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The Funk Promise

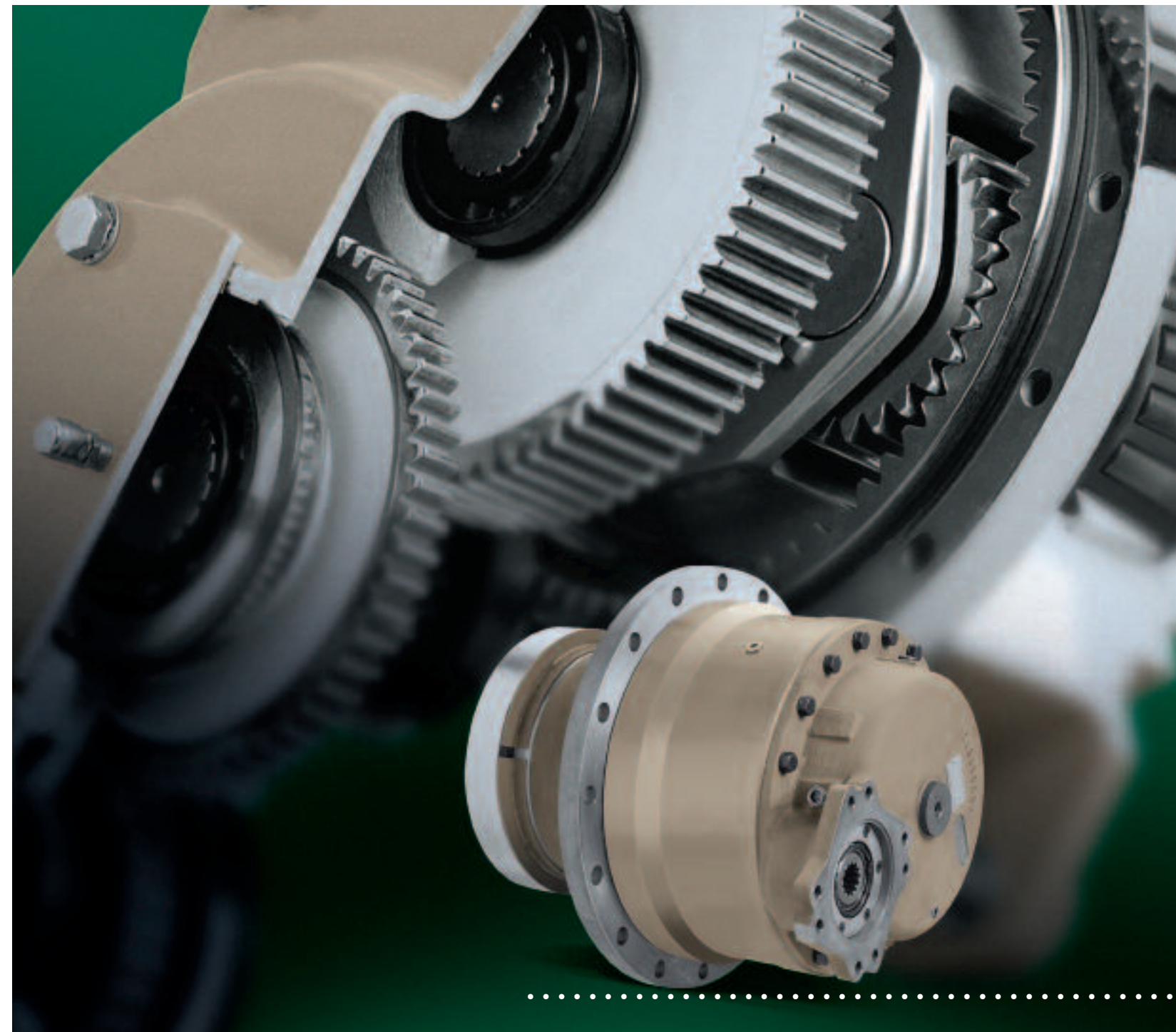
Funk Manufacturing offers proven products with over 25 years of OEM and off-road experience. To satisfy OEM requirements, we have a strong commitment to the newest design technology, stringent testing, and expert application engineering. We also offer dedicated OEM service and long-term aftermarket support to ensure prompt response and problem solving.

