

# Plunger Pumps

## FEATURING

**MANIFOLD:** High strength forged brass or nickel plated for long term use.

**BOLTS:** Eight 8mm grade 8.8.

**PLUNGERS:** A special thick solid ceramic for long life, strong durability and more resilience.

**CRANKCASE:** Precision die-cast, large cooling fins and anodized for maximum heat dissipation. Sight glass, fill and side and bottom drain plugs.

**BEARINGS:** Oversized tapered roller bearing for maximum life and load distribution.

**BEARINGS SUPPORTS:** Precision die-cast and machined to assure concentricity and alignment.

**VALVES, SEATS, AND SPRINGS:** Stainless steel with specially designed Ultra Form cages to provide long life and positive seating.

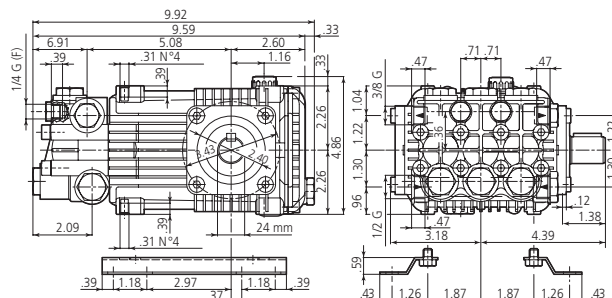
**SEALS AND V-PACKINGS:** Continuously lubricating for extended life.

**PLUNGER RODS:** Stainless steel construction for strength, no plating to scrape off, back-up and o-ring plunger sealing system.

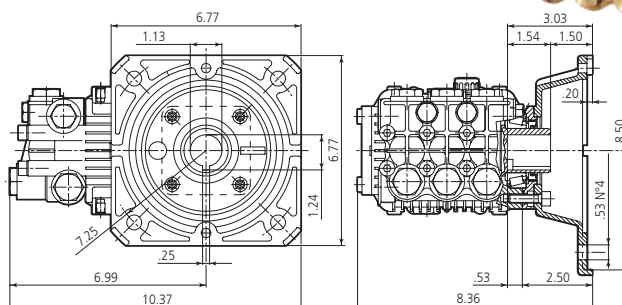
**CONNECTING RODS:** One piece special alloy aluminum or bronze for higher pressure, oversized for maximum strength, load disbursement, and long life. Heavy pin area construction, for added load strength.

## DIMENSIONS

RKA N version  
Solid shaft pump / ø 24 mm



RKA E version + F17  
Hollow shaft pump ø 1" 1/8



## SPECIFICATIONS

MODEL	MAX GPM	MAX LMP	MAX PSI	MAX BAR	POWER EBHP	BORE DIA MM	STROKE MM	CRANKSHAFT ID STAMP	WEIGHT LBS.
RKA3.5G25N	3.5	13.2	2500	170	5.0	18	10.8	5	19
RKA3.5G30N	3.5	13.2	3000	205	7.5	18	10.8	5	19
RKA3.5G40HN	3.5	13.2	4000	275	10.0	18	10.8	5	20
RKA4G20N	4.0	15.1	2000	140	5.0	18	12.0	4	19
RKA4G30N	4.0	15.1	3000	205	7.5	18	12.0	4	19
RKA4G35N	4.0	15.1	3500	241	10.0	18	12.0	4	20
RKA4G35NL	4.0	15.1	3500	241	10.0	18	12.0	4	20
RKA4G40HN	4.0	15.1	4000	275	11.0	18	12.0	4	19
RKA4G40HNL	4.0	15.1	4000	275	11.0	18	12.0	4	19
RKA4.5G35HN	4.5	17.0	3500	241	11.0	18	13.8	2	19
RKA5.5G30HN	5.5	20.8	3000	205	11.0	20	13.8	2	20
RKA6.5G20HN	6.6	25.0	2000	138	9.0	22	13.8	2	20
RKA7G20HN	7.1	27.0	2000	138	10.0	22	14.6	1	20
RKA3.5G30E-F17	3.5	13.2	3000	205	7.5	18	10.8	5	22
RKA3.5G40HE-F17	3.5	13.2	4000	275	9.6	18	10.8	5	22
RKA4G20E-F17	4.0	15.1	2000	140	5.0	18	12.0	4	21
RKA4G30E-F17	4.0	15.1	3000	205	7.5	18	12.0	4	21
RKA4G30HE-F17	4.0	15.1	3000	205	7.5	18	12.0	4	21
RKA4.8G30E-F17	4.8	18.2	3000	205	10.0	20	12.0	4	21
RKA5.5G13E-F17	5.5	20.8	1300	90	5.0	20	13.8	2	21
RKA7G20HE-F17	7.1	27.0	2000	138	10.0	22	14.6	1	21

