# **DATA SHEET**

# 15 FRAME BLOCK-STYLE PLUNGER PUMP



Stainless Steel with Brass and Bronze Model:

1570

Manifolds and cylinders are 304 stainless steel with an aluminum housing block. Valve assemblies are made with 304 stainless steel components. Male adapters are made from brass material, and some backup rings are made from PTFE with bronze materials.

See Parts List to confirm material compatibility with the fluid pumped before use.



(Mounting rails sold separately)

SPECIFICATIONS	U.S. Measure	<b>Metric Measure</b>				
Flow	6.0 gpm	22.7 lpm				
Pressure Range	100-6000 psi	6.9-414 bar				
Pump RPM*	1350 rpm	1350 rpm				
Inlet Pressure Range	Flooded to 60 psi	Flooded to 4.1 bar				
Max. Liquid Temp. (NBR)	160° F	71°C				
Alternative seals available for	Alternative seals available for higher temperatures up to 180° F.					
Bore	0.630"	16 mm				
Stroke	1.181"	30 mm				
Crankcase Capacity	42 oz	1.26				
Inlet Ports (2)	½" NPT(F)	1/2" NPT(F)				
Discharge Ports (2)	3/8 " NPT(F)	3/8 "NPT(F)				
Pulley Mounting	Either Side	Either Side				
Shaft Diameter	1.181"	30 mm				
Weight	68.3 lbs	31 kg				
Dimensions	17.99 x 13.37 x 7.01"	457 x 340 x 178 mm				

<sup>\*</sup>Pump minimum is 100 RPM

#### **FEATURES**

- Triplex design ensures high-efficiency and low-pulsation.
- V-packings and low-pressure seals are completely lubricated and cooled, greatly increasing seal life.
- Special high-density, polished, concentric plungers provide a true wear surface and extended seal life.
- High-strength block-style design is built to handle the rigors of industrial-duty applications.
- Pump comes standard with NBR seals. Alternative seal materials are available for higher temperature or chemical compatibility.

#### **ALTERNATIVE SEAL CONFIGURATION**

MATERIAL	SUFFIX CODE	ODE MAXIMUM TEMPERATURE		
NBR	_	160° F	(71° C)	
FPM	.0110	180° F	(82° 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	hp	=	gpm x psi
THE REQUIRED HP	(Electric Brake)		1460
DETERMINING	Motor Pulley OD	=	Pump Pulley OD
MOTOR PULLEY SIZE	Pump rpm		Motor rpm

