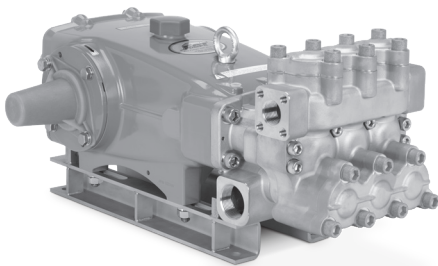


DATA SHEET

36 FRAME PLUNGER PUMPS



Stainless Models: 3641X, 3641XD



Model 3641X Shown
(Shaft protector included, mounting rails sold separately)

FEATURES

- Innovative X-Series high-pressure packings offer up to three times the lifespan of standard packings.
- Corrosion-resistant cast duplex discharge and 316 stainless steel inlet manifolds provide 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.
- Delrin plunger sleeves provide enhanced separation between the packing spring and the ceramic plunger, providing a longer operational life for both plungers and packings.
- High-strength valve plate cover design eliminates the need for threaded stainless steel valve plugs, making servicing easier.
- Precision-machined 316 stainless steel valves and seats deliver extended service life and reliable performance across a broad range of fluids.
- High-strength coated screws help reduce the risk of galling while preventing corrosion in harsh environments.
- 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. Measure	Metric Measure
Flow	45 gpm	170 lpm
Pump Pressure Range	100–1000 psi	6.9–69 bar
Pump RPM*	765 rpm	765 rpm
Inlet Pressure Range	Flooded to 70 psi	Flooded to 4.8 bar
Max. Liquid Temp. (NBR)	140° F	60° C
Bore	1.772"	45 mm
Stroke	1.890"	48 mm
Crankcase Capacity	4.2 qts	4 l
Inlet Ports (2)	1½" NPT(F)	1½" NPT (F)
Discharge Ports (2)	1" NPT (F)	1" NPT (F)
Shaft Diameter	1.378"	35 mm
Pulley Mounting	Either Side	Either Side
Weight	138 lbs	62.5 kg
Dimensions	25.35 x 18.11 x 10.28"	644 x 460 x 261 mm

*Pump minimum is 100 RPM.

