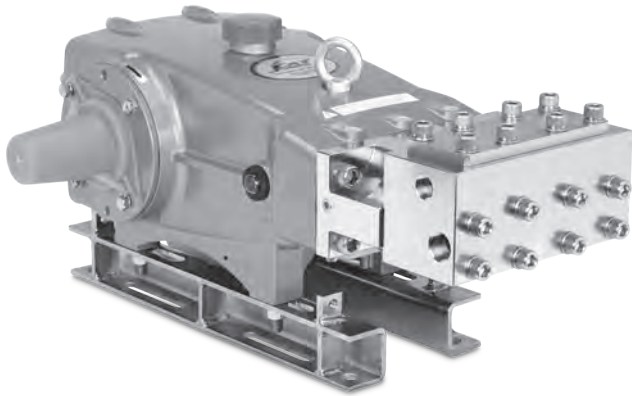


# DATA SHEET

## 35 FRAME PLUNGER PUMP



**Model: 3550**



Model 3550 Shown  
(Shaft protector included, mounting rails sold separately)

SPECIFICATIONS	U.S. Measure	Metric Measure
Flow	10 gpm	38 lpm
Pressure Range	100-6000 psi	6.9-414 bar
Pump RPM*	940 rpm	940 rpm
Inlet Pressure Range	Flooded to 70 psi	Flooded to 4.8 bar
Max. Liquid Temp. (NBR)	140° F	60° C
Bore	0.787"	20 mm
Stroke	1.890"	48 mm
Crankcase Capacity	4.2 qts	4 L
Inlets Ports (2)	3/4" NPT(F)	3/4" NPT(F)
Discharge Ports (2)	1/2" NPT(F)	1/2" NPT(F)
Pulley Mounting	Either Side	Either Side
Shaft Diameter	1.378"	35 mm
Weight	124 lbs	56.4 kg
Dimensions	24.17 x 18.11 x 9.76"	614 x 460 x 248 mm

\*Pump minimum is 100 RPM.

### FEATURES

- Triplex design delivers high efficiency and low pulsation.
- Durable V-Packings are lubricated and cooled by pumped liquid.
- Pre-set Lo-Pressure Seals provide secondary protection against external leaks and require no packing adjustment.
- Special high-density, polished, concentric plungers provide a true wear surface.
- Specially formulated Seals and V-Packings offer unmatched performance and extended life.
- Wet-end easily serviced without entering crankcase.
- Standard NBR seals with alternate options for temperature and chemical compatibility.

### ALTERNATIVE SEAL CONFIGURATION

MATERIAL	SUFFIX CODE	MAXIMUM TEMPERATURE
NBR	—	140° F (60° C)
FPM	.0110	140° F (60° C)
EPDM	.0220	140° F (60° C)

See Reference Document 99REF017 for inlet conditions and RPM at high temperature.

$$\text{DETERMINING THE PUMP R.P.M.} \quad \frac{\text{Rated gpm}}{\text{Rated rpm}} = \frac{\text{"Desired" gpm}}{\text{"Desired" rpm}}$$

$$\text{DETERMINING THE REQUIRED H.P.} \quad \frac{\text{Hp (Electric Brake)}}{1460} = \frac{\text{gpm x psi}}{1460}$$

