

KT6DC - **W** - 038 - 022 - 1 R 00 - B 1 - 00 - *

① **Series**

② **Severe duty shaft only**

③ **Cam ring for " P1 "**

Volumetric displacement (cm³/rev)

014=47.6	035=111.0
017=58.2	038=120.3
020=66.0	042=136.0
024=79.5	045=145.7
028=89.7	050=158.0
031=98.3	060=190.5

Cam ring for " P2 "

Volumetric displacement (cm³/rev)

005=17.2	017=58.3
006=21.3	020=63.8
008=26.4	022=70.3
010=34.1	025=79.3
012=37.1	028=88.8
014=46.0	031=100.0

④ **Type of shaft**

- 1 = Keyed (SAE C)
- 2 = Keyed (no SAE)
- 3 = Splined (SAE C)
- 4 = Splined (no SAE)

Sever duty KT6DCW only

- 5 = Keyed (no SAE)

⑤ **Direction of rotation**

(view on shaft end)

R = clockwise

L = counter - clockwise

⑥ **Porting combination**

00 = standard

⑦ **Design letter**

⑧ **Seal class**

1 = S1 (for mineral oil)

4 = S4 (for the resistant fluids)

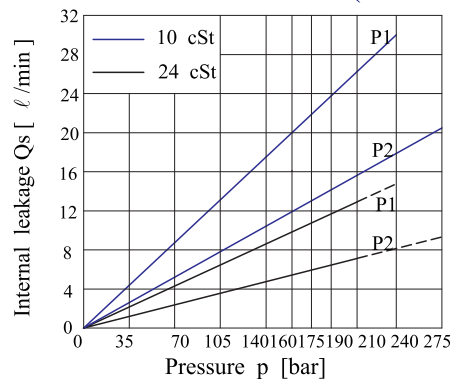
5 = S5 (for mineral oil and fire resistant fluids)

⑨ **Mounting W / connection variables**

	UNC		METRIC	
	00	01	M0	M1
P2	1"	3/4"	1"	3/4"

⑩ **Modifications**

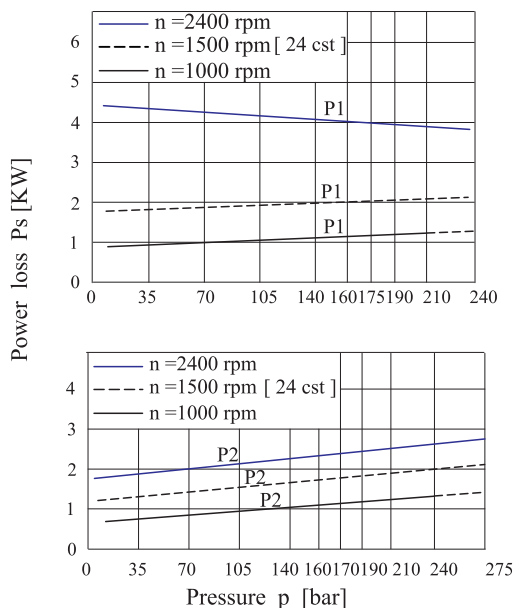
INTERNAL LEAKAGE (TYPICAL)



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

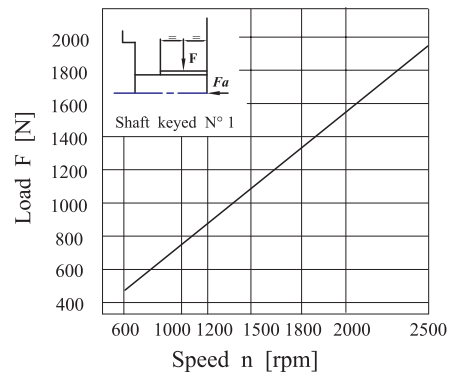
Total leakage is the sum of each section loss at its operating conditions.

HYDROMECHANICAL POWER LOSS (TYPICAL)

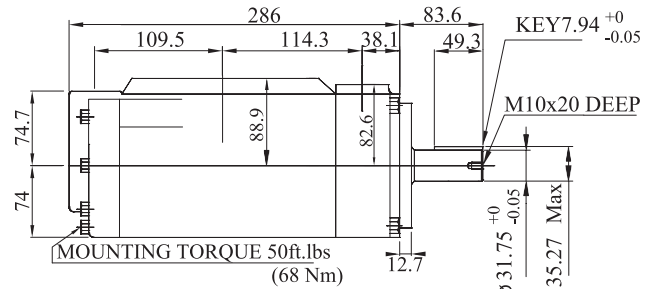
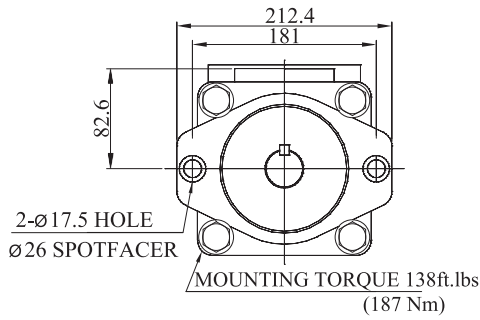


Total hydromechanical power loss is the sum of each section at its operating conditions.

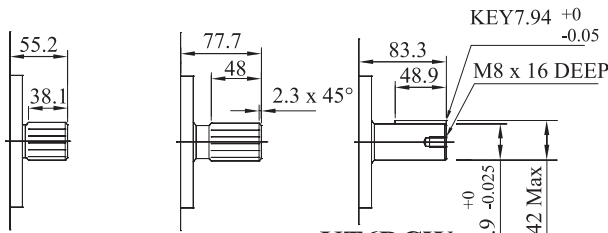
PERMISSIBLE RADIAL LOAD



Maximum permissible axial load Fa = 1200 N



Shaft Code 1
(Keyed SAE C)



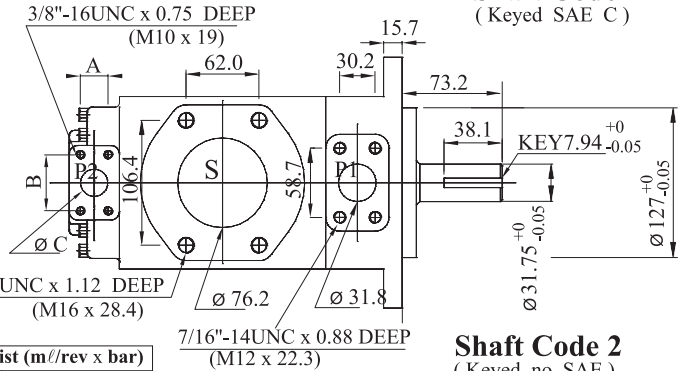
Shaft code 3

SAE C Splined shaft class 1 - J498b
12/24 d.p. -14 teeth
30° pressure angle.
Flat root side fit.

Shaft code 4

NO SAE Splined shaft class 1 - J498
b 12/24 d.p. -14 teeth
30° pressure angle. Flat root side fit.

KT6DCW Shaft code 5
(Keyed no SAE)



Shaft Code 2
(Keyed no SAE)

Shaft torque limist (mℓ/rev x bar)		
Pump	Shaft	Vp x p max.P1+P2
KT6DC	1	43240
	2	34590
	3	61200
	4	61200
	5	55600

Alternate connect. variables		
	00 & M0	01 & M1
A	1.031 (26.2)	0.874 (22.2)
B	2.06 (52.4)	1.874 (47.6)
C	1.0 (25.4)	0.75 (19.05)

OPERATING CHARACTERISTICS - TYPICAL [24 cSt]