At Funk, we promise on-time delivery, as well as quick response to your service and warranty questions. To see the value we can add to your equipment, call us today at 1-800-844-1337.

FUNK
MANUFACTURING
A John Deere Company

*Our full line
of planetary
gear drives.*

EIGHT DEPENDABLE MODELS.



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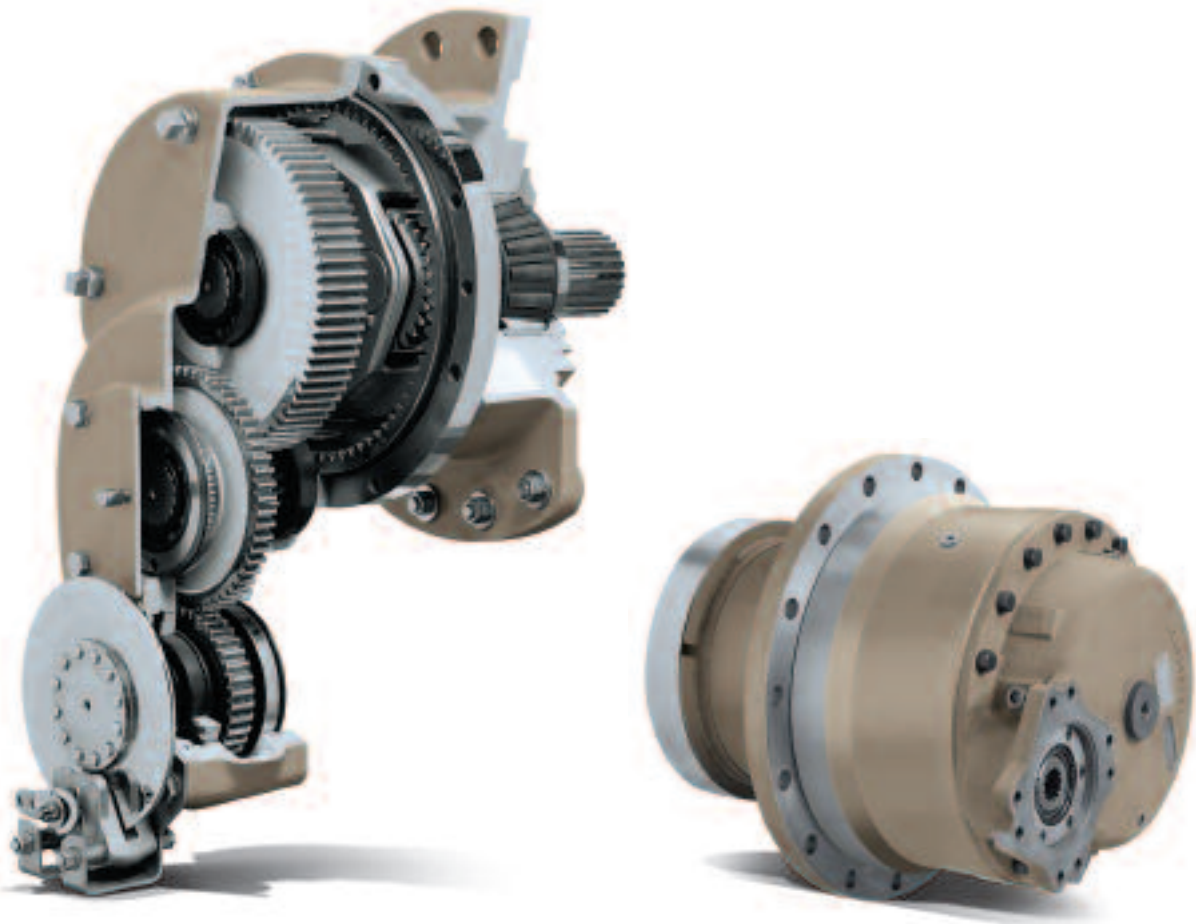
www.JohnDeere.com/jdpower

DKD1503 Litho in U.S.A. (05-01)

Your source for reliable Planetary Drives.

Eight models. Three types. At Funk, we offer a complete line of planetary drives for OEMs in the ag, construction, manufacturing, marine, mining, and petroleum industries.

