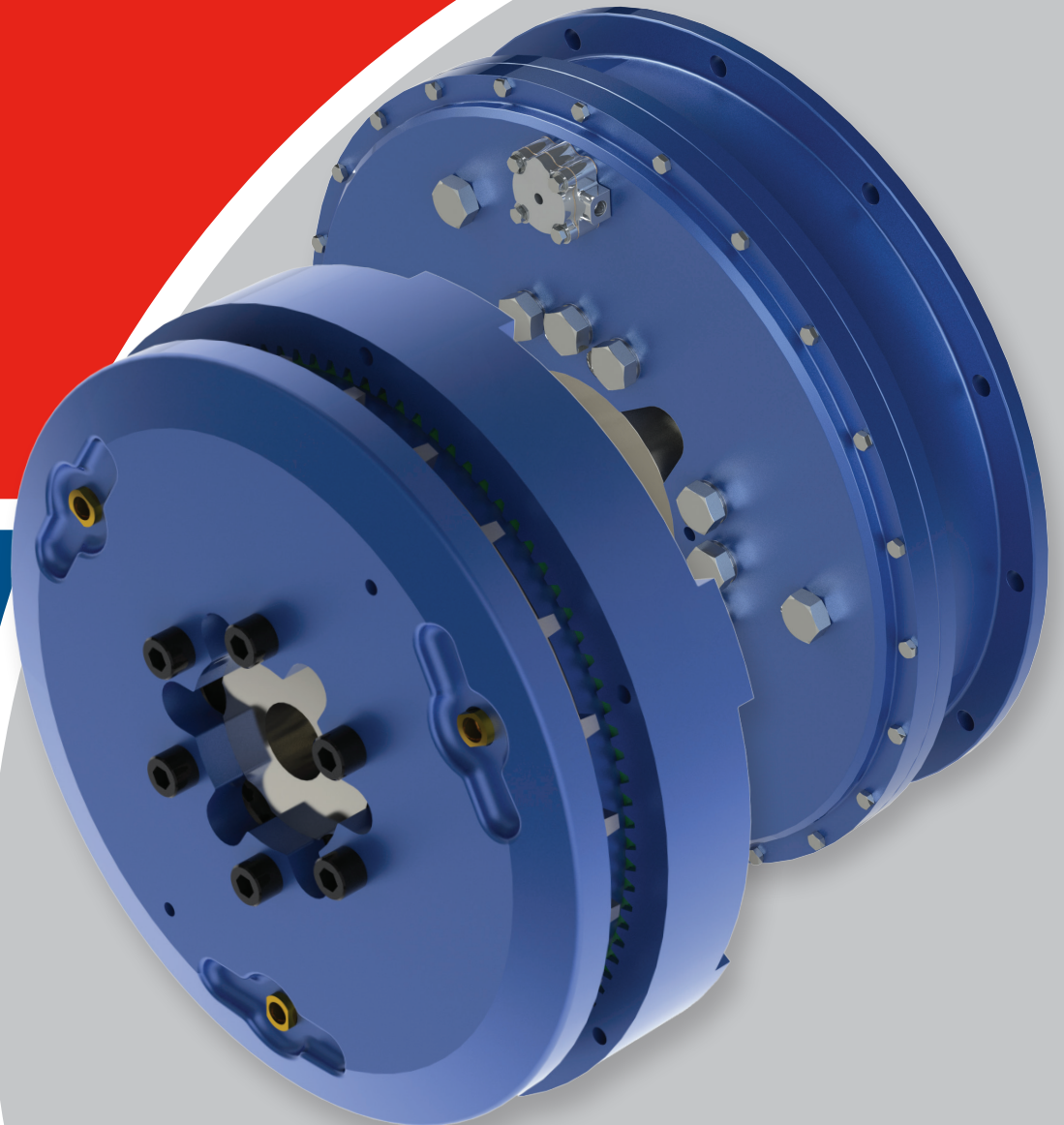




# Power Grip & Power Grip PO Clutches



## Vision Statement

Our vision is to be the leader in every market we serve, to the benefit of our customers and our shareholders.

## Mission Statement

Profitable growth through superior customer service, innovation, quality and commitment to customer satisfaction.

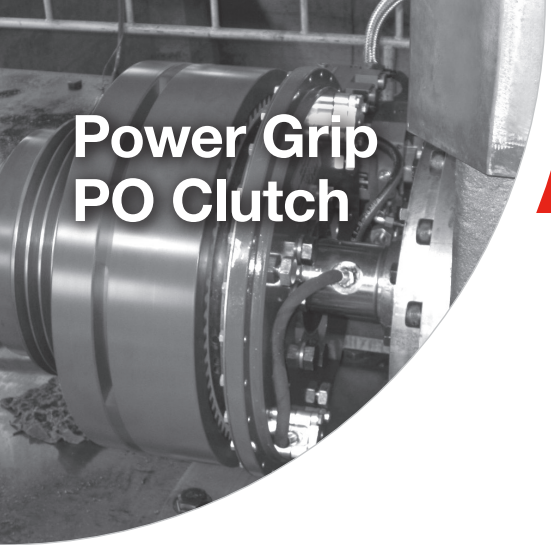
## Core Values

1. We respect each other, our community and the environment.
2. We are ethical and honest in all of our business dealings.
3. We are diligent in protecting the safety of our people.
4. We are disciplined and personally accountable for our decisions, actions attitude and results.
5. We have an entrepreneur's mindset, driving innovation and striving for excellence in all we do.
6. We openly communicate among all levels of the company.
7. We believe in working as a team toward common objectives with a can-do attitude.

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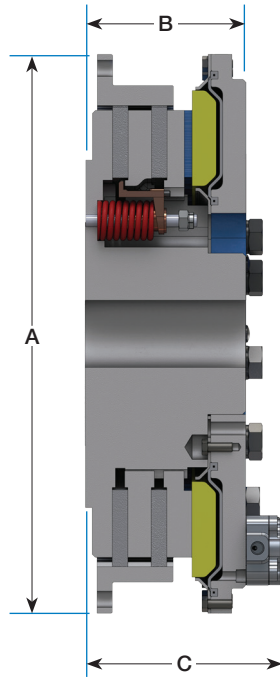
WPT Power is constantly striving to improve and develop the product range. For this reason, WPT Power reserves the right to make changes in any product information without prior notice. Every effort has been made to ensure that the dimensions, performance, specifications, etc. are correct at the time of printing. For more information, please contact your authorized WPT Power distributor or visit: [WPTpower.com](http://WPTpower.com).

# Power Grip PO Clutch



The WPT Power Grip PO Clutch is a pneumatic clutch suitable for inline or shaft-to-shaft applications. This design utilizes a large diaphragm that compensates for wear during the life of the friction material, no adjustment necessary. WPT's Power Grip PO Clutch is available in 1, 2, or 3 plate construction with diameters ranging from 14" thru 42".

