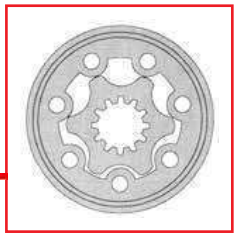
Model PHDP



The PHDP and PHDPH geroter gear sets are a highly advanced and innovative design that features a compact and lightweight construction. They are specifically designed to deliver low speed-high torque performance, making them ideal for a wide range of industrial and mobile applications. The shaft distribution flow and hydraulic motors that are used in these gear sets are also highly efficient and optimized for performance. These gear sets can be used in both parallel and series systems, providing flexibility and versatility to meet a variety of requirements. They are also manufactured in accordance with the strict quality standards of the ISO 9001-2008 quality system, ensuring that they are reliable, durable, and able to deliver consistent performance over a long service life. Additionally, these gear sets are suitable for harsh environments, and can withstand high pressure and high-temperature operations.

MAIN SPECIFICATIONS

			PHDPH PHDP **50**	PHDPH PHDP **80**	PHDPH PHDP **100**	PHDPH PHDP **125**	PHDPH PHDP **160**	PHDPH PHDP **200**	PHDPH PHDP **250**	PHDPH PHDP **315**	PHDPH PHDP **400**
		[in^3./rev.] cm^3/rev.	[3.228] 52.9	[4.839] 79.3	[5.992] 98.2	[7.377] 120.9	[9.684] 158.7	[11.985] 196.4	[14.755] 241.8	[19.362] 317.3	[23.976] 392.9
	cont.	bar [psi]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	120 [1740]	100 [1450]	80 [1160]
Max.Pressure.Drop	int.	bar [psi]	175 [2538]	175 [2538]	175 [2538]	175 [2538]	175 [2538]	175 [2538]	140 [2030]	120 [1740]	100 [1450]
	peak.	bar [psi]	220 [3190]	220 [3190]	220 [3190]	220 [3190]	220 [3190]	220 [3190]	200 [2900]	150 [2175]	130 [1885]
Max.torque	cont.	n.m [Lb.in]	97 [858]	148 [1309]	183 [1619]	229 [2026]	295 [2610]	364 [3221]	369 [3265]	404 [3575]	416 [3681]
	int.	n.m [Lb.in]	125 [1106]	189 [1672]	238 [2106]	292 [2584]	382 [3380]	470 [4159]	444 [3929]	501 [4434]	531 [4699]
	peak.	n.m [Lb.in	149 [1318]	222 [1964]	276 [2442]	340 [3009]	445 [3938]	532 [4708]	568 [5027]	555 [4912]	596 [5275]
Max.Speed	cont.	r/min	755	750	610	490	375	305	245	185	150
Max.Flow	cont.	L/min [G/min]	40 [10.56]	60 [15.85]	60 [15.85]	60 [15.85]	60 [15.85]	60 [15.85]	60 [15.85]	60 [15.85]	60 [15.85]
Max.Output.Power	cont.	kw [hp]	6.5 [8.71]	10 [13.41]	10 [13.41]	10 [13.41]	10 [13.41]	10 [13.41]	8 [10.72]	7 [9.38]	5.7 [7.64]
Weight		kg [lbs]	5.6 [12.34]	5.7 [12.56]	5.9 [13.007]	6 [13.22]	6.2 [13.66]	6.4 [14.10]	6.6 [14.55]	6.9 [15.21]	7.4 [16.31]

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

PHDP 50(52.9cc)

		Max cont.						Max int.	
		[435] 30	[870] 60	[1160] 80	[1450] 100	[1812] 125	[2030] 140	[2320] 160	[2538] 175	[PSI] BAR
[GPM] L/min	[2.11] 8	[159] **18** 148	[336] **38** 140	[486] **55** 123	[610] **69** 102	[770] **87** 83	[885] **100** 61	[1017] **115** 42		
Flow	[3.96] 15	[168] **19** 277	[345] **39** 264	[495] **56** 251	[619] **70** 242	[770] **87** 233	[902] **102** 219	[1026] **116** 202	[1132] **128** 188	TORQUE [LB-IN] **TORQUE N•M** SPEED RPM
	[5.28] 20	[168] **19** 370	[345] **39** 359	[477] **54** 348	[610] **69** 337	[787] **89** 328	[885] **100** 320	[1017] **115** 301	[1124] **127** 282	
	[7.92] 30	[159] **18** 556	[336] **38** 541	[469] **53** 529	[601] **68** 516	[778] **88** 509	[867] **98** 500	[1008] **114** 487	[1115] **126** 461	
	[9.24] 35	[150] **17** 649	[327] **37** 629	[460] **52** 619	[593] **67** 608	[761] **86** 601	[858] **97** 595	[1000] **113** 578	[1106] **125** 559	
Max cont.	[10.56] 40	[141] **16** 741	[318] **36** 725	[442] **50** 718	[584] **66** 710	[752] **85** 695	[849] **96** 688	[982] **111** 673	[1088] **123** 627	
	[13.20] 50	[115] 13 927	[274] 31 919	[415] 47 910	[522] 59 900	[716] 81 888	[831] 94 874	[920] 104 856	[1017] 115 837	Max cont.
Max int.	[15.85] 60	[79] **9** 1122	[221] **25** 1101	[371] **42** 1094	[442] **50** 1082	[672] **76** 1075	[796] **90** 1064	[867] **98** 1042	[938] **106** 1011	Max int.

PHDP 80(79.3cc)

		Max cont.						Max int.	
		[435] 30	[870] 60	[1160] 80	[1450] 100	[1812] 125	[2030] 140	[2320] 160	[2538] 175	[PSI] BAR
[GPM] L/min	[2.11] 8	[292] **33** 99	[531] **60** 91	[716] **81** 79	[911] **103** 67	[1177] **133** 56	[1309] **148** 42	[1522] **172** 32		
Flow	[3.96] 15	[318] **36** 185	[539] **61** 172	[725] **82** 163	[920] **104** 152	[1177] **133** 134	[1318] **149** 125	[1531] **173** 117	[1699] **192** 94	TORQUE [LB-IN] **TORQUE N•M** SPEED RPM
	[5.28] 20	[300] **34** 247	[548] **62** 238	[734] **83** 230	[929] **105** 220	[1186] **134** 205	[1327] **150** 197	[1540] **174** 189	[1699] **192** 172	
	[7.92] 30	[292] **33** 370	[531] **60** 363	[725] **82** 355	[920] **104** 342	[1177] **133** 327	[1318] **149** 316	[1522] **172** 302	[1681] **190** 285	
	[9.24] 35	[283] **32** 433	[522] **59** 417	[708] **80** 406	[920] **102** 398	[1159] **131** 390	[1309] **148** 384	[1504] **170** 367	[1672] **189** 365	
	[10.56] 40	[256] **30** 494	[504] **57** 484	[690] **78** 478	[893] **101** 471	[1141] **129** 461	[1301] **147** 453	[1495] **169** 443	[1663] **188** 411	
	[13.20] 50	[256] **29** 617	[495] **56** 604	[681] **77** 597	[885] **100** 590	[1132] **128** 578	[1283] **145** 571	[1486] **168** 558	[1646] **186** 519	Max cont.
Max cont.	[15.85] 60	[247] **28** 741	[486] **55** 726	[672] **76** 718	[876] **99** 710	[1124] **127** 700	[1274] **144** 686	[1478] **167** 673	[1628] **184** 624	Max int.
Max int.	[19.81] 75	[194] **22** 926	[424] **48** 906	[628] **71** 896	[823] **93** 887	[1062] **120** 867	[1186] **134** 857	[1416] **160** 838	[1548] **175** 779	

PHDP 100(98.2cc)

		Max cont.						Max int.	
		[435] 30	[870] 60	[1160] 80	[1450] 100	[1812] 125	[2030] 140	[2320] 160	[2538] 175	[PSI] BAR
[GPM] L/min	[2.11] 8	[327] **37** 80	[646] **73** 68	[867] **98** 59	[1132] **128** 50	[1451] **164** 163	[1646] **186** 33			
Flow	[3.96] 15	[336] **38** 150	[654] **74** 139	[876] **99** 129	[1141] **129** 117	[1460] **165** 102	[1655] **187** 96	[1929] **218** 87	[2124] **240** 69	TORQUE [LB-IN] **TORQUE N•M** SPEED RPM
	[5.28] 20	[345] **39** 200	[663] **75** 189	[885] **100** 180	[1150] **130** 171	[1469] **166** 159	[1663] **188** 150	[1938] **219** 136	[2133] **241** 119	
	[7.92] 30	[327] **37** 299	[646] **73** 286	[867] **98** 279	[1124] **127** 270	[1442] **163** 259	[1637] **185** 250	[1911] **216** 234	[2115] **239** 219	
	[9.24] 35	[318] **36** 349	[628] **71** 338	[858] **97** 333	[1115] **126** 329	[1424] **161** 318	[1619] **183** 309	[1894] **214** 299	[2106] **238** 281	
	[10.56] 40	[309] **35** 399	[619] **70** 391	[849] **96** 387	[1097] **124** 383	[1416] **160** 375	[1610] **182** 370	[1885] **213** 363	[2088] **236** 338	
	[13.20] 50	[300] **34** 499	[610] **69** 489	[840] **95** 484	[1088] **123** 479	[1407] **159** 468	[1601] **181** 463	[1867] **211** 453	[2079] **235** 423	
Max cont.	[15.85] 60	[292] **33** 599	[601] **68** 587	[831] **94** 580	[1079] **122** 574	[1398] **158** 562	[1593] **180** 556	[1858] **210** 544	[2062] **233** 507	Max cont.
Max int.	[19.81] 75	[238] **27** 748	[539] **61** 733	[761] **86** 726	[982] **111** 718	[1318] **149** 703	[1486] **168** 695	[1752] **198** 680	[1787] **202** 634	Max int.

