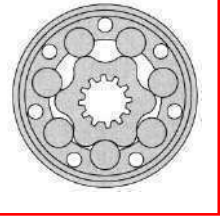




Model PHDM6



The PHDM6 hydraulic orbital motor is an innovative and efficient solution for converting fluid pressure and flow into torque and rotational motion in mobile and industrial applications. As a radial piston motor, it utilizes the principle of orbital motion to generate output power, which results in a compact, high-performing, and reliable rotary actuator.

In addition to its high performance, the PHDM6 hydraulic orbital motor is also characterized by its compact design, which makes it suitable for use in applications where space is limited. It features a high power-to-weight ratio, making it an ideal choice for mobile applications where weight is a critical factor.

In conclusion, the PHDM6 hydraulic orbital motor is a versatile, reliable, and high-performing rotary actuator that is ideal for a wide range of mobile and industrial applications. Its compact design, high efficiency, and smooth operation make it a popular choice for many engineers and operators in the heavy machinery industry.

MAIN SPECIFICATIONS

		PHDM6-800	PHDM6-1000	PHDM6-1250
Displacement	ml/r cc [in ³ /rev.]	759.6 [46.35]	949.5 [57.94]	1186.8 [72.42]
Max.Pressure.Drop	cont. bar [psi]	160 [2320]	160 [2320]	160 [2320]
	int. bar [psi]	180 [2610]	180 [2610]	180 [2610]
	peak. bar [psi]	210 [3045]	210 [3045]	210 [3045]
Max.Torque	cont. n.m [Lb.in]	1690 [14957]	2160 [19117]	2650 [23454]
	int. n.m [Lb.in]	1903 [16842]	2379 [21055]	2973 [26313]
	peak. n.m [Lb.in]	2220 [19648]	2774 [24551]	3469 [30703]
Max.Speed	cont. r/min	5-200	5-160	5-130
Max.Flow	cont. L/min [G/min]	160 [42.27]	160 [42.27]	160 [42.27]
Max.Output.Power	cont. kw [hp]	35 [46.93]	35 [46.93]	35 [46.93]
Weight	kg [lbs]	54 [119.0]	56 [123.4]	58 [127.9]

Intermittent operation the permissible values may occur for max. 10% of every minute

Peak load: the permissible values may occur for max. 1% of every minute



PERFORMANCE DATA

PHDM6 800(759.6cc)

		[435] 30	[725] 50	[1015] 70	[1522] 105	[1740] 120	[2030] 140	[2320] 160	[2610] 180	[PSI] BAR	Max cont.	Max int.
[GPM]	[2.64]	[2062] 233	[4336] 490	[6045] 683								
L/min	10	13	13	12								
	[3.96]	[2035] 230	[4292] 485	[6018] 680	[8895] 1005	[10134] 1145	[11860] 1340					
	15	20	20	19	17	16	15					
	[7.92]	[2628] 297	[4257] 481	[6000] 678	[8877] 1003	[10107] 1142	[11824] 1336	[14913] 1685	[17002] 1921			
	30	39	38	38	37	37	36	35	32			
	[11.89]	[2610] 295	[4239] 479	[5974] 675	[8850] 1000	[10089] 1140	[11789] 1332	[14869] 1680				
	45	58	58	57	57	56	55	54				
	[15.85]	[2584] 292	[4212] 476	[5938] 671	[8833] 998	[10072] 1138	[11762] 1329	[15037] 1699				
	60	77	77	76	75	75	74	74				
	[19.81]	[2549] 288	[4186] 473	[5912] 668	[8806] 995	[10045] 1135	[11727] 1325	[15002] 1695				
	75	96	95	94	94	93	92	91				
	[23.77]	[2504] 283	[4168] 471	[5841] 660	[8762] 990	[10019] 1132	[11682] 1320	[14957] 1690				
	90	115	114	113	113	112	111	110				
	[27.74]	[2478] 280	[4097] 463	[5752] 650	[8691] 982	[9912] 1120	[11612] 1312					
	105	135	134	133	132	130	129					
	[31.70]		[3991] 451	[5620] 635	[8567] 968	[9833] 1111	[11505] 1300					
	120		153	152	151	149	147					
	[36.98]		[3894] 440	[5487] 620	[8425] 952	[9744] 1101						
	140		178	176	175	173						
	[42.27]			[5416] 612	[8248] 932	[9665] 1092						
	160			198	197	196						
Max cont.	[50.19]				[8080] 913	[9479] 1071						
Max int.	190			241	240	238						

