

Power Drivetrain Products

Mechanical Over-Center Power Take-Off

Sizes 6½" thru 18" with standard SAE housing sizes #6 thru #0. All mechanical clutches also supplied as O.E.M. clutch packages.

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Automotive Style Spring Loaded Power Take-Off

11" (SAE #4) and 13" (SAE #3) sizes available. A 11" size is also available with a GM style bellhousing.

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Type 1 Air/Hydraulic Power Take-Off

Sizes 314 (SAE #1,#0), 318 (SAE #0), 321 (SAE #00) straddle-bearing heavy duty design for very high side load applications.

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Type 2 Air/Hydraulic Power Take-Off

Sizes 211/311 (SAE #3), 214/314 (SAE #2,#1,#0), 318 (SAE #0) cantilever design for medium to high side load applications.

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Power Grip High Speed Clutch

14" thru 21" size air or hydraulic clutches supplied with drive rings suitable for mounting to standard SAE industrial engine flywheels.

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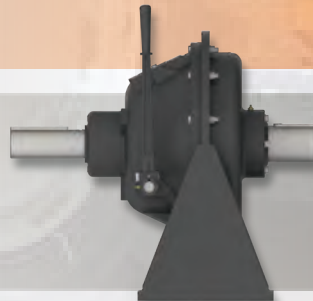
Product Selection Guide

Page 11



Versatile PTO Applications

Page 14



Power Pump Drive

Versatile pump drive that has a power take-off mounted behind it to allow for live multiple pump drives. Many unique accessories are available to complete the final assembly.

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Mechanical

The WPT Power mechanical power take-off consists of a lever actuated clutch with a shaft and bearings mounted in a rigid cast housing. The mechanical PTO is designed for inline and sload applications on all internal combustion engines with standard SAE industrial flywheel/flywheel housing dimensions.

- Supplied with sealed-for-life pilot bearings to eliminate lubrication problems
- Ball bearing throw-out collars are optional on 10", 11½", 14", 18" and standard on 311 PTOs
- Heavy duty Kevlar® is available for heavy shock load applications that require extra tooth strength
- All drive rings are ductile (nodular) iron as standard
- Roller bearings are available for customers requiring higher sideloads



SPECIFICATIONS

MODEL	AVAILABLE SAE HOUSINGS	MAXIMUM INPUT TORQUE LB-FT (NM) ¹	MAXIMUM SPEED RPM ¹	WEIGHT LBS (KGS)
C106	6, 5, 4	171 (232)	3500	60 (27)
C107	6, 5, 4	191 (259)	3200	72 (32)
C108	5, 4, 3	248 (336)	3100	82 (37)
C110	4, 3, 2	354 (481)	2800	117 (53)
SP111	3, 2, 1	487 (660)	2500	143 (64)
SP211	3, 2, 1	974 (1321)	2500	157 (71)
SP311	3, 2	1746 (2367)	2300	233 (101)
SP114	1, 0	862 (1169)	2300	263 (119)
SP214	1, 0	1724 (2337)	2300	332 (150)
SP314	1, 0	2586 (3506)	2300	413 (187)
IBF314	1	2586 (3506)	2300	595 (270)
SP318	0	6465 (8765)	2100	897 (407)

¹ For applications requiring higher capacity or speed ratings, contact WPT applications.

For product selection see page 11



Kevlar® is a registered trademark of DuPont, Inc.

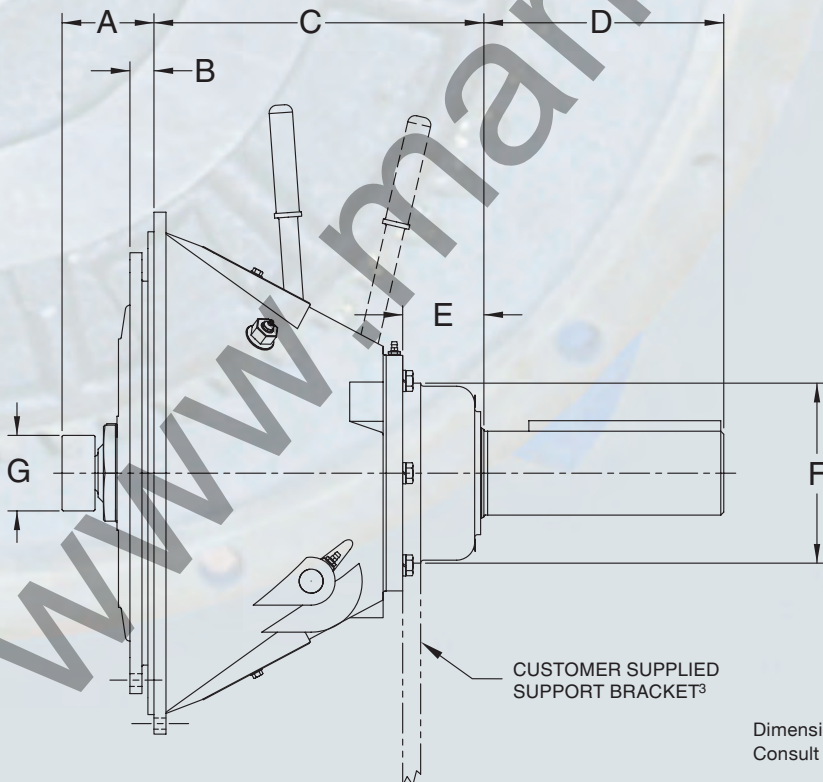
DIMENSIONS inches (mm)

MODEL	A	B	C	OUTPUT SHAFT			E	F	G ²
				D	DIA	KEYWAY			
C106	2 3/4 (69.9)	1 3/16 (30.2)	5 9/16 (141.3)	3 1/2 (88.9)	1.438 (36.51)	3/8 x 3/16	7/8 (22.2)	4 1/2 (114.3)	2.047 (52.00)
C106 ¹	2 3/4 (69.9)	1 3/16 (30.2)	7 1/8 (181.0)	3 1/2 (88.9)	1.438 (36.51)	3/8 x 3/16	2 1/8 (54.0)	4 5/8 (117.48)	2.047 (52.00)
C107	2 3/4 (69.9)	1 3/16 (30.2)	5 9/16 (141.3)	3 1/2 (88.9)	1.438 (36.51)	3/8 x 3/16	7/8 (22.2)	4 1/2 (114.3)	2.047 (52.00)
C107 ¹	2 3/4 (69.9)	1 3/16 (30.2)	7 1/8 (181.0)	3 1/2 (88.9)	1.438 (36.51)	3/8 x 3/16	2 1/8 (54.0)	4 5/8 (117.48)	2.047 (52.00)
C108	3 15/16 (100.1)	2 7/16 (61.9)	7 1/16 (179.4)	6 (152.4)	1.750 (44.45)	1/2 x 1/4	2 1/4 (57.2)	5 (127.0)	2.440 (62.00)
C110	3 15/16 (100.1)	2 1/8 (53.8)	8 5/8 (219.18)	5 1/2 (139.7)	2.250 (57.15)	5/8 x 5/16	3 3/4 (95.3)	5 5/8 (142.8)	2.834 (72.00)
SP111	3 15/16 (100.1)	1 9/16 (39.7)	9 1/4 (235.0)	6 1/2 (165.1)	2.250 (57.15)	5/8 x 5/16	3 3/4 (95.3)	5 3/4 (146.1)	2.835 (72.00)
SP211	3 15/16 (100.1)	1 9/16 (39.7)	9 5/8 (244.5)	6 1/2 (165.1)	2.500 (63.50)	5/8 x 5/16	3 (76.2)	6 1/4 (158.8)	2.835 (72.00)
SP311 ³	3 15/16 (100.1)	1 9/16 (39.7)	13 57/64 (352.8)	10 (254.0)	3.500 (88.90)	7/8 x 7/16	3 3/8 (85.7)	7 1/2 (190.5)	2.835 (72.00)
SP114	3 15/16 (100.1)	1 (25.4)	12 1/8 (308.0)	8 1/2 (215.9)	3.000 (76.20)	3/4 x 3/8	3 3/32 (78.6)	6 5/8 (168.2)	3.149 (80.00)
SP214 ³	3 15/16 (100.1)	1 (25.4)	13 3/4 (349.3)	10 (254.0)	3.500 (88.90)	7/8 x 7/16	3 3/8 (85.7)	7 1/2 (190.5)	3.149 (80.00)
SP314 ³	3 15/16 (100.1)	1 (25.4)	14 1/2 (368.3)	10 (254.0)	3.938 (100.01)	1 x 1/2	3 3/8 (85.7)	7 1/2 (190.5)	3.937 (100.00)
IBF314 ³	3 15/16 (100.1)	1 (25.4)	16 3/4 (425.5)	10 (254.0)	3.938 (100.01)	1 x 1/2	3 5/8 (92.1)	12 1/2 (317.5)	3.937 (100.00)
SP318 ³	3 15/16 (100.1)	5/8 (15.9)	18 1/4 (463.6)	10 (254.0)	4.500 (114.30)	1 x 1/2	2 5/8 (66.7)	10 (254.0)	4.724 (120.00)

¹ Double main bearings

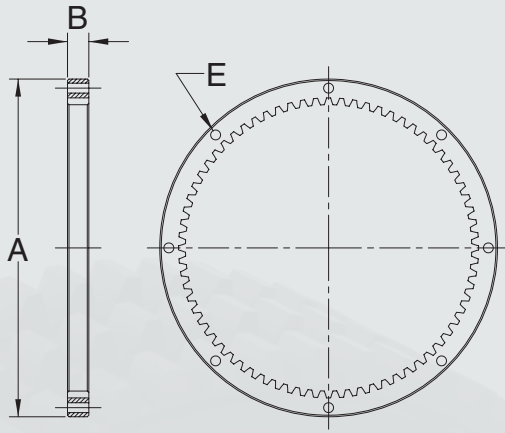
² Other pilot bearing sizes may be available

³ Support plate for 311, 214, 314 is required for side load applications and recommended for in-line applications. Support plate for 318 is required for side load applications and in-line applications.