PHDP 125(120.9cc)

		Max cont.						Max int.	
		[435] 30	[870] 60	[1160] 80	[1450] 100	[1812] 125	[2030] 140	[2320] 160	[2538] 175	[PSI] BAR
[GPM] L/min	[2.11] 8	[389] **44** 65	[796] **90** 61	[1088] **123** 51	[1398] **158** 44	[1814] **205** 36	[2044] **231** 30			
Flow	[3.96] 15	[398] **45** 122	[805] **91** 118	[1097] **124** 112	[1407] **159** 105	[1823] **206** 99	[2053] **232** 91	[2345] **265** 79	[2602] **294** 61	TORQUE [LB-IN] **TORQUE N•M** SPEED RPM
	[5.28] 20	[407] **46** 165	[796] **90** 152	[1106] **125** 143	[1416] **160** 133	[1823] **206** 126	[2062] **233** 112	[2354] **266** 106	[2610] **295** 98	
	[7.92] 30	[398] **45** 243	[778] **88** 238	[1088] **123** 236	[1398] **158** 231	[1805] **204** 224	[2035] **230** 217	[2336] **264** 206	[2593] **293** 191	
	[9.24] 35	[380] **43** 284	[761] **86** 278	[1070] **121** 275	[1380] **156** 272	[1787] **202** 266	[2026] **229** 263	[2327] **263** 258	[2584] **292** 240	
	[10.56] 40	[371] **42** 342	[752] **85** 323	[1062] **120** 314	[1363] **154** 311	[1770] **200** 304	[2000] **226** 301	[2318] **262** 294	[2566] **290** 274	
	[13.20] 50	[362] **41** 405	[743] **84** 397	[1044] **118** 393	[1345] **152** 389	[1743] **197** 380	[1973] **223** 376	[2310] **261** 368	[2549] **288** 343	
Max cont.	[15.85] 60	[354] **40** 486	[734] **83** 476	[1026] **116** 470	[1327] **150** 465	[1734] **195** 465	[1956] **221** 452	[2292] **259** 441	[2531] **286** 412	Max cont.
Max int.	[19.81] 75	[283] **31** 608	[690] **78** 596	[947] **107** 589	[1230] **139** 583	[1655] **187** 571	[1867] **211** 564	[2133] **241** 552	[2407] **272** 515	Max int.

PHDP 160(158.7cc)

		Max cont.						Max int.	
		[435] 30	[870] 60	[1160] 80	[1450] 100	[1812] 125	[2030] 140	[2320] 160	[2538] 175	[PSI] BAR
[GPM] L/min	[2.11] 8	[504] **57** 49	[1035] **117** 46	[1416] **160** 41	[1823] **206** 34	[2310] **261** 29				
	[3.96] 15	[513] **58** 93	[1044] **118** 84	[1424] **161** 79	[1832] **207** 72	[2318] **262** 64	[2637] **298** 58	[3088] **349** 50	[3407] **385** 41	TORQUE [LB-IN] **TORQUE N•M** SPEED RPM
	[5.28] 20	[522] **59** 123	[1053] **119** 118	[1433] **162** 115	[1840] **208** 111	[2327] **263** 104	[2646] **299** 99	[3097] **350** 93	[3416] **386** 82	
	[7.92] 30	[513] **58** 185	[1035] **117** 181	[1416] **160** 177	[1814] **205** 173	[2310] **261** 168	[2637] **298** 165	[3080] **348** 159	[3398] **384** 148	
Flow	[9.24] 35	[504] **57** 216	[1017] **115** 211	[1407] **159** 209	[1796] **203** 207	[2301] **260** 202	[2610] **295** 200	[3062] **346** 196	[3380] **382** 183	
	[10.56] 40	[486] **55** 247	[1008] **114** 241	[1380] **156** 238	[1779] **201** 236	[2292] **259** 231	[2593] **293** 228	[3044] **344** 220	[3363] **380** 207	
	[13.20] 50	[469] **53** 309	[982] **111** 302	[1363] **154** 299	[1761] **199** 296	[2283] **258** 289	[2584] **292** 286	[3026] **342** 280	[3345] **378** 261	
Max cont.	[15.85] 60	[460] **52** 370	[964] **109** 363	[1345] **152** 359	[1743] **197** 355	[2265] **256** 348	[2566] **290** 344	[3009] **340** 336	[3327] **376** 314	Max cont.
Max int.	[19.81] 75	[380] **43** 463	[893] **101** 453	[1265] **143** 448	[1681] **190** 444	[2203] **249** 430	[2495] **282** 420	[2849] **322** 410	[3168] **358** 383	Max int.

PHDP 200(196.4cc)

		Max cont.						Max int.	
		[435] 30	[870] 60	[1160] 80	[1450] 100	[1812] 125	[2030] 140	[2320] 160	[2538] 175	[PSI] BAR
[GPM] L/min	[2.11] 8	[610] **69** 40	[1239] **140** 33	[1708] **193** 29	[2194] **248** 25					
	[3.96] 15	[619] **70** 75	[1247] **141** 70	[1717] **194** 64	[2203] **249** 58	[2867] **324** 50	[3239] **366** 41	[3788] **428** 32		TORQUE [LB-IN] **TORQUE N•M** SPEED RPM
	[5.28] 20	[628] **71** 100	[1256] **142** 92	[1725] **195** 83	[2212] **250** 75	[2876] **325** 69	[3248] **367** 58	[3788] **428** 52	[4177] **472** 47	
	[7.92] 30	[619] **70** 150	[1247] **141** 140	[1708] **193** 136	[2194] **248** 129	[2858] **323** 120	[3239] **366** 112	[3770] **426** 101	[4168] **471** 93	
Flow	[9.24] 35	[610] **69** 175	[1239] **140** 170	[1690] **191** 164	[2186] **247** 160	[2841] **321** 154	[3221] **364** 148	[3761] **425** 140	[4159] **470** 129	
	[10.56] 40	[593] **67** 199	[1221] **138** 194	[1681] **190** 191	[2177] **246** 188	[2832] **320** 183	[3203] **362** 179	[3743] **423** 171	[4142] **468** 159	
	[13.20] 50	[584] **66** 249	[1203] **136** 244	[1672] **189** 241	[2159] **244** 239	[2814] **318** 234	[3195] **361** 230	[3735] **422** 226	[4124] **466** 211	
Max cont.	[15.85] 60	[575] **65** 299	[1194] **135** 293	[1655] **187** 290	[2150] **243** 287	[2796] **316** 281	[3177] **359** 278	[3717] **420** 255	[4115] **465** 238	Max cont.
Max int.	[19.81] 75	[513] **58** 374	[1124] **127** 366	[1584] **179** 362	[2071] **234** 358	[2726] **308** 351	[3080] **348** 347	[3611] **408** 339	[4035] **456** 317	Max int.

PHDP 250(241.8cc)

		Max cont.					Max int.	
		[435] 30	[870] 60	[1160] 80	[1450] 100	[1740] 120	[2030] 140	[PSI] BAR
[GPM] L/min	[2.11] 8	[761] **86** 32	[1522] **172** 30	[2071] **234** 26				
	[3.96] 15	[770] **87** 61	[1531] **173** 59	[2079] **235** 54	[2628] **297** 49	[3257] **368** 40	[3920] **443** 33	TORQUE [LB-IN] **TORQUE N•M** SPEED RPM
	[5.28] 20	[778] **88** 81	[1540] **174** 78	[2088] **236** 73	[2637] **298** 68	[3265] **369** 62	[3929] **444** 56	
	[7.92] 30	[761] **86** 123	[1531] **173** 120	[2079] **235** 118	[2628] **297** 116	[3257] **368** 112	[3920] **443** 103	
Flow	[9.24] 35	[752] **85** 142	[1513] **171** 138	[2071] **234** 132	[2619] **296** 125	[3239] **366** 117	[3912] **442** 108	
	[10.56] 40	[734] **83** 162	[1495] **169** 159	[2053] **232** 154	[2602] **294** 150	[3221] **364** 144	[3894] **440** 135	
	[13.20] 50	[725] **82** 203	[1478] **167** 198	[2035] **230** 195	[2593] **293** 193	[3203] **362** 191	[3876] **438** 186	
Max cont.	[15.85] 60	[716] **81** 243	[1469] **166** 238	[2017] **228** 236	[2584] **292** 233	[3186] **360** 230	[3867] **437** 221	Max cont.
Max int.	[19.81] 75	[654] **74** 304	[1354] **153** 297	[1876] **212** 294	[2487] **281** 291	[3088] **349** 288	[3743] **423** 277	Max int.