Oil Capacity = 15.3 oz

Maximum Fluid Temperature = 140° F

Inlet Thread = 1/2" F

Discharge Thread = 3/8" F

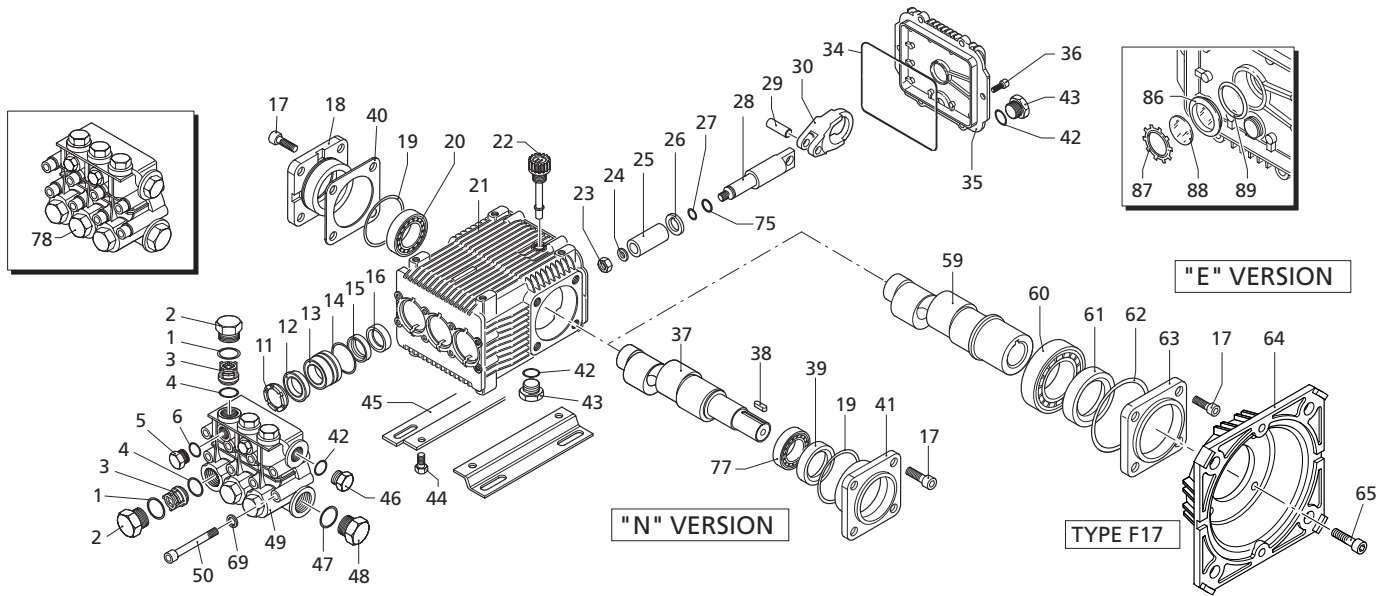
### Torque Specifications Inch pounds (ft. lbs)

HEAD	PISTON NUT	REAR COVER	SIDE COVER	VALVE CAP	CON RODS
217 (18)	106 (8.8)	89 (7.5)	217 (18)	478 (40)	N/A


**SPECIAL NOTE:** Use AR64516 Oil. First change oil after 50 hours of use. Then every 500 hours. This oil is specially formulated to provide correct lubrication properties for our pumps. **No** other oil is factory approved for these pumps.

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**Repair Kits**



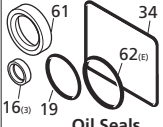
**Valves**  
Kit 2864




**Pistons**  
Kit 2546 - ø 18  
Kit 2547 - ø 20  
Kit 2759 - ø 22



**Water Seals**  
Kit 1857 - ø 18  
Kit 1887 - ø 20  
Kit 1888 - ø 22



**Oil Seals**  
Kit 1855 - N  
Kit 1856 - E



**Support Rings**  
Kit 1829 - ø 18  
Kit 1815 - ø 20  
Kit 1816 - ø 22

**Special Parts / Kits**

Code	Description	Qty.
2809	Viton water seals ø18	1
2810	Viton water seals ø20	1
2811	Viton water seals ø22	1
2819	Kit for up to 180° F ø18 High Temp	1
2820	Kit for up to 180° F ø20 High Temp	1
1837	Rail Kit 5/8" - 2 Rails & 4 Bolts (N only)	1
2633	Rail Kit 1-3/4" - 2 Rails & 4 Bolts (N only)	1
2633H	Rail Kit 2-5/8" - 2 Rails & 4 Bolts (N only)	1

