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Size	Series	Theoretical Displacement Vi m ³ /rev	Minimum Speed RPM	Maximum Speed			Maximum Pressure								
				HF-0 , HF-1 HF-2	HF-3 , HF-4 HF-5		HF-0 , HF-2		HF-1 , HF-4 , HF-5		HF-3				
				RPM	RPM	RPM	Int. bar	Cont. bar	Int. bar	Cont. bar	Int. bar	Cont. bar			
C	005	17.2	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										2500	210	160	160
031	100.0														
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										2200	210	160	160
	050	158.0													
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	269.0										210	175	175	175

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 further information or if performance characteristics outlined above do not meet your own particular requirements, please **consult your local KCL Hydraulics distributor**

ATTENTION AT STARTING

At first start operation of the pump shaft at the lowest speed and at the lowest pressure to obtain priming. When a pressure relief valve is used at the outlet it should be backed off to minimize return pressure.
 When possible an air bleed off should be provided in the circuit to facilitate purging of system air.
 Never operate pump shaft at top speed and pressure without checking for completion of pump priming, and the fluid has no aeration disaerated.

Series	Mounting Standard (SAE J477c ISO/3019-1)	Displacement (cm ³ / rev)	Speed		Max.Pressure		Weight (without connectors and bracket)		SAE 4-bolt J518-ISO/DIS 6162-1			
			max	min	psi	bar	lbs	Kg	suction	pressure		
KT6C/ KT6CM	SAE - B	17.2 - 100.0	2800	600 400	4000	275	36.6	16.6	1 1/2"	1"		
KT6D/ KT6DM	SAE - C	47.6 - 190.5	2500	600 400	3500	240	60.9	27.62	2"	1 1/4"		
KT6E/ KT6EM	SAE - C	132.3 - 269.8	2200	600 400	3500	240	95.4	43.3	3"	1 1/2"		
KT6GC	R.17-102	17.2 - 100.0	2800	400	4000	275	39.7	18.0	1 1/2"	1" SAE		
KT7B/ KT7BS	ISO 3019-2 / SAE J744 100 A2 HW / SAE B	5.7 - 50.0	3600	600	4640	320	51.1	23.2	1 1/2"	1" or 3/4"		
KT7QC1 KT7QC2	SAE - B SAE - C	P1=17.2 - 100.0 P2=17.2 - 100.0	3000	600	4350	300	50.7	23	1 1/2"	1" or 3/4"		
KT7D/ KT7DS	ISO 3019-2 / SAE J744 125 A2 HW / SAE C	43.9 - 157.9	3000	600	4350	300	57.3	26.1	2"	1" 1/4"		
KT7DSW	SAE - C	47.6 - 190.5	2500	600	3500	240	70.4	32.1	2 1/2"	1 1/4"		
KT7DXW	SAE - C	43.9 - 157.9	3000	600	4350	300	70.4	32.1	2 1/2"	1 1/4"		
KT6CR	SAE - B	17.2 - 100.0	2800	600 400	4000	275	42.5	19.3	1 1/2"	1"		
KT6DR	SAE - C	47.6 - 190.5	2500	600 400	3500	240	70.3	31.9	2"	1 1/4"		
KT6ER	SAE - C	132.3 - 269.8	2200	600 400	3500	240	103.2	46.8	3"	1 1/2"		
										P1	P2	
KT6CC/ KT6CCM	SAE - B	P1=17.2 - 100.0 P2=17.2 - 100.0	2800	600 400	4000	275	58.4	26.5	2 1/2" or 3"	1"	1" or 3/4"	
KT6CCZ	SAE - B	P1=17.2 - 100.0 P2=17.2 - 100.0	2800	600	4000	275	58.4	26.5	2 1/2" or 3"	1"	1" or 3/4"	
KT6GCC	R.17-102	P1=17.2 - 100.0 P2=17.2 - 100.0	2800	400	4000	275	60	27.2	2 1/2" or 3"	1"	1" or 3/4"	
KT6DC/ KT6DCM	SAE - C	P1=47.6 - 190.5 P2=17.2 - 100.0	2500	600 400	3500 4000	240 275	84.9	38.5	3"	1 1/4"	1" or 3/4"	
KT6DDS	SAE - C	P1=47.6 - 190.5 P2=47.6 - 190.5	2500	600	3500	240	123.4	56.0	4"	1 1/4"	1 1/4"	
KT6EC/ KT6ECM	SAE - C	P1=132.3 - 269.8 P2=17.2 - 100.0	2200	600 400	3500 4000	240 275	121.2	55	3 1/2"	1 1/2"	1"	
KT6ED/ KT6EDM	SAE - C	P1=132.3 - 269.8 P2=47.6 - 190.5	2200	600 400	3500 3500	240 240	140.0	63.5	4"	1 1/2"	1 1/4"	
KT6EE/ KT6EES	ISO-3019-2 / SAE - E 250 B4 HW /	P1=132.3 - 269.8 P2=132.3 - 269.8	2200	600	3500	240	209.4	95.0	4"	1 1/2"	1 1/4"	
KT67BB	SAE - B	P1=5.7 - 50.0 P2=5.7 - 50.0	2800	600	4000	275	58.4	26.5	2 1/2" or 3"	1"	1" or 3/4"	
KT67CB	SAE J744 SAE B	P1=17.2 - 100.0 P2=5.7 - 50.0	2800	600	4350	300	58.4	26.5	2 1/2"	1"	3/4"	
KT67DB	SAE J744 SAE C	P1=47.6 - 190.5 P2=5.7 - 50.0	2500	600	4350	300	84.9	38.5	3 "	1 1/4"	3/4"	
KT67EB	SAE J744 SAE C	P1=132.2 - 269.8 P2=5.7 - 50.0	2200	600	4350	300	121.2	55	3 1/2 "	1 1/2"	3/4"	
KT7BB / KT7BBS	ISO 3019-2 / SAE J744 100 A2 HW / SAE C	P1=5.7 - 50.0 P2=5.7 - 50.0	2200	600	4640	320	75.5	34	2 1/2 "	1" or 3/4"	3/4"	
KT7QCC1 KT7QCC2	SAE - B SAE - C	P1=17.2 - 100.0 P2=17.2 - 100.0	3000	600	4350	300	75.5	34	2 1/2"	1"	1" or 3/4"	
KT7ED / KT7EDS	ISO 3019-2 / SAE J744 125 A2 HW / SAE E	P1=132.2 - 268.7 P2=43.9 - 157.9	2200	600	3500 3630	240 250	145.5	63.5	4"	1 1/2"	1 1/4"	
KT7EE / KT7EES	ISO 3019-2 / SAE J744 250 B4 HW / SAE E	P1=132.2 - 268.7 P2=132.2 - 268.7	2200	600	3500	240	209.4	95.2	4"	1 1/2"	1 1/4"	
										P1	P2	P3
KT6DCC	SAE - C	P1=47.6 - 190.5 P2=17.2 - 100.0 P3=17.2 - 100.0	2500	600 400	3500 4000	240 275	145.7	66.1	4"	1 1/4"	1"	1 " or 3/4"
KT6DDCS	SAE - C	P1=47.6 - 190.5 P2=47.6 - 190.5 P3=17.2 - 100.0	2500	600 400	3500 4000	240 275	153.2	69.5	4"	1 1/4"	1 1/4"	1 " or 3/4"
KT6EDC	ISO 3019-2 250 B4 HW	P1=132.3 - 269.8 P2=47.6 - 190.5 P3=17.2 - 100.0	2200	600 400	3500 3500 3500	240 240 275	239.1	108.5	4"	1 1/2"	1 1/4"	1 " or 3/4"
KT67DCB	SAE J744 SAE C	P1=47.6 - 190.5 P2=17.2 - 100.0 P3=5.7 - 50.0	2500	600	4350	300	145.7	66.1	4"	1 1/4"	1"	3/4"
KT7DBB	SAE C	P1=43.9 - 157.9 P2=5.7 - 50.0 P3=5.7 - 50.0	2500	600	3500 4350	240 300	145.7	66.1	4"	1 1/4"	1"	1 " or 3/4"

KT6C- * 014 - 1 R 00 - B 1 *
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① **Series**

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

③ **Cam ring**

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

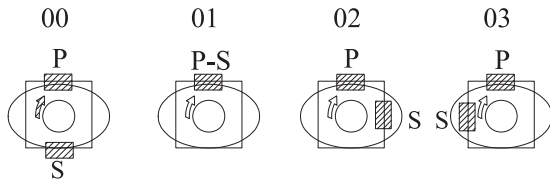
④ **Type of shaft**

1= keyed (SAE B)

2= keyed (no SAE)

3= Splined (SAE B)

4= Splined (SAE BB)



S=Suction port

P=Pressure port

⑤ **Direction of rotation**

(view on shaft end)

R=clockwise

L=counter-clockwise

⑥ **Porting combination**

00=standard

⑦ **Design letter**

⑧ **Seal class**

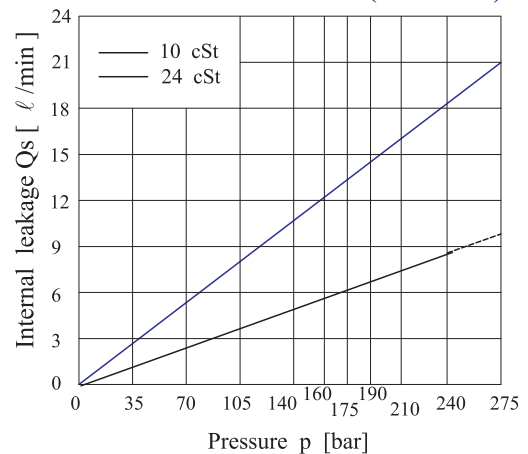
1 = S1 (for mineral oil)

4 = S4 (for fire resistant fluids)

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

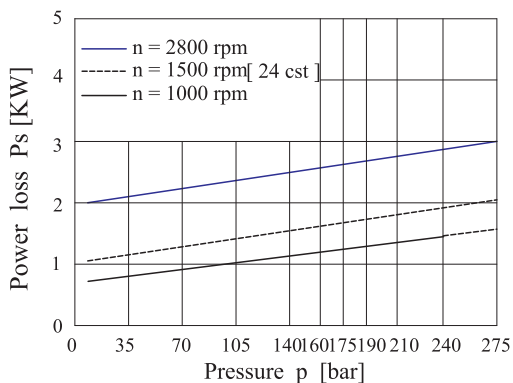
⑨ **Modifications**

INTERNAL LEAKAGE (TYPICAL)

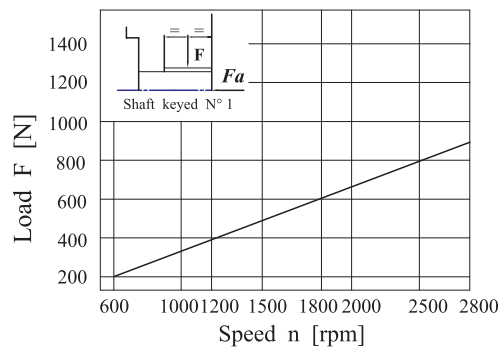


Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 % of theoretical flow.

