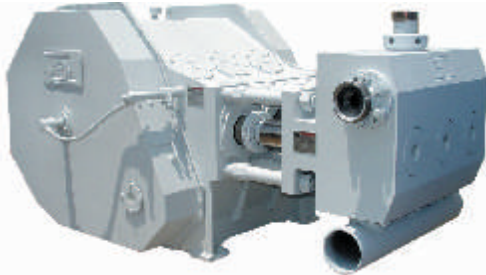


# Weir SPM



Additional Intermittent Duty Pumps & Extended Duty Pumps

## TWS 1600 LW



**APPLICATIONS:** Acid-frac, fracturing, frac-pack.

Rated Max. Brake HP.....1,600 BHP (1,193 Kw)  
 Maximum Rod Load.....200,000 Lbs. (90,729 kg)  
 Stroke Length.....8" (203.2 mm)  
 Gear Ratio.....6.353:1  
 Length.....84-3/4" (2,153 mm)  
 Width.....53-7/8" (1,369 mm)  
 Height.....43-3/8" (1,102 mm)  
 Weight Dry (Approx.).....8,750# (3,970 kg)

### TWS 1600 LW Performance Data <sup>1, 2</sup>

PLUNGER DIAMETER	OUTPUT PER REV	DISPLACEMENT AT PUMP STROKES PER MINUTE / PINION RPM									
		75 / 476		115 / 731		200 / 1271		300 / 1906		330 / 2100	
in (mm)	gal/rev (liter/rev)	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )
3 3/4 (95.3)	1.15 (4.4)	86 (326)	18,115 (1273)	132 (500)	18,115 (1273)	230 (871)	10,735 (755)	345 (1306)	7,155 (503)	380 (1438)	6,495 (457)
4 (101.6)	1.30 (4.9)	98 (371)	15,925 (1120)	150 (568)	15,925 (1120)	260 (984)	9,495 (667)	390 (1476)	6,330 (445)	429 (1624)	5,755 (405)
4 1/2 (114.3)	1.65 (6.3)	124 (469)	12,580 (884)	190 (719)	12,580 (884)	330 (1249)	7,480 (526)	495 (1874)	4,985 (350)	545 (2063)	4,530 (318)
5 (127.0)	2.04 (7.7)	153 (579)	10,190 (716)	235 (889)	10,190 (716)	408 (1544)	6,050 (425)	612 (2316)	4,035 (284)	673 (2547)	3,670 (258)
5 1/2 (139.7)	2.47 (9.4)	185 (700)	8,420 (592)	284 (1075)	8,420 (592)	494 (1870)	5,000 (352)	741 (2805)	3,330 (234)	815 (3085)	3,030 (213)
5 3/4 (146.1)	2.70 (10.2)	203 (768)	7,705 (542)	311 (1177)	7,705 (542)	540 (2044)	4,570 (321)	810 (3066)	3,050 (214)	891 (3372)	2,770 (195)
6 (152.4)	2.94 (11.1)	221 (836)	7,075 (497)	338 (1279)	7,075 (497)	588 (2226)	4,200 (295)	882 (3338)	2,800 (197)	970 (3671)	2,545 (179)
6 1/2 (165.1)	3.45 (13.1)	259 (980)	6,030 (424)	397 (1503)	6,030 (424)	690 (2612)	3,580 (252)	1,035 (3917)	2,385 (168)	1,139 (4311)	2,170 (153)
INPUT POWER: BHP (Kw)		1012 (755)		1550 (1156)		1600 (1193)		1600 (1193)		1600 (1193)	

<sup>1</sup> Based on 90% ME and 100% VE - Intermittent Service Only.  
<sup>2</sup> For applications demanding pressures over 15,000 psi, contact Weir SPM Engineering.