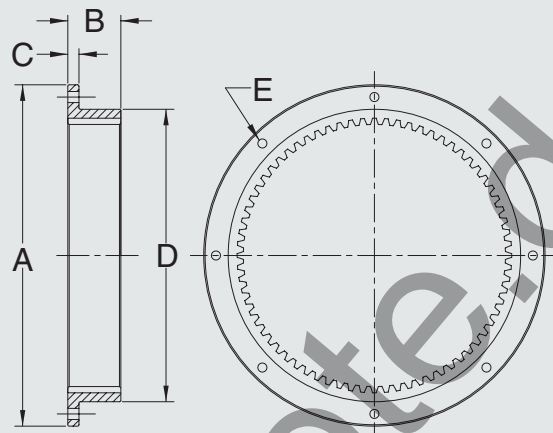


Dimension drawings for reference only.
Consult WPT for installation drawing.

Type A



Type B



Dimension drawings for reference only.
Consult WPT for installation drawing.

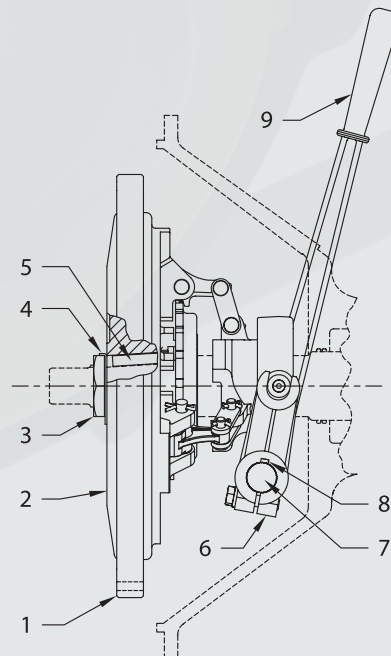
DRIVING RING DIMENSIONS inches (mm)

MODEL	TYPE	A	B	C	D	E HOLES			# OF TEETH
						BOLT CIRCLE	QTY	DIA	
C106	A	8.500 (215.90)	5/8 (15.9)	-	-	7.88 (200.0)	6	21/64 (8.3)	42
C107	A	9.500 (241.30)	5/8 (15.9)	-	-	8.75 (222.3)	8	21/64 (8.3)	47
C108	A	10.375 (263.53)	5/8 (15.9)	-	-	9.63 (244.5)	6	13/32 (10.3)	51
C110	A	12.375 (314.33)	7/8 (22.2)	-	-	11.63 (295.3)	8	13/32 (10.3)	63
SP111	A	13.875 (352.43)	7/8 (22.2)	-	-	13.13 (333.4)	8	13/32 (10.3)	72
SP211	A	13.875 (352.43)	1 7/8 (47.6)	-	-	13.13 (333.4)	8	13/32 (10.3)	72
SP311	A	13.875 (352.43)	3 1/8 (79.4)	-	-	13.13 (333.4)	8	13/32 (10.3)	72
SP114	B	18.375 (466.73)	1 1/8 (28.6)	1/2 (12.7)	16 (406.4)	17.25 (438.2)	8	17/32 (13.5)	59
SP214	B	18.375 (466.73)	2 3/8 (60.3)	1/2 (12.7)	16 (406.4)	17.25 (438.2)	8	17/32 (13.5)	59
SP314	B	18.375 (466.73)	3 3/8 (85.7)	1/2 (12.7)	16 (406.4)	17.25 (438.2)	8	17/32 (13.5)	59
IBF314	B	18.375 (466.73)	5 3/8 (136.5)	1/2 (12.7)	16 (406.4)	17.25 (438.2)	8	17/32 (13.5)	59
SP318	B	22.500 (571.50)	4 1/4 (107.9)	5/8 (15.9)	20 (508.0)	21.38 (542.9)	6	21/32 (16.7)	75
321	B	26.500 (673.10)	5 1/4 (133.35)	5/8 (15.9)	22 3/8 (593.7)	25.25 (641.4)	12	21/32 (16.7)	87

OEM Mechanical Clutch Packs

O.E.M. over center clutch packs are available for manufacturers of gear boxes requiring a disconnect clutch. WPT Power can furnish a complete package under one part number that includes the clutch and all needed accessories.

For product selection see page 11



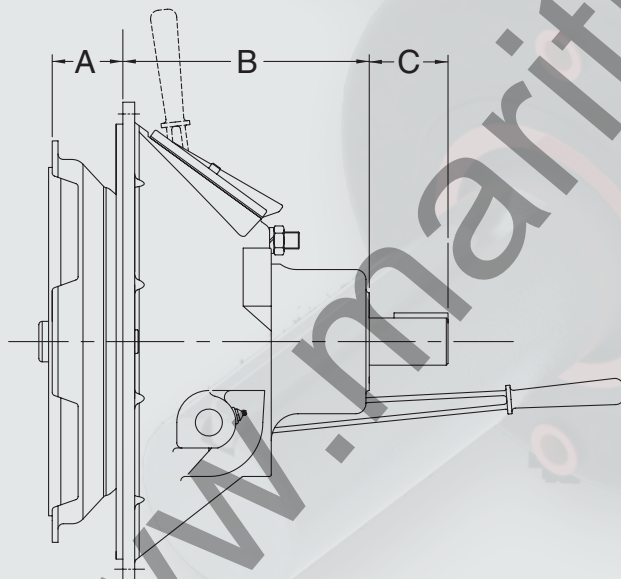
- 1 Drive Ring
- 2 Clutch Assembly
- 3 Hub Nut
- 4 Hub Lockwasher
- 5 Clutch Key
- 6 Throw-out Yoke
- 7 Operating Shaft
- 8 Woodruff Key
- 9 Hand Lever

Automotive

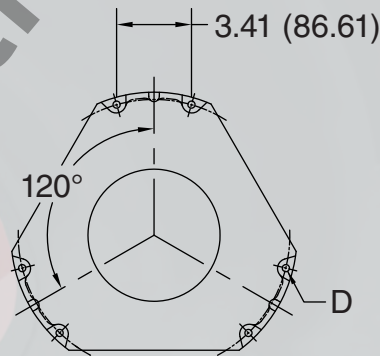
The Automotive style Mechanical PTO is a rugged, heavy-duty power take-off assembly made for flat faced flywheels used in marine, industrial, construction, brush chipper, and irrigation applications.

Feature loaded and virtually maintenance free.

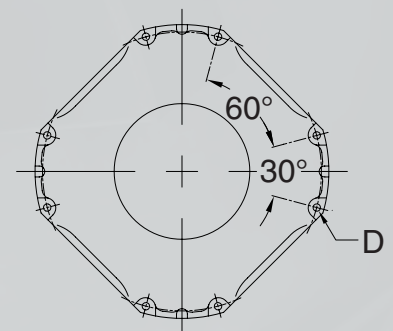
- The pilot bearing has been eliminated to reduce troublesome downtime from failures and prevent crankshaft loading from the PTO shaft.
- Main bearings are sealed for life and require no adjustment.
- Torsionally dampened automotive style spring loaded clutch compensates for wear with a simple adjustment at the initial setup.
- Externally located ball stud and jam nut make adjustment easy.
- Angular contact throw-out bearing reduces heat build up during long idle times.
- Engagement force is 1/3 of the force required to engage an equivalent over center type PTO.



11" Pressure Plate



13" Pressure Plate



Dimension drawings for reference only.
Consult WPT for installation drawing.

For product selection see page 11

DIMENSIONS inches (mm)

MODEL	AVAILABLE SAE HOUSINGS	A	B	OUTPUT SHAFT			D HOLE		
				C	DIA	KEYWAY	BOLT CIRCLE	QTY	DIA
WTD-11-140	4	2 17/64 (57.5)	10 11/32 (262.7)	4 21/32 (118.2)	1.750 (44.45)	3/8 x 3/16	12 3/8 (314.3)	6	3/8 (9.5)
WTD-13-130	3	2 9/16 (65.0)	9 9/64 (232.1)	2 29/32 (73.8)	1.750 (44.45)	3/8 x 3/16	14 1/8 (358.8)	8	3/8 (9.5)

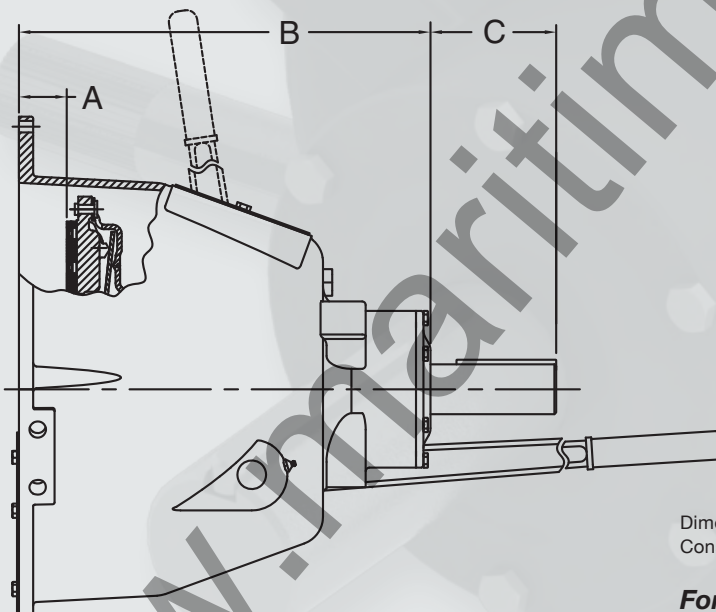
SPECIFICATIONS

MAXIMUM INPUT TORQUE LB-FT (NM)	MAXIMUM SPEED RPM	WEIGHT LBS (KG)
407 (552)	3500	123 (56)
412 (560)	3000	149 (68)

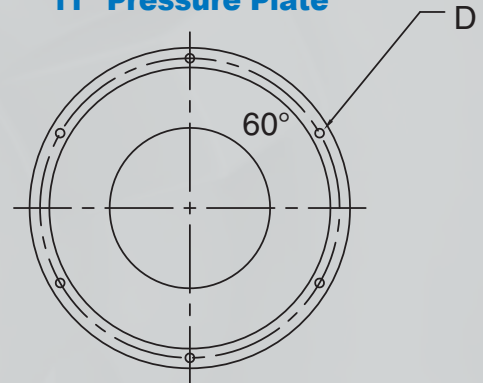
GM Style

Features

- GM style bellhousing mounts directly to 5.7, 6.2, 7.4 & 8.1 liter engines
- Solid ductile iron bellhousing built for heavy duty applications. No large open holes, helps keep out weather and other elements.
- Easy adjustment ball screw with jam nut. The heavy duty adjustment mechanism, has no stamped or die cast parts.
- In-line or side load applications



11" Pressure Plate



Dimension drawings for reference only.
Consult WPT for installation drawing.

