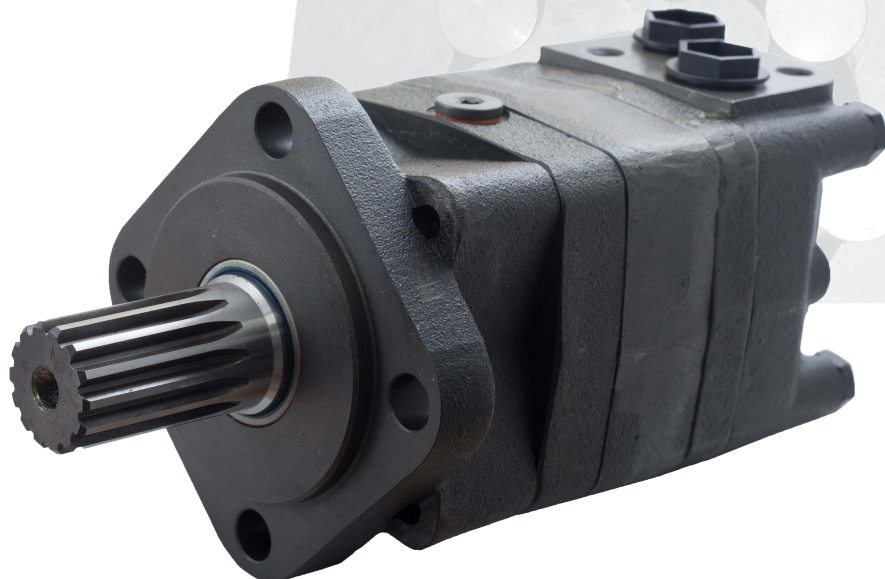




QHTM MOTEURS / MOTORS

ORBITAL GEROTOR GEROLOR

EUROPEAN(DANFOSS®) STYLE
AMERICAN(CHAR-LYNN®) STYLE





MOTORS MOTEURS

SELECTION LIENS RAPIDES / QUICK LINKS



QHMM Series Hydraulic Motor



QHMP Series Hydraulic Motor EUROPEAN STYLE



QHMPH Series Hydraulic Motor AMERICAN STYLE



QHMR Series Hydraulic Motor EUROPEAN STYLE



QHMRs Series Hydraulic Motor AMERICAN STYLE

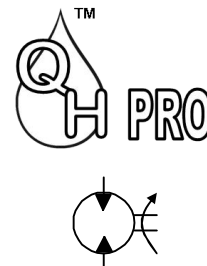


QHMS Series Hydraulic Motor



Accessoires / Accessories

Brake and Valves For Hydraulic Motors



Usage Guide

In order to make the motors working in optimal situation, we recommend the following:

1. Oil temperature :normal 20℃~60℃ upper limit 90℃ (no more than one hour).
2. Filtering and oil cleanliness :a return filter should be installed in the system with a fineness in the range of 10~30μm and a piece of magnet should be installed at the bottom of the tank to prevent grits into the system. The max solid contamination grade of the oil is no more than 19/16.
3. Viscosity: 42~74 mm²/s at 40℃ of oil temperature ,according to the condition to choose an applicable hydraulic oil.
4. The motors can be operated in parallel or in series. When the pressure of the back exceeds 2MPa,it is necessary to install an external drain line to the tank.
- 5.1 For QHMM and QHMP and QHMR series motors,the type of output shaft may be chosen in demand.
 - 5.1.1 The output shaft permits a radial force with the radial bearing.
 - 5.1.2 The output shaft doesn't permit the radial force without the radial bearing.When the radial force acts on the shaft,the force must be discharged.
- 5.2 For QHMS /QHMSY /QHMT and QHMV series motors, the output shaft permit high axial and radial forces.
6. The optimal operation situation should be at the 1/3~2/3 of the rated operation situation.
7. In order to obtain a longer life of operating motor should operate motors at first for one hour under 30% of rated pressure. In any case, be sure to fill up with hydraulic oil inside motor before increasing load.

Specification Data of Hydraulic Motors

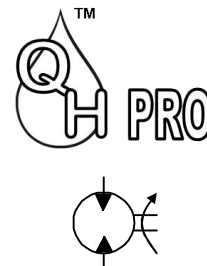
Distribution type	Model	Displacement (cm³/rev.)	Max. operating pressure (MPa)	Speed range (rpm)	Max. output power (kW)
Axial distribution	QHMM	8~50	14	30-1950	3.2
	QHMP	36~400	16.5	30~879	10
	QHMR	36~375	20	30~970	15
	QHMH	200~500	20	30~430	17

Specification Data of Hydraulic Motor

Distribution type	Model	Displacement (cm³/rev.)	Max. operating pressure (MPa)	Speed range (rpm)	Max. output power (kW)
Disc distribution	QHMS	80~375	22.5	30~800	20
	QHMSY	80~475	22.5	8~800	24
	QHMT	160~800	24	30~705	35
	QHMV	315~800	28	10~446	43

MOTEURS / MOTORS

QHMM SERIES



QHMM series motor are small volume, economical type, which is designed with shaft distribution flow, which adapt the Gerotor gear set design and provide compact volume, high power and low weight.

Characteristic features:

- * Advanced manufacturing devices for the Gerotor gear set, which provide small volume, high efficiency and long life.
- * Shaft seal can bear high pressure of motor of which can be used in parallel or in series.
- * Advanced construction design, high power and low weight.

SPECIFICATIONS

Type		QHMM 8	QHMM 12.5	QHMM 20	QHMM 32	QHMM 40	QHMM 50
Geometric displacement (cm ³ /rev.)		8.2	12.9	19.9	31.6	39.8	50.3
Max. speed (rpm)	cont.	1950	1550	1000	630	500	400
	int.	2450	1940	1250	800	630	500
Max. torque (N•m)	cont.	11	16	25	40	45	46
	int.	15	23	35	57	70	88
	peak	21	33	51	64	82	100
Max. output (kW)	cont.	1.8	2.4	2.4	2.4	2.2	1.8
	int.	2.6	3.2	3.2	3.2	3.2	3.2
Max. pressure drop (MPa)	cont.	10	10	10	10	9	7
	int.	14	14	14	14	14	14
	peak	20	20	20	16	16	16
Max. flow (L/min)	cont.	16	20	20	20	20	20
	int.	20	25	25	25	25	25
Weight (kg)		1.9	2	2.1	2.2	2.3	2.4

Type		Max.inlet pressure
QHMM8-50 (MPa)	cont.	17.5
	int.	22.5

- * Continuous pressure:Max. value of operating motor continuously.
- * Intermittent pressure:Max. value of operating motor in 6 seconds per minute.
- * Peak pressure:Max. value of operating motor in 0.6 second per minute.



MOTEURS / MOTORS



Performance Data

QHMM SERIES

QHMM8 [8.2 cm³/rev.]

Pressure (MPa)

	Max.cont.						Max.int.
	3.5	5	7	10	12	14	
Flow (L/min)	3	5	8	10	12	14	
	228	218	206	156	111	58	
4	474	471	463	426	391	331	
8	953	946	926	884	855	816	
12	1444	1426	1402	1360	1324	1288	
15		4	7	10	12	14	
Max.cont.		1912	1900	1861	1833	1780	
Max.int.			6	10	11	14	
20			2395	2350	2328	2281	

QHMM12.5 [12.9 cm³/rev.]

Pressure (MPa)

	Max.cont.					Max.int.
	3.5	5	7	10	12	14
Flow (L/min)	6	8	11	16	19	
	140	136	119	68	35	
4	6	8	12	17	19	23
8	5	8	12	17	20	24
12	5	8	11	16	20	24
15	5	7	11	16	19	23
Max.cont.	1152	1144	1136	1102	1078	1036
20	3	7	10	15	19	22
Max.int.	1542	1532	1521	1500	1482	1437
25	2	6	9	14	18	22
	1910	1891	1878	1848	1828	1788

QHMM20 [19.9 cm³/rev.]

Pressure (MPa)

	Max.cont.						Max.int.
	1.7	3.5	5	7	10	12	14
Flow (L/min)	3	9	14	19	26	30	
	99	96	89	74	42	21	
4	4	9	14	19	26	31	36
8	4	9	13	19	27	31	36
12	3	8	13	18	26	31	37
15	3	8	12	17	25	30	36
Max.cont.	745	741	738	728	695	684	660
20	1	6	11	19	24	29	35
Max.int.	998	995	991	985	962	916	885
25		4	9	14	23	28	33
		1247	1245	1242	1189	1180	1176

QHMM32 [31.6 cc/rev.]

Pressure (MPa)

	Max.cont.						Max.int.
	2	3.5	5	7	10	12	14
Flow (L/min)	7	15	21	28	40		
	61	57	52	47	16		
4	7	15	21	29	41	48	57
8	7	15	21	29	41	49	58
12	6	13	20	28	40	48	58
15	4	12	18	27	39	47	57
Max.cont.	476	472	468	462	441	429	406
20	3	10	17	25	37	46	55
Max.int.	633	630	627	619	601	585	566
25	1	8	15	23	35	43	52
	791	789	787	783	766	753	732

QHMM40 [39.8 cm³/rev.]

Pressure (MPa)

	Max.cont.						Max.int.
	3	5	7	8.5	10	12	
Flow (L/min)	16	27	36	44	51		
	45	40	34	28	17		
4	16	27	37	44	52	62	
8	96	93	85	79	65	52	
12	15	26	36	44	52	63	
15	14	25	35	43	51	62	
Max.cont.	293	287	282	277	268	257	
20	13	24	34	42	50	62	
Max.int.	371	365	360	355	347	338	
25	10	21	31	39	48	59	
	497	492	487	480	472	463	
	7	19	29	37	44	56	
	622	617	612	607	600	591	

QHMM50 [50.3 cm³/rev.]

Pressure (MPa)

	Max.cont.					Max.int.
	1.5	3	5	7	10	
Flow (L/min)	11	23	36	50		
	37	33	27	22		
4	11	22	36	50	70	
8	11	21	35	50	71	
12	11	20	33	49	71	
15	10	18	32	47	69	
Max.cont.	296	295	294	288	282	
20	8	14	29	44	64	
Max.int.	395	395	393	390	381	
25	4	10	25	40	59	
	498	496	494	490	484	

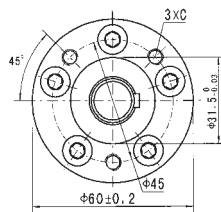
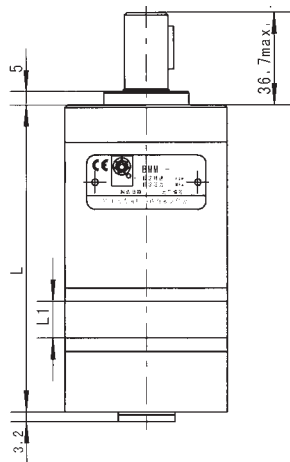
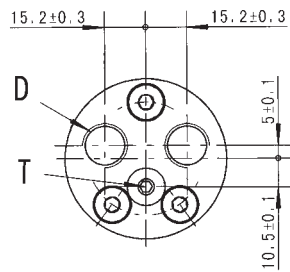
cont.
int.

Torque (N•m) 37
Speed (rpm) 607

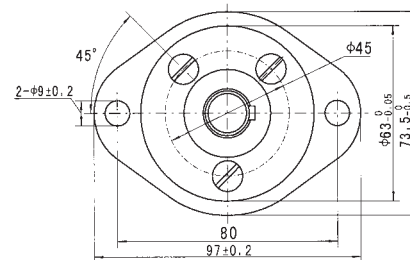
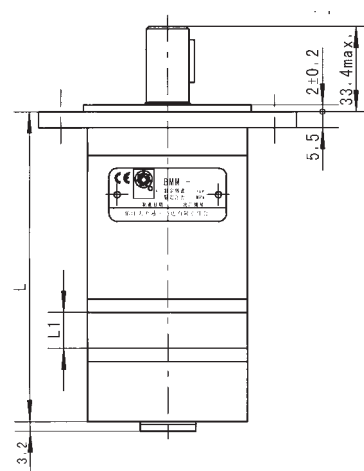
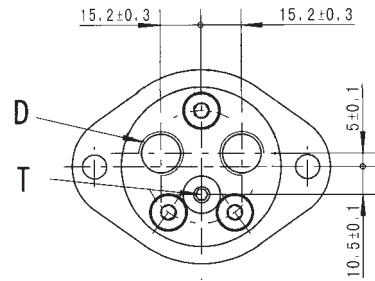
QHMM END PORT DIMENSIONS AND MOUNTING DATA

MOUNTING

Flange M、U



Flange F



	M / U Flange		F Flange	
Model	L	L1	L	L1
QHMM8	104	3.5	107.5	3.5
QHMM12.5	106	5.5	109.5	5.5
QHMM20	109	8.5	112.5	8.5
QHMM32	114	13.5	117.5	13.5
QHMM40	117.5	17	121	17
QHMM50	122	21.5	125.5	21.5

	M / U Flange		F Flange	
Code	1E (depth)	1U (depth)	1E (depth)	1U (depth)
C	3-M6 (10)	3-1/4-28UNF-2B(10)	--	--
D	G3/8 (12)	9/16-18UNF(12)	G3/8 (12)	9/16-18UNF(12)
T	G1/8 (8)	3/8-24UNF(8)	G1/8 (8)	3/8-24UNF(8)

MOTEURS / MOTORS

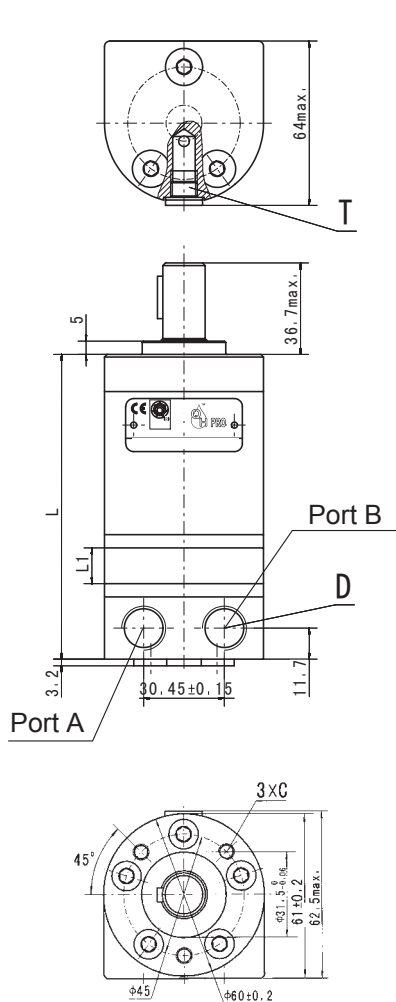
QHMM SERIES



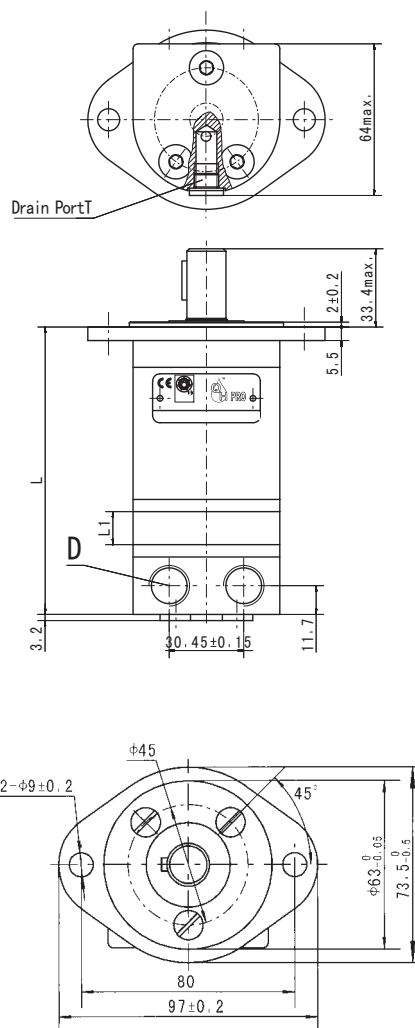
QHMM SIDE PORT DIMENSIONS AND MOUNTING DATA

MOUNTING

Flange M / U

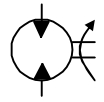


Flange F



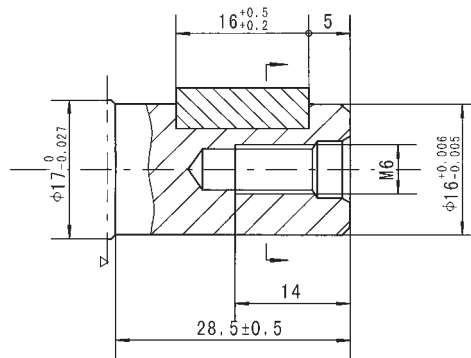
	M / U Flange		F Flange	
Model	L	L1	L	L1
QHMM8	105	3.5	108.5	3.5
QHMM12.5	107	5.5	110.5	5.5
QHMM20	110	8.5	113.5	8.5
QHMM32	115	13.5	118.5	13.5
QHMM40	118.5	17	122	17
QHMM50	123	21.5	126.5	21.5

Mounting	M / U Flange		F Flange	
	E (depth)	U (depth)	E (depth)	U (depth)
C	3-M6 (10)	3-1/4-28UNF-2B(10)	--	--
D	G3/8 (12)	9/16-18UNF(12)	G3/8 (12)	9/16-18UNF(12)
T	G1/8 (8)	3/8-24UNF(8)	G1/8 (8)	3/8-24UNF(8)

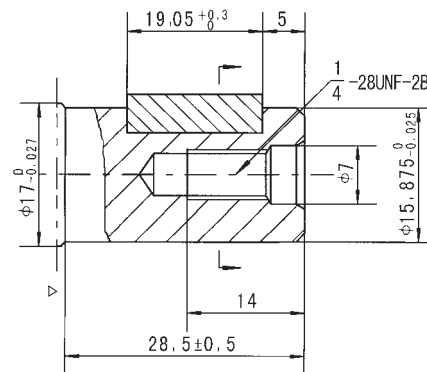


QHMM SHAFT EXTENSIONS FOR QHMM MOTORS

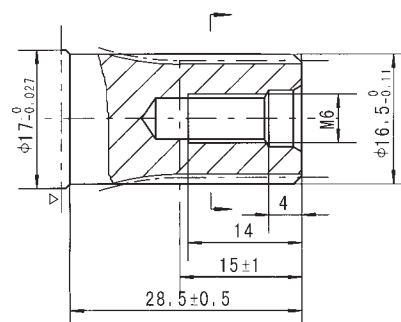
Shaft A: Cylindrical shaft
 $\varnothing 16$ Parallel key 5x5x16



Shaft B: Cylindrical shaft $\varnothing 15.875$
 Parallel key 4.8x4.8x19.05



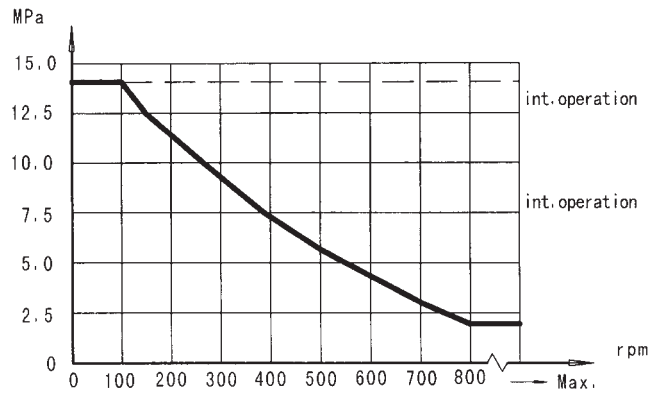
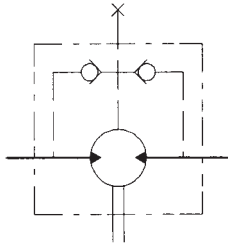
Shaft C: Involute spline shaft
 B17x14 DIN5482



▷ Motor Mounting Surface

QHMM Series Hydraulic Motor

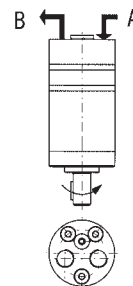
Permissible shaft seal pressure



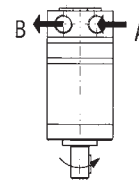
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

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.



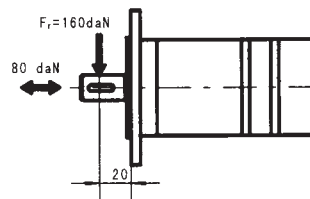
QHMM End Port



QHMM Side Port

Status of the shaft's radial force

$$F_r = \frac{13040}{61.5 + L} \text{ daN}$$



F_r = Radial Force (daN)

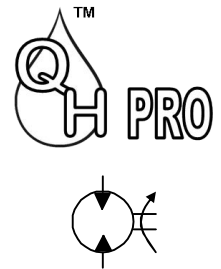
L = Distance (mm)

n = Speed (rpm)

Max. force load

Rhomb-flange $L=15\text{mm}$

Square-flange $L=20\text{mm}$



CODE INFORMATION

1

2

3

4

5

6

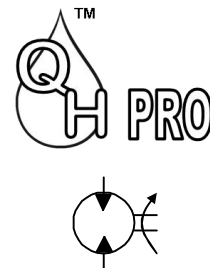
7

8

QHMM

Pos.1	2	3		4		5		6		7		8	
Code	Displacement	Flange		Output shaft		Port and drain port		Rotation direction		Paint		Unusually function	
Omit	8	M U F	3-M6 Round flange, pilot Ø31.5×5 3-1/4-28UNF Round flange,pilot Ø31.5×5 2-Ø9 Rhomb-flange, pilot Ø63×2	A B C	Shaft Ø16, parallel key 5×5×16 Shaft Ø15.875, parallel key 4.8×4.8×19.05 Shaft Ø16.5, involute B17×14, DIN5482	E U 1E 1U	G3/8, G1/8 BSPP 9/16-18UNF, 3/8-24UNF ORB End port G3/8, G1/8 BSPP End port 9/16-18UNF, 3/8-24UNF ORB	Omit R	Standard Opposite	00 Omit B S	No paint Blue Black Silver grey	Omit 0	Standard No case drain
	12.5												
	20												
	32												
	40												
	50												

Note:When the table is used, please fill the code of left rows in the table and give us, which the code information is consists of construction, displacement, mounting flange, output shaft and ports. If the specification is not in the table or you have specific requirements, please contact us.