(input power p (kw) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp	Flow qve [ℓ/min] 1500 rpm			Input power P [KW] 1500 rpm			P Max Kg/cm ²	Max r.p.m
			P = 0 bar	P = 140 bar	P = 240 bar	P = 7 bar	P = 140 bar	P = 240 bar		
P1	014	47.6ml/rev	71.4	62.1	55.9	2.3	18.5	30.6	240	2500
	017	58.2ml/rev	87.3	78.0	71.8	2.5	22.2	37.0		
	020	66.0ml/rev	99.0	89.7	83.5	2.8	24.9	41.7		
	024	79.5ml/rev	119.3	110.0	103.8	3.0	29.6	49.8		
	028	89.7ml/rev	134.5	125.2	119.0	3.2	33.2	55.9		
	031	98.3ml/rev	147.5	138.1	131.9	3.3	36.2	61.0		
	035	111.0ml/rev	166.5	157.2	151.0	3.5	40.7	68.7		
	038	120.3ml/rev	180.4	171.2	164.9	3.7	43.9	74.3		
	042 1)	136.0ml/rev	204.0	194.7	188.5	4.0	49.4	83.7		
	045 1)	145.7ml/rev	218.5	209.2	203.0	4.1	52.8	89.5		
	050 1)	158.0ml/rev	237.0	227.7	224.0 2)	4.4	57.0	85.0 2)		
061 1)	190.5ml/rev	285.7	278.0 3)	—	4.6	60.6 3)	—			
P2	005	17.2ml/rev	25.8	20.8	17.3	1.4	7.5	12.2	275	2500
	006	21.3ml/rev	31.9	26.9	23.4	1.5	8.9	14.7		
	008	26.4ml/rev	39.6	34.6	31.1	1.6	10.7	17.7		
	010	34.1ml/rev	51.1	46.1	42.6	1.7	13.4	22.3		
	012	37.1ml/rev	55.6	50.6	47.1	1.7	14.4	24.1		
	014	46.0ml/rev	69.0	64.0	60.5	1.9	17.6	29.5		
	017	58.3ml/rev	87.4	82.4	78.9	2.1	21.9	36.9		
	020	63.8ml/rev	95.7	90.7	87.2	2.2	23.8	40.2		
	022	70.3ml/rev	105.4	100.4	96.9	2.3	26.1	44.1		
	025	79.3ml/rev	118.9	113.9	110.4	2.5	29.2	49.5		
	028	88.8ml/rev	133.2	128.2	125.8 2)	2.8	32.7	48.5 2)		
031	100.0ml/rev	150.0	145.0	142.6 2)	2.8	36.5	54.4 2)			

1) 042 - 045- 050- 061 = 2200 rpm max

2) 028 - 031- 050 = 210 bar max. int.

Min Speed : 600 rpm

3) 061 = 120 bar max. int.
061 = 80 bar max. cont.

KT6EC - * - 066 - 014 - 1 R 00 - B 1

① ② P1 P2 ④ ⑤ ⑥ ⑦ ⑧

③

① **Series**

② **Y-Metric port connection, Omit for UNC**

③ **Cam ring for " P1 "**

Volumetric displacement (cm³/rev)

042 = 132.3	062 = 196.7
045 = 142.4	066 = 213.3
050 = 158.5	072 = 227.1
052 = 164.8	085 = 269.8
057 = 180.7	

Cam ring for " P2 "

005=17.2	017=58.3
006=21.3	020=63.8
008=26.4	022=70.3
010=34.1	025=79.3
012=37.1	028=88.8
014=46.0	031=100.0

④ **Type of shaft**

- 1 = Keyed (SAE CC)
- 2 = Keyed (no SAE)
- 3 = Splined (SAE C)
- 4 = Splined (SAE CC)

⑤ **Direction of rotation**
(view on shaft end)

- R = clockwise
- L = counter - clockwise

⑥ **Porting combination**

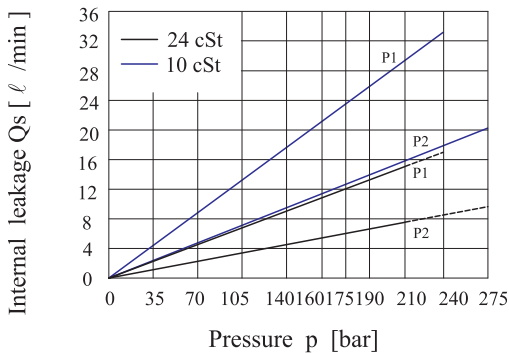
- 00 = standard

⑦ **Design letter**

⑧ **Seal class**

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

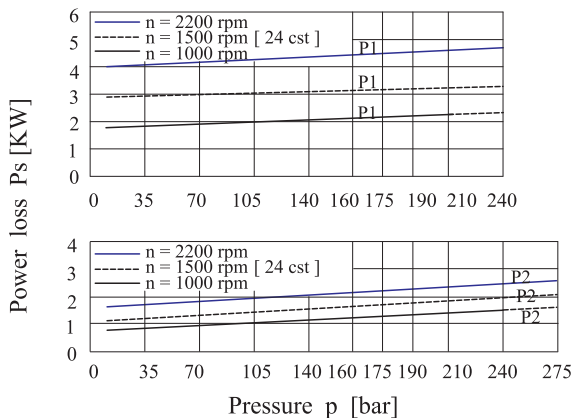
INTERNAL LEAKAGE (TYPICAL)



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

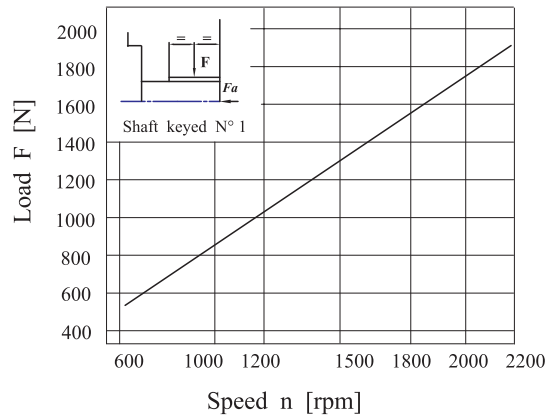
Total leakage is the sum of each section loss at its operating conditions.

HYDROMECHANICAL POWER LOSS (TYPICAL)

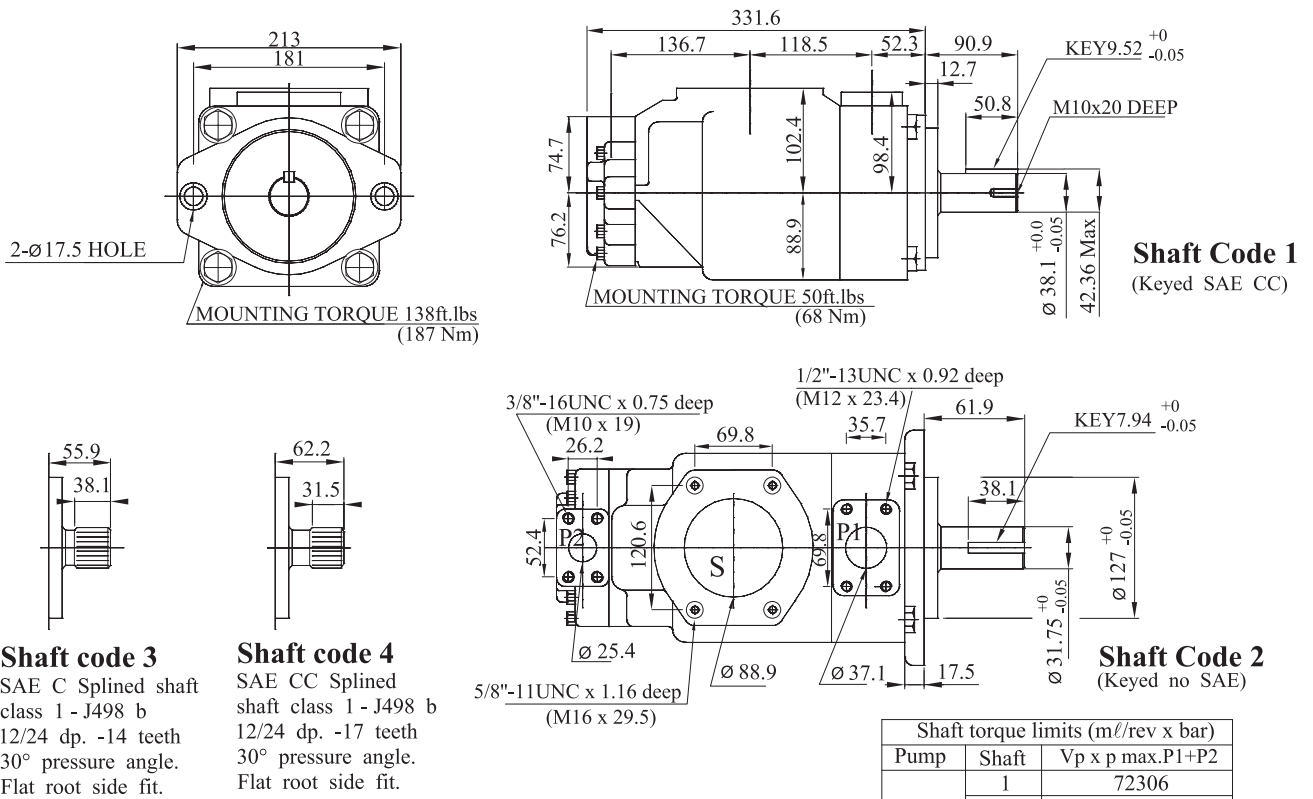


Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Maximum permissible axial load Fa = 2000 N



KT6EC OPERATING CHARACTERISTICS - TYPICAL [24 cSt] (input power p (kw) for one cartridge only)