For product selection see page 11

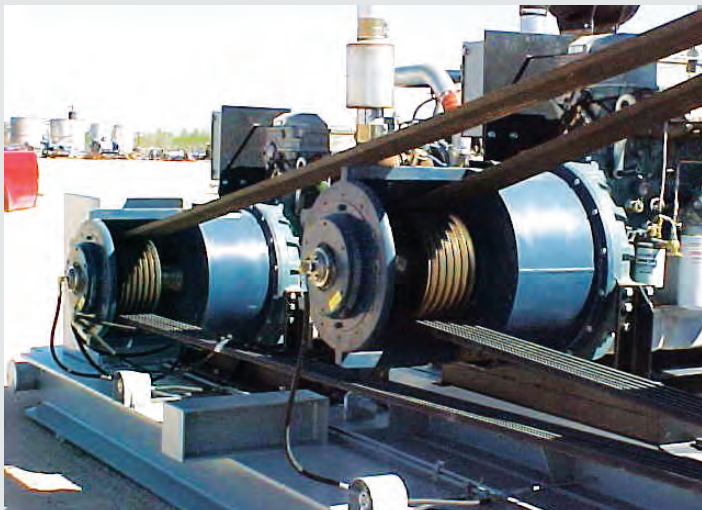
DIMENSIONS inches (mm)

MODEL	A	B	OUTPUT SHAFT			D HOLE		
			C	DIA	KEYWAY	BOLT CIRCLE	QTY	DIA
WTD-11-143	1 11/16 (42.9)	14 7/16 (366.7)	4 7/16 (112.7)	1.750 (44.45)	3/8 x 3/16	12.63 (320.7)	6	3/8 (9.5)

SPECIFICATIONS

MAXIMUM INPUT TORQUE LB-FT (NM)	MAXIMUM SPEED RPM	WEIGHT LBS (KG)
386 (523)	3400	160 (73)

Type 1



Type 1 PTO's are some of the most rugged, highest capacity Power Take-Off products available on the market today. These PTO's are designed so customers can install a sheave between the bearings in order to attain the maximum potential of the massive spherical roller bearings.

The benefits of this WPT product include, but are not limited to: Potential for remote engagement, maintenance free self-adjusting clutch, either air or hydraulic actuation, Kevlar® reinforced friction discs, & easy drive belt removal.

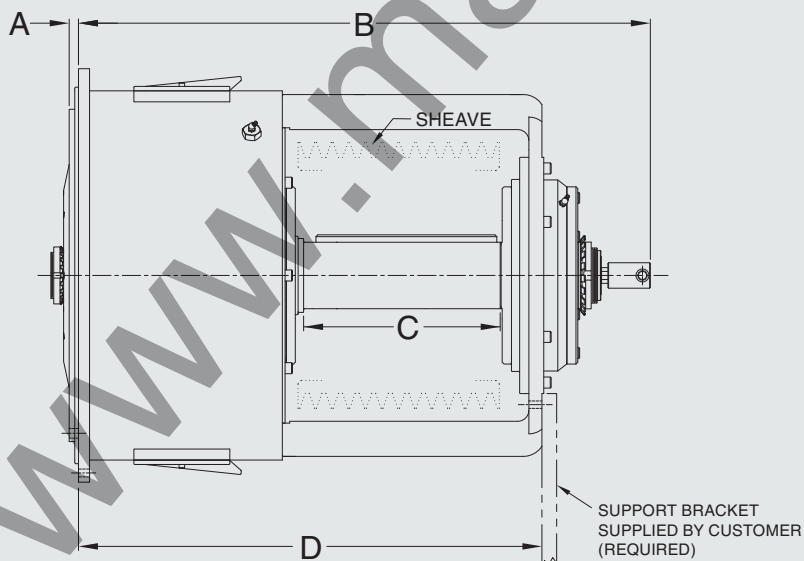
These PTO's are intended for customers with the most demanding of applications. Typical drive belt tension capacity of these PTO's can range from double to triple of the cantilevered sheave designs. Maximum belt tension capacity combined with WPT's Kevlar® reinforced friction discs, and industry leading torque capacities, make this product unbeatable.

DIMENSIONS inches (mm)

SIZE/ MODEL	AVAILABLE SAE HOUSING	A	B	OUTPUT SHAFT			D	SHEAVE (CUSTOMER SUPPLIED)	
				C	DIA	KEYWAY		MAX DIA	MAX WIDTH ¹
314H	1,0	1 (25.4)	28 3/16 (716.0)	8 5/8 (219.1)	3.938 (100.00)	1 X 1/2	23 1/4 (590.6)	14 (355.6)	10 1/2 (266.7)
318	0	5/8 (15.9)	38 23/32 (983.5)	13 5/16 (338.1)	4.500 (114.30)	1 X 1/2	31 1/2 (800.1)	18 (457.2)	15 11/32 (389.7)
318/EXT VERSION	0	5/8 (15.9)	44 23/32 (1135.9)	19 5/16 (490.5)	4.500 (114.30)	1 X 1/2	37 1/2 (952.5)	18 (457.2)	21 3/8 (542.9)
321	00	0 (0.0)	44 5/8 (1133.5)	19 15/16 (506.4)	4.750 (120.65)	1 1/4 X 5/8	39 25/32 (1010.4)	23 (584.2)	22 (558.8)
321/SHORT VERSION	00	0 (0.0)	35 5/8 (904.9)	11 (279.4)	4.750 (120.65)	1 1/4 X 5/8	30 25/32 (781.8)	23 (584.2)	13 (330.2)
321/EXT VERSION	00	0 (0.0)	47 5/8 (1209.7)	23 (584.2)	4.750 (120.65)	1 1/4 X 5/8	42 25/32 (1086.6)	23 (584.2)	25 (635.0)

¹ Maximum sheave width varies with sheave diameter. Tabulated value is at the maximum sheave diameter.

For product selection see page 11



Dimension drawings for reference only.
Consult WPT for installation drawing.



Kevlar® is a registered trademark of DuPont, Inc.

Type 2

Type 2 PTO's are some of the most innovative, highest capacity Power Take-Off products available on the market today. These PTO's employ the use of field proven dry clutches, top of the line spherical roller bearings, and a very versatile design, allowing these PTO's to be used in almost any application.

The benefits of this WPT product include, but are not limited to: Potential for remote engagement, maintenance free self-adjusting clutch, either air or hydraulic actuators, Kevlar® reinforced friction discs (standard on 14" & 18" models), & easy drive belt removal.

These PTO's are designed for customers needing maximum capacity in a small package. These come with either greased or oil lubricated bearings and are used

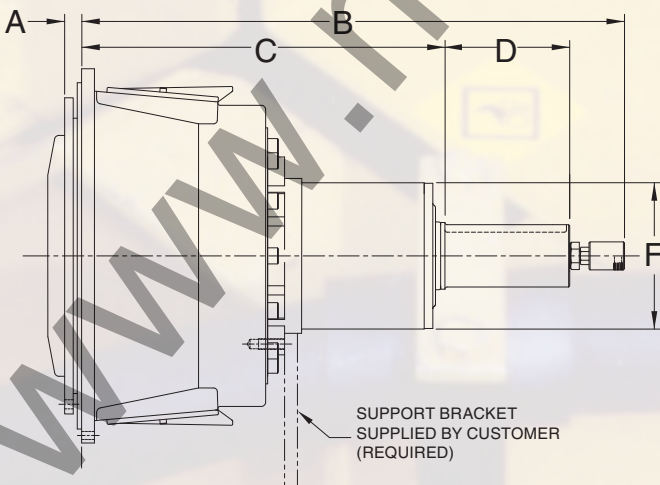


with only the best seal materials. Field proven clutches combined with Kevlar® reinforced friction discs, and a compact design, mean WPT's Type 2 PTO's will be a long lasting product for your application.

