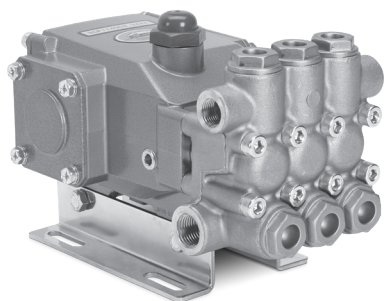


# DATA SHEET

## 3CP PLUNGER PUMPS



### Brass Models: **3CP1110CS, 3CP1110RS**



Model 3CP1110CS Shown  
(Mounting rails sold separately)

#### FEATURES

- Triplex plunger design ensures high efficiency and low pulsation.
- High-pressure and low-pressure seals are completely lubricated and cooled by pumped liquid, greatly increasing service life.
- Belt-driven option provides precision flow setting.
- Direct-driven option offers a compact footprint for electric motors with a NEMA or IEC frame, or SAE hydraulic motor with a bell housing/flexible coupler assembly.
- Pump comes standard with NBR seals. Alternative seal materials are available for higher temperature or chemical compatibility.

#### COMMON

SPECIFICATIONS	U.S. Measure	Metric Measure
Inlet Pressure Range	Flooded to 70 psi	Flooded to 4.8 bar
Bore	0.709"	18 mm
Crankcase Capacity	12 oz	0.35 l
Standard Liquid Temp. (NBR)	160° F	71° C

#### Alternative seals available for higher temperatures up to 190° F

Inlet Ports (2)	½" NPT(F)	½" NPT(F)
Discharge Ports (2)	¾" NPT(F)	¾" NPT(F)
Shaft Diameter	0.650"	16.5 mm
Pulley Mounting	Either Side	Either Side
Weight	14.84 lbs	6.7 kg
Dimensions	9.13 x 7.36 x 5.71"	232 x 187 x 145 mm

#### SPECIFICATIONS

	U.S. Measure	Metric Measure
<b>3CP1110CS</b>		
Flow	5 gpm	18.9 lpm
Pressure Range	100–1700 psi	6.9–117 bar
Pump RPM*	1725 rpm	1725 rpm
Stroke	0.590"	15 mm
<b>3CP1110RS</b>		
Flow	5 gpm	18.9 lpm
Pressure Range	100–1700 psi	6.9–117 bar
Pump RPM*	1725 rpm	1725 rpm
Stroke	0.590"	15 mm

\*Pump minimum is 100 RPM.

#### ALTERNATIVE SEAL CONFIGURATION

MATERIAL	SUFFIX CODE	MAXIMUM TEMPERATURE	
NBR	—	160° F	(71° C)
FPM	.0110	180° F	(82° C)
EPDM	.0220	160° F	(71° C)
HT	.3000	180° F	(82° C)
STHT	.3400	190° F	(88° C)
STHT	.3410	190° F	(88° C)

