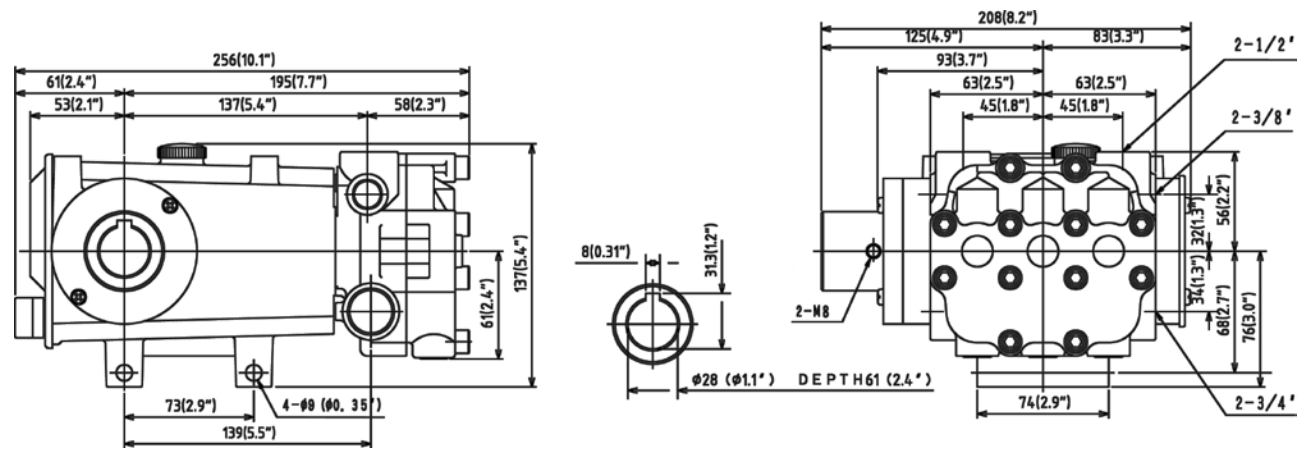
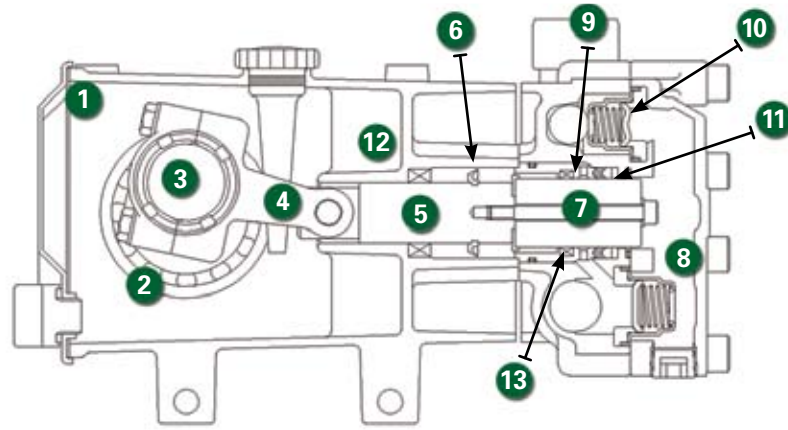


DIMENSIONS (mm/in.)



CUTAWAY

- 1 High strength, lightweight die cast crankcase
- 2 Oversized crankshaft bearings for long life and quiet operation
- 3 Forged crankshaft is machined for low friction, quiet operation and high efficiency
- 4 High strength connecting rods are tolerance matched for extended life and low friction operation
- 5 High polish stainless steel plunger rods for smooth operation and even wear
- 6 Zero clearance, polymer exclusionary seal protects pump crankcase from fluid entry and will not corrode
- 7 Proprietary blend, solid ceramic plungers for long wear and increased thermal shock resistance
- 8 Forged brass manifolds for strength and corrosion resistance, machined to optimize fluid flow and performance while extending useful life
- 9 Liquid-cooled, low drag seals provide long life, extended run-dry ability and increased suction lift
- 10 100% stainless steel valve construction provides superior protection against chemical and temperature damage
- 11 Mechanically-loaded seals require no adjustment and self-compensate for wear
- 12 Balanced flow crankcase ensures lubrication and quiet operation
- 13 Slide-in seal cases mean no special tools are required, making seal replacement easy



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Manufactured by Arimitsu Industry Co., Ltd., of Osaka, Japan, a leading supplier of industrial plunger pumps and systems used by industrial leaders throughout the World.

