KT6CC-W- 022 - 008 - 1 R 00 - C 1 00

① ② P1 P2 ④ ⑤ ⑥ ⑦ ⑧ ⑨

③

① **Series**

② **Use for Severe duty shaft only**

③ **Cam ring for " P1 " & " P2 "**
Volumetric displacement (cm^3/rev)

003 = 10.8	017 = 58.3
005 = 17.2	020 = 63.8
006 = 21.3	022 = 70.3
008 = 26.4	025 = 79.3
010 = 34.1	028 = 88.8
012 = 37.1	031 =100.0
014 = 46.0	

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**

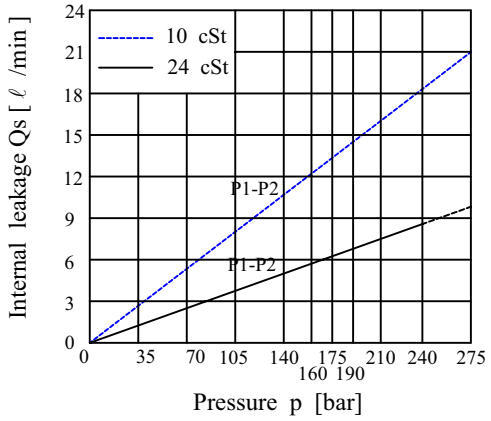
⑧ **Seal class**
1 = S1 (for mineral oil)
4 = S4 (for fire resistant fluids)
5 = S5 (for mineral oil and fire resistant fluids)

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.

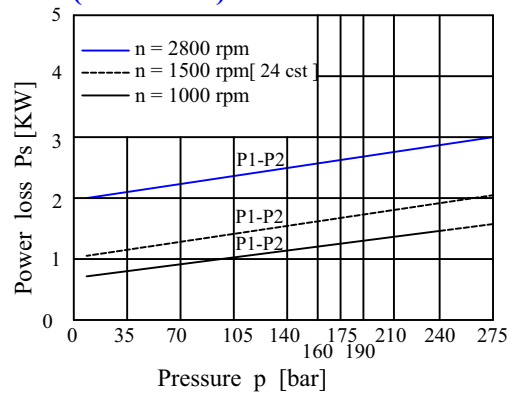
INTERNAL LEAKAGE (TYPICAL)



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

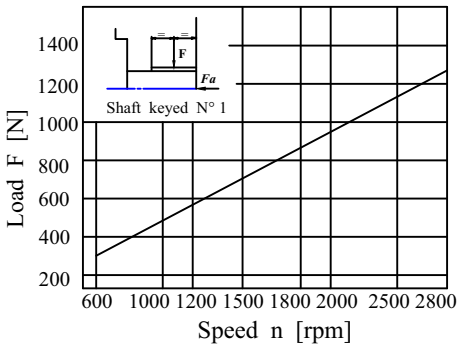
Total leakage is the sum of each section loss at its operating conditions.

HYDROMECHANICAL POWER LOSS (TYPICAL)



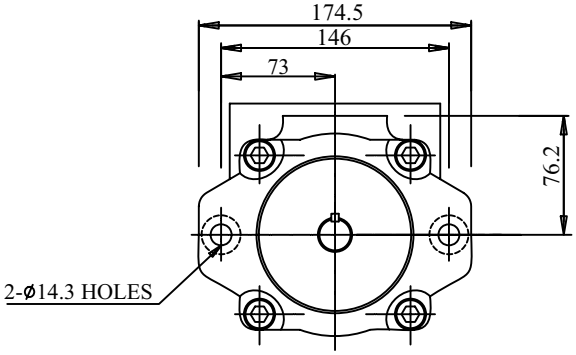
Total hydromechanical power loss is the sum of each section at its operating conditions.

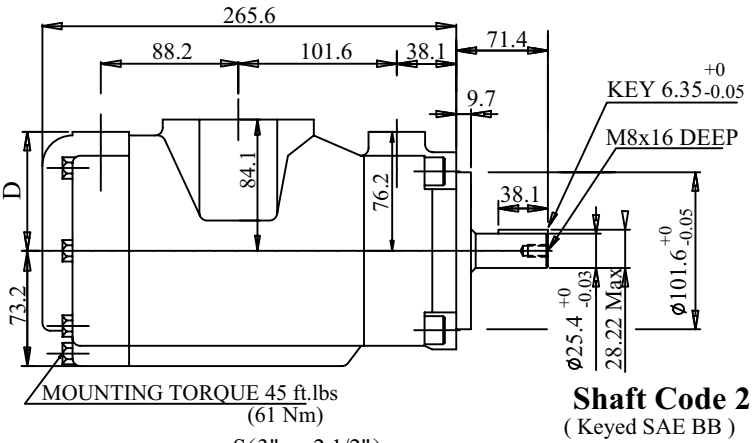
PERMISSIBLE RADIAL LOAD



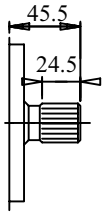
Maximum permissible axial load Fa = 800 N

KT6CC Dimensional Drawing

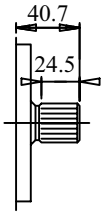




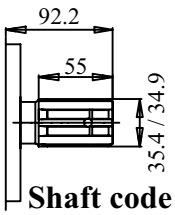
Shaft Code 2
(Keyed SAE BB)



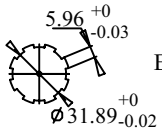
Shaft code 3
SAE BB Splined shaft
class 1 - J498 b 16/32
dp. -15 teeth 30°
pressure angle. Flat root
side fit.

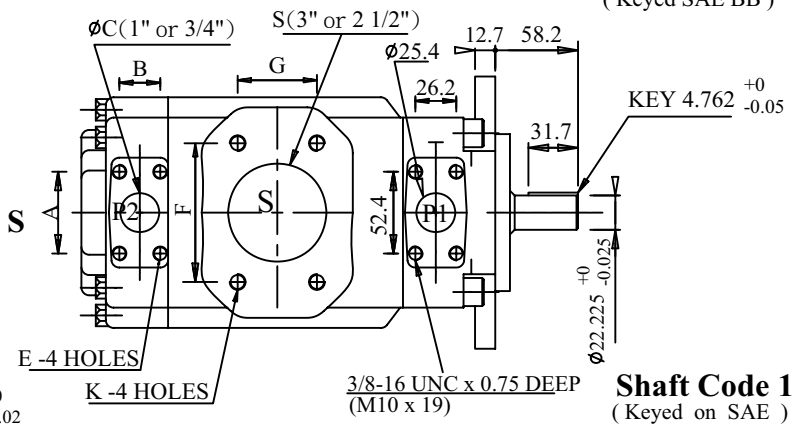


Shaft code 5
SAE B Splined shaft
class 1 - J498 b 16/32
dp. -13 teeth 30°
pressure angle. Flat root
side fit.