QHMP SERIES HYDRAULIC MOTOR

QHMP series motor are small volume, economical type, which is designed with shaft distribution flow, which adapt the Gerotor gear set design and provide compact volume, high power and low weight.

Characteristic features:

- * Advanced manufacturing devices for the Gerotor gear set, which provide small volume, high efficiency and long life.
- * Shaft seal can bear high pressure of motor of which can be used in parallel or in series.
- * Advanced construction design, high power and low weight.

Main Specification

Technical data for QHMP with 25 and 1 in and 1 in splined and 28.56 tapered shaft

Type		QHMP	QHMP	QHMP	QHMP	QHMP	QHMP	QHMP	QHMP	QHMP	QHMP	QHMP
		QHMPH	QHMPH	QHMPH	QHMPH	QHMPH	QHMPH	QHMPH	QHMPH	QHMPH	QHMPH	QHMPH
		QHMPW	QHMPW	QHMPW	QHMPW	QHMPW	QHMPW	QHMPW	QHMPW	QHMPW	QHMPW	QHMPW
		36	50	80	100	125	160	200	250	315	400	500
Geometric displacement (cm³/rev.)		36	51.7	77.7	96.2	120.2	157.2	194.5	240.3	314.5	389.5	486.5
Max. speed (rpm)	cont.	1500	1150	770	615	490	383	310	250	192	155	120
	int.	1650	1450	960	770	615	475	385	310	240	190	150
Max. torque (N•m)	cont.	55	100	146	182	236	302	360	380	375	360	385
	int.	76	128	186	227	290	370	440	460	555	525	560
	peak	96	148	218	264	360	434	540	550	650	680	680
Max. output (kW)	cont.	8.0	10.0	10.0	11.0	10.0	10.0	10.0	8.5	7.0	6.0	5.0
	int.	11.5	12.0	12.0	13.0	12.0	12.0	12.0	10.5	8.5	7.0	6.0
Max. pressure drop (MPa)	cont.	12.5	14	14	14	14	14	14	11	9	7	6
	int.	16.5	17.5	17.5	17.5	17.5	17.5	17.5	14	14	10.5	9
	peak	22.5	22.5	22.5	22.5	22.5	22.5	22.5	18	16	14	12
Max. flow (L/min)	cont.	55	60	60	60	60	60	60	60	60	60	60
	int.	60	75	75	75	75	75	75	75	75	75	75
Weight (kg)		5.6	5.6	5.7	5.9	6.0	6.2	6.4	7	6.9	7.4	8

- * Continuous pressure:Max. value of operating motor continuously.
- * Intermittent pressure:Max. value of operating motor in 6 seconds per minute.
- * Peak pressure:Max. value of operating motor in 0.6 second per minute.



Main Specification

Technical data for QHMP with 31.75 and 32 shaft

Type		QHMP QHMPH 36	QHMP QHMPH 50	QHMP QHMPH 80	QHMP QHMPH 100	QHMP QHMPH 125	QHMP QHMPH 160	QHMP QHMPH 200	QHMP QHMPH 250	QHMP QHMPH 315	QHMP QHMPH 400	QHMP QHMPH 500
Geometric displacement (cm ³ /rev.)		36	51.7	77.7	96.2	120.2	157.2	194.5	240.3	314.5	389.5	486.5
Max. speed (rpm)	cont.	1500	1150	770	615	490	383	310	250	192	155	120
	int.	1650	1450	960	770	615	475	385	310	240	190	150
Max. torque (N•m)	cont.	55	100	146	182	236	302	360	460	475	490	430
	int.	76	128	186	227	290	370	440	570	555	580	560
	peak	96	148	218	264	360	434	540	670	840	840	780
Max. output (kW)	cont.	8.0	10.0	10.0	11.0	10.0	10.0	10.0	8.5	7.0	6.0	6.0
	int.	11.5	12.0	12.0	13.0	12.0	12.0	12.0	10.5	8.5	7.0	7.0
Max. pressure drop (MPa)	cont.	12.5	14	14	14	14	14	14	14	12	9.5	7
	int.	16.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	14	11.5	9
	peak	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	18	13
Max. flow (L/min)	cont.	55	60	60	60	60	60	60	60	60	60	60
	int.	60	75	75	75	75	75	75	75	75	75	75
Weight (kg)		5.6	6	5.7	5.9	6.0	6.2	6.4	7	6.9	7.4	8.0

* Continuous pressure:Max.value of operating motor continuously.

* Intermittent pressure:Max.value of operating motor in 6 seconds per minute .

* Peak pressure:Max.value of operating motor in 0.6 second per minute.



Performance Data

QHMP 36 [36cm³/rev.]

Pressure (MPa)

							Max.cont.	Max.int.
	3	6	7	8	10	11	12.5	16.5

Flow (L/min)		13	25	29	34	43	48		
		214	205	200	194	187	179		
8		13	25	29	34	43	48	56	75
15		406	398	391	383	374	366	353	324
20		13	24	29	34	43	48	56	76
30		541	534	528	521	513	500	486	458
35		12	24	29	34	43	48	56	76
40		814	804	792	778	763	749	726	701
45		12	23	28	34	43	48	56	76
55		952	944	930	913	897	879	858	833
60		12	23	28	32	41	47	55	75
Max.cont.		1090	1078	1064	1048	1024	998	977	943
Max.int.		11	22	26	32	41	46	54	74
		1232	1218	1196	1175	1149	1118	1080	1044
		6	15	22	28	37	44	52	71
		1505	1494	1480	1466	1438	1406	1367	1309
		3	11	18	20	30	38	49	67
		1650	1640	1626	1603	1571	1536	1502	1446

QHMP 50 [51.7cm³/rev.]

Pressure (MPa)

							Max.cont.	Max.int.
	3	6	8	10	12.5	14	16	17.5

Flow (L/min)		20	41	56	69	89	95		
		151	134	115	90	56	42		
8		19	40	56	71	91	100	112	120
15		286	274	261	243	204	182	139	102
20		18	39	55	71	92	101	117	128
30		382	373	361	348	318	309	287	251
35		17	38	55	71	91	98	116	124
40		573	568	558	535	503	488	462	440
45		17	38	54	69	89	98	117	124
55		670	661	652	640	606	589	562	548
60		14	36	53	67	88	98	114	123
Max.cont.		863	858	849	837	807	788	764	746
Max.int.		12	33	50	65	85	96	111	121
		1055	1042	1028	1010	979	963	947	920
		10	32	47	64	83	94	108	119
		1150	1143	1126	1111	1079	1065	1043	1015
		6	25	42	56	76	87	101	112
		1440	1430	1416	1395	1367	1351	1335	1312

QHMP 80 [77.7cm³/rev.]

Pressure (MPa)

							Max.cont.	Max.int.
	3	6	8	10	12.5	14	16	17.5

Flow (L/min)		32	62	85	104	129	144		
		97	87	74	55	33	22		
8		32	63	84	107	126	144	165	
15		186	181	170	154	132	118	86	
20		31	63	84	107	132	146	168	185
30		251	243	236	225	207	196	178	155
35		31	62	83	106	131	146	168	186
40		381	379	368	355	332	316	285	263
45		30	59	81	102	130	144	167	185
55		443	435	426	415	397	383	361	342
60		25	58	79	100	126	142	165	182
Max.cont.		570	564	554	543	526	509	483	458
Max.int.		23	57	78	97	124	140	161	179
		696	685	672	656	643	630	602	579
		20	53	75	94	120	137	160	177
		761	753	744	736	720	706	681	660
		14	44	67	87	112	151	169	169
		948	940	931	920	906	890	871	854

Torque (N•m) 87
Speed (rpm) 920

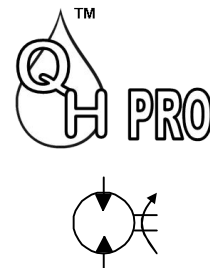
QHMP 100 [96.2cm³/rev.]

Pressure (MPa)

							Max.cont.	Max.int.
	3	6	8	10	12.5	14	16	17.5

Flow (L/min)		40	77	105	130	161	180		
		81	75	69	57	36	24		
8		39	77	106	130	160	180	208	
15		152	149	145	140	122	103	81	
20		36	74	104	128	161	179	205	227
30		204	200	195	190	177	166	148	133
35		33	72	103	125	160	177	203	225
40		308	304	298	290	280	268	255	231
45		30	70	98	122	159	176	202	224
55		360	352	343	331	320	306	294	275
60		29	67	95	118	155	174	200	220
Max.cont.		462	458	451	443	433	419	402	383
Max.int.		25	64	93	116	152	170	198	217
		566	558	549	540	529	515	498	478
		22	60	91	114	149	167	194	213
		618	611	601	589	580	570	558	540
		15	54	83	106	141	160	186	205
		771	763	755	744	735	724	708	693

cont.
int.



Performance Data

QHMP 125 [120.2cm³/rev.]

Pressure (MPa)

	3	6	8	10	12.5	14	16	17.5

	8	51 63	98 60	137 55	168 47	208 28	236 15	
	15	51 121	101 116	138 110	168 102	209 89	236 73	267 48
	20	48 162	98 158	135 153	167 148	211 137	237 128	269 109
	30	46 243	96 239	132 234	164 227	209 216	232 202	264 189
	35	42 284	92 279	130 274	160 269	206 259	229 247	260 231
	45	37 370	89 362	125 355	157 348	201 340	224 327	261 310
	55	33 452	84 446	122 438	152 431	196 420	218 412	252 402
Max.cont.	60	29 490	78 482	117 475	146 468	191 459	215 448	248 439
Max.int.	75	18 615	66 606	107 598	133 586	179 575	202 563	236 549

QHMP 160 [157.2cm³/rev.]

Pressure (MPa)

	3	6	8	10	12.5	14	16	17.5

	8	62 49	120 48	170 46	212 42	263 26	290 14	
	15	60 93	122 91	172 88	215 85	264 76	294 68	340 48
	20	57 125	120 123	170 120	214 117	262 110	290 106	340 92
	30	53 187	115 184	164 181	206 178	259 175	288 168	335 155
	35	49 220	110 216	160 213	202 209	255 205	284 202	328 192
	45	44 283	102 280	154 276	196 272	248 267	278 260	321 250
	55	40 345	99 342	148 340	191 336	243 331	272 328	316 320
Max.cont.	60	33 377	94 374	144 371	188 367	236 363	267 359	308 353
Max.int.	75	19 473	80 469	124 465	170 459	216 453	252 447	296 440

QHMP 200 [194.5cm³/rev.]

Pressure (MPa)

	3	6	8	10	12.5	14	16	17.5

	8	79 40	164 39	207 38	250 35	320 28	360 22	
	15	78 76	162 75	205 74	250 71	322 66	361 61	410 51
	20	76 100	158 98	203 97	247 95	320 92	358 89	403 73
	30	70 151	153 149	200 147	245 145	315 142	350 139	398 131
	35	66 177	149 175	194 173	232 171	297 168	343 166	386 160
	45	63 228	146 226	190 224	230 221	294 218	340 215	383 210
	55	54 280	140 278	181 276	224 274	286 271	334 269	371 263
Max.cont.	60	38 304	127 302	164 300	212 297	270 294	325 291	356 286
Max.int.	75	22 382	96 378	145 374	192 371	235 368	293 364	321 360

QHMP 250 [240.3cm³/rev.]

Pressure (MPa)

	3	6	8	10	12.5	14	16	17.5

	8	96 30	190 28	268 24	326 21	403 11		
	15	98 60	194 58	270 54	327 50	405 40	450 30	510 12
	20	92 82	188 80	267 77	325 76	405 69	456 64	514 52
	30	85 123	180 120	259 118	320 114	400 106	448 98	513 87
	35	77 143	176 141	252 139	311 135	389 128	436 122	504 112
	45	70 185	168 182	243 178	300 174	377 168	428 161	495 152
	55	63 226	159 223	237 218	290 213	369 209	417 202	483 193
Max.cont.	60	60 248	150 246	228 243	280 239	358 233	407 226	473 215
Max.int.	75	34 309	128 306	202 302	264 297	342 292	387 286	448 278

□ cont.
■ int.

Torque (N•m) 128
Speed (rpm) 306



MOTORS MOTEURS



Performance Data

QHMP 315 [314.5cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

3	5	7	9	10	12.5	14
---	---	---	---	----	------	----

Flow (L/min)	8	123 25	215 23	292 21	368 17	405 11		
	15	118 47	211 46	287 44	367 40	404 28	495 21	568 10
	20	110 62	205 61	278 60	360 57	395 46	494 40	566 36
	30	101 94	196 93	271 91	349 88	388 76	490 68	565 65
	35	96 109	188 107	264 106	341 104	382 96	478 89	557 84
	45	89 141	180 140	254 138	337 135	372 127	468 120	553 115
	55	76 173	166 172	239 170	325 167	362 160	457 152	548 143
	60	65 188	154 186	227 184	308 182	348 178	443 172	529 163
	75	40 236	120 234	201 232	279 228	323 226	418 223	497 214
	Max.cont.							
Max.int.								

QHMP 400 [389.5cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

3	4.5	5.5	6.5	8	10	12.5
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Flow (L/min)	8	166 20	232 19	287 18	340 16	418 12		
	15	165 38	228 36	277 35	337 33	417 31	496 27	612 21
	20	162 50	223 49	273 49	331 48	413 45	495 41	608 35
	30	154 76	216 75	266 74	318 73	405 71	486 67	600 60
	35	146 88	210 87	256 87	312 86	395 83	480 80	588 75
	45	132 114	197 113	243 112	300 110	383 108	464 106	576 99
	55	117 139	184 137	227 136	283 135	363 135	450 132	552 123
	60	102 153	163 152	215 150	272 148	347 146	436 143	532 138
	75	53 191	128 189	182 187	234 185	318 183	391 180	484 176
	Max.cont.							

Torque (N•m) 234
Speed (rpm) 185

QHMP500[486.5cm³/rev.]

Pressure (MPa)

Max.cont.

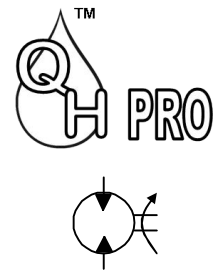
Max.int.

1.5	3	4.5	6	7	8	9
-----	---	-----	---	---	---	---

Flow (L/min)	4	96 7	194 6	285 4				
	8	98 15	201 15	304 14	391 14	443 12	512 9	574 7
	15	96 30	192 30	284 29	380 28	421 26	496 23	550 22
	20	96 40	191 40	280 40	372 39	418 37	493 33	546 31
	30	91 61	185 60	272 60	360 58	412 56	486 53	541 50
	40	86 81	172 80	261 80	343 79	408 76	480 73	538 70
	50	78 102	160 101	241 100	332 98	391 96	466 93	528 90
	60	66 122	134 121	213 120	305 119	371 117	438 114	496 110
	70	52 143	111 142	189 141	292 139	344 137	418 135	475 131
	75	35 153	83 152	154 151	241 150	312 149	389 147	448 144
Max.cont.								
Max.int.								

cont.
int.

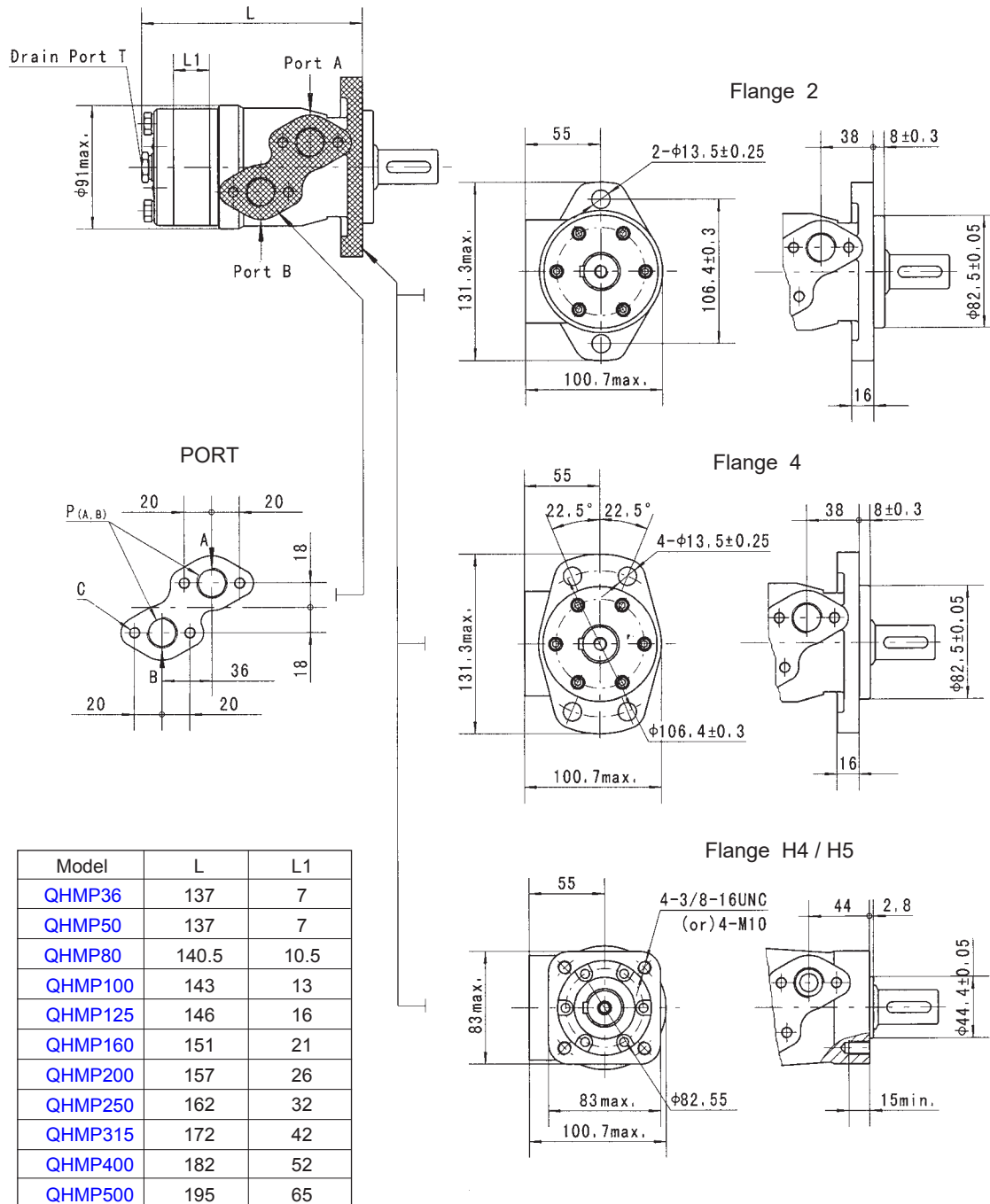
Torque (N•m) 389
Speed (rpm) 147



QHMP DIMENSIONS AND MOUNTING DATA



MOUNTING

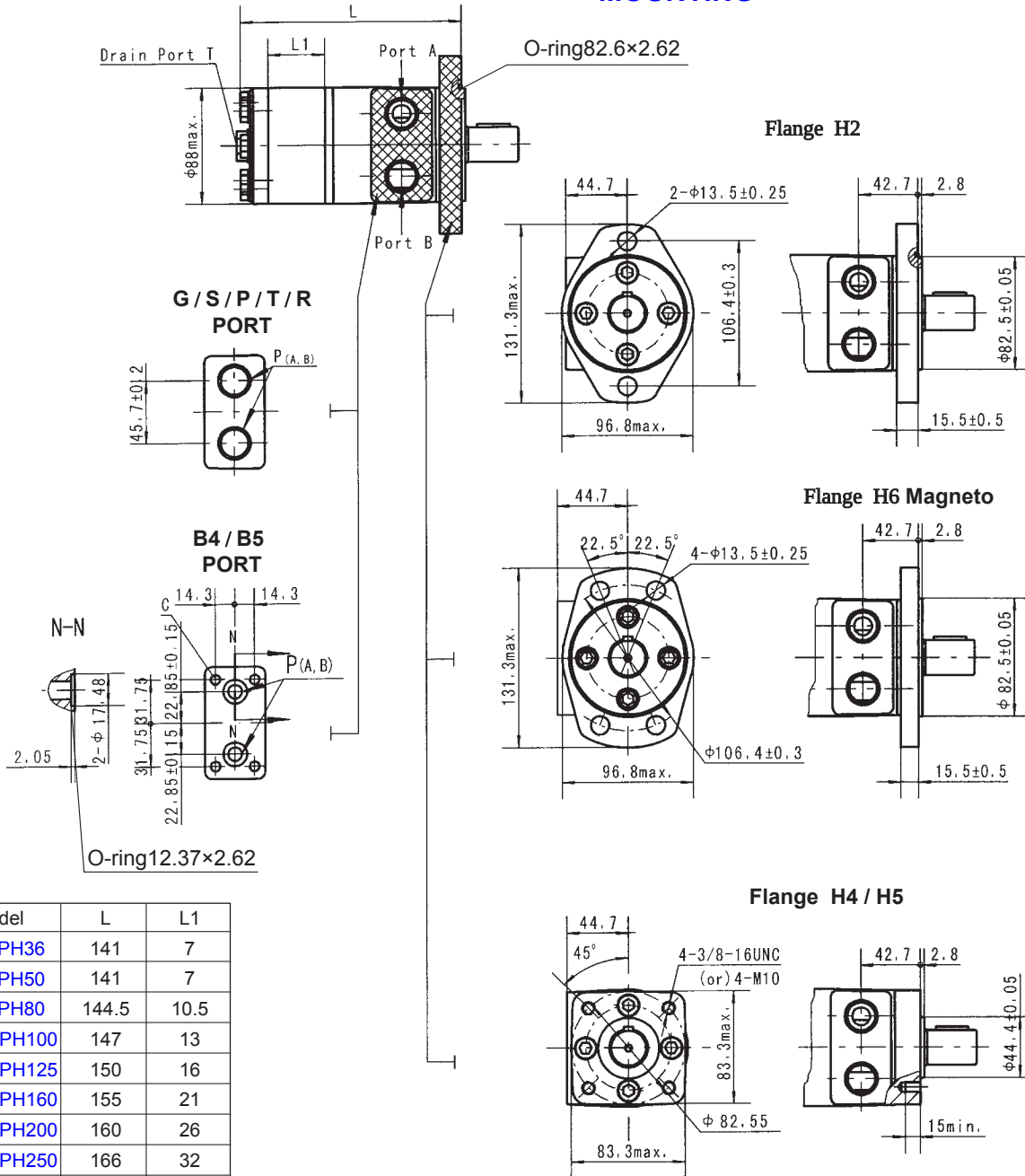


Code	D (depth)	M (depth)	S (depth)	P (depth)	R (depth)
Mounting					
P(A,B)	G1/2 (15)	M22 x 1.5 (15)	7/8-14 O-ring (17)	1/2-14NPTF (15)	PT(RC)1/2 (15)
C	4-M8 (13)	4-M8 (13)	4-5/16-18UNC(13)	4-5/16-18UNC(13)	4-M8 (13)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT(RC)1/4 (9.7)