Rev.1, 5H Series, 509, (3-07)
 Part #. 114



Floating 5 Series Model 509

FEATURES

- Unique mounting technology increases life and decreases noise (pat. pending)
- Triplex pumps provide smooth liquid flow
- Liquid cooled, low drag seals provide long life, improved suction, higher efficiency and longer dry running without damage
- Balanced flow crankcase design and precision machining ensures uniform lubrication and quiet operation
- Manifold is designed and machined to guarantee superior fluid flow
- Zero-clearance exclusionary seals protect crankcase

QUALITY

- 100% stainless steel valve assemblies deliver greater temperature and chemical handling abilities
- Precision ground ceramic plungers utilize a proprietary material blend for long life and increased thermal shock resistance
- Forged brass manifolds offer strength and corrosion resistance
- Proprietary, proven seal blend maximizes life and increases maintenance intervals
- Oversized crankshaft bearings for long life and quiet operation

MAINTENANCE

- No special tools required for repair or maintenance
- Fluid end is easily serviced without entering crankcase
- Easy access seal case and valve assemblies
- Seals require no adjustment

SPECIFICATIONS

Model 509	US	METRIC
Flow	9.5 gpm	36 lpm
Pressure	1000 psi	70 bar
RPM	1800	1800
Inlet Pressure	flooded to 70 psi	1 to 5 bar
Inlet	3/4"	3/4"
Outlet	1/2" & 3/8"	1/2" & 3/8"
Oil requirement	19 oz.	.55 L
Shaft Dia.	1.102"	28 mm
Max Liquid Temp.	175°F	80°C
Shaft Location	L or R	L or R
Weight	21 lbs.	9.5 kg

Determining Pump RPM	Rated GPM	=	"Desired" GPM
	Rated RPM	=	"Desired" RPM
Determining Required HP	GPM x PSI	=	Electric Brake H.P. Required
	1460	=	
Determining Motor Pulley Size	Motor Pulley OD	=	Pump Pulley OD
	Pump RPM	=	Motor RPM

