



Power Drivetrain Products



About WPT Power



Power. It's in our name and in our products.

Since 1992, WPT® Power Corporation, located in Wichita Falls, Texas, has been building an international reputation for excellence in the power transmission industry. Clutches, brakes, power take-offs, hydraulic pump drives and winches comprise the core of our product lines.

WPT products are engineered for simplicity, reliability and durability. The foundation of our success is built on quality products, competitive lead-times and over twenty years of hands-on knowledge.

Our equipment is thoroughly tested in our manufacturing process to assure that every precaution is taken for both personal and environmental safety.

In addition to our own set of rigid quality standards, we have third party testing and audits such as DNV ISO 9001:2008 certification and ABS Type Approvals to help you choose WPT with confidence.

When you choose WPT products, you can rely on us for design, engineering and production expertise to create fast, successful solutions for even your most diverse and demanding applications.

As a global technology leader, WPT engineers specialize in products that will meet and exceed your expectations from standard applications to designs engineered for your specific needs.

Competitive pricing, quality products, outstanding lead-times and customer service make WPT the OEM supplier of choice for major manufacturers worldwide.

Let us show you how our power can work for you.

Give us a call at 940-761-1971 or visit us online at wptpower.com for more information on any of the products and services we provide.



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Pump Drive
A versatile pump drive with rear-mounted power take-off allowing for
multiple pump drives. Many unique accessories are available to complete
the final assembly.

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.

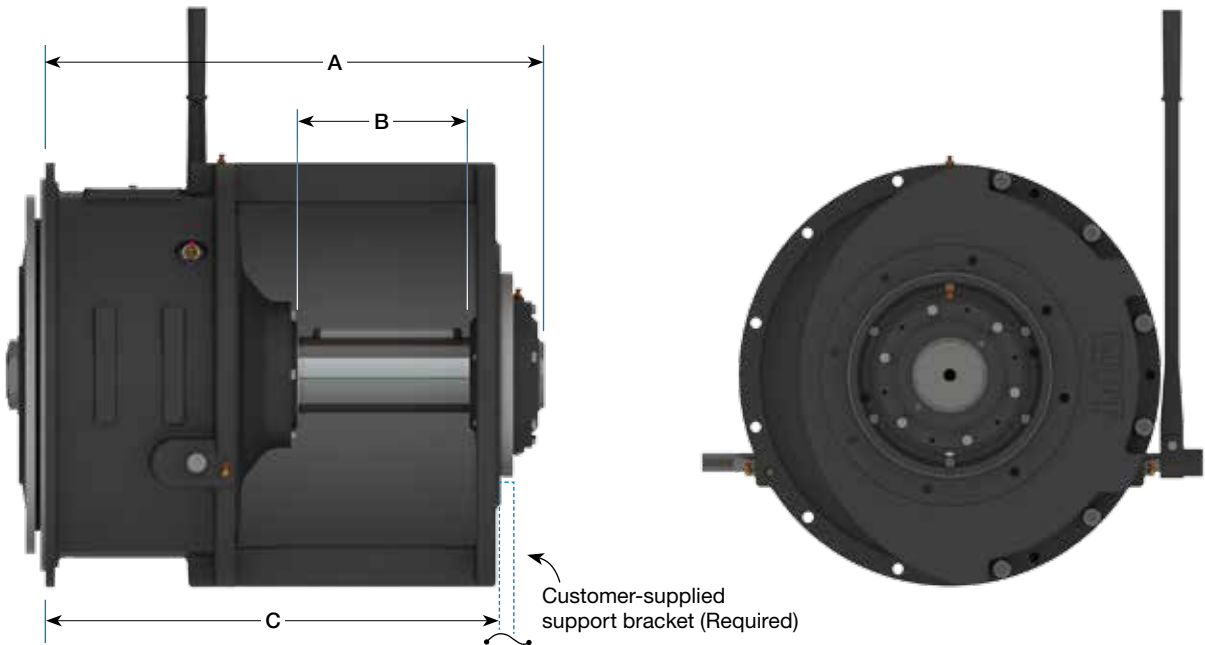


Mechanical

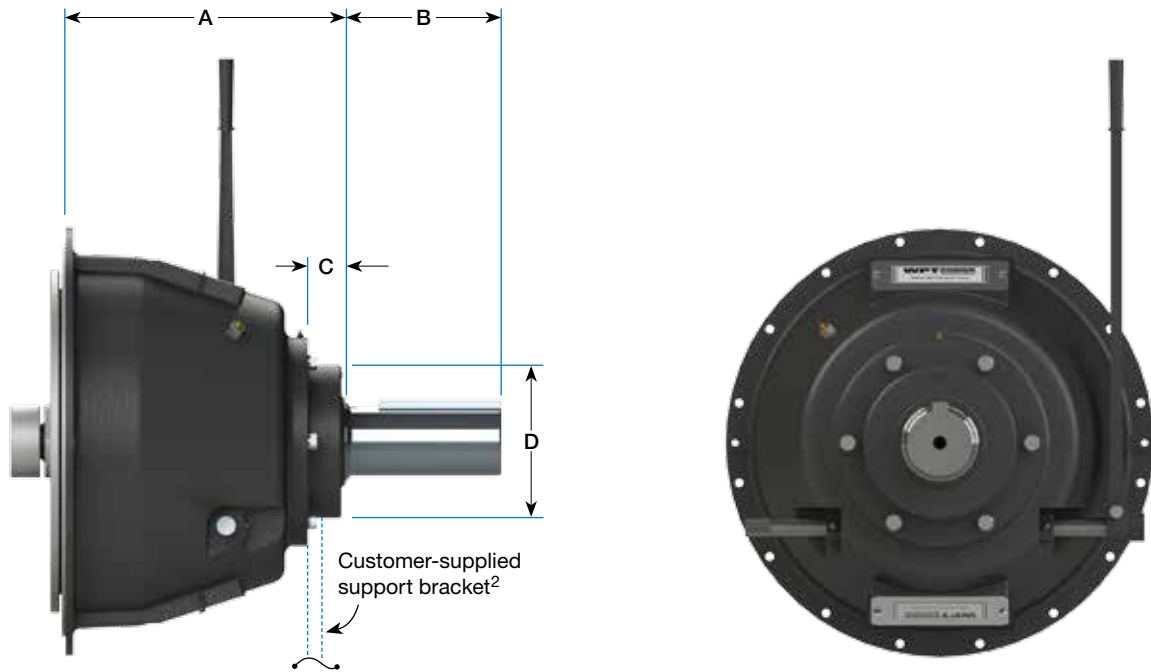
The WPT® mechanical power take-off consists of a lever-actuated clutch with a shaft and bearings mounted in a rigid cast housing. The mechanical PTO is designed for inline and sideload applications on all internal combustion engines with standard SAE industrial flywheel/flywheel housing dimensions.



- Sealed-for-life pilot bearings eliminate lubrication problems.
- Ball bearing throwout collars are optional on 10", 11 1/2", 14" and 18". Standard on the 311 PTO.
- Heavy-duty, laminated, gear tooth friction disc is available for heavy shock load applications that require extra friction disc tooth strength.
- All drive rings are ductile (nodular) iron or steel.
- Roller pilot bearings are available for higher sideload requirements in select sizes.



Type 1	Model	SAE Housings	A	Output Shaft			C	Sheave (Customer Supplied)		Weight lb (kg)
				B	Dia	Keyway		Max Dia	Max Width ¹	
	SP314 (GEN II)	1, 0	29 1/2 (749.3)	9 1/2 (241.3)	3.938 (100.00)	1 x 1/2 (25.4 x 12.7)	23 7/8 (606.4)	17 (431.8)	12 7/8 (327.0)	730 (330)



Model	SAE Housings	A	Output Shaft			C	D	Weight lb (kg)	# of Teeth
			B	Dia	Keyway				
C106	6, 5, 4	5 9/16 (141.3)	3 1/2 (88.9)	1.438 (36.53)	3/8 x 3/16 (9.5 x 4.8)	7/8 (22.2)	4 1/2 (114.3)	60 (27)	42
C106 ¹	6, 5, 4	7 1/8 (181.0)	3 1/2 (88.9)	1.438 (36.53)	3/8 x 3/16 (9.5 x 4.8)	2 1/8 (54.0)	4 5/8 (117.5)	65 (30)	42
C107	6, 5, 4	5 9/16 (141.3)	3 1/2 (88.9)	1.438 (36.53)	3/8 x 3/16 (9.5 x 4.8)	7/8 (22.2)	4 1/2 (114.3)	72 (33)	47
C107 ¹	6, 5, 4	7 1/8 (181.0)	3 1/2 (88.9)	1.438 (36.53)	3/8 x 3/16 (9.5 x 4.8)	2 1/8 (54.0)	4 5/8 (117.5)	78 (35)	47
C108	5, 4, 3	7 1/8 (181.0)	6 (152.4)	1.750 (44.45)	1/2 x 1/4 (12.7 x 6.4)	2 1/4 (57.2)	5 (127.0)	82 (37)	51
C110	4, 3	8 5/8 (219.1)	5 1/2 (139.7)	2.250 (57.15)	5/8 x 5/16 (15.9 x 7.9)	3 3/4 (95.3)	5 5/8 (142.9)	117 (53)	63
SP111	3, 2, 1	9 1/4 (235.0)	6 1/2 (165.1)	2.250 (57.15)	5/8 x 5/16 (15.9 x 7.9)	3 3/4 (95.3)	5 3/4 (146.1)	143 (65)	72
SP211	3, 2, 1	9 5/8 (244.5)	6 1/2 (165.1)	2.500 (63.50)	5/8 x 5/16 (15.9 x 7.9)	3 (76.2)	6 1/4 (158.8)	157 (71)	72
SP311 ²	3, 2	13 7/8 (352.4)	10 (254.0)	3.500 (88.90)	7/8 x 7/16 (22.2 x 11.1)	3 3/8 (85.7)	7 1/2 (190.5)	233 (106)	72
SP114	1	12 1/8 (308.0)	8 1/2 (215.9)	3.000 (76.20)	3/4 x 3/8 (19.1 x 9.5)	3 3/4 (95.3)	6 5/8 (168.3)	263 (119)	59
SP214 ²	1, 0	13 3/4 (349.3)	10 (254.0)	3.500 (88.90)	7/8 x 7/16 (22.2 x 11.1)	3 3/8 (85.7)	7 1/2 (190.5)	332 (151)	59
SP314 ²	1, 0	14 1/2 (368.3)	10 (254.0)	3.938 (100.01)	1 x 1/2 (25.4 x 12.7)	3 3/8 (85.7)	7 1/2 (190.5)	413 (187)	59
IBF314 ²	1, 0	16 3/4 (425.5)	10 (254.0)	3.938 (100.01)	1 x 1/2 (25.4 x 12.7)	3 5/8 (92.1)	12 1/2 (317.5)	595 (270)	59
SP318 ²	0	18 1/4 (463.6)	10 (254.0)	4.500 (114.30)	1 x 1/2 (25.4 x 12.7)	2 5/8 (66.7)	10 (254.0)	897 (407)	75

OEM Mechanical Clutch Packs

OEM 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.