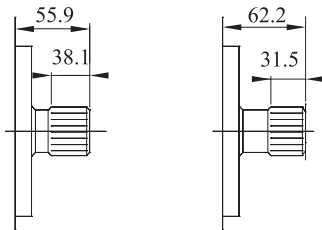
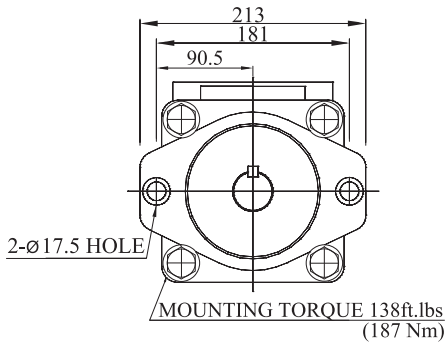
Pressure port	Series	Volumetric Displacement Vp	Flow qve [ℓ /min]1500rpm			Input power P [KW]1500rpm			P Max Kg/cm ²	Max r.p.m
			P = 0 bar	P = 140 bar	P = 240 bar	P = 7 bar	P = 140 bar	P = 240 bar		
P1	042	132.3ml/rev	198.5	188.5	181.3	5.2	49.4	82.6	240	2200
	045	142.4ml/rev	213.6	203.6	196.5	5.4	52.9	88.7		
	050	158.5ml/rev	237.7	227.7	220.6	5.7	58.5	98.3		
	052	164.8ml/rev	247.2	237.2	230.1	5.8	60.8	102.1		
	057	180.7ml/rev	271.1	261.1	254.0	6.1	66.4	106.9		
	062	196.7ml/rev	295.0	285.0	277.9	6.4	71.9	121.3		
	066	213.3ml/rev	319.9	309.9	302.8	6.7	77.7	131.2		
	072	227.1ml/rev	340.6	330.6	323.5	6.9	82.6	139.5		
	085 1)	269.8ml/rev	404.7	397.7 2)	-	7.3	65.3 2)	-	90	2000
P2	005	17.2ml/rev	25.8	20.8	17.3	1.4	7.5	12.2	275	2200
	006	21.3ml/rev	31.9	26.9	23.4	1.5	8.9	14.7		
	008	26.4ml/rev	39.6	34.6	31.1	1.6	10.7	17.7		
	010	34.1ml/rev	51.1	46.1	42.6	1.7	13.4	22.3		
	012	37.1ml/rev	55.6	50.6	47.1	1.7	14.4	24.1		
	014	46.0ml/rev	69.0	64.0	60.5	1.9	17.6	29.5		
	017	58.3ml/rev	87.4	82.4	78.9	2.1	21.9	36.9		
	020	63.8ml/rev	95.7	90.7	87.2	2.2	23.8	40.2		
	022	70.3ml/rev	105.4	100.4	96.9	2.3	26.1	44.1		
	025	79.3ml/rev	118.9	113.9	110.4	2.5	29.2	49.5		
	028	88.8ml/rev	133.2	128.2	125.8 3)	2.8	32.7	48.5 3)		
	031	100.0ml/rev	150.0	145.0	142.6 3)	2.8	36.5	54.4 3)		

1) 085 = 2000 rpm max.

2) 085 = 90 bar max. int.

3) 028 - 031 = 210 bar max. int.

Min Speed : 600 rpm

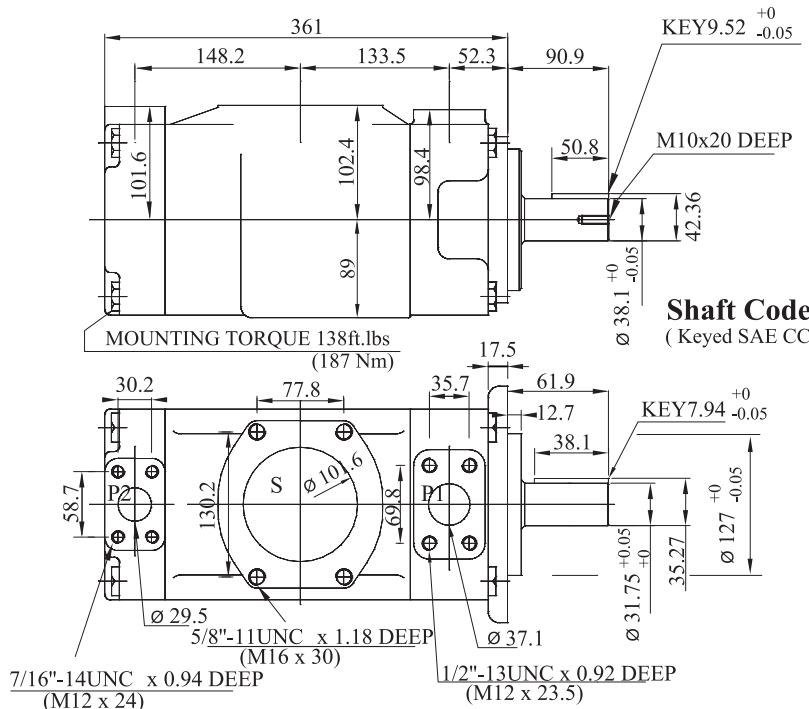


Shaft code 3

SAE C Splined shaft class 1 - J498 b
12/24 dp. -14 teeth
30° pressure angle.
Flat root side fit.

Shaft code 4

SAE CC Splined shaft class 1 - J498 b
12/24 dp. -17 teeth
30° pressure angle.
Flat root side fit.



Shaft torque limits (ml/rev x bar)		
Pump	Shaft	Vp x p max.P1+P2
KT6ED	1	72306
	2	34590
	3	61200
	4	76376

KT6ED OPERATING CHARACTERISTICS - TYPICAL [24 cSt] (input power p (kw) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp	Flow qve [l/min] 1500 rpm			Input power P [KW] 1500rpm			P Max Kg/cm ²	Max r.p.m	
			P = 0 bar	P = 140 bar	P = 240 bar	P = 7 bar	P = 140 bar	P = 240 bar			
P1	042	132.3ml/rev	198.5	188.5	181.3	5.2	49.4	82.6	240	2200	
	045	142.4ml/rev	213.6	203.6	196.5	5.4	52.9	88.7			
	050	158.5ml/rev	237.7	227.7	220.6	5.7	58.5	98.3			
	052	164.8ml/rev	247.2	237.2	230.1	5.8	60.8	102.1			
	057	180.7ml/rev	271.1	261.1	254.0	6.1	66.4	106.9			
	062	196.7ml/rev	295.0	285.0	277.9	6.4	71.9	121.3			
	066	213.3ml/rev	319.9	309.9	302.8	6.7	77.7	131.2			
	072	227.1ml/rev	340.6	330.6	323.5	6.9	82.6	139.5			
	085 1)	269.8ml/rev	404.7	397.7 2)	-	7.3	65.3 2)	-			90
P2	014	47.6ml/rev	71.4	62.1	55.9	2.3	18.5	30.6	240	2200	
	017	58.2ml/rev	87.3	78.0	71.8	2.5	22.2	37.0			
	020	66.0ml/rev	99.0	89.7	83.5	2.8	24.9	41.7			
	024	79.5ml/rev	119.3	110.0	103.8	3.0	29.6	49.8			
	028	89.7ml/rev	134.5	125.2	119.0	3.2	33.2	55.9			
	031	98.3ml/rev	147.5	138.1	131.9	3.3	36.2	61.0			
	035	111.0ml/rev	166.5	157.2	151.0	3.5	40.7	68.7			
	038	120.3ml/rev	180.4	171.1	164.9	3.7	43.9	74.3			
	042	136.0ml/rev	204.0	194.7	188.5	4.0	49.4	83.7			
	045	145.7ml/rev	218.5	209.2	203.0	4.1	52.8	89.5			
	050	158.0ml/rev	237.0	227.7	224.0 3)	4.4	57.0	85.0 3)			210
	061	190.5ml/rev	285.7	278.0 4)	-	4.6	60.6 4)	-			120

1) 085 = 2000 rpm max.

2) 085 = 90 bar max. int.

085 = 75 bar max. cont.

Min Speed : 600 rpm

3) 050 = 210 bar max. int.

4) 061 = 120 bar max. int.

061 = 80 bar max. cont.