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

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

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

# PARTS LIST

ITEM	PART NUMBER	MATL	DESCRIPTION	QTY
5	125824	STCP R	Screw, HHC Sems (M6 x 16) (See Tech Bulletin 074)	8
8	46901	AL	Cover, Bearing	1
10	14028	NBR	O-Ring, Bearing Cover	2
11	43222	NBR	Seal, Oil, Crankshaft	1
15	14480	STL	Bearing, Ball	2
20	48730	TNM	Rod, Connecting, Assembly (See Tech Bulletin 074)	3
25	48805	FCM	Crankshaft, Single-End (M15)	1
30	48259	AL	Cover, Blind	1
32	46798	—	Cap, Oil Filler	1
33	14179	NBR	O-Ring, Oil Filler Cap	1
37	92241	PC	Gauge, Oil, Bubble with Gasket	1
38	44428	NBR	Gasket, Flat, Oil Gauge	1
40	125824	STCP R	Screw, HHC Sems (M6 x 16) (See Tech Bulletin 074)	4
48	25625	STCP	Plug, Drain (1/4" x 19 BSP)	1
49	23170	NBR	O-Ring, Drain Plug	1
50	46939	AL	Cover, Rear	1
51	14041	NBR	O-Ring, Rear Cover	1
53	48644	AL	Crankcase	1
64	46615	CM	Pin, Crosshead	3
65	48459	BBNP	Rod, Plunger	3
70	46839	NBR	Seal, Oil, Crankcase	3
75	48809	S	Slinger, Barrier	3
88	670388	S	Washer, Keyhole (M14.3 x 10.2 x 1.0)	3
90	46976	CC	Plunger (M18 x 43)	3
98	46730	NBR	Washer, Seal	3
99	670345	S	Retainer, Plunger with Stud (M6) (See Tech Bulletin 074)	3
100	46541	PVDF	Retainer, Seal	3
106	43243	NBR	Seal, Low-Pressure with S-Spring	3
120	46625	BB	Case, Seal	3
121	13976	NBR	O-Ring, Seal Case	3
125	43245	SNG	Seal, High-Pressure with S-Support	3
139	43448	BB	Plug, Inlet (1/2" NPT[F])	1
163	17547	NBR	O-Ring, Seat	6
164	45790	S	Seat	6
166	43723	S	Valve	6
167	43750	S	Spring	6
168	44565	PVDF	Retainer, Spring	6
172	49382	NBR	O-Ring, Valve Plug	6
174	46756	BB	Plug, Valve (See Tech Bulletin 074)	6
185	46616	FBB	Manifold, Head	1
188	126512	STCP R	Screw, HSH (M8 x 65) (See Tech Bulletin 074)	8

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

For additional technical information see [www.catpumps.com/literature/tech-bulletins](http://www.catpumps.com/literature/tech-bulletins). For motorized versions see BD motor data sheet. For Gearbox version see 8075 data sheet.

MATERIAL CODES (Not Part of Part Number): AL=Aluminum BB=Brass BBCP=Brass/Chrome Plated BBNP=Brass/Nickel Plated CC=Ceramic CM=Chrome-moly

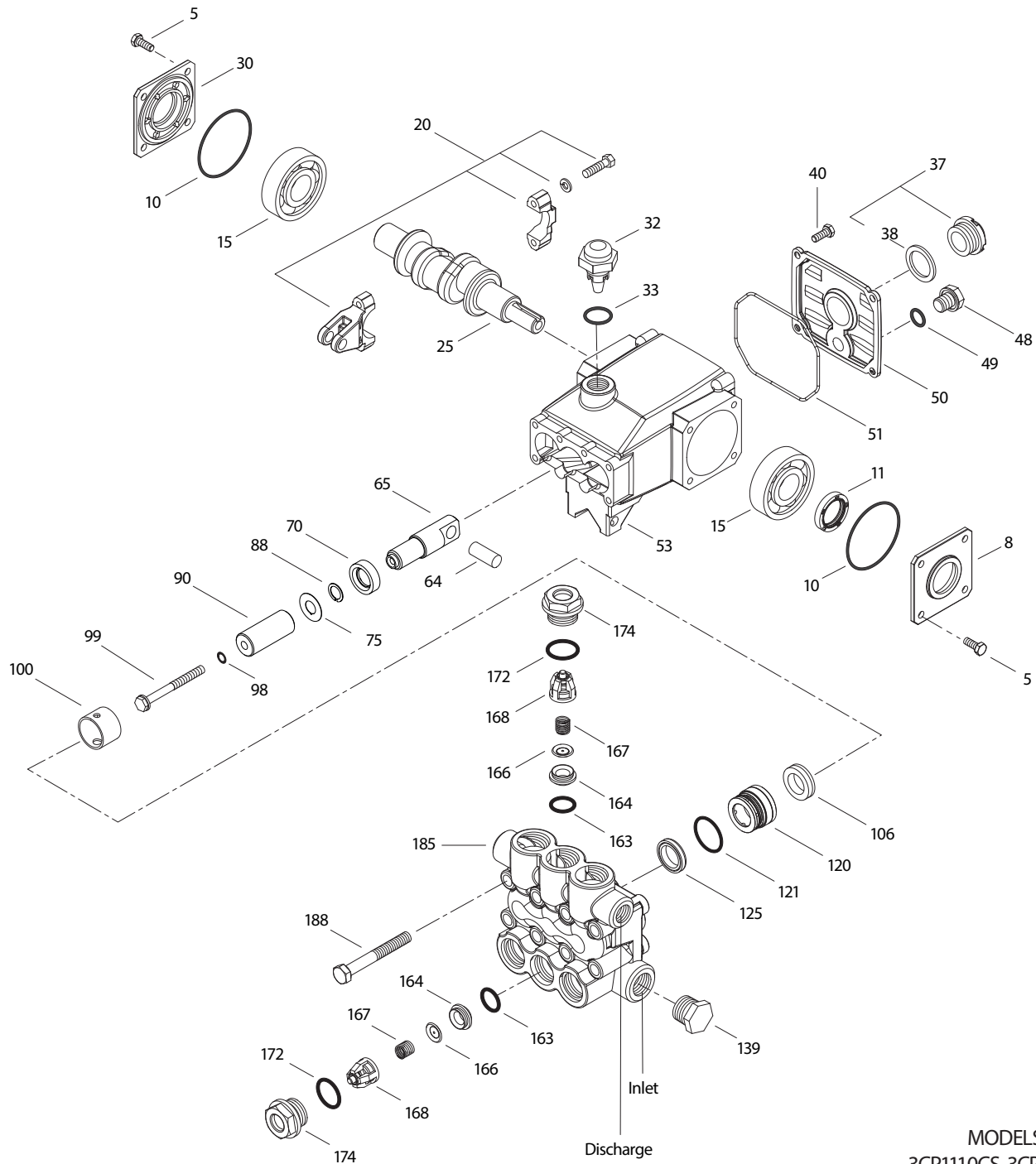
EPDM=Ethylene Propylene Diene Monomer FBB=Forged Brass FCM=Forged Chrome-Moly FPM=Fluorocarbon HT=Hi-Temp (EPDM Alternative)

