WPT Power Tran mi ion,

a global manufacturer of heavy duty power tran mi ion equipment, introduce

A New Generation of Mechanical Over-Center Power Take-Off Clutche

The WPT power take-off i uitable for inline and ideload application on all internal combu tion engine with tandard SAE flywheel hou ing dimen ion . All PTO and part are 100% interchangeable with exi ting PTO . All unit are upplied with ealed ball pilot bearing to eliminate lubrication problem normally encountered. Ball bearing throw-out collar are optional on 14" unit and tandard on 311 unit . *Plea e pay clo e attention to certain application criteria including peed, ide load, and clutch torque*.

SPECIFICATIONS

Model/ Size	Available SAE Hou ing Size	Maximum Input Torque lb-ft (Nm)	Duty Service Cla ification Maximum Clutch Rating hp (Kw)[a]			Maximum Speed rpm[b]	Approx.Net Weight lb (kg)
		Cla 1	Cla 2	Cla 3	Cla 4		
C107	6,5,4	177 (240)	57 (43)	38 (28)	28 (21)	3200	56 (25.4)
C108	5,4,3	230 (312)	68 (51)	45 (34)	34 (25)	3100	73 (33.1)
C110	4,3,2	329 (446)	98 (73)	65 (49)	49 (37)	3400	117 (53.1)
SP111	3,2,1	452 (613)	128 (95)	85 (63)	64 (48)	3200	143 (64.9)
SP211	3,2,1	904 (1 226)	255 (190)	170 (128)	128 (95)	3200	157 (71.2)
SP311	3,2	1,620 (2 200)	383 (286)	252 (188)	189 (141)	3200	223 (101.2)
SP114	1,0	800 (1 085)	194 (145)	125 (93)	94 (70)	2400	263 (119.3)
SP214	1,0	1,600 (2 170)	388 (289)	252 (188)	190 (142)	2400	332 (150.6)
SP314	1,0	2,400 (3 255)	582 (434)	374 (279)	281 (210)	2400	413 (187.3)

[a] Hor epower (Kw) rating may be increa ed with optional clutch plate .

[b] Contact WPT Engineering for application requiring higher peed .

[c] If in doubt of proper duty ervice cla to u e con ult WPT Engineering for application a i tance. Attention mu t al o be paid to the maximum peed rating and ide load capacitie in addition to clutch rating . Clutch rating are ba ed on engagement at low idle peed and once engaged clutch mu t be engaged for at lea t one hour before di connecting.

Duty Service Cla ification [c]

CLASS 1
Primarily u ed a a di connect clutch. Light load with minimal lip.

CLASS 2
Primarily u ed a a di connect clutch. Light to medium load with a maximum 2 econd lip before engagement.

CLASS 3
U ed to tart medium load . Maximum 3 econd lip before engagement.

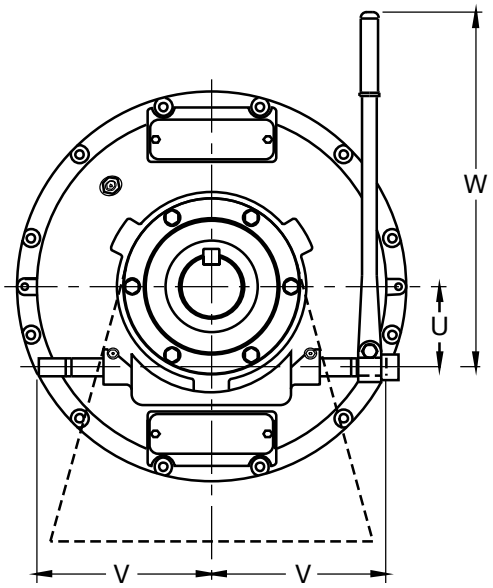
CLASS 4
U ed to tart heavy load . Maximum 4 econd lip before engagement.