Shaft code S
DIN 5462
B8x32x36





Shaft Code 1
(Keyed on SAE)

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/cm²	Max r.p.m
			P = 0 bar	P = 140 bar	P = 240 bar	P =7 bar	P = 140 bar	P = 240 bar		
P1 & P2	B03	10.8mℓ/rev	16.2	10.7	—	1.3	5.3	—	275	2800
	B05	17.2mℓ/rev	25.8	20.3	15.8	1.4	7.5	12.2		
	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		2500
	B28 1)	88.8mℓ/rev	133.2	127.7	124.5 2)	2.8	32.7	48.5 2)	210	
	B31 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 ② P1 P2 ④⑤⑥ ⑦⑧⑨
③

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 (cm^3/rev)

B03 = 10.8	B17 = 58.3
B05 = 17.2	B20 = 63.8
B06 = 21.3	B22 = 70.3
B08 = 26.4	B25 = 79.3
B10 = 34.1	B28 = 88.8
B12 = 37.1	B31 =100.0
B14 = 46.0	

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**

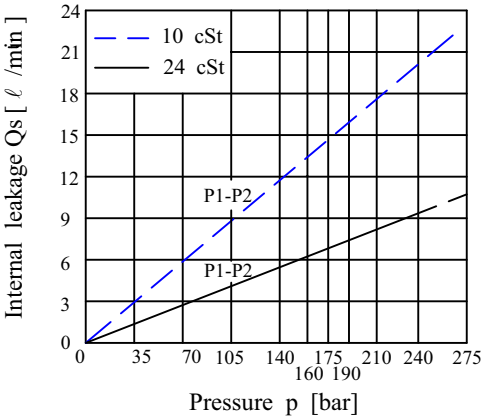
⑧ **Seal class**
1 = S1 (for mineral oil)
4 = S4 (for fire resistant fluids)
5 = S5 (for mineral oil and fire resistant fluids)

⑨ **Mounting W/connection variables**

		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.

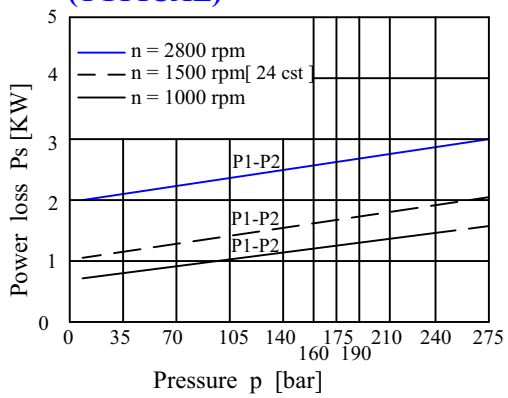
INTERNAL LEAKAGE (TYPICAL)



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

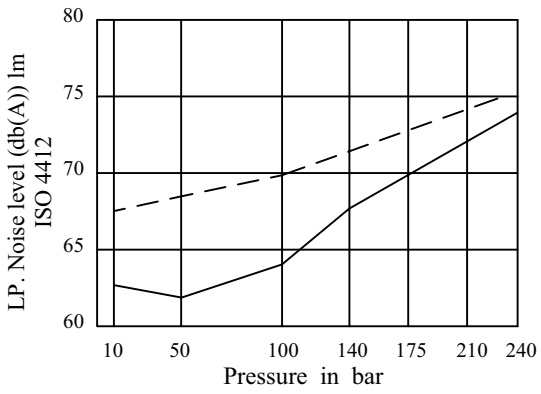
Total leakage is the sum of each section loss at its operating conditions.

HYDROMECHANICAL POWER LOSS (TYPICAL)



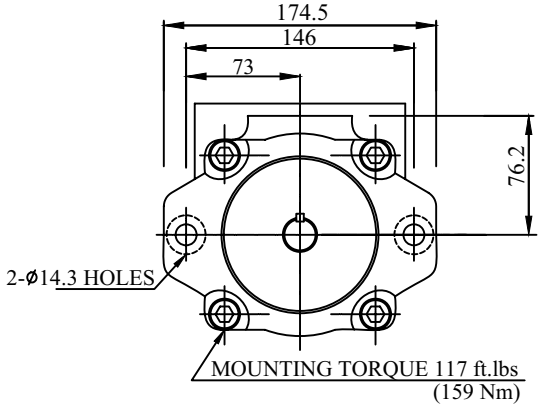
Total hydromechanical power loss is the sum of each section at its operating conditions.

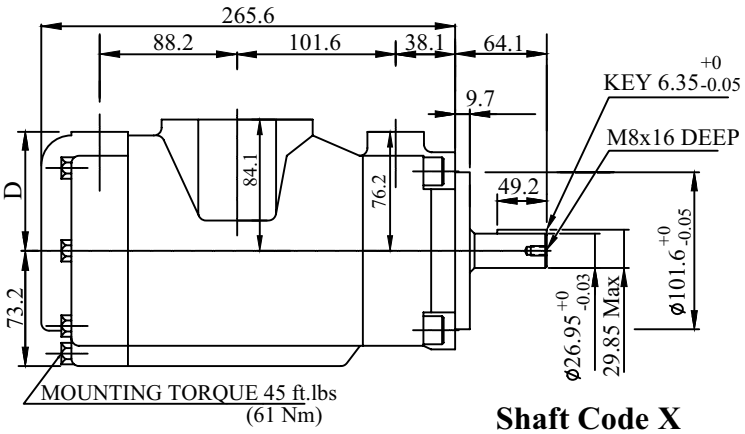
NOISE LEVEL (TYPICAL)



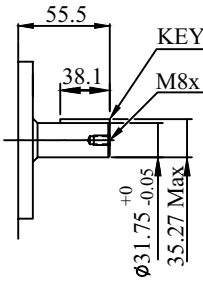
Double pump noise level is given with each section discharging at the pressure noted on the curve.

KT6CCZ Dimensional Drawing

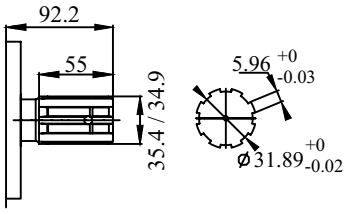




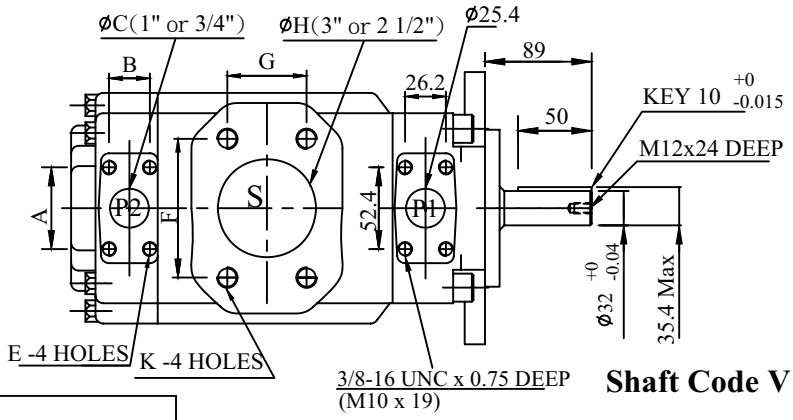
Shaft Code X



Shaft code W



Shaft code S
DIN 5462
B8x32x36



Shaft Code V

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/cm²	Max r.p.m
			P = 0 bar	P = 140 bar	P = 240 bar	P =7 bar	P = 140 bar	P = 240 bar		
P1 & P2	B03	10.8mℓ/rev	16.2	10.7	—	1.3	5.3	—	275	2800
	B05	17.2mℓ/rev	25.8	20.3	15.8	1.4	7.5	12.2		
	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		2500
	B28 1)	88.8mℓ/rev	133.2	127.7	124.5 2)	2.8	32.7	48.5 2)	210	
	B31 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

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

① ② P1 P2 ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

① Series

② Severe duty shaft only

③ Cam ring for " P1 "

Volumetric displacement (cm^3/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 (cm^3/rev)

003=10.8	017=58.3
005=17.2	020=63.8
006=21.3	022=70.3
008=26.4	025=79.3
010=34.1	028=88.8
012=37.1	031=100.0
014=46.0	