¹ Double main bearings

² Support plate for 311, 214, 314 is required for sideload applications and recommended for inline applications. Support plate for 318 is required for both sideload and inline applications.

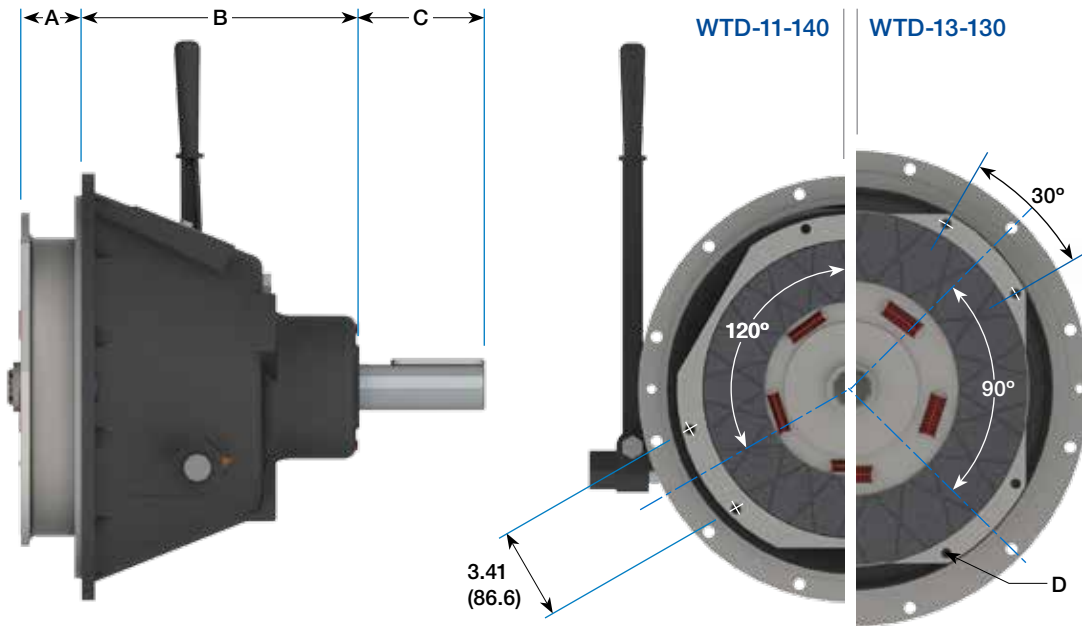


Automotive-Style

Loaded with features and virtually maintenance free, the rugged automotive-style PTO is used with flat-faced flywheels in marine, industrial, construction, brush chipper and irrigation applications.



- The troublesome pilot bearing has been eliminated to reduce failures and downtime.
- Main bearings are sealed and require no adjustments for the life of the bearing.
- Simple adjustments at the initial setup compensate for wear with a torsionally-dampened automotive-style spring-loaded clutch.
- Adjustments are quick and easy with an external ball stud and jam nut.
- The angular contact throwout bearing reduces heat buildup during long idle times.
- Engagement force is 1/3 of the force required to engage an equivalent over-center type PTO.

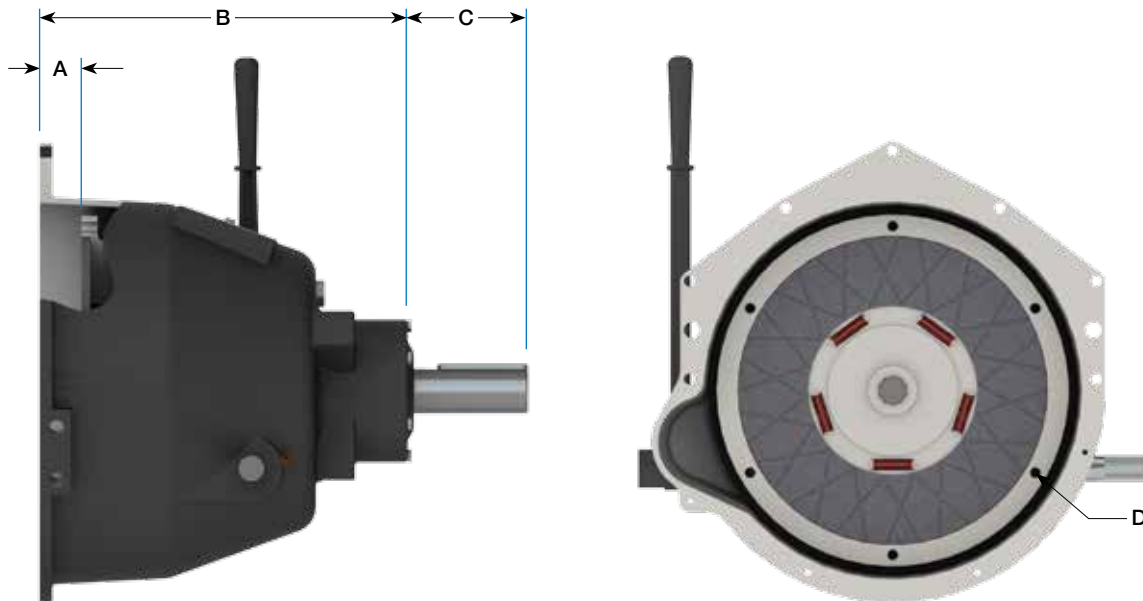


Model	SAE Housings	A	B	Output Shaft			D Hole			Weight lb (kg)
				C	Dia	Keyway	Bolt Circle	Qty	Dia	
WTD-11-140	4	2 1/4 (57.2)	10 5/16 (261.9)	4 5/8 (117.5)	1.750 (44.45)	3/8 x 3/16 (9.5 x 4.8)	12 3/8 (314.3)	6	3/8 (9.5)	123 (56)
WTD-13-130	3	2 9/16 (65.1)	9 1/8 (231.8)	2 15/16 (74.6)	1.750 (44.45)	3/8 x 3/16 (9.5 x 4.8)	14 1/8 (358.8)	8	3/8 (9.5)	149 (68)

GM-Style



- GM-style bellhousing mounts directly to 4.1, 5.7, 6.2, 7.4 & 8.1 liter engines.
- Solid ductile iron bellhousing is built for heavy-duty applications, keeping out weather and other contaminants.
- Heavy-duty adjustment ball screw with jam nut makes adjustments easy.
- Inline or sideload applications.
- Heavy-duty, precision components are made of steel and ductile iron.



Model	A	B	Output Shaft			D Hole			Weight lb (kg)
			C	Dia	Keyway	Bolt Circle	Qty	Dia	
GM Style	1 11/16 (42.9)	14 7/16 (366.7)	4 7/16 (112.7)	1.750 (44.45)	3/8 x 3/16 (9.5 x 4.8)	12 5/8 (320.7)	6	3/8 (9.5)	160 (73)
GM Style HD	1 11/16 (42.9)	14 7/16 (366.7)	4 7/16 (112.7)	2.250 (57.15)	1/2 x 1/4 (12.7 x 6.4)	12 5/8 (320.7)	6	3/8 (9.5)	160 (73)



Type 1

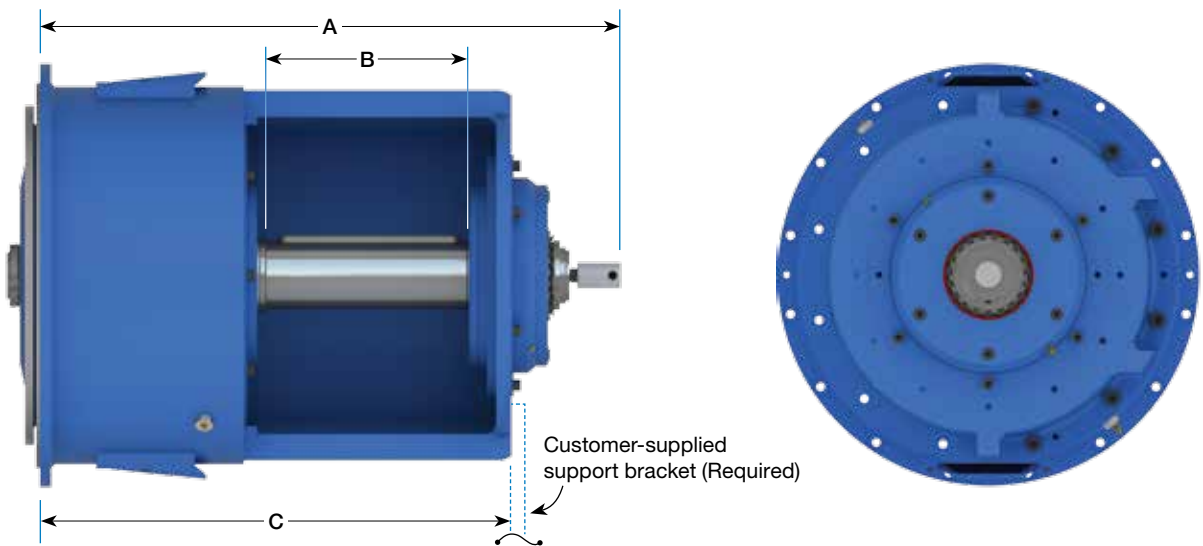


The Type 1 PTO is one of the most rugged, highest capacity products available on the market today. With sheaves between the bearings, these power take-offs are designed to attain the maximum potential of their massive spherical roller bearings.