# Extended Duty Pumps

## THB 175



**APPLICATIONS:** Reverse circulation, waterblasting, drill cuttings re-injection.

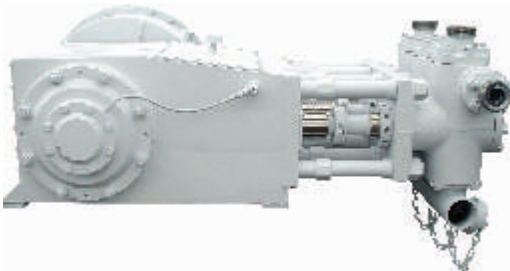
Rated Max. Brake HP.....175 BHP (130 Kw)  
 Maximum Rod Load.....24,540 Lbs. (11,131 kg)  
 Stroke Length.....5" (127 mm)  
 Gear Ratio.....4.44:1  
 Length.....59" (1,499 mm)  
 Width.....45" (1,143 mm)  
 Height.....26" (660 mm)  
 Weight Dry (Approx.).....4,070# (1,692 kg)

### THB 175 Performance Data\*

PLUNGER DIAMETER	DISPLACEMENT PER REV	DISPLACEMENT AT PUMP STROKES PER MINUTE / PINION RPM									
		55 / 244		100 / 444		170 / 755		270 / 1200		405 / 1800	
in (mm)	gal/rev (liter/rev)	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )
1-3/4 (44.5)	.156 (0.6)	9 (34)	10,202 (716)	16 (61)	10,202 (717)	27 (102)	10,202 (717)	42 (152)	6,429 (452)	63 (238)	4,286 (301)
2 (50.8)	.204 (0.8)	11 (42)	7,811 (549)	20 (76)	7,811 (549)	35 (132)	7,811 (549)	55 (208)	4,910 (345)	83 (314)	3,253 (229)
2-1/4 (57.2)	.258 (1.0)	14 (53)	6,172 (434)	26 (98)	6,172 (434)	44 (167)	6,172 (434)	70 (265)	3,858 (271)	104 (394)	2,596 (182)
2-1/2 (63.5)	.319 (1.2)	18 (68)	5,000 (352)	32 (121)	5,000 (352)	54 (204)	5,000 (352)	86 (326)	3,140 (221)	129 (488)	2,093 (147)
2-3/4 (69.9)	.386 (1.5)	21 (79)	4,130 (290)	39 (148)	4,130 (290)	66 (250)	4,130 (290)	104 (394)	2,596 (182)	156 (590)	1,731 (122)
3 (76.2)	.459 (1.7)	25 (95)	3,470 (244)	46 (174)	3,470 (244)	78 (295)	3,470 (244)	124 (469)	2,178 (153)	186 (704)	1,452 (102)
3-1/2 (88.9)	.625 (2.4)	34 (129)	2,550 (179)	63 (238)	2,550 (179)	106 (401)	2,550 (179)	169 (640)	1,598 (112)	253 (958)	1,067 (75)
3-3/4 (95.3)	.717 (2.7)	39 (148)	2,222 (156)	72 (273)	2,222 (156)	122 (462)	2,222 (156)	194 (734)	1,392 (98)	290 (1098)	931 (65)
4 (101.6)	.816 (3.1)	45 (170)	1,950 (137)	82 (310)	1,950 (137)	139 (526)	1,950 (137)	220 (833)	1,227 (86)	330 (1249)	818 (58)
INPUT POWER: BHP (Kw)		57 (43)		103 (77)		175 (130)		175 (130)		175 (130)	

\*Based on 90% ME and 100% VE - Extended Service Only.

## THB 225



Rated Max. Brake HP.....225 BHP (168 Kw)  
 Maximum Rod Load.....24,540 Lbs. (11,131 kg)  
 Stroke Length.....6" (152.4 mm)  
 Gear Ratio.....4.61:1  
 Length.....74-1/4" (1,810 mm)  
 Width.....45-3/8" (1,153 mm)  
 Height.....26-1/2" (674 mm)  
 Weight Dry (Approx.).....4,500# (2,041 kg)

