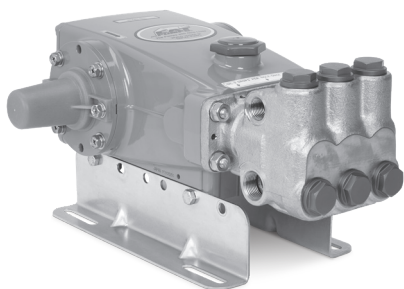


DATA SHEET

15 FRAME PLUNGER PUMPS



Stainless Models: 1061X, 1061XD



Model 1061X Shown
(Shaft protector included rails sold separately)

FEATURES

- Innovative X-Series high-pressure packings offer up to three times the lifespan of our standard packings.
- The corrosion-resistant cast 316 stainless steel manifold offers superior durability compared to chrome-plated or brass alternatives.
- Advanced connecting rods and plunger rod materials optimize the drive end's performance for continuous-duty applications.
- Precision-machined 316 stainless steel valves and seats deliver extended service life and reliable performance across a broad range of fluids.
- Specialized low-pressure seals in the XD models are engineered for low-lubricity fluids, such as deionized water, which eliminates the need for freshwater flushing.

SPECIFICATIONS

	U.S.	Metric
Flow	10 gpm	38 lpm
Pressure Range	100–2200 psi	6.9–152 bar
Pump RPM*	958 rpm	958 rpm
Inlet Pressure Range	-5–60 psi	-0.35–4.1 bar
Max. Liquid Temp. (NBR)	160° F	71° C

*Pump minimum is 100 RPM.

ALTERNATE SPECIFICATIONS

	U.S.	Metric
Flow	12.3 gpm	46.6 lpm
Pressure Range	100–1800 psi	6.9–124 bar
Pump RPM*	1180 rpm	1180 rpm
Inlet Pressure Range	20–60 psi	1.4–4.1 bar
Max. Liquid Temp. (NBR)	100° F	38° C

*Pump minimum is 100 RPM.

COMMON SPECIFICATIONS

	U.S.	Metric
Bore	0.945"	24 mm
Stroke	1.181"	30 mm
Crankcase Capacity	42 oz	1.26 l
Inlet Ports (2)	¾" NPT(F)	¾" NPT (F)
Discharge Ports (2)	½" NPT (F)	½" NPT (F)
Pulley Mounting	Either Side	Either Side
Shaft Diameter	1.181"	30 mm
Weight	44 lbs	20 kg
Dimensions	16.30 x 12.99 x 6.45"	414 x 330 x 164 mm

DETERMINING THE PUMP RPM

$$\frac{\text{Rated gpm}}{\text{Rated rpm}} = \frac{\text{Desired gpm}}{\text{Desired rpm}}$$

DETERMINING THE REQUIRED HP

$$\frac{\text{HP}}{\text{(Electric Brake)}} = \frac{\text{gpm} \times \text{psi}}{1460}$$

DETERMINING MOTOR PULLEY SIZE

$$\frac{\text{Motor Pulley OD}}{\text{Pump rpm}} = \frac{\text{Pump Pulley OD}}{\text{Motor rpm}}$$

Refer to pump **Service Manual** for repair procedure and additional technical information.