Some benefits of the WPT® Type 1 include: Potential for remote engagement, maintenance-free self-adjusting clutch, air or hydraulic actuation, heavy-duty, laminated gear tooth friction discs and easy drive belt removal.

The Type 1 PTO is intended for customers with the most demanding of applications. Typical drive belt tension capacity of these PTOs can range from two to four times that of the Type 2 PTO.

Gen II Type 1 PTO's make it possible to house mechanical clutch packs. In addition, the sheave housing is designed with internal and external pilots, vastly improving the quality and ease of field repairs while increasing uptime.



Model	SAE Housings	A	Output Shaft			C	Sheave (Customer Supplied)	
			B	Dia	Keyway		Max Dia	Max Width ¹
314H (GEN II)	1, 0	29 1/2 (749.3)	9 1/2 (241.3)	3.938 (100.00)	1 x 1/2 (25.4 x 12.7)	23 7/8 (606.4)	17 (431.8)	12 7/8 (327.0)
318	0	38 3/4 (984.3)	13 5/16 (338.1)	4.500 (114.30)	1 x 1/2 (25.4 x 12.7)	31 1/2 (800.1)	18 (457.2)	15 5/16 (388.9)
318/Ext Version	0	44 3/4 (1136.7)	19 5/16 (490.5)	4.500 (114.30)	1 x 1/2 (25.4 x 12.7)	37 1/2 (952.5)	18 (457.2)	21 3/8 (542.9)
321	00	44 5/8 (1133.5)	19 15/16 (506.4)	4.750 (120.65)	1 1/4 x 5/8 (31.8 x 15.9)	39 3/4 (1009.7)	23 (584.2)	22 (558.8)
321/Short Version	00	35 5/8 (904.9)	11 (279.4)	4.750 (120.65)	1 1/4 x 5/8 (31.8 x 15.9)	30 3/4 (781.1)	23 (584.2)	13 (330.2)
321/Ext Version	00	47 5/8 (1209.7)	23 (584.2)	4.750 (120.65)	1 1/4 x 5/8 (31.8 x 15.9)	42 3/4 (1085.9)	23 (584.2)	25 (635.0)

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

Type 2

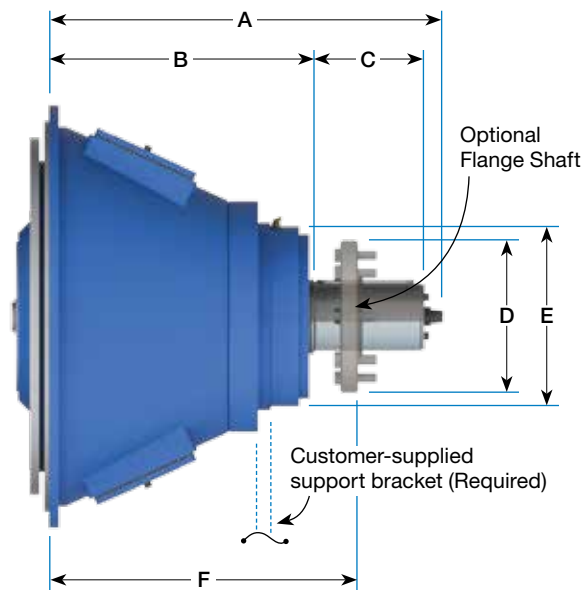


If you are looking for an innovative, high capacity power take-off, look no further than the WPT® Type 2.

With its versatile design, dry clutch and top-of-the-line spherical roller bearings, the Type 2 PTO has been field-proven in many sideload applications.

The benefits of the WPT Type 2 include the potential for remote engagement, maintenance free self-adjusting clutch, with air or hydraulic actuation. Heavy-duty, laminated gear tooth friction discs are standard on 14" and 18" models. Bearings are lubricated with either grease or oil.

Customers needing maximum capacity in a small package will find the Type 2 an outstanding PTO for their applications.



Model	SAE Housings	A	B	Output Shaft			Output Flange			D	E	F
				C	Dia	Keyway	Hole Circle	Qty	Thds			
211/311	3, 2	14 11/16 (373.1)	11 3/16 (284.2)	3 3/8 (85.7)	2.750 (69.85)	5/8 x 5/16 (15.9 x 7.9)	-	-	-	-	7 3/16 (182.6)	-
214/314H	1, 0	31 9/16 (801.7)	21 1/16 (535.0)	7 1/4 (184.2)	3.625 (92.08)	7/8 x 7/16 (22.3 x 11.1)	-	-	-	-	8 1/2 (215.9)	-
214/314H Compact	2, 1	20 7/16 (519.1)	13 5/8 (346.0)	5 9/16 (141.3)	3.543 (90.00)	.98 x .42 (25 x 10.7)	-	-	-	-	9 (228.6)	-
214/314H Flanged	1	26 1/2 (673.1)	-	-	-	-	4.75 (120.7)	6	5/8-18	6 1/2 (165.5)	8 1/2 (215.9)	21 7/8 (555.6)
218/318	0	31 7/16 (798.5)	21 7/16 (544.5)	7 1/4 (184.2)	3.625 (92.08)	7/8 x 7/16 (22.3 x 11.1)	-	-	-	-	8 1/2 (215.9)	-
218/318 Flanged	0	27 3/16 (690.6)	-	-	-	-	6.25 (158.8)	8	5/8-18	7 3/4 (196.9)	9 7/8 (250.8)	23 9/16 (598.5)
318 HD Flanged	0	23 3/4 (603.3)	-	-	-	-	8.75 (222.3)	16	3/4-10	10 1/2 (266.7)	12 (304.8)	21 1/8 (536.6)



Custom Units

▶ **WTD-11-333**



Designed for very high tension and torque applications, this heavy-duty PTO will carry 1.5 times the torque and close to 3 times the belt tension of comparably sized PTOs.

▶ **WTD Shaft-to-Shaft**



Specifically designed for customers needing a mechanical disconnect clutch between shafts.

▶ **W15-CG-325**



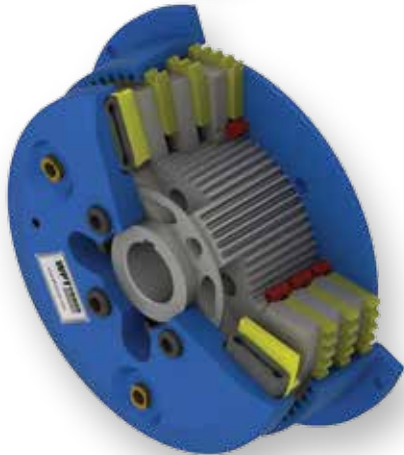
Designed for proper sheave location while still having the capacity for very high belt tension.

▶ **WTD-14-21D**



Designed for customers running an SAE E hydraulic pump directly behind an engine. Features the ability to disengage the pump at any time.

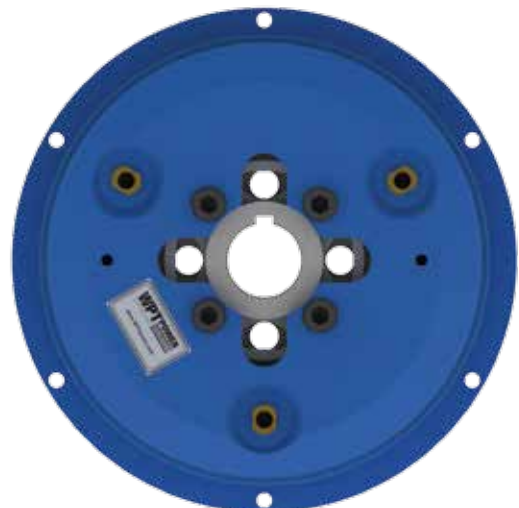
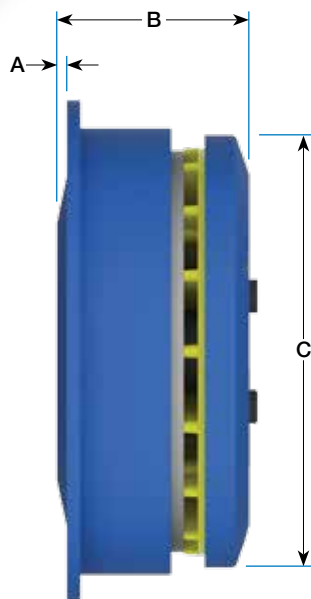
Power Grip High Speed Clutch



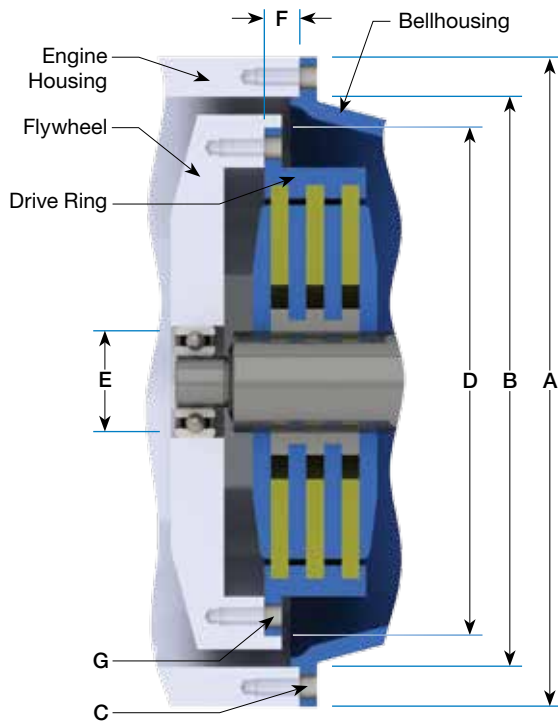
The Power Grip high speed clutch is designed to withstand the most severe applications imaginable. The heavy-duty, laminated gear tooth friction discs withstand heavy shock loads and the torsional vibrations of internal combustion engines. Drive rings are designed to fit standard SAE industrial flywheels for easy installation.