QHMPH DIMENSIONS AND MOUNTING DATA



MOUNTING

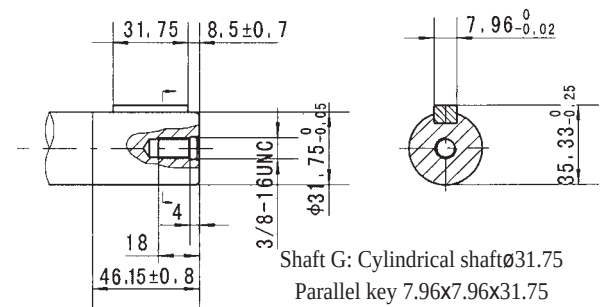
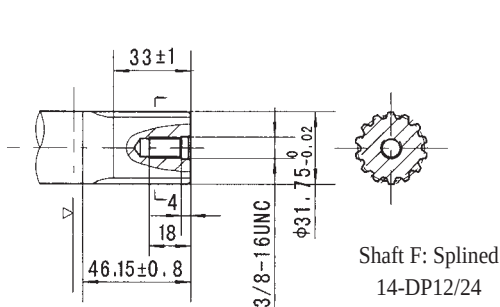
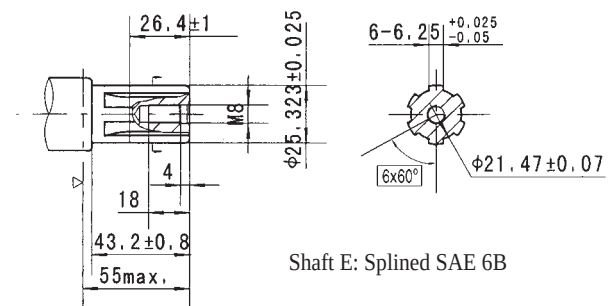
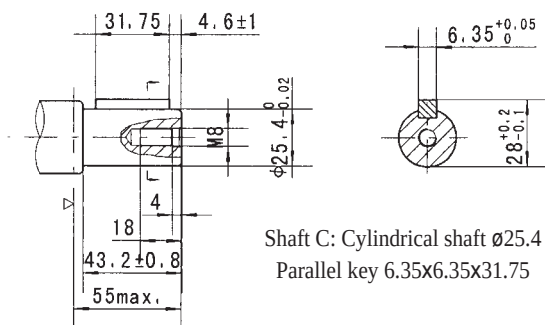
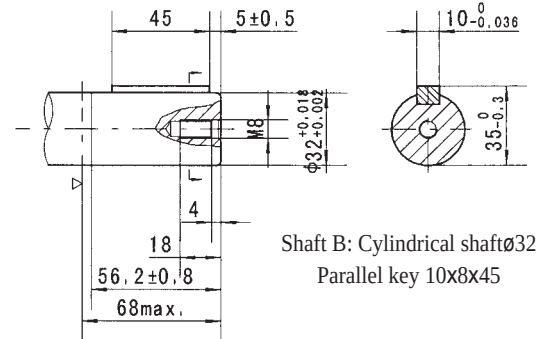
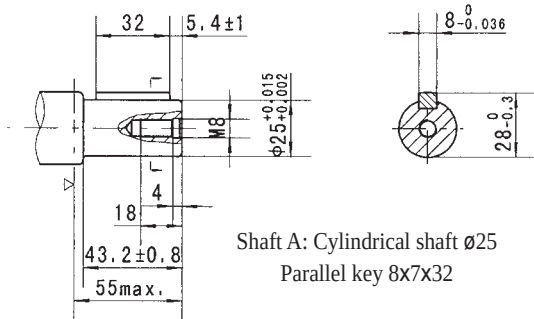


Model	L	L1
QHMPH36	141	7
QHMPH50	141	7
QHMPH80	144.5	10.5
QHMPH100	147	13
QHMPH125	150	16
QHMPH160	155	21
QHMPH200	160	26
QHMPH250	166	32
QHMPH315	176	42
QHMPH400	186	52
QHMPH500	199	65

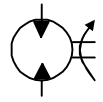
Code Mounting	G (depth)	S (depth)	P (depth)	T (depth)	R (depth)	B4 (depth)	B5 (depth)
P(A,B)	G1/2 (15)	7/8-14 O-ring (17)	1/2-14NPTF (15)	3/4-16 O-ring (15)	PT(RC)1/2 (15)	ø10	ø10
T	G1/4 (12)	7/16-20UNF (12)	7/16-20UNF (12)	7/16-20UNF(12)	PT(RC)1/4 (9.7)	7/16-20UNF(12)	G1/4(12)
C	—	—	—	—	—	4-5/16-18UNC(13)	4-M8(13)



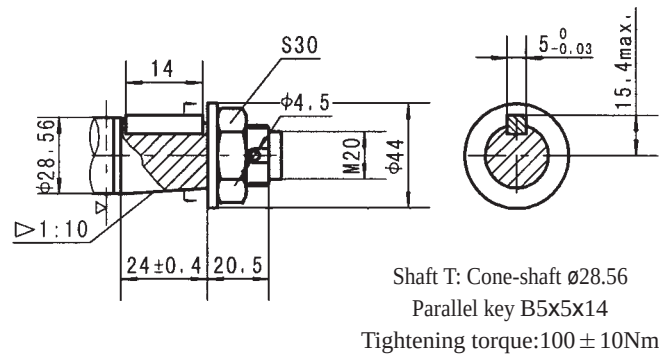
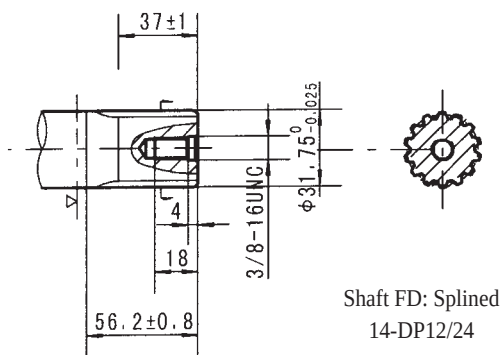
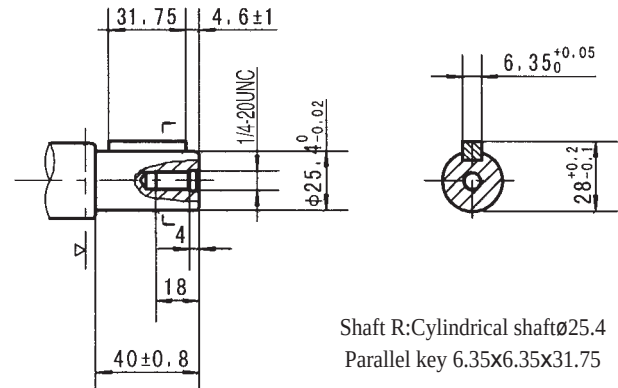
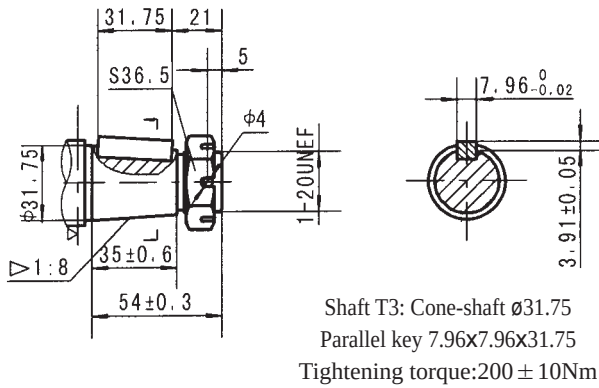
QHMP SHAFT EXTENSIONS DIMENSIONS DATA



▷ Motor Mounting Surface

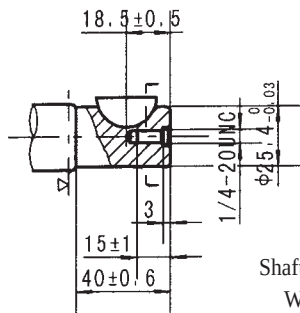


QHMP SHAFT EXTENSIONS DIMENSIONS DATA

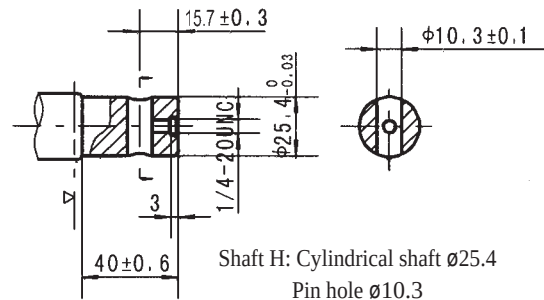


▷ Motor Mounting Surface

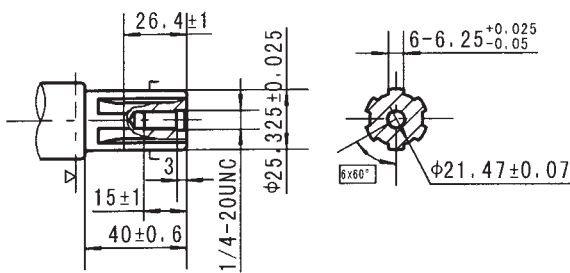
QHMPH SHAFT EXTENSIONS DIMENSIONS DATA



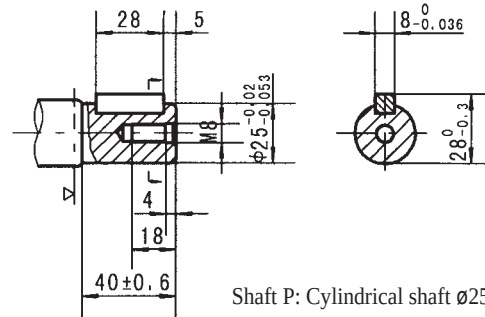
Shaft K: Cylindrical shaft $\varnothing 25.4$
Woodruff key $\varnothing 25.4 \times 6.35$



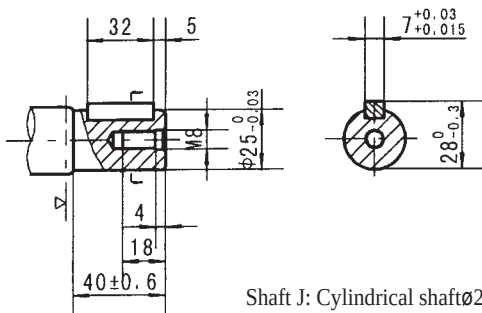
Shaft H: Cylindrical shaft $\varnothing 25.4$
Pin hole $\varnothing 10.3$



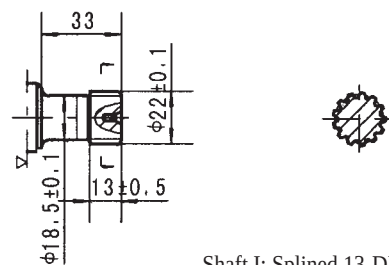
Shaft S: Splined SAE 6B



Shaft P: Cylindrical shaft $\varnothing 25$
Parallel key 8x7x28

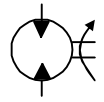


Shaft J: Cylindrical shaft $\varnothing 25$
Parallel key 7x7x32

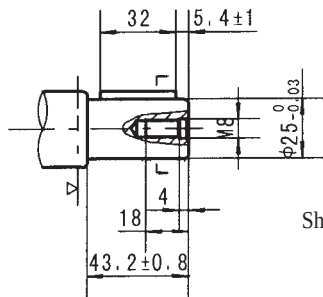


Shaft I: Splined 13-DP16/32

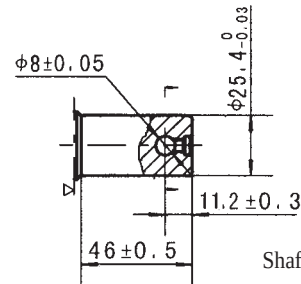
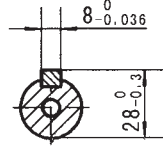
▷ Motor Mounting Surface



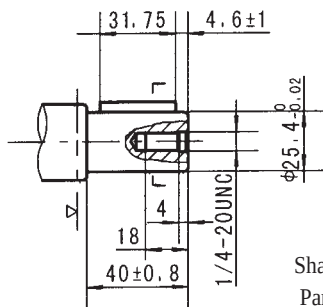
QHMPH SHAFT EXTENSIONS DIMENSIONS DATA



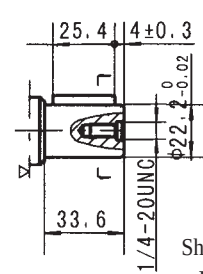
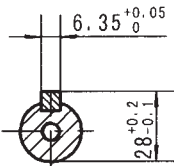
Shaft A: Cylindrical shaft ø25
Parallel key 8x7x32



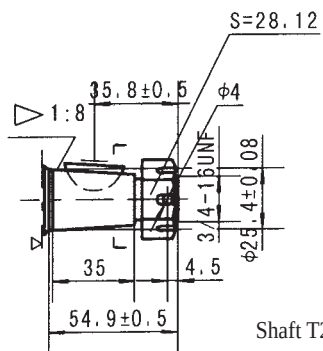
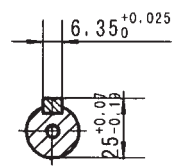
Shaft H1: Cylindrical shaft ø25.4
Pin hole ø8



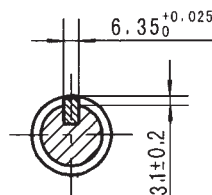
Shaft R: Cylindrical shaft ø25.4
Parallel key 6.35x6.35x31.75



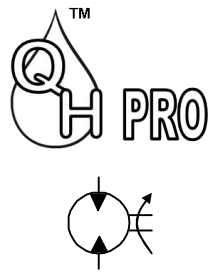
Shaft D: Cylindrical shaft ø22.22
Parallel key 6.35x6.35x25.4



Shaft T2: Cone-shaft ø25.4
Parallel key ø25.4x6.35
Tightening torque: 200 ± 10Nm



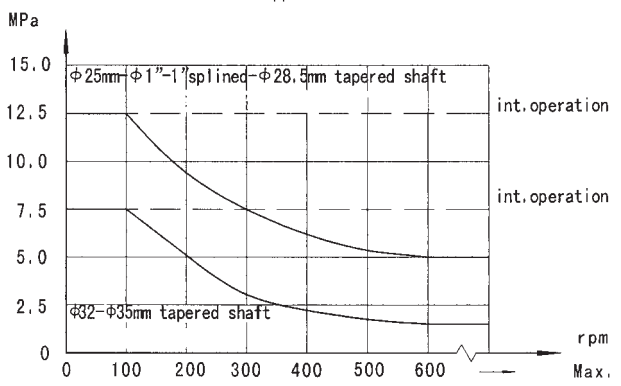
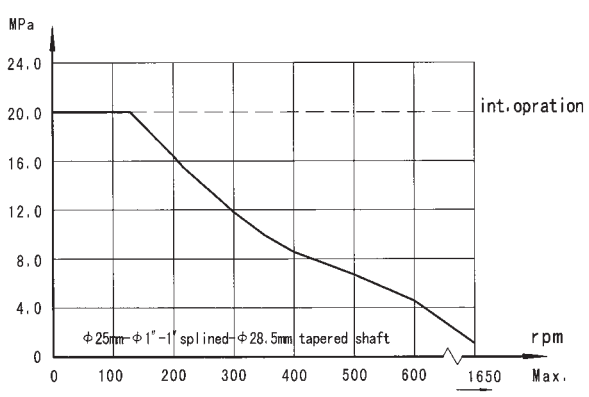
▷ Motor Mounting Surface



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QHMP, QHMPH Series Hydraulic Motor

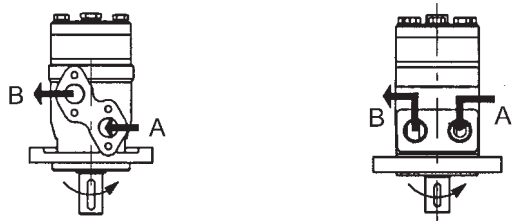
Permissible shaft seal pressure



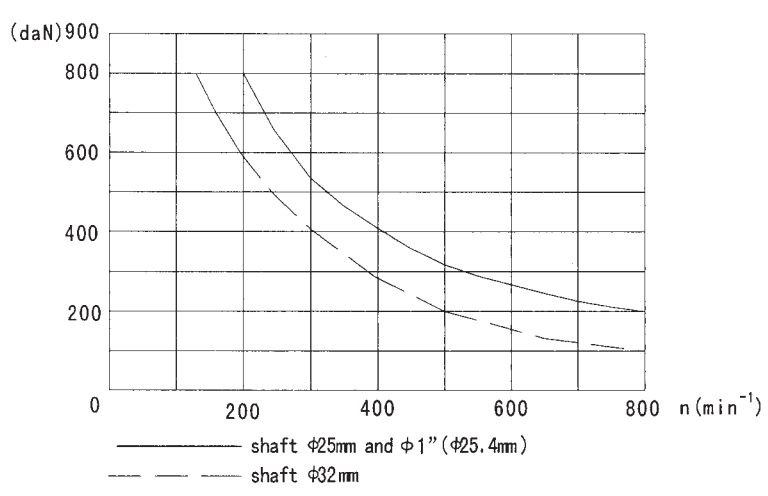
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Direction of shaft rotation: Standard

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

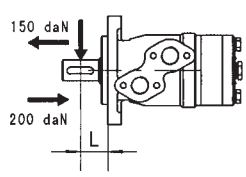


Status of the shaft's radial force



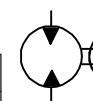
$$F_r = \frac{800 \cdot 25000}{n \cdot 95 + L} \text{ daN}$$

F_r =Radial Force (daN)
 L =Distance (mm)
 n =Speed (rpm)
 Rhomb-flange $L=30\text{mm}$
 Square-flange $L=24\text{mm}$





CODE INFORMATION



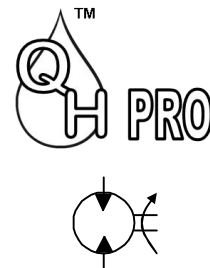
1 2 3 4 5 6 7 8
QHMP — — — — — — —

Pos.1	2	3	4	5	6	7	8
Code	Disp.	Flange	Output Shaft	Port and Drain Port	Rotation Direction	Paint	Unusually Function
QHMP	36	2	2-Ø13.5 Rhomb-flange , pilot Ø82.5 × 8	A Shaft Ø25,parallel key 8x7x32	D	G1/2 Manifold Mount 4 × M8, G1/4	
	50			B Shaft Ø32,parallel key 10x8x45			
	80			C Shaft Ø25.4,parallel key 6.35x6.35x31.75			
	100	4	4-Ø13.5 Rhomb-flange , pilot Ø82.5 × 8	E Shaft Ø25.4,splined tooth SEA 6B	M	M22 × 1.5 Manifold Mount 4 × M8, M14 × 1.5	
	125			R Short shaft Ø25.4,parallel key 6.35x6.35x31.75			
	160	H4	4-3/8-16 Square-flange , pilot Ø44.4 × 2.8	F Shaft Ø31.75,splined tooth 14-DP12/24	S	7/8-14 O-ring manifold 4x5/16-18UNC, 7/16-20UNF	
	200			FD Long shaft Ø31.75,splined tooth 14-DP12/24			
	250	H5	4-M10 Square-flange , pilot Ø44.4 × 2.8	G Shaft Ø31.75, parallel key 7.96x7.96x31.75	P	1/2-14 NPTF Manifold 4x5/16-18UNC, 7/16-20UNF	
	315			T Cone shaft Ø28.56,parallel key B5x5x14			
	400			T3 Cone shaft Ø31.75,parallel key 7.96x7.96x25.4			
	500						

1 2 3 4 5 6 7 8
QHMPH — — — — — — —

Pos.1	2	3	4	5	6	7	8
Code	Disp.	Flange	Output Shaft	Port and Drain Port	Rotation Direction	Paint	Unusually Function
QHMPH	36	H2	2-Ø13.5 Rhomb-flange , pilot Ø82.5 × 2.8	K Shaft Ø25.4, woodruff key Ø25.4 × 6.35	G	G1/2, G1/4	
	50			S Shaft Ø25.4 , splined tooth SAE 6B			
	80			A Shaft Ø25 , parallel key 8 × 7 × 32			
	100	H6	4-Ø13.5 Rhomb-flange , pilot Ø82.5 × 2.8	R Shaft Ø25.4, parallel key 6.35 × 6.35 × 31.75	S	7/8-14 O-ring ,7/16-20UNF	
	125			H Shaft Ø25.4 , pin hole Ø10.3			
	160	H4	4-3/8-16 Square-flange , pilot Ø44.4 × 2.8	H1 Shaft Ø25.4 , pin hole Ø8	P	1/2-14 NPTF, 7/16-20UNF	
	200			D Shaft Ø22.22, parallel key 6.35 × 6.35 × 25.4		T	3/4-16 O-ring, 7/16-20UNF
	250	H5	4-M10 Square-flange , pilot Ø44.4 × 2.8	I Shaft Ø22.22, splined tooth 13-DP16/32	R	PT(Rc)1/2 ,PT(Rc)1/4	
	315			T2 Cone shaft Ø25.4 , woodruff key Ø25.4 × 6.35			
	400			P Shaft Ø25 , parallel key 8 × 7 × 28			
	500			J Shaft Ø25 , parallel key 7 × 7 × 32			

Note:When the table is used, please fill the code of left rows in dash area and give us, which the code information is consists of construction, displacement, mounting flange, output shaft and ports. If the specification is not in the table or you have specific requirements, please contact us.