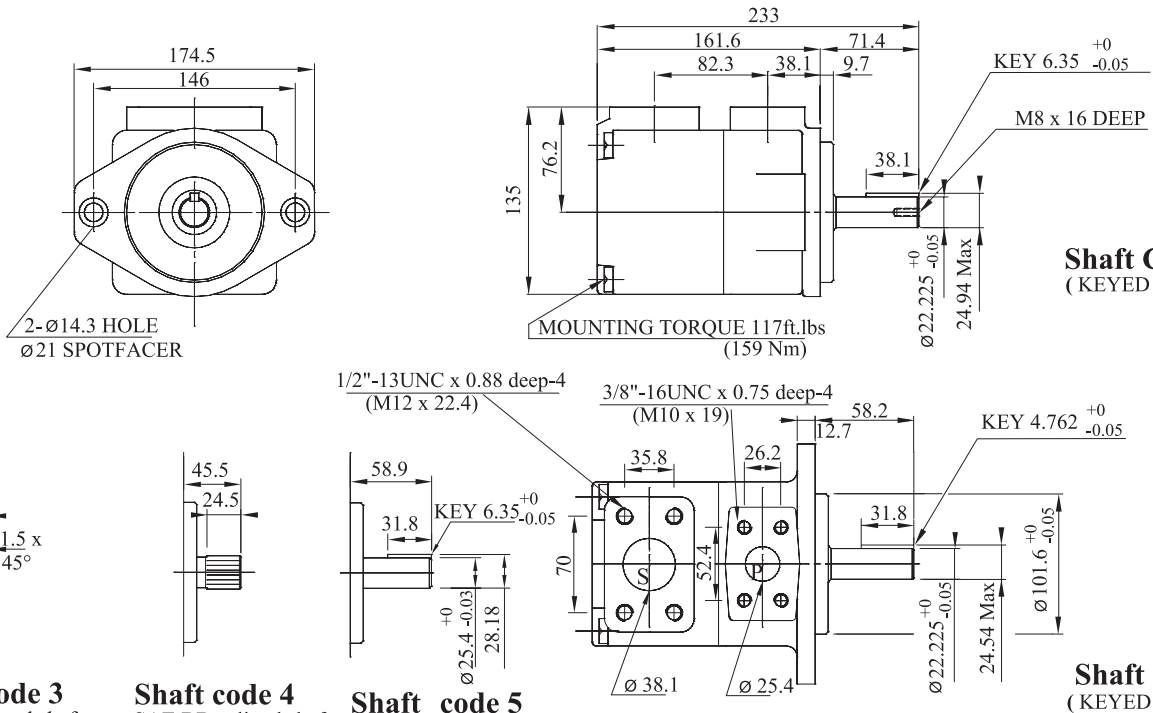
HYDROMECHANICAL POWER LOSS (TYPICAL)



PERMISSIBLE RADIAL LOAD



Maximum permissible axial load Fa = 800 N



Shaft code 3

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

Shaft code 4

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

Shaft code 5

Shaft torque limits(mℓ/rev x bar)		
Pump	Shaft	Vp x p max
KT6C	1	16500
	2	14300
	3	20600
	4	20600

KT6C OPERATING CHARACTERISTICS - TYPICAL [24 cSt]

Series	Volumetric Displacement Vp	Speed n [R.P.M]	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		
005	17.2ml/rev	1500	25.8	20.8	17.3	1.4	7.5	12.2	275	2800
006	21.3ml/rev	1500	31.9	26.9	23.4	1.5	8.9	14.7		
008	26.4ml/rev	1500	39.6	34.6	31.1	1.6	10.7	17.7		
010	34.1ml/rev	1500	51.1	46.1	42.6	1.7	13.4	22.3		
012	37.1ml/rev	1500	55.6	50.6	47.1	1.7	14.4	24.1		
014	46.0ml/rev	1500	69.0	64.0	60.5	1.9	17.6	29.5		
017	58.3ml/rev	1500	87.4	82.4	78.9	2.1	21.9	36.9		
020	63.8ml/rev	1500	95.7	90.7	87.2	2.2	23.8	40.2		
022	70.3ml/rev	1500	105.4	100.4	96.9	2.3	26.1	44.1		
025 1)	79.3ml/rev	1500	118.9	113.9	110.4	2.5	29.2	49.5		
028 1)	88.8ml/rev	1500	133.2	128.2	125.8 2)	2.8	32.7	48.5 2)		
031 1)	100.0ml/rev	1500	150.0	145.0	142.6 2)	2.8	36.5	54.4 2)		

1) 025 - 028 - 031 = 2500 R.P.M.max

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

Min Speed : 600 rpm

KT6CM- * 014 - 1 R 00 - B 1 *
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① **Series**

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

③ **Cam ring**

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

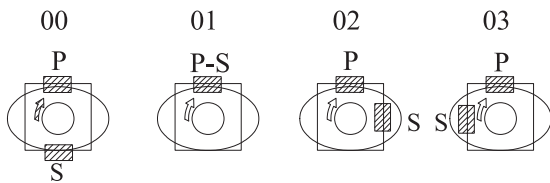
④ **Type of shaft**

1= keyed (SAE B)

2= keyed (no SAE)

3= Splined (SAE B)

4= Splined (SAE BB)



S=Suction port

P=Pressure port

⑤ **Direction of rotation**

(view on shaft end)

R=clockwise

L=counter-clockwise

⑥ **Porting combination**

00=standard

⑦ **Design letter**

⑧ **Seal class**

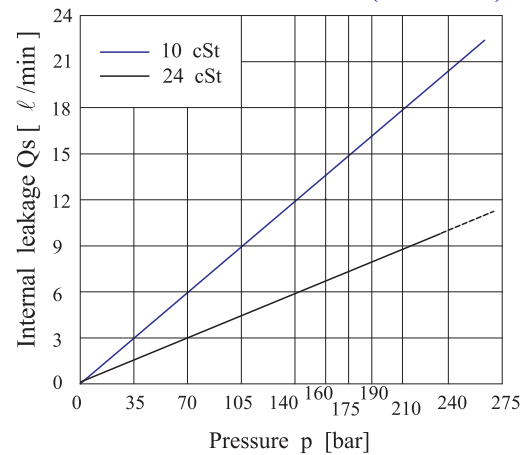
1 = S1 (for mineral oil)

4 = S4 (for fire resistant fluids)

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

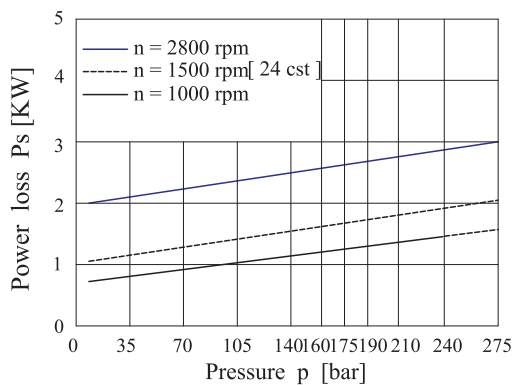
⑨ **Modifications**

INTERNAL LEAKAGE (TYPICAL)

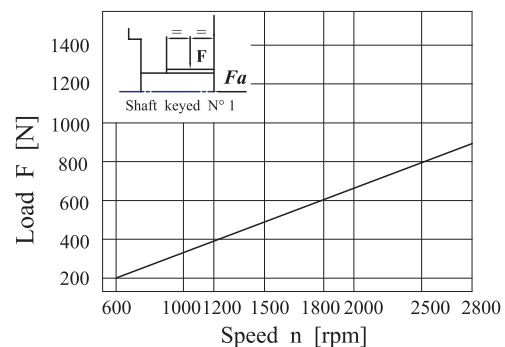


Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 % of theoretical flow.

