastelloy / NBR	x							
125	1	Cover for shaft seal	Super Duplex								
126	2	Pin (Ø10.5x20)	Duplex	x							
127	4	Screw (M6x16)	AISI 316	x							
128	10	Screw (M8x75)	AISI 316	x							
129	1	Lifting eye	AISI 316								
142	1	Stop for shaft seal	PP	x							
144	4	Tail stock screw (M12x60)	AISI 316								
145	4	Check nut (M12)	AISI 316	x							
151	1	O-ring (Ø35x3)	FPM 75	x							x
152	1	Valve cone	Super Duplex								x
153	1	Spring (Ø1.9xØ25x33.7)	Duplex								x
154	1	Plug/guide	Super Duplex								x
155	1	O-ring (Ø47.22x3.53)	NBR	x							x
		Instruction		x	x	x	x	x	x	x	x



Parts list | APP 0.6-43 / APM 0.8-2.9 / APP (W) 5.1-10.2

18. Parts list APP 21-26

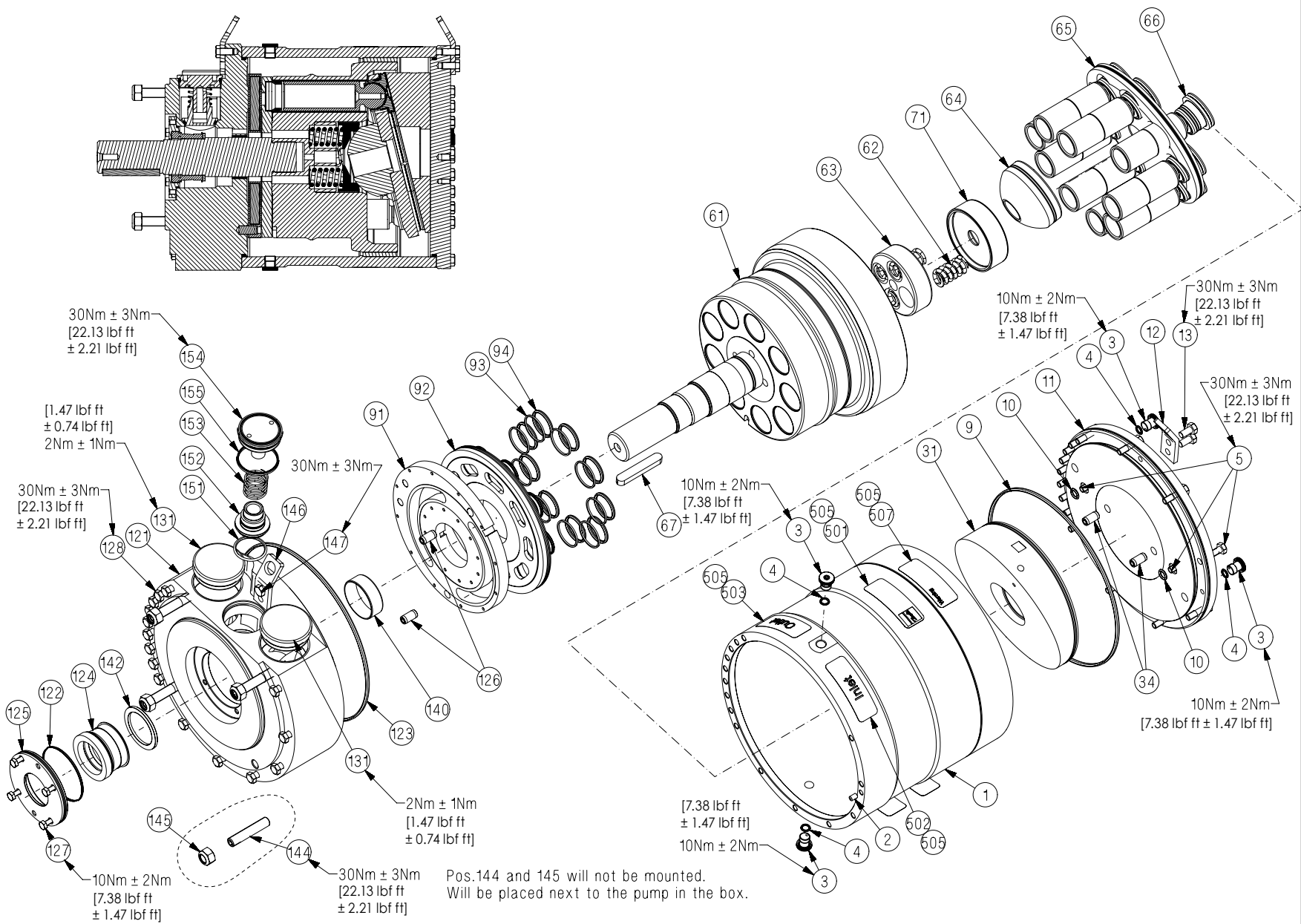
Note:

The parts listed are not sold separately,
only in various kits.