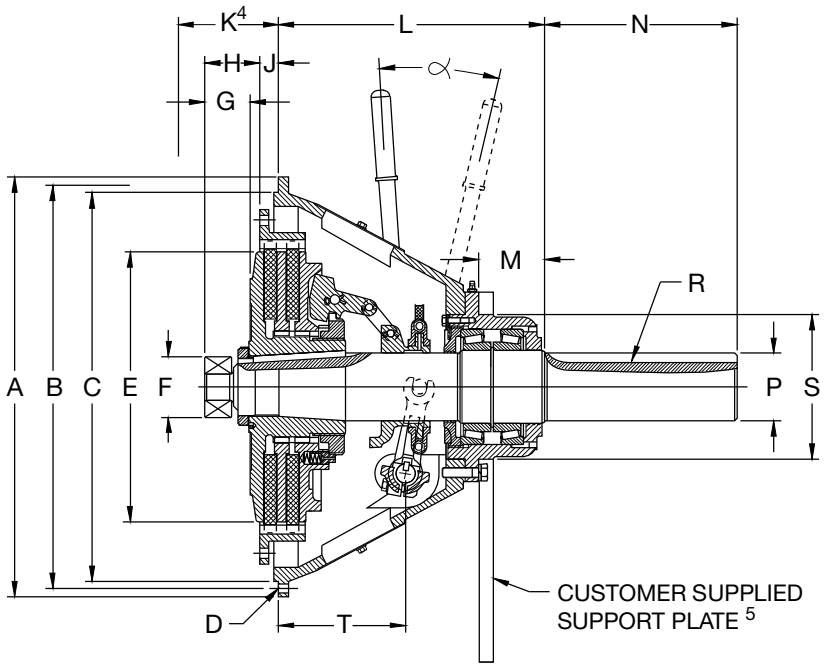
HOUSING DIMENSIONS inche (mm)

SAE HSG #	A OUTSIDE DIA	B BOLT CIRCLE	C +.000/-.005 (+.00/-.13)	D HOLES QTY	D HOLES DIA	V
6	12 1/8 (308.0)	11.25 (285.8)	10.500 (266.70)	8	13/32 (10.3)	7 3/4 (196.9)
5	14 (355.6)	13.13 (333.4)	12.375 (314.33)	8	13/32 (10.3)	7 3/4 (196.9)
4	15 7/8 (403.2)	15.00 (381.0)	14.250 (361.95)	12	13/32 (10.3)	7 3/4 (196.9)
3	17 3/4 (450.9)	16.88 (428.6)	16.125 (409.58)	12	13/32 (10.3)	9 3/4 (247.7)
2	19 1/4 (489.0)	18.38 (466.7)	17.625 (447.68)	12	13/32 (10.3)	9 3/4 (247.7)
1	21 3/4 (552.5)	20.88 (530.2)	20.125 (511.18)	12	15/32 (11.9)	9 3/4 (247.7)
1/2	25 1/2 (647.7)	24.38 (619.1)	23.000 (584.20)	12	17/32 (13.5)	9 3/4 (247.7)
0	28 (711.2)	26.75 (679.5)	25.500 (647.70)	16	17/32 (13.5)	12 3/4 (323.9)
00	34 3/4 (882.7)	33.50 (850.9)	31.000 (787.40)	16	17/32 (13.5)	16 3/4 (425.5)

MECHANICAL

MODEL/ SIZE SAE HSG #	E	+.0 (+.
WTD C107 4, 5, 6	7 1/2 (190.5)	
WTD C108 3, 4, 5	8 (203.2)	
WTD C110 3, 4	10 (254.0)	
WTD SP111 2, 3	11 3/8 (288.9)	
WTD SP211 2, 3	11 3/8 (288.9)	
WTD SP311 2, 3	11 3/8 (288.9)	
WTD SP114 1	14 (355.6)	
WTD SP214 1, 0	14 (355.6)	
WTD SP314 1, 0	14 (355.6)	





POWER TAKE-OFF DIMENSIONS inche (mm)