QHMR SERIES HYDRAULIC MOTOR

QHMR series motor adapt the advanced Gerolor gear set design with shaft distribution flow, which can automatically compensate in operating with high pressure, provide reliable and smooth operation, high efficiency and long life.

Characteristic features:

- *Advanced manufacturing devices for the Gerolor gear set, which use low pressure of start-up, provide smooth, reliable operation and high efficiency.
- *Shaft seal can bear high pressure of back and the motor can be used in parallel or in series.
- *Special design in the driver-linker and prolong operating life
- *Special design for distribution system can meet the requirement of low noise of unit.
- *Compact volume and easy installation

Main Specification

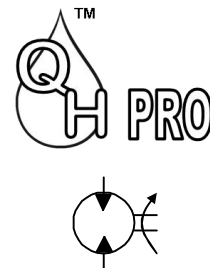
Technical data for QHMR with 25 and 1 in and 1 in splined and 28.56 tapered shaft

Type		QHMR QHMR 36	QHMR QHMR 50	QHMR QHMR 80	QHMR QHMR 100	QHMR QHMR 125	QHMR QHMR 160	QHMR QHMR 200	QHMR QHMR 250	QHMR QHMR 315	QHMR QHMR 375
Geometric displacement (cm ³ /rev.)		36	51.7	81.5	102	127.2	157.2	194.5	253.3	317.5	381.4
Max. speed (rpm)	cont.	1085	960	750	600	475	378	310	240	190	155
	int.	1220	1150	940	750	600	475	385	300	240	190
Max. torque (N•m)	cont.	72	100	195	240	300	360	360	390	390	365
	int.	83	126	220	280	340	430	440	490	535	495
	peak	105	165	270	320	370	460	560	640	650	680
Max. output (kW)	cont.	8.5	9.5	12.5	13.0	12.5	12.5	10.0	7.0	6.0	5.0
	int.	9.8	11.2	15.0	15.0	14.5	14.0	13.0	9.5	9.0	8.0
Max. pressure drop (MPa)	cont.	14.0	14	17.5	17.5	17.5	16.5	13	11	9	7
	int.	16.5	17.5	20	20	20	20	17.5	15	13	10
	peak	22.5	22.5	22.5	22.5	22.5	22.5	22.5	20	17.5	15
Max. flow (L/min)	cont.	40	50	60	60	60	60	60	60	60	60
	int.	45	60	75	75	75	75	75	75	75	75
Weight (kg)		6.5	6.7	6.9	7	7.3	7.6	8.0	8.5	9.0	9.5

* Continuous pressure:Max.value of operating motor continuously.

* Intermittent pressure:Max.value of operating motor in 6 seconds per minute .

* Peak pressure:Max.value of operating motor in 0.6 second per minute.



Main Specification

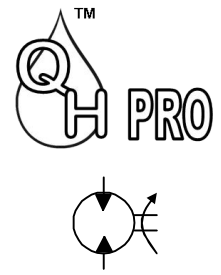
Technical data for QHMR with 31.75 and 32 shaft

Type		QHMR QHMRs 36	QHMR QHMRs 50	QHMR QHMRs 80	QHMR QHMRs 100	QHMR QHMRs 125	QHMR QHMRs 160	QHMR QHMRs 200	QHMR QHMRs 250	QHMR QHMRs 315	QHMR QHMRs 375
Geometric displacement (cm ³ /rev.)		36	51.7	81.5	102	127.2	157.2	194.5	253.3	317.5	381.4
Max. speed (rpm)	cont.	1250	960	750	600	475	378	310	240	190	155
	int.	1520	1150	940	750	600	475	385	300	240	190
Max. torque (N•m)	cont.	72	100	195	240	300	380	450	540	550	580
	int.	83	126	220	280	340	430	500	610	690	690
	peak	105	165	270	320	370	460	560	710	840	830
Max. output (kW)	cont.	8.5	9.5	12.5	13.0	12.5	12.5	11.0	10.0	9.0	7.5
	int.	9.8	11.2	15.0	15.0	14.5	14.0	13.0	12.0	10.0	9.0
Max. pressure drop (MPa)	cont.	14.0	14	17.5	17.5	17.5	17.5	17.5	17.5	13.5	11.5
	int.	16.5	17.5	20	20	20	20	20	20	17.5	15
	peak	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	21	17.5
Max. flow (L/min)	cont.	45	50	60	60	60	60	60	60	60	60
	int.	55	60	75	75	75	75	75	75	75	75
Weight (kg)		6.5	6.7	6.9	7	7.3	7.6	8.0	8.5	9.0	9.5

* Continuous pressure:Max.value of operating motor continuously.

* Intermittent pressure:Max.value of operating motor in 6 seconds per minute .

* Peak pressure:Max.value of operating motor in 0.6 second per minute.



Performance Data

QHMR 36 [36cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

2	3	5	7	9	10	12.5	14.0	16.5
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Flow (L/min)		10	16	25	37	46	50			
		105	100	92	80	71	58			
4										
8		9	15	25	37	47	50	63	71	83
		208	200	188	175	158	149	134	120	108
15		8	14	23	36	45	51	64	72	82
		403	392	380	365	348	326	318	302	274
20		6	13	22	35	44	50	64	72	82
		540	531	518	500	483	462	450	435	412
30		6	12	21	32	42	47	63	70	80
		810	798	780	763	742	722	705	694	668
40	Max.cont.	5	11	19	30	41	45	61	68	79
		1092	1080	1069	1056	1042	1028	1011	984	957
45	Max.int.	4	10	17	29	40	44	59	66	77
		1230	1215	1194	1170	1150	1128	1100	1070	1020

QHMR 50 [51.7cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

5	7	9	10	12	14	16	17.5
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Flow (L/min)		35	45	61	67	77	88		
		93	84	76	73	69	46		
5									
10		36	46	62	69	80	95	108	120
		186	178	166	162	153	136	118	97
15		35	49	63	73	88	100	109	123
		283	277	269	261	250	230	211	185
20		34.5	47	61	69	83	96	109	126
		377	375	365	361	346	330	302	270
30		33	44	60	67	80	95	108	126
		576	569	561	554	542	531	500	465
40		30	41	58	66	79	92	106	122
		760	758	753	750	738	724	700	670
45		29.5	40	57	65	78	90	105	121
		856	853	849	845	835	815	796	770
50	Max.cont.	26	37	53	60	73	85	99	114
		950	940	925	906	880	852	832	801
60	Max.int.	20	33	48	56	69	81	95	109
		1138	1124	1100	1075	1056	1028	1006	970

QHMR 80 [81.5cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

5	7	9	10	12	14	16	17.5	20
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Flow (L/min)		50	64	88	108	133			
		59	56	50	44	38			
5									
10		54	77	99	108	129	150	173	
		118	113	106	97	86	79	56	
20		57	78.0	102	111	134	155	177	196
		238	234	227	216	203	190	178	154
30		54	75	100	108	131	152	176	195
		360	352	340	332	316	302	290	274
40		48	73	96	105	127	148	172	190
		480	470	458	445	430	418	403	388
50		42	70	93	102	124	147	170	188
		604	595	582	570	556	540	521	504
60	Max.cont.	37	66	89	98	121	144	166	184
		726	715	704	692	678	663	647	622
70		32	60	83	95	116	140	160	177
		845	834	820	802	789	767	754	730
75	Max.int.	21	50	78	90	111	135	154	171
		910	895	881	867	852	830	806	787

QHMR 100 [102cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

5	7	9	10	12	14	16	17.5	20
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Flow (L/min)		66	92	120	135	156			
		45	42	38	34	27			
5									
10		68	96	125	138	159	188	212	
		93	90	86	81	74	57	42	
20		65	94.0	123	137	155	186	210	238
		189	185	180	173	165	158	150	139
30		63	92	120	133	153	185	209	235
		286	281	275	266	257	246	237	225
40		57	88	117	130	152	185	208	233
		385	378	365	355	345	332	320	314
50		48	79	110	123	150	183	204	228
		482	477	470	460	448	435	420	405
60	Max.cont.	38	70	105	120	144	178	200	220
		580	572	560	548	535	523	510	500
70		32	65	100	118	141	176	197	215
		678	670	660	648	638	626	615	606
75	Max.int.	23	59	93	111	136	170	192	210
		728	720	710	695	681	667	650	634

Torque (N•m) 135
Speed (rpm) 830





Performance Data

QHMR 125 [127.2cm³/rev.]

Pressure (MPa)

	5	7	9	10	12	14	16	17.5	20
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Flow (L/min)		Max.cont.								Max.int.	
		5	7	9	10	12	14	16	17.5	20	
5		76	110	145	167	189					
		36	31	25	19	13					
10		84	118	155	176	202	228	253			
		73	70	60	48	36	25	19			
20		82	117	153	174	200	230	259	294	332	
		153	151	148	144	138	128	117	104	73	
30		79	116	151	171	198	228	257	292	329	
		231	228	224	218	210	201	183	168	137	
40		72	114	148	168	196	226	256	290	327	
		309	307	303	298	292	280	270	252	218	
50		62	105	143	165	195	223	254	287	323	
		389	386	382	378	370	360	344	328	292	
60	Max.cont.	52	98	136	160	191	220	250	282	319	
		467	463	459	456	448	427	410	399	352	
70		41	90	130	156	187	215	242	278	313	
		545	542	538	534	529	520	508	486	430	
75	Max.int.	32	79	126	148	180	208	234	262	300	
		586	583	578	570	560	546	532	520	480	

QHMR 160 [157.2cm³/rev.]

Pressure (MPa)

	5	7	9	10	12	14	16	17.5	20
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Flow (L/min)		Max.cont.								Max.int.	
		5	7	9	10	12	14	16	17.5	20	
5		104	146	190	210	245					
		26	23	20	16	10					
10		107	150	195	216	250	290	335			
		59	56	50	45	37	30	22			
20		102	151	198	220	257	298	342	370	420	
		121	118	115	113	108	102	97	90	78	
30		97	146	190	217	256	295	340	368	416	
		184	178	173	170	164	155	143	128	103	
40		89	140	185	210	252	290	335	363	412	
		246	241	235	228	220	210	194	177	150	
50		72	128	179	202	244	284	327	358	409	
		310	307	300	295	287	278	262	247	210	
60	Max.cont.	60	116	170	198	240	279	321	352	400	
		374	367	359	354	346	338	323	306	265	
70		49	107	164	193	233	271	309	344	390	
		437	430	421	415	403	393	381	365	318	
75	Max.int.	36	98	152	185	226	265	300	334	379	
		472	463	450	441	431	420	405	389	365	

QHMR 200 [194.5cm³/rev.]

Pressure (MPa)

	5	7	9	10	12	14	16	17.5	20
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Flow (L/min)		Max.cont.								Max.int.	
		5	7	9	10	12	14	16	17.5	20	
5		132	181	238	262	310					
		24	22	18	13	10					
10		135	186	240	264	315	356	403			
		49	47	45	43	38	33	24			
20		131	183	238	260	314	358	404	438	498	
		99	97	94	92	88	83	74	64	56	
30		126	178	233	254	311	355	402	431	486	
		149	147	144	141	135	126	113	105	91	
40		112	169	228	250	307	352	400	426	477	
		200	197	194	191	185	174	160	151	127	
50		95	156	221	246	300	350	398	421	470	
		252	249	246	243	238	228	212	194	161	
60	Max.cont.	78	145	213	238	289	342	386	412	459	
		304	301	298	294	286	276	262	243	218	
70		67	135	206	228	277	336	375	408	453	
		355	353	349	340	329	316	300	288	257	
75	Max.int.	58	125	197	220	270	321	360	398	442	
		382	379	373	362	350	337	322	312	278	

QHMR 250 [253.5cm³/rev.]

Pressure (MPa)

	5	7	9	10	12	14	16	17.5	20
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Flow (L/min)		Max.cont.								Max.int.	
		5	7	9	10	12	14	16	17.5	20	
5		175	243	304	342	407					
		17	16	14	12	10					
10		178	246	310	344	409	465	525			
		37	35	31	28	23	18	11			
20		175	244	308	340	408	463	520	558	636	
		75	73	72	70	66	58	53	50	42	
30		162	235	304	332	400	455	516	550	621	
		114	111	108	106	100	92	83	77	65	
40		143	223	300	329	396	447	512	546	617	
		154	152	150	147	143	132	120	110	90	
50		124	208	289	323	384	440	503	535	600	
		193	190	187	174	168	160	149	140	116	
60	Max.cont.	103	192	280	314	371	426	489	514	578	
		233	230	227	224	218	205	190	181	155	
70		88	178	264	301	356	418	479	498	560	
		273	270	267	263	252	242	226	209	173	
75	Max.int.	62	165	256	288	347	412	474	486	542	
		294	291	287	283	274	263	249	236	211	

cont.
int.

Torque (N•m) 256
Speed (rpm) 287



Performance Data

QHMR 315 [317.5cm³/rev.]

Pressure (MPa)

				Max.cont.			Max.int.
5	7	9	10	12	14	16	17.5

Flow (L/min)	5	215 13	302 11					
	10	218 28	305 27	383 25	422 24	488 21	551 18	622 13
20	215 60	303 59	380 57	418 55	485 52	549 49	620 45	660 42
	30	204 91	296 89	375 86	413 84	480 81	542 78	613 72
40	196 122	287 120	368 117	410 112	477 106	539 100	609 94	650 85
	50	176 154	270 151	356 147	393 140	461 131	526 120	597 109
Max.cont. 60	162 185	246 182	339 177	374 172	446 163	511 152	586 140	628 134
	70	143 217	235 213	324 208	358 201	430 190	493 178	562 166
Max.int. 75	125 232	212 228	303 222	339 216	417 208	481 200	543 183	582 171

Torque (N•m) 481
Speed (rpm) 200

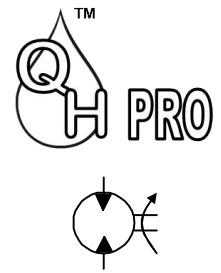
QHMR 375 [381.4cm³/rev.]

Pressure (MPa)

				Max.cont.			Max.int.
3	4.5	5.5	6.5	8	10	12.5	14

Flow (L/min)	5	153 12	232 10					
	10	157 24	236 23	284 22	337 21	406 19	497 17	612 15
20	150 49	232 48	280 47	332 46	401 44	490 41	606 38	660 32
	30	142 76	215 75	274 74	327 73	398 71	483 67	603 63
40	126 103	212 101	268 99	320 97	393 95	477 92	593 88	635 70
	50	105 128	187 126	242 124	302 121	376 118	455 115	583 111
Max.cont. 60	90 154	167 152	229 150	281 148	362 145	444 138	566 130	600 121
	70	90 180	149 179	200 178	258 176	341 173	425 168	546 160
Max.int. 75	56 195	125 194	182 193	241 191	320 189	408 185	524 178	565 170

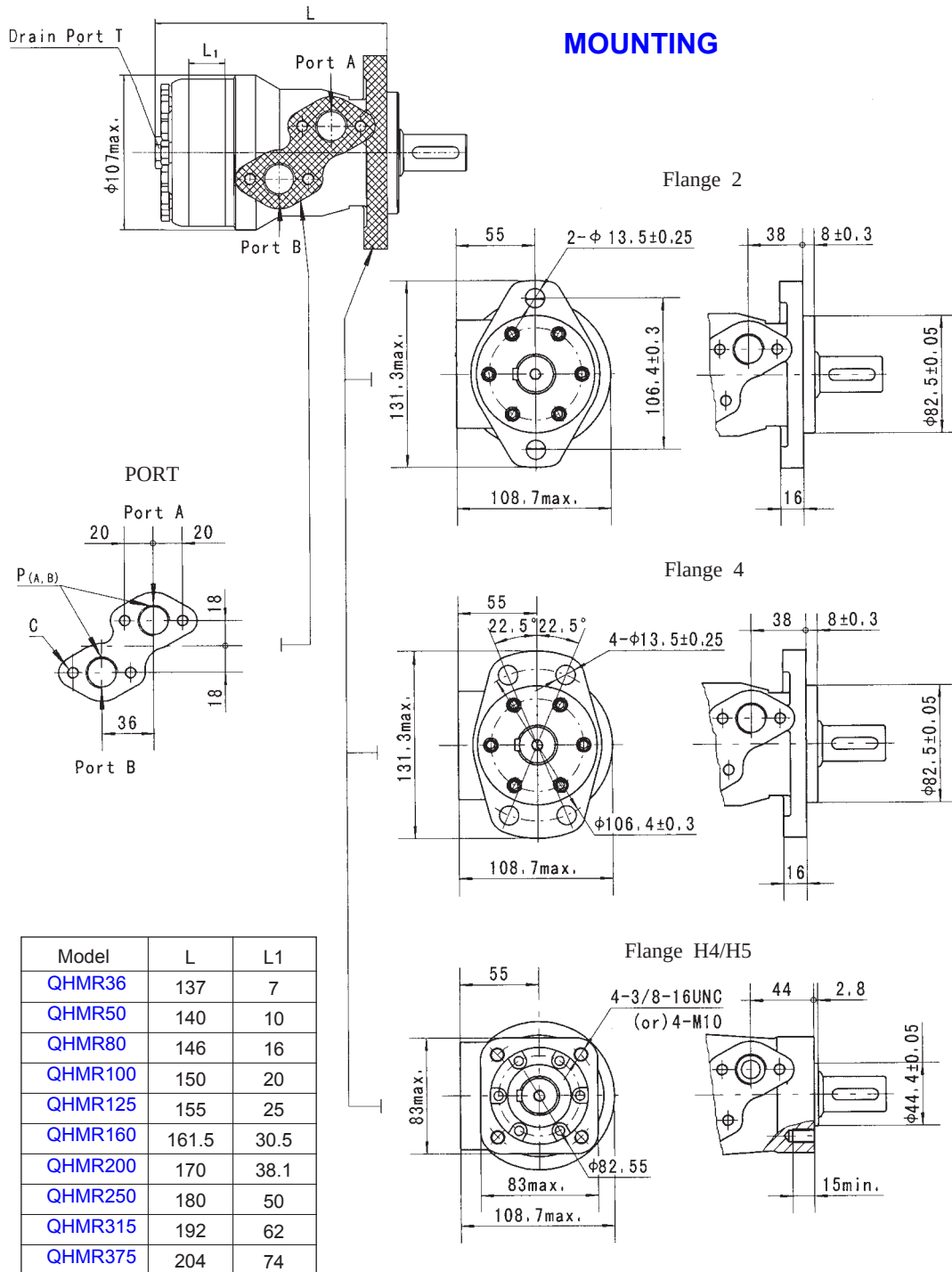
☐ cont.
☐ int.