Exploded view, see next page.

Pos.	Qnt.	Designation	Material	180B4171 – Seal set (APP 21-26)	180B4166 – Cylinder barrel (APP 21-26)	180B4165 – Valve plate set (APP 21-26)	180B4164 – Retainer set (APP 21-26)	180B4163 – Piston set (APP 21-24 / 1500 rpm)	180B4163 – Piston set (APP 21-26 / 1200 rpm)	180B4199 – Piston set (APP 26 / 1500 rpm)	180B4167 – Swash plate set (APP 21 / 1200 rpm - APP 26 / 1500 rpm)	180B4077 – Swash plate set (APP 21 / 1500 rpm)	180B4168 – Swash plate set (APP 24 / 1200 rpm)	180B4224 – Swash plate set (APP 24 / 1500 rpm)	180B4169 – Swash plate set (APP 26 / 1200 rpm)	180B4170 – Flushing valve set (APP 21-26)
1	1	Housing	Duplex / PEEK													
2	2	Pin (Ø6x10)	AISI 316	x												
3	2	Bleeding plug	Super Duplex	x												
4	4	O-ring (Ø11x2)	NBR	x												
5	17	Screw (M8x30)	AISI 316	x				x	x	x						
9	1	O-ring (Ø228x4)	NBR	x				x	x	x						
10	2	O-ring (Ø9.19x2.62)	NBR	x							x	x	x	x	x	
11	1	End flange	Duplex													
12	1	Lifting eye	AISI 316													
13	2	Screw (M8x16)	AISI 316	x												
31	1	Swash plate	Super Duplex								x	x	x	x	x	
34	2	Pin (Ø10.5x20)	Duplex	x							x	x	x	x	x	
61	1	Cylinder barrel	Super Duplex / PEEK		x											
62	4	Spring	Duplex				x									
63	1	Spring guide	PP				x									
64	1	Retainer ball	Super Duplex / DLC				x									
65	1	Retainer plate	Super Duplex				x									
66	9	Piston	Super Duplex / PEEK					x	x	x						
67	1	Key (12x8x70)	AISI 316	x												
71	1	Retainer guide	Super Duplex / PEEK				x									
91	1	Port plate	Super Duplex / PEEK			x										
92	1	Valve plate	Super Duplex			x										
93	9	Back-up ring	PEEK	x		x										
94	9	O-ring (Ø30.2x3)	NBR	x		x										
121	1	Port flange	Duplex / PEEK													
122	1	O-ring (Ø68x2)	NBR	x												
123	1	O-ring (Ø228x4)	NBR	x												
124	1	Shaft seal	Hastelloy / NBR	x												
125	1	Cover for shaft seal	Super Duplex													
126	2	Pin (Ø10.5x20)	Duplex	x												
127	4	Screw (M6x16)	AISI 316	x												
128	15	Screw (M8x90)	AISI 316	x												
142	1	Stop for shaft seal	PP	x												
144	4	Tailstock screw (M12x60)	AISI 316													
145	4	Check nut (M12)	AISI 316	x												
146	1	Lifting eye	AISI 316													
147	1	Screw (M8x16)	AISI 316	x												
151	1	O-ring (Ø35x3)	FPM 75	x												x
152	1	Valve cone	Super Duplex													x
153	1	Spring (Ø1.9xØ25x33.7)	Duplex													x
154	1	Plug/guide	Super Duplex													x
155	1	O-ring (Ø47.22x3.53)	NBR	x												x
		Instruction		x	x	x	x	x	x	x	x	x	x	x	x	x

19. Exploded view
APP 21-26



Parts list | APP 0.6-43 / APM 0.8-2.9 / APP (W) 5.1-10.2

20. Parts list APP 30-43

Note:
The parts listed are not sold
separately, only in various kits.

Exploded view, see next page.