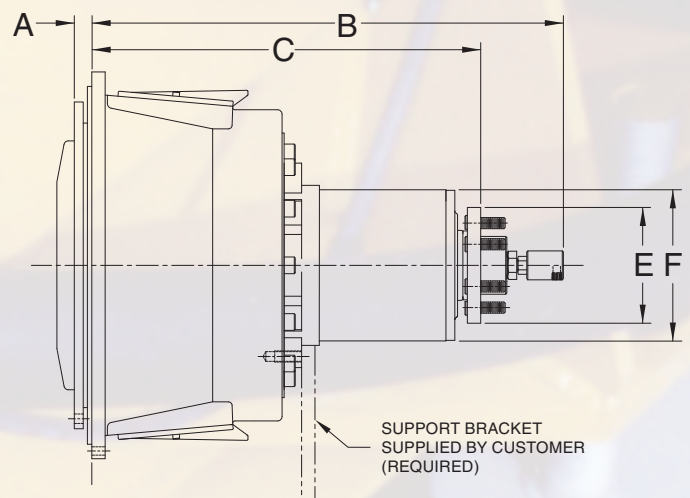
DIMENSIONS inches (mm)

SIZE/ MODEL	AVAILABLE SAE HOUSINGS	A	B	C	OUTPUT SHAFT			OUTPUT FLANGE			E	F
					D	DIA	KEYWAY	HOLE CIRCLE	QTY	THDS		
211/311	2,3	1 9/16 (39.7)	14 43/64 (372.6)	11 11/64 (283.7)	3 3/8 (85.7)	2.750 (69.85)	5/8 x 5/16	-	-	-	-	7 3/16 (182.6)
214/314H	1,0	1 (25.4)	31 9/16 (801.7)	21 3/32 (535.8)	7 1/4 (184.2)	3.625 (92.08)	7/8 x 7/16	-	-	-	-	8 1/2 (215.9)
214/314H COMPACT	2	1 9/16 (39.7)	20 27/64 (518.6)	13 5/8 (346.0)	5 35/64 (140.9)	3.543 (90.00)	(25 x 10.7)	-	-	-	-	9 (228.6)
	1	1 (25.4)										
214/314H FLG SHAFT	1	1 (25.4)	26 1/2 (673.1)	21 27/32 (554.8)	-	-	-	4.75 (120.7)	6	5/8-18	6 1/2 (165.5)	8 1/2 (215.9)
218/318	0	5/8 (15.9)	31 29/32 (810.4)	21 7/16 (544.5)	7 1/4 (184.2)	3.625 (92.08)	7/8 x 7/16	-	-	-	-	8 1/2 (215.9)
218/318 FLG SHAFT	0	5/8 (15.9)	27 3/16 (690.6)	23 9/16 (598.5)	-	-	-	6.25 (158.8)	8	5/8-18	7 3/4 (196.9)	9 27/32 (250.1)
318 HD	0	5/8 (15.9)	23 3/4 (603.3)	21 1/8 (536.6)	-	-	-	8.75 (222.3)	16	3/4-10	10 1/2 (266.7)	12 (304.8)

For product selection see page 11



Dimension drawings for reference only.
Consult WPT for installation drawing.



Kevlar® is a registered trademark of DuPont, Inc.

Power Grip High Speed Clutches



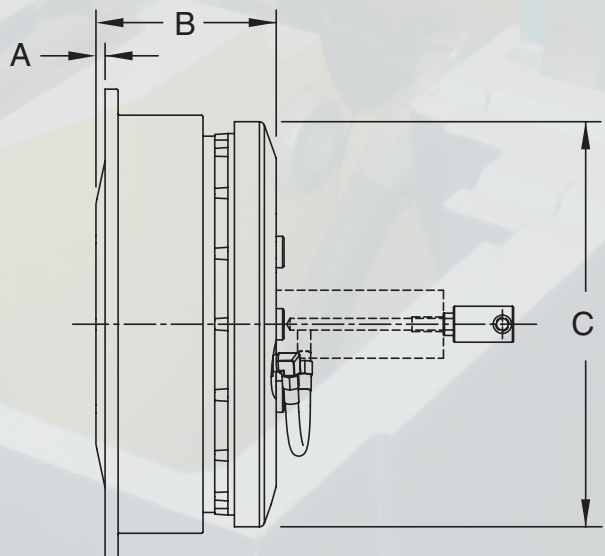
Power Grip High Speed Clutches are designed to withstand severe applications mounted to internal combustion engines. The drive rings will fit standard SAE industrial flywheels. Heavy duty laminated gear teeth friction discs are designed to withstand heavy shock loads and torsional vibrations.

DIMENSIONS inches (mm)

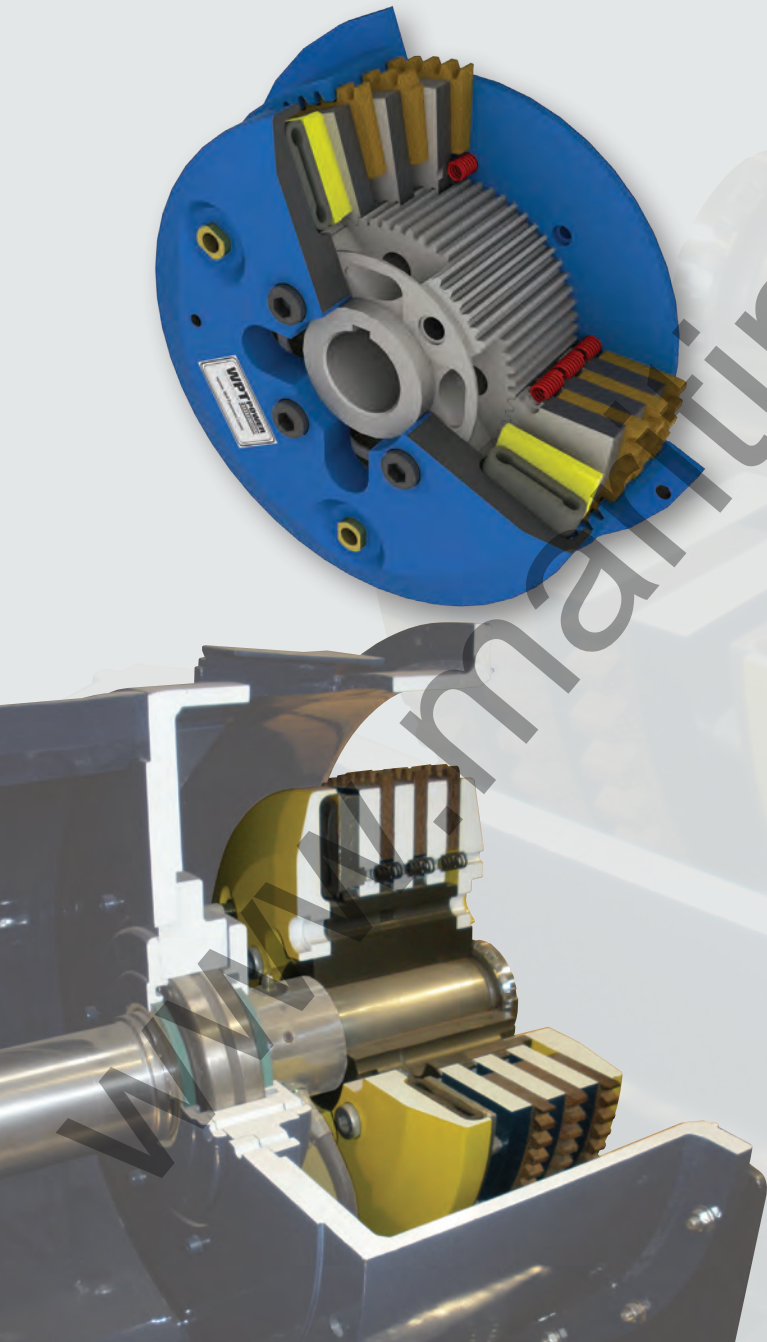
SIZE	A	B	C	MAX BORE	TOTAL WEIGHT LBS (KGS)
214H	3/4 (19.05)	6 1/2 (165.10)	16 5/16 (414.34)	3.25 (82.6)	212 (96)
314H	3/4 (19.05)	8 (203.20)	16 5/16 (414.34)	3.25 (82.6)	290 (132)
218	3/8 (9.53)	7 1/8 (180.98)	20 (508.00)	3.88 (98.4)	397 (180)
318	3/8 (9.53)	8 7/8 (225.43)	20 (508.00)	3.88 (98.4)	501 (227)
321	3/4 (19.05)	10 1/8 (257.18)	21 5/16 (541.34)	4.75 (120.7)	738 (335)

For product selection see page 11

For corresponding drive ring dimensions see page 4




Dimension drawings for reference only.
Consult WPT for installation drawing.



Product Selection Guide

Consult WPT® Power for application assistance and applicable service factors

1 STEP ONE

APPLICATION SERVICE FACTOR SELECTION GUIDE			SERVICE FACTOR (SF)			
	DUTY SERVICE CLASSIFICATION	TYPICAL APPLICATIONS	SINGLE CYLINDER ENGINE		MULTI-CYLINDER ENGINE	
			OVER 10 HOURS/DAY	OVER 10 HOURS/DAY	UP TO 10 HOURS/DAY	OVER 10 HOURS/DAY
UNIFORM	Light loads with minimal slip.	Centrifugal blowers, compressors, fans, rotary pumps	1.5	1.75	1.25	1.5
MODERATE	Medium loads with maximum 3 second slip at engagement.	Cone crushers, wood chippers, mine fans, reciprocating pumps, road milling planers	2	2.25	1.75	2
SEVERE	Heavy loads requiring bump start sequence for engagement.	Jaw crushers, tub grinders, dredge/mud pumps, hammer mills, reciprocating compressors, waste recyclers, rock crushers	2.25	2.5	2	2.25

All engagements are to be with engine running at idle speed.