- Large diaphragm provides high torque capacity and minimizes release drag
- Oversized release springs ensure quick, positive mechanical plate separation



SIZE	A +0.000/-0.005 (+0.00/-0.13)	B	C
	in (mm)	in (mm)	in (mm)
114	18.370 (466.60)	4 3/8 (111.5)	5 7/8 (149.2)
214	18.370 (466.60)	5 3/4 (146.8)	7 3/16 (183.9)
314	18.370 (466.60)	7 1/8 (181.4)	8 11/16 (220.7)
118	22.496 (571.40)	4 3/4 (121.9)	6 1/4 (159.5)
218	22.496 (571.40)	6 3/8 (163.3)	7 15/16 (202.9)
318	22.495 (571.37)	8 1/16 (204.5)	9 9/16 (244.3)
124	28.870 (733.30)	5 15/16 (151.6)	7 9/16 (192.3)
224	28.870 (733.30)	7 5/8 (193.8)	9 3/16 (234.4)
324	28.870 (733.30)	9 3/8 (238.1)	10 15/16 (278.9)
230	34.745 (882.52)	8 7/16 (215.4)	9 15/16 (252.7)
330	34.745 (882.52)	10 3/8 (263.9)	11 13/16 (301.5)
236	39.995 (1,015.87)	10 1/4 (261.9)	10 15/16 (278.4)
336	39.995 (1,015.87)	12 11/16 (322.3)	13 1/2 (343.9)
342	46.745 (1,187.32)	13 1/2 (342.9)	16 1/4 (413.3)

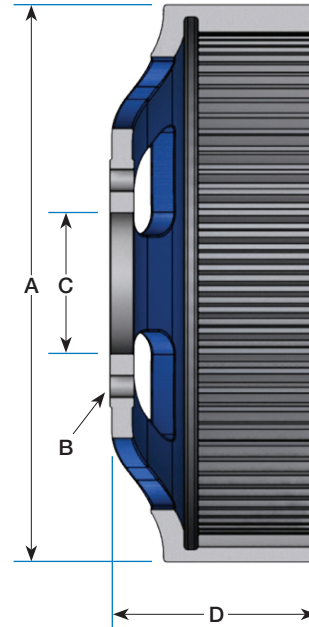
Torque Rating @ 100 psi (7 bar)		Maximum Speed	Maximum Slip Speed	Weight and Inertia				Lining Area	Bore Range	
Model	Static Torque			Total Weight	Total Inertia	Ring & FD Weight	Ring & FD Inertia		Minimum	Maximum
	lbf-in (N-m)	r/min	r/min	lb (kg)	lb-ft <sup>2</sup> (kg-m <sup>2</sup> )	lb (kg)	lb-ft <sup>2</sup> (kg-m <sup>2</sup> )	in <sup>2</sup> (cm <sup>2</sup> )	in (mm)	in (mm)
114	38,400 (4340)	2450	1640	191 (87)	47 (2.0)	9.2 (4.2)	9.0 (0.38)	170 (1080)	2.00 (50.8)	3.50 (88.9)
214	76,800 (8680)	2450	1640	229 (100)	54 (2.3)	14 (6.2)	16 (0.68)	340 (2170)	2.00 (50.8)	3.50 (88.9)
314	115,000 (13000)	2450	1640	284 (130)	67 (2.8)	18 (8.2)	21 (0.88)	500 (3250)	2.00 (50.8)	3.50 (88.9)
118	78,500 (8870)	2000	1270	309 (140)	120 (4.9)	20 (9.1)	20 (0.84)	270 (1760)	2.94 (74.6)	4.55 (115.6)
218	157,000 (17700)	2000	1270	400 (180)	130 (5.5)	31 (14)	37 (1.5)	540 (3490)	2.94 (74.6)	4.55 (115.6)
318	236,000 (26600)	2000	1270	508 (230)	190 (7.9)	55 (25)	55 (2.3)	810 (5230)	2.94 (74.6)	4.55 (115.6)
124	188,000 (21300)	1500	950	680 (310)	440 (18)	96 (44)	96 (4.0)	440 (2850)	3.00 (76.2)	6.00 (142.4)
224	377,000 (42600)	1500	950	820 (370)	500 (21)	100 (47)	100 (4.3)	880 (5700)	3.00 (76.2)	6.00 (142.4)
324	565,000 (63800)	1500	950	990 (450)	600 (25)	150 (68)	140 (6.0)	1,300 (8550)	3.50 (88.9)	6.00 (142.4)
230	731,000 (82600)	1300	760	1,430 (650)	1,400 (60)	500 (230)	500 (21)	1,500 (9600)	3.75 (95.3)	7.00 (177.8)
330	1,097,000 (123900)	1300	760	1,810 (820)	1,900 (78)	780 (350)	780 (33)	2,200 (14400)	3.75 (95.3)	7.00 (177.8)
236	1,300,000 (146900)	900	640	2,260 (1000)	2,900 (120)	950 (430)	820 (35)	2,300 (14900)	4.50 (114.0)	7.75 (196.9)
336	1,940,000 (219200)	900	640	2,810 (1300)	3,700 (160)	1,300 (580)	320 (13)	3,500 (22400)	4.50 (114.3)	7.75 (196.9)
342	3,370,000 (380800)	750	550	4,650 (2100)	8,500 (360)	3,300 (1500)	3,400 (140)	4,600 (29600)	8.25 (209.6)	10.00 (254.0)

Consult WPT Application Engineering for application assistance and applicable service factors.  
Dynamic torque is 75% of static torque.

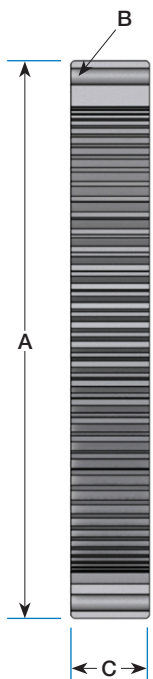
# PO Drive Rings & Spider Flanges

## Spider Flange Dimensions

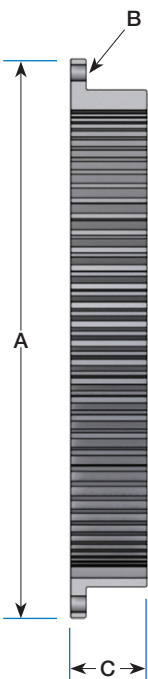
Size	A in (mm)	B		Qty	C +0.002/-0.000 (+0.05/-0.00)	D in (mm)	No. of Teeth	Weight lb (kg)
		Hole Circle in (mm)	Diameter in (mm)					
114	16 (406.4)	8.00 (203.2)	1/2 (12.7)	8	6.500 (165.10)	3 (79.4)	59	27 (12)
214						5 (114.3)		37 (17)
314						6 (152.4)		49 (22)
118	20 1/4 (514.4)	8.00 (203.2)	1/2 (12.7)	8	6.500 (165.10)	3 (82.6)	75	57 (26)
218						5 (125.4)		76 (35)
318						6 (160.3)		89 (40)
124	26 1/4 (666.8)	10.00 (254.0)	5/8 (15.9)	8	8.000 (203.20)	5 (114.3)	99	120 (55)
224						6 (161.9)		150 (70)
324						8 (211.2)		180 (82)