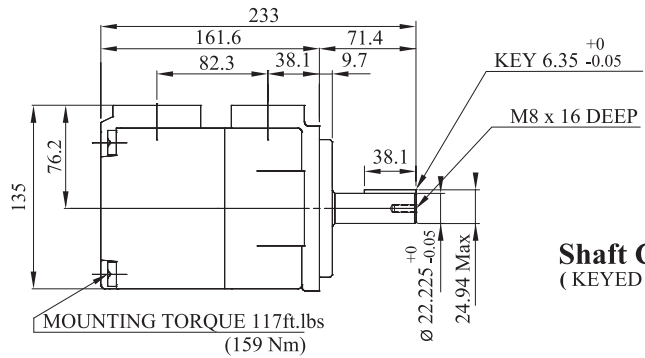
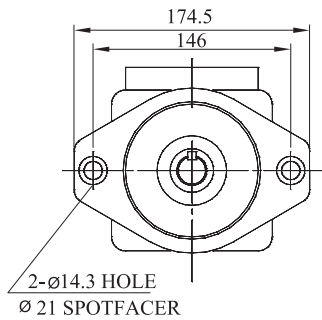
HYDROMECHANICAL POWER LOSS (TYPICAL)



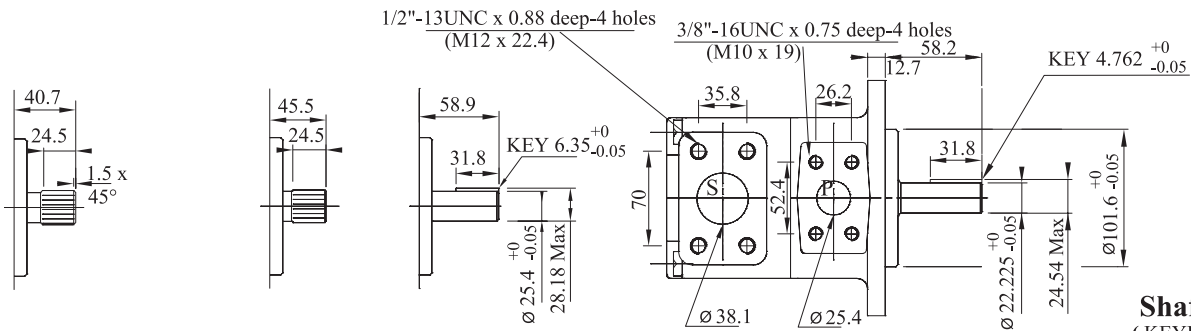
PERMISSIBLE RADIAL LOAD



Maximum permissible axial load Fa = 800 N



Shaft Code 1
(KEYED SAE B)



Shaft Code 2
(KEYED NO SAE)

Shaft code 3
SAE B splined shaft
Class 1-J498 b 16/32
d.p. -13 teeth 30°
pressure angle flat root
side fit

Shaft code 4
SAE BB splined shaft
Class 1-J498 16/32
d.p. -15 teeth 30°
pressure angle flat
root side fit

Shaft code 5

Shaft torque limits(mℓ/rev x bar)		
Pump	Shaft	Vp x p max
KT6CM	1	16500
	2	14300
	3	20600
	4	21821

KT6CM OPERATING CHARACTERISTICS - TYPICAL [24 cSt]

Series	Volumetric Displacement Vp	Speed n [R.P.M]	Flow qve [ℓ/min]=1500 rpm			Input power P [KW]=1500 rpm			P Max ₂ Kg/cmf	Max r.p.m
			p = 0 bar	p = 140 bar	p = 240 bar	p =7 bar	p = 140 bar	p = 240 bar		
005	17.2mℓ/rev	1500	25.8	20.3	15.8	1.4	7.5	12.2	275	2800
006	21.3mℓ/rev	1500	31.9	26.5	22.0	1.5	8.9	14.7		
008	26.4mℓ/rev	1500	39.6	34.1	29.6	1.6	10.7	17.7		
010	34.1mℓ/rev	1500	51.1	45.7	41.2	1.7	13.4	22.3		
012	37.1mℓ/rev	1500	55.6	50.2	45.7	1.7	14.4	24.1		
014	46.0mℓ/rev	1500	69.0	63.5	59.0	1.9	17.6	29.5		
017	58.3mℓ/rev	1500	87.4	82.0	77.5	2.1	21.9	36.9		
020	63.8mℓ/rev	1500	95.7	90.2	85.7	2.2	23.8	40.2		
022	70.3mℓ/rev	1500	105.4	100.0	95.5	2.3	26.1	44.1		
025 1)	79.3mℓ/rev	1500	118.9	113.5	109.0	2.5	29.2	49.5		
028 1)	88.8mℓ/rev	1500	133.2	127.7	124.5 2)	2.8	32.7	48.5 2)	210	2500
031 1)	100.0mℓ/rev	1500	150.0	144.5	141.3 2)	2.8	36.5	54.4 2)		

1) 025 - 028 - 031 = 2500 R.P.M.max

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

Min Speed : 600 rpm

KT6D * - 045 - 1 R 00 - B 1 *
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Series

② Y - Metric port connection (not for code Q)
Omit for UNC

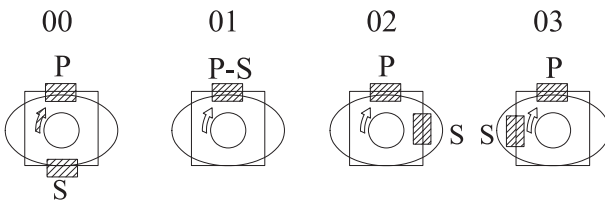
③ Cam ring

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

④ Type of shaft

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



S=Suction port P=Pressure port

⑤ Direct. of rotation

(view on shaft end)

R=clockwise

L=counter-clockwise

⑥ Porting combination

00=Standard

⑦ Design letter

⑧ Seal class

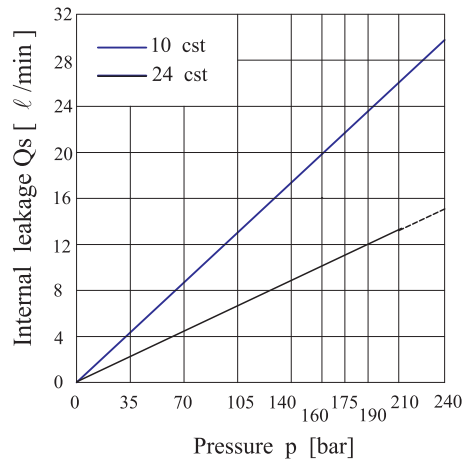
1 = S1 (for mineral oil)

4 = S4 (for fire resistant fluids)

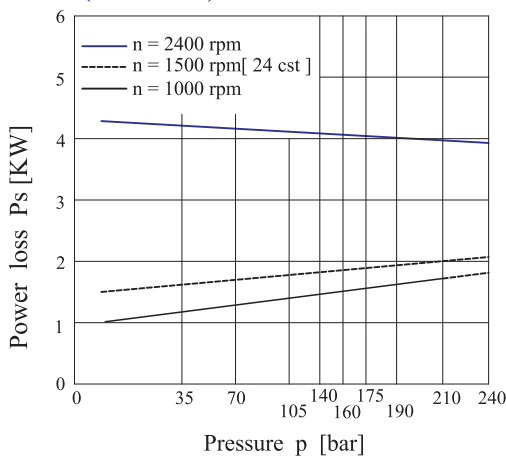
5 = S5 (for mineral oil and fire resistant fluids)

⑨ Modifications

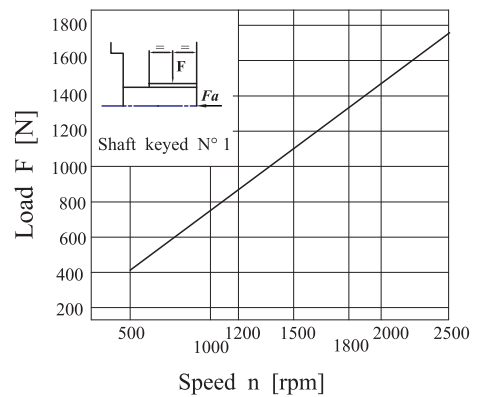
INTERNAL LEAKAGE (TYPICAL)



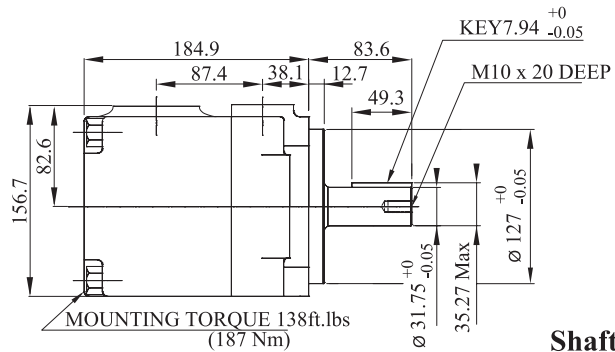
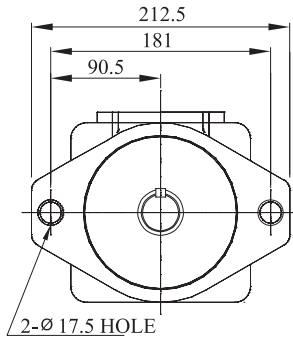
HYDROMECHANICAL POWER LOSS (TYPICAL)



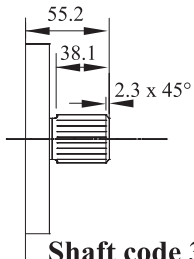
PERMISSIBLE RADIAL LOAD



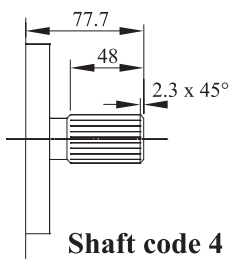
Maximum permissible axial load Fa = 1200 N



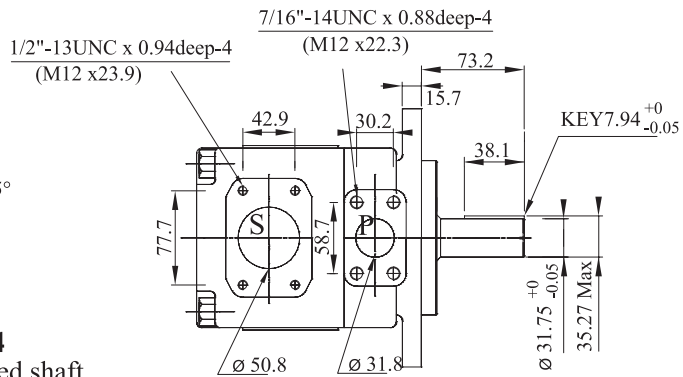
Shaft Code 1
(Keyed SAE C)



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



Shaft code 4
no SAE splined shaft
Class 1 - J498 b
12/24 dp. -14 teeth
30° pressure angle
Flat root side fit.