Certified print available upon reque t

							SHAFT							TRAVEL (DEGREES) ∝
F +.0000/-.0005 (+.000/-.013)	G	H	J	K[4]	L	M	N	P +.000/-.001 (+.00/-.03)	R KEYWAY	S	T	U	W	
2.0472 (52.000)	1 5/16 (33.3)	1 11/16 (42.9)	1 3/16 (30.2)	2 13/16 (71.4)	5 9/16 (141.3)	7/8 (22.2)	3 1/2 (88.9)	1.438 (36.51)	3/8 x 3/16 (9.5 x 4.8)	4 1/2 (114.3)	2 1/8[2] (54.0)	3 (76.2)	15 3/8 (390.5)	13°
2.4409 (62.000)	1 3/16 (30.0)	1 7/16 (36.5)	2 7/16 (61.9)	3 15/16 (100.0)	7 1/16 (179.4)	2 11/32 (59.5)	6 (152.4)	1.750 (44.45)	1/2 x 1/4 (12.7 x 6.4)	5 (127.0)	1 7/8 (47.6)	3 (76.2)	15 3/8 (390.5)	17°
2.8346 (72.000)	1 1/2 (38.1)	1 3/4 (44.5)	2 1/8 (53.8)	3 15/16 (100.0)	8 5/8 (219.1)	3 3/4 (95.3)	5 1/2 (139.7)	2.250 (57.15)	5/8 x 5/16 (15.9 x 7.9)	5 3/4 (146.1)	2[3] (50.8)	3 (76.2)	15 3/8 (390.5)	15°
2.8346 (72.000)	1 53/64 (46.5)	2 17/64 (57.4)	1 9/16 (39.7)	3 15/16 (100.0)	9 1/4 (235.0)	3 3/4 (95.3)	6 1/2 (165.1)	2.250 (57.15)	5/8 x 5/16 (15.9 x 7.9)	5 3/4 (146.1)	3 3/16 (81.0)	3 (76.2)	15 3/8 (390.5)	15.5°
2.8346 (72.000)	1 59/64 (48.8)	2 5/16 (58.7)	1 9/16 (39.7)	3 15/16 (100.0)	9 5/8 (244.5)	3 (76.2)	6 1/2 (165.1)	2.500 (63.50)	5/8 x 5/16 (15.9 x 7.9)	6 1/2 (165.1)	4 1/16 (103.2)	3 3/4 (95.3)	15 3/8 (390.5)	15.5°
2.8346 (72.000)	2 21/64 (58.9)	2 17/64 (57.4)	1 9/16 (39.7)	3 15/16 (100.0)	13 57/64 (352.8)	3 3/8 (85.7)	10 (254.0)	3.500 (88.90)	7/8 x 7/16 (22.2 x 11.1)	7 1/2 (190.5)	6 5/8 (168.3)	4 1/2 (114.3)	23 3/8 (593.7)	18°
3.1496 (80.000)	2 7/16 (61.9)	2 53/64 (71.6)	1 (25.4)	3 15/16 (100.0)	12 1/8 (308.0)	3 7/16 (87.3)	8 1/2 (215.9)	3.000 (76.20)	3/4 x 3/8 (19.1 x 9.5)	6 21/32 (169.1)	5 7/16 (138.1)	4 1/2 (114.3)	23 3/8 (593.7)	18°
3.1496 (80.000)	2 3/8 (60.3)	2 53/64 (71.6)	1 (25.4)	3 15/16 (100.0)	13 3/4 (349.3)	3 3/8 (85.7)	10 (254.0)	3.500 (88.90)	7/8 x 7/16 (22.2 x 11.1)	7 1/2 (190.5)	6 5/8 (168.3)	4 1/2 (114.3)	23 3/8 (593.7)	18°
3.9370 (100.000)[1]	2 7/16 (61.9)	2 53/64 (71.6)	1 (25.4)	3 15/16 (100.0)	14 1/2 (368.3)	3 3/8 (85.7)	10 (254.0)	3.938 (100.01)	1 x 1/2 (25.4 x 12.7)	7 1/2 (190.5)	7 3/4 (196.9)	4 1/2 (114.3)	23 3/8 (593.7)	18°