Whether you need reducer drives, swing drives, or track drives, you can count on Funk to deliver durability, performance, and superior engineering. Our drive designs include various ratios of input gear reduction sets, along with single and multiple combinations of center section planetary gears that drive power through output arrangements to accommodate your reducer, swing, and track drive applications. Years of design research and practical application have given us an edge in the planetary drive market.



Planetary Drive Specifications

Drive type	Series model	Output torque, lb-ft (Nm)		Ratio range	Input speed, max, rpm (1)	Maximum radial load, lbs. (Kgf) (2)	Maximum input power, hp (kW)	Approx. weight, lbs. (kg) (3)
		Intermittent	Continuous					
Speed reducer	F9R	9,500 (12,880) (4)	6,000 (8,135)	3.27 - 117:1	2800	31,500 (14,287)	36 (27)	220-400 (100-181)
	F12R	12,500 (16,948)	7,500 (10,168)	7.3 - 119:1	2800	31,500 (14,287)	48 (35)	200-270 (91-122)
	F25R	25,000 (33,895)	13,800 (18,710)	7.5 - 122:1	2800	63,000 (28,570)	95 (71)	475-580 (215-263)
	P25R	25,000 (33,895)	17,000 (23,049)	45 - 104:1	4000	—	130 (97)	315-393 (143-178)
	P40R	40,000 (54,232)	26,000 (35,251)	60 - 166:1	4000	—	165 (123)	711-911 (322-413)
	P65R	65,000 (88,127)	42,000 (56,944)	51 - 179:1	4000	—	185 (138)	864-1004 (392-455)
	P120R	120,000 (162,696)	65,000 (88,127)	64 - 194:1	4000	—	225 (168)	1417-1450 (643-658)
	P200R	200,000 (271,160)	105,000 (142,359)	158 - 309:1	4000	—	325 (242)	2313-2580 (1049-1170)
Swing	F12S	7,500 (10,168)	—	7.3 - 119:1	2800	46,000 (20,862)	48 (35)	230-300 (104-136)
	F25S	13,800 (18,710)	—	7.5 - 122:1	2800	63,000 (28,570)	95 (71)	630-710 (286-322)
	P25S	17,000 (23,049)	—	45 - 104:1	4000	30,000 (13,605)	130 (97)	465-543 (211-246)
	P40S	27,000 (36,607)	—	60 - 166:1	4000	80,000 (36,281)	165 (123)	1133-1333 (514-605)
	P65S	43,000 (58,299)	—	51 - 179:1	4000	90,000 (40,816)	185 (138)	1447-1587 (656-720)
	P120S	80,000 (108,464)	—	64 - 194:1	4000	150,000 (68,027)	225 (168)	2017-2077 (915-942)
Track	P25T	25,000 (33,895)	17,000 (23,049)	45 - 104:1	4000	60,000 (27,211)	130 (97)	439-517 (199-234)
	P40T	40,000 (54,232)	26,000 (35,251)	60 - 166:1	4000	80,000 (36,281)	165 (123)	1003-1143 (455-518)
	P65T	65,000 (88,127)	42,000 (56,944)	51 - 179:1	4000	110,000 (49,887)	185 (138)	1279-1419 (580-644)
	P120T	120,000 (162,696)	65,000 (88,127)	64 - 194:1	4000	230,000 (104,308)	225 (168)	2011-2044 (912-927)

(1) Maximum input speed related to ratio and maximum output speed.

(2) Maximum radial load placed at optimum load position.

(3) Weight varies with configuration and ratio selected.

(4) Requires tapered roller planet bearings (not available with all ratios).

Planetary Gear Reductions

Funk offers a wide selection of planetary gear drives to meet the needs of your design. The Funk tradition of quality engineering and manufacturing is found in each planetary drive we produce.

Our regional sales managers will assist you in analyzing our planetary drives and selecting the one that fits the needs of your application.

We offer eight basic models of planetary drives. Each series provides unique benefits that have been developed through years of design research and practical application.