### THB 225 Performance Data\*

PLUNGER DIAMETER	OUTPUT PER REV	DISPLACEMENT AT PUMP STROKES PER MINUTE / PINION RPM							
		75 / 346		100 / 461		125 / 576		185 / 853	
in (mm)	gal/rev (liter/rev)	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )
2 1/2 (63.5)	.38 (1.4)	29 (110)	5,000 (352)	38 (144)	5,000 (352)	48 (182)	5,000 (352)	70 (265)	5,000 (352)
2 3/4 (69.9)	.46 (1.7)	35 (132)	4,130 (290)	46 (174)	4,130 (290)	58 (220)	4,130 (290)	85 (322)	4,130 (290)
3 (76.2)	.55 (2.1)	41 (155)	3,470 (244)	55 (208)	3,470 (244)	69 (261)	3,470 (244)	102 (386)	3,470 (244)
3 1/2 (88.9)	.75 (2.8)	56 (212)	2,550 (179)	75 (284)	2,550 (179)	94 (356)	2,550 (179)	139 (526)	2,550 (179)
4 (101.6)	.98 (3.7)	74 (280)	1,950 (137)	98 (371)	1,950 (137)	123 (466)	1,950 (137)	181 (685)	1,950 (137)
4 1/2 (114.3)	1.24 (4.7)	93 (352)	1,540 (108)	124 (469)	1,540 (108)	155 (587)	1,540 (108)	229 (867)	1,540 (108)
INPUT POWER: BHP (Kw)		93 (69)		124 (92)		155 (116)		225 (168)	

\* Based on 90% ME and 100% VE - Extended Service Only.

**APPLICATIONS:** Underbalanced CT drilling, industrial grouting, waterblasting, drill cuttings re-injection.

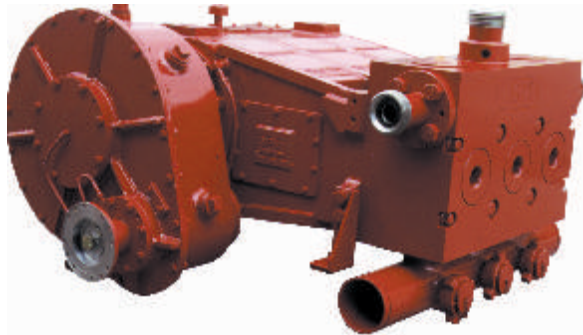
Pump dimensions are approximate. For full detailed drawings, please contact Weir SPM Engineering.

# Weir SPM



## Extended Duty Pumps

### THB 300S



#### THB 300S Performance Data\*

PLUNGER DIAMETER	DISPLACEMENT PER REV	DISPLACEMENT AT PUMP STROKES PER MINUTE / PINION RPM									
		55 / 244		100 / 444		170 / 755		270 / 1200		405 / 1800	
in (mm)	gal/rev (liter/rev)	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )
1-3/4 (44.5)	.156 (0.6)	9 (34)	10,202 (716)	16 (61)	10,202 (717)	27 (102)	10,202 (717)	42 (159)	6,429 (452)	63 (238)	4,286 (301)
2 (50.8)	.204 (0.8)	11 (42)	7,811 (549)	20 (76)	7,811 (549)	35 (132)	7,811 (549)	55 (208)	4,910 (345)	83 (314)	3,253 (229)
2-1/4 (57.2)	.258 (1.0)	14 (53)	6,172 (434)	26 (98)	6,172 (434)	44 (167)	6,172 (434)	70 (265)	3,858 (271)	104 (394)	2,596 (182)
2-1/2 (63.5)	.319 (1.2)	18 (68)	5,000 (352)	32 (121)	5,000 (352)	54 (204)	5,000 (352)	86 (326)	3,140 (221)	129 (488)	2,093 (147)
2-3/4 (69.9)	.386 (1.5)	21 (79)	4,130 (290)	39 (148)	4,130 (290)	66 (250)	4,130 (290)	104 (394)	2,596 (182)	156 (590)	1,731 (122)
3 (76.2)	.459 (1.7)	25 (95)	3,470 (244)	46 (174)	3,470 (244)	78 (295)	3,470 (244)	124 (469)	2,178 (153)	186 (704)	1,452 (102)
3-1/2 (88.9)	.625 (2.4)	34 (129)	2,550 (179)	63 (238)	2,550 (179)	106 (401)	2,550 (179)	169 (640)	1,598 (112)	253 (958)	1,067 (75)
3-3/4 (95.3)	.717 (2.7)	39 (148)	2,222 (156)	72 (273)	2,222 (156)	122 (462)	2,222 (156)	194 (734)	1,392 (98)	290 (1098)	931 (65)
4 (101.6)	.816 (3.1)	45 (170)	1,950 (137)	82 (310)	1,950 (137)	139 (526)	1,950 (137)	220 (833)	1,227 (86)	330 (1249)	818 (58)
INPUT POWER: BHP (Kw)		57 (43)		103 (77)		175 (130)		175 (130)		175 (130)	