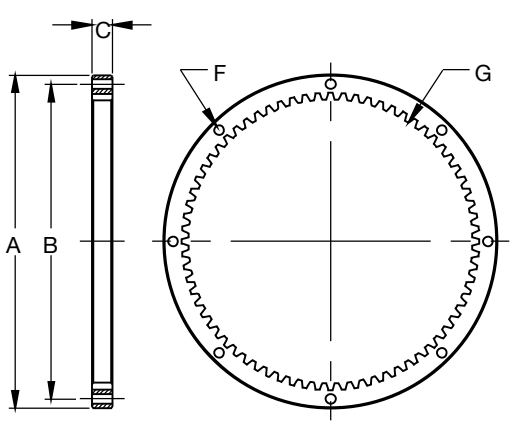
[1] Al o available with 80mm pilot bearing

[2] 2 5/8 (66.7) for SAE #5 bellhou ing

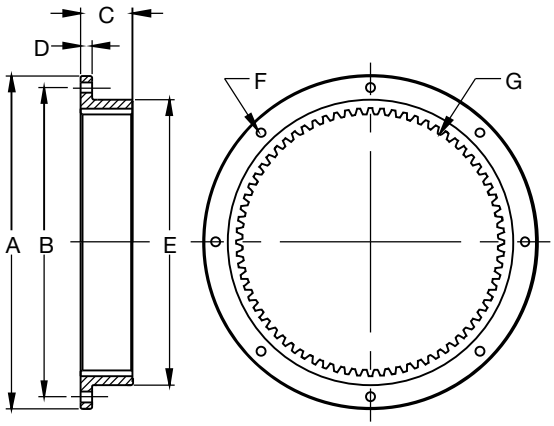
[3] 2 5/32 (54.8) for SAE #4 bellhou ing

[4] Flywheel hou ing face to bottom of pilot bore in flywheel

[5] Support plate for SP311/214/314 i required for ideload application and recommended for in-line application



TYPE A



TYPE B

DRIVING RING DIMENSIONS inche (mm)

MODEL/ SIZE	TYPE	A +.000/-.005 (+.00/-.13)	B BOLT CIRCLE	C	D	E	F HOLES		G TEETH 20 ° P.A.	
							QT Y	DIA	QT Y	PITCH
WTD C107	A	9.500 (241.30)	8.75 (222.3)	5/8 (15.9)	-	-	8	21/64 (8.3)	47	6/8
WTD C108	A	10.375 (263.53)	9.63 (244.5)	5/8 (15.9)	-	-	6	13/32 (10.3)	51	6/8
WTD C110	A	12.375 (314.33)	11.63 (295.3)	7/8 (22.2)	-	-	8	13/32 (10.3)	63	6/8
WTD SP111	A	13.875 (352.43)	13.13 (333.4)	7/8 (22.2)	-	-	8	13/32 (10.3)	72	6/8
WTD SP211	A	13.875 (352.43)	13.13 (333.4)	1 7/8 (47.6)	-	-	8	13/32 (10.3)	72	6/8
WTD SP311	A	13.875 (352.43)	13.13 (333.4)	3 1/8 (79.4)	-	-	8	13/32 (10.3)	72	6/8
WTD SP114	B	18.375 (466.73)	17.25 (438.2)	1 1/8 (28.6)	1/2 (12.7)	16 (406.4)	8	17/32 (13.5)	59	4/5
WTD SP214	B	18.375 (466.73)	17.25 (438.2)	2 3/8 (60.3)	1/2 (12.7)	16 (406.4)	8	17/32 (13.5)	59	4/5
WTD SP314	B	18.375 (466.73)	17.25 (438.2)	3 3/8 (85.7)	1/2 (12.7)	16 (406.4)	8	17/32 (13.5)	59	4/5

