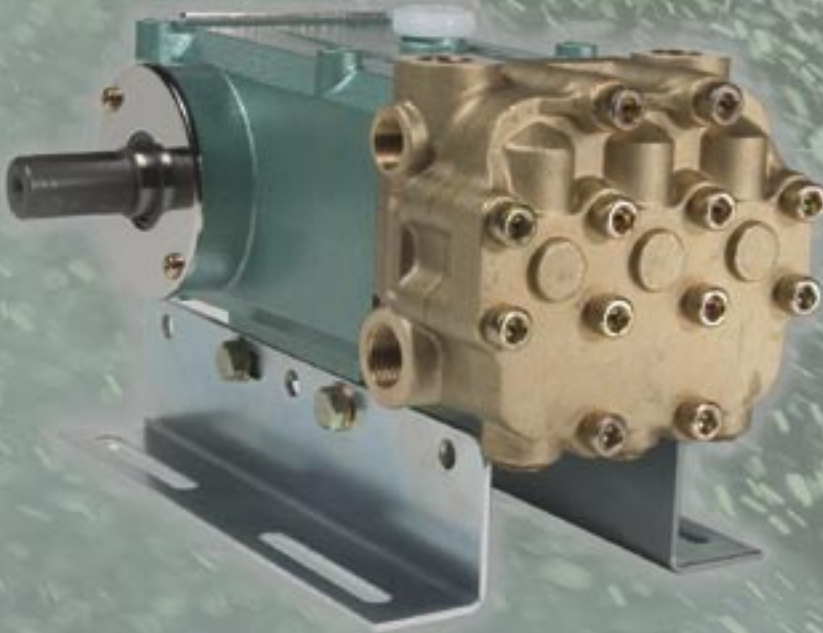


# ARIMITSU

PROVEN PLUNGER PUMPS



## 5 Series

### Model 516

#### 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
- Interchangeable valves for maintenance ease
- 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 516	US	METRIC
Flow	4 gpm	15 lpm
Pressure	2300 psi	160 bar
RPM	950	950
Inlet Pressure	-5 to 70 psi	0-5 bar
Alternative specification		
Flow	5 gpm	19 lpm
Pressure	2000 psi	140 bar
RPM	1200	1200
Inlet Pressure	Flooded to 70 psi	0-5 bar
Inlet	1/2" NPT	1/2" NPT
Outlet	3/8" NPT	3/8" NPT
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