NBR=Medium Nitrile (Buna-N) PC=Poly Carbonate PVDF=Polyvinylidene Fluoride S=304SS SNG=Special Blend (Buna) SS=316SS

ST2=Special PTFE 2 STHT=Special PTFE High Temp STL=Steel STCP=Steel/Chrome Plated

STZP=Steel/Zinc Plated TNM=Special High Strength

# EXPLODED VIEW



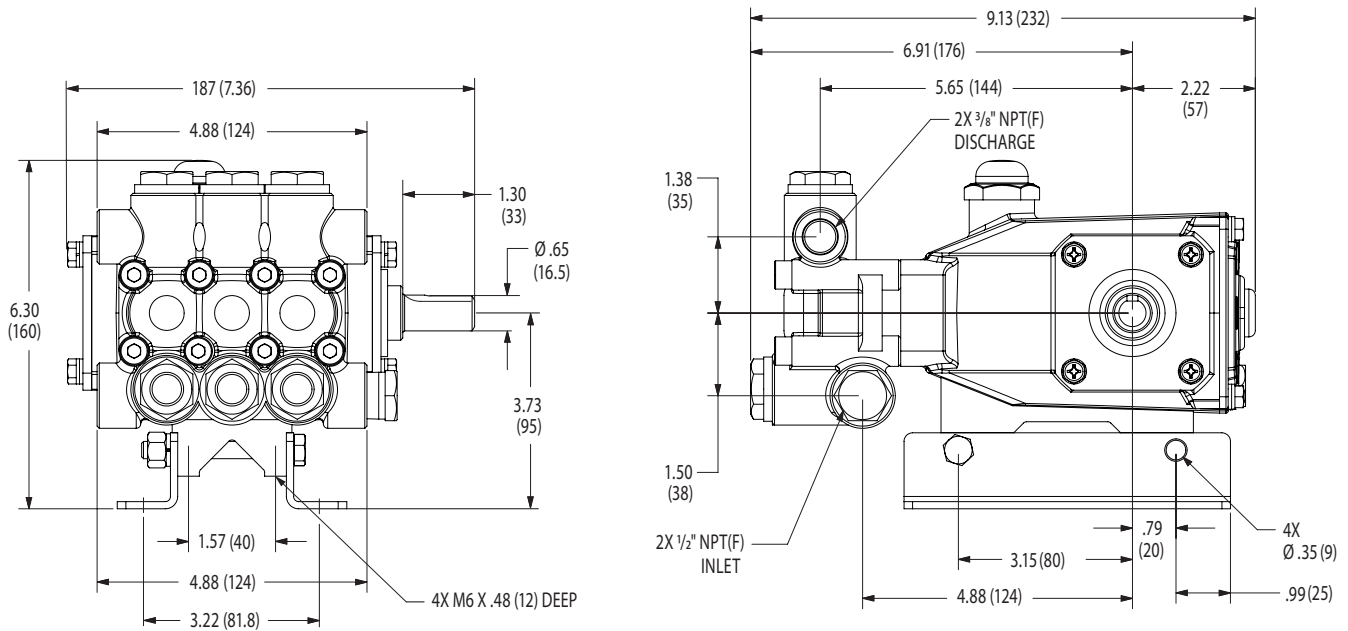
MODELS  
3CP1110CS, 3CP1110RS,  
April 2026