Model	A	B	C	Max Bore ¹	Weight lb (kg)
214H	3/4 (19.1)	6 1/2 (165.1)	16 5/16 (414.3)	3.25 (82.6)	212 (96)
314H	3/4 (19.1)	8 (203.2)	16 5/16 (414.3)	3.25 (82.6)	290 (132)
218	3/8 (9.53)	7 1/8 (181.0)	20 (508.0)	3.88 (98.4)	397 (180)
318	3/8 (9.53)	8 7/8 (225.4)	20 (508.0)	3.88 (98.4)	501 (227)
321	3/4 (19.1)	10 1/8 (257.2)	21 5/16 (541.3)	4.75 (120.7)	738 (335)

¹ Larger bore sizes available upon request.



Product Selection Dimensions

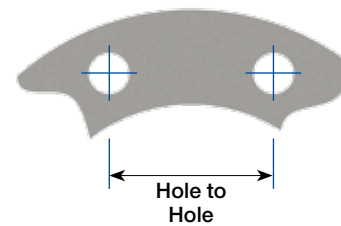


WPT SAE Housing Adapters Available

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

WPT PTOs meet the mounting requirements of SAE J617 and SAE J620.

Dual or double-drilled flywheels may interfere with PTO. Contact us for assistance.



Housing

SAE Housing	A	B Pilot	C			
			Bolt Circle	Qty	Dia	Hole to Hole
6	12 1/8 (307.8)	10.500 (266.70)	11.25 (285.8)	8	13/32 (10.3)	4.31 (109.4)
5	14 (355.6)	12.375 (314.32)	13.13 (333.4)	8	13/32 (10.3)	5.02 (127.6)
4	15 7/8 (403.4)	14.250 (361.95)	15.00 (381.0)	12	13/32 (10.3)	3.88 (98.6)
3	17 3/4 (450.8)	16.125 (409.58)	16.88 (428.6)	12	13/32 (10.3)	4.37 (110.9)
2	19 1/4 (489.0)	17.625 (447.68)	18.38 (466.7)	12	13/32 (10.3)	4.76 (120.8)
1	21 3/4 (552.4)	20.125 (511.18)	20.88 (530.2)	12	15/32 (11.9)	5.40 (137.2)
1/2	25 1/2 (647.7)	23.000 (584.20)	24.38 (619.1)	12	17/32 (11.5)	6.31 (160.2)
0	28 (711.2)	25.500 (647.70)	26.75 (679.5)	16	17/32 (11.5)	5.22 (132.6)
00	34 3/4 (882.6)	31.000 (787.40)	33.50 (850.9)	16	17/32 (11.5)	6.54 (166.0)

Flywheel

WPT Clutch Size	D Pilot	E (mm)	F	G			
				Bolt Circle	Qty	Dia	Hole to Hole
6"	8.500 (215.90)	52	1 3/16 (30.2)	7.88 (200.0)	6	21/64 (8.3)	3.94 (100.0)
7"	9.500 (241.30)	52	1 3/16 (30.2)	8.75 (222.3)	8	21/64 (8.3)	3.35 (85.1)
8"	10.375 (263.52)	62	2 7/16 (62.0)	9.63 (244.5)	6	13/32 (10.3)	4.81 (122.2)
10"	12.375 (314.32)	62 72	2 1/8 (53.8)	11.63 (295.3)	8	13/32 (10.3)	4.45 (113.0)
11"	13.875 (352.42)	62 72 80	1 9/16 (39.6)	13.13 (333.4)	8	13/32 (10.3)	5.02 (127.6)
14"	18.375 (466.72)	72 80 100	1 (25.4)	17.25 (438.2)	8	17/32 (13.5)	6.60 (167.7)
18"	22.500 (571.50)	100 120	5/8 (15.7)	21.38 (542.9)	6	21/32 (16.7)	10.69 (271.5)
21"	26.500 (673.10)	-	0 (0)	25.25 (641.4)	12	21/32 (16.7)	6.54 (166.0)

Product Selection Calculations

► Step One

Application Service Factor Selection Guide			Service Factor (SF)			
	Duty Service Classification	Typical Applications	Single Cylinder Engine		Multi-Cylinder Engine	
			Up to 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 machines and 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	2.25	2.5	2	2.25

► Step Two

Maximum Input Torque

$$T = \frac{\text{hp} \times \text{SF}}{\text{r/min}} \times 5,252 = \text{_____ lbf-ft}$$

$$T = \frac{\text{kW} \times \text{SF}}{\text{r/min}} \times 9,549 = \text{_____ N-m}$$

$$T = \text{Engine Torque [lbf-ft (N-m)]} \times \text{SF}$$

Conversions		
Multiply	By	To Obtain
lbf-ft	1.356	N-m
hp	0.746	kW
lbf	0.454	kgf
kg	9.807	N

► Step Three

In-line applications go to Step Four.

Sideload

$$L = \frac{\text{hp} \times F \times \text{SF}}{\text{r/min} \times D \text{ (in)}} \times 126,000 = \text{_____ lbf}$$

$$L = \frac{\text{kW} \times F \times \text{SF}}{\text{r/min} \times D \text{ (mm)}} \times 1,947,000 = \text{_____ kgf}$$

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

► Step Four

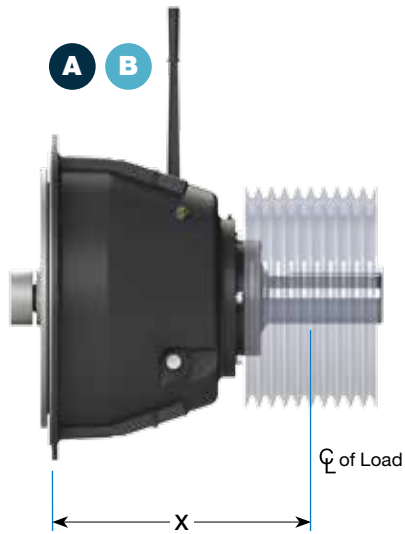
See Pages 12 and 13 for PTO Maximum Input Torque, r/min and Sideload ratings.

Product Selection Ratings

A		Steps Two and Three		Mechanical Sideload and Torque					
"X" Distance Inches (mm) · Allowable Sideload ¹ lbf (kgf)								Maximum Input Torque ² lbf-ft (N-m)	Maximum Speed ² r/min
Model	r/min	"X"	Sideload	"X"	Sideload	"X"	Sideload		
C106 C107	1800	7 (178)	600 (300)	8 (203)	600 (300)	9 (229)	500 (200)	171 (232) 191 (259)	3500 3200
	2500		600 (300)		500 (200)		500 (200)		
	3500		500 (200)		500 (200)		400 (200)		
(Double Main Bearings) C106 C107	1800	8 (203)	1,300 (600)	9 (229)	1,000 (400)	10 (254)	800 (400)	171 (232) 191 (259)	3500 3200
	2500		1,200 (500)		900 (400)		700 (300)		
	3500		1,100 (500)		800 (400)		600 (300)		
C108	1800	8 (203)	2,100 (900)	10 (254)	1,300 (600)	12 (305)	900 (400)	248 (336)	3100
	2500		1,900 (900)		1,200 (500)		800 (400)		
	3100		1,800 (800)		1,100 (500)		800 (400)		
C110	1800	10 (254)	2,600 (1200)	12 (305)	2,000 (900)	14 (356)	1,400 (600)	354 (481)	2800
	2500		2,300 (1100)		1,800 (800)		1,300 (600)		
	2800		2,300 (1000)		1,700 (800)		1,200 (600)		
SP111	1800	10 (254)	2,600 (1200)	12 (305)	2,100 (1000)	14 (356)	1,500 (700)	487 (660)	2500
	2100		2,500 (1100)		2,000 (900)		1,400 (600)		
	2500		2,400 (1100)		1,900 (900)		1,300 (600)		
SP211	1800	11 (279)	3,300 (1500)	13 (330)	2,100 (900)	15 (381)	1,500 (700)	974 (1321)	2500
	2100		3,200 (1500)		2,000 (900)		1,400 (600)		
	2500		3,000 (1400)		1,900 (800)		1,300 (600)		
SP311	1200	15 (381)	3,500 (1600)	18 (457)	1,900 (900)	22 (559)	1,200 (500)	1746 (2367)	2300
	1800		3,500 (1600)		1,900 (900)		1,200 (500)		
	2300		3,400 (1500)		1,900 (900)		1,200 (500)		
SP114	1200	13 (330)	5,300 (2400)	16 (406)	2,800 (1300)	20 (508)	1,700 (800)	862 (1169)	2300
	1800		4,600 (2100)		2,400 (1100)		1,500 (700)		
	2300		4,200 (1900)		2,200 (1000)		1,400 (600)		
SP214	1200	15 (381)	5,200 (2400)	18 (457)	2,900 (1300)	22 (559)	1,800 (800)	1724 (2337)	2300
	1800		4,500 (2100)		2,500 (1100)		1,600 (700)		
	2300		4,200 (1900)		2,300 (1000)		1,400 (700)		
SP314 (80 mm PB)	1200	16 (406)	5,600 (2500)	19 (483)	3,100 (1400)	23 (584)	1,900 (800)	2586 (3506)	2300
	1800		4,900 (2200)		2,700 (1200)		1,700 (800)		
	2300		4,500 (2000)		2,500 (1100)		1,500 (700)		
SP314 (100mm PB)	1200	16 (406)	6,000 (2700)	19 (483)	4,700 (2100)	23 (584)	2,900 (1300)	2586 (3506)	2300
	1800		5,300 (2400)		4,100 (1900)		2,600 (1200)		
	2300		4,900 (2200)		3,800 (1700)		2,400 (1100)		
IBF314	1200	18 (457)	6,400 (2900)	22 (559)	5,400 (2400)	27 (686)	4,500 (2000)	2586 (3506)	2300
	1800		5,700 (2600)		4,800 (2200)		4,000 (1800)		
	2300		5,300 (2400)		4,400 (2000)		3,700 (1700)		
SP318	1200	19 (483)	12,600 (5700)	23 (584)	7,100 (3200)	27 (686)	4,600 (2100)	6465 (8765)	2100
	1800		11,200 (5100)		6,200 (2800)		4,000 (1800)		
	2100		10,200 (4600)		5,900 (2700)		3,800 (1700)		

