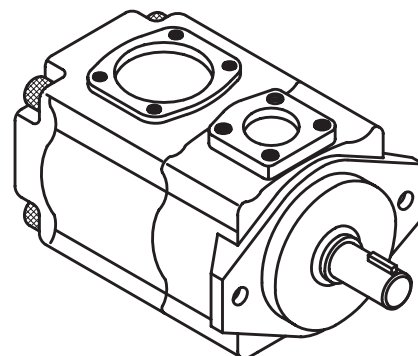


## KT6 Series Variable Displacement Vane Pumps

### Care in Application

1. Check speed range, pressure, temperature, fluid quality, viscosity and pump rotation.
2. Check inlet conditions of the pump, if it can accept application requirement.
3. Type of shaft : If it would support operating torque.
4. Coupling must be chosen to minimize pump shaft load (weight, misalignment).
5. Filtration : must be adequate for lowest contamination level.
6. Environment of pump : to avoid noise reflection, pollution and shocks.



### Larger Flow

Greater flow for the envelope size is achieved by increased displacement cam rings :  
at high permissible speeds with atmospheric inlet.

C → 5~31 GPM (18~100 ml/rev)

D → 14~50 GPM (66~158 ml/rev)

E → 42~85 GPM (132~268 ml/rev)

### Higher Pressure

Pressure ratings to 275 bar, reduce size and cost of actuators, valves and lines, give extended life at reduced pressure.

### Excellent Efficiency

Better efficiency under load, increase productivity, reduces heating and operating costs.

### Flexible Mounting

Up to 32 positions for double pumps and up to 128 for triple pumps, this reduces mounting costs and improves performance.

### Low Noise

Increase operator safety and acceptance.

### Conform To

SAE-J744c2-bolt standards and to ISO 3019-1 in the various keyed and splined shaft options offered.

### Advanced Cartridge

Provides for drop-in assemblies. They permit easy conversion or renewal of serviceable elements in minutes at minimum expense and risk of contamination. Pump rotation is easy to change by changing position of cam ring on port plate dowel pin hole.

### Allow Large Range

Viscosities from 860 to 10 cSt, permit colder starts and hotter running. The balanced design compensates for wear and temperature changes. At high viscosity or cold temperature the rotor to side plates gap is well lubricated and improves mechanical efficiency.

### Synthetic

Including phosphate esters, chlorinated hydrocarbons, water glycols and invert emulsions may be pumped at higher pressures and with longer service life by these pumps.

## Minimum & Maximum Speed, Pressure Ratings

Size	Series	Theoretical Displacement	Minimum Speed	Maximum Speed		Maximum Speed					
				HF-0 , HF-1 HF-2	HF-3 , HF-4 HF-5	HF-0 , HF-2		HF-1 , HF-4 , HF-5		HF-3	
		ml/rev	RPM	RPM	RPM	Int. bar	Cont. bar	Int. bar	Cont. bar	Int. bar	Cont. bar
C	005	18.0	600	2800	1800	275	240	210	175	175	140
	006	21.3									
	008	26.4									
	010	34.1									
	012	37.1									
	014	46.0									
	017	58.3									
	020	63.8									
	022	70.3									
	025	79.3									
	028	88.8									
	031	100.0		2500		210	160		160		
D	014	46.0	600	2500	1800	240	210	210	175	175	175
	017	58.2									
	020	66.0									
	024	79.5									
	028	89.7									
	031	98.3									
	035	111.0									
	038	120.3									
	042	136.0									
	045	145.0									
	050	158.0		2200		210	160		160		
E	042	132.3	600	2200	1800	240	210	210	175	175	140
	045	142.4									
	050	158.5									
	052	164.8									
	062	196.7									
	066	213.3									
	072	227.1									
	085	265.0				210	175	175	175	160	140

HF-0, HF-2 = Antiwear Petroleum Base

HF-1 = Non Antiwear Petroleum Base

HF-5 = Synthetic Fluids

HF-3 = Water in oil Emulsions

HF-4 = Water Glycols

For future information or if performance characteristics outlined above do not meet your own particular requirements, please contact us.

## Pump Selection

### Intermittent Pressure Rating

KT6 units may be operated intermittently at pressures higher than the recommended continuous rating when the time weighted average of pressure is less than or equal to the continuous duty pressure rating.

This intermittent pressure rating calculation is only valid if other parameters; speed, fluid, viscosity and contamination level are respected.

For total cycle time higher than 15 minutes please contact us.

Example : KT6C-014

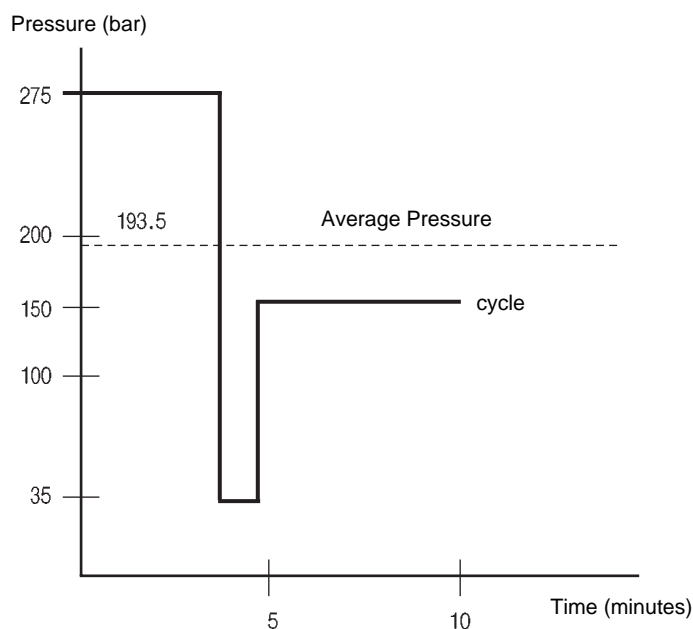
Duty cycle 4 min. at 275 bar

1 min. at 35 bar

5 min. at 160 bar

$$\frac{(4 \times 275) + (1 \times 35) + (5 \times 160)}{10} = 193.5 \text{ bar}$$

193.5 bar is lower than 240 bar allowed as continuous pressure for KT6-014 with HF-0 fluid.



## Description

### Application Advantages

The high pressure capability to 275 bar, in the small envelope, reduces installation costs and provides extended life at reduced pressure.

The high volumetric efficiency, typically 94%, reduces heat generation, and allows speeds down to 600 RPM at full pressure.

The high mechanical efficiency, typically 94%, reduces energy consumption.

The wide speed range from 600 RPM to 2800 RPM, combined with large size cartridge displacements, will optimize operation for the lowest noise level in the smallest envelope.

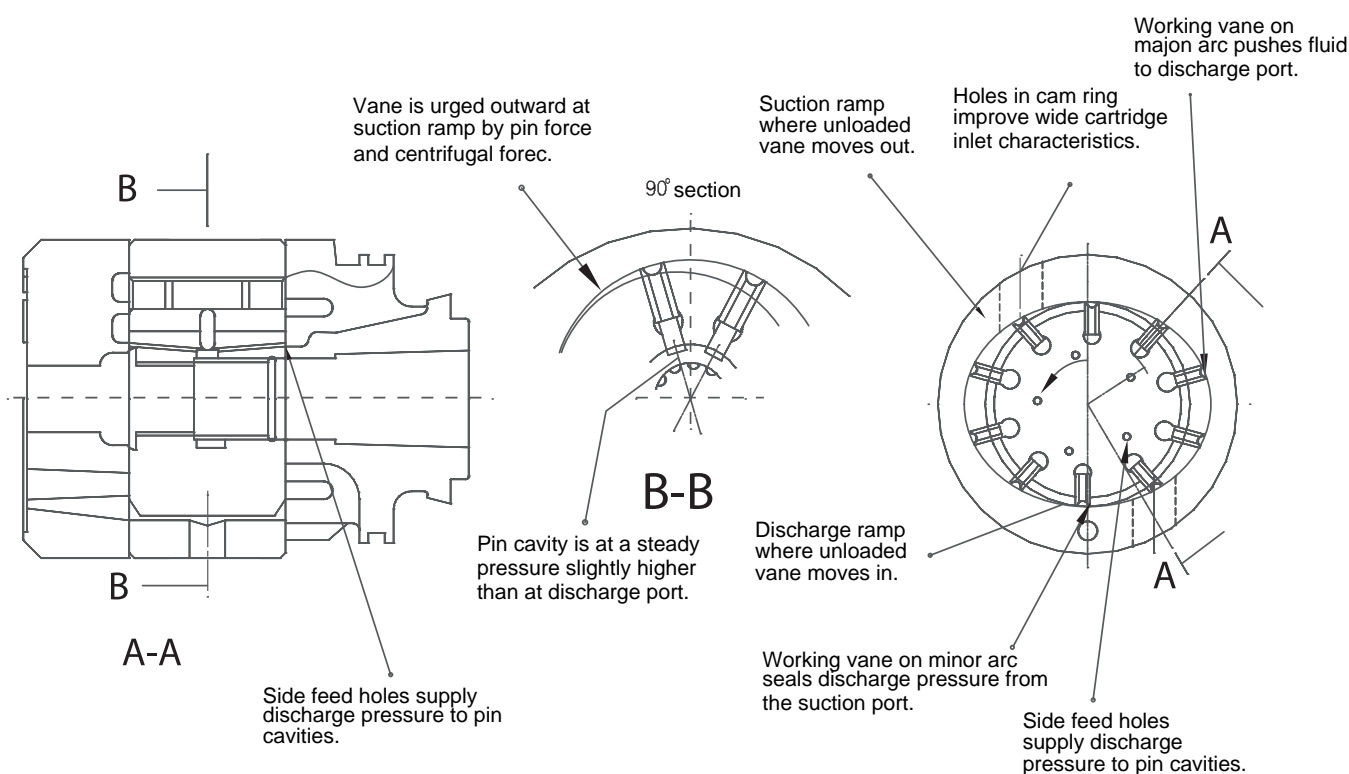
The low speed 600 RPM, low pressure, high viscosity 860 cSt allow application in cold environments with minimum energy consumption and without seizure risk.

The low ripple pressure  $\pm 2$  bar reduces piping noise and increases life time of other components the circuit.

The high resistance to particle contamination because of the double lip vane increases pump life.

The large variety of options (cam displacement, shaft, porting) allows customized installation.

### Description





## Shaft and Hydraulic Fluids

Recommended Fluids	Petroleum based antiwear R & O fluids. These fluids are the recommended fluids for KT6 series pumps. Maximum catalog ratings and performance data are based on operation with these fluids.	
Acceptable Alternate Fluids	The use of fluids other than petroleum based antiwear R & O fluids, requires that the maximum ratings of the pumps will be reduced. In some cases the minimum replenishment pressure must be increased. Consult specific for more details.	
Viscosity	Max (cold start, low speed&pressure) 860mm <sup>2</sup> /s (cSt) Max (full speed&pressure) 108mm <sup>2</sup> /s (cSt) Optimum (max. life) 30mm <sup>2</sup> /s (cSt) Min (full speed&pressure for HF-1,HF-3,HF-4&HF-5 fluids) 18mm <sup>2</sup> /s (cSt) Min (full speed&pressure for HF-0&HF-2 fluids) 0mm <sup>2</sup> /s (cSt)	
Viscosity Index	90° min, higher values extend range of operation temperatures. Maximum fluid temperature HF-0 373 (+100°C) HF-3 323 (+50°C) HF-5 343 (+70°C) Biodegradable fluids (esters & rapeseed base) 338 (+65°C) Minimum fluid temperature HF-0 255 (-18°C) HF-3 283 (+10°C) 253 (-20°C)	
Fluid Cleanliness	The fluid must be cleaned before and during operation to maintain contamination level of NAS1638 class8 (or ISO 18/14) or better. Filters with 25 micron (or better, B10>100) nominal ratings may be adequate but do not guarantee the required cleanliness levels. Suction strainers must be of adequate size to provide minimum inlet pressure specified. 100 mesh (149 micron) is the finest mesh recommended. Use oversize strainers or omit them all together on applications which require cold starts or use fire resistant fluids.	
Operating Temperatures and Viscosities	Operating temperatures are a function of fluid viscosities, fluid type, and the pump. Fluid viscosities should be selected to provide optimum viscosity at normal operating temperatures. For cold starts the pumps should be operated at low speed and pressure until fluid warms up to	
Water contamination in the Fluid	Maximum acceptable content of water. • 0.10% for mineral base fluids. • 0.05% for synthetic fluids, crankcase oils, biodegradable fluids. If amount of water is higher then it should be drained off the circuit.	
Couplings and splines Female splines	• The mating female spline should be free to float and find its own center. If both members are rigidly supported they must be aligned within 0.15 TIR or less to reduce fretting. The angular alignment of two spline axes must be less than $\pm 0.05$ per 25.4 radius. • The coupling spline must be lubricated with a lithium molydisulfide grease or a similar lubricant. • The coupling must be hardened to a hardness between 27 and 45 R.C. • The female spline must be made to conform to the Class 1 fit as described in SAE-J498b. This is described as a Flat Root Side Fit.	
Keyed Shafts	SEWON supplies the KT6 series keyed shaft pumps with high strength heat-treated keys. Therefore, when installing or replacing these pumps, the heat-treated keys must be used in order to insure maximum life in the application. If the key is replaced it must be a heat-treated key between 27 and 34 R.C. hardness. The corners of the keys must be chamfered from 0.76 to 1.02 at 45° to clear radii in the key way.	
Note	Alignment of key shafts must be within tolerances given for splined shafts.	
Shaft Loads	These products are designed primarily for coaxial drives which do not impose axial or side loading on the shaft. Consult specific sections for more details.	

