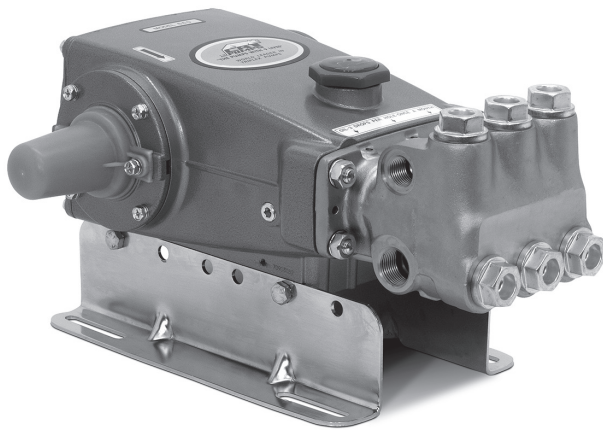


DATA SHEET

15 FRAME PLUNGER PUMP



Nickel Aluminum Bronze: **640**



Model 660 Shown
(Mounting rails sold separately)

SPECIFICATIONS	U.S. Measure	Metric Measure
Flow	8 gpm	30 lpm
Pressure Range	100 to 3000 psi	6.9 to 207bar
Pump RPM*	1450 rpm	1450 rpm
Inlet Pressure Range	Flooded to 60 psi	Flooded to 4.1 bar
Max. Liquid Temp. (NBR)	160° F	71° C
Bore	0.709"	18 mm
Stroke	1.181"	30 mm
Crankcase Capacity	42 oz.	1.26 l
Inlet Ports (2)	3/4" NPT(innen)	3/4" NPT(innen)
Discharge Ports (2)	1/2" NPT(innen)	1/2" NPT(innen)
Pulley Mounting	Either Side	Either Side
Shaft Diameter	1.181"	30 mm
Weight	42 lbs.	19 kg
Dimensions	16.28 x 12.99 x 6.44"	413.5 x 330 x 163.5 mm

*Pump minimum is 100 RPM.

FEATURES

- Triplex design delivers high efficiency and low pulsation.
- Durable V-Packings are lubricated and cooled by the liquid being pumped.
- Pre-set Lo-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.

DETERMINING THE PUMP R.P.M.	$\frac{\text{Rated gpm}}{\text{Rated rpm}}$	=	$\frac{\text{"Desired" gpm}}{\text{"Desired" rpm}}$
DETERMINING THE REQUIRED H.P.	$\frac{\text{gpm} \times \text{psi}}{1460}$	=	Electric Brake H. P. Required
DETERMINING MOTOR PULLEY SIZE	$\frac{\text{Motor Pulley O.D.}}{\text{Pump rpm}}$	=	$\frac{\text{Pump Pulley O.D.}}{\text{Motor rpm}}$

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

PARTS LIST

ITEM	PART NUMBER	MATL	DESCRIPTION	QTY
640				
5	126540	STCP R	Screw, HHC Sems (M8x20) (See Tech Bulletins 074, 128)	8
8	134805	ALE	Cover, Bearing (See Tech Bulletin 118, 128)	2
9	855043	FBR	Split Shim, Bearing Cover, 2 Pc. (See Tech Bulletin 128)	2
10	11340	NBR	O-Ring, Bearing Case - 70D	2
11	43495	NBR	Seal, Oil, Crankshaft - 70D	2
12	855044	S	Split Shim, Bearing Cover, 2 Pc. (See Tech Bulletin 128)	2
15	39060	STL	Bearing, Roller	2
20	48600	TNM	Rod Assembly, Connecting (See Tech Bulletin 074)	3
25	43494	FCM	Crankshaft - Dual End (M30)	1
31	<i>828710</i>	<i>PE</i>	<i>Protector, Oil Cap w/Foam Gasket</i>	<i>1</i>
32	43211	ABS	Cap, Oil Filler	1
33	14177	NBR	O-Ring, Filler Cap - 70D	1
37	92241	PC	Gauge, Oil, Bubble w/Gasket - 80D	1
38	44428	NBR	Gasket, Flat, Oil Gauge - 80D	1
40	126541	STCP R	Screw, HHC Sems (M6x20) (See Tech Bulletin 074)	4
48	25625	STCP	Plug, Drain (1/4"x19 BSP)	1
49	23170	NBR	O-Ring, Drain Plug - 70D	1
50	133576	ALE	Cover, Rear (See Tech Bulletin 118)	1
51	44834	NBR	O-Ring, Rear Cover - 70D	1
53	134836	ALE	Crankcase (Incls: 54, 55) (See Tech Bulletin 118, 128)	1
54	27488	S	Pin, Guide	2
55	126545	STCP R	Stud (M10x45) (See Tech Bulletin 128)	4
56	44664	POP	Pan, Oil	1
64	43507	CM	Pin, Crosshead	3
65	48228	SHS	Rod, Plunger, Long	3
69	126592	STCP R	Washer, Seal	3
70	43500	NBR	Seal, Oil, Crankcase - 80D	3
75	43506	S	Slinger, Barrier	3
88	45675	S	Washer, Keyhole	3
89	43584	BB	Spacer, Plunger	3
90	43232	CC	Plunger (M18x77)	3
96	43235	PTFE	Back-up-Ring, Plunger Retainer	3
97	17399	NBR	O-Ring, Plunger Retainer - 80D	3
98	45891	CU	Gasket, Plunger Retainer	3
99	104360	S	Retainer w/stud, Plunger (M6) (See Tech Bulletin 074)	3
100	855001	POP	Retainer, Seal, 2-Pc. (See Tech Bulletin 098)	3
101	43585	—	Wick, Long Tab	3
106	43586	NBR	Seal, LPS	3
120	49291	BB	Case, Seal	3
121	14762	NBR	O-Ring, Seal Case - 70D	3
126	43588	BB	Adapter, Female	3
127	111437	STG	V-Packing	6
128	43590	BB	Adapter, Male	3
139	20326	BBCP	Plug, Inlet [3/4" NPT(M)]	1
162	43248	PTFE	Back-up-Ring, Seat	6
163	43249	NBR	O-Ring, Seat - 80D	6
164	43722	S	Seat	6
166	43721	S	Valve	6
167	43751	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	45975	NAB	Head, Manifold	1
192	126231	STCP R	Lockwasher (M10)	4
194	126522	STCP R	Nut, Hex (M10) (See Tech Bulletin 074)	4
250	855046	NY	Protector, Shaft w/Two Screws (See Tech Bulletin 128)	1