KT6GCC - B22 - B08 - 6 R 00 - A 1 - 00 *

① P1 P2 ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Series

② Cam ring for " P1 "

Volumetric displacement (cm³/rev)

B05=17.2	B17=58.3
B06=21.3	B20=63.8
B08=26.4	B22=70.3
B10=34.1	B25=79.3
B12=37.1	B28=88.8
B14=46.0	B31=100.0

Cam ring for " P2 "

B05=17.2	B17=58.3
B06=21.3	B20=63.8
B08=26.4	B22=70.3
B10=34.1	B25=79.3
B12=37.1	B28=88.8
B14=46.0	B31=100.0

③ Type of shaft

6-splined (DIN 5462)

④ Direction of rotation(view on shaft end)

R=clockwise

L=counter-clockwise

⑤ Porting combination

00-standard

⑥ Design letter

⑦ Seal class

1-S1

⑧ Mounting W/connection variables

		P1=1" S=3"		P1=1" S=2 1/2" 2)	
P2		1"	3/4" 1)	1"	3/4" 1)
Code	Unc	00	01	10	11
	Metric	0M	M0	1M	M1

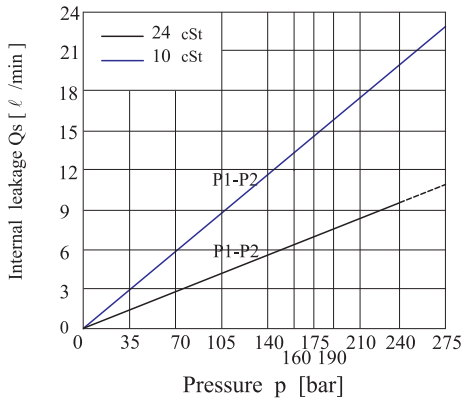
1)for 46mℓ/rev.max.

2)for 126mℓ/rev.max.

The large cartridge must be always mounted in the front.

⑨ Modifications

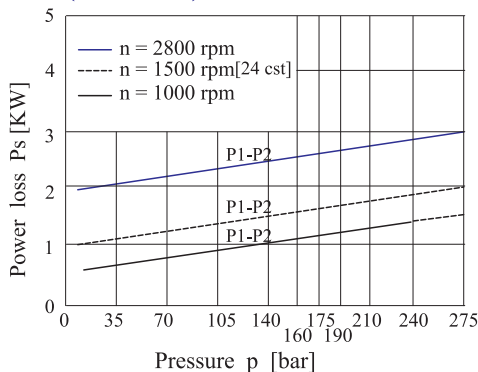
INTERNAL LEAKAGE (TYPICAL)



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

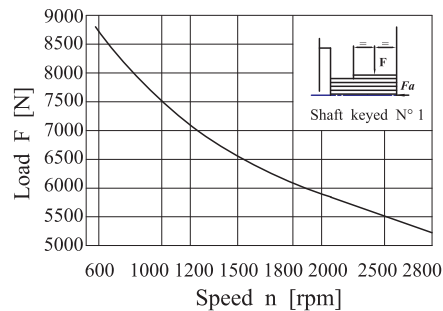
Total leakage is the sum of each section loss at its operating conditions.

HYDROMECHANICAL POWER LOSS (TYPICAL)

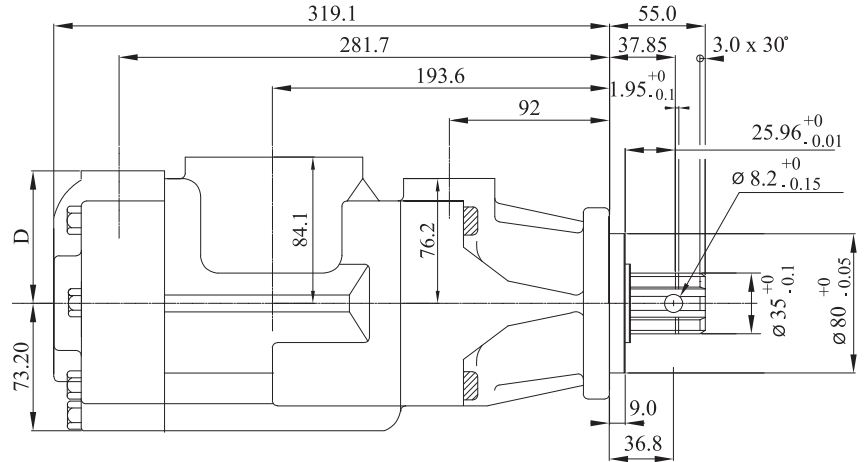
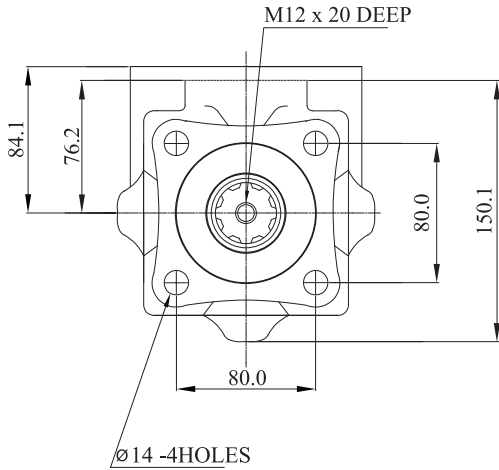


Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



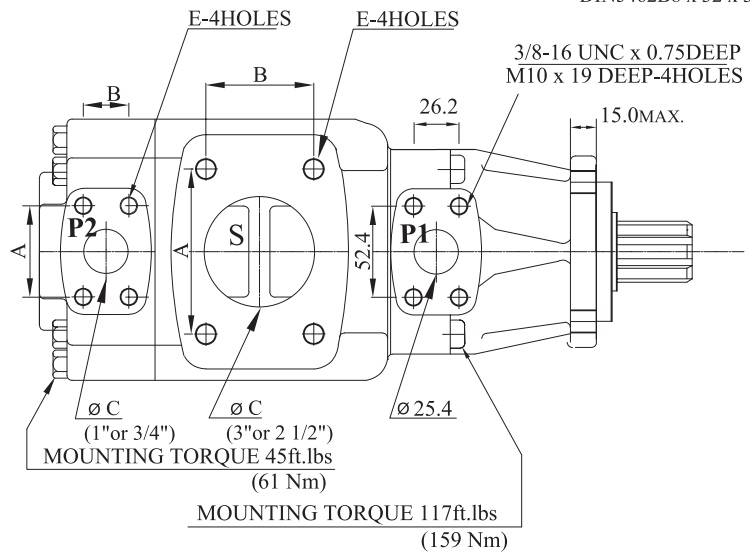
Lift time 3000 hours when 70% of the time at 500N and 30% at max. load



Shaft Code-6
DIN5462B8 x 32 x 36

PORT	A	B	C	D	E
S (3")	106.4	61.9	76.2		5/8-11UNC x 1.12 (M16 x 28.4 DEEP)
S (2 1/2")	88.9	50.8	63.5		1/2-13UNC x 0.94 (M12 x 24.0 DEEP)
P2 (3/4")	47.7	22.2	19.0	76.2	3/8-16UNC x 0.75 (M10 x 19.0 DEEP)
P2 (1")	52.4	26.2	25.4	74.7	

Shaft torque limits (mℓ/rev x bar)	
Shaft	Vp x p max.(P1+P2)
6	32670



OPERATING CHARACTERISTICS - TYPICAL (24 cST) (input power p (kw) for one cartridge only)

Pressure Port	Series	Volumetric Displacement Vp cm ³ /rev	Flow q & n=1500 rpm (ℓ/min)			Input power p & n=1500rpm (KW)			P Max Kg/cm ²	Max r.p.m
			P=0 bar	P=140 bar	P=240 bar	P=7 bar	P=140 bar	P=240 bar		
P1 - P2	B05	17.2	25.8	20.3	15.8	1.4	7.5	12.2	275	2800
	B06	21.3	31.9	26.5	22.0	1.5	8.9	14.7		
	B08	26.4	39.6	34.1	29.6	1.6	10.7	17.7		
	B10	34.1	51.1	45.7	41.2	1.7	13.4	22.3		
	B12	37.1	55.6	50.2	45.7	1.7	14.4	24.1		
	B14	46.0	69.0	63.5	59.0	1.9	17.6	29.5		
	B17	58.3	87.4	82.0	77.5	2.1	21.9	36.9		
	B20	63.8	95.7	90.2	85.7	2.2	23.8	40.2		
	B22	70.3	105.4	100.0	95.5	2.3	26.1	44.1		
	B25 1)	79.3	118.9	113.5	109.0	2.5	29.2	49.5		
B28 1)	88.8	133.2	127.7	124.5 2)	2.8	32.7	48.5 2)	210	2500	
B31 1)	100.0	150.0	144.5	141.3 2)	2.8	36.5	54.4 2)			

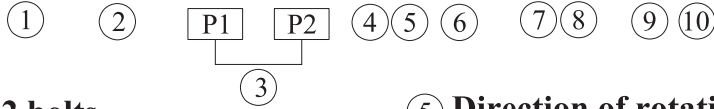
1) B25-B28-B31=2500 rpm. max

2) B28-B31=210 bar max. int.

Min Speed : 600 rpm

--Not to use because internal leakage greater than 50% theoretical flow.