## Ordering Code - KT6C Series

Model No. KT6C - 014 - 1 R 00 - B 1

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⑦

① - Series

② - Cam Ring (delivery at 0 bar & 1500 r.p.m)

005=25.8 l/min    017=87.4 l/min  
006=31.9 l/min    020=95.7 l/min  
008=39.6 l/min    022=105.4 l/min  
010=51.1 l/min    025=118.9 l/min  
012=55.6 l/min    028=133.2 l/min  
014=69.0 l/min    031=150.0 l/min

③ - Type of shaft

1= keyed (SAE B)  
2= keyed (no SAE)  
3= splined (SAE B)  
4= splined (SAE EE)

④ - Direct. of rotation (view on shaftend)

R= clockwise

L= counter-clockwise

⑤ - Port combination

00= standard

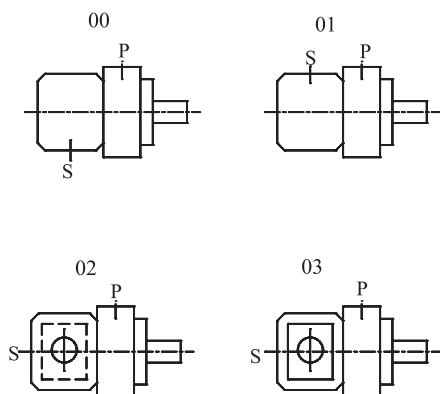
⑥ - Design Number

⑦ - Seal class

1=S1 (for mineral oil)

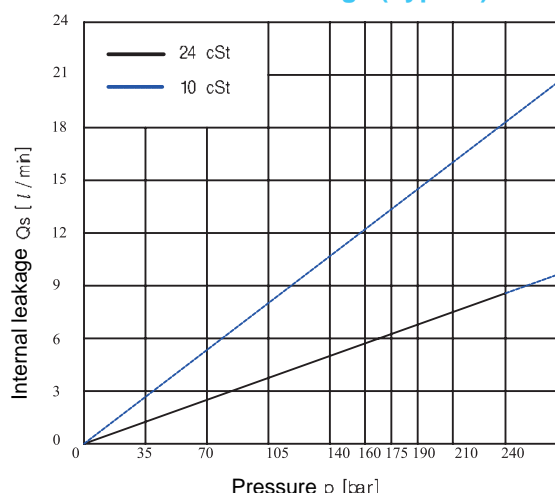
4=S4 (for the resistant fluids)

5=S5 (for mineral oil and fire resistant fluids)



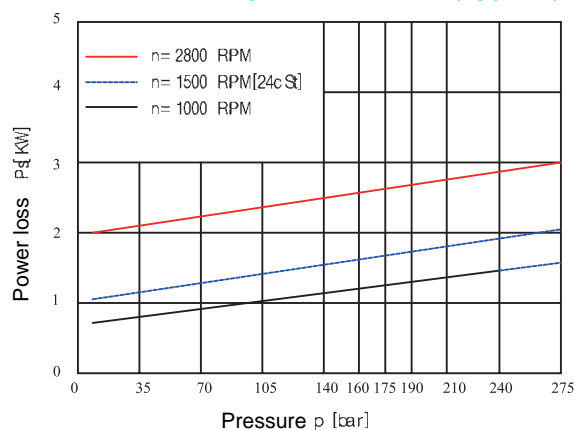
P = Pressure port    S = Suction port

### Internal Leakage (Typical)

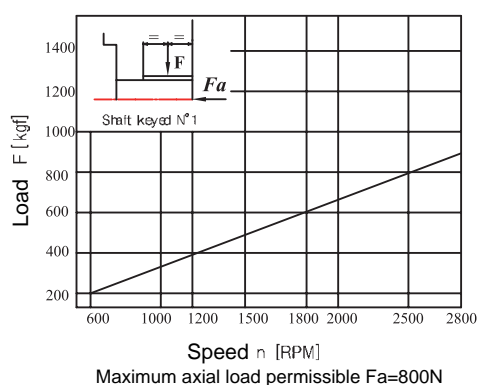


Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow.

### Power Loss Hydromechanics (Typical)

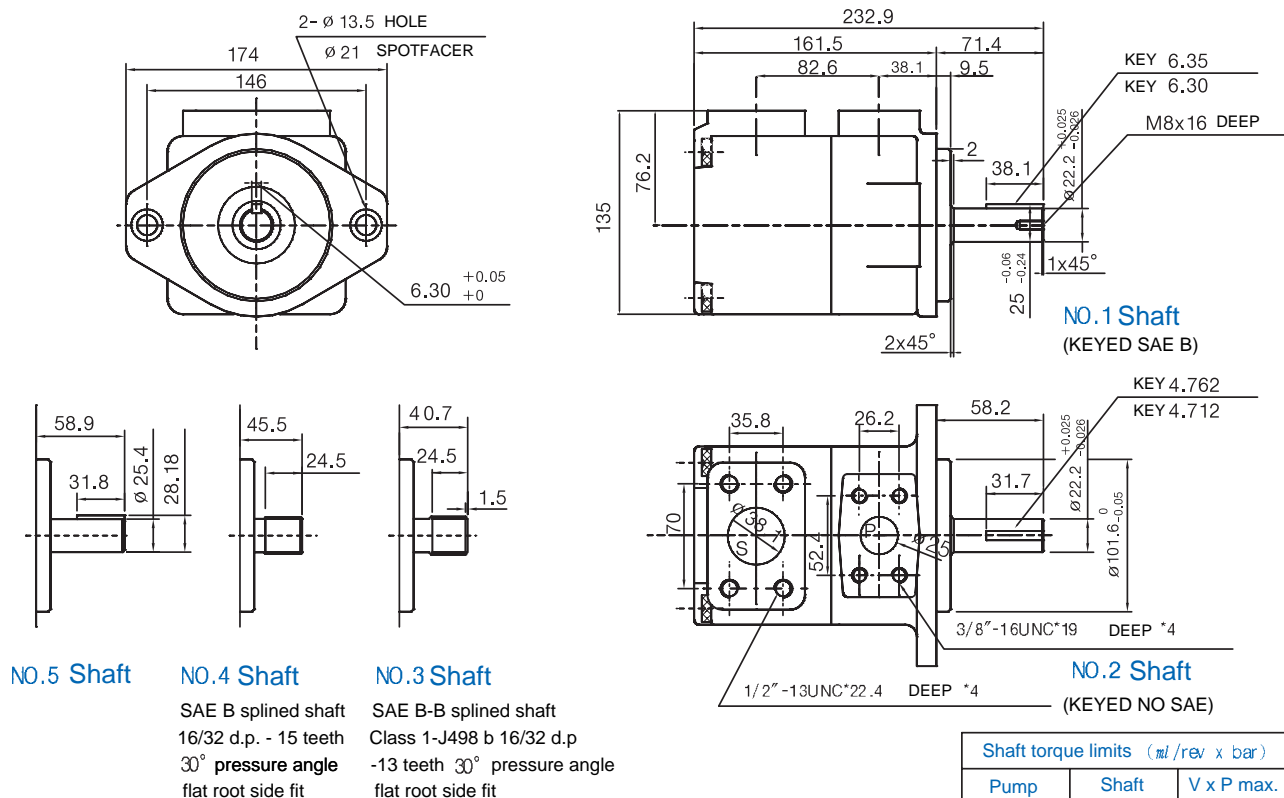


### Permissible Radial load



Maximum axial load permissible Fa=800N

## Dimensions & Operating Characteristics - Weight : 15.7 kg



Shaft torque limits (ml/rev x bar)		
Pump	Shaft	V x P max.
KT6C	1	16500
	2	14300
	3	20600
	5	20600

## Operating Characteristics - Typical [24 cSt]

No.	Volumetric Displacement Vp	Speed n[R.P.M.]	Flow Q <sub>L</sub> /min)			Input power P(KW)		
			p= 0bar	p= 140bar	p= 240bar	p= 7bar	p= 140bar	p= 240bar
005	18.0cm <sup>3</sup> /rev	1000	18.0	14.0	12.0	1.0	5.2	8.5
		1500	27.0	21.0	18.0	1.4	7.5	12.2
006	21.3cm <sup>3</sup> /rev	1000	21.3	16.3	12.8	1.1	6.0	10.0
		1500	31.9	26.9	23.4	1.5	8.9	14.7
008	26.4cm <sup>3</sup> /rev	1000	26.4	21.4	17.9	1.2	7.2	12.1
		1500	39.6	34.6	31.1	1.6	10.7	17.7
010	34.1cm <sup>3</sup> /rev	1000	34.1	29.1	25.6	1.3	8.9	15.1
		1500	51.1	46.1	42.6	1.7	13.4	22.3
012	37.1cm <sup>3</sup> /rev	1000	37.1	32.1	28.6	1.3	9.6	16.3
		1500	55.6	50.6	47.1	1.7	14.4	24.1
014	46.0cm <sup>3</sup> /rev	1000	46.0	41.0	37.5	1.4	11.7	19.9
		1500	69.0	64.0	60.5	1.9	17.6	29.5
017	58.3cm <sup>3</sup> /rev	1000	58.3	53.3	49.8	1.6	14.5	24.8
		1500	87.4	82.4	78.9	2.1	21.9	36.9
020	63.8cm <sup>3</sup> /rev	1000	63.8	58.8	55.3	1.6	15.81	27.0
		1500	95.7	90.7	87.2	2.2	23.82	40.2
022	70.3cm <sup>3</sup> /rev	1000	70.3	65.3	61.8	1.7	17.3	29.6
		1500	105.4	100.4	96.9	2.3	26.1	44.1
025*	79.3cm <sup>3</sup> /rev	1000	79.3	74.3	70.8	1.8	19.3	33.2
		1500	118.9	113.9	110.4	2.5	29.2	49.5
028*	88.8cm <sup>3</sup> /rev	1000	88.8	83.8	81.4**	1.9	21.9	32.5**
		1500	133.2	128.2	125.8**	2.8	32.7	48.5**
031*	100.0cm <sup>3</sup> /rev	1000	100.0	95.0	92.6**	2.0	24.4	36.4**
		1500	150.0	145.0	142.6**	2.8	36.5	54.4**

Port connection can be furnished with metric threads.

