

KT7DB/KT7DBS - B38 - B12 - 1 R 00 - B 1 - 00 - *

① P1 P2 ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① **KT7DB series -125-A2 HW**
ISO 2 bolts 3019-2 mounting flange
KT7DBS series -SAE-C2 bolts
mounting flange j744

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)
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

③ **Type of shaft**
1 = Keyed (SAE C)
2 = Keyed (no SAE)
3 = Splined (SAE C)
4 = Splined (no SAE)
Severe duty KT7DB/KT7DBS only
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**

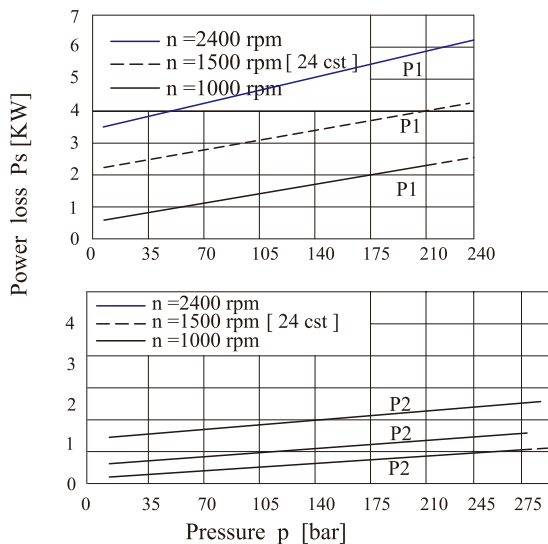
⑦ **Seal class**
1 = S1 (for mineral oil)
4 = S4 (for the resistant fluids)
5 = S5 (for mineral oil and fire resistant fluids)

⑧ **Mounting W / connection variables**

	UNC		METRIC	
	KT7DBS	KT7DB/KT7DBS	KT7DBS	KT7DB/KT7DBS
	00	01	M0	M1
P2	1"	3/4"	1"	3/4"

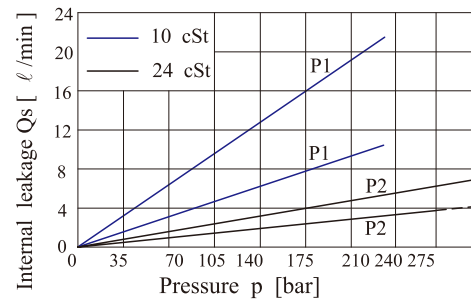
⑨ **Modifications**

HYDROMECHANICAL POWER LOSS (TYPICAL)



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

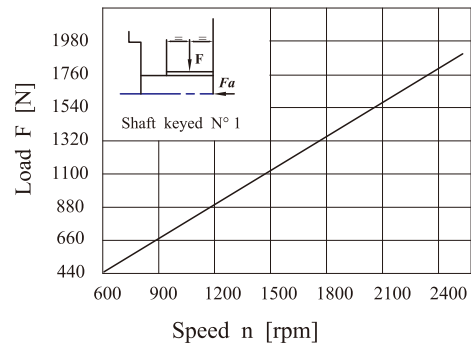
INTERNAL LEAKAGE (TYPICAL)



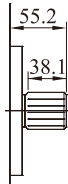
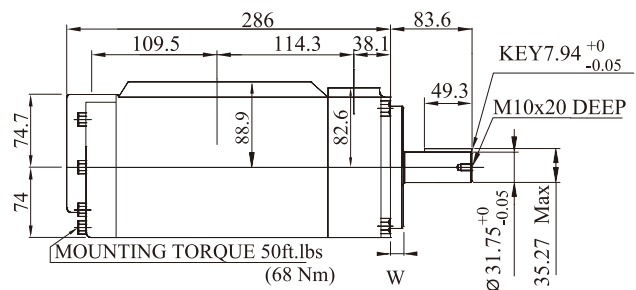
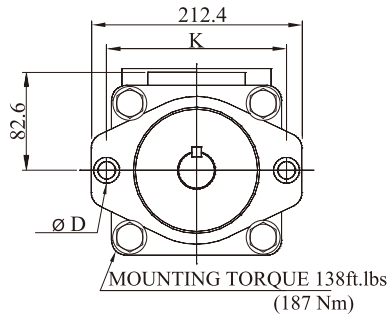
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 % of theoretical flow.

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

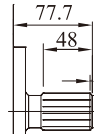
PERMISSIBLE RADIAL LOAD



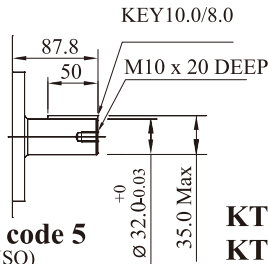
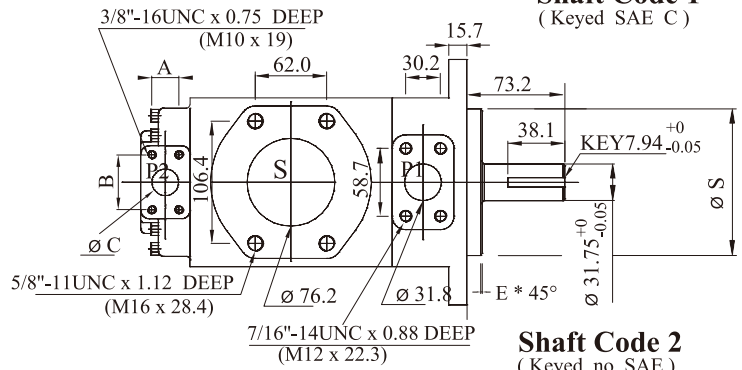
Maximum permissible axial load Fa = 1200 N



Shaft code 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 ISO)
(R775-G32M)

**KT7DB/
KT7DBS**

Shaft torque limit (mℓ/rev x bar)		
Pump	Shaft	Vp x p max.P1+P2
KT7DB/ KT7DBS	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)

Series	Ø S	E*45°	W	K	Ø D
KT7DB	4.921"(124.99/124.94)	0.079"(2.0)	0.374"(9.49)	7.087"(180.0)	0.709"(18.0)
KT7DBS	5" (127.0/126.94)	0.051"(1.3)	0.5"(12.7)	7.126"(181.0)	0.689"(17.5)

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 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	262.2	253.6	246.8	5.0	62.4	108.7	210		
B50 1)	157.9	284.0	275.8	271.3 1)	5.3	67.5	100.3 1)			
P2		cm ³ /rev	P=0 bar	P=140 bar	P=300 bar	P=7 bar	P=140 bar	P=300 bar	300	2500
	B02	5.7	10.4	8.8	6.8	0.55	2.99	6.04		
	B03	9.8	17.6	15.9	14.0	0.63	4.65	9.64		
	B04	12.8	23.0	21.4	19.4	0.70	5.89	12.34		
	B05	15.9	28.6	26.9	25.0	0.76	7.17	15.13		
	B06	19.8	35.6	33.9	32.0	0.84	8.79	18.64		
	B07	22.5	40.4	38.8	36.8	0.89	9.91	21.07		
	B08	24.9	44.7	43.1	41.1	0.94	10.9	23.23		
	B09	28.0	50.3	48.6	47.0	1.01	12.19	26.04		
	B10	31.8	57.2	55.5	53.5	1.11	13.75	29.44		
	B11	34.9	62.9	61.2	59.3	1.15	15.04	32.23		
	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 2)	1.47	21.28	42.76 2)	280		

1) B50=210 bar max. int.

2) B15=280 bar max. int.

Min Speed : 600 rpm