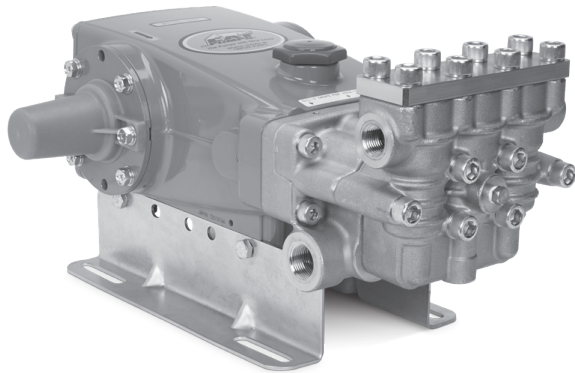


DATA SHEET

15 FRAME PLUNGER PUMP



Brass Model: 1760



(Shaft protector included, mounting rails sold separately)

SPECIFICATIONS	U.S. Measure	Metric Measure
Flow	8.5 gpm	32,3 lpm
Pressure Range	100 - 4000 psi	6.9 - 275 bar
Pump RPM*	1470 rpm	1470 rpm
Inlet Pressure Range	Flooded to 70 psi	Flooded to 4.8 bar
Std. Liquid Temp.	160° F	71° C
Alternative seals available for higher temperatures up to 88°C (190° F)		
Bore	0.787"	20 mm
Stroke	0.984"	25 mm
Crankcase Capacity	42 oz.	1.26 l
Inlet Ports (2)	3/4" NPT(F)	3/4" NPT(F)
Discharge Ports (2)	1/2" NPT(F)	1/2" NPT(F)
Pulsator Port (1)	1/8" NPT(F)	1/8" NPT(F)
Pulley Mounting	Either Side	Either Side
Shaft Diameter	1.181"	30 mm
Weight	59.9 lbs.	27.2 kg
Dimensions	16.93 x 12.99 x 6.44"	430 x 330 x 163.5 mm

*Pump minimum is 100 RPM.

FEATURES

- Triplex design offers high efficiency and low pulsation.
- Durable V-packings are lubricated and cooled by the liquid being pumped.
- Pre-set low-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.
- Stacked valve design promotes ease of servicing.
- Special pulsator assembly port allows jetting option.
- Standard NBR seals with alternative options for temperatures and chemical compatibility.

ALTERNATIVE SEAL CONFIGURATION

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

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.

$$\text{Hp (Electric Brake)} = \frac{\text{gpm} \times \text{psi}}{1460}$$

DETERMINING MOTOR PULLEY SIZE

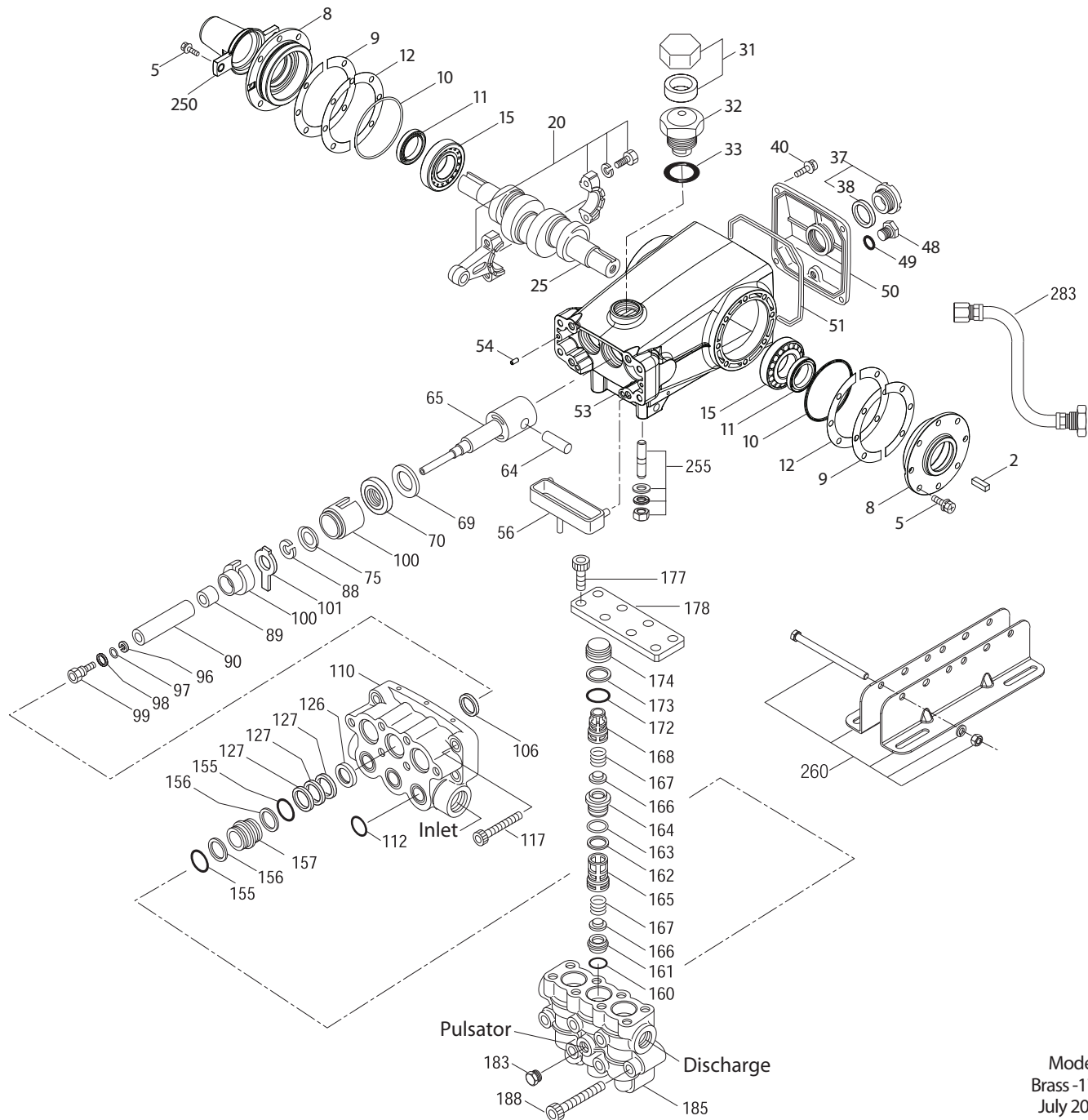
$$\frac{\text{Motor Pulley O.D.}}{\text{Pump rpm}} = \frac{\text{Pump Pulley O.D.}}{\text{Motor rpm}}$$

