

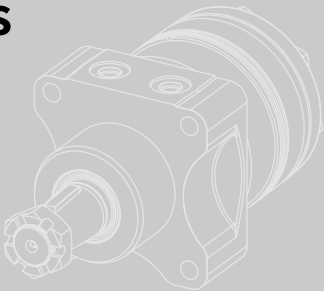
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HCW/HCG/HCP series

Orbital hydraulic motor

The HCW/HCG/HCP series orbital hydraulic motor, which boasts superior mass-to-power ratio, has been extensively used in all kinds of mobile and rotary conditions, particularly for low flow and large torque load starting conditions.



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Overview

The HCW/HCG/HCP series orbital hydraulic motor, which boasts superior mass-to-power ratio, has been extensively used in all kinds of mobile and rotary conditions, particularly for lowflow and large torque load starting conditions.

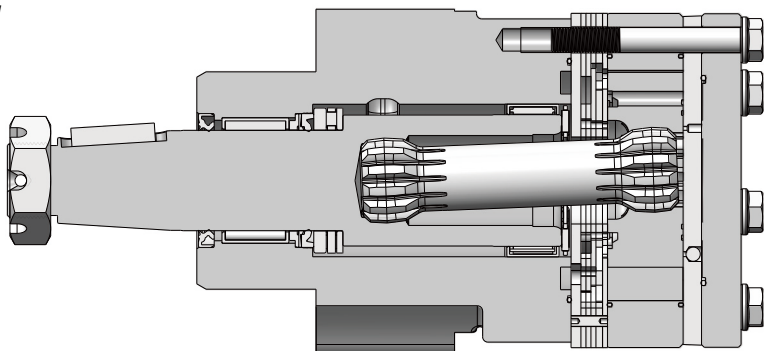
During the working process, the unique balance plate design bends to the rotor under the effect of oil pressure, greatly reducing the end clearance of the fixed rotor and realizing higher volume efficiency; when the oil pressure reaches the working pressure, the deflection and oil pressure of the balance plate will achieve a dynamic balance, allowing for easy, mechanically-efficient rotor operation. This perfect exchange of efficiency maximizes the steady performance of the system and enables the whole machine to consume less energy.

Advantages

- The optimized high-pressure combined seal design ensures excellent sealing performance and reliability.
- The roller bearing structure bears radial loads better.
- The unique balance plate design ensures stable operation at low speeds and high pressures.
- The full flow cooling treatment of its linkage mechanism prolongs its service life.
- The advanced flow distribution system design greatly improves efficiency and makes the motor more compact.
- A variety of flange connection sizes are provided, facilitating installation.

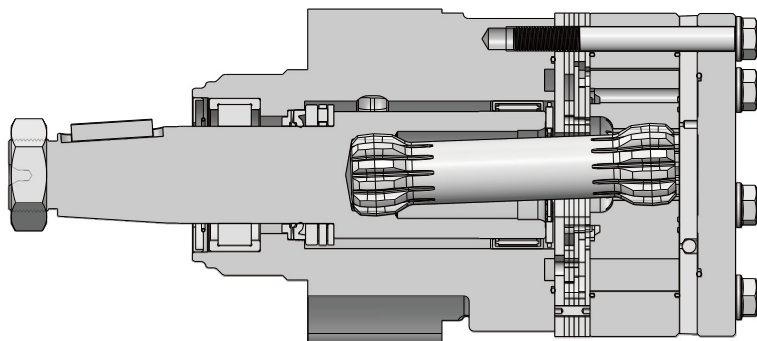
Standard structure

· HCW



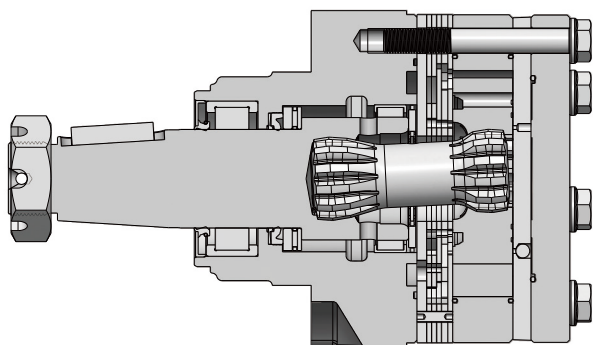
P-0001

· HCG



P-0079

· HCP



P-0101

Specification

Type		HCW	HCW	HCW	HCW	HCW	HCW	HCW	HCW	HCW	HCW	HCW	HCW
		HCG	HCG	HCG	HCG	HCG	HCG	HCG	HCG	HCG	HCG	HCG	HCG
			HCP	HCP	HCP	HCP	HCP	HCP	HCP	HCP			
		120	160	200	230	260	300	350	375	400	470	540	620
Displacement (cm³/rev.)		116.8	157	198	225	253	291	328	363	400	451	542	618
Max.speed (rpm)	Continuous	360	374	337	294	292	278	241	203	193	162	140	120
	Intermittent	488	466	409	358	349	316	269	241	228	196	170	142
Max.torque (Nm)	Continuous	337	480	559	658	726	827	929	1017	1098	1099	997	1014
	Intermittent	387	552	637	726	808	950	1061	1175	1249	1281	1251	1293
Max. differential pressure (bar)	Continuous	207	207	207	207	207	207	207	207	207	173	138	121
	Intermittent	241	241	241	241	241	241	241	241	241	207	173	155
	Peak	276	276	276	276	276	276	276	276	276	241	207	173
Max.flow (L/min)	Continuous	45	61	68	68	76	83	83	76	76	76	76	76
	Intermittent	61	76	83	83	91	95	95	91	91	91	91	91
Max.no-load starting pressure (bar)		7	8	8	10	10	10	10	10	10	12	12	14
Min.starting torque (Nm)	Max. Continuous different pressure	236	336	391	461	508	579	650	712	769	769	698	710
	Max. Intermittent different pressure	271	386	446	508	566	665	743	823	874	897	876	905