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

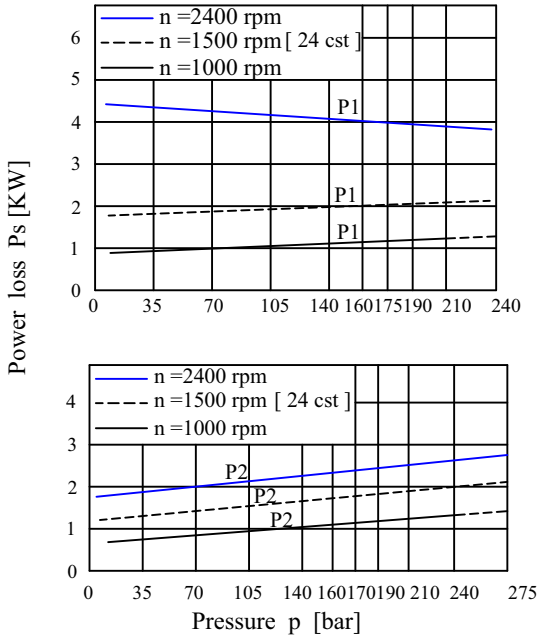
1 = S1 (for mineral oil)
4 = S4 (for the resistant fluids)
5 = S5 (for mineral oil and fire resistant fluids)

⑨ Mounting W / connection variables

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

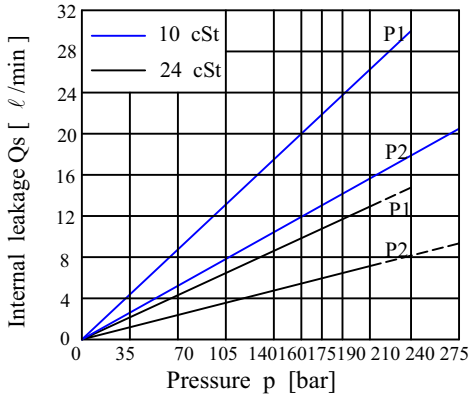
⑩ Modifications

HYDROMECHANICAL POWER LOSS (TYPICAL)



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

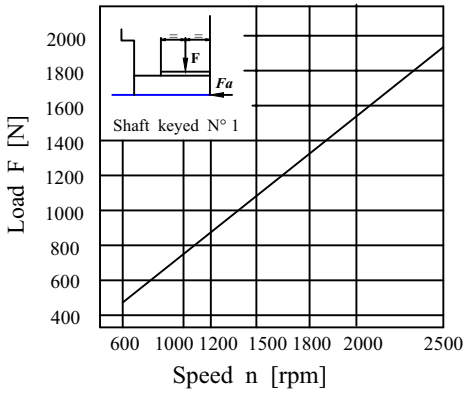
INTERNAL LEAKAGE (TYPICAL)



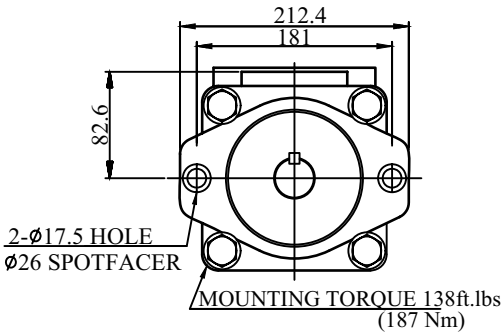
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 % of theoretical flow.

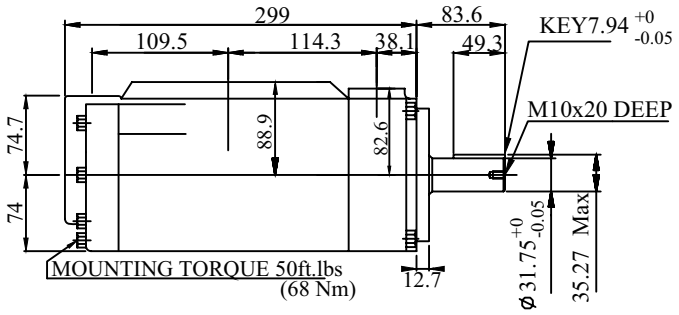
Total leakage is the sum of each section loss at its operating conditions.

PERMISSIBLE RADIAL LOAD

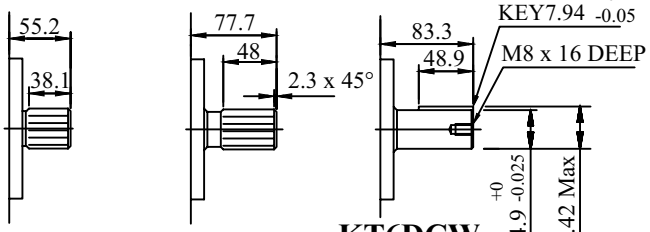


Maximum permissible axial load Fa = 1200 N





Shaft Code 1
(Keyed SAE C)

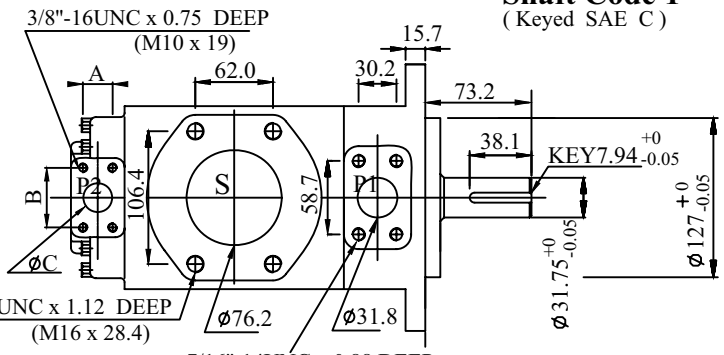


KT6DCW

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.

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/cm²	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		2200
	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)	210	
	061 1)	190.5mℓ/rev	285.7	278.0 3)	——	4.6	60.6 3)	——	120	
P2	003	10.8mℓ/rev	16.2	11.2	7.7	1.3	5.3	8.4	275	2500
	005	17.2mℓ/rev	25.8	20.8	17.3	1.4	7.5	12.2		
	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)	210	

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.

KT6DDS - 038 - 022 - 1 R 00 - A 1 - 00 *

① ② (P1 P2) ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① **Series** SAE C 6 bolts
Mounting flange J744c

② **Cam ring for " P1 " "P2"**
Volumetric displacement (cm^3/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 (SAE CC)
3 = Splined (SAE C)
4 = Splined (SAE BB)
5 = Keyed (no SAE)

④ **Direction of rotation**
(view on shaft end)
R = clockwise
L = counter - clockwise

⑤ **Porting combination**
00 = standard

⑥ **Design letter**

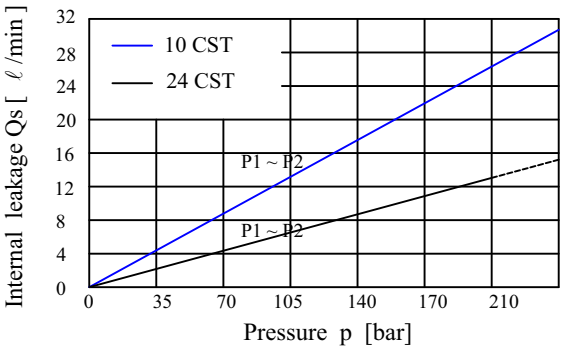
⑦ **Seal class**
1 = S1 (for mineral oil)
4 = S4 (for fire resistant fluids)
5 = S5 (for mineral oil and fire resistant fluids)

⑧ **Mounting W/connection variables**

P1 & P2 = 1 1/4" S = 4"		
KT6DDS	Unc	Metric
	00	M0

⑨ **Modifications**

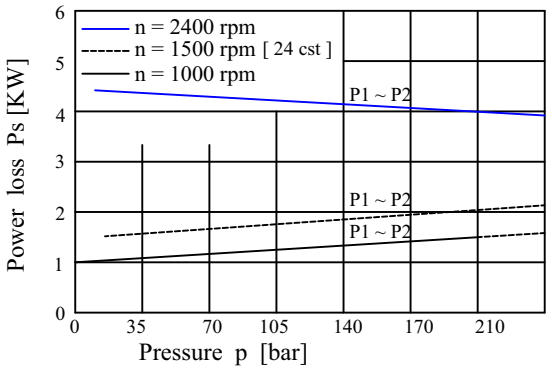
INTERNAL LEAKAGE (TYPICAL)



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

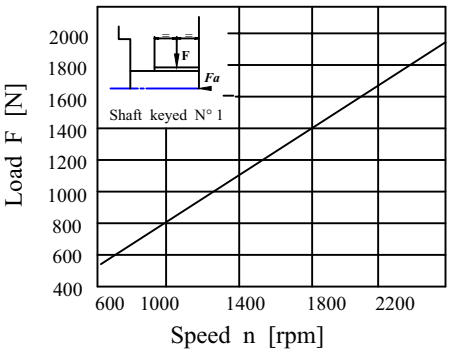
Total leakage is the sum of each section loss at its operating conditions.