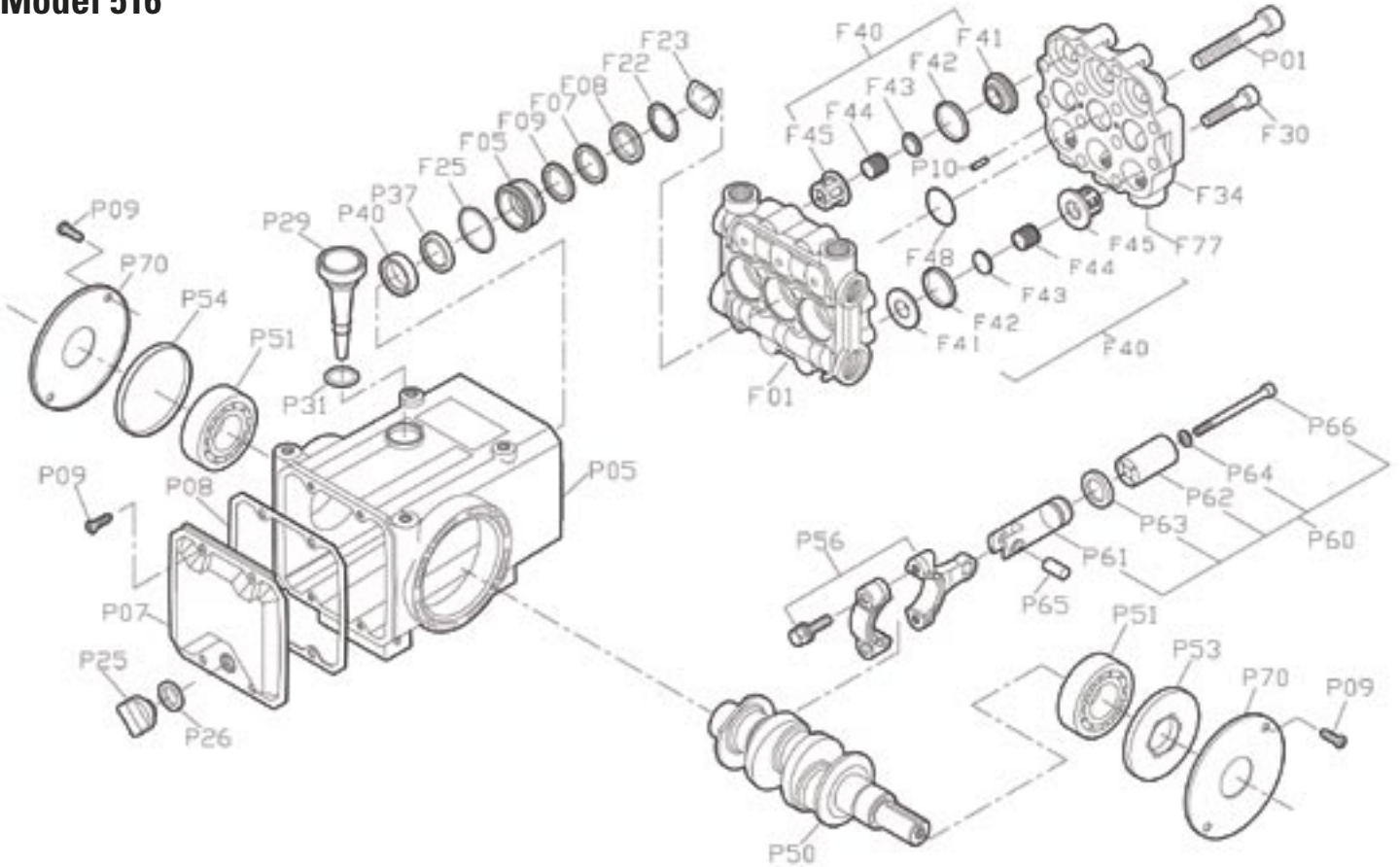
REF. #	PART NUMBER	PART NAME	MATERIAL	QTY
F01	A3277	MANIFOLD, PORTED	FORGED BRASS	1
F05	A3241	SEAL RETAINER	BRASS	3
F06	A3230	SEAL ASSEMBLY		3
F07	<i>(included in F06)</i>	BACKING RING	FP	3
F08	<i>(included in F06)</i>	V-PACKING	NBR/TEXTILE	3
F09	<i>(included in F06)</i>	VACUUM SEAL	NBR	3
F22	A3240	SPREADER	BRASS	3
F23	A3251	WAVE WASHER	STAINLESS	3
F25	9203B15032	O-RING, RETAINER	NBR	3
F30	A3236	BOLT, MANIFOLD	PLATED STEEL	8
F34	A3309	MANIFOLD, VALVES	FORGED BRASS	1
F40	A3177	VALVE ASSEMBLY		6
F41	<i>(included in F40)</i>	SEAT	STAINLESS	6
F42	A3146 <i>(included in F40)</i>	GASKET	NBR	6
F43	<i>(included in F40)</i>	POPPET	STAINLESS	6
F44	<i>(included in F40)</i>	SPRING	STAINLESS	6
F45	<i>(included in F40)</i>	CAGE	STAINLESS	6
F48	A3226	O-RING, MANIFOLD	NBR	3
F77	A3351	PLUG	BRASS	3
P01	A3227	BOLT, HEAD	PLATED STEEL	4
P05	A3361	CRANKCASE	ALUMINUM	1
P07	A3353	BACK COVER	PLATED STEEL	1
P08	A3048	GASKET	BONDED PAPER	1
P09	A3228	SCREW, PHILLIPS	PLATED STEEL	8
P10	A3354	DOWEL PIN, MANIFOLD	PLATED STEEL	2
P25	A3356	DRAIN PLUG	FP	1
P26	A3343	GASKET, DRAIN PLUG	NBR	1
P29	A3260	OIL DIPSTICK ASSEMBLY	FP	1
P31	A3305	O-RING, DIPSTICK	NBR	1
P37	A3055	WATER SLINGER	NBR	3
P40	A3237	OIL SEAL	NBR	3
P50	A3390	CRANKSHAFT	STEEL	1
P51	A3049	BEARING, BALL	STEEL	2
P53	A3275	OIL SEAL, SHAFT SIDE	NBR	1
P54	A3276	OIL SEAL, COVER	NBR	1
P56	A3271	CON-ROD ASSEMBLY	ALUMINUM	3
P60	02781047S0	PLUNGER ASSEMBLY		3
P61	<i>(included in F60)</i>	ROD	STAINLESS	3
P62	<i>(included in F60)</i>	PLUNGER	CERAMIC	3
P63	<i>(included in F60)</i>	SPACER	BRASS	3
P64	A3264	GASKET	COPPER	3
P66	<i>(included in F60)</i>	BOLT	STAINLESS	3
P65	A3047	PIN, PLUNGER	STEEL	3
P70	A3287	COVER, BEARING	PLATED STEEL	2
P80	0120008050	SHAFT KEY, STEPPED	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 Steel (300 Series)

