



15 Frame Plunger Pumps

Standard Model

Stainless Steel Model

SS Flushed Model

Duplex SS Model

Nickel Aluminum Bronze Model

1050
1051
1051C
1051D
1057

FEATURES

Superior Design

- Triplex plunger design provides smoother liquid flow.
- V-Packings are completely lubricated and cooled by the liquid being pumped.
- Special ported inlet manifold permits an external flush liquid providing cooling for hi-temp liquids and lubrication for low lubricity liquids.
- Lubricated Lo-Pressure Seals provide double protection against external leakage.
- Oil bath crankcase assures optimum lubrication.
- Close tolerance concentricity of the ceramic plunger offers perfect alignment and maximizes seal life.

Quality Materials

- Precision design 304 and 316 stainless steel valves and seats are hardened and polished for ultimate seating and extended valve life.
- Brass, Stainless Steel, Duplex SS or Nickel Aluminum Bronze manifolds for strength and corrosion resistance.
- Special concentric, high-density, polished, solid ceramic plungers provide a true wear surface and extended seal life.
- Specially formulated, CAT PUMP exclusive, V-Packings offers unmatched performance and seal life.
- Die cast aluminum crankcase provides high strength, minimum weight and precision tolerance control.
- Chrome-moly crankshaft gives unmatched strength and surface hardness.
- Oversized crankshaft bearings with greater loading capacity mean longer bearing life.

Easy Maintenance

- Wet-end easily serviced without entering crankcase.
- Valve assemblies are accessible without disturbing piping.
- Interchangeable inlet and discharge valve assemblies.
- Preset seals require no packing adjustment.

⚠ CAUTIONS AND WARNINGS

All High Pressure Systems require a primary pressure regulating device (i.e. regulator, unloader) and a secondary pressure relief device (i.e. pop-off valve, relief valve). Failure to install such relief devices could result in personal injury or damage to pump or property. CAT PUMPS does not assume any liability or responsibility for the operation of a customer's high pressure system.

Read all CAUTIONS and WARNINGS before commencing service or operation of any high pressure system. The CAUTIONS and WARNINGS are included in each service manual and with each Accessory Data sheet. CAUTIONS and WARNINGS can also be viewed online at www.catpumps.com/cautions-warnings or can be requested directly from CAT PUMPS.

WARRANTY

View the Limited Warranty on-line at www.catpumps.com/warranty.

SPECIFICATIONS

U.S. Measure

Metric Measure

STANDARD SPECIFICATIONS

Flow	10 gpm	(38 l/m)
Pressure Range	100 to 2200 psi	(7 to 155 bar)
RPM	958 RPM	(958 RPM)
Inlet Pressure Range	-5 to 60 psi	(-0.35 to 4 bar)
Maximum Liquid Temperature	160°F	(70°C)

Above 130°F call CAT PUMPS for inlet conditions and elastomer recommendations.

ALTERNATE SPECIFICATIONS - MODEL 1050 ONLY

Flow*	12 gpm	(45 l/m)
Pressure Range*	100 to 1800 psi	(7 to 125 bar)
RPM*	1150 RPM	(1150 RPM)
Inlet Pressure Range*	20 to 60 psi	(1.4 to 4 bar)
Maximum Liquid Temperature*	100°F	(38°C)

*C.A.T. Required

COMMON SPECIFICATIONS

Bore	0.945"	(24 mm)
Stroke	1.180"	(30 mm)
Crankcase Capacity	42 oz.	(1.26 l)
Inlet Ports (2)	3/4" NPTF	(3/4" NPTF)
Flushing Ports (2) (1051C)	1/8" NPTF	(1/8" NPTF)
Discharge Ports (2)	1/2" NPTF	(1/2" NPTF)
Pulley Mounting	Either Side	(Either Side)
Shaft Diameter	1.181"	(30 mm)
Weight	44 lbs.	(20 kg)
Dimensions	16.28 x 12.99 x 6.44"	(414 x 330 x 164 mm)

ELECTRIC HORSEPOWER REQUIREMENTS

FLOW		PRESSURE			MOTOR PULLEY SIZE	
		psi 1800	psi 2000	psi 2200	Using 1725 RPM Motor & Std. 10" Pump Pulley	
U.S. gpm	l/m	bar 125	bar 140	bar 155	RPM	Pulley O.D.
12.0	45	14.8	N/A	N/A	1150	6.5
10.0	38	12.4	13.7	15.1	958	5.4
9.0	34	11.1	12.4	13.6	836	4.9

DETERMINING THE PUMP R.P.M.	<u>Rated G.P.M.</u>	=	<u>"Desired" G.P.M.</u>
	Rated R.P.M.	=	"Desired" R.P.M.
DETERMINING THE REQUIRED H.P.	<u>GPM x psi</u>	=	Electric Brake
	1460	=	H. P. Required
DETERMINING MOTOR PULLEY SIZE	<u>Motor Pulley O.D.</u>	=	<u>Pump Pulley O.D.</u>
	Pump R.P.M.	=	Motor R.P.M.

See complete Drive Packages [Incls: Pulleys, Belts, Hubs, Key] Tech Bulletin 003. Refer to pump **Service Manual** for repair procedure and additional technical information.

"Customer confidence is our greatest asset"