HYDROMECHANICAL POWER LOSS (TYPICAL)

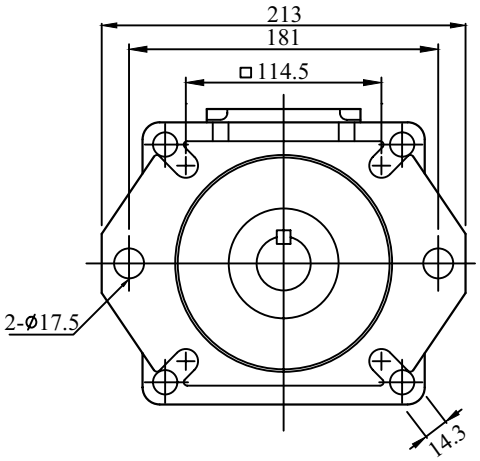


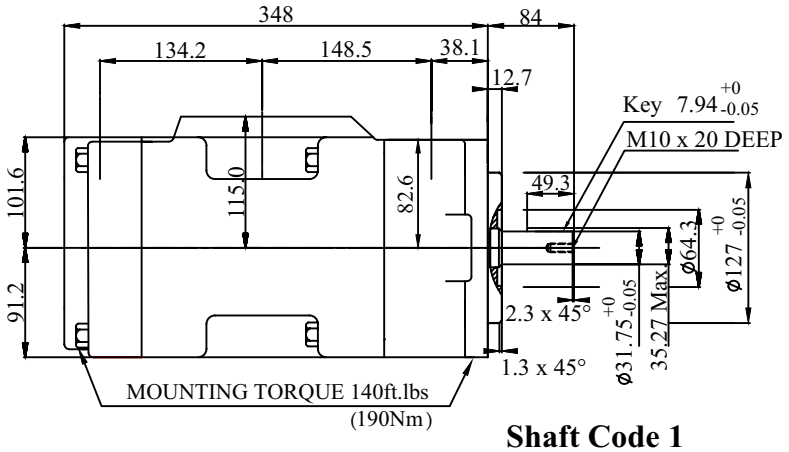
Total hydromechnical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD

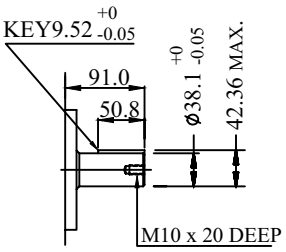


Maximum axial load permissible Fa = 1200 N

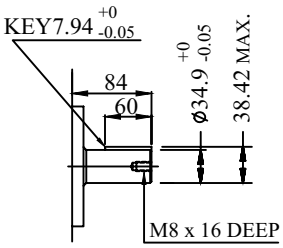




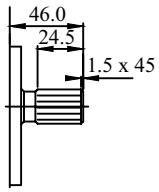
Shaft Code 1
Keyed SAE C



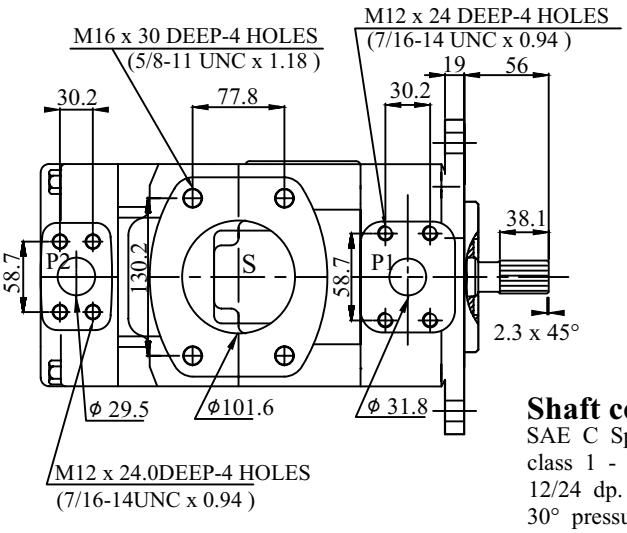
Shaft Code 2
Keyed SAE CC



Shaft code 5
Keyed no SAE



Shaft code 4
SAE BB Splined shaft
class 1 - J498 b
16/32 d.p. -15 teeth
30° pressure angle.
Flat root side fit.



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
KT6DDS	1	43240
	3	61200
	4	35880
	5	55600

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

Pressure Port	Series	Volumetric Displacement Vp	Flow q & n =1500 rpm (ℓ/min)			Input power p & n =1500rpm (KW)			P Max Kg/cm²	Max r.p.m
		cm³/rev	P=0 bar	P=140 bar	P=240 bar	P=7 bar	P=140 bar	P=240 bar		
P1 ~ P2	014	47.6	71.4	62.1	55.9	2.3	18.5	30.6	240	2500
	017	58.2	87.3	78.0	71.8	2.5	22.2	37.0		
	020	66.0	99.0	89.7	83.5	2.8	24.9	41.7		
	024	79.5	119.3	110.0	103.8	3.0	29.6	49.8		
	028	89.7	134.5	125.2	119.0	3.2	33.2	55.9		
	031	98.3	147.5	138.1	131.9	3.3	36.2	61.0		
	035	111.0	166.5	157.2	151.0	3.5	40.7	68.7		
	038	120.3	180.4	171.1	164.9	3.7	43.9	74.3		
	042 1)	136.0	204.0	194.7	188.5	4.0	49.4	83.7		2200
	045 1)	145.7	218.5	209.2	203.0	4.1	52.8	89.5		
	050 1)	158.0	237.0	227.7	224.0 2)	4.4	57.0	85.0 2)	210	
	061	190.5	285.7	278.0 3)	——	4.6	60.6 3)	——	120	

1) 042-045-050-061=2200 rpm. max. 2) 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 (cm^3/rev)

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

Cam ring for " P2 "

003=10.8
005=17.2
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

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

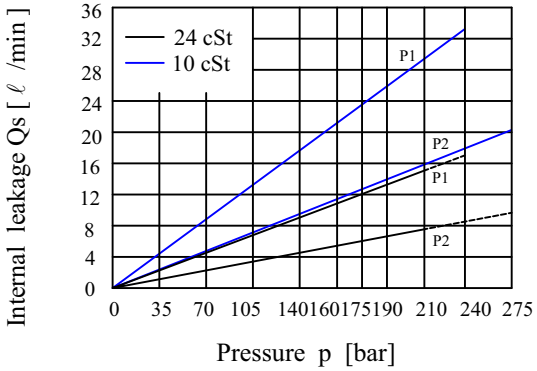
00 = standard

⑦ Design letter

⑧ Seal class

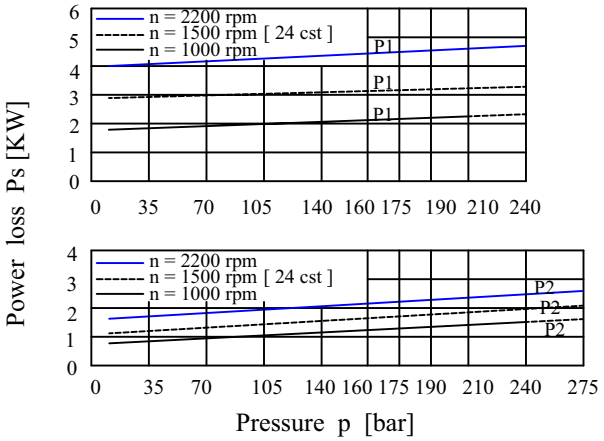
1 = S1 (for mineral oil)
4 = S4 (for fire resistant fluids)
5 = S5 (for mineral oil and fire resistant fluids)