## Ordering Code - KT6D Series

Model No. KT6D - 045 - 1 R 00 - B 1

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① - Series

② - Cam Ring (delivery at 0 bar & 1500 r.p.m)

014= 71.4 l /min    035=166.5 l /min

017= 87.5 l /min    038=180.4 l /min

020= 99.0 l /min    042=204.0 l /min

024=119.3 l /min    045=218.5 l /min

028=134.5 l /min    050=237.0 l /min

031=147.4 l /min

③ - Type of shaft

1= keyed (SAE B)

2= keyed (no SAE)

3= splined (SAE B)

4= splined (SAE EE)

④ - Direct. of rotation (view on shaftend)

R= clockwise

L= counter-clockwise

⑤ - Port combination

00= standard

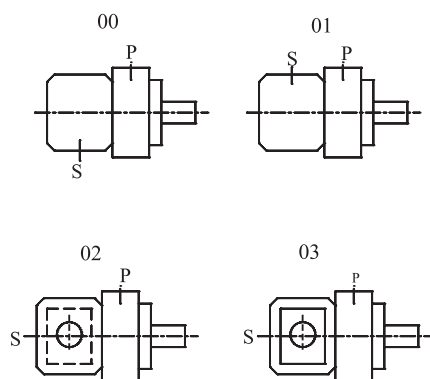
⑥ - Design Number

⑦ - Seal class

1=S1 (for mineral oil)

4=S4 (for the resistant fluids)

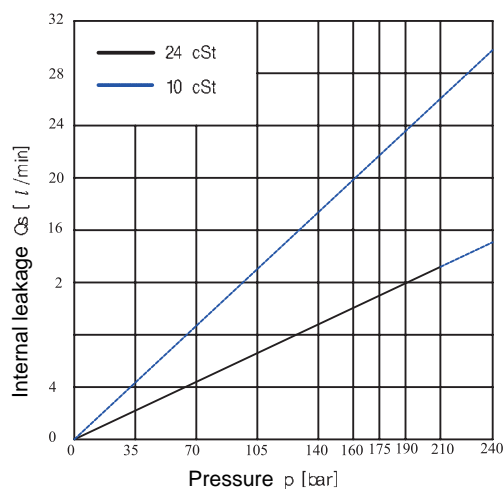
5=S5 (for mineral oil and fire resistant fluids)



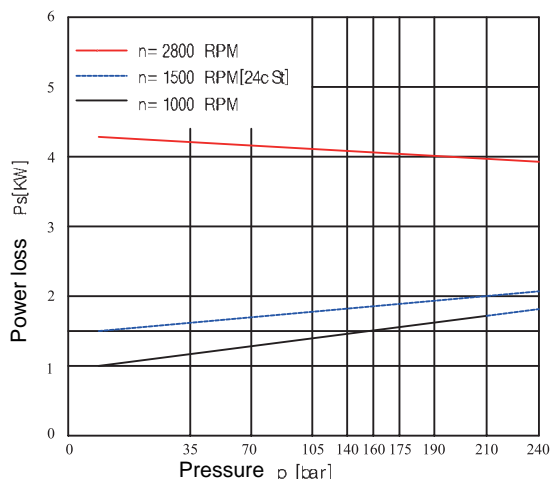
P = Pressure port

S = Suction port

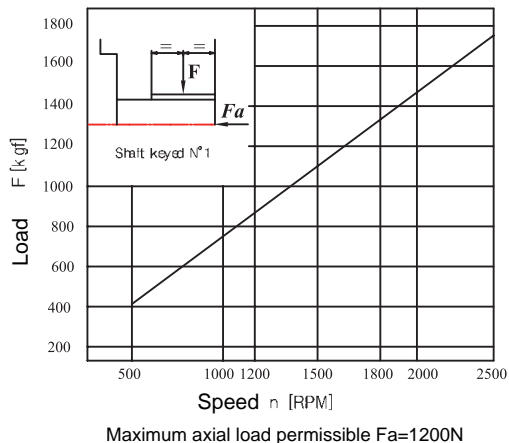
### Internal Leakage (Typical)



### Power Loss Hydromechanics (Typical)

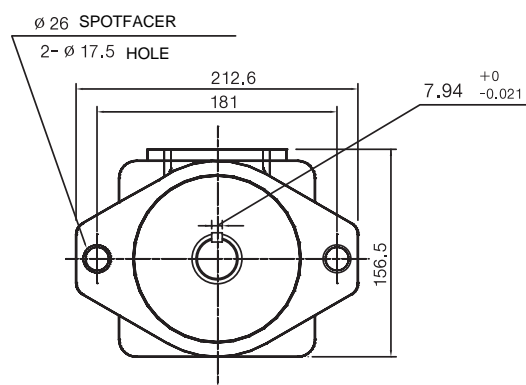


### Permissible Radial load

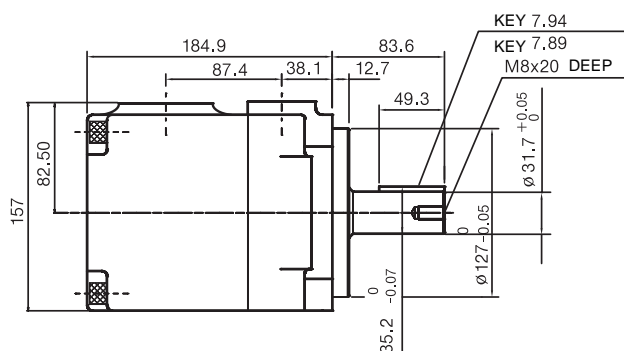


Maximum axial load permissible Fa=1200N

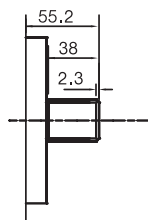
## Dimensions & Operating Characteristics - Weight : 24.0 kg



NO.1 Shaft (KEYED SAE C)

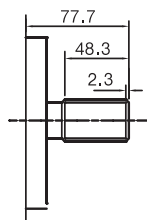


NO.3 Shaft



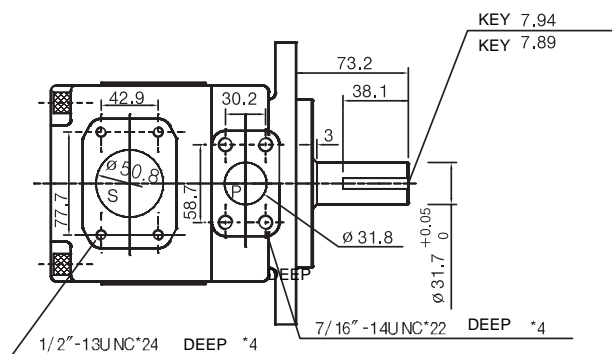
SAE splined shaft  
Class 1-J498 b 12/24 d.p  
-14 teeth 30° pressure angle  
flat root side fit

NO.4 Shaft



NO SAE splined shaft  
Class 1-J498 b 12/24 d.p  
-14 teeth 30° pressure angle  
flat root side fit

NO.2 Shaft (KEYED NO SAE)



Shaft torque limits (ml/rev x bar)		
Pump	Shaft	V x P max.
KT6D	2	34590

## Operating Characteristics - Typical [24 cSt]

No.	Volumetric Displacement V <sub>p</sub>	Speed n [R.P.M.]	Flow Q <sub>t</sub> [l/min]			Input power P [kW]		
			p= 0bar	p= 140bar	p= 240bar	p= 7bar	p= 140bar	p= 240bar
014	47.6cm <sup>3</sup> /rev	1000	47.6	38.3	32.1	1.5	12.5	20.7
		1500	71.4	62.1	55.9	2.3	18.5	30.6
017	58.2cm <sup>3</sup> /rev	1000	87.3	78.0	71.8	2.5	22.2	37.0
		1500	130.9	117.0	107.7	3.7	33.3	55.5
020	66.0cm <sup>3</sup> /rev	1000	66.0	56.7	50.5	1.7	16.8	28.0
		1500	99.0	89.7	83.5	2.8	24.9	41.7
024	79.5cm <sup>3</sup> /rev	1000	79.5	70.2	64.0	1.9	19.9	33.4
		1500	119.3	110.0	103.8	3.0	29.6	49.8
028	89.7cm <sup>3</sup> /rev	1000	89.7	80.4	74.2	2.0	22.3	37.5
		1500	134.5	125.2	119.0	3.2	33.2	55.9
031	98.3cm <sup>3</sup> /rev	1000	98.3	89.0	82.8	2.1	24.3	40.9
		1500	147.4	138.1	131.9	3.3	36.2	61.0
035	111.0cm <sup>3</sup> /rev	1000	111.0	101.7	95.5	2.3	27.3	46.0
		1500	166.5	157.2	151.0	3.5	40.7	68.7
038	120.3cm <sup>3</sup> /rev	1000	120.3	111.0	104.8	2.4	29.4	49.8
		1500	180.4	171.1	164.9	3.7	43.9	74.3
042*	136.0cm <sup>3</sup> /rev	1000	136.0	126.7	120.5	2.6	33.1	56.0
		1500	204.0	194.7	188.5	4.0	49.4	83.7
045*	145.7cm <sup>3</sup> /rev	1000	145.7	136.4	130.2	2.7	35.3	59.9
		1500	218.2	209.2	203.0	4.1	52.8	89.5
050*	158.0cm <sup>3</sup> /rev	1000	158.0	148.7	145.0**	2.8	38.2	56.8**
		1500	237.0	227.7	224.0**	4.4	57.0	85.0**

Port connection can be furnished with metric threads.

## Ordering Code - KT6D Series

Model No. KT6E - 066 - 3 R 00 - A 1

①                      ②                      ③    ④    ⑤                      ⑥    ⑦

① - Series

② - Cam Ring (delivery at 0 bar & 1500 r.p.m)

042= 198.5 l /min    062=295.0 l /min  
 045= 213.6 l /min    066=319.9 l /min  
 050= 237.8 l /min    072=340.6 l /min  
 052=247.2 l /min    085=402.0 l /min

③ - Type of shaft

1= keyed (SAE B)  
 2= keyed (no SAE)  
 3= splined (SAE B)  
 4= splined (SAE EE)

④ - Direct. of rotation (view on shaftend)

R= clockwise

L= counter-clockwise

⑤ - Port combination

00= standard

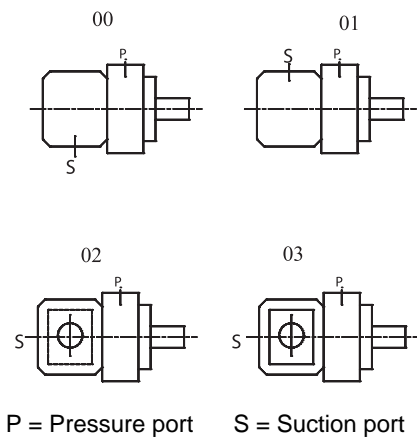
⑥ - Design Number

⑦ - Seal class

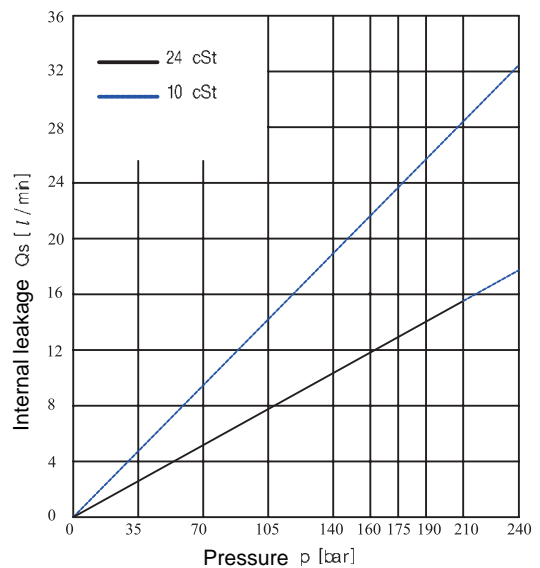
1=S1 (for mineral oil)

4=S4 (for the resistant fluids)

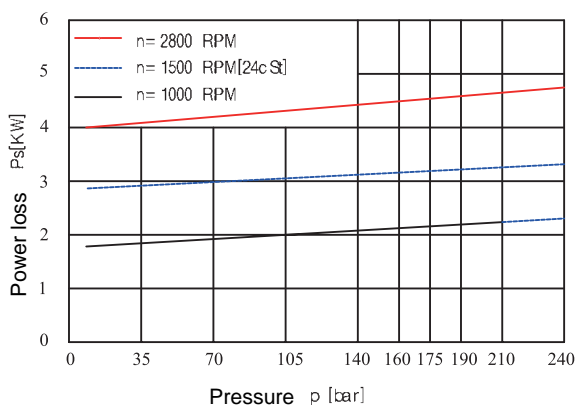
5=S5 (for mineral oil and fire resistant fluids)



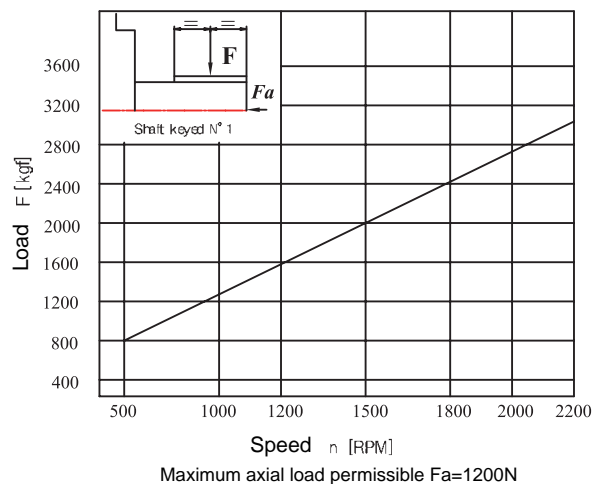
Internal Leakage (Typical)