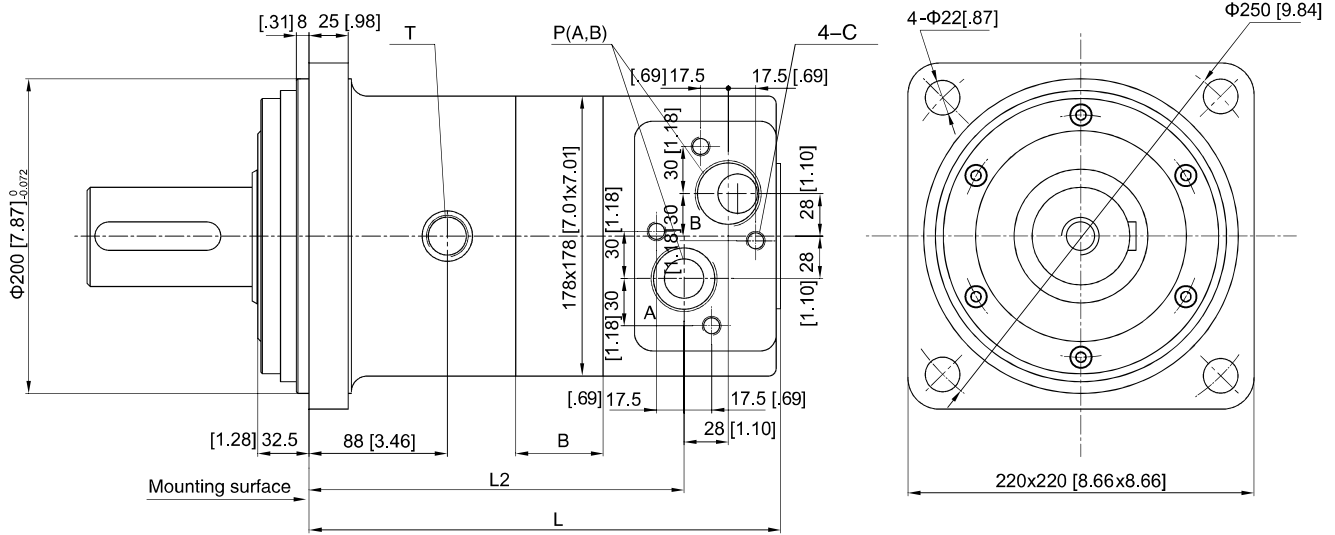
PHDM6 1000(949.5cc)

		[435] 30	[725] 50	[1015] 70	[1522] 105	[1740] 120	[2030] 140	[2320] 160	[2610] 180	[PSI] BAR	Max cont.	Max int.
[GPM]	[3.96]	[3239] 366	[5328] 602	[7399] 836	[11063] 1250	[12727] 1438						
L/min	15	14	13	13	12	11						
	[7.92]	[3221] 364	[5310] 600	[7381] 834	[11045] 1248	[12674] 1432	[14771] 1669					
	30	31	31	30	30	29	28					
	[11.89]	[3203] 362	[5292] 598	[7363] 832	[11019] 1245	[12638] 1428	[14754] 1667					
	45	46	45	45	44	43	43					
	[15.85]	[3186] 360	[5266] 595	[7346] 830	[10992] 1242	[12568] 1420	[14709] 1662	[17807] 2012	[20498] 2316			
	60	62	61	61	60	59	58	57	54			
	[19.81]	[3168] 358	[5248] 593	[7328] 828	[10974] 1240	[12550] 1418	[14674] 1658	[17757] 2006				
	75	77	76	75	74	73	72	72				
	[23.77]	[3133] 354	[5221] 590	[7310] 826	[10957] 1238	[12523] 1415	[14612] 1651	[17728] 2003				
	90	93	92	92	91	90	89	88				
	[27.74]	[3097] 350	[5142] 581	[7089] 801	[10806] 1221	[12408] 1402	[14586] 1648					
	105	108	107	106	105	104	103					
	[31.70]		[5053] 571	[7000] 791	[10709] 1210	[12337] 1394	[12674] 1432					
	120		123	122	121	120	119					
	[36.98]		[4885] 552	[6832] 772	[10585] 1196	[12258] 1385	[12612] 1425					
	140		143	142	140	139	138					
	[42.27]			[6735] 761	[10496] 1186	[12107] 1368						
	160			163	162	161						
Max cont.	[50.19]			[6567] 742	[10311] 1165	[11966] 1352						
Max int.	190			193	192	191						