INTERNAL LEAKAGE (TYPICAL)



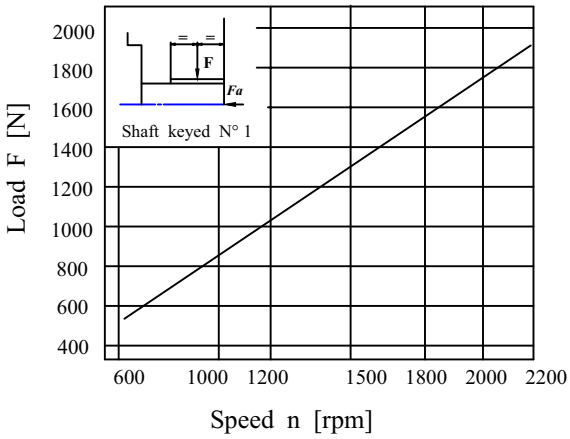
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 % of theoretical flow.
Total leakage is the sum of each section loss at its operating conditions.

HYDROMECHANICAL POWER LOSS (TYPICAL)



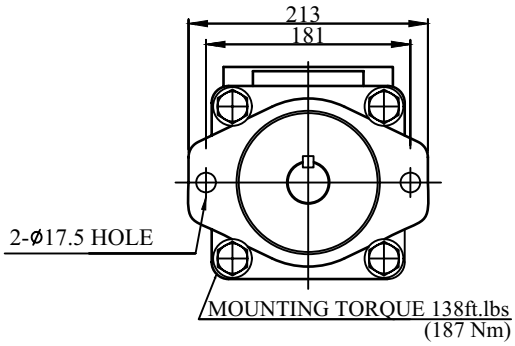
Total hydromechanical power loss is the sum of each section at its operating conditions.

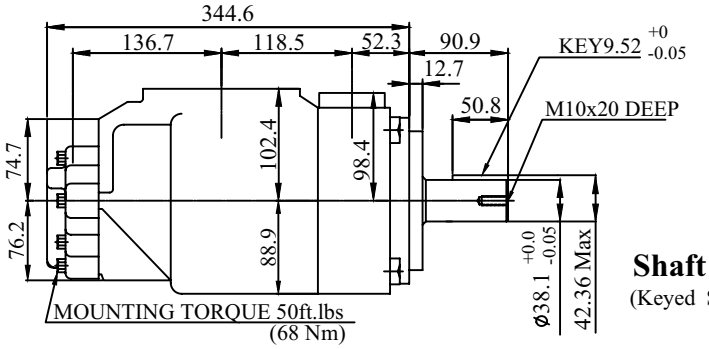
PERMISSIBLE RADIAL LOAD



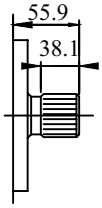
Maximum permissible axial load Fa = 2000 N

KT6EC Dimensional Drawing

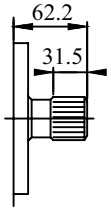




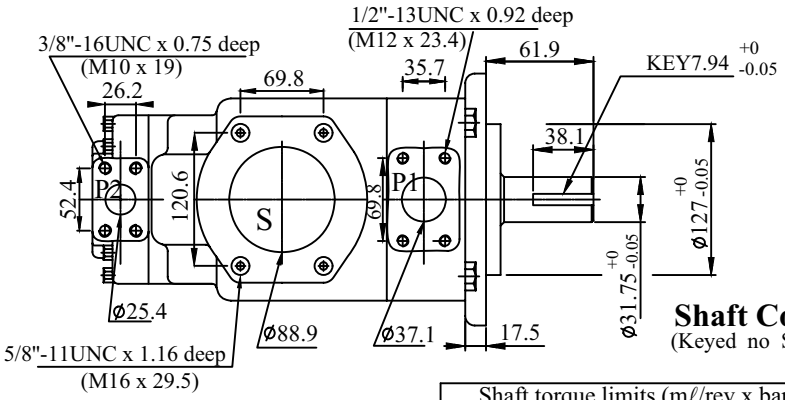
Shaft Code 1
(Keyed SAE CC)



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



Shaft code 4
SAE CC Splined
shaft class 1 - J498 b
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.P1+P2
KT6EC	1	72306
	2	34590
	3	61200
	4	76376

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/cm²	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	003	10.8mℓ/rev	16.2	11.2	7.7	1.3	5.3	8.4	275	2200
	005	17.2mℓ/rev	25.8	20.8	17.3	1.4	7.5	12.2		
	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)	210	
	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

KT6ED - * - 066 - 038 - 1 R 00 - B 1 *

① ② ③ (P1 / P2) ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Series

② Y-Metric port connection, Omit for UNC

③ Cam ring for " P1 "

Volumetric displacement (cm^3/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 "

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 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

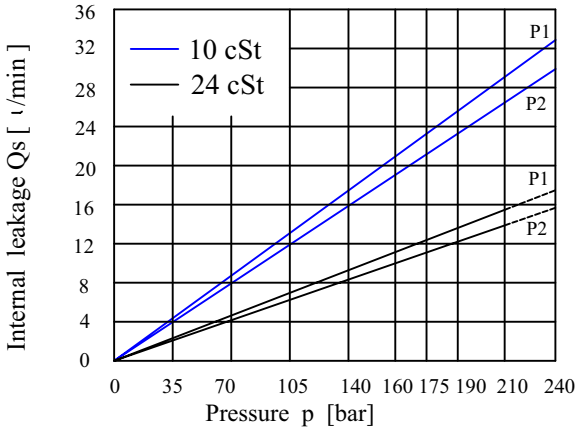
⑦ Design letter

⑧ Seal class

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

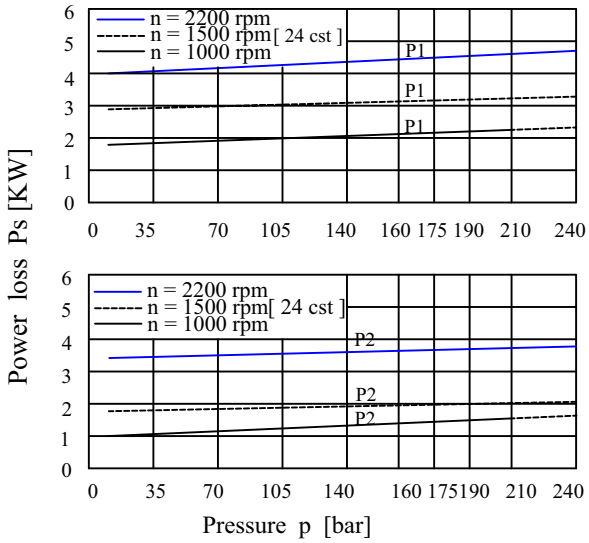
⑨ Modifications

INTERNAL LEAKAGE (TYPICAL)



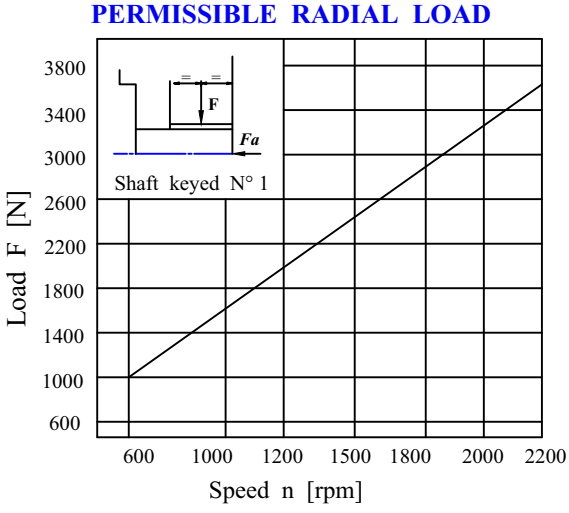
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 % of theoretical flow.

