

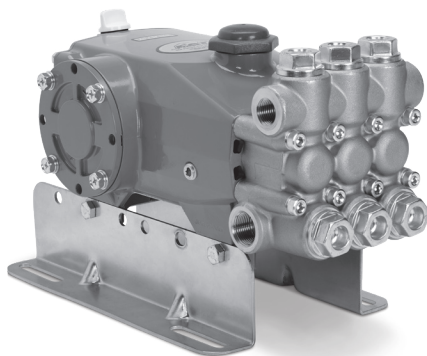
DATA SHEET

7CP PLUNGER PUMPS



Brass Model: **7CP6160CS**

Brass Gearbox Model: **7CP6160CSG1**



Model 7CP6160CS Shown
(Mounting rails sold separately)

FEATURES

- Forged brass manifold head.
- Flexible coupling/bell housing and belt drive options provide flexibility with a compact footprint.
- Gearbox model available with 1" hollow shaft to fit most common engines.
- Standard NBR seals with alternative options for temperature and chemical compatibility.

COMMON SPECIFICATIONS

	U.S.	Metric
Inlet Pressure Range	Flooded – 70 psi	Flooded – 4.8 bar
Max. Liquid Temp. (NBR)	140° F	60° C
Alternative seals available for high temperature up to 190° F		
Bore	0.787"	20 mm
Crankcase Capacity	38 oz.	1.15 l
Inlet Ports (2)	¾" NPT(F)	¾" NPT(F)
Discharge Ports (2)	½" NPT(F)	½" NPT(F)
Shaft Diameter	0.945"	24 mm
Weight (7CP6160CS)	30.9 lbs.	14.0 kg
Weight (7CP6160CSG1)	40.4 lbs.	18.3 kg
Dimensions	13.46 x 9.25 x 6.89"	342 x 235 x 175 mm

SPECIFICATIONS

	U.S. Measure	Metric Measure
7CP6160CS		
Flow	10.6 gpm	40.1 lpm
Pressure Range	100 – 2500 psi	6.9 – 172 bar
Pump RPM*	1750 rpm	1750 rpm
Stroke	1.024"	26 mm
7CP6160CSG1		
Flow	10.0 gpm	38.0 lpm
Pressure Range	100 – 2500 psi	6.9 – 172 bar
Engine RPM	3400 rpm	3400 rpm
Stroke	1.024"	26 mm

*Pump minimum is 100 RPM.

ALTERNATIVE SEAL CONFIGURATION

MATERIAL	SUFFIX CODE	MAXIMUM TEMPERATURE
NBR	—	140° F (60° C)
FPM	.0110	180° F (82° C)
EPDM	.0220	160° F (71° C)
STHT	.3400	190° F (88° C)

See **Tech Bulletin 002** for inlet conditions for high temperature.

