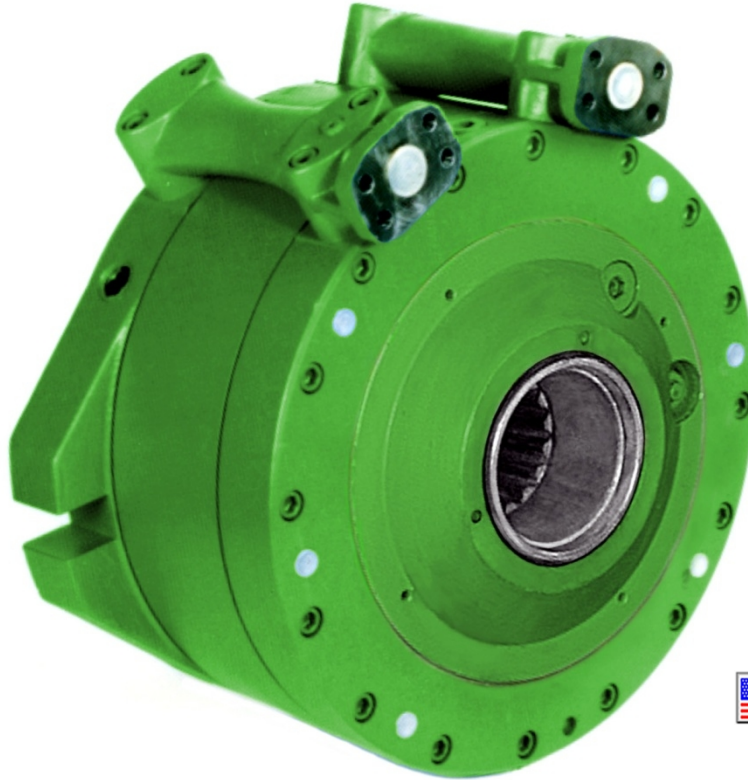


Titan Hydraulic Motor™

**HMD SERIES LOW SPEED, HIGH TORQUE,
RADIAL PISTON HYDRAULIC MOTORS**



FEATURES:

- INTERCHANGEABLE WITH HYDREX HYDRAULIC MOTORS (MADE BY FLENDER AND LATER BY HAGGLUNDS)
- MULTI-CAM LOBE DESIGN
- LARGE HOLLOW THRU-SHAFT
- 120 POWER STROKES PER REVOLUTION
- EXCEPTIONALLY QUIET RUNNING
- INTEGRAL TORQUE ARM AND COUPLING
- TANDEM MOUNTING CAPABILITY
- SUPERIOR LOW SPEED PERFORMANCE
- MULTIPLE MOUNTING CONFIGURATIONS
- VERY COMPACT
- WIDE RANGE OF ACCESSORIES
- DESIGNED FOR INDUSTRIAL DUTY APPLICATIONS
- OUTPUT TORQUE CAPACITY TO 155,000 LB. FT. INTERMITTENTLY; 124,000 LB. FT. CONTINUOUSLY

OPTIONS:

- HOLLOW THRU-SHAFT WITH SHRINK DISC
- SOLID OUTPUT SHAFT

ACCESSORIES:

- THRUST BEARINGS
- ENCODERS
- TORQUE ARMS
- FOOT BRACKETS
- MULT-DISC BRAKES
- BACKSTOPS
- CROSS-LINE RELIEF VALVES
- FLUID POWER GENERATORS AND CONTROL SYSTEMS
- PLANETARY TORQUE MULTIPLIERS WITH OUTPUT TORQUES TO 1,000,000 LB. FT. OR MORE