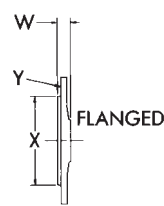
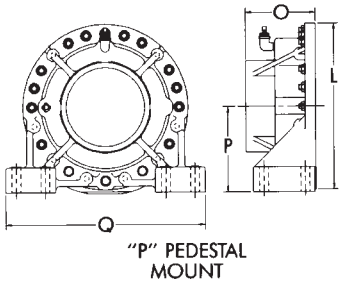
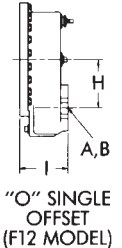
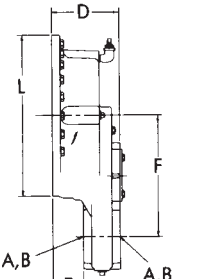
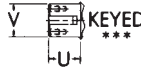
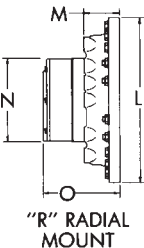
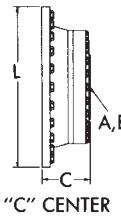
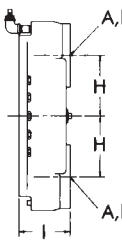
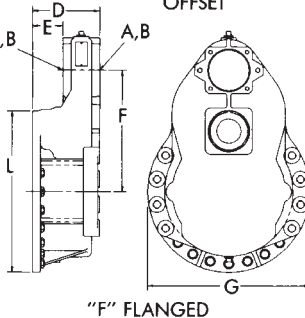
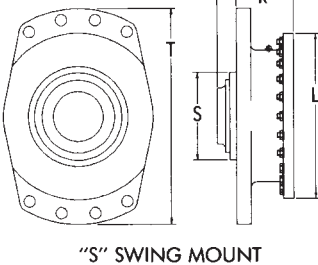
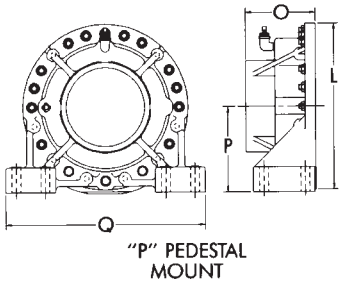
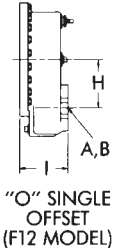
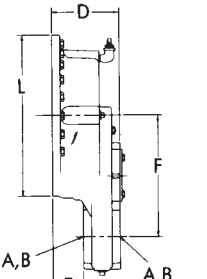
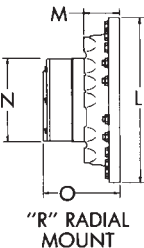
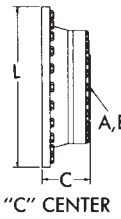
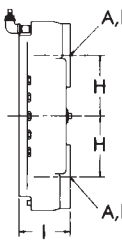
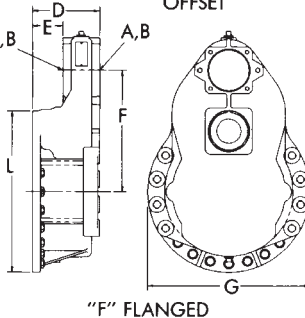
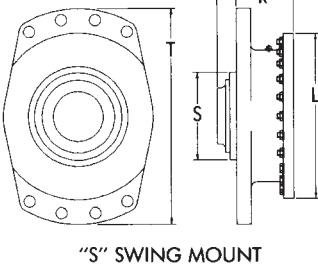
NOTE: All data and specifications subject to change without notice or obligation. Application and installation are subject to review by Funk Manufacturing.

Some typical applications of Funk planetary drives include conveyers, cranes, crawlers, excavators, road rollers, track vehicles, winches, and many others in the agriculture, construction, industrial, marine, mining, and petroleum industries.