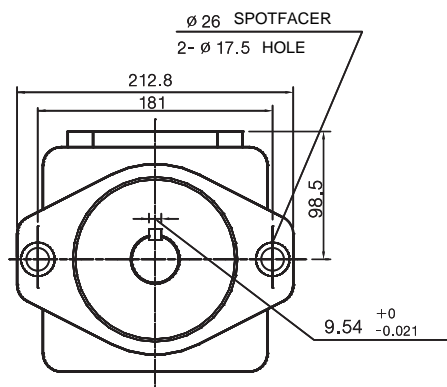
Power Loss Hydromechanics (Typical)



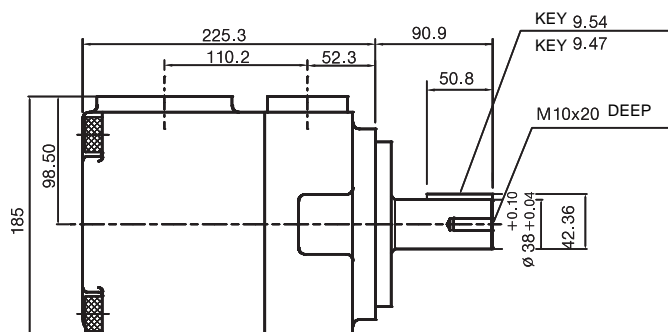
Permissible Radial load



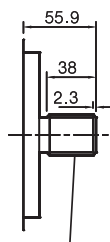
## Dimensions & Operating Characteristics - Weight : 43.3 kg



NO.1 Shaft (KEYED SAE C-C)

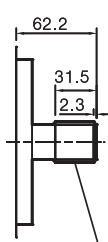


NO.3 Shaft



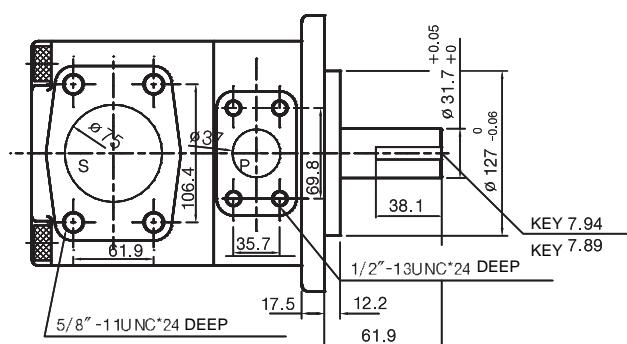
SAE C splined shaft  
Class 1-J498 b 12/24 d.p  
-14 teeth 30° pressure angle  
flat root side fit

NO.4 Shaft



SAE C-C splined shaft  
Class 1-J498 b 12/24 d.p  
-14 teeth 30° pressure angle  
flat root side fit

NO.2 Shaft (KEYED NO SAE)



Shaft torque limits (ml/rev x bar)		
Pump	Shaft	V x P max.
KT6E	2	34590

## Operating Characteristics - Typical [24 cSt]

No.	Volumetric Displacement Vp	Speed n [R.P.M]	Flow Q (l/min)			Input power P(kW)		
			p= 0bar	p= 140bar	p= 240bar	p= 7bar	p= 140bar	p= 240bar
042	132.3ml/rev	1000	132.3	122.3	115.2	3.2	32.9	55.2
		1500	198.5	188.5	181.3	5.2	49.4	82.6
045	142.4ml/rev	1000	142.4	132.4	125.3	3.4	35.3	59.2
		1500	213.6	203.6	196.5	5.4	52.9	88.7
050	158.5ml/rev	1000	158.5	148.5	141.4	3.5	39.0	65.6
		1500	237.7	227.2	220.6	5.7	58.5	98.3
052	164.8ml/rev	1000	164.8	154.8	147.7	3.6	40.5	68.2
		1500	247.2	237.2	230.1	5.8	60.8	102.1
062	196.7ml/rev	1000	196.7	186.7	179.6	4.0	47.9	80.9
		1500	295.0	285.0	277.9	6.4	71.9	121.3
066	213.3ml/rev	1000	213.3	203.3	196.2	4.2	51.8	87.6
		1500	319.9	309.9	302.8	6.7	77.7	131.2
072	227.1ml/rev	1000	227.1	217.1	210.0	4.3	55.0	93.1
		1500	340.6	330.6	323.5	6.9	82.6	139.5
085	268.0ml/rev	1000	268.0	255.0	—	4.5	64.9	—
		1500	402.0	381.0	—	7.1	97.4	—

Port connection can be furnished with metric threads.

## Ordering Code - KT6CC Series

Model No. KT6CC - W - 022 - 008 - 1 R 00 - C 1 00

①

②

P1

P2

④

⑤

⑥

⑦

⑧

⑨

③

① - Series

② - Severe duty shaft

③ - Cam Ring for "P1" & "P2"

(delivery at 0 bar & 1500 r.p.m)

005= 25.8 l /min 017=87.4 l /min

006= 31.9 l /min 020=95.7 l /min

008= 39.6 l /min 022=105.4 l /min

010= 51.1 l /min 025=118.9 l /min

012= 55.6 l /min 028=133.2 l /min

014= 69.0 l /min 031=150.0 l /min

④ - Type of shaft

1= keyed (NO SAE)

2= keyed (SAE BB)

3= splined (SAE BB)

5= splined (SAE B)

⑤ - Direct. of rotation (view on shaftend)

R= clockwise

L= counter-clockwise

⑥ - Port combination

00= standard

⑦ - Design Number

⑧ - Seal class

1=S1 (for mineral oil)

4=S4 (for the resistant fluids)

5=S5 (for mineral oil and fire resistant fluids)

⑨ - Mounting W/connetion variables

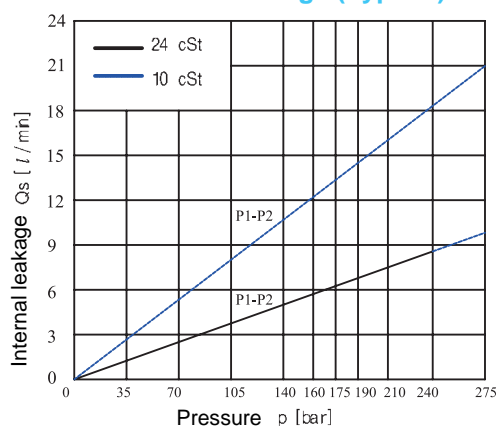
	P1=1", S=3"		P1=1", 1", S=2 1/2"	
P2	1"	3/4" <sup>1)</sup>	1"	3/4" <sup>1)</sup>
Code	00	01	10	11

1) for 46ml/rev. max.

2) for 126ml/rev. max.

The largest cartridge must be always mounted in the front.

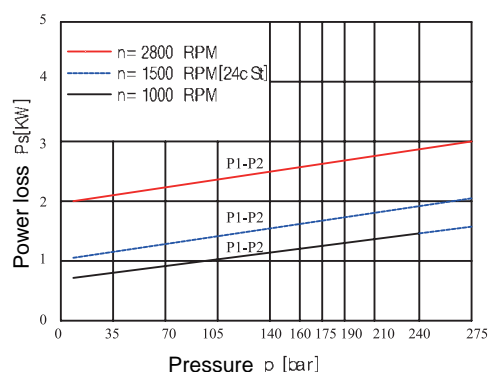
### Internal Leakage (Typical)



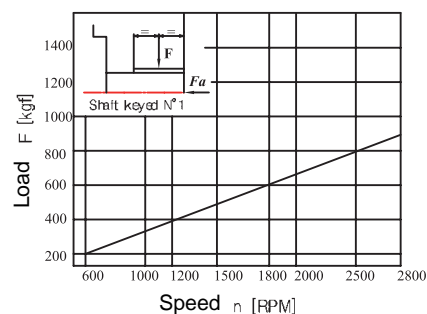
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow.

Total leakage is the sum of each section loss at its operating conditions.

### Power Loss Hydromechanics (Typical)



### Permissible Radial Load

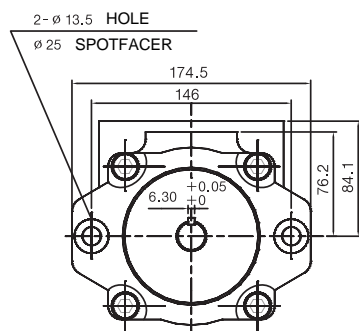


Maximum axial load permissible Fa=1200N

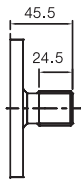


# SEWON Hydraulics

## Dimensions & Operating Characteristics - Weight : 26.0 kg

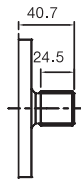


NO.3 Shaft

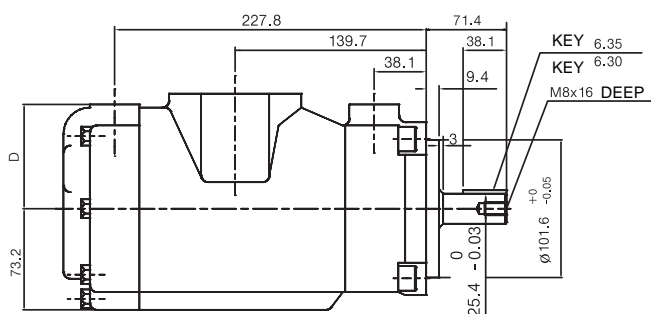


SAE B-B splined shaft  
Class 1-J498 b 16/32 d.p  
-15 teeth 30° pressure angle  
flat root side fit

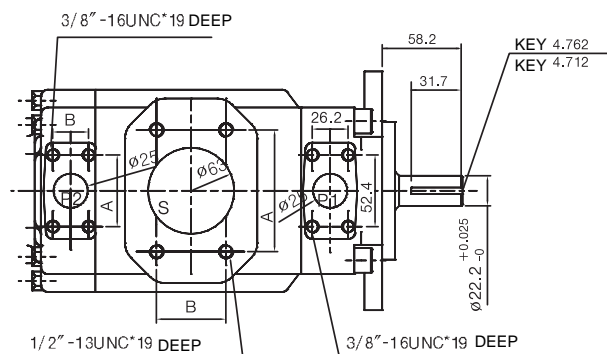
NO.5 Shaft



SAE C-C splined shaft  
Class 1-J498 b 16/32 d.p  
-13 teeth 30° pressure angle  
flat root side fit



NO.2 Shaft (KEYED SAE BB)



NO.1 Shaft  
(KEYED NO SAE)

Prot	Code	A	B	C	D	E
S	3"	106.4	61.9	76.2		5/8"- 11x28.4 deep
S	2"1/2	88.9	50.8	63		1/2"-13x23.9 deep
P2	3/4"	47.7	22.2	19.0	76.2	3/8"-16x19.0 deep
P2	1"	52.4	26.2	25.0	74.7	3/8"-16x19.0 deep

Shaft torque limits		
Pump	Shaft	VxPmax.P1+P2
KT6CC	1	14300
	2	21420
	3	32670
	5	20600

## Operating Characteristics - Typical [24 cSt]

Pressure Port	No.	Volumetric Displacement	Flow Q (l/min)			Input power P (kW)		
			p= 0bar	p= 140bar	p= 240bar	p= 7bar	p= 140bar	p= 240bar
P1 & P2	005	17.2 cm <sup>3</sup> /rev	25.8	20.8	17.3	1.4	7.5	12.2
	006	21.3 cm <sup>3</sup> /rev	31.9	26.9	23.4	1.5	8.9	14.7
	008	26.4 cm <sup>3</sup> /rev	39.6	34.6	31.1	1.6	10.7	17.7
	010	34.1 cm <sup>3</sup> /rev	51.1	46.1	42.6	1.7	13.4	22.3
	012	37.1 cm <sup>3</sup> /rev	55.6	50.6	47.1	1.7	14.4	24.1
	014	46.0 cm <sup>3</sup> /rev	69.0	64.0	60.5	1.9	17.6	29.5
	017	58.3 cm <sup>3</sup> /rev	87.4	82.4	78.9	2.1	21.9	36.9
	020	63.8 cm <sup>3</sup> /rev	95.7	90.7	87.2	2.2	23.8	40.2
	022	70.3 cm <sup>3</sup> /rev	105.4	100.4	96.9	2.3	26.1	44.1
	025*	79.3 cm <sup>3</sup> /rev	118.9	113.9	110.4	2.5	29.2	49.5
	028*	88.8 cm <sup>3</sup> /rev	133.2	128.2	125.8**	2.8	32.7	48.5**
	031*	100.0 cm <sup>3</sup> /rev	150.0	145.0	142.6**	2.8	36.5	54.4**

Port connection can be furnished with metric threads.

