

DATA SHEET

25 FRAME PISTON PUMPS



Standard Brass Model

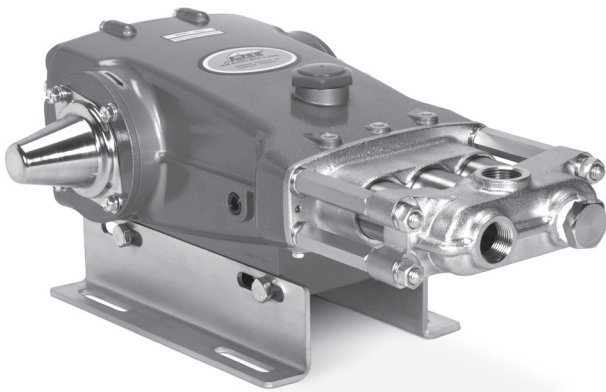
2520

Pulse Pump Manifold Model

2525

Hi-Temp Model

2520C



Model 2520 Shown
(Shaft protector and mounting rails sold separately)

SPECIFICATIONS	U.S. Measure	Metric Measure
Flow	25 gpm	94.6 lpm
Pump Pressure Range	100 to 800 psi	6.9 to 55 bar
Pump RPM*	772 rpm	772 rpm
Inlet Pressure Range	-8.5 to +40 psi	-0.6 to +2.8 bar
Max. Liquid Temp. (NBR) (2520, 2525)	160° F	71° C
Alternative seals available for high temp up to 180° F		
Max. Liquid Temp. (2520C)	210° F	98° C
Bore	1.490"	38 mm
Stroke	1.417"	36 mm
Crankcase Capacity	84 oz.	2.5 l
Inlet Ports (1)	1-1/4" NPT(F)	1-1/4" NPT (F)
Flush Ports (2) "C"	1/4" NPT (F)	1/4" NPT (F)
Discharge Ports (3)	1" NPT (F)	1" NPT (F)
Shaft Diameter	1.181"	30 mm
Pulley Mounting	Either Side	Either Side
Weight	69.3 lbs.	31.5 kg
Dimensions (2520, 2525)	21.93 x 15.04 x 7.8"	557 x 382 x 198 mm
Dimensions (2520C)	21.42 x 15.04 x 7.8"	544 x 382 x 198 mm

*Pump minimum is 100 RPM.

FEATURES

- Triplex Uniflow design provides continuous forward liquid flow for smooth operation.
- Wetted cups and floating pistons are lubricated and cooled by pumped liquid for long cup life.
- Mechanically actuated inlet valves give strong lift and easy prime.
- Oil bath crankcase assures optimum lubrication.
- 100% wetted seal design allows pumped liquid to cool and lubricate for longer life.
- Special dual inlet seals on Model 2520C with cooling ports allow pumped liquids up to 210°F.

ALTERNATIVE SEAL CONFIGURATION

MATERIAL	SUFFIX CODE	MAXIMUM TEMPERATURE
NBR	—	160° F (71° C)
FPM	.0110	180° F (82° C)
HT	.3000	180° F (82° C)