 **WARNING VEHICLE RUNAWAY HAZARD**

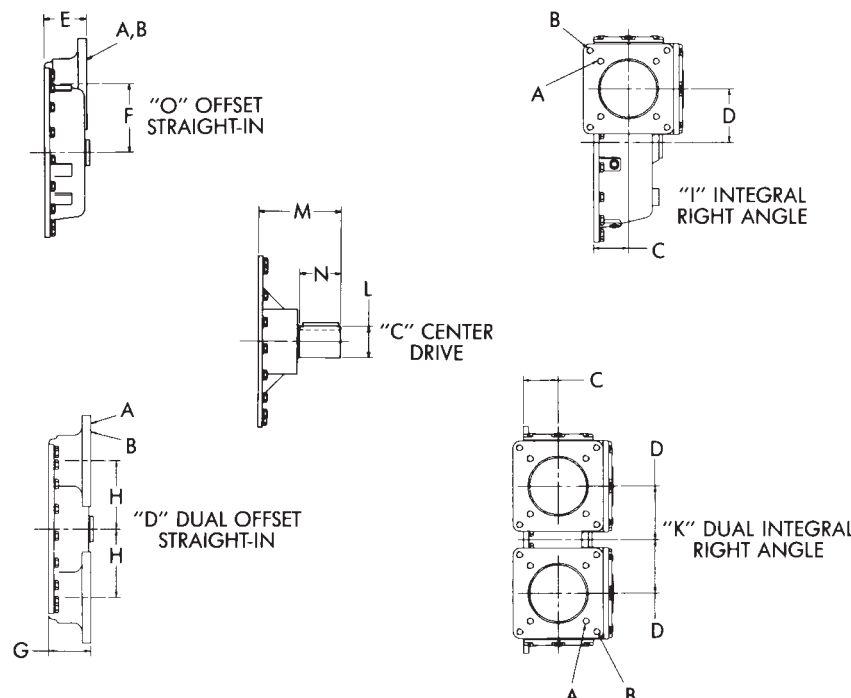
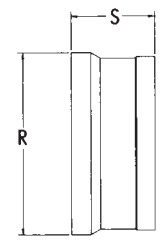
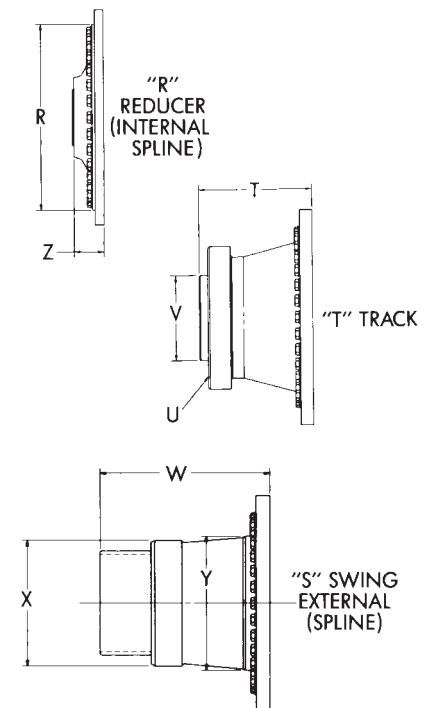
Avoid serious or fatal injury. This transmission is not a braking system. Install it only if there is a braking system capable of stopping vehicle with dead engine, disengaged transmission, or loss of hydrostatic retardation. Otherwise, vehicle may roll freely, resulting in loss of control.

F Series Input-Output Options

Model	Output Shafts			Output Configurations					Center Section	Input Configurations																Product Information																																			
F12 and F25																																										F9 Model Output Rotation – same as input on all models Gear Ratios One Stage – 3.27:1, 4.89:1 Two Stage – 10.7:1, 16.0:1, 23.9:1 Three Stage – 35.0:1, 52.3:1, 78.2:1, 116.9:1 Hydraulic Motor Mounting – SAE “B,” “C,” or “D” 2- or 4-bolt Input Spline – 13T, ¹⁶/₃₂P 14T, ¹²/₂₄P 13T, ⁸/₁₆P, 30° P.A. Output Shaft – splined – 23T, ⁸/₁₆P, 30° P.A. Output Shaft – keyed – 3" (Nom.) Dia. ⁵/₈" key width F12 Model O Input Configuration Output Rotation – opposite input Gear Ratios – 7.34:1, 10.76:1, 13.15:1, 24.14:1 Hydraulic Motor Mounting – SAE “B” 2- or 4-bolt, or SAE “C” 4-bolt Input Spline – 13T, ¹⁶/₃₂P 14T, ¹²/₂₄P, 30° P.A. Output Shaft – splined – 29T, ⁸/₁₆P, 30° P.A. L and F Input Configurations Output Rotation – opposite input Gear Ratios – 19.73:1, 28.94:1, 36.22:1, 44.25:1, 53.12:1, 64.95:1, 81.22:1, 119.21 Hydraulic Motor Mounting – SAE “B” or “C,” 2- or 4-bolt Input Spline – 13T, ¹⁶/₃₂P 14T, ¹²/₂₄P, 30° P.A. Output Shaft – splined – 29T, ⁸/₁₆P, 30° P.A.																			
																																																													