T - 0001

- Intermittent working condition: The working time should be less than 6 seconds per minute under the intermittent working condition.
- Peak differential pressure: At peak differential pressure, the operating time is less than 0.6 seconds per minute.
- It is not recommended for the motor to work at simultaneous maximum torque and maximum speed.
- The filtration standard of ISO 4406 cleaning standard 20/18/15 is recommended.
- High quality anti-wear hydraulic fluids are recommended.
- When the temperature is 50° , the minimum viscosity of the oil is recommended to be 20mm²/s.
- The recommended maximum operating temperature is 82°C .
- To assure best motor life, run motor 10-15 minutes in low speed high torque mode at approximately 50% of continuous pressure and 50% of continuous flow.
- High pressure shaft seal series: Max.permissible inlet pressure 300bar.

Displacement performance

		Pressure(bar)						Max.Cont	Max.Inter
120		17	35	69	104	138	173	207	241
116.8 cm³/rev.		Torque(Nm), Speed(rpm)							
Flow (L/min)	2	18	52	96	139				
		14	14	10	7				
	4	23	53	111	163	226			
		25	24	25	21	14			
	8		55	120	178	228	272	303	344
			56	55	53	46	41	36	28
	15		53	115	187	244	378	337	361
			110	105	98	94	89	87	81
	23		51	114	186	237	277	336	359
			176	165	155	150	143	140	137
Max.Cont	30			111	168	224	281	326	386
				245	213	206	198	197	189
	38			103	167	220	276	323	384
				293	282	271	265	252	241
	45			101	163	216	275	320	387
Max.Inter				360	346	330	325	320	306
	53			89	156	210	269	336	
				413	414	400	393	367	
	61			85	147	210	273	326	
				488	477	456	448	426	

Overall Efficiency: 70-100%40-69%0-39%

T - 0002

Torque (Nm):273
Speed (rpm):448

Displacement performance

		Pressure(bar)						Max.Cont	Max.Inter
160		17	35	69	104	138	173	207	241
157 cm³/rev.		Torque(Nm), Speed(rpm)							
Flow (L/min)	2	37 7	77 3	149 3	223 3	310 2	349 1		
	4	31 22	80 18	164 17	243 15	325 15	379 14	443 10	
	8	37 46	81 44	160 40	242 39	317 38	380 36	480 31	552 29
	15	41 94	77 92	173 88	254 85	320 81	379 80	453 78	518 74
	23		72 139	157 133	237 133	318 128	380 123	453 123	515 117
	30		69 188	164 182	235 178	314 175	387 172	456 167	513 163
	38		73 233	147 228	232 227	306 219	377 221	454 212	523 208
	45		67 279	143 278	225 271	303 269	368 263	441 256	499 249
	53			136 327	229 324	312 319	373 309	459 306	542 300
	61			124 373	215 374	295 361	368 361	433 355	486 334
Max.Cont	68			108 419	200 418	284 417	362 407	420 402	
Max.Inter	76			105 466	190 460	278 460	350 454	454 444	

Overall Efficiency: 70-100% 40-69% 0-39%

T - 0003

Displacement performance

		Pressure(bar)						Max.Cont	Max.Inter
200		17	35	69	104	138	173	207	241
198 cm ³ /rev.		Torque(Nm), Speed(rpm)							
Flow (L/min)	2	39	91	133	294	375			
		6	4	4	4	3			
	4	43	85	200	276	373	441	525	
		16	13	12	11	10	8	5	
	8	44	94	196	300	375	462	540	615
		34	32	30	28	28	26	21	19
	15	40	95	197	307	402	479	545	630
		73	70	68	65	61	60	56	52
	23		84	192	285	391	464	555	637
			113	110	108	105	101	101	91
	30		80	188	287	403	460	545	631
			148	145	143	137	136	132	126
	38		69	182	277	402	459	536	616
			188	183	177	173	171	161	197
	45			162	260	364	451	537	618
				218	213	212	208	200	196
Max.Cont	53			151	271	369	449	559	603
				258	254	248	244	242	236
	61			136	254	337	436	523	600
				298	293	286	278	272	271
Max.Inter	68			124	231	340	418	511	594
				337	329	328	322	312	303
	76			111	207	309	401	501	
				373	373	366	357	346	
	83			193	282	371	468		
				409	400	389	370		

Overall Efficiency: 70-100% 40-69% 0-39% T - 0004

Displacement performance

		Pressure(bar)						Max.Cont	Max.Inter
230		17	35	69	104	138	173	207	241
225 cm³/rev.		Torque(Nm), Speed(rpm)							
Flow (L/min)	2	43	91	184	292	373			
		6	4	3	1	1			
	4	51	105	223	315	416	491	565	
		14	14	11	11	9	7	4	
	8	55	108	217	335	436	527	615	715
		31	28	27	26	24	22	17	14
	15	46	111	211	329	439	542	658	726
		66	62	56	55	55	50	43	41
	23		107	214	338	427	535	627	722
			95	91	86	84	79	73	72
Max.Cont	30		92	210	318	427	524	639	717
			129	123	122	118	113	105	99
	38		82	198	314	438	528	617	707
			164	158	154	149	145	142	132
	45			193	297	425	514	604	691
				194	186	179	170	173	165
	53			180	295	388	498	591	684
				226	218	214	209	208	164
	61			155	278	401	487	582	666
				259	257	251	247	241	228
Max.Inter	68			145	269	356	500	570	662
				294	287	282	279	272	261
	76			127	238	253	452	574	
				324	320	316	309	302	
	83				216	344	460	553	
					358	353	344	340	