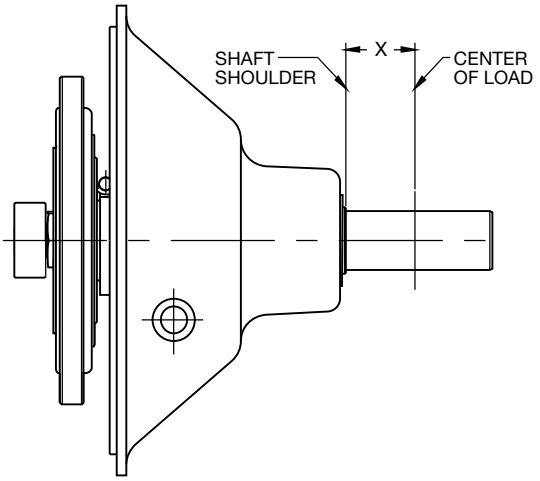
For ide load application u e one of the formula below for determining the actual applied load:

(1) $L = \frac{126{,}000 \times HP}{N \times D} \times F \times SF$

(2) $L = \frac{1{,}945{,}000 \times Kw}{N \times D} \times F \times SF$

L = Actual Applied Load (lb . for (1) and Kg for (2))
N = Shaft Speed (RPM)
D = Pitch Diameter (in. for (1) and mm for (2)) of Sheave
F = Load Factor
- 1.0 for Chain Drive or Gear Drive
- 1.5 for Timing Belt
- 2.5 for All V-Belt
- 3.5 for All Flat Belt

SF = Service Factor
- 2.1 for Reciprocating Compressors and other evere hock drive
- 1.8 for Large Inertia Drive uch a Cru her , Chipper , and Planer



ALLOWABLE SIDE-PULL LOADS: lb (Kg)