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

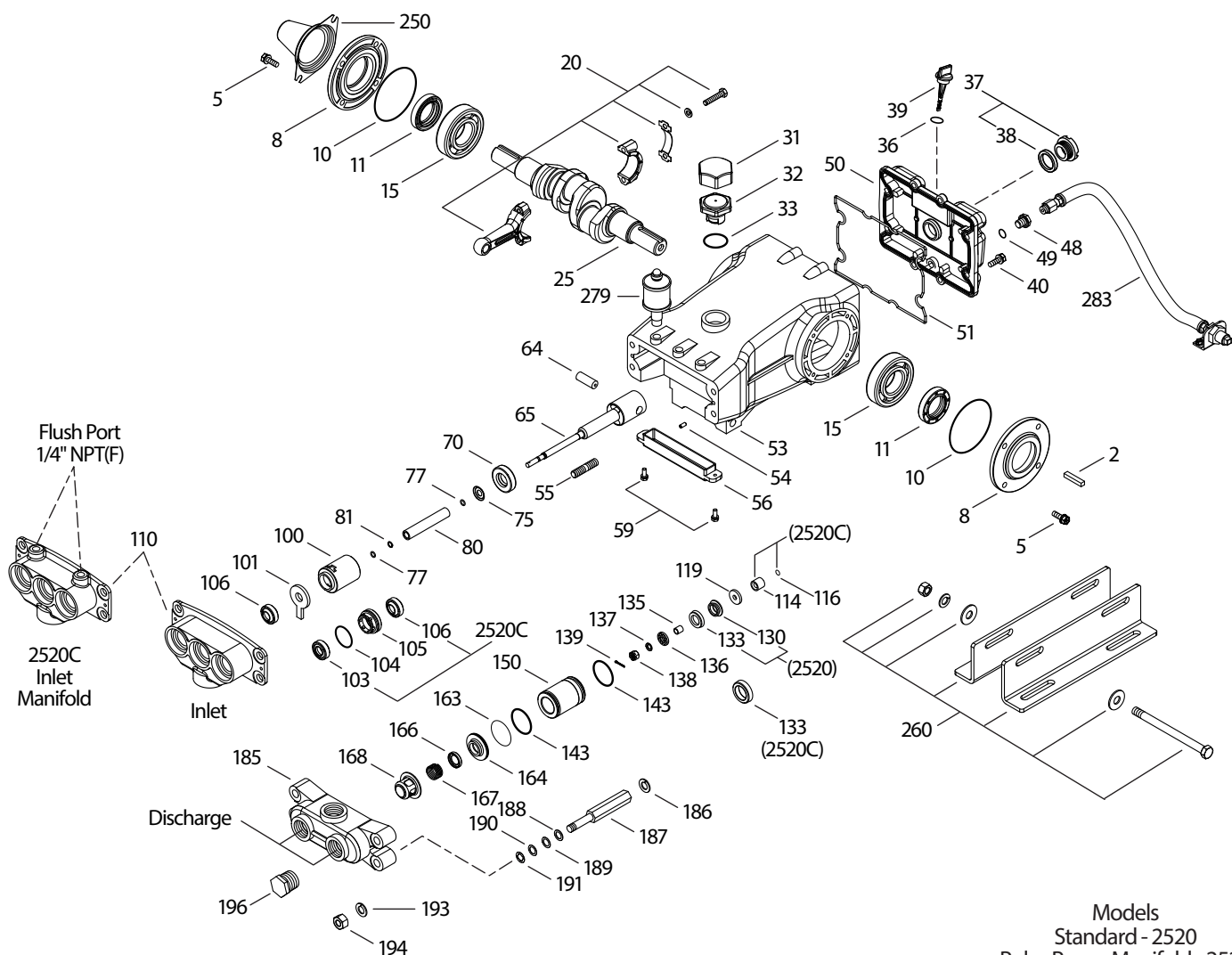
DETERMINING THE PUMP R.P.M.	Rated gpm	=	"Desired" gpm
	Rated rpm	=	"Desired" rpm
DETERMINING THE REQUIRED H.P.	Hp (Electric Brake)	=	gpm x psi 1460
	DETERMINING MOTOR PULLEY SIZE	Motor Pulley O.D. Pump rpm	=

