

Steel Water Cooled Brake



WPT Steel Water Cooled Brakes (Steel WCBs) are designed for high-heat applications, such as coil processors and high-cycle press / shear lines. The unique design of the steel water jackets allows for the rapid transfer of heat to an external cooler or recirculation system. This increased heat transfer capabilities allow the Steel WCB to operate in continuous slip applications. WPT's Steel WCBs are available in 1, 2, or 3 plate construction with diameters ranging from 6 through 30 inches.

- High duty cycle
- Maximum heat transfer
- Predictable preventative maintenance
- Durable steel water jacket design
- Low-inertia drive plate design

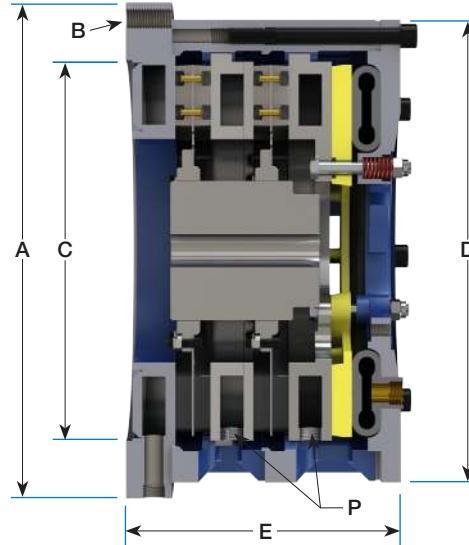
Steel WCB Specifications

Model	Torque Rating @ 100 psi (7 bar)		Maximum Speed		Heat Dissipation Capacity	Water flow (minimum)	Weight and Inertia			Lining Area	Bore Range*	
	Static Torque**		Hub & Drive Plate	Slip			Total Weight	Hub & Drive Plate Weight	Hub & Drive Plate Inertia		Minimum	Maximum
	lbf-in (N-m)		r/min				lb (kg)	lb (kg)	lb-ft ² (kg-m ²)		in (mm)	in (mm)
106	3380 (382)		5290	3530	6 (4.5)	1 (3.5)	50 (22)	8.7 (3.9)	0.27 (0.011)	40 (260)	0.88 (22.4)	1.90 (48.3)
108	5840 (660)		4300	2870	9 (6.7)	2 (5.5)	100 (45)	11 (4.9)	0.40 (0.017)	22 (140)	0.94 (23.9)	2.50 (63.5)
208	11700 (1320)		4300	2870	18 (13.4)	3 (11)	140 (64)	22 (9.8)	0.85 (0.036)	43 (280)	1.13 (28.7)	2.50 (63.5)
111	13100 (1480)		3130	2090	19 (14.2)	3 (11)	200 (91)	29 (13)	1.8 (0.078)	22 (140)	1.25 (31.8)	2.80 (71.1)
211	26200 (2960)		3130	2090	38 (28.3)	6 (22)	250 (110)	45 (20)	12 (0.48)	91 (580)	1.25 (31.8)	2.80 (71.1)
311	39300 (4440)		3130	2090	57 (42.6)	9 (33)	300 (130)	61 (27)	16 (0.68)	160 (1000)	1.25 (31.8)	2.80 (71.1)
114	22000 (2490)		2460	1640	28 (20.9)	4 (16)	310 (140)	54 (24)	7.0 (0.29)	74 (480)	1.50 (38.1)	3.30 (83.8)
214	44100 (5000)		2460	1640	56 (41.8)	9 (32)	350 (160)	50 (23)	4.3 (0.18)	140 (890)	2.00 (50.8)	3.50 (88.9)