KT67CB **W** - **022** - **B08** - **1** **R** **00** - **A** **1** - **11** *



① **Series-SAE B 2 bolts**
Mounting flange J744c

② **Use for severe duty shaft only**

③ **Cam ring for " P1 "**
Volumetric displacement (cm³/rev)

005=17.2	017=58.3
006=21.3	020=63.8
008=26.4	022=70.3
010=34.1	025=79.3
012=37.1	028=88.8
014=46.0	031=100.0

Cam ring for " P2 "

B02=5.7	B09=28.0
B03=9.8	B10=31.8
B04=12.8	B11=34.9
B05=15.9	B12=40.9
B06=19.8	B14=45.1
B07=22.5	B15=50.0
B08=24.9	

④ **Type of shaft**

1-Keyed(no SAE)
3-splined (SAE BB)
5-splined(SAE B)

W version
2-Keyed(SAE BB)

⑤ **Direction of rotation(view on shaft end)**
R=clockwise
L=counter-clockwise

⑥ **Porting combination**
00-standard

⑦ **Design letter**

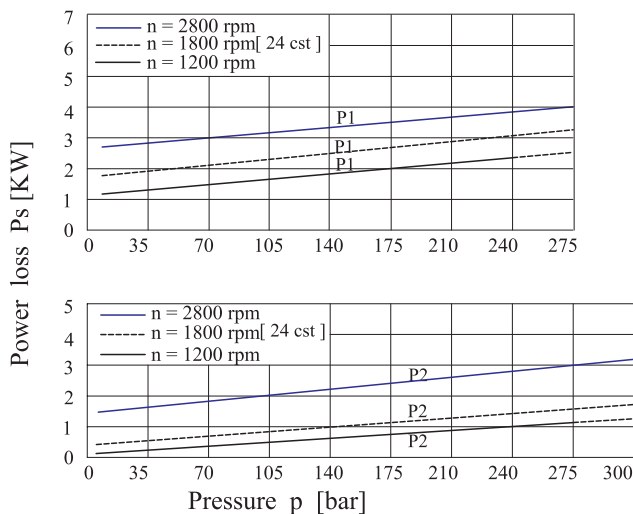
⑧ **Seal class**
1-S1 (for mineral oil)
4-S4 (for fire resistant fluids)
5-S5 (for mineral oil and fire resistant fluids)

⑨ **Mounting W/connection variables**

P1=1" , P2=3/4" ,S=2 1/2"	
Unc	Metric
11	M1

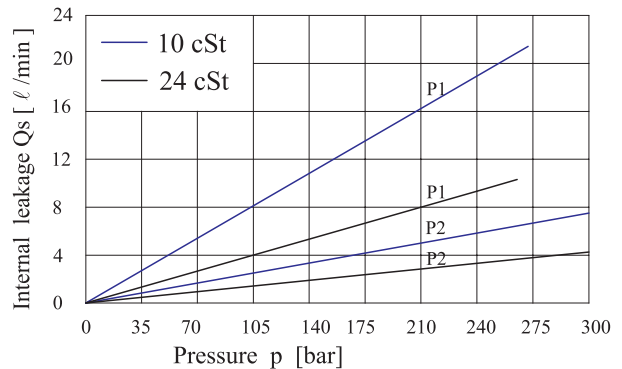
⑩ **Modifications**

HYDROMECHANICAL POWER LOSS (TYPICAL)

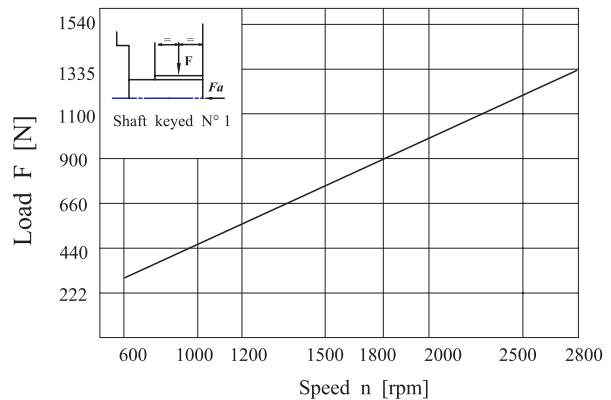


Total hydromechanical power loss is the sum of each section at its operating conditions.

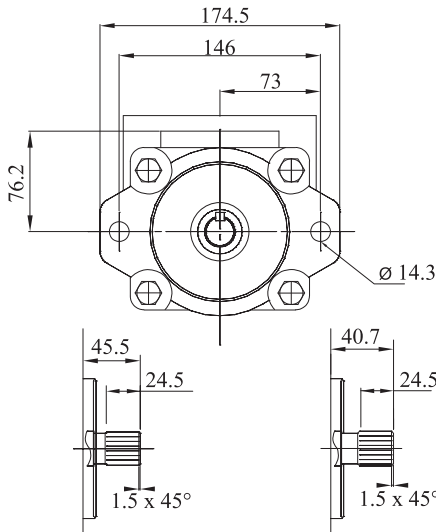
INTERNAL LEAKAGE (TYPICAL)



PERMISSIBLE RADIAL LOAD



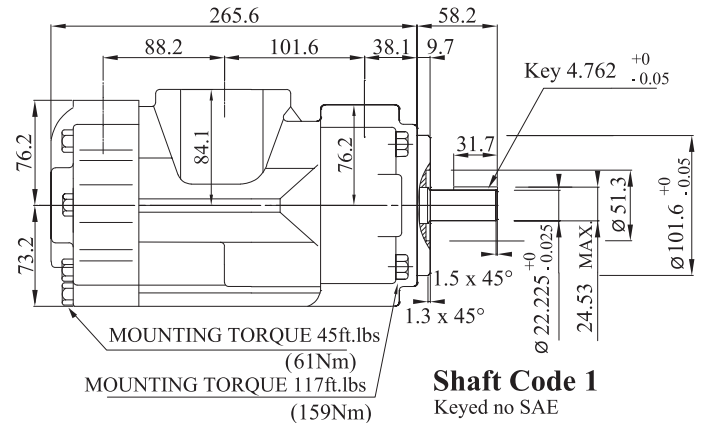
Maximum permissible axial load $F_a = 800$ N



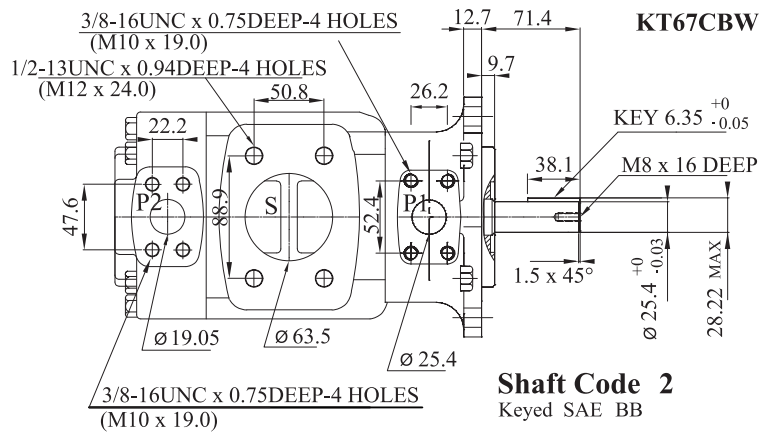
Shaft code 3
SAE BB splined shaft
Class 1-J498 b 16/32dp.
-15 teeth 30° pressure
angle flat root side fit

Shaft code 5
SAE B splined shaft
Class 1-J498 b 16/32dp.
-13 teeth 30° pressure
angle flat root side fit

Shaft torque limits (mℓ/rev x bar)		
Pump	Shaft	Vp x p max.(P1+P2)
KT67CB	1	14300
	2	21420
	3	32670
	5	20600



Shaft Code 1
Keyed no SAE



Shaft Code 2
Keyed SAE BB

OPERATING CHARACTERISTICS - TYPICAL (24 cST) (input power p (kw) for one cartridge only)

