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## 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 mm<sup>2</sup>/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 OMM and OMP and OMR 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 OMS、 OMSY、 OMT 、 OMV and BMK6 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 (cm <sup>3</sup> /rev.)	Max. operating pressure (MPa)	Speed range (rpm)	Max. output power (kW)
Axial distribution	OMM	8~50	14	30~1950	3.2
	OMP	36~400	16.5	30~879	10
	OMR	36~375	20	30~970	15
	OMH	200~500	20	30~430	17

## Specification Data of Hydraulic Motor

Distribution type	Model	Displacement (cm <sup>3</sup> /rev.)	Max. operating pressure (MPa)	Speed range (rpm)	Max. output power (kW)
Disc distribution	OMS	80~375	22.5	30~800	20
	OMSY	80~475	22.5	8~800	24
	OMT	160~800	24	30~705	35
	OMV	315~800	28	10~446	43



## OMM SERIES HYDRAULIC MOTOR

OMM 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

Type		OMM 8	OMM 12.5	OMM 20	OMM 32	OMM 40	OMM 50
Geometric displacement (cm <sup>3</sup> /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
OMM8-50 (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.



Performance Data

OMM8 [8.2 cm<sup>3</sup>/rev.]

		Pressure (MPa)					
		Max.cont.			Max.int.		
		3.5	5	7	10	12	14
Flow (L/min)	2	3	5	8	10	12	14
		<b>228</b>	<b>218</b>	<b>206</b>	<b>156</b>	<b>111</b>	<b>58</b>
	4	3	5	7	11	13	15
		<b>474</b>	<b>471</b>	<b>463</b>	<b>426</b>	<b>391</b>	<b>331</b>
	8	3	5	7	11	13	15
		<b>953</b>	<b>946</b>	<b>926</b>	<b>884</b>	<b>855</b>	<b>816</b>
	12	2	5	7	10	13	15
		<b>1444</b>	<b>1426</b>	<b>1402</b>	<b>1360</b>	<b>1324</b>	<b>1288</b>
Max.cont.	15		4	7	10	12	14
			<b>1912</b>	<b>1900</b>	<b>1861</b>	<b>1833</b>	<b>1780</b>
Max.int.	20			6	10	11	14
				<b>2395</b>	<b>2350</b>	<b>2328</b>	<b>2281</b>

OMM12.5 [12.9 cm<sup>3</sup>/rev.]

		Pressure (MPa)					
		Max.cont.			Max.int.		
		3.5	5	7	10	12	14
Flow (L/min)	2	6	8	11	16	19	
		<b>140</b>	<b>136</b>	<b>119</b>	<b>68</b>	<b>35</b>	
	4	6	8	12	17	19	23
		<b>296</b>	<b>289</b>	<b>274</b>	<b>229</b>	<b>200</b>	<b>145</b>
	8	5	8	12	17	20	24
		<b>605</b>	<b>596</b>	<b>583</b>	<b>543</b>	<b>514</b>	<b>469</b>
	12	5	8	11	16	20	24
		<b>912</b>	<b>905</b>	<b>895</b>	<b>859</b>	<b>834</b>	<b>784</b>
	15	5	7	11	16	19	23
		<b>1152</b>	<b>1144</b>	<b>1136</b>	<b>1102</b>	<b>1078</b>	<b>1036</b>
Max.cont.	20	3	7	10	15	19	22
		<b>1542</b>	<b>1532</b>	<b>1521</b>	<b>1500</b>	<b>1482</b>	<b>1437</b>
Max.int.	25	2	6	9	14	18	22
		<b>1910</b>	<b>1891</b>	<b>1878</b>	<b>1848</b>	<b>1828</b>	<b>1788</b>

OMM20 [19.9 cm<sup>3</sup>/rev.]

		Pressure (MPa)						
		Max.cont.				Max.int.		
		1.7	3.5	5	7	10	12	14
Flow (L/min)	2	3	9	14	19	26	30	
		<b>99</b>	<b>96</b>	<b>89</b>	<b>74</b>	<b>42</b>	<b>21</b>	
	4	4	9	14	19	26	31	36
		<b>197</b>	<b>191</b>	<b>182</b>	<b>178</b>	<b>134</b>	<b>112</b>	<b>74</b>
	8	4	9	13	19	27	31	36
		<b>398</b>	<b>395</b>	<b>391</b>	<b>377</b>	<b>340</b>	<b>319</b>	<b>288</b>
	12	3	8	13	18	26	31	37
		<b>596</b>	<b>594</b>	<b>588</b>	<b>579</b>	<b>545</b>	<b>523</b>	<b>493</b>
	15	3	8	12	17	25	30	36
		<b>745</b>	<b>741</b>	<b>738</b>	<b>728</b>	<b>695</b>	<b>684</b>	<b>660</b>
Max.cont.	20	1	6	11	19	24	29	35
		<b>998</b>	<b>995</b>	<b>991</b>	<b>985</b>	<b>962</b>	<b>916</b>	<b>885</b>
Max.int.	25		4	9	14	23	28	33
			<b>1247</b>	<b>1245</b>	<b>1242</b>	<b>1189</b>	<b>1180</b>	<b>1176</b>

OMM32 [31.6 cc/rev.]

		Pressure (MPa)						
		Max.cont.				Max.int.		
		2	3.5	5	7	10	12	14
Flow (L/min)	2	7	15	21	28	40		
		<b>61</b>	<b>57</b>	<b>52</b>	<b>47</b>	<b>16</b>		
	4	7	15	21	29	41	48	57
		<b>126</b>	<b>121</b>	<b>114</b>	<b>106</b>	<b>82</b>	<b>67</b>	<b>49</b>
	8	7	15	21	29	41	49	58
		<b>250</b>	<b>244</b>	<b>239</b>	<b>231</b>	<b>207</b>	<b>194</b>	<b>167</b>
	12	6	13	20	28	40	48	58
		<b>378</b>	<b>374</b>	<b>369</b>	<b>362</b>	<b>338</b>	<b>322</b>	<b>297</b>
	15	4	12	18	27	39	47	57
		<b>476</b>	<b>472</b>	<b>468</b>	<b>462</b>	<b>441</b>	<b>429</b>	<b>406</b>
Max.cont.	20	3	10	17	25	37	46	55
		<b>633</b>	<b>630</b>	<b>627</b>	<b>619</b>	<b>601</b>	<b>585</b>	<b>566</b>
Max.int.	25	1	8	15	23	35	43	52
		<b>791</b>	<b>789</b>	<b>787</b>	<b>783</b>	<b>766</b>	<b>753</b>	<b>732</b>

OMM40 [39.8 cm<sup>3</sup>/rev.]

		Pressure (MPa)					
		Max.cont.			Max.int.		
		3	5	7	8.5	10	12
Flow (L/min)	2	16	27	36	44	51	
		<b>45</b>	<b>40</b>	<b>34</b>	<b>28</b>	<b>17</b>	
	4	16	27	37	44	52	62
		<b>96</b>	<b>93</b>	<b>85</b>	<b>79</b>	<b>65</b>	<b>52</b>
	8	15	26	36	44	52	63
		<b>197</b>	<b>195</b>	<b>182</b>	<b>176</b>	<b>166</b>	<b>154</b>
	12	14	25	35	43	51	62
		<b>293</b>	<b>287</b>	<b>282</b>	<b>277</b>	<b>268</b>	<b>257</b>
	15	13	24	34	42	50	62
		<b>371</b>	<b>365</b>	<b>360</b>	<b>355</b>	<b>347</b>	<b>338</b>
Max.cont.	20	10	21	31	39	48	59
		<b>497</b>	<b>492</b>	<b>487</b>	<b>480</b>	<b>472</b>	<b>463</b>
Max.int.	25	7	19	29	37	44	56
		<b>622</b>	<b>617</b>	<b>612</b>	<b>607</b>	<b>600</b>	<b>591</b>

OMM50 [50.3 cm<sup>3</sup>/rev.]

		Pressure (MPa)				
		Max.cont.			Max.int.	
		1.5	3	5	7	10
Flow (L/min)	2	11	23	36	50	
		<b>37</b>	<b>33</b>	<b>27</b>	<b>22</b>	
	4	11	22	36	50	70
		<b>76</b>	<b>73</b>	<b>68</b>	<b>63</b>	<b>55</b>
	8	11	21	35	50	71
		<b>157</b>	<b>154</b>	<b>149</b>	<b>145</b>	<b>137</b>
	12	11	20	33	49	71
		<b>237</b>	<b>234</b>	<b>231</b>	<b>226</b>	<b>218</b>
	15	10	18	32	47	69
		<b>296</b>	<b>295</b>	<b>294</b>	<b>288</b>	<b>282</b>
Max.cont.	20	8	14	29	44	64
		<b>395</b>	<b>395</b>	<b>393</b>	<b>390</b>	<b>381</b>
Max.int.	25	4	10	25	40	59
		<b>498</b>	<b>496</b>	<b>494</b>	<b>490</b>	<b>484</b>

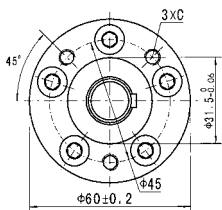
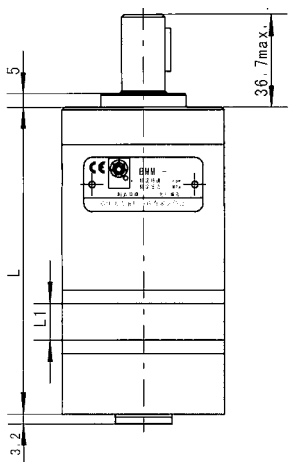
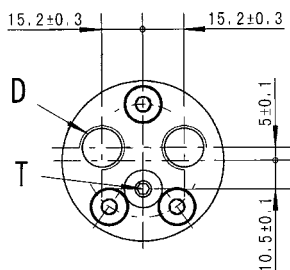
Torque (N•m) 37  
Speed (rpm) 607



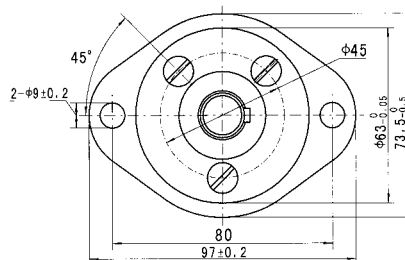
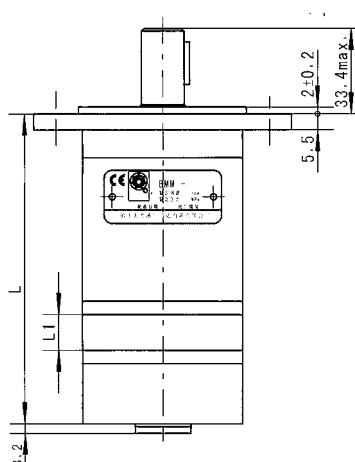
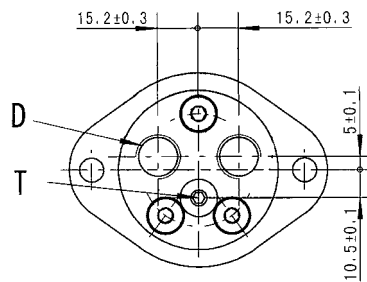
OMM END PORT DIMENSIONS AND MOUNTING DATA

MOUNTING

Flange M、U



Flange F



Model	M、 U Flange		F Flange	
	L	L1	L	L1
OMM8	104	3.5	107.5	3.5
OMM12.5	106	5.5	109.5	5.5
OMM20	109	8.5	112.5	8.5
OMM32	114	13.5	117.5	13.5
OMM40	117.5	17	121	17
OMM50	122	21.5	125.5	21.5

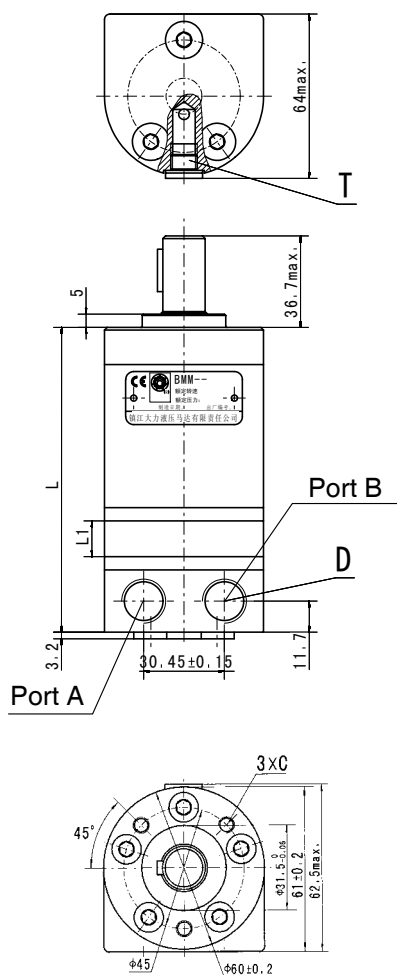
Mounting	M、 U Flange		F Flange	
	1E (depth)	1U (depth)	1E (depth)	1U (depth)
C	3-M6 (10)	3-1/4-28UNF-2B(10)	--	--
D	G3/8 (12)	9/16-18UNF(12)	G3/8 (12)	9/16-18UNF(12)
T	G1/8 (8)	3/8-24UNF(8)	G1/8 (8)	3/8-24UNF(8)



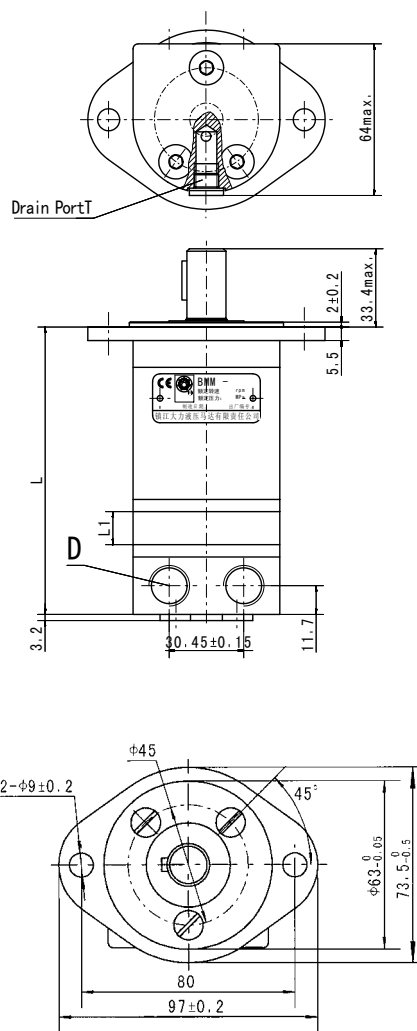
OMM SIDE PORT DIMENSIONS AND MOUNTING DATA

MOUNTING

Flange M、U



Flange F

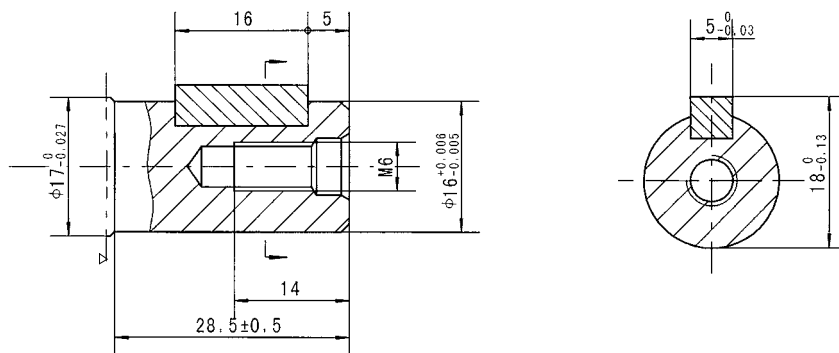


Model	M、U Flange		F Flange	
	L	L1	L	L1
OMM8	105	3.5	108.5	3.5
OMM12.5	107	5.5	110.5	5.5
OMM20	110	8.5	113.5	8.5
OMM32	115	13.5	118.5	13.5
OMM40	118.5	17	122	17
OMM50	123	21.5	126.5	21.5

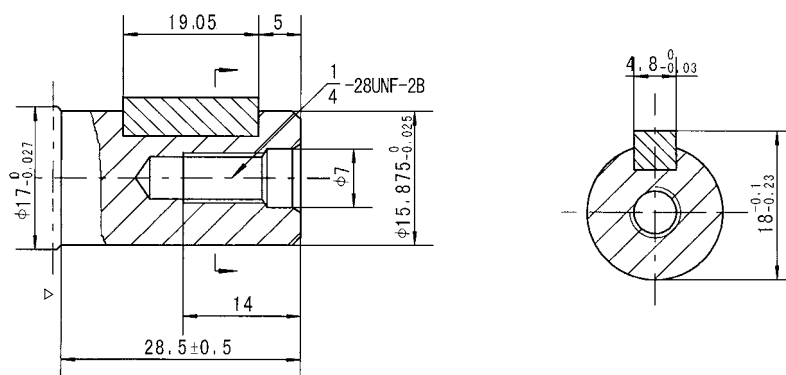
Mounting	M、U Flange		F Flange	
	E (depth)	U (depth)	E (depth)	U (depth)
C	3-M6 (10)	3-1/4-28UNF-2B(10)	--	--
D	G3/8 (12)	9/16-18UNF(12)	G3/8 (12)	9/16-18UNF(12)
T	G1/8 (8)	3/8-24UNF(8)	G1/8 (8)	3/8-24UNF(8)

OMM SHAFT EXTENSIONS FOR BMM MOTORS

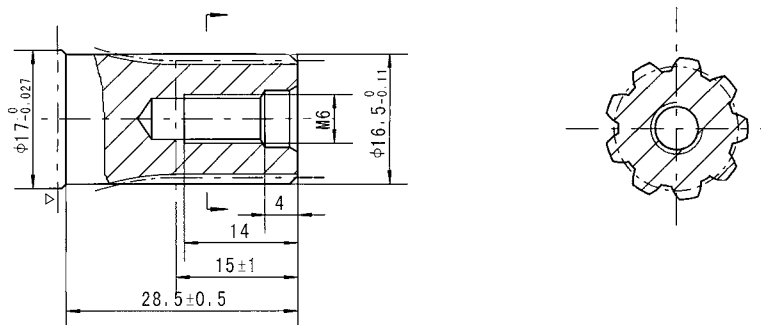
Shaft A: Cylindrical shaft  $\varnothing 16$   
Parallel key 5x5x16



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



Shaft C: Involute splind shaft  
B17x14 DIN5482

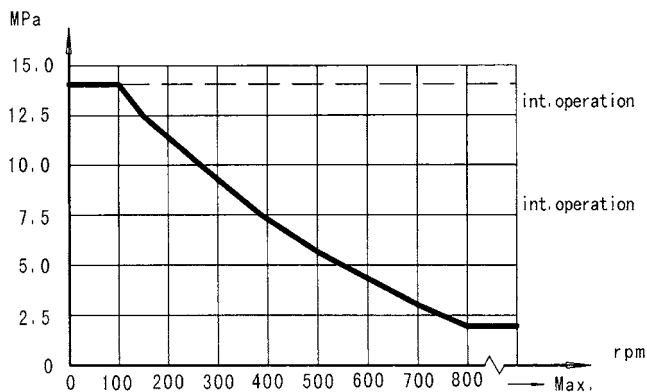
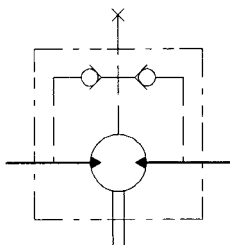


▷ Motor Mounting Surface



## OMM Series Hydraulic Motor

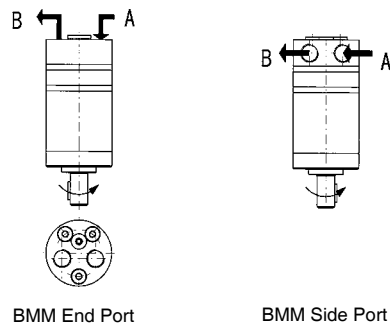
### Permissible shaft seal pressure



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.

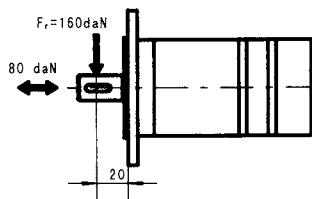
### Direction of shaft rotation: Standard

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



### Status of the shaft's radial force

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

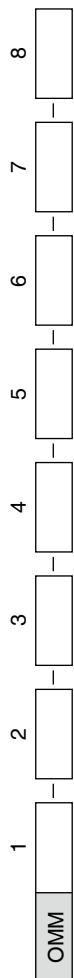


$F_r$  = Radial Force (daN)  
 $L$  = Distance (mm)  
 $n$  = Speed (rpm)  
 Max. force load  
 Rhomb-flange  $L=15\text{mm}$   
 Square-flange  $L=20\text{mm}$





Order Information



Pos.1	2	3	4	5	6	7	8
Code	Displacement	Flange	Output shaft	Ports and drain port	Rotation direction	Paint	Unusually function
	8						
	12.5	M	A	E		00	
	20	U	B	U	Omit Standard	Omit	Omit
	32	F	C	1E	R	B	O
	40			1U		S	No case drain
	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.



## OMP SERIES HYDRAULIC MOTOR

OMP 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 BMP with 25 and 1 in and 1 in splined and 28.56 tapered shaft

Type	OMP 36		OMP 50		OMP 80		OMP 100		OMP 125		OMP 160		OMP 200		OMP 250		OMP 315		OMP 400		OMP 500		
	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	OMP OMPH OMPW	
Geometric displacement (cm <sup>3</sup> /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	6.7	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 OMP with 31.75 and 32 shaft

Type		OMP OMPH 36	OMP OMPH 50	OMP OMPH 80	OMP OMPH 100	OMP OMPH 125	OMP OMPH 160	OMP OMPH 200	OMP OMPH 250	OMP OMPH 315	OMP OMPH 400	OMP OMPH 500
Geometric displacement (cm <sup>3</sup> /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	5.6	5.7	5.9	6.0	6.2	6.4	6.7	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

OMP 125 [120.2cm<sup>3</sup>/rev.]

Pressure (MPa)

		Max.cont.							Max.int.		
		3	6	8	10	12.5	14	16	17.5		
8		51	98	137	168	208	236				
		<b>63</b>	<b>60</b>	<b>55</b>	<b>47</b>	<b>28</b>	<b>15</b>				
15		51	101	138	168	209	236	267			
		<b>121</b>	<b>116</b>	<b>110</b>	<b>102</b>	<b>89</b>	<b>73</b>	<b>48</b>			
20		48	98	135	167	211	237	269	290		
		<b>162</b>	<b>158</b>	<b>153</b>	<b>148</b>	<b>137</b>	<b>128</b>	<b>109</b>	<b>94</b>		
30		46	96	132	164	209	232	264	287		
		<b>243</b>	<b>239</b>	<b>234</b>	<b>227</b>	<b>216</b>	<b>202</b>	<b>189</b>	<b>176</b>		
35		42	92	130	160	206	229	260	284		
		<b>284</b>	<b>279</b>	<b>274</b>	<b>269</b>	<b>259</b>	<b>247</b>	<b>231</b>	<b>222</b>		
45		37	89	125	157	201	224	261	281		
		<b>370</b>	<b>362</b>	<b>355</b>	<b>348</b>	<b>340</b>	<b>327</b>	<b>310</b>	<b>296</b>		
55		33	84	122	152	196	218	252	275		
		<b>452</b>	<b>446</b>	<b>438</b>	<b>431</b>	<b>420</b>	<b>412</b>	<b>402</b>	<b>384</b>		
Max.cont.	60	29	78	117	146	191	215	248	272		
		<b>490</b>	<b>482</b>	<b>475</b>	<b>468</b>	<b>459</b>	<b>448</b>	<b>439</b>	<b>427</b>		
Max.int.	75	18	66	107	133	179	202	236	260		
		<b>615</b>	<b>606</b>	<b>598</b>	<b>586</b>	<b>575</b>	<b>563</b>	<b>549</b>	<b>528</b>		

OMP 160 [157.2cm<sup>3</sup>/rev.]

Pressure (MPa)

		Max.cont.							Max.int.		
		3	6	8	10	12.5	14	16	17.5		
8		62	120	170	212	263	290				
		<b>49</b>	<b>48</b>	<b>46</b>	<b>42</b>	<b>26</b>	<b>14</b>				
15		60	122	172	215	264	294	340			
		<b>93</b>	<b>91</b>	<b>88</b>	<b>85</b>	<b>76</b>	<b>68</b>	<b>48</b>			
20		57	120	170	214	262	290	340	371		
		<b>125</b>	<b>123</b>	<b>120</b>	<b>117</b>	<b>110</b>	<b>106</b>	<b>92</b>	<b>81</b>		
30		53	115	164	206	259	288	335	368		
		<b>187</b>	<b>184</b>	<b>181</b>	<b>178</b>	<b>175</b>	<b>168</b>	<b>155</b>	<b>139</b>		
35		49	110	160	202	255	284	328	362		
		<b>220</b>	<b>216</b>	<b>213</b>	<b>209</b>	<b>205</b>	<b>202</b>	<b>192</b>	<b>176</b>		
45		44	102	154	196	248	278	321	358		
		<b>283</b>	<b>280</b>	<b>276</b>	<b>272</b>	<b>267</b>	<b>260</b>	<b>250</b>	<b>238</b>		
55		40	99	148	191	243	272	316	351		
		<b>345</b>	<b>342</b>	<b>340</b>	<b>336</b>	<b>331</b>	<b>328</b>	<b>320</b>	<b>303</b>		
Max.cont.	60	33	94	144	188	236	267	308	345		
		<b>377</b>	<b>374</b>	<b>371</b>	<b>367</b>	<b>363</b>	<b>359</b>	<b>353</b>	<b>342</b>		
Max.int.	75	19	80	124	170	216	252	296	325		
		<b>473</b>	<b>469</b>	<b>465</b>	<b>459</b>	<b>453</b>	<b>447</b>	<b>440</b>	<b>424</b>		

OMP 200 [194.5cm<sup>3</sup>/rev.]

Pressure (MPa)

		Max.cont.							Max.int.		
		3	6	8	10	12.5	14	16	17.5		
8		79	164	207	250	320	360				
		<b>40</b>	<b>39</b>	<b>38</b>	<b>35</b>	<b>28</b>	<b>22</b>				
15		78	162	205	250	322	361	410			
		<b>76</b>	<b>75</b>	<b>74</b>	<b>71</b>	<b>66</b>	<b>61</b>	<b>51</b>			
20		76	158	203	247	320	358	403	422		
		<b>100</b>	<b>98</b>	<b>97</b>	<b>95</b>	<b>92</b>	<b>89</b>	<b>73</b>	<b>57</b>		
30		70	153	200	245	315	350	398	417		
		<b>151</b>	<b>149</b>	<b>147</b>	<b>145</b>	<b>142</b>	<b>139</b>	<b>131</b>	<b>120</b>		
35		66	149	194	232	297	343	386	415		
		<b>177</b>	<b>175</b>	<b>173</b>	<b>171</b>	<b>168</b>	<b>166</b>	<b>160</b>	<b>149</b>		
45		63	146	190	230	294	340	383	410		
		<b>228</b>	<b>226</b>	<b>224</b>	<b>221</b>	<b>218</b>	<b>215</b>	<b>210</b>	<b>198</b>		
55		54	140	181	224	286	334	371	400		
		<b>280</b>	<b>278</b>	<b>276</b>	<b>274</b>	<b>271</b>	<b>269</b>	<b>263</b>	<b>250</b>		
Max.cont.	60	38	127	164	212	270	325	356	395		
		<b>304</b>	<b>302</b>	<b>300</b>	<b>297</b>	<b>294</b>	<b>291</b>	<b>286</b>	<b>272</b>		
Max.int.	75	22	96	145	192	235	293	321	367		
		<b>382</b>	<b>378</b>	<b>374</b>	<b>371</b>	<b>368</b>	<b>364</b>	<b>360</b>	<b>350</b>		

OMP 250 [240.3cm<sup>3</sup>/rev.]

Pressure (MPa)

		Max.cont.							Max.int.		
		3	6	8	10	12.5	14	16	17.5		
8		96	190	268	326	403					
		<b>30</b>	<b>28</b>	<b>24</b>	<b>21</b>	<b>11</b>					
15		98	194	270	327	405	450	510			
		<b>60</b>	<b>58</b>	<b>54</b>	<b>50</b>	<b>40</b>	<b>30</b>	<b>12</b>			
20		92	188	267	325	405	456	514	565		
		<b>82</b>	<b>80</b>	<b>77</b>	<b>76</b>	<b>69</b>	<b>64</b>	<b>52</b>	<b>38</b>		
30		85	180	259	320	400	448	513	561		
		<b>123</b>	<b>120</b>	<b>118</b>	<b>114</b>	<b>106</b>	<b>98</b>	<b>87</b>	<b>76</b>		
35		77	176	252	311	389	436	504	557		
		<b>143</b>	<b>141</b>	<b>139</b>	<b>135</b>	<b>128</b>	<b>122</b>	<b>112</b>	<b>101</b>		
45		70	168	243	300	377	428	495	543		
		<b>185</b>	<b>182</b>	<b>178</b>	<b>174</b>	<b>168</b>	<b>161</b>	<b>152</b>	<b>139</b>		
55		63	159	237	290	369	417	483	531		
		<b>226</b>	<b>223</b>	<b>218</b>	<b>213</b>	<b>209</b>	<b>202</b>	<b>193</b>	<b>185</b>		
Max.cont.	60	60	150	228	280	358	407	473	520		
		<b>248</b>	<b>246</b>	<b>243</b>	<b>239</b>	<b>233</b>	<b>226</b>	<b>215</b>	<b>207</b>		
Max.int.	75	34	128	202	264	342	387	448	488		
		<b>309</b>	<b>306</b>	<b>302</b>	<b>297</b>	<b>292</b>	<b>286</b>	<b>278</b>	<b>264</b>		

□ cont.  
 □ int.

Torque (N•m) 128  
 Speed (rpm) 306



Performance Data

OMP 315 [314.5cm<sup>3</sup>/rev.]

Pressure (MPa)		Max.cont.					Max.int.	
		3	5	7	9	10	12.5	14

Flow (L/min)	Pressure (MPa)							
	3	5	7	9	10	12.5	14	
8	123 <b>25</b>	215 <b>23</b>	292 <b>21</b>	368 <b>17</b>	405 <b>11</b>			
15	118 <b>47</b>	211 <b>46</b>	287 <b>44</b>	367 <b>40</b>	404 <b>28</b>	495 <b>21</b>	568 <b>10</b>	
20	110 <b>62</b>	205 <b>61</b>	278 <b>60</b>	360 <b>57</b>	395 <b>46</b>	494 <b>40</b>	566 <b>36</b>	
30	101 <b>94</b>	196 <b>93</b>	271 <b>91</b>	349 <b>88</b>	388 <b>76</b>	490 <b>68</b>	565 <b>65</b>	
35	96 <b>109</b>	188 <b>107</b>	264 <b>106</b>	341 <b>104</b>	382 <b>96</b>	478 <b>89</b>	557 <b>84</b>	
45	89 <b>141</b>	180 <b>140</b>	254 <b>138</b>	337 <b>135</b>	372 <b>127</b>	468 <b>120</b>	553 <b>115</b>	
55	76 <b>173</b>	166 <b>172</b>	239 <b>170</b>	325 <b>167</b>	362 <b>160</b>	457 <b>152</b>	548 <b>143</b>	
Max.cont. 60	65 <b>188</b>	154 <b>186</b>	227 <b>184</b>	308 <b>182</b>	348 <b>178</b>	443 <b>172</b>	529 <b>163</b>	
Max.int. 75	40 <b>236</b>	120 <b>234</b>	201 <b>232</b>	279 <b>228</b>	323 <b>226</b>	418 <b>223</b>	497 <b>214</b>	

OMP 400 [389.5cm<sup>3</sup>/rev.]

Pressure (MPa)		Max.cont.					Max.int.	
		3	4.5	5.5	6.5	8	10	12.5

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

Torque (N•m) 234  
Speed (rpm) 185

OMP500[486.5cm<sup>3</sup>/rev.]

Pressure (MPa)		Max.cont.					Max.int.	
		1.5	3	4.5	6	7	8	9

Flow (L/min)	Pressure (MPa)							
	1.5	3	4.5	6	7	8	9	
4	96 <b>7</b>	194 <b>6</b>	285 <b>4</b>					
8	98 <b>15</b>	201 <b>15</b>	304 <b>14</b>	391 <b>14</b>	443 <b>12</b>	512 <b>9</b>	574 <b>7</b>	
15	96 <b>30</b>	192 <b>30</b>	284 <b>29</b>	380 <b>28</b>	421 <b>26</b>	496 <b>23</b>	550 <b>22</b>	
20	96 <b>40</b>	191 <b>40</b>	280 <b>40</b>	372 <b>39</b>	418 <b>37</b>	493 <b>33</b>	546 <b>31</b>	
30	91 <b>61</b>	185 <b>60</b>	272 <b>60</b>	360 <b>58</b>	412 <b>56</b>	486 <b>53</b>	541 <b>50</b>	
40	86 <b>81</b>	172 <b>80</b>	261 <b>80</b>	343 <b>79</b>	408 <b>76</b>	480 <b>73</b>	538 <b>70</b>	
50	78 <b>102</b>	160 <b>101</b>	241 <b>100</b>	332 <b>98</b>	391 <b>96</b>	466 <b>93</b>	528 <b>90</b>	
Max.cont. 60	66 <b>122</b>	134 <b>121</b>	213 <b>120</b>	305 <b>119</b>	371 <b>117</b>	438 <b>114</b>	496 <b>110</b>	
70	52 <b>143</b>	111 <b>142</b>	189 <b>141</b>	292 <b>139</b>	344 <b>137</b>	418 <b>135</b>	475 <b>131</b>	
Max.int. 75	35 <b>153</b>	83 <b>152</b>	154 <b>151</b>	241 <b>150</b>	312 <b>149</b>	389 <b>147</b>	448 <b>144</b>	

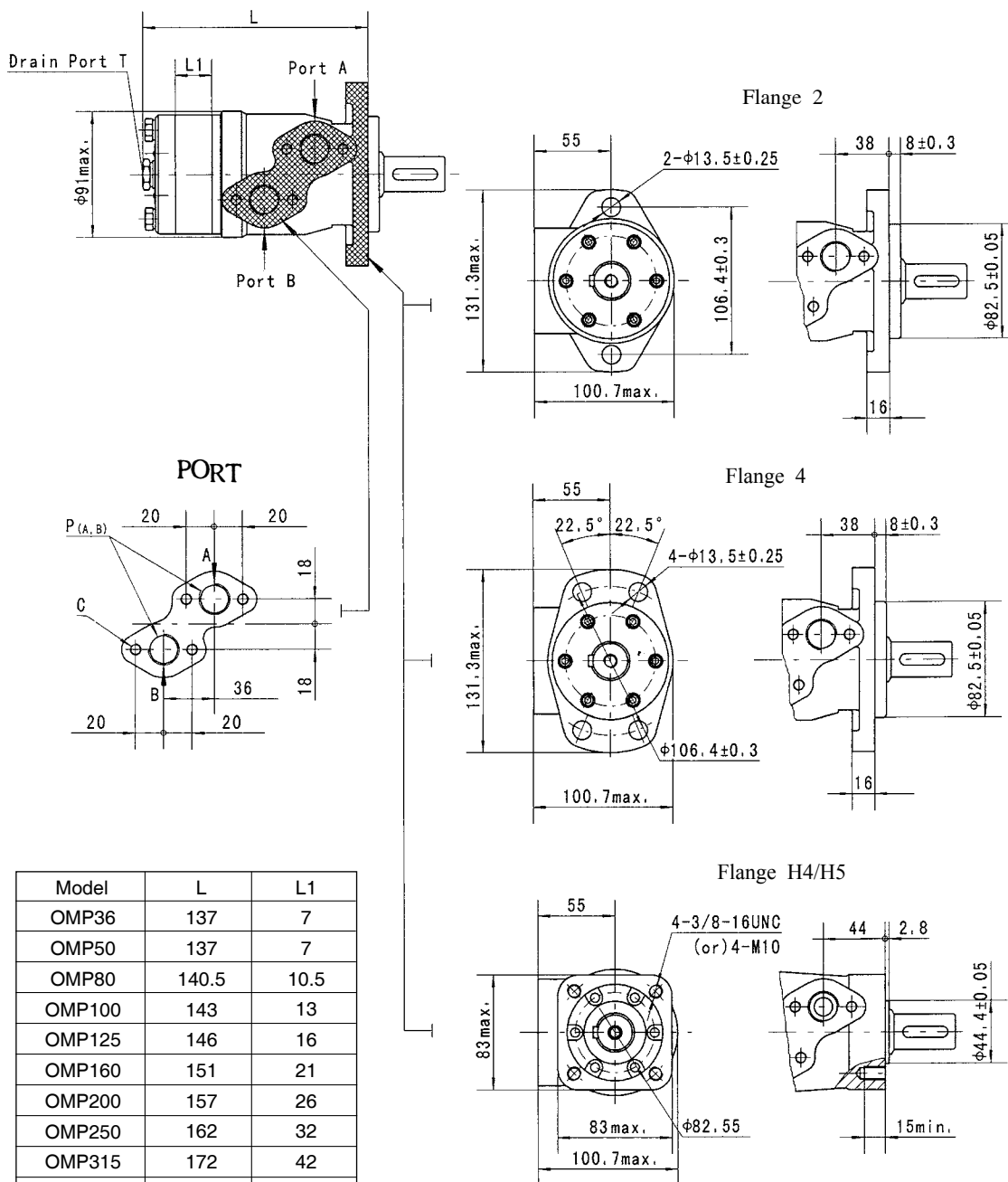
cont.  
int.