Overall Efficiency: 70-100% 40-69% 0-39%

T - 0005

Displacement performance

		Pressure(bar)						Max.Cont	Max.Inter
260		17	35	69	104	138	173	207	241
253 cm ³ /rev.		Torque(Nm), Speed(rpm)							
Flow (L/min)	2	51	114						
	4	4	2						
	8	55	116	244	365	482	578	352	
	15	11	11	12	9	9	7	6	
	23	57	113	144	365	490	598	708	
	30	29	27	25	23	22	21	18	
	38	53	117	266	370	492	597	703	805
	45	61	57	52	53	50	48	43	39
	53	47	127	244	369	504	595	726	806
	61	88	86	82	81	77	72	68	66
	68		98	232	353	481	595	698	799
	76		116	110	109	106	100	98	90
	83		86	234	344	474	588	689	800
	91		143	142	141	137	135	128	119
	Max.Cont		82	222	345	474	570	677	808
	Max.Inter		175	174	171	168	161	154	144
			70	203	332	451	572	673	770
			205	204	202	197	184	184	176
				185	301	454	555	656	754
				230	229	223	218	215	207
				163	310	419	551	646	744
				261	262	255	248	243	232
				139	283	396	526	640	738
				292	290	286	279	273	265
				138	263	378	513	618	
				323	317	318	311	301	
				86	230	366	501		
				349	348	347	343		

Overall Efficiency: 70-100% 40-69% 0-39%

T - 0006

Displacement performance

		Pressure(bar)						Max.Cont	Max.Inter
300		17	35	69	104	138	173	207	241
291 cm³/rev.		Torque(Nm), Speed(rpm)							
Flow (L/min)	2	51	95						
		3	1						
	4	64	146	302	434	510	626		
		12	11	9	9	7	3		
	8	62	158	309	438	572	680	767	830
		22	20	20	20	17	14	8	5
	15	67	144	315	430	556	682	818	907
		49	46	44	43	37	35	26	20
	23	60	138	291	423	547	691	819	909
		77	73	73	68	66	58	48	41
	30	47	127	307	389	572	697	827	929
		101	99	101	94	88	79	72	61
	38		112	283	410	505	684	796	921
			126	125	122	117	107	100	90
	45		94	260	390	475	643	784	880
Max.Cont			152	149	150	146	135	123	112
	53		76	246	394	530	662	809	950
			175	176	178	173	164	151	139
	61		64	223	368	506	632	799	918
			202	200	201	190	186	176	165
	68			202	340	468	667	803	901
				226	226	223	212	198	196
	76			174	328	477	609	743	909
				253	252	244	238	230	216
	83			145	323	467	575	733	
Max.Inter				278	278	270	263	255	
	91			121	282	433	558	702	
				304	302	298	290	279	
	95			106	261	433	554	708	
				316	313	310	308	295	

Overall Efficiency: 70-100% 40-69% 0-39%

T - 0007

Displacement performance

		Pressure(bar)						Max.Cont	Max.Inter
350		17	35	69	104	138	173	207	241
328 cm³/rev.		Torque(Nm), Speed(rpm)							
Flow (L/min)	2	64	133	272	399				
		4	3	3	2				
	4	65	134	297	436				
		11	9	9	7				
	8	68	145	313	461	599	742	856	
		20	20	20	17	17	17	15	
	15	72	152	314	471	631	773	889	993
		43	42	41	39	38	36	34	28
	23	62	148	314	474	631	767	925	1033
		64	62	61	60	58	53	51	46
	30	55	137	309	460	625	769	929	1053
		88	83	86	83	78	76	70	67
	38		114	298	433	602	743	912	1061
			109	108	110	103	98	95	86
	45		98	264	446	581	740	890	1046
			130	128	129	125	117	108	106
	53		87	253	423	571	726	882	1032
			153	152	151	148	142	134	121
Max.Cont	61		64	236	409	549	720	849	1012
			174	174	172	170	163	154	147
	68			220	393	570	695	837	985
				195	193	189	189	173	163
	76			207	376	516	686	836	975
				216	217	217	216	196	188
	83			181	351	551	686	815	959
				241	238	235	234	223	216
	91			173	360	534	666		
				262	261	260	256		
Max.Inter	95				367	528	648		
					269	269	266		

Overall Efficiency: 70-100% 40-69% 0-39%

T - 0008

Displacement performance

		Pressure(bar)						Max.Cont	Max.Inter
		17	35	69	104	138	173	207	241
		Torque(Nm), Speed(rpm)							
Flow (L/min)	2	75 3							
	4	85 7	164 7	325 7	492 6	643 5	758 4		
	8	85 17	173 17	364 16	536 16	688 15	841 13	949 10	
	15	75 38	161 38	363 37	539 37	701 33	862 29	985 26	1115 22
	23	68 60	155 59	355 57	531 56	698 53	867 49	1017 42	1175 39
	30	59 80	148 79	343 79	514 78	699 73	845 67	1012 62	1163 52
	38		132 99	325 99	498 98	685 94	835 88	1012 80	1155 73
	45		118 120	303 120	482 119	642 115	812 106	983 97	1145 95
	53		95 141	283 141	478 139	628 135	797 130	947 122	1125 107
	61		76 160	264 160	432 160	607 154	775 153	939 142	1094 132
	68			238 182	436 181	599 178	773 169	908 163	1085 154
	76			212 203	386 201	562 199	740 193	876 185	1025 171
	83			176 221	372 220	532 219	699 215	843 207	
	91			143 241	323 241	514 240	665 231		