Shaft Code 2
(Keyed no SAE)

Shaft torque limits (mℓ/rev x bar)		
Pump	Shaft	Vp x p max
KT6D	1	43283
	2	34590
	3	61200
	4	61200

OPERATING CHARACTERISTICS - TYPICAL [24 cSt]

Series	Volumetric Displacement Vp	Speed n [R.P.M]	Flow qve [ℓ/min]=1500 rpm			Input power P [KW]=1500 rpm			P Max ² 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		
014	47.6mℓ/rev	1500	71.4	62.1	55.9	2.3	18.5	30.6	240	2500
017	58.2mℓ/rev	1500	87.3	78.0	71.8	2.5	22.2	37.0		
020	66.0mℓ/rev	1500	99.0	89.7	83.5	2.8	24.9	41.7		
024	79.5mℓ/rev	1500	119.3	110.0	103.8	3.0	29.6	49.8		
028	89.7mℓ/rev	1500	134.5	125.2	119.0	3.2	33.2	55.9		
031	98.3mℓ/rev	1500	147.5	138.1	131.9	3.3	36.2	61.0		
035	111.0mℓ/rev	1500	166.5	157.2	151.0	3.5	40.7	68.7		
038	120.3mℓ/rev	1500	180.4	171.1	164.9	3.7	43.9	74.3		
042 1)	136.0mℓ/rev	1500	204.0	194.7	188.5	4.0	49.4	83.7	2200	2200
045 1)	145.7mℓ/rev	1500	218.5	209.2	203.0	4.1	52.8	89.5		
050 1)	158.0mℓ/rev	1500	237.0	227.7	224.0 2)	4.4	57.0	85.0 2)		
061 1)	190.5mℓ/rev	1500	285.7	278.0 3)	—	4.6	60.6 3)	120		

1) B42 - B45 - B50 - 61 = 2200 R.P.M.max 2) B50 = 210 bar max. int. 3) 061 = 120 bar max. int. Min Speed : 600 rpm

KT6DS - 045 - 1 R 00 - B 1 *
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① **Series**

② **Cam ring**

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

③ **Type of shaft**

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

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

R=clockwise
L=counter-clockwise

⑤ **Porting combination**

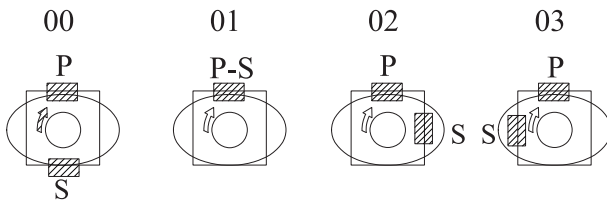
00=Standard

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)

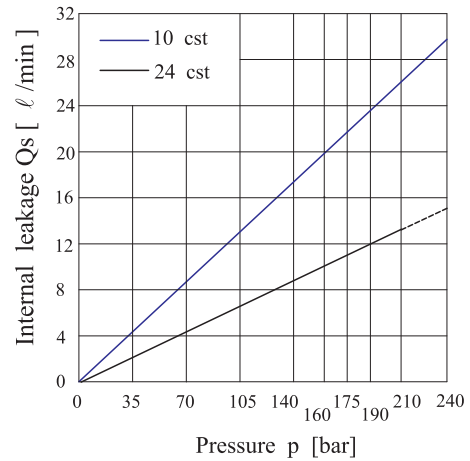
⑧ **Modifications**



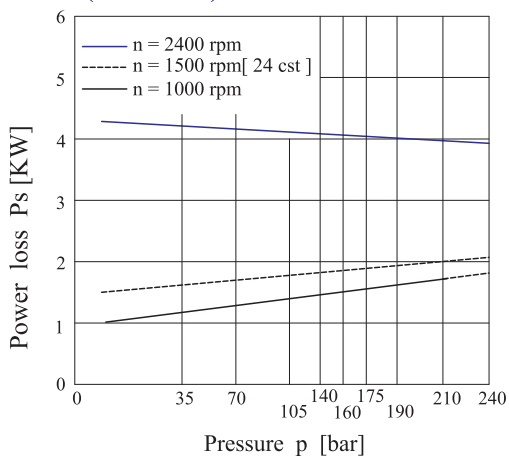
S=Suction port

P=Pressure port

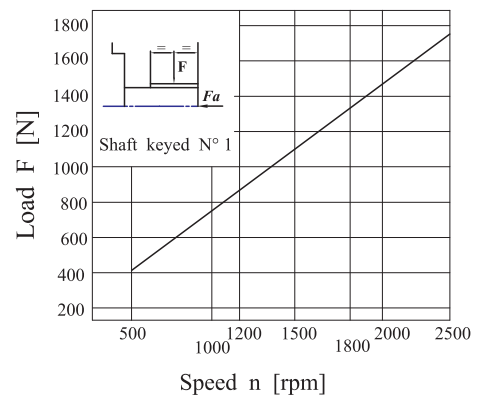
INTERNAL LEAKAGE (TYPICAL)



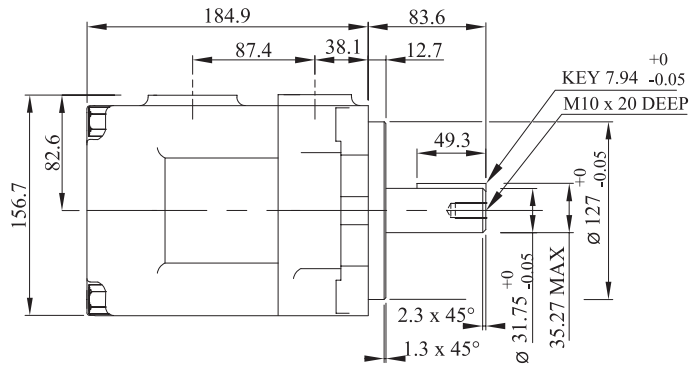
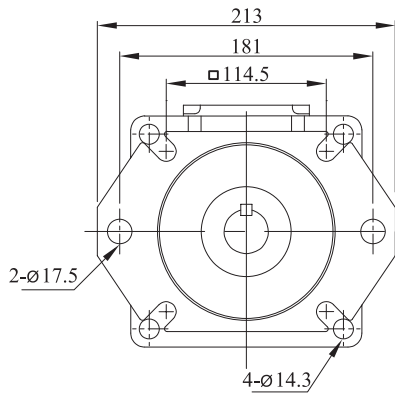
HYDROMECHANICAL POWER LOSS (TYPICAL)



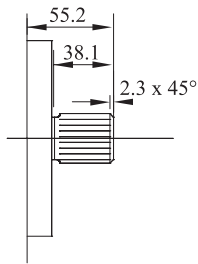
PERMISSIBLE RADIAL LOAD



Maximum permissible axial load Fa = 1200 N

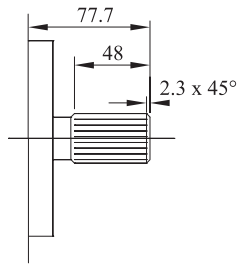


Shaft code 1
(Keyed SAE C)



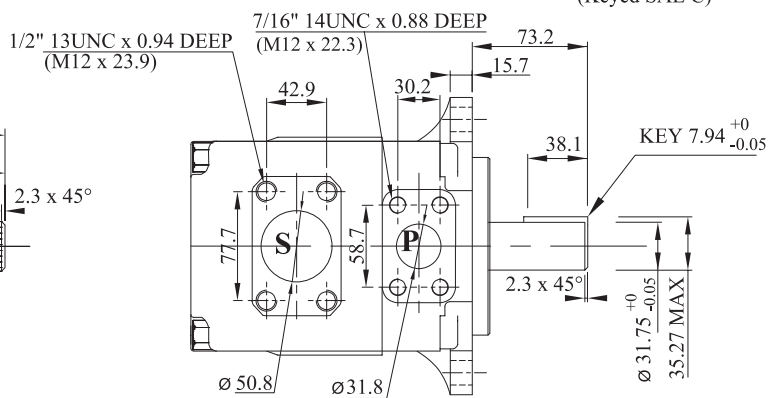
Shaft code 3

SAE C splined shaft
Class 1 - J498 b
12/24 dp. -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.