B		Steps Two and Three		Automotive Sideload and Torque					
"X" Distance Inches (mm) · Allowable Sideload ¹ lbf (kgf)								Maximum Input Torque ² lbf-ft (N-m)	Maximum Speed ² r/min
Model	r/min	"X"	Sideload	"X"	Sideload	"X"	Sideload		
WTD-11-140 WTD-13-130	1000	8 (203)	1,800 (800)	10 (254)	1,300 (600)	13 (330)	900 (400)	412 (560)	3500 3000
	2000		1,400 (700)		1,000 (500)		700 (300)		
	3000		1,300 (600)		900 (400)		600 (300)		
GM Style	1000	13 (330)	1,800 (800)	15 (381)	1,300 (600)	18 (457)	900 (400)	386 (523)	3400
	2000		1,400 (700)		1,000 (500)		700 (300)		
	3000		1,300 (600)		900 (400)		600 (300)		
GM Style HD	1000	13 (330)	4,400 (2000)	15 (381)	2,900 (1300)	18 (457)	2,000 (900)	386 (523)	3400
	2000		4,400 (2000)		2,900 (1300)		2,000 (900)		
	3000		4,400 (2000)		2,900 (1300)		2,000 (900)		

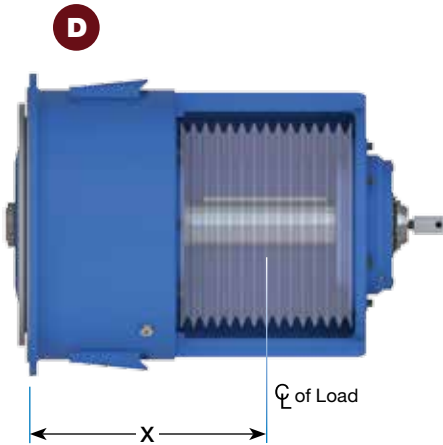
¹ Allowable sideload does not apply to OEM clutch packs. ² Contact WPT for applications requiring higher capacity or speed ratings.



C D E Step Two
Power Grip, Type 1, and Type 2 Torque

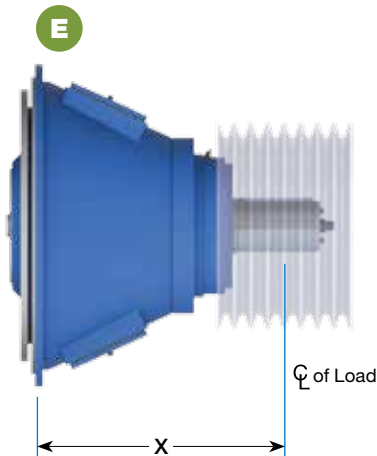
Size	Maximum Input Torque lbf-ft (N-m)	Maximum Speed r/min
211	1,300 (1800)	2500
311	1,900 (2600)	2500
214H	2,500 (3400)	2300
314H	3,800 (5100)	2300
218	4,700 (6400)	2100
318	7,100 (9600)	2100
321	13,500 (18300)	1800

D Step Three Type 1 Sideload



"X" Distance Inches (mm) · Allowable Sideload ¹ lbf (kgf)							
Model	RPM	"X"	Sideload	"X"	Sideload	"X"	Sideload
314H (GEN II)	1800	15	11,500 (5200)	17	15,100 (6900)	19	12,400 (5600)
	2100	(381)	11,000 (5000)	(432)	14,400 (6600)	(483)	11,800 (5400)
	2300		10,700 (4900)		14,100 (6400)		11,500 (5200)
318	1200	18	22,100 (10000)	22	31,400 (14300)	26	23,900 (10800)
	1800	(457)	19,900 (9000)	(559)	28,300 (12800)	(660)	21,700 (9900)
	2100		19,000 (8600)		27,000 (12300)		19,800 (9000)
318/Ext Version	1200	20	22,500 (10200)	25	31,500 (14300)	30	24,200 (11000)
	1800	(508)	20,300 (9200)	(635)	28,400 (12800)	(762)	22,000 (10000)
	2100		19,400 (8800)		27,100 (12300)		20,100 (9100)
321	1200	22	22,600 (10300)	28	31,700 (14400)	32	24,400 (11100)
	1800	(559)	20,400 (9300)	(711)	28,800 (13100)	(813)	22,200 (10100)
321/ Short Version	1200	19	24,800 (11200)	22	33,200 (15100)	25	26,300 (11900)
	1800	(483)	17,000 (7700)	(559)	22,800 (10400)	(635)	23,900 (10800)
321/Ext Version	1200	23	22,800 (10300)	29	32,600 (14800)	33	25,900 (11700)
	1800	(584)	20,500 (9300)	(737)	29,400 (13300)	(838)	23,500 (10700)

E Step Three Type 2 Sideload

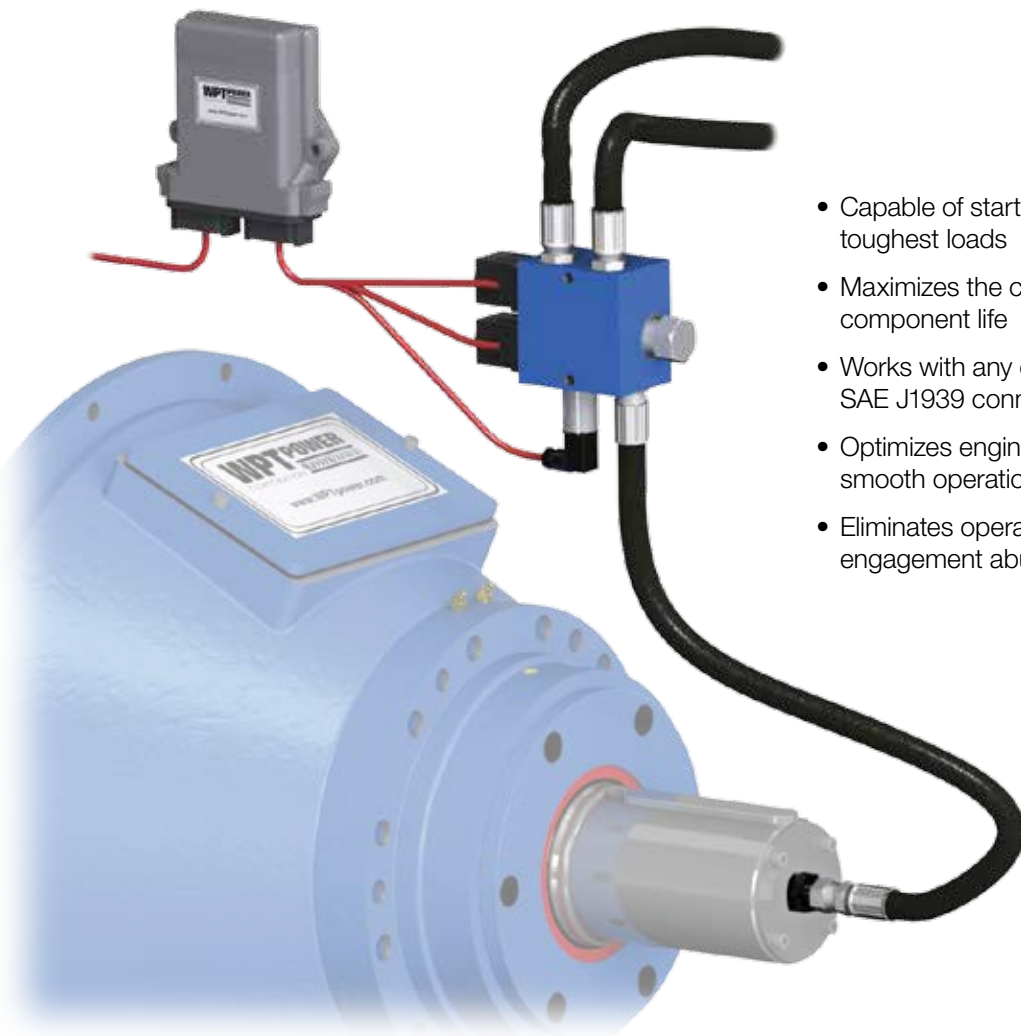


"X" Distance Inches (mm) · Allowable Sideload ¹ lbf (kgf)							
Model	r/min	"X"	Sideload	"X"	Sideload	"X"	Sideload
211/311	2100	9	6,700 (3100)	12	3,500 (1600)	15	2,400 (1100)
	2300	(229)	6,600 (3000)	(305)	3,400 (1600)	(381)	2,300 (1100)
	2500		6,400 (2900)		3,300 (1500)		2,300 (1000)
214/314H 218/318	1800	17	13,700 (6200)	23	8,000 (3600)	29	5,500 (2500)
	2100	(432)	13,700 (6200)	(584)	8,000 (3600)	(737)	5,500 (2500)
	2300		13,100 (5900)		7,600 (3500)		5,300 (2400)
214/314H Compact	1800	14	6,600 (3000)	16	5,300 (2400)	19	3,800 (1700)
	2100	(356)	6,600 (3000)	(406)	5,300 (2400)	(483)	3,600 (1600)
	2300		6,600 (3000)		5,300 (2400)		3,500 (1600)
318 Heavy Duty	1200	14	28,500 (12900)	17	18,100 (8200)	20	11,200 (5100)
	1800	(356)	25,200 (11500)	(432)	16,000 (7300)	(508)	11,700 (5300)
	2100		24,100 (10900)		15,300 (6900)		13,300 (6000)

Hydraulic Remote Start

WPT® Power's new Monotonic Remote Start is the perfect tool for any equipment whose engine struggles during machine startup. With the "push of a button", our Remote Start will feather any fluid-actuated clutch as needed to accelerate the most demanding loads. It eliminates the need for bump starting heavy loads which can stall or damage the engine.