PHDP 315(317.3cc)

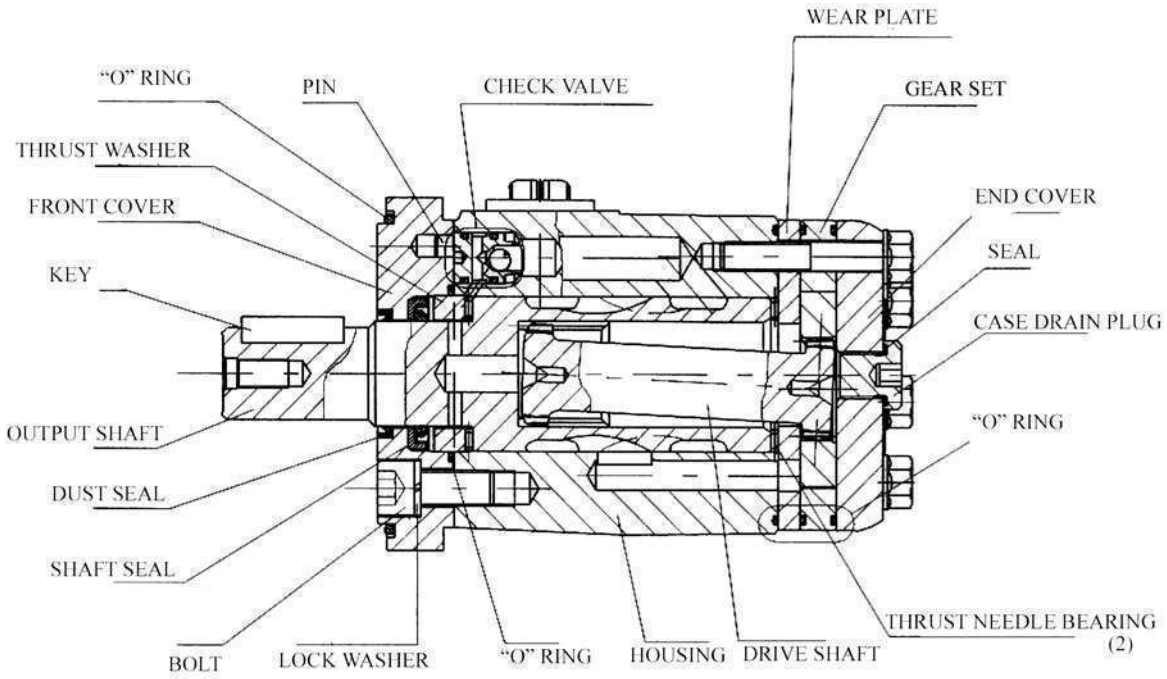
		Max cont.				Max int.	
		[435] 30	[725] 50	[1015] 70	[1305] 90	[1450] 100	[1740] 120	[PSI] BAR
[GPM] L/min	[2.11] 8	[1008] **114** 25	[1690] **191** 22	[2389] **270** 19				
	[3.96] 15	[1017] **115** 46	[1699] **192** 42	[2398] **271** 38	[3142] **355** 34	[3566] **403** 29	[4425] **500** 21	TORQUE [LB-IN] **TORQUE N•M** SPEED RPM
	[5.28] 20	[1026] **116** 62	[1708] **193** 59	[2407] **272** 55	[3150] **356** 51	[3575] **404** 45	[4434] **501** 40	
	[7.92] 30	[1008] **114** 93	[1690] **191** 90	[2389] **270** 86	[3133] **354** 80	[3566] **403** 76	[4416] **499** 65	
Flow	[9.24] 35	[991] **112** 108	[1672] **189** 105	[2372] **268** 103	[3115] **352** 101	[3540] **400** 100	[4398] **497** 95	
	[10.56] 40	[973] **110** 123	[1655] **187** 121	[2354] **266** 119	[3097] **350** 116	[3522] **398** 114	[4381] **495** 109	
	[13.20] 50	[955] **108** 154	[1628] **184** 151	[2336] **264** 148	[3080] **348** 144	[3504] **396** 142	[4363] **493** 137	
Max cont.	[15.85] 60	[938] **106** 185	[1610] **182** 181	[2318] **262** 179	[3062] **346** 176	[3487] **394** 174	[4345] **491** 171	Max cont.
Max int.	[19.81] 75	[885] **100** 231	[1548] **175** 226	[1380] **156** 222	[3000] **339** 219	[3425] **387** 215	[4266] **482** 209	Max int.

PERFORMANCE DATA

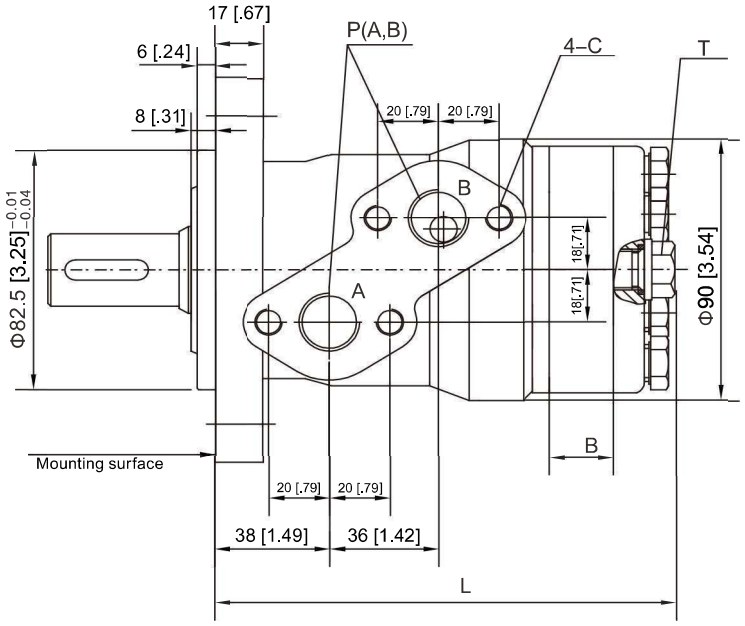
PHDP 400(392.9cc)

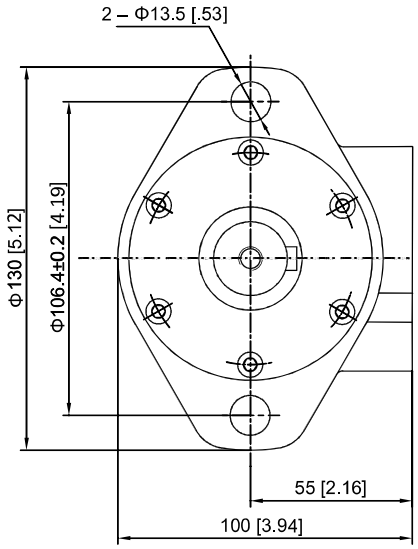
Flow		Max cont.				Max int.		
		[435] 30	[580] 40	[725] 50	[1015] 70	[1160] 80	[1450] 100	[PSI] BAR
[GPM]	[2.11]	[1371] **155** 20	[1805] **204** 18					
L/min	8							
	[3.96]	[1380] **156** 37	[1814] **205** 34	[2318] **262** 31	[3239] **366** 27	[3788] **428** 24	[4814] **544** 19	TORQUE [LB-IN] **TORQUE N•M** SPEED RPM
	15							
	[5.28]	[1389] **157** 50	[1840] **208** 47	[2336] **264** 44	[3257] **368** 39	[3841] **434** 37	[4859] **549** 32	
	20							
	[7.92]	[1345] **152** 75	[1805] **204** 72	[2283] **258** 69	[3203] **362** 66	[3752] **424** 64	[4779] **540** 60	
	30							
	[9.24]	[1309] **148** 87	[1752] **198** 84	[2230] **252** 81	[3150] **356** 77	[3681] **416** 74	[4699] **531** 69	
	35							
	[10.56]	[1256] **142** 100	[1708] **193** 97	[2177] **246** 94	[3080] **348** 90	[3593] **406** 88	[4628] **523** 84	
	40							
	[13.20]	[1203] **136** 125	[1646] **186** 122	[2106] **238** 120	[3018] **341** 117	[3522] **398** 115	[4558] **515** 111	
	50							
	[15.85]	[1159] **131** 150	[1593] **180** 148	[2044] **231** 146	[2947] **333** 142	[3451] **390** 140	[4478] **506** 137	Max cont.
Max cont.	60							
	[19.81]	[1088] **123** 187	[1486] **168** 183	[1902] **215** 179	[2761] **312** 1 72	[3283] **371** 169	[4354] **492** 162	Max int.
Max int.	75							

