

# ARIMITSU

PROVEN PLUNGER PUMPS



## 5 Series

### Model 508

#### FEATURES

- 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 508	US	METRIC
Flow	8 gpm	30 lpm
Pressure	1200 psi	85 bar
RPM	950	950
Inlet Pressure	-5 to 70 psi	0-5 bar
Alternative specification		
Flow	10 gpm	38 lpm
Pressure	1000 psi	70 bar
RPM	1200	1200
Inlet Pressure	Flooded to 70 psi	0 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.	.866"	22 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	$\frac{\text{Rated GPM}}{\text{Rated RPM}}$	=	$\frac{\text{"Desired" GPM}}{\text{"Desired" RPM}}$
Determining Required HP	$\frac{\text{GPM} \times \text{PSI}}{1460}$	=	Electric Brake H.P. Required
Determining Motor Pulley Size	$\frac{\text{Motor Pulley OD}}{\text{Pump RPM}}$	=	$\frac{\text{Pump Pulley OD}}{\text{Motor RPM}}$

## Parts List

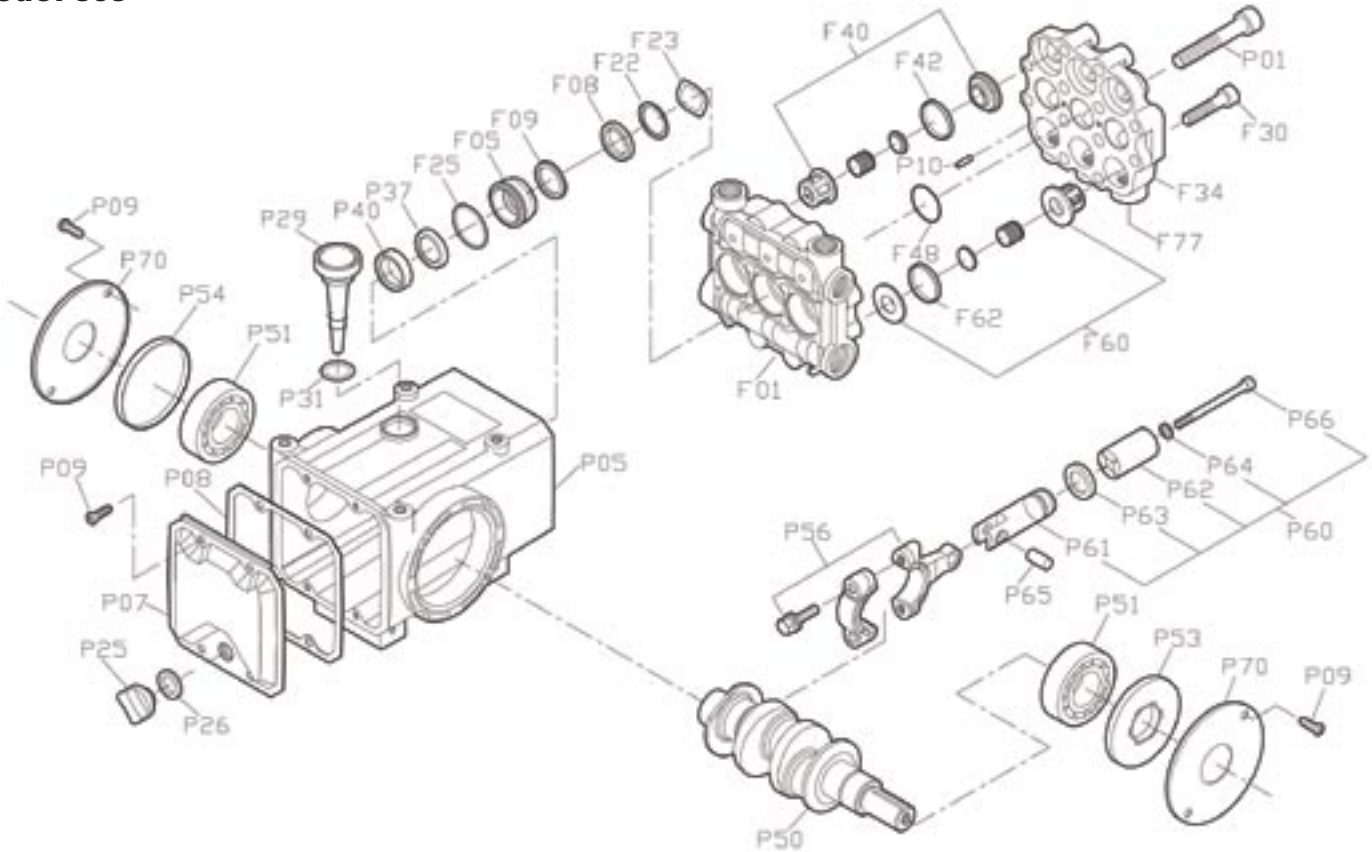
REF. #	PART NUMBER	PART NAME	MATERIAL	QTY
F01	0256101010	MANIFOLD, PORTED	BRASS	1
F05	0256012001	SEAL RETAINER	BRASS	3
F08	02565014B0	V-PACKING	NBR/TEXTILE	3
F09	03620012301	VACUUM SEAL	NBR	3
F22	0256501430	SPREADER	BRASS	3
F23	0261001450	WAVE WASHER	STAINLESS	3
F25	9203B15032	O-RING, RETAINER	NBR	3
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	03620038002	VALVE ASSEMBLY, INLET	STAINLESS	3
F62	0361003340	GASKET	NBR	3
F77	0130003930	PLUG, MANIFOLD	BRASS	3
P01	02560011001	BOLT, HEAD	PLATED STEEL	4
P05	0276102010	CRANKCASE	ALUMINUM	1
P07	0256002040	BACK COVER	ALUMINUM	1
P08	0256002050	GASKET	BONDED PAPER	1
P09	9136A05010	SCREW, PHILLIPS	PLATED STEEL	8
P10	0361001110	DOWEL PIN, MANIFOLD	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	02561040102	CRANKSHAFT	STEEL	1
P51	0256004020	BEARING	STEEL	2
P53	0256004030	OIL SEAL, SHAFT	NBR	1
P54	0256104430	OIL SEAL, BEARING	NBR	1
P56	0130004600	CON-ROD ASSEMBLY	ALUM/STEEL	3
P60	02761047S01	PLUNGER ASSEMBLY		3
P61	0276104880	ROD	STAINLESS	3
P62	02560048S01	PLUNGER	CERAMIC	3
P63	0362004850	SPACER	BRASS	3
P64	0121114852	GASKET	COPPER	3
P65	0150004900	PIN, PLUNGER	STEEL	3
P66	9120R05055	BOLT	STAINLESS	3
P70	02560044201	COVER, BEARING	PLATED STEEL	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 Steal (300 Series)