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

PARTS LIST

ITEM	P/N	MATL	P/N	MATL	DESCRIPTION	QTY
	2520, 2525		2520C			
2	990036	STL	990036	STL	Key (M8x7x40) [3/00]	1
5	126544	STCP R	126544	STCP R	Screw, HHC, Sems (M8x25)	8
8	49533	ALE	49533	ALE	Cover, Bearing (See Tech Bulletin 118)	2
10	27772	NBR	27772	NBR	O-Ring, Bearing Cover - 70D	2
11	27771	NBR	27771	NBR	Seal, Oil, Crankshaft - 70D	2
15	26512	STL R	26512	STL R	Bearing, Ball	2
20	48613	TNM	48613	TNM	Rod, Connecting	3
21	126562	STCP R	126562	STCP R	Washer, Locking	3
25	49795	FCM	49795	FCM	Crankshaft Dual-End (M38.5)	1
31	828710	—	828710	—	Protector, Oil Cap w/Foam Gasket	1
32	43211	ABS	43211	ABS	Cap, Oil Filler	1
33	14177	NBR	14177	NBR	O-Ring, Oil Filler Cap - 70D	1
36	129343	RBR	129343	RBR	Gasket, Flat	1
37	92241	—	92241	—	Gauge, Oil Bubble w/ Gasket - 80D	1
38	44428	NBR	44428	NBR	Gasket, Flat, Oil Gauge - 80D	1
39	27769	ABS	27769	ABS	Dipstick	1
40	126544	STCP R	126544	STCP R	Screw, HHC, Sems (M8x25)	8
48	25625	STCP	25625	STCP	Plug, Drain (1/4"x19BSP)	1
49	23170	NBR	23170	NBR	O-Ring, Drain Plug - 70D	1
50	49531	ALE	49531	ALE	Cover, Rear (See Tech Bulletin 118, 126)	1
51	27767	NBR	27767	NBR	O-Ring, Rear Cover - 70D	1
53	49528	ALE	49528	ALE	Crankcase, w/Guide Pins (See Tech Bulletin 118)	1
54	27488	S	27488	S	Pin, Guide	2
55	126547	STCP R	126547	STCP R	Stud (M12x53)	4
56	27790	POP	27790	POP	Pan, Oil	1
59	125824	STCP R	125824	STCP R	Screw, HHC, Sems (M6x16)	2
64	27784	CM	27784	CM	Pin, Crosshead	3
65	29229	SZZ	43266	SZZ	Rod, Piston (M8)	3
70	27785	NBR	27785	NBR	Seal, Oil, Crankcase - 70D	3
75	27786	S	27786	S	Slinger, Barrier	3
77	26531	NBR	14198	FPM	O-Ring, Sleeve	6
	14198	FPM	—	—	O-Ring, Sleeve	6
80	43122	SCP	43122	SCP	Sleeve (M16)	3
	43123	S	43123	S	Sleeve (M16) - Unchromed	3
81	29246	PTFE	29246	PTFE	Back-up-Ring, Sleeve	3
100	27788	PVDF	27788	PVDF	Retainer, Seal	3
101	43126	—	43126	—	Wick, Long Tab (M16)	3
103	—	—	43269	FPM	Seal w/Lip	3
104	—	—	14178	NBR	O-Ring, Seal Adapter	3
105	—	—	43268	S	Adapter, LPS	3
106	43124	NBR	43272	FPM	Seal (M16)/Seal w/Grease Pocket	3
	43125	FPM	—	—	Seal (M16)	3
110	27791	BBCP	43270	BBCP	Manifold, Inlet	1
	28595	SS	—	—	Manifold, Inlet	1
114	—	—	46148	S	Spacer, Inlet Valve	3
116	—	—	14198	FPM	O-Ring, Spacer	3
119	29240	S	29240	S	Valve, Inlet (M8)	3
130	27840	S	—	—	Piston	3
133	28409	FPM	—	—	Cup, Piston	3
	76498	ST4	76498	ST4	Cup-Piston, Assy (1000 PSI MAX)	3
	29094	ST4	—	—	Cup, V-Hot	3
135	29231	S	29231	S	Spacer, Piston (M8)	3
136	29239	S	29239	S	Retainer, Piston (M8)	3
137	27871	S	27871	S	Washer, Conical (M8)	3
138	27510	S	27510	S	Nut, Slotted (M8)	3
139	29589	S	29589	S	Cotterpin (M2x18)	3
143	25495	NBR	11748	FPM	O-Ring, Cylinder - 70D	6
	11748	FPM	—	—	O-Ring, Cylinder - 70D	6
150	27844	SCP	27844	SCP	Cylinder, (M65)	3
	29049	S	29049	S	Cylinder, (M65) - Unchromed	3
163	28395	NBR	28769	FPM	O-Ring, Valve Seat	3
	28769	FPM	—	—	O-Ring, Valve Seat	3
164	28396	S	28396	S	Seat	3
166	43133	S	43133	S	Valve	3
167	26548	S	26548	S	Spring	3
168	43134	S	43134	S	Retainer, Spring	3
185	27805	BBCP	27805	BBCP	Manifold, Discharge	1
	6425	BB	—	—	Manifold, Pulse Pump, Ported	1
186	126570	STCP R	126570	STCP R	Lockwasher (1/2")	4
187	27803	STCP	43277	STCP	Bolt, Cylinder	4
188	126586	STCP R	126586	STCP R	Shim, Washer (M12.5x0.3)	4/8
189	126580	STCP R	126580	STCP R	Shim, Washer (M12x0.5)	4/8