Pressure Port	Series	Volumetric Displacement Vp cm ³ /rev	Flow q & n =1800 rpm (ℓ/min)			Input power p & n =1800rpm (KW)			P Max Kg/cm ²	Max r.p.m
			P=0 bar	P=140 bar	P=275 bar	P=7 bar	P=140 bar	P=275 bar		
P1									275	2800
	005	17.2	30.9	26.0	21.5	1.70	8.94	14.77		
	006	21.3	38.3	33.4	28.8	1.78	10.64	17.74		
	008	26.4	47.4	42.6	37.9	1.89	12.75	21.43		
	010	34.1	61.3	56.4	51.8	2.06	15.94	27.00		
	012	37.1	66.7	61.8	57.2	2.11	17.18	29.18		
	014	46.0	82.7	77.8	73.2	2.30	20.87	35.62		
	017	58.3	104.8	99.9	95.3	2.55	25.95	44.54		
	020	63.8	114.7	109.8	105.2	2.66	28.23	48.52		
	022	70.3	126.4	121.5	116.9	2.80	30.92	53.22		
	025 1)	79.3	142.5	137.6	133.1	2.99	34.64	59.74		
028 1)	88.8	159.6	154.7	152.4 2)	3.18	38.58	57.22 2)	210	2500	
031 1)	100.0	179.7	174.9	172.5 2)	3.41	43.21	64.17 2)			
P2	Series	cm ³ /rev	P=0 bar	P=140 bar	P=300 bar	P=7 bar	P=140 bar	P=300 bar	300	2800
	B02	5.7	10.4	8.8	6.8	0.55	2.99	6.40		
	B03	9.8	17.6	15.9	14.0	0.63	4.65	10.25		
	B04	12.8	23.0	21.4	19.4	0.70	5.89	13.13		
	B05	15.9	28.6	26.9	25.0	0.76	7.17	16.12		
	B06	19.8	35.6	33.9	32.0	0.84	8.79	19.88		
	B07	22.5	40.4	38.8	36.8	0.89	9.91	22.47		
	B08	24.9	44.7	43.1	41.1	0.94	10.9	24.78		
	B09	28.0	50.3	48.6	47.0	1.01	12.19	27.77		
	B10	31.8	57.2	55.5	53.5	1.11	13.75	31.42		
	B11	34.9	62.9	61.2	59.3	1.15	15.04	32.22		
	B12	40.9	73.7	72.1	70.1	1.28	17.56	37.71		
	B14	45.1	80.8	79.2	77.0	1.36	19.23	41.37		
	B15	50.0	89.8	88.3	86.5 3)	1.47	21.28	42.76 3)		

1) 025-028-031=2500 rpm
3) B15=280 bar max. int.

2) 028-031=210 bar max. int.

--Not to use because internal leakage greater than 50% theoretical flow.
Min Speed : 600 rpm

KT7QCC 1 W - 022 - 1 R 00 - B 1 00 *

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪

① **Series**

② **Mounting**

- 1 - SAE B
- 2 - SAE C

③ **Use for severe duty shaft only**

④ **Cam ring for "P1" "P2"**

Volumetric displacement (cm³/rev)

005 = 17.2	017 = 58.3
006 = 21.3	020 = 63.8
008 = 26.4	022 = 70.3
010 = 34.1	025 = 79.3
012 = 37.1	028 = 88.8
014 = 46.0	031 = 100.0

⑤ **Type of shaft**

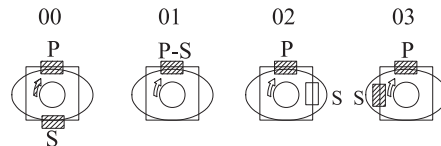
- 1 = keyed (no SAE) **Severe duty**
- 3 = Splined (SAE BB) **2 = keyed (SAE BB)**
- 5 = Splined (SAE B)

⑥ **Direction of rotation**

- (view on shaft end)
- R = clockwise
- L = counter - clockwise

⑦ **Porting combination**

00 = standard



S=Suction port P=Pressure port

⑧ **Design letter**

⑨ **Seal class**

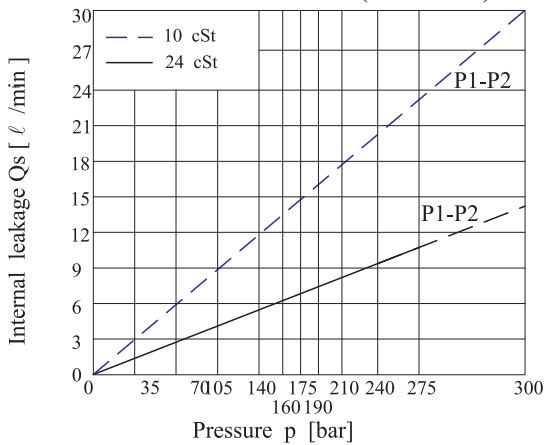
- 1 = S1 (for mineral oil)
- 4 = S4 (for fire resistant fluids)
- 5 = S5 (for mineral oil and fire resistant fluids)

⑩ **Mounting W/connection variables**

	P1=1" S=3"	P1=1" S=2 1/2"
CODE P2	1" 3/4" 1)	1" 3/4" 1)
UNC	00 01 10 11	
METRIC	0M W0 1M W1	

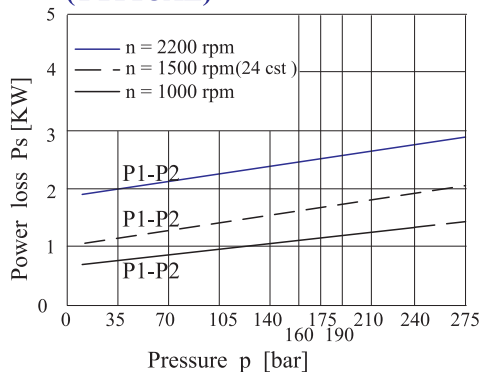
- 1) for 46 ml/rev max.
- 2) for 126 ml/rev max.
- The large cartridge must be always mounted in the front.

INTERNAL LEAKAGE (TYPICAL)

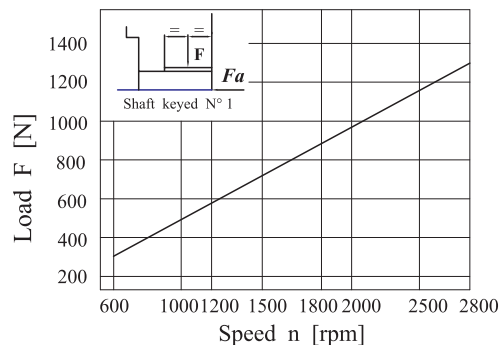


Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 % of theoretical flow.

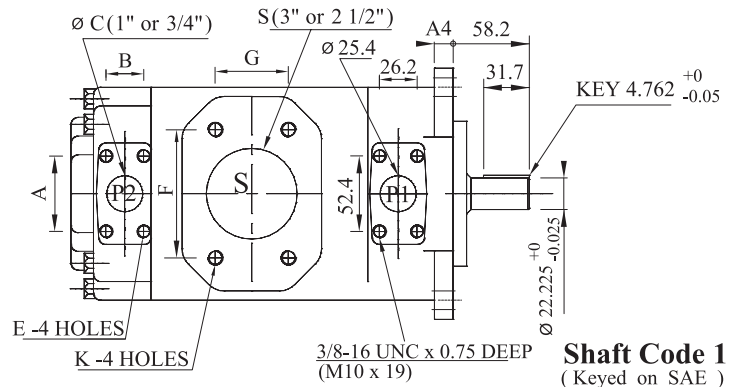
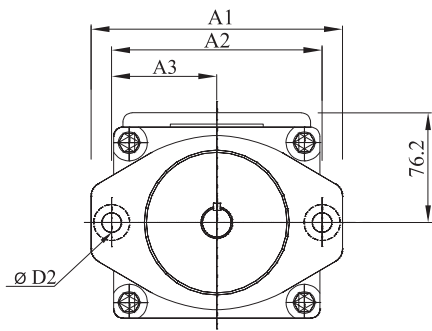
HYDROMECHANICAL POWER LOSS (TYPICAL)



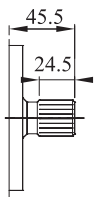
PERMISSIBLE RADIAL LOAD



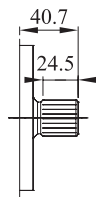
Maximum permissible axial load Fa = 800 N



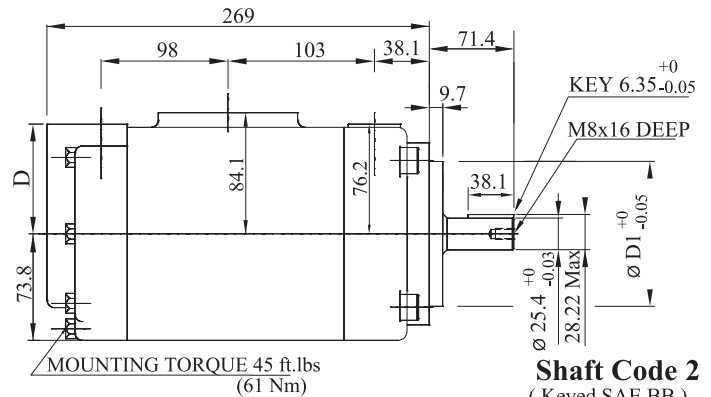
Shaft Code 1
(Keyed on SAE)



Shaft code 3
SAE BB Splined shaft
class 1 - J498 b 16/32
dp. -15 teeth 30°
pressure angle. Flat root
side fit.