DETERMINING THE PUMP RPM	$\frac{\text{Rated gpm}}{\text{Rated rpm}} = \frac{\text{Desired gpm}}{\text{Desired rpm}}$
DETERMINING THE REQUIRED HP	$\frac{\text{hp (Electric Brake)}}{1460} = \frac{\text{gpm} \times \text{psi}}{1460}$
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	P/N	MATL	P/N	MATL	DESCRIPTION	QTY
	3641X		3641XD			
5	96049	S	96049	S	Screw, HHC Sems (M10 x 25) (See Tech Bulletins 074)	8
8	134604	ALE	134604	ALE	Cover, Bearing	2
9	815279	FBR	815279	FBR	Shim, Split, 2-Piece	2
10	12398	NBR	12398	NBR	O-Ring, Bearing Cover	2
11	13296	NBR	13296	NBR	Seal, Oil, Crankshaft	2
12	855049	S	855049	S	Shim, Split, 2-Piece	0-2
15	29326	STL	29326	STL	Bearing, Roller	2
20	126725	BZ R	126725	BZ R	Rod, Connecting Assembly (Includes: 21, 22, 23) (See Tech Bulletins 074)	3
21	126749	STCP R	126749	STCP R	Washer, Locking	3
22	126593	STCP R	126593	STCP R	Washer, Flat (M10.5)	6
23	122045	STZP	122045	STZP	Screw, HH (M10 x 55)	6
25	29325	FCM	29325	FCM	Crankshaft, Dual-End (M48)	1
31	828710	PE	828710	PE	Protector, Oil Cap with Foam Gasket	1
32	43211	ABS	43211	ABS	Cap, Oil Filler	1
33	14177	NBR	14177	NBR	O-Ring, Oil Filler Cap	1
34	126743	STCP R	126743	STCP R	Bolt, Eye (M12 x 1.75) (For Lifting Pump Only)	1
37	92241	PC	92241	PC	Gauge, Oil, Bubble with Gasket (See Tech Bulletins 074)	1
38	44428	NBR	44428	NBR	Gasket, Flat Oil Gauge	1
40	125753	S	125753	S	Screw, HHC Sems (M8 x 25) (See Tech Bulletins 074)	8
48	25625	STCP	25625	STCP	Plug, Drain (1/4" x 19 BSP)	1
49	23170	NBR	23170	NBR	O-Ring, Drain Plug	1
50	45936	ALE	45936	ALE	Cover, Rear	1
51	16612	NBR	16612	NBR	O-Ring, Cover	1
53	134784	ALE	134784	ALE	Crankcase Assembly (Includes: 54)	1
54	27488	S	27488	S	Pins, Guide	2
56	27790	POP	—	—	Pan, Oil	1
59	92538	S	—	—	Screw, HHC Sems (M16 x 16)	2
64	43864	CM	43864	CM	Pin, Crosshead	3
65	49166	SSHB	49166	SSHB	Rod, Plunger	3
69	126587	STCP R	126587	STCP R	Washer, Oil Seal	3
70	100488	NBR	100488	NBR	Seal, Oil, Crankcase	3
75	43865	S	43865	S	Slinger, Barrier	3
88	45676	S	45676	S	Washer, Keyhole (M16)	3
90	46806	CC	46806	CC	Plunger (M45 x 145)	3
95	89778	SS	89778	SS	Stud, Plunger Retainer (M10 x 135)	3
96	20189	PTFE	20189	PTFE	Backup Ring, Plunger Retainer	3
97	11345	NBR	11345	NBR	O-Ring, Plunger Retainer	3
98	44085	SS	44085	SS	Gasket, Retainer	3
99	44084	SS	44084	SS	Retainer, Plunger (M10) (See Tech Bulletins 074)	3
100	44119	PPG	44119	PPG	Retainer, Seal	3
106	48384	NBR	702013	SFTB	Seal, Low-Pressure, with SS-Spring	3
107	48380	SS	48380	SS	Washer	3
110	77366	SS	77366	SS	Manifold, Inlet	1
112	18688	NBR	18688	NBR	O-Ring, Inlet Manifold	3
117	44585	S	44585	S	Screw, HSH (M14 x 40) (See Tech Bulletins 074)	4
126	670238	PVDF	670238	PVDF	Backup Ring, Packing	3
127	670237	PFB	670237	PFB	Packing, Square	3
128	670332	SS	670332	SS	Washer, Spring	3
129	670239	D	670239	D	Sleeve, Plunger	3
141	670231	SS	670231	SS	Spring Large, Coil	3
155	17784	NBR	17784	NBR	O-Ring, Packing Spacer	3
157	49506	SS	49506	SS	Spacer, Packing	3
163	26143	NBR	26143	NBR	O-Ring, Seat	6
164	48393	SS	48393	SS	Seat, Stepped	6
166	44108	SS	44108	SS	Valve	6
167	44109	SS	44109	SS	Spring	6
168	44728	PVDF	44728	PVDF	Retainer, Spring	6
170	44729	SS	44729	SS	Washer, Spring Retainer	6
171	44644	SS	44644	SS	Coil Spring (70 kg), Valve Plug	6
172	89827	NBR	89827	NBR	O-Ring, Valve Plug	6
173	48364	D	48364	D	Backup Ring, Valve Plug	12
174	670143	SS	670143	SS	Plug, Valve	6
176	129759	SSD	129759	SSD	Plate	2
177	32393	STZF	32393	STZF	Screw, HSH (M14 x 70) (See Tech Bulletins 074)	14
185	670107	SSD	670107	SSD	Manifold, Discharge	1
188	89981	S	89981	S	Screw, HSH (M12 x 70) (See Tech Bulletins 074)	8
250	855042	POP	855042	POP	Protector, Shaft with Two (2) Screws, Lockwashers and Washers	1

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

R Compoments 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 AL=Aluminum ALE=Aluminum Epoxy BZ=Bronze CC=Ceramic CM=Chrome-Moly D=Acetal FBR=Fiber

FCM=Forged Chrome-moly NBR=Medium Nitrile (Buna-N) NBR5=Buna, Silicone Free PC=Poly Carbonate PE=Polyethylene PFB=Proprietary Fiber Blend