# Exploded View

## Model 508



09/05

REF. #	PART NUMBER	PART NAME	MATERIAL	QTY
	30102	RAIL, 5 SERIES	NBR	2
	30103	OIL, BOTTLE, 32oz., ISO 100		1
	30110	SEAL KIT, 508 (F08, F09, F25)	NBR	1
	30111	VALVE KIT, INLET (F60, F62)	STAINLESS/NBR	1
	30112	VALVE KIT, OUTLET (F40, F42)	STAINLESS/NBR	1
	30115	RAIL, SET, 508L, 7 CP REPLACEMENT	PLATED STEEL	1
Recommended Accessories				
	70100	6085 REGULATOR, 15 gpm, 1200 PSI	BRONZE/CERAMIC	1

### Horsepower Requirements

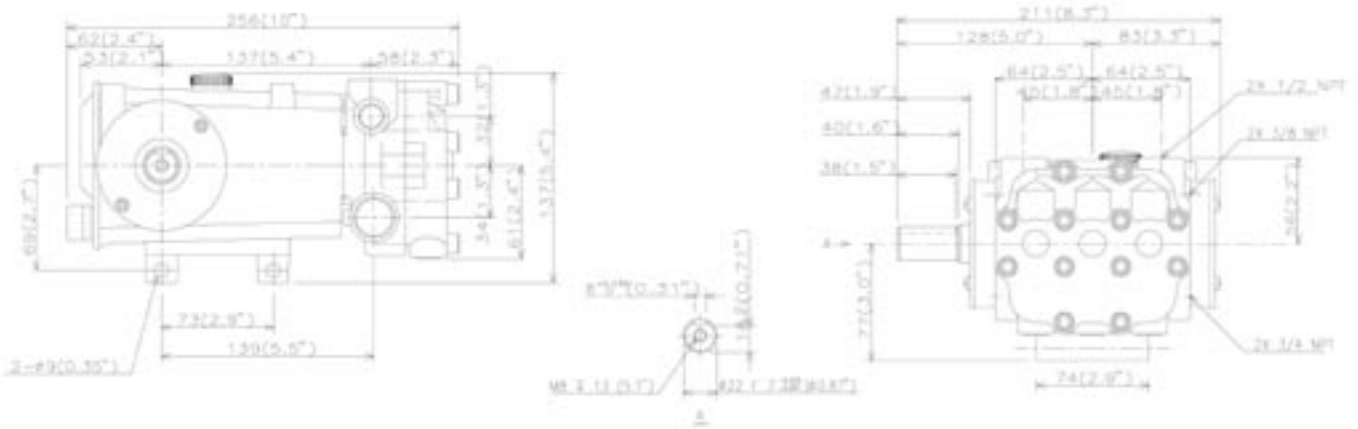
#### Pressure (psi)

				Pressure (psi)				
	RPM	GPM	LPM	800	900	1000	1100	1200
<b>508</b>	950	8.0	30.8	4.4	4.9	5.5	6.0	6.6
	1200	10.0	38.9	5.5	6.1	6.8	7.5	
	1450	12.0	47.0	6.6	7.4			

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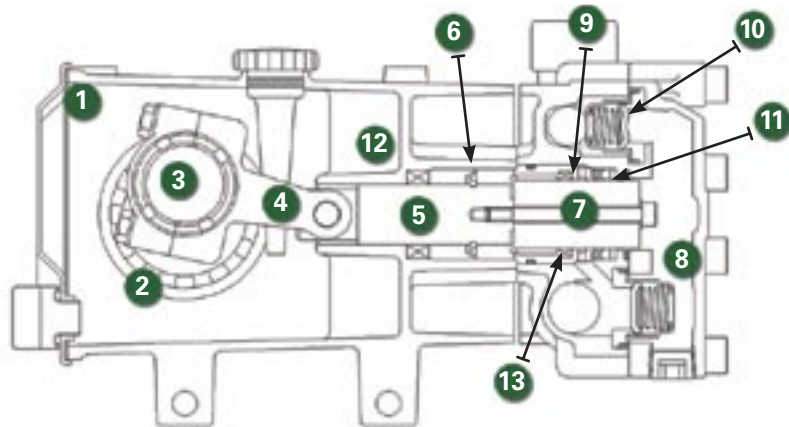
## PROVEN PLUNGER PUMPS

### 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.



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