Shaft code 2
(Keyed no SAE)

Shaft torque limits (mℓ/rev x bar)		
Pump	Shaft	Vp x p max
KT6DS	1	43283
	2	34590
	3	61200
	4	61200

OPERATING CHARACTERISTICS - TYPICAL [24 cSt]

Series	Volumetric Displacement Vp	Speed n [R.P.M]	Flow qve [ℓ/min]=1500 rpm			Input power P [KW]=1500 rpm			P Max ₂ Kg/cmf	Max r.p.m
			p = 0 bar	p = 140 bar	p = 240 bar	p = 7 bar	p = 140 bar	p = 240 bar		
014	47.6ml/rev	1500	71.4	62.1	55.9	2.3	18.5	30.6	240	2500
017	58.2ml/rev	1500	87.3	78.0	71.8	2.5	22.2	37.0		
020	66.0ml/rev	1500	99.0	89.7	83.5	2.8	24.9	41.7		
024	79.5ml/rev	1500	119.3	110.0	103.8	3.0	29.6	49.8		
028	89.7ml/rev	1500	134.5	125.2	119.0	3.2	33.2	55.9		
031	98.3ml/rev	1500	147.5	138.1	131.9	3.3	36.2	61.0		
035	111.0ml/rev	1500	166.5	157.2	151.0	3.5	40.7	68.7		
038	120.3ml/rev	1500	180.4	171.1	164.9	3.7	43.9	74.3		
042 1)	136.0ml/rev	1500	204.0	194.7	188.5	4.0	49.4	83.7		
045 1)	145.7ml/rev	1500	218.5	209.2	203.0	4.1	52.8	89.5		
050 1)	158.0ml/rev	1500	237.0	227.7	224.0 2)	4.4	57.0	85.0 2)		
061 1)	190.5ml/rev	1500	285.7	278.0 3)	—	4.6	60.6 3)	120		

1) B42 - B45 - B50 - 61 = 2200 R.P.M.max 2) B50 = 210 bar max. int. 3) 061 = 120 bar max. int. Min Speed : 600 rpm

KT6E ^{*} **- 066 - 3** **R** **00** **- A** **1** ^{*}
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① **Series**

② Y - Metric port connection,
Omit for UNC

③ **Cam ring**

Volumetric displacement (cm³/rev)

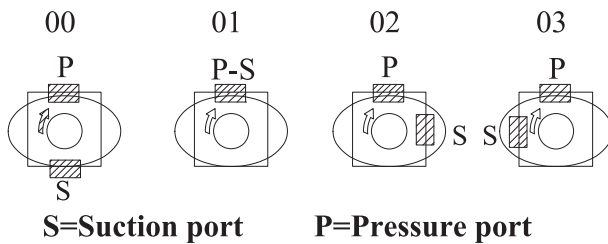
042=132.3	062=196.7
045=142.4	066=213.3
050=158.5	072=227.1
052=164.8	085=269.8
057=180.7	

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

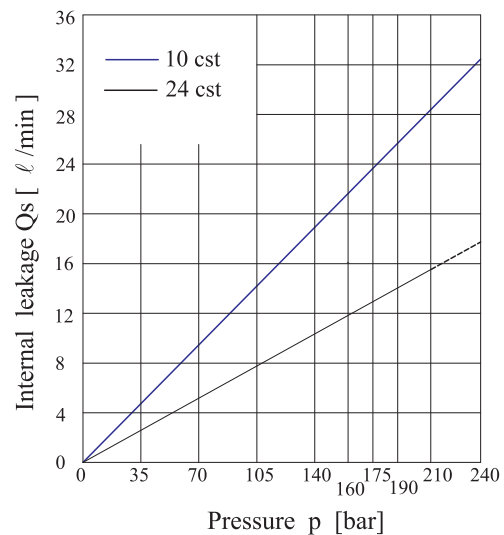
⑦ **Design letter**

⑧ **Seal class**

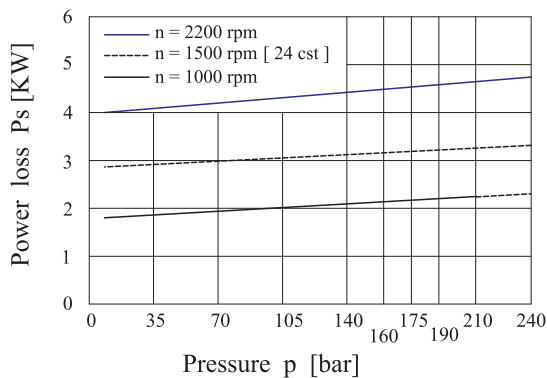
- 1=S1 (for mineral oil)
- 4=S4 (for fire resistant fluids)
- 5=S5 (for mineral oil and fire resistant fluids)

⑨ **Modifications**

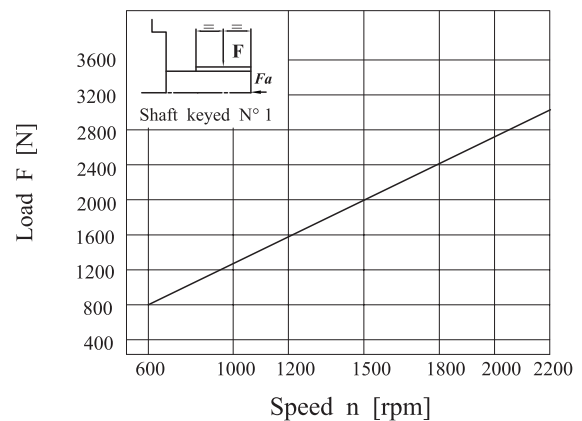
INTERNAL LEAKAGE (TYPICAL)



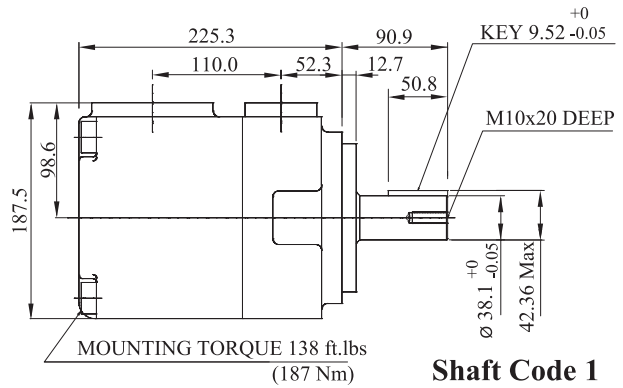
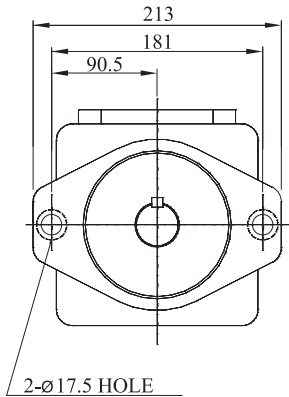
HYDROMECHANICAL POWER LOSS (TYPICAL)



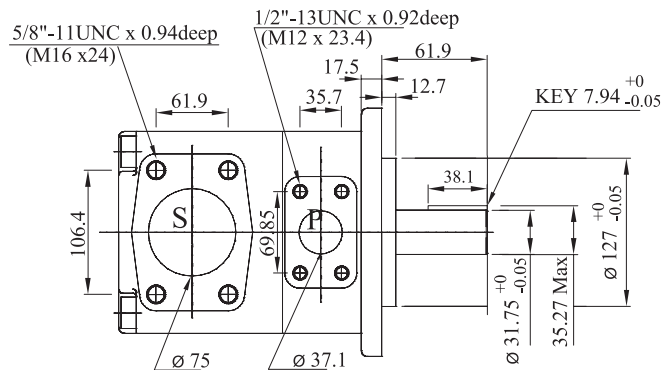
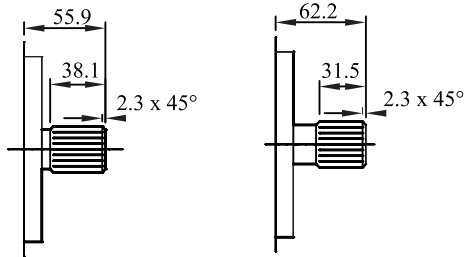
PERMISSIBLE RADIAL LOAD



Maximum permissible axial load Fa = 2000 N



Shaft Code 1
(Keyed SAE CC)



Shaft code 3

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

Shaft code 4

SAE CC Splined shaft
class 1 - J498b 12/24
dp. -17 teeth 30°
pressure angle. Flat root
side fit.

Shaft Code 2

(Keyed no SAE)

shaft torque limits(mℓ/rev x bar)		
Pump	Shaft	Vp x P max.
KT6E	1	54555
	2	34590
	3	61200
	4	61200

KT6E OPERATING CHARACTERISTICS - TYPICAL [24 cSt]

Series	Volumetric Displacement Vp	Speed n [R.P.M]	Flow qve [ℓ/min]			Input power P [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		
042	132.3mℓ/rev	1500	198.5	188.5	181.3	5.2	49.4	82.6	240	2200
045	142.4mℓ/rev	1500	213.6	203.6	196.5	5.4	52.9	88.7		
050	158.5mℓ/rev	1500	237.7	227.7	220.6	5.7	58.5	98.3		
052	164.8mℓ/rev	1500	247.2	237.2	230.1	5.8	60.8	102.1		
057	180.7mℓ/rev	1500	271.1	261.1	254.0	6.1	66.4	106.9		
062	196.7mℓ/rev	1500	295.0	285.0	277.9	6.4	71.9	121.3		
066	213.3mℓ/rev	1500	319.9	309.9	302.8	6.7	77.7	131.2		
072	227.1mℓ/rev	1500	340.6	330.6	323.5	6.9	82.6	139.5		
085 ¹⁾	269.8mℓ/rev	1500	404.7 ²⁾	397.7	—	7.3 ²⁾	65.3 ²⁾	—	90	2000

1) 085 = 2000 rpm max.

2) 085 = 75 bar cont.