Shaft code 5
SAE B Splined shaft
class 1 - J498 b 16/32
dp. -13 teeth 30°
pressure angle. Flat root
side fit.



Shaft Code 2
(Keyed SAE BB)

Alternate Port									
S = 3"				S = 2 1/2"					
F	106.4				88.9				
G	61.9				50.8				
ØH	76.2				63.5				
Code	00	01	0M	W0	10	11	1M	W1	
A	52.4	47.7	52.4	47.7	52.4	47.7	52.4	47.7	
B	26.2	22.4	26.2	22.4	26.2	22.4	26.2	22.4	
ØC	25.4	19.0	25.4	19.0	25.4	19.0	25.4	19.0	
D	74.7	76.2	74.7	76.2	74.7	76.2	74.7	76.2	
E	3/8"-16UNCx19 deep		M10x19 deep		3/8"-16UNCx19 deep		M10x19 deep		
K	5/8"-11UNCx28.4 deep		M16x28.4 deep		1/2"-13UNCx23.9 deep		M12x24.0 deep		

Shaft torque limits (mℓ/rev x bar)			KT7QCC1		KT7QCC2
Pump	Shaft	Vp x p max. P1+P2	Mounting	SAE B	SAE C
KT7QCC	1	14300	ØD1	101.6	127
	2	21420	ØD2	14.3	17.5
	3	32670	A1	174.5	212.5
	5	20600	A2	146	181
			A3	73	90.5
			A4	12.7	15.7

KT7QCC OPERATING CHARACTERISTICS - TYPICAL [24 cSt]

(input power p (kw) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp	Flow qvc [ℓ/min]1500rpm				Input power P [KW]1500rpm				P Max Kg/cm ²	Max r.p.m	
			P = 0 bar	P =140 bar	P =240 bar	P =300 bar	P =7 bar	P =140 bar	P =240 bar	P =300 bar			
P1 & P2	005	17.2mℓ/rev	25.8	21.5	17.7	13.7	1.4	7.5	12.2	14.9	300	2800	
	006	21.3mℓ/rev	31.9	26.5	22.0	18.0	1.5	8.9	14.7	18.0			
	008	26.4mℓ/rev	39.6	34.1	29.6	25.6	1.6	10.7	17.7	21.8			
	010	34.1mℓ/rev	51.1	45.7	41.2	37.2	1.7	13.4	22.3	27.5			
	012	37.1mℓ/rev	55.6	50.2	45.7	41.7	1.7	14.4	24.1	29.8			
	014	46.0mℓ/rev	69.0	63.5	59.0	55.0	1.9	17.6	29.5	36.5			
	017	58.3mℓ/rev	87.4	82.0	77.5	73.5	2.1	21.9	36.9	45.7			
	020	63.8mℓ/rev	95.7	90.2	85.7	81.7	2.2	23.8	40.2	49.8			
	022	70.3mℓ/rev	105.4	100.0	95.5	91.5 2)	2.3	26.1	44.1	50.3 2)			275
	025 1)	79.3mℓ/rev	118.9	113.5	109.0 3)	—	2.5	29.2	49.5 3)	—			240
	028 1)	88.8mℓ/rev	133.2	127.7	124.5 4)	—	2.8	32.7	48.5 4)	—	210	2500	
	031 1)	100.0mℓ/rev	150.0	144.5	141.3 4)	—	2.8	36.5	54.4 4)	—			

1) 025 - 028 - 031 = 2500 rpm. max
3) 025 = 240 bar max. int.

2) 022 = 275 bar max. int.
4) 028 - 031 = 210 bar max. int.

Min Speed : 600 rpm

KT7QDC - B38 - 022 - 1 R 00 - A 1 - 00 - *

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Series

② Cam ring for " P1 "

Volumetric displacement (cm³/rev)

B14=43.9	B35=113.4
B17=55.0	B38=120.6
B20=66.0	B42=137.5
B24=81.1	B45=145.7
B28=89.9	B50=157.9
B31=99.1	

Cam ring for " P2 "

Volumetric displacement (cm³/rev)

005=17.2	017=58.3
006=21.3	020=63.8
008=26.4	022=70.3
010=34.1	025=79.3
012=37.1	028=88.8
014=46.0	031=100.0

③ Type of shaft

- 1 = Keyed (SAE C)
- 2 = Keyed (SAE CC)
- 3 = Splined (SAE C)

④ Direction of rotation

(view on shaft end)

rotation

- R = clockwise
- L = counter - clockwise

⑤ Porting combination

00 = standard

⑥ Design letter

⑦ Seal class

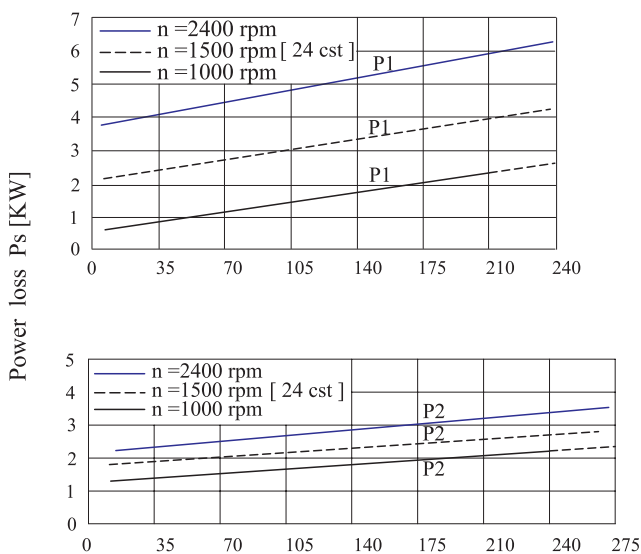
- 1 = S1 (for mineral oil)
- 4 = S4 (for the resistant fluids)
- 5 = S5 (for mineral oil and fire resistant fluids)

⑧ Mounting W / connection variables

	UNC		METRIC	
	00	01	M0	M1
P2	1"	3/4"	1"	3/4"

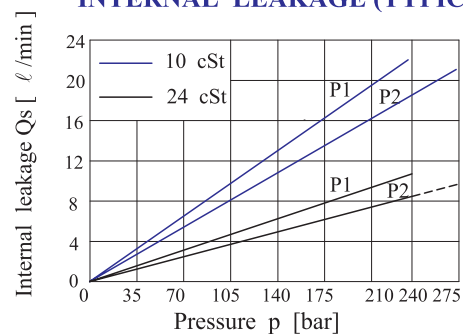
⑨ Modifications

HYDROMECHANICAL POWER LOSS (TYPICAL)



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

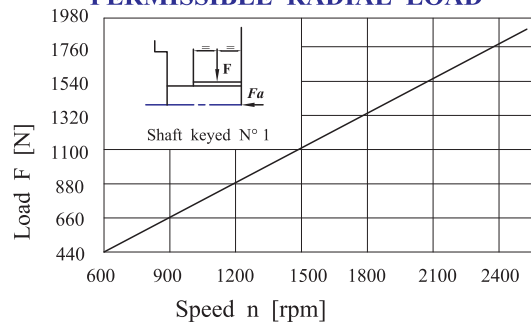
INTERNAL LEAKAGE (TYPICAL)



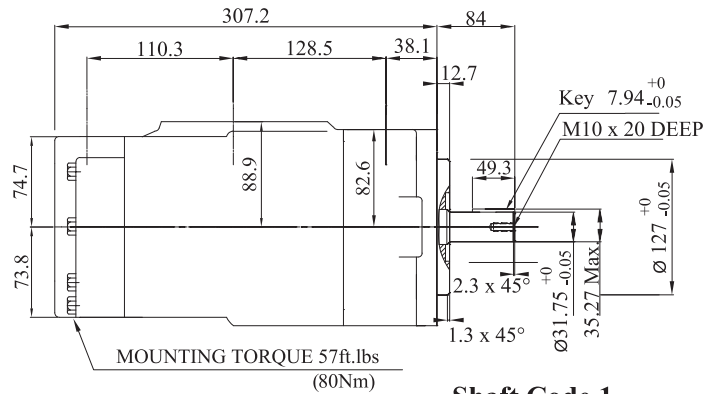
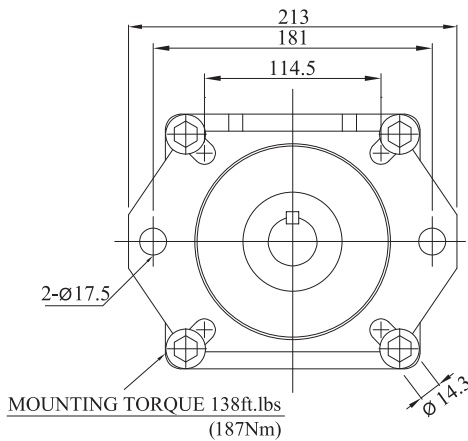
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 % of theoretical flow.