This product was designed and tested alongside seasoned experts in the Off-Highway Equipment industry, is patent pending, and was specifically engineered for applications with very high inertia loads. Our product offering is perfect for anyone from the OEM to the end user, is field installable, comes in complete kits and with WPT Power's immaculate reputation for customer service.



- Capable of starting the industry's toughest loads
- Maximizes the clutch's wear component life
- Works with any engine with an SAE J1939 connection
- Optimizes engine behavior for smooth operation
- Eliminates operator-related engagement abuse

Pump Drive

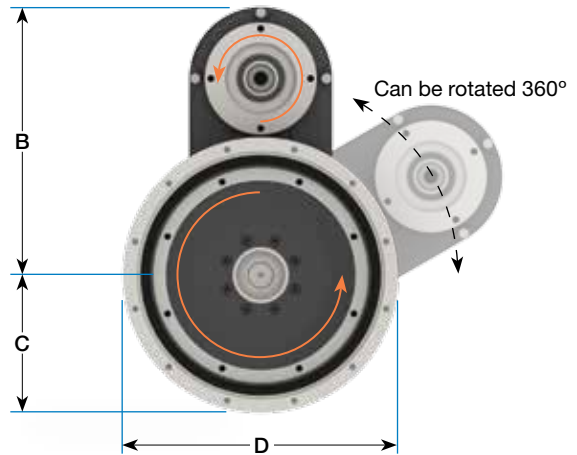
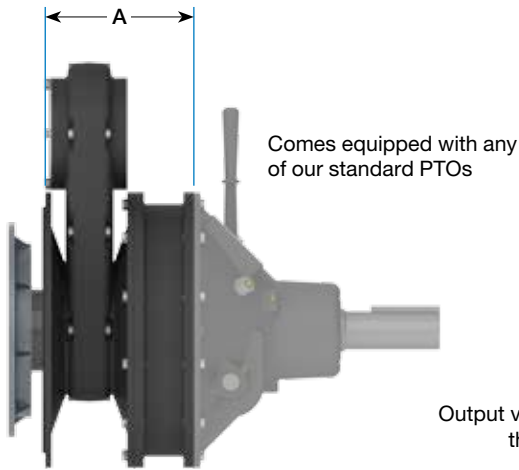


Mounted between the power take-off and the engine, the WPT® Power Pump Drive (PPD) is a rugged and versatile unit providing for multiple live or clutched pumps. As the PPD is self-contained, no external lubrication is required. Flexible couplings on the input side dampen torsional vibrations and are standard on all WPT PPDs.

The Power Pump Drive can be provided with a variety of SAE engine housings, power take-off clutches, SAE pump drives and accessories. All units mount to standard SAE flywheel housings and provide up to 8 pump mounting faces. An internal heat exchanger can be added as required.



Pump Drive

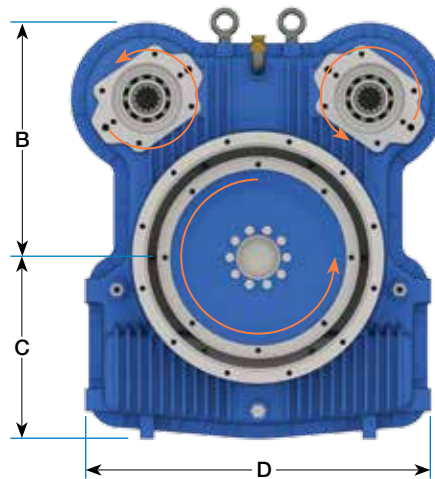
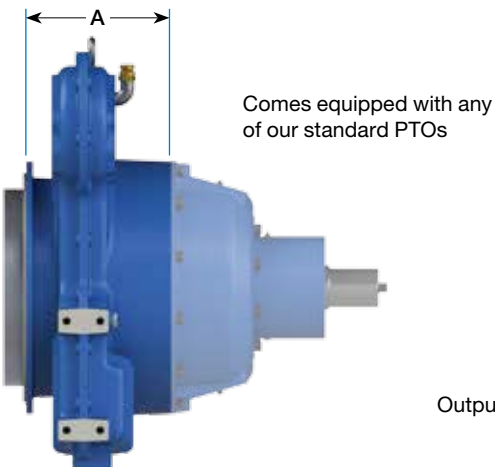


WPD-03					
SAE Input	SAE Output	A	B	C	D
#5 - 7 1/2"	#4M - 10"	8 5/8 (218.5)	15 1/2 (393.0)	7 (178.0)	15 7/8 (404.0)
#4 - 10"				7 15/16 (202.0)	
#3 - 11 1/2"				8 7/8 (225.5)	

Maximum Input Speed r/min	Maximum Input Torque lbf-ft (N·m)	Head hp (kW) ¹	Head Ratio	Weight lb (kg)
3000	230 (310)	58 (43)	1 : 1	110 (50)
	413 (560)			
	413 (560)			

Available in SAE B (spline only)

¹ Rated at maximum input speed.



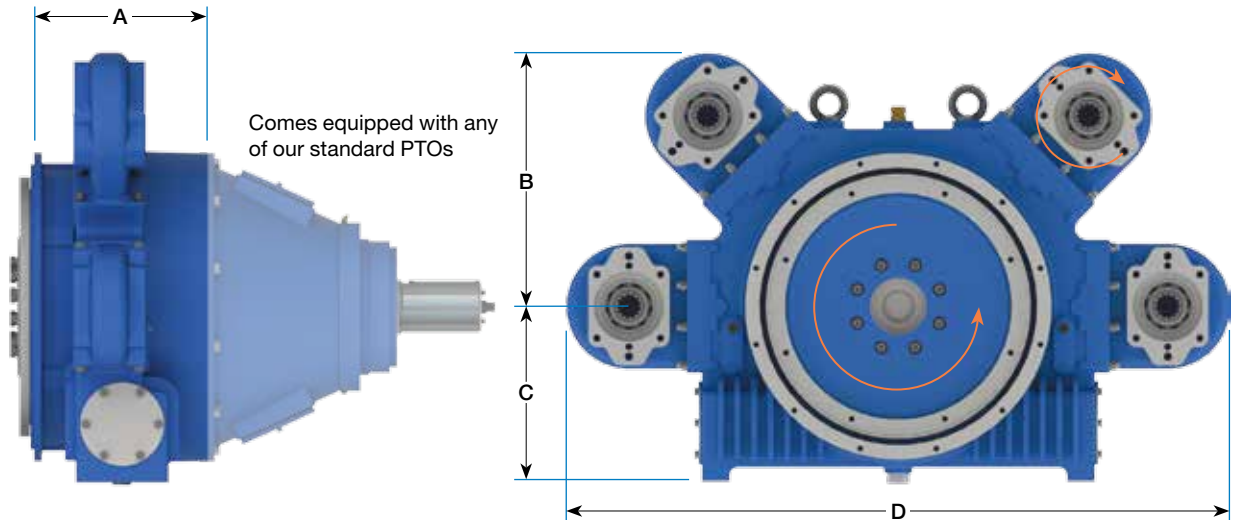
WPD-00					
SAE Input	SAE Output	A	B	C	D
#3, 2# - 11 1/2"	#3M - 11 1/2"	10 1/8 (257.0)	16 5/8 (422.0)	12 13/16 (325.0)	24 7/16 (620.0)
#1 - 14"		11 1/8 (282.0)			

Maximum Input Speed r/min	Maximum Input Torque lbf-ft (N·m)	Total Head hp (kW) ¹	Single Head hp (kW) ¹	Head Ratio	Weight lb (kg)
2600	1475 (2000)	235 (175)	160 (120)	1 : 1	430 (195)

Available in SAE B, B-B, C, D, E (spline only)

¹ Rated at maximum input speed.