314	66100 (7470)		2460	1640	84 (62.7)	13 (48)	390 (170)	65 (29)	7.8 (0.33)	210 (1400)	2.00 (50.8)	3.50 (88.9)
116	30300 (3420)		2150	1440	38 (28.3)	6 (22)	410 (190)	73 (33)	12 (0.52)	100 (670)	2.13 (54.1)	4.20 (106.7)
216	60600 (6850)		2150	1440	76 (56.7)	12 (44)	590 (270)	140 (65)	25 (1.1)	210 (1300)	2.13 (54.1)	4.20 (106.7)
118	50600 (5720)		1950	1300	44 (32.8)	7 (25)	450 (200)	90 (42)	19 (0.80)	120 (760)	2.25 (57.2)	4.90 (124.5)
218	101000 (11400)		1910	1280	88 (65.6)	13 (50)	590 (270)	120 (56)	22 (0.94)	230 (1500)	2.13 (54.1)	4.10 (104.1)
318	152000 (17200)		1950	1300	130 (98.4)	20 (75)	880 (400)	180 (84)	34 (1.4)	340 (2200)	2.13 (54.1)	4.10 (104.1)
121	72800 (8230)		1640	1100	60 (44.7)	9 (34)	630 (290)	140 (65)	41 (1.7)	170 (1100)	2.75 (69.9)	6.30 (160.0)
221	146000 (16500)		1640	1100	120 (89.5)	18 (68)	810 (370)	160 (73)	38 (1.6)	330 (2100)	2.13 (54.1)	4.10 (104.1)
124	79600 (9000)		1430	955	96 (71.6)	15 (54)	970 (430)	230 (100)	71 (3.0)	260 (1700)	2.13 (54.1)	6.30 (160.0)
224	159000 (18000)		1430	955	190 (143.2)	29 (108)	1200 (520)	260 (120)	76 (3.2)	510 (3300)	2.75 (69.9)	5.50 (139.7)
124H	129000 (14600)		1430	955	96 (71.6)	15 (54)	860 (390)	230 (100)	71 (3.0)	260 (1700)	2.75 (69.9)	6.30 (160.0)
224H	258000 (29200)		1430	955	190 (143.2)	29 (108)	1100 (500)	260 (120)	76 (3.2)	520 (3300)	2.75 (69.9)	5.50 (139.7)
127	145000 (16400)		1270	850	110 (80.5)	16 (61)	990 (450)	240 (110)	120 (5.2)	350 (2300)	3.25 (82.6)	6.30 (160.0)
130	211000 (23800)		1270	850	140 (102.2)	21 (78)	130 (600)	330 (150)	210 (8.9)	390 (2500)	3.50 (88.9)	7.00 (177.8)
230	422000 (47700)		1270	850	270 (204.3)	41 (156)	2000 (910)	680 (310)	420 (18)	780 (5000)	3.50 (88.9)	7.00 (177.8)
230H	541000 (61100)		1150	770	140 (204.3)	41 (156)	2000 (910)	680 (310)	420 (18)	780 (5000)	3.50 (88.9)	7.00 (177.8)
330H	811000 (91600)		1150	770	210 (306.5)	62 (234)	2700 (1200)	1000 (470)	630 (26)	1200 (7500)	3.50 (88.9)	7.00 (177.8)