085=90bar max. int

Min Speed : 600 rpm

KT6GC - B22 - 6 R 00 - A 1 - 00 *

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Series

② Cam ring

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

③ Type of shaft

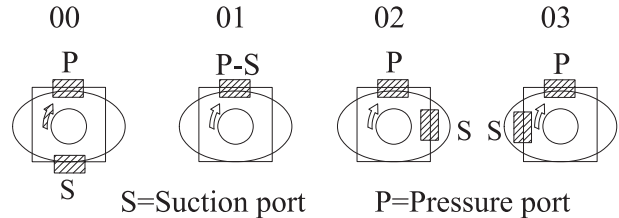
6-splined (DIN 5462)

④ Direction of rotation(view on shaft end)

R=clockwise
L=counter-clockwise

⑤ Porting combination

00-standard



⑥ Design letter

⑦ Seal class

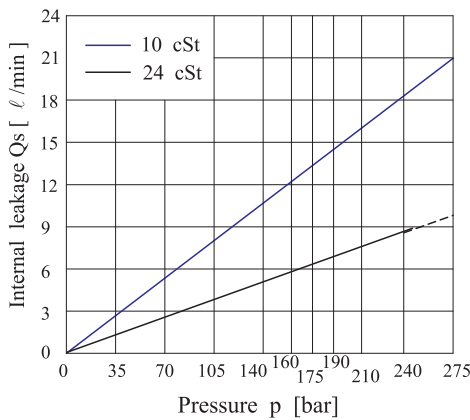
1-S1

⑧ Mounting W/connection variables

00-Flange 1" BSPP
01-Flange 1" SAE 4 bolts(UNC)
M1-Flange 1" SAE 4 bolts(METRIC)

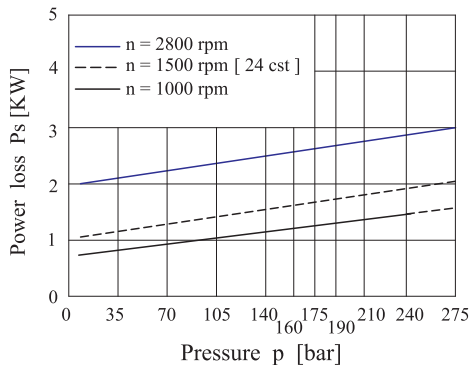
⑨ Modifications

INTERNAL LEAKAGE (TYPICAL)

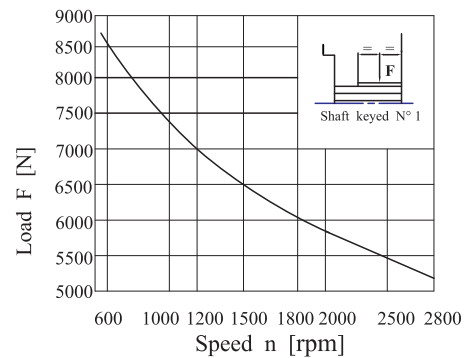


Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 % of theoretical flow.

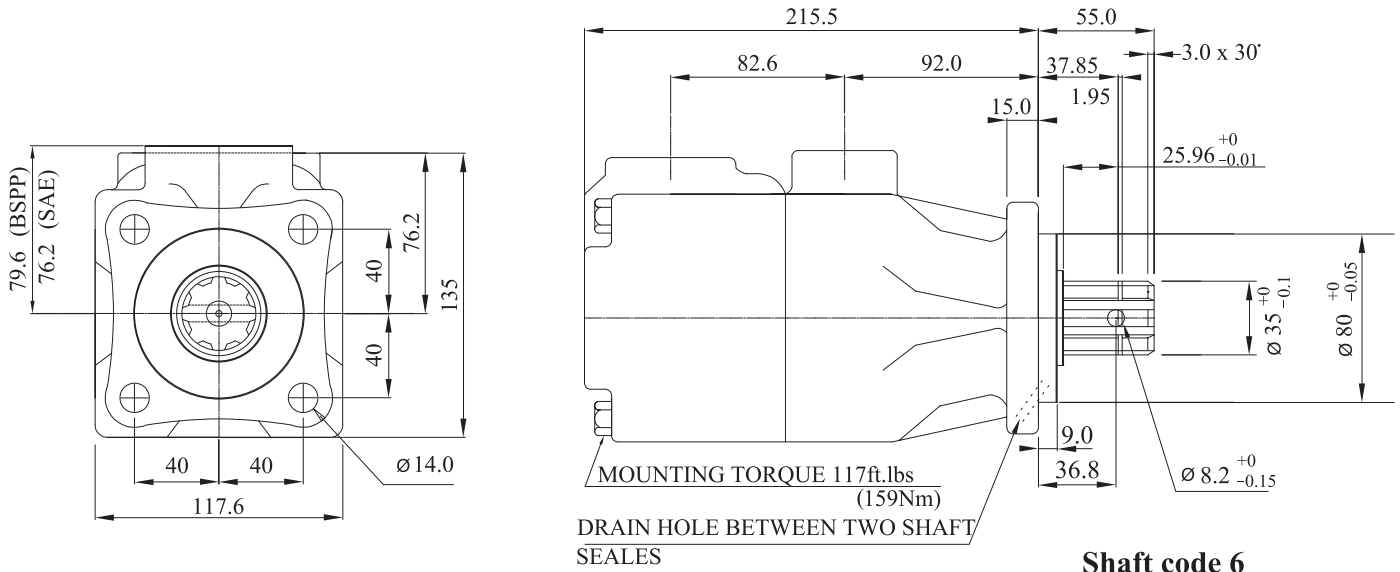
HYDROMECHANICAL POWER LOSS (TYPICAL)



PERMISSIBLE RADIAL LOAD

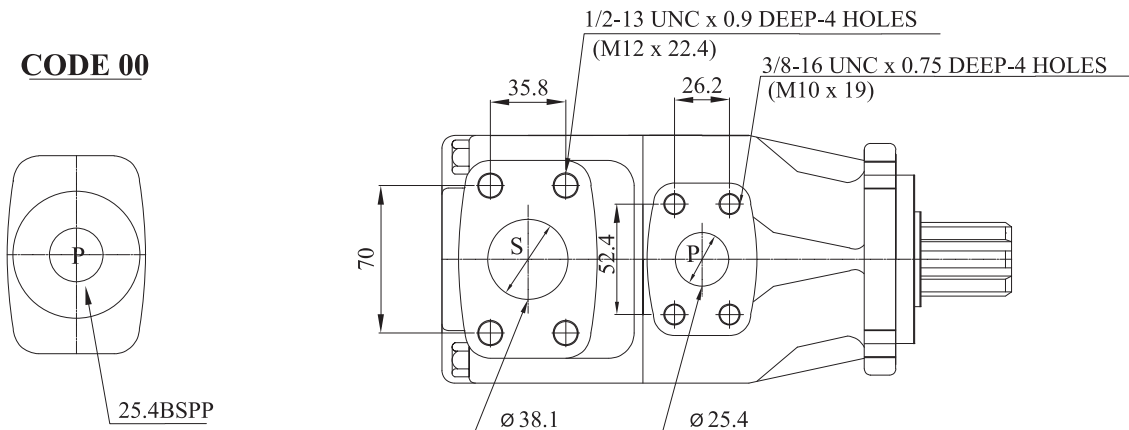


Life time 3000 hours when 70% of the time at 500 N and 30% at max. load



Shaft code 6
(DIN 5462) B8 x 32 x 36

CODE 00



OPERATING CHARACTERISTICS - TYPICAL (24 cST)

Pressure Port	Series	Volumetric Displacement Vp	Flow q & n =1500 rpm (ℓ/min)			Input power p & n =1500rpm (KW)			P Max Kg/cm ²	Max r.p.m
		cm ³ /rev	P=0 bar	P=140 bar	P=240 bar	P=7 bar	P=140 bar	P=240 bar		
KT6GC	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=2500rpmmax.

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

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

Min Speed : 400 rpm

KT7QC 1 - 022 - 1 R 00 - B 1 00 *

①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩

① Series

② Mounting

- 1 - SAE B
- 2 - SAE C

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

④ Type of shaft

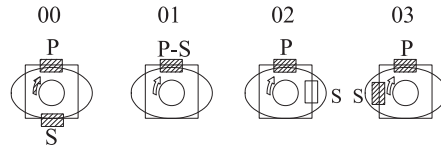
- 1 = keyed (SAE B)
- 2 = keyed (non SAE)
- 3 = Splined (SAE B)
- 4 = Splined (SAE BB)

⑤ Direction of rotation

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

⑥ Porting combination

00 = standard



S=Suction port P=Pressure port

⑦ Design letter

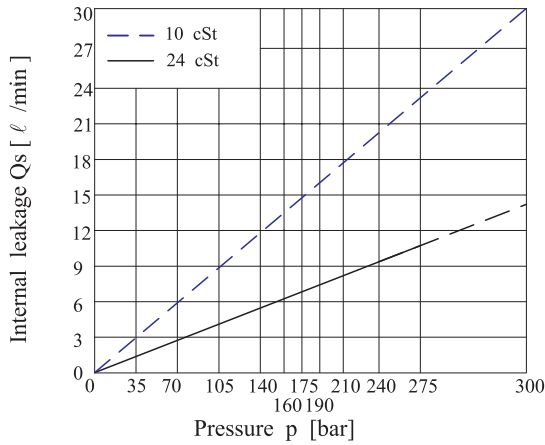
⑧ Seal class

- 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

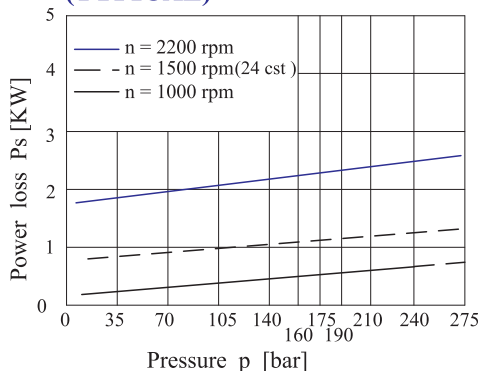
	UNC		METRIC	
	00	01	M0	M1
P	1"	3/4"	1"	3/4"
S	1 1/2"			

INTERNAL LEAKAGE (TYPICAL)

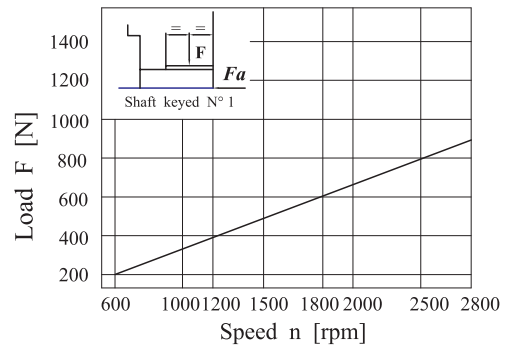


Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 % of theoretical flow.