2 STEP TWO

For In-line applications, proceed to step 3
Use one of the formulas below for determining the actual applied load:

$$① \quad L = \frac{126,000 \times \text{HP}}{\text{RPM} \times D \text{ (in)}} \times F \times \text{SF}$$

$$② \quad L = \frac{1,945,000 \times \text{kW}}{\text{RPM} \times D \text{ (mm)}} \times F \times \text{SF}$$

L = Actual Applied Load
D = Pitch Diameter
F = Load Factor
1.0 for Chain Drive or Gear Drive
1.5 for Timing Belts
2.2 for All V-belts

3 STEP THREE

Required PTO
Maximum Input
Torque =

$$= \frac{\text{HP} \times 5252 \times \text{SF}}{\text{RPM}} = \text{_____} \text{ lb-ft}$$

$$= \frac{\text{kW} \times 9.549 \times \text{SF}}{\text{RPM}} = \text{_____} \text{ Nm}$$

$$= \text{Peak Engine Torque [lb-ft (Nm)]} \times \text{SF}$$

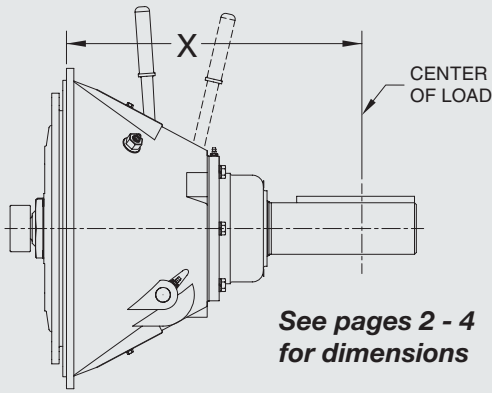
CONVERSIONS

1 lb-ft = 1.356 Nm

1 Hp = 0.746 kW

4 STEP FOUR

See Pages 12 & 13 for Maximum Input Torque, RPM and Sideload



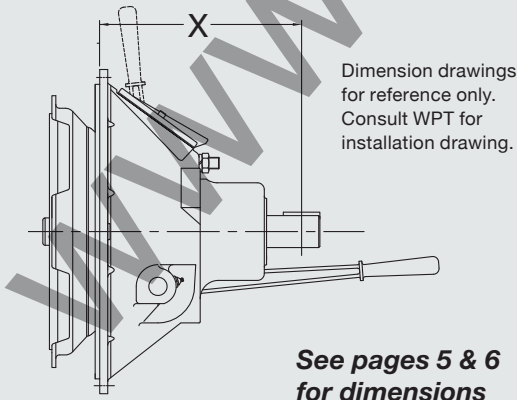
SAE FLYWHEEL HOUSING DIMENSIONS inches (mm)

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

For corresponding flywheel dimensions see page 4

SPACELESS ADAPTER RINGS

PART NUMBER	FROM SAE ENGINE HOUSING	TO SAE BELLHOUSING
WTD-00-000	2	4
WTD-00-001	1	2
WTD-00-002	1/2	1
WTD-00-003	0	1
WTD-00-004	00	0



MECHANICAL PTOs & OEM CLUTCH PACKS

RATINGS

MODEL	RPM	ALLOWABLE SIDE-PULL LOADS ¹ lbs (Kgs) · "X" DISTANCE inches (mm)				MAXIMUM INPUT TORQUE ² LB-FT (Nm)	MAXIMUM SPEED RPM
		"X"	SIDE LOAD	"X"	SIDE LOAD		
C106	1800	7	600 (300)	8	600 (300)	171 (232)	3500
	2500	(178)	600 (300)	(203)	500 (200)		
	3500		500 (200)		400 (200)		
C106 (Double Main Bearings)	1800	8	1,300 (600)	9	1,000 (400)	171 (232)	3500
	2500	(203)	1,200 (500)	(229)	900 (400)		
	3500		1,100 (500)		800 (400)		
C107	1800	7	600 (300)	8	600 (300)	191 (259)	3200
	2500	(178)	600 (300)	(203)	500 (200)		
	3200		500 (200)		400 (200)		
C107 (Double Main Bearings)	1800	8	1,300 (600)	9	1,000 (400)	191 (259)	3200
	2500	(203)	1,200 (500)	(229)	900 (400)		
	3200		1,100 (500)		800 (400)		
C108	1800	8	2,100 (900)	10	1,300 (600)	248 (336)	3100
	2500	(203)	1,900 (900)	(254)	1,200 (500)		
	3100		1,800 (800)		1,100 (500)		
C110	1800	10	2,600 (1200)	12	2,000 (900)	354 (481)	2800
	2500	(254)	2,300 (1100)	(305)	1,800 (800)		
	2800		2,300 (1000)		1,700 (800)		
SP111	1800	10	2,600 (1200)	12	2,100 (1000)	487 (660)	2500
	2100	(254)	2,500 (1100)	(305)	2,000 (900)		
	2500		2,400 (1100)		1,900 (900)		
SP211	1800	11	3,300 (1500)	13	2,100 (900)	974 (1321)	2500
	2100	(279)	3,200 (1500)	(330)	2,000 (900)		
	2500		3,000 (1400)		1,900 (800)		
SP311	1200	15	3,500 (1600)	18	1,900 (900)	1746 (2367)	2300
	1800	(381)	3,500 (1600)	(457)	1,900 (900)		
	2300		3,400 (1500)		1,900 (900)		
SP114	1200	13	5,300 (2400)	16	2,800 (1300)	862 (1169)	2300
	1800	(330)	4,600 (2100)	(406)	2,400 (1100)		
	2300		4,200 (1900)		2,200 (1000)		
SP214	1200	15	5,200 (2400)	18	2,900 (1300)	1724 (2337)	2300
	1800	(381)	4,500 (2100)	(457)	2,500 (1100)		
	2300		4,200 (1900)		2,300 (1000)		
SP314 (80 mm PB)	1200	16	5,600 (2500)	19	3,100 (1400)	2586 (3506)	2300
	1800	(406)	4,900 (2200)	(483)	2,700 (1200)		
	2300		4,500 (2000)		2,500 (1100)		
SP314 (100mm PB)	1200	16	6,000 (2700)	19	4,700 (2100)	2586 (3506)	2300
	1800	(406)	5,300 (2400)	(483)	4,100 (1900)		
	2300		4,900 (2200)		3,800 (1700)		
IBF314	1200	18	6,400 (2900)	22	5,400 (2400)	2586 (3506)	2300
	1800	(457)	5,700 (2600)	(559)	4,800 (2200)		
	2300		5,300 (2400)		4,400 (2000)		
SP318	1200	19	12,600 (5700)	23	7,100 (3200)	6465 (8765)	2100
	1800	(483)	11,200 (5100)	(584)	6,200 (2800)		
	2100		10,200 (4600)		5,900 (2700)		

¹ Allowable side-pull does not apply to OEM clutch packs.

² For applications requiring higher capacity or speed ratings, contact WPT applications.

AUTOMOTIVE & GM STYLE PTOs

RATINGS

MODEL	RPM	ALLOWABLE SIDE-PULL LOADS lbs (Kgs) · "X" DISTANCE inches (mm)				MAXIMUM INPUT TORQUE LB-FT (Nm)	MAXIMUM SPEED RPM
		"X"	SIDE LOAD	"X"	SIDE LOAD		
WTD-11-140	1000	9	1,800 (800)	11	1,300 (600)	407 (552)	3500
	2000	(228.6)	1,400 (700)	(279.4)	1,000 (500)		
	3000		1,300 (600)		900 (400)		
WTD-13-130	1000	8	1,800 (800)	10	1,300 (600)	412 (560)	3000
	2000	(203.2)	1,400 (700)	(254)	1,000 (500)		
	3000		1,300 (600)		900 (400)		
WTD-11-143	1000	13	1,800 (800)	15	1,300 (600)	386 (523)	3400
	2000	(330.2)	1,400 (700)	(381)	1,000 (500)		
	3000		1,300 (600)		900 (400)		

TYPE 1 PTO, TYPE 2 PTO & POWER GRIP CLUTCH TORQUE & SPEED RATINGS

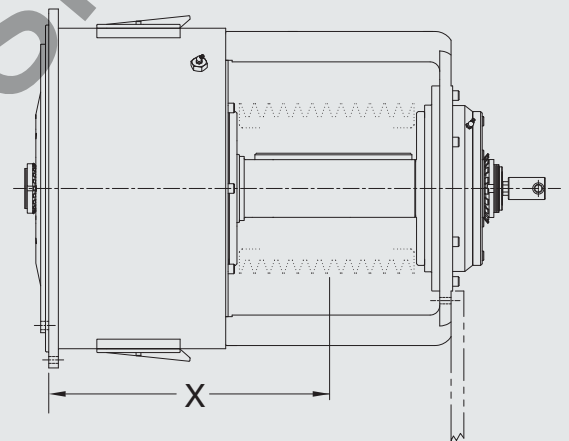
SIZE	MAXIMUM INPUT TORQUE LB-FT (Nm)	MAXIMUM SPEED RPM
211	1300 (1800)	2500
311	1900 (2600)	2500
214H	2500 (3400)	2300
314H	3800 (5100)	2300
218	4700 (6400)	2100
318	7100 (9600)	2100
321	13,500 (18300)	1800



TYPE 1 PTOs

SIDE-PULL RATINGS

ALLOWABLE SIDE-PULL LOADS lbs (Kgs) · "X" DISTANCE inches (mm)							
MODEL	RPM	"X"	SIDE LOAD	"X"	SIDE LOAD	"X"	SIDE LOAD
314H	1800	15 (381)	11,400 (5200)	17 (432)	14,600 (6600)	19 (483)	11,100 (5000)
	2100		10,900 (5000)		13,900 (6300)		10,600 (4800)
	2300		10,600 (4800)		13,600 (6200)		10,300 (4700)
318	1200	18 (457)	22,100 (10000)	22 (559)	31,400 (14300)	26 (660)	23,900 (10800)
	1800		19,900 (9000)		28,300 (12800)		21,700 (9900)
	2100		19,000 (8600)		27,000 (12300)		19,800 (9000)
318/EXT VERSION	1200	20 (508)	22,500 (10200)	25 (635)	31,500 (14300)	30 (762)	24,200 (11000)
	1800		20,300 (9200)		28,400 (12900)		22,000 (10000)
	2100		19,400 (8800)		27,100 (12300)		20,100 (9100)
321	1200	22 (559)	22,600 (10300)	28 (711)	31,700 (14400)	32 (813)	24,400 (11100)
	1800		20,400 (9300)		28,800 (13100)		22,200 (10100)
321/SHORT VERSION	1200	19 (483)	24,800 (11200)	22 (559)	33,200 (15100)	25 (635)	26,300 (11900)
	1800		17,000 (7700)		22,800 (10400)		23,900 (10800)
321/EXT VERSION	1200	23 (584)	22,800 (10300)	29 (737)	32,600 (14800)	33 (838)	25,900 (11700)
	1800		20,500 (9300)		29,400 (13300)		23,500 (10700)