Torque (N•m) 389  
Speed (rpm) 147



## OMP DIMENSIONS AND MOUNTING DATA

### MOUNTING



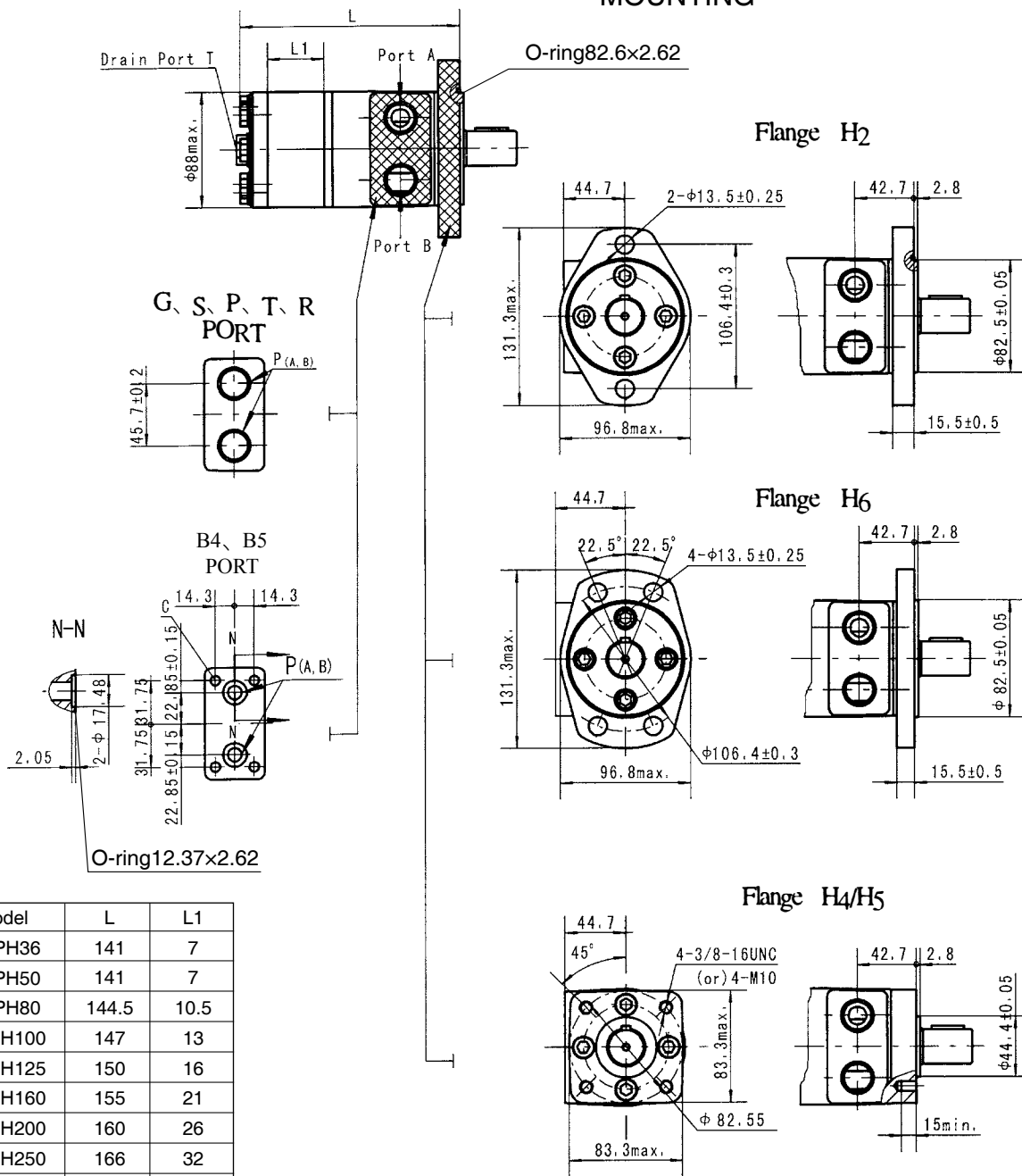
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OMP36	137	7
OMP50	137	7
OMP80	140.5	10.5
OMP100	143	13
OMP125	146	16
OMP160	151	21
OMP200	157	26
OMP250	162	32
OMP315	172	42
OMP400	182	52
OMP500	195	65

Code	D (depth)	M (depth)	S (depth)	P (depth)	R (depth)
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)



OMPH DIMENSIONS AND MOUNTING DATA

MOUNTING



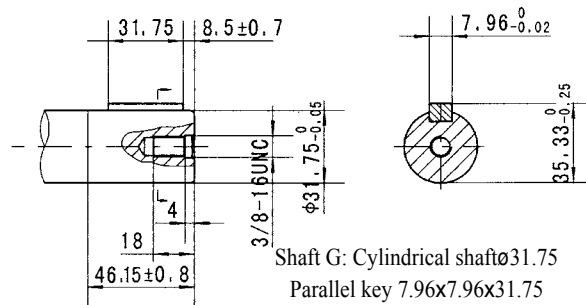
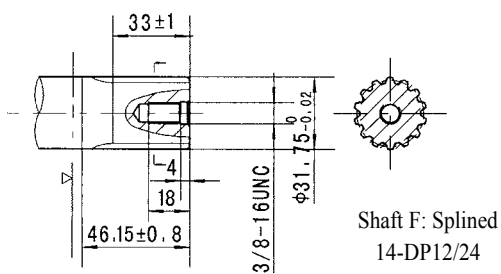
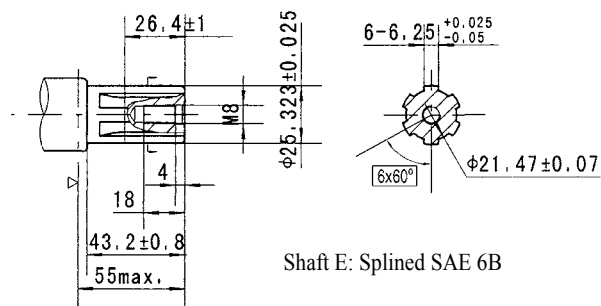
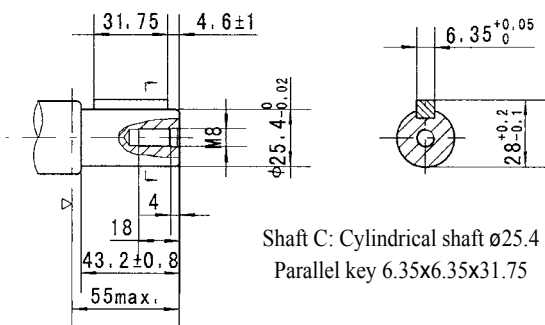
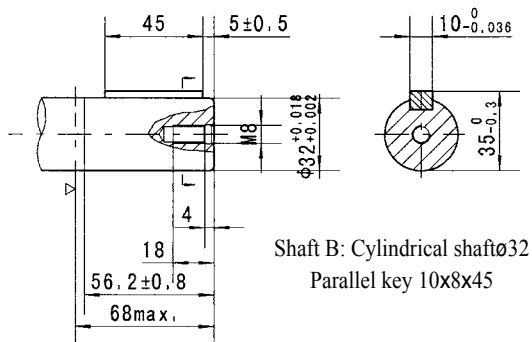
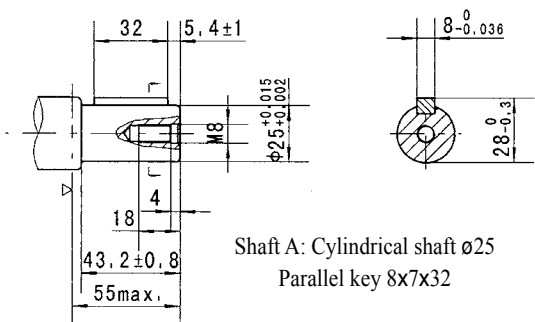
Model	L	L1
BMPH36	141	7
BMPH50	141	7
BMPH80	144.5	10.5
BMPH100	147	13
BMPH125	150	16
BMPH160	155	21
BMPH200	160	26
BMPH250	166	32
BMPH315	176	42
BMPH400	186	52
BMPH500	199	65

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)





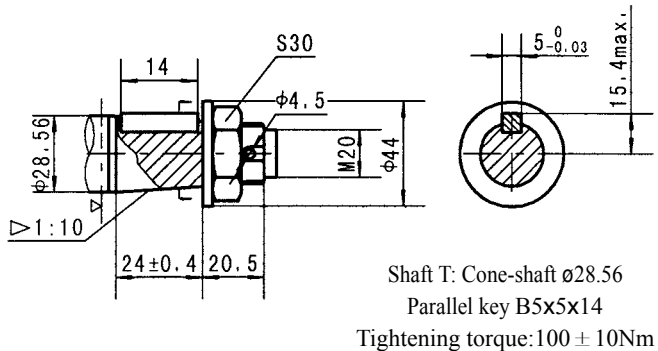
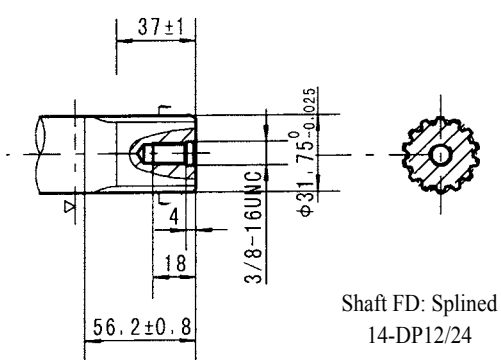
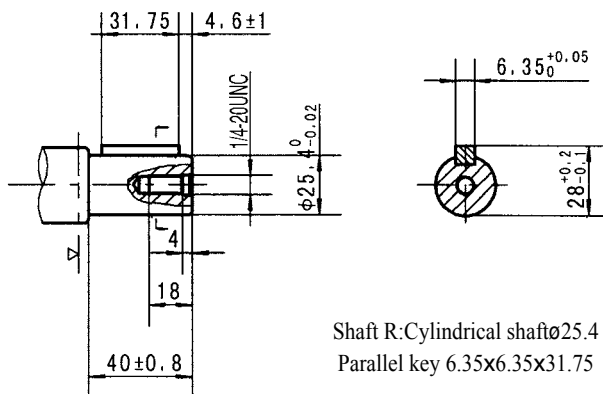
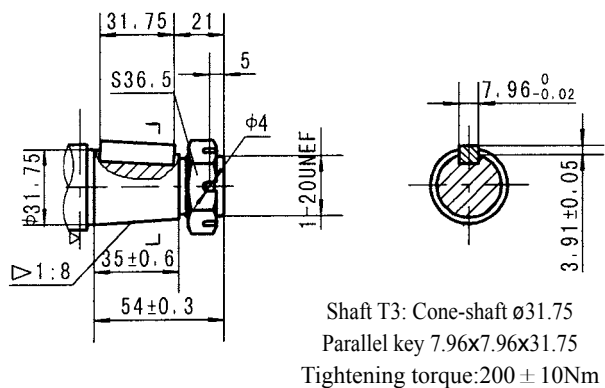
### OMP SHAFT EXTENSIONS DIMENSIONS DATA



▷ Motor Mounting Surface



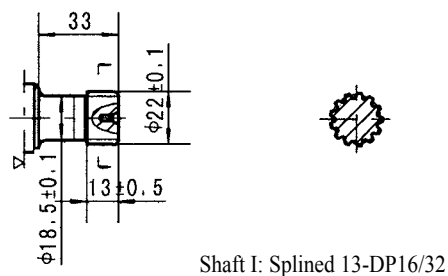
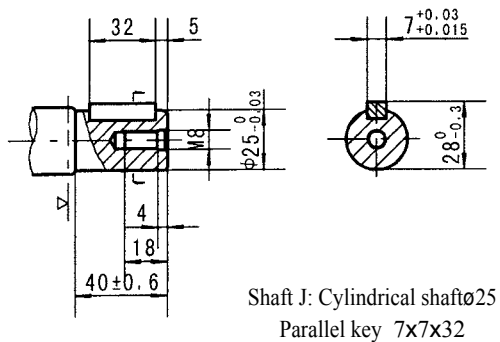
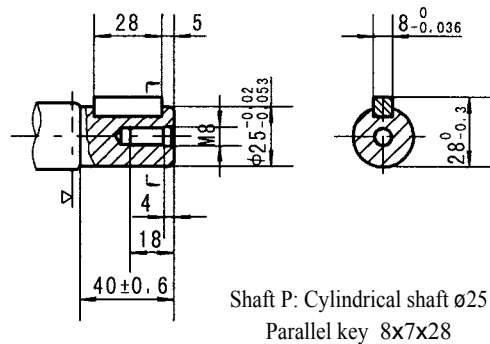
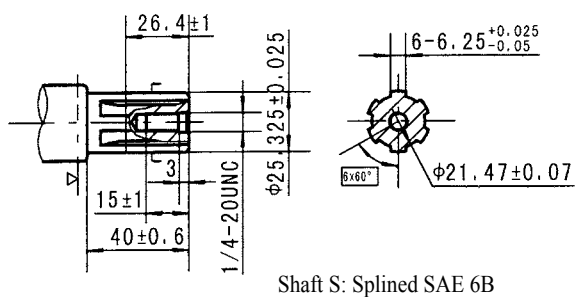
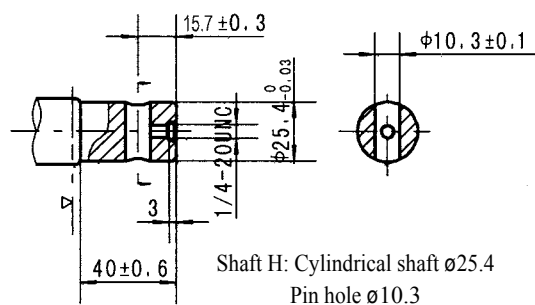
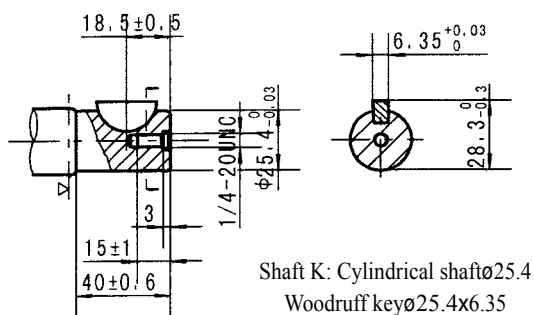
OMP SHAFT EXTENSIONS DIMENSIONS DATA



▷ Motor Mounting Surface



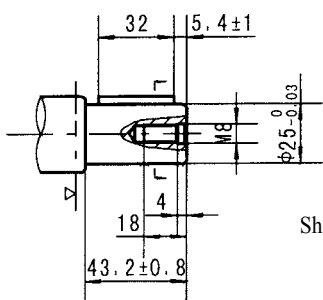
### OMPH SHAFT EXTENSIONS DIMENSIONS DATA



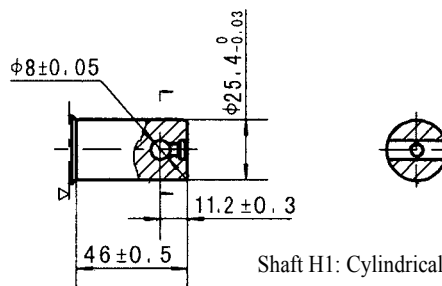
▷ Motor Mounting Surface



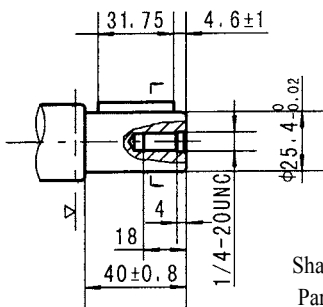
OMPH SHAFT EXTENSIONS DIMENSIONS DATA



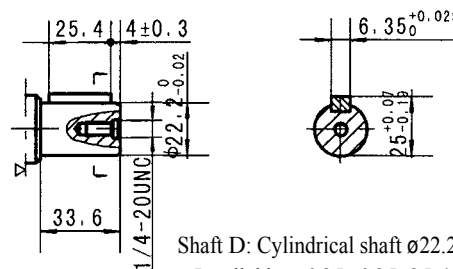
Shaft A: Cylindrical shaft ø25  
Parallel key 8x7x32



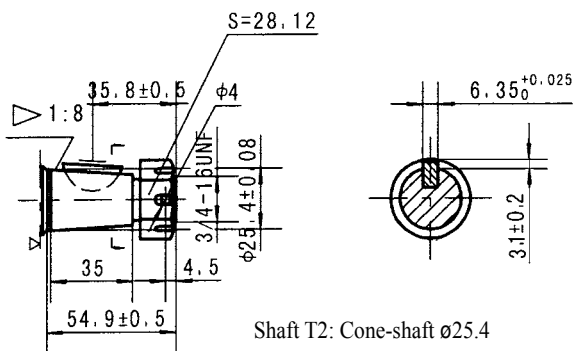
Shaft H1: Cylindrical shaft ø25.4  
Pin hole ø8



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



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



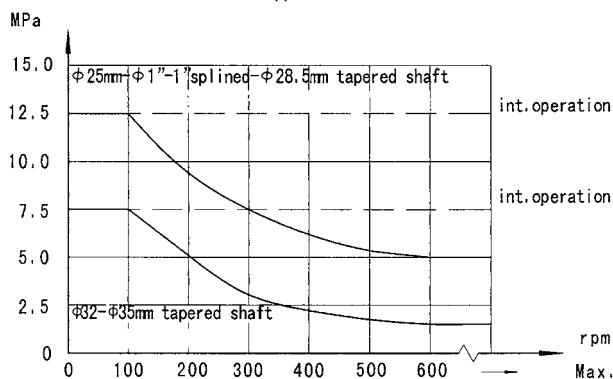
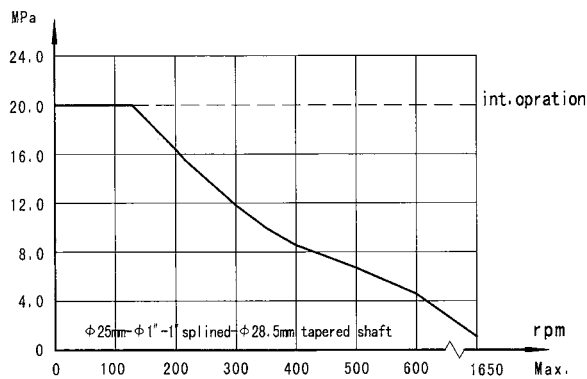
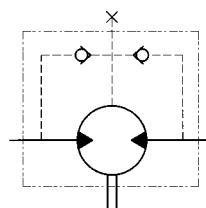
Shaft T2: Cone-shaft ø25.4  
Parallel key ø25.4x6.35  
Tightening torque: 200 ± 10Nm

▷ Motor Mounting Surface



### OMP, OMPH Series Hydraulic Motor

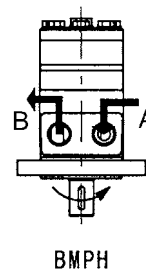
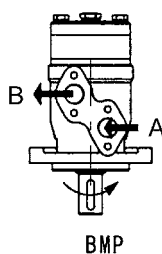
#### Permissible shaft seal pressure



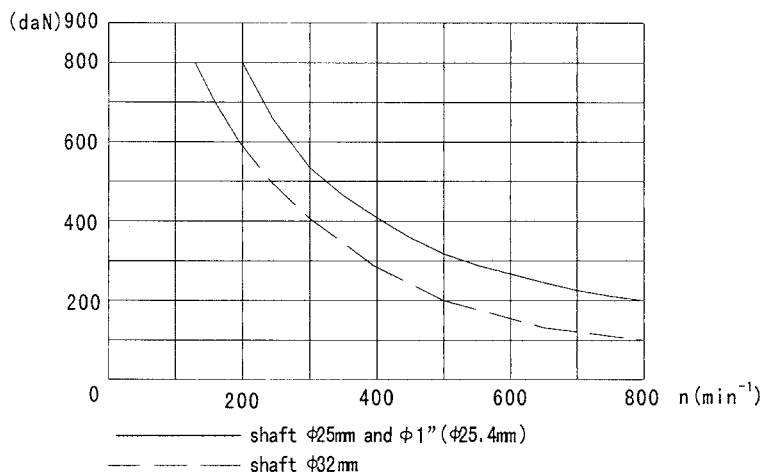
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

#### Direction of shaft rotation: Standard

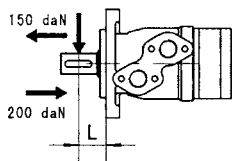
When facing shaft end of motor, shaft to rotate:  
 Clockwise when port "A" is pressurized.  
 Counter-clockwise when port "B" is pressurized.



#### 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  $L=24\text{mm}$



Order Information

1  2  3  4  5  6  7  8

OMP

Pos.1	2	3	4	5	6	7	8				
Code	Disp.	Flange	Output Shaft	Ports and Drain Port	Rotation Direction	Paint	Unusually Function				
OMP	36	2-Ø13.5 Rhomb-flange , pilot Ø82.5 × 8	A Shaft Ø25,parallel key 8x7x32	D G1/2 Manifold Mount 4 × M8, G1/4	Omit	00	Standard				
	50		C Shaft Ø25.4,parallel key 6.35x6.35x31.75					M M22 × 1.5 Manifold Mount 4 × M8, M14 × 1.5	R	No paint	Omit
	80		E Shaft Ø25.4,spined tooth SEA 6B								
	100	R Short shaft Ø25.4,parallel key 6.35x6.35x31.75	P Manifold 4x5/16-18UNC, 7/16-20UNF	S	Black	F					
	125	B Shaft Ø32,parallel key 10x8x45					R PT(Rc)1/2 Manifold 4xM8, PT(Rc)1/4	S	Silver grey	LS	
	160	F Shaft Ø31.75,spined tooth 14-DP12/24									T Cone shaft Ø28.56,parallel key B5x5x14
	200	FD Long shaft Ø31.75,spined tooth 14-DP12/24	T3 Cone shaft Ø31.75,parallel key 7.96x7.96x25.4	Omit	Opposite	Big radial force					
	250	G Shaft Ø31.75, parallel key 7.96x7.96x31.75					R	Opposite	No case drain	Free Running	
	315	T Cone shaft Ø28.56,parallel key B5x5x14									R
	400	T3 Cone shaft Ø31.75,parallel key 7.96x7.96x25.4	R	Opposite	Low Speed						
	500					R	Opposite	Low Speed			

1  2  3  4  5  6  7  8

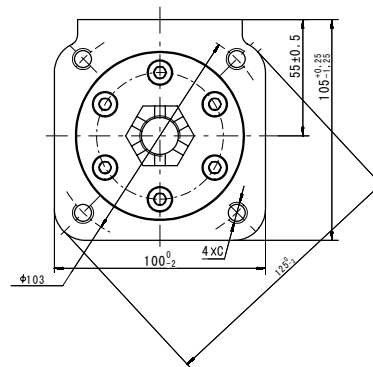
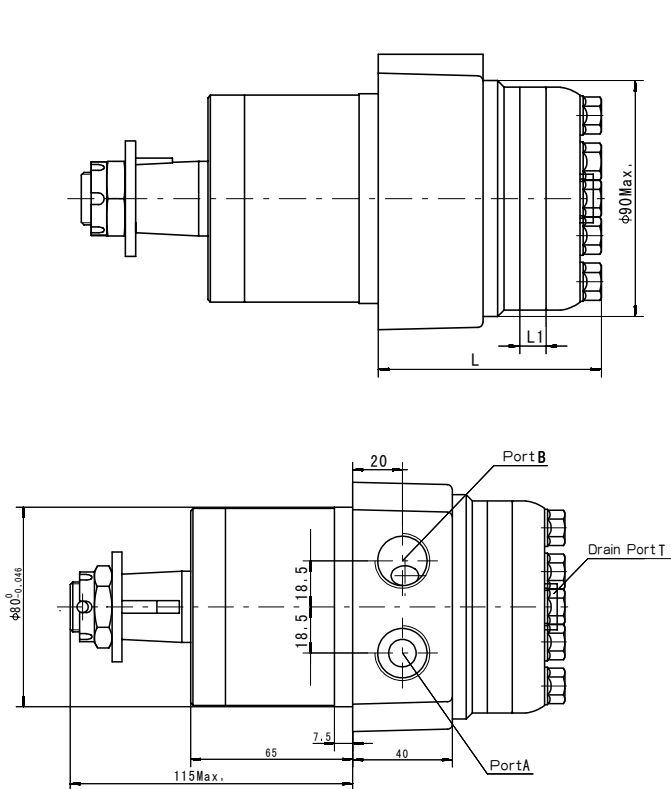
OMPH

Pos.1	2	3	4	5	6	7	8				
Code	Disp.	Flange	Output Shaft	Ports and Drain Port	Rotation Direction	Paint	Unusually Function				
OMPH	36	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	Omit	00	Standard				
	50		S Shaft Ø25.4, spined tooth SEA 6B					S 7/8-14 O-ring, 7/16-20UNF	R	No paint	Omit
	80		A Shaft Ø25, parallel key 8 × 7 × 32								
	100	R Shaft Ø25.4, parallel key 6.35 × 6.35 × 31.75	T 3/4-16 O-ring, 7/16-20UNF	S	Black	F					
	125	H Shaft Ø25.4, pin hole Ø10.3					R PT(Rc)1/2, PT(Rc)1/4	S	Silver grey	LS	
	160	H1 Shaft Ø25.4, pin hole Ø8									B4 Ø10 O-ring manifold
	200	D Shaft Ø22.22, parallel key 6.35 × 6.35 × 25.4	B5 4x5/16-18UNC,7/16-20UNF Ø10 O-ring manifold 4xM8, 7/16-20UNF	Omit	Opposite	No case drain					
	250	I Shaft Ø22.22, spined tooth 13-DP16/32					R	Opposite	Free Running		
	315	T2 Cone shaft Ø25.4, woodruff key Ø25.4 × 6.35								R	Opposite
	400	P Shaft Ø25, parallel key 8 × 7 × 28	R	Opposite	Low Speed						
	500	J Shaft Ø25, parallel key 7 × 7 × 32				R	Opposite	Low Speed			

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.



OMPW DIMENSIONS AND MOUNTING DATA



Model	L	L1
OMPW50	81	7
OMPW80	84.5	10.5
OMPW100	87	13
OMPW125	90	16
OMPW160	95	21
OMPW200	100	26
OMPW250	106	32
OMPW315	116	42
OMPW400	126	52
OMPW500	139	65

Mounting	Code		
	G (depth)	S (depth)	M (depth)
P(A,B)	G1/2 (15)	7/8-14 O-ring (17)	M22x1.5 (15)
T	G1/4 (12)	7/16-20UNF (12)	M14x1.5 (12)
C	4xM10(20)	4x3/8-16UNC(20)	4xM10(20)



Order Information

Pos.1	2	3	4	5	6	7	8
Code		Flange	Output shaft	Ports and drain port	Rotation direction	Paint	Unusually function
	50 80 100 125 160 200 250 315 400 500	Wheel-flange Omit	A Shaft Ø25x6 ,Parallel key 8×7×32 C Shaft Ø25.4 ,Parallel key 6.35×6.35×31.75 E Shaft Ø25.4 ,Splined key SAE 6B T Cone shaft Ø28.56 ,Parallel key B5×5×14	G G1/2, G1/4 S 7/8-14 O-ring, M 7/16-20UNF M22x1.5,M14x1.5	Omit Standard R Opposite	No paint Blue Black Silver grey	Omit Standard N Big radial force 0 No case drain

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.



## OZ SERIES HYDRAULIC MOTOR

OZ 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

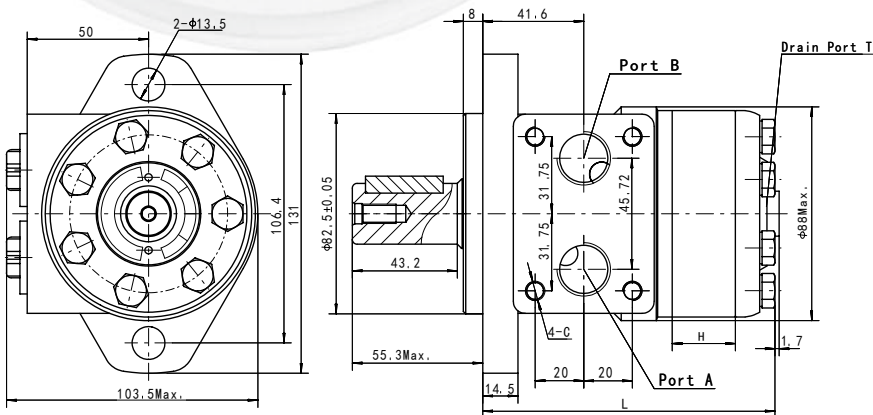
Technical data for OZ with 25 and 1 in and 1 in splined and 28.56 tapered shaft

Code	Displacement [cm <sup>3</sup> /rev]	Max.Speed [rpm]		Max.Torque [Nm]		Max.output [kW]		Max.pressure [MPa]		Max.Oil Flow[L/min]
		cont.	int.	cont.	int.	cont.	int.	cont.	int.	
OZ 36	37	1081	68	51	5.2	8.6	10.5	14	40	
OZ 50	51.7	774	96	73	5.2	8.6	10.5	14	40	
OZ 80	77.7	515	143	106	5.2	8.6	10.5	14	40	
OZ 100	96.2	416	178	140	5.2	8.6	10.5	14	40	
OZ 125	117.9	339	218	162	5.2	8.6	10.5	14	40	
OZ 160	155.5	257	288	216	5.2	8.6	10.5	14	40	
OZ 200	189.9	211	351	264	5.2	8.6	10.5	14	40	
OZ 250	231	173	351	281	4.6	7	9	11.5	40	
OZ 315	311.7	128	433	312	3.4	5.8	7	10.5	40	
OZ 400	386.2	104	582	392	3.4	5.8	7	10.5	40	

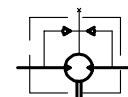
\* Intermittent operation: the permissible values may occur for max.10% of every minute

### OZ DIMENSIONS AND MOUNTING DATA

Type	H	L
OZ36	7	101
OZ50	7	101
OZ80	10.5	104.5
OZ100	13	107
OZ125	16	110
OZ160	21	115
OZ200	26	120
OZ250	32	126
OZ315	42	136
OZ400	52	146



Code Mounting	D (depth)	M (depth)	S (depth)	P (depth)	R (depth)
P(A,B)	G1/2 (15)	M22 x 1.5 (15)	7/8-14 O-ring (16.7)	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)



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.







## OMR SERIES HYDRAULIC MOTOR

OMR 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 OMR with 25 and 1 in and 1 in splined and 28.56 tapered shaft

Type		OMR OMRS 36	OMR OMRS 50	OMR OMRS 80	OMR OMRS 100	OMR OMRS 125	OMR OMRS 160	OMR OMRS 200	OMR OMRS 250	OMR OMRS 315	OMR OMRS 375
Geometric displacement (cm <sup>3</sup> /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 OMR with 31.75 and 32 shaft

Type		OMR OMRS 36	OMR OMRS 50	OMR OMRS 80	OMR OMRS 100	OMR OMRS 125	OMR OMRS 160	OMR OMRS 200	OMR OMRS 250	OMR OMRS 315	OMR OMRS 375
Geometric displacement (cm <sup>3</sup> /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

OMR 36 [36cm<sup>3</sup>/rev.]

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

OMR 50 [51.7cm<sup>3</sup>/rev.]

		Pressure (MPa)								
		5	7	9	10	12	14	16	17.5	
		Max.cont.							Max.int.	
Flow (L/min)	5	35	45	61	67	77	88			
	10	93	84	76	73	69	46			
	15	36	46	62	69	80	95	108	120	
	20	186	178	166	162	153	136	118	97	
	30	8	14	23	36	45	51	64	72	82
	40	283	277	269	261	250	230	211	185	
	45	34.5	47	61	69	83	96	109	126	
	Max.cont.	377	375	365	361	346	330	302	270	
	Max.int.	33	44	60	67	80	95	108	126	
	Max.int.	576	569	561	554	542	531	500	465	
60	30	41	58	66	79	92	106	122		
70	760	758	753	750	738	724	700	670		
80	29.5	40	57	65	78	90	105	121		
90	856	853	849	845	835	815	796	770		
100	26	37	53	60	73	85	99	114		
110	950	940	925	906	880	852	832	801		
120	20	33	48	56	69	81	95	109		
130	1138	1124	1100	1075	1056	1028	1006	970		

OMR 80 [81.5cm<sup>3</sup>/rev.]

		Pressure (MPa)								
		5	7	9	10	12	14	16	17.5	20
		Max.cont.							Max.int.	
Flow (L/min)	5	50	64	88	108	133				
	10	59	56	50	44	38				
	20	54	77	99	108	129	150	173		
	30	118	113	106	97	86	79	56		
	40	57	78.0	102	111	134	155	177	196	225
	50	238	234	227	216	203	190	178	154	135
	60	54	75	100	108	131	152	176	195	223
	70	360	352	340	332	316	302	290	274	250
	80	48	73	96	105	127	148	172	190	220
	90	480	470	458	445	430	418	403	388	359
100	42	70	93	102	124	147	170	188	218	
110	604	595	582	570	556	540	521	504	487	
120	37	66	89	98	121	144	166	184	213	
130	726	715	704	692	678	663	647	622	594	
140	32	60	83	95	116	140	160	177	208	
150	845	834	820	802	789	767	754	730	705	
160	21	50	78	90	111	135	154	171	200	
170	910	895	881	867	852	830	806	787	756	

OMR 100 [102cm<sup>3</sup>/rev.]

		Pressure (MPa)								
		5	7	9	10	12	14	16	17.5	20
		Max.cont.							Max.int.	
Flow (L/min)	5	66	92	120	135	156				
	10	45	42	38	34	27				
	20	68	96	125	138	159	188	212		
	30	93	90	86	81	74	57	42		
	40	65	94.0	123	137	155	186	210	238	274
	50	189	185	180	173	165	158	150	139	118
	60	63	92	120	133	153	185	209	235	270
	70	286	281	275	266	257	246	237	225	207
	80	57	88	117	130	152	185	208	233	267
	90	385	378	365	355	345	332	320	314	297
100	48	79	110	123	150	183	204	228	260	
110	482	477	470	460	448	435	420	405	389	
120	38	70	105	120	144	178	200	220	252	
130	580	572	560	548	535	523	510	500	478	
140	32	65	100	118	141	176	197	215	246	
150	678	670	660	648	638	626	615	606	580	
160	23	59	93	111	136	170	192	210	240	
170	728	720	710	695	681	667	650	634	618	

Torque (N·m) 135  
Speed (rpm) 830

□ cont.  
■ int.



Performance Data

OMR 125 [127.2cm³/rev.]

Pressure (MPa)		Max.cont.						Max.int.		
		5	7	9	10	12	14	16	17.5	20

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

OMR 160 [157.2cm³/rev.]

Pressure (MPa)		Max.cont.						Max.int.		
		5	7	9	10	12	14	16	17.5	20

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

OMR 200 [194.5cm³/rev.]

Pressure (MPa)		Max.cont.						Max.int.		
		5	7	9	10	12	14	16	17.5	20

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

OMR 250 [253.5cm³/rev.]

Pressure (MPa)		Max.cont.						Max.int.		
		5	7	9	10	12	14	16	17.5	20

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

cont.  
int.

Torque (N·m) 256  
Speed (rpm) 287



Performance Data

OMR 315 [317.5cm<sup>3</sup>/rev.]

Pressure (MPa)

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

Flow (L/min)	5	215 <b>13</b>	302 <b>11</b>					
	10	218 <b>28</b>	305 <b>27</b>	383 <b>25</b>	422 <b>24</b>	488 <b>21</b>	551 <b>18</b>	622 <b>13</b>
20	215 <b>60</b>	303 <b>59</b>	380 <b>57</b>	418 <b>55</b>	485 <b>52</b>	549 <b>49</b>	620 <b>45</b>	660 <b>42</b>
30	204 <b>91</b>	296 <b>89</b>	375 <b>86</b>	413 <b>84</b>	480 <b>81</b>	542 <b>78</b>	613 <b>72</b>	654 <b>67</b>
40	196 <b>122</b>	287 <b>120</b>	368 <b>117</b>	410 <b>112</b>	477 <b>106</b>	539 <b>100</b>	609 <b>94</b>	650 <b>85</b>
50	176 <b>154</b>	270 <b>151</b>	356 <b>147</b>	393 <b>140</b>	461 <b>131</b>	526 <b>120</b>	597 <b>109</b>	645 <b>100</b>
Max.cont. 60	162 <b>185</b>	246 <b>182</b>	339 <b>177</b>	374 <b>172</b>	446 <b>163</b>	511 <b>152</b>	586 <b>140</b>	628 <b>134</b>
70	143 <b>217</b>	235 <b>213</b>	324 <b>208</b>	358 <b>201</b>	430 <b>190</b>	493 <b>178</b>	562 <b>166</b>	614 <b>158</b>
Max.int. 75	125 <b>232</b>	212 <b>228</b>	303 <b>222</b>	339 <b>216</b>	417 <b>208</b>	481 <b>200</b>	543 <b>183</b>	582 <b>171</b>

Torque (N•m) 481  
Speed (rpm) 200

OMR 375 [381.4cm<sup>3</sup>/rev.]