CROSS SECTION

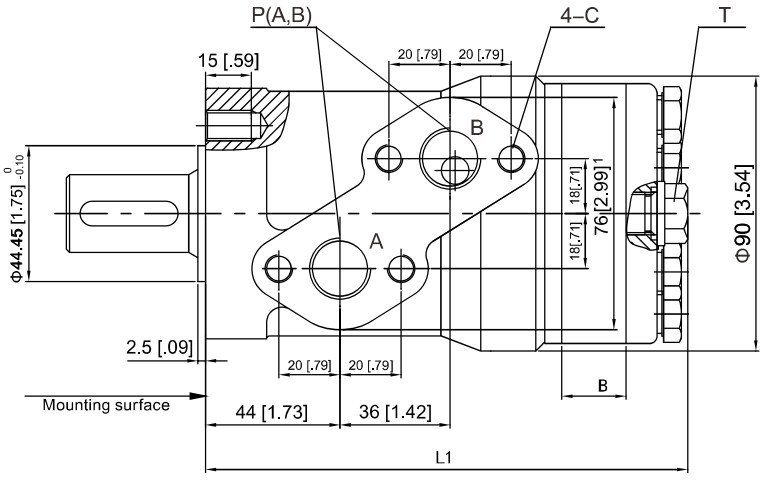


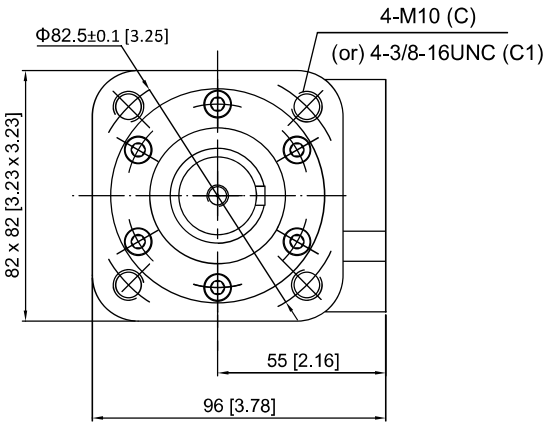
A2 : 2-Hole Oval Flange





C, C1 : Square Flange





Note: C, C1 mounting are assembling to PHDPH shaft

	PHDP-50	PHDP-80	PHDP-100	PHDP-125	PHDP-160	PHDP-200	PHDP-250	PHDP-315	PHDP-400
L	143.5 [5.65]	145 [5.71]	147 [5.79]	150 [5.90]	155 [6.10]	160 [6.29]	166 [6.53]	176 [6.93]	186 [7.32]
L1	151.5 [5.95]	153 [6.02]	155 [6.10]	158 [6.22]	163 [6.42]	168 [6.61]	174 [6.85]	184 [7.28]	194 [7.72]
B	7 [0.28]	11 [0.43]	13 [0.51]	16 [0.63]	21 [0.83]	26 [1.02]	32 [1.26]	42 [1.65]	52 [2.05]

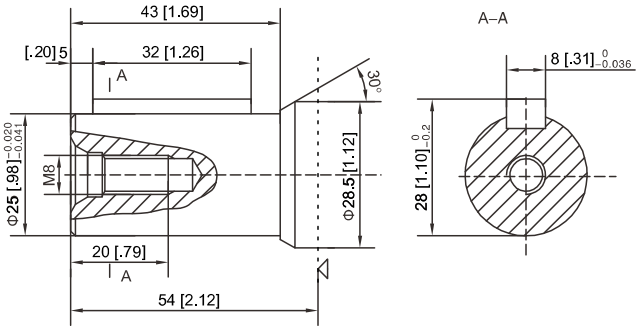
PORT CODES

Port Codes	Port (A,B)	Mounting Thread (C)	Drain Connection (T)
Y	G1/2 (15)	M8 (10)	M14 × 1.5 (12)
Y1	M18 × 1.5 (15)	M8 (10)	M14 × 1.5 (12)
Y2	M22 × 1.5 (15)	M8 (10)	M14 × 1.5 (12)
Y4	ZG3/8 (15)	M8 (10)	M14 × 1.5 (12)
Y5	7/8–14UNF (15)	—	M14 × 1.5 (12)
Y7	ZG1/2 (15)	M8 (10)	M14 × 1.5 (12)
Y8	NPT1/2 (15)	M8 (10)	M14 × 1.5 (12)
Y9	NPTF1/2 (15)	5/16-18 UNC(10)	7/16-20UNF(12)
Y10	G1/2 (15)	M8 (10)	G1/4 (12)
Y15	7/8–14UNF (15)	5/16–18UNC (10)	7/16–20UNF (12)

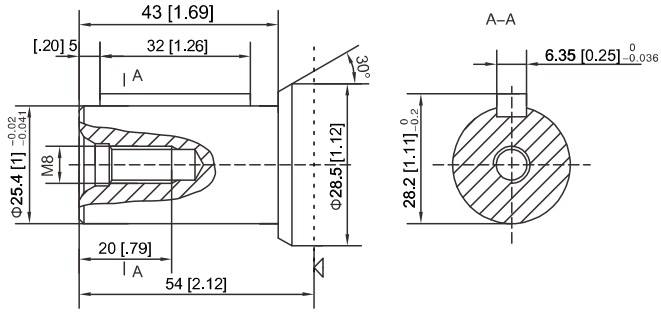
Note: P (A,B) ==Ports , C==Mounting Thread (--Indicates no thread) , T==Drain Connection

DIMENSIONS AND MOUNTING

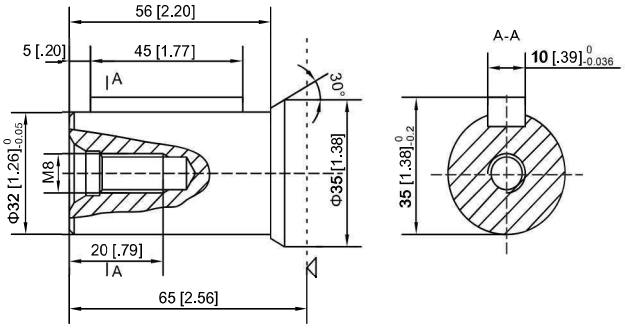
P1 : Φ[.98] Cylindrical shaft, parallel key [0.31] x [0.28] x [1.26]
Φ25 Cylindrical shaft，parallel key8 × 7 × 32



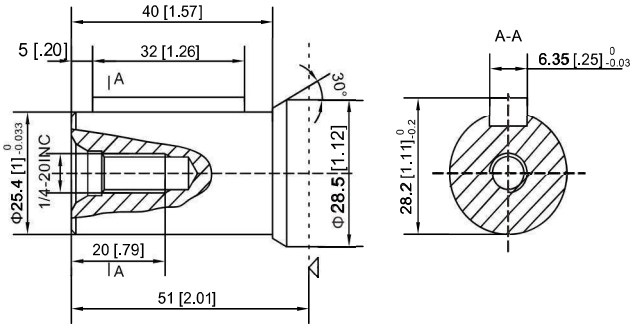
P3 : Φ[1] Cylindrical shaft, parallel key [.25] x [.25] x [1.26]
Φ25.4 Cylindrical shaft，parallel key6.35 × 6.35 × 32



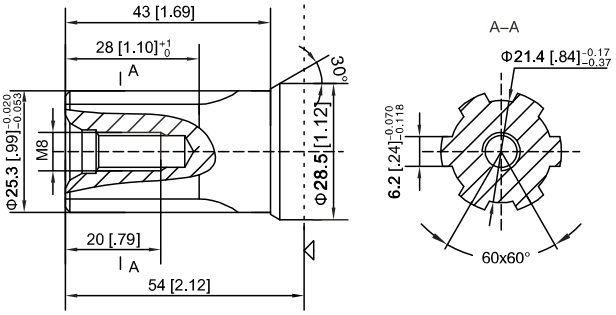
P5 : Φ[1.26] Cylindrical shaft, parallel key [.39] x [.31] x [1.77]
Φ32 Cylindrical shaft，parallel key10×8×45