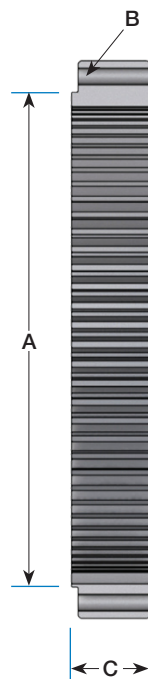
Type A



Type B



Type C



## Drive Ring Dimensions

Size	Ring Type	A +0.000/-0.005 (+0.00/-0.13)	B		C in (mm)	No. of Teeth	Weight lb (kg)	
			Hole Circle in (mm)	Diameter in (mm)				
114	A	18.375 (466.73)	17.25 (438.2)	17/32 (13.5)	8	59	1 1/8 (28.6)	
214	A						2 3/8 (60.3)	26 (12)
314	A						4 (101.6)	43 (20)
118	B	22.500 (571.50)	21.38 (542.9)	21/32 (16.7)	6	75	1 1/8 (28.6)	
218	B						3 1/16 (77.8)	43 (20)
318	B						4 1/4 (108.0)	55 (25)
124	A	28.875 (733.43)	27.25 (692.2)	25/32 (19.8)	12	99	1 1/2 (38.1)	
224	B						3 1/2 (88.9)	64 (29)
324	B						5 1/2 (139.7)	88 (40)
330	C	37.500 (952.50)	38.50 (977.9)	25/32 (19.8)	12	123	7 (177.8)	
236	C						4 3/4 (120.7)	250 (112)
336	C						7 1/2 (190.5)	380 (172)
342	C	46.000 (1168.40)	45.00 (1143.0)	25/32 (19.8)	24	171	530 (239)	

# Power Grip Clutches



The Power Grip Clutch is designed to accommodate in-line and shaft-to-shaft power transmission applications with large inertia loads. Our air-tube design allows seamless, controlled engagement and disengagement with minimal air volume. Power Grip clutches allow for quick response, space-saving footprints, minimal maintenance requirements and are available in sizes ranging from 8" to 60".

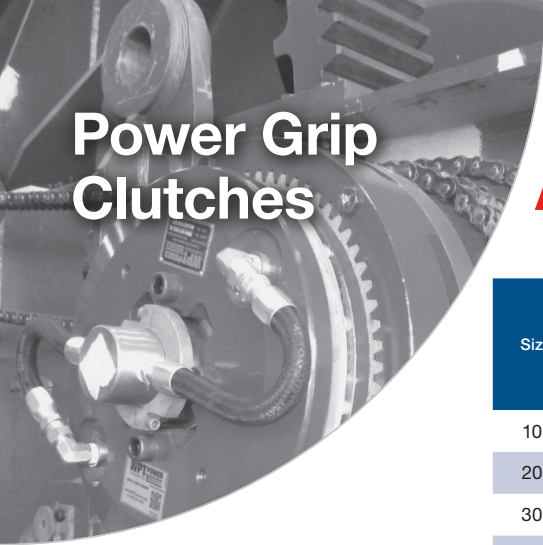
- Extended Hub Teeth for serviceability
- Wave Springs as standard release spring
- Optional standard or quick change driving adapters
- Optional split airtubes and friction discs for easier replacement and minimal downtime
- Available with pneumatic or hydraulic actuation



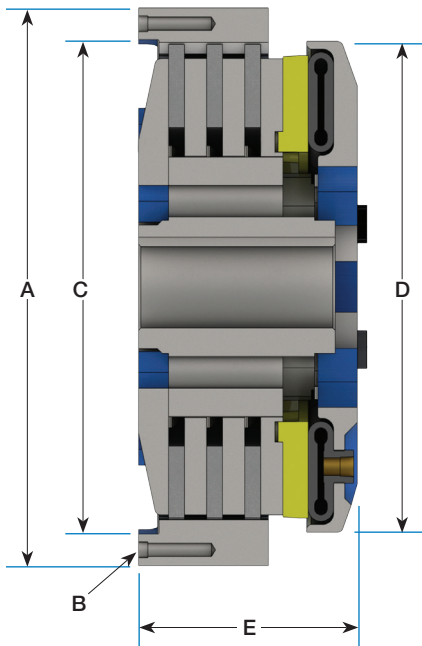
Torque Rating @ 100 psi (7 bar)		Maximum Speed	Maximum Slip Speed	Weight and Inertia				Lining Area	Bore Range	
Model	Static Torque			Total Weight	Total Inertia	Ring & FD Weight	Ring & FD Inertia		Minimum	Maximum
	lbf-in (N-m)	r/min	r/min	lb (kg)	lb-ft <sup>2</sup> (kg-m <sup>2</sup> )	lb (kg)	lb-ft <sup>2</sup> (kg-m <sup>2</sup> )	in <sup>2</sup> (cm <sup>2</sup> )	in (mm)	in (mm)
108	7,560 (854)	3600	2860	30 (14)	2.4 (0.10)	8.3 (3.7)	1.2 (0.05)	55 (355)	0.94 (23.8)	1.94 (49.2)
208	14,700 (1660)	3600	2860	50 (23)	4.3 (0.18)	17 (7.5)	2.3 (0.10)	110 (711)	0.94 (23.8)	1.94 (49.2)
308	21,300 (2410)	3600	2860	67 (30)	6.0 (0.25)	25 (11)	3.5 (0.15)	170 (1070)	1.13 (28.6)	1.94 (49.2)
111	17,000 (1920)	2650	2080	55 (25)	9.2 (0.39)	19 (9.0)	5.4 (0.23)	110 (730)	1.25 (31.8)	3.00 (76.2)
211	33,300 (3760)	2650	2080	96 (44)	16 (0.69)	37 (17)	10 (0.44)	230 (1460)	1.25 (31.8)	3.00 (76.2)
311	48,700 (5500)	2650	2080	130 (60)	23 (0.97)	52 (24)	15 (0.65)	340 (2190)	1.25 (31.8)	3.00 (76.2)
114H	35,600 (4020)	2180	1640	160 (73)	41 (1.7)	38 (17)	17 (0.72)	170 (1070)	2.13 (54.0)	3.25 (82.6)
214H	69,700 (7880)	2180	1640	210 (96)	57 (2.4)	57 (26)	25 (1.0)	330 (2140)	2.13 (54.0)	3.25 (82.6)
314H	102,000 (11500)	2180	1640	290 (130)	80 (3.4)	97 (44)	42 (1.8)	500 (3220)	2.13 (54.0)	3.25 (82.6)
216	79,700 (9010)	1900	1430	300 (130)	88 (3.7)	79 (36)	42 (1.8)	460 (2940)	2.13 (54.0)	3.41 (86.6)