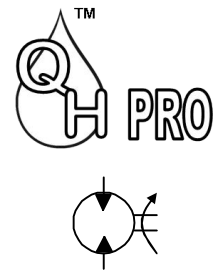


QHMR DIMENSIONS AND MOUNTING DATA



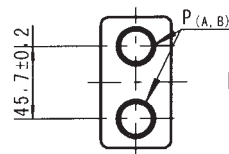
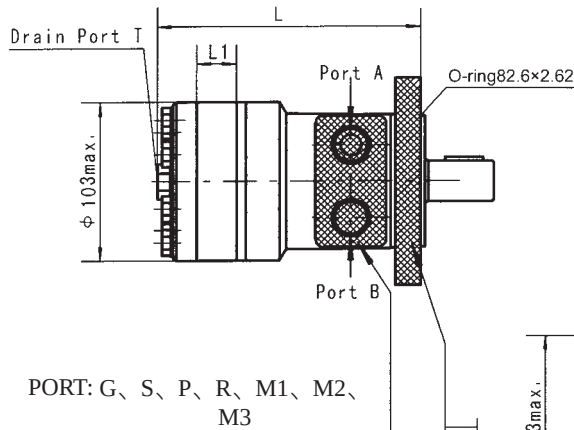
MOUNTING



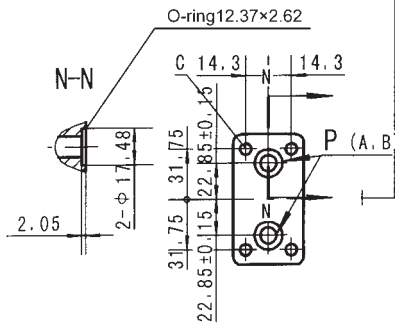


QHMS DIMENSIONS AND MOUNTING DATA

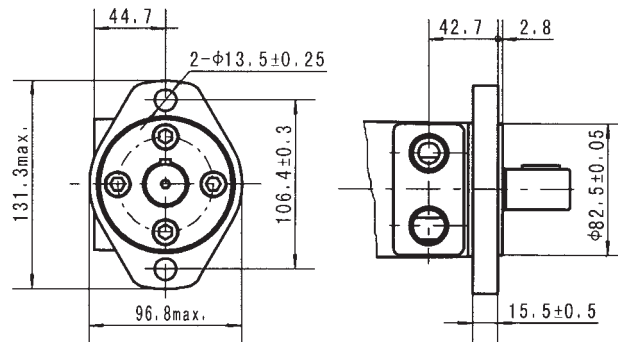
MOUNTING



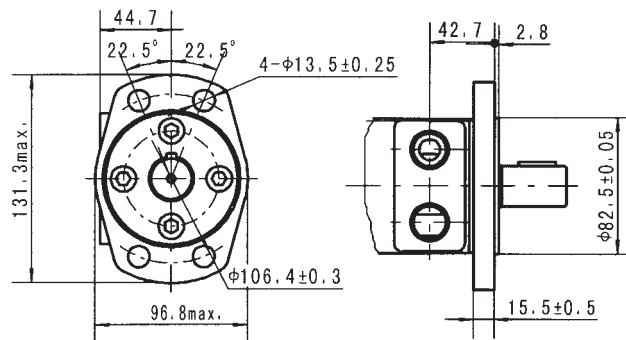
PORT: B4, B5



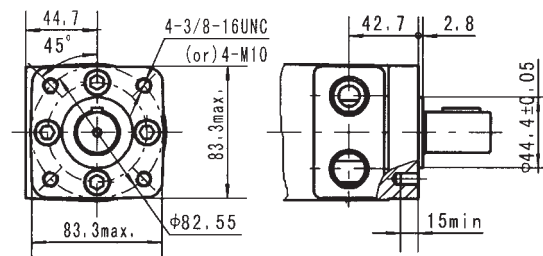
Flange H2



Flange H6



Flange H4/H5

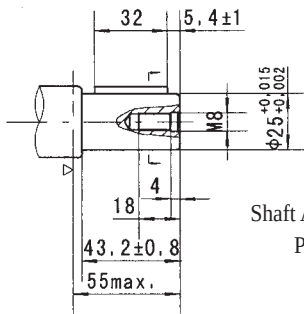


Model	L	L1
QHMS36	141	7
QHMS50	144	10
QHMS80	150	16
QHMS100	154	20
QHMS125	159	25
QHMS160	165.5	30.5
QHMS200	174	38.1
QHMS250	184	50
QHMS315	196	62
QHMS375	208	74

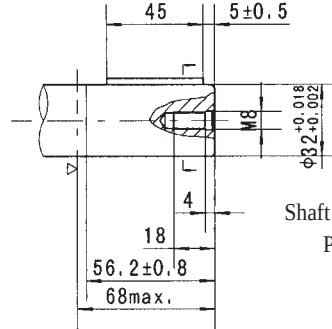
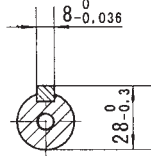
Code Mounting	G (depth)	S (depth)	P (depth)	R (depth)	M1 (depth)	M2 (depth)	M3 (depth)	B4 (depth)	B5 (depth)
P(A,B)	G1/2 (15)	7/8-14 O-ring (17)	1/2-14NPTF (15)	PT(RC)1/2 (15)	M18 x 1.5 (15)	M20 x 1.5 (15)	M22 x 1.5 (15)	ø10	ø10
T	G1/4 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT(RC)1/4 (9.7)	M10 x 1 (12)	M10 x 1 (12)	M10 x 1 (12)	7/16-20UNF(12)	G1/4(12)
C	-	-	-	-	-	-	-	4-5/16-18UNC(13)	4-M8(13)



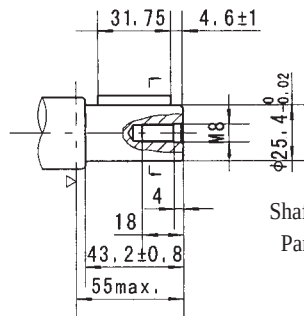
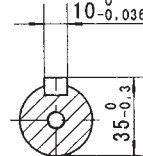
QHMR SHAFT EXTENSIONS DIMENSIONS DATA



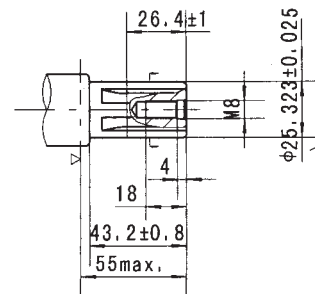
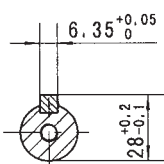
Shaft A: Cylindrical shaft Ø25
Parallel key 8x7x32



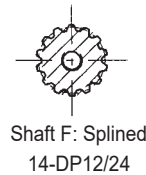
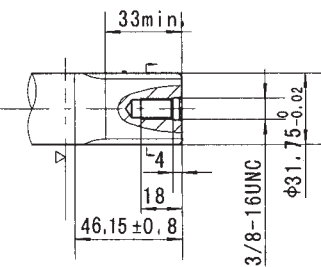
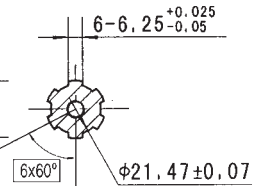
Shaft B: Cylindrical shaft Ø32
Parallel key 10x8x45



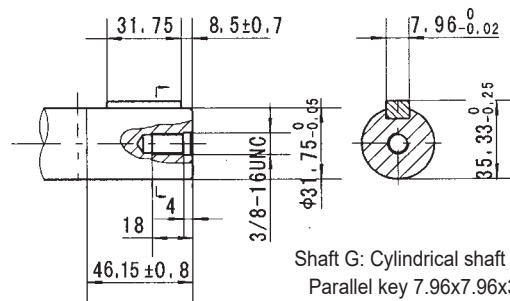
Shaft C: Cylindrical shaft Ø25.4
Parallel key 6.35x6.35x31.75



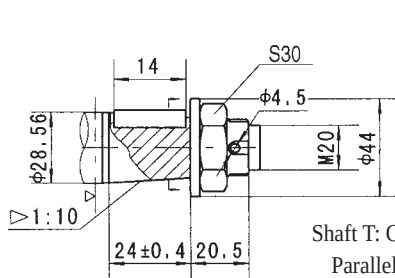
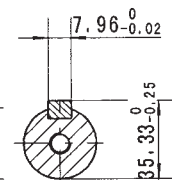
Shaft E: Splined SAE 6B



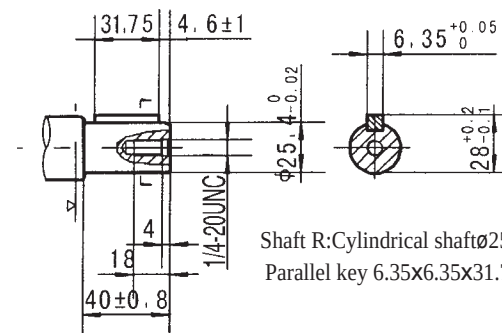
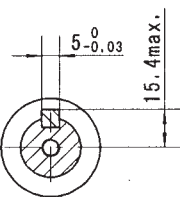
Shaft F: Splined
14-DP12/24



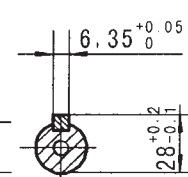
Shaft G: Cylindrical shaft Ø31.75
Parallel key 7.96x7.96x31.75



Shaft T: Cone-shaft Ø28.56
Parallel key B5x5x14
Tightening torque: 100 ± 10Nm

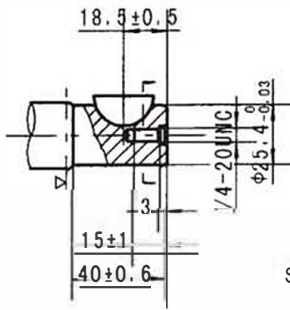


Shaft R: Cylindrical shaft Ø25.4
Parallel key 6.35x6.35x31.75

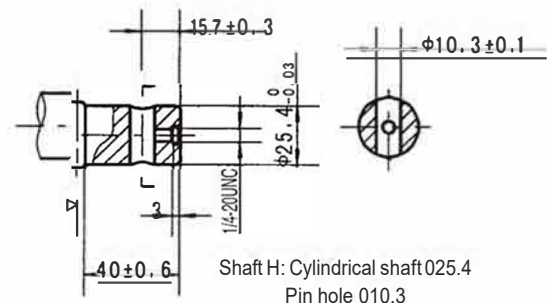


▷ Motor Mounting Surface

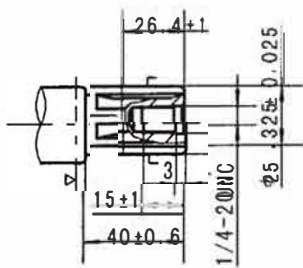
QHMSR SHAFT EXTENSIONS DIMENSIONS DATA



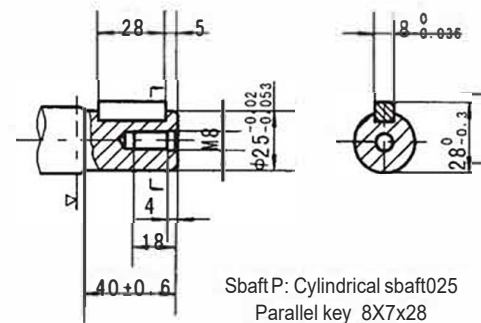
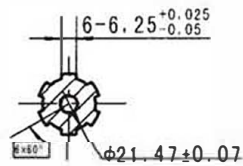
Shaft K: Cylindrical shaft 025.4
Woodruff key 025.4x6.35



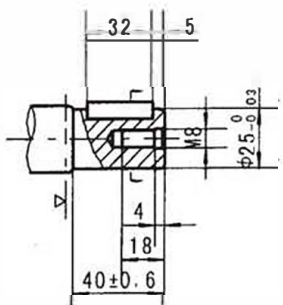
Shaft H: Cylindrical shaft 025.4
Pin hole 010.3



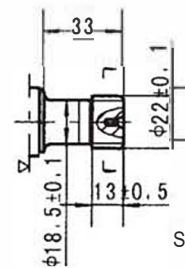
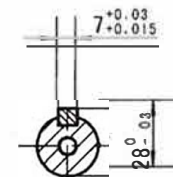
Shaft S: Splined SAE 6B



Shaft P: Cylindrical shaft 025
Parallel key 8X7x28

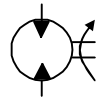


Shaft J: Cylindrical shaft 025
Parallel key 7X7X32

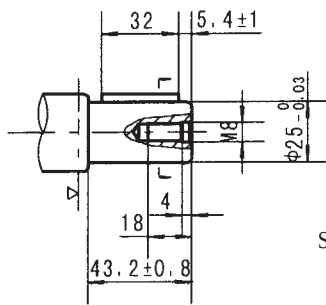


Shaft I: Splined 13-DP16/32

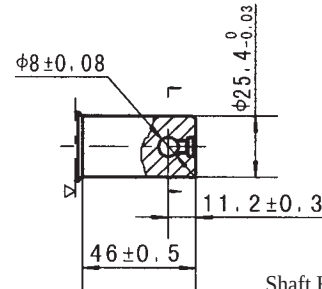
▷ Motor Mounting Surface



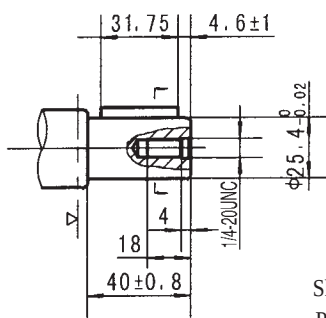
QHMRS SHAFT EXTENSIONS DIMENSIONS DATA



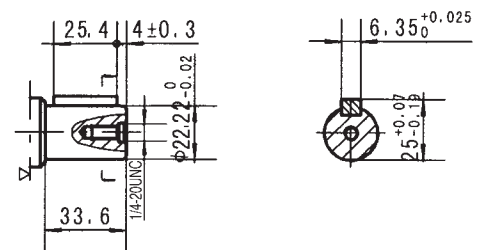
Shaft A: Cylindrical shaft Ø25
Parallel key 8x7x32



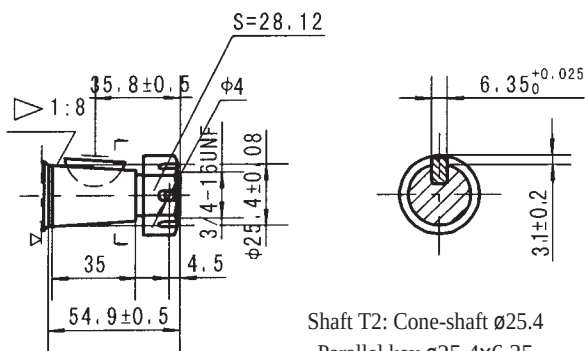
Shaft H1: Cylindrical shaft Ø25.4
Pin hole Ø8



Shaft R: Cylindrical shaft Ø25.4
Parallel key 6.35x6.35x31.75



Shaft D: Cylindrical shaft Ø22.22
Parallel key 6.35x6.35x25.4



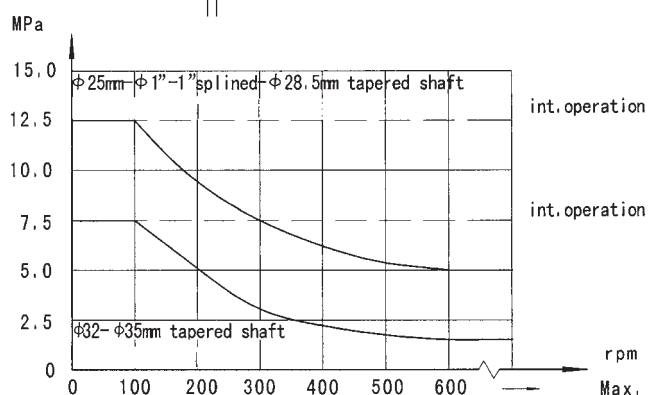
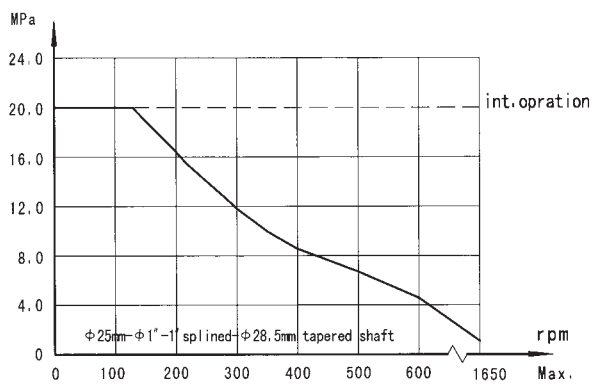
Shaft T2: Cone-shaft Ø25.4
Parallel key Ø25.4x6.35
Tightening torque: 200 ± 10 Nm

▷ Motor Mounting Surface



QHMR, QHMRS Series Hydraulic

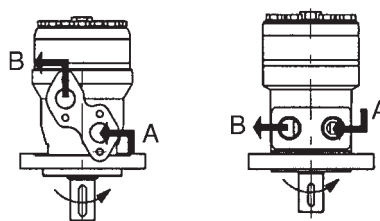
Motor Permissible shaft seal pressure



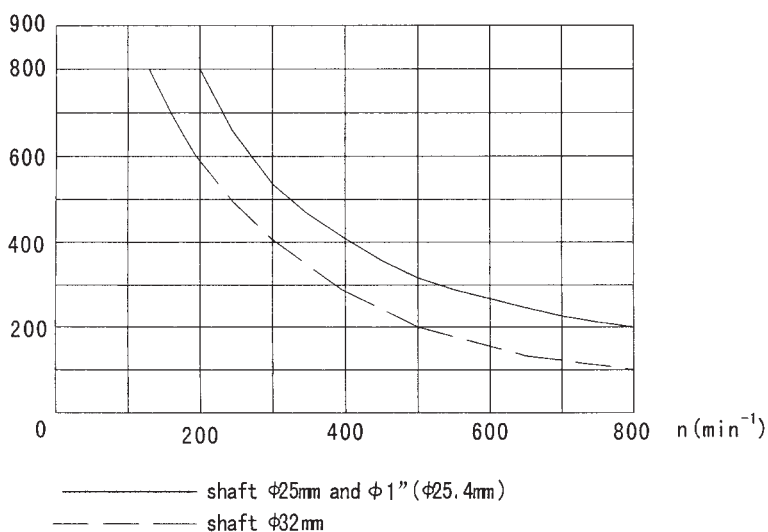
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Direction of shaft rotation: Standard

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



Status of the shaft's radial force



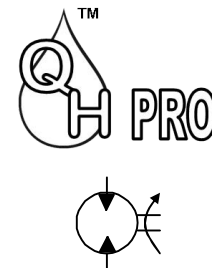
$$F_r = \frac{800 \cdot 25000}{n \cdot 95 + L} \text{ daN}$$

F_r = Radial Force (daN)
 L = Distance (mm)
 n = Speed (rpm)
 Rhomb-flange $L=30\text{mm}$
 Square-flange $L=24\text{mm}$



CODE INFORMATION

1 2 3 4 5 6 7 8
QHMR - - - - - - -



Pos.1	2	3		4		5		6		7		8	
Code	Disp.	Flange		Output Shaft		Port and Drain Port		Rotation Direction		Paint		Unusually Function	
QHMR	36	2	2-Ø13.5Rhomb-flange, pilot Ø82.5 × 8	A	Shaft Ø25,parallel Key 8x7x32	D	G1/2 Manifold Mount	Omit R	Standard Opposite	00 Omit B S	No paint Blue Black Silver grey	Omit N O F LS	Standard Big radial force No case drain Free Running Low Speed
	50			B	Shaft Ø32,parallel Key 10x8x45	M	M22 × 1.5 Manifold Mount						
	80			C	Shaft Ø25.4,parallel Key 6.35x6.35x31.75	S	7/8-14 O-ring manifold						
	100	4	4-Ø13.5Rhomb-flange, pilot Ø82.5 × 8	E	Shaft Ø25.4,splined tooth SAE 6B	S	4-5/16-18UNC, 7/16-20UNF						
	125			R	Short shaft Ø25.4,parallel key 6.35x6.35x31.75	P	1/2-14 NPTF						
	160	H4	4-3/8-16 Square-flange, pilot Ø44.4 × 2.8	F	Shaft Ø31.75,splined tooth 14-DP12/24	P	Manifold 4-5/16-18UNC, 7/16-20UNF						
	200	H5	4-M10 Square-flange, pilot Ø44.4 × 2.8	FD	Long shaft Ø31.75,splined tooth 14-DP12/24	R	PT(Rc)1/2 Manifold 4-M8, PT(Rc)1/4						
	250			G	Shaft Ø31.75,parallel Key 7.96x7.96x31.75								
	315			T	Cone-Shaft Ø28.56,parallel Key B5x5x14								
	375												

1 2 3 4 5 6 7 8
QHMRs - - - - - - -

Pos.1	2	3		4		5		6		7		8	
Code	Disp.	Flange		Output Shaft		Port and Drain Port		Rotation Direction		Paint		Unusually Function	
QHMR5	36	H2	2-Ø13.5Rhomb-flange, pilot Ø82.5 × 2.8	K	Shaft Ø25.4,Woodruff Key Ø25.4 × 6.35	G	G1/2, G1/4 7/8-14 O-ring 7/16-20UNF (G1/4) 1/2-14 NPTF, 7/16-20UNF (G1/4) 3/4-16 O-ring, 7/16-20UNF PT(Rc)1/2, PT(Rc)1/4 Ø10 O-ring manifold 4x5/16-18, 7/16-20UNF Ø10 O-ring manifold 4xM8, G1/4 M18 × 1.5, M10 × 1 M20 × 1.5, M10 × 1 M22 × 1.5, M10 × 1	Omit R	Standard Opposite	00 Omit B S	No paint Blue Black Silver grey	Omit N O F LS	Standard Big radial force No case drain Free Running Low Speed
	50			S	Sub-shaft Ø25.4,splined tooth SAE 6B								
	80	H6	4-Ø13.5Rhomb-flange, pilot Ø82.5 × 2.8	A	Shaft Ø25 , parallel key 8 × 7 × 32								
	100			R	Shaft Ø25.4, parallel key 6.35 × 6.35 × 31.75								
	125	H4	4-3/8-16 Square-flange, pilot Ø44.4 × 2.8	H	Sub-shaft Ø25.4,Pin hole Ø10.3								
	160			H1	Shaft Ø25.4, pin hole Ø8								
	200	H5	4-M10 Square-flange, pilot Ø44.4 × 2.8	D	Shaft Ø22.22, parallel key 6.35 × 6.35 × 25.4								
	250			I	Shaft Ø22.22, splined tooth 13-DP16/32								
	315			T2	Cone shaft Ø25.4 , woodruff key Ø25.4 × 6.35								
	375			P	Shaft Ø25,parallel Key 8 × 7 × 28								
				J	Shaft Ø25,parallel Key 7 × 7 × 32								

Note:When the table is used, please fill the code of left rows in dash area and give us, which the code information is consists of construction, displacement, mounting flange, output shaft and ports. If the specification is not in the table or you have specific requirements, please contact us.



