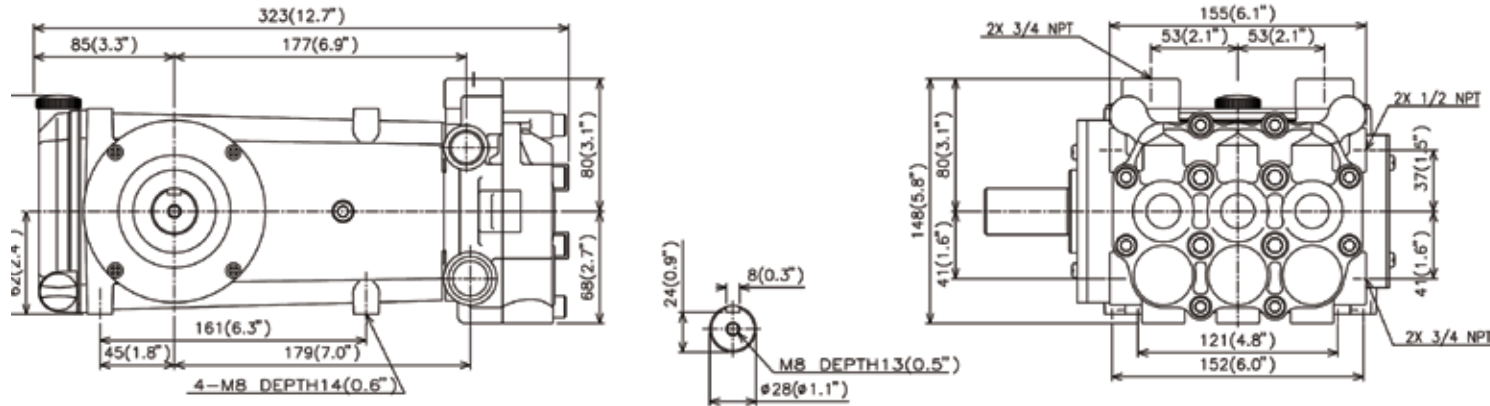
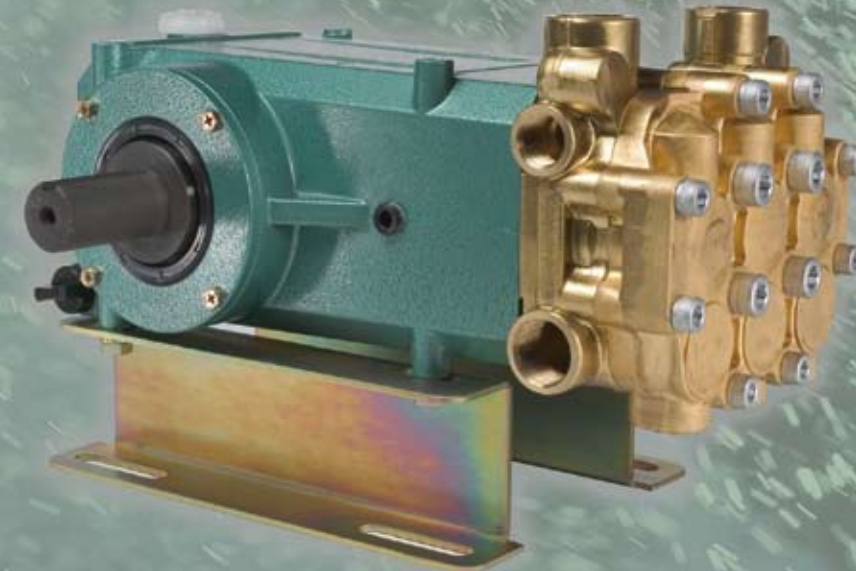
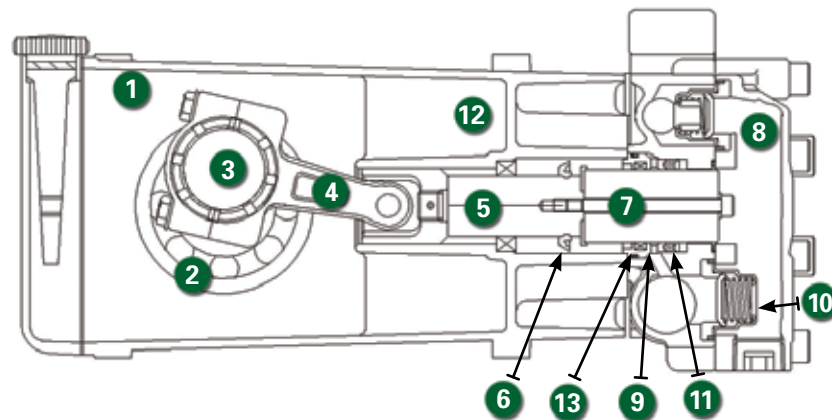


DIMENSIONS (mm/in.)