\*Based on 90% ME and 100% VE - Extended Service Only.

**APPLICATIONS:** Underbalanced CT drilling, industrial grouting, waterblasting, drill cuttings re-injection.

Rated Max. Brake HP.....300 BHP (223 Kw)  
 Maximum Rod Load.....54,082 Lbs. (22,531kg)  
 Stroke Length.....6" (152.4 mm)  
 Gear Ratio.....4.6:1

Length.....50" (1,270 mm)  
 Width.....53" (1,346 mm)  
 Height.....24" (610 mm)  
 Weight Dry (Approx.).....4,600# (2,086 kg)

### THB 350



#### THB 350 Performance Data\*

PLUNGER DIAMETER	OUTPUT PER REV	DISPLACEMENT AT PUMP STROKES PER MINUTE / PINION RPM							
		75 / 346		140 / 645		193 / 890		282 / 1300	
in (mm)	gal/rev (liter/rev)	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )
2½ (63.5)	.38 (1.4)	29 (110)	10,185 (716)	54 (204)	10,185 (716)	74 (208)	7,298 (513)	108 (409)	5,000 (352)
2¾ (69.9)	.46 (1.7)	35 (132)	8,418 (592)	65 (246)	8,418 (592)	89 (337)	6,068 (427)	131 (496)	4,123 (290)
3 (76.2)	.55 (2.1)	41 (155)	7,074 (497)	77 (291)	7,074 (497)	106 (401)	5,095 (358)	155 (587)	3,484 (245)
3½ (88.9)	.75 (2.8)	56 (212)	5,197 (365)	105 (397)	5,197 (365)	145 (549)	3,724 (262)	211 (799)	2,559 (180)
4 (101.6)	.98 (3.7)	74 (280)	3,979 (280)	137 (519)	3,979 (280)	190 (719)	2,842 (200)	276 (1045)	1,957 (138)
4½ (114.3)	1.24 (4.7)	93 (352)	3,144 (221)	174 (659)	3,144 (221)	239 (905)	2,260 (159)	349 (1321)	1,547 (109)
INPUT POWER: BHP (Kw)		190 (142)		350 (261)		350 (261)		350 (261)	

\* Based on 90% ME and 100% VE - Extended Service Only.

**APPLICATIONS:** Underbalanced CT drilling, industrial grouting, waterblasting, drill cuttings re-injection.

Rated Max. Brake HP.....350 BHP (261 Kw)  
 Maximum Rod Load.....50,000 Lbs. (22,680 kg)  
 Stroke Length.....6" (152.4 mm)  
 Gear Ratio.....4.6:1

Length.....73-1/2" (1,867 mm)  
 Width.....50-7/8" (1,292 mm)  
 Height.....29-3/8" (746 mm)  
 Weight Dry (Approx.).....5,700# (2,586 kg)

Pump dimensions are approximate. For full detailed drawings, please contact Weir SPM Engineering.