QHMS SERIES HYDRAULIC MOTOR

QHMS series motor adapt the advanced Geroler gear set design with disc distribution flow and high pressure. The unit can be supplied the individual variant in operating multifunction in accordance with requirement of applications.

Characteristic features:

- * Advanced manufacturing devices for the Geroler gear set, which use low pressure of start-up, provide smooth and reliable operation and high efficiency.
- * The output shaft adapts in tapered roller bearings that permit high axial and radial forces. The case can offer capacities of high pressure and high torque in the wide of applications.
- * Advanced design in disc distribution flow, which can automatically compensate in operating with high volume efficiency and long life, provide smooth and reliable operation.

Main Specification

Type		QHMS QHMS 80	QHMS QHMS 100	QHMS QHMS 125	QHMS QHMS 160	QHMS QHMS 200	QHMS QHMS 250	QHMS QHMS 315	QHMS QHMS 375
Geometric displacement (cm ³ /rev.)		80.6	100.8	125	157.2	200	252	314.5	370
Max. speed (rpm)	cont.	800	748	600	470	375	300	240	200
	int.	988	900	720	560	450	360	280	240
Max. torque (N•m)	cont.	190	240	310	316	400	450	560	536
	int.	240	300	370	430	466	540	658	645
	peak	260	320	400	472	650	690	740	751
Max. output (kW)	cont.	15.9	18.8	19.5	15.6	15.7	14.1	14.1	11.8
	int.	20.1	23.5	23.2	21.2	18.3	17.0	18.9	17
Max. pressure drop (MPa)	cont.	17.5	17.5	17.5	15	14	12.5	12	10
	int.	21	21	21	21	16	16	14	12
	peak	22.5	22.5	22.5	22.5	22.5	20	18.5	14
Max. flow (L/min)	cont.	65	75	75	75	75	75	75	75
	int.	80	90	90	90	90	90	90	90
Max. inlet pressure (MPa)	cont.	25	25	25	25	25	25	25	25
	int.	30	30	30	30	30	30	30	30
Weight (kg)		9.8	10	10.3	10.7	11.1	11.6	12.3	12.6

- * Continuous pressure: Max. value of operating motor continuously.
- * Intermittent pressure: Max. value of operating motor in 6 seconds per minute.
- * Peak pressure: Max. value of operating motor in 0.6 second per minute.



Performance Data

QHMS 80 [80.6cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	21	22.5
--	-----	---	------	----	------	----	------

Flow (L/min)		35	80	120	158	195	235	249
		180	174	168	164	158	151	143
15		35	80	120	158	195	240	260
30		362	352	346	338	330	322	310
40		35	79	119	155	193	234	250
50		482	473	464	453	444	434	415
60		30	77	117	153	192	232	248
Max.cont.	60	602	594	587	569	560	551	522
	65	28	77	117	153	192	232	247
	65	724	713	707	683	673	664	629
	65	25	75	114	152	190	230	245
	65	790	785	770	760	742	720	704
Max.int.	80	22	70	110	140	170	200	220
	80	980	965	950	920	891	860	830

QHMS 100 [100.8cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	21	22.5
--	-----	---	------	----	------	----	------

Flow (L/min)		48	95	150	200	250	289	310
		146	144	139	135	130	120	105
15		45	94	146	198	250	295	317
30		291	289	278	274	269	258	242
40		43	89	142	196	248	293	316
50		387	384	374	359	350	335	320
60		40	88	135	194	247	292	315
Max.cont.	60	486	483	473	462	450	430	420
	75	37	88	132	185	244	289	312
	75	588	584	574	562	550	538	520
	75	35	80	130	180	240	286	310
	75	740	735	720	705	696	676	653
Max.int.	90	30	75	124	170	236	277	303
	90	850	840	810	787	770	750	747

QHMS 125 [125cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	21	22.5
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Flow (L/min)		55	120	176	245	309	349	375
		112	110	103	96	93	90	84
15		55	120	175	250	324	375	408
30		222	220	217	208	200	199	190
40		55	120	175	250	324	370	408
50		302	298	292	284	276	268	260
60		50	115	176	248	320	370	406
Max.cont.	60	379	373	368	363	350	339	328
	75	45	113	171	245	324	368	406
	75	456	448	443	439	425	406	393
	75	45	110	167	240	314	370	401
	75	570	563	555	546	533	515	503
Max.int.	90	40	105	162	237	309	365	398
	90	685	676	670	659	644	625	610

QHMS 160 [157.2cm³/rev.]

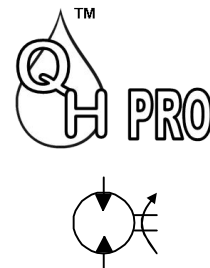
Pressure (MPa)

	3.5	7	10.5	14	17.5	21	22.5
--	-----	---	------	----	------	----	------

Flow (L/min)		70	140	205	305	371	430	473
		91	88	84	78	76	74	58
15		75	150	214	321	380	427	490
30		185	182	176	168	164	162	152
40		70	150	215	320	378	425	488
50		248	244	239	229	224	217	204
60		65	145	215	316	378	425	482
Max.cont.	60	312	308	304	294	288	280	270
	75	65	145	214	315	375	424	482
	75	375	371	365	357	346	336	323
	75	60	138	208	311	375	420	
	75	470	465	458	447	436	426	
Max.int.	90	56	130	200	308	370	414	
	90	564	559	551	541	526	517	

cont.
int.

Torque (N•m) 309
Speed (rpm) 644



Performance Data

QHMS 200 [200cm³/rev.]

		Pressure (MPa)					
		3.5	7	10.5	14	17.5	22.5
Flow (L/min)	15	89	190	295	400	484	608
		73	71	68	64	60	52
30		87	190	294	399	485	600
		148	146	143	140	135	127
40		86	188	292	397	483	594
		193	191	189	186	181	172
50		80	184	290	395	480	590
		247	245	243	240	235	226
60		74	178	286	390	475	582
		298	295	293	290	284	273
Max.cont.	75	58	160	275	375	460	570
		372	369	365	362	358	346
Max.int.	90	49	148	260	355	445	555
		440	435	430	422	411	401

QHMS 250 [252cm³/rev.]

		Pressure (MPa)					
		3.5	7	10.5	14	17.5	22.5
Flow (L/min)	15	117	230	355	52	450	554
		58	55	350	51	47	46
30		117	225	112	446	560	657
		118	117	348	109	107	106
40		115	225	152	442	552	650
		160	156	345	150	146	142
50		110	220	198	438	546	645
		202	200	340	196	195	192
60		105	220	237	435	542	642
		242	239	338	234	231	229
Max.cont.	75	95	215	293	430	537	638
		300	296	332	286	282	278
Max.int.	90	90	205	348	420	530	632
		360	354		340	332	326

QHMS 315 [314.5cm³/rev.]

		Pressure (MPa)					
		3.5	7	10.5	12	14	18.5
Flow (L/min)	15	160	320	465	555	650	748
		48	47	45	43	40	38
30		165	322	468	560	658	752
		94	92	90	89	86	85
40		160	310	457	546	642	741
		125	123	120	118	116	115
50		155	305	450	538	637	736
		158	156	153	150	147	145
60		152	302	442	532	632	732
		175	174	170	164	162	159
Max.cont.	75	145	295	436	525	628	726
		236	234	230	227	225	222
Max.int.	90	132	280	430	520	622	723
		285	282	280	276	273	270

QHMS 375 [370cm³/rev.]

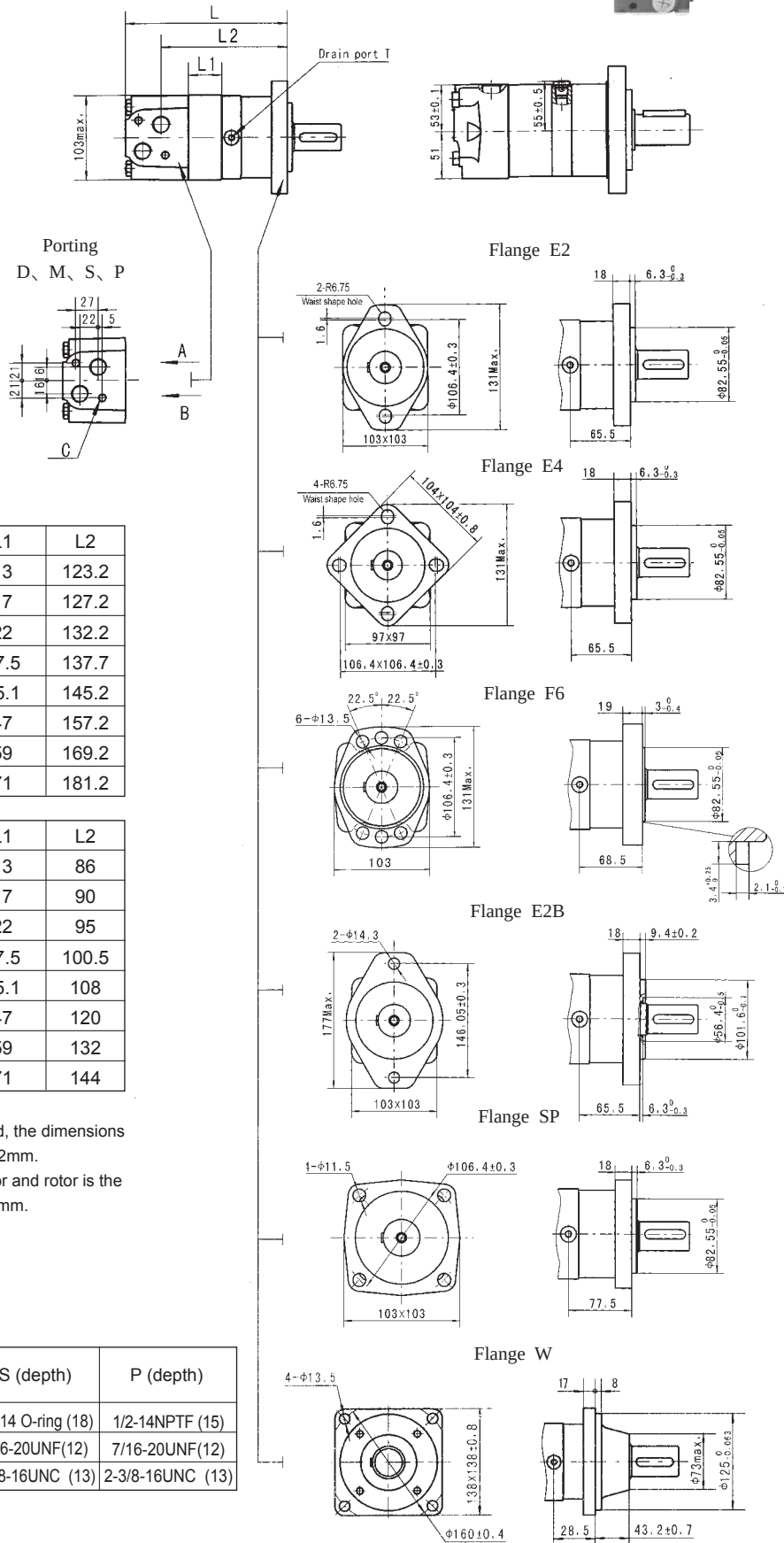
		Pressure (MPa)					
		3.5	7	9	10	12	14
Flow (L/min)	15	185	362	474	512	588	660
		40	39	38	37	35	33
30		184	364	475	514	590	661
		80	78	77	76	74	72
40		180	362	473	513	588	659
		106	104	103	102	100	97
50		160	360	472	511	586	658
		133	131	130	129	128	125
60		150	359	471	510	585	657
		157	156	155	154	152	150
Max.cont.	75	130	353	465	504	584	651
		200	198	196	195	194	193
Max.int.	90	105	350	462	500	580	647
		238	235	234	232	230	227

Torque (N•m) 520
Speed (rpm) 276

□ cont.
■ int.



QHMS DIMENSIONS AND MOUNTING DATA



Model	L	L1	L2
QHMS-80	167	13	123.2
QHMS-100	171	17	127.2
QHMS-125	176	22	132.2
QHMS-160	181.5	27.5	137.7
QHMS-200	189	35.1	145.2
QHMS-250	201	47	157.2
QHMS-315	213	59	169.2
QHMS-375	225	71	181.2

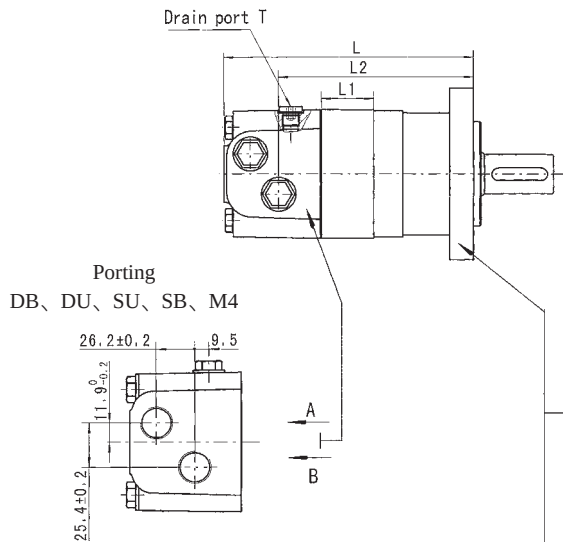
Model	L	L1	L2
QHMS-80-W	129.4	13	86
QHMS-100-W	133.4	17	90
QHMS-125-W	138.4	22	95
QHMS-160-W	143.9	27.5	100.5
QHMS-200-W	151.4	35.1	108
QHMS-250-W	163.4	47	120
QHMS-315-W	175.4	59	132
QHMS-375-W	187.4	71	144

Note:1) If the mounting SP is used, the dimensions of L and L2 should plus 12mm.

2) The thickness of the stator and rotor is the dimension of L1 plus 3mm.

Code Mounting	D (depth)	M (depth)	S (depth)	P (depth)
P(A,B)	G1/2(18)	M22x1.5(18)	7/8-14 O-ring (18)	1/2-14NPTF (15)
T	G1/4(12)	M14x1.5(12)	7/16-20UNF(12)	7/16-20UNF(12)
C	2-M10(13)	2-M10 (13)	2-3/8-16UNC (13)	2-3/8-16UNC (13)

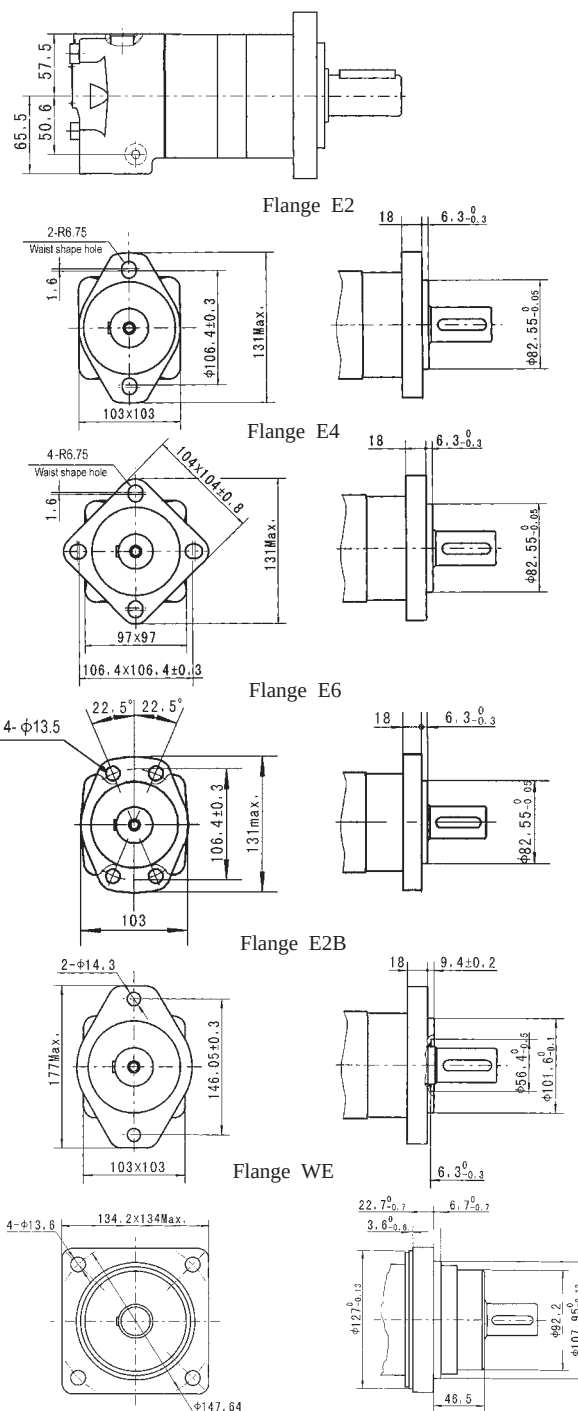
QHMSE DIMENSIONS AND MOUNTING DATA



Model	L	L1	L2
QHMSE-80	171	13	123.2
QHMSE-100	175	17	127.2
QHMSE-125	180	22	132.2
QHMSE-160	185.5	27.5	137.7
QHMSE-200	193	35.1	145.2
QHMSE-250	205	47	157.2
QHMSE-315	217	59	169.2
QHMSE-375	229	71	181.2

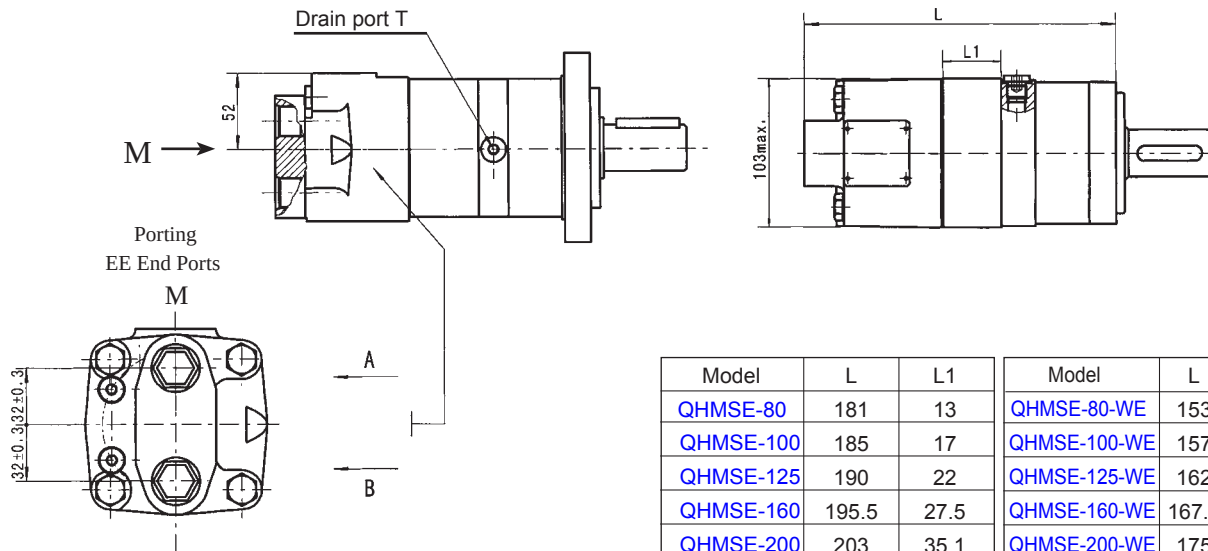
Model	L	L1	L2
QHMSE-80-WE	143	13	95
QHMSE-100-WE	147	17	99
QHMSE-125-WE	152	22	104
QHMSE-160-WE	157.5	27.5	109.5
QHMSE-200-WE	165	35.1	117
QHMSE-250-WE	177	47	129
QHMSE-315-WE	189	59	141
QHMSE-375-WE	201	71	153

Note: The thickness of the stator and rotor is the dimension of L1 plus 3mm.



