

Additional T6EM shaft code T: see page 33  
 Additional T6EP version shaft see page 33

Shaft torque limits [ml/rev x bar]		
Pump	Shaft	Vi x p max.
T6EM	1	54500
	2	34590
	3	61200
	4	61200

**OPERATING CHARACTERISTICS - TYPICAL [24 cSt]**

Series	Volumetric Displacement Vi	Speed n [R.P.M.]	Flow Q [l/min]			Input power P [kW]		
			p = 0 bar	p = 140 bar	p = 240 bar	p = 7 bar	p = 140 bar	p = 240 bar
042	132,3 ml/rev	1000	132,3	122,3	115,2	3,2	32,9	55,2
		1500	198,5	188,5	181,3	5,2	49,4	82,6
045	142,4 ml/rev	1000	142,4	132,4	125,3	3,4	35,3	59,2
		1500	213,6	203,6	196,5	5,4	52,9	88,7
050	158,5 ml/rev	1000	158,5	148,5	141,4	3,5	39,0	65,6
		1500	237,7	227,7	220,6	5,7	58,5	98,3
052	164,8 ml/rev	1000	164,8	154,8	147,7	3,6	40,5	68,2
		1500	247,2	237,2	230,1	5,8	60,8	102,1
062	196,7 ml/rev	1000	196,7	186,7	179,6	4,0	47,9	80,9
		1500	295,0	285,0	277,9	6,4	71,9	121,3
066	213,3 ml/rev	1000	213,3	203,3	196,2	4,2	51,8	87,6
		1500	319,9	309,9	302,8	6,7	77,7	131,2
072	227,1 ml/rev	1000	227,1	217,1	210,0	4,3	55,0	93,1
		1500	340,6	330,6	323,5	6,9	82,6	139,5

Port connection can be furnished with metric threads.

**Ordering Code**

**Model No.**

T6CC\* W - B22 - B08 - 1 R 00 - D 1-00

Series M = Mobile 1 shaft seal  
Series P = Mobile 2 shaft seals

Use for severe duty shaft only\*

Cam ring for "P1" & "P2"

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

- B03 = 16,2 l/min
- B05 = 25,8 l/min
- B06 = 31,9 l/min
- B08 = 39,6 l/min
- B10 = 51,1 l/min
- B12 = 55,6 l/min
- B14 = 69,0 l/min
- B17 = 87,4 l/min
- B20 = 95,7 l/min
- B22 = 105,4 l/min
- B25 = 118,9 l/min
- B28 = 133,2 l/min
- B31 = 150,0 l/min

**Type of shaft**

**M version**

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

**P version**

- 3 = splined (no SAE)
- 4 = splined (SAE BB)
- 6 = splined (no SAE)

**Type of shaft**

**MW severe duty**

- \*2 = keyed (SAE BB)
- \*R = keyed special
- \*X = keyed special
- \*W = keyed special
- \*V = keyed special
- \*T = splined (SAE J718c)

**Modification**

**Mounting W/connection variables**

P2	P1 = 1" - S = 3"		P1 = 1" - S = 2.1/2" <sup>(2)</sup>	
	1"	3/4" <sup>(1)</sup>	1"	3/4" <sup>(1)</sup>
Code	00	01	10	11

<sup>1)</sup> for 46 ml/rev. max.

<sup>2)</sup> for 126 ml/rev. max.

The largest cartridge must be always mounted in the front.