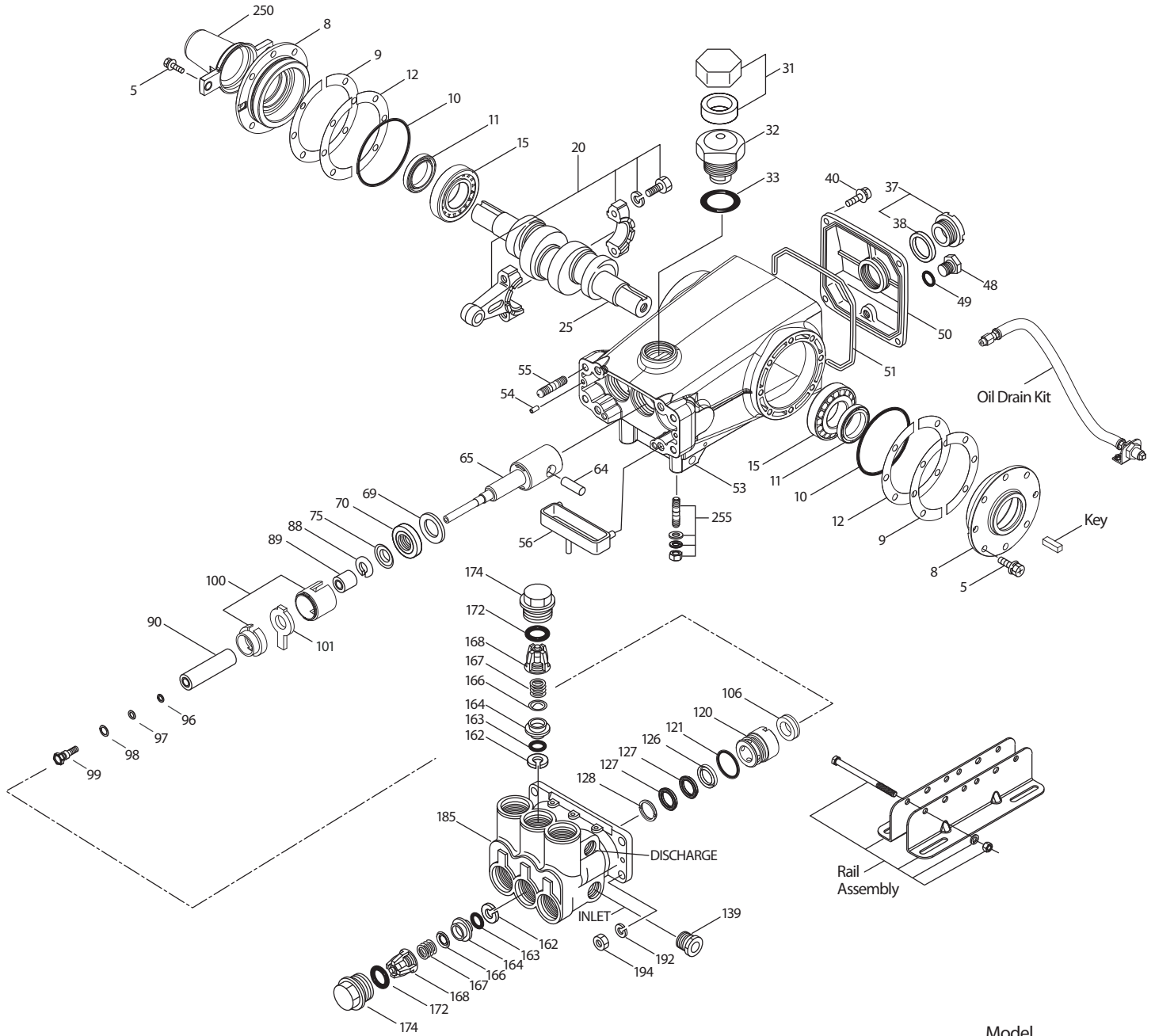
Italics are optional items. R Components comply with RoHS Directive.