Code Mounting	DB (depth)	DU (depth)	SU (depth)	SB (depth)	M4 (depth)
P(A,B)	G1/2 (18)	G1/2 (18)	7/8-14 O-ring (18)	7/8-14 O-ring (18)	M22 x 1.5 (18)
T	G1/4 (12)	7/16-20UNF(12)	7/16-20UNF(12)	G1/4 (12)	M14 x 1.5 (12)

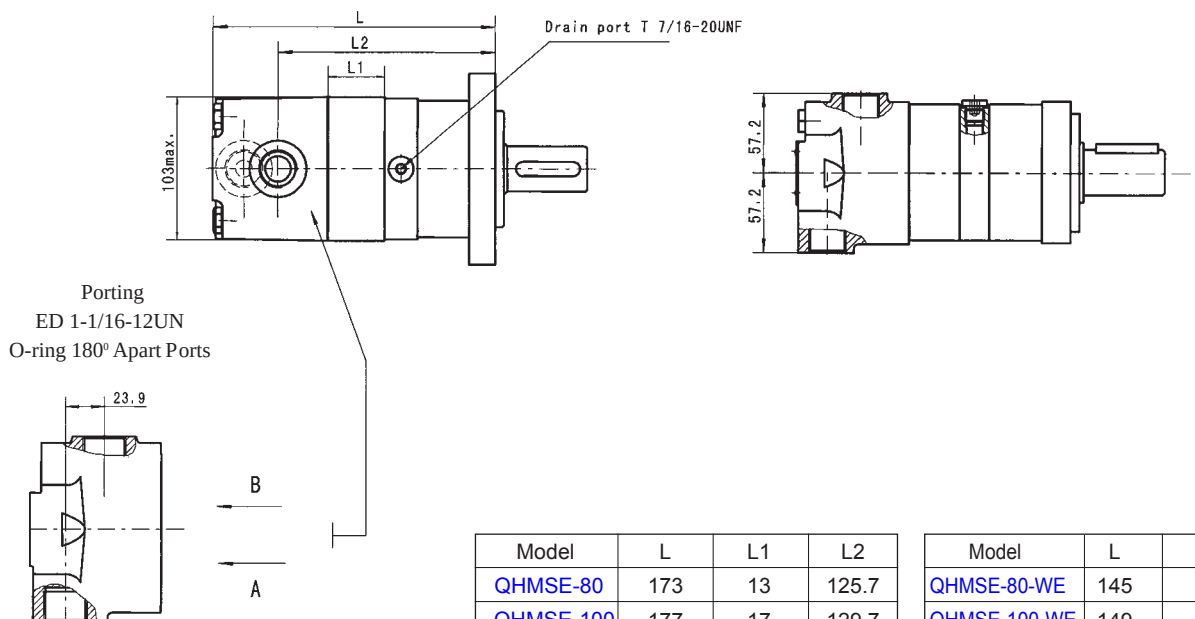
QHMSE DIMENSIONS AND MOUNTING DATA



Code Mounting	EE-D (depth)	EE-M2 (depth)	EE-S2 (depth)
P(A,B)	G1/2 (18)	M22 x 1.5 (18)	7/8-14 O-ring (18)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)

Model	L	L1	Model	L	L1
QHMSE-80	181	13	QHMSE-80-WE	153	13
QHMSE-100	185	17	QHMSE-100-WE	157	17
QHMSE-125	190	22	QHMSE-125-WE	162	22
QHMSE-160	195.5	27.5	QHMSE-160-WE	167.5	27.5
QHMSE-200	203	35.1	QHMSE-200-WE	175	35.1
QHMSE-250	215	47	QHMSE-250-WE	187	47
QHMSE-315	227	59	QHMSE-315-WE	199	59
QHMSE-375	239	71	QHMSE-375-WE	211	71

Note: The thickness of the stator and rotor is the dimension of L1 plus 3mm.



Code Mounting	ED (depth)
P(A,B)	1-1/16-12UN O-ring (18)
T	7/16-20UNF(12)

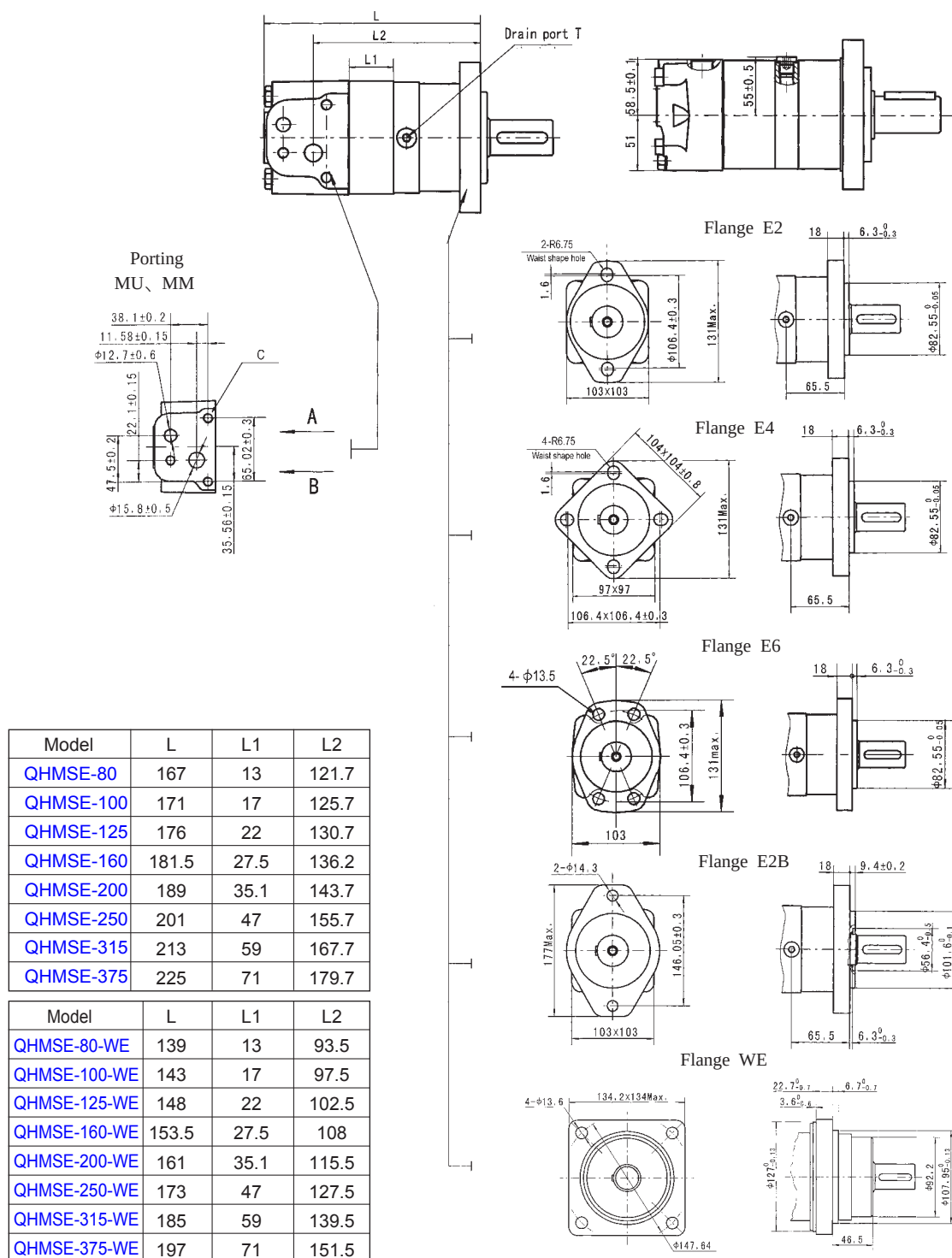
Model	L	L1	L2
QHMSE-80	173	13	125.7
QHMSE-100	177	17	129.7
QHMSE-125	182	22	134.7
QHMSE-160	187.5	27.5	140.2
QHMSE-200	195	35.1	147.7
QHMSE-250	207	47	159.7
QHMSE-315	219	59	171.7
QHMSE-375	231	71	183.7

Model	L	L1	L2
QHMSE-80-WE	145	13	97.5
QHMSE-100-WE	149	17	101.5
QHMSE-125-WE	153	22	106.5
QHMSE-160-WE	158.5	27.5	112
QHMSE-200-WE	166	35.1	119.5
QHMSE-250-WE	179	47	131.5
QHMSE-315-WE	191	59	143.5
QHMSE-375-WE	203	71	155.5

Note: The thickness of the stator and rotor is the dimension of L1 plus 3mm.



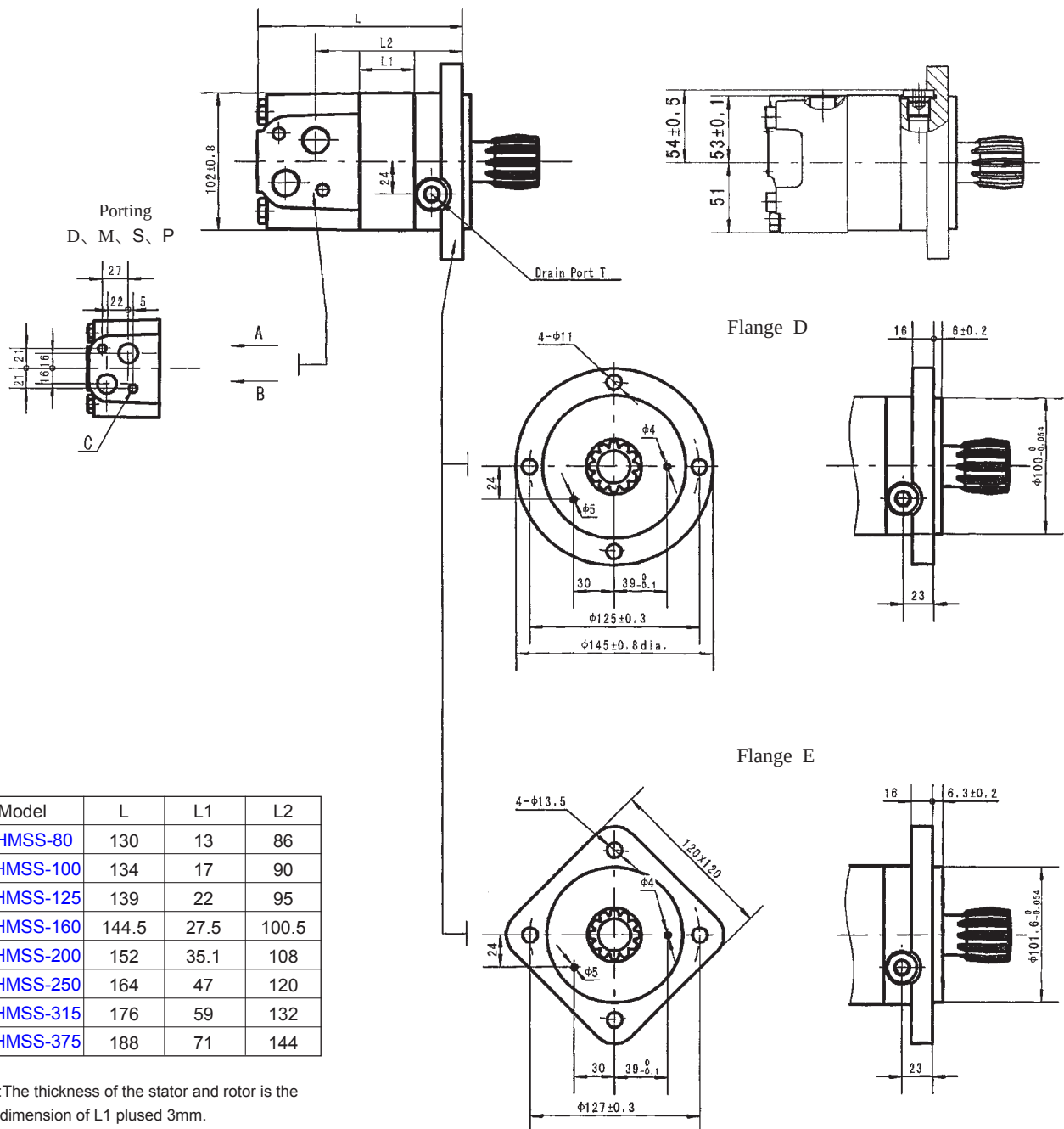
QHMSE DIMENSIONS AND MOUNTING DATA



Note:1) If the porting G、M2、S2 is used, the dimensions of L2 should plus 1.5mm.
2) The thickness of the stator and rotor is the dimension of L1 plus 3mm.

Code	MU	MM
Mounting		
P(A,B)	ø12.7, ø15.8	ø12.7, ø15.8
T	7/16-20UNF(12)	G1/4 (12)
C	3 x 3/8-16UNC	3 x M10

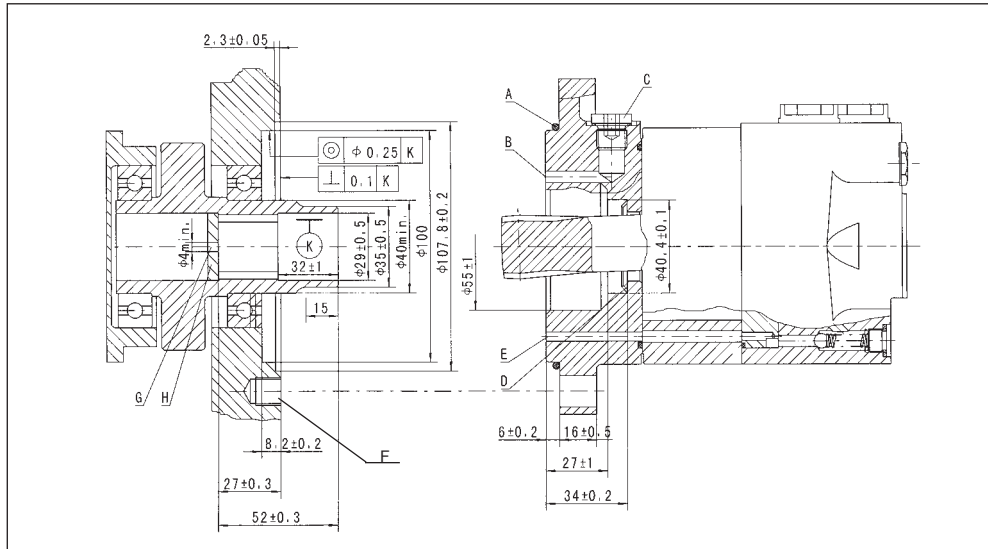
QHSS DIMENSIONS AND MOUNTING DATA



Model	L	L1	L2
QHSS-80	130	13	86
QHSS-100	134	17	90
QHSS-125	139	22	95
QHSS-160	144.5	27.5	100.5
QHSS-200	152	35.1	108
QHSS-250	164	47	120
QHSS-315	176	59	132
QHSS-375	188	71	144

Code Mounting	D (depth)	M (depth)	S (depth)	P (depth)
P(A,B)	G1/2 (18)	M22 x 1.5 (18)	7/8-14 O-ring (18)	1/2-14NPTF (15)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)	7/16-20UNF(12)
C	2-M10 (13)	2-M10 (13)	2-3/8-16UNC (13)	2-3/8-16UNC (13)

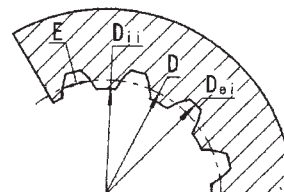
QHSS DIMENSIONS AND MOUNTING DATA



- A: O-ring:100x3
- B: External drain channel
- C: Drain connection G 1/4;12 mm deep
- D: Conical seal ring
- E: Internal drain channel
- F: M10;min. 15mm deep
- G: Oil circulation hole
- H: Hardened stop plate

INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

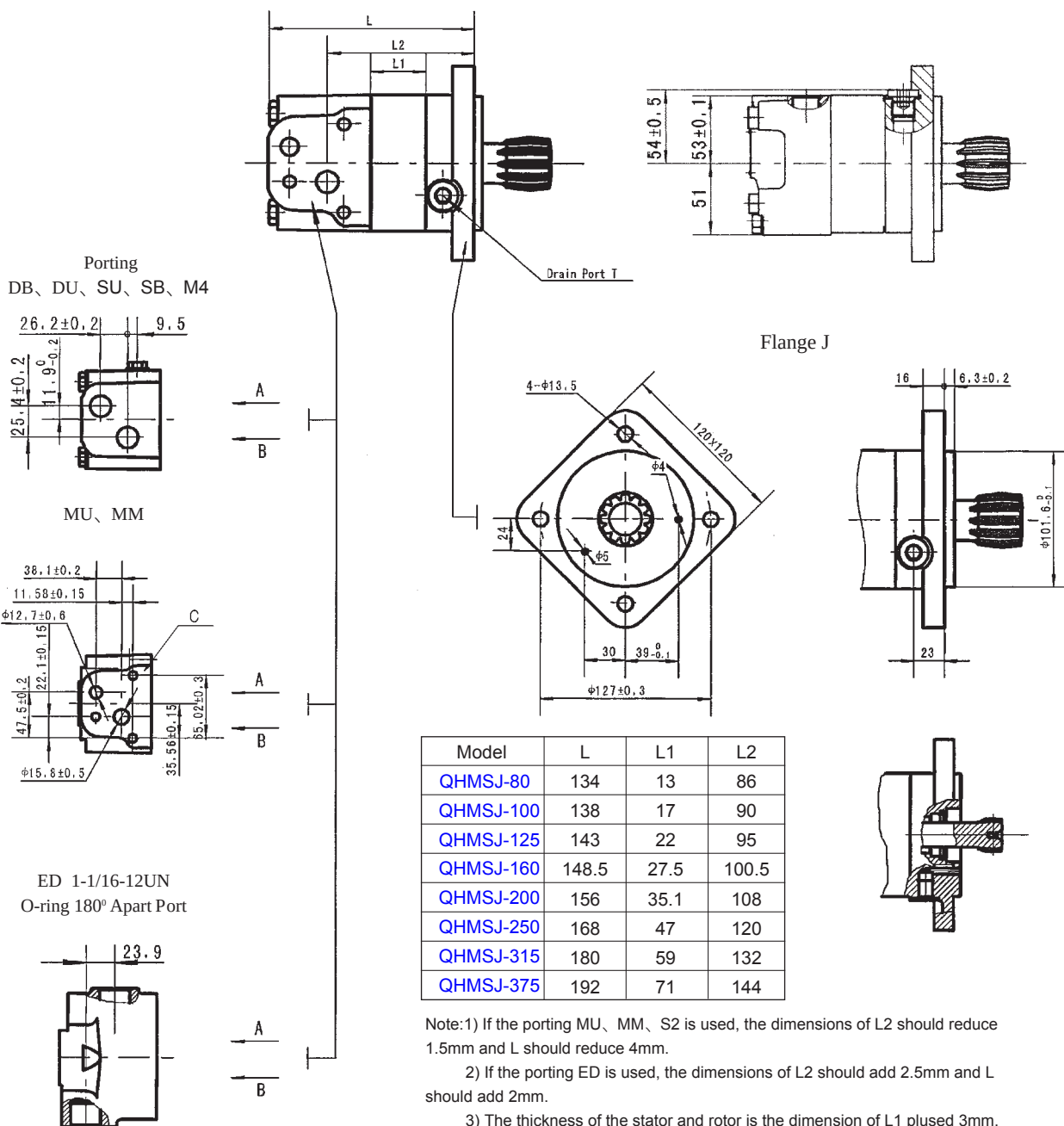
Fillet Root Side Fit		mm
Number of Teeth	Z	12
Diametral Pitch	DP	12/24
Pressure Angle	α_D	30°
Pitch Dia.	D	ø25.4
Major Dia.	D_{ei}	ø28 ⁰ _{-0.1}
Minor Dia.	D_{ii}	ø23 ^{+0.033} ₀
Space Width [Circular]	E	4.308±0.02



Hardening Specification: HRC 62±2
Effective case depth 0.7±0.2

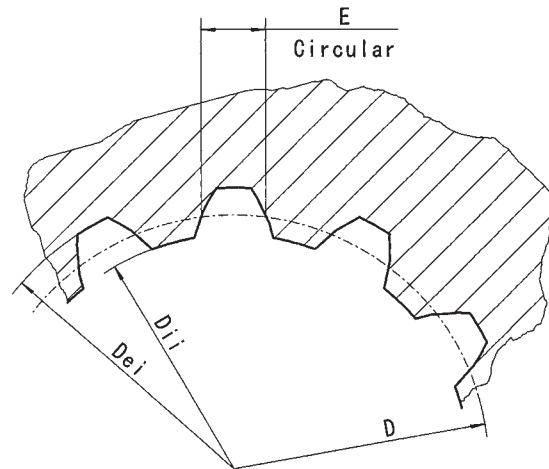
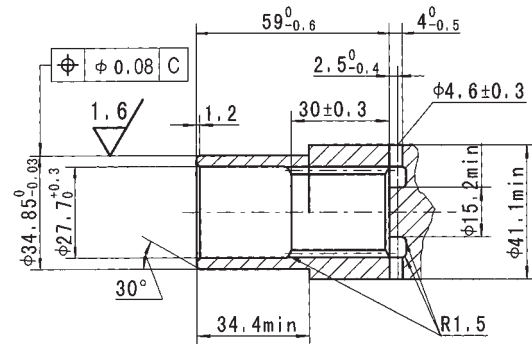
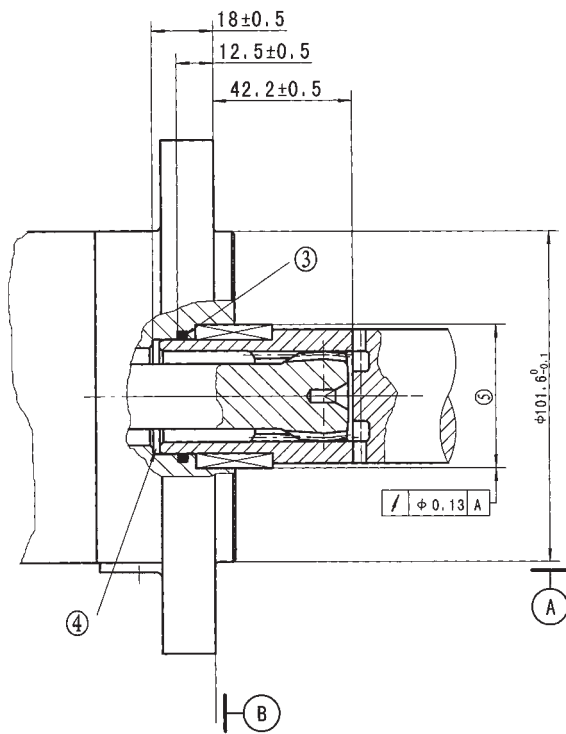


