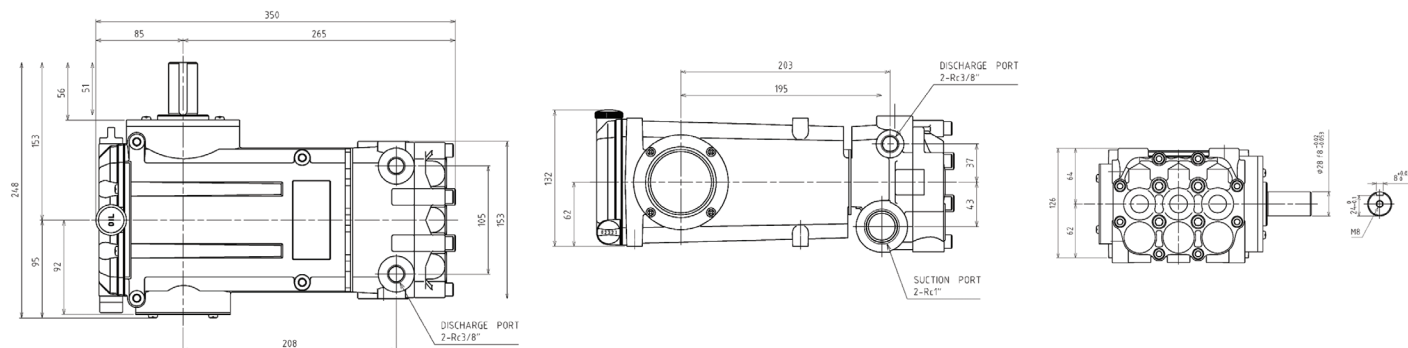


# ARIMITSU

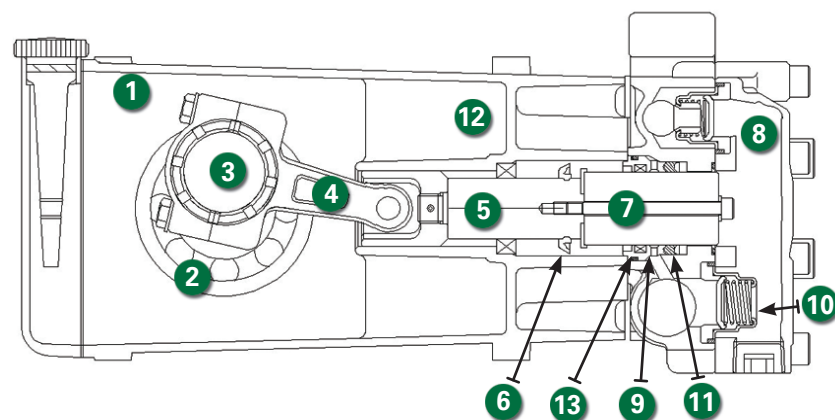
## PROVEN PLUNGER PUMPS

### 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



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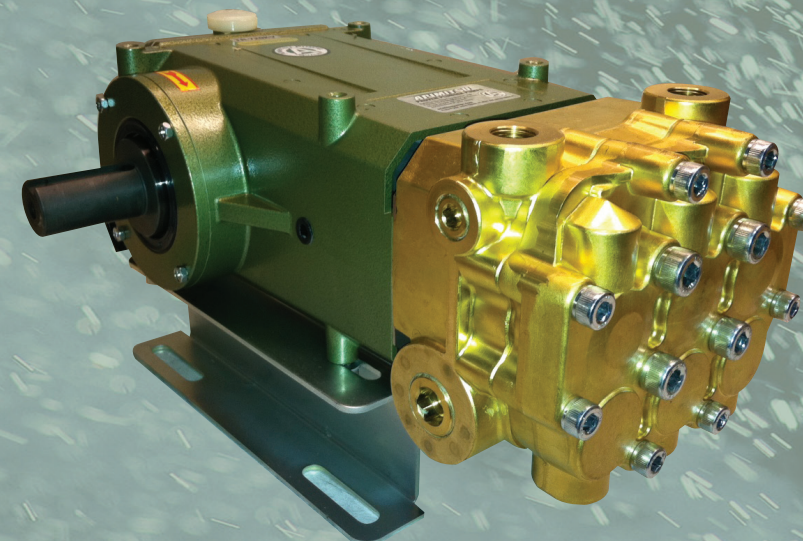
Manufactured by Arimitsu Industry Co., Ltd., of Osaka, Japan, a leading supplier of Industrial plunger pumps and systems used by Industrial leaders throughout the World.