EXPLODED VIEW



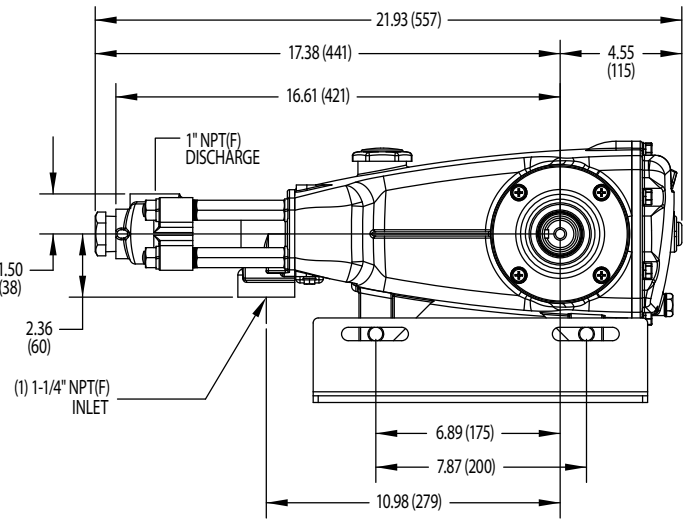
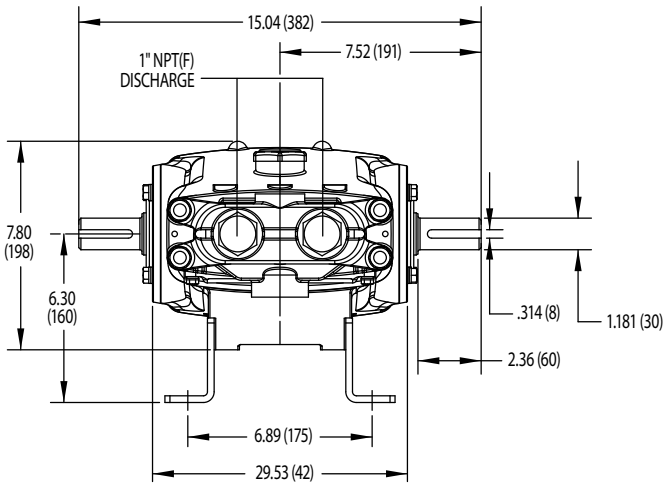
Models
 Standard - 2520
 Pulse Pump Manifold - 2525
 Hi-Temp - 2520C
 January 2019

ITEM	P/N	MATL	P/N	MATL	DESCRIPTION	QTY
	2520, 2525		2520C			
190	126581	STCP R	126581	STCP R	Shim, Washer (M12.5x1.0)	4/8
191	27933	STZP	27933	STZP	Lockwasher (M12)	4
193	126570	STCP R	126570	STCP R	Lockwasher (1/2")	4
194	126523	STCP R	126523	STCP R	Nut, Hex (M12)	4
196	27807	BBCP	27807	BBCP	Plug [1"NPT(M)]	1
250	26516	STCP	26516	STCP	Protector, Shaft	1
260	30614	STZP R	30614	STZP R	Mount, Rail, Assy	1
279	30278	STZP	30278	STZP	Oiler (1 oz.)	3
283	34334	—	34334	—	Kit, Oil Drain (3/8" x 24") (See Individual Data Sheet)	1
295	6300	BBSS	—	—	Pump, Pulse (1 qt.) 1000 PSI (See Individual Data Sheet)	1
295	6305	BBSS	—	—	Pump, Pulse (1 gal.) 1000 PSI (See Individual Data Sheet)	1
300	30256	FPM*	—	—	Kit, Cup (Incls: 133,139,143,355)	1
302	30252	NBR	—	—	Kit, Piston (Incls: 119-143,355)	1
305	30819	NBR	—	—	Kit, Sleeve & Seal (Incls: 75,77,80,101,106,139)	1
306	30482	NBR	—	—	Kit, Seal (Incls: 101,106,139)	1
310	30767	NBR	30767	NBR	Kit, Valve (Incls: 143,163,164,166,167,168)	1
355	27853	NY	—	—	Insertor, Cup	1
—	6100	—	6100	—	Oil, Case (12 Bottles) ISO 68 Multi-viscosity Hydraulic (Fill to specified crankcase capacity prior to start-up)	1

Bold part numbers are unique to a particular pump model. Italics are optional items. [] Date of latest production change.

R Components comply with RoHS Directive. See Tech Bulletins 008, 009, 017, 021, 024, 034, 036, 063, 064, 074, 083, 085, 118 and 126 for additional information.

MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic ALE=Aluminum Epoxy BB=Brass BBCP=Brass/Chrome Plated BBSS=Brass/316SS CM=Chrome-Moly
 FCM=Forged Chrome-Moly FPM=Fluorocarbon NBR=Medium Nitrile (Buna-N) NY=Nylon POP=Polypropylene PTFE=Pure Polytetrafluoroethylene
 PVDF=Polyvinylidene Fluoride S=304SS SCP=304SS/Chrome Plated SNG=Special Blend (Buna) SS=316SS ST4=Special Blend PTFE4 STCP=Steel/Chrome Plated STL=Steel
 STZP=Steel/Zinc Plated SZZ=304SS/Zamak TNM=Special High Strength



Model 2520

⚠ 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 or can be requested directly from Cat Pumps.

WARRANTY

View the Limited Warranty on-line at www.catpumps.com/warranty.