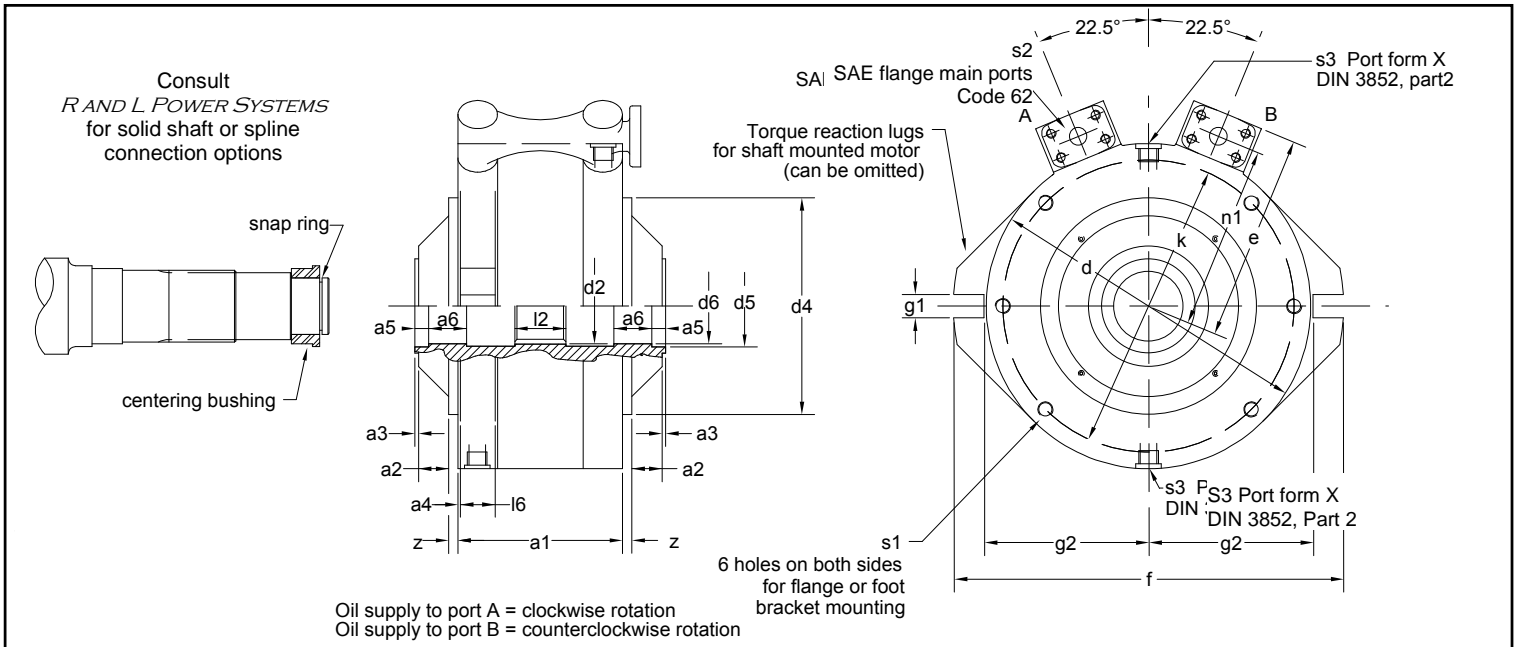
R & L POWER SYSTEMS

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www.randpowersystems.com

TITAN Hydraulic Motor™ • Direct Drive • Shaft Mounted • Hollow Through Shaft with Involute Splines



Dimensions (inches)

Type HMD	a1	a2	a3	a4	a5	a6	d	d2	d4	d5	d6	e	f	g1	g2	k	l2	l6	n1	s1 mm	s2 SAE Flange	s3 Motor Drain Ports	Z
345 410	6.89 8.27	1.26 1.02	.16 .16	.10 .10	.59 .71	1.85 2.09	13.58 16.14	3.15 3.74	9.06 10.83	3.43 4.02	3.15 3.74	8.66 10.31	16.34 19.29	.98 1.18	6.81 8.11	12.20 14.57	2.76 3.35	1.46 1.77	7.68 9.09	M16x22 M16x24	¾" 1"	G ½" G ¾"	.39 .39
455 515	9.25 10.43	1.10 1.18	.20 .24	.12 .12	.79 .79	2.36 2.52	17.91 20.28	4.13 4.72	12.20 13.78	4.41 5.04	4.13 4.72	11.61 13.15	21.46 24.21	1.30 1.50	8.98 10.16	16.14 18.31	3.74 4.13	1.97 2.17	10.24 11.57	M20x30 M20x35	1-¼" 1-½"	G ¾" G ¾"	.39 .39
575 635	11.61 12.80	1.14 1.26	.24 .28	.16 .16	.98 .98	2.95 3.15	22.64 25.00	5.11 5.91	15.16 16.73	5.51 6.30	5.12 5.91	14.45 15.63	26.97 29.72	1.65 1.81	11.34 12.52	20.47 22.64	4.72 5.12	2.56 2.76	12.80 13.98	M24x40 M24x45	1-½" 1-½"	G 1 G 1	.59 .59
690 745	13.78 14.72	1.38 1.65	.28 .28	.20 .20	1.18 1.18	3.35 3.54	27.17 29.33	6.30 6.69	19.31 19.69	6.69 7.09	6.30 6.69	16.93 18.03	32.28 35.04	1.97 2.17	13.62 14.69	24.61 26.57	5.71 6.10	2.87 3.15	15.20 16.30	M30x45 M30x50	1-½" 1-½"	G 1 G 1	.59 .59
910.1 910	18.11 18.11	2.05 2.05	.31 .31	.31 .31	1.38 1.38	4.33 4.33	35.83 35.83	8.27 8.27	27.56 27.56	8.66 8.66	8.27 8.27	21.65 21.65	43.31 43.31	2.76 2.76	17.95 17.95	32.87 32.87	7.48 7.48	3.94 3.94	19.80 19.80	M36x55 M36x55	2" 2"	G1-½" G1-½"	.59 .59
1100.1 1100	20.47 20.47	2.75 2.75	.39 .39	.31 .31	1.57 1.57	5.12 5.12	43.31 43.31	10.24 10.24	32.28 32.28	10.83 10.83	10.24 10.24	25.59 25.59	51.97 51.97	3.35 3.35	21.73 21.73	39.37 39.37	9.06 9.06	4.13 4.13	23.62 23.62	M42x65 M42x65	2" 2"	G1-½" G1-½"	.79 .79

Displacements, Torques, Pressures, Speed Ranges and Weights

Type: HMS	Displacement	Gal. / Rev.	Torque Ratings (1)			Max Pressure PSI	Speed Range RPM	Max. Speed RPM	Weight Lbs.
			Lb. Ft. / 1000 PSI	(2) Nominal (Lb. Ft.)	(3) Max (Lb. Ft.)				
345	77	0.33	1020	3690	4750	4650	0-160	200	230
410	120	0.52	1590	5755	7400	4650	0-160	200	385
455	177	0.77	2345	8480	10915	4650	0-150	180	520
515	253	1.10	3370	12170	15665	4650	0-150	175	730
575	353	1.53	4680	16965	21770	4650	0-140	150	1015
635	476	2.06	6315	22865	29355	4650	0-120	130	1345
690	614	2.65	8130	29500	37800	4650	0-100	110	1740
745	768	3.32	10210	36880	47490	4650	0-80	90	2160
910.1	1118	4.84	14830	53100	68950	4650	0-60	65	4015
910	1449	6.27	19200	69330	89300	4650	0-50	65	4015
1100.1	1924	8.33	25500	92165	118575	4650	0-40	45	6835
1100	2562	11.09	33950	122435	157850	4650	0-40	45	6835

- (1) Theoretical values
 (2) Based on 4000-PSI, S.F. 1.0
 (3) Maximum 10% of duty cycle