Rev.2, Model TR-713KV  
 (12-22)

# ARIMITSU

## PROVEN PLUNGER PUMPS



# 7 Series

## Model TR-713KV

### FEATURES

- Triplex plunger 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

TR-713KV	US	METRIC
Flow	10 gpm	39 lpm
Pressure	1800 psi	125 bar
RPM	900	900
Inlet Pressure	-5 to 70 psi	0-5 bar
Inlet	3/4"	3/4"
Outlet	1/2" & 3/8"	1/2" & 3/8"
Oil requirement	37 oz.	1.1 L
Shaft Dia.	1.102"	28mm
Max Liquid Temp.	175°F	80°C
Shaft Location	L or R	L or R
Weight	33 lbs.	15 kg

$$\frac{\text{Determing Pump RPM}}{\text{Rated RPM}} = \frac{\text{Rated GPM}}{\text{"Desired" GPM}}$$

$$\frac{\text{Determing Required HP}}{1500} = \frac{\text{GPM} \times \text{PSI}}{\text{Electric Brake H.P. Required}}$$

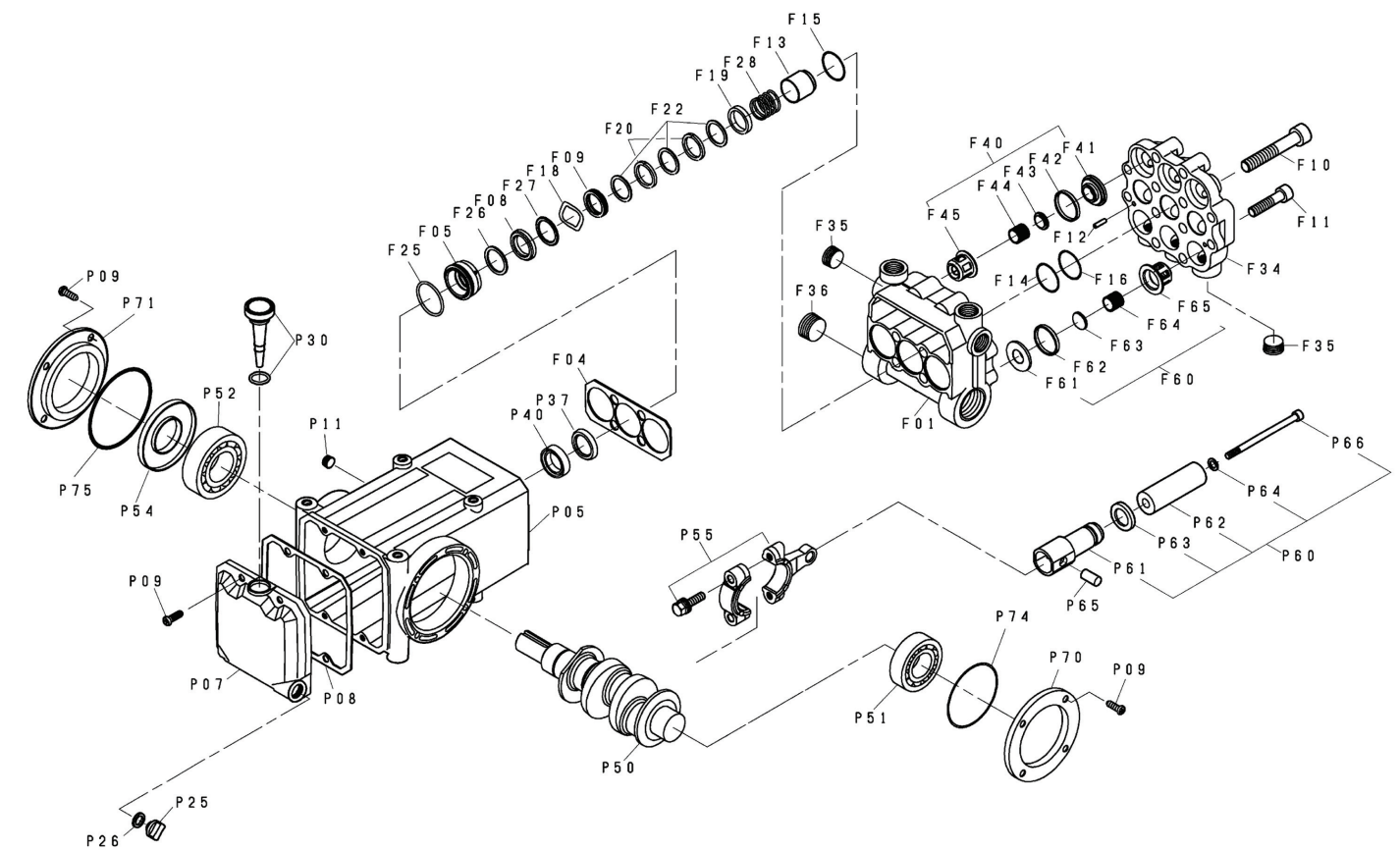
$$\frac{\text{Determing Motor Pulley Size}}{\text{Pump RPM}} = \frac{\text{Motor Pulley OD}}{\text{Pump Pulley OD}}$$