Overall Efficiency: 70-100% 40-69% 0-39%

T - 0009

Displacement performance

		Pressure(bar)						Max.Cont	Max.Inter
400		17	35	69	104	138	173	207	241
400 cm ³ /rev.		Torque(Nm), Speed(rpm)							
Flow (L/min)	2	73	167	336	497	647			
		5	4	4	3	3			
	4	85	184	367	532	703	865		
		8	8	8	9	9	8		
	8	96	196	381	551	716	907	1046	
		19	20	19	19	19	18	17	
	15	89	201	370	558	722	882	1083	1249
		37	36	38	36	36	35	31	26
	23	83	193	381	549	740	931	1098	1222
		56	56	56	57	55	54	52	49
	30	70	177	375	546	728	923	1075	1186
		75	74	71	73	72	69	68	66
	38	55	159	358	530	713	905	1080	1167
		92	95	92	93	91	88	86	85
	45	42	144	336	512	684	879	1077	1158
		110	112	111	111	109	105	101	100
Max.Cont	53	19	121	321	492	665	864	1050	1135
		131	132	131	130	128	125	121	118
	61		89	290	470	651	842	1028	1122
			154	152	150	147	144	140	138
	68		61	262	447	623	804	975	1091
			173	171	168	166	162	158	164
	76		30	230	419	594	784	955	1063
			193	191	188	185	182	177	187
	83			195	389	564	738	919	
				210	207	204	201	196	
Max.Inter	91			171	368	541	721	900	
				228	225	222	219	214	

Overall Efficiency: 70-100%

40-69%

0-39%

T - 0010

Displacement performance

		Pressure(bar)					Max.Cont	Max.Inter
		17	35	69	104	138	173	207
		Torque(Nm), Speed(rpm)						
Flow (L/min)	2	93 2	185 1					
	4	98 8	204 6	409 5	610 5	815 4		
	8	98 15	208 13	435 13	658 12	855 12	1025 11	1196 9
	15	93 30	200 30	445 29	660 29	887 27	1067 24	1250 21
	23	86 48	194 48	438 44	673 44	874 43	1073 37	1259 33
	30	74 65	180 64	426 62	664 61	858 58	1099 51	1281 45
	38	54 83	164 80	408 79	627 78	851 75	1068 69	1275 60
	45		142 98	379 94	629 94	833 91	1069 85	1271 74
	53		113 112	351 113	580 111	804 110	1015 104	1223 95
	61		84 131	322 129	546 128	797 124	968 122	1192 115
	68		56 146	274 144	525 144	738 143	958 140	1167 129
	76			235 162	479 161	705 157	918 155	1124 145
	83			203 180	461 179	669 176	885 172	
	91			158 196	386 195	621 191	842 185	

Overall Efficiency: 70-100% 40-69% 0-39% T - 0011

Displacement performance

		Pressure(bar)				Max.Cont	Max.Inter
540		17	35	69	104	138	173
542 cm ³ /rev.		Torque(Nm), Speed(rpm)					
Flow (L/min)	2	104 2	197 2				
	4	127 7	230 5	467 6	699 5	939 5	1150 5
	8	134 13	239 12	500 11	754 11	976 10	1185 10
	15	121 28	232 27	509 25	755 24	997 23	1223 23
	23	99 43	225 42	505 40	783 40	993 38	1226 35
	30	79 57	213 56	485 56	751 55	984 54	1251 48
	38	59 70	189 69	454 68	727 68	958 66	1246 64
	45		176 84	439 84	717 81	946 81	1204 78
	53		140 99	418 97	681 95	952 94	1185 93
	61		108 111	384 110	669 112	900 111	1164 106
	68		83 127	357 127	612 125	870 125	1117 124
	Max.Cont 76			323 140	603 139	828 137	1109 134
	83			299 156	538 154	792 152	
	Max.Inter 91			216 170	492 169	751 169	

Overall Efficiency: 70-100% 40-69% 0-39%

T - 0012

Displacement performance

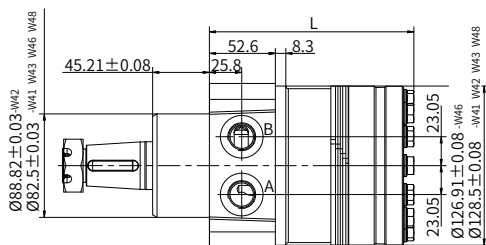
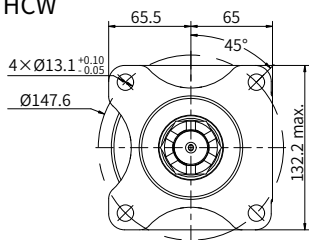
		Pressure(bar)				Max.Cont	Max.Inter
620		17	35	69	104	121	155
618 cm ³ /rev.		Torque(Nm), Speed(rpm)					
Flow (L/min)	2	120 1	228 1				
	4	137 6	264 5	535 5	796 4	936 4	
	8	143 12	276 11	570 10	853 10	985 9	1256 7
	15	131 23	269 23	581 23	871 23	1009 22	1280 18
	23	112 36	261 36	575 34	883 34	1014 33	1285 29
	30	91 47	249 49	554 45	854 44	999 43	1293 42
	38	68 60	221 59	526 58	883 57	973 57	1269 53
	45		203 71	505 71	816 71	953 69	1240 65
	53		161 84	476 81	779 81	931 80	1226 79
	61		125 96	440 95	753 93	895 92	1187 90
	68		91 107	407 107	704 107	851 104	1148 105
	Max.Cont 76			359 120	675 118	816 118	1100 115
	83			329 132	615 132	759 130	
	Max.Inter 91			246 142	556 142	705 140	

