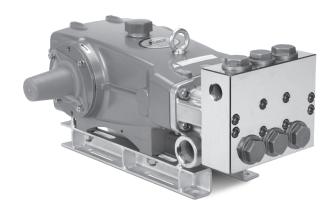
DATA SHEET 35 FRAME PLUNGER PUMPS



Brass Models: **3570, 3570S**

Flushed Model: 3570C



Model 3570 Shown (Shaft protector included, mounting rails sold separately)

FEATURES

- Triplex design delivers high-efficiency and low-pulsation.
- Durable dual V-packings are lubricated and cooled by pumped liquid.
- Pre-set low-pressure seals provide secondary protection against external leaks and require no packing adjustment.
- Special high-density, polished, concentric plungers provide a true wear surface and extended seal life.
- Special flushed inlet manifold on 3570C permits external flush for added cooling with high-temperature liquids and lubrication with low-lubricity liquids.
- Standard pumps are fitted with NBR seals. Optional seals are available for higher temperatures or chemical compatibility.

SPECIFICATIONS	U.S. Measure	Metric Measure		
Flow*	30 gpm	114 lpm		
Pressure Range* (3570S)	100-3000 psi	6.9–207 bar		
Pressure Range (3570, 3570C)	100-2500 psi	6.9–170 bar		
Pump RPM**	1080 rpm	1080 rpm		
Inlet Pressure Range	Flooded to 70 psi	Flooded to 4.8 bar		
Max. Liquid Temp. (NBR)	120° F	48° C		
Alternative seals available for higher temperatures up to 140° F				
Bore	1.260"	32 mm		
Stroke	1.890"	48 mm		
Crankcase Capacity	4.2 qts	4 L		
Inlets Ports (2)	1 ½" NPT(F)	1 ½" NPT(F)		
Flush Ports (2)	1/4" NPT(F)	1/4" NPT(F)		
Discharge Ports (2)	1" NPT(F)	1" NPT(F)		
Pulley Mounting	Either Side	Either Side		
Shaft Diameter	1.378"	35 mm		
Weight	138.9 lbs	63 kg		
Dimensions	23.94 x 18.11 x 9.74"	608 x 460 x 247 mm		

^{*}Intermittent duty only

INTERMITTENT DUTY CYCLE DEFINED AS:

Operating pump at stated flow and pressure for no more than 50% of time in any given hour.

ALTERNATIVE SEAL CONFIGURATION

MATERIAL	SUFFIX CODE	MAXIMUM TEMPERATURE		
NBR	_	120° F	(48° C)	
FPM	.0110	140° F	(60°C)	

See **Tech Bulletin 002** for inlet conditions and RPM at high-temperature.

DETERMINING	Rated gpm	=	Desired gpm
THE PUMP RPM	Rated rpm		Desired rpm
DETERMINING THE REQUIRED HP	hp (Electric Brake)	=	gpm x psi 1460
DETERMINING	Motor Pulley OD	=	Pump Pulley OD
MOTOR PULLEY SIZE	Pump rpm		Motor rpm

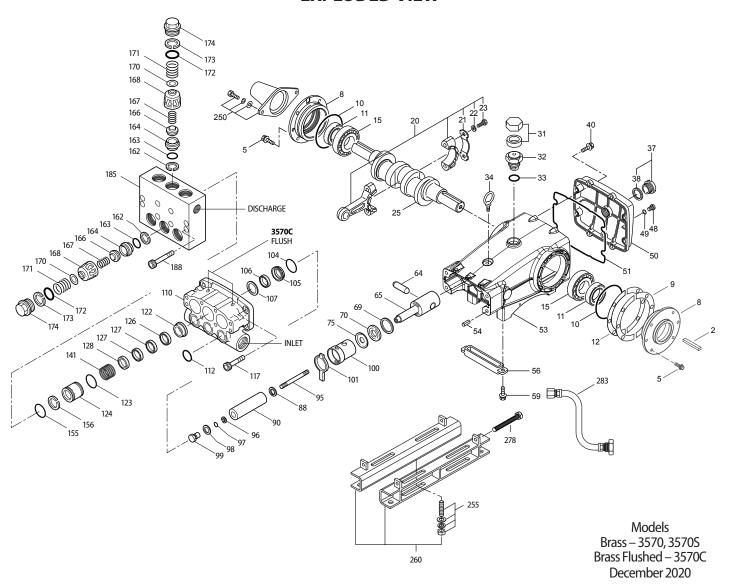
 $\hbox{\it Refer to pump {\bf Service\,Manual} for repair procedure and additional technical information.}$

^{**}Pump minimum is 100 RPM.