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



7 Series

Model 709

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 709	US	METRIC
Flow	15 gpm	57 lpm
Pressure	1100 psi	75 bar
RPM	950	950
Inlet Pressure	-5 to 70 psi	0-5 bar
Inlet	3/4"	3/4"
Outlet	1/2" & 3/4"	1/2" & 3/4"
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

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

Parts List

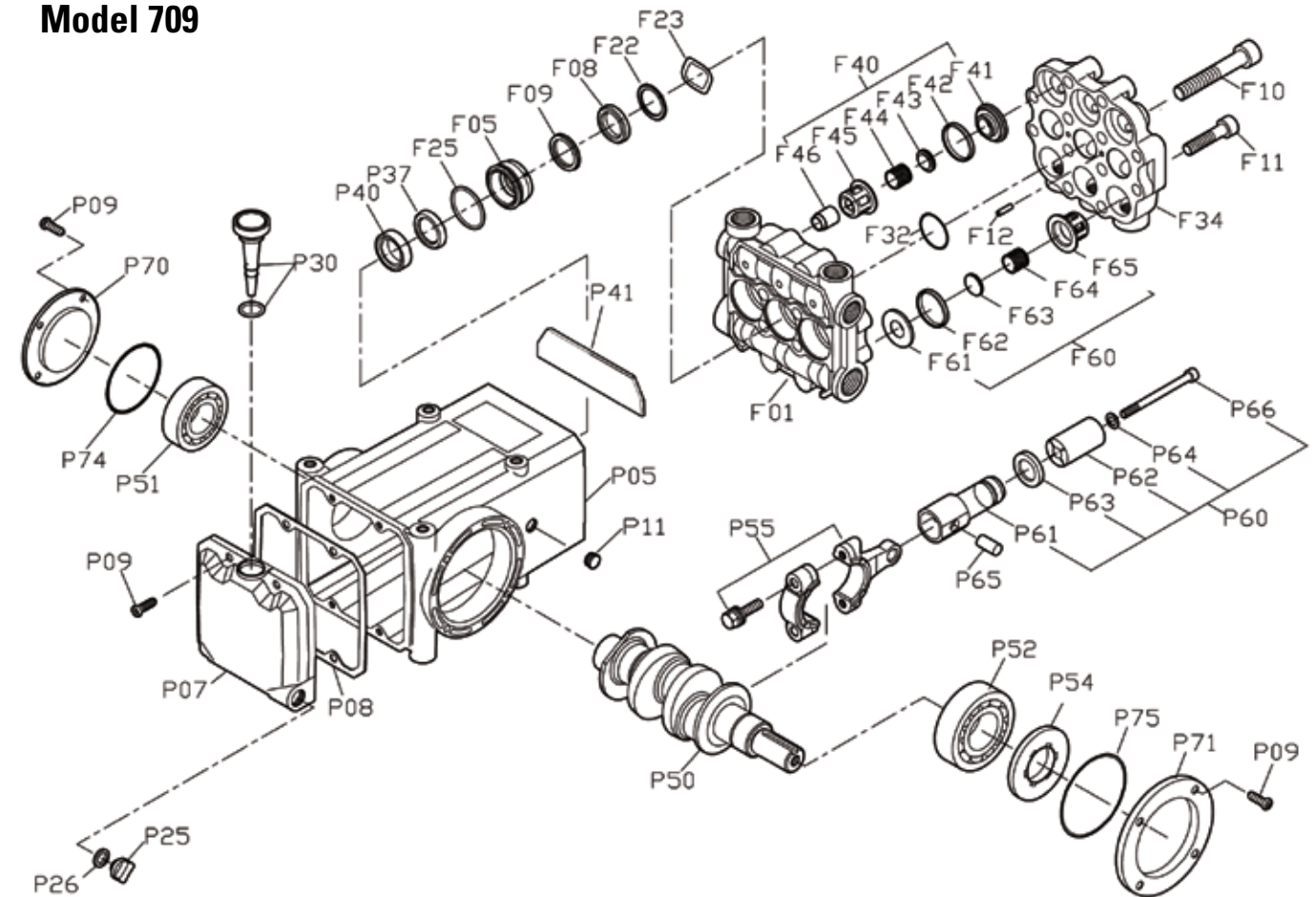
REF. #	PART NUMBER	PART NAME	MATERIAL	QTY
F01	0361001010	MANIFOLD, PORTED	BRASS	1
F05	0361501200	SEAL RETAINER	BRASS	3
F06	03615014000A	SEAL ASSEMBLY		3
F08	(included in F06)	V-PACKING	NBR/TEXTILE	3
F09	(included in F06)	VACUUM SEAL	NBR	3
F10	0361001100	BOLT, HEAD	PLATED STEEL	4
F11	0361001140	BOLT, MANIFOLD	PLATED STEEL	8
F12	0361001110	DOWEL, MANIFOLD	PLATED STEEL	2
F22	0361501430	SPREADER	BRASS	3
F23	0270101450	WAVE WASHER	STAINLESS	3
F25	9203B15040	O-RING, RETAINER	NBR	3
F32	9203F15034	O-RING, MANIFOLD	NBR	3
F34	03610032001	MANIFOLD, VALVES	BRASS	1
F40	03615033002	VALVE ASSEMBLY, OUTLET		3
F41	(included in F40)	SEAT	STAINLESS	3
F42	0361003340	GASKET	NBR	3
F43	(included in F40)	DISC	STAINLESS	3
F44	(included in F40)	SPRING	STAINLESS	3
F45	(included in F40)	CAGE	STAINLESS	3
F46	(included in F40)	GUIDE	BRASS	3
F60	03610038001	VALVE ASSEMBLY, INLET		3
F61	(included in F60)	SEAT	STAINLESS	3
F62	0361003840	PACKING	NBR	3
F63	(included in F60)	DISC	STAINLESS	3
F64	(included in F60)	SPRING	STAINLESS	3
F65	(included in F60)	CAGE	STAINLESS	3
P05	0366002010	CRANKCASE	ALUMINUM	1
P07	0366002040	BACK COVER	ALUMINUM	1