PARTS LIST

ITEM	DESCRIPTION				QTY	
	1061X	MATL	1061XD	MATL		
5	49651	S	49651	S	Screw, HHC Sems (M8 x 20) (See Tech Bulletin 074)	8
8	134805	ALE	134805	ALE	Cover, Bearing	2
9	855043	FBR	855043	FBR	Shim, Split, Bearing Cover 2-Piece	2-4
10	11340	NBR	11340	NBR	O-Ring, Bearing Cover	2
11	43495	NBR	43495	NBR	Seal, Oil, Crankshaft	2
12	855044	S	855044	S	Shim, Split, Bearing Cover 2-Piece	2-4
15	39060	STL	39060	STL	Bearing, Roller	2
20	126805	BZ	126805	BZ	Rod, Connecting Assembly (See Tech Bulletin 074)	3
25	43494	FCM	43494	FCM	Crankshaft, Dual-End (M30)	1
32	43211	ABS	43211	ABS	Cap, Oil Filler	1
33	14177	NBR	14177	NBR	O-Ring, Filler Cap	1
37	92241	PC	92241	PC	Gauge, Oil, Bubble with Gasket (See Tech Bulletin 074)	1
38	44428	NBR	44428	NBR	Gasket, Flat, Oil Gauge	1
40	92542	S	92542	S	Screw, HHC Sems (M6 x 20) (See Tech Bulletin 074)	4
48	25625	STCP	25625	STCP	Plug, Drain (1/4" x 19 BSP)	1
49	23170	NBR	23170	NBR	O-Ring, Drain Plug	1
50	133576	ALE	133576	ALE	Cover, Rear	1
51	44834	NBR	44834	NBR	O-Ring, Rear Cover	1
53	134848	ALE	134848	ALE	Crankcase (Includes: 54, 55)	1
54	27488	S	27488	S	Pin, Guide	2
55	44005	S	44005	S	Stud, Manifold (M10 x 45)	4
56	44664	POP	—	—	Pan, Oil	1
64	43507	CM	43507	CM	Pin, Crosshead	3
65	48892	SSBZ	48892	SSBZ	Rod, Plunger	3
69	126592	STCP R	126592	STCP R	Washer, Oil Seal	3
70	43500	NBR	43500	NBR	Seal, Oil, Crankcase	3
75	43506	S	43506	S	Slinger, Barrier	3
88	45675	S	45675	S	Washer, Keyhole	3
89	45879	SS	45879	SS	Collar, Spacer	3
90	43552	CC	43552	CC	Plunger (M24 x 77)	3
95	89651	SS	89651	SS	Stud, Plunger Retainer (M6 x 70)	3
96	43235	PTFE	43235	PTFE	Backup Ring, Plunger Retainer	3
97	17399	NBR	17399	NBR	O-Ring, Plunger Retainer	3
98	44041	SS	44041	SS	Gasket, Plunger Retainer	3
99	44031	SS	44031	SS	Retainer, Plunger (M6) (See Tech Bulletin 074)	3
100	855001	POP	855001	POP	Retainer, Seal 2-Piece	3
101	43554	—	—	—	Wick	3
106	44035	NBR	—	—	Seal, Low-Pressure with SS-Spring	3
	—	—	76035	ST	Seal, Low-Pressure with E-Spring	3
120	670259	SSNP	670259	SSNP	Case, Seal (See Tech Bulletin 074)	3
121	14762	NBR	14762	NBR	O-Ring, Seal Case	3
126	670263	PVDF	670263	PVDF	Backup Ring, Rear (3.5mm Thick)	3
127	670261	PFB	670261	PFB	Packing, Square	6
128	670262	PVDF	670262	PVDF	Backup Ring, Front (1.5mm Thick)	3
139	44382	SS	44382	SS	Plug, Inlet (3/4" NPT[M])	1
162	43248	PTFE	43248	PTFE	Backup Ring, Valve Seat	6
163	43249	NBR	43249	NBR	O-Ring, Seat	6
164	44037	SS	44037	SS	Seat	6
166	48793	SS	48793	SS	Valve	6
167	44039	SS	44039	SS	Spring, Valve	6
168	44564	PVDF	44564	PVDF	Retainer, Spring	6
172	17617	NBR	17617	NBR	O-Ring, Valve Plug	6
174	49293	SS	49293	SS	Plug, Valve (See Tech Bulletin 074)	6
185	670257	SS	670257	SS	Head, Manifold	1
192	15847	S	15847	S	Lockwasher (M10)	4
194	81258	S	81258	S	Nut, Hex (M10) (See Tech Bulletin 074)	4
250	855047	POP	855047	POP	Protector, Shaft with Two (2) Screws	1

Italics are optional items. Bold print part numbers are unique to a particular pump model.

R components comply with RoHS Directive. For additional technical information see www.catpumps.com/literature/tech-bulletins.
 MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic ALE=Aluminum Epoxy BZ=Bronze CC=Ceramic CM=Chrome-moly
 D=Acetal E=Elgiloy FBR=Fiber FCM=Forged Chrome-moly NBR=Medium Nitrile (Buna-N) PC=Polycarbonate PE=Ployethylene
 PFB=Proprietary Fiber Blend POP=Polypropylene PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride
 S=304SS SS=316SS SSBZ=316SS/Bronze STCP=Steel/Chrome Plated ST=Special PTFE
 SSNP=316SS/Nickel Plated STL=Steel

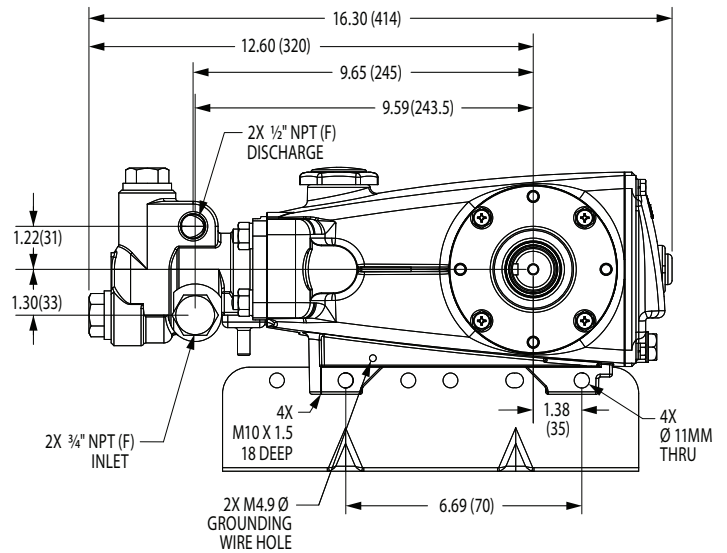
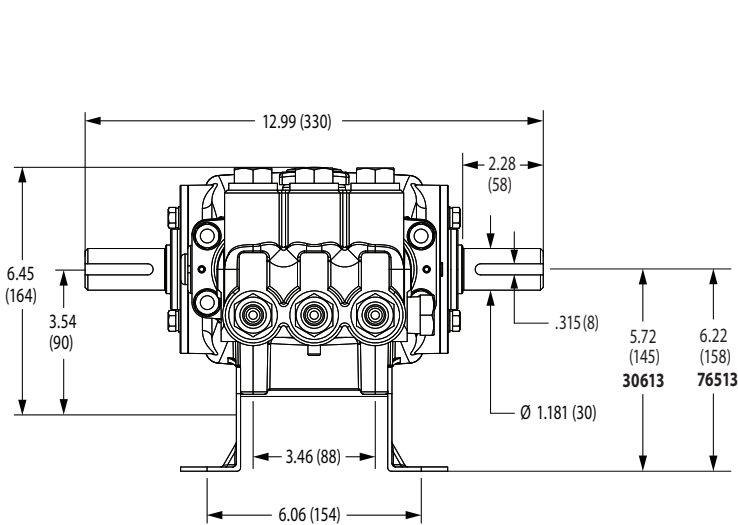
Optional Parts and Accessories and Service Parts listed on page 3. Standard Seal and Valve Kits listed on pages 3 and 4.