For additional technical information see www.catpumps.com/literature/tech-bulletins.

MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic ALE=Aluminum Epoxy BB=Brass BBCP=Brass/Chrome Plated CC=Ceramic CM=Chrome-Moly CU=Copper
 EPDM=Ethylene Propylene Diene Monomer FBR=Fiber FCM=Forged Chrome-Moly FPM=Fluorocarbon IPFE=I-Perfluoroelastomer NAB=Nickel Aluminum Bronze
 NBR=Medium Nitrile (Buna-N) NY=Nylon PC=Poly Carbonate PE=Polyethylene POP=Polypropylene PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride S=304SS
 SHS=304SS/High Strength STCP=Steel/Chrome Plated STG=Special Blend PTFE White STL=Steel TNM=Special High Strength

Seal Kit and Valve Kit listed on pages 3 and 4. Optional Parts and Accessories and Service parts listed on Page 3.

EXPLODED VIEW



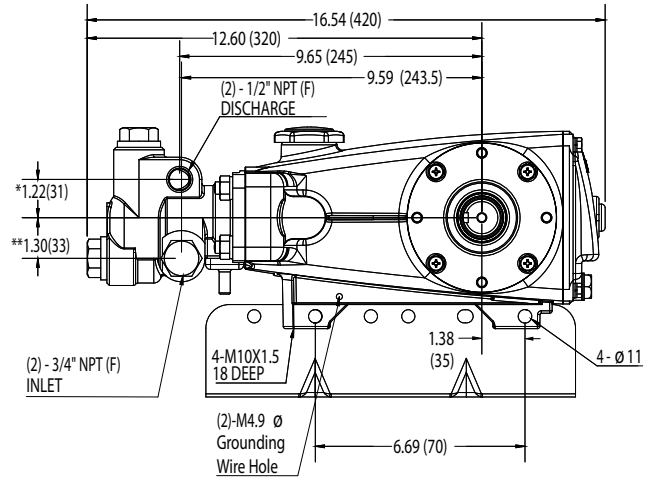
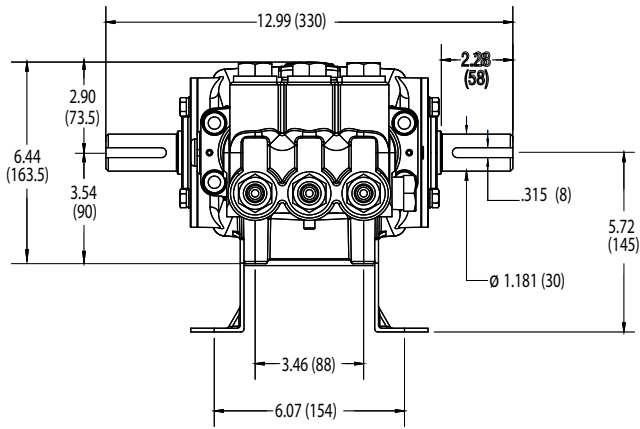
Model
Nickel Aluminum Bronze - 640
September 2019

OPTIONAL PARTS AND ACCESSORIES

PART	DESCRIPTION	QTY
30716	Key (8 x 7 x 43)	1
126609	Assy, Rail	1
30264	Kit, Direct Mount	1
34334	Kit, Oil Drain (3/8" x 24")	1

SERVICE PARTS

PART	DESCRIPTION	QTY
31884	Seal Kit - Standard NBR	1
30820	Valve Kit - Standard NBR	2
6107	Oil, Bottle (21 oz) ISO 68 Hydraulic	2
30696	Plier, Reverse	1
33006	Socket, Seal Case (1/2")	1



Model 640

SEAL KIT One (1) seal kit required per pump

PUMP MODEL	NBR (STD)
640	31884

ITEM (Included in Seal Kit)		DESCRIPTION	QTY
97	17399	O-Ring, Plunger Retainer	3
106	43586	Seal, LPS	3
121	14762	O-Ring, Seal Case	3
127	111437	V-Packing	6

VALVE KIT Two (2) valve kits required per pump

PUMP MODEL	NBR (STD)
640	30820

ITEM (Included in Valve Kit)		DESCRIPTION	QTY
162	43248	Back-up-Ring, Seat	6
163	43249	O-Ring, Seat	6
164	43722	Seat	6
166	43721	Valve	6
167	43751	Spring	6
168	44564	Retainer, Spring	6
172	17617	O-Ring, Valve Plug	6

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.de or can be requested directly from CAT PUMPS