Overall Efficiency: 70-100% 40-69% 0-39%

T - 0013

Installation size

- HCW



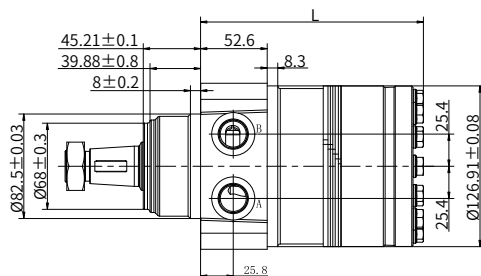
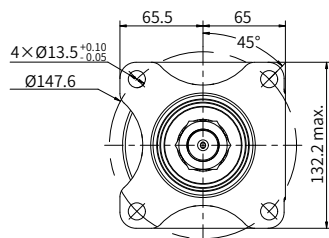
P - 0002

Main Port A、B: W41 W42 7/8-14UNF

W43 W46 G1/2

W48 9/16-18UNC

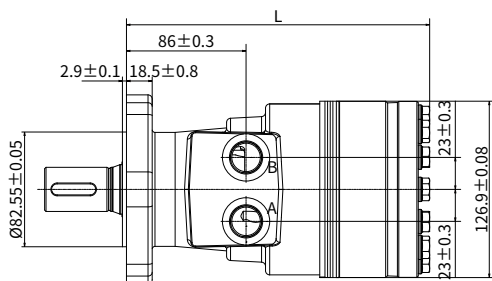
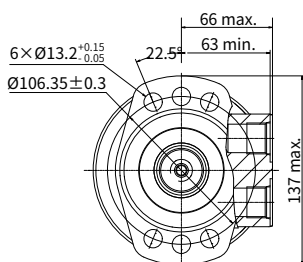
- HCG



P - 0080

Main Port A、B: **W45** 7/8-14UNF

W46 G1/2

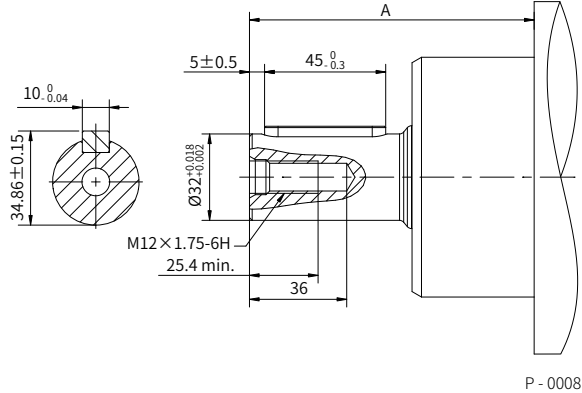


P - 0188

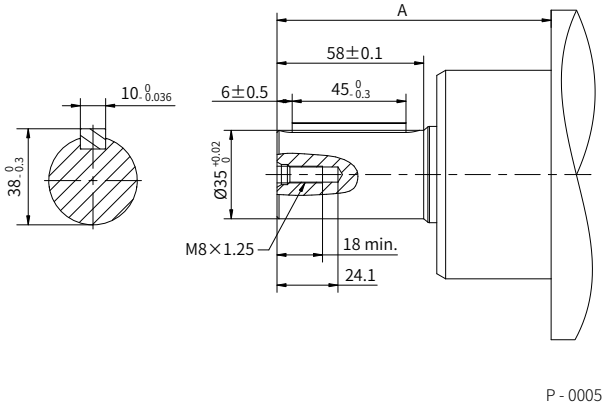
Main Port A、B: M01 M02 7/8-14UNF

Shaft end dimensions

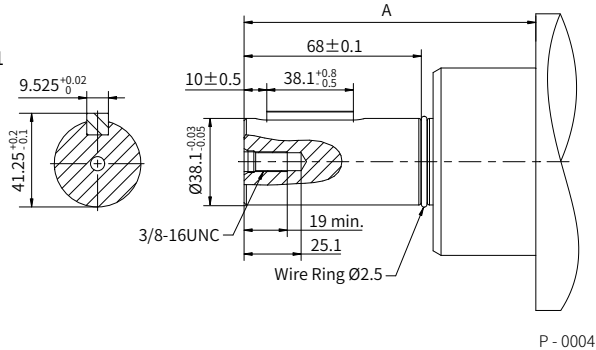
S5
Ø32mm Straight
Parallel key 10×8×45
Max. Torque: 1200Nm



S7
Ø35mm Straight
Parallel key 10×8×45
Max. Torque: 1200Nm



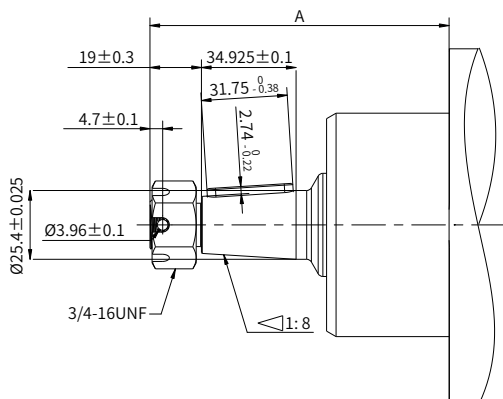
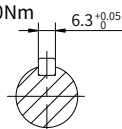
S4
Ø38.1mm Straight
Parallel key 9.525×9.525×38.1
Max. Torque: 1200Nm