P08	0270102050	GASKET	BONDED PAPER	1
P09	9138A05015	SCREW, PHILLIPS	PLATED STEEL	12
P11	9313A10800	PLUG	STEEL	1
P25	0090002320	DRAIN PLUG	FP	2
P26	0090002340	GASKET	NBR	2
P30	02701026001	OIL DIPSTICK ASSEMBLY	FP	1
P37	0366001730	WATER SLINGER	NBR/FP	3
P40	0220002400	OIL SEAL	NBR	3
P41	0366792800	GASKET	CFR	1
P50	03611040101	CRANKSHAFT	STEEL	1
P51	9180630600	BEARING	STEEL	1
P52	9180621000	BEARING, SHAFT	STEEL	1
P54	0613112410	OIL SEAL, BEARING	NBR	1
P55	0180004600	CON-ROD ASSEMBLY	ALUM/STEEL	3
P60	03660047S0	PLUNGER ASSEMBLY		3
P61	0366004860	GUIDE ASSEMBLY	STEEL/STAINLESS	3
P62	03610048S0	PLUNGER	CERAMIC	3
P63	03610048501	SPACER	BRASS	3
P64	0121114852	GASKET	COPPER	3
P65	03200049001	PIN, PLUNGER	STEEL	3
P66	9120R05065	BOLT, PLUNGER	STAINLESS	3
P70	0365004420	COVER, BEARING	PLATED STEEL	1
P71	0366004430	COVER, BEARING, SHAFT	ALUMINUM	1
P74	0361004425	O-RING, COVER, BEARING	NBR	1
P75	9203B15090	O-RING, COVER, SHAFT	NBR	1

* 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)

Exploded View

Model 709



09/05

REF. #	PART NUMBER	PART NAME	MATERIAL	QTY
	30105	SEAL KIT, 709 (F06, F25)	NBR	1
	30106	VALVE KIT, INLET (F60, F62)	STAINLESS/NBR	1
	30116	VALVE KIT, OUTLET (F40, F42)	STAINLESS/NBR	1
	30109	RAIL SET, 7 SERIES	PLATED STEEL	1
Recommended Accessories				
	70100	6085 REGULATOR, 15 GPM, 1200 PSI BRONZE/CERAMIC		1

Horsepower Requirements

Pressure (psi)

709	RPM			Pressure (psi)				
	GPM	LPM		800	900	1000	1100	1300
	760	12.5	48.4	6.9	7.7	8.6	9.4	11.1
	920	15.0	58.5	8.2	9.2	10.3	11.3	
	1050	17.1	66.8	9.4	10.6			