HYDROMECHANICAL POWER LOSS (TYPICAL)



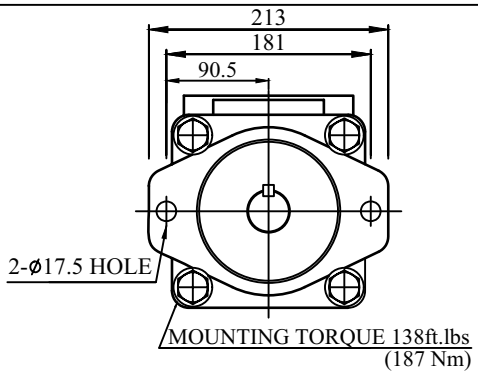
Total hydromechanical power loss is the sum of each section at its operating conditions.

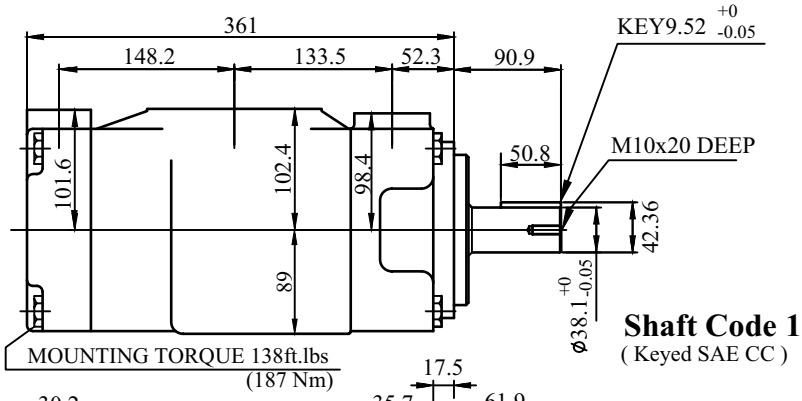
PERMISSIBLE RADIAL LOAD



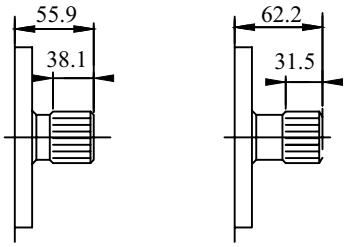
Maximum permissible axial load Fa = 2000 N

KT6ED Dimensional Drawing



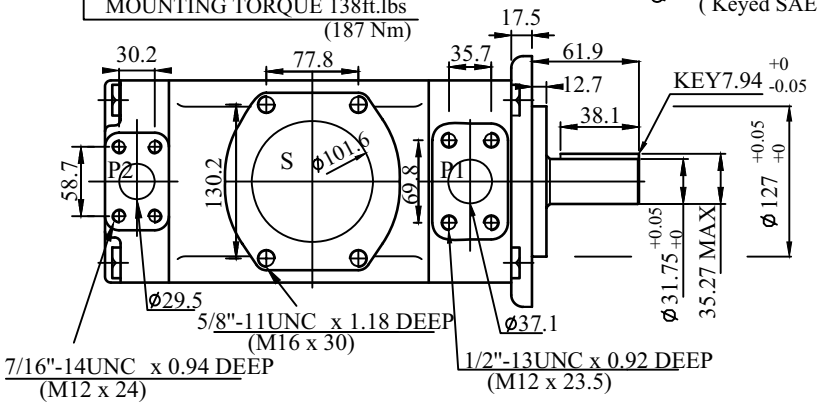


Shaft Code 1
(Keyed SAE CC)



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

Shaft code 4
SAE CC Splined shaft class 1 - J498 b 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.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/cm²	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	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.

KT6EE / KT6EES - 066 - 052 - 1 R 00 - B 1 0 - 00 *

① ② (P1 P2) ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

① **Series** KT6EE Series - 250 B4HW
ISO 3019-2 MOUNTING FLANGE
KT6EES Series - SAE 4 BOLTS
mounting flange J744c

② **Cam ring for " P1 " &" P2"**
Volumetric displacement (cm^3/rev)

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

③ **Type of shaft** (KT6EES)
1 = Keyed (SAE CC)
3 = Splined (SAE CC)
4 = Splined (SAE D&E)
5 = Keyed (SAE D&E)
(KT6EE)
2 = Keyed (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)

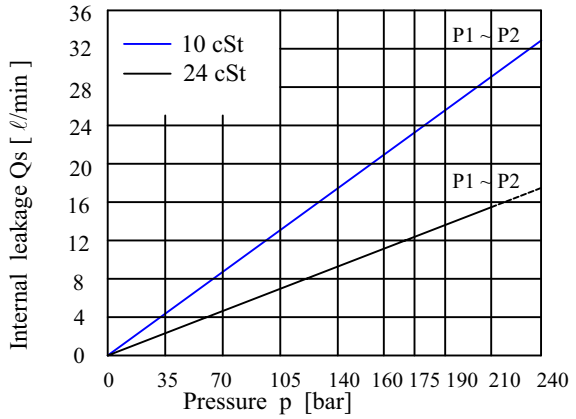
⑧ **Coupling adapter**
0 - None
2 - SAE B
3 - SAE BB

⑨ **Port connection variables**
SAE 4 bolt flange(J518c)

P1 & P2 = 1 1/2" S=4"		
	KT6EES	KT6EE/KT6EES
Type	Unc	Metric
code	00	M0

⑩ **Modifications**

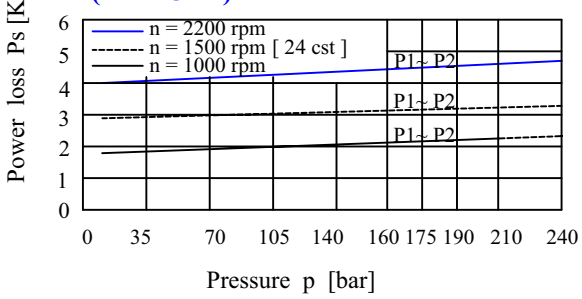
INTERNAL LEAKAGE (TYPICAL)



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

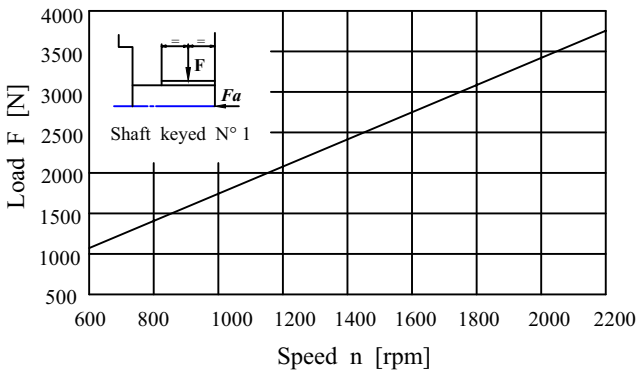
Total leakage is the sum of each section loss at its operating conditions.