PARTS LIST

ITEM	P/N	MATL	DESCRIPTION	QTY
2	34021	STL	Key (M10 x8 x 70)	1
5	96049	S	Screw, HHC, Sems (M10 x 25) (See Tech Bulletin 125) [6/18]	8
8	134604	ALE	Cover, Bearing (See Tech Bulletin 118, 125) [6/18]	2
9	815279 12398	FBR NBR	Shim, Split, 2-Piece (See Tech Bulletin 125) [6/18] O-Ring, Bearing Cover–70D	3 2
10 11	13296	NBR	Seal, Oil, Crankshaft	3
12	855049	S	Shim, Split, 2-Piece	0-2
15	29326	STL	Bearing, Roller	2
20	121467	TNM	Rod, Connecting Assembly (Includes: 21, 22, 23)	3
21	126749	STCP R	Washer, Locking (M10)	3
22	126593	STCP R	Washer, Flat (M10.5)	6
23	122045	STZP	Screw, HH (M10 x 55)	6
25	29325	FCM	Crankshaft, Dual End (M 48)	1
31	828710	PE	Protector, Oil Cap with 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 (M12 x 1.75) (For Lifting Pump Only)	1
37	92241		Gauge, Oil, Bubble with Gasket	1
38	44428	NBR	Gasket, Flat, Oil Gauge – 80D	1
40	125753	S	Screw, HHC, Sems (M8 x 25)	8
48	25625	STCP	Plug, Drain (¼" x 19 BSP)	1
49 50	23170 45936	NBR ALE	O-Ring, Drain Plug–70D Cover, Crankcase (See Tech Bulletin 118)	<u>1</u> 1
51	16612	NBR	O-Ring, Crankcase –70D	<u></u>
53	134784	ALE	Crankcase Assembly (Includes: 34, 54) (See Tech Bulletin 118, 125) [6/18]	<u></u>
54	27488	S	Pins, Guide	2
56	27790	POP	Pan, Oil	
59	92538	S	Screw, HHC, Sems (M6 x 16)	2
64	43864	CM	Pin, Crosshead	3
65	49166	SSHB	Rod, Plunger	3
69	126587	STCP R	Washer, Oil Seal	3
70	100488	NBRS	Seal, Oil, Crankcase	3
	44739	FPM	Seal, Oil, Crankcase	3
75	43865	S	Slinger, Barrier	3
88	45676	S	Washer, Keyhole (M16)	3
90	43957	CC	Plunger (M32 X 145)	3
95	† 89778	SS	Stud, Plunger Retainer (M10 X 135)	3
96	20189	PTFE	Backup-Ring, Plunger Retainer	3
97	11345 11375	NBR FPM	O-Ring, Plunger Retainer–70D O-Ring, Plunger Retainer	3
98	44085	SS	Gasket, Retainer	3
99	† 44084	SS	Retainer, Plunger (M10)	3
100	44119	PPG	Retainer, Franger (WHO) Retainer, Seal (See Tech Bulletin 105)	3
101	44106		Wick, Long Tab	3
104	43875	NBR	O-Ring, Adapter–70D	3
	44826	FPM	O-Ring, Adapter–70D	3
105	49741	BB	Adapter	3
106	† 44098	NBR	Seal, LPS with SS–Spring	3
	44827	FPM	Seal, LPS with SS–Spring	3
107	43962	S	Washer, LPS	3
110	49464	BBCP R	Manifold, Inlet – (Models 3570, 3570S)	1
	49464C	BBCPR	Manifold, Inlet, Flushed (¼" Flush Ports) – (Model 3570C)	1
112	11379	NBR	O-Ring, Inlet Manifold—70D	3
117	14183	FPM	O-Ring, Inlet Manifold	3
117 122	44585 49744	S BB	Screw, HSH (M14 x 40) Spacer, V-Packing	<u>4</u> 3
123	12391	NBR	O-Ring, Spacer–70D	3
123	13266	FPM	O-Ring, Spacer–70D	3
124	49742	BB	Cylinder, V-Packing	3
126	43963	BB	Adapter, Female	3
127	† 44608	STG	V-Packing	6
128	43965	BB	Adapter, Male	3
141	49743	SS	Spring, Coil	3
155	48860	NBR	O-Ring, V-Packing Cylinder–90D	3
	20137	FPM	O-Ring, V-Packing Cylinder–70D	3
156	48362	D	Backup-Ring, V-Packing Cylinder	3
162	48363	D	Backup-Ring, Valve Seat	6
163	26142	NBR	O-Ring, Valve Seat–80D	6
	14330	FPM	O-Ring, Valve Seat–70D	6
164	133052	S	Seat, Valve	6
166	43932	S	Valve	6
167	133053	S	Spring	6
168	44728	PVDF	Retainer, Spring	6
170	44729	SS	Washer, Spring	6
171	44644	SS	Spring, Coil	6