**THB 550**



**APPLICATIONS:** Underbalanced CT drilling, waterblasting.

Rated Max. Brake HP.....550 BHP (410 Kw)  
 Maximum Rod Load.....71,400 Lbs. (32,387 kg)  
 Stroke Length.....8" (203.2 mm)  
 Gear Ratio.....6.353:1  
 Length.....88 1/16" (2,236 mm)  
 Width.....54 1/8" (1,375 mm)  
 Height.....43 1/2" (1,105 mm)  
 Weight Dry (Approx.).....8,500# (3,856 kg)

**THB 550 Performance Data\***

PLUNGER DIAMETER	DISPLACEMENT PER REV	FLOW RATE AT CRANKSHAFT RPM & (INPUT RPM)							
		60 (381)		115 (731)		165 (1048)		215 (1366)	
in (mm)	gal/rev (liter/rev)	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )
3 (76.2)	.73 (2.76)	44 (167)	10,101 (710)	84 (318)	10,101 (710)	120 (454)	7,072 (497)	157 (594)	5,405 (380)
3-1/4 (82.6)	.86 (3.26)	52 (197)	8,607 (605)	99 (375)	8,607 (605)	142 (537)	5,976 (420)	185 (700)	4,587 (322)
3-1/2 (88.9)	1.00 (3.79)	60 (227)	7,421 (522)	115 (435)	7,421 (522)	165 (625)	5,143 (362)	215 (814)	3,947 (277)
3-3/4 (95.3)	1.15 (4.4)	69 (261)	6,464 (454)	132 (500)	6,464 (454)	190 (719)	4,467 (314)	247 (935)	3,436 (242)
4 (101.6)	1.30 (4.9)	78 (295)	5,682 (399)	150 (568)	5,682 (399)	215 (814)	3,947 (277)	280 (1060)	3,031 (213)
4-1/2 (114.3)	1.65 (6.3)	99 (375)	4,489 (316)	190 (719)	4,489 (316)	272 (1030)	3,120 (219)	355 (1344)	2,391 (168)
5 (127.0)	2.04 (7.7)	122 (462)	3,636 (256)	235 (889)	3,636 (256)	337 (1276)	2,518 (177)	439 (1662)	1,933 (136)
5-1/2 (139.7)	2.47 (9.4)	148 (560)	3,005 (211)	284 (1075)	3,005 (211)	408 (1544)	2,080 (146)	531 (2010)	1,598 (112)
5-3/4 (146.1)	2.70 (10.2)	162 (613)	2,750 (193)	311 (1177)	2,750 (193)	446 (1688)	1,903 (134)	581 (2199)	1,461 (103)
6 (152.4)	2.94 (11.1)	176 (666)	2,525 (178)	338 (1279)	2,525 (178)	485 (1836)	1,750 (123)	632 (2392)	1,343 (94)
INPUT POWER: BHP (Kw)		290 (216)		550 (410)		550 (410)		550 (410)	

\*Based on 90% ME and 100% VE - Extended Service Only.

**THB 1050**



**APPLICATIONS:** Under-balanced CT drilling, waterblasting.

Rated Max. Brake HP.....1,050 BHP (783 Kw)  
 Maximum Rod Load.....110,500 Lbs. (50,123 kg)  
 Stroke Length.....8" (203.2 mm)  
 Gear Ratio.....6.353:1  
 Length.....89-3/4" (2,280 mm)  
 Width.....59-3/4" (1,518 mm)  
 Height.....44-1/4" (1,124 mm)  
 Weight Dry (Approx.).....12,500# (5,670 kg)