Pump Drive



Comes equipped with any of our standard PTOs

Output view from the Y side

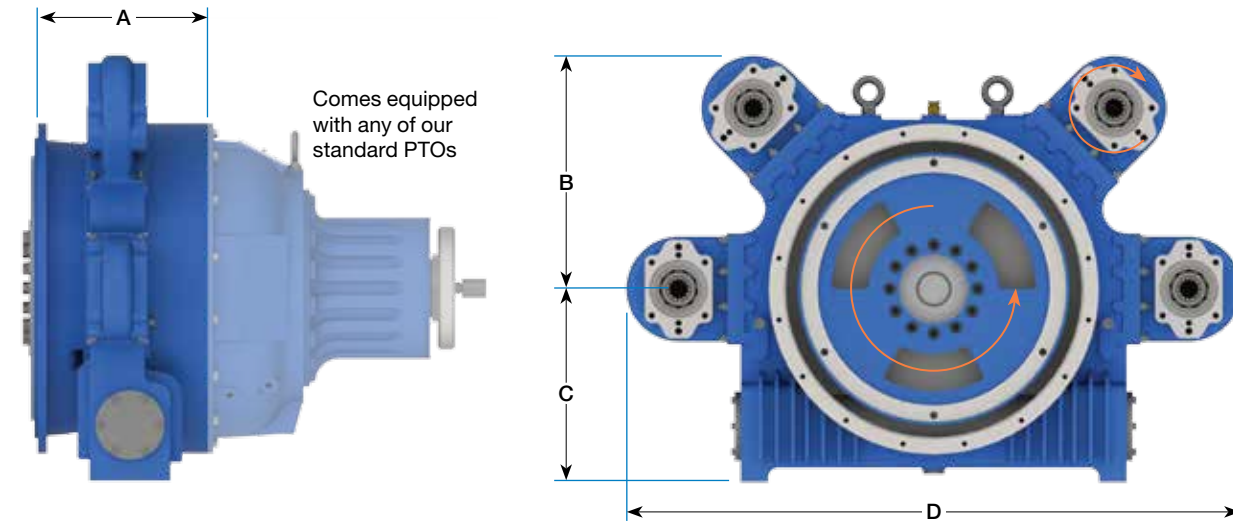
WPD-01					
SAE Input	SAE Output	A	B	C	D
#1 - 14"	#1M - 14"	12 3/16 (310.0)	18 (456.5)	12 7/16 (315.0)	47 1/8 (1197.0)

Maximum Input Speed r/min	Maximum Input Torque lb-ft (N-m)	Total Head hp (kW) ¹	Single Head hp (kW) ¹	Head Ratio ²	Weight lb (kg)
2200	2470 (3350)	400 (300)	160 (120)	1 : 1 1 : 0.88	770 (350)

Available in SAE B, B-B, C, D, E (spline only)

¹ Rated at maximum input speed.

² Head ratios other than 1:1 are speed increasing



Comes equipped with any of our standard PTOs

Output view from the Y side

WPD-02					
SAE Input	SAE Output	A	B	C	D
#1 - 14"	#0M - 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)			

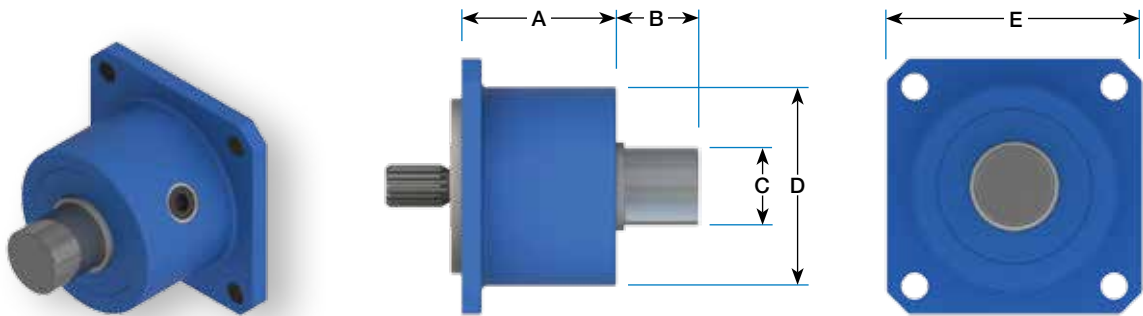
Maximum Input Speed r/min	Maximum Input Torque lb-ft (N-m)	Total Head hp (kW) ¹	Single Head hp (kW) ¹	Head Ratio ²	Weight lb (kg)
2100	4650 (6300)	535 (400)	235 (175)	1 : 0.95	1170 (530)

Available in SAE B, B-B, C, D, E (spline only)

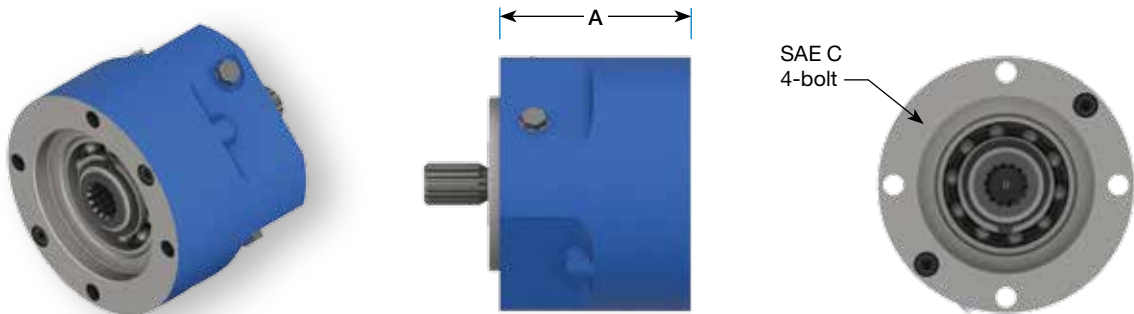
¹ Rated at maximum input speed.

² Head ratios other than 1:1 are speed increasing

Accessories



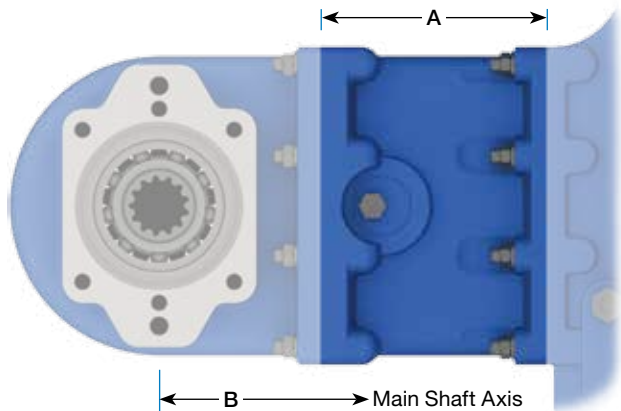
Head PTO	A	B	C	D	E	Maximum Side Load lbf (kgf)	Maximum Input Torque lbf-ft (Nm)
	3.52 (89.5)	1.87 (47.5)	1.772 (45.00)	3.54 (90.0)	5.79 (147.0)	1620 (734)	370 (500)



Oil Actuated Clutch	A	Operating Pressure lbf/in ² (bar)	115 (8)	232 (16)
	5.47 (139.0)	Torque lbf-ft (Nm)	196 (266)	392 (531)



Attention!
Head rotation
direction is
reversed when
extension is
used.



Head Extension	Model	A	B
	WPD-01	6.46 (164.0)	25.55 (649.2)
	WPD-02	7.48 (190.0)	29.42 (740.0)

Application Data Sheet 1 of 2

WPT Power Corporation
ATTN: Applications Dept.
P.O. Box 8148
Wichita Falls, TX 76307

940-761-1971
940-761-1989 Fax
applications@WPTpower.com
www.WPTpower.com

Please provide the following information to help ensure the most accurate and competitive offer for your applications.

Name / Title: _____
 Company Name: _____
 Address: _____
 City / State / Zip: _____

Email: _____
 Phone: _____
 Country: _____
 Special Instructions: _____

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

Customer Information

Machine Type & Model : _____
 Quantity (per year) : _____

Engine

(Please enclose curves)

Make & Model : _____
 Application Power : _____ Power @ _____ r/min
 Maximum Engine Ratings : _____ Torque @ _____ r/min
 : _____ Power @ _____ r/min
 : _____ r/min

Installation

SAE Housing Size | SAE Flywheel Size

Engine-Mounted : _____ | _____
 Remote-Mounted : _____

In-Line (Shaft-to-shaft)

Belt Drive

Type of Belt Tensioner : Hydraulic / Pneumatic / Spring / Mechanical
 (Please circle one)

L1 : _____
 L2 : _____
 X Distance : _____
 D : _____
 Belt Type : _____

(Example: 5V-10 belts)

Pump Information (View from Z side)

Pump Type** | Absorbed Power

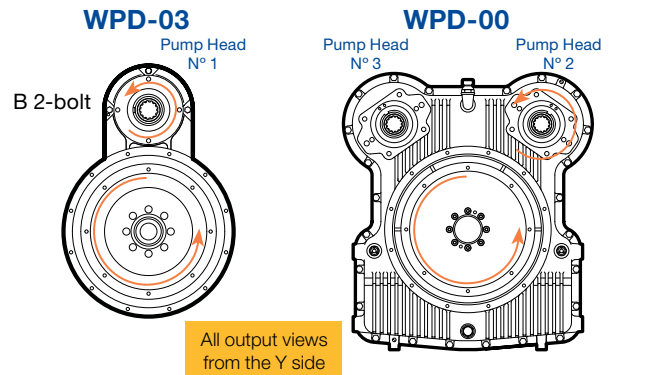
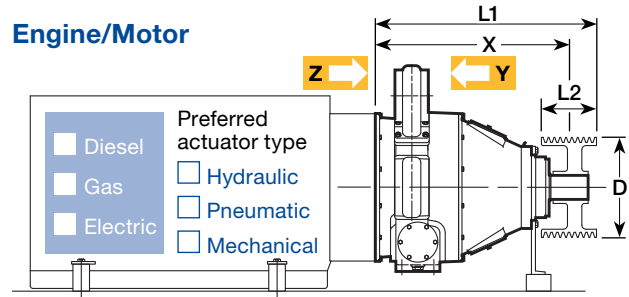
Head 1: SAE* _____ : _____ | _____
 Head 2: SAE* _____ : _____ | _____
 Head 3: SAE* _____ : _____ | _____
 Head 4: SAE* _____ : _____ | _____

Duty Cycle (View from Z side)

% of Time | % of Power

Head 1: : _____ | _____
 Head 2: : _____ | _____
 Head 3: : _____ | _____
 Head 4: : _____ | _____

Engine/Motor



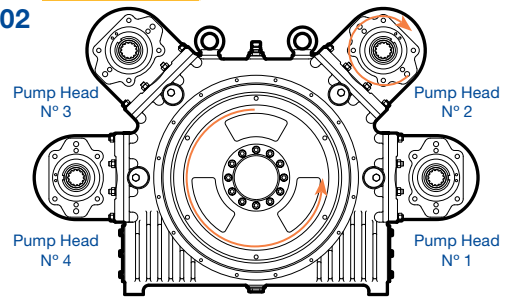
WPD-01, -02

WPD-01

1 : 1
 .88 : 1

WPD-02

.95 : 1



Pump Information (View from Y side)