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

PARTS LIST

ITEM	PART NUMBER	MATL	DESCRIPTION	QTY
	1760			
2	30716	STL	Key (8x7x43)	1
5	126540	STCP R	Screw, HHC, Sems (M8x20) (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)	0-2
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)	0-2
15	39060	STL	Bearing, Roller	2
20	126805	BZ	Rod, Connecting Assembly (See Tech Bulletin 074)	3
25	670009	FCM	Crankshaft, Dual-End (M25)	1
31	828710	PE	Protector, Oil Cap with Foam Gasket	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 (M6x20) (See Tech Bulletin 074)	4
48	25625	STCP	Plug, Drain (1/4" x 19 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	134889	ALE	Crankcase with Guide Pins (See Tech Bulletin 118, 128)	1
54	27488	S	Pan, Oil	2
56	44664	POP	Ölauffangschale	1
64	43507	CM	Pin, Crosshead	3
65	49223	SBZ	Rod, Plunger	3
69	126592	STCP R	Washer, Oil Seal	3
70	43500	NBR	Seal, Oil Crankcase	3
75	43506	S	Slinger, Barrier	3
88	45675	S	Washer, Keyhole	3
89	43505	BB	Spacer	3
90	43300	CC	Plunger, Ceramic (M20x77)	3
96	43235	PTFE	Back-up Ring, Plunger Retainer	3
97	17399	NBR	O-Ring, Plunger Retainer - 80D	3
	14160	FPM	O-Ring, Plunger Retainer - 80D	3
98	45891	CU	Gasket, Plunger Retainer	3
99	104360	S	Retainer, Plunger with Stud (See Tech Bulletin 074)	3
100	855001	POP	Retainer, Seal, 2-Piece	3
101	43508	—	Wick	3
106	† 44071	NBR	Seal, LPS with SS-Spring	3
	44381	FPM	Seal, LPS with S-Spring	3
	76071	ST2	Seal, LPS with SS-Spring	3
110	49229	FBB	Manifold, Inlet	1
112	14179	NBR	O-Ring, Inlet Manifold - 70D	3
	15855	FPM	O-Ring, Inlet Manifold - 70D	3
117	126515	STCP R	Screw, HSH (M10x55) (See Tech Bulletin 074)	4
126	49231	BB	Adapter, Female	3
127	† 44607	STG	V-Packing	9
155	14176	NBR	O-Ring, Spacer, V/P - 70D	6
	77319	FPM	O-Ring, Spacer, V/P - 70D	6
156	49232	PTFE	Back-up Ring, Spacer, V/P	6
157	49230	BB	Spacer, V/P	3
160	49238	NBR	O-Ring, Seat, Inlet - 90D	3
	129593	FPM	O-Ring, Seat, Inlet - 70D	3
161	49237	S	Seat, Inlet	3
162	49235	PTFE	Back-up Ring, Seat, Discharge	3
163	49236	NBR	O-Ring, Seat, Discharge - 70D	3
	129594	FPM	O-Ring, Seat, Discharge - 70D	3
164	49234	S	Seat, Discharge	3
165	49198	PVDF	Retainer, Spring, Inlet	3
166	48793	SS	Valve	6
167	43751	S	Spring	6
168	49199	PVDF	Retainer, Spring, Discharge	3
172	14176	NBR	O-Ring, Valve Plug - 70D	3
	77319	FPM	O-Ring, Valve Plug - 70D	3
173	49232	PTFE	Back-up Ring, Valve Plug	3
174	49239	BB	Plug, Valve	3
177	126783	STCP R	Screw, HSH (M12x25) (See Tech Bulletin 074)	8
178	49227	BB	Cover, Valve	1
183	49462	BB	Plug, Pulsator Port [1/8" NPT(M)]	1
185	49197	FBB	Manifold, Discharge	1
188	126519	STCP R	Screw, HSH (M12x70) (See Tech Bulletin 074)	6
250	855046	NY	Protector, Shaft with 2 Screws (See Tech Bulletin 128)	1