# Parts List

# Exploded View

REF. #	PART NUMBER	PART NAME	MATERIAL	QTY
F01	0381001010	MANIFOLD, PORTED	BRASS	1
F04	0381001250	SPACER	STAINLESS STEEL	1
F05	0381001200	SEAL RETAINER	BRASS	3
F08	02556014B0	LOW PRESSURE PACKING	NBR/TEXTILE	3
F09	0381001260	PACKING ADAPTER	BRASS	3
F10	0380001100	MANIFOLD BOLT, LONG	PLATED STEEL	4
F11	A3236	MANIFOLD BOLT, SHORT	PLATED STEEL	8
F12	A3354	DOWEL PIN	STEEL	2
F13	0381001300	STUFFING BOX	STAINLESS STEEL	3
F14	9206A25035	BACKUP RING	PTFE TEFLON	3
F15	A3253	O-RING, STUFFING BOX	NBR	3
F16	9202F25035	O-RING, MANIFOLD	NBR	3
F18	A3233	WAVE WASHER	STAINLESS STEEL	3
F19	0381001430	MALE ADAPTER	BRASS	3
F20	06870014Y0	HIGH PRESSURE GLAND PACKING	ARAMIDE	6
F22	0687001272	GLAND PACKING ADAPTER	PTFE + CG	9
F25	A3252	O-RING, SEAL RETAINER	NBR	3
F26	0381001280	ADAPTER, SEAL RETAINER	PTFE + CG	3
F27	A3234	MALE ADAPTER	BRASS	3
F28	0381001450	SPRING	STAINLESS STEEL	3
F34	0381003200	MANIFOLD, VALVES	BRASS	1
F35	A3351	PLUG, 3/8"	BRASS	4
F36	0440003940	PLUG, 1"	BRASS	1
F40	A3148	VALVE ASSEMBLY	STAINLESS STEEL	3
F41		SEAT	STAINLESS STEEL	3
F42	A3146	VALVE GASKET	NBR	3
F43		DISC	STAINLESS STEEL	3
F44		SPRING	STAINLESS STEEL	3
F45		RETAINER, CAGE	STAINLESS STEEL	3
F60	A3149	VALVE ASSEMBLY	STAINLESS STEEL	3
F61		SEAT	STAINLESS STEEL	3
F62	A3222	VALVE GASKET	NBR	3
F63		DISC	STAINLESS STEEL	3
F64		SPRING	STAINLESS STEEL	3
F65		RETAINER, CAGE	STAINLESS STEEL	3
P05	0380022010	CRANKCASE	ALUMINUM	1
P07	0380002040	BACK COVER	ALUMINUM	1
P08	A3368	GASKET	BONDED PAPER	1
P09	A3228	SCREW, PHILLIPS	PLATED STEEL	12
P11	9313A10800	PLUG	CARBON STEEL	1
P25	A3356	DRAIN PLUG	POLYAMIDE	2
P26	A3343	GASKET	NBR	2
P30	02701026001	OIL GAUGE, DIPSTICK	POLYAMIDE, NBR	1
P37	A3372	SLINGER	NBR	3
P40	A3274	OIL SEAL	NBR	3
P50	A3373	CRANKSHAFT	STEEL	1
P51	A3374	BEARING	STEEL	1
P52	A3375	BEARING	STEEL	1
P54	A3207	OIL SEAL, SHAFT	NBR	1
P55	A3376	CONNECTING ROD ASSEMBLY	ALUMINUM/STEEL	3
P60		PLUNGER ASSEMBLY		3
P61	0366004860	PLUNGER ROD	STAINLESS STEEL	3
P62	03810048S0	PLUNGER	CERAMIC	3
P63	0381004830	SPACER	BRASS	3
P64	A3264	GASKET	COPPER	3
P65	A3378	PLUNGER PIN	STEEL	3
P66	9120R05095	BOLT, PLUNGER	STAINLESS STEEL	3
P70	A3380	BEARING COVER, BLIND SIDE	STEEL	1
P71	0380004430	BEARING COVER, SHAFT SIDE	ALUMINUM	1
P74	A3057	O-RING, COVER	NBR	1
P75	A3104	O-RING, COVER	NBR	1

## Model TR-713KV



REF. #	PART NUMBER	PART NAME	MATERIAL	QTY
	A1007	RAIL SET, 7 SERIES	PLATED STEEL	1
	A1009	VALVE KIT, INLET (F60, F62)	STAINLESS/NBR	1
	A1010	VALVE KIT, OUTLET (F40, F42)	STAINLESS/NBR	1
	A1022	SEAL KIT (F08, F09, F15, F19, F20, F22, F25, F26, F27)	NBR	1

### Horsepower Requirements

### Pressure (psi)

	RPM	GPM	LPM	1000	1200	1500	1800	2000
TR-713KV	725	8.0	32.0	5.5	6.6	8.2	9.9	11.0
	900	10.0	39.7	6.8	8.2	10.2	12.3	
	975	11.0	43.0	7.5	9.1	11.3		

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

\* Material codes: FP=Fluoropolymer, NBR=Medium Nitrile (Buna-N), CFR=Foam Rubber  
STAINLESS=Stainless Steel (300 Series)