Pos	Code	Description	Qty.	Pos	Code	Description	Qty.	Pos	Code	Description	Qty.
1	960160	O-Ring ø17.86x2.62	6	30	1383020	Con rod - Bronze > 3000 PSI	3	61	621170	Oil seal	1
2	960090	Valve cap - Brass (478 in/lbs)	6	31	1383050	Con rod - Aluminum < 3000 PSI	3	62	1380220	O-Ring ø72.75x1.78	1
3	960850	Valve cap - SS (478 in/lbs)	6	32	1780510	O-Ring	1	63	1380210	Complete cover	1
4	1380740	Valve cap - NP (478 in/lbs)	6	33	1789010	Complete cover	1	64	1591	Electric Flange F17	1
5	960090T	Valve cap - 1/4" threaded - Brass (478 in/lbs)	1	34	1343510	Bolt M6x14 (89 in/lbs)	6	65	620610	Bolt	4
6	960850T	Valve cap - 1/4" threaded - SS (478 in/lbs)	1	35	2280100	Crankshaft 24mm	1	69	1381850	Washer	8
7	1389051	Complete valve	6	36	2280090	Crankshaft 24mm	1		1389270	Complete pump head - Brass ø18	1
8	880830	O-Ring ø15.54x2.62	6	37	2280070	Crankshaft 24mm	1		1389272	Complete pump head - NP ø18	1
9	880581	Plug 1/4" G - Brass	2	38	2280060	Crankshaft 24mm	1		1389271	Complete pump head - NP ø18	1
10	1380690	Plug 1/4" G NP	2	39	2280110	Crankshaft 24mm - NL	1		1389208	Complete pump head - Brass ø20	1
11	820510	O-Ring ø10.82x1.78	2	40	1380520	Key	1		1389212	Complete pump head - NP ø20	1
12	960110	Support ring ø18 □◆◆	3	41	180340	Oil seal	1		1389268	Complete pump head - Brass ø22	1
13	840300	Support ring ø20 ■	3	42	1380120	Shim 0.10 mm	1-3		1389269	Complete pump head - NP ø22	1
14	840320	Support ring ø22 ■★	3	43	1380130	Shim 0.20 mm	1-3	75	1080401	Back-up ring	3
15	880320	High pressure packing ø18 □◆◆	3	44	1380530	Shim 0.25 mm	1-3	77	840370	Bearing	1
16	840290	High pressure packing ø20 ■	3	45	1382810	Shim 0.05 mm	1-3	86	1260250	Oil sight glass	1
17	840330	High pressure packing ø22 ■★	3	46	1380040	Open bearing support (217 in/lbs)	1	87	1260430	Snap ring	1
18	1380090	Piston guide ø18 □◆◆	3	47	1380290	O-Ring ø14x1.78	3	88	1780690	Contrast disc	1
19	1380150	Piston guide ø20 ■	3	48	1980740	Plug 3/8" G	2	89	1140450	O-Ring ø20.24x2.62	1
20	1380160	Piston guide ø22 ■★	3	49	1260470	Bolt M8x10	4		AR64516	Oil	1
21	961240	O-Ring ø31.47x1.78	3	50	1380141	Rail 5/8" (N Version only)	2		OIL CAPACITY - 15 OZ		
22	880330	Low pressure seal ø18 □◆◆	3	51	Z-Bracket 1-3/4"	(N Version only)	2		<b>Legend</b>		
23	840280	Low pressure seal ø20 ■	3	52	Z-Bracket	(N Version only)	2	For ○	For ●	For ■	For ▨
24	840340	Low pressure seal ø22 ■★	3	53	1980740	Plug 3/8" G	1	RKA3.5G22	RKA4G20	RKA4.5G13	RKA6.5G13
25	1383130	Oil seal	3	54	1981180	Plug 3/8" G NP	1	RKA3.5G25	RKA4G30A	RKA4.5G20H	RKA6.5G20H
26	850370	Bolt M8x16 (217 in/lbs)	8	55	180101	O-Ring ø17.5x2	1	RKA3.5G30H	RKA4G30	RKA4.5G26H	RKA5.5G26H
27	1380050	Closed bearing support	1	56	820361	Plug 1/2" G	1	RKA3.5G40H	RKA4G30H	RKA4.5G30H	
28	640030	O-Ring ø59.99x2.62	2	57	960870	Plug 1/2" G NP	1	RKA4G35H			For ★
29	2280240	Bearing	1	58	1381071	Pump head - Brass	ø18 1	RKA4G40H			RKA7G13
30	1382770	Pump housing	1	59	1381070	Pump head - NP	ø18 1				RKA7G20H
31	880130	Vented oil cap	1	60	1380020	Pump head - Brass	ø20 1				
32	962010	Nut M8 (106in/lbs)	3		1380680	Pump head - NP	ø20 1				
33	962000	Washer ø8.1	3		1383010	Pump head - Brass	ø22 1				
34	1380940	Ceramic piston ø18 □◆◆	3		1383310	Pump head - NP	ø22 1				
35	1380930	Ceramic piston ø20 ■	3		820150	Head bolt M8x70 (217 in/lbs)	8				
36	1382360	Ceramic piston ø22 ■★	3		2280260	Hollow shaft ø1-1/8"	1				
37	1380950	Slinger	3		2280200	Hollow shaft ø1-1/8"	◆ 1				
38	600180	O-Ring ø7.66x1.78	3		2280270	Hollow shaft ø1-1/8"	■ 1				
39	1380920	Guiding piston	3		2280280	Hollow shaft ø1-1/8"	★ 1				
40	1380060	Piston pin	3		1380320	Bearing	1				