## Ordering Code - KT6DC Series

Model No. KT6DC - W - 038 - 022 - 1 R 00 - B 1

① ② P1 P2 ④ ⑤ ⑥ ⑦ ⑧  
③

① - Series

② - Severe duty shaft

③ - Cam Ring for "P1" & "P2"

(delivery at 0 bar & 1500 r.p.m)

014= 71.4 l /min 035=166.5 l /min

017= 87.3 l /min 038=180.4 l /min

020= 99.0 l /min 042=204.0 l /min

024= 119.3 l /min 045=218.5 l /min

028= 134.5 l /min 050=237.0 l /min

031= 147.4 l /min

③ - Cam Ring for "P2"

(delivery at 0 bar & 1500 r.p.m)

005= 25.8 l /min 017=87.4 l /min

006= 31.9 l /min 020=95.7 l /min

008= 39.6 l /min 022=105.4 l /min

010= 51.1 l /min 025=118.9 l /min

012= 55.6 l /min 028=133.2 l /min

014= 69.0 l /min 031=150.0 l /min

④ - Type of shaft

1= keyed (NO SAE)

2= keyed (SAE C)

3= splined (SAE C)

4= splined (NO SAE)

⑤ - Direct. of rotation (view on shaftend)

R= clockwise

L= counter-clockwise

⑥ - Port combination

00= standard

⑦ - Design Number

⑧ - Seal class

1=S1 (for mineral oil)

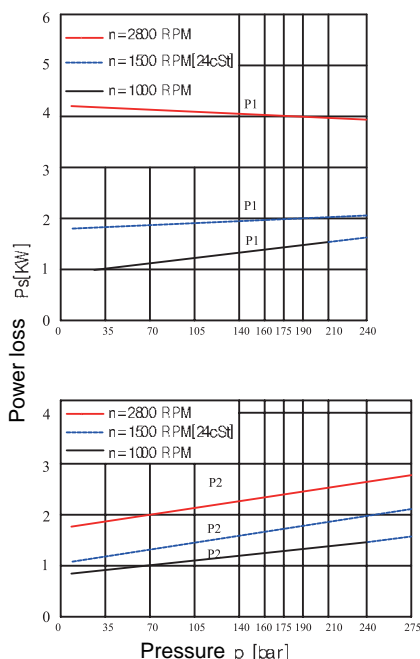
4=S4 (for the resistant fluids)

5=S5 (for mineral oil and fire resistant fluids)

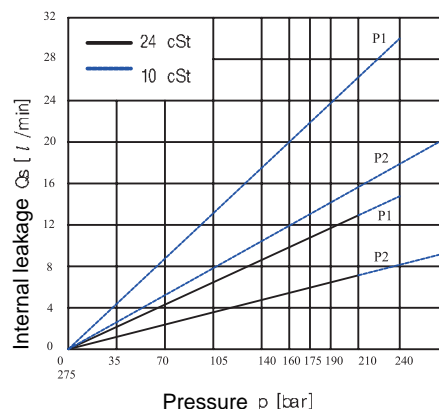
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow.

Total leakage is the sum of each section loss at its operating conditions.

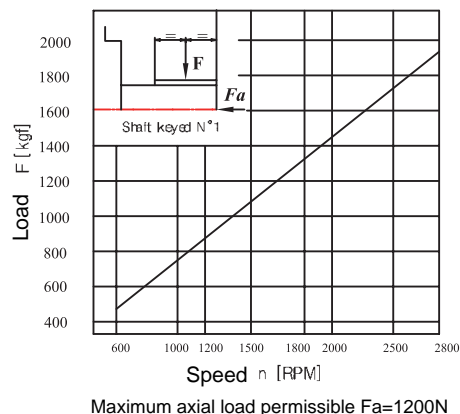
### Power Loss Hydromechanics (Typical)



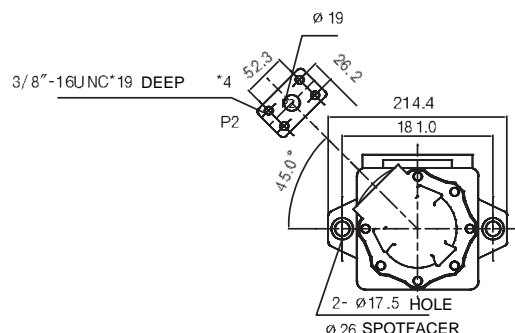
### Internal Leakage (Typical)



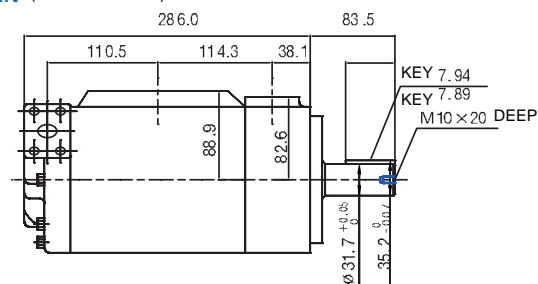
### Permissible Radial load



## Dimensions & Operating Characteristics - Weight : 36.6 kg



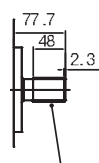
NO.1 Shaft (KEYED SAE C)



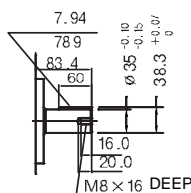
NO.3 Shaft



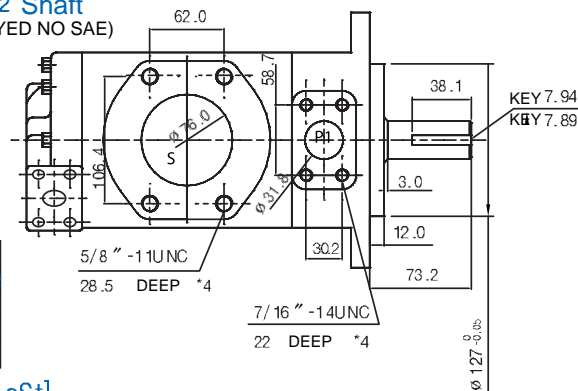
NO.4 Shaft



NO.5 Shaft



NO.2 Shaft (KEYED NO SAE)



SAE C splined shaft  
Class 1-J498 b 12/24 d.p  
-14 teeth 30° pressure angle  
flat root side fit

NO SAE splined shaft  
Class 1-J498 b 12/24 d.p  
-14 teeth 30° pressure angle  
flat root side fit

Shaft torque limits			
Pump	Shaft	Max P1	Max P2
KT6DC	1	432.49	
	2	345.90	
	5	556.00	

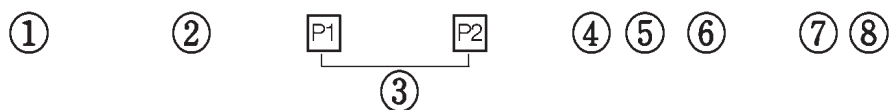
## Operating Characteristics - Typical [24 cSt]

Pressure Port	No.	Volumetric Displacement	Flow Q (l/min)			Input power P (KW)		
			p= 0bar	p= 140bar	p= 240bar	p= 7bar	p= 140bar	p= 240bar
P1	014	46.7 cm <sup>3</sup> /rev	71.4	62.1	55.9	2.3	18.5	30.6
	017	58.3 cm <sup>3</sup> /rev	87.4	82.4	78.9	2.1	21.9	36.9
	020	66.0 cm <sup>3</sup> /rev	99.0	89.7	83.5	2.8	24.9	41.7
	024	79.5 cm <sup>3</sup> /rev	119.3	110.0	103.8	3.0	29.6	49.8
	028	89.7 cm <sup>3</sup> /rev	134.5	125.2	119.0	3.2	33.2	55.9
	031	98.3 cm <sup>3</sup> /rev	147.4	138.1	131.9	3.3	36.2	61.0
	035	110.0 cm <sup>3</sup> /rev	166.5	157.2	151.0	3.5	40.7	68.7
	038	120.3 cm <sup>3</sup> /rev	180.4	171.1	164.9	3.7	43.9	74.3
	042	136.0 cm <sup>3</sup> /rev	204.0	194.7	188.5	4.0	49.4	83.7
	045	145.7 cm <sup>3</sup> /rev	218.5	209.2	203.0	4.1	52.8	89.5
	050	158.0 cm <sup>3</sup> /rev	237.0	227.7	224.0	4.4	57.0	85.0*
P2	005	17.2 cm <sup>3</sup> /rev	25.8	20.8	17.3	1.4	7.5	12.2
	006	21.3 cm <sup>3</sup> /rev	31.9	26.9	23.4	1.5	8.9	14.7
	008	26.4 cm <sup>3</sup> /rev	39.6	34.6	31.1	1.6	10.7	17.7
	010	34.1 cm <sup>3</sup> /rev	51.1	46.1	42.6	1.7	13.4	22.3
	012	37.1 cm <sup>3</sup> /rev	55.6	50.6	47.1	1.7	14.4	24.1
	014	46.0 cm <sup>3</sup> /rev	69.0	64.0	60.5	1.9	17.6	29.5
	017	58.3 cm <sup>3</sup> /rev	87.4	82.4	78.9	2.1	21.9	36.9
	020	63.8 cm <sup>3</sup> /rev	95.7	90.7	87.2	2.2	23.8	40.2
	022	70.3 cm <sup>3</sup> /rev	105.4	100.4	96.9	2.3	26.1	44.1
	025*	79.3 cm <sup>3</sup> /rev	118.9	113.9	110.4	2.5	29.2	49.5
	028*	88.8 cm <sup>3</sup> /rev	133.2	128.2	125.8**	2.8	32.7	48.5**
	031*	100.0 cm <sup>3</sup> /rev	150.0	145.0	142.6**	2.8	36.5	54.4**

Port connection can be furnished with metric threads.

## Ordering Code - KT6EC Series

Model No. KT6EC - W - 066 - 038 - 1 R 00 - B 1



① - Series

② - Severe duty shaft

③ - Cam Ring for "P1" & "P2"  
(delivery at 0 bar & 1500 r.p.m)

042= 198.5 l /min	062=295.0 l /min
045= 213.6 l /min	066=319.9 l /min
050= 237.8 l /min	072=340.6 l /min
052=247.2 l /min	085=402.0 l /min

③ - Cam Ring for "P2"  
(delivery at 0 bar & 1500 r.p.m)

003= 16.2 l /min	017=87.4 l /min
005= 25.8 l /min	020=95.7 l /min
006= 31.9 l /min	022=105.4 l /min
008= 39.6 l /min	025=118.9 l /min
010= 51.1 l /min	028=133.2 l /min
012= 55.6 l /min	031=150.0 l /min
014= 69.0 l /min	

④ - Type of shaft

- 1= keyed (SAE CC)
- 2= keyed (NO SAE)
- 3= splined (SAE C)
- 4= splined (SAE CC)

⑤ - Direct. of rotation (view on shaftend)

- R= clockwise
- L= counter-clockwise

⑥ - Port combination

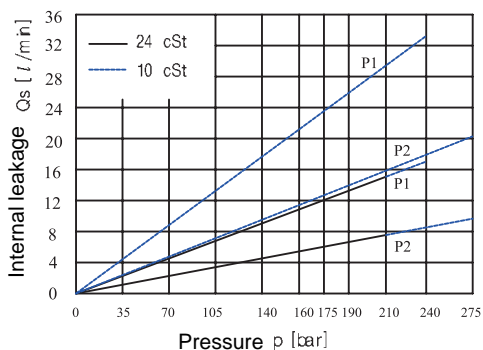
- 00= standard

⑦ - Design Number

⑧ - Seal class

- 1=S1 (for mineral oil)
- 4=S4 (for the resistant fluids)
- 5=S5 (for mineral oil and fire resistant fluids)

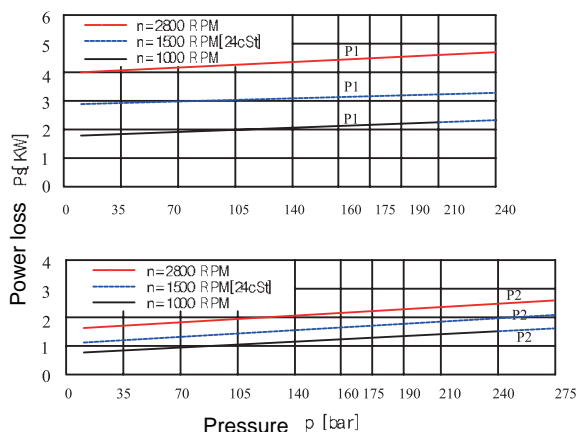
### Internal Leakage (Typical)



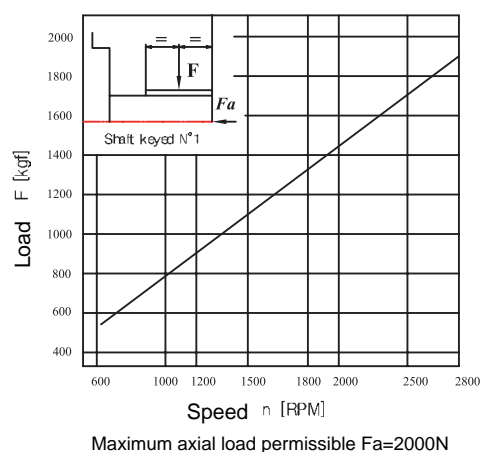
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow.