Parts List

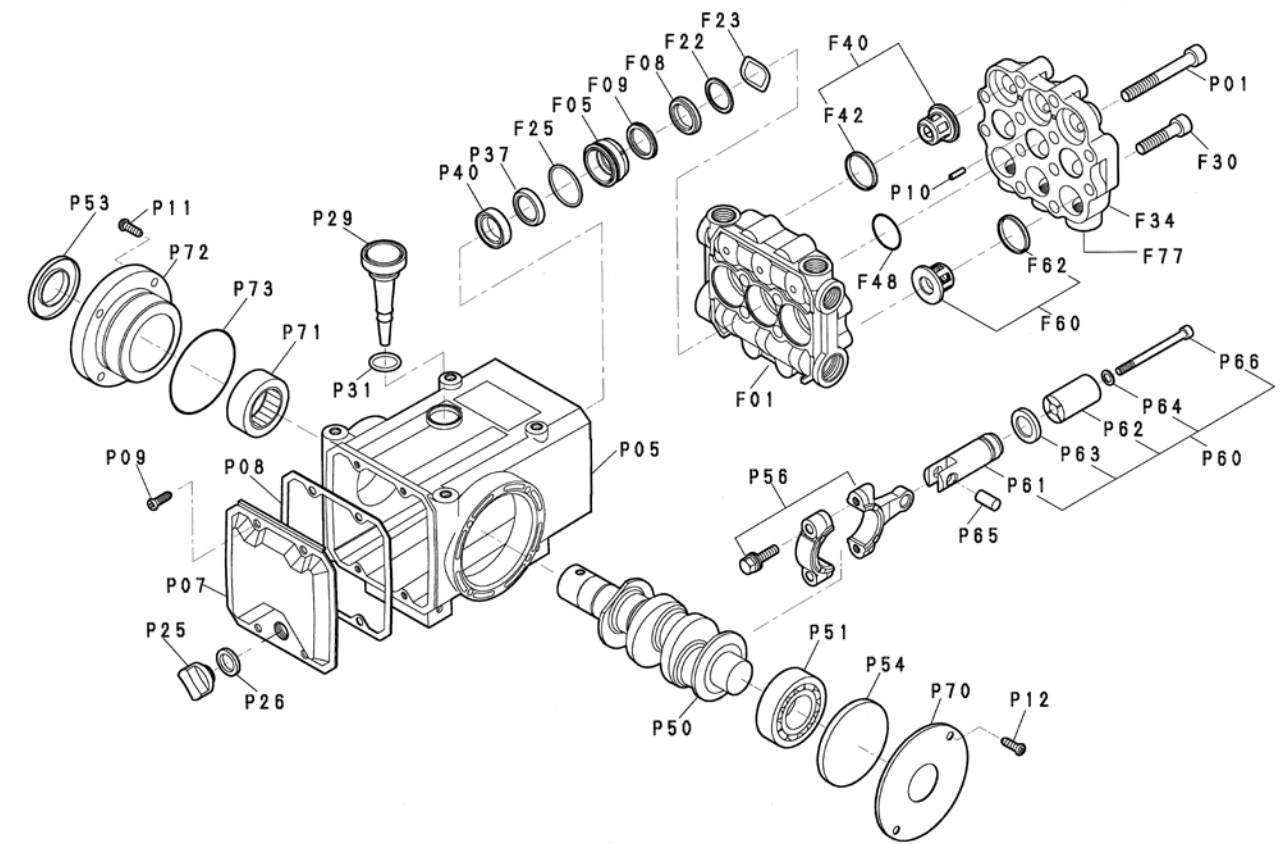
REF. #	PART NUMBER	PART NAME	MATERIAL	QTY
F01	02561010100A	MANIFOLD, PORTED	BRASS	1
F05	02565012001	SEAL RETAINER	BRASS	3
F08	02565014B0	V-PACKING	NBR/TEXTILE	3
F09	03620012301	VACUUM SEAL	NBR	3
F22	0256501430	SPREADER	BRASS	3
F23	0261001450	WAVE WASHER	STAINLESS	3
F25	9203B15032	O-RING, RETAINER	NBR	3
F30	0361001140	BOLT, MANIFOLD	PLATED STEEL	8
F34	0256103200	MANIFOLD, VALVES	BRASS	1
F40	03620033001	VALVE ASSEMBLY, OUTLET	STAINLESS	3
F42	0362003340	GASKET	NBR	3
F48	9203F15029	O-RING, MANIFOLD	NBR	3
F60	0275203800	VALVE ASSEMBLY, INLET	STAINLESS	3
F62	0361003340	GASKET	NBR	3
F77	0130003930	PLUG, MANIFOLD	BRASS	3
P01	02560011001	BOLT, HEAD	PLATED STEEL	4
P05	0275502010	CRANKCASE	ALUMINUM	1
P07	02560020401	COVER	PLATED STEEL	1
P08	0256002050	GASKET	BONDED PAPER	1
P09	9136A05010	SCREW, PHILLIPS	PLATED STEEL	4
P10	0361001110	DOWEL PIN, MANIFOLD	STEEL	2
P11	9110B05020	BOLT	STEEL	4
P12	9113A05015	SCREW, COVER	STEEL	2
P25	0090002320	DRAIN PLUG	FP	1
P26	0090002340	GASKET	NBR	1
P29	01300026000A	OIL DIPSTICK ASSEMBLY	FP	1
P31	9201B20016	O-RING, DIPSTICK	NBR	1
P37	0276101730	WATER SLINGER	NBR/FP	3
P40	0256302400	OIL SEAL	NBR	3
P50	0275504010	CRANKSHAFT	STEEL	1
P51	0256004020	BEARING	STEEL	1
P53	0275504030	OIL SEAL, SHAFT	NBR	1
P54	0256104430	OIL SEAL, BEARING	NBR	1
P56	0130004600	CON-ROD ASSEMBLY	ALUM/STEEL	3
P60	02790047S0	PLUNGER ASSEMBLY		3
P61	0276104880	ROD	STAINLESS	3
P62	02560048S0	PLUNGER	CERAMIC	3
P63	0255104850	SPACER	BRASS	3
P64	0121114852	GASKET	COPPER	3
P65	0150004900	PIN, PLUNGER	STEEL	3
P66	9120R05060	BOLT, PLUNGER	STAINLESS	3
P70	02560044201	COVER, BEARING	PLATED STEEL	1
P71	0275504020	BEARING, ROLLER	STEEL	1
P72	0275504420	COVER, BEARING	ALUMINUM	1
P73	9203B15056	O-RING, COVER	NBR	1

* Material listed may be a proprietary version. Parts names without part numbers are only available within complete assemblies.

* Material codes: FP=Flouropolymer, NBR=Medium Nitrile (Buna-N), STAINLESS=Stainless Steel (300 Series)

Exploded View

Model 509



03/07

REF. #	PART NUMBER	PART NAME	MATERIAL	QTY
	30103	OIL, BOTTLE, 32oz., ISO 100		1
	30110	SEAL KIT, 509 (F08, F09, F25)	NBR	1
	30126	VALVE KIT, INLET (F60, F62)	STAINLESS/NBR	1
	30112	VALVE KIT, OUTLET (F40, F42)	STAINLESS/NBR	1
	30326	BRACKET KIT, FLOATING	COATED STEEL	1
Recommended Accessories				
	70100	6085 REGULATOR, 15 GPM, 1200 PSI	BRONZE/CERAMIC	1

Horsepower Requirements

	Pressure (psi)							
	RPM	GPM	LPM	250	500	750	900	1000
509	600	3.2	12.1	0.5	1.1	1.6	1.9	2.1
	1200	6.3	23.8	1.1	2.1	3.2	3.8	4.2
	1800	9.5	36.0	1.6	3.2	4.8	5.7	