Pressure (MPa)

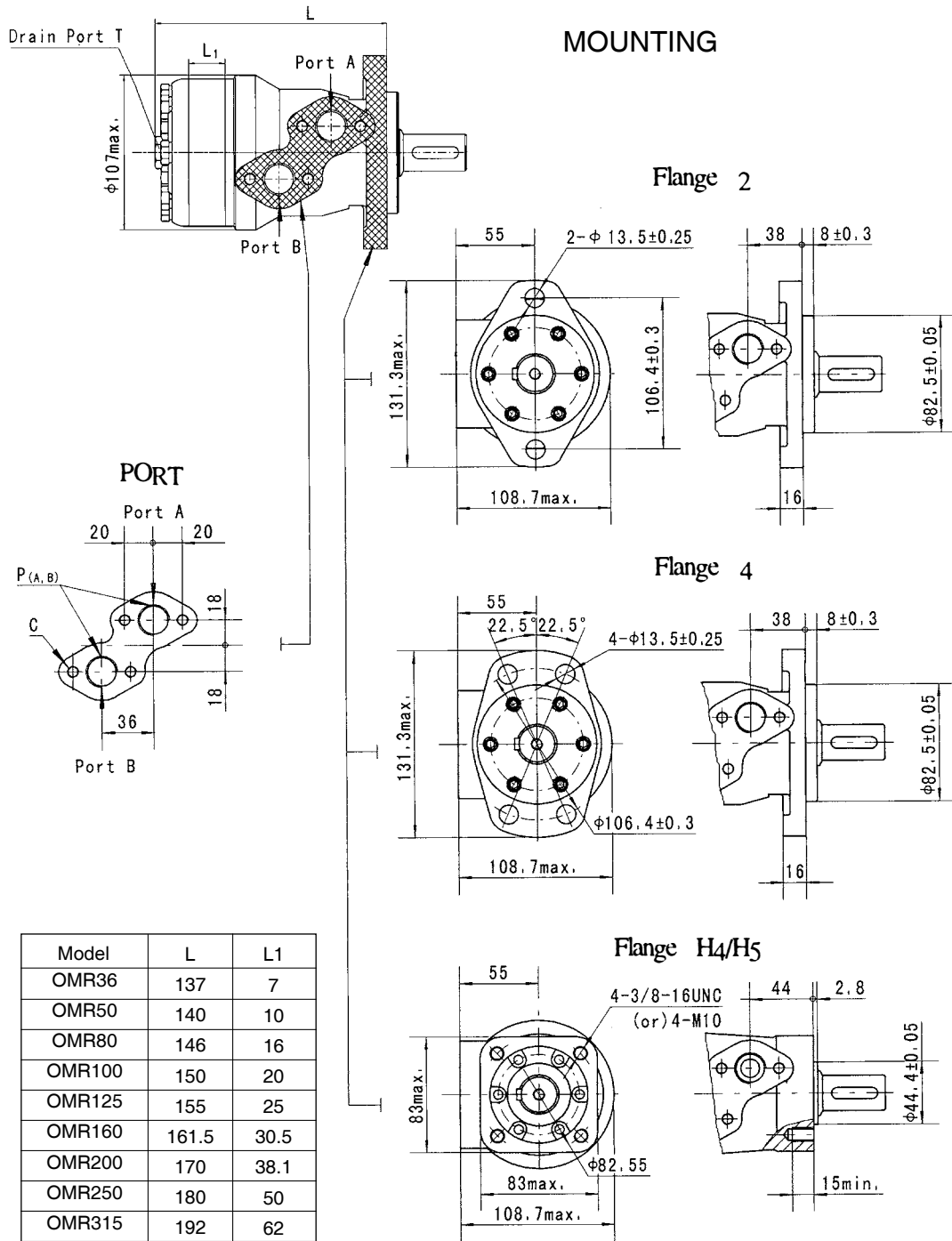
	Max.cont.						Max.int.	
	3	4.5	5.5	6.5	8	10	12.5	14

Flow (L/min)	5	153 <b>12</b>	232 <b>10</b>					
	10	157 <b>24</b>	236 <b>23</b>	284 <b>22</b>	337 <b>21</b>	406 <b>19</b>	497 <b>17</b>	612 <b>15</b>
20	150 <b>49</b>	232 <b>48</b>	280 <b>47</b>	332 <b>46</b>	401 <b>44</b>	490 <b>41</b>	606 <b>38</b>	660 <b>32</b>
30	142 <b>76</b>	215 <b>75</b>	274 <b>74</b>	327 <b>73</b>	398 <b>71</b>	483 <b>67</b>	603 <b>63</b>	652 <b>50</b>
40	126 <b>103</b>	212 <b>101</b>	268 <b>99</b>	320 <b>97</b>	393 <b>95</b>	477 <b>92</b>	593 <b>88</b>	635 <b>70</b>
50	105 <b>128</b>	187 <b>126</b>	242 <b>124</b>	302 <b>121</b>	376 <b>118</b>	455 <b>115</b>	583 <b>111</b>	608 <b>96</b>
Max.cont. 60	90 <b>154</b>	167 <b>152</b>	229 <b>150</b>	281 <b>148</b>	362 <b>145</b>	444 <b>138</b>	566 <b>130</b>	600 <b>121</b>
70	90 <b>180</b>	149 <b>179</b>	200 <b>178</b>	258 <b>176</b>	341 <b>173</b>	425 <b>168</b>	546 <b>160</b>	580 <b>148</b>
Max.int. 75	56 <b>195</b>	125 <b>194</b>	182 <b>193</b>	241 <b>191</b>	320 <b>189</b>	408 <b>185</b>	524 <b>178</b>	565 <b>170</b>

cont.  
 int.



OMR DIMENSIONS AND MOUNTING

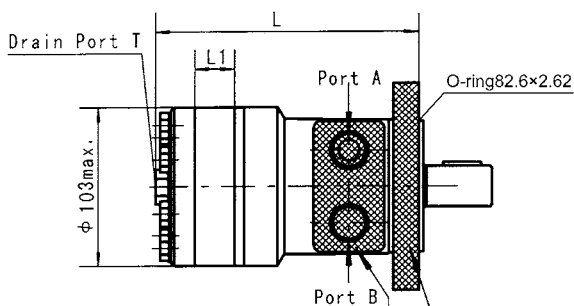


Code	D (depth)	M (depth)	S (depth)	P (depth)	R (depth)
P(A,B)	G1/2 (15)	M22 x 1.5 (15)	7/8-14 O-ring (17)	1/2-14NPTF (15)	PT(RC)1/2 (15)
C	4-M8 (13)	4-M8 (13)	4-5/16-18UNC(13)	4-5/16-18UNC(13)	4-M8 (13)
T	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT(RC)1/4 (9.7)

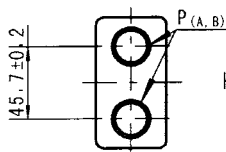


OMRS DIMENSIONS AND MOUNTING DATA

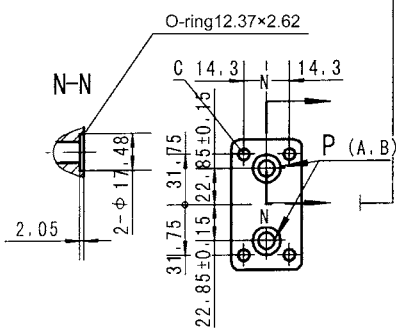
MOUNTING



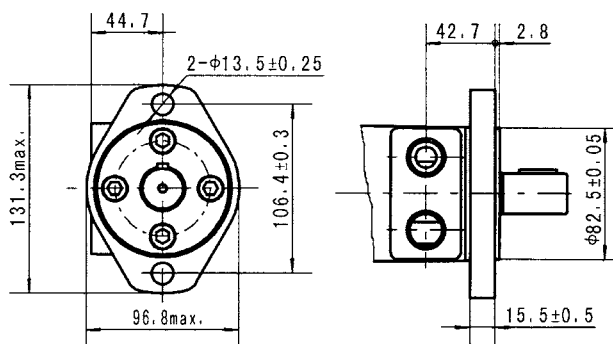
PORT: G、S、P、R、M1、M2、M3



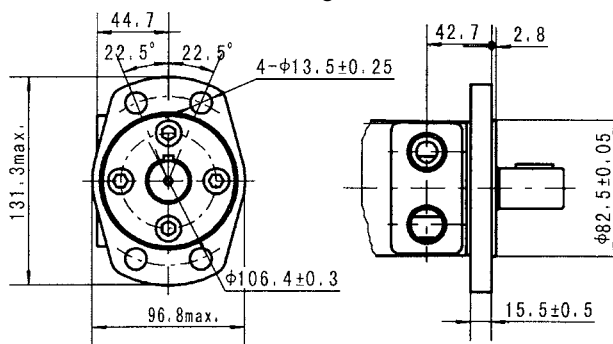
PORT: B4、B5



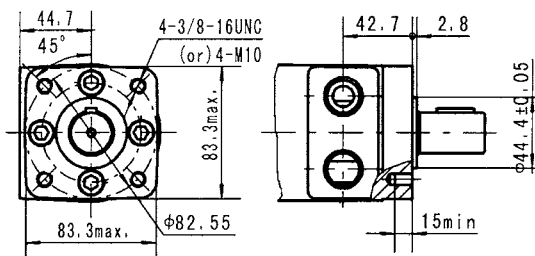
Flange H2



Flange H6



Flange H4/H5



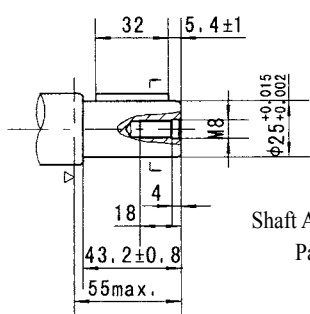
Model	L	L1
OMRS36	141	7
OMRS50	144	10
OMRS80	150	16
OMRS100	154	20
OMRS125	159	25
OMRS160	165.5	30.5
OMRS200	174	38.1
OMRS250	184	50
OMRS315	196	62
OMRS375	208	74

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)

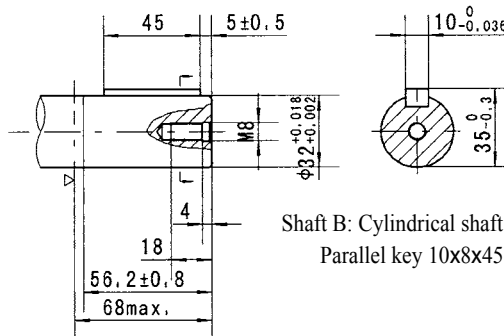




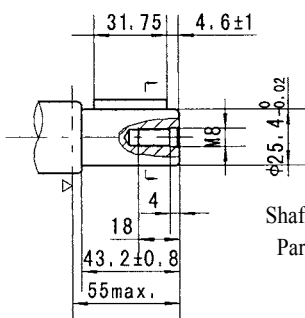
OMR SHAFT EXTENSIONS DIMENSIONS DATA



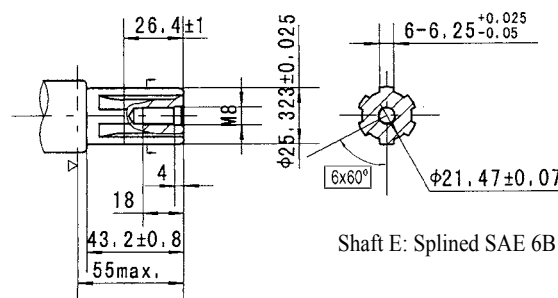
Shaft A: Cylindrical shaft ø25  
Parallel key 8x7x32



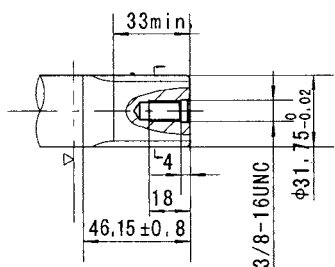
Shaft B: Cylindrical shaft ø32  
Parallel key 10x8x45



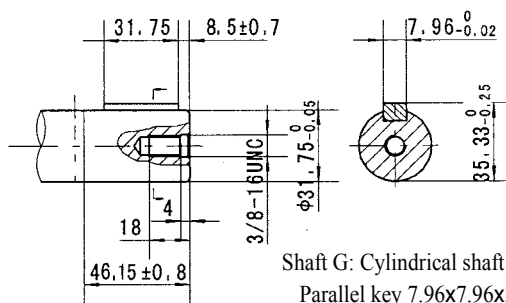
Shaft C: Cylindrical shaft ø25.4  
Parallel key 6.35x6.35x31.75



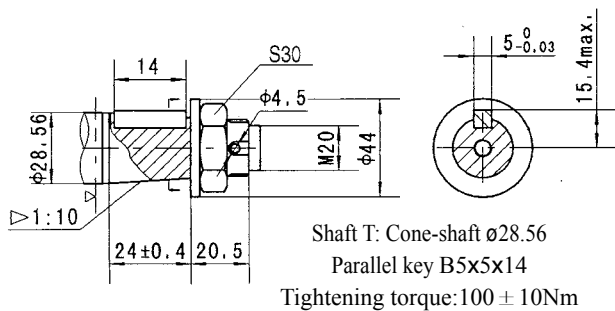
Shaft E: Splined SAE 6B



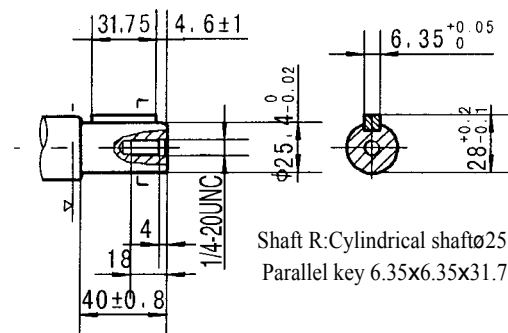
Shaft F: Splined  
14-DP12/24



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

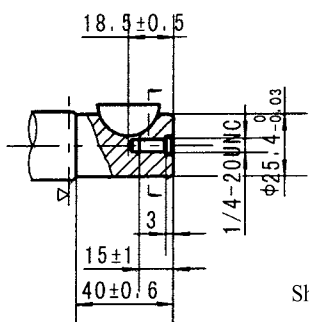


Shaft R: Cylindrical shaft ø25.4  
Parallel key 6.35x6.35x31.75

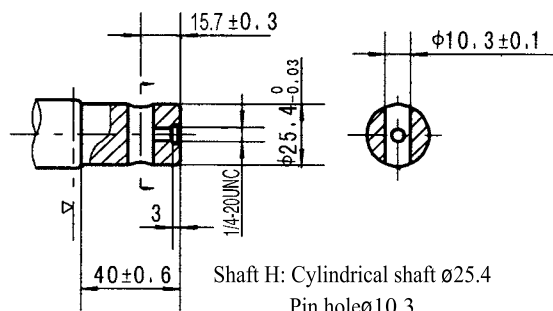
▷ Motor Mounting Surface



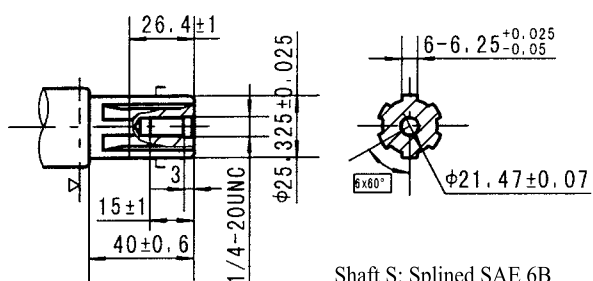
BMRS SHAFT EXTENSIONS DIMENSIDNS DATA



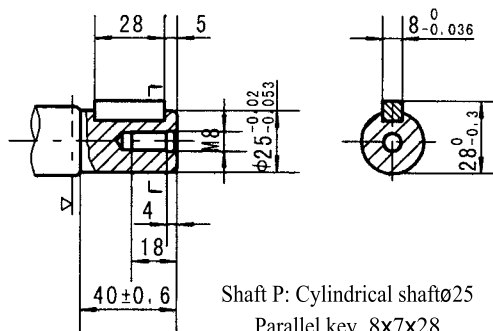
Shaft K: Cylindrical shaft  $\phi 25.4$   
Woodruff key  $\phi 25.4 \times 6.35$



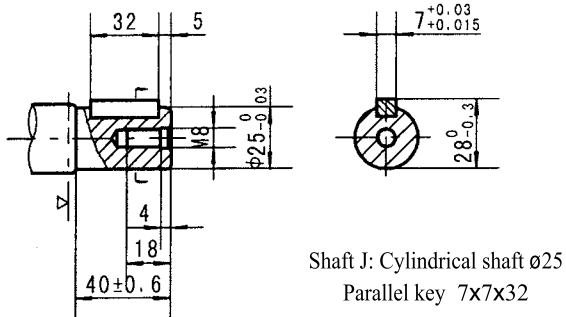
Shaft H: Cylindrical shaft  $\phi 25.4$   
Pin hole  $\phi 10.3$



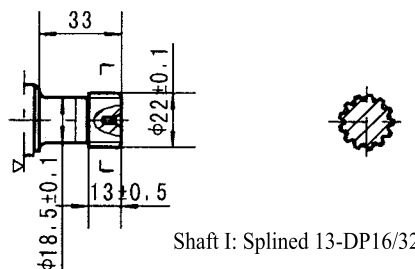
Shaft S: Splined SAE 6B



Shaft P: Cylindrical shaft  $\phi 25$   
Parallel key  $8 \times 7 \times 28$



Shaft J: Cylindrical shaft  $\phi 25$   
Parallel key  $7 \times 7 \times 32$

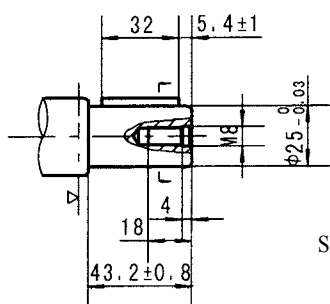


Shaft I: Splined 13-DP16/32

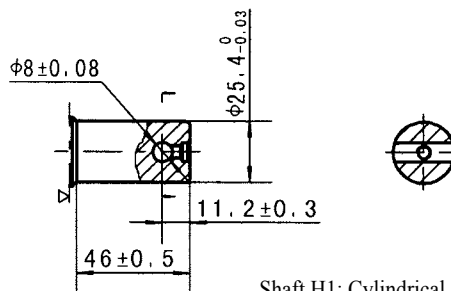
▷ Motor Mounting Surface



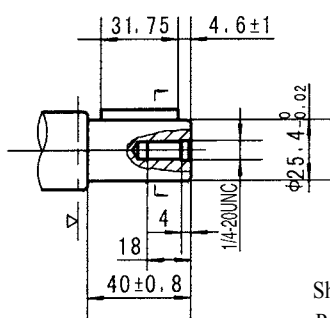
OMRS SHAFT EXTENSIONS DIMENSIONS DATA



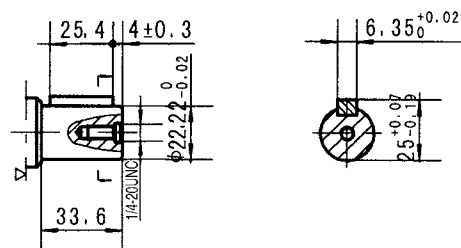
Shaft A: Cylindrical shaft ø25  
Parallel key 8x7x32



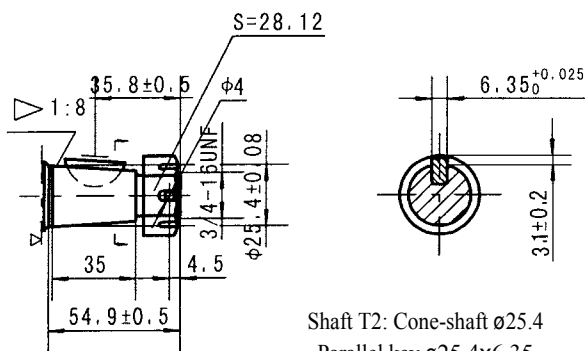
Shaft H1: Cylindrical shaft ø25.4  
Pin hole ø8



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



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



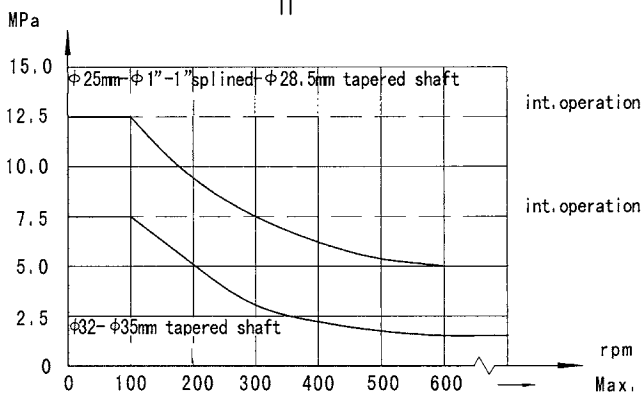
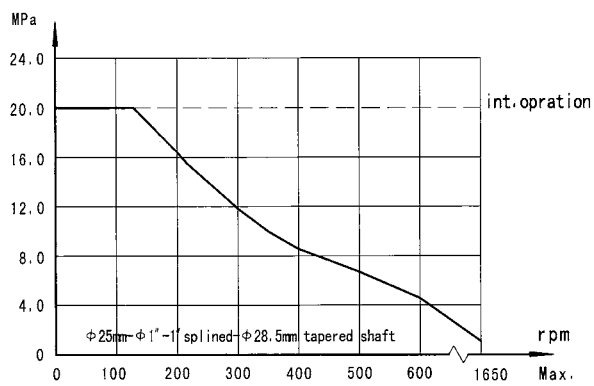
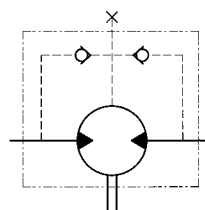
Shaft T2: Cone-shaft ø25.4  
Parallel key ø25.4x6.35  
Tightening torque: 200 ± 10Nm

▷ Motor Mounting Surface



### OMR, OMRS Series Hydraulic Motor

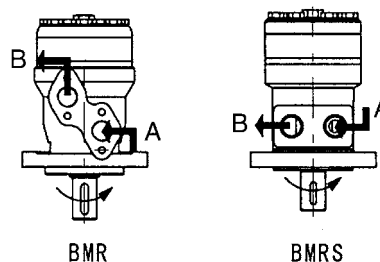
#### Permissible shaft seal pressure



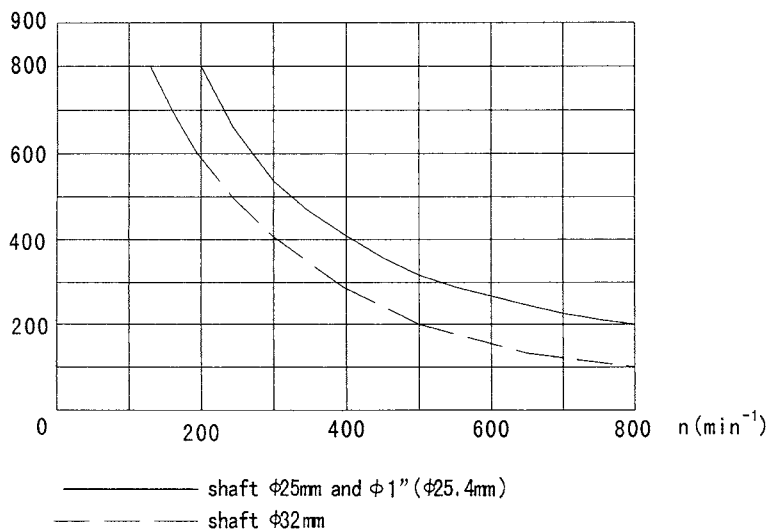
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

#### Direction of shaft rotation: Standard

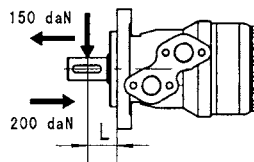
When facing shaft end of motor, shaft to rotate:  
 Clockwise when port "A" is pressurized.  
 Counter-clockwise when port "B" is pressurized.



#### Status of the shaft's radial force



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



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



Order Information

1  2  3  4  5  6  7  8

OMR

Pos.1	2	3	4	5	6	7	8
Code	Disp.	Flange	Output Shaft	Ports and Drain Port	Rotation Direction	Paint	Unusually Function
OMR	36	2-Ø13.5Rhomb-flange, pilot Ø82.5 × 8 4-Ø13.5Rhomb-flange, pilot Ø82.5 × 8 4-3/8-16 Square-flange, pilot Ø44.4 × 2.8 4-M10 Square-flange, pilot Ø44.4 × 2.8	A Shaft Ø25,parallel Key 8x7x32	G1/2 Manifold Mount 4-M8, G1/4 M22 × 1.5 Manifold Mount 4-M8, M14 × 1.5 S 7/8-14 O-ring manifold 4-5/16-18UNC, 7/16-20UNF 1/2-14 NPTF Manifold 4-5/16-18UNC, 7/16-20UNF PT(Rc)1/2 Manifold 4-M8, PT(Rc)1/4	Standard Opposite	No paint Blue Black Silver grey	Omit N 0 F LS Standard Big radial force No case drain Free Running Low Speed
	50		C Shaft Ø25.4,parallel Key 6.35x6.35x31.75				
	80		E Shaft Ø25.4,spined tooth SAE 6B				
	100		R Short shaft Ø25.4,parallel key 6.35x6.35x31.75				
	125		B Shaft Ø32,parallel Key 10x8x45				
	160		F Shaft Ø31.75,spined tooth 14-DP12/24				
	200		FD Long shaft Ø31.75,spined tooth 14-DP12/24				
	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

OMRS

Pos.1	2	3	4	5	6	7	8
Code	Disp.	Flange	Output Shaft	Ports and Drain Port	Rotation Direction	Paint	Unusually Function
OMRS	36	2-Ø13.5Rhomb-flange, pilot Ø82.5 × 2.8 4-Ø13.5Rhomb-flange, pilot Ø82.5 × 2.8 4-3/8-16 Square-flange, pilot Ø44.4 × 2.8 4-M10 Square-flange, pilot Ø44.4 × 2.8	K Shaft Ø25.4,Woodruff Key Ø25.4 × 6.35	G G1/2, G1/4 S 7/8-14 O-ring 7/16-20UNF (G1/4) P 1/2-14 NPTF, 7/16-20UNF (G1/4) T 3/4-16 O-ring, 7/16-20UNF R PT(Rc)1/2, PT(Rc)1/4 B4 Ø10 O-ring manifold 4x5/16-18, 7/16-20UNF B5 Ø10 O-ring manifold 4xM8, G1/4 M1 M18 × 1.5, M10 × 1 M2 M20 × 1.5, M10 × 1 M3 M22 × 1.5, M10 × 1	Standard Opposite	No paint Blue Black Silver grey	Omit N 0 F LS Standard Big radial force No case drain Free Running Low Speed
	50		S Sub-shaft Ø25.4,spined tooth SAE 6B				
	80		A Shaft Ø25 , parallel key 8 × 7 × 32				
	100		R Shaft Ø25.4, parallel key 6.35 × 6.35 × 31.75				
	125		H Sub-shaft Ø25.4,Pin hole Ø10.3				
	160		H1 Shaft Ø25.4, pin hole Ø8				
	200		D Shaft Ø22.22, parallel key 6.35 × 6.35 × 25.4				
	250		I Shaft Ø22.22, spined 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.



## OK SERIES HYDRAULIC MOTOR

OK series motor adapt the advanced Geroler 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 Geroler 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

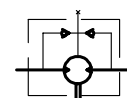
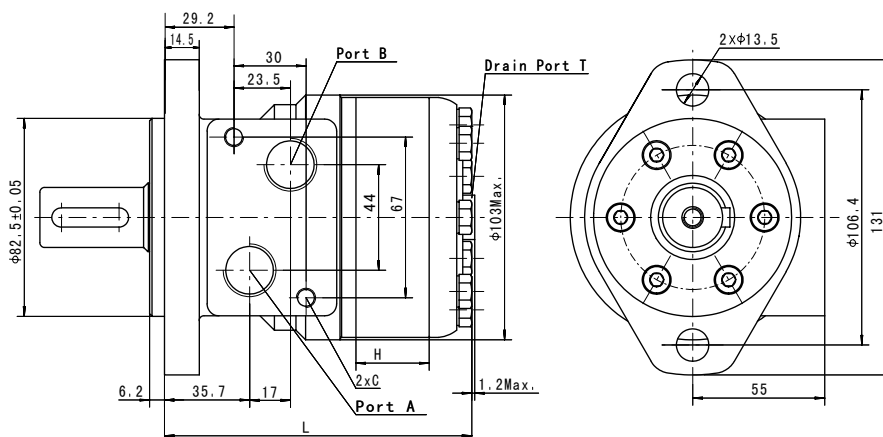
### Main Specification

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

Code	Displacement [cm/rev]	Max.Speed [rpm]	Max.Torque [Nm]		Max.output [kW]		Max.pressure [MPa]		Max.Oil Flow[L/min]
		cont.	cont.	int.	cont.	int.	cont.	int.	cont.
OK 36	36	1111	66	83	9	10.4	14	17.5	40
OK 50	51.7	780	100	129	9	10.4	14	17.5	40
OK 80	81.5	744	158	196	10.4	12.6	14	17.5	60
OK 100	102	595	200	242	10.8	12.8	14	17.5	60
OK 125	127.2	480	248	298	10.8	12.5	14	17.5	60
OK 160	157.2	382	315	384	10.4	11.5	14	17.5	60
OK 200	194.5	301	339	419	8.8	10.2	12.5	15.5	60
OK 250	253.3	238	403	474	8.1	9.4	11	14	60
OK 315	317.5	191	398	498	7.4	7.8	9	12.5	60
OK 375	381.4	162	373	466	6.2	7.1	7.5	9	60

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

Type	H	L
OK36	7	105
OK50	10	108
OK80	16	114
OK100	20	118
OK125	25	123
OK160	30.5	128.5
OK200	38.1	136
OK250	50	148
OK315	62	160
OK375	74	172

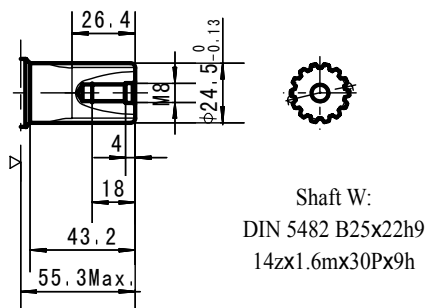
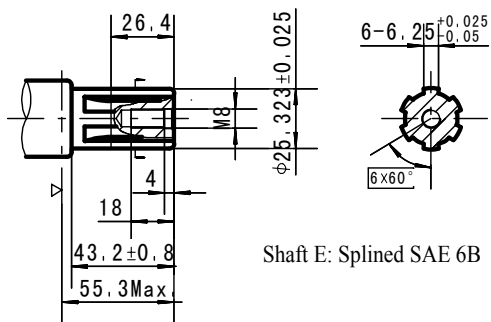
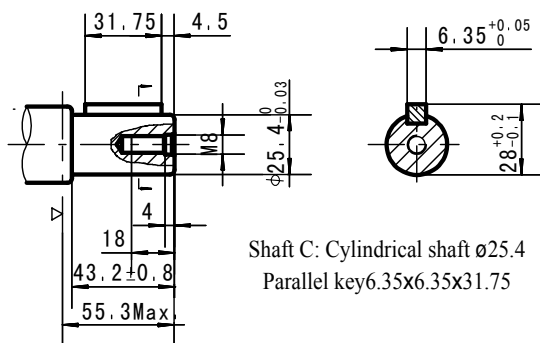
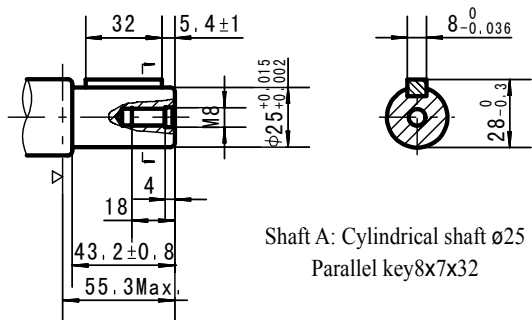


Direction of shaft rotation: Standard  
 When facing shaft end of motor, shaft to rotate:  
 Clockwise when port "A" is pressurized.  
 Counter-clockwise when port "B" is pressurized.

Code	D (depth)	M (depth)	S (depth)	P (depth)	R (depth)
P(A,B)	G1/2 (15)	M22 x 1.5 (15)	7/8-14 O-ring (16.7)	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)



SHAFT EXTENSIONS FOR OK MOTORS



▷ Motor Mounting Surface

Order Information

OK  1  2  3  4  5  6  7  8

Pos.1	2	3	4	5	6	7	8
Code	Disp.	Flange	Output Shaft	Ports and Drain Port	Rotation Direction	Paint	Unusually Function
36	50	80	100	G1/2 Manifold 4xM8, G1/4	Standard	No paint	Standard
125	160	200	250	M22x1.5 Manifold 4xM8, M14x1.5	Omit	Blue	Free Running
200	250	315	375	7/8-14 O-ring manifold	R	Black	No case drain
Omit				4x5/16-18UNC, 7/16-20UNF		Black	
				1/2-14NPTF manifold		Silver grey	
				4x5/16-18UNC, 7/16-20UNF			
				PT(Rc)1/2 manifold 4xM8, PT(Rc)1/4			
				D G1/2 Manifold 4xM8, G1/4			
				M M22x1.5 Manifold 4xM8, M14x1.5			
				S 7/8-14 O-ring manifold			
				P 4x5/16-18UNC, 7/16-20UNF			
				R 4x5/16-18UNC, 7/16-20UNF			
				T Cone shaft Ø28.56, parallel key B5x5x14			
				A Shaft Ø25, parallel key 8x7x32			
				C Shaft Ø25.4, parallel key 6.35x6.35x31.75			
				E Shaft Ø25.4, splined key SEA 6B			
				W Shaft Ø24.5, splined B25x22			
				T Cone shaft Ø28.56, parallel key B5x5x14			



## OMH SERIES HYDRAULIC MOTOR

OMH series motor adapt the advanced Geroler 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 Geroler 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 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 Specifaion

Type		OMH 200	OMH 250	OMH 315	OMH 400	OMH 500
Geometric displacement (cm <sup>3</sup> /rev.)		203.2	255.9	316.1	406.4	489.2
Max. speed (rpm)	cont.	366	290	236	183	155
	int.	439	348	282	220	184
Max. torque (N•m)	cont.	510	621	740	850	830
	int.	579	702	827	990	1040
	peak	651	790	980	1092	1170
Max. output (kW)	cont.	16	16	14	12.5	11
	int.	18.5	18.5	15.5	15	14
Max. pressure drop (MPa)	cont.	17.5	17.5	17.5	15.5	12.5
	int.	20	20	20	19	16
	peak	22.5	22.5	22.5	21	18
Max. flow (L/min)	cont.	75	75	75	75	75
	int.	90	90	90	90	90
Weight (kg)		10.5	11	11.5	12.3	13

Type		Max.inlet pressure	Max.return pressure with drain line
OMH200-500 (MPa)	cont.	200	175
	int.	225	200
	peak	250	225

- \* 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.
- \* Technical data BMH with 35mm cylindrical, 1 1/4 in splined and 35mm tapered shaft.





Performance Data

OMH 200 [203.2cm³/rev.]

Pressure (MPa)						Max.cont.	Max.int.
3.5	7	10.5	14	17.5	20		

Flow (L/min)	Pressure (MPa)						
	3.5	7	10.5	14	17.5	20	
5	98 <b>25</b>	194 <b>25</b>	284 <b>22</b>				
10	101 <b>43</b>	204 <b>41</b>	301 <b>36</b>	391 <b>29</b>	482 <b>14</b>		
20	99 <b>100</b>	201 <b>97</b>	304 <b>93</b>	402 <b>85</b>	509 <b>69</b>	576 <b>56</b>	
30	97 <b>145</b>	197 <b>143</b>	300 <b>139</b>	402 <b>130</b>	510 <b>114</b>	579 <b>101</b>	
40	90 <b>200</b>	190 <b>200</b>	292 <b>200</b>	399 <b>188</b>	507 <b>168</b>	578 <b>153</b>	
50	82 <b>248</b>	183 <b>246</b>	284 <b>244</b>	392 <b>235</b>	500 <b>213</b>	571 <b>199</b>	
60	73 <b>292</b>	174 <b>290</b>	274 <b>287</b>	384 <b>279</b>	493 <b>260</b>	563 <b>244</b>	
70	63 <b>352</b>	163 <b>350</b>	264 <b>349</b>	374 <b>338</b>	481 <b>318</b>	554 <b>301</b>	
Max.cont. 75	59 <b>366</b>	157 <b>365</b>	259 <b>363</b>	366 <b>355</b>	475 <b>335</b>	547 <b>319</b>	
80	53 <b>381</b>	150 <b>381</b>	253 <b>380</b>	358 <b>371</b>	466 <b>352</b>	538 <b>338</b>	
Max.int. 90	39 <b>443</b>	140 <b>437</b>	241 <b>434</b>	348 <b>426</b>	456 <b>407</b>	526 <b>392</b>	

OMH 250 [255.9cm³/rev.]

Pressure (MPa)							Max.cont.	Max.int.
3.5	7	9	12	14.5	17.5	20		

Flow (L/min)	Pressure (MPa)						
	3.5	7	9	12	14.5	17.5	20
5	121 <b>19</b>	246 <b>19</b>	318 <b>18</b>	398 <b>14</b>			
10	130 <b>34</b>	258 <b>33</b>	331 <b>31</b>	425 <b>29</b>	515 <b>23</b>	595 <b>12</b>	
20	130 <b>78</b>	258 <b>77</b>	332 <b>76</b>	432 <b>73</b>	520 <b>65</b>	621 <b>53</b>	702 <b>42</b>
30	122 <b>115</b>	251 <b>113</b>	327 <b>111</b>	429 <b>105</b>	520 <b>96</b>	621 <b>84</b>	700 <b>75</b>
40	115 <b>157</b>	240 <b>157</b>	323 <b>156</b>	422 <b>150</b>	513 <b>139</b>	616 <b>127</b>	698 <b>114</b>
50	105 <b>196</b>	232 <b>195</b>	314 <b>192</b>	411 <b>185</b>	505 <b>173</b>	606 <b>159</b>	687 <b>147</b>
60	94 <b>232</b>	220 <b>230</b>	302 <b>226</b>	401 <b>218</b>	496 <b>206</b>	596 <b>192</b>	676 <b>180</b>
70	81.4 <b>274</b>	209 <b>274</b>	288 <b>274</b>	389 <b>266</b>	484 <b>252</b>	582 <b>238</b>	666 <b>222</b>
Max.cont. 75	72 <b>290</b>	203 <b>289</b>	280 <b>287</b>	381 <b>279</b>	475 <b>266</b>	574 <b>251</b>	659 <b>236</b>
80	66 <b>303</b>	194 <b>302</b>	273 <b>298</b>	371 <b>290</b>	467 <b>279</b>	566 <b>264</b>	651 <b>249</b>
Max.int. 90	49 <b>348</b>	178 <b>347</b>	256 <b>345</b>	355 <b>337</b>	453 <b>325</b>	552 <b>309</b>	634 <b>292</b>

OMH 315 [316.1cm³/rev.]