Consult WPT Application Engineering for application assistance, service factors, specifications, and detailed drawings/3D models.

*Contact WPT for larger bore sizes. Listed bore sizes are for square key.

**Dynamic (slipping) Torque is 75% of the Static Torque.



Steel WCB Dimensions

Model	Imperial Mounting						Metric Mounting						D	E
	A		B		C	P	A	B		C	P			
	+0.000/-0.003 (+0.00/-0.08)	Hole Circle	Dia	Qty	+0.003/-0.000 (+0.08/-0.00)	Coolant Ports	(+0.08/-0.00)	Hole Circle	Dia	H7	Coolant Ports			
	in (mm)	in (mm)	in		in (mm)	NPT	(mm)	(mm)	(mm)		(mm)	BSPT		
106	8.749 (222.22)	8.00 (203.2)	11/32	4	7.377 (187.38)	1/4	(220.00)	(203.0)	(9.0)	4	(190.00)	1/4	8 13/16 (223.8)	5 13/16 (147.6)
108	12.125 (307.98)	11.13 (282.7)	17/32	4	8.375 (212.73)	3/8	(310.00)	(280.0)	(14.0)	4	(220.00)	1/2	11 1/8 (282.6)	6 11/16 (169.9)
208	12.125 (307.98)	11.13 (282.7)	17/32	4	8.375 (212.73)	3/8	(310.00)	(280.0)	(14.0)	4	(220.00)	1/2	11 1/8 (282.6)	8 7/8 (225.4)
111	16.000 (406.40)	14.75 (374.7)	21/32	4	11.375 (288.93)	1/2	(400.00)	(375.0)	(18.0)	4	(295.00)	1/2	14 3/4 (374.7)	7 7/16 (188.9)
211	16.000 (406.40)	14.75 (374.7)	21/32	4	11.375 (288.93)	1/2	(400.00)	(375.0)	(18.0)	4	(295.00)	1/2	14 3/4 (374.7)	9 9/16 (242.9)
311	16.000 (406.40)	14.75 (374.7)	21/32	4	11.375 (288.93)	1/2	(400.00)	(375.0)	(18.0)	4	(295.00)	1/2	14 3/4 (374.7)	11 11/16 (296.9)
114	18.750 (476.25)	17.50 (444.5)	21/32	6	14.375 (365.13)	1/2	(470.00)	(445.0)	(18.0)	6	(370.00)	1/2	17 1/2 (444.5)	8 9/16 (217.5)
214	18.750 (476.25)	17.50 (444.5)	21/32	6	14.375 (365.13)	1/2	(470.00)	(445.0)	(18.0)	6	(370.00)	1/2	17 1/2 (444.5)	10 7/16 (265.1)
314	18.750 (476.25)	17.50 (444.5)	21/32	6	14.375 (365.13)	1/2	(470.00)	(445.0)	(18.0)	6	(370.00)	1/2	17 1/2 (444.5)	13 1/2 (342.9)
116	21.248 (539.70)	20.00 (508.0)	21/32	10	16.250 (412.75)	1/2	(540.00)	(510.0)	(18.0)	10	(410.00)	1/2	20 (508.0)	8 11/16 (220.7)
216	21.248 (539.70)	20.00 (508.0)	21/32	10	16.250 (412.75)	1/2	(540.00)	(510.0)	(18.0)	10	(410.00)	1/2	20 (508.0)	10 7/8 (276.2)
118	23.250 (590.55)	22.00 (558.8)	21/32	10	18.250 (463.55)	1/2	(590.00)	(560.0)	(18.0)	10	(470.00)	1/2	22 (558.8)	9 (228.6)
218	23.250 (590.55)	22.00 (558.8)	21/32	10	18.250 (463.55)	1/2	(590.00)	(560.0)	(18.0)	10	(470.00)	1/2	22 (558.8)	11 3/4 (298.5)
318	23.250 (590.55)	22.00 (558.8)	21/32	10	18.250 (463.55)	1/2	(590.00)	(560.0)	(18.0)	10	(470.00)	1/2	22 (558.8)	14 5/16 (363.5)
121	27.000 (685.80)	25.50 (647.7)	21/32	10	21.375 (542.93)	1/2	(685.00)	(648.0)	(18.0)	10	(540.00)	1/2	24 7/8 (631.8)	9 1/2 (241.3)
221	27.000 (685.80)	25.50 (647.7)	21/32	10	21.375 (542.93)	1/2	(685.00)	(648.0)	(18.0)	10	(540.00)	1/2	24 7/8 (631.8)	11 13/16 (300.0)
124	30.000 (762.00)	28.75 (730.3)	21/32	10	24.375 (619.13)	1/2	(760.00)	(730.0)	(18.0)	10	(620.00)	1/2	29 (736.6)	9 3/4 (247.7)
224	30.000 (762.00)	28.75 (730.3)	21/32	10	24.375 (619.13)	1/2	(760.00)	(730.0)	(18.0)	10	(620.00)	1/2	29 (736.6)	12 1/4 (311.2)
124H	30.000 (762.00)	28.75 (730.3)	21/32	10	24.375 (619.13)	1/2	(760.00)	(730.0)	(18.0)	10	(620.00)	1/2	29 (736.6)	9 3/4 (247.7)
224H	30.000 (762.00)	28.75 (730.3)	21/32	10	24.375 (619.13)	1/2	(760.00)	(730.0)	(18.0)	10	(620.00)	1/2	29 (736.6)	12 1/4 (311.2)
127	32.750 (831.85)	31.50 (800.1)	21/32	14	27.375 (695.33)	1/2	-	-	-	-	-	-	31 (787.4)	10 (254.0)
130	37.000 (939.80)	35.50 (901.7)	25/32	16	30.375 (771.53)	3/4	-	-	-	-	-	-	34 3/4 (882.7)	11 (279.4)
230	37.000 (939.80)	35.50 (901.7)	25/32	16	30.375 (771.53)	3/4	-	-	-	-	-	-	34 3/4 (882.7)	16 11/16 (423.9)
230H	37.000 (939.80)	35.50 (901.7)	25/32	16	30.375 (771.53)	3/4	-	-	-	-	-	-	34 3/4 (882.7)	16 11/16 (423.9)
330H	37.000 (939.80)	35.50 (901.7)	25/32	16	30.375 (771.53)	3/4	-	-	-	-	-	-	34 3/4 (882.7)	22 (558.8)

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