**THB 1050 Performance Data\***

PLUNGER DIAMETER	DISPLACEMENT PER REV	FLOW RATE AT CRANKSHAFT RPM & (INPUT RPM)							
		215 (1366)		215 (1366)		215 (1366)		215 (1366)	
in (mm)	gal/rev (liter/rev)	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )
3-3/4 (95.3)	1.15 (4.4)	69 (261)	10,005 (703)	109 (413)	10,005 (703)	162 (613)	10,005 (703)	247 (935)	6,559 (461)
4 (101.6)	1.30 (4.9)	78 (295)	8,794 (618)	124 (469)	8,794 (618)	183 (693)	8,794 (618)	280 (1060)	5,786 (407)
4-1/2 (114.3)	1.65 (6.3)	99 (375)	6,948 (488)	157 (594)	6,948 (488)	233 (882)	6,948 (488)	355 (1344)	4,564 (321)
5 (127.0)	2.04 (7.7)	122 (462)	5,628 (396)	194 (734)	5,628 (396)	288 (1090)	5,628 (396)	439 (1662)	3,691 (259)
5-1/2 (139.7)	2.47 (9.4)	148 (560)	4,651 (327)	235 (889)	4,651 (327)	348 (1317)	4,651 (327)	531 (2010)	3,051 (214)
5-3/4 (146.1)	2.70 (10.2)	162 (613)	4,256 (299)	257 (973)	4,256 (299)	381 (1442)	4,256 (299)	581 (2199)	2,789 (196)
6 (152.4)	2.94 (11.1)	176 (666)	3,908 (275)	279 (1056)	3,908 (275)	415 (1571)	3,908 (275)	632 (2392)	2,564 (180)
6-1/2 (165.1)	3.45 (13.1)	207 (783)	3,330 (234)	328 (1241)	3,330 (234)	486 (1840)	3,330 (234)	742 (2808)	2,183 (153)
6-3/4 (171.5)	3.72 (14.1)	223 (844)	3,088 (217)	353 (1336)	3,088 (217)	525 (1987)	3,088 (217)	800 (3028)	2,025 (142)
INPUT POWER: BHP (Kw)		450 (336)		705 (526)		1050 (783)		1050 (783)	

\*Based on 90% ME and 100% VE - Extended Service Only.

**QHB 1575**



**APPLICATIONS:** Water-blasting, water jetting, ultra high pressure drilling.

Rated Max. Brake HP.....1,575 BHP (1,175 Kw)  
 Maximum Rod Load.....100,000 Lbs. (45,450 kg)  
 Stroke Length.....8" (203.2 mm)  
 Gear Ratio.....6.353:1  
 Length.....96" (2,438 mm)  
 Width.....74" (1,877 mm)  
 Height.....60" (1,524 mm)  
 Weight Dry (Approx.).....16,500# (7,500 kg)

**QHB 1575 Performance Data\***

PLUNGER DIAMETER	DISPLACEMENT PER REV	DISPLACEMENT AT PUMP STROKES PER MINUTE / PINION RPM					
		95 / 604		140 / 889		215 / 1366	
in (mm)	gal/rev (liter/rev)	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )	gpm (lpm)	psi (kg/cm <sup>2</sup> )
2-1/2 (63.5)	.85 (3.2)	81 (306)	20,372 (1436)	119 (450)	20,370 (1436)	183 (692)	13,295 (937)
2-3/4 (69.9)	1.03 (3.9)	98 (370)	16,836 (1186)	144 (545)	16,836 (1186)	221 (837)	10,987 (774)
3 (76.2)	1.22 (4.6)	116 (440)	14,147 (997)	171 (649)	14,147 (997)	263 (996)	9,232 (651)
3 1/4 (82.6)	1.44 (5.4)	136 (517)	12,054 (849)	201 (761)	12,054 (849)	309 (1169)	7,867 (554)
3 1/2 (88.9)	1.67 (6.3)	158 (599)	10,394 (732)	233 (883)	10,394 (732)	358 (1356)	6,783 (478)
3 3/4 (95.3)	1.91 (7.2)	182 (688)	9,054 (638)	268 (1013)	9,054 (638)	411 (1556)	5,909 (416)
4 (101.6)	2.18 (8.2)	207 (782)	7,958 (561)	305 (1153)	7,958 (561)	468 (1771)	5,193 (366)
4 1/2 (114.3)	2.75 (10.4)	262 (990)	6,288 (443)	386 (1459)	6,288 (443)	592 (2241)	4,103 (289)
5 (127.0)	3.40 (12.9)	323 (1223)	5,093 (359)	476 (1802)	5,093 (359)	731 (2767)	3,324 (234)
INPUT POWER: BHP (Kw)		1066 (796)		1572 (1173)		1575 (1175)	

\* Based on 90% ME and 100% VE - Extended Service Only.

Pump dimensions are approximate. For full detailed drawings, please contact Weir SPM Engineering.