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

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

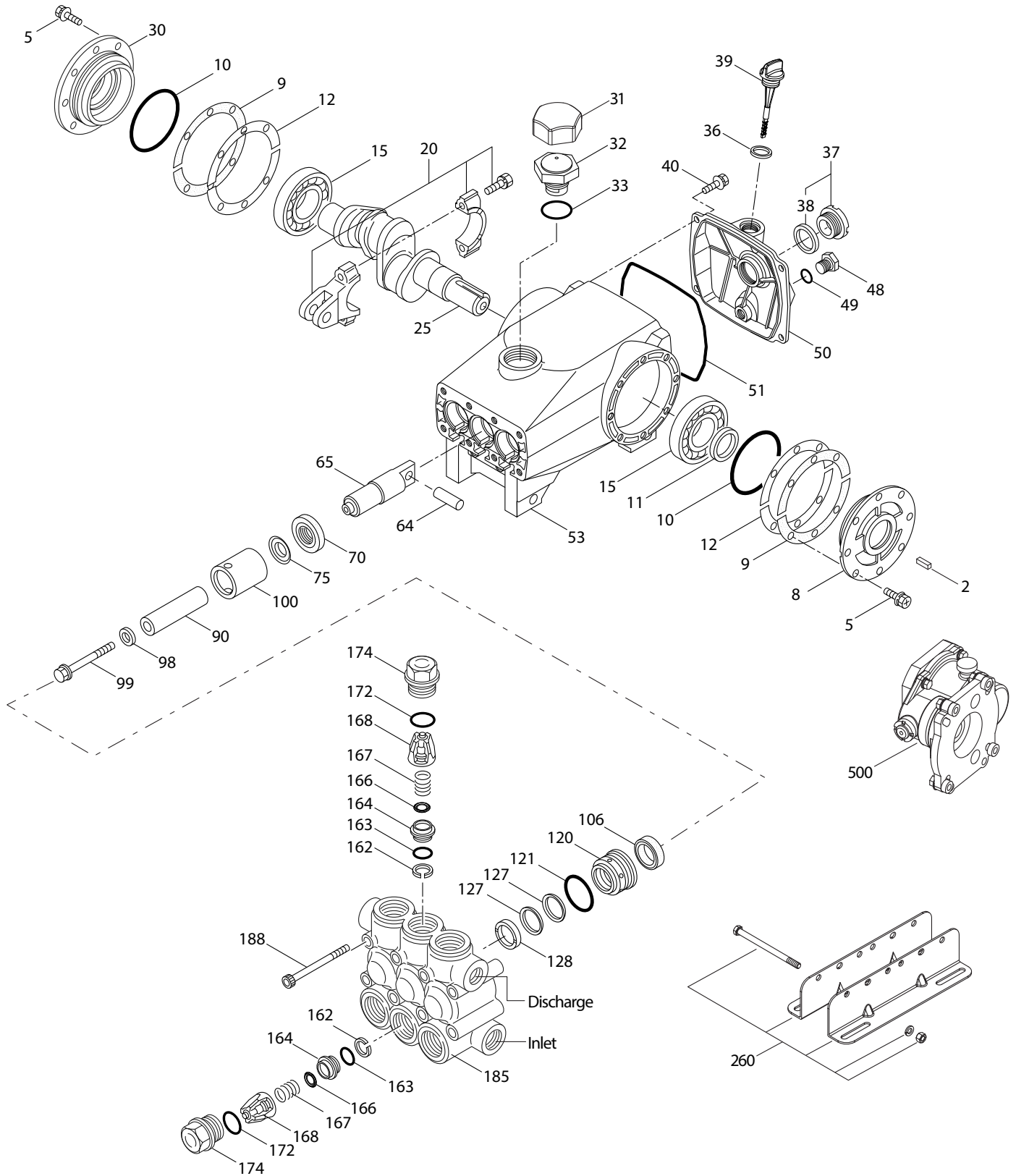
PARTS LIST

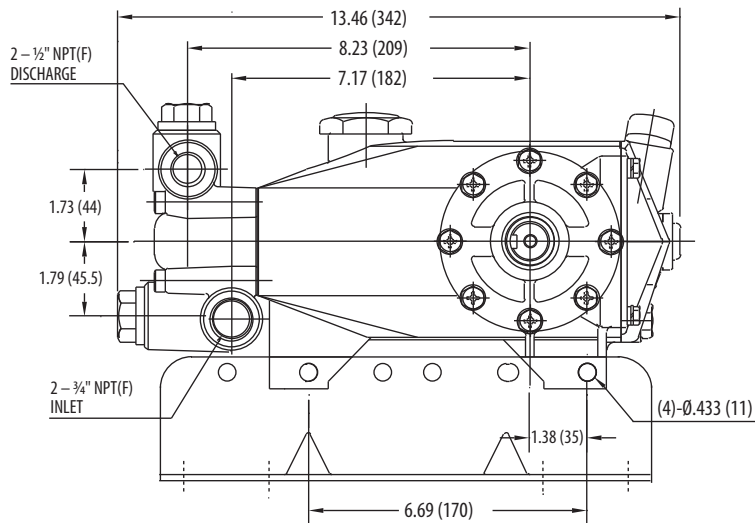
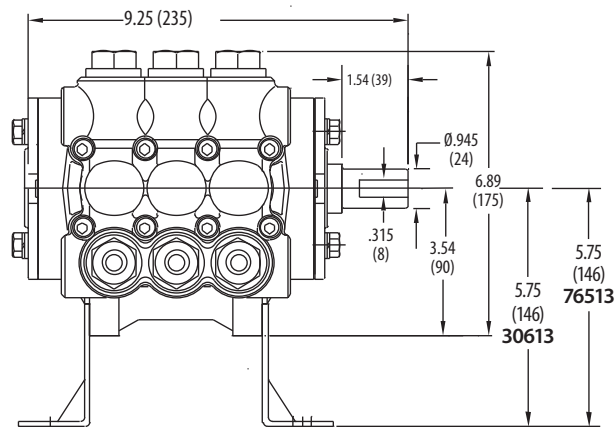
ITEM	P/N	MATL	DESCRIPTION	QTY
2	30067	STL	Key (M8 x 7.5 x 25)	1
5	126540	STCP R	Screw, HHC Sems (M8 x 20) (See Tech Bulletin 074)	8
8	131405	ALE	Cover, Bearing	1
9	49503	FBR	Shim, Split, 2-Piece, Outer	0-2
10	12393	NBR	O-Ring, Bearing Cover – 70D	2
11	49190	NBR	Seal, Oil Crankshaft	1
12	49504	S	Shim, Split, 2-Piece, Inner	0-2
15	63479	STL	Bearing, Roller	2
20	48727	TNM	Rod, Connecting Assembly (See Tech Bulletin 074)	3
25	49649	FCM	Crankshaft, Single-End (M26)	1
30	131407	ALE	Cover, Blind Bearing	1
31	828710	PE	Protector, Oil Cap with Foam Gasket	1
32	44666	RTP	Cap, Oil Filler	1
33	14177	NBR	O-Ring, Oil Filler Cap – 70D	1
36	129343	RBR	Gasket, Flat	1
37	92241	PC	Gauge, Oil, Bubble with Gasket – 80D (See Tech Bulletin 074)	1
38	44428	NBR	Gasket, Flat, Oil Gauge – 80D	1
39	49948	ABS	Stick, Dip [11/12] (See Tech Bulletin 130)	1
40	125824	STCP R	Screw, HHC Sems (M6 x 16) (See Tech Bulletin 074)	4
48	25625	STCP	Plug, Drain (1/4" x 19BSP)	1
49	23170	NBR	O-Ring, Drain Plug – 70D	1
50	131403	ALE	Cover, Rear	1
51	14030	NBR	O-Ring, Rear Cover – 70D	1
53	131400	ALE	Crankcase	1
64	46969	CM	Pin, Crosshead	3
65	46968	BBNP	Rod, Plunger	3
70	48281	NBR	Seal, Oil Crankcase	3
75	43328	S	Slinger, Barrier	3
90	134938	CC	Plunger, Ceramic (M20 x 53)	3
98	46730	NBR	Washer, Seal – 90D	3
99	46729	S	Retainer, Plunger (M6) (See Tech Bulletin 074)	3
100	46964	NY	Retainer, Seal	3
106	43305	NBR	Seal, LPS with S-Spring	3
120	134941	BB	Case, Seal	3
121	13982	NBR	O-Ring, Seal Case – 70D	3