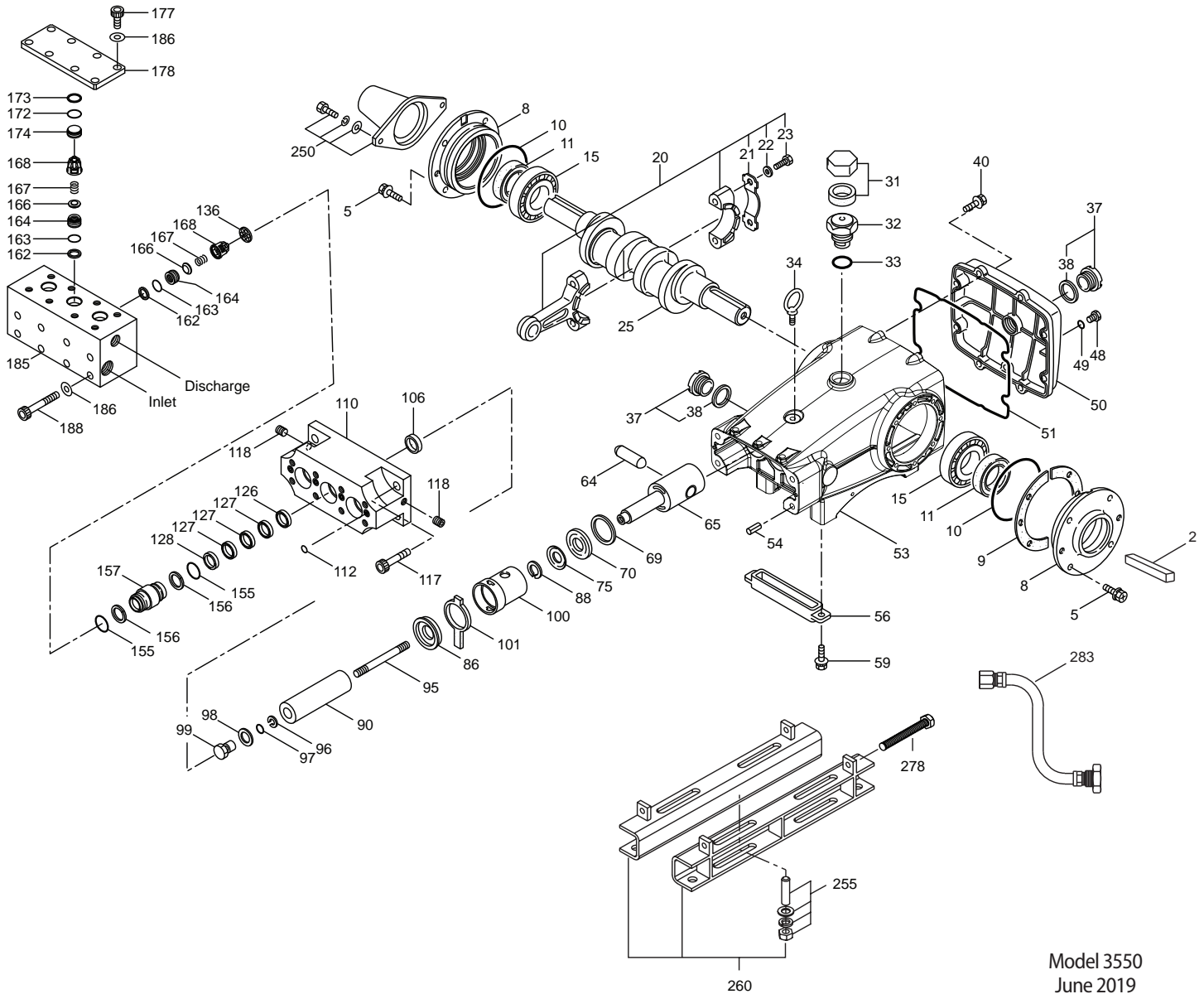
$$\text{DETERMINING MOTOR PULLEY SIZE} \quad \frac{\text{Motor Pulley O.D.}}{\text{Pump rpm}} = \frac{\text{Pump Pulley O.D.}}{\text{Motor rpm}}$$