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

#### **PARTS LIST**

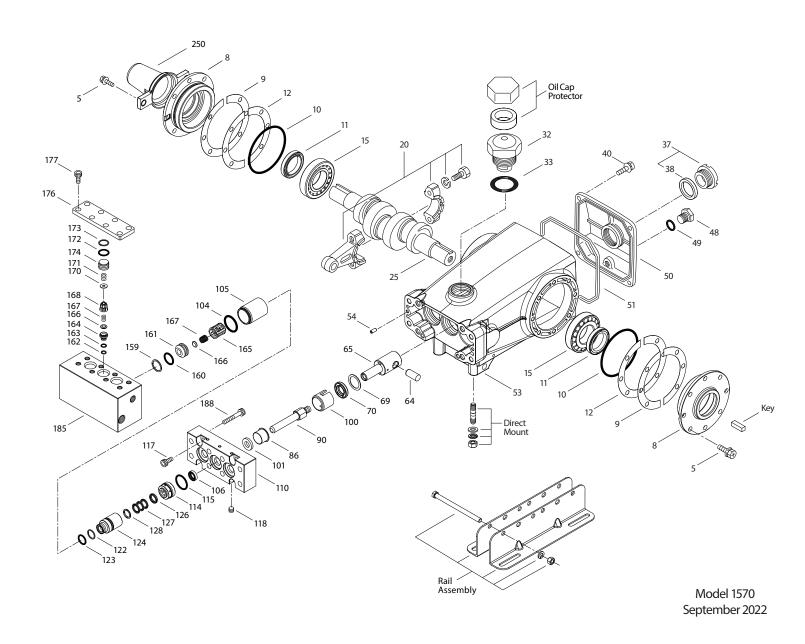
ITEM	PART NUMBER	MATERIAL	DESCRIPTION	QTY
5	126540	STCP R	Screw, HHC, Sems (M8 x 20) (See Tech Bulletin 074, 128)	8
8	134805	ALE	Cover, Bearing (See Tech Bulletin 118, 128)	2
9	855043	FBR	Shim, Split, 2-Piece (See Tech Bulletin 128)	3
10	11340	NBR	O-Ring, Bearing Cover–70D	2
11	43495	NBR	Seal, Oil, Crankshaft	2
12	855044	S	Shim, Split, 2-Piece (See Tech Bulletin 128)	2
15	39060	STL	Bearing, Roller	2
20	126805	BZ	Rod, Connecting Assembly (See Tech Bulletin 074)	3
25	43494	FCM	Crankshaft, Dual-End (30mm)	1
32	43211	ABS	Cap, Oil Filler	1
33	14177	NBR	O-Ring, Filler Cap–70D	1
37	92241	PC	Gauge, Oil, Bubble with Gasket–80D (See Tech Bulletin 074)	1
38	44428	NBR	Gasket, Flat, Oil Gauge–80D	1
40	126541	STCP R	Screw, HHC, Sems (M6 x 20) (See Tech Bulletin 074)	4
48	25625	STCP	Plug, Drain (¼" x 19 BSP[M])	1
49	23170	NBR	O-Ring, Drain Plug–70D	1
50	133576	ALE	Cover, Rear (See Tech Bulletin 118)	<u></u>
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51	44834	NBR	O-Ring, Rear Cover–70D	1
53	134927	ALE	Crankcase with Guide Pins (See Tech Bulletin 118, 128)	1
54	27488	S	Pin, Guide	2
64	43507	CM CD7	Pin, Crosshead	3
65	131772	SBZ	Rod, Plunger	3
69	126592	STCP R	Washer, Oil Seal	3
70	43500	NBR	Seal, Oil Crankcase	3
86	131777	D	Collar	3
90	132150	CC	Assembly, Plunger (M16 x 83), with S-Holder	3
100	125649	D	Retainer, Seal	3
101	131740		Wick	3
104	126148	NBR	O-Ring, Cylinder–70D	3
105	131783	S	Cylinder, Outer	3
106	48222	NBR	Seal, LPS with S–Spring	3
	76089	ST2	Seal, LPS with SS–Spring	3
110	131778	AL	Block, Housing	1
114	132153	S	Case, Seal	3
115	13986	NBR	O-Ring, Seal Case–70D	3
117	131779	S	Screw, HSH (M10 x 40) (See Tech Bulletin 074)	4
118	165769	S	Plug (1/8" BSP[M])	3
122	49850	PTFB	Backup Ring, Cylinder	3
123	49382	NBR	O-Ring, Cylinder–90D	3
124	132154	S630	Cylinder, V-Packing	3
126	131744	PE	Adapter, Female	3
127	43319	SNG	V-Packing	9
128	43318	BB	Adapter, Male	3
159	131788	PTFB	Backup Ring, Inlet Seat	3
160	142807	NBR	O-Ring, Seat, Inlet–90D	3
161	131787	S630	Seat, Inlet	3
162	129638	PTFE	Backup Ring, Discharge Seat	3
163	49104	NBR	O-Ring, Seat, Discharge–90D	3
164	131790	S630	Seat, Discharge	3
165	132679	PVDF	Retainer, Spring, Inlet	3
166	46562	S	Valve	6
167	43750	S	Spring, Valve	6
168	44565	PVDF	Retainer, Spring, Discharge	3
170	131757	S	Washer	3
171	44832	S	Spring, Coil	3
172	49382	NBR	O-Ring, Valve Plug–90D	3
173	49382 49850	PTFB	Backup Ring, Valve Plug	3
174				
	131791	S	Plug, Valve	3
176	131792	AL	Cover, Valve	1
177	122599	S	Screw, HSH (M12 x 25) (See Tech Bulletin 074)	8
185	132156	S	Manifold, Inlet/Discharge	1
188	131793	S	Screw, HSH (M12 x 90) (See Tech Bulletin 074)	8
250	855046	NY	Protector, Shaft with Two (2) Screws (See Tech Bulletin 128)	1