127	45191	SNG	V-Packing	6
128	134942	BB	Adapter, Male	3
162	43248	PTFE	Back-up Ring, Seat	6
163	43249	NBR	O-Ring, Seat – 80D	6
164	49696	S	Seat	6
166	43721	S	Valve	6
167	43251	S	Spring	6
168	44564	PVDF	Retainer, Spring	6
172	17617	NBR	O-Ring, Valve Plug – 90D	6
174	43850	BB	Plug, Valve (See Tech Bulletin 074)	6
185	134940	FBB	Head, Manifold	1
188	126513	STCP R	Screw, HSH (M8 x 70) (See Tech Bulletin 074)	8
260	30645	STZPR	Mount, Rail, Assembly (5.75" See Dimensional Drawing)	1
	30613	STZPR	Mount, Rail, Assembly (6.25" See Dimensional Drawing)	1
269	30206	F	Pulley (10") [See Tech Bulletin 003]	1
274	33000	STL	Hub, "H", M24 (Keyway M8) (See Tech Bulletin 003)	1
283	34334	—	Kit, Oil Drain (See Individual Data Sheet)	1
299	—	FBB	Head, Complete with NBR O-Rings and Seals	1
300	77052	NBR	Kit, Seal (Includes: 98, 106, 121, 127) Standard	1
310	77053	NBR	Kit, Valve Pre-Assembled (Includes: 162, 163, 164, 166, 167, 168, 172) Standard	2
	6107	—	Oil, Bottle (21 oz.) ISO 68 Hydraulic (Fill to specified crankcase capacity prior to start-up)	1-2
500	8081	—	Gearbox, 1" Shaft (See Individual Data Sheet)	1

Italics are optional items. [] Date of latest production change.

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 ALE=Aluminum Epoxy BB=Brass BBNP=Brass/Nickel Plated CC=Ceramic
 CM=Chrome-moly F=Cast Iron FBB=Forged Brass FBR=Fiber FCM=Forged Chrome-moly NBR=Medium Nitrile (Buna-N) NY= Nylon
 PC=Poly Carbonate PE=Polyethylene PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride RBR=Rubber RTP=Reinforced Composite
 S=304SS SNG=Special Blend (Buna) STL=Steel STCP=Steel/Chrome Plated STZP=Steel/Zinc Plated TNM=Special High Strength

EXPLODED VIEW





Model 7CP6160CS

⚠ 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