Pressure (MPa)							Max.cont.	Max.int.
3.5	7.5	10	13.5	15.5	17.5	20		

Flow (L/min)	Pressure (MPa)						
	3.5	7.5	10	13.5	15.5	17.5	20
5	155 <b>16</b>	325 <b>13</b>					
10	163 <b>27</b>	342 <b>24</b>	454 <b>18</b>	556 <b>14</b>			
20	169 <b>63</b>	349 <b>61</b>	469 <b>55</b>	582 <b>48</b>	664 <b>40</b>	733 <b>32</b>	809 <b>19</b>
30	165 <b>93</b>	344 <b>89</b>	470 <b>82</b>	580 <b>77</b>	669 <b>67</b>	740 <b>59</b>	824 <b>46</b>
40	154 <b>126</b>	337 <b>126</b>	465 <b>119</b>	577 <b>111</b>	663 <b>99</b>	737 <b>88</b>	827 <b>73</b>
50	141 <b>159</b>	325 <b>155</b>	455 <b>148</b>	568 <b>139</b>	656 <b>126</b>	728 <b>115</b>	824 <b>98</b>
60	121 <b>187</b>	312 <b>186</b>	440 <b>179</b>	555 <b>169</b>	643 <b>154</b>	715 <b>143</b>	812 <b>124</b>
70	103 <b>222</b>	298 <b>222</b>	425 <b>215</b>	541 <b>205</b>	631 <b>187</b>	703 <b>176</b>	800 <b>157</b>
Max.cont. 75	94 <b>236</b>	287 <b>233</b>	417 <b>224</b>	529 <b>215</b>	623 <b>196</b>	696 <b>184</b>	792 <b>166</b>
80	82 <b>246</b>	277 <b>244</b>	406 <b>236</b>	518 <b>228</b>	611 <b>210</b>	688 <b>197</b>	784 <b>174</b>
Max.int. 90	62 <b>282</b>	256 <b>280</b>	386 <b>275</b>	496 <b>266</b>	593 <b>248</b>	669 <b>234</b>	767 <b>209</b>

OMH 400 [406.4cm³/rev.]

Pressure (MPa)						Max.cont.	Max.int.
3.5	6	10.5	12.5	15.5	19		

Flow (L/min)	Pressure (MPa)					
	3.5	6	10.5	12.5	15.5	19
5	196 <b>13</b>	348 <b>13</b>	516 <b>10</b>			
10	205 <b>22</b>	363 <b>21</b>	546 <b>21</b>	702 <b>17</b>	859 <b>11</b>	
20	209 <b>50</b>	366 <b>49</b>	543 <b>46</b>	708 <b>41</b>	874 <b>36</b>	988 <b>31</b>
30	201 <b>73</b>	357 <b>72</b>	542 <b>70</b>	706 <b>63</b>	864 <b>56</b>	984 <b>51</b>
40	195 <b>99</b>	346 <b>98</b>	532 <b>96</b>	701 <b>86</b>	858 <b>77</b>	973 <b>71</b>
50	173 <b>123</b>	332 <b>122</b>	518 <b>118</b>	687 <b>107</b>	848 <b>97</b>	958 <b>90</b>
60	154 <b>146</b>	319 <b>144</b>	501 <b>141</b>	668 <b>128</b>	833 <b>115</b>	944 <b>106</b>
70	138 <b>174</b>	305 <b>173</b>	480 <b>169</b>	649 <b>156</b>	814 <b>141</b>	925 <b>130</b>
Max.cont. 75	128 <b>183</b>	294 <b>181</b>	466 <b>177</b>	637 <b>163</b>	802 <b>149</b>	911 <b>138</b>
80	113 <b>192</b>	277 <b>191</b>	451 <b>188</b>	621 <b>174</b>	786 <b>158</b>	899 <b>144</b>
Max.int. 90	90 <b>220</b>	256 <b>220</b>	433 <b>215</b>	595 <b>202</b>	767 <b>183</b>	881 <b>165</b>

Torque (N·m) 593  
Speed (rpm) 248

cont.  
int.



Performance Data

OMH 500 [489.2cm<sup>3</sup>/rev.]

Pressure (MPa)

Max.cont. Max.int.

2.5	5	8.5	10	12.5	16
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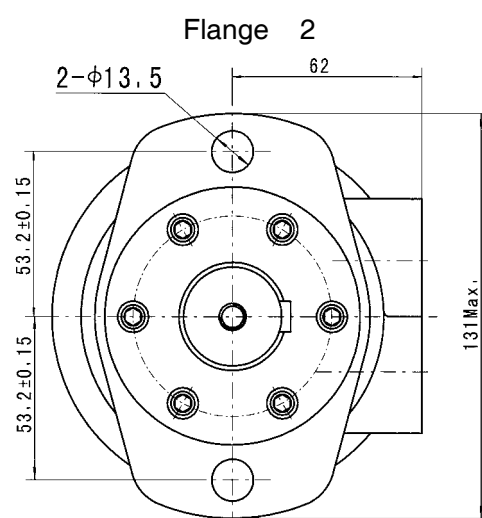
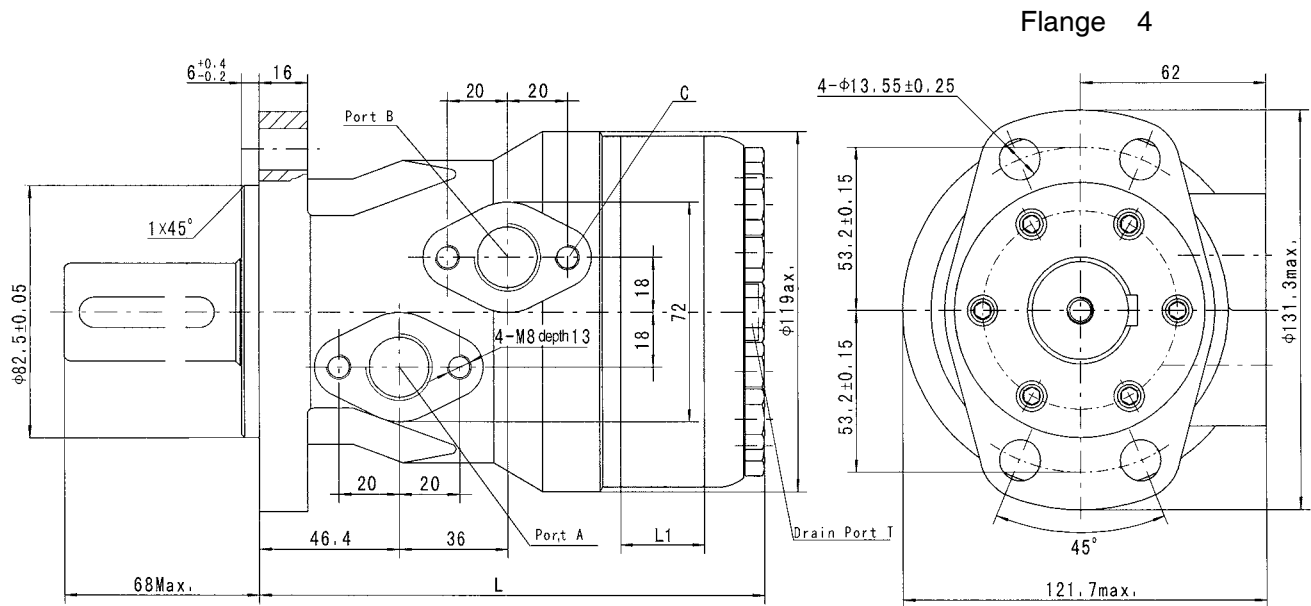
Flow (L/min)	5	165 <b>11</b>	317 <b>11</b>	516 <b>8</b>				
	10	178 <b>20</b>	335 <b>19</b>	555 <b>17</b>	669 <b>15</b>	791 <b>13</b>	969 <b>9</b>	
	20	177 <b>42</b>	331 <b>42</b>	559 <b>41</b>	673 <b>38</b>	799 <b>36</b>	988 <b>29</b>	
	30	172 <b>64</b>	320 <b>63</b>	553 <b>61</b>	663 <b>57</b>	792 <b>53</b>	983 <b>47</b>	
	40	163 <b>85</b>	309 <b>85</b>	541 <b>83</b>	654 <b>79</b>	783 <b>75</b>	971 <b>67</b>	
	50	146 <b>103</b>	296 <b>103</b>	523 <b>103</b>	635 <b>97</b>	768 <b>93</b>	954 <b>85</b>	
	60	121 <b>124</b>	275 <b>124</b>	502 <b>123</b>	614 <b>117</b>	747 <b>113</b>	934 <b>103</b>	
	70	97 <b>148</b>	256 <b>148</b>	482 <b>148</b>	597 <b>140</b>	729 <b>134</b>	917 <b>122</b>	
	Max.cont.	75	79 <b>155</b>	240 <b>155</b>	469 <b>155</b>	582 <b>152</b>	714 <b>144</b>	902 <b>130</b>
		80	60 <b>166</b>	226 <b>166</b>	453 <b>166</b>	570 <b>159</b>	701 <b>153</b>	884 <b>139</b>
Max.int.	90	34 <b>184</b>	201 <b>183</b>	421 <b>182</b>	550 <b>177</b>	673 <b>166</b>	869 <b>155</b>	

cont.  
 int.

Torque (N•m) **673**  
 Speed (rpm) **166**



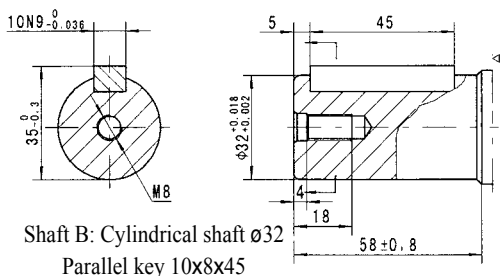
OMH DIMENSIONS AND MOUNTING DATA



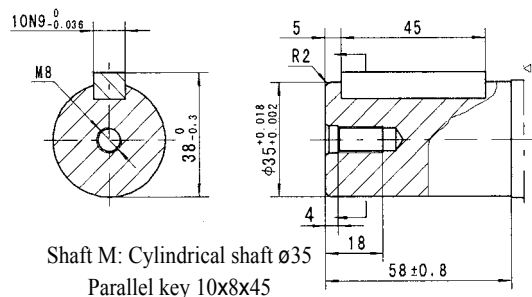
Model	L	L1
OMH-160	162	21
OMH-200	168	27
OMH-250	175	34
OMH-315	184	42
OMH-400	195	54
OMH-500	206	65

Code	D (depth)	M (depth)	S (depth)	P (depth)	R (depth)
P(A,B)	G1/2 (15)	M22 x 1.5 (15)	7/8-14 O-ring (15)	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 1/4

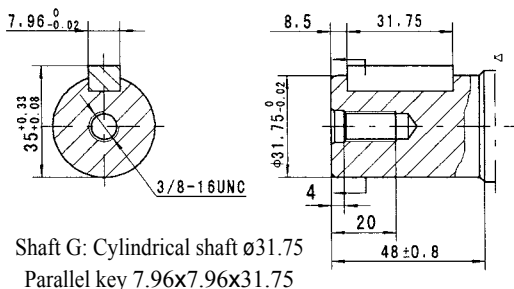
OMH SHAFT EXTENSIONS DIMINSIONS DATA



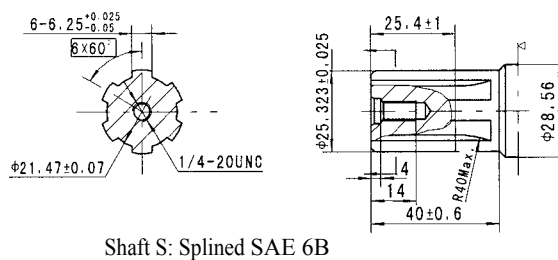
Shaft B: Cylindrical shaft ø32  
Parallel key 10x8x45



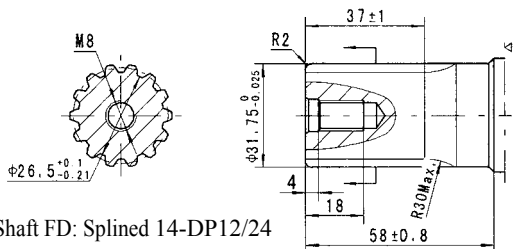
Shaft M: Cylindrical shaft ø35  
Parallel key 10x8x45



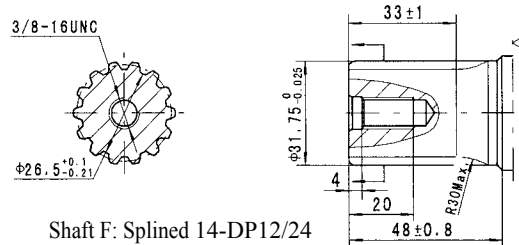
Shaft G: Cylindrical shaft ø31.75  
Parallel key 7.96x7.96x31.75



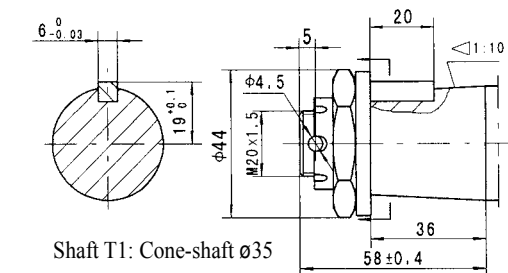
Shaft S: Splined SAE 6B



Shaft FD: Splined 14-DP12/24



Shaft F: Splined 14-DP12/24



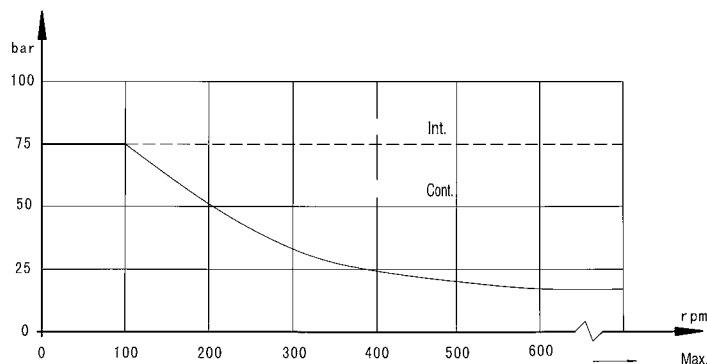
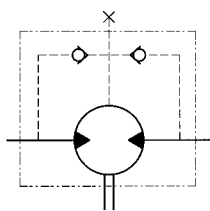
Shaft T1: Cone-shaft ø35  
Parallel key B6x6x20  
Tightening torque: 200 ± 10Nxm



## OMH series Hydraulic Motor

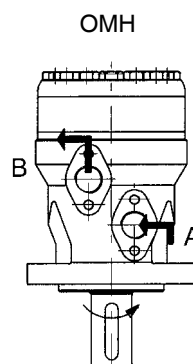
### Permissible shaft seal pressure

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

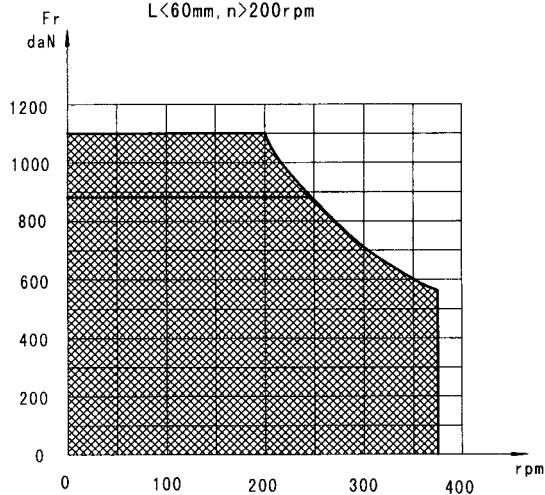
When facing shaft end of motor, shaft to rotate:  
 Clockwise when port "A" is pressurized.  
 Counter-clockwise port "B" is pressurized.



Status of the shaft's radial force

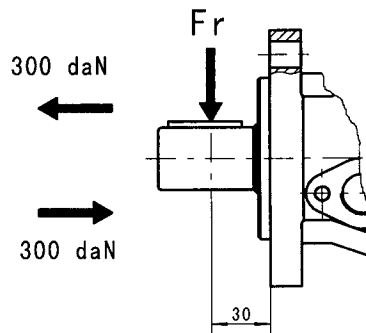
$$F_r = \frac{1100}{n} \times \frac{25000}{103.5+L} \text{ daN}$$

$L < 60\text{mm}, n > 200\text{rpm}$



— shaft  $\phi 1"$  ( $\phi 25.4\text{mm}$ ) and shaft SAE 6B

The drawing is the Possible load when  $L=30\text{mm}$ .



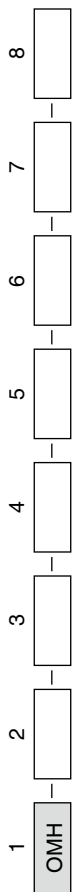
$F_r$  =Radial Force (daN)

$L$  =Distance (mm)

$n$  =Speed (rpm)



Order Information



Pos.1	2	3	4	5	6	7	8
Code		Flange	Output shaft	Ports and drain port	Rotation direction	Paint	Unusually function
160			B Shaft Ø32 , parallel key 10 × 8 × 45	D G1/2 Manifold mount 4 × M8, G1/4			
200		4 × Ø13.5 Rhomb × flange	M Shaft Ø35, parallel key 10 × 8 × 45	M M22 × 1.5 Manifold mount 4 × M8,			
250		Pilot Ø82.5 × 6	F Shaft Ø31.75, splined key 14-DP12/24	M14 × 1.5		00 No paint	Omit Standard
315		2 × Ø13.5 Rhomb × flange	FD Long Shaft Ø31.75, splined key 14-DP12/24	S 7/8-14 O × ring Manifold mount	Omit Standard	Blue	No drain
400		Pilot Ø82.5 × 6	G Shaft Ø32 , parallel key 7.96 × 7.96 × 31.75	P 4 × 5/16-18UNC;7/16-20UNF	R Opposite	Black	Free
500			T1 Cone shaft Ø35, parallel key B6 × 6 × 20	R 1/2-14 NPTF Manifold mount		Silver grey	Running
			S Shaft Ø25.4 , parallel key SAE 6B	PT(Rc) 1/2 Manifold mount			Low Speed

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.



## OMS SERIES HYDRAULIC MOTOR

OMS 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 feautres:

- \* 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 offers 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 Specificaion

Type		OMS OMSE 80	OIMS OMSE 100	OMS OMSE 125	OMS BMSE 160	OMS OMSE 200	OMS OMSE 250	OMS OMSE 315	OMS OMSE 375
Geometric displacement (cm <sup>3</sup> /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

OMS 80 [80.6cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	21	22.5
					Max.cont.		Max.int.

Flow (L/min)	Pressure (MPa)						
	3.5	7	10.5	14	17.5	21	22.5
15	35	80	120	158	195	235	249
	<b>180</b>	<b>174</b>	<b>168</b>	<b>164</b>	<b>158</b>	<b>151</b>	<b>143</b>
30	35	80	120	158	195	240	260
	<b>362</b>	<b>352</b>	<b>346</b>	<b>338</b>	<b>330</b>	<b>322</b>	<b>310</b>
40	35	79	119	155	193	234	250
	<b>482</b>	<b>473</b>	<b>464</b>	<b>453</b>	<b>444</b>	<b>434</b>	<b>415</b>
50	30	77	117	153	192	232	248
	<b>602</b>	<b>594</b>	<b>587</b>	<b>569</b>	<b>560</b>	<b>551</b>	<b>522</b>
Max.cont. 60	28	77	117	153	192	232	247
	<b>724</b>	<b>713</b>	<b>707</b>	<b>683</b>	<b>673</b>	<b>664</b>	<b>629</b>
65	25	75	114	152	190	230	245
	<b>790</b>	<b>785</b>	<b>770</b>	<b>760</b>	<b>742</b>	<b>720</b>	<b>704</b>
Max.int. 80	22	70	110	140	170	200	220
	<b>980</b>	<b>965</b>	<b>950</b>	<b>920</b>	<b>891</b>	<b>860</b>	<b>830</b>

OMS 100 [100.8cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	21	22.5
					Max.cont.		Max.int.

Flow (L/min)	Pressure (MPa)						
	3.5	7	10.5	14	17.5	21	22.5
15	48	95	150	200	250	289	310
	<b>146</b>	<b>144</b>	<b>139</b>	<b>135</b>	<b>130</b>	<b>120</b>	<b>105</b>
30	45	94	146	198	250	295	317
	<b>291</b>	<b>289</b>	<b>278</b>	<b>274</b>	<b>269</b>	<b>258</b>	<b>242</b>
40	43	89	142	196	248	293	316
	<b>387</b>	<b>384</b>	<b>374</b>	<b>359</b>	<b>350</b>	<b>335</b>	<b>320</b>
50	40	88	135	194	247	292	315
	<b>486</b>	<b>483</b>	<b>473</b>	<b>462</b>	<b>450</b>	<b>430</b>	<b>420</b>
60	37	88	132	185	244	289	312
	<b>588</b>	<b>584</b>	<b>574</b>	<b>562</b>	<b>550</b>	<b>538</b>	<b>520</b>
Max.cont. 75	35	80	130	180	240	286	310
	<b>740</b>	<b>735</b>	<b>720</b>	<b>705</b>	<b>696</b>	<b>676</b>	<b>653</b>
Max.int. 90	30	75	124	170	236	277	303
	<b>850</b>	<b>840</b>	<b>810</b>	<b>787</b>	<b>770</b>	<b>750</b>	<b>747</b>

OMS 125 [125cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	21	22.5
					Max.cont.		Max.int.

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

OMS 160 [157.2cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	21	22.5
					Max.cont.		Max.int.

Flow (L/min)	Pressure (MPa)						
	3.5	7	10.5	14	17.5	21	22.5
15	70	140	205	305	371	430	473
	<b>91</b>	<b>88</b>	<b>84</b>	<b>78</b>	<b>76</b>	<b>74</b>	<b>58</b>
30	75	150	214	321	380	427	490
	<b>185</b>	<b>182</b>	<b>176</b>	<b>168</b>	<b>164</b>	<b>162</b>	<b>152</b>
40	70	150	215	320	378	425	488
	<b>248</b>	<b>244</b>	<b>239</b>	<b>229</b>	<b>224</b>	<b>217</b>	<b>204</b>
50	65	145	215	316	378	425	482
	<b>312</b>	<b>308</b>	<b>304</b>	<b>294</b>	<b>288</b>	<b>280</b>	<b>270</b>
60	65	145	214	315	375	424	482
	<b>375</b>	<b>371</b>	<b>365</b>	<b>357</b>	<b>346</b>	<b>336</b>	<b>323</b>
Max.cont. 75	60	138	208	311	375	420	
	<b>470</b>	<b>465</b>	<b>458</b>	<b>447</b>	<b>436</b>	<b>426</b>	
Max.int. 90	56	130	200	308	370	414	
	<b>564</b>	<b>559</b>	<b>551</b>	<b>541</b>	<b>526</b>	<b>517</b>	

□ cont.  
 ■ int.

Torque (N•m) 309  
 Speed (rpm) 644





Performance Data

OMS 200 [200cm<sup>3</sup>/rev.]

Pressure (MPa)		Max.cont.			Max.int.	
3.5	7	10.5	14	17.5	22.5	

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

OMS 250 [252cm<sup>3</sup>/rev.]

Pressure (MPa)		Max.cont.			Max.int.	
3.5	7	10.5	14	17.5	22.5	

Flow (L/min)	15	117 <b>58</b>	230 <b>55</b>	355 <b>52</b>	450 <b>51</b>	554 <b>47</b>	652 <b>46</b>
	30	117 <b>118</b>	225 <b>117</b>	350 <b>348</b>	446 <b>409</b>	560 <b>510</b>	657 <b>610</b>
40	115 <b>160</b>	225 <b>156</b>	350 <b>345</b>	442 <b>410</b>	552 <b>490</b>	650 <b>610</b>	
50	110 <b>202</b>	220 <b>200</b>	340 <b>340</b>	438 <b>419</b>	546 <b>519</b>	645 <b>619</b>	
60	105 <b>242</b>	220 <b>239</b>	338 <b>338</b>	435 <b>434</b>	542 <b>531</b>	642 <b>629</b>	
Max.cont. 75	95 <b>300</b>	215 <b>296</b>	332 <b>332</b>	430 <b>428</b>	537 <b>528</b>	638 <b>628</b>	
Max.int. 90	90 <b>360</b>	205 <b>354</b>	348 <b>348</b>	420 <b>420</b>	530 <b>530</b>	632 <b>632</b>	

OMS 315 [314.5cm<sup>3</sup>/rev.]

Pressure (MPa)		Max.cont.			Max.int.	
3.5	7	10.5	12	14	18.5	

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

OMS 375 [370cm<sup>3</sup>/rev.]

Pressure (MPa)		Max.cont.			Max.int.	
3.5	7	9	10	12	14	

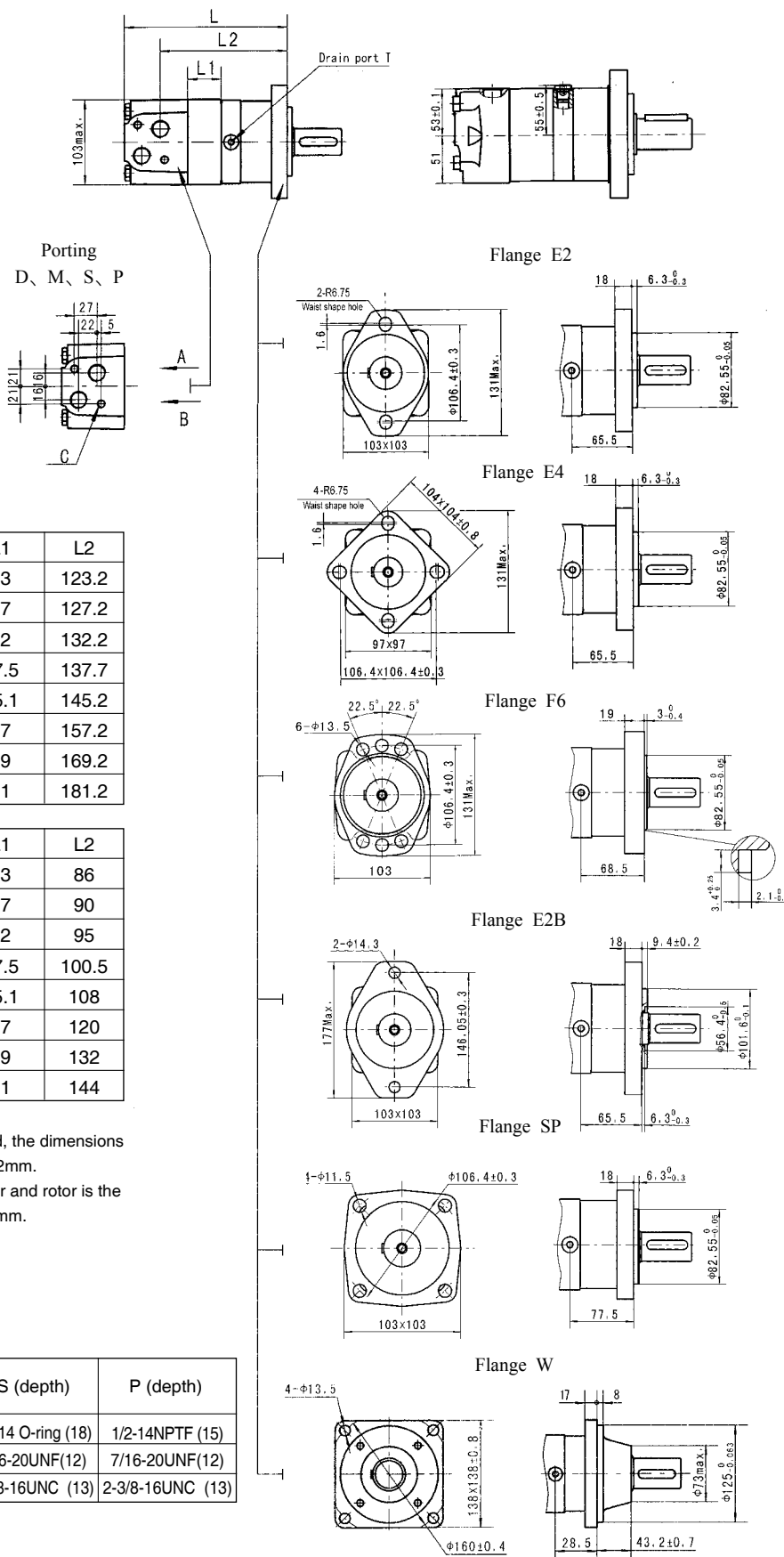
Flow (L/min)	15	185 <b>40</b>	362 <b>39</b>	474 <b>38</b>	512 <b>37</b>	588 <b>35</b>	660 <b>33</b>
	30	184 <b>80</b>	364 <b>78</b>	475 <b>77</b>	514 <b>76</b>	590 <b>74</b>	661 <b>72</b>
40	180 <b>106</b>	362 <b>104</b>	473 <b>103</b>	513 <b>102</b>	588 <b>100</b>	659 <b>97</b>	
50	160 <b>133</b>	360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

Torque (N•m) 520  
Speed (rpm) 276

□ cont.  
■ int.



OMS DIMENSIONS AND MOUNTING DATA



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

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

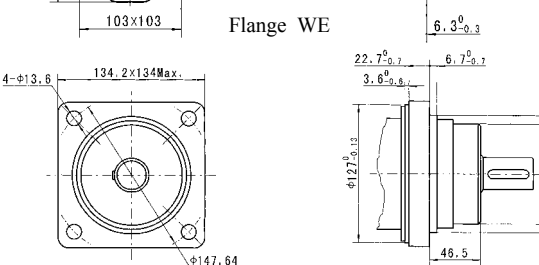
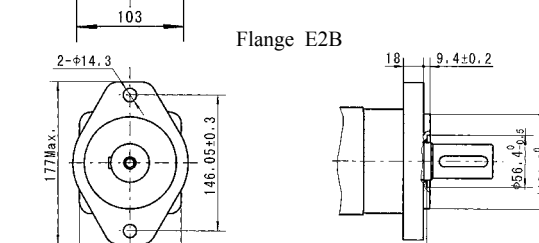
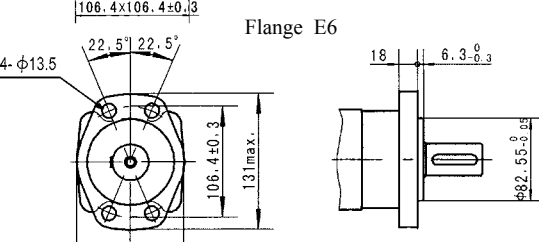
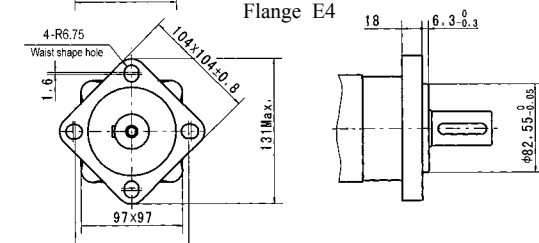
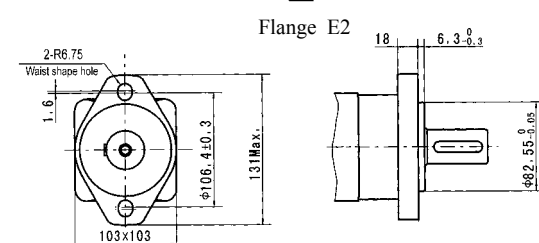
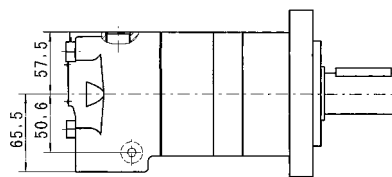
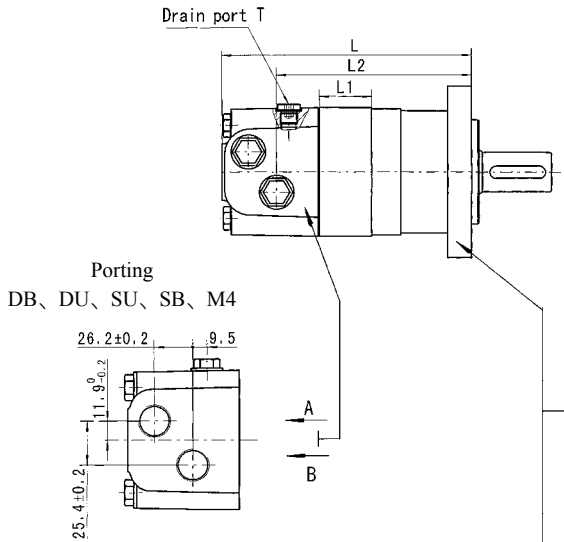
Note:1) If the mounting SP is used, the dimensions of L and L2 should plus 12mm.

2) The thickness of the stator and rotor is the dimension of L1 plused 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)



OMSE DIMENSIONS AND MOUNTING DATA



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

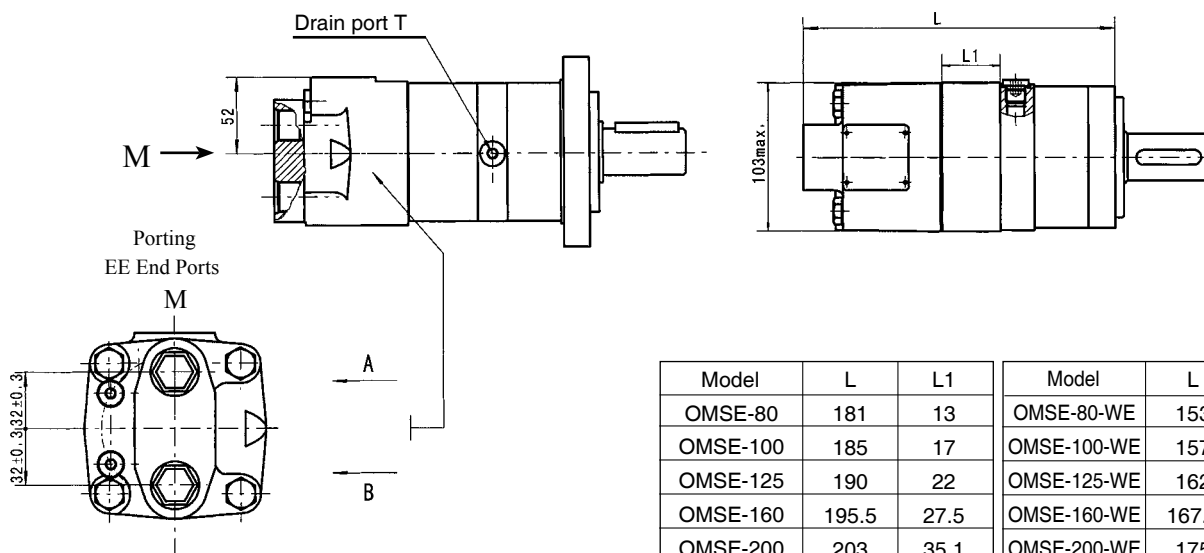
Model	L	L1	L2
OMSE-80-WE	143	13	95
OMSE-100-WE	147	17	99
OMSE-125-WE	152	22	104
OMSE-160-WE	157.5	27.5	109.5
OMSE-200-WE	165	35.1	117
OMSE-250-WE	177	47	129
OMSE-315-WE	189	59	141
OMSE-375-WE	201	71	153

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

Code	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)



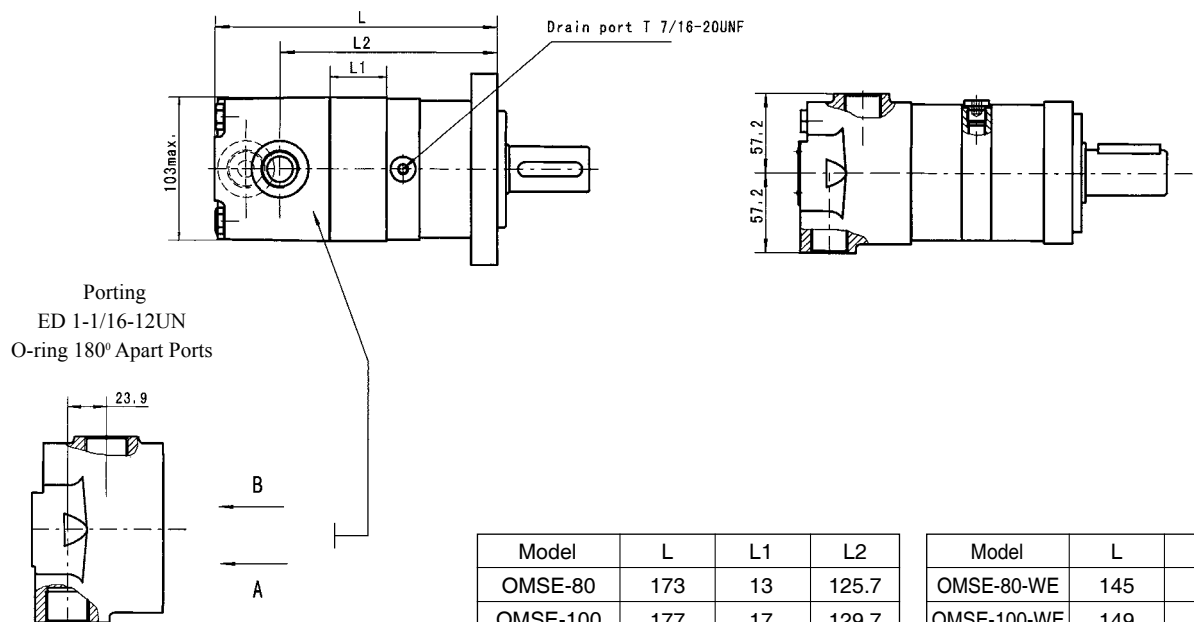
### OMSE DIMENSIONS AND MOUNTING DATA



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

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

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

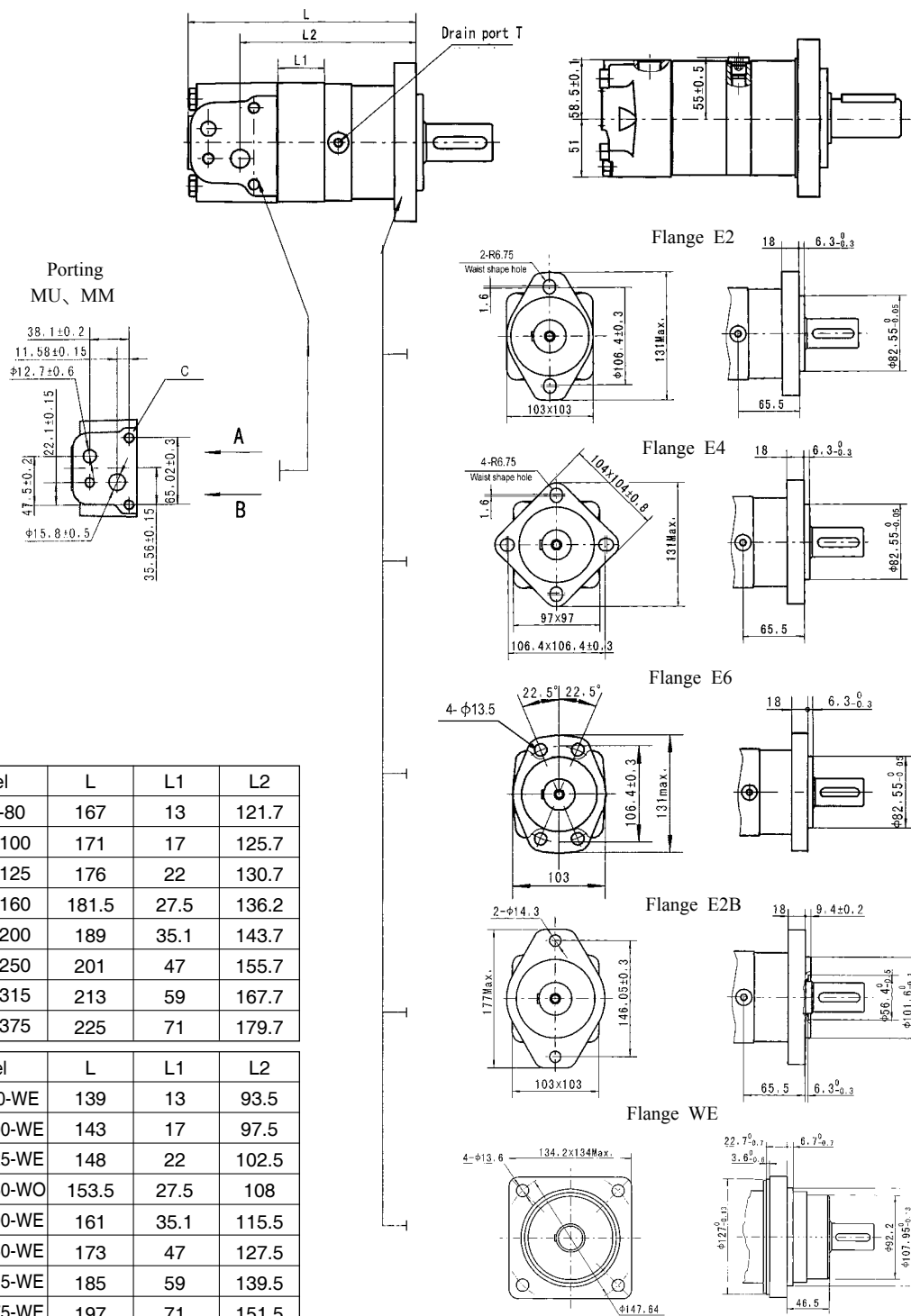
Model	L	L1	L2
OMSE-80-WE	145	13	97.5
OMSE-100-WE	149	17	101.5
OMSE-125-WE	153	22	106.5
OMSE-160-WE	158.5	27.5	112
OMSE-200-WE	166	35.1	119.5
OMSE-250-WE	179	47	131.5
OMSE-315-WE	191	59	143.5
OMSE-375-WE	203	71	155.5