# Exploded View

## Model 516



09/05

REF. #	PART NUMBER	PART NAME	MATERIAL	QTY
	A1001	SEAL KIT, (INCLUDES F06, F25)	NBR	1
	A1002	VALVE KIT, (INCLUDES F40, F42)	STAINLESS/NBR	1
	A3003	RAIL, STND, 5 SERIES	PLATED STEEL	2
	A8037	OIL, BOTTLE (32 OZ) ISO 100		1
Recommended Accessories				
	70100	6085 REGULATOR, 5-15 gpm, 1200 PSI	bronze/ceramic	1

### Horsepower Requirements

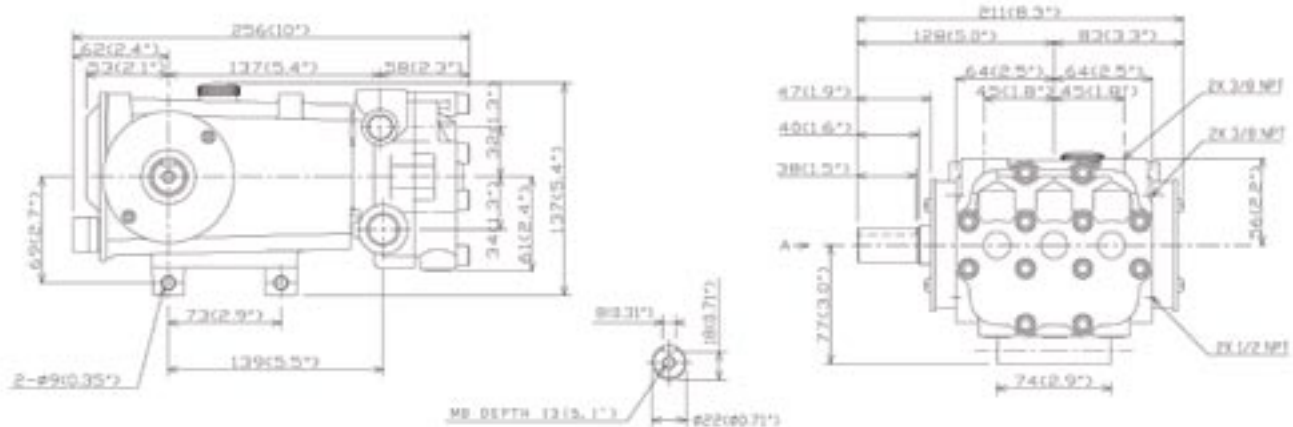
### Pressure (psi)

				Pressure (psi)				
	RPM	GPM	LPM	1000	1250	1500	2000	2300
<b>516</b>	850	3.8	14.3	2.6	3.2	3.9	5.2	5.9
	950	4.0	15.0	2.7	3.4	4.1	5.4	6.2
	1200	5.0	19.0	3.4	4.3	5.2	6.9	

# ARIMITSU

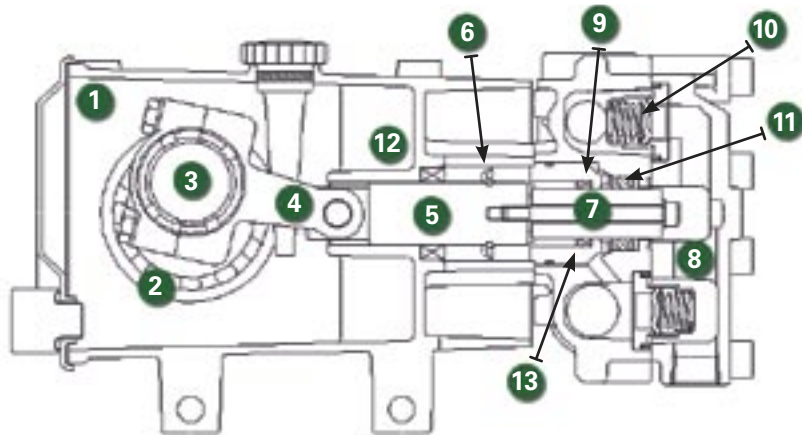
## PROVEN PLUNGER PUMPS

### 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



Arimitsu of North America, Inc.  
 700 McKinley St.  
 Anoka, MN 55303  
 ph: 612.219.7522  
 fax: 763.433.0404  
 www.arimitsupumps.com

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.2, Model 516, (12-22)  
 Part #. 100