EXPLODED VIEW



ITEM	P/N	MATL	DESCRIPTION	QTY
172	89827	NBR	O-Ring, Valve Plug–90D	6
	11747	FPM	O-Ring, Valve Plug-90D	6
173	48364	D	Backup-Ring, Valve Plug	6
174	44643	NAB	Plug, Valve	6
185	133049	BBCP	Manifold, Discharge (Models 3570, 3570C)	1
	133559	SS	Manifold, Discharge (Model 3570S)	1
188	89981	S	Screw, HSH (M12 x 70)	8
250	855042	NY	Protector, Shaft with 2 Screws, Lockwashers and Washers (Included with Pump) (See Tech Bulletin 125) [6/18]	1
255	34018	STZPR	Kit, Direct Mount	1
260	92674	STZPR	Mount, Rail Assembly (Includes: 34018)	1
278	80540	STZP	Screw, HH (M12 x 100) (Rail Adjusting Screw)	2
279	30278	STZP	Oilers (1 oz) (Not Shown)	3
283	34334	_	Kit, Oil Drain (¾" x 24") (See Individual Data Sheet)	1
290	6124	_	Gasket, Liquid (3 oz)	1
299	818610	BBCP	Head, Complete with NBR Seals and O-Rings (Model 3570 Only)	1
300	31039	NBR*	Kit, Seal (Includes: 97, 104, 106, 112, 123, 127, 155, 156) Standard	1
	76818	FPM*	Kit, Seal (Includes: 97, 104, 106, 112, 123, 127, 155) .0110	1
310	76794	NBR	Kit, Valve Preassembled (Includes: 162, 163, 164, 166, 167, 168, 170, 172, 173) Standard	2
	76831	FPM	Kit, Valve Preassembled (Includes: 162, 163, 164, 166, 167, 168, 170, 172, 173) .0110	2
_	6100	_	Oil, Case (12 Bottles) ISO 68 Hydraulic (Fill to Specified Crankcase Capacity Prior to Start-Up)	1

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

[] Date of lastest production change. For additional technical information see www.catpumps.com/literature/tech-bulletins. † Production parts different from service parts.

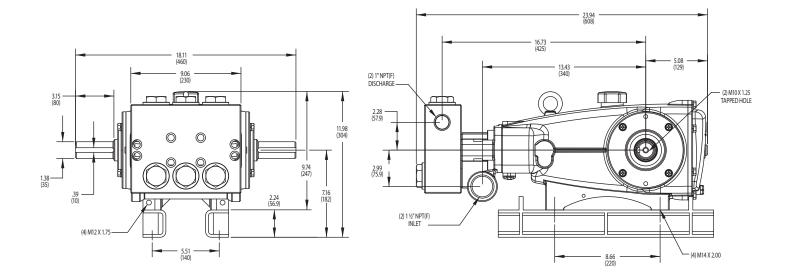
MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic ALE=Aluminum Epoxy BB=Brass BBCP=Brass/Chrome Plated CC=Ceramic CM=Chrome-Moly

D=Acetal FBR=Fiber FCM=Forged Chrome-Moly FPM=Fluorocarbon NAB=Nickel Aluminum Bronze NBR=Medium Nitrile (Buna-N) NBRS=Buna, Silicone Free

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

SSHB=316SS/High Strength STCP=Steel/Chrome Plated STG=Special Blend PTFE White STL=Steel STZP=Steel/Zinc Plated TNM=Special High Strength

^{*} Review material codes for individual items (STG generally may be used as alternate). R Components comply with RoHS Directive.



\triangle 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/dynamic-literature/cautions-and-warnings or can be requested directly from Cat Pumps.

WARRANTY

 $View the \ Limited \ Warranty \ on-line \ at \ www. catpumps.com/literature/cat-pumps-limited-warranty$

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