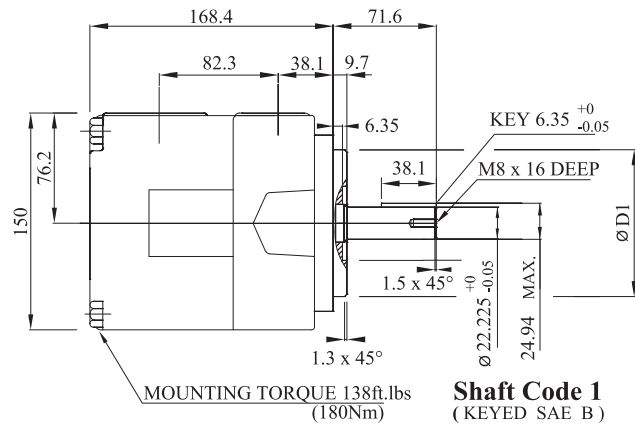
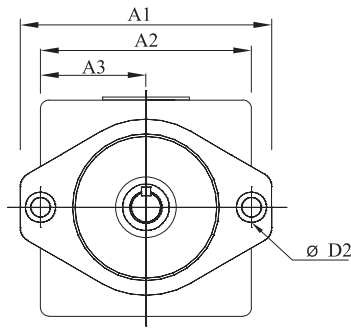
HYDROMECHANICAL POWER LOSS (TYPICAL)



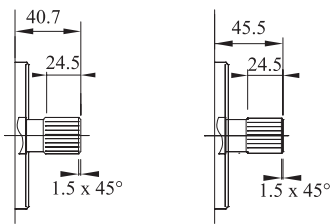
PERMISSIBLE RADIAL LOAD



Maximum permissible axial load $F_a = 800$ N



Shaft Code 1
(KEYED SAE B)

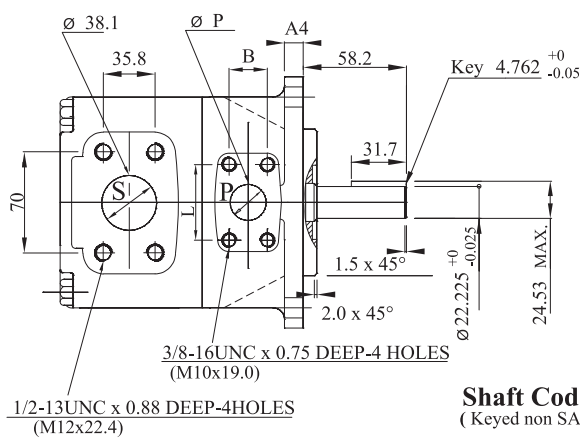


Shaft code 3

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

Shaft code 4

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



Shaft Code 2
(Keyed non SAE)

	KT7QC1	KT7QC2
Mounting	SAE B	SAE C
∅D1	101.6 / 101.55	127 / 126.94
∅D2	14.3	17.5
A1	174.5	212.5
A2	146	181.0
A3	73	90.5
A4	12.7	15.7

CODE	∅P	L	B
01 / M1	19.05	47.6	22.2
00 / M0	25.4	52.4	26.2

Shaft torque limits (mℓ/rev x bar)		
Pump	Shaft	Vp x p max.P1+P2
KT7QC	1	16500
	2	14300
	3	20600
	4	21820

KT7QC 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 ₂ 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	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	2.3	26.1	44.1	50.3	275	2500
	025 ₁₎	79.3ml/rev	118.9	113.5	109.0	—	2.5	29.2	49.5	—	240	
	028 ₁₎	88.8ml/rev	133.2	127.7	124.5 ₂₎	—	2.8	32.7	48.5 ₂₎	—	210	
	031 ₁₎	100.0ml/rev	150.0	144.5	141.3 ₂₎	—	2.8	36.5	54.4 ₂₎	—	210	

1) 025 - 028 - 031 = 2500 rpm. max

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

Min Speed : 600 rpm

KT6CC-W-022-008-1R00-C100

① ② P1 P2 ④⑤⑥ ⑦⑧⑨
 (3)

① **Series**

② **Use for Severe duty shaft only**

③ **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

④ **Type of shaft**

- 1 = keyed (no SAE)
- 3 = Splind (SAE BB)
- 5 = Splind (SAE B)

W version

- 2 = keyed (SAE BB)
- S = splined (DIN 5462)

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**

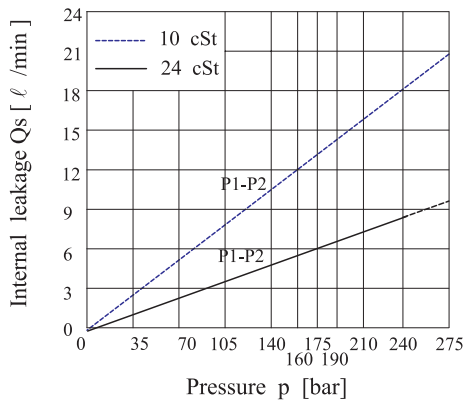
		P1=1",S=3"		P1=1",S=2 1/2" 2)	
P2		1"	3/4" 1)	1"	3/4" 1)
Code	Unc	00	01	10	11
	Metric	0M	W0	1M	W1

1) for 46 mℓ/rev. max.

2) for 126 mℓ/rev. max.

The large cartridge must be always mounted in the front.

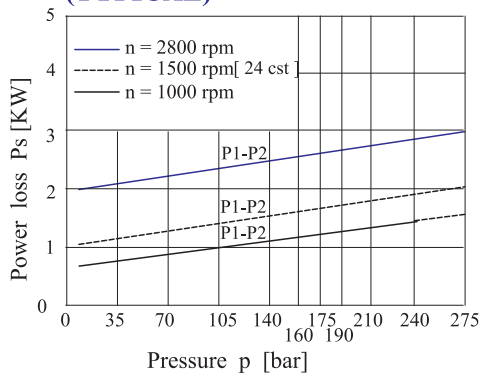
INTERNAL LEAKAGE (TYPICAL)



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

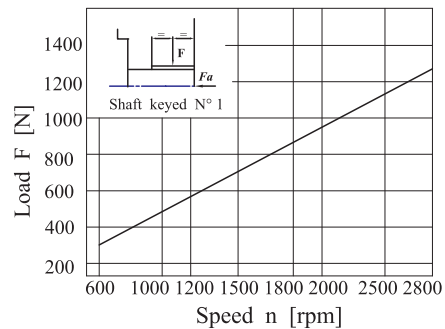
Total leakage is the sum of each section loss at its operating conditions.

HYDROMECHANICAL POWER LOSS (TYPICAL)

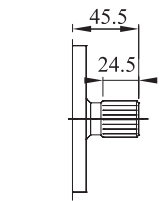
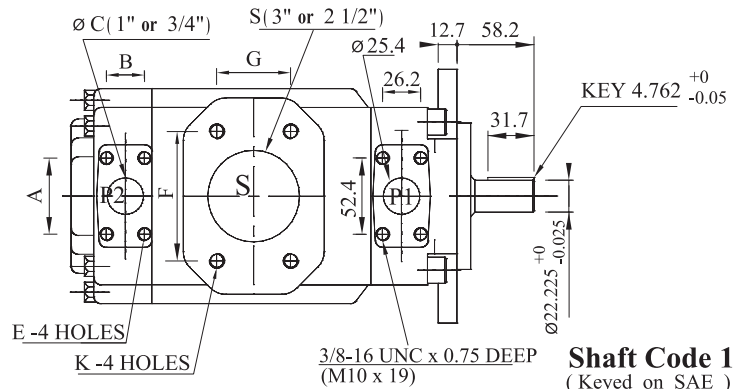
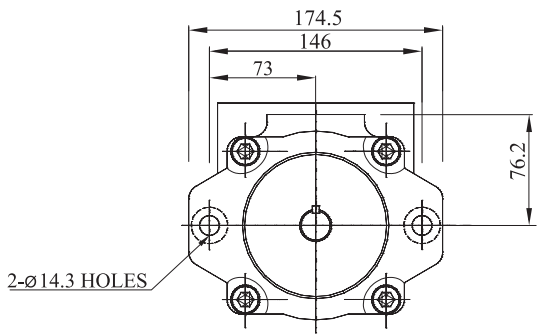


Total hydromechanical power loss is the sum of each section at its operating conditions.

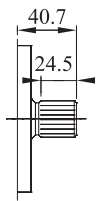
PERMISSIBLE RADIAL LOAD



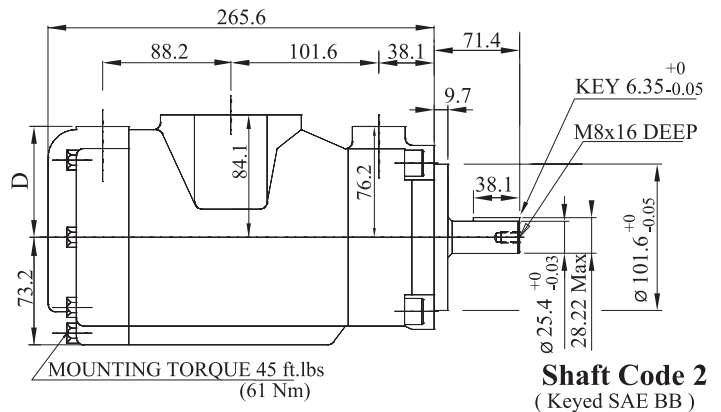
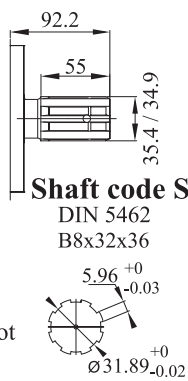
Maximum permissible axial load Fa = 800 N



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	47.6	52.4	47.6	52.4	47.6	52.4	47.6
B	26.2	22.2	26.2	22.2	26.2	22.2	26.2	22.2
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)		
Pump	Shaft	Vp x p max.P1+P2
KT6CC	1	14300
	2	21420
	3	32670
	5	20600