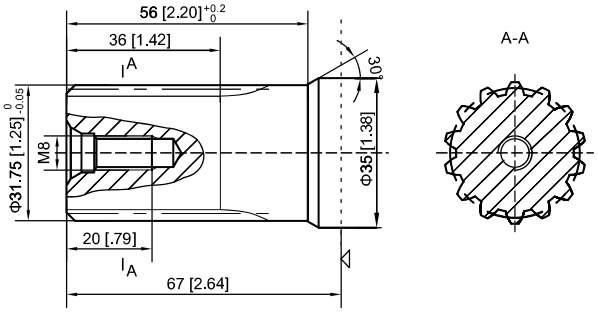
P33 : Φ[1] Cylindrical shaft, parallel key [.25] x [.25] x [1.26]
Φ25.4 Cylindrical shaft，parallel key6.35×6.35×32



H3 : Φ[.99] Splined shaft, 6 – [.99] x [.84] x [.24]
Φ25.3Splined shaft，6–25.3×21.4×6.2

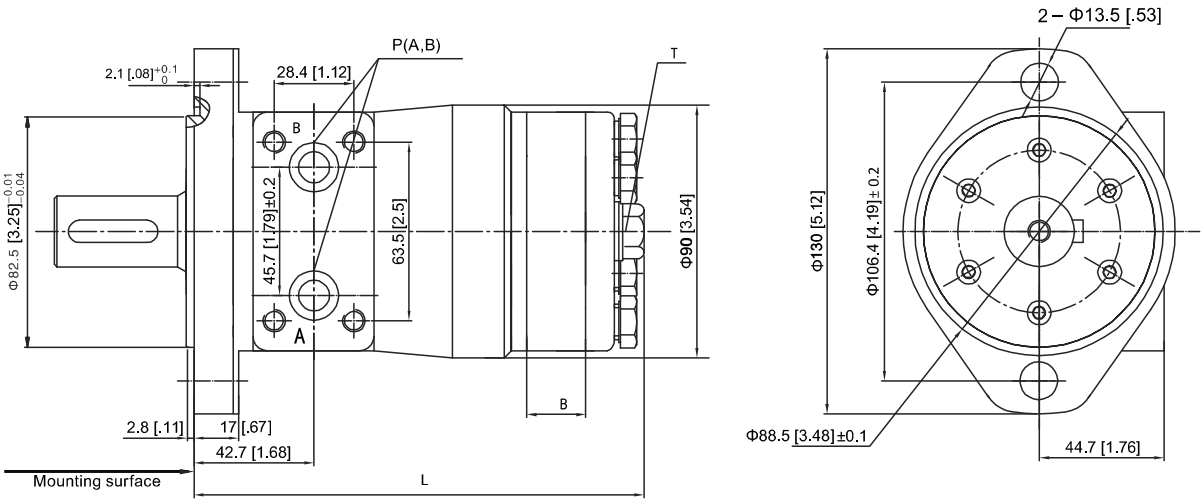


K13 : Φ[1.25] Involute splined shaft 14 – DP12/24 a=30°
Φ31.75 involute splined shaft 14–DP12/24 a=30°

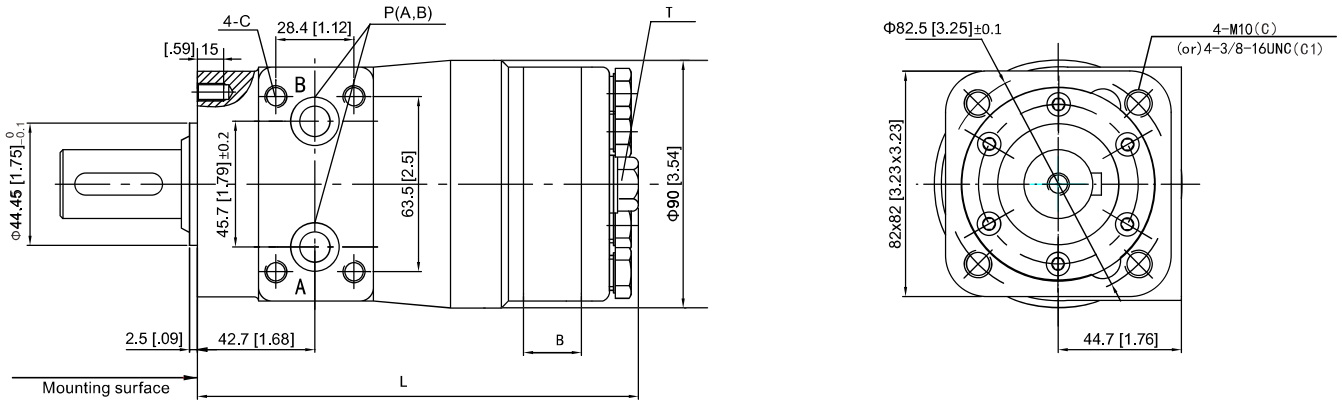


DIMENSIONS AND MOUNTING

A2 : 2-hole oval flange



C, C1 Square flange



	PHDPH-50	PHDPH-80	PDHPH-100	PHDPH-125	PHDPH-160	PHDPH-200	PHDPH-250	PHDPH-315	PHDPH-400
L	151.5 [5.95]	153 [6.02]	155 [6.10]	158 [6.22]	163 [6.42]	168 [6.61]	174 [6.85]	184 [7.24]	194 [7.64]
B	7 [0.28]	11 [0.43]	13 [0.51]	16 [0.63]	21 [0.83]	26 [1.02]	32 [1.26]	42 [1.65]	52 [2.05]

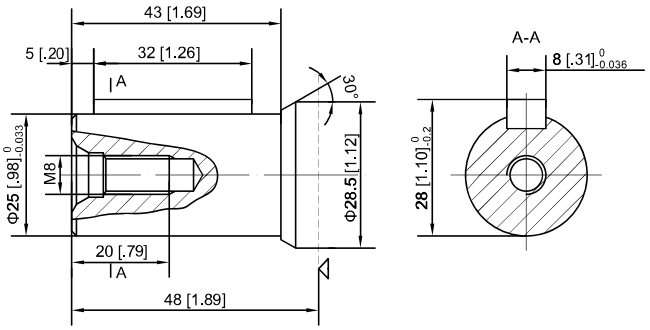
PORT CODES

Port Codes	Port (A,B)	Mounting Thread (C)	Drain Connection (T)
Y	G1/2 (15)	—	M14 × 1.5(12)
Y5	7/8–14UNF(15)	—	7/16–20UNF(12)
Y7	ZG1/2(15)	—	G1/4(12)
Y9	NPTF1/2(15)	—	7/16–20UNF(12)
Y10	G1/2(15)	—	G1/4(12)
Y17	3/4–16UNF(15)	—	7/16–20UNF(12)
Y19	Φ11(15)	5/16–18UNC(13)	7/16–20UNF(12)
Y20	M18 × 1.5(15)	M8 (13)	G1/4(12)

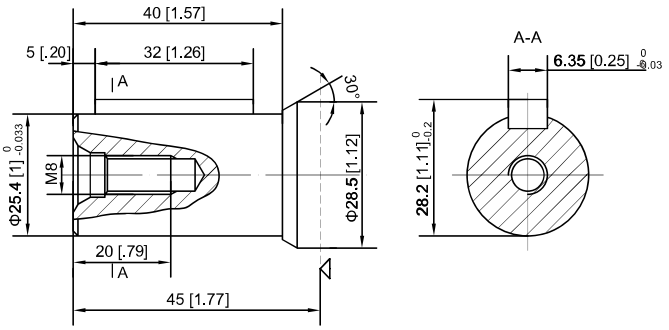
Note: P (A,B) ==Ports , C==Mounting Thread (--Indicates no thread) , T==Drain Connection

DIMENSIONS AND MOUNTING

P1 : Φ[.98] Cylindrical shaft, parallel key [.31] x [.27] x [1.26]
Φ25 Cylindrical shaft，parallel key8 × 7 × 32

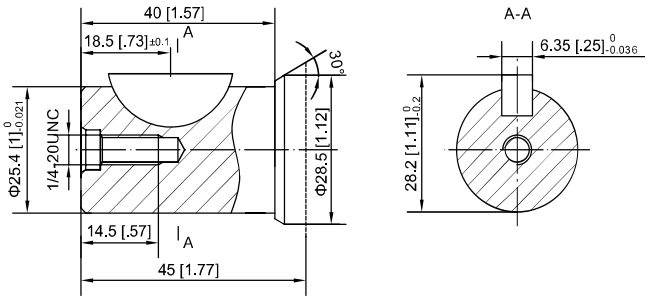


P3 : Φ[1] Cylindrical shaft, parallel key [.25] x [.25] x [1.26]
Φ25.4 Cylindrical shaft，parallel key6.35 × 6.35 × 32