## OPTIONAL PARTS AND ACCESSORIES

PART	DESCRIPTION	QTY
30047	Key (M5 x 5 x 24)	1
32604	Mount, Assembly (Includes: 30612, 32603, 118672) (Not Shown)	1
30612	Mount, Rail, Assembly	1
30943	Assembly, Hub "H" and Key (Not Shown)	1
32603	Pulley, Assembly (Includes: 99AK51H, 30047, 30943) (Not Shown)	1
127409	Cap, Rain with O-Ring (Vented) (Not Shown)	1
34334	Kit, Oil Drain (3/8" x 24) (Not Shown)	1

## SERVICE PARTS

PART	DESCRIPTION	QTY
<b>33983</b>	Kit, Seal – Standard NBR	1
<b>33062</b>	Kit, Valve – Standard NBR	2
6107	Oil, Bottle (21 oz) ISO 68 Hydraulic (Fill to Specified Crankcase Capacity Prior to Start-up)	1-2
6124	Gasket, Liquid (3 oz)	2
30696	Reverse Pliers (Not Shown)	1
814841	Head, Complete with NBR Seals and O-Rings	1



Model 3CP1110CS

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

PUMP MODELS	NBR (STD)	FPM (.0110)	EPDM (.0220) ♦	HT (.3000)	STHT (.3400)	STHT (.3400)	STHT (.3410)
3CP1110CS, 3CP1110RS	<b>33983</b>	<b>33257</b>	<b>76924</b>	<b>31983</b>	<b>76526</b> Prior to 4/10	<b>76983</b> After 4/10	<b>32096</b>

ITEM (Included in Seal Kits)								DESCRIPTION	QTY
98	46730	48394	48432	46730	46730	46730	48394	Washer, Seal, Plunger Retainer	3
106	43243	44926	46651	43243	76243	76243	76243	Seal, Low-Pressure with SS-Spring	3
120	—	—	—	—	46625	—	—	Case, Seal	3
121	13976	48522	48905	13976	13976	13976	48522	O-Ring, Seal Case	3
125	43245	44925	46652	46652	46652	46652	46652	Seal, High-Pressure with S-Support	3

♦ Silicone oil/grease required

## VALVE KITS Two (2) valve kits required per pump

PUMP MODELS	NBR (STD)	FPM (.0110)	EPDM (.0220) ♦	HT (.3000)	STHT (.3400)	STHT (.3410)
3CP1110CS, 3CP1110RS	<b>33062</b>	<b>33258</b>	<b>76882</b>	<b>33062</b>	<b>33062</b>	<b>33258</b>

ITEM (Included in Valve Kits)							DESCRIPTION	QTY
163	17547	11685	46648	17547	17547	11685	O-Ring, Seat	3
164	45790	45790	45790	45790	45790	45790	Seat	3
166	43723	43723	43723	43723	43723	43723	Valve	3
167	43750	43750	43750	43750	43750	43750	Spring	3
168	44565	44565	44565	44565	44565	44565	Retainer, Spring	3
172	49382	15855	48431	49382	49382	15855	O-Ring, Valve Plug	3

♦ Silicone oil/grease required

### ⚠ 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](http://www.catpumps.com/dynamic-literature/cautions-and-warnings) or can be requested directly from Cat Pumps.

### WARRANTY

View the Limited Warranty online at [www.catpumps.com/literature/cat-pumps-limited-warranty](http://www.catpumps.com/literature/cat-pumps-limited-warranty)