KT6CC OPERATING CHARACTERISTICS - TYPICAL [24 cSt] (input power p (kw) for one cartridge only)

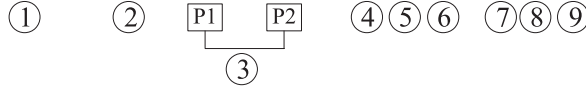
Pressure port	Series	Volumetric Displacement Vp	Flow qve [l/min]1500rpm			Input power P [KW]1500rpm			P Max Kg/cm ²	Max r.p.m
			P = 0 bar	P = 140 bar	P = 240 bar	P = 7 bar	P = 140 bar	P = 240 bar		
P1 & P2	005	17.2ml/rev	25.8	20.3	15.8	1.4	7.5	12.2	275	2800
	006	21.3ml/rev	31.9	26.5	22.0	1.5	8.9	14.7		
	008	26.4ml/rev	39.6	34.1	29.6	1.6	10.7	17.7		
	010	34.1ml/rev	51.1	45.7	41.2	1.7	13.4	22.3		
	012	37.1ml/rev	55.6	50.2	45.7	1.7	14.4	24.1		
	014	46.0ml/rev	69.0	63.5	59.0	1.9	17.6	29.5		
	017	58.3ml/rev	87.4	82.0	77.5	2.1	21.9	36.9		
	020	63.8ml/rev	95.7	90.2	85.7	2.2	23.8	40.2		
	022	70.3ml/rev	105.4	100.0	95.5	2.3	26.1	44.1		
	025 ₁₎	79.3ml/rev	118.9	113.5	109.0	2.5	29.2	49.5		
	028 ₁₎	88.8ml/rev	133.2	127.7	124.5 ₂₎	2.8	32.7	48.5 ₂₎	210	2500
031 ₁₎	100.0ml/rev	150.0	144.5	141.3 ₂₎	2.8	36.5	54.4 ₂₎			

1) 025 - 028 - 031 = 2500 rpm. max

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

Min Speed : 600 rpm

KT6CCZ * - B22 - B08 - X R 00 - A 1 00



① **Series - SAE B 2 Bolts**

Mounting flange J744c

② **One letter can be added to specify special parts in series**

③ **Cam ring for " P1 " & " P2 "**

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

④ **Type of shaft**

- X = keyed
- W = keyed
- V = keyed
- S = Splined (DIN 5462)

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**

P2	P1=1", S=3"		P1=1", S=2 1/2" 2)		
	1"	3/4" 1)	1"	3/4" 1)	
Code	Unc	00	01	10	11
	Metric	0M	W0	1M	W1

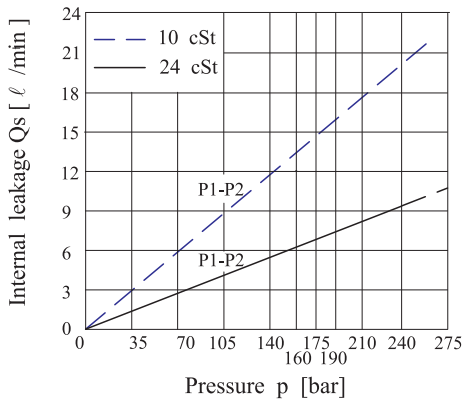
- 1) for 46 ml/rev. max.
- 2) for 126 ml/rev. max.

The large cartridge must be always mounted in the front.

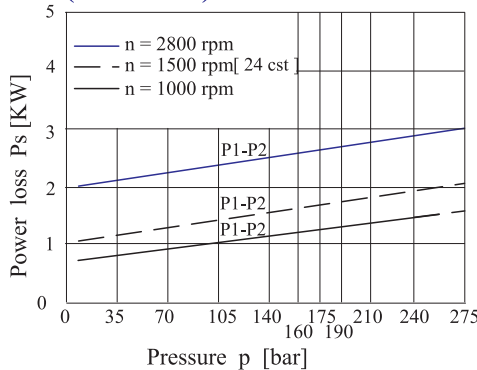
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 % of theoretical flow.

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

INTERNAL LEAKAGE (TYPICAL)

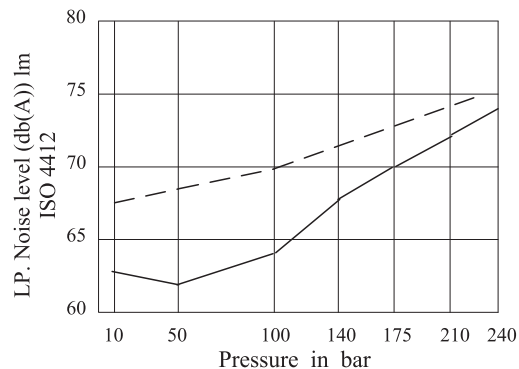


HYDROMECHANICAL POWER LOSS (TYPICAL)

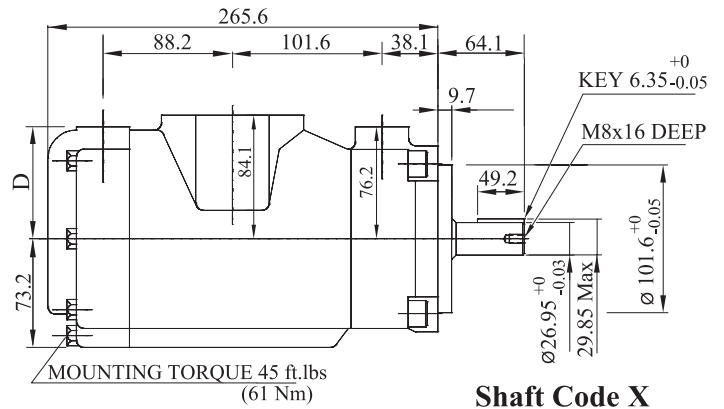
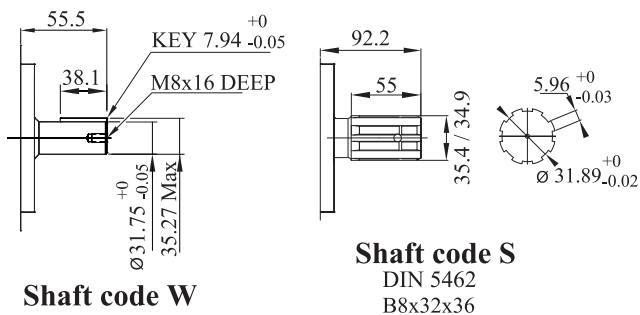
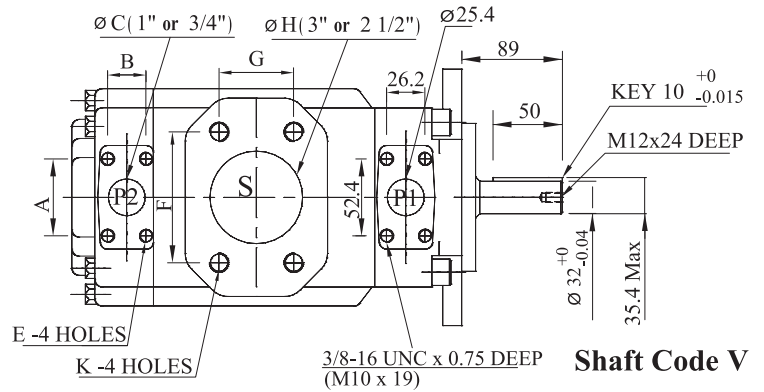
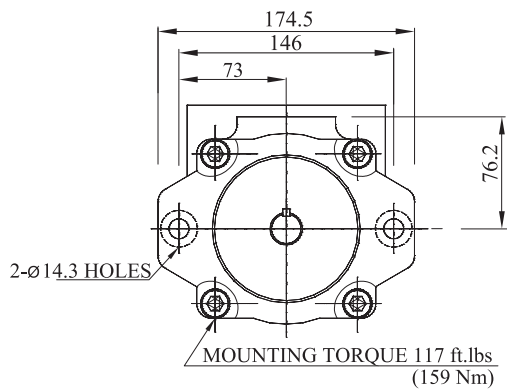


Total hydromechanical power loss is the sum of each section at its operating conditions.

NOISE LEVEL (TYPICAL)



Double pump noise level is given with each section discharging at the pressure noted on the curve.



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	47.6	52.4	47.6	52.4	47.6	52.4	47.6
B	26.2	22.2	26.2	22.2	26.2	22.2	26.2	22.2
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)		
Pump	Shaft	Vp x p max. P1+P2
KT6CCZ	X	25400
	V	32670
	W	32670

KT6CCZ 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 & P2	B05	17.2mℓ/rev	25.8	20.3	15.8	1.4	7.5	12.2	275	2800
	B06	21.3mℓ/rev	31.9	26.5	22.0	1.5	8.9	14.7		
	B08	26.4mℓ/rev	39.6	34.1	29.6	1.6	10.7	17.7		
	B10	34.1mℓ/rev	51.1	45.7	41.2	1.7	13.4	22.3		
	B12	37.1mℓ/rev	55.6	50.2	45.7	1.7	14.4	24.1		
	B14	46.0mℓ/rev	69.0	63.5	59.0	1.9	17.6	29.5		
	B17	58.3mℓ/rev	87.4	82.0	77.5	2.1	21.9	36.9		
	B20	63.8mℓ/rev	95.7	90.2	85.7	2.2	23.8	40.2		
	B22	70.3mℓ/rev	105.4	100.0	95.5	2.3	26.1	44.1		
	B25 ₁₎	79.3mℓ/rev	118.9	113.5	109.0	2.5	29.2	49.5		
	B28 ₁₎	88.8mℓ/rev	133.2	127.7	124.5 ₂₎	2.8	32.7	48.5 ₂₎	210	2500
	B31 ₁₎	100.0mℓ/rev	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