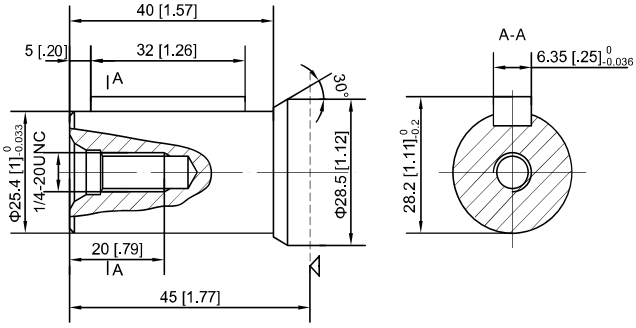


DIMENSIONS AND MOUNTING

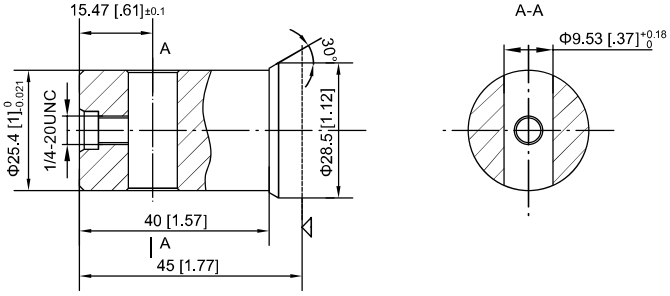
P4 : Φ[1] Cylindrical shaft, Woodruff key Φ[1] x [.25]
Φ25.4 Cylindrical shaft，Woodruff key Φ25.4 × 6.35



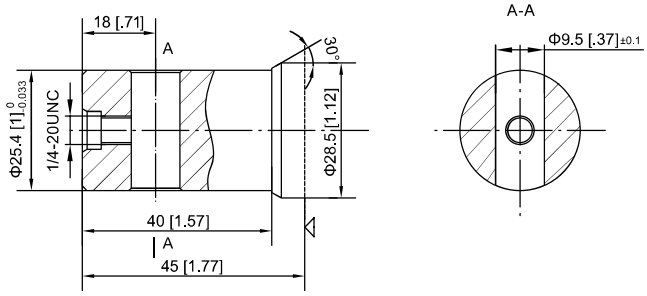
P33 : Φ[1] Cylindrical shaft, parallel key [.25] x [.25] x [1.26]
Φ25.4 Cylindrical shaft，parallel key6.35 × 6.35 × 32



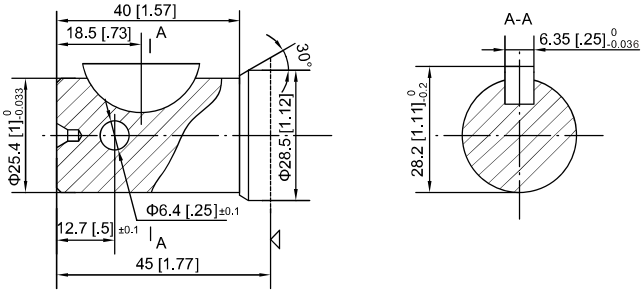
P89 : Φ[1] Cylindrical shaft pin hole Φ[.37]
Φ25.4Cylindrical shaft pin hole Φ9.53



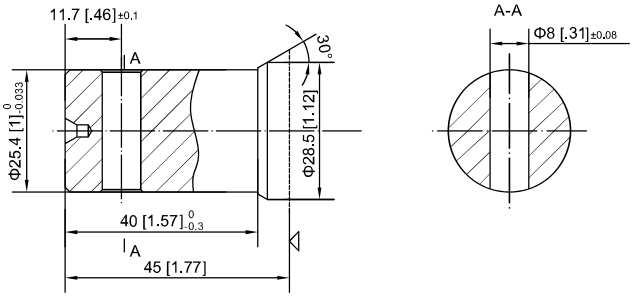
P93 : Φ[1] Cylindrical shaft pin hole Φ[.37]
Φ25.4Cylindrical shaft pin hole Φ9.5



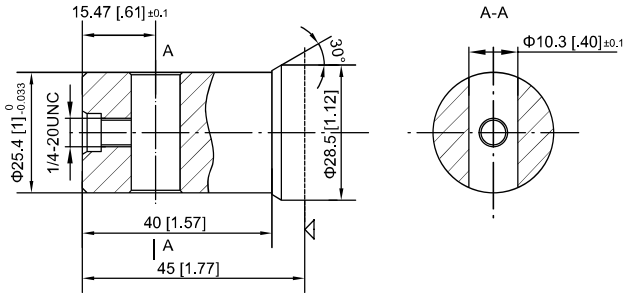
P95 : Φ[1] Cylindrical shaft pin hole Φ[.252],
Woodruff key Φ[1] x [.25]
Φ25.4Cylindrical shaft pin hole Φ6.4，
Woodruff key Φ25.4 × 6.35



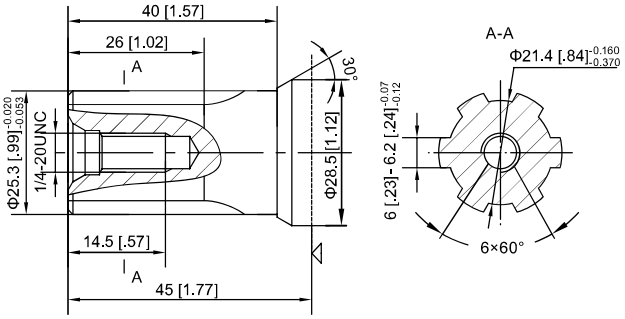
P96 : Φ[1] Cylindrical shaft pin hole Φ[.315]
Φ25.4Cylindrical shaft pin hole Φ8



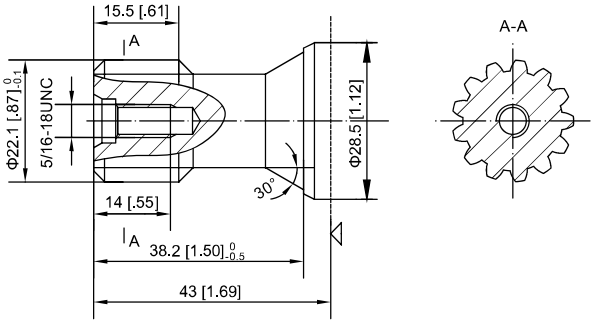
P97 : Φ[1] Cylindrical shaft pin hole Φ[.40]
Φ25.4Cylindrical shaft pin hole Φ10.3



H4 : Φ[.99] Splined shaft, 6 – [.99] x [.84] x [.24]
Φ25.3 Splined shaft，6–25.3 × 21.4 × 6.2

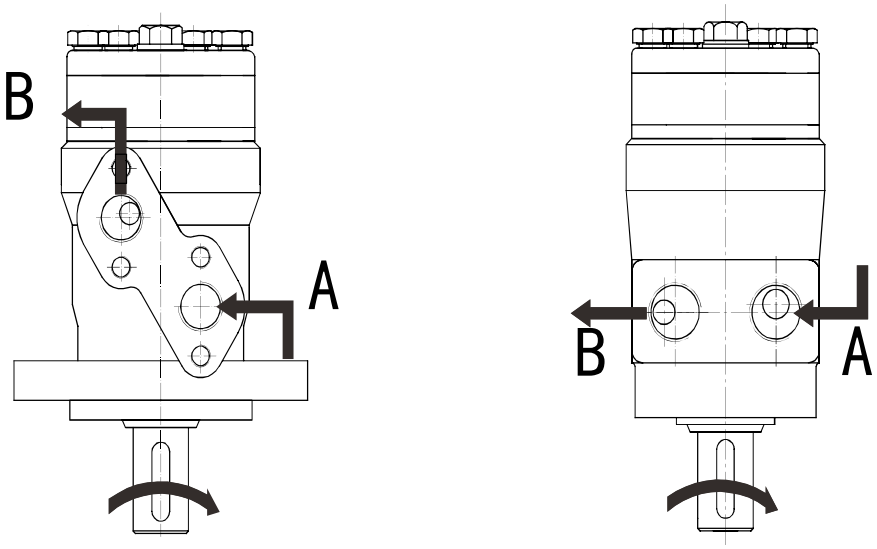


K8 : Φ[.87] Involve splined shaft 13–DP16/32
Φ22.1 involve splined shaft 13–DP16/32