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)



OMSE DIMENSIONS AND MOUNTING DATA



Model	L	L1	L2
OMSE-80	167	13	121.7
OMSE-100	171	17	125.7
OMSE-125	176	22	130.7
OMSE-160	181.5	27.5	136.2
OMSE-200	189	35.1	143.7
OMSE-250	201	47	155.7
OMSE-315	213	59	167.7
OMSE-375	225	71	179.7

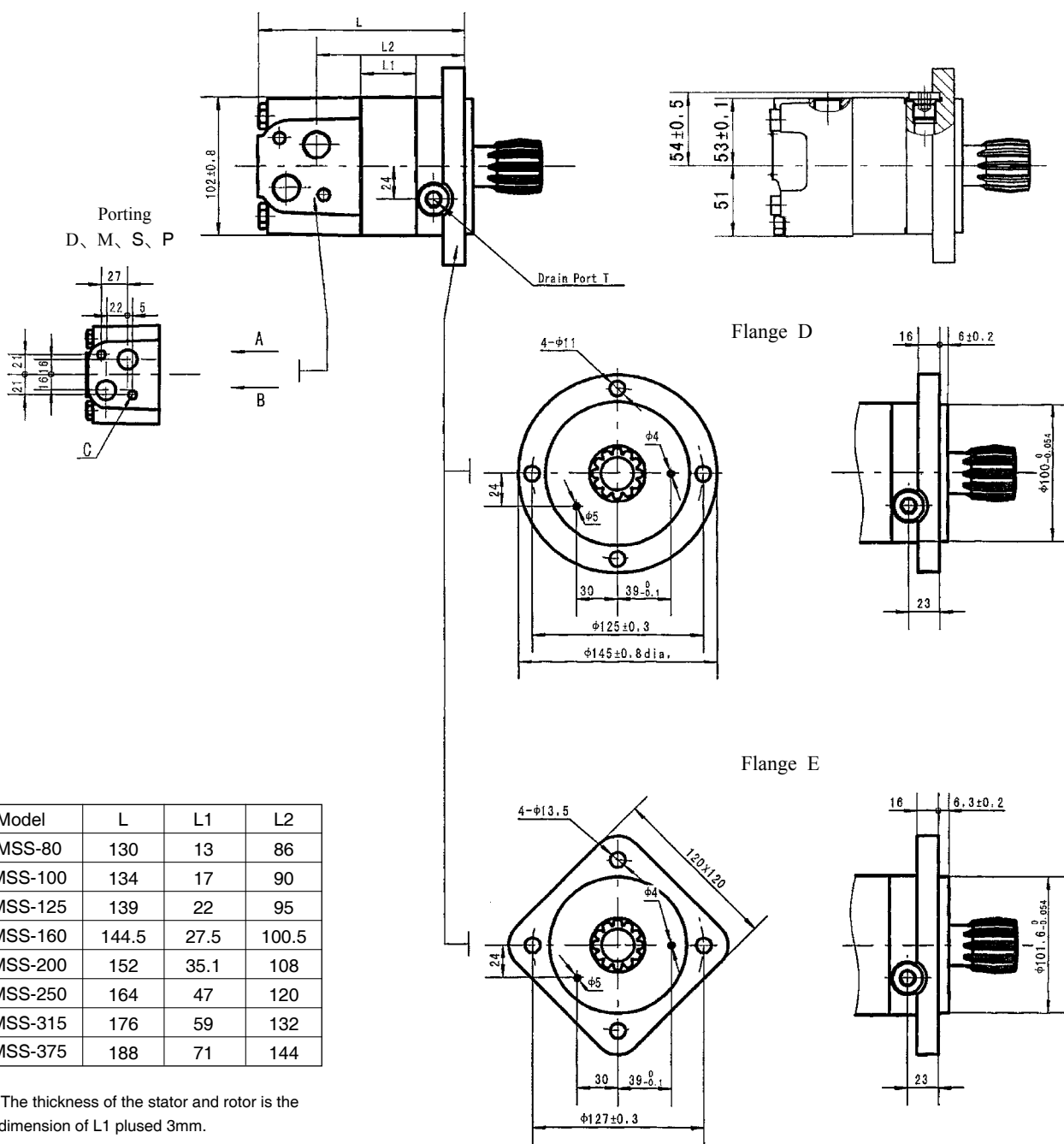
Model	L	L1	L2
OMSE-80-WE	139	13	93.5
OMSE-100-WE	143	17	97.5
OMSE-125-WE	148	22	102.5
OMSE-160-WO	153.5	27.5	108
OMSE-200-WE	161	35.1	115.5
OMSE-250-WE	173	47	127.5
OMSE-315-WE	185	59	139.5
OMSE-375-WE	197	71	151.5

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 plused 3mm.

Code	MU	MM
Mounting P(A,B)	$\phi 12.7$ 、 $\phi 15.8$	$\phi 12.7$ 、 $\phi 15.8$
T	7/16-20UNF(12)	G1/4 (12)
C	3 x 3/8-16UNC	3 x M10



OMSS DIMENSIONS AND MOUNTING DATA



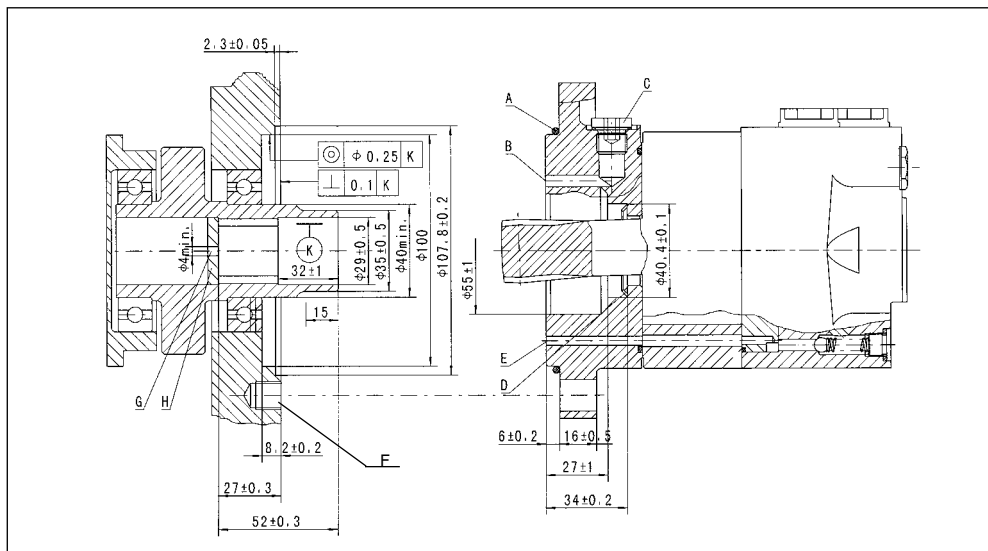
Model	L	L1	L2
OMSS-80	130	13	86
OMSS-100	134	17	90
OMSS-125	139	22	95
OMSS-160	144.5	27.5	100.5
OMSS-200	152	35.1	108
OMSS-250	164	47	120
OMSS-315	176	59	132
OMSS-375	188	71	144

Note: 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)	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)



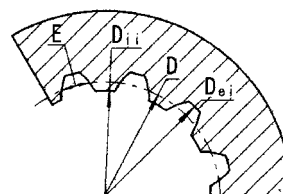
OMSS DIMENSIONS AND MOUNTING DATA



- 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

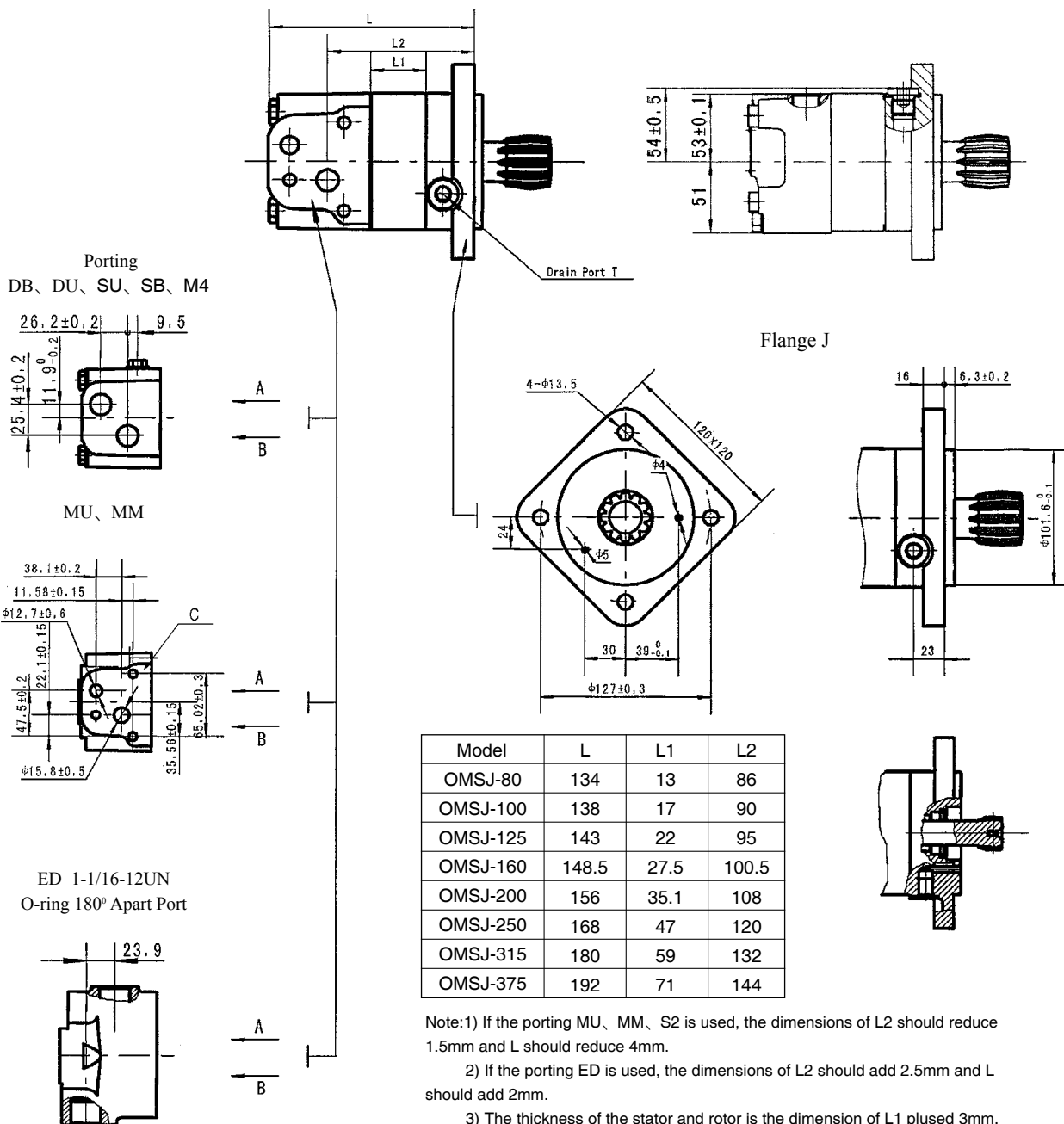
Fillet Root Side Fit		mm
Number of Teeth	Z	12
Diametral Pitch	DP	12/24
Pressure Angle	$\alpha_o$	30°
Pitch Dia.	D	φ25.4
Major Dia.	$D_{ei}$	φ28 <sup>0</sup> <sub>-0.1</sub>
Minor Dia.	$D_{ii}$	φ23 <sup>+0.033</sup> <sub>0</sub>
Space Width [Circular]	E	4.308 ± 0.02



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



OMSJ DIMENSIONS AND MOUNTING DATA

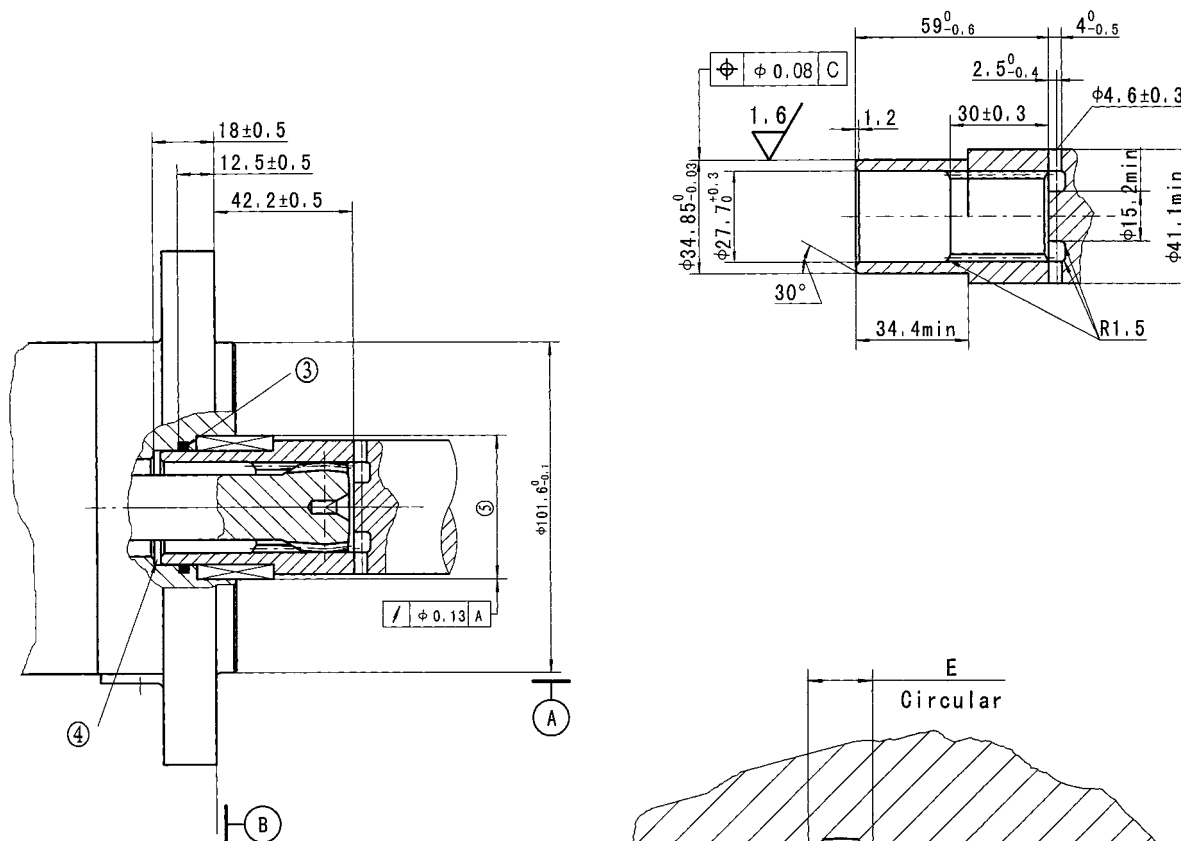


Code Mounting	DB (depth)	DU (depth)	SU (depth)	SB (1depth)	M4 (depth)	MU	MM	ED (depth)
P(A,B)	G1/2 (18)	G1/2 (18)	7/8-14 O-ring (18)	7/8-14 O-ring (18)	M22 x 1.5 (18)	φ12.7、φ15.8	φ12.7、φ15.8	1-1/16-12UN (18)
T	G1/4 (12)	7/16-20UNF(12)	7/16-20UNF(12)	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)	G1/4 (12)	7/16-20UNF(12)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





OMSJ 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	$\alpha_D$	30°
Pitch Dia.	D	ø25.4
Major Dia.	$D_{ei}$	ø27.6 <sup>+0.14</sup> <sub>0</sub>
Minor Dia.	$D_i$	ø23.1 <sup>+0.12</sup> <sub>0</sub>
Space Width [Circular]	E	4.282±0.036
Dimension between two pins(ø3.38)	$M_o$	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.

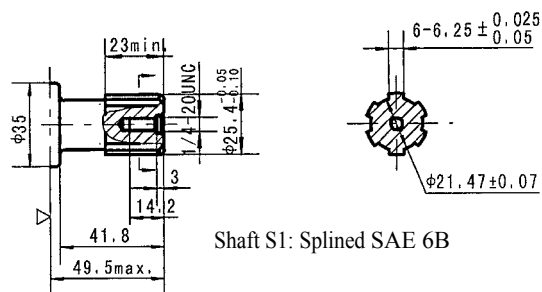
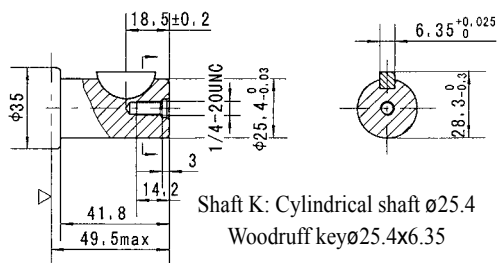
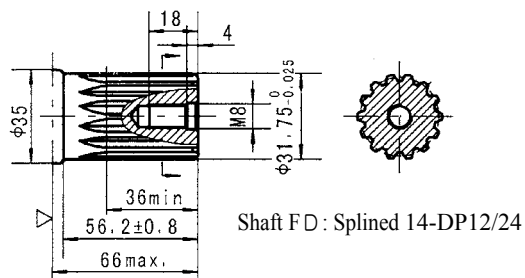
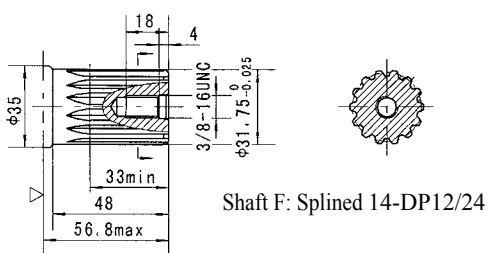
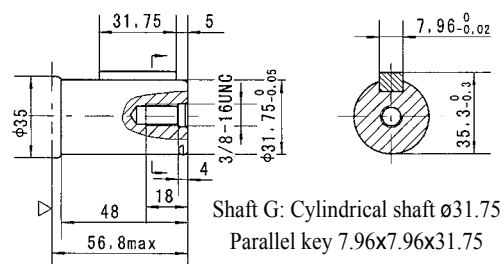
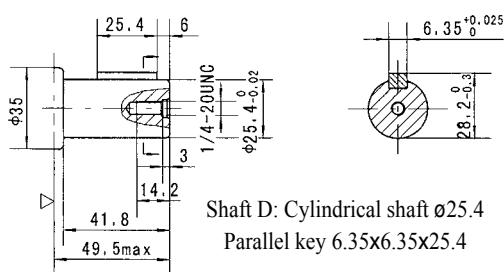
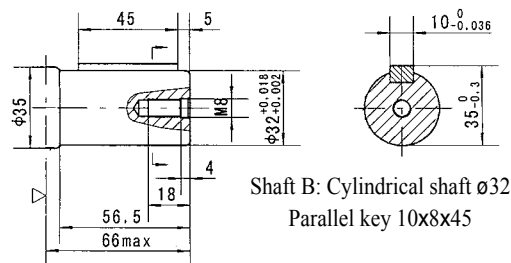
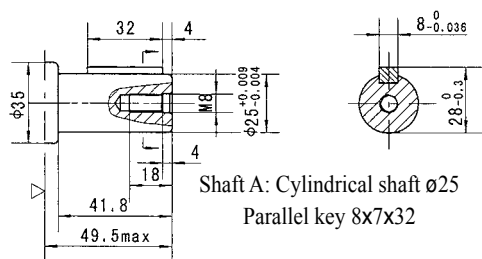
③ Some means of maintaining clearance between shaft and mounting flange must be provided.

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).

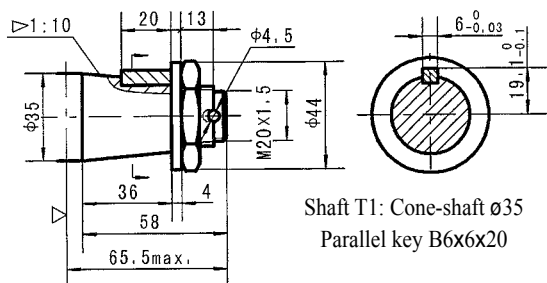
C This surface to be diameter of output shaft.

### SHAFT EXTENSIONS FOR OMS(E) MOTORS

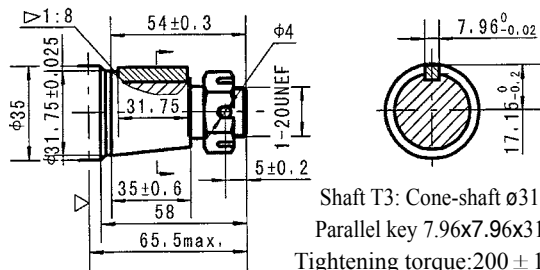


▷ Motor Mounting Surface(Dimension corresponding mounting E2, by analogy with others)

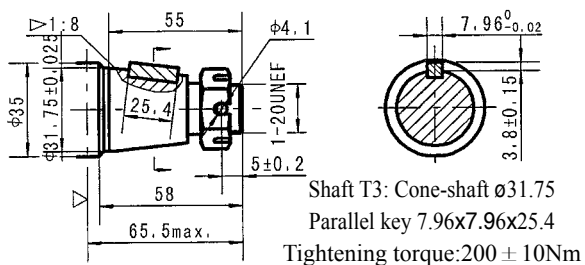
SHAFT EXTENSIONS FOR OMS(E) MOTORS



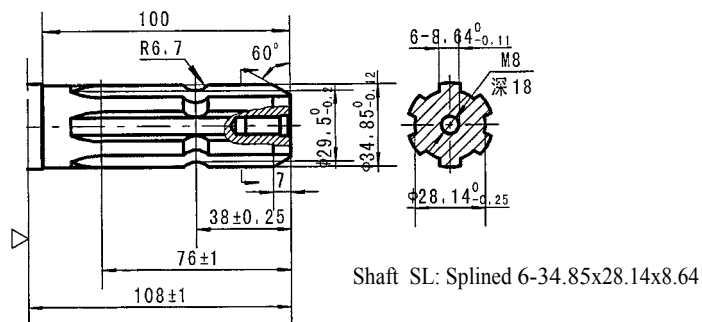
Shaft T1: Cone-shaft ø35  
Parallel key B6x6x20



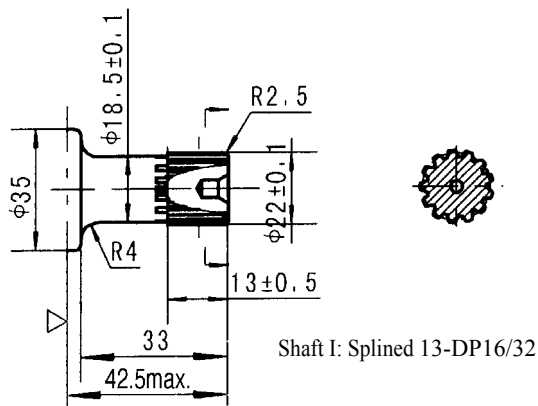
Shaft T3: Cone-shaft ø31.75  
Parallel key 7.96x7.96x31.75  
Tightening torque:200 ± 10Nm



Shaft T3: Cone-shaft ø31.75  
Parallel key 7.96x7.96x25.4  
Tightening torque:200 ± 10Nm



Shaft SL: Splined 6-34.85x28.14x8.64

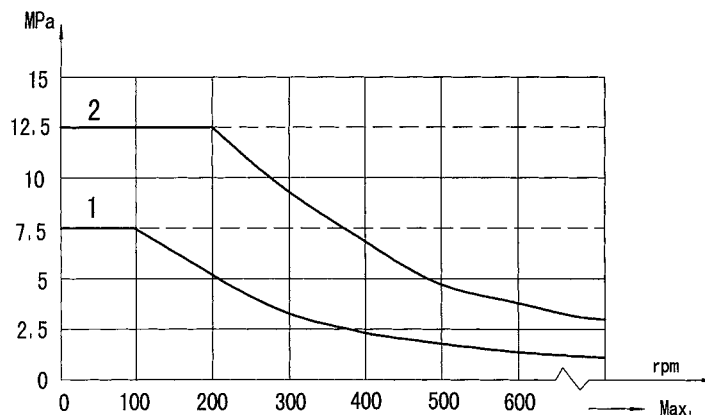
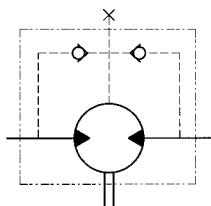


Shaft I: Splined 13-DP16/32

- ▷ 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.

OMS(E) Series Hydraulic Motor

Permissible shaft seal pressure

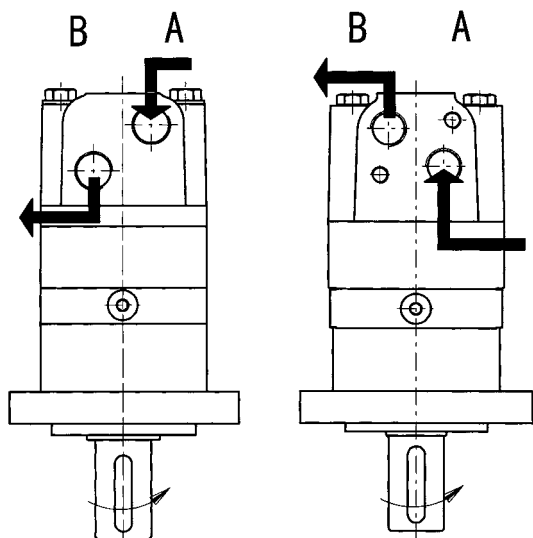


Note:1.Chart for standard shaft seal;  
2.Chart for high pressure shaft seal.

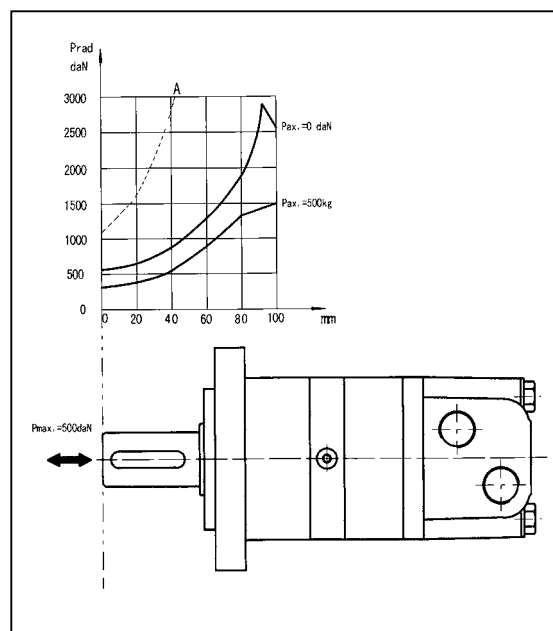
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

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.



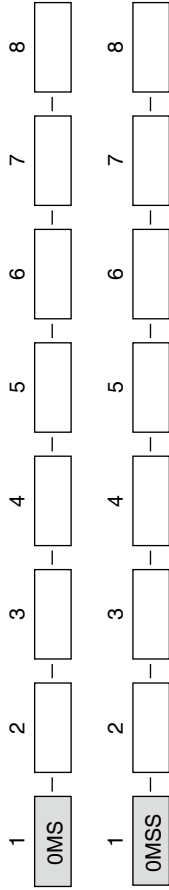
Axial and Radial forces



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.



Order Information

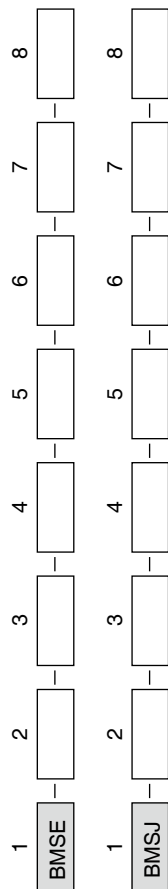


Pos.1	2	3	4	5	6	7	8	
Code	Disp.	Flange	Output Shaft	Ports and Drain Port	Rotation Direction	Paint	Unusually Function	
OMS	80	E2 2-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 6.3	A Shaft Ø25 , parallel key 8 × 7 × 32 B Shaft Ø32 , parallel key 10 × 8 × 45 D Shaft Ø25.4 , parallel key 6.35 × 6.35 × 25.4 G Shaft Ø31.75 , parallel key 7.96 × 7.96 × 31.75 F Shaft Ø31.75 , parallel key 7.96 × 7.96 × 31.75 FD Long Shaft Ø31.75 , splined tooth 14-DP12/24 SL shaft Ø34.85,Splined key 6-34.85 × 28.14 × 8.64	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				
	100	E4 4-Ø13.5 Rhomb-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 S1 Shaft Ø25.4 ,splined tooth SAE 6B I Sub-shaft Ø22 , splined tooth 13-DP16/32					
	125	F6 6-Ø13.5 Rhomb-flange Ø106.4, pilot Ø82.5 × 2.6						
	160	W 4-Ø13.5 Wheel-flange Ø160 , pilot Ø125 × 8						
	200	E2B 2-Ø14.3 Rhomb-flange Ø146.05, pilot Ø101.6 × 9.4						
	250	SP 4-Ø11.5 Square-flange Ø106.4, pilot Ø82.5 × 6.3						
	315							
	OMSS	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				

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. SP for T1, D, B, F, G. Shaft T1, D, B, FD, G for flange SP code T2, D1, B1, F1, G1. The specific dimensions see installation diagram provides additional.



Order Information



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

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 . SP for T1、D、B、F、G . Shaft B、G、T4、F for flange WE code TB1、G1、T5、F2. The specific dimensions see installation diagram provides additional.



## OMSY SERIES HYDRAULIC MOTOR

OMSY new series motor adapt the advanced Geroler gear set designed 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:

The motor has the same dimensions and mounting data as the hydraulic motors type OMS.

- \* The motor is described with 15-20% higher technical data(Max. torque and Max. pressure drop), thereby higher power. The new motor is suitable for vehicles with greater loads and pressure drop.

### Main Specification

Type		OMSY 80	OMSY 100	OMSY 125	OMSY 160	OMSY 200	OMSY 250	OMSY 315	OMSY 400	OMSY 475
Geometric displacement (cm <sup>3</sup> /rev.)		80.6	100.8	125	154	194	243	311	394	475
Max. speed (rpm)	cont.	800	748	600	470	375	300	240	185	155
	int.	988	900	720	560	450	360	280	225	185
Max. torque (N•m)	cont.	225	290	365	485	586	708	880	880	910
	int.	250	320	400	540	645	806	960	960	960
Max. output (kW)	cont.	16	18	18	18.1	18.1	18	17	11	9
	int.	20	22	23	25	24	23.8	20.2	12	11
Max. pressure drop (MPa)	cont.	20.5	20.5	20.5	21	21	20	20	16	14
	int.	22.5	22.5	22.5	22.5	22.5	22.5	22.5	17.5	15
	peak	29.5	29.5	29.5	28	27	27	26	21	17.5
Max. flow (L/min)	cont.	65	75	75	75	75	75	75	75	75
	int.	80	90	90	90	90	90	90	90	90
Max. inlet pressure (MPa)	cont.	25	25	25	25	25	25	25	25	25
	int.	30	30	30	30	30	30	30	30	30
Weight (kg)		9.8	10	10.3	10.7	11.1	11.6	12.3	13.2	14.3

\* 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

OMSY80 [80.6cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	20.5	22.5
--	-----	---	------	----	------	------	------

Flow (L/min)	Pressure (MPa)						
	3.5	7	10.5	14	17.5	20.5	22.5
15	35	80	120	158	195	228	249
	<b>180</b>	<b>174</b>	<b>168</b>	<b>164</b>	<b>158</b>	<b>151</b>	<b>143</b>
30	35	80	120	158	195	232	260
	<b>362</b>	<b>352</b>	<b>346</b>	<b>338</b>	<b>330</b>	<b>322</b>	<b>310</b>
40	35	79	119	155	193	227	250
	<b>487</b>	<b>480</b>	<b>468</b>	<b>457</b>	<b>446</b>	<b>438</b>	<b>425</b>
50	30	77	117	153	192	224	248
	<b>612</b>	<b>603</b>	<b>592</b>	<b>581</b>	<b>572</b>	<b>558</b>	<b>542</b>
60	28	77	117	153	192	224	243
	<b>735</b>	<b>726</b>	<b>718</b>	<b>703</b>	<b>687</b>	<b>673</b>	<b>646</b>
Max.cont.	26	75	116	151	188	217	236
Max.int.	<b>794</b>	<b>786</b>	<b>773</b>	<b>760</b>	<b>744</b>	<b>722</b>	<b>706</b>
	24	72	109	142	176	206	227
	<b>981</b>	<b>968</b>	<b>955</b>	<b>925</b>	<b>893</b>	<b>870</b>	<b>832</b>

OMSY100 [100.8cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	20.5	22.5
--	-----	---	------	----	------	------	------

Flow (L/min)	Pressure (MPa)						
	3.5	7	10.5	14	17.5	20.5	22.5
15	48	95	150	200	250	282	310
	<b>146</b>	<b>144</b>	<b>139</b>	<b>135</b>	<b>130</b>	<b>120</b>	<b>105</b>
30	45	94	146	198	250	290	317
	<b>291</b>	<b>289</b>	<b>278</b>	<b>274</b>	<b>269</b>	<b>258</b>	<b>242</b>
40	43	89	142	196	248	288	316
	<b>387</b>	<b>384</b>	<b>374</b>	<b>359</b>	<b>350</b>	<b>335</b>	<b>320</b>
50	40	88	135	194	247	286	315
	<b>486</b>	<b>483</b>	<b>473</b>	<b>462</b>	<b>450</b>	<b>430</b>	<b>420</b>
60	37	88	132	185	244	283	312
	<b>588</b>	<b>584</b>	<b>574</b>	<b>562</b>	<b>550</b>	<b>538</b>	<b>520</b>
Max.cont.	35	80	130	180	240	279	310
Max.int.	<b>740</b>	<b>735</b>	<b>720</b>	<b>705</b>	<b>696</b>	<b>676</b>	<b>653</b>
	30	75	124	170	236	271	303
	<b>850</b>	<b>840</b>	<b>810</b>	<b>787</b>	<b>770</b>	<b>750</b>	<b>747</b>

OMSY125 [125cm³/rev.]

Pressure (MPa)

	3.5	7	10.5	14	17.5	20.5	22.5
--	-----	---	------	----	------	------	------

Flow (L/min)	Pressure (MPa)						
	3.5	7	10.5	14	17.5	20.5	22.5
15	55	120	176	245	309	345	375
	<b>115</b>	<b>113</b>	<b>110</b>	<b>104</b>	<b>98</b>	<b>90</b>	<b>84</b>
30	55	120	175	250	315	364	404
	<b>231</b>	<b>228</b>	<b>223</b>	<b>214</b>	<b>202</b>	<b>188</b>	<b>172</b>
40	53	118	178	250	315	364	403
	<b>312</b>	<b>309</b>	<b>290</b>	<b>289</b>	<b>278</b>	<b>262</b>	<b>235</b>
50	50	115	176	248	315	362	397
	<b>391</b>	<b>386</b>	<b>378</b>	<b>365</b>	<b>352</b>	<b>339</b>	<b>308</b>
60	45	113	171	241	308	358	397
	<b>469</b>	<b>461</b>	<b>450</b>	<b>437</b>	<b>425</b>	<b>400</b>	<b>372</b>
Max.cont.	45	110	167	240	306	352	389
Max.int.	<b>588</b>	<b>574</b>	<b>560</b>	<b>544</b>	<b>526</b>	<b>505</b>	<b>481</b>
	40	105	162	237	301	343	378
	<b>710</b>	<b>696</b>	<b>680</b>	<b>661</b>	<b>646</b>	<b>628</b>	<b>610</b>

OMSY160 [154cm³/rev.]