EXPLODED VIEW



Model
Brass -1760
July 2022

ITEM	PART NUMBER	MATL	DESCRIPTION	QTY
	1760			
255	30264	STZP	Mount, Direct (See Tech Bulletin 074)	1
260	126609	STZP	Mounting Rail Assembly	1
283	34334	—	Kit, Oil Drain (3/8" x 24")	1
299	818385	FBB	Head, Complete with NBR Seals and O-Rings	1
300	31862	NBR*	Kit, Seal (Incls:: 97, 106, 112, 127, 155, 156) Standard	1
	76862	FPM*	Kit, Seal (Incls:: 97, 106, 112, 127, 155, 156) .0110	1
	76162	STHT	Kit, Seal (Incls:: 97, 106, 112, 127, 155, 156) .3400	1
310	31872	NBR	Kit, Valve (Incls:: 160 - 168, 172, 173) Standard, .3400	1
	76872	FPM	Kit, Valve (Incls:: 160 - 168, 172, 173) .0110	1
—	76560	—	Pulsator Assembly	1
—	6107	—	Oil, Bottle (0,62 l / 21 oz.) ISO-68 Hydraulic (Fill to specified crankcase capacity prior to start-up)	2

**Review individual parts in each kit for material code identification. *Italics are optional items.* R Components comply with RoHS Directive.

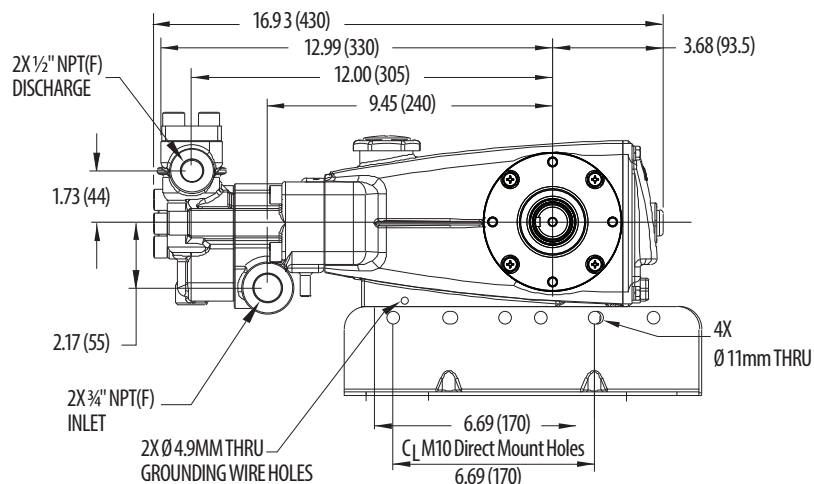
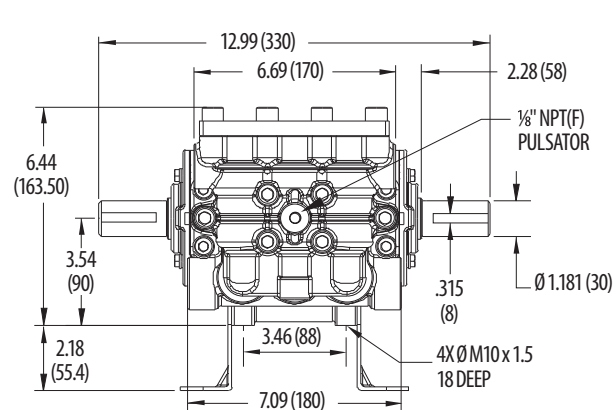
† Production parts are different than service parts. For additional technical information see www.catpumps.com/literature/tech-bulletins.

MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic ALE=Aluminum Epoxy BB=Brass BZ=Bronze CC=Ceramic CM=Chrome-moly CU=Copper F=Cast Iron

FBB=Forged Brass FBR=Fiber FCM=Forged Chrome-moly FPM=Flouorocarbon NBR=Medium Nitrile (Buna-N) NY=Nylon PC=Poly Carbonate

PE=Polyethylene POP=Polypropylene PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride S=304SS SBZ=304SS/Bronze SS=316SS ST2=Special PTFE 2

STCP=Steel/Chrome Plated STG=Special Blend PTFE White STHT=Special PTFE High Temp STL=Steel STZP=Steel/Zinc Plated



Model 1760

⚠ 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