QHMSJ DIMENSIONS AND MOUNTING DATA



Code Mounting	DB (depth)	DU (depth)	SU (depth)	SB (1depth)	M4 (depth)	MU	MM	ED (depth)
P(A,B)	G1/2 (18)	G1/2 (18)	7/8-14 O-ring (18)	7/8-14 O-ring (18)	M22 x 1.5 (18)	φ12.7, φ15.8	φ12.7, φ15.8	1-1/16-12UN (18)
T	G1/4 (12)	7/16-20UNF(12)	7/16-20UNF(12)	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)	G1/4 (12)	7/16-20UNF(12)
C			--			3 x 3/8-16UNC	3 x M10	--

QHMSJ DIMENSIONS AND MOUNTING DATA

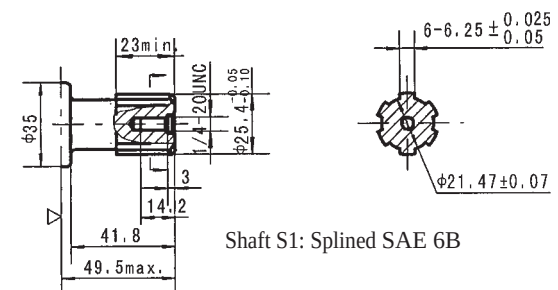
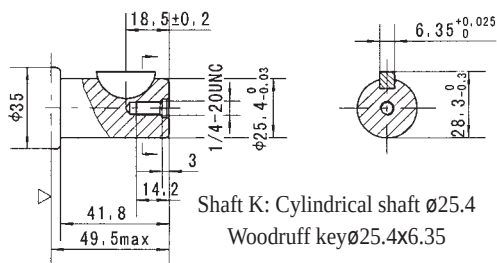
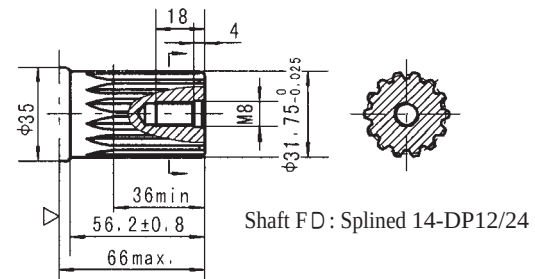
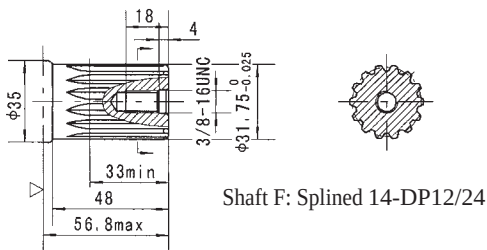
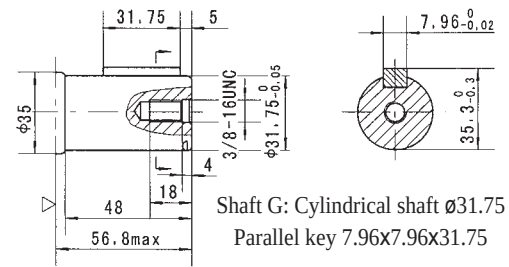
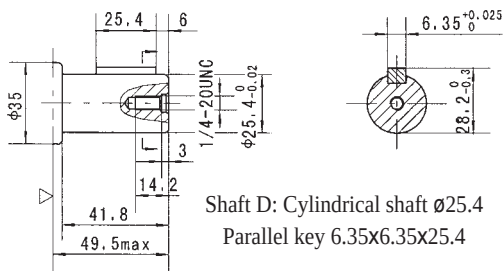
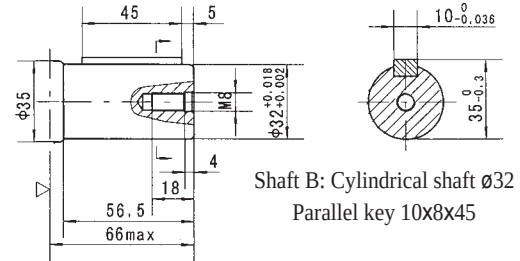
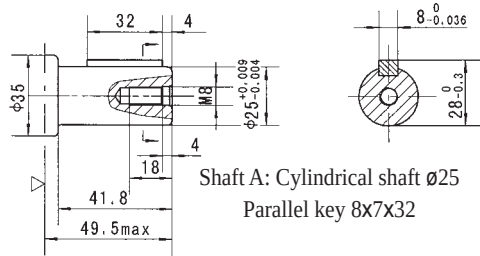


INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

Fillet Root Side Fit		mm
Number of Teeth	Z	12
Diametral Pitch	DP	12/24
Pressure Angle	α_D	30°
Pitch Dia.	D	ø25.4
Major Dia.	D_{ei}	$ø27.6^{+0.14}_0$
Minor Dia.	D_{fi}	$ø23.1^{+0.12}_0$
Space Width [Circular]	E	4.282 ± 0.036
Dimension between two pins(ø3.38)	M_e	19.02-19.19

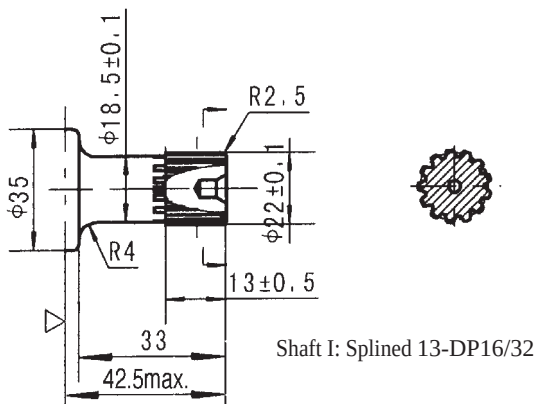
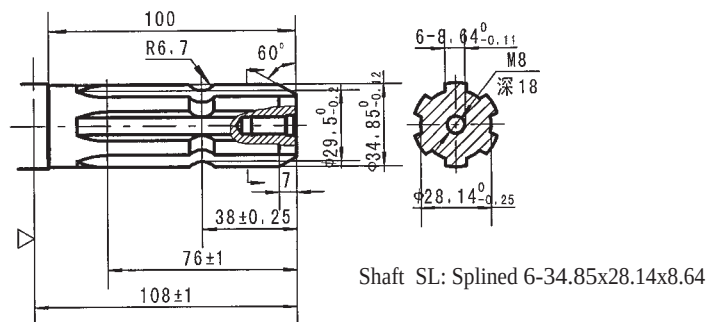
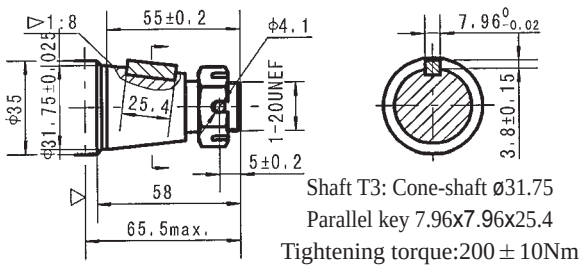
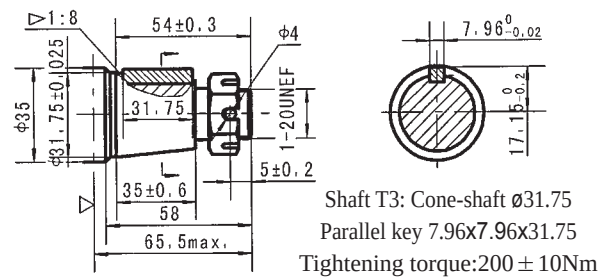
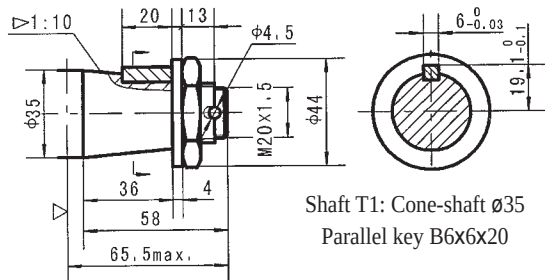
- ① Internal spline in mating part to be per data. Specification material to be ASTM A304, 8620H. Vacuum degassed alloy steel carburize to a hardness of 58-62HRC with case depth (to 50HRC) of 0.75-1 [.030-.040] (dimensions apply after heat treat).
- ② Mating part to have critical dimensions as shown, Oil holes must be provided and open for proper oil circulation.
- ③ Some means of maintaining clearance between shaft and mounting flange must be provided.
- ④ Seal to be furnished with motor for proper oil circulation thru splines.
- ⑤ Counterbore designed to adapt to a standard sleeve bearing 35.010-35.040 [1.3784-1.3795] ID by 44.040-44.070 [1.7339-1.7350] O.D.(Oilite Bronze Sleeve Bearing AAM3544-22).
- C This surface to be diameter of output shaft.

SHAFT EXTENSIONS FOR QHMS(E) MOTORS



▷ Motor Mounting Surface(Dimension corresponding mounting E2, by analogy with others)

SHAFT EXTENSIONS FOR QHMS(E) MOTORS

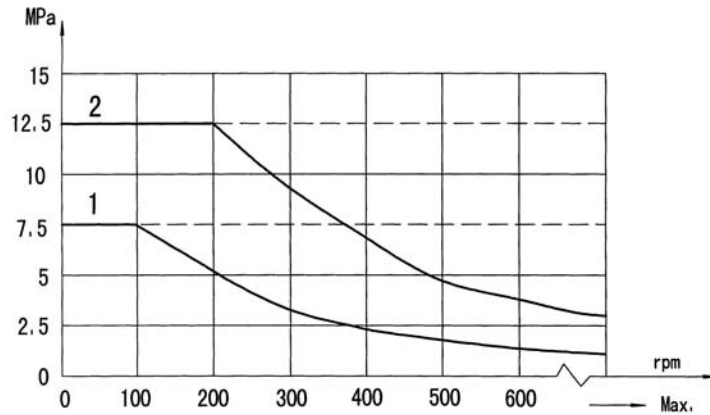
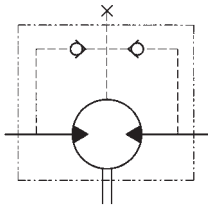


- ▷ Motor Mounting Surface(Dimension corresponding mounting E2, by analogy with others)
Note: Mounting SP is the same with shaft mode T1、D、B、F and G.

QHMS(E) Series Hydraulic Motor



Permissible shaft seal pressure

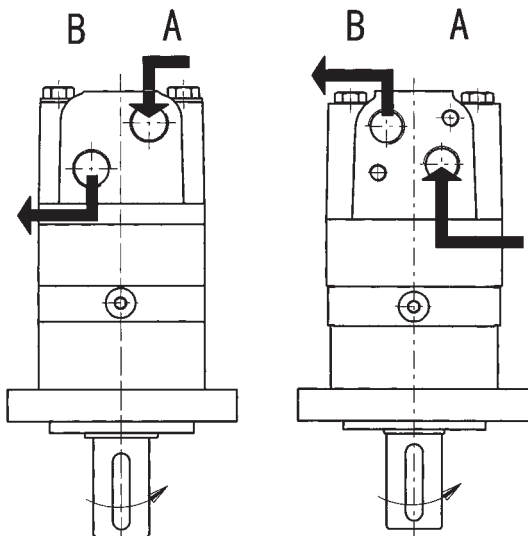


Note: 1. Chart for standard shaft seal;
2. Chart for high pressure shaft seal.

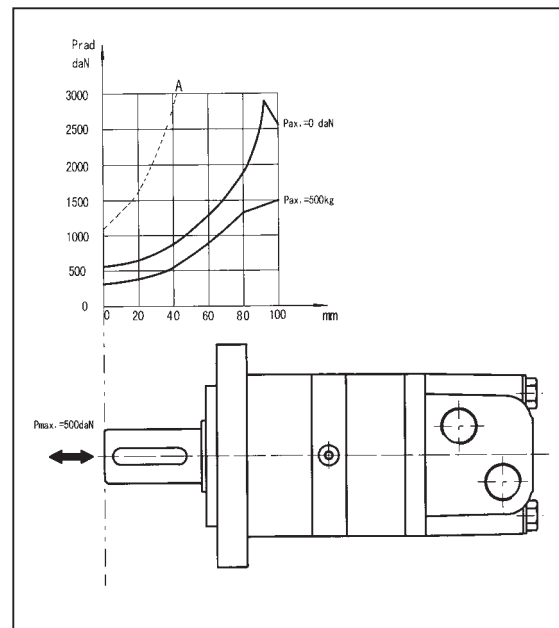
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Standard 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.



Axial and Radial forces



The output shaft runs in tapered bearings that permit high axial and radial forces, Curve "A" shows max radial shaft load, Any shaft loads exceeding the values quoted in the curve will involve a risk of breakage, The two other curves apply to a B10 bearing life of 3000 hours at 200 RPM.



CODE INFORMATION

1	2	3	4	5	6	7	8
QHMS							

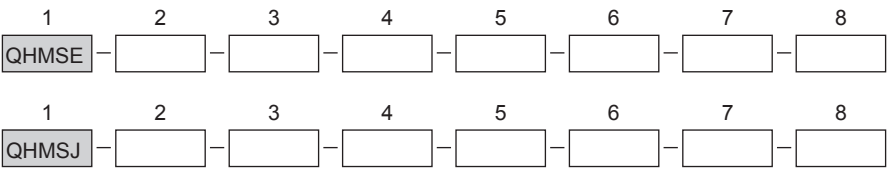
1	2	3	4	5	6	7	8
QHMS							

Pos.1	2	3	4	5	6	7	8
Code	Disp.	Flange	Output Shaft	Port and Drain Port	Rotation Direction	Paint	Unusually Function
QHMS	80	E2 2-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 6.3	A Shaft Ø25 , parallel key 8 × 7 × 32 B Shaft Ø32 , parallel key 10 × 8 × 45 D Shaft Ø25.4 , parallel key 6.35 × 6.35 × 25.4	D G1/2 Manifold Mount 2-M10 , G1/4 M M22 × 1.5 Manifold Mount 2-M10 , M14 × 1.5 S 7/8-14UNF O-ring manifold 2-3/8-16 , 7/16-20UNF P 1/2-14NPTF manifold 2-3/8-16UNC , 7/16-20UNF	Omit R	Standard Opposite	00 No paint B Blue S Black S Silver grey
	100	E4 4-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 6.3	G Shaft Ø31.75 , parallel key 7.96 × 7.96 × 31.75				
	125	F6 6-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 2.6	F Shaft Ø31.75 , splined tooth 14-DP12/24				
	160	W 4-Ø13.5 Wheel-flange Ø160 , pilot Ø125 × 8	FD Long Shaft Ø31.75 , splined tooth 14-DP12/24				
	200	E2B 2-Ø14.3 Rhomb-flange Ø146.05, pilot Ø101.6 × 9.4	SL shaft Ø34.85, Splined key 6-34.85 × 28.14 × 8.64				
	250	SP 4-Ø11.5 Square-flange Ø106.4, pilot Ø82.5 × 6.3	T1 Cone-shaft Ø35 , parallel key B6 × 6 × 20 T3 Cone-shaft Ø31.75 , parallel key 7.96 × 7.96 × 31.75				
	315		S1 Shaft Ø25.4 , splined tooth SAE 6B I Sub-shaft Ø22, splined tooth 13-DP16/32				
	375	D 4-Ø11 Circle-flange Ø125 , pilot Ø100 × 6 E 4-Ø13.5 Square-flange Ø127 , pilot Ø101.6 × 6.3	Omit Short shaft 12-DP12/24				
QHMS							

Note: When the table is used, please fill the code of left rows in the table and give us, which the code information consists of construction, displacement, mounting flange, output shaft and ports. If the specification is not in the table or you have specific requirements, please contact us. SP for T1, D, B, F, G.



CODE INFORMATION



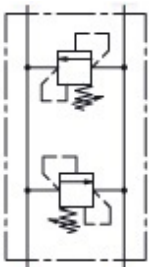
Pos.1	2	3		4		5		6		7		8	
Code	Disp.	Flange		Output Shaft		Port and Drain Port		Rotation Direction		Paint		Unusually Function	
QHMSE	80	E2	2-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 6.3	A	Shaft Ø25 , parallel key 8 × 7 × 32	MU MM EE-D EE-M2 EE-S2 ED DB DU SB SU M4	1/2" ,5/8" Crosshole Manifold 3 × 3/8-16UNC,7/16-20UNF 1/2" ,5/8" Crosshole Manifold 3 × M10,G1/4 G1/2,G1/4 M22 × 1.5,M14 × 1.5 7/8-14UNF O-ring,7/16-20 UNF 1-1/16-12UN O-ring,7/16-20 UNF G1/2,G1/4 G1/2,7/16-20 UNF 7/8-14UNF O-ring,G1/4 7/8-14UNF O-ring,7/16-20 UNF M22 × 1.5,M14 × 1.5	Omit R	Standard Opposite	00 Omit B S	No paint Blue Black Silver grey	Omit LL F LS	Standard Low Leakage Free Running Low Speed
	100	E4	4-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 6.3	K	Shaft Ø25.4 , Woodruff key Ø25.4 × 6.35								
	125	E2B	2-Ø14.3 Rhomb-flange Ø146.05, pilot Ø101.6 × 9.4	G	Shaft Ø31.75 , parallel key 7.96 × 7.96 × 31.75								
	160	E6	4-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 6.3	F	Shaft Ø31.75 , splined tooth 14-DP12/24								
	200	WE	4-Ø13.6Wheel-flangeØ147.6, pilot Ø107.95*6.4	T4	Cone-shaftØ31.75 , parallel key 7.96 × 7.96 × 25.4								
	250			S1	Shaft Ø25.4 ,splined tooth SAE 6B								
	315			I	Sub-shaft Ø22 , splined tooth 13-DP16/32								
	375			Omit	Short shaft12- DP12/24								
QHMSJ		J	4-Ø13.5 Square-flange Ø127 , pilot Ø101.6 × 6.3										



CROSSOVER RELIEF VALVES

- MADE TO ABSORB PEAK OF PRESSURE
- COMPACT DESIGN
- FITS MANY MANUFACTURERS

PART NO	FITS ON MOTORS	PSI RANGE	PORT
QH469-8210	QHMM	500-2000	SAE #6
QH460-2100	QHMP/QHMR	725-1450	
QH460-2210	QHMP/QHMR	1000-3000	
QH465-1210	QHMS	1000-3000	



FOR QHMM



FOR QHMP & QHMR



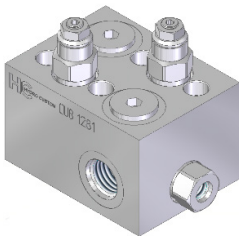
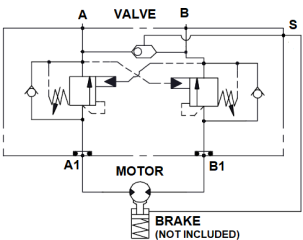
FOR QHMS



INTEGRATED COUNTERBALANCE VALVES

- MADE TO SMOOTHLY BRAKE ROTATION
- FITS ON BM1 & BM2 MOTORS- INTEGRATE A
- SHUTTLE TO SEND A SIGNAL/OIL

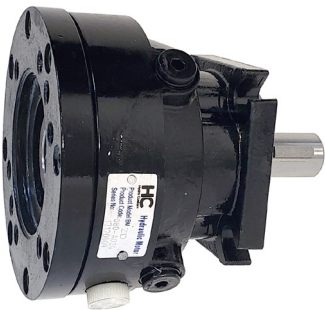
PART NO
QH1281



QHZD80 HYDRAULIC BRAKES TO INSTALL ON MOTORS

- MULTI-DISC BRAKE THAT RELEASE UNDER HYDRAULIC PRESSURE
- COMPACT, EASY TO INSTALL
- MIN STARTING TORQUE: 3980 LB*IN
- MIN OPERATING PRESSURE: 360 PSI
- MAX OPENING PRESSURE: 4350 PSI
- DRAIN AND BRAKE RELEASE PORT: SAE-04

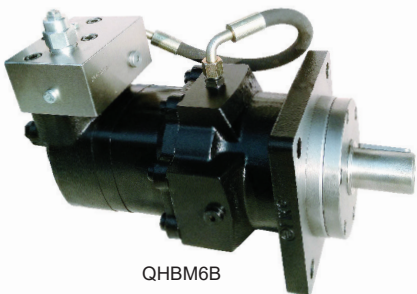
PART NO	FEMALE	MALE	MOUNTING FLANGE
QHSD80-A014	1"-6T SPLINE	1" KEYED	SAE-A 2/4 BOLTS
QHSD80-A024		1"-6T SPLINE	



MOTOR WITH INTEGRATED BRAKES



QHBM2B



QHBM6B