																																																													
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Model	Outputs	Inputs	Dimensions — Inches (Millimeters)																																		
F9	R	C	A Standard	B* Optional	C	D	E	F	G	* NOTE: Optional input pads may alter dimensions shown. Two-bolt SAE mounting pads available on some styles. ** One pad blocked on “O” single offset input configuration. *** Not available on F12 models.																											
			SAE “C” 1/2" - 13 UNC 4 PLCS. ON 6.375 (162) B.C.D.	SAE “D” 3/4" - 10 UNC 4 PLCS. ON 9.000 (228.6) B.C.D.	14.0 (356)	3.75 (95.3)	One Stage W/SAE “D” PAD 14.88 (378) W/SAE “C” PAD 15.25 (387)	Two Stage W/SAE “D” PAD 18.13 (460) W/SAE “C” PAD 18.5 (470)	Three Stage W/SAE “D” PAD 21.38 (543) W/SAE “C” PAD 21.75 (552)	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y										
F12	R, S	F, L, O	SAE “C” 1/2" - 13 UNC 4 PLCS. ON 6.375 (162) B.C.D.	SAE “B” 1/2" - 13 UNC 4 PLCS. ON 5.000 (127) B.C.D.	—	7.13 (181)	3.00 (76)	12.0 (305)	14.5 (368)	6.0 (152)	5.94 (151)	0.5 (12.7)	14.0 (356)	14.0 (356)	3.18 (81)	7.5 (191)	7.18 (182)	—	—	5.18 (132)	9.25 (235)	17.0 (432)	3.75 (95.3)	—	1.5 (37.8)	6.25 (159)	.78 Dia. (20) 10 holes on 8.75 (222) B.C.D.										
F25	P, R, S	C, D, F L, O	SAE “C” 1/2" - 13 UNC 4 PLCS. ON 6.375 (162) B.C.D.	SAE “D” 3/4" - 10 UNC 4 PLCS. ON 9.000 (228.6) B.C.D.	Two Stage 6.63 (168) Three Stage 9.31 (237)	8.02 (204)	3.53 (90)	15.0 (381)	20.0 (508)	7.5 (191)	6.06 (154)	1.77 (45)	18.88 (479)	19.75 (502)	4.0 (102)	10.0 (254)	9.0 (229)	10.25 (260)	22.12 (562)	6.63 (168)	10.5 (267)	25.88 (657)	3.75 (95.3)	3.998/3.997 (101.55/101.52)	1.5 (37.8)	10.62 (270)	1.03 Dia. (26.2) 10 holes on 13.188 (335) B.C.D.										