Italics are optional items. 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 AL=Aluminum ALE= Aluminum Epoxy BB=Brass BZ=Bronze CC=Ceramic CM-Chrome-moly D=Acetal F=Cast Iron FBR=Fiber FCM=Forged Chrome-moly FPM=Fluorocarbon HT=High Temp NBR=Medium Nitrile (Buna-N) NY=Nylon PC= Poly Carbonate PE=Polyethylene POP=Polypropylene PTFB-Pure Polytetrafluoroethylene w/ Bronze PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride S=304SS SBZ=304SS/Bronze SNG=Special Blend (Buna) ST2=Special PTFE 2 STCP=Steel/Chrome Plated STL=Steel STZP=Steel/Zinc Plated S630=304SS/Hardened

### **EXPLODED VIEW**

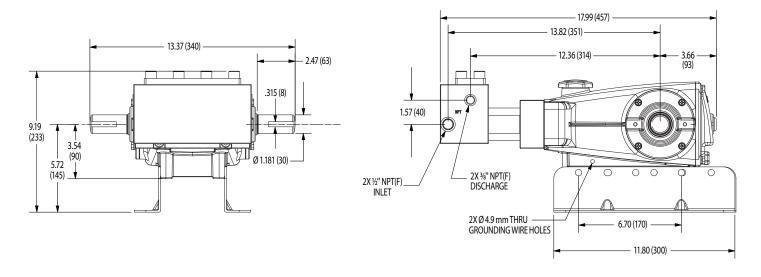


#### **OPTIONAL PARTS AND ACCESSORIES**

PART	DESCRIPTION	QTY
30067	Key, M8 x 7.5 x 25	1
990036	Key, M8 x 7 x 40	1
30613	Assembly, Rail (5.72" See Dimension Drawing)	1
76513	Assembly, Rail (6.22" See Dimension Drawing)	1
990550	Assembly, Rail (5.72" See Dimension Drawing)	1
30264	Mount, Direct	1
828710	Protector, Oil Cap	1
34334	Kit, Oil Drain	1
30206	Pulley, 10", 2-Groove H	1
30059	Hub, H, 30mm	1
990012	Hub, B,30mm	1

#### **OPTIONAL PARTS AND ACCESSORIES**

PART	DESCRIPTION	QTY
76389	Kit, Seal	1
76390	Kit, Valve	1
6107	Oil, Bottle (21 oz)	2
6124	Gasket, Liquid (3 oz)	1
6139	Lubricant, Anti-seize (8 oz) (See Tech Bulletin 095)	1
818577	Head, Complete with NBR Seals and O-Rings	1



## **SEAL KITS** One (1) seal kit required per pump

NBR (STD)

**PUMP MODELS** 

1570	76389	76670		
ITEM (Included in Seal Kits)	PART NUMBER		DESCRIPTION	QTY
101	131740	131740	Wick	3
104	126148	76663	O-Ring, Outer Cylinder	3
106	48222	670019	Seal, LPS with S-Spring	3
115	13986	76664	O-Ring, Seal Case	3
122	49850	49850	Backup Ring, Cylinder	3
123	49382	49897	O-Ring, Cylinder	3
126	131744	131744	Adapter, Female	3
127	43319	46287	V-Packing	9

FPM (.0110)

## **VALVE KITS** One (1) valve kit required per pump

PUMP MODELS	NBR (STD)	FPM (0.0110)		
1570	76390	76679		
ITEM (Included in Valve Kits)	PART N	UMBER	DESCRIPTION	QTY
159	131788	131788	Backup Ring, Inlet Seat	3
160	142807	547743	O-Ring, Inlet Seat	3
161	131787	131787	Seat, Inlet	3
162	129638	129638	Backup Ring, Discharge Seat	3
163	49104	76665	O-Ring, Discharge Seat	3
164	131790	131790	Seat, Discharge	3
165	132679	132679	Retainer, Inlet Spring	3
166	46562	46562	Valve	6
167	43750	43750	Spring	6
168	44565	44565	Retainer, Discharge Spring	3
172	49382	49897	O-Ring, Valve Plug	3
173	49850	49850	Backup 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

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