Pressure (MPa)

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

Flow (L/min)	Pressure (MPa)						
	3.5	7	10.5	14	17.5	21	22.5
15	70	142	215	298	372	435	476
	<b>93</b>	<b>91</b>	<b>89</b>	<b>85</b>	<b>80</b>	<b>76</b>	<b>58</b>
30	73	151	225	312	382	456	492
	<b>189</b>	<b>187</b>	<b>181</b>	<b>176</b>	<b>170</b>	<b>162</b>	<b>153</b>
40	75	152	228	314	383	454	488
	<b>252</b>	<b>250</b>	<b>246</b>	<b>239</b>	<b>234</b>	<b>228</b>	<b>212</b>
50	70	148	225	305	372	445	480
	<b>313</b>	<b>310</b>	<b>306</b>	<b>298</b>	<b>293</b>	<b>285</b>	<b>272</b>
60	68	143	218	296	370	442	480
	<b>378</b>	<b>376</b>	<b>370</b>	<b>362</b>	<b>353</b>	<b>346</b>	<b>332</b>
Max.cont.	62	140	211	291	365	439	475
Max.int.	<b>475</b>	<b>469</b>	<b>461</b>	<b>450</b>	<b>441</b>	<b>432</b>	<b>414</b>
	59	131	202	286	357	425	460
	<b>567</b>	<b>561</b>	<b>554</b>	<b>543</b>	<b>532</b>	<b>520</b>	<b>509</b>

TORQUE(N\*m) 301  
SPEED (r/min) 646

□ cont.  
■ int.





Performance Data

OMSY200 [194cm<sup>3</sup>/rev.]

		Pressure (MPa)						
		3.5	7	10.5	14	17.5	21	22.5
Flow (L/min)	15	87	179	273	371	471	562	610
		<b>74</b>	<b>73</b>	<b>71</b>	<b>68</b>	<b>64</b>	<b>60</b>	<b>48</b>
	30	91	190	288	386	489	572	618
		<b>150</b>	<b>148</b>	<b>143</b>	<b>140</b>	<b>134</b>	<b>128</b>	<b>119</b>
	40	94	193	296	394	498	584	645
		<b>198</b>	<b>195</b>	<b>192</b>	<b>188</b>	<b>183</b>	<b>178</b>	<b>167</b>
	50	90	191	292	389	493	580	634
	<b>248</b>	<b>246</b>	<b>241</b>	<b>236</b>	<b>230</b>	<b>223</b>	<b>212</b>	
	60	85	185	279	382	483	575	622
	<b>300</b>	<b>295</b>	<b>288</b>	<b>281</b>	<b>273</b>	<b>263</b>	<b>251</b>	
Max.cont.	75	78	176	271	370	472	561	610
	<b>374</b>	<b>370</b>	<b>364</b>	<b>360</b>	<b>352</b>	<b>340</b>	<b>331</b>	
Max.int.	90	68	163	265	361	456	545	599
	<b>443</b>	<b>440</b>	<b>435</b>	<b>428</b>	<b>424</b>	<b>413</b>	<b>400</b>	

OMSY250 [243cm<sup>3</sup>/rev.]

		Pressure (MPa)						
		3.5	7	10.5	14	17.5	20	22.5
Flow (L/min)	15	110	231	351	462	585	681	778
		<b>59</b>	<b>58</b>	<b>56</b>	<b>53</b>	<b>50</b>	<b>46</b>	<b>35</b>
	30	116	236	359	475	597	700	790
		<b>119</b>	<b>117</b>	<b>114</b>	<b>108</b>	<b>102</b>	<b>92</b>	<b>80</b>
	40	118	241	363	480	599	706	796
		<b>162</b>	<b>159</b>	<b>156</b>	<b>150</b>	<b>143</b>	<b>134</b>	<b>121</b>
	50	111	234	352	472	591	693	788
	<b>203</b>	<b>201</b>	<b>197</b>	<b>191</b>	<b>182</b>	<b>173</b>	<b>158</b>	
	60	106	224	345	462	582	685	772
	<b>244</b>	<b>242</b>	<b>237</b>	<b>230</b>	<b>220</b>	<b>208</b>	<b>194</b>	
Max.cont.	75	101	214	340	454	570	670	760
	<b>303</b>	<b>299</b>	<b>294</b>	<b>285</b>	<b>272</b>	<b>260</b>	<b>244</b>	
Max.int.	90	93	209	335	447	559	657	749
	<b>363</b>	<b>359</b>	<b>354</b>	<b>348</b>	<b>340</b>	<b>328</b>	<b>303</b>	

OMSY315 [311cm<sup>3</sup>/rev.]

		Pressure (MPa)						
		3.5	7	10.5	14	17.5	20	22.5
Flow (L/min)	15	148	304	456	613	762	879	978
		<b>48</b>	<b>47</b>	<b>45</b>	<b>43</b>	<b>41</b>	<b>39</b>	<b>27</b>
	30	155	314	465	635	778	884	988
		<b>95</b>	<b>93</b>	<b>91</b>	<b>89</b>	<b>86</b>	<b>82</b>	<b>67</b>
	40	160	321	479	650	796	906	997
		<b>127</b>	<b>125</b>	<b>121</b>	<b>117</b>	<b>115</b>	<b>109</b>	<b>91</b>
	50	155	314	465	638	780	886	988
	<b>159</b>	<b>157</b>	<b>153</b>	<b>149</b>	<b>145</b>	<b>142</b>	<b>128</b>	
	60	151	306	453	620	765	886	976
	<b>187</b>	<b>185</b>	<b>181</b>	<b>176</b>	<b>169</b>	<b>157</b>	<b>143</b>	
Max.cont.	75	146	300	445	613	755	875	966
	<b>238</b>	<b>236</b>	<b>232</b>	<b>227</b>	<b>224</b>	<b>220</b>	<b>196</b>	
Max.int.	90	135	284	436	601	740	863	952
	<b>286</b>	<b>283</b>	<b>278</b>	<b>272</b>	<b>265</b>	<b>257</b>	<b>232</b>	

OMSY400 [394cm<sup>3</sup>/rev.]

		Pressure (MPa)					
		3.5	7	10.5	14	16	17.5
Flow (L/min)	15	186	379	578	779	896	986
		<b>37</b>	<b>36</b>	<b>35</b>	<b>33</b>	<b>31</b>	<b>29</b>
	30	190	388	590	791	905	991
		<b>75</b>	<b>73</b>	<b>71</b>	<b>68</b>	<b>65</b>	<b>61</b>
	40	195	394	596	797	912	998
		<b>99</b>	<b>97</b>	<b>95</b>	<b>93</b>	<b>90</b>	<b>85</b>
	50	191	388	587	785	904	983
	<b>125</b>	<b>123</b>	<b>118</b>	<b>114</b>	<b>109</b>	<b>102</b>	
	60	186	388	587	785	904	983
	<b>149</b>	<b>146</b>	<b>142</b>	<b>137</b>	<b>131</b>	<b>122</b>	
Max.cont.	75	181	372	576	770	891	973
	<b>187</b>	<b>183</b>	<b>177</b>	<b>171</b>	<b>164</b>	<b>153</b>	
Max.int.	90	176	367	571	766	883	965
	<b>226</b>	<b>221</b>	<b>214</b>	<b>208</b>	<b>199</b>	<b>183</b>	

OMSY475 [475cm<sup>3</sup>/rev.]

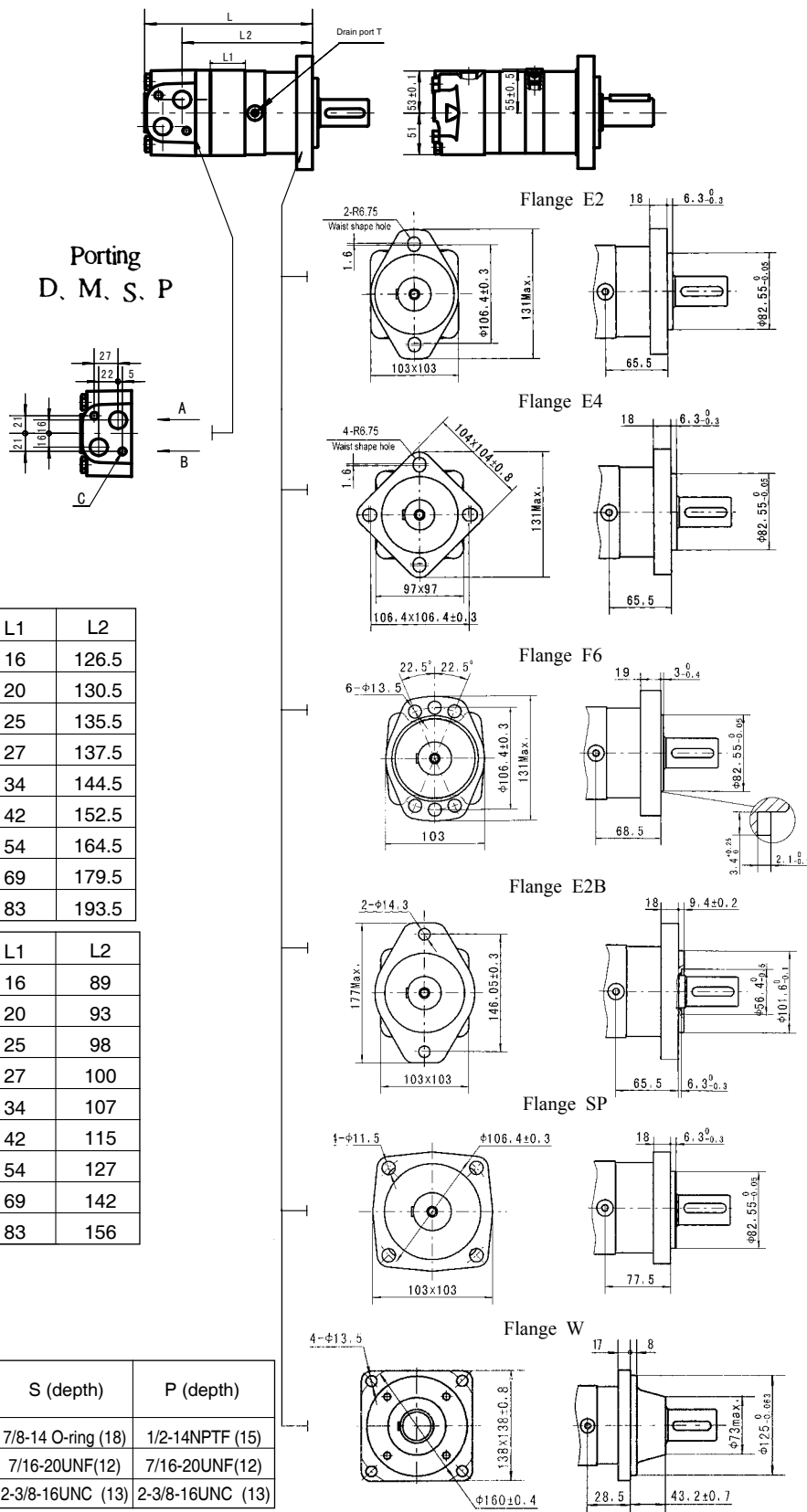
		Pressure (MPa)				
		3.5	7	10.5	14	15
Flow (L/min)	15	218	439	661	892	995
		<b>30</b>	<b>29</b>	<b>28</b>	<b>27</b>	<b>25</b>
	30	223	450	676	910	1002
		<b>61</b>	<b>60</b>	<b>58</b>	<b>56</b>	<b>53</b>
	40	228	461	689	927	1017
		<b>82</b>	<b>80</b>	<b>77</b>	<b>74</b>	<b>68</b>
	50	224	456	682	920	1008
	<b>103</b>	<b>101</b>	<b>97</b>	<b>92</b>	<b>86</b>	
	60	220	451	677	913	998
	<b>123</b>	<b>121</b>	<b>118</b>	<b>112</b>	<b>105</b>	
Max.cont.	75	212	443	664	901	980
	<b>155</b>	<b>153</b>	<b>147</b>	<b>140</b>	<b>132</b>	
Max.int.	90	196	421	643	877	959
	<b>186</b>	<b>184</b>	<b>178</b>	<b>170</b>	<b>157</b>	

TORQUE (N•m) 766  
SPEED (rpm) 208

□ cont.  
■ int.



OMSY DIMENSIONS AND MOUNTING DATA



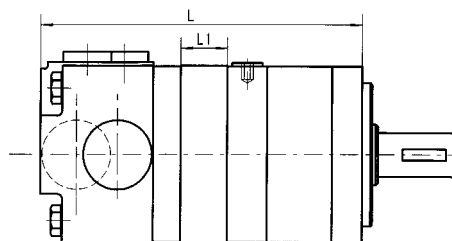
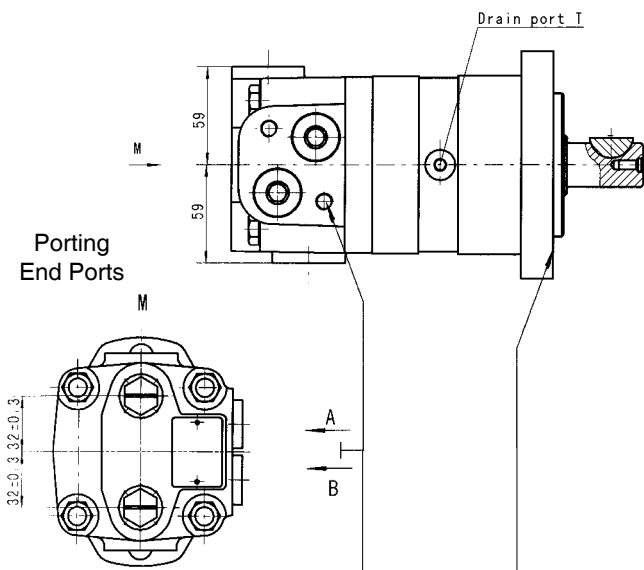
Model	L	L1	L2
OMSY-80	170	16	126.5
OMSY-100	174	20	130.5
OMSY-125	179	25	135.5
OMSY-160	181	27	137.5
OMSY-200	188	34	144.5
OMSY-250	196	42	152.5
OMSY-315	208	54	164.5
OMSY-400	223	69	179.5
OMSY-475	237	83	193.5

Model	L	L1	L2
OMSY-80-W	132.5	16	89
OMSY-100-W	136.5	20	93
OMSY-125-W	141.5	25	98
OMSY-160-W	143.5	27	100
OMSY-200-W	150.5	34	107
OMSY-250-W	158.5	42	115
OMSY-315-W	170.5	54	127
OMSY-400-W	185.5	69	142
OMSY-475-W	199.5	83	156

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)



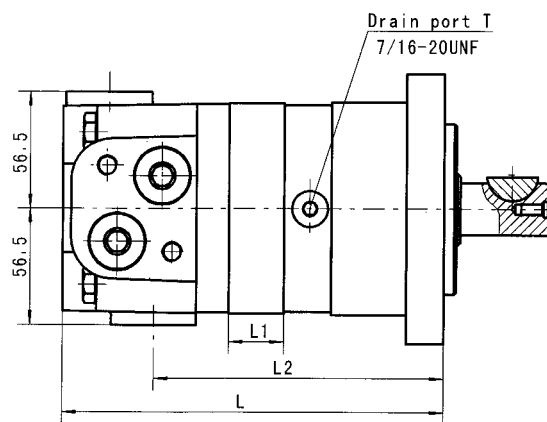
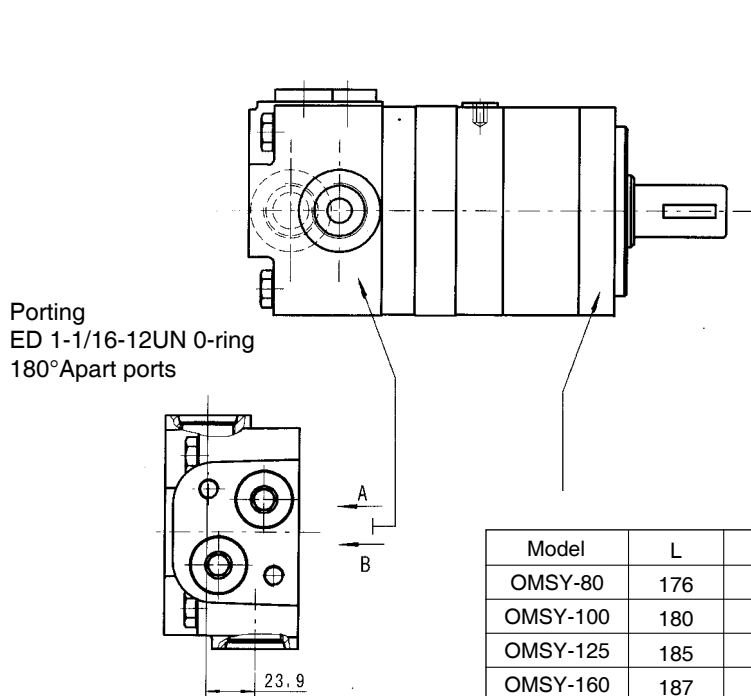
OMSY DIMENSIONS AND MOUNTING DATA



End Ports P(A B)

Model	L	L1	Model	L	L1
OMSY-80	176	16	OMSY-80-WE	148	16
OMSY-100	180	20	OMSY-100-WE	152	20
OMSY-125	185	25	OMSY-125-WE	157	25
OMSY-160	187	27	OMSY-160-WE	159	27
OMSY-200	194	34	OMSY-200-WE	166	34
OMSY-250	202	42	OMSY-250-WE	174	42
OMSY-315	214	54	OMSY-315-WE	186	54
OMSY-400	229	69	OMSY-400-WE	201	69
OMSY-475	243	83	OMSY-475-WE	215	83

Code	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)

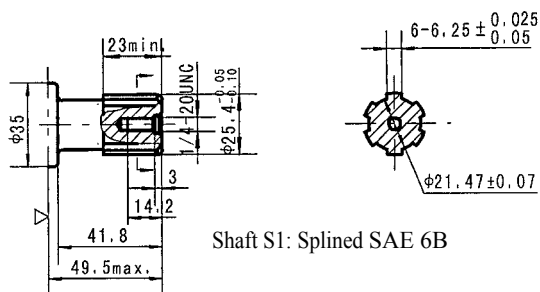
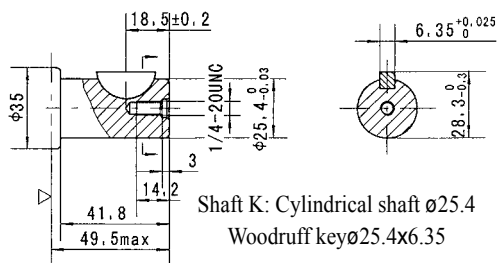
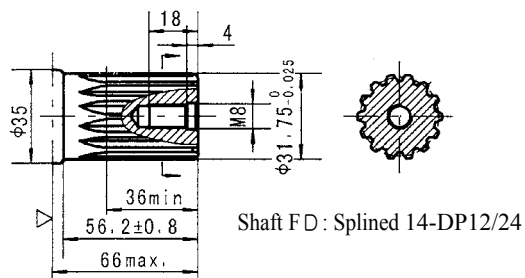
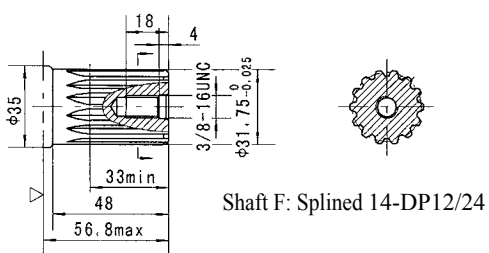
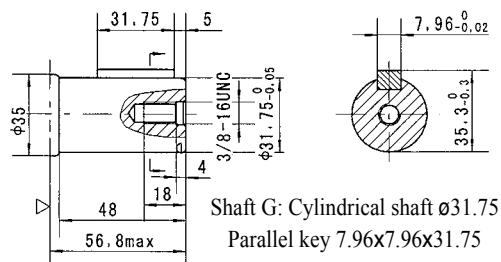
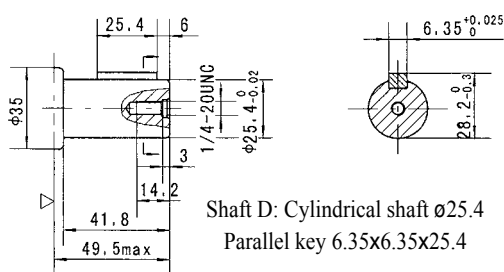
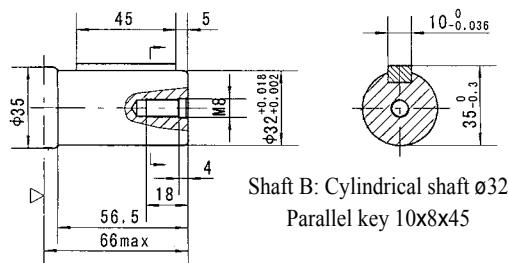
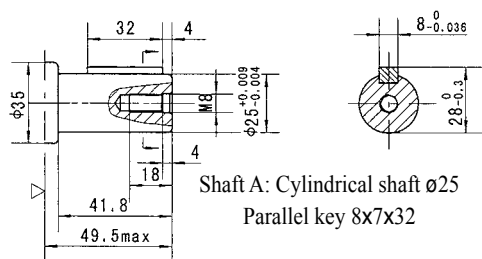


Code	ED (depth)
P(A,B)	1-1/16-12UN (18)
T	7/16-20UNF (12)

Model	L	L1	L2
OMSY-80	176	16	130
OMSY-100	180	20	134
OMSY-125	185	25	139
OMSY-160	187	27	141
OMSY-200	194	34	148
OMSY-250	202	42	156
OMSY-315	214	54	168
OMSY-400	229	69	183
OMSY-475	243	83	197

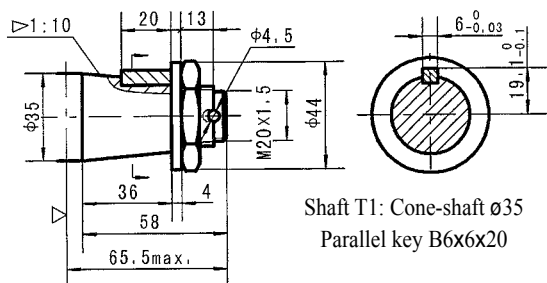
Model	L	L1	L2
OMSY-80-WE	148	16	102
OMSY-100-WE	152	20	106
OMSY-125-WE	157	25	111
OMSY-160-WE	159	27	113
OMSY-200-WE	166	34	119
OMSY-250-WE	178	42	127
OMSY-315-WE	190	54	139
OMSY-400-WE	205	69	154
OMSY-475-WE	219	83	168

### SHAFT EXTENSIONS FOR OMSY MOTORS

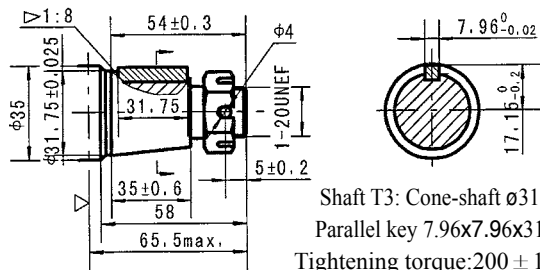


▷ Motor Mounting Surface(Dimension corresponding mounting E2, by analogy with others)

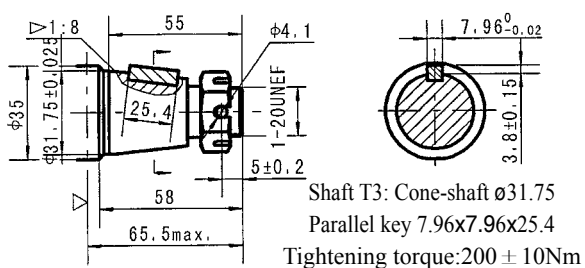
### SHAFT EXTENSIONS FOR OMSY MOTORS



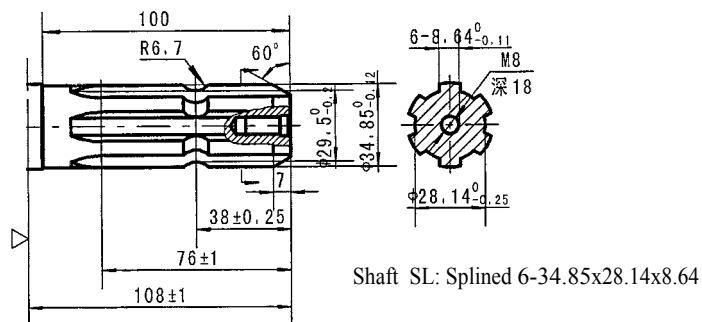
Shaft T1: Cone-shaft ø35  
Parallel key B6x6x20



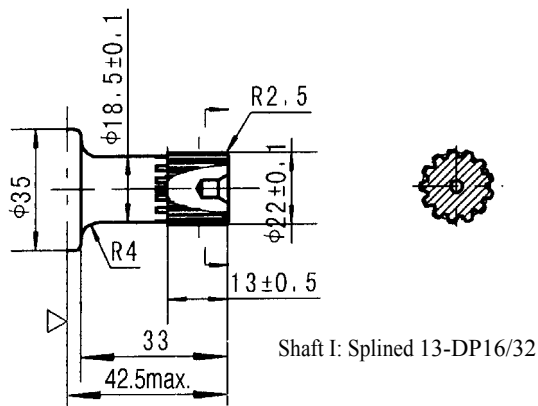
Shaft T3: Cone-shaft ø31.75  
Parallel key 7.96x7.96x31.75  
Tightening torque:200 ± 10Nm



Shaft T3: Cone-shaft ø31.75  
Parallel key 7.96x7.96x25.4  
Tightening torque:200 ± 10Nm



Shaft SL: Splined 6-34.85x28.14x8.64

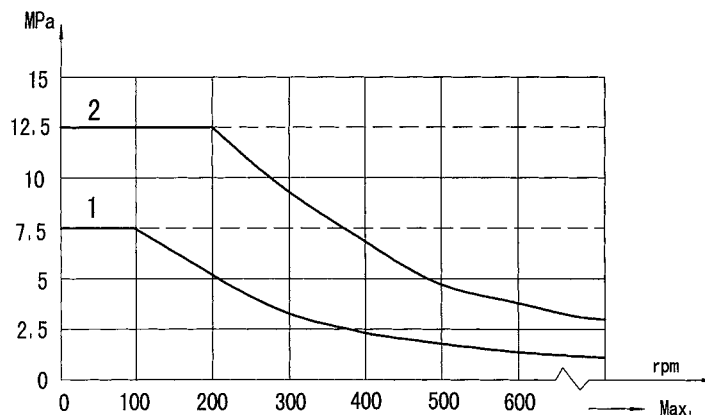
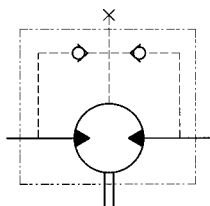


Shaft I: Splined 13-DP16/32

- ▷ 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.

### OMSY Series Hydraulic Motor

#### Permissible shaft seal pressure

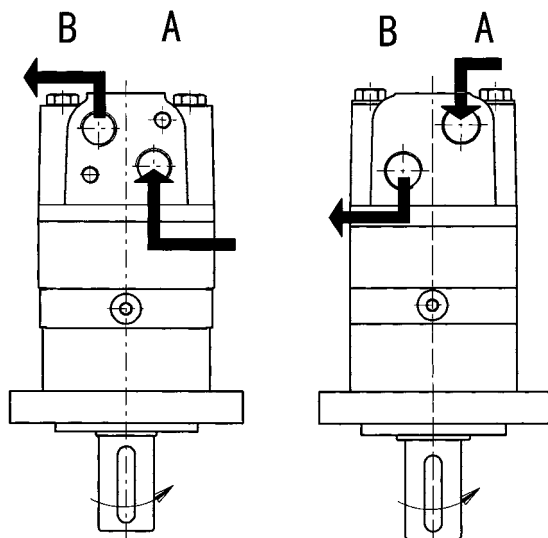


Note:1.Chart for standard shaft seal;  
2.Chart for high pressure shaft seal.

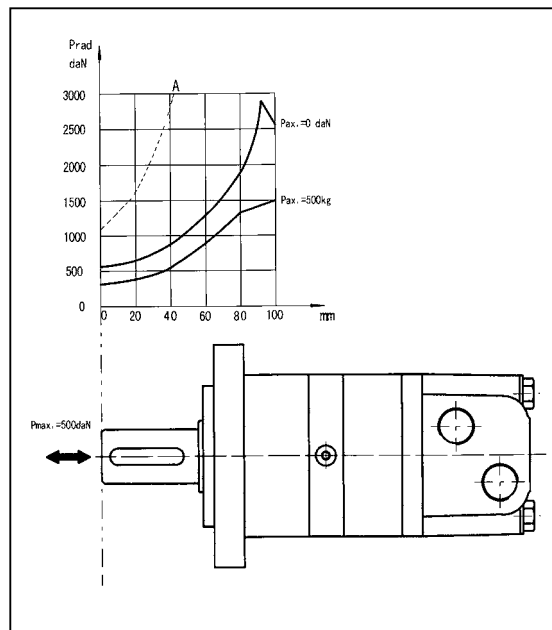
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

#### 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.



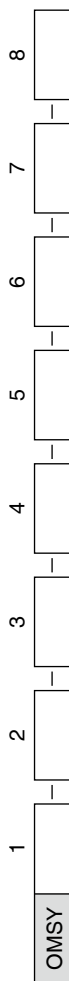
#### Axial and Radial forces



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.



Order Information



Pos.1	2	3	4	5	6	7	8
Code	Disp.	Flange , Pilot , Port	Output Shaft	Ports and Drain Port	Rotation direction	Paint	Unusually function
	80	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			
	100	E2	G Parallel key 7.96 × 7.96 × 31.75 Shaft Ø31.75,	S 7/8-14UNF O-ring manifold			
	125	E4	F Parallel key 7.96 × 7.96 × 31.75 Shaft Ø31.75,Splined key 14-DP12/24	F 2-3/8-16,7/16-20UNF			
	160	F6	FD Long Shaft Ø31.75,	P 1/2-14NPTF manifold			
	200	W	Splined key 14-DP12/24 Shaft Ø34.85,	2-3/8-16UNC,7/16-20UNF	Omit Standard	00 Omit	Omit F LS
	250	E2B	SL Splined key 6-34.85 × 28.14 × 8.64 Cone-shaft Ø35,parallel key B6 × 6 × 20	EE-D G1/2,G1/4(end port) EE-M2 M22 × 1.5,M14 × 1.5(end port)	Omit R	No paint Blue Black Silver Grey	Standard Free Running Low Speed
	315	E2B	T1 Cone-shaft Ø35,parallel key B6 × 6 × 20 Cone-shaft Ø31.75,	EE-S2 7/8-14UNF O-ring,7/16-20 UNF(end port)			
	400	SP	T3 Parallel key 7.96 × 7.96 × 31.75 Shaft Ø25.4,Splined key SAE 6B	ED 1-1/16-12UN O-ring,7/16-20 UNF(180° Apart ports)			
	475	SP	S1 Sub-shaft Ø22, Splined key 13-DP16/32				

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.The informations of mounting flange,output shaft and frotrs are the same as BMS series.The SP flange afflies to shafts of T1、D、B、F、G. If the specification is not in the table or you have specific requirements, please contact us.



## OMT SERIES HYDRAULIC MOTOR

OMT 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. 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 Specifaion

Type		OMT 160	OMT 200	OMT 230	OMT 250	OMT 315	OMT 400	OMT 500	OMT 630	OMT 800
Geometric displacement (cm <sup>3</sup> /rev.)		161.1	201.4	232.5	251.8	326.3	410.9	523.6	629.1	801.8
Max. speed (rpm)	cont.	625	625	536	500	380	305	240	196	154
	int.	780	750	643	600	460	365	285	233	185
Max. torque (N•m)	cont.	470	590	670	730	950	1080	1220	1318	1464
	int.	560	710	821	880	1140	1260	1370	1498	1520
	peak	669	838	958	1036	1346.3	1450.3	1643.8	1618.8	1665
Max. output (kW)	cont.	27.7	34.9	34.7	34.5	34.9	31.2	28.8	25.3	22.2
	int.	32	40	40	40	40	35	35	27.5	26.8
Max. pressure drop (MPa)	cont.	20	20	20	20	20	18	16	14	12.5
	int.	24	24	24	24	24	21	18	16	13
	peak	28	28	28	28	28	24	21	19	16
Max. flow (L/min)	cont.	100	125	125	125	125	125	125	125	125
	int.	125	150	150	150	150	150	150	150	150
Max. inlet pressure (MPa)	cont.	21	21	21	21	21	21	21	21	21
	int.	25	25	25	25	25	25	25	25	25
	peak	30	30	30	30	30	30	30	30	30
Weight (kg)		19.5	20	20.4	20.5	21	22	23	24	25

- \* 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

OMT 160 [161.1cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

	4	8	10	12	16	20	24
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Flow (L/min)	Pressure (MPa)						
	4	8	10	12	16	20	24
10	88 <b>60</b>	176 <b>59</b>	228 <b>58</b>	275 <b>56</b>	361 <b>54</b>	447 <b>50</b>	535 <b>44</b>
20	89 <b>121</b>	181 <b>120</b>	234 <b>117</b>	277 <b>114</b>	372 <b>109</b>	459 <b>103</b>	557 <b>95</b>
40	91 <b>249</b>	180 <b>246</b>	235 <b>243</b>	277 <b>236</b>	381 <b>230</b>	471 <b>223</b>	573 <b>212</b>
60	82 <b>371</b>	178 <b>367</b>	235 <b>362</b>	277 <b>356</b>	381 <b>349</b>	470 <b>340</b>	572 <b>330</b>
80	78 <b>492</b>	173 <b>489</b>	229 <b>485</b>	276 <b>478</b>	379 <b>470</b>	466 <b>462</b>	567 <b>447</b>
Max.cont. 100	70 <b>614</b>	160 <b>611</b>	218 <b>606</b>	269 <b>598</b>	370 <b>590</b>	455 <b>582</b>	558 <b>570</b>
Max.int. 125	58 <b>770</b>	148 <b>764</b>	211 <b>758</b>	261 <b>750</b>	359 <b>741</b>	448 <b>731</b>	552 <b>715</b>

OMT 200 [201.4cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

	4	8	10	12	16	20	24
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Flow (L/min)	Pressure (MPa)						
	4	8	10	12	16	20	24
10	124 <b>47</b>	233 <b>46</b>	289 <b>45</b>	340 <b>42</b>	454 <b>39</b>	560 <b>37</b>	669 <b>33</b>
20	125 <b>95</b>	239 <b>94</b>	298 <b>92</b>	347 <b>90</b>	468 <b>87</b>	576 <b>84</b>	696 <b>75</b>
40	120 <b>195</b>	241 <b>193</b>	296 <b>191</b>	352 <b>187</b>	475 <b>183</b>	589 <b>178</b>	716 <b>167</b>
60	116 <b>297</b>	237 <b>295</b>	295 <b>292</b>	352 <b>287</b>	478 <b>282</b>	589 <b>276</b>	718 <b>263</b>
80	108 <b>395</b>	231 <b>393</b>	289 <b>389</b>	350 <b>384</b>	474 <b>377</b>	586 <b>370</b>	716 <b>359</b>
100	99 <b>493</b>	227 <b>490</b>	286 <b>486</b>	344 <b>482</b>	471 <b>475</b>	580 <b>467</b>	712 <b>460</b>
Max.cont. 125	84 <b>615</b>	208 <b>611</b>	276 <b>607</b>	333 <b>602</b>	459 <b>595</b>	566 <b>588</b>	697 <b>572</b>
Max.int. 150	70 <b>743</b>	194 <b>740</b>	260 <b>735</b>	324 <b>727</b>	447 <b>717</b>	554 <b>706</b>	682 <b>682</b>

OMT 250 [251.8cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

	4	8	10	12	16	20	24
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Flow (L/min)	Pressure (MPa)						
	4	8	10	12	16	20	24
10	138 <b>38</b>	286 <b>38</b>	355 <b>37</b>	419 <b>36</b>	559 <b>34</b>	689 <b>32</b>	824 <b>31</b>
20	143 <b>76</b>	296 <b>75</b>	364 <b>74</b>	432 <b>72</b>	580 <b>70</b>	708 <b>67</b>	853 <b>62</b>
40	139 <b>156</b>	301 <b>154</b>	372 <b>152</b>	440 <b>149</b>	593 <b>146</b>	723 <b>142</b>	884 <b>134</b>
60	132 <b>237</b>	294 <b>236</b>	372 <b>233</b>	441 <b>229</b>	592 <b>224</b>	727 <b>219</b>	888 <b>207</b>
80	128 <b>317</b>	283 <b>316</b>	364 <b>314</b>	433 <b>308</b>	587 <b>303</b>	721 <b>299</b>	887 <b>284</b>
100	126 <b>396</b>	282 <b>394</b>	355 <b>391</b>	427 <b>387</b>	582 <b>381</b>	716 <b>373</b>	879 <b>359</b>
Max.cont. 125	116 <b>495</b>	260 <b>492</b>	340 <b>488</b>	414 <b>483</b>	568 <b>476</b>	703 <b>469</b>	864 <b>454</b>
Max.int. 150	88 <b>592</b>	242 <b>589</b>	320 <b>585</b>	397 <b>580</b>	552 <b>572</b>	686 <b>565</b>	847 <b>545</b>

OMT 315 [326.3cm³/rev.]

Pressure (MPa)

Max.cont. Max.int.