P Series Input-Output Options

Input Configurations												Center Section				Output Configurations						Product Information			
																						P25 Model Hydraulic Motor Mounting – SAE “C” 2- or 4-bolt Input Spline – 14T ¹²/₂₄ 30° P.A. “R” Output Spline – 28T ⁸/₁₆ 30° P.A. “S” Output Spline – 39T ⁸/₁₆ 30° P.A. Major Dia. Fit P40 Model Hydraulic Motor Mounting – SAE “D” or “E” 4-bolt Input Spline – 13T ⁸/₁₆ 30° P.A. “R” Output Spline – 40T ⁸/₁₆ 30° P.A. “S” Output Spline – 54T ⁸/₁₆ 30° P.A. P65 Model Hydraulic Motor Mounting – SAE “D” or “E” 4-bolt Input Spline – 13T ⁸/₁₆ 30° P.A. “R” Output Spline – 42T ⁸/₁₆ 30° P.A. “S” Output Spline – 56T ⁸/₁₆ 30° P.A. P120 Model Hydraulic Motor Mounting – SAE “D” or “E” 4-bolt Input Spline – 13T ⁸/₁₆ 30° P.A. “R” Output Spline – 48T ⁸/₁₆ 30° P.A. “S” Output Spline – 60T ⁸/₁₆ 30° P.A. P200 Model Hydraulic Motor Mounting – SAE “D” or “E” Input Spline – 13T ⁸/₁₆ 30° P.A. “R” Output Spline – 48T ⁶/₁₂ 30° P.A. All P Series Models Rotation Output Rotation – same as input on C, I, & K input configurations Output Rotation – opposite input on D & O input configurations Gear Ratios Consult Funk Manufacturing for available ratios. Lubrication Splash Lubrication Recommended lubricant – EP Gear Oil meeting MIL-L-2105C or API Classification GL5			
Model	Outputs	Inputs	Dimensions — Inches (Millimeters) * May vary with some ratios																						
P25	R, S, T	C, D, I, O	A	B	C	D	E	F	G	H	L	M	N	R	S*	T	U	V	W	X	Y	Z			
			SAE “C” 1/2 - 13 UNC 4 PLCS. ON 6.375 (162) B.C.D.	SAE “C” 5/8 - 11 UNC 4 PLCS. ON 7.125 (181) B.C.D.	3.45 (87.5)	3.59 (91.2)	5.50 (140)	4.24 (107.7)	6.75 (171.5)	6.00 (152.4)	—	—	—	13.375 (339.7)	7.50 (190.5)	9.38 (283)	5/8 - 18 UNF 24 PLCS. ON 10.25 (260) B.C.D.	8.50 (216)	10.50 (267)	11.00 (279.4)	13.375 (339.7)	2.88 (73.2)			
P40	R, S, T	D, I, O	SAE “D” 3/4 - 10 UNC 4 PLCS. ON 9.00 (228.6) B.C.D.	SAE “E” 3/4 - 10 UNC 4 PLCS. ON 12.50 (317.5) B.C.D.	4.25 (108)	5.59 (142)	4.88 (124)	5.59 (142)	4.88 (124)	7.90 (201)	—	—	—	20.50 (521)	8.48 (215.4)	10.94 (278)	3/4 - 10 UNC 24 PLCS. ON 12.50 (317.5) B.C.D.	10.50 (267)	18.44 (468.4)	14.00 (355.6)	15.50 (393.7)	3.62 (91.9)			
P65	R, S, T	C, I, O	SAE “D” 3/4 - 10 UNC 4 PLCS. ON 9.00 (228.6) B.C.D.	SAE “E” 3/4 - 10 UNC 4 PLCS. ON 12.50 (317.5) B.C.D.	4.25 (108)	5.59 (142)	4.88 (124)	5.59 (142)	—	—	3.63 (92)	9.5 (241)	4.75 (121)	Center 21.00 (533.4) “R” 21.50 (546.1)	9.63 (244.6)	13.13 (333.5)	1 1/4 - 7 UNC 18 PLCS. ON 13.779 (350) B.C.D.	9.85 (250)	20.72 (526)	14.50 (368)	15.50 (393.7)	3.66 (93)			
P120	R, S, T	I, K, O	SAE “D” 3/4 - 10 UNC 4 PLCS. ON 9.00 (228.6) B.C.D.	SAE “E” 3/4 - 10 UNC 4 PLCS. ON 12.50 (317.5) B.C.D.	4.00 (102)	“I” 6.16 (156.5) “K” 7.25 (184.2)	9.13 (232)	6.16 (156.5)	—	—	—	—	—	23.25 (590.6)	11.00 (279.4)	16.7 (424)	7/8 - 9 UNC 32 PLCS. ON 19.50 (495) B.C.D.	17.00 (431.8)	22.62 (574.5)	15.00 (381)	16.00 (406.4)	5.50 (140)			
P200	R	L, K	SAE “D” 3/4 - 10 UNC 4 PLCS. ON 9.00 (228.6) B.C.D.	SAE “E” 3/4 - 10 UNC 4 PLCS. ON 12.50 (317.5) B.C.D.	“I” 4.50 (114.3) “K” 3.75 (95.3)	“I” 7.47 (189.8) “K” 6.00 (152.4)	—	—	—	—	—	—	—	27.00 (685.8)	13.00 (330.3)	—	—	—	—	—	—	5.44 (138)			