HYDROMECHANICAL POWER LOSS (TYPICAL)



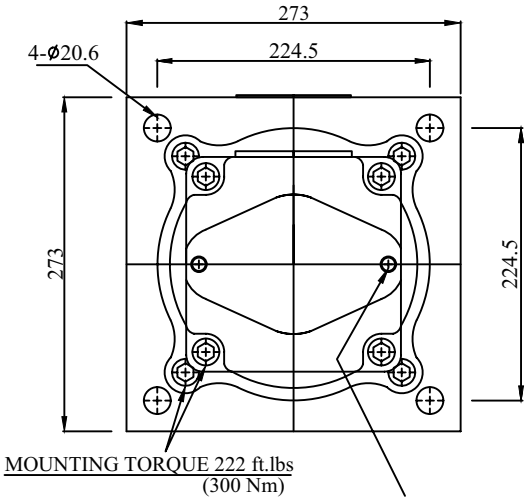
Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD

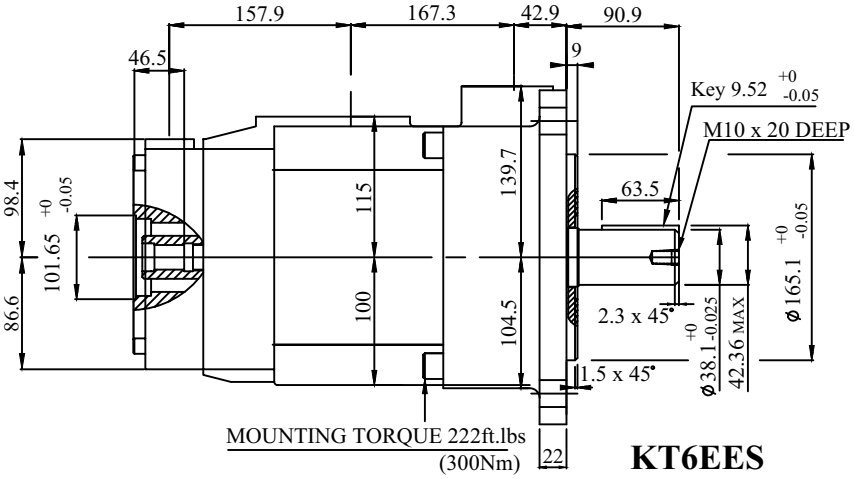


Maximum permissible axial load Fa = 2000 N

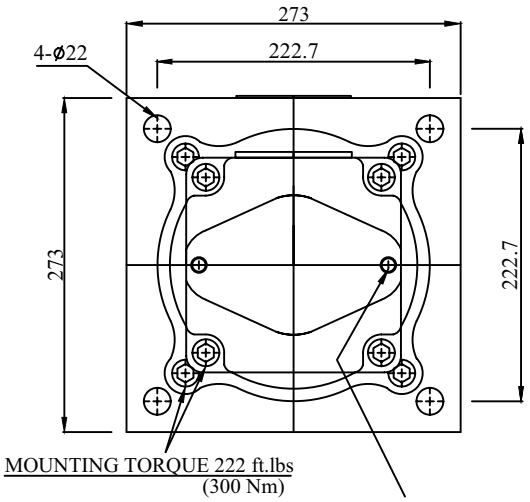
KT6EE/KT6EES Dimensional Drawing



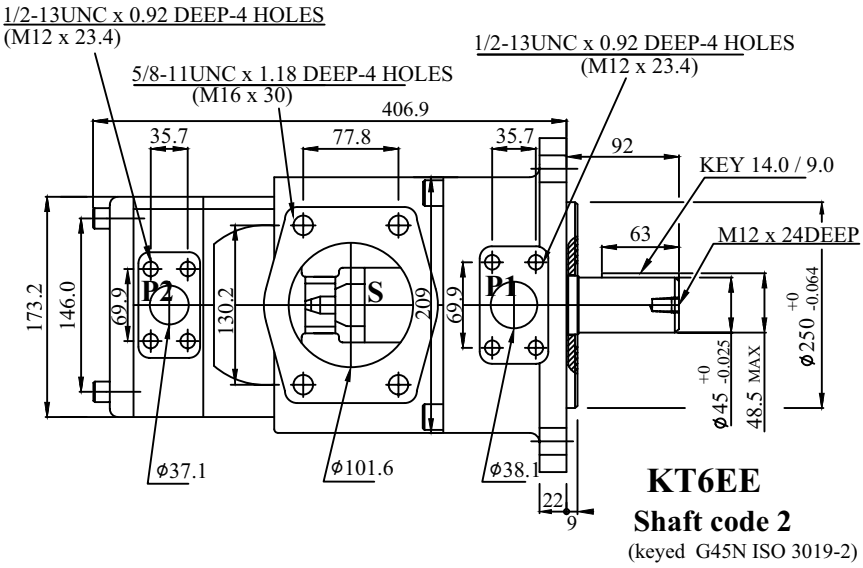
KT6EES



KT6EES
Shaft code 1
(keyed SAE CC)



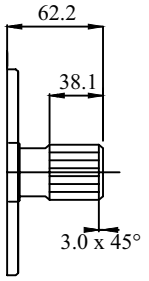
KT6EE



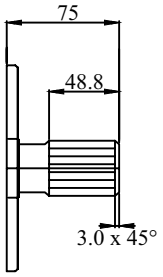
KT6EE
Shaft code 2
(keyed G45N ISO 3019-2)

Shaft torque limits (mℓ/rev x bar)			
Shaft	Vi x p max.	Copling	Vi x p max.
1	90380	SAE-B	20600
2	114600	SAE-BB	32670
3	126800		
4	126800		
5	110840		

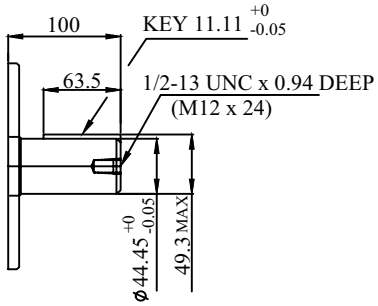
Code	Coupling adapter
0	without coupling
2	SAE B -13 teeth -pitch 16/32 Major dia (min)0.875(22.225) Minor dia (min)0.753(19.126)
3	SAE BB -15 teeth -pitch 16/32 Major dia (min)1.00(25.4) Minor dia (min)0.877(22.275)



Shaft code 3
SAE CC Splined shaft
Class 1- J498b
12/24dp. 17 teeth
30° pressureangle
Flat root side fit



Shaft code 4
SAE D&E Splined shaft
Class 1- J498b
8/16 dp. 13 teeth
30° pressureangle
Flat root side fit



Shaft code 5
(keyed SAE D&E)

OPERATING CHARACTERISTICS - TYPICAL (24 cST)

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

Pressure Port	Series	Volumetric Displacement Vp	Flow q & n =1500rpm (ℓ/min)			Input power p & n =1500rpm (KW)			P Max Kg/cm²	Max r.p.m
		cm³/rev	P=0 bar	P=140 bar	P=240 bar	P=7 bar	P=140 bar	P=240 bar		
P1 ~ P2	042	132.3	198.5	188.5	181.3	5.2	49.4	82.6	240	2200
	045	142.4	213.6	203.6	196.5	5.4	52.9	88.7		
	050	158.5	237.7	227.7	220.6	5.7	58.5	98.3		
	052	164.8	247.2	237.2	230.1	5.8	60.8	102.1		
	057	180.7	271.1	261.1	254.0	6.1	66.4	106.9		
	062	196.7	295.0	285.0	277.9	6.4	71.9	121.3		
	066	213.3	319.9	309.9	302.8	6.7	77.7	131.2		
	072	227.1	340.6	330.6	323.5	6.9	82.6	139.5		
	085 1)	269.8	404.7	397.7 2)		7.3	65.3 2)		90	2000