316	117,000 (13200)	1900	1430	380 (170)	120 (4.9)	120 (53)	61 (2.6)	680 (4410)	2.13 (54.0)	3.41 (86.6)
218	130,000 (14700)	1750	1270	400 (180)	140 (6.0)	95 (43)	62 (2.6)	520 (3340)	2.38 (60.3)	3.88 (98.4)
318	191,000 (21600)	1750	1270	500 (230)	190 (8.0)	140 (66)	93 (3.9)	780 (5010)	2.38 (60.3)	3.88 (98.4)
118H	82,000 (9270)	1750	1270	290 (130)	100 (4.2)	44 (20)	28 (1.2)	260 (1670)	2.38 (60.3)	3.88 (98.4)
218H	161,000 (18200)	1750	1270	410 (190)	150 (6.4)	95 (43)	62 (2.6)	520 (3340)	2.38 (60.3)	3.88 (98.4)
318H	238,000 (26900)	1750	1270	530 (240)	200 (8.4)	140 (66)	93 (3.9)	780 (5010)	2.38 (60.3)	3.88 (98.4)
221	189,000 (21400)	1530	1090	570 (260)	280 (12)	140 (63)	120 (5.2)	720 (4640)	2.75 (69.9)	4.75 (120.7)
321	279,000 (31500)	1530	1090	740 (340)	380 (16)	210 (95)	190 (7.8)	1,100 (6960)	2.75 (69.9)	4.75 (120.7)
124H	167,000 (18900)	1350	950	590 (270)	370 (16)	120 (52)	130 (5.6)	570 (3710)	2.75 (69.9)	4.75 (120.7)
224H	330,000 (37300)	1350	950	800 (360)	510 (22)	190 (86)	210 (8.8)	1,100 (7410)	2.75 (69.9)	4.75 (120.7)
324H	488,000 (55100)	1350	950	990 (450)	620 (26)	250 (110)	260 (11)	1,700 (11100)	2.75 (69.9)	4.75 (120.7)
124SHD	207,000 (23400)	1350	950	610 (280)	380 (16)	120 (52)	130 (5.6)	570 (3710)	2.75 (69.9)	4.75 (120.7)
224SHD	413,000 (46700)	1350	950	820 (370)	520 (22)	190 (86)	210 (8.8)	1,100 (7410)	2.75 (69.9)	4.75 (120.7)
324SHD	620,000 (70100)	1350	950	1,000 (460)	630 (27)	250 (110)	260 (11)	1,700 (11100)	2.75 (69.9)	4.75 (120.7)
227	370,000 (41800)	1200	850	930 (420)	700 (29)	190 (86)	250 (11)	1,500 (9430)	3.50 (88.9)	7.00 (177.8)
327	549,000 (62000)	1200	850	1,200 (560)	950 (40)	300 (140)	400 (17)	2,200 (14100)	3.50 (88.9)	7.00 (177.8)
230H	648,000 (73200)	1100	760	1,500 (670)	1,300 (56)	290 (130)	440 (19)	1,600 (10500)	3.88 (98.5)	7.00 (177.8)
330H	954,000 (108000)	1100	760	1,900 (850)	1,700 (72)	430 (190)	650 (27)	2,400 (15800)	3.88 (98.5)	7.00 (177.8)
236	1,010,000 (114000)	900	640	2,100 (970)	3,000 (130)	430 (190)	960 (40)	2,200 (14500)	5.00 (127.0)	9.00 (228.6)
336	1,490,000 (168000)	900	640	2,900 (1300)	3,300 (140)	640 (290)	980 (41)	3,400 (21700)	5.00 (127.0)	9.00 (228.6)
242	1,540,000 (174000)	750	550	3,100 (1400)	5,500 (230)	680 (310)	2,200 (94)	2,800 (18100)	7.00 (177.8)	11.00 (279.4)
342	2,290,000 (259000)	750	550	4,100 (1800)	7,500 (320)	1,100 (480)	3,500 (150)	4,200 (27200)	7.00 (177.8)	11.00 (279.4)
248	2,750,000 (311000)	650	480	4,700 (2100)	11,000 (450)	800 (360)	3,400 (140)	4,000 (25900)	8.00 (203.2)	12.00 (304.8)
348	4,100,000 (463000)	650	480	5,800 (2600)	14,000 (570)	1,100 (520)	4,800 (200)	6,000 (38900)	8.00 (203.2)	12.00 (304.8)
260	5,590,000 (632000)	525	380	7,500 (3400)	23,000 (960)	1,500 (670)	8,500 (360)	7,200 (46700)	11.00 (279.4)	15.00 (381.0)
360	8,320,000 (940000)	525	380	9,400 (4300)	31,000 (1300)	2,200 (1000)	13,000 (550)	10,900 (70000)	11.00 (279.4)	15.00 (381.0)
460	11,100,000 (1250000)	525	380	12,000 (5300)	40,000 (1700)	3,100 (1400)	18,000 (750)	14,500 (93400)	11.00 (279.4)	15.00 (381.0)