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

# PARTS LIST

ITEM	P/N	MATL	DESCRIPTION	QTY
2	34021	STL	Key (M10x8x70)	1
5	96049	S	Screw, HHC, Sems (M10x25) (See Tech Bulletin 125) [6/18]	8
8	134604	ALE	Cover, Bearing (See Tech Bulletin 118, 125) [6/18]	2
9	815279	FBR	Shim, Split, 2-Pc (See Tech Bulletin 125) [6/18]	2
10	12398	NBR	O-Ring, Bearing Cover - 70D	2
11	13296	NBR	Seal, Oil, Crankshaft	2
15	29326	STL	Bearing, Roller	2
20	121467	TNM	Rod, Connecting Assy (Incls: 21, 22, 23)	3
21	126749	STCP R	Washer, Locking (M10)	3
22	126593	STCP R	Washer, Flat (M10)	6
23	122045	STZP	Screw, HH (M10x55)	6
25	29325	FCM	Crankshaft, Dual End (M 48)	1
31	828710	PE	Protector, Oil Cap w/ Foam Gasket	1
32	43211	ABS	Cap, Oil Filler	1
33	14177	NBR	O-Ring, Oil Filler Cap - 70D	1
34	126743	STCP R	Bolt, Eye (M12x1.75) (For Lifting Pump Only)	1
37	92241	—	Gauge, Oil, Bubble w/Gasket	2
38	44428	NBR	Gasket, Flat, Oil Gauge - 80D	2
40	125753	S	Screw, HHC, Sems (M8x25)	8
48	25625	STCP	Plug, Drain (1/4"x19BSP)	1
49	23170	NBR	O-Ring, Drain Plug - 70D	1
50	45936	ALE	Cover, Crankcase (See Tech Bulletin 118)	1
51	16612	NBR	O-Ring, Crankcase - 70D	1
53	134786	ALE	Crankcase Assy (Incls: 34, 54) (See Tech Bulletin 118, 125) [6/18]	1
54	27488	S	Pin, Guide	2
56	27790	POP	Pan, Oil	1
59	92538	S	Screw, HHC, Sems (M6x16)	2
64	43864	CM	Pin, Crosshead	3
65	49076	SSHB	Rod, Plunger	3
69	126587	STCP R	Washer, Oil Seal	3
70	100488	NBRS	Seal, Oil, Crankcase	3
75	110669	S	Slinger, Barrier	3
86	132952	D	Adapter	3
88	110670	S	Washer, Keyhole (M16)	3
90	132953	CC	Plunger (M20x110)	3
95	126549	STCP R	Stud, Plunger Retainer (M7x103)	3
96	132954	PTFB	Back-up-Ring, Plunger Retainer	3
97	14190	NBR	O-Ring, Plunger Retainer - 70D	3
98	44069	SS	Gasket, Retainer	3
99	44068	SS	Retainer, Plunger (M7)	3
100	44119	PPG	Retainer, Seal (See Tech Bulletin 105)	3
101	44095	—	Wick, Long Tab	3
106	43513	NBR	Seal, LPS w/SS-Spg	3
110	132956	BBCP	Manifold, Seal	1
112	11373	NBR	O-Ring, Inlet Manifold - 70D	4
117	44585	S	Screw, HSH (M14 x 40)	4
118	48702	S	Plug [1/4" NPT(M)]	2
126	132958	PTFB	Adapter, Female	3
127	43516	SNG	V-Packing	9
128	43517	BB	Adapter, Male	3
136	132964	BB	Retainer, Valve Assy	3
155	14200	NBR	O-Ring, Valve Spacer - 70D	6
156	132960	PTFE	Back-up-Ring, Valve Spacer	6
157	132959	BB	Spacer, Valve	3
162	48510	PTFE	Back-up-Ring, Valve Seat	6
163	11338	NBR	O-Ring, Valve Seat - 70D	6
164	132965	S	Seat, Valve	6
166	48793	SS	Valve	6
167	43751	S	Spring	6
168	44564	PVDF	Retainer, Spring	6
172	14179	NBR	O-Ring, Valve Plug - 70D	3
173	49850	PTFB	Back-up-Ring, Valve Plug	3
174	132966	BB	Plug, Valve	3
177	89921	S	Screw, HSH (M12 x 30)	8
178	132967	BB	Cover, Valve	1
185	132962	BBCP	Manifold, Inlet/Discharge, Block-Style	1
186	19935	SCP	Washer (M12)	16
188	128035	S	Screw, HSH (M12 x 110)	8

# EXPLODED VIEW



Model 3550  
June 2019

ITEM	P/N	MATL	DESCRIPTION	QTY
250	855042	NY	Protector, Shaft w/2 Screws, Lockwashers and Washers (Included with pump) (See Tech Bulletin 125)	1
255	34018	STZPR	Kit, Direct Mount	1
260	92674	STZPR	Mount, Rail Assembly (Includes: 34018)	1
278	80540	ZP	Screw, HH (M12 x 100) (Rail Adjusting Screw)	2
279	30278	STZP	Oilers (1 oz.) (Not Shown)	3
283	34334	—	Kit, Oil Drain (3/8" x 24") (See individual data sheet)	1
290	6124	—	Gasket, Liquid (3 oz.)	1
299	818608	BBCP	Head, Complete	1
300	76982	NBR	Kit, Seal (Includes: 97, 106, 112, 126, 127, 155, 156)	1
310	77033	NBR	Kit, Valve (Includes: 162, 163, 164, 166, 167, 168, 172, 173)	2
6100	—	—	Oil, Case (12 Bottles) ISO 68 Hydraulic (Fill to specified crankcase capacity prior to start-up)	1

*Italics are optional items. R Components comply with RoHS Directive.*

[ ] Date of latest production change View Tech Bulletins 024, 035, 036, 043, 074, 083, 105, 118 and 125 for additional information.

MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic AL=Aluminum Epoxy

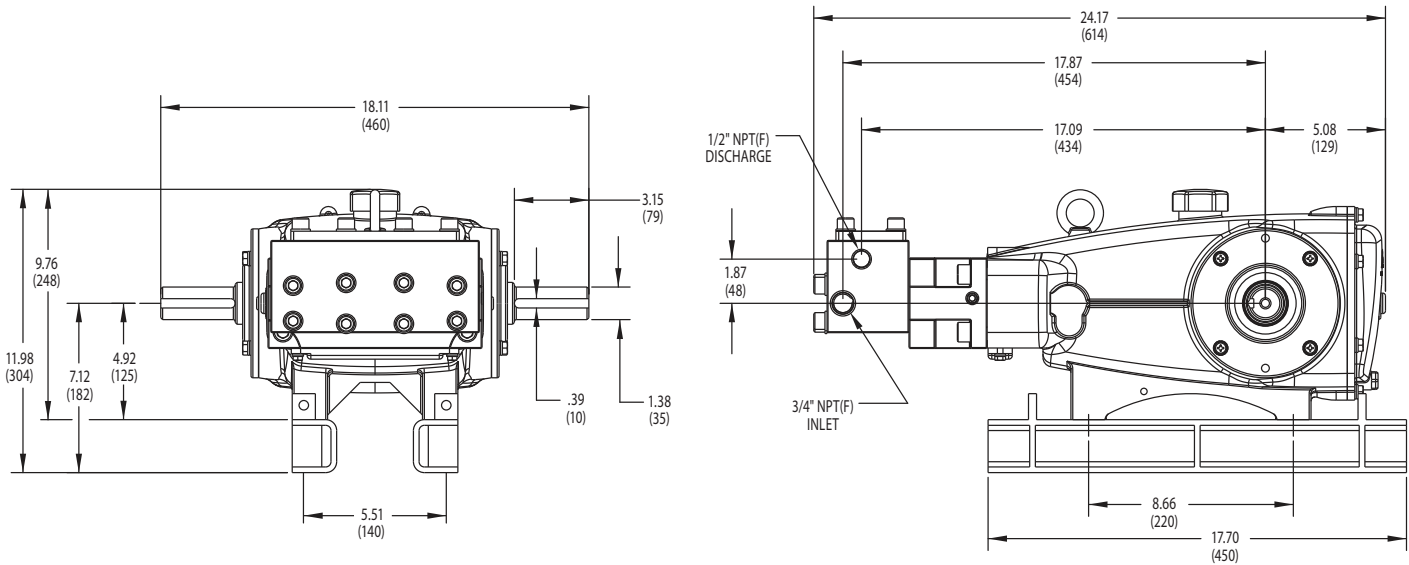
BB=Brass BBCP= Brass/Chrome Plated CC=Ceramic CM=Chrome-Moly D=Acetal FBR=Fiber FCM=Forged Chrome-Moly NBR=Medium Nitrile (Buna-N)

NBRS=Buna, Silicone Free NY=Nylon PE=Polyethylene POP=Polypropylene PPG=Glass Fitted Polypropylene PTFE=Pure Polytetrafluoroethylene

PTFB=Polytetrafluoroethylene w/60% Bronze PVDF=PolyvinylideneFluoride S=304SS SCP=304SS/Chrome-Plated SNG=Special Blend (Buna)

SS=316SS SSHB=316SS/High Strength STCP=Steel/Chrome Plated STL=Steel STZP=Steel/Zinc Plated

TNM=Special High Strength ZP=Zinc Plated



**⚠ 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](http://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](http://www.catpumps.com/warranty).