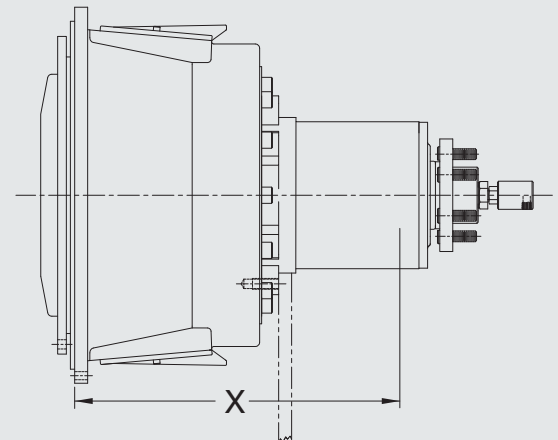


See Page 7 for Dimensions

TYPE 2 PTOs

SIDE-PULL RATINGS

ALLOWABLE SIDE-PULL LOADS lbs (Kgs) · "X" DISTANCE inches (mm)							
MODEL	RPM	"X"	SIDE LOAD	"X"	SIDE LOAD	"X"	SIDE LOAD
211 311	2100	9 (229)	6,700 (3100)	12 (305)	3,500 (1600)	15 (381)	2,400 (1100)
	2300		6,600 (3000)		3,400 (1600)		2,300 (1100)
	2500		6,400 (2900)		3,300 (1500)		2,300 (1000)
214/314H COMPACT	1800	14 (356)	6,600 (3000)	16 (406)	5,300 (2400)	19 (483)	3,800 (1700)
	2100		6,600 (3000)		5,300 (2400)		3,600 (1600)
	2300		6,600 (3000)		5,300 (2400)		3,500 (1600)
214/314H 218/318	1800	17 (432)	13,700 (6200)	23 (584)	8,000 (3600)	29 (737)	5,500 (2500)
	2100		13,700 (6200)		8,000 (3600)		5,500 (2500)
	2300		13,100 (5900)		7,600 (3500)		5,300 (2400)
318 HD	1200	14 (356)	28,500 (12900)	17 (432)	18,100 (8200)	20 (508)	13,300 (6000)
	1800		25,200 (11500)		16,000 (7300)		11,700 (5300)
	2100		24,100 (10900)		15,300 (6900)		11,200 (5100)



See Page 8 for Dimensions

Dimension drawings for reference only.
Consult WPT for installation drawing.

Versatile PTO Applications

WTD-11-333

Designed for a very high belt tension & very high torque application. Will carry 1.5 times more torque and close to 3 times more belt tension than comparably sized PTOs.



WTD Shaft to Shaft

Designed specifically for a customer needing a mechanical disconnect clutch between two shafts.



W15-CG-325

Designed to help an OEM locate their sheave properly while still having the capacity for very high belt tension.



WTD-14-21D

Designed such that a customer can run an SAE E hydraulic gear pump directly behind their engine, complete with the ability to disengage the pump at any time.



Pump Drive



The WPT Power Pump Drive (PPD) is a versatile unit that is mounted between the rugged WPT power take-off and the engine. Providing for live or clutched multiple pumps. All drives are supplied as standard with flexible couplings on the input side that dampen torsional vibrations. The PPD is self contained and no external lubrication is required. An internal heat exchanger can be added as required.

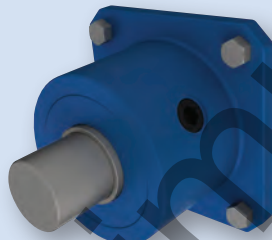
The Power Pump Drive can be provided with a variety of SAE engine housings, power take-off clutches, SAE pump drives, and accessories.

The WPT Power Pump Drives are available in four different sizes with torque capacities from 413 lb-ft (560 Nm) through 4650 lb-ft (6300 Nm) at typical engine operating speeds. All units mount to standard SAE flywheel housings and provide up to 8 pump mounting faces.

+ Featured Options



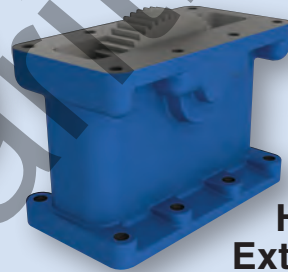
Mechanical PTO



Head PTO



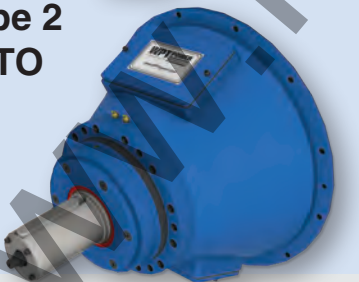
Type 1 PTO



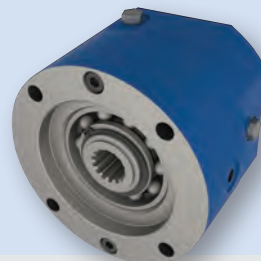
Head Extension



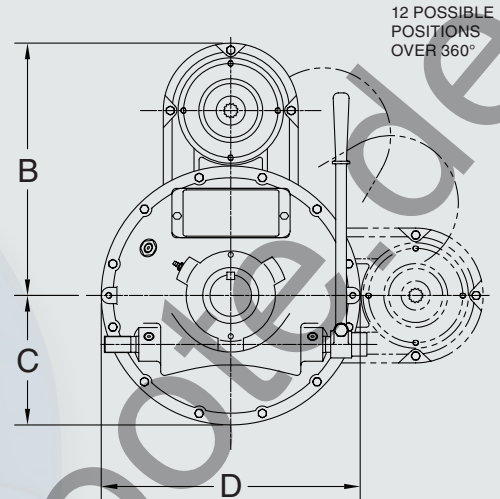
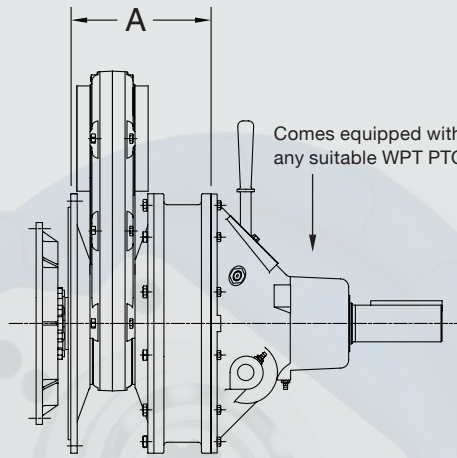
Type 2 PTO



Oil Actuated Clutch



WPD-03



Dimension drawings for reference only.
Consult WPT for installation drawing.

Output End

DIMENSIONS inches (mm)

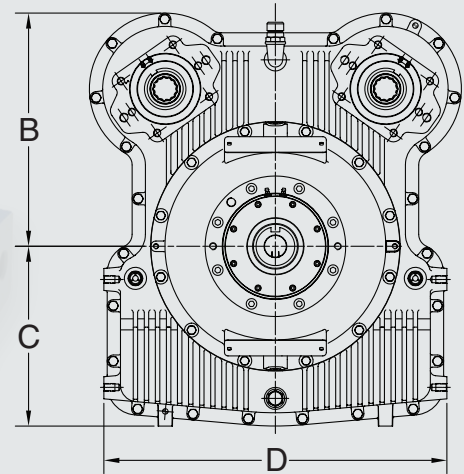
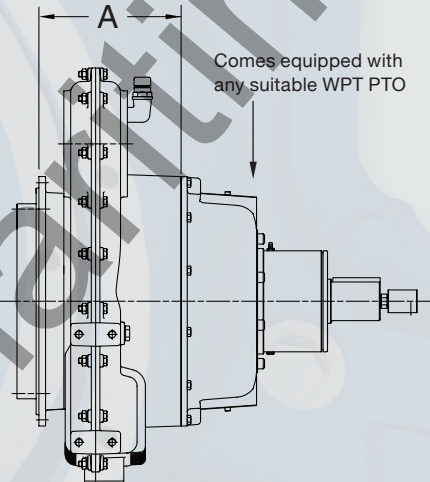
SAE INPUT	SAE OUTPUT	A	B	C	D
#4 - 10"	#4 - 10"	8 5/8 (218.5)	15 1/2 (393.0)	7 15/16 (202.0)	23 7/16 (595.0)

SPECIFICATIONS

MAXIMUM INPUT SPEED RPM	MAX INPUT TORQUE LB-FT (NM)	HEAD HP (KW) ¹	HEAD RATIO	WEIGHT LBS (KG)
3000	413 (560)	32 (43)	1:1	110 (50)

¹Rated at maximum input speed

WPD-00



Dimension drawings for reference only.
Consult WPT for installation drawing.