**Seal Class**

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

**Design letter**

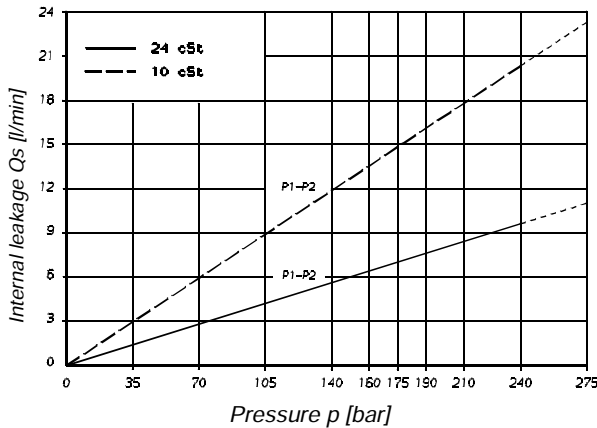
**Porting combination (see page 34)**

00 = standard

**Direct. of rotation (view on shaft end)**

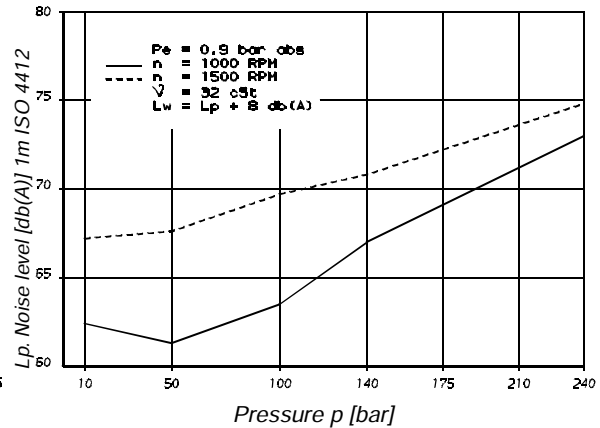
- R = clockwise
- L = counter-clockwise

**INTERNAL LEAKAGE (TYPICAL)**



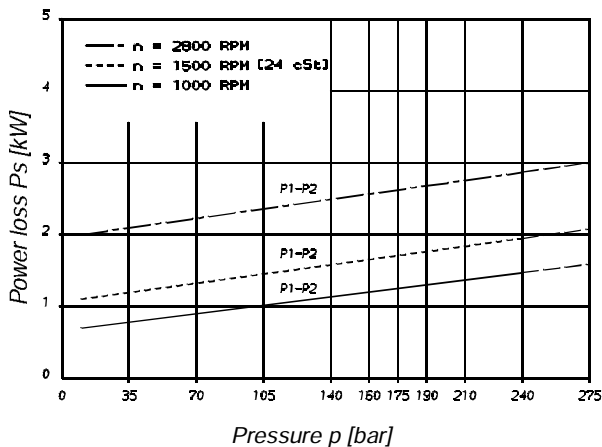
Do not operate the pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 % of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

**NOISE LEVEL (TYPICAL)**  
T6CCM - B22 - B22



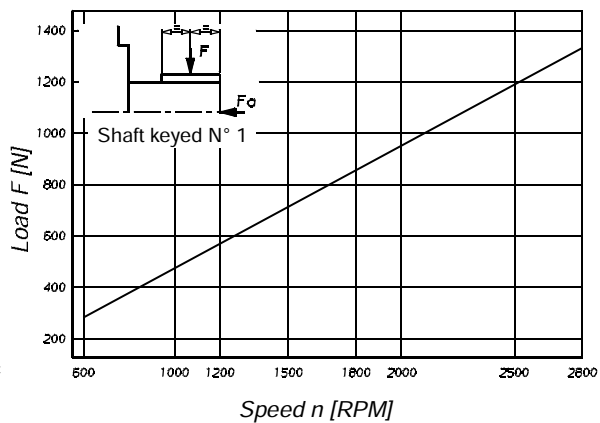
Double pump noise level is given with each section discharging at the pressure noted on the curve.