This exploded view diagram illustrates the assembly of the 1061X/1061XD engine. The components are numbered 1 through 250, with some parts having alternative part numbers in parentheses. The diagram shows the following sub-assemblies and components:

- Top Cover Assembly:** Includes parts 250, 9, 12, 8, 5, 10, 11, 15, 25, 20, 31, 32, 33, 40, 37, 38, 48, 49, 50, 51, 53, 54, 55, 64, 65, 69, 75, 70, 88, 90, 97, 98, 99, 100, 101, 106, 120, 121, 126, 127, 128, 139, 162, 163, 164, 166, 167, 168, 172, 174, 185, 192, 194, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250.
- Direct Mount:** A mounting bracket (part 56) for direct engine installation.
- Model 1061X Only:** Specific components for the 1061X model, including parts 56, 64, 65, 69, 75, 70, 88, 90, 97, 98, 99, 100, 101, 106, 120, 121, 126, 127, 128, 139, 162, 163, 164, 166, 167, 168, 172, 174, 185, 192, 194, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250.
- Discharge Inlet:** The lower section of the engine block, including parts 162, 163, 164, 166, 167, 168, 172, 174, 185, 192, 194, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250.
- Rail Assembly:** A mounting rail (part 200) for the engine.
- Key:** A small pin (part 201) used for alignment.

The diagram is a technical illustration showing the exploded view of the 1061X/1061XD engine assembly. It includes various components such as the cylinder head, crankshaft, connecting rod, piston, and various mounting brackets. The parts are numbered 1 through 250, with some parts having alternative part numbers in parentheses. The diagram is a technical illustration showing the exploded view of the 1061X/1061XD engine assembly. It includes various components such as the cylinder head, crankshaft, connecting rod, piston, and various mounting brackets. The parts are numbered 1 through 250, with some parts having alternative part numbers in parentheses. The diagram is a technical illustration showing the exploded view of the 1061X/1061XD engine assembly. It includes various components such as the cylinder head, crankshaft, connecting rod, piston, and various mounting brackets. The parts are numbered 1 through 250, with some parts having alternative part numbers in parentheses.

Kits – NBR listed on page 4.



Models: 1061X, 1061XD

SEAL KITS One (1) seal kit required per pump

PUMP MODELS	NBR (STD)	NBR (STD)
1061X	32446*	—
1061XD	—	32388*

ITEM (Included in Seal Kits)	DESCRIPTION		QTY
97	17399	17399 O-Ring, Plunger Retainer	3
106	44035	Seal, Low-Pressure with SS-Spring	3
	—	76035 Seal, Low-Pressure with E-Spring	3
121	14762	14762 O-Ring, Seal Case	3
126	670263	670263 Backup Ring, Rear (3.5mm Thick)	3
127	670261	670261 Packing, Square	6
128	670262	670262 Backup Ring, Front (1.5mm Thick)	3

* Review material codes for individual items (PFB, ST may be used as alternative)

VALVE KITS Two (2) valve kits required per pump

PUMP MODELS	NBR (STD)
1061X, 1061XD	34387

ITEM (Included in Valve Kits)	DESCRIPTION		QTY
162	43248	43248 Backup Ring, Seat	3
163	43249	43249 O-Ring, Seat	3
164	44037	44037 Seat	3
166	48793	48793 Valve	3
167	44039	44039 Spring	3
168	44564	44564 Retainer, Spring	3
172	17617	17617 O-Ring, Valve Plug	3

⚠ CAUTIONS AND WARNINGS

All high-pressure systems require a primary pressure regulating device (e.g. regulator, unloader) and a secondary pressure relief device (e.g. 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/dynamic-literature/cautions-and-warnings or can be requested directly from Cat Pumps.

WARRANTY

View the Limited Warranty online at www.catpumps.com/literature/cat-pumps-limited-warranty