Shaft end dimensions

T9

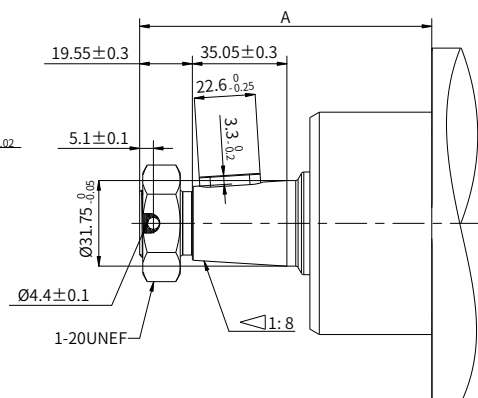
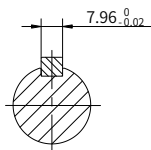
Ø25.4mm Tapered
Parallel key 6.35×6.35×31.75
Tightening torque 200±10Nm
Max. Torque: 655Nm



P - 0119

T2

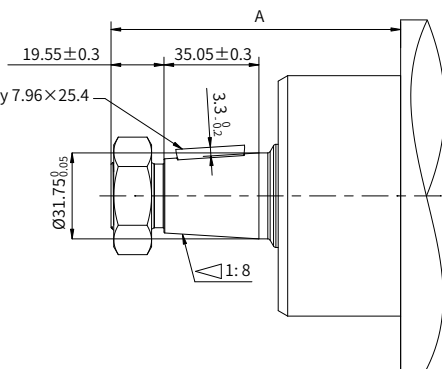
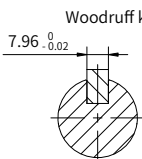
Ø31.75mm Tapered
Parallel key 7.96×7×22.25
Tightening torque 380Nm
Max. Torque: 1200Nm



P - 0120

T1

Ø31.75mm Tapered
Woodruff key 7.96×25.4
Tightening torque 380Nm
Max. Torque: 1200Nm

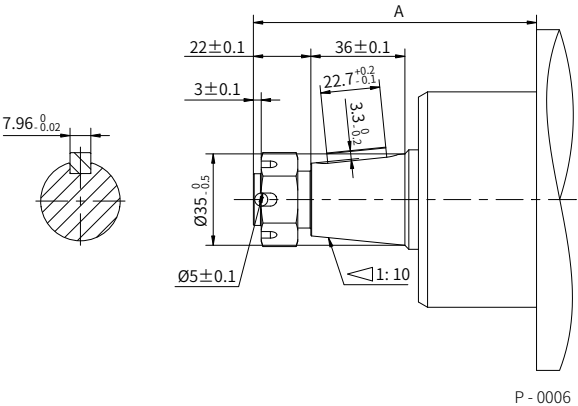


P - 0007

Shaft end dimensions

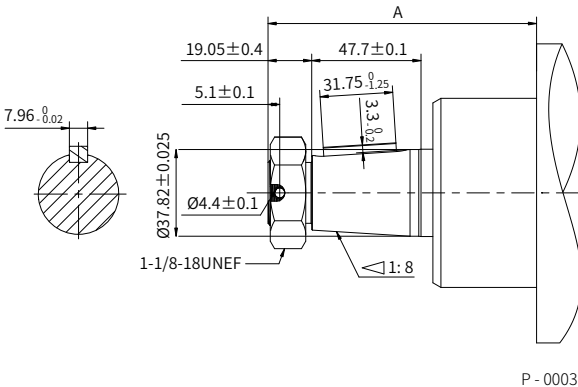
T8

Ø35mm Straight
Parallel key 7.96×7.96×22.7
Tightening torque 325Nm
Max. Torque: 1200Nm



T7

Ø38.1mm Tapered
Parallel key 7.96×7×31.75
Tightening torque 410-540Nm
Max. Torque: 1200Nm



Shaft depth	A mm
S5	105.2
S7	111.9
S4	129.9
T9	110.4
T2	108.2
T1	106.8
T8	111.9
T7	116.9

T - 0030

Note: Dimension A is the overall distance from the flange mounting surface to the end of the shaft, and the tolerance is ±1.03mm.

Length and weight

Displacement cm ³ /rev.	L mm	HCW/HCG
		Weight kg
120	151.3	14.3
160	154.5	14.6
200	158.0	15
230	160.4	15.2
260	162.9	15.5
300	166.2	15.7
350	169.4	16
375	172.5	16.3
400	175.7	16.6
470	180.1	17
540	188.1	17.7
620	194.7	18.4

T - 0015

Note: Dimensions L are the length from the flange mounting surface to the rear end of the motor, and the tolerance is $\pm 1.13\text{mm}$.

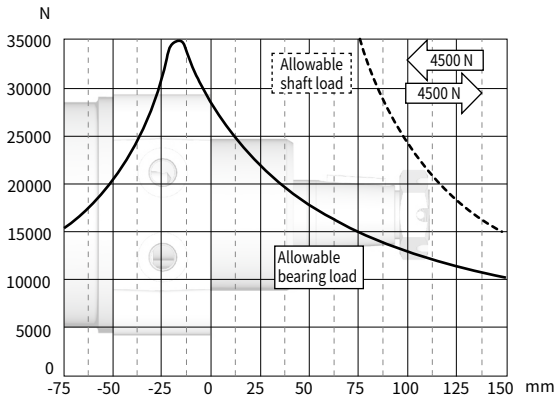
Allowable shaft load/bearing curve

As shown in the figure, when the axial load is 0, the radial allowable load of the output shaft is related to the distance from the flange mounting surface to the load action point.

The solid line shows the allowable radial load of the bearing. It is based on L_{10} bearing life 2000 hrs at 100 RPM with rated output torque.

The dash line shows max radial shaft load. Any shaft load exceeding the values quoted in the curve will involve a risk of failure.