Total leakage is the sum of each section loss at its operating conditions.

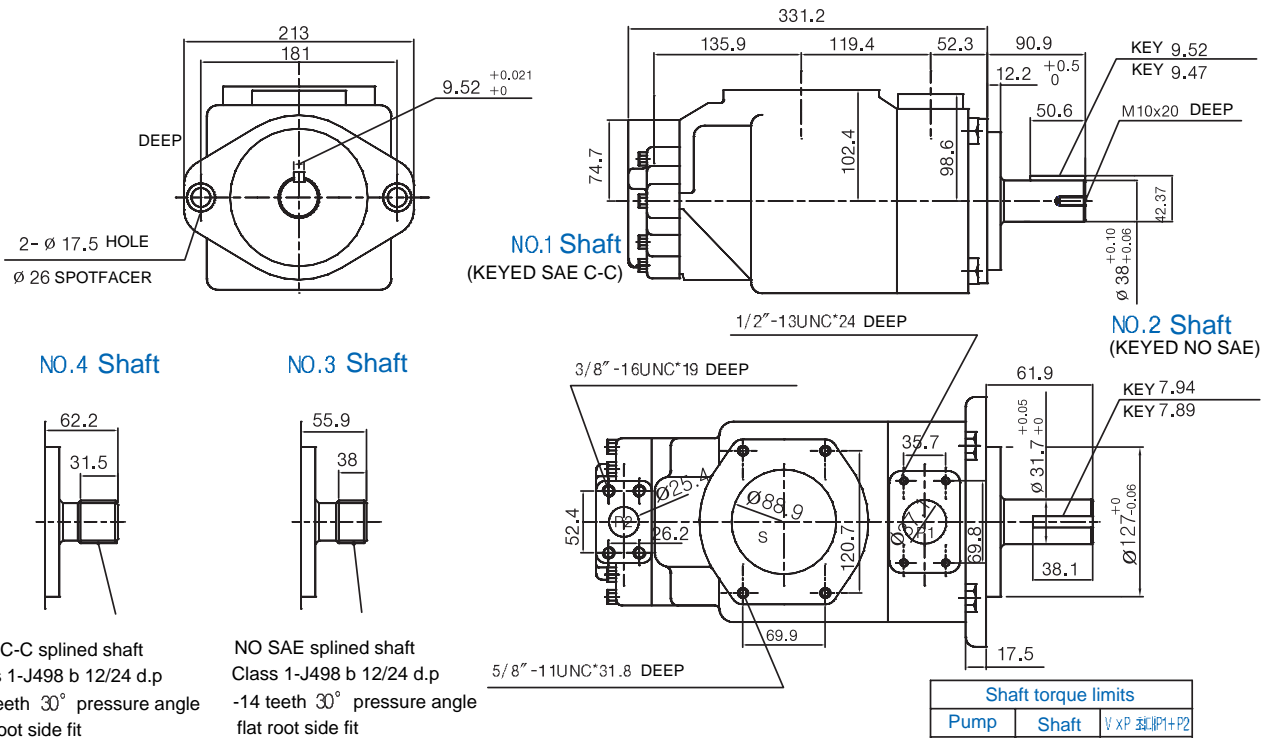
### Power Loss Hydromechanics (Typical)



### Permissible Radial load



## Dimensions & Operating Characteristics - Weight : 55.0 kg



## Operating Characteristics - Typical [24 cSt]

Pressure Port	No.	Volumetric Displacement	Flow Q <sub>t</sub> (l/min)			Input power P (KW)		
			p= 0bar	p= 140bar	p= 240bar	p= 7bar	p= 140bar	p= 240bar
P1	042	132,3 cm <sup>3</sup> /rev	198.5	188.5	181.3	5.2	49.4	82.6
	045	142,4 cm <sup>3</sup> /rev	213.6	203.6	196.5	5.4	52.9	88.7
	050	158,5 cm <sup>3</sup> /rev	237.7	227.7	220.6	5.7	58.5	98.3
	052	164,8 cm <sup>3</sup> /rev	247.2	237.2	230.1	5.8	60.8	102.1
	062	196,7 cm <sup>3</sup> /rev	295.0	285.0	277.9	6.4	71.9	121.3
	066	213,3 cm <sup>3</sup> /rev	319.9	309.9	302.8	6.7	77.7	131.2
	072	227,1 cm <sup>3</sup> /rev	340.6	330.6	323.5	6.9	82.6	139.5
	085	268,0 cm <sup>3</sup> /rev	402.0	381.0	—	7.1	97.4	—
P2	006	21,3 cm <sup>3</sup> /rev	31.9	26.9	23.4	1.5	8.9	14.7
	008	26,4 cm <sup>3</sup> /rev	39.6	34.6	31.1	1.8	10.7	17.7
	010	34,1 cm <sup>3</sup> /rev	51.1	46.1	42.6	1.7	13.4	22.3
	012	37,1 cm <sup>3</sup> /rev	55.6	50.6	47.1	1.7	14.4	24.1
	014	46,0 cm <sup>3</sup> /rev	69.0	64.0	60.5	1.9	17.6	29.5
	017	58,3 cm <sup>3</sup> /rev	87.4	82.4	78.9	2.1	21.9	36.9
	020	63,8 cm <sup>3</sup> /rev	95.7	90.7	87.2	2.2	23.8	40.2
	022	70,3 cm <sup>3</sup> /rev	105.4	100.4	96.9	2.3	26.1	44.1
	025	79,3 cm <sup>3</sup> /rev	118.9	113.9	110.4	2.5	29.2	49.5
	028	88,8 cm <sup>3</sup> /rev	133.2	128.2	125.8*	2.8	32.7	48.5**
	031	100,0 cm <sup>3</sup> /rev	150.0	145.0	142.6*	2.8	36.5	54.4**

Port connection can be furnished with metric threads.

## Ordering Code - KT6ED Series

Model No. KT6ED - W - 066 - 038 - 1 R 00 - B 1

① ② P1 P2 ④ ⑤ ⑥ ⑦ ⑧  
③

① - Series

② - Severe duty shaft

③ - Cam Ring for "P1" & "P2"  
(delivery at 0 bar & 1500 r.p.m)

042= 198.5 l /min 062=295.0 l /min  
045= 213.6 l /min 066=319.9 l /min  
050= 237.8 l /min 072=340.6 l /min  
052=247.2 l /min 085=402.0 l /min

③ - Cam Ring for "P2"  
(delivery at 0 bar & 1500 r.p.m)

014= 71.4 l /min 035=166.5 l /min  
017= 87.3 l /min 038=180.4 l /min  
020= 99.0 l /min 042=204.0 l /min  
024= 119.3 l /min 045=218.5 l /min  
028= 134.5 l /min 050=237.0 l /min  
031= 147.4 l /min

④ - Type of shaft

1= keyed (SAE CC)  
2= keyed (NO SAE)  
3= splined (SAE C)  
4= splined (SAE CC)

⑤ - Direct. of rotation (view on shaftend)

R= clockwise  
L= counter-clockwise

⑥ - Port combination

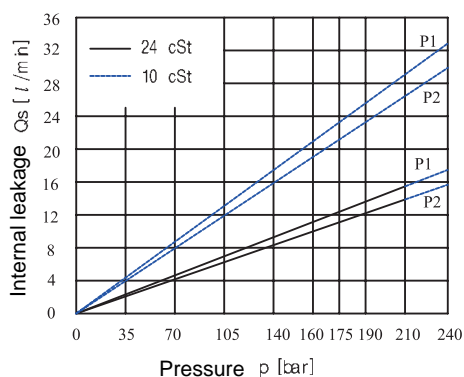
00= standard

⑦ - Design Number

⑧ - Seal class

1=S1 (for mineral oil)  
4=S4 (for the resistant fluids)  
5=S5 (for mineral oil and fire resistant fluids)

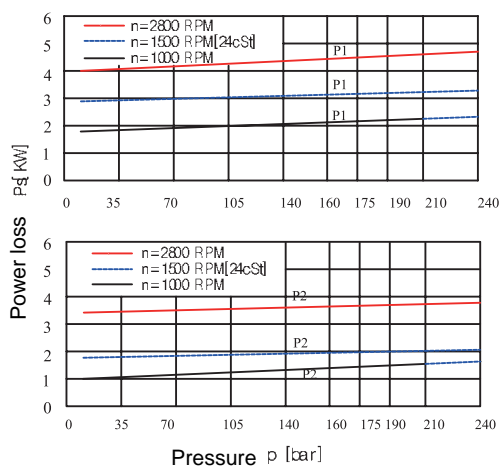
### Internal Leakage (Typical)



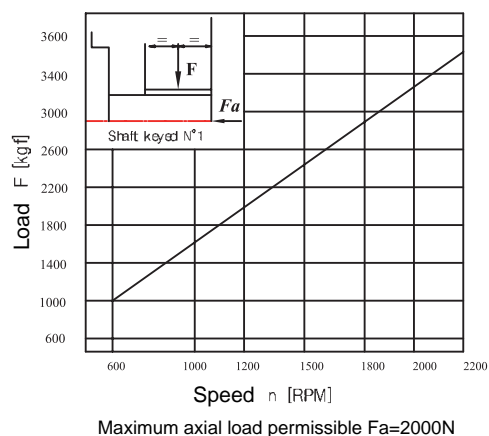
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow.

Total leakage is the sum of each section loss at its operating conditions.