Pump Type** | Absorbed Power

Head 1: SAE* _____ : _____ | _____
 Head 2: SAE* _____ : _____ | _____
 Head 3: SAE* _____ : _____ | _____
 Head 4: SAE* _____ : _____ | _____

Duty Cycle (View from Y side)

% of Time | % of Power

Head 1: : _____ | _____
 Head 2: : _____ | _____
 Head 3: : _____ | _____
 Head 4: : _____ | _____

*Splined only: SAE B (2 holes), SAE B-B (2 holes), SAE C (2 or 4 holes), SAE D (4 holes), SAE E (4 holes)

**Piston, Vane, Gear, Plunger, Centrifugal, etc.

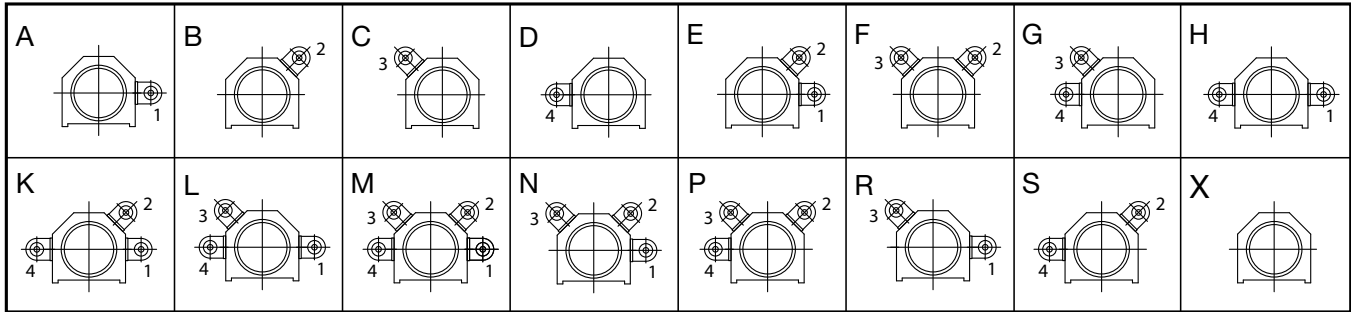
Application Data
Sheet 2 of 2

WPT Power Corporation
ATTN: Applications Dept.
P.O. Box 8148
Wichita Falls, TX USA 76307

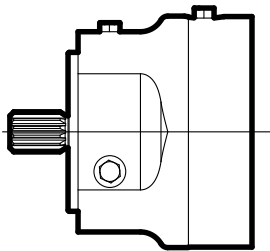
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940-761-1989 Fax
applications@WPTpower.com
www.WPTpower.com

Please provide the following information to help ensure the most accurate and competitive offer for your applications.

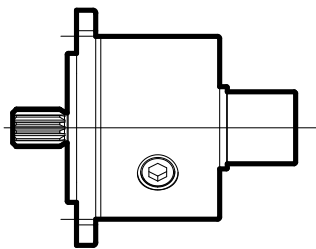
View from Y side



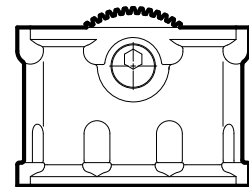
Disconnect Clutch
Oil Actuated Clutch



Head PTO



Head Extension



Attention!
Head rotation direction is reversed when extension is used.

Accessories (View from Z side)

Disconnect Clutch	Head PTO	Head Extension**
Head 1: _____	_____	_____
Head 2: _____	_____	_____
Head 3: _____	_____	_____
Head 4: _____	_____	_____

*When PTO is used to drive pulley, specify pulley type and effective diameter.
**When head extension is used, the pump head rotation is reversed.

Accessories (View from Y side)

Disconnect Clutch	Head PTO	Head Extension**
Head 1: _____	_____	_____
Head 2: _____	_____	_____
Head 3: _____	_____	_____
Head 4: _____	_____	_____

*When PTO is used to drive pulley, specify pulley type and effective diameter.
**When head extension is used, the pump head rotation is reversed.

$$kW = hp * 0.746$$

$$hp = \text{gal/min} * \text{lbf/in}^2 / 1714$$

$$hp = \text{r/min} * \text{lbf-ft} / 5252$$

$$kW = \text{l/min} * \text{bar} / 600$$

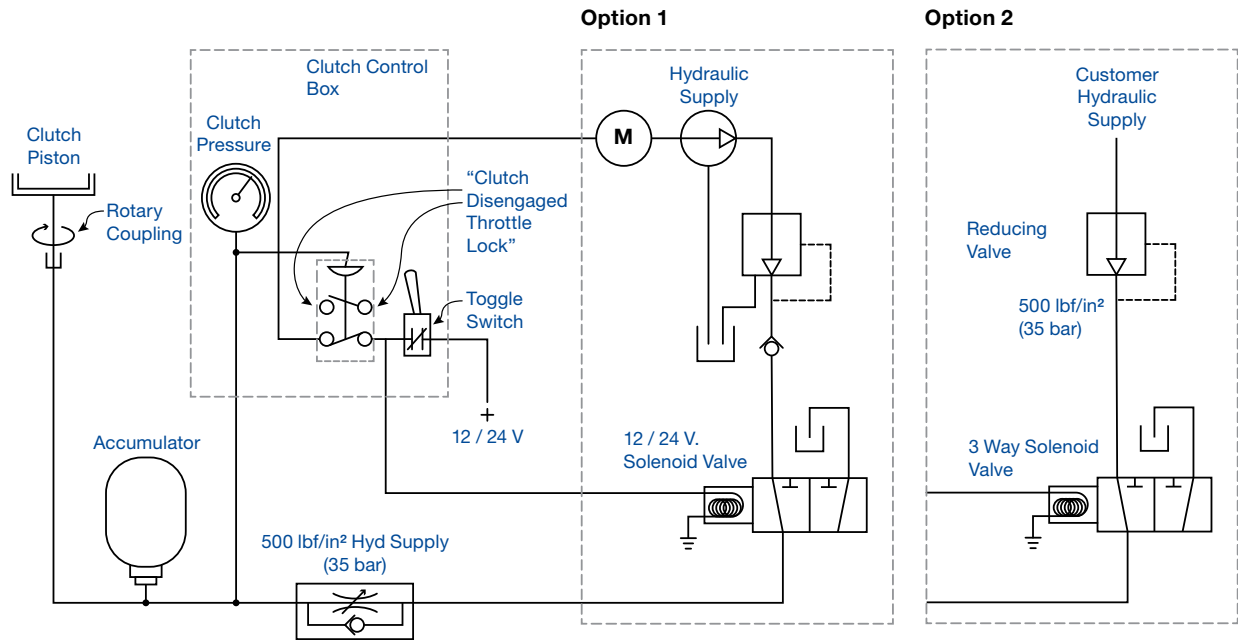
$$kW = \text{r/min} * \text{N}\cdot\text{m} / 9549$$

Office Use Only

Remote Actuation Schematics

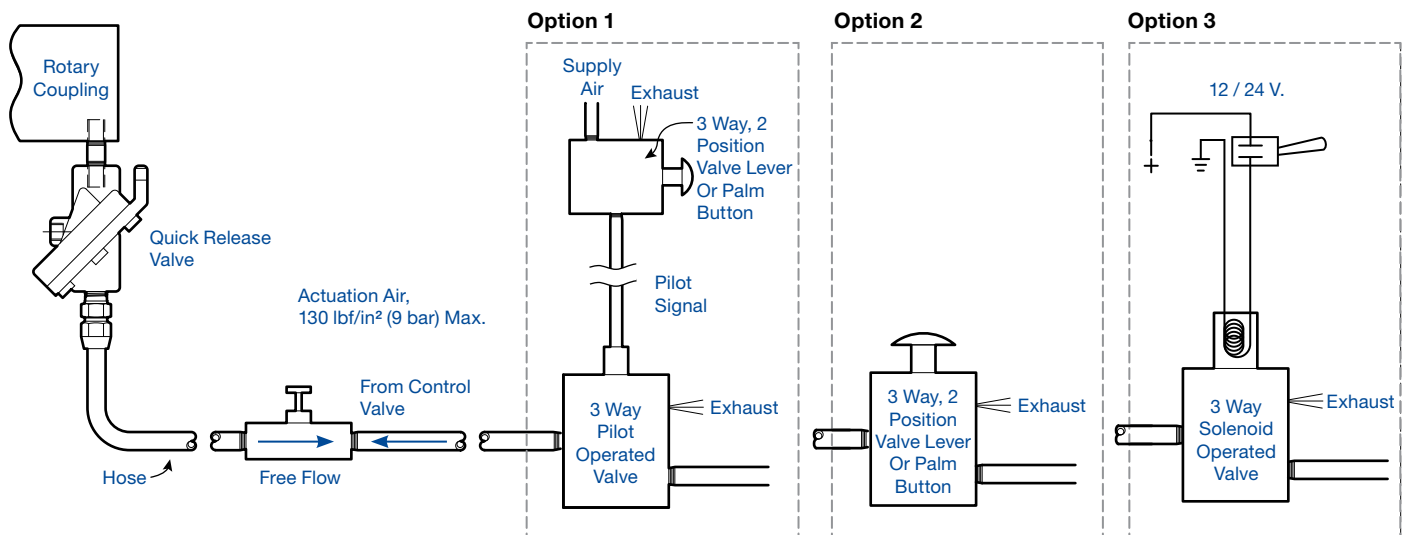
Hydraulic Actuation

See our new patent pending remote controller on page 14.



This hydraulic schematic represents two possible methods for remote actuation control. Many possibilities beyond these examples can be configured to your specific needs.

Air Actuation



This hydraulic schematic represents three possible methods for remote actuation control. Many possibilities beyond these examples can be configured to your specific needs.

Global resource network

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