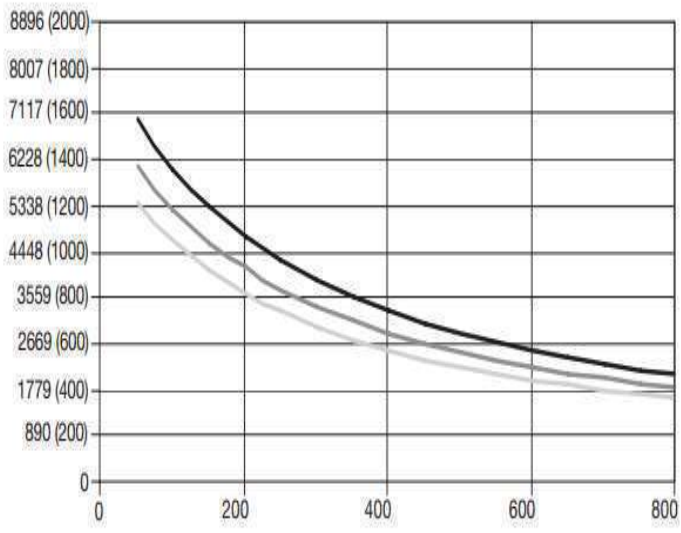
Direction of shaft ration：Standard

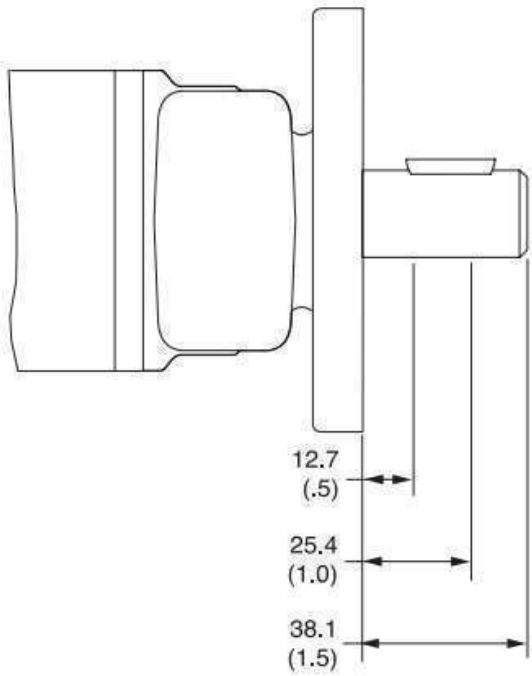
When facing shaft end of motor，shaft to rotate：
Clockwise when port “A” is pressurized.
Counter–clockwise port “B” is pressurized.



PERMISSIBLE SHAFT LOADS

N (lbs) Radial force





The allowable side load curve is based on bushing life of 2.5 x 106 revolutions.

PHDPH	—					—		—	

Pos.1	2	3		4		5			6		7	
Series	Disp	Output		Flange		Code	Ports		Special features		Rotation direction	
							Ports(A,B)	Drain Port T				
PHDPH	50	P1	Φ[.98] Cylindrical shaft, parallel key [.31] x [.27] x [1.26] Φ25 Cylindrical shaft，parallel key8×7×32	A2	2–Φ[.53] Oval flange, pilot Φ[3.25] x [.11] 2–Φ13.5 Oval flange, pilotΦ82.5×2.8	Y	G1/2(15)	M14×1.5(12)	Omit	Standard	Omit	Standard
	80	P3	Φ[1] Cylindrical shaft, parallel key [.25] x [.25] x [1.26] Φ25.4 Cylindrical shaft，parallel key6.35×6.35×32			Y5	7/8–14UNF(15)	7/16–20UNF(12)				
	100	P4	Φ[1] Cylindrical shaft, Woodruff key Φ[1] x [.25] Φ25.4 Cylindrical shaft，Woodruff keyΦ25.4×6.35			Y7	ZG1/2(15)	G1/4(12)				
	125	P33	Φ[1] Cylindrical shaft, parallel key [.25] x [.25] x [1.26] Φ25.4 Cylindrical shaft，parallel key6.35×6.35×32			Y9	NPTF1/2(15)	7/16–20UNF(12)				
	160	P89	Φ[1] Cylindrical shaft pin hole Φ[.37] Φ25.4 Cylindrical shaft pin hole Φ9.53	C	4–M10 Square flange, pilotΦ[1.75] x [.11] 4–M10 Square flange, pilotΦ44.45×2.8							
		P93	Φ[1] Cylindrical shaft pin hole Φ[.37] Φ25.4 Cylindrical shaft pin hole Φ9.5			Y10	G1/2(15)	G1/4(12)	T21	No case drain	L	Opposite
	200	P95	Φ[1] Cylindrical shaft pin hole Φ[.25], Woodruff key Φ[1] x [.25] Φ25.4 Cylindrical shaft pin hole Φ6.4，Woodruff key Φ25.4×6.35									
		P96	Φ[1] Cylindrical shaft pin hole Φ[.31] Φ25.4 Cylindrical shaft pin hole Φ8			Y17	3/4–16UNF(15)	7/16–20UNF(12)				
	250	P97	Φ[1] Cylindrical shaft pin hole Φ[.40] Φ25.4 Cylindrical shaft pin hole Φ10.3									
	315	H4	Φ[.99] Splined shaft, 6– [.99] x [.84] x [.24] Φ25.3 Splined shaft， 6–25.3×21.4×6.2	C1	4–3/8– 16UNC Square flange, pilot Φ[1.75] x [.11] 4–3/8–16UNC Square flange, pilotΦ44.45×2.8	Y19	Φ11(15)	7/16–20UNF(12)				
	400	K8	Φ[.87] Involute splined shaft, 13–DP/6132 Φ22.1 involute splined shaft，13–DP16/32			Y20	M18×1.5(15)	G1/4(12)				

ORDERING INFORMATION

1		2	3	4	5		6		7
PHDP	—					—		—	

Pos.1	2	3		4		5			6		7	
Series	Disp	Output		Flange		Code	Ports		Special features		Rotation direction	
							Ports(A,B)	Drain Port T				
PHDP	50 80 100 125 160 200 250 315 400	P1	Φ[.98] Cylindrical shaft, parallel key [.31] x [.27] x [1.26] Φ25 Cylindrical shaft，parallel key8×7×32	A2	2–Φ[.53] Oval flange, pilot Φ[3.25] x [.31] 2–Φ13.5 Oval flange, pilot Φ82.5×8	Y	G1/2(15)	M14×1.5(12)	Omit	Standard	Omit	Standard
		P3	Φ[1] Cylindrical shaft, parallel key [.25] x [.25] x [1.26] Φ25.4 Cylindrical shaft，parallel key6.35×6.35×32			Y1	M18×1.5(15)	M14×1.5(12)				
		P5	Φ[1.26] Cylindrical shaft, parallel key [.39] x [.31] x [1.77] Φ32 Cylindrical shaft，parallel key10×8×45			Y2	M22×1.5(15)	M14×1.5(12)				
		P33	Φ[1] Cylindrical shaft, parallel key [.25] x [.25] x [1.26] Φ25.4 Cylindrical shaft，parallel key6.35×6.35×32	C	4–M10 Square flange, pilot Φ[1.75] x [.09] 4–M10 Square flange, pilot Φ44.45×2.5	Y4	ZG3/8(15)	M14×1.5(12)				
		H3	Φ[.99] Splined shaft, [.24] – [.99] x [.84] x [.24] Φ25.3 Splined shaft， 6–25.3×21.4×6.2			Y5	7/8–14UNF(15)	M14×1.5(12)	T7	With dustproof ring	L	Opposite
		H33	Φ[.99] Splined shaft, [.24] – [.99] x [.84] x [.24] Φ25.3 Splined shaft， 6–25.3×21.4×6.2			Y7	ZG1/2(15)	M14×1.5(12)				
		K13	Φ[1.25] Involute splined shaft, 14–DP12/24 a=30° Φ31.75 involute splined shaft，14–DP12/24 a=30°			Y8	NPT1/2(15)	M14×1.5(12)	T10	With high pressure seals		
				C1	4–3/8–16UNC Square flange, pilot Φ[1.75] x [.09] 4–3/8–16UNC Square flange, pilot Φ44.45×2.5	Y9	NPTF1/2(15)	7/16–20UNF(12)				
						Y10	G1/2(15)	G1/4(12)				
						Y15	7/8–14UNF(15)	7/16–20UNF(12)				