Pos.	Qty.	Designation	Material	180B4171 – Seal set (APP 30-43)	180B4166 – Cylinder barrel (APP 30-43)	180B4180 – Valve plate set (APP 30-43)	180B4179 – Retainer set (APP 30 / 1200 rpm and APP 38 / 1500 rpm)	180B4164 – Retainer set (APP 30 / 1500 rpm)	180B4383 – Retainer set (APP 43 / 1700 rpm)	180B4199 – Piston set (APP 30-43)	180B4178 – Swash plate set (APP 30 / 1,200 rpm, APP 38 / 1500 rpm and APP 43 / 1700 rpm)	180B4168 – Swash plate set (APP 30 / 1500 rpm)	180B4170 – Flushing valve set (APP 30-43)
1	1	Housing	Duplex / PEEK										
2	2	Pin (Ø6x10)	AISI 316	x									
3	2	Bleeding plug	Super Duplex	x									
4	4	O-ring (Ø11x2)	NBR	x									
5	17	Screw (M8x30)	AISI 316	x						x			
9	1	O-ring (Ø228x4)	NBR	x						x			
10	2	O-ring (Ø9.19x2.62)	NBR	x							x	x	
11	1	End flange	Duplex										
12	1	Lifting eye	AISI 3169										
13	1	Screw (M8x16)	AISI 316	x									
31	1	Swash plate	Super Duplex								x	x	
34	2	Pin (Ø10.5x20)	Duplex	x							x	x	
61	1	Cylinder barrel	Super Duplex / PEEK		x								
62	4	Spring	Duplex				x	x	x				
63	1	Spring guide	PP				x	x	x				
64	1	Retainer ball	Super Duplex / DLC				x	x	x				
65	1	Retainer plate	Super Duplex				x	x	x				
66	9	Piston	Super Duplex / PEEK							x			
67	1	Key (12x8x70)	AISI 316	x									
71	1	Retainer guide	Super Duplex / PEEK				x	x	x				
80	4	Spacer	Super Duplex										
91	1	Port plate	Super Duplex / PEEK			x							
92	1	Valve plate	Super Duplex			x							
93	9	Back-up ring	PTFE	x		x							
94	9	O-ring (Ø30.2x3)	NBR	x		x							
121	1	Port flange	Duplex / PEEK										
122	1	O-ring (Ø68x2)	NBR	x									
123	1	O-ring (Ø228x4)	NBR	x									
124	1	Shaft seal	Hastelloy / NBR	x									
125	1	Cover for shaft seal	Super Duplex										
126	2	Pin (Ø10.5x20)	Duplex	x									
127	4	Screw (M6x16)	AISI 316	x									
128	15	Screw (M8x90)	AISI 316	x									
142	1	Stop for shaft seal	PP	x									
144	4	Tailstock screw (M12x60)	AISI 316										
145	4	Check nut (M12)	AISI 316	x									
146	1	Lifting eye	AISI 316										
147	1	Screw (M8x16)	AISI 316	x									
151	1	O-ring (Ø35x3)	FPM 75	x									x
152	1	Valve cone	Super Duplex										x
153	1	Spring (Ø1.9xØ25x33.7)	Duplex										x
154	1	Plug/guide	Super Duplex										x
155	1	O-ring (Ø47.22x3.53)	NBR	x									x
		Instruction		x	x	x	x	x	x	x	x	x	x

[illegible]

22. Tool sets

Note:
The parts listed are not sold separately, only in various kits.

Designation	180B4188 – Tool set (APP 0.6-1.0 Compact)	180B4142 – Tool set (APP 0.6-1.0)	180B4148 – Tool set (APP 1.5-3.5)	180B4162 – Tool set (APP 5.1-10.2)	180B4230 – Tool set (APP 11-13)	180B4222 – Tool set (APP 16-22)	180B4172 – Tool set (APP 21-43)
Shaft bush	x						
Press bush	x						
Drift	x						
Torx (T30)	x						
Shaft bush (Ø18)		x	x				
Press bush (Ø18)		x	x				
Allen key (4 mm)		x					
Allen key (5 mm)			x				
Allen key (6 mm)				x	x	x	x
Shaft bush (Ø35)				x			
Shaft seal extractor (Ø35)				x	x		
Press bush (Ø35)				x	x		
Adjustable pin wrench				x	x	x	x
Combination wrench (10 mm)				x	x	x	x
Combination wrench (13 mm)					x	x	x
Nut (M8x6.5x13)					x	x	x
Guide bolt (M8x140)					x		x
Shaft seal extractor (Ø45)						x	x
Press bush (Ø45)						x	x
Eye bolt (M8)					x	x	
Press bush for valve plate						x	x
Stop for retainer plate							x
Screw (M8x20)					x	x	x
Screw (M8x70)						x	x

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