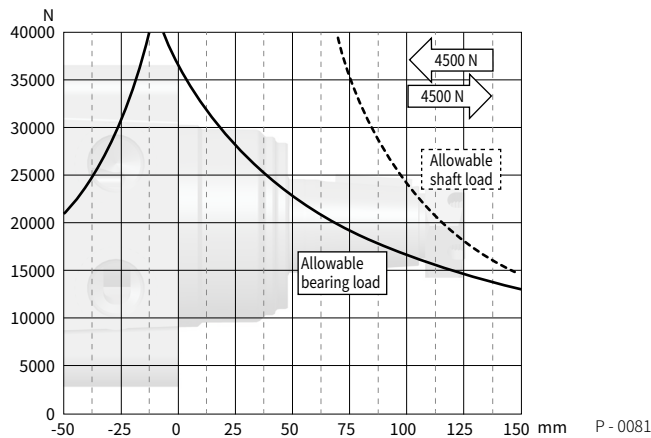
· HCW



P - 0009

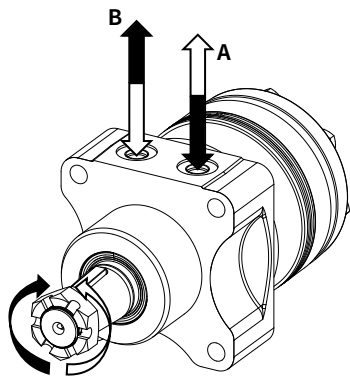
Allowable shaft load/bearing curve

· HCG



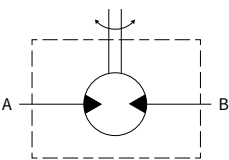
Rotation direction: CW

When facing the motor shaft extension direction, port A is high pressure oil, the output shaft rotates CW; Otherwise, it rotates CCW.



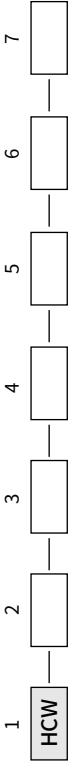
P - 0011

Hydraulic diagram



P - 0010

Ordering information



Pos.1	2	3	4	5	6	7
Series code	Displacement	Mount, Port	Output shaft	Rotation direction	Paint option	Special features
HCW	120	W41	S5	A	No Paint	A
	160	4×Ø13.1 Wheel mount Ø82.5 pilot, Port 7/8-14UNF, Rear pilot Ø128.5	S7	CW	Black	F
	200	W42	S4	CCW	Hengli blue	V
	230	4×Ø13.1 Wheel mount Ø88.82 pilot, Port 7/8-14UNF, Rear pilot Ø128.5	T9	R		S
	260	W43	T2			
	300	4×Ø13.1 Wheel mount Ø82.5 pilot, Port G1/2, Rear pilot Ø128.5	T1			
	350	W46	T8			
	375	4×Ø13.1 Wheel mount Ø82.5 pilot, Port G1/2, Rear pilot Ø126.91	T7			
	400	W48				
	470	4×Ø13.1 Wheel mount Ø82.5 pilot, Port 9/16-18UNC, Rear pilot Ø128.5				
	540					
	620					

T - 0038

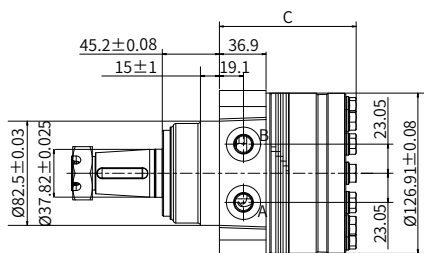
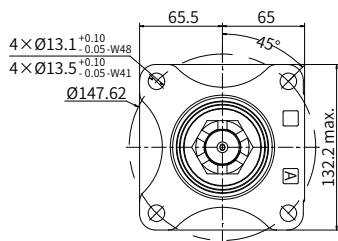
Note: When using the order information, the user can select the motor series, displacement, installation flange, port, shaft and other information. If the selected specification is not in the table or has special requirements, please contact us.

T-0087

Note: When using the order information, the user can select the motor series, displacement, installation flange, port, shaft and other information. If the selected specification is not in the table or has special requirements, please contact us.

Installation size

· HCP



P - 0102

Main Port A, B: **W41** 7/8-14UNF

W48 9/16-18UNF

Shaft end dimensions

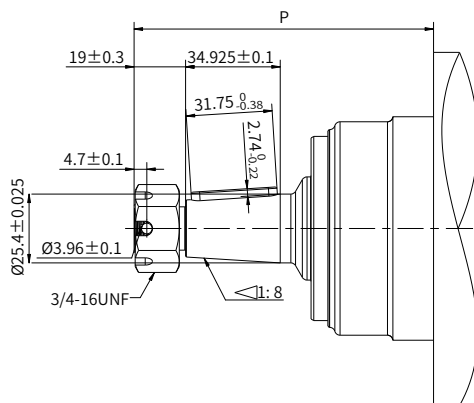
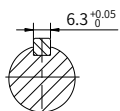
T9