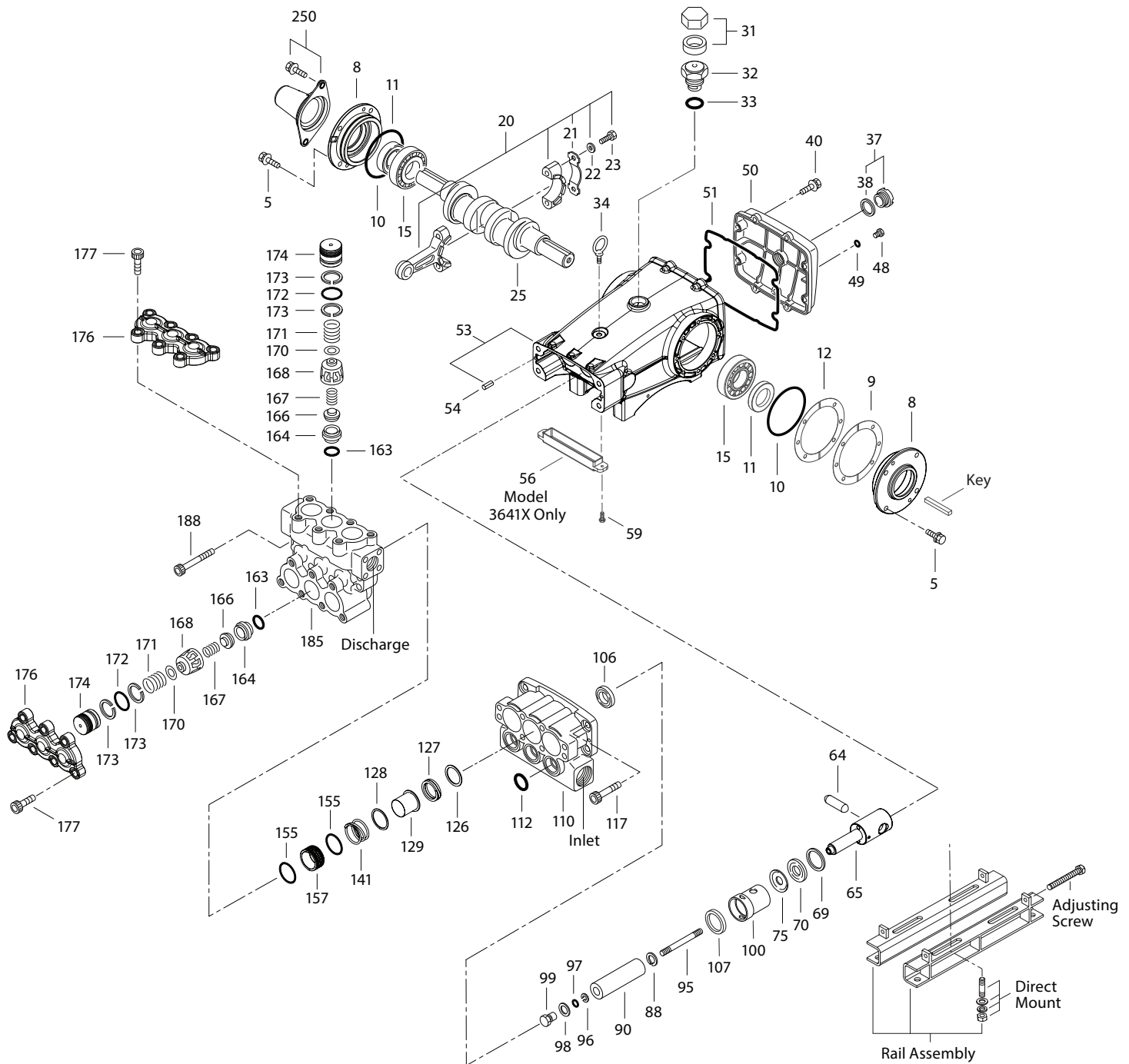
POP=Polypropylene PPG=Glass Filled Polypropylene PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride S=304SS SS=316SS

SFTB=Special Blend PTFE Black SSD=Duplex Stainless Steel STCP=Steel/Chrome Plated STL=Steel STZF=Steel/Zinc Flake Coated