Consult WPT Application Engineering for application assistance and applicable service factors.  
Larger bore sizes may be accommodated, consult WPT Application Engineering.  
Dynamic torque is 75% of static torque.

# Power Grip Clutches

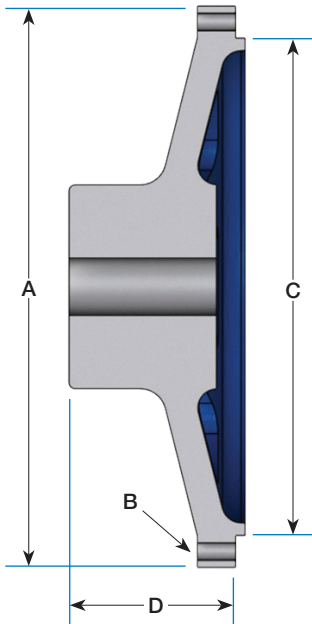


Size	A	B			C		D	E
		Hole Circle	Thread Size	Quantity	+0.003/ -0.000	(+0.08/ -0.00)		
	in (mm)	in (mm)	in		in (mm)		in (mm)	in (mm)
108	10 3/8 (263.5)	9.63 (244.5)	1/2-13	6	8.872 (225.35)	9 5/8 (244.5)	3 7/8 (98.43)	
208	10 3/8 (263.5)	9.63 (244.5)	1/2-13	6	8.872 (225.35)	9 5/8 (244.5)	5 1/4 (133.4)	
308	10 3/8 (263.5)	9.63 (244.5)	1/2-13	6	8.872 (225.35)	9 5/8 (244.5)	6 5/8 (168.3)	
111	14 3/8 (365.1)	13.38 (339.7)	5/8-11	8	12.375 (314.33)	11 15/16 (303.2)	4 1/8 (104.8)	
211	14 3/8 (365.1)	13.38 (339.7)	5/8-11	8	12.375 (314.33)	11 15/16 (303.2)	5 3/8 (136.5)	
311	14 3/8 (365.1)	13.38 (339.7)	5/8-11	8	12.375 (314.33)	11 15/16 (303.2)	6 11/16 (169.9)	
114H	17 1/2 (444.5)	16.25 (412.8)	5/8-11	6	15.125 (384.18)	16 5/16 (414.3)	5 1/8 (130.2)	
214H	17 1/2 (444.5)	16.25 (412.8)	5/8-11	6	15.125 (384.18)	16 5/16 (414.3)	6 5/8 (168.3)	
314H	17 1/2 (444.5)	16.25 (412.8)	5/8-11	6	15.125 (384.18)	16 5/16 (414.3)	8 (203.2)	
216	20 (508.0)	18.75 (476.3)	5/8-11	6	17.500 (444.50)	16 1/4 (413.9)	6 9/16 (166.7)	
316	20 (508.0)	18.75 (476.3)	5/8-11	6	17.500 (444.50)	16 1/4 (413.9)	8 (203.2)	
218	22 (558.8)	20.75 (527.1)	5/8-11	6	19.500 (495.30)	19 3/8 (492.1)	7 1/4 (184.2)	
318	22 (558.8)	20.75 (527.1)	5/8-11	6	19.500 (495.30)	19 3/8 (492.1)	8 7/8 (225.4)	
118H	22 (558.8)	20.75 (527.1)	5/8-11	6	19.500 (495.30)	21 5/16 (541.3)	5 11/16 (144.5)	
218H	22 (558.8)	20.75 (527.1)	5/8-11	6	19.500 (495.30)	21 5/16 (541.3)	7 1/4 (184.2)	
318H	22 (558.8)	20.75 (527.1)	5/8-11	6	19.500 (495.30)	21 5/16 (541.3)	8 3/4 (222.3)	
221	25 (635.0)	23.75 (603.3)	5/8-11	6	22.500 (571.50)	21 5/16 (541.3)	8 3/8 (212.7)	
321	25 (635.0)	23.75 (603.3)	5/8-11	6	22.500 (571.50)	21 5/16 (541.3)	10 1/8 (257.2)	
124H	28 (711.2)	26.75 (679.5)	5/8-11	6	25.500 (647.70)	27 (685.8)	6 3/4 (171.5)	
224H	28 (711.2)	26.75 (679.5)	5/8-11	6	25.500 (647.70)	27 (685.8)	8 1/2 (215.9)	
324H	28 (711.2)	26.75 (679.5)	5/8-11	6	25.500 (647.70)	27 (685.8)	10 1/2 (266.7)	
124SHD	28 (711.2)	26.75 (679.5)	5/8-11	6	25.500 (647.70)	27 (685.8)	6 7/8 (174.6)	
224SHD	28 (711.2)	26.75 (679.5)	5/8-11	6	25.500 (647.70)	27 (685.8)	8 1/2 (215.9)	
324SHD	28 (711.2)	26.75 (679.5)	5/8-11	6	25.500 (647.70)	27 (685.8)	10 1/2 (266.7)	
227	31 (787.4)	29.75 (755.7)	5/8-11	12	28.500 (647.70)	27 (685.8)	8 3/4 (222.3)	
327	31 (787.4)	29.75 (755.7)	5/8-11	12	28.500 (647.70)	27 (685.8)	10 3/4 (273.1)	
230H	34 (863.6)	32.75 (831.9)	5/8-11	12	31.500 (800.10)	32 3/8 (822.3)	10 3/16 (258.8)	
330H	34 (863.6)	32.75 (831.9)	5/8-11	12	31.500 (800.10)	32 3/8 (822.3)	12 3/4 (323.9)	
236	41 (1041.4)	39.75 (1009.7)	5/8-11	16	38.500 (977.90)	38 1/4 (971.6)	11 7/8 (301.6)	
336	41 (1041.4)	39.75 (1009.7)	5/8-11	16	38.500 (977.90)	38 1/4 (971.6)	14 3/4 (374.7)	
242	49 1/4 (1251.0)	47.25 (1200.2)	1-8	12	45.000 (1143.00)	44 1/8 (1120.8)	11 3/8 (288.9)	
342	49 1/4 (1251.0)	47.25 (1200.2)	1-8	12	45.000 (1143.00)	44 1/8 (1120.8)	14 1/8 (358.8)	
248	56 (1422.4)	54.00 (1371.6)	1-8	12	52.000 (1320.80)	52 3/8 (1330.3)	13 (330.2)	
348	56 (1422.4)	54.00 (1371.6)	1-8	12	52.000 (1320.80)	52 3/8 (1330.3)	15 3/4 (400.1)	
260	66 3/4 (1695.5)	64.75 (1644.7)	1-8	24	62.750 (1593.85)	61 1/2 (1562.1)	16 1/4 (412.8)	
360	66 3/4 (1695.5)	64.75 (1644.7)	1-8	24	62.750 (1593.85)	61 1/2 (1562.1)	20 (508.0)	
460	66 3/4 (1695.5)	64.75 (1644.7)	1-8	24	62.750 (1593.85)	61 1/2 (1562.1)	23 1/2 (596.9)	



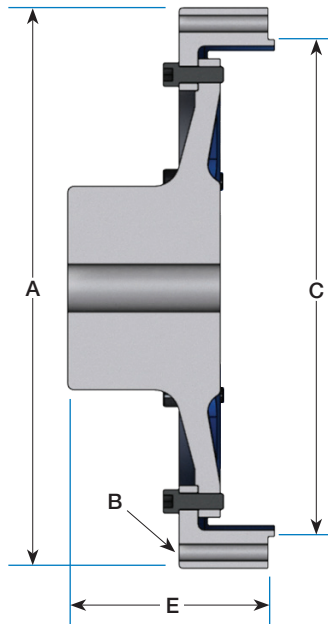


# Power Grip Driving Adapters



## Standard Driving Adapters

Our standard adapter enables the clutch to work in a shaft-to-shaft or coupling package.



## Quick Change Driving Adapters

This quick change arrangement starts with a driving elbow flange positioned between the Power Grip drive ring and Quick Change Driving Adapter. It allows service on the clutch (wear parts) without removing or disturbing either shaft.

Size	A	B			C		D	E	Bore Range	
		Hole Circle	Diameter	Quantity	+0.003/ -0.000	(+0.08/ -0.00)			Minimum	Maximum
	in (mm)	in (mm)	in		in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	
8"	10 3/8 (263.5)	9.63 (244.5)	1/2	6	8.872 (225.35)	3 (76.2)	3 (76.2)	0.94 (23.8)	2.33 (59.2)	
11"	14 3/8 (365.1)	13.38 (339.7)	5/8	8	12.374 (314.30)	3 1/2 (88.9)	3 1/4 (82.6)	1.38 (34.9)	2.50 (63.5)	
14"	17 1/2 (444.5)	16.25 (412.8)	5/8	6	15.124 (384.15)	5 1/8 (130.2)	5 3/8 (136.5)	1.63 (41.3)	4.17 (105.9)	
16"	20 (508.0)	18.75 (476.3)	5/8	6	17.498 (444.45)	5 7/8 (149.2)	7 7/16 (188.9)	1.88 (47.6)	5.34 (135.5)	
18"	22 (558.8)	20.75 (527.1)	5/8	6	19.508 (495.50)	6 1/2 (165.1)	8 5/8 (219.1)	1.88 (47.6)	5.34 (135.5)	
21"	25 (635.0)	23.75 (603.3)	5/8	6	22.495 (571.37)	6 1/2 (165.1)	10 1/4 (260.4)	2.50 (63.5)	6.37 (161.8)	
24"	28 (711.2)	26.75 (679.5)	5/8	6	25.468 (646.89)	8 1/8 (206.4)	11 (279.4)	3.00 (76.2)	6.67 (169.4)	
27"	31 (787.4)	29.75 (755.7)	5/8	12	28.498 (723.85)	8 1/2 (215.9)	8 3/16 (208.0)	3.00 (76.2)	7.71 (195.7)	
30"	34 (863.6)	32.75 (831.9)	5/8	12	31.498 (800.05)	9 (228.6)	12 1/4 (311.2)	3.50 (88.9)	9.34 (237.2)	
36"	41 (1041.4)	39.75 (1009.7)	5/8	16	38.498 (977.85)	10 1/4 (260.4)	12 (304.8)	6.00 (152.4)	10.00 (254.0)	
42"	49 1/4 (1251.0)	47.25 (1200.2)	1 1/16	12	44.998 (1142.95)	10 3/4 (273.1)	13 3/16 (335.0)	7.00 (177.8)	12.00 (304.8)	
48"	56 (1422.4)	54.00 (1371.6)	1 1/16	12	51.998 (1320.75)	- -	16 1/4 (412.8)	7.94 (201.6)	14.00 (355.6)	
60"	66 3/4 (1695.5)	64.75 (1644.7)	1 1/16	24	62.748 (1593.80)	- -	26 1/4 (666.8)	10.00 (254.0)	16.00 (406.4)	