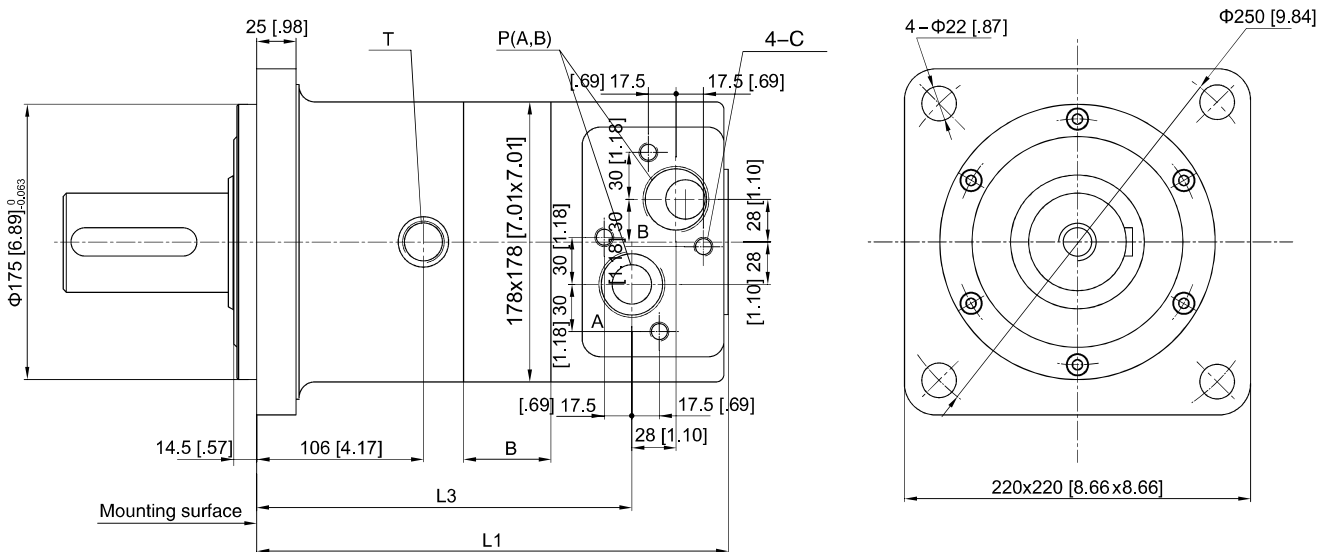
PHDM6 1250(1186.8cc)

		[435] 30	[725] 50	[1015] 70	[1522] 105	[1740] 120	[2030] 140	[2320] 160	[2610] 180	[PSI] BAR	Max cont.	Max int.
[GPM]	[7.92]	[4142] 468	[6815] 770	[9470] 1070	[14178] 1602							
L/min	30	25	24	23	22							
	[11.89]	[4115] 465	[6788] 767	[9452] 1068	[14152] 1599	[16161] 1826						
	45	37	36	35	34	33						
	[15.85]	[4089] 462	[6753] 763	[9426] 1065	[14125] 1596	[16126] 1822						
	60	50	49	48	47	45						
	[19.81]	[4071] 460	[6726] 760	[9399] 1062	[14090] 1592	[16090] 1818	[18790] 2123	[23489] 2654	[26357] 2978			
	75	62	61	60	58	57	57	56	52			
	[23.77]	[4035] 456	[6708] 758	[9381] 1060	[14072] 1590	[16072] 1816	[18745] 2118	[23472] 2652	[26330] 2975			
	90	74	73	72	71	70	68	67	64			
	[27.74]	[4009] 453	[6691] 756	[9364] 1058	[14046] 1587	[16055] 1814	[18728] 2116	[23454] 2650	[26313] 2973			
	105	87	86	85	84	82	82	81	79			
	[31.70]		[6646] 751	[9293] 1050	[14001] 1582	[15949] 1802	[18675] 2110	[23374] 2641	[26224] 2963			
	120		98	97	96	95	93	92	91			
	[36.98]		[6567] 742	[9213] 1041	[13816] 1561	[15860] 1792	[17772] 2008					
	140		113	112	111	109	107					
	[42.27]			[9133] 1032	[13718] 1550	[15772] 1782	[17577] 1986					
	160			129	128	127	126					
Max cont.	[50.19]			[9027] 1020	[13559] 1532	[15665] 1770						
Max int.	190			153	152	151						