STZP=Steel/Zinc Plated SSHB=316SS/High Strength Brass

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

EXPLODED VIEW



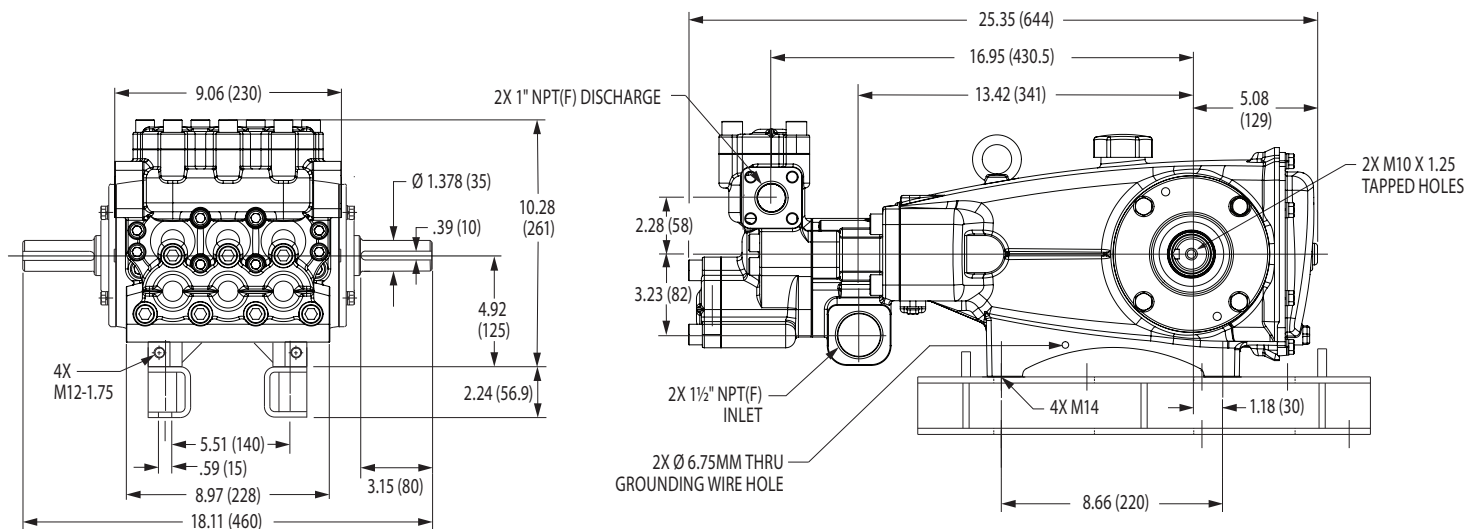
Models
3641X, 3641XD
November 2025

OPTIONAL PARTS AND ACCESSORIES

PART	DESCRIPTION	QTY
34021	Key (M10 x 8 x 70)	1
76514	Mount, Rail Assembly (S) (Includes: 34039)	1
34039	Mount, Direct (S)	1
990013	Hub, "B", 35 mm (STL) (Not Shown)	1
80540	Screwing, Adjusting (M12 x 100)	2
34314	Kit, Oil Drain (3/8" x 48") (Not Shown)	1

SERVICE PARTS

PART	DESCRIPTION	QTY
32542	Seal Kit – Standard NBR (Model3641X)	1
32541	Seal Kit – Standard NBR (Model3641XD)	1
32470	Valve Kit – Standard NBR	2
6100	Oil, Case (12–21 oz bottles) (Fill to Specified Crankcase Capacity Prior to Start-up)	1
6124	Gasket, Liquid (3 oz)	1
6139	Lubricant, Anti-Seize (8 oz) (See Tech Bulletin 095)	1
32273	Crankcase Oil Seal Removal and Installation Kit (Not Shown) (Includes: Oil Seals, Guide Tool, Screws, Washers, Driver)	1
30696	Reverse Pliers (Not Shown)	1
910640	Head Complete with NBR & PFB Seals, NBR O-Rings (Model 3641X)	1
910641	Head Complete with SFTB & PFB Seals, NBR O-Rings (Model 3641XD)	1



Models 3641X, 3641XD

SEAL KITS One (1) seal kit required per pump

PUMP MODELS	NBR (STD)	NBR (STD)
3641X	32542*	—
3641XD	—	32541*

ITEM (Included in Seal Kits)	DESCRIPTION		QTY
97	11345	11345 O-Ring, Plunger Retainer	3
106	48384	702013 Seal, Low-Pressure, with SS-Spring	3
112	18688	18688 O-Ring, Inlet Manifold	3
126	670238	670238 Backup Ring, Packing	3
127	670237	670237 Packing, Square	3
129	670239	670239 Sleeve, Plunger	3
155	17784	17784 O-Ring, Packing, Spacer	6

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

VALVE KITS Two (2) valve kits required per pump

PUMP MODELS	NBR (STD)
3641X, 3641XD	32470

ITEM (Included in Valve Kits)	DESCRIPTION		QTY
163	26143	O-Ring, Valve Seat	3
164	48393	Seat, Stepped	3
166	44108	Valve	3
167	44109	Spring	3
168	44728	Retainer, Spring	3
170	44729	Washer, Spring Retainer	3
172	89827	O-Ring, Valve Plug	3
173	48364	Backup Ring, Valve Plug	6

⚠ 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