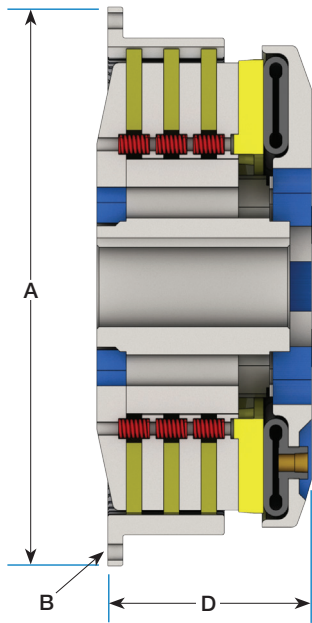
Larger bore sizes may be accommodated, consult WPT Application Engineering.



# Power Grip High Speed Clutches

Power Grip High Speed Clutches are designed to withstand severe applications mounted to internal combustion engines. The drive rings will fit standard SAE industrial flywheels. Heavy duty gear teeth friction discs are designed to withstand high shock loads. WPT's Power Grip High Speed clutches are well suited for bell housing gear box clutch applications.

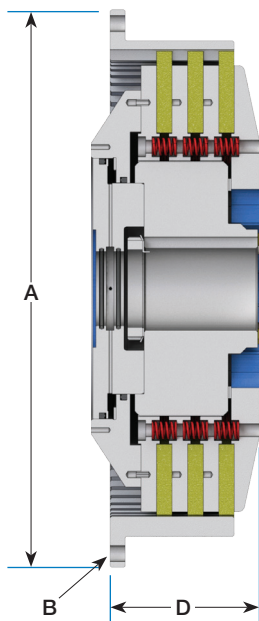
## Pneumatic Clutches



Model	Maximum Input Torque*	Maximum Speed	Lining Area
	lbf-ft (N·m)	r/min	in <sup>2</sup> (cm <sup>2</sup> )
111	650 (881)	2500	110 (730)
211	1300 (1760)	2500	230 (1460)
311	1900 (2580)	2500	340 (2190)
114H	1200 (1630)	2300	160 (1020)
214H	2500 (3390)	2300	320 (2050)
314H	3800 (5150)	2300	480 (3070)
318	7100 (9630)	2100	780 (5050)
321	13500 (18300)	1800	1100 (6960)

\*Pneumatic actuation at 100 PSI.  
Hydraulic actuation at 500 PSI.

## Hydraulic Clutches



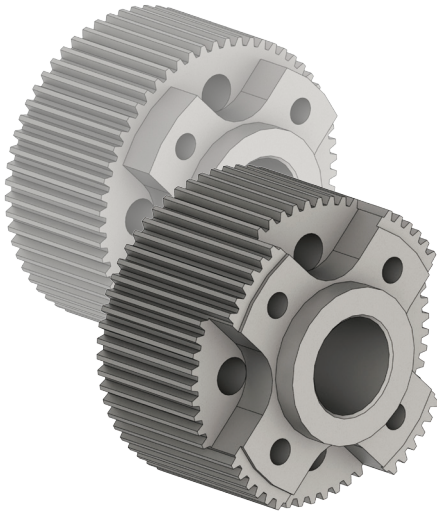
SIZE	Ring Type*	A		B			C	D
		+0.003/-0.005	(+0.00/-0.13)	Hole Circle	Diameter	Qty		
		in (mm)	in (mm)	in (mm)	in (mm)		in (mm)	in (mm)
111	B					4 1/8 (104.8)	3 1/2 (89.2)	
211		13.875 (352.43)	13.13 (333.4)	13/32 (10.3)	8	5 3/8 (136.5)	4 1/2 (114.3)	
311						6 11/16 (169.9)	5 1/2 (140.2)	
114H	A					5 1/8 (130.2)	- -	
214H		18.375 (466.73)	17.25 (438.2)	17/32 (13.5)	8	6 5/8 (168.3)	4 5/8 (118.9)	
314H						8 (203.2)	5 7/16 (138.4)	
318		22.498 (571.45)	21.38 (542.9)	21/32 (16.7)	6	8 3/4 (222.3)	6 (153.2)	
321		26.500 (673.10)	33.50 (850.9)	21/32 (16.7)	12	10 1/8 (257.2)	- -	

Consult WPT Application Engineering for application assistance and applicable service factors.

Larger bore sizes may be accommodated, consult WPT Application Engineering.

Dynamic torque is 75% of static torque.

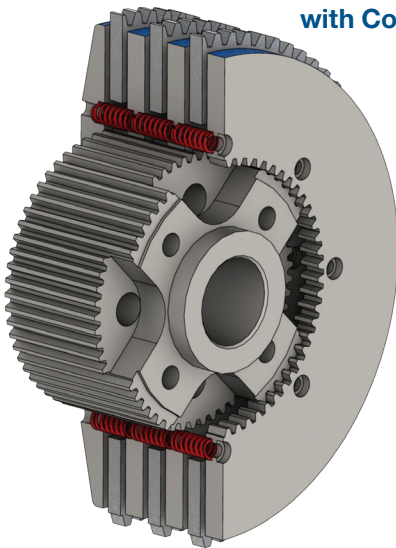
\*For Drive Ring Dimensions see chart on page 3



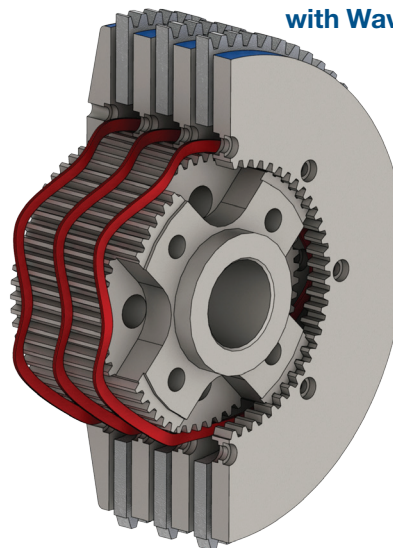
## Extended Tooth Hub

A major innovation for the Power Grip Clutch is WPT's extended tooth hub which simplifies assembly of the clutch while mounted in a horizontal position. The extended teeth allow for all center/floating plates to remain at rest on the hub teeth with the release springs in a relaxed state. No special tools are required to retain all parts on the hub while the airtube holding plate and bolts are installed.