Output End

DIMENSIONS inches (mm)

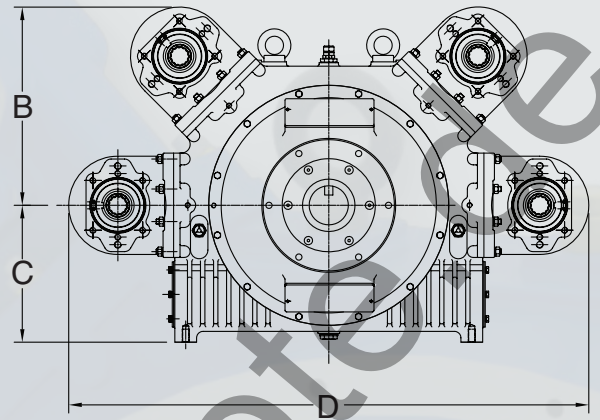
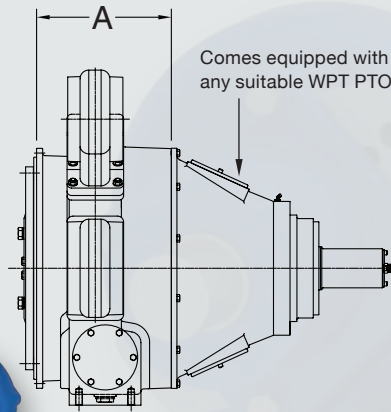
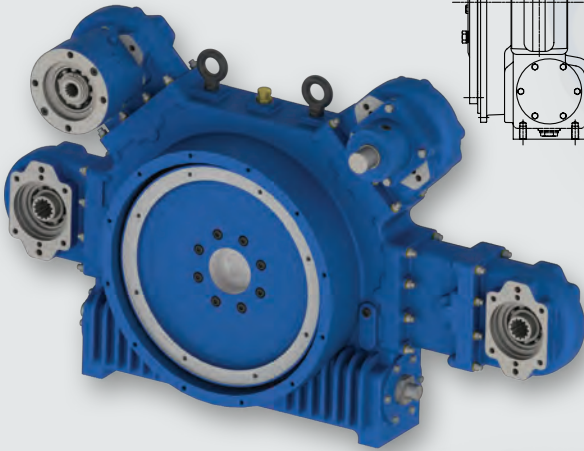
SAE INPUT	SAE OUTPUT	A	B	C	D
#3 - 11 1/2" #2 - 11 1/2"	#3 - 11 1/2"	10 1/8 (257.0)	16 5/8 (422.0)	12 13/16 (325.0)	24 7/16 (620.0)
#1 - 14"		11 1/8 (282.0)			

SPECIFICATIONS

MAXIMUM INPUT SPEED RPM	MAX INPUT TORQUE LB-FT (NM)	TOTAL HEAD HP (KW) ¹	SINGLE HEAD HP (KW) ¹	HEAD RATIO	WEIGHT LBS (KG)
2600	1475 (2000)	235 (175)	160 (120)	1:1	430 (195)

¹Rated at maximum input speed

WPD-01



Output End

Dimension drawings for reference only.
Consult WPT for installation drawing.

DIMENSIONS inches (mm)

SAE INPUT	SAE OUTPUT	A	B	C	D
#1 - 14"	#1 - 14"	12 3/16 (310.0)	18 (456.5)	12 7/16 (315.0)	47 1/8 (1197.0)

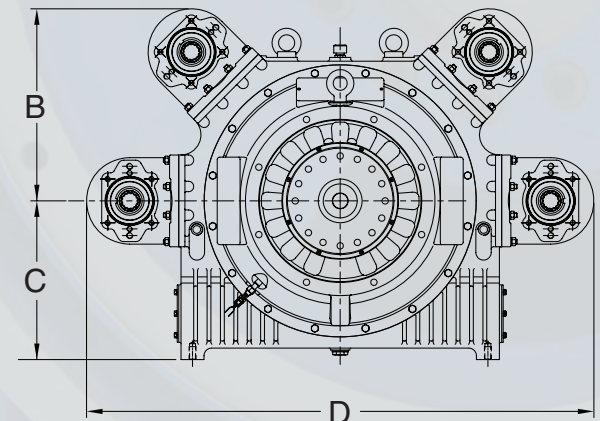
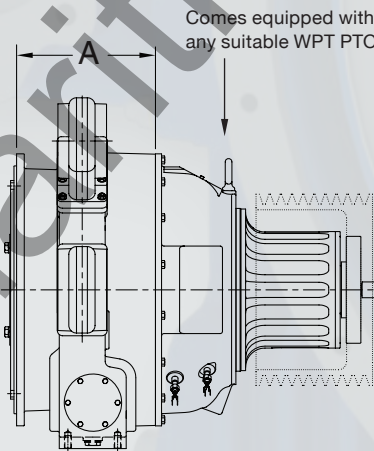
SPECIFICATIONS

MAXIMUM INPUT SPEED RPM	MAX INPUT TORQUE LB-FT (NM)	TOTAL HEAD HP (KW) ¹	SINGLE HEAD HP (KW) ¹	HEAD RATIO ²	WEIGHT LBS (KG)
2200	2470 (3350)	400 (300)	160 (120)	1 : 1 1 : 0.88	770 (350)

¹Rated at maximum input speed

²Head ratios other than 1:1 are speed increasing

WPD-02



Output End

Dimension drawings for reference only.
Consult WPT for installation drawing.

DIMENSIONS inches (mm)

SAE INPUT	SAE OUTPUT	A	B	C	D
#1 - 14"	#0 - 18"	14 3/4 (374.0)	19 3/4 (502.0)	16 3/8 (415.0)	52 3/16 (1326.0)
#0 - 18"		14 5/16 (363.0)			

SPECIFICATIONS

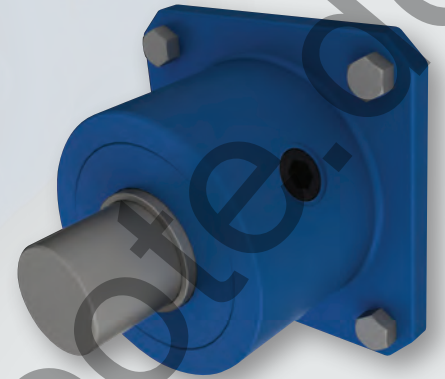
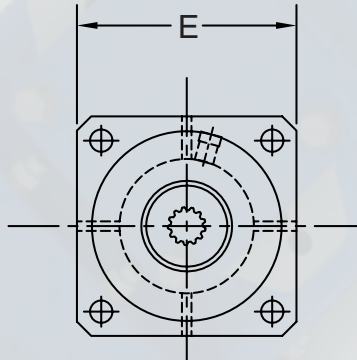
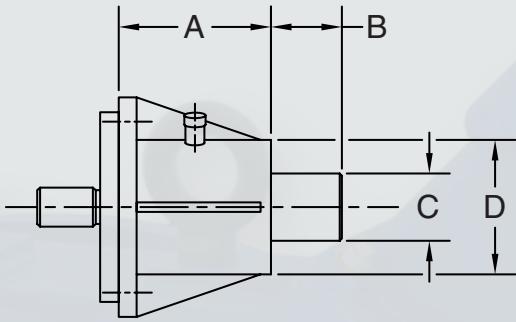
MAXIMUM INPUT SPEED RPM	MAX INPUT TORQUE LB-FT (NM)	TOTAL HEAD HP (KW) ¹	SINGLE HEAD HP (KW) ¹	HEAD RATIO ²	WEIGHT LBS (KG)
2100	4650 (6300)	535 (400)	235 (175)	1 : 0.95	1170 (530)

¹Rated at maximum input speed

²Head ratios other than 1:1 are speed increasing

Accessories

Head PTO for in-line and pulley mounting



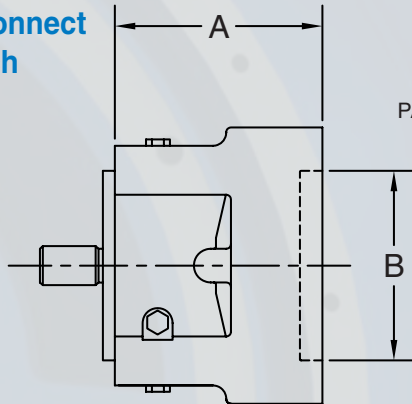
DIMENSIONS inches (mm)

A	B	C	D	E
3.52 (89.5)	1.87 (47.5)	1.772 (45.00)	3.54 (90.0)	5.79 (147.0)

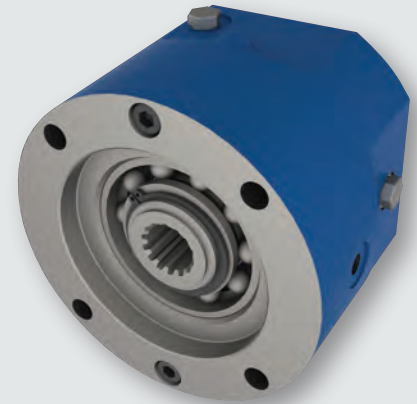
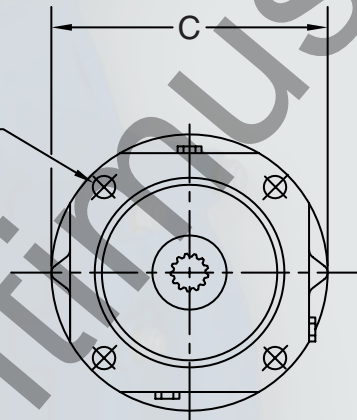
SPECIFICATIONS

MAX SIDE LOAD LB (KG)	MAX TORQUE LB-FT (Nm)
1620 (734)	370 (500)

Disconnect Clutch



SAE C
4 BOLT
PATTERN



DIMENSIONS inches (mm)

A	B	C
5.47 (139.0)	5.000 (127.00)	7.28 (185.0)

SPECIFICATIONS

OPERATING PRESSURE PSI (BAR)	115 (8)	365 (25)
TORQUE LB-FT (Nm)	196 (266)	612 (830)

For higher torques, please contact WPT Power for approval

Head extension for PPD WP1-01 and WP1-02 only

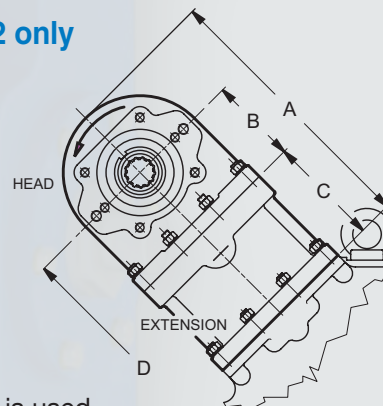
DIMENSIONS inches (mm)

FOR PPD MODEL	A	B	C	D
WPD-01	9.50 (241.0)	5.04 (128.0)	6.46 (164.0)	25.55 (649.2)
WPD-02				28.12 (714.0)

*From main shaft axis

Attention!

Head rotation direction is reversed when extension is used.



Dimension drawings for reference only.
Consult WPT for installation drawing.