MODEL / SIZE	RPM	"X" DISTANCE inche (mm)								
		1 (25.4)	2 (50.8)	3 (76.2)	4 (101.6)	5 (127.0)	6 (152.4)	7 (177.8)	8 (203.2)	9 (228.6)
WTD C107	1000	840 (381)	625 (284)	475 (215)						
	2000	665 (302)	590 (268)	475 (215)						
	3000	580 (263)	525 (238)	475 (215)						
WTD C108	1000	1500 (680)	1100 (499)	880 (399)	740 (336)	625 (284)				
	2000	1500 (680)	1100 (499)	880 (399)	740 (336)	625 (284)				
	3000	1500 (680)	1100 (499)	880 (399)	740 (336)	625 (284)				
WTD C110	1000	2800 (1270)	2080 (943)	1700 (771)	1440 (653)	1200 (544)				
	1500	2480 (1125)	2080 (943)	1700 (771)	1440 (653)	1200 (544)				
	2000	2260 (1025)	2000 (907)	1700 (771)	1440 (653)	1200 (544)				
	2600	2080 (943)	1900 (862)	1700 (771)	1440 (653)	1200 (544)				
WTD SP111	1000	2850 (1293)	2500 (1134)	2200 (998)	1850 (839)	1575 (714)				
	1200	2700 (1225)	2420 (1098)	2200 (998)	1850 (839)	1575 (714)				
	1800	2370 (1075)	2150 (975)	2000 (907)	1850 (839)	1575 (714)				
	2400	2150 (975)	2000 (907)	1870 (848)	1850 (839)	1575 (714)				
	2800	1950 (885)	1820 (826)	1683 (763)	1620 (735)	1575 (714)				
WTD SP211	1000	4550 (2064)	3450 (1565)	2760 (1252)	2300 (1043)	1900 (862)	1700 (771)			
	1200	4375 (1985)	3270 (1483)	2760 (1252)	2300 (1043)	1900 (862)	1700 (771)			
	1800	3900 (1769)	3270 (1483)	2760 (1252)	2300 (1043)	1900 (862)	1700 (771)			
	2400	3540 (1606)	3300 (1497)	2760 (1252)	2300 (1043)	1900 (862)	1700 (771)			
	2800	3400 (1542)	3150 (1429)	2760 (1252)	2300 (1043)	1900 (862)	1700 (771)			
WTD SP311	1000	4940 (2241)	3850 (1746)	3200 (1452)	2740 (1243)	2360 (1070)	2100 (953)	1850 (839)	1700 (771)	
	1800	4940 (2241)	3850 (1746)	3200 (1452)	2740 (1243)	2360 (1070)	2100 (953)	1850 (839)	1700 (771)	
	2500	4940 (2241)	3850 (1746)	3200 (1452)	2740 (1243)	2360 (1070)	2100 (953)	1850 (839)	1700 (771)	
	3000	4750 (2155)	3850 (1746)	3200 (1452)	2740 (1243)	2360 (1070)	2100 (953)	1850 (839)	1700 (771)	
WTD SP114	1000	3375 (1531)	2600 (1179)	2120 (962)	1788 (811)	1560 (708)	1375 (624)	1220 (553)	1090 (494)	
	1500	3375 (1531)	2600 (1179)	2120 (962)	1788 (811)	1560 (708)	1375 (624)	1220 (553)	1090 (494)	
	2000	3375 (1531)	2600 (1179)	2120 (962)	1788 (811)	1560 (708)	1375 (624)	1220 (553)	1090 (494)	
	2200	3375 (1531)	2600 (1179)	2120 (962)	1788 (811)	1560 (708)	1375 (624)	1220 (553)	1090 (494)	
WTD SP214	1000	6000 (2722)	4750 (2155)	3900 (1769)	3330 (1510)	2900 (1315)	2560 (1161)	2300 (1043)	2090 (948)	
	1500	6000 (2722)	4750 (2155)	3900 (1769)	3330 (1510)	2900 (1315)	2560 (1161)	2300 (1043)	2090 (948)	
	2000	6000 (2722)	4750 (2155)	3900 (1769)	3330 (1510)	2900 (1315)	2560 (1161)	2300 (1043)	2090 (948)	
	2200	6000 (2722)	4750 (2155)	3900 (1769)	3330 (1510)	2900 (1315)	2560 (1161)	2300 (1043)	2090 (948)	
WTD SP314 (80mm PB)	1000	6200 (2812)	5100 (2313)	4200 (1905)	3550 (1610)	3100 (1406)	2750 (1247)	2450 (1111)	2250 (1021)	2100 (953)
	1500	5470 (2481)	5100 (2313)	4200 (1905)	3550 (1610)	3100 (1406)	2750 (1247)	2450 (1111)	2250 (1021)	2100 (953)
	2000	5000 (2268)	4800 (2177)	4200 (1905)	3550 (1610)	3100 (1406)	2750 (1247)	2450 (1111)	2250 (1021)	2100 (953)
	2200	4850 (2200)	4650 (2109)	4200 (1905)	3550 (1610)	3100 (1406)	2750 (1247)	2450 (1111)	2250 (1021)	2100 (953)
WTD SP314 (100mm PB)	1000	6200 (2812)	5800 (2631)	5550 (2517)	4700 (2132)	4100 (1860)	3650 (1656)	3250 (1474)	2920 (1325)	2700 (1225)
	1500	5470 (2481)	4900 (2223)	4850 (2200)	4650 (2109)	4100 (1860)	3650 (1656)	3250 (1474)	2920 (1325)	2700 (1225)
	2000	5000 (2268)	4750 (2155)	4400 (1996)	4300 (1950)	4100 (1860)	3650 (1656)	3250 (1474)	2920 (1325)	2700 (1225)
	2200	4850 (2200)	4650 (2109)	4200 (1905)	4200 (1905)	4100 (1860)	3650 (1656)	3250 (1474)	2920 (1325)	2700 (1225)