$\varnothing 25.4$ mm Tapered

Parallel key 6.35×6.35×31.75

Tightening torque: 200±10Nm

Max. Torque: 655Nm

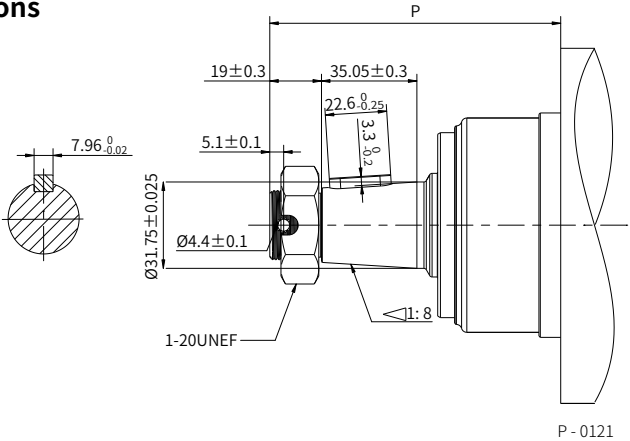


P - 0113

Shaft end dimensions

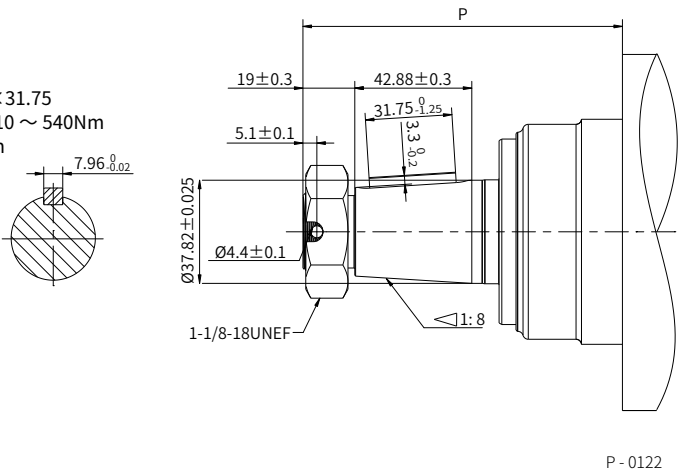
T2

Ø31.75mm Tapered
Parallel key 7.96×7×22.25
Tightening torque: 380Nm
Max. Torque: 1200Nm



T7

Ø38.1mm Tapered
Parallel key 7.96×7×31.75
Tightening torque: 410 ~ 540Nm
Max. Torque: 1200Nm



Shaft depth	P mm
T9	110.4
T2	106.9
T7	116.9

T - 0030

Note: Dimension P is the overall distance from the flange mounting surface to the end of the shaft, and the tolerance is ±1.03mm.

Length and weight

Displacement cm ³ /rev.	C mm	HCP
		Weight kg
160	103.8	10.2
200	108.2	11.2
230	111.5	11.4
260	114.7	11.7
300	119.9	11.9
350	113.6	12.2
375	116.7	12.5
400	119.9	12.8

T - 0111

Note: Dimensions C are the length from the flange mounting surface to the rear end of the motor, and the tolerance is $\pm 1.13\text{mm}$.

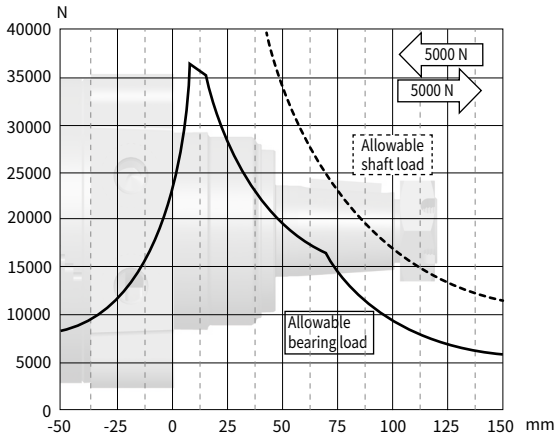
Allowable shaft load/bearing curve

As shown in the figure, when the axial load is 0, the radial allowable load of the output shaft is related to the distance from the flange mounting surface to the load action point.

The solid line shows the allowable radial load of the bearing. It is based on L_{10} bearing life 2000 hrs at 100 RPM with rated output torque.

The dash line shows max radial shaft load. Any shaft load exceeding the values quoted in the curve will involve a risk of failure.

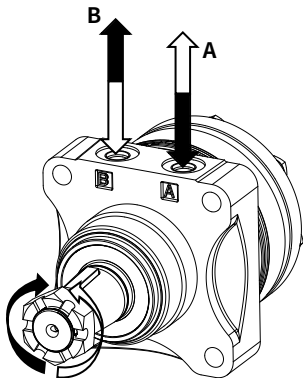
· HCP



P - 0111

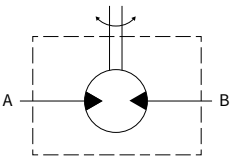
Rotation direction: CW

When facing the motor shaft extension direction, port A is high pressure oil, the output shaft rotates CW; Otherwise, it rotates CCW.



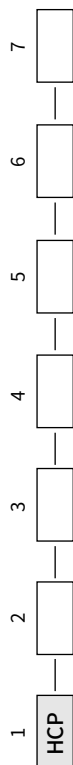
P - 00123

Hydraulic diagram



P - 0010

Ordering information



Pos.1	2	3	4	5	6	7	
Series code	Displacement	Mount, Port	Output shaft	Rotation direction	Paint option	Special features	
HCP	160	4×Ø13.5 Wheel mount Ø82.5 pilot, Port 7/8-14UNF, Rear pilot Ø126.91	T9 Ø25.4 Tapered, Parallel key 6.35×6.35×31.75 T2 Ø31.75 Tapered, Parallel key 7.96×7×22.25 T7 Ø38.1 Tapered, Parallel key 7.96×7×31.75	A R C	No Paint Black Hengli blue	Standard Free running High temperature Low temperature	
	200						
	230						
	260						
	300	4×Ø13.1 Wheel mount Ø82.5 pilot, Port 9/16-18UNF, Rear pilot Ø126.91					
	350						
	375						
	400						

T-0108

Note: When using the order information, the user can select the motor series, displacement, installation flange, port, shaft and other information. If the selected specification is not in the table or has special requirements, please contact us.