A: 4 – $\Phi 22$ [.87] Square flange



A1 : 4 – $\Phi 22$ [.87] Square flange



	PHDM6-800	PHDM6-1000	PHDM6-1250
L	278 [10.94]	288 [11.34]	300 [11.81]
L1	296 [11.65]	306 [12.05]	318 [12.52]
L2	217 [8.54]	227 [8.94]	239 [9.41]
L3	235 [9.25]	245 [9.64]	257 [10.12]
B	33 [1.29]	43 [1.69]	55.5 [2.18]

PORT CODES

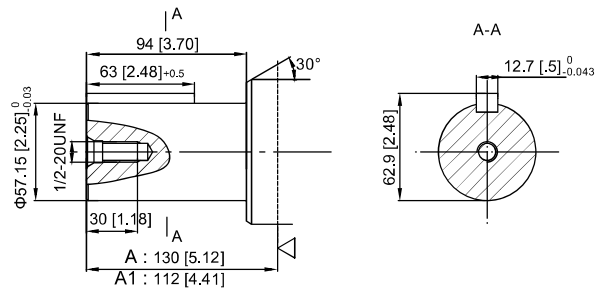
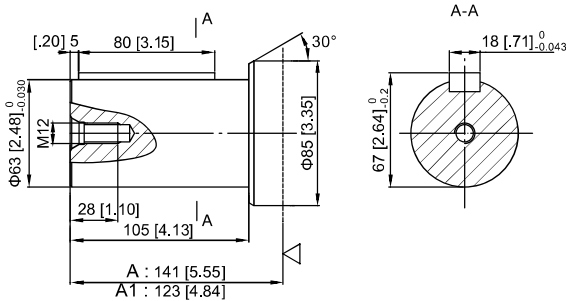
Port Codes	Ports (A,B)	Mounting Thread (C)	Drain Connection (T)
Y	G1-1/4(20)	M12(12)	G3/8" (12)
Y1	Φ36(20)	M12(12)	G3/8" (12)

P(A, B)--Ports, C--Mounting Thread (—Indicates no this thread) , T--Drain connettion

DIMENSIONS AND MOUNTING

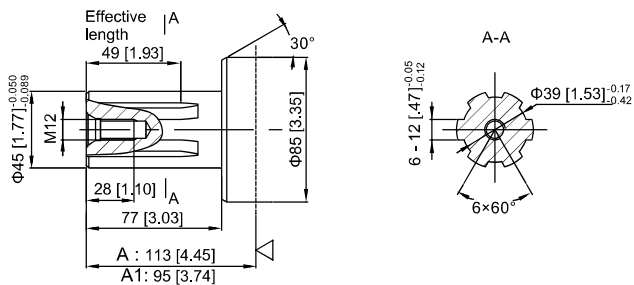
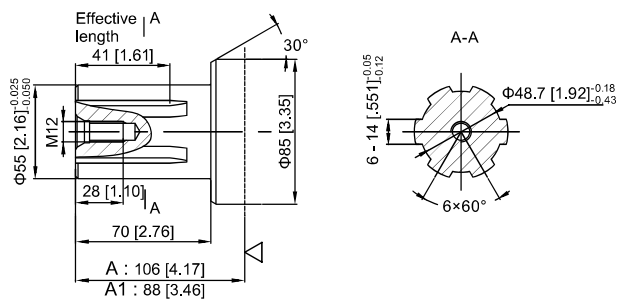
P: Φ[2.48] Cylindrical shaft, parallel key [.71] x [.43] x [3.15]
 Φ63 Cylindrical shaft, parallel key 18 x 11 x 80

P1: Φ[2.25] Cylindrical shaft, parallel key C12 x [.43] x [2.48]
 Φ57.15 Cylindrical shaft, parallel key C12.7x11x63



H1 : Φ[2.16] Splined shaft, 6 – [2.16] x [1.92] x [.55]
 Φ55 Splined shaft, 6–55 x 48.7 x 14