	4	8	10	12	16	20	24
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Flow (L/min)	Pressure (MPa)						
	4	8	10	12	16	20	24
10	184 <b>30</b>	363 <b>29</b>	453 <b>28</b>	545 <b>27</b>	734 <b>26</b>	891 <b>25</b>	1062 <b>23</b>
20	189 <b>60</b>	380 <b>59</b>	472 <b>58</b>	562 <b>56</b>	757 <b>54</b>	917 <b>52</b>	1109 <b>50</b>
40	191 <b>121</b>	381 <b>120</b>	484 <b>118</b>	570 <b>115</b>	774 <b>112</b>	954 <b>109</b>	1149 <b>104</b>
60	189 <b>183</b>	376 <b>181</b>	493 <b>179</b>	573 <b>175</b>	772 <b>172</b>	962 <b>168</b>	1154 <b>158</b>
80	179 <b>244</b>	369 <b>242</b>	479 <b>239</b>	565 <b>236</b>	768 <b>231</b>	954 <b>227</b>	1153 <b>217</b>
100	169 <b>305</b>	357 <b>304</b>	467 <b>301</b>	562 <b>298</b>	758 <b>294</b>	942 <b>289</b>	1143 <b>276</b>
Max.cont. 125	147 <b>380</b>	336 <b>378</b>	447 <b>375</b>	544 <b>371</b>	745 <b>367</b>	920 <b>362</b>	1127 <b>349</b>
Max.int. 150	119 <b>458</b>	318 <b>456</b>	432 <b>453</b>	526 <b>449</b>	713 <b>444</b>	894 <b>431</b>	1097 <b>425</b>

Torque (N•m) 552  
Speed (rpm) 572



Performance Data

OMT 400 [410.9cm³/rev.]

Pressure (MPa)

		Max.cont.			Max.int.			
		3	6	9	12	15	18	21
Flow (L/min)	10	176 <b>24</b>	367 <b>23</b>	560 <b>22</b>	715 <b>21</b>	885 <b>20</b>	1050 <b>19</b>	1209 <b>18</b>
	20	179 <b>49</b>	370 <b>48</b>	565 <b>47</b>	726 <b>44</b>	899 <b>42</b>	1071 <b>40</b>	1236 <b>38</b>
	40	176 <b>96</b>	370 <b>95</b>	567 <b>93</b>	733 <b>90</b>	919 <b>87</b>	1091 <b>83</b>	1263 <b>79</b>
	60	174 <b>145</b>	361 <b>143</b>	563 <b>139</b>	729 <b>135</b>	920 <b>131</b>	1095 <b>127</b>	1269 <b>121</b>
	80	166 <b>193</b>	353 <b>191</b>	553 <b>188</b>	719 <b>184</b>	912 <b>180</b>	1084 <b>176</b>	1263 <b>170</b>
	100	150 <b>242</b>	339 <b>240</b>	538 <b>238</b>	708 <b>234</b>	896 <b>228</b>	1067 <b>224</b>	1252 <b>218</b>
	Max.cont.	125	135 <b>302</b>	309 <b>300</b>	524 <b>298</b>	688 <b>294</b>	873 <b>289</b>	1045 <b>285</b>
Max.int.	150	126 <b>364</b>	292 <b>362</b>	508 <b>358</b>	666 <b>354</b>	852 <b>350</b>	1020 <b>346</b>	1197 <b>339</b>

OMT 500 [523.6cm³/rev.]

Pressure (MPa)

		Max.cont.			Max.int.			
		3	6	9	12	14	16	18
Flow (L/min)	10	222 <b>18</b>	451 <b>18</b>	692 <b>18</b>	892 17	1050 <b>16</b>	1193 <b>15</b>	1340 <b>13</b>
	20	231 <b>37</b>	464 <b>36</b>	714 <b>35</b>	918 34	1070 <b>33</b>	1220 <b>32</b>	1377 <b>30</b>
	40	230 <b>75</b>	466 <b>74</b>	727 <b>73</b>	941 72	1094 <b>70</b>	1244 <b>68</b>	1422 <b>64</b>
	60	225 <b>113</b>	457 <b>112</b>	714 <b>111</b>	941 109	1088 <b>107</b>	1245 <b>105</b>	1409 <b>101</b>
	80	213 <b>151</b>	431 <b>150</b>	696 <b>149</b>	927 147	1076 <b>145</b>	1244 <b>143</b>	1401 <b>138</b>
	100	194 <b>189</b>	420 <b>188</b>	680 <b>187</b>	901 185	1063 <b>183</b>	1224 <b>181</b>	1383 <b>177</b>
	Max.cont.	125	182 <b>237</b>	398 <b>236</b>	641 <b>235</b>	877 233	1024 <b>231</b>	1199 <b>229</b>
Max.int.	150	147 <b>284</b>	369 <b>283</b>	618 <b>282</b>	853 280	1004 <b>278</b>	1167 <b>276</b>	1325 <b>272</b>

OMT 630 [629.1cm³/rev.]

Pressure (MPa)

		Max.cont.			Max.int.			
		3	6	9	10.5	12	14	16
Flow (L/min)	10	233 <b>14</b>	520 <b>14</b>	795 <b>13</b>	902 <b>13</b>	1074 <b>13</b>	1194 <b>11</b>	1363 <b>11</b>
	20	237 <b>28</b>	554 <b>27</b>	837 <b>27</b>	953 <b>26</b>	1117 <b>26</b>	1239 <b>24</b>	1407 <b>22</b>
	40	239 <b>62</b>	553 <b>62</b>	860 <b>61</b>	987 <b>60</b>	1171 <b>59</b>	1308 <b>56</b>	1483 <b>54</b>
	60	223 <b>94</b>	544 <b>94</b>	863 <b>92</b>	978 <b>91</b>	1172 <b>90</b>	1318 <b>86</b>	1498 <b>82</b>
	80	220 <b>123</b>	537 <b>122</b>	854 <b>121</b>	965 <b>119</b>	1172 <b>118</b>	1314 <b>114</b>	1497 <b>110</b>
	100	208 <b>156</b>	522 <b>155</b>	832 <b>153</b>	945 <b>152</b>	1156 <b>150</b>	1303 <b>147</b>	1488 <b>142</b>
	Max.cont.	125	201 <b>196</b>	499 <b>196</b>	810 <b>194</b>	931 <b>192</b>	1137 <b>191</b>	1292 <b>187</b>
Max.int.	150	174 <b>233</b>	492 <b>232</b>	785 <b>231</b>	921 <b>230</b>	1121 <b>227</b>	1277 <b>223</b>	1454 <b>217</b>

OMT 800 [801.8cm³/rev.]

Pressure (MPa)

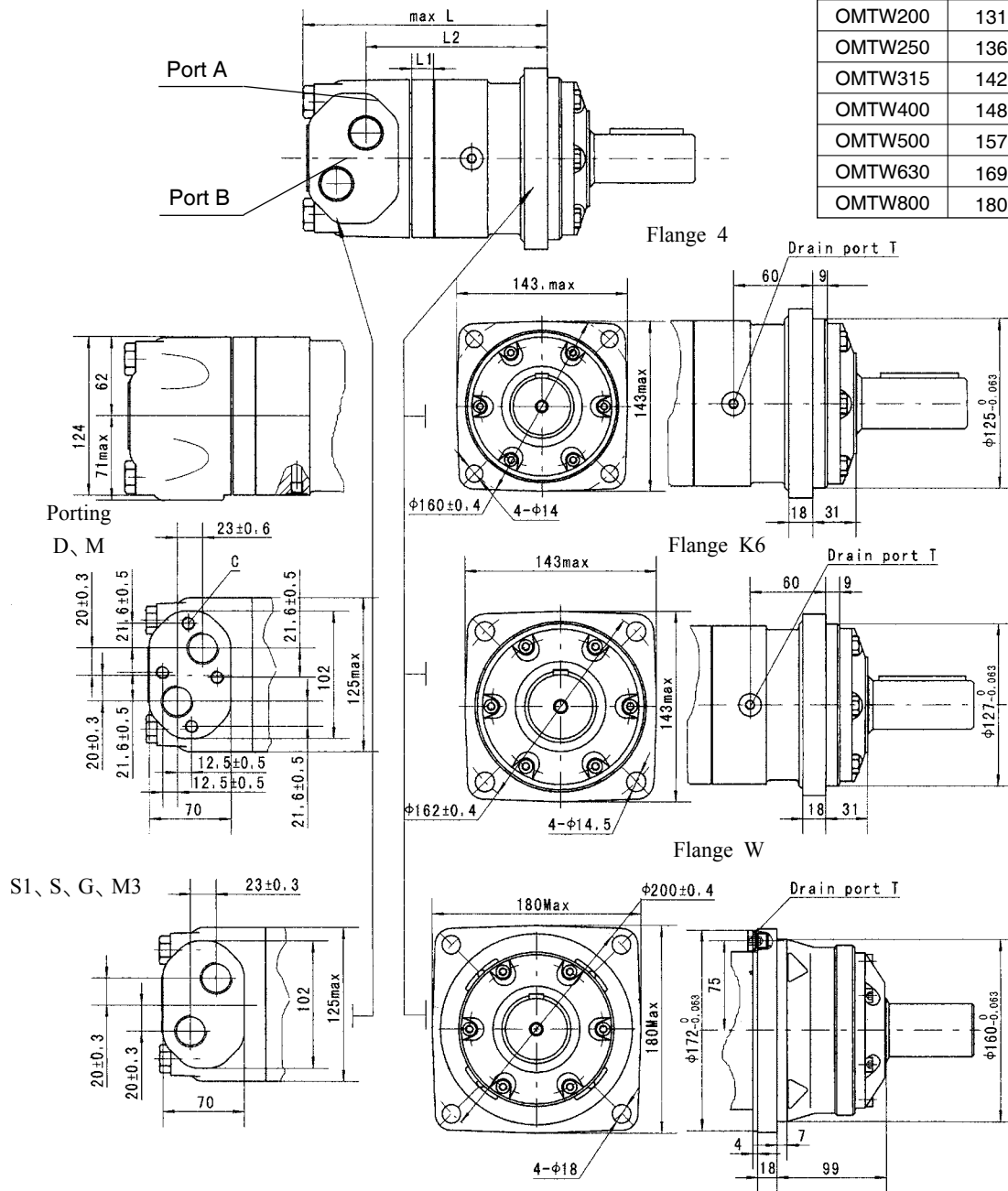
		Max.cont.			Max.int.		
		3	6	9	10.5	12.5	13
Flow (L/min)	10	346 <b>12</b>	677 <b>12</b>	1003 <b>11</b>	1159 <b>11</b>	1365 <b>11</b>	1390 <b>10</b>
	20	356 <b>24</b>	692 <b>24</b>	1034 <b>24</b>	1183 <b>23</b>	1404 <b>22</b>	1458 <b>18</b>
	40	365 <b>50</b>	703 <b>50</b>	1066 <b>49</b>	1236 <b>48</b>	1459 <b>46</b>	1516 <b>40</b>
	60	354 <b>74</b>	703 <b>73</b>	1060 <b>71</b>	1237 <b>71</b>	1464 <b>68</b>	1520 <b>63</b>
	80	332 <b>99</b>	686 <b>98</b>	1050 <b>98</b>	1226 <b>96</b>	1464 <b>93</b>	1514 <b>86</b>
	100	305 <b>125</b>	654 <b>123</b>	1025 <b>123</b>	1207 <b>121</b>	1445 <b>118</b>	1506 <b>110</b>
	Max.cont.	125	280 <b>154</b>	622 <b>153</b>	989 <b>153</b>	1181 <b>150</b>	1422 <b>149</b>
Max.int.	150	247 <b>185</b>	590 <b>184</b>	953 <b>183</b>	1156 <b>181</b>	1406 <b>179</b>	1476 <b>172</b>

Torque (N•m) 1121  
Speed (rpm) 227



OMT DIMENSIONS AND MOUNTING DATA

Model	L	L1	L2
OMTW160	127	17	77
OMTW200	131	21	81
OMTW250	136	14	86
OMTW315	142	20	91
OMTW400	148	27	98
OMTW500	157	35	106
OMTW630	169	47	118
OMTW800	180	58	129



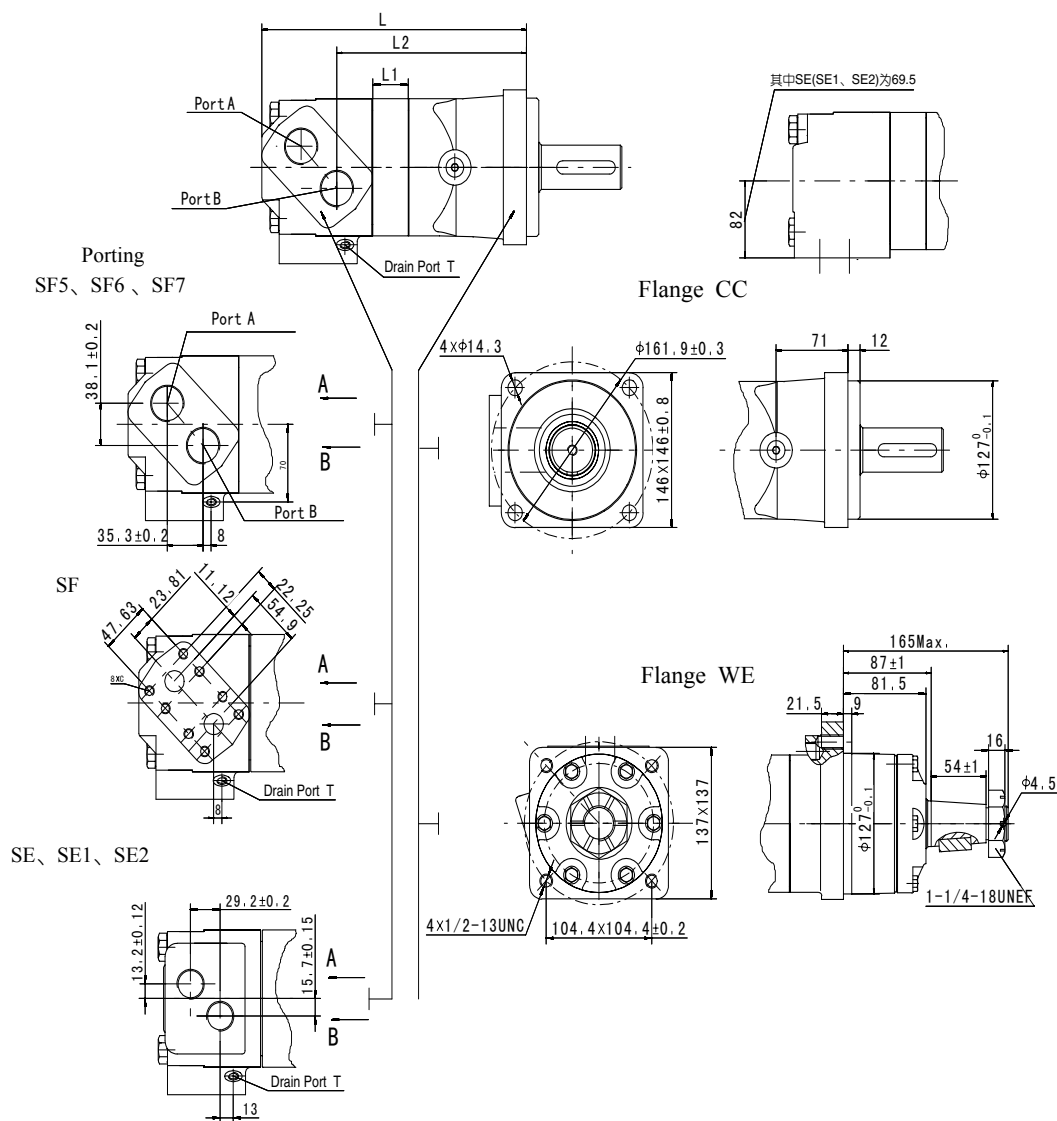
Model	L	L1	L2
OMT160	193	17	142.5
OMT200	197	21	146.5
OMT250	204	14	152.5
OMT315	210	20	158.5
OMT400	217	27	165.5
OMT500	225	35	173.5
OMT630	237	47	185.5
OMT800	248	58	196.5

Content	Code					
	D (depth)	M (depth)	S (depth)	G (depth)	M3 (depth)	S1 (depth)
P(A,B)	G3/4 (18)	M27 x 2 (18)	1-1/16-12UN (18)	G3/4 (18)	M27 x 2 (18)	1-1/16-12UN (18)
T	G1/4 (12)	M14 x 1.5 (12)	9/16-18UNF (12)	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)
C	4-M10(10)	4-M10(10)	--	--	--	--

Note: 1) The thickness of the stator and rotor for disp. from 160 to 200 is the dimension of L1 adding on 3mm.  
 2) The thickness of the stator and rotor for disp. from 250 to 800 is the dimension of L1 adding on 7mm.



OMTE DIMENSIONS AND MOUNTING DATA



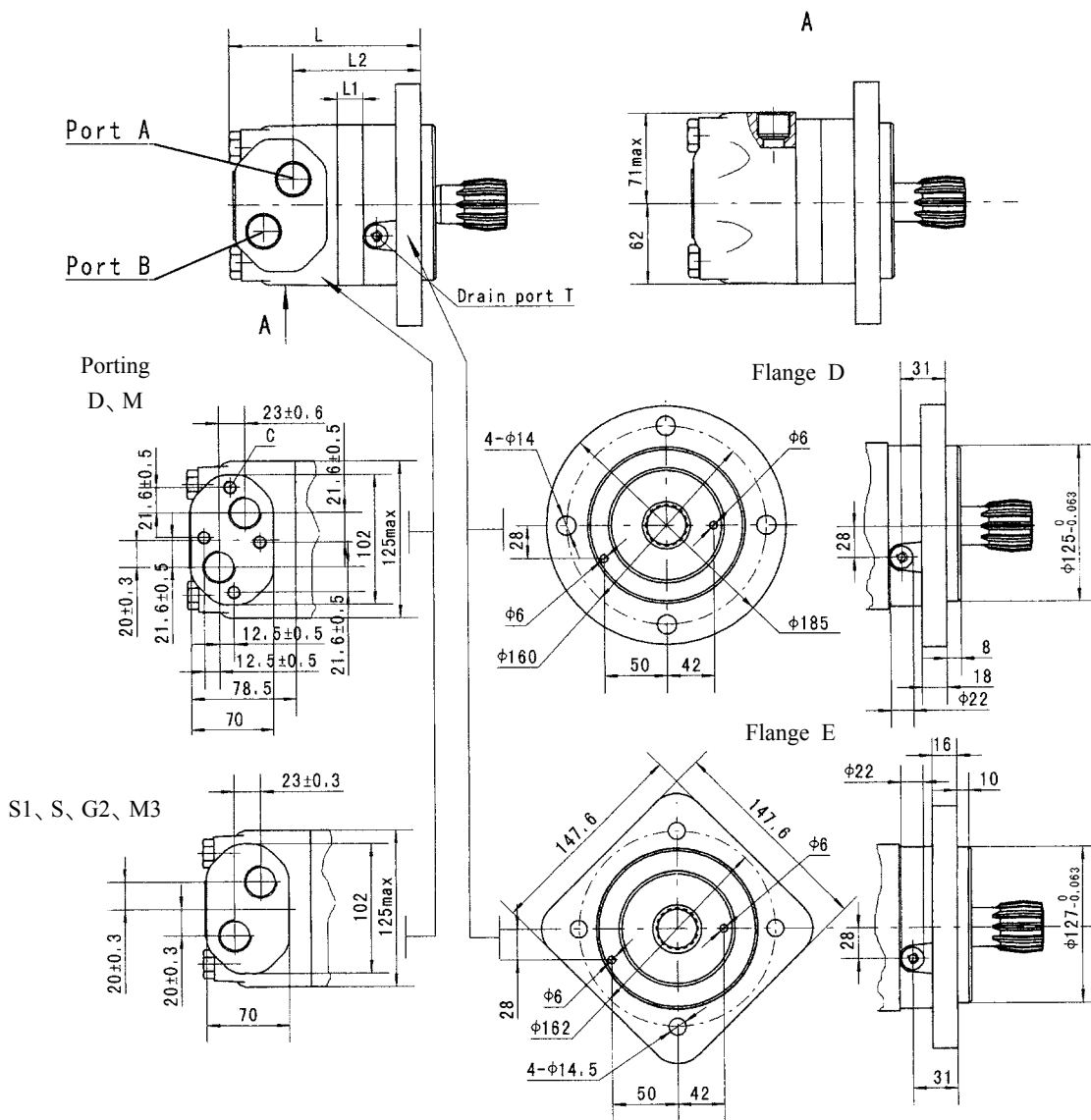
Model	L	L1	L2
OMTE230	238.5	12	164.5
OMTE250	240.5	14	166.5
OMTE315	246.5	20	172.5
OMTE400	253.5	27	179.5
OMTE500	261.5	35	187.5
OMTE630	273.5	47	199.5
OMTE800	284.5	58	210.5

Note:1)The data for the port of SF (SF5 and SF6and sf7 )  
 2)The data for the port of SE (SE1 and SE2) and flange WE:L-70 and L2-59.  
 3)The thickness of the stator and rotor for disp,from 315 to 800 is the dimension of L1 adding on 7mm.

Content	Code						
	SF5(depth)	SF6 (depth)	SF7 (depth)	SF (depth)	SE (depth)	SE1 (depth)	SE2(depth)
P(A,B)	1-5/16-12UN (18)	M33 x 2 (18)	G1 (18)	3/4" (18)	1-1/16-12UN (18)	1-1/16-12UN (18)	G3/4 (18)
T	7/16-20UNF (12)	M14 x 1.5 (12)	G1/4 (12)	7/16-20UNF (12)	9/16-18UNF (12)	7/16-20UNF (12)	G1/4 (12)
C	--	--	--	8 x 3/8-16UNC	--	--	--



OMTS DIMENSIONS AND MOUNTING DATA



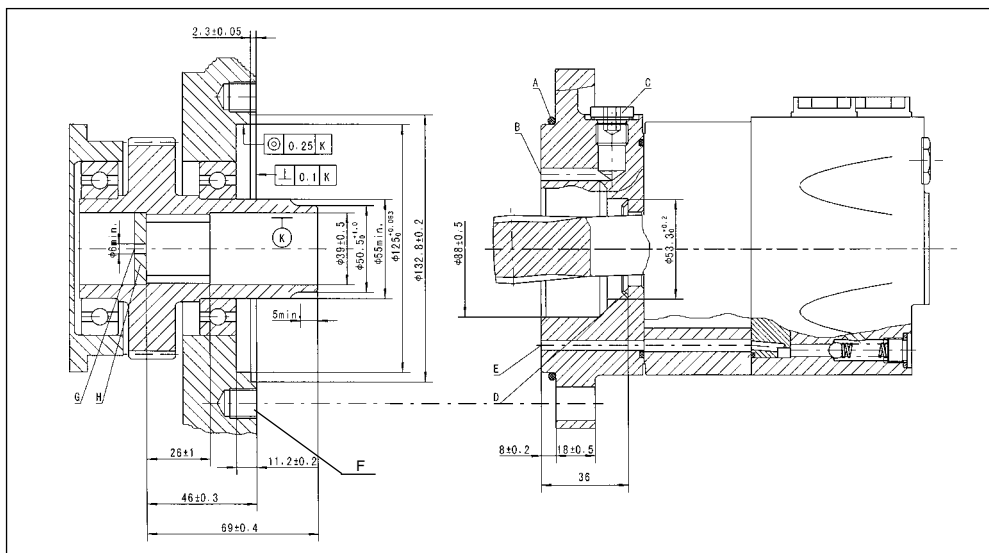
Model	L	L1	L2
OMT160	148	17	96.5
OMT200	152	21	100.5
OMT250	157	14	109
OMT315	163	20	115
OMT400	170	27	122
OMT500	178	35	130
OMT630	190	47	142
OMT800	201	58	153

Content	Code					
	D (depth)	M (depth)	S (depth)	G (depth)	M3 (depth)	S1 (depth)
Mounting P(A,B)	G3/4 (18)	M27 x 2 (18)	1-1/16-12UN (18)	G3/4 (18)	M27 x 2 (18)	1-1/16-12UN (18)
T	G1/4 (12)	M14 x 1.5 (12)	9/16-18UNF (12)	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF (12)
C	4-M10(10)	4-M10(10)	--	--	--	--

Note:1)The thickness of the stator and rotor for disp.from 160 to 200 is the dimension of L1 adding on 3mm.  
 2)The thickness of the stator and rotor for disp.from 250 to 800 is the dimension of L1 adding on 7mm.



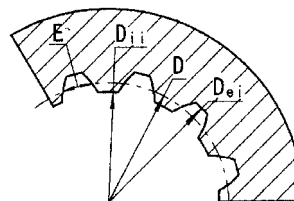
OMTS MOUNTING DATA



- A: O-ring:125x3
- B: External drain channel
- C: Drain connection G 1/4;12 mm deep
- D: Conical seal ring
- E: Internal drain channel
- F: M12;min. 18mm deep
- G: Oil circulation hole
- H: Hardened stop plate

INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

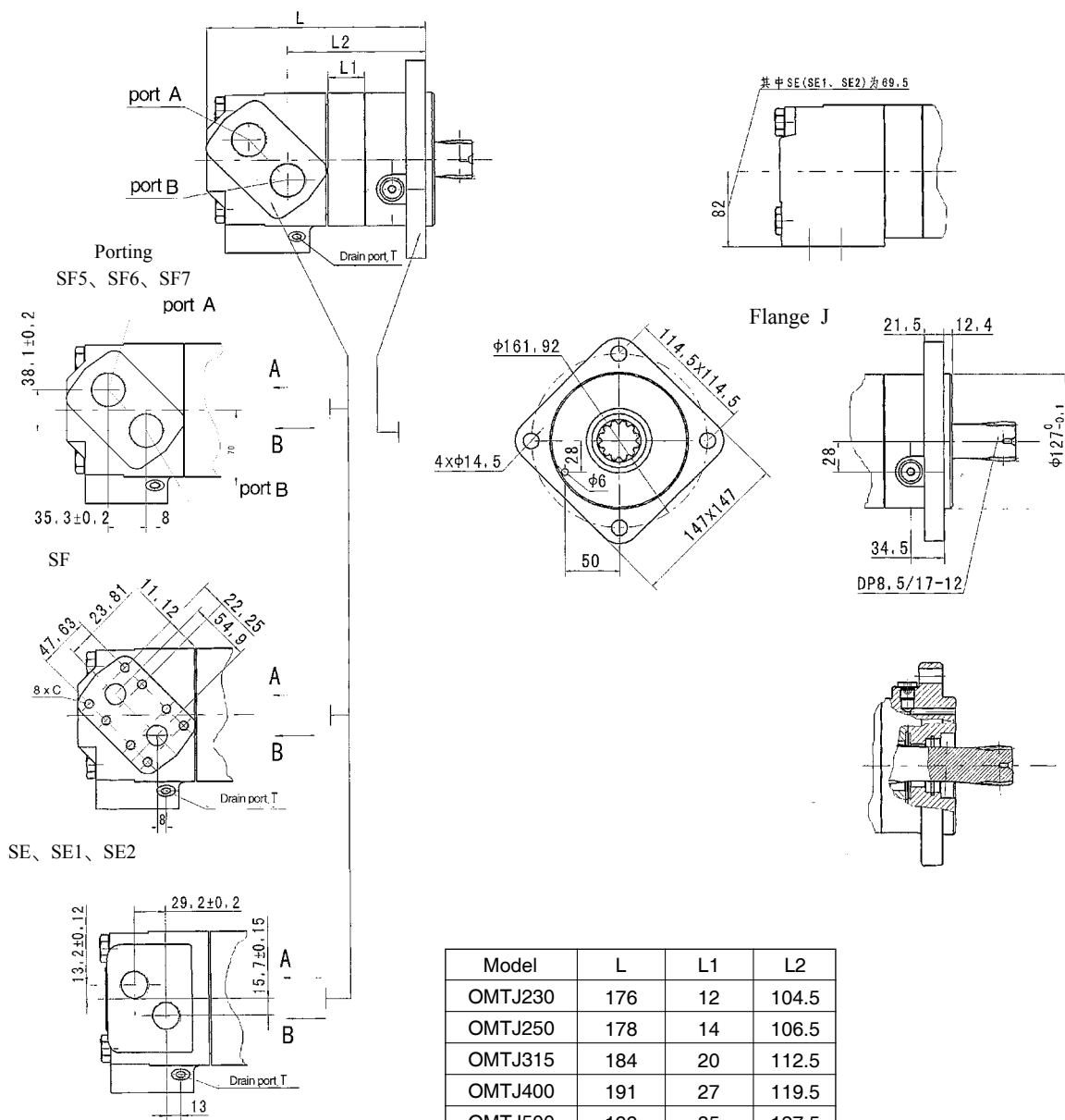
Fillet Root Side Fit		mm
Number of Teeth	Z	16
Diametral Pitch	DP	12/24
Pressure Angle	$\alpha_D$	30°
Pitch Dia.	D	$\phi 33.8656$
Major Dia.	$D_{ei}$	$\phi 38.4^{+0.25}_0$
Minor Dia.	$D_i$	$\phi 32.15^{+0.04}_0$
Space Width [Circular]	E	$4.516 \pm 0.037$



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



OMTJ DIMENSIONS AND MOUNTING DATA



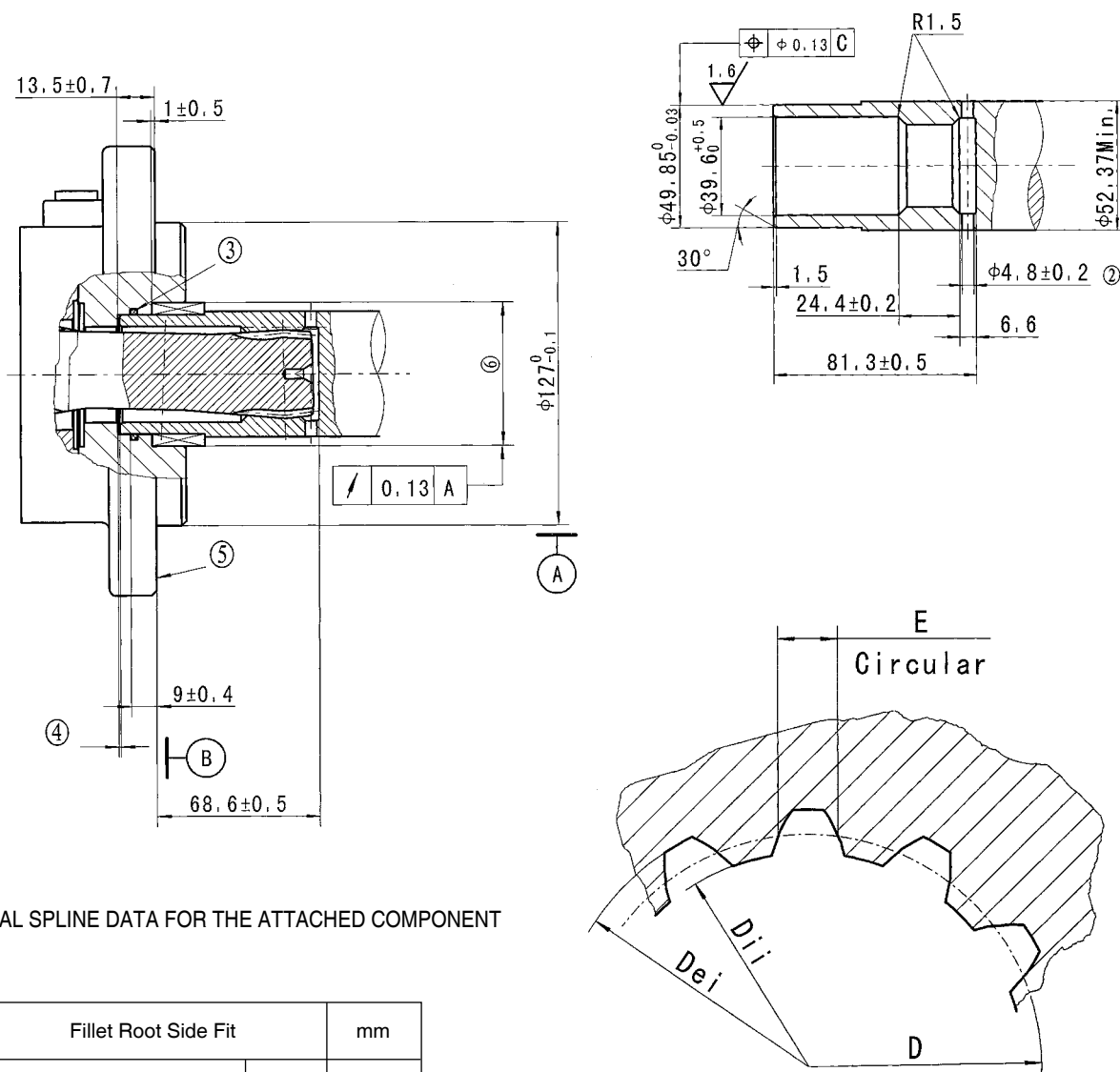
Model	L	L1	L2
OMTJ230	176	12	104.5
OMTJ250	178	14	106.5
OMTJ315	184	20	112.5
OMTJ400	191	27	119.5
OMTJ500	199	35	127.5
OMTJ630	211	47	139.5
OMTJ800	222	58	150.5

Note: 1) The data for the port of SF (SF5 and SF6 and SF7).  
 2) The data for the port of SE (SE1 and SE2) and flange WE: L-70 and L2-59.  
 3) The thickness of the stator and rotor is the dimension of L1 adding on 7mm.

Content	Code						
	SF5 (depth)	SF6 (depth)	SF7 (depth)	SF (depth)	SE (depth)	SE1 (depth)	SE2 (depth)
P(A,B)	1-5/16-12UN (18)	M33 x 2 (18)	G1 (18)	3/4" (18)	1-1/16-12UN (18)	1-1/16-12UN (18)	G3/4 (18)
T	7/16-20UNF (12)	M14 x 1.5 (12)	G1/4 (12)	7/16-20UNF (12)	9/16-18UNF (12)	7/16-20UNF (12)	G1/4 (12)
C	--	--	--	8 x 3/8-16UNC	--	--	--



OMTJ DIMENSIONS AND MOUNTING DATA



INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

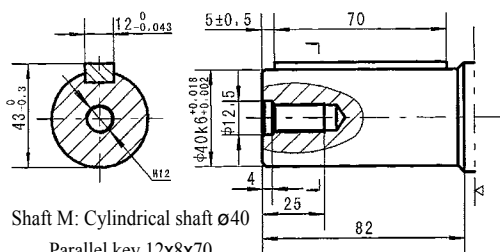
Fillet Root Side Fit		mm
Number of Teeth	Z	12
Diametral Pitch	DP	8.5/17
Pressure Angle	D	30°
Pitch Dia.	$\alpha_D$	$\phi 35.858823$
Major Dia.	$D_{ei}$	$\phi 38.97^{+0.20}_0$
Minor Dia.	$D_{ii}$	$\phi 33.3^{+0.18}_0$
Space Width [Circular]	E	$5.866 \pm 0.032$
Dimension between two pins( $\phi 4$ )	$M_e$	$26.929-27.084$

- ① Internal spline in mating part to be as follows:Material to be ASTM A304, 8620H. Carborize to a hardness of 60-64HRC 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 Similar to SAE "C" Four Bolt Flange
- ⑥ Counterbore designed to adapt to a standard sleeve bearing 50.010-50.038 [1.9689-1.9700] ID by 60.51-60.079 [2.3642-2.3653] O.D.(Oilite bronze sleeve bearing).
- C This surface to be diameter of output shaft.