**Power Grip Clutch with Coil Springs**



**Power Grip Clutch with Wave Springs**



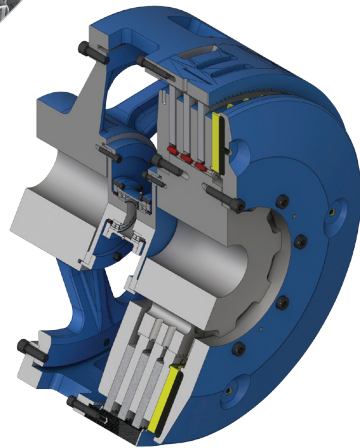
## Wave Release Springs

Another service innovation for the Power Grip Clutch is the use of wave springs. Only one wave spring is required per plate in contrast to aligning several coil springs. The wave spring allows for ease of assembly while the clutch is mounted in a horizontal position. It eliminates the use of special tools to retain the coil springs.

## Speed Ratings of Wave Springs

Clutch Size	Maximum Speed
	r/min
14" / 14H	1140
16"	1040
18" / 18H	940
21"	890
24" / 24H / 24SHD	750
27"	720
30" / 30H	690
36"	480

# Power Grip Grinding Mill Clutches



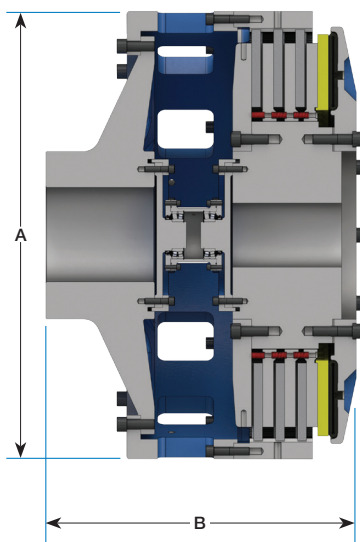
## Grinding Mill Clutches

Power Grip Grinding Mill Clutches are the best heavy duty option for ball, pebble, rod, AG and SAG grinding mill applications. High inertia loads are brought on line quickly and smoothly where controlled starts are required. WPT's Power Grip clutches are designed to use a minimal amount of air volume.

- Reduces power demand for high inertia load starts
- Disc design has more torque capacity and lining area than drum style products
- Suitable for jogging and inching

### Specifications with Axial Locking

Torque Rating @ 100 psi (7 bar)		Maximum Speed	Maximum Slip Speed	Weight and Inertia				Lining Area	Bore Range	
Model	Static Torque			Total Weight	Total Inertia	Ring, FD, & QC Adapter Weight	Ring, FD, & QC Adapter Inertia		Clutch	Adapter
	lb-ft-in (N-m)	r/min	lb (kg)	lb-ft <sup>2</sup> (kgm <sup>2</sup> )	lb (kg)	lb-ft <sup>2</sup> (kgm <sup>2</sup> )	in (mm)	in (mm)		
336	1,490,000 (168000)	900	640	3,080 (1400)	3,650 (153)	616 (279)	932 (39)	4,100 (26500)	9.00 (228.6)	9.75 (247.7)
242	1,540,000 (174000)	750	550	5,400 (2450)	10,600 (445)	2,820 (1280)	6,980 (293)	3,200 (20600)	11.00 (279.4)	12.56 (319.1)
342	2,290,000 (259000)	750	550	6,340 (2880)	13,000 (546)	3,620 (1640)	9,370 (394)	4,800 (30900)		
248	2,750,000 (311000)	650	480	8,200 (3720)	20,400 (857)	4,000 (1810)	12,700 (533)	4,800 (30900)	12.00 (304.8)	14.00 (355.6)
348	4,100,000 (463000)	650	480	9,340 (4240)	23,100 (970)	4,220 (1910)	13,700 (575)	7,200 (46400)		
260	8,320,000 (632000)	525	380	13,400 (6070)	45,500 (1910)	7,290 (3310)	19,000 (799)	7,800 (50300)	15.00 (381.0)	16.75 (425.5)
360	8,320,000 (940000)	525	380	14,900 (6760)	53,600 (2250)	6,400 (2900)	31,300 (1310)	11,700 (75500)		
460	11,100,000 (1250000)	525	380	16,900 (7670)	61,500 (2580)	7,250 (3290)	35,500 (1490)	15,600 (101000)		



### Dimensions with Axial Locking

Size	A		B	
	in	(mm)	in	(mm)
336			39 3/4	(1009.9)
436	41	(1041.4)	47 13/16	(1214.9)
242			30 1/8	(765.6)
342	49 1/4	(1251.0)	34 3/8	(873.1)
248			43 9/16	(1108.0)
348	56	(1422.4)	39 1/2	(1003.3)
260			42 1/2	(1079.5)
360	66 3/4	(1695.5)	46 1/4	(1174.8)
460			49 7/8	(1267.0)

Consult WPT Application Engineering for application assistance and applicable service factors.

Larger bore sizes may be accommodated, consult WPT Application Engineering.

Dynamic torque is 75% of static torque.

# Power Grip Grinding Mill Clutch

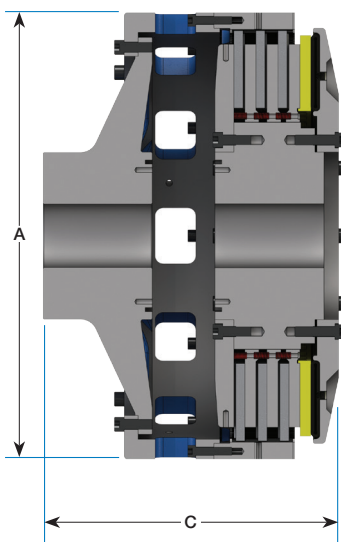
## Axial Locking Device

An optional axial locking device that holds the grinding mill electric motor shaft in the magnetic center.

### Specifications without Axial Locking

Torque Rating @ 100 psi (7 bar)		Maximum Speed	Maximum Slip Speed	Weight and Inertia				Lining Area	Bore Range	
Model	Static Torque			Total Weight	Total Inertia	Ring, FD, & QC Adapter Weight	Ring, FD, & QC Adapter Inertia		Clutch	Adapter
	lb-in (N-m)	r/min	r/min	lb (kg)	lb-ft <sup>2</sup> (kgm <sup>2</sup> )	lb (kg)	lb-ft <sup>2</sup> (kgm <sup>2</sup> )	in <sup>2</sup> (cm <sup>2</sup> )	in (mm)	in (mm)
224H	330,000 (37300)	1350	950	1,180 (536)	746 (31.3)	557 (253)	436 (18.3)	1,200 (7570)	4.75 (120.7)	7.00 (177.8)
324H	488,000 (55100)	1350	950	1,450 (657)	864 (36.3)	622 (282)	487 (20.4)	1,800 (11400)		
230H	648,000 (73200)	1100	760	2,210 (1000)	1,970 (82.9)	997 (452)	1,060 (44.6)	1,700 (10800)	7.00 (177.8)	8.00 (203.2)
330H	954,000 (108000)	1100	760	2,640 (1200)	2,530 (106)	1,070 (486)	1,210 (50.6)	2,500 (16200)		
236	1,010,000 (114000)	900	640	3,000 (1360)	3,930 (165)	1,250 (568)	1,960 (82.3)	2,700 (17700)	9.00 (228.6)	9.75 (247.7)
336	1,490,000 (168000)	900	640	3,770 (1710)	4,870 (204)	1,440 (655)	2,440 (102)	4,100 (26500)		
242	1,540,000 (174000)	750	550	4,740 (2150)	9,100 (382)	2,380 (1080)	5,710 (240)	3,200 (20600)	11.00 (279.4)	12.56 (319.1)
342	2,290,000 (259000)	750	550	5,550 (2520)	10,900 (458)	2,610 (1180)	6,620 (278)	4,800 (30900)		
248	2,750,000 (311000)	650	480	7,570 (3430)	18,500 (777)	3,560 (1610)	10,600 (445)	4,800 (30900)	12.00 (304.8)	14.00 (355.6)
348	4,100,000 (463000)	650	480	8,720 (3960)	20,600 (865)	3,860 (1750)	11,900 (500)	7,200 (46400)		
260	5,590,000 (632000)	525	380	12,900 (5860)	43,200 (1810)	5,710 (2590)	24,600 (1030)	7,800 (50300)	15.00 (381.0)	15.00 (355.6)
360	8,320,000 (940000)	525	380	14,700 (6670)	51,700 (2170)	6,490 (2940)	29,300 (1230)	11,700 (75500)		
460	11,100,000 (1250000)	525	380	16,700 (7570)	59,400 (2490)	7,190 (3260)	33,500 (1410)	15,600 (101000)		