Application Data Sheet

Date _____

Name / Title _____

Company Name _____

Address _____

City _____

State _____

Zip _____

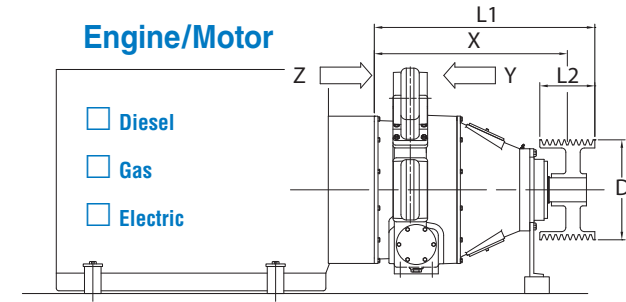
Email Address _____

Phone Number _____

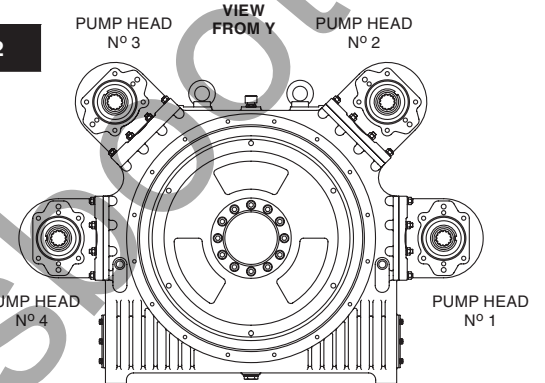
Country _____

SEND VIA EMAIL, FAX, MAIL, OR FILL OUT ONLINE

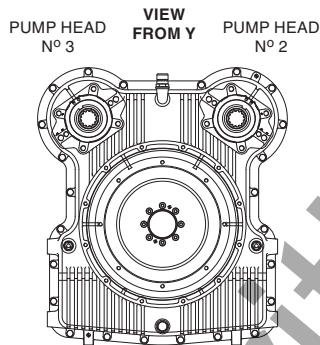
Engine/Motor



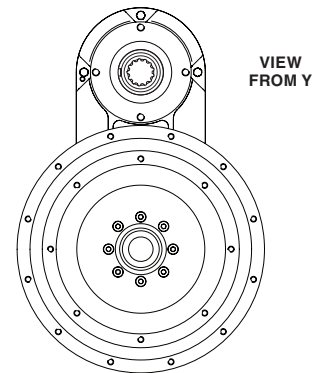
WPD-01, 02



WPD-00



WPD-03



WPD-00, -01, -02, -03

Customer Information

Quantity _____ per year

Type of Machine _____

Engine

Make & Model _____

Application Power _____ Power @ _____ RPM
(please enclose curves)

Maximum Engine/Motor Ratings _____ Torque @ _____ RPM
 _____ Power @ _____ RPM
 _____ RPM

Installation

Engine Mounted

Remote Mounted

Desired SAE Housing Size _____

Desired SAE Flywheel Size _____

Sheave Information

Type of belt tensioner
 Hydraulic Spring
 Pneumatic Mechanical
 Other _____

L1 _____

L2 _____

X Distance _____

D _____

Type of sheave or belts (select all that apply)
 3V _____ # of bands Banded Belts
 5V _____ # of bands Individual Belts
 8V _____ # of bands Flange Mount
 Keyed-to-Shaft
 Other _____

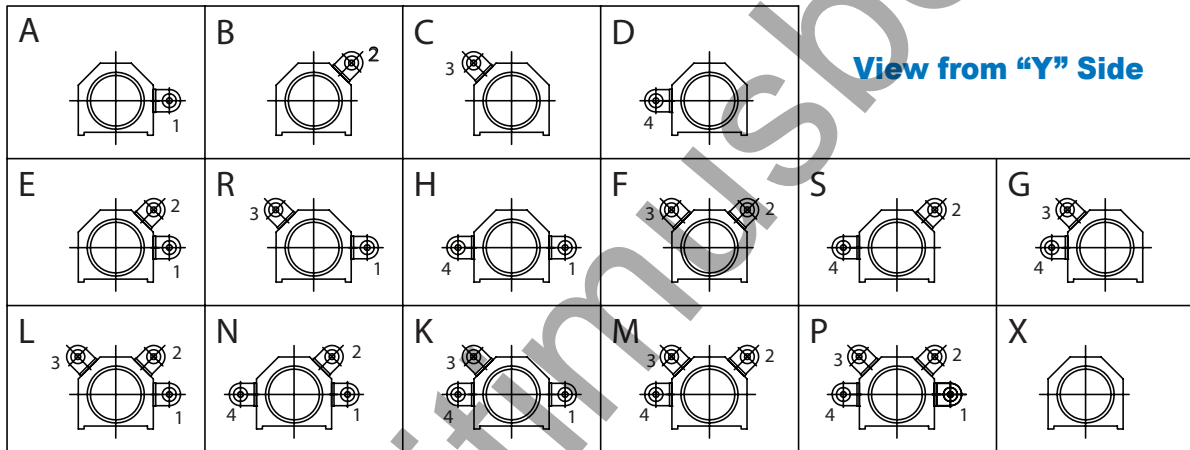
$kW = Hp * 0.746$

$Hp = \text{Gal/Min} * \text{PSIG} / 1714$
 $Hp = \text{RPM} * \text{Lb-Ft} / 5252$

$kW = \text{L/Min} * \text{Bar} / 600$
 $kW = \text{RPM} * \text{N-M} / 9549$

Pump Information (View from Z)			
Head	SAE B (2 holes) SAE C (2 or 4 holes) SAE D (4 holes)	Pump Type	Absorbed Power
Head 1 <input type="checkbox"/>			
Head 2 <input type="checkbox"/>			
Head 3 <input type="checkbox"/>			
Head 4 <input type="checkbox"/>			
Duty Cycle (Z side)			
Head	% of time	% of power	
Head 1 <input type="checkbox"/>			
Head 2 <input type="checkbox"/>			
Head 3 <input type="checkbox"/>			
Head 4 <input type="checkbox"/>			

Pump Information (View from Y)			
Head	SAE B (2 holes) SAE C (2 or 4 holes) SAE D (4 holes)	Pump Type	Absorbed Power
Head 1 <input type="checkbox"/>			
Head 2 <input type="checkbox"/>			
Head 3 <input type="checkbox"/>			
Head 4 <input type="checkbox"/>			
Duty Cycle (Y side)			
Head	% of time	% of power	
Head 1 <input type="checkbox"/>			
Head 2 <input type="checkbox"/>			
Head 3 <input type="checkbox"/>			
Head 4 <input type="checkbox"/>			



View from "Y" Side

ACCESSORIES		
DISCONNECT CLUTCH (OIL-AIR ACTUATED CLUTCH)	PTO (POWER TAKE OFF)	HEAD EXTENSION

Accessories (View from Z)			
Head	Disconnect Clutch	PTO*	Head Extension**
Head 1			
Head 2			
Head 3			
Head 4			

Accessories (View from Y)			
Head	Disconnect Clutch	PTO*	Head Extension**
Head 1			
Head 2			
Head 3			
Head 4			

*When PTO is used to drive pulley, specify pulley type and diametral pitch.

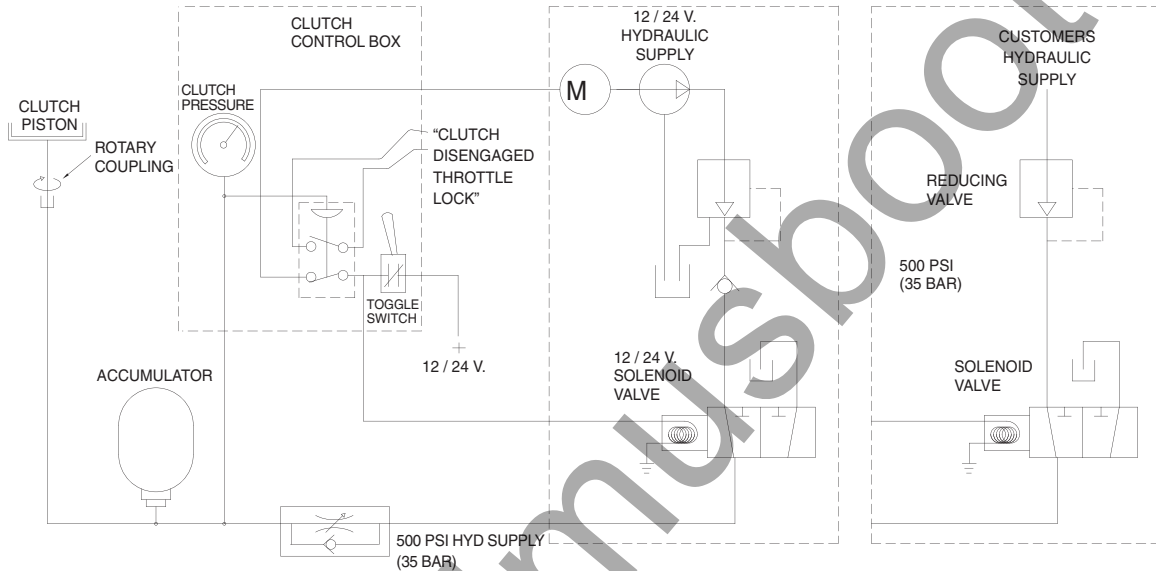
**When head extension is used, the pump head rotation is reversed.

OFFICE USE ONLY		Product Recommendation
Name:	Date:	

Suggested Remote Actuation Control Circuits

Hydraulic Actuation

This hydraulic schematic represents two possible methods for remote actuation control, however the possibilities are not limited to these two examples. This schematic is intended for a general understanding of the hydraulic remote actuation control process.



If needing a remote actuator control, please see page 10 for reference

Air Actuation

This schematic represents three possible pneumatic remote actuation control circuits. Once again, the possibilities are not limited to these examples. These suggestions are intended for a general understanding of the pneumatic remote actuation control process.