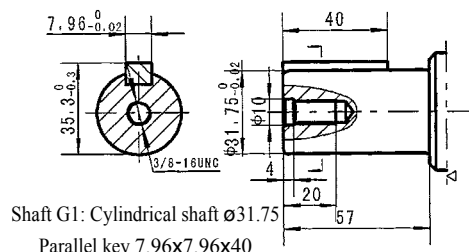




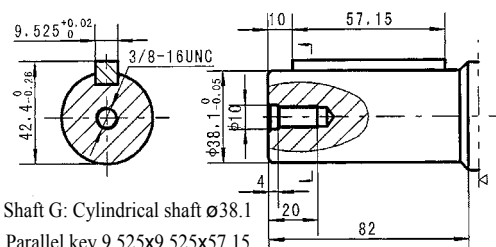
### SHAFT EXTENSIONS FOR OMT(E) MOTORS



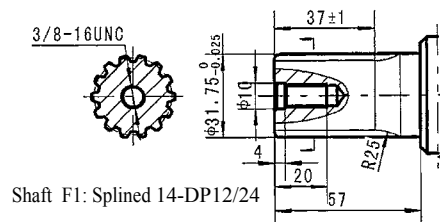
Shaft M: Cylindrical shaft  $\phi 40$   
Parallel key 12x8x70



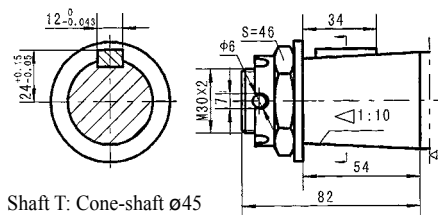
Shaft G1: Cylindrical shaft  $\phi 31.75$   
Parallel key 7.96x7.96x40



Shaft G: Cylindrical shaft  $\phi 38.1$   
Parallel key 9.525x9.525x57.15

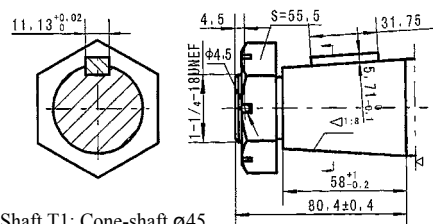


Shaft F1: Splined 14-DP12/24

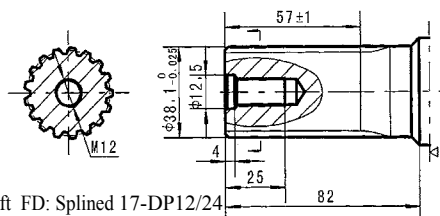


Shaft T: Cone-shaft  $\phi 45$   
Parallel key B12x8x28

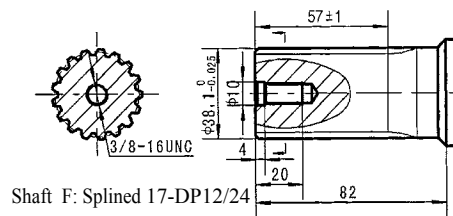
Tightening torque:  $500 \pm 10\text{Nm}$



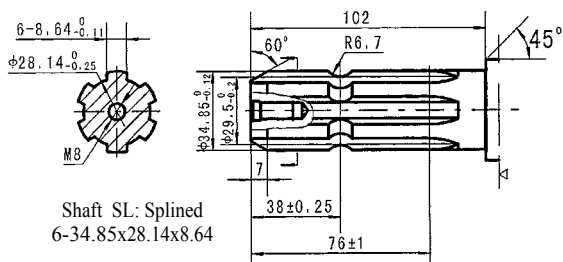
Shaft T1: Cone-shaft  $\phi 45$   
Parallel key 11.13x11.13x31.75  
Tightening torque:  $500 \pm 10\text{Nm}$



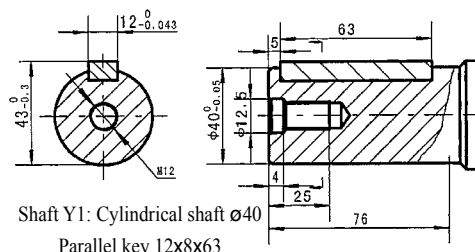
Shaft FD: Splined 17-DP12/24



Shaft F: Splined 17-DP12/24



Shaft SL: Splined  
6-34.85x28.14x8.64

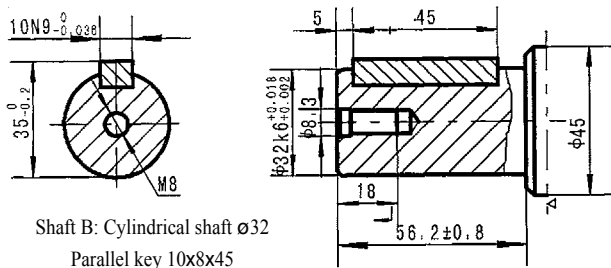


Shaft Y1: Cylindrical shaft  $\phi 40$   
Parallel key 12x8x63

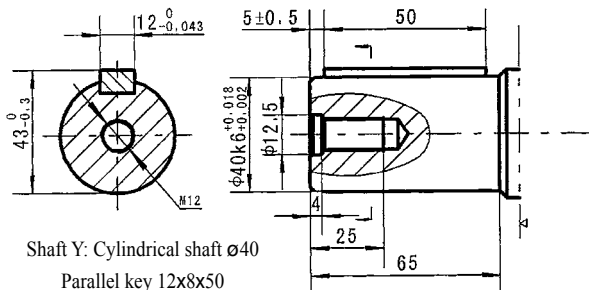
▷ Motor Mounting Surface



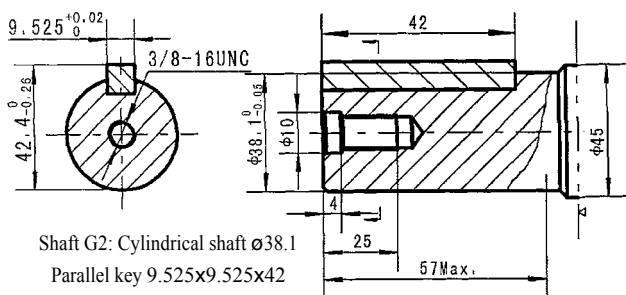
SHAFT EXTENSIONS FOR OMT(E) MOTORS



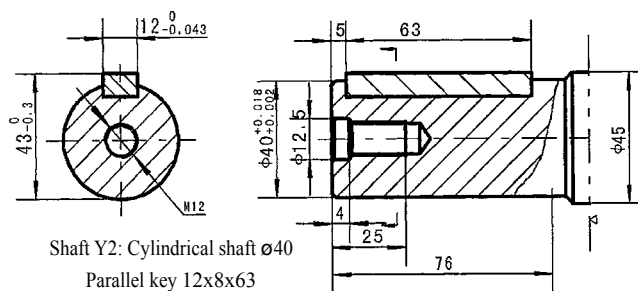
Shaft B: Cylindrical shaft  $\phi 32$   
Parallel key 10x8x45



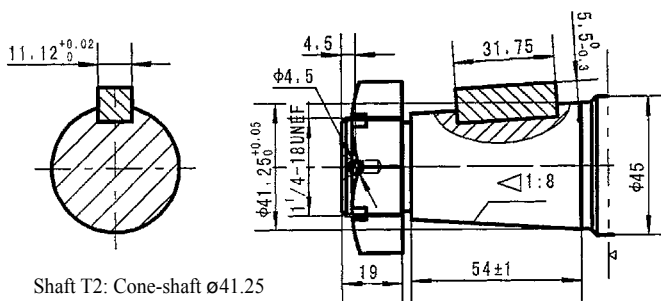
Shaft Y: Cylindrical shaft  $\phi 40$   
Parallel key 12x8x50



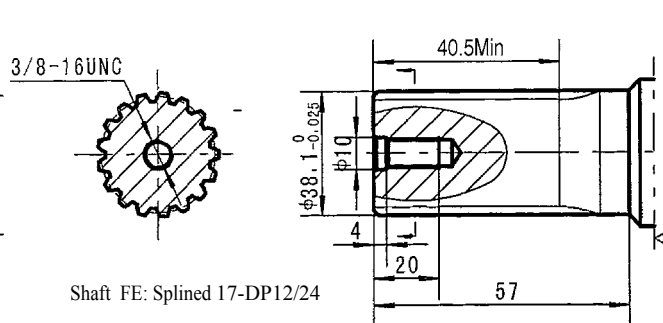
Shaft G2: Cylindrical shaft  $\phi 38.1$   
Parallel key 9.525x9.525x42



Shaft Y2: Cylindrical shaft  $\phi 40$   
Parallel key 12x8x63



Shaft T2: Cone-shaft  $\phi 41.25$   
Parallel key 11.13x11.13x31.75  
Tightening torque:  $500 \pm 10\text{Nm}$



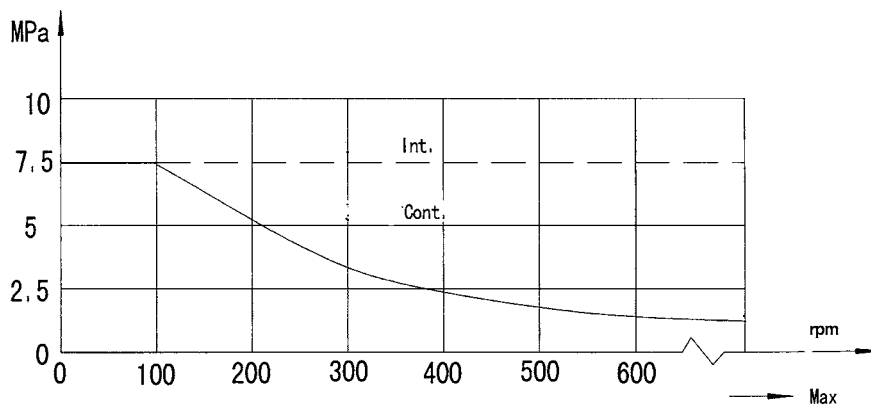
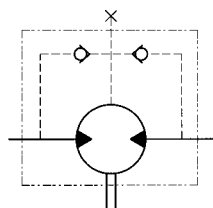
Shaft FE: Splined 17-DP12/24

▷ Motor Mounting Surface



### OMT Series Hydraulic Motor

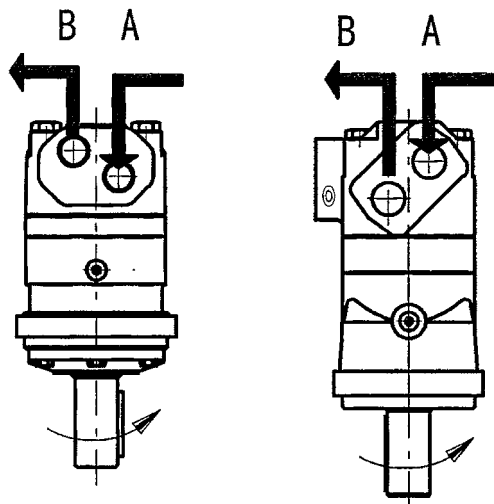
#### Permissible shaft seal pressure



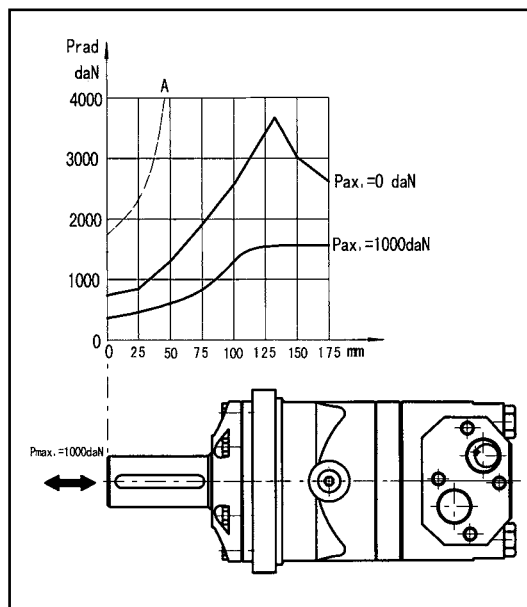
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

#### Standard 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.



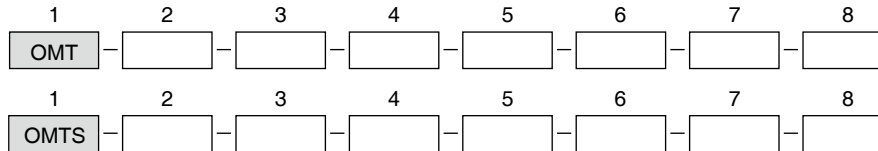
#### Axial and Radial forces



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.



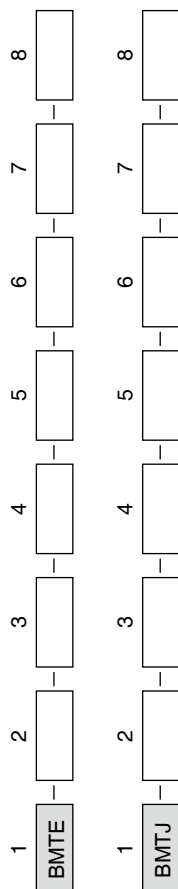
Order Information



Pos.1	2	3	4	5	6	7	8	
Code	Disp.	Flange	Output Shaft	Ports and Drain Port	Rotation Direction	Paint	Unusually Function	
OMT	160	4 4-Ø14 Square-flangeØ160, pilotØ125 × 9	M Shaft Ø40 , parallel key 12 × 8 × 70 G Shaft Ø38.1 ,parallel key 9.52 × 9.52 × 57.15 F Shaft Ø38.1 ,splined tooth 17-DP12/24 FD Shaft Ø38.1 ,splined tooth 17-DP12/24 T Cone-shaft 1:10 Ø45 ,parallel key B12 × 8 × 28 T1 Cone-shaft 1:8 Ø45 , parallel key 11.13 × 11.13 × 31.75	D G3/4 Manifold Mount,4-M10 , G1/4 M M27 × 2 Manifold Mount,4-M10, M14 × 1.5	Omit R	Standard Opposite	00 No paint Omit Blue B Black S Silver grey	Omit F LS Standard Free Running Low Speed
	200 250 315 400 500 630 800							
OMTS		D 4-Ø14 Circle-flange Ø160, pilot Ø125 × 8 E 4-Ø14.5 Square-flange Ø162, pilot Ø127 × 10	Omit Short shaft 16-DP12/24	M3 M27 × 2,M14 × 1.5				



Order Information



Pos.1	2	3	4	5	6	7	8	
Code	Disp.	Flange	Output Shaft	Ports and Drain Port	Rotation Direction	Paint	Unusually Function	
BMTE	230 250 315 400 500 630 800	CC: 4-Ø14.3 Square-flange Ø161.9, pilotØ127 × 12	G2 FE Y1 Y2 T2	SF SF5 SF6 SF7 SE SE1 SE2	Omit R Standard Opposite	00 Omit B S	Omit F LS Standard Free Running Low Speed	
			Shaft Ø38.1 ,parallel key 9.52 × 9.52 × 42					3/4" ,Manifold Mount,8-3/8-16UNC, 7/16-20UNF 1-5/16-12UN O-ring,7/16-20 UNF M33 × 2,M14 × 1.5 G1,G1/4 1-1/16-12UN O-ring,9/16-18UNF 1-1/16-12UN O-ring,7/16-20 UNF G3/4,G1/4
			Shaft Ø38.1 ,splined tooth 17-DP12/24					
			ShaftØ40,parallel key 12 × 8 × 63					
			ShaftØ40,parallel key 12 × 8 × 63					
			Cone-shaft 1:8 Ø41.25 , parallel key 11.13 × 11.13 × 31.75					
T3	Cone-shaft 1:8 Ø41.25 , parallel key 11.13 × 11.13 × 31.75							
BMTJ		J 4-Ø14.5 Square-flange Ø161.9 pilot Ø127 × 12.4	Omit Short shaft 12-DP8.5/17					

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 .



## OMV SERIES HYDRAULIC MOTOR

OMV series motor adapt the advanced Geroler gear set designed 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 Specifaion

Type		OMV 315	OMV 400	OMV 500	OMV 630	OMV 800	OMV 1000
Geometric displacement (cm <sup>3</sup> /rev.)		333	419	518	666	801	990
Max. speed (rpm)	cont.	510	500	400	320	250	200
	int.	630	600	480	380	300	240
Max. torque (N•m)	cont.	920	1180	1460	1660	1880	2015
	int.	1110	1410	1760	1940	2110	2280
	peak	1290	1640	2050	2210	2470	2400
Max. output (kW)	cont.	38.0	47.0	47.0	40.0	33.0	28.6
	int.	46.0	56.0	56.0	56.0	44.0	40.0
Max. pressure drop (MPa)	cont.	20	20	20	18	16	14
	int.	24	24	24	21	18	16
	peak	28	28	28	24	21	18
Max. flow (L/min)	cont.	160	200	200	200	200	200
	int.	200	240	240	240	240	240
Weight (kg)		31.8	32.6	33.5	34.9	36.5	38.6

- \* 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

OMV 315 [333cm³/rev.]

Pressure (MPa)		Max.cont.		Max.int.		
3.5	7	10	14	18	20	24

Flow (L/min)	Pressure (MPa)						
	3.5	7	10	14	18	20	24
10	140	294	440	610	742	845	1000
	<b>26</b>	<b>24</b>	<b>23</b>	<b>22</b>	<b>20</b>	<b>17</b>	<b>14</b>
20	153	314	466	636	787	895	1070
	<b>55</b>	<b>54</b>	<b>53</b>	<b>52</b>	<b>51</b>	<b>48</b>	<b>44</b>
50	149	312	465	654	815	935	1112
	<b>145</b>	<b>144</b>	<b>142</b>	<b>140</b>	<b>137</b>	<b>133</b>	<b>127</b>
75	143	304	458	642	816	940	1119
	<b>220</b>	<b>218</b>	<b>215</b>	<b>211</b>	<b>207</b>	<b>202</b>	<b>195</b>
100	136	297	452	636	810	936	1108
	<b>294</b>	<b>292</b>	<b>290</b>	<b>287</b>	<b>283</b>	<b>278</b>	<b>270</b>
125	123	286	442	626	799	921	1093
	<b>368</b>	<b>366</b>	<b>364</b>	<b>361</b>	<b>357</b>	<b>352</b>	<b>345</b>
150	114	275	435	615	788	906	1078
	<b>445</b>	<b>443</b>	<b>441</b>	<b>437</b>	<b>430</b>	<b>422</b>	<b>410</b>
160	107	268	430	608	780	895	1070
	<b>475</b>	<b>473</b>	<b>470</b>	<b>466</b>	<b>460</b>	<b>452</b>	<b>439</b>
200	82	249	412	593	758	871	1047
	<b>596</b>	<b>594</b>	<b>590</b>	<b>584</b>	<b>576</b>	<b>565</b>	<b>544</b>

OMV 400 [419cm³/rev.]

Pressure (MPa)		Max.cont.		Max.int.		
3.5	7	10	14	18	20	24

Flow (L/min)	Pressure (MPa)						
	3.5	7	10	14	18	20	24
10	183	385	568	776	968	1101	1292
	<b>20</b>	<b>20</b>	<b>19</b>	<b>18</b>	<b>17</b>	<b>16</b>	<b>14</b>
20	196	398	590	815	1010	1152	1346
	<b>44</b>	<b>44</b>	<b>43</b>	<b>42</b>	<b>40</b>	<b>39</b>	<b>37</b>
50	200	402	603	842	1040	1186	1430
	<b>114</b>	<b>113</b>	<b>113</b>	<b>112</b>	<b>110</b>	<b>108</b>	<b>103</b>
75	195	394	596	838	1043	1188	1432
	<b>175</b>	<b>173</b>	<b>170</b>	<b>166</b>	<b>163</b>	<b>1579</b>	<b>152</b>
100	172	385	593	827	1036	1184	1425
	<b>236</b>	<b>235</b>	<b>233</b>	<b>231</b>	<b>227</b>	<b>223</b>	<b>215</b>
125	167	374	583	816	1021	1177	1413
	<b>296</b>	<b>294</b>	<b>291</b>	<b>288</b>	<b>282</b>	<b>275</b>	<b>268</b>
150	158	361	559	801	1008	1165	1390
	<b>355</b>	<b>354</b>	<b>352</b>	<b>349</b>	<b>344</b>	<b>335</b>	<b>324</b>
175	143	346	553	784	989	1145	1377
	<b>416</b>	<b>414</b>	<b>411</b>	<b>407</b>	<b>403</b>	<b>396</b>	<b>388</b>
200	118	331	536	770	969	1128	1356
	<b>475</b>	<b>473</b>	<b>469</b>	<b>463</b>	<b>455</b>	<b>448</b>	<b>439</b>
240	82	301	506	740	943	1104	1332
	<b>571</b>	<b>569</b>	<b>565</b>	<b>548</b>	<b>539</b>	<b>530</b>	<b>520</b>

OMV 500 [518cm³/rev.]

Pressure (MPa)		Max.cont.		Max.int.		
3.5	7	10	14	18	20	24

Flow (L/min)	Pressure (MPa)						
	3.5	7	10	14	18	20	24
10	242	468	696	959	1190	1353	1607
	<b>17</b>	<b>17</b>	<b>16</b>	<b>16</b>	<b>15</b>	<b>13</b>	<b>11</b>
20	245	501	738	1003	1232	1394	1658
	<b>36</b>	<b>35</b>	<b>35</b>	<b>34</b>	<b>33</b>	<b>32</b>	<b>29</b>
50	240	500	758	1025	1270	1449	1743
	<b>93</b>	<b>92</b>	<b>91</b>	<b>90</b>	<b>88</b>	<b>85</b>	<b>80</b>
75	233	498	752	1030	1288	1475	1766
	<b>140</b>	<b>139</b>	<b>137</b>	<b>135</b>	<b>132</b>	<b>127</b>	<b>120</b>
100	228	491	748	1026	1289	1472	1760
	<b>189</b>	<b>187</b>	<b>185</b>	<b>182</b>	<b>178</b>	<b>173</b>	<b>166</b>
125	220	483	742	1014	1280	1460	1745
	<b>237</b>	<b>236</b>	<b>234</b>	<b>231</b>	<b>227</b>	<b>223</b>	<b>216</b>
150	201	465	723	1008	1250	1429	1736
	<b>287</b>	<b>286</b>	<b>284</b>	<b>281</b>	<b>276</b>	<b>270</b>	<b>260</b>
175	182	446	711	997	1238	1406	1715
	<b>335</b>	<b>334</b>	<b>332</b>	<b>329</b>	<b>325</b>	<b>320</b>	<b>310</b>
200	161	423	676	974	1218	1385	1697
	<b>384</b>	<b>383</b>	<b>381</b>	<b>378</b>	<b>374</b>	<b>366</b>	<b>354</b>
240	120	378	622	921	1172	1340	1650
	<b>461</b>	<b>459</b>	<b>457</b>	<b>454</b>	<b>450</b>	<b>444</b>	<b>432</b>

OMV 630 [666cm³/rev.]

Pressure (MPa)		Max.cont.		Max.int.		
3.5	6	9	12	15	18	21

Flow (L/min)	Pressure (MPa)						
	3.5	6	9	12	15	18	21
10	280	522	812	1100	1268	1549	1784
	<b>14</b>	<b>13</b>	<b>13</b>	<b>12</b>	<b>12</b>	<b>11</b>	<b>10</b>
20	288	552	839	1101	1315	1607	1864
	<b>28</b>	<b>28</b>	<b>27</b>	<b>27</b>	<b>26</b>	<b>24</b>	<b>22</b>
50	289	555	868	1137	1364	1682	1956
	<b>72</b>	<b>72</b>	<b>71</b>	<b>69</b>	<b>68</b>	<b>66</b>	<b>62</b>
75	270	548	863	1120	1352	1680	1964
	<b>109</b>	<b>108</b>	<b>106</b>	<b>104</b>	<b>102</b>	<b>99</b>	<b>94</b>
100	264	538	856	1093	1350	1674	1965
	<b>146</b>	<b>145</b>	<b>143</b>	<b>141</b>	<b>138</b>	<b>135</b>	<b>130</b>
125	251	516	837	1071	1336	1659	1950
	<b>184</b>	<b>183</b>	<b>181</b>	<b>179</b>	<b>177</b>	<b>173</b>	<b>168</b>
150	240	495	817	1063	1330	1650	1928
	<b>221</b>	<b>220</b>	<b>219</b>	<b>217</b>	<b>215</b>	<b>212</b>	<b>205</b>
175	210	485	796	1052	1300	1636	1908
	<b>259</b>	<b>258</b>	<b>257</b>	<b>254</b>	<b>250</b>	<b>246</b>	<b>241</b>
200	182	469	751	1018	1280	1611	1883
	<b>297</b>	<b>297</b>	<b>295</b>	<b>293</b>	<b>290</b>	<b>284</b>	<b>273</b>
240	130	416	712	978	1237	1563	1835
	<b>358</b>	<b>357</b>	<b>355</b>	<b>351</b>	<b>346</b>	<b>340</b>	<b>332</b>

Torque (N·m) 1340  
Speed (rpm) 444

cont.  
int.



Performance Data

OMV 800 [801cm<sup>3</sup>/rev.]

Pressure (MPa)		Max.cont.					Max.int.
2.5	5	8	10	13	16	18	

Flow (L/min)	OMV 800 [801cm <sup>3</sup> /rev.]						
	2.5	5	8	10	13	16	18
10	278 <b>11</b>	565 <b>10</b>	830 <b>10</b>	1095 <b>9</b>	1405 <b>8</b>	1712 <b>8</b>	1915 <b>7</b>
20	282 <b>23</b>	571 <b>22</b>	845 <b>22</b>	1150 <b>21</b>	1456 <b>20</b>	1783 <b>18</b>	1994 <b>16</b>
50	288 <b>60</b>	582 <b>59</b>	856 <b>57</b>	1162 <b>56</b>	1463 <b>54</b>	1790 <b>52</b>	2001 <b>48</b>
75	269 <b>91</b>	580 <b>90</b>	855 <b>89</b>	1165 <b>87</b>	1465 <b>84</b>	1786 <b>81</b>	1993 <b>77</b>
100	251 <b>122</b>	566 <b>121</b>	840 <b>120</b>	1140 <b>118</b>	1448 <b>115</b>	1767 <b>111</b>	1985 <b>105</b>
125	242 <b>153</b>	535 <b>152</b>	824 <b>150</b>	1118 <b>147</b>	1427 <b>143</b>	1739 <b>139</b>	1976 <b>133</b>
150	236 <b>185</b>	526 <b>183</b>	808 <b>181</b>	1102 <b>178</b>	1401 <b>174</b>	1714 <b>169</b>	1959 <b>163</b>
175	215 <b>216</b>	504 <b>214</b>	793 <b>212</b>	1079 <b>209</b>	1377 <b>206</b>	1698 <b>203</b>	1936 <b>196</b>
Max.cont. 200	197 <b>247</b>	468 <b>245</b>	765 <b>243</b>	1063 <b>240</b>	1362 <b>237</b>	1681 <b>232</b>	1913 <b>225</b>
Max.int. 240	118 <b>297</b>	388 <b>296</b>	713 <b>295</b>	1020 <b>293</b>	1318 <b>288</b>	1637 <b>283</b>	1838 <b>277</b>

cont.  
 int.

OMV 1000 [990cm<sup>3</sup>/rev.]

Pressure (MPa)		Max.cont.				Max.int.
2.5	5	7	10	14	16	

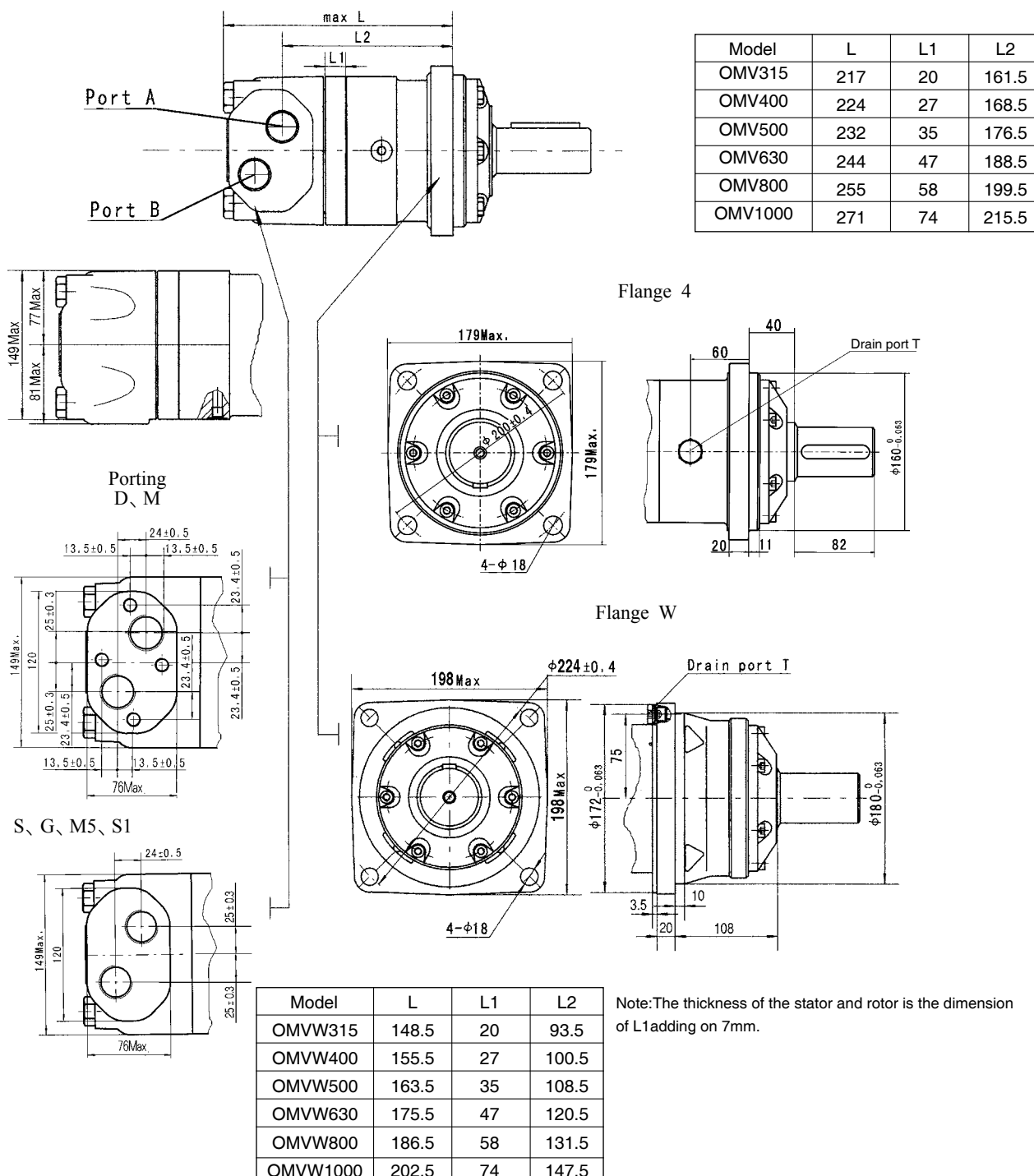
Flow (L/min)	OMV 1000 [990cm <sup>3</sup> /rev.]					
	2.5	5	7	10	14	16
10	312 <b>9</b>	640 <b>9</b>	971 <b>9</b>	1400 <b>8</b>	1978 <b>7</b>	2259 <b>6</b>
20	320 <b>28</b>	648 <b>27</b>	978 <b>26</b>	1410 <b>25</b>	1980 <b>23</b>	2270 <b>21</b>
50	326 <b>47</b>	655 <b>46</b>	992 <b>45</b>	1422 <b>43</b>	2015 <b>41</b>	2280 <b>38</b>
75	318 <b>72</b>	642 <b>71</b>	987 <b>70</b>	1425 <b>68</b>	2003 <b>66</b>	2276 <b>63</b>
100	309 <b>98</b>	634 <b>97</b>	983 <b>95</b>	1418 <b>93</b>	1994 <b>90</b>	2243 <b>86</b>
125	303 <b>123</b>	624 <b>122</b>	975 <b>120</b>	1409 <b>117</b>	1988 <b>114</b>	2224 <b>110</b>
150	278 <b>149</b>	602 <b>148</b>	961 <b>146</b>	1368 <b>144</b>	1963 <b>140</b>	2208 <b>133</b>
175	264 <b>174</b>	580 <b>172</b>	946 <b>170</b>	1338 <b>166</b>	1925 <b>162</b>	2159 <b>155</b>
Max.cont. 200	230 <b>199</b>	556 <b>196</b>	912 <b>193</b>	1300 <b>190</b>	1891 <b>185</b>	2105 <b>178</b>
Max.int. 240	166 <b>240</b>	513 <b>237</b>	867 <b>233</b>	1267 <b>229</b>	1825 <b>225</b>	2034 <b>218</b>

Torque (N•m) 1825  
 Speed (rpm) 225



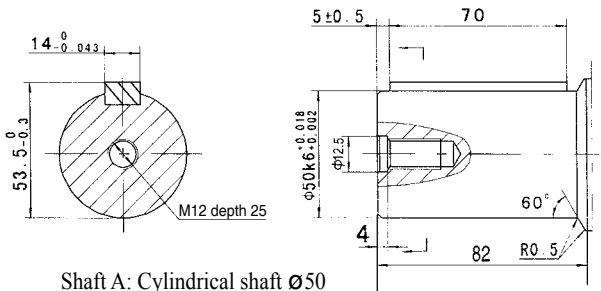


OMV DIMINSIONS AND MOUNTING DATA

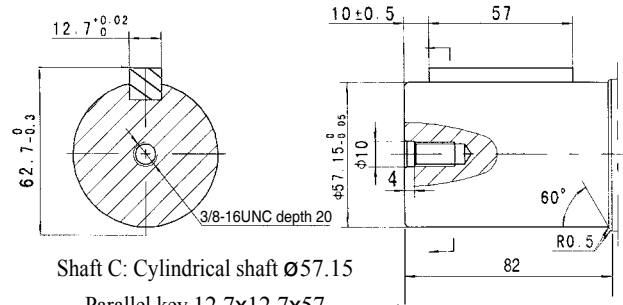


Content	Code					
	D (depth)	M (depth)	S (depth)	G (depth)	M5 (depth)	S1 (depth)
P(A,B)	G1 (18)	M33 x 2 (18)	1-5/16-12UN(18)	G1 (18)	M33 x 2 (18)	1-5/16-12UN(18)
T	G1/4 (12)	M14 x 1.5 (12)	9/16-18UNF(12)	G1/4 (12)	M14 x 1.5 (12)	7/16-20UNF(12)
C	4-M12 (10)	4-M12 (10)	--	--	--	--

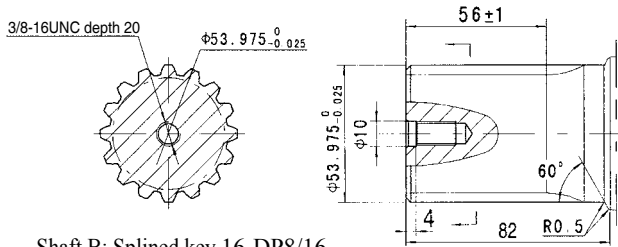
OMV SHAFT EXTENSIONS DIMENSIONS DATA



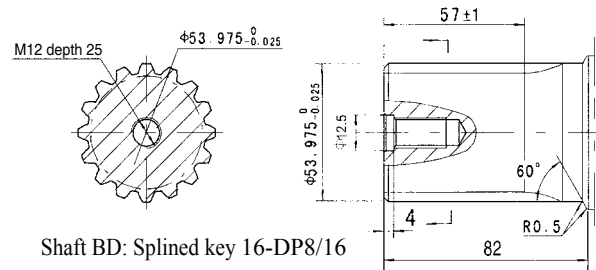
Shaft A: Cylindrical shaft Ø50  
Parallel key 14x9x70



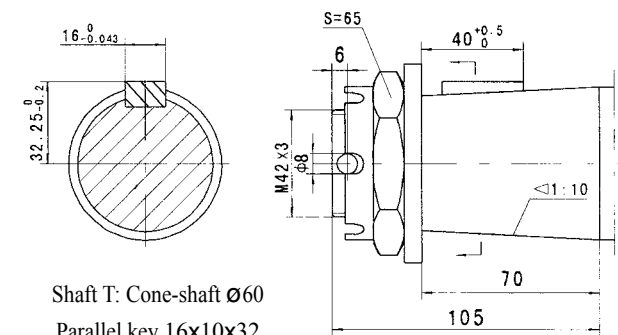
Shaft C: Cylindrical shaft Ø57.15  
Parallel key 12.7x12.7x57



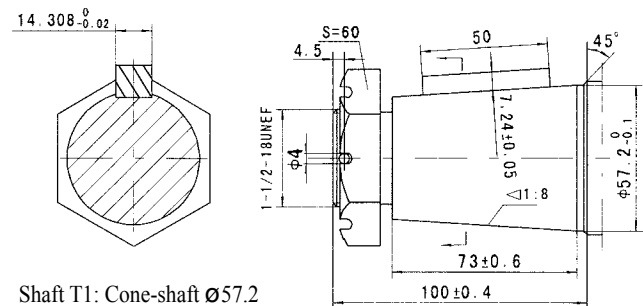
Shaft B: Splined key 16-DP8/16



Shaft BD: Splined key 16-DP8/16



Shaft T: Cone-shaft Ø60  
Parallel key 16x10x32  
Tightening torque: 750 ± 50Nm

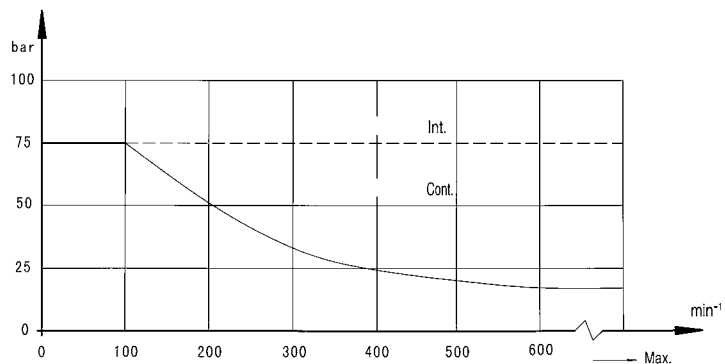
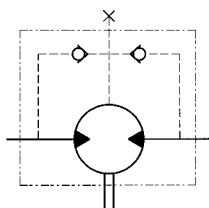


Shaft T1: Cone-shaft Ø57.2  
Parallel key 14.308x14.308x50  
Tightening torque: 750 ± 50Nm



## OMV Series Hydraulic Motor

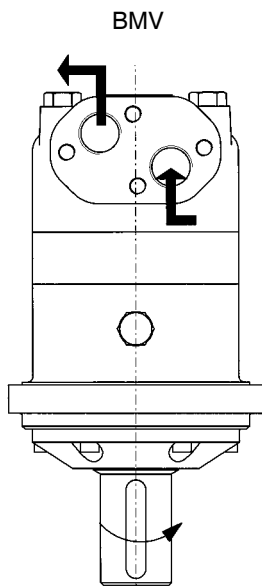
### Permissible shaft seal pressure



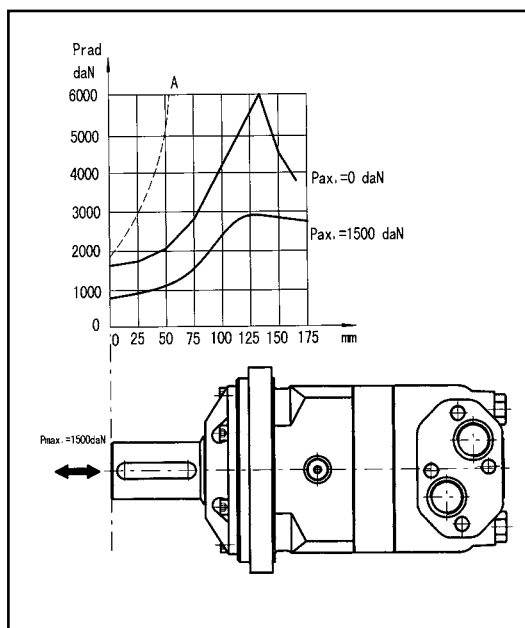
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

### Standard direction of shaft rotation: Standard

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



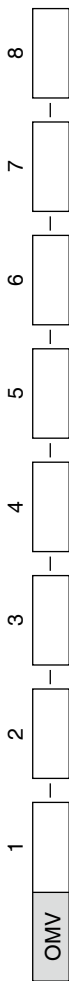
### Axial and Radial forces



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.



Order Information



Pos.1	2	3	4	5	6	7	8
Code	Displacement	Flange	Output shaft	Ports and drain port	Rotation direction	Paint	Unusually function
	315	4 4-Ø18 Square-flangeØ200, pilot Ø160 × 11	A Shaft Ø50 , parallel key 14 × 9 × 70	D G1 Manifold 4 × M12, G1/4 M M33 × 2 Manifold 4 × M12, M14 × 1.5 S 1-5/16-12UN, 9/16-18UNF G G1,G1/4 M5 M33 × 2, M14 × 1.5 S1 1-5/16-12UN(18), 7/16-20UNF(12)	Omit Standard R Opposite	00 No paint Blue Black Silver grey	Standard
	400		BD Shaft Ø53.975, splined key 16-DP8/16				
	500		B Shaft Ø53.975, splined key 16-DP8/16				
Omit	630		C Shaft Ø57.15, parallel key 12.7 × 12.7 × 57.15				
	800	W 4-Ø18 Wheel-flange Ø224, pilot Ø180 × 10	T Cone shaft Ø60, parallel key 16 × 10 × 32				
	1000		T1 Cone shaft Ø60, parallel key 14.308 × 14.308 × 50.8				

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.