### Power Loss Hydromechanics (Typical)

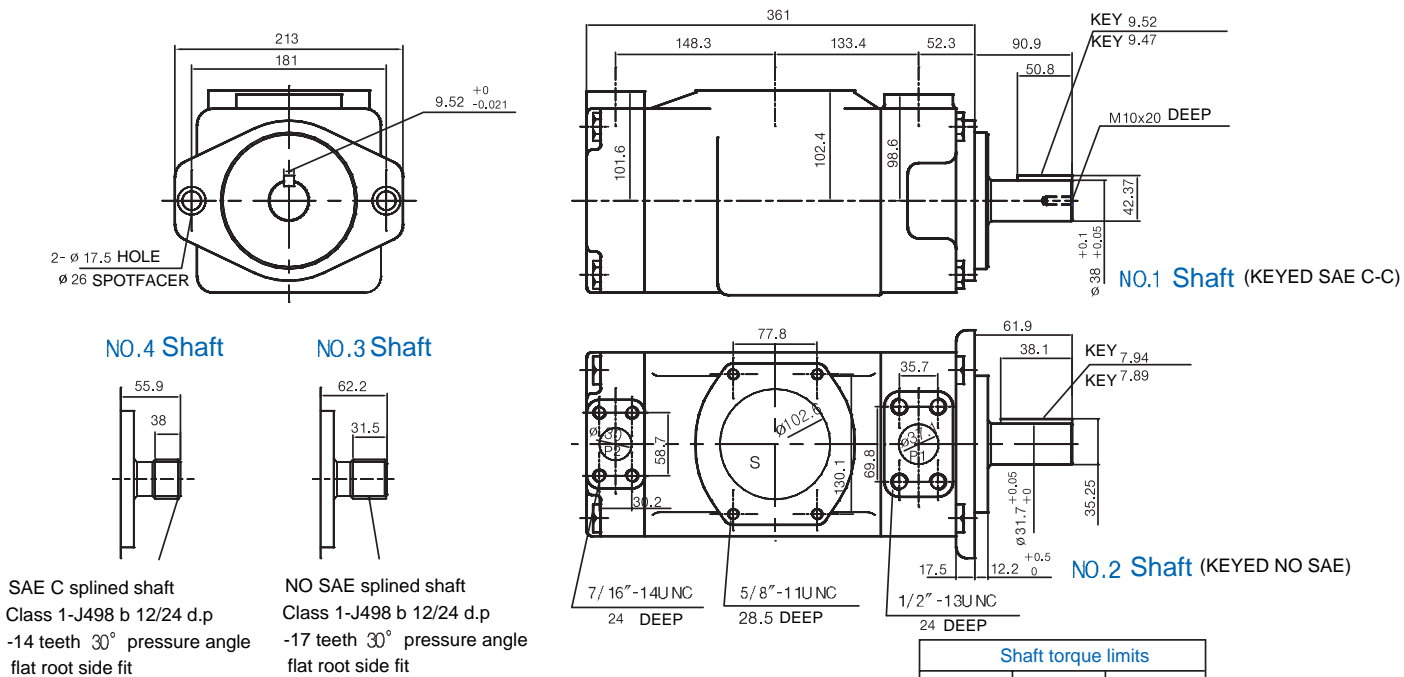


### Permssible Radial load



# SEWON Hydraulics

## Dimensions & Operating Characteristics - Weight : 66.0 kg



### Operating Characteristics - Typical [24 cSt]

Pressure Port	No.	Volumetric Displacement	Flow Q (l/min)			Input power P (kW)		
			p= 0bar	p= 140bar	p= 240bar	p= 7bar	p= 140bar	p= 240bar
P1	042	132.3cm <sup>3</sup> /rev	198.5	188.5	181.3	5.2	49.4	82.6
	045	142.4cm <sup>3</sup> /rev	213.6	203.6	196.5	5.4	52.9	88.7
	050	158.5cm <sup>3</sup> /rev	237.7	227.7	220.6	5.7	58.5	98.3
	052	164.8cm <sup>3</sup> /rev	247.2	237.2	230.1	5.8	60.8	102.1
	062	196.7cm <sup>3</sup> /rev	295.0	285.0	277.9	6.4	71.9	121.3
	066	213.3cm <sup>3</sup> /rev	319.9	309.9	302.8	6.7	77.7	131.2
	072	227.1cm <sup>3</sup> /rev	340.6	330.6	323.5	6.9	82.6	139.5
	085	268.0cm <sup>3</sup> /rev	402.0	381.0	—	7.1	97.4	—
P2	014	46.7cm <sup>3</sup> /rev	71.4	62.1	55.9	2.3	18.5	30.6
	017	58.3cm <sup>3</sup> /rev	87.4	82.4	78.9	2.1	21.9	36.9
	020	66.0cm <sup>3</sup> /rev	99.0	89.7	83.5	2.8	24.9	41.7
	024	79.5cm <sup>3</sup> /rev	119.3	110.0	103.8	3.0	29.6	49.8
	028	89.7cm <sup>3</sup> /rev	134.5	125.2	119.0	3.2	33.2	55.9
	031	98.3cm <sup>3</sup> /rev	147.4	138.1	131.9	3.3	36.2	61.0
	035	110.0cm <sup>3</sup> /rev	166.5	157.2	151.0	3.5	40.7	68.7
	038	120.3cm <sup>3</sup> /rev	180.4	171.1	164.9	3.7	43.9	74.3
	042	136.0cm <sup>3</sup> /rev	204.0	194.7	188.5	4.0	49.4	83.7
	045	145.7cm <sup>3</sup> /rev	218.5	209.2	203.0	4.1	52.8	89.5
	050	158.0cm <sup>3</sup> /rev	237.0	227.7	224.0	4.4	57.0	85.0*

Port connection can be furnished with metric threads.

## Ordering Code - KT6DR Series

Model No. **KT6DR - 066 - 1 R 00 - A 1 0 - A 1 ..**

Series

Cam Ring (delivery at 0 bar & 1500 r.p.m)

014= 71.4 l /min	035=166.5 l /min
017= 87.3 l /min	038=180.4 l /min
020= 99.0 l /min	042=204.0 l /min
024= 119.3 l /min	045=218.5 l /min
028= 134.5 l /min	050=237.0 l /min
031= 147.4 l /min	

Type of shaft

- 1= keyed (SAE C)
- 2= keyed (SAE CC)
- 3= splined (SAE C)
- 4= splined (NO SAE)

Direct. of rotation (view on shaftend)

- R= clockwise
- L= counter-clockwise

Port combination

Modification

Seal class

- 1=S1 (for mineral oil)
- 4=S4 (for the resistant fluids)
- 5=S5 (for mineral oil and fire resistant fluids)

Design Number

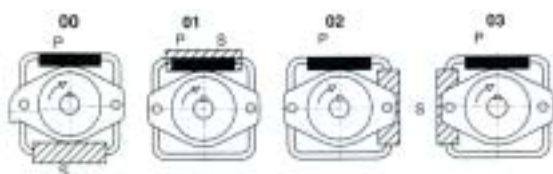
Port adaptor

Coupling

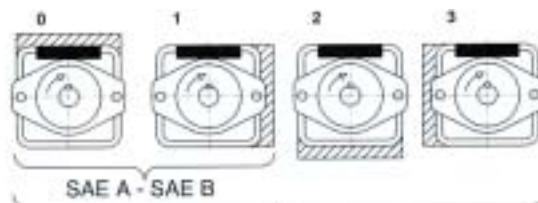
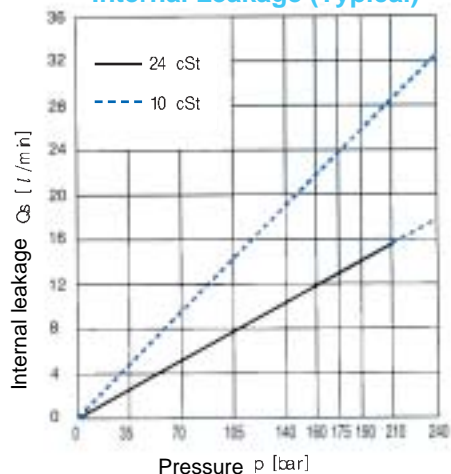
- 1=SEA A 4=SEA C
- 2=SEA A 5=SEA J498b
- 3=SEA BB 16/32-11 tee th

Adaptor

- 0=None B=SEA B
- A=SEA A C=SEA C



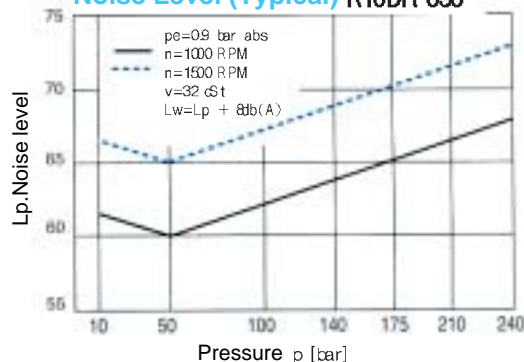
Internal Leakage (Typical)



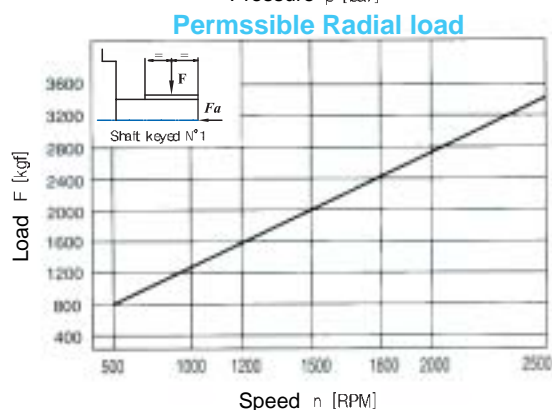
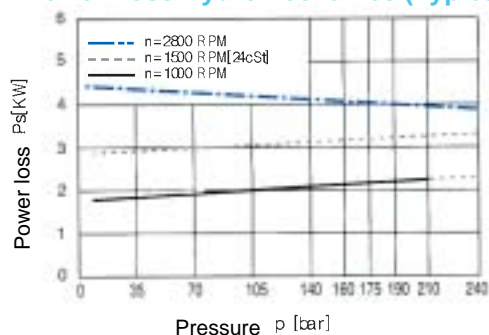
SAE A - SAE B

SAE C

Noise Level (Typical) KT6DR-038



Power Loss Hydromechanics (Typical)



Maximum axial load permissible Fa=2000N





## Ordering Code - KT6ER Series

Model No. KT6ER - 066 - 1 R 00 - A 1 0 - A 1 ..

Series

Cam Ring (delivery at 0 bar & 1500 r.p.m)

042= 198.5 l /min 062=295.0 l /min

045= 213.6 l /min 066=319.9 l /min

050= 237.8 l /min 072=340.6 l /min

052=247.2 l /min

Type of shaft

1= keyed (SAE CC)

3= splined (SAE C)

4= splined (SAE C)

Direct. of rotation (view on shaftend)

R= clockwise

L= counter-clockwise

Port combination

Modification

Seal class

1=S1 (for mineral oil)

4=S4 (for the resistant fluids)

5=S5 (for mineral oil and fire resistant fluids)

Design Number

Port adaptor

Coupling

1=SEA A 4=SEA C

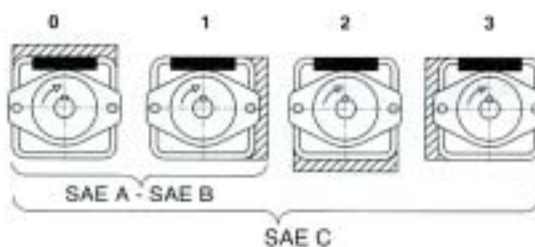
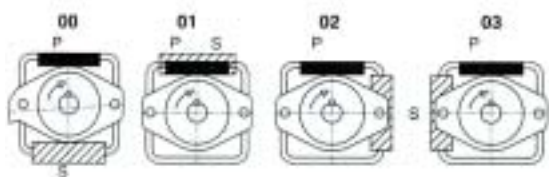
2=SEA A 5=SEA J498b

3=SEA BB 16/32-11 tee th

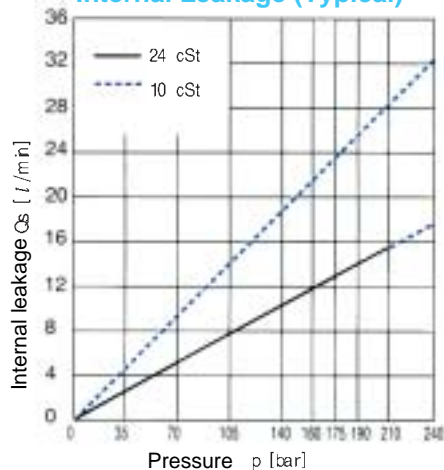
Adaptor

0=None B=SEA B

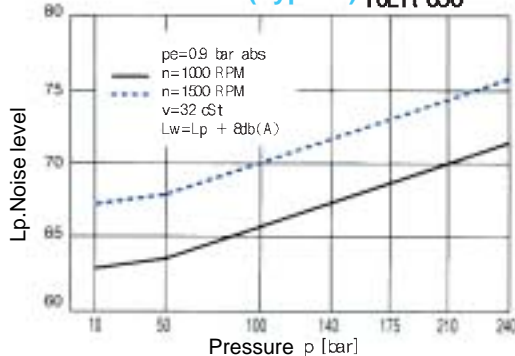
A=SEA A C=SEA C



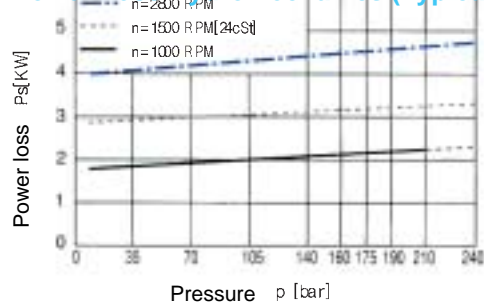
Internal Leakage (Typical)