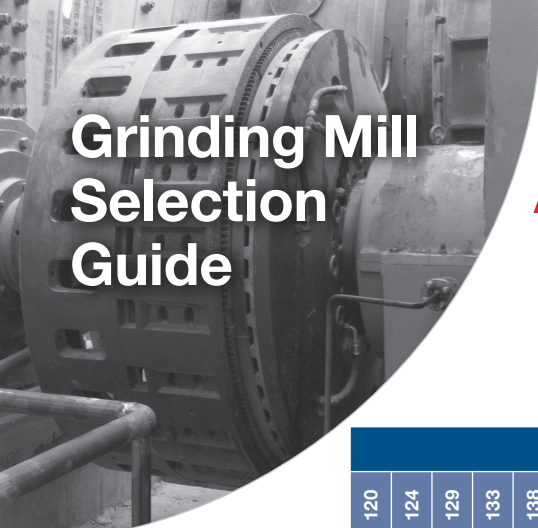
### Dimensions without Axial Locking



Size	A		C	
	in	(mm)	in	(mm)
224H	28	(711.2)	11 (279.4)	
324H			21 1/2 (546.1)	
230H	34	(863.6)	22 5/8 (574.7)	
330H			25 1/8 (638.2)	
236	41	(1041.0)	22 5/8 (574.7)	
336			26 3/4 (679.5)	
436			29 5/8 (752.5)	
242	49 1/4	(1251.0)	24 1/2 (622.3)	
342			27 9/16 (700.1)	
248	56	(1422.0)	29 3/8 (746.1)	
348			32 1/8 (816.0)	
260			40 (1016.0)	
360	66 3/4	(1695.5)	43 3/4 (1111.3)	
460			47 3/8 (1203.5)	



# Grinding Mill Selection Guide



	Speed r/min																												
	120	124	129	133	138	144	150	157	164	172	180	190	200	212	225	240	257	277	300	327	360	430	450	514	600	720	900	1200	
0 (0)																													
125 (130)																													
150 (112)																													
175 (130)																													
200 (149)																													
250 (186)																													
300 (224)																													
350 (261)																													
400 (298)																													
450 (336)																													
500 (373)																													
600 (447)																													
700 (522)																													
800 (597)																													
900 (671)																													
1000 (746)	236																												
1250 (932)																													
1500 (1120)																													
1650 (1230)																													
1750 (1300)																													
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2500 (1860)																													
2750 (2050)																													
3000 (2240)																													
3500 (2610)																													
3800 (2830)																													
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11500 (8580)																													
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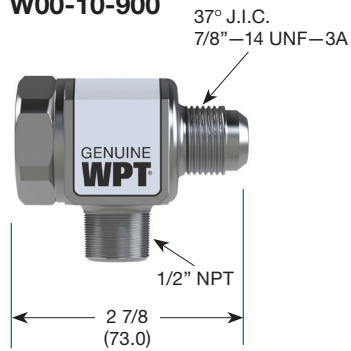
Grinding Mill Selection Guide is for reference only. For full warranty consideration, a data sheet must be turned into WPT Power and complete review performed by WPT Power Applications Engineering.

# Power Grip Accessories

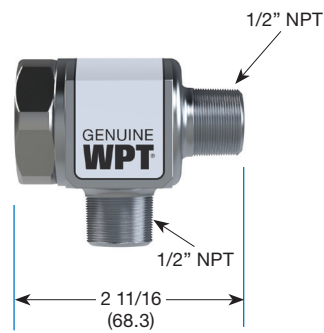
## Quick Release Valves

WPT quick release valves are utilized to provide fast exhaust of air pressure from the clutch. Mounted directly to the airtube spuds, these QRVs provide a large exhaust port directly at clutch or brake. Mufflers are optional for quieter operation.

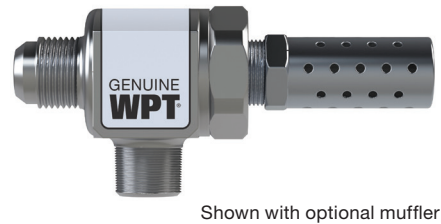
**W00-10-900**



**W00-10-901**



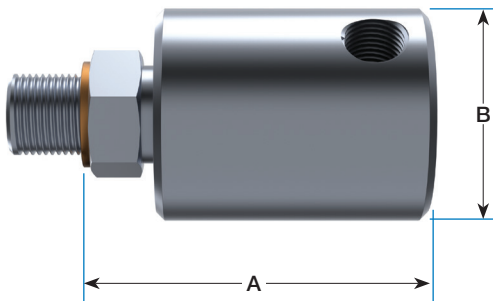
**W00-10-900 with W00-10-906**



Shown with optional muffler

## Rotating Unions

The WPT rotating union is engineered to allow air or fluid passage, under pressure, to the end of a rotating shaft. This is a maintenance free design that protects against leakage.



Clutch Size	Air Union Part Number	A	B	Rotor Thread	Inlet Thread
		in (mm)	in (mm)		
108 thru 318H	W00-21-006	2 9/16 (66.5)	1 5/8 (41.3)	5/8"-18 UNF	1/4" NPT
	W00-21-001	3 3/8 (85.7)	1 11/16 (43.7)	5/8"-18 UNF	3/8" NPT
121 thru 336	W00-21-002	3 11/16 (95.2)	2 3/16 (56.7)	1"-14 UNS	1/2" NPT/BSPT
	W00-21-008	4 1/4 (109.5)	2 13/16 (72.9)	1"-14 UNS	3/4" NPT
342 thru 460	W00-21-011	5 1/16 (128.5)	3 1/4 (82.6)	1 1/2"-12UNF	1" NPT

Larger capacity rotating air unions for faster response time available.

## Typical Hose Arrangements for Power Grip Clutches



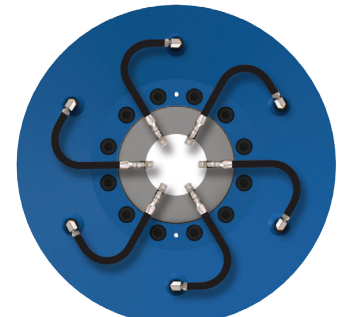
8" - 16"



18" - 27"



30" - 48"



60"



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