H2 : Φ[1.77] Splined shaft, 6 – [1.77] x [1.53] x [.47]
 Φ45 Splined shaft, 6–45 x 39 x 12

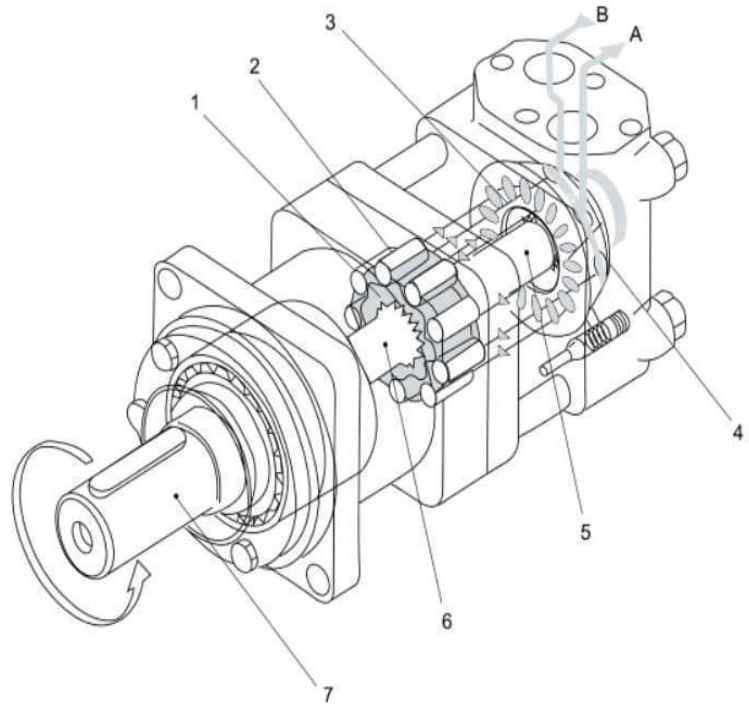
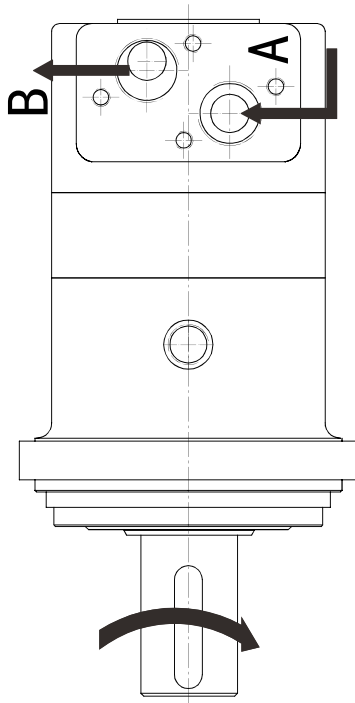




PHDM6 SERIES MOTOR

Direction of shaft rotation: Standard

When facing shaft end of motor, shaft to rotate:
Clockwise when port "A" is pressurized.
Counter-clockwise port "B" is pressurized.





ORDERING INFORMATION

1	2	3	4	5	6	7
PHDM6	—				—	—

Pos.1	2	3		4		5		6		7		
Series	Disp	Output		Flange		Code	Ports		Special features		Rotation direction	
							Ports(A,B)(deep)	Drain port T(deep)				
PHDM6	800	P	Φ[2.48] Cylindrical shaft, parallel key [.71] x [.43] x [3.15] Φ63 Cylindrical shaft, parallel key 18 x 11 x 80	A	4-Φ [.87] Square flange, pilot Φ[7.87] 4-Φ22 Square flange, pilot Φ200	Y	G1 1/4(20)	G3/8" (12)	Omit	Standard	Omit	Standard
		P1	Φ[2.25] Cylindrical shaft, parallel key C12.7 x [.43] x [2.48] Φ57.15 Cylindrical shaft, parallel key C12.7 x 11 x 63									
	1250	H1	Φ[2.16] Splined shaft, 6- [2.16] x [1.92] x [.55] Φ55 Splined shaft, 6-55 x 48.7 x 14	A1	4 - Φ[.87] Square flange, pilot Φ[6.89] 4- Φ22 Square flange, pilot Φ 175	Y1	Φ36(20)	G3/8" (12)			L	Opposite
		H2	Φ[1.77] Splined shaft, 6- [1.77] x [1.53] x [.47] Φ45 Splined shaft, 6-45 x 39 x 12									