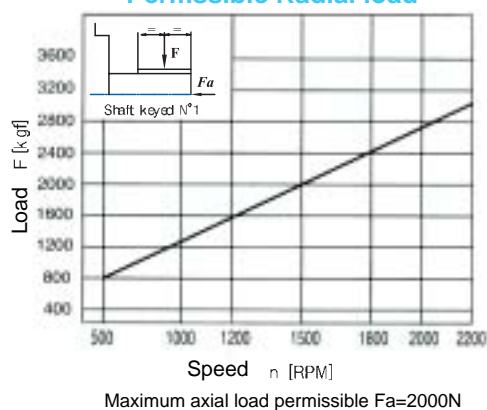
Noise Level (Typical) T6ER-050



Power Loss Hydromechanics (Typical)



Permissible Radial load

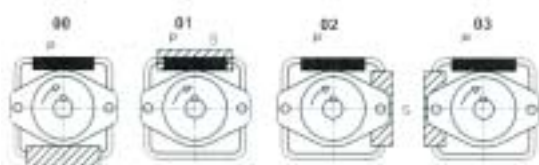




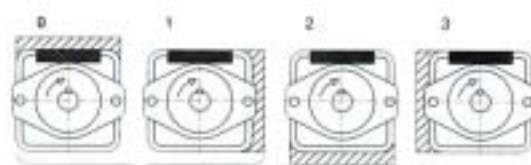
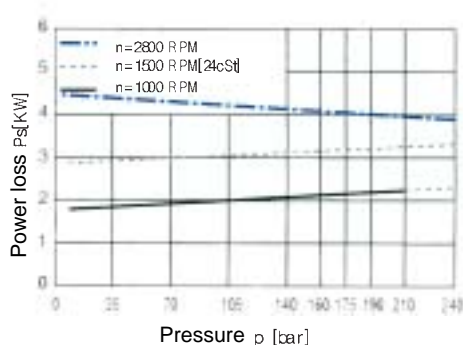
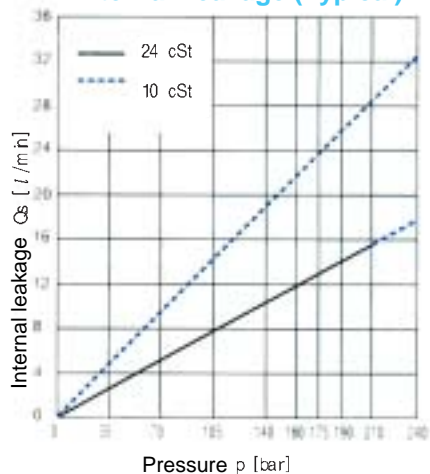
## Ordering Code - KT6DRS Series

Model No. KT6DRS - 045 - 1 R 00 - A 1 0 - A 1 ..

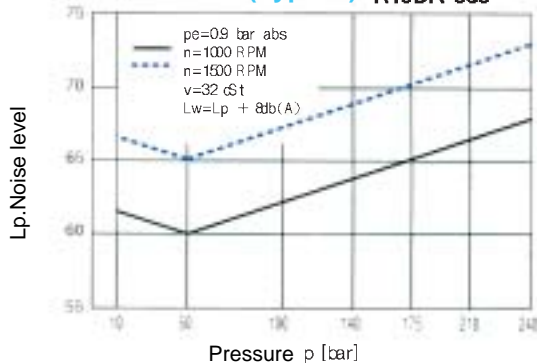
Series	Modification
Cam Ring (delivery at 0 bar & 1500 r.p.m)	Seal class
014= 71.4 l /min      035=166.5 l /min	1=S1 (for mineral oil)
017= 87.3 l /min      038=180.4 l /min	4=S4 (for the resistant fluids)
020= 99.0 l /min      042=204.0 l /min	5=S5 (for mineral oil and fire resistant fluids)
024= 119.3 l /min      045=218.5 l /min	Design Number
028= 134.5 l /min      050=237.0 l /min	Port adaptor
031= 147.4 l /min	Coupling
Type of shaft	1=SEA A      4=SEA C
1= keyed (SAE C)	2=SEA A      5=SEA J498b
2= keyed (SAE CC)	3=SEA BB 16/32-11 tee th
3= splined (SAE C)	Adaptor
5= splined (NO SAE)	0=None      B=SEA B
Direct. of rotation (view on shaftend)	A=SEA A      C=SEA C
R= clockwise	
L= counter-clockwise	
Port combination	



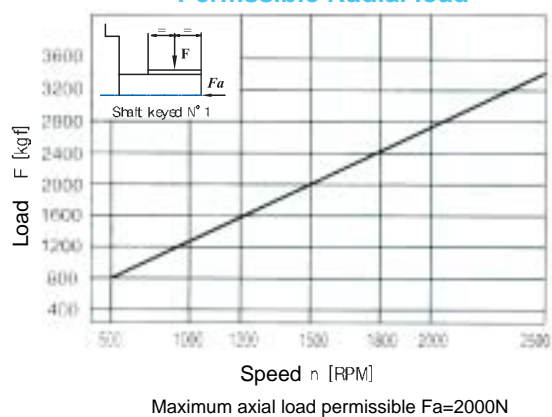
Internal Leakage (Typical)



Noise Level (Typical) KT6DR-038



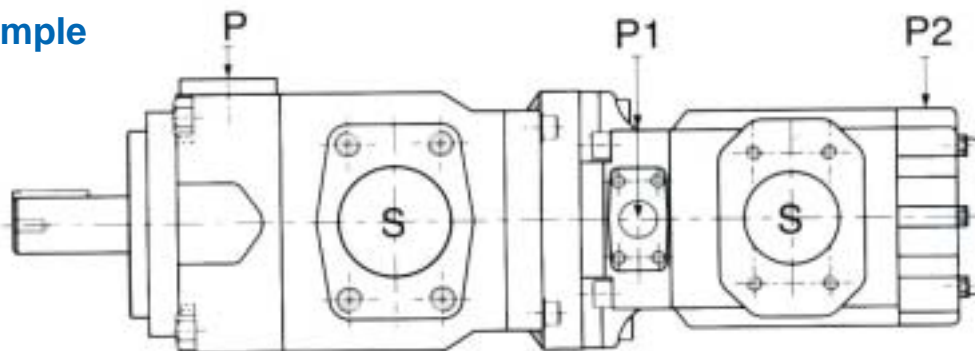
Permissible Radial load





## Adaptor & Coupling Selection - KT6 Series

### Example



**KT6ER + KT6CC**

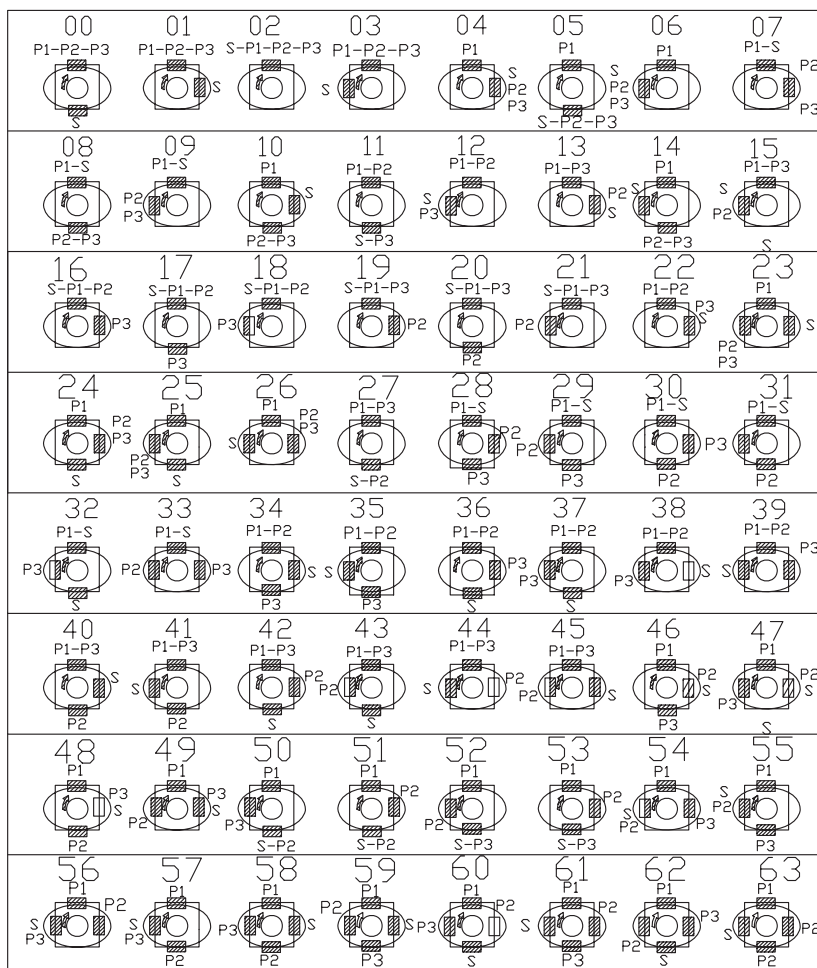
- 1. KT6ER-\*\*-1R02-B21-A1
- 2. KT6ER-\*\*\*-\*\*\*-5R01-C100
- 3. Ass'y tandem W03

Rear Pump		Drive train pump			
		KT6*R (single pumps)		KT6***R (single pumps)	
Series	Shaft	Coupling	Adaptor	Coupling	Adaptor
KT6C*	3	2	B	Not available	
KT6GR*			B		
KT6CSH	4	3	B		
KT6CC*	3 5	3 2	B B	Not available	
KT6D*	3	4	C	Not available	
KT6DR*					
KT6DC*					
KT6DCC*					
KT6E*	3	4	3	Not available	
KT6ER*					
KT6EC*					
KT6ED*					
KTE	4 3	1 5	A A	Available	
KT7B	3 4	2 3	B B	Not available	
KT6H***	4	3	B	Not available	
PV6	1	2	A	Available with special coupling	
PV10 PV15	1	2	B	Not available	
PV20 PV29	1	4	C	Not available	
GP1D	3	1	A	Available	
GP2D	3	1	A	Available up to 12cm <sup>3</sup> /rev	
GP2A	3	1	A	Available	
GP3A	3	2	B	Not available	

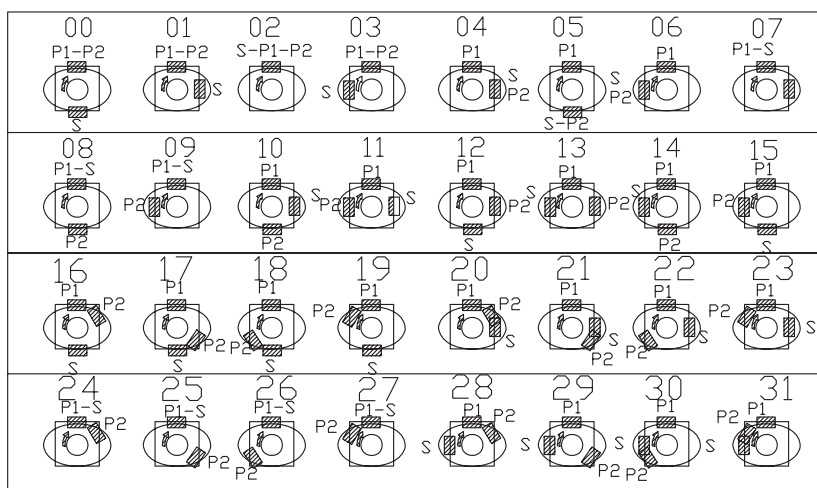


## Porting Diagrams - KT6 Series

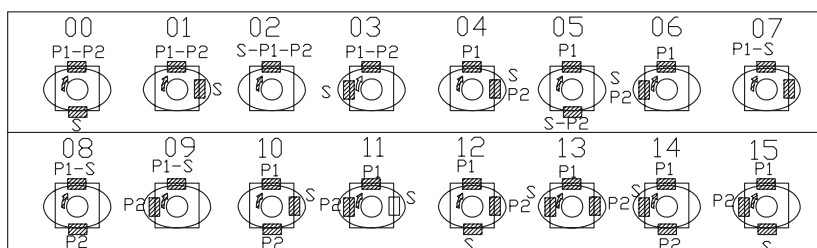
### KT6DCC-KT6EDC



### KT6CC-KT6DC-KT6EC



### KT6ED



## Porting Diagrams - KT6 Series

### KT6DCC-KT6EDC

P1



S	P2	P3				P2	P3			
		02	16	17	18		20	30	08	31
		19	07	26	32		21	33	29	09
		01	22	34	36		40	48	10	58
		13	04	46	47		45	49	59	23
		00	16	17	18		27	51	05	50
		42	24	53	60		43	62	52	25
		03	39	35	12		41	53	14	57
		44	26	61	56		15	54	55	06