PHDPH CROSS REFERENCE DATA

MOUNT	SHAFT	PORTS	BRAND	DISPLACEMENT Cm³/Rev (In³/Rev)								
				51.7 (3.15)	77.7 (4.74)	96.2 (5.87)	117.9 (7.2)	155.5 (9.5)	189.9 (11.6)	231 (14.1)	312 (19)	387 (23.6)
4 BOLT FLANGE	Woodruff Keyed	1/2" NPT	ANFIELD PRINCE CHAR-LYNN® DANFOSS	BMPH-50-H4-K-P ADM50-4RP 101-1001 151-2121	BMPH-80-H4-K-P ADM75-4RP 101-1002 151-2122	BMPH-100-H4-K-P ADM100-4RP 101-1003 151-2123	BMPH-125-H4-K-P N/A 101-1755 151-2124	BMPH-160-H4-K-P ADM150-4RP 101-1004 151-2125	BMPH-200-H4-K-P ADM50-4RP 101-1005 151-2126	BMPH-250-H4-K-P ADM50-4RP 101-1006 151-2127	BMPH-315-H4-K-P ADM300-4RP 101-1007 151-2128	BMPH-400-H4-K-P ADM400-4RP 101-1008 151-2129
		#10 SAE	ANFIELD PRINCE CHAR-LYNN® DANFOSS	BMPH-50-H4-K-S ADM50-4RO 101-1009 151-2041	BMPH-80-H4-K-S ADM75-4RO 101-1010 151-2042	BMPH-100-H4-K-S ADM100-4RO 101-1011 151-2043	BMPH-125-H4-K-S N/A 101-1751 151-2044	BMPH-160-H4-K-S ADM150-4RO 101-1012 151-2045	BMPH-200-H4-K-S ADM200-4RO 101-1013 151-2046	BMPH-250-H4-K-S ADM250-4RO 101-1014 151-2047	BMPH-315-H4-K-S ADM300-4RO 101-1015 151-2048	BMPH-400-H4-K-S ADM400-4RO 101-1016 151-2049
		Manifold	ANFIELD PRINCE CHAR-LYNN® DANFOSS	BMPH-50-H4-K-B4 ADM50-4RT 101-1017 151-2201	BMPH-80-H4-K-B4 ADM75-4RT 101-1018 151-2202	BMPH-100-H4-K-B4 ADM100-4RT 101-1019 151-2203	BMPH-125-H4-K-B4 N/A 101-1759 151-2201	BMPH-160-H4-K-B4 ADM150-4RT 101-1020 151-2205	BMPH-200-H4-K-B4 ADM200-4RT 101-1021 151-2206	BMPH-250-H4-K-B4 ADM250-4RT 101-1022 151-2207	BMPH-315-H4-K-B4 ADM300-4RT 101-1023 151-2208	BMPH-400-H4-K-B4 ADM400-4RT 101-1024 151-2209
	Splined	1/2" NPT	ANFIELD PRINCE CHAR-LYNN® DANFOSS	BMPH-50-H4-S-P ADM50-4SP 101-1049 151-2131	BMPH-80-H4-S-P ADM75-4SP 101-1050 151-2132	BMPH-100-H4-S-P ADM100-4SP 101-1051 151-2133	BMPH-125-H4-S-P N/A 101-1766 151-2134	BMPH-160-H4-S-P ADM150-4SP 101-1052 151-2135	BMPH-200-H4-S-P ADM200-4SP 101-1053 151-2136	BMPH-250-H4-S-P ADM250-4SP 101-1054 151-2137	BMPH-315-H4-S-P ADM300-4SP 101-1055 151-2138	BMPH-400-H4-S-P ADM400-4SP 101-1056 151-2139
		#10 SAE	ANFIELD PRINCE CHAR-LYNN® DANFOSS	BMPH-50-H4-S-S ADM50-4SO 101-1057 151-2051	BMPH-80-H4-S-S ADM75-4SO 101-1058 151-2052	BMPH-100-H4-S-S ADM100-4SO 101-1059 151-2053	BMPH-125-H4-S-S N/A 101-1872 151-2054	BMPH-160-H4-S-S ADM150-4SO 101-1060 151-2055	BMPH-200-H4-S-S ADM200-4SO 101-1061 151-2056	BMPH-250-H4-S-S ADM250-4SO 101-1062 151-2057	BMPH-315-H4-S-S ADM300-4SO 101-1063 151-2058	BMPH-400-H4-S-S ADM400-4SO 101-1064 151-2059
		Manifold	ANFIELD PRINCE CHAR-LYNN® DANFOSS	BMPH-50-H4-S-B4 ADM50-4ST 101-1065 151-2211	BMPH-80-H4-S-B4 ADM75-4ST 101-1066 151-2212	BMPH-100-H4-S-B4 ADM100-4ST 101-1067 151-2213	BMPH-125-H4-S-B4 N/A 101-1770 151-2214	BMPH-160-H4-S-B4 ADM150-4ST 101-1068 151-2215	BMPH-200-H4-S-B4 ADM200-4ST 101-1069 151-2216	BMPH-250-H4-S-B4 ADM250-4ST 101-1070 151-2217	BMPH-315-H4-S-B4 ADM300-4ST 101-1071 151-2218	BMPH-400-H4-S-B4 ADM400-4ST 101-1072 151-2219
2 BOLT FLANGE	Woodruff Keyed	1/2" NPT	ANFIELD PRINCE CHAR-LYNN® DANFOSS	BMPH-50-H2-K-P ADM50-2RP 101-1025 151-2081	BMPH-80-H2-K-P ADM75-2RP 101-1026 151-2082	BMPH-100-H2-K-P ADM100-2RP 101-1027 151-2083	BMPH-125-H2-K-P N/A 101-1706 151-2084	BMPH-160-H2-K-P ADM150-2RP 101-1028 151-2085	BMPH-200-H2-K-P ADM200-2RP 101-1029 151-2086	BMPH-250-H2-K-P ADM250-2RP 101-1030 151-2087	BMPH-315-H2-K-P ADM300-2RP 101-1031 151-2088	BMPH-400-H2-K-P ADM400-2RP 101-1032 151-2089
		#10 SAE	ANFIELD PRINCE CHAR-LYNN® DANFOSS	BMPH-50-H2-K-S ADM50-2RO 101-1033 151-2001	BMPH-80-H2-K-S ADM75-2RO 101-1034 151-2002	BMPH-100-H2-K-S ADM100-2RO 101-1035 151-2003	BMPH-125-H2-K-S N/A 101-1702 151-2004	BMPH-160-H2-K-S ADM150-2RO 101-1036 151-2005	BMPH-200-H2-K-S ADM200-2RO 101-1037 151-2006	BMPH-250-H2-K-S ADM250-2RO 101-1038 151-2007	BMPH-315-H2-K-S ADM300-2RO 101-1039 151-2008	BMPH-400-H2-K-S ADM400-2RO 101-1040 151-2009
		Manifold	ANFIELD PRINCE CHAR-LYNN® DANFOSS	BMPH-50-H2-K-B4 ADM50-4RT 101-1041 151-2161	BMPH-80-H2-K-B4 ADM75-4RT 101-1042 151-2162	BMPH-100-H2-K-B4 ADM100-4RT 101-1043 151-2163	BMPH-125-H2-K-B4 N/A 101-11710 151-2164	BMPH-160-H2-K-B4 ADM150-4RT 101-1044 151-2165	BMPH-200-H2-K-B4 ADM200-4RT 101-1045 151-2166	BMPH-250-H2-K-B4 ADM250-4RT 101-1046 151-2167	BMPH-315-H2-K-B4 ADM300-4RT 101-1047 151-2168	BMPH-400-H2-K-B4 ADM400-4RT 101-1048 151-2169
	Splined	1/2" NPT	ANFIELD PRINCE CHAR-LYNN® DANFOSS	BMPH-50-H2-S-P ADM50-2SP 101-1073 151-2091	BMPH-80-H2-S-P ADM75-2SP 101-1074 151-2092	BMPH-100-H2-S-P ADM100-2SP 101-1075 151-2093	BMPH-125-H2-S-P N/A 101-1727 151-2094	BMPH-160-H2-S-P ADM150-2SP 101-1076 151-2095	BMPH-200-H2-S-P ADM200-2SP 101-1077 151-2096	BMPH-250-H2-S-P ADM250-2SP 101-1078 151-2097	BMPH-315-H2-S-P ADM300-2SP 101-1079 151-2098	BMPH-400-H2-S-P ADM400-2SP 101-1080 151-2099
		#10 SAE	ANFIELD PRINCE CHAR-LYNN® DANFOSS	BMPH-50-H2-S-S ADM50-2SO 101-1081 151-2011	BMPH-80-H2-S-S ADM75-2SO 101-1082 151-2012	BMPH-100-H2-S-S ADM100-2SO 101-1083 151-2013	BMPH-125-H2-S-S N/A 101-1723 151-2014	BMPH-160-H2-S-S ADM150-2SO 101-1084 151-2015	BMPH-200-H2-S-S ADM200-2SO 101-1085 151-2016	BMPH-250-H2-S-S ADM250-2SO 101-1086 151-2017	BMPH-315-H2-S-S ADM300-2SO 101-1087 151-2018	BMPH-400-H2-S-S ADM400-2SO 101-1088 151-2019
		Manifold	ANFIELD PRINCE CHAR-LYNN® DANFOSS	BMPH-50-H2-S-B4 ADM50-2ST 101-1089 151-2171	BMPH-80-H2-S-B4 ADM75-2ST 101-1090 151-2172	BMPH-100-H2-S-B4 ADM100-2ST 101-1091 151-2173	BMPH-125-H2-S-B4 N/A 101-1731 151-2174	BMPH-160-H2-S-B4 ADM150-2ST 101-1092 151-2175	BMPH-200-H2-S-B4 ADM200-2ST 101-1093 151-2176	BMPH-250-H2-S-B4 ADM250-2ST 101-1094 151-2177	BMPH-300-H2-S-B4 ADM300-2ST 101-1095 151-2178	BMPH-400-H2-S-B4 ADM400-2ST 101-1096 151-2179

Note: The cross reference information in this chart is to be used only as a reference for guideline purposes only. After selecting a model from above, review motor specifications to determine compatibility with specific application.