

# *Titan* Hydraulic Motor™

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



## **FEATURES:**

- INTERCHANGEABLE WITH FLENDER HYDRAULIC MOTORS
- 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 213.000 NM INTERMITTENTLY;  
166.000 NM CONTINUOUSLY

## **OPTIONS:**

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

## **ACCESSORIES:**

- THRUST BEARINGS
- SPEED ENCODERS / TACHOMETERS
- TORQUE ARMS (SINGLE OR DOUBLE – ENDED)
- FOOT BRACKETS
- INTEGRAL MULT-DISC BRAKES
- BACKSTOPS
- CROSS-LINE RELIEF VALVES
- FLUID POWER GENERATORS AND CONTROL SYSTEMS
- PLANETARY TORQUE MULTIPLIERS WITH OUTPUT  
TORQUES TO 1'359.000 NM. OR MORE

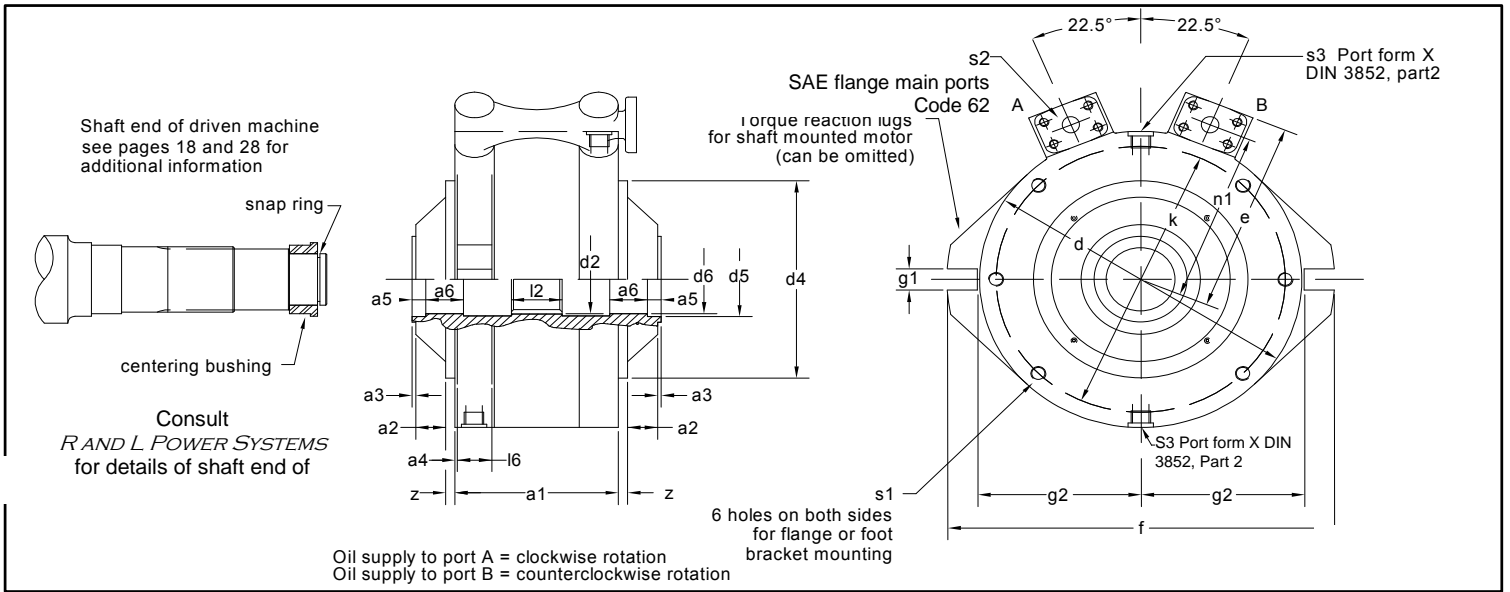
## **R & L POWER SYSTEMS**

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



## Dimensions (mm)

Type HMD	a1	a2	a3	a4	a5	a6	d	d2	d4 h8	d5	d6 H7	e	f	g1	g2	k	l2	l6	n1	s1	s2 SAE Flange	s3 Motor Drain Ports	Z
345	175	32	4	3	15	47	345	80	230	87	80	220	415	25	173	310	70	37	195	M16x22	¾"	G ½"	10
410	210	26	4	3	18	53	410	95	275	102	95	262	490	30	206	370	85	45	231	M16x24	1"	G ¾"	10
455	235	28	5	3	20	60	455	105	310	112	105	295	545	33	228	410	95	50	260	M20x30	1 ¼"	G ¾"	10
515	265	30	6	3	20	64	515	120	350	128	120	334	615	38	258	465	105	55	294	M20x35	1 ½"	G ¾"	10
575	295	29	6	4	25	75	575	130	385	140	130	367	685	42	288	520	120	65	325	M24x40	1 ½"	G 1"	15
635	325	32	7	4	25	80	635	150	425	160	150	397	755	46	318	575	130	70	355	M24x45	1 ½"	G 1"	15
690	350	35	7	5	30	85	690	160	465	170	160	430	820	50	346	625	145	73	386	M30x45	1 ½"	G 1"	15
745	374	42	7	5	30	90	745	170	500	180	170	458	890	55	373	675	155	80	414	M30x50	1 ½"	G 1"	15
910.1	460	52	8	8	35	110	910	210	700	220	210	550	1100	70	456	835	190	100	503	M36x55	2"	G 1 ¼"	15
910	460	52	8	8	35	110	910	210	700	220	210	550	1100	70	456	835	190	100	503	M36x55	2"	G 1 ¼"	15
1100.1	520	70	10	8	40	130	1100	260	820	275	260	650	1320	85	552	1000	230	105	600	M42x65	2"	G 1 ¼"	20
1100	520	70	10	8	40	130	1100	260	820	275	360	650	1320	85	552	1000	230	105	600	M42x65	2"	G 1 ¼"	20

## Displacements, Torques, Pressures, Speed Ranges and Weights

Type: HMD	Displacement	Torque Ratings (1)				Max Pressure (Bar)	Speed Range (RPM)	Max. Speed (RPM)	Weight (Kg.)
		(cm³ / Rev.)	(Liter / Rev.)	(Nm / Bar)	(2) Nominal (Nm)				
345	1257	1,26	20	5000	6400	320	0-160	200	100
410	1962	1,96	31	7800	9985	320	1-160	190	165
455	2893	2,89	46	11500	14720	320	1-150	185	220
515	4150	4,15	66	16500	21120	320	1-150	180	310
575	5786	5,77	92	23000	29440	320	0-140	175	430
635	7798	7,80	124	31000	39680	320	0-120	155	580
690	10062	10,1	160	40000	51200	320	0-100	120	750
745	12578	12,6	200	50000	64000	320	0-80	100	920
910.1	18317	18,3	290	72000	93000	350	0-60	75	1720
910	23740	23,7	375	94000	120000	320	0-50	60	1720
1100.1	31537	31,5	500	125000	160000	350	0-40	50	2900
1100	41987	42,0	665	166000	213000	320	0-32	40	2900

- (1) Theoretical values
- (2) Based on 250 Bar, S.F. 1.0
- (3) Maximum 10% of duty cycle