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

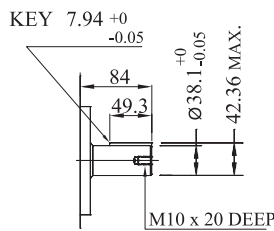
PERMISSIBLE RADIAL LOAD



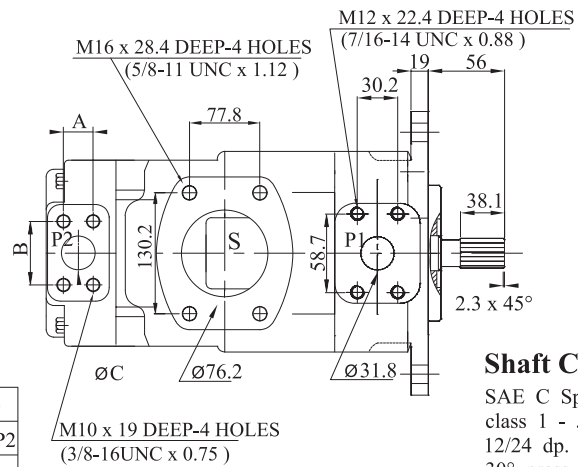
Maximum permissible axial load Fa = 1200 N



Shaft Code 1
Keyed SAE C



Shaft Code 2
Keyed SAE CC



Shaft Code 3
SAE C Splined shaft
class 1 - J498 b
12/24 dp. -14 teeth
30° pressure angle.
Flat root side fit.

Shaft torque limits (mℓ/rev x bar)		
Pump	Shaft	Vp x p max.P1+P2
KT7QDC	1	43240
	2	61200
	3	35880

Alternate connect. variables		
	00 & M0	01 & M1
A	1.031 (26.2)	0.874 (22.2)
B	2.06 (52.4)	1.874 (47.6)
C	1.0 (25.4)	0.75 (19.05)

OPERATING CHARACTERISTICS - TYPICAL (24 cST) (input power p (kw) for one cartridge only)

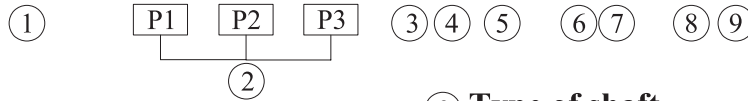
Pressure Port	Series	Volumetric Displacement Vp cm ³ /rev	Flow q & n=1800rpm (ℓ/min)			Input power p & n=1800rpm (KW)			P Max ₂ Kg/cm ²	Max r.p.m
			P=0 bar	P=140 bar	P=250 bar	P=7 bar	P=140 bar	P=250 bar		
P1	B14	43.9	79.1	72.5	67.3	2.6	20.7	35.0	250	2500
	B17	55.0	98.8	92.3	87.0	2.8	25.3	43.0		
	B20	66.0	118.6	112.0	106.8	3.0	29.8	50.9		
	B24	81.1	145.8	139.2	134.0	3.4	36.1	61.9		
	B28	89.9	161.8	155.2	150.0	3.5	39.7	68.3		
	B31	99.1	178.3	171.7	166.5	3.7	43.6	75.0		
	B35	113.4	203.9	197.2	192.0	4.0	49.4	85.3		
	B38	120.6	216.8	210.2	204.9	4.2	52.4	90.5		
	B42	137.5	247.2	240.6	235.4	4.5	59.4	102.7		
	B45	145.7	261.9	253.6	246.8	5.0	62.4	108.7		
B50	157.9	284.1	275.8	271.3 1)	5.3	67.5	100.3 1)	210	2200	
P2	Series	cm ³ /rev	P=0 bar	P=140 bar	P=300 bar	P=7 bar	P=140 bar	P=300 bar	275	2500
	005	17.2	30.9	26.0	16.44	1.70	8.94	17.88		
	006	21.3	38.3	33.4	21.6	1.78	10.64	21.6		
	008	26.4	47.4	42.6	30.72	1.89	12.75	26.16		
	010	34.1	61.3	56.4	44.64	2.06	15.94	33.0		
	012	37.1	66.7	61.8	50.04	2.11	17.18	35.4		
	014	46.0	82.7	77.8	66.0	2.30	20.87	43.8		
	017	58.3	104.8	99.9	88.2	2.55	25.95	54.84		
	020	63.8	114.7	109.8	98.04	2.66	28.23	59.76		
	022	70.3	126.4	121.5	109.8 2)	2.80	30.92	60.36 2)		
	025	79.3	142.5	137.6	—	2.99	34.64	—		
	028	88.8	159.6	154.7	—	3.18	38.58	—		
	031	100.0	179.7	174.9	—	3.41	43.21	—		

1) B50=210 bar max. int.

2) 022=240 bar max. int.

Min Speed : 600 rpm

KT6DCC - 038 - 022 - 008 - 1 R 00 - A 1 - 00 *



① **Series**

② **Cam ring for " P1 "**

Volumetric displacement (cm³/rev)

014=47.6	035=111.0
017=58.2	038=120.3
020=66.0	042=136.0
024=79.5	045=145.7
028=89.7	050=158.0
031=98.3	061=190.5

Cam ring for " P2 " & " P3 "

005=17.2	017=58.3
006=21.3	020=63.8
008=26.4	022=70.3
010=34.1	025=79.3
012=37.1	028=88.8
014=46.0	031=100.0

③ **Type of shaft**

- 1 - Keyed (no SAE)
- 2 - Keyed (SAE CC)
- 3 - Splined (SAE C)
- 4 - Splined (SAE CC)

④ **Direction of rotation(view on shaft end)**

- R=clockwise
- L=counter-clockwise

⑤ **Porting combination**

00-standard

⑥ **Design letter**

⑦ **Seal class**

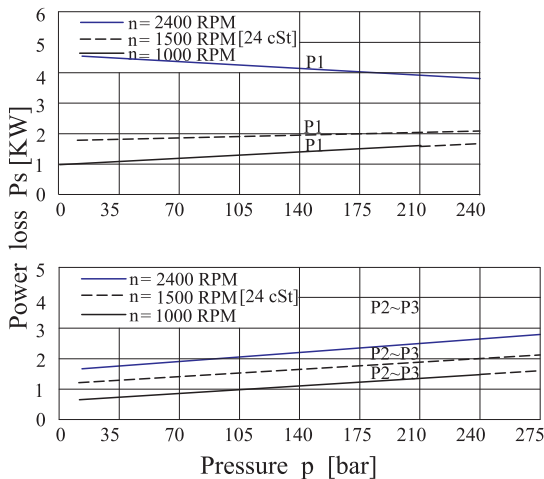
- 1-S1 (for mineral oil)
- 4-S4 (for fire resistant fluids)
- 5-S5 (for mineral oil and fire resistant fluids)

⑧ **Mounting W/connection variables**

	Unc		Metric	
	00	01	M0	M1
P3	1"	3/4"	1"	3/4"

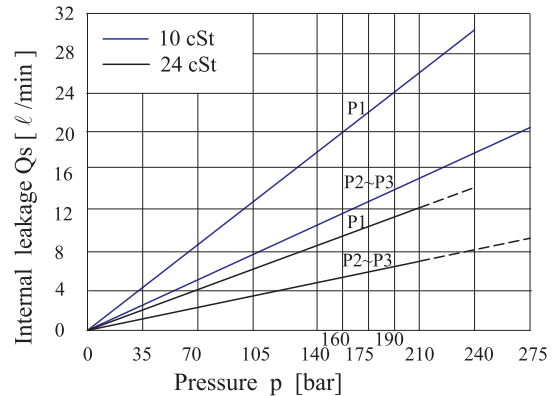
⑨ **Modifications**

HYDROMECHANICAL POWER LOSS (TYPICAL)

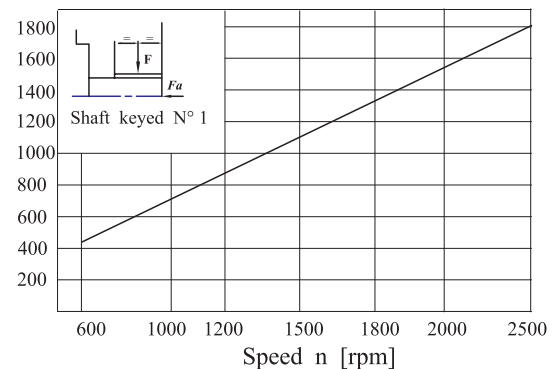


Total hydromechanical power loss is the sum of each section at its operating conditions.

INTERNAL LEAKAGE (TYPICAL)



PERMISSIBLE RADIAL LOAD



Maximum permissible axial load Fa = 1200 N