1) 085=2000 rpm. max. 2) 085=75 bar cont. 085=90 bar max. int. Min Speed : 600 rpm

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

① KT6GCC ② P1 P2 ③ 6 ④ R ⑤ 00 ⑥ A ⑦ 1 ⑧ 00 ⑨ *

① Series

② Cam ring for " P1 "

Volumetric displacement (cm^3/rev)

B03=10.8	B17=58.3
B05=17.2	B20=63.8
B06=21.3	B22=70.3
B08=26.4	B25=79.3
B10=34.1	B28=88.8
B12=37.1	B31=100.0
B14=46.0	

Cam ring for " P2 "

B03=10.8	B17=58.3
B05=17.2	B20=63.8
B06=21.3	B22=70.3
B08=26.4	B25=79.3
B10=34.1	B28=88.8
B12=37.1	B31=100.0
B14=46.0	

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

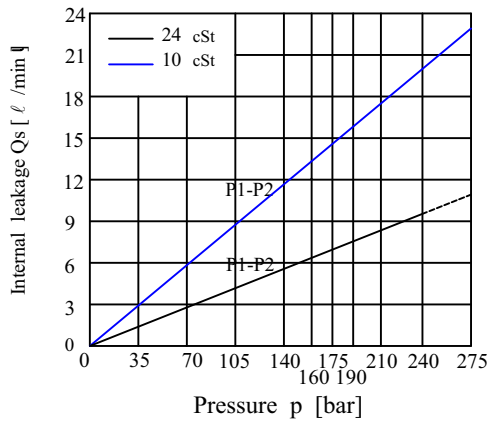
1)for 46mℓ/rev.max.

2)for 126mℓ/rev.max.

The large cartridge must be always mounted in the front.

⑨ Modifications

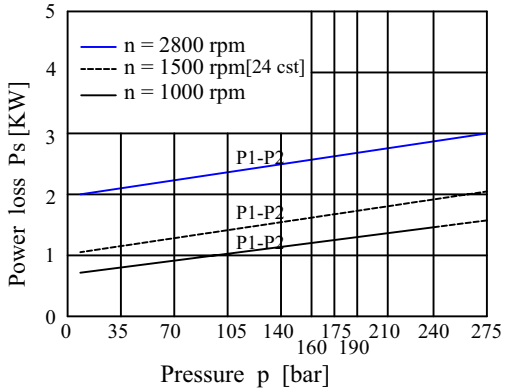
INTERNAL LEAKAGE (TYPICAL)



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

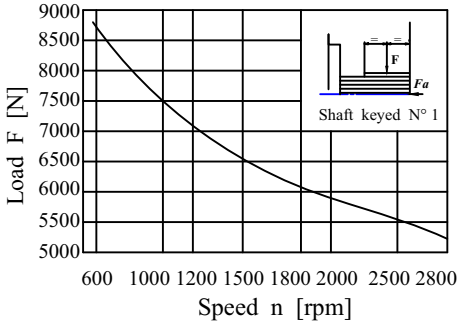
Total leakage is the sum of each section loss at its operating conditions.

HYDROMECHANICAL POWER LOSS (TYPICAL)

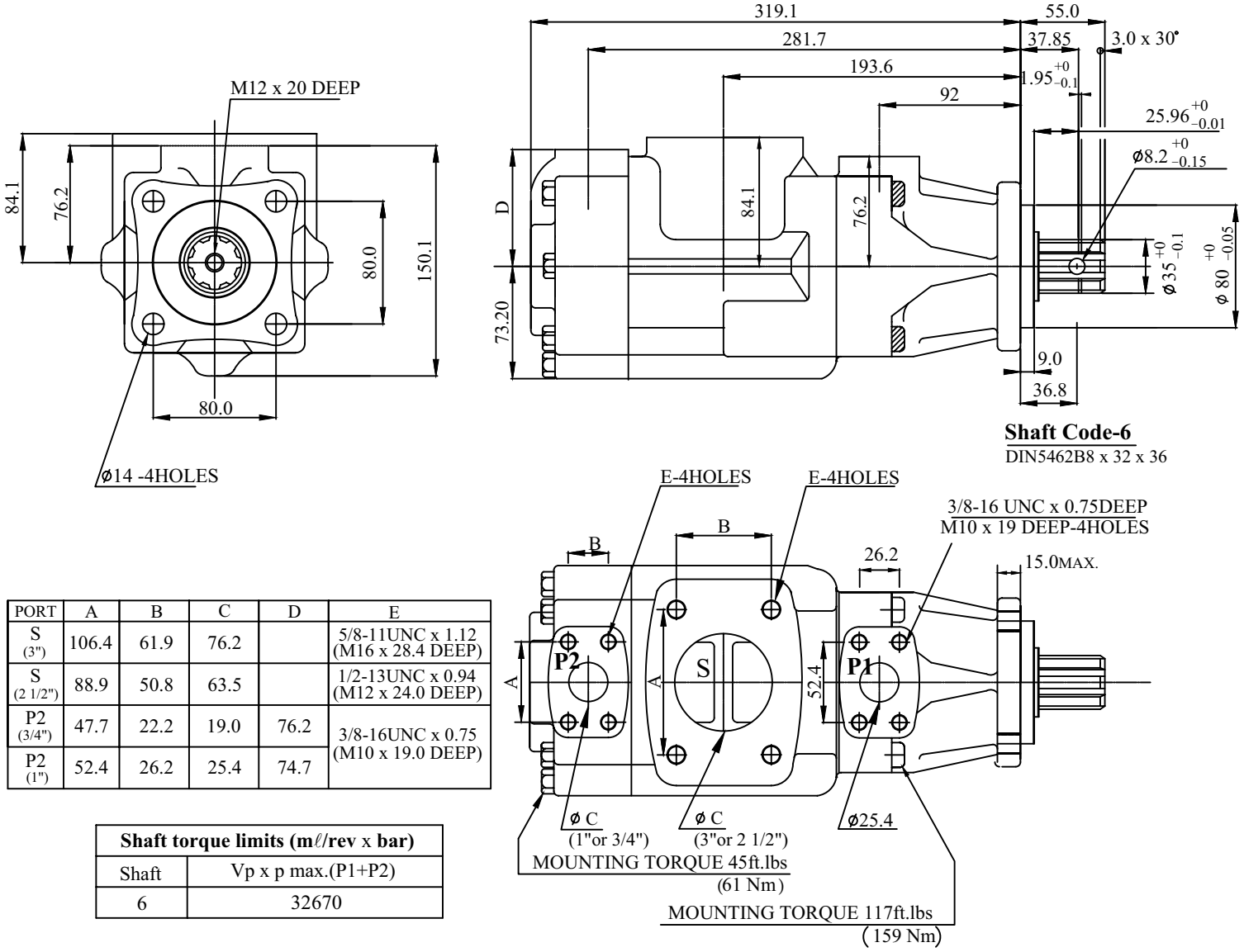


Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



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



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	Flow q & n =1500 rpm (ℓ/min)			Input power p & n =1500rpm (KW)			P Max Kg/cm²	Max r.p.m
		cm³/rev	P=0 bar	P=140 bar	P=240 bar	P=7 bar	P=140 bar	P=240 bar		
P1 - P2	B03	10.8	16.2	10.7		1.3	5.3		275	2800
	B05	17.2	25.8	20.3	15.8	1.4	7.5	12.2		
	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		2500
	B28 1)	88.8	133.2	127.7	124.5 2)	2.8	32.7	48.5 2)	210	
	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.