**POWER LOSS HYDROMECHANICAL (TYPICAL)**

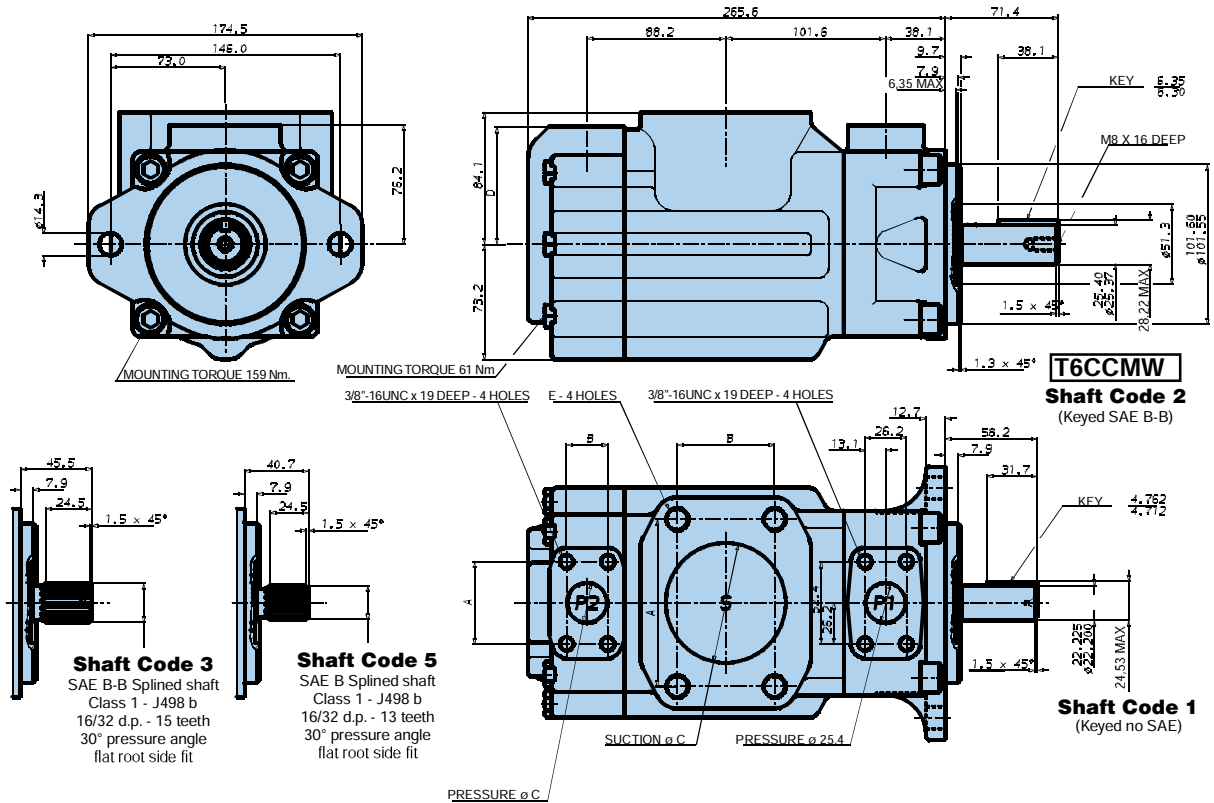


Total hydrodynamic power loss is the sum of each section at its operating conditions.

**PERMISSIBLE RADIAL LOAD**



Maximum permissible axial load  $F_a = 800 \text{ N}$



Additional special shafts: see page 33  
 Additional T6CCMW shaft code T: see page 33  
 Additional T6CCP version shaft see page 33

Port	Code	A	B	C	D	E
S	3"	106,4	61,9	76,2		5/8"-11 x 28.4 deep
S	2 1/2"	88,9	50,8	63,5		1/2"-13 x 23.9 deep
P1	1"	52,4	26,2	25,4	76,2	
P2	3/4"	47,7	22,2	19,0	76,2	
P2	1"	52,4	26,2	25,4	74,7	

Shaft torque limits [ml/rev x bar]		
Pump	Shaft	Vi x p max. P1 + P2
T6CCM	1	14300
T6CCMW	2	21420
T6CCM	3	32670
T6CCM	5	20600

**OPERATING CHARACTERISTICS - TYPICAL [24 cSt]**

Pressure port	Series	Volumetric Displacement Vi	Flow Q [l/min] & n = 1500 RPM			Input power P [kW] & n = 1500 RPM		
			p = 0 bar	p = 140 bar	p = 240 bar	p = 7 bar	p = 140 bar	p = 240 bar
P1 & P2	B03	10,8 ml/rev	16,2	10,7	-	1,3	5,3	-
	B05	17,2 ml/rev	25,8	20,3	15,8	1,4	7,5	12,2
	B06	21,3 ml/rev	31,9	26,5	22,0	1,5	8,9	14,7
	B08	26,4 ml/rev	39,6	34,1	29,6	1,6	10,7	17,7
	B10	34,1 ml/rev	51,1	45,7	41,2	1,7	13,4	22,3
	B12	37,1 ml/rev	55,6	50,2	45,7	1,7	14,4	24,1
	B14	46,0 ml/rev	69,0	63,5	59,0	1,9	17,6	29,5
	B17	58,3 ml/rev	87,4	82,0	77,5	2,1	21,9	36,9
	B20	63,8 ml/rev	95,7	90,2	85,7	2,2	23,8	40,2
	B22	70,3 ml/rev	105,4	100,0	95,5	2,3	26,1	44,1
	B25 <sup>1)</sup>	79,3 ml/rev	118,9	113,5	109,0	2,5	29,2	49,5
B28 <sup>1)</sup>	88,8 ml/rev	133,2	127,7	124,5 <sup>2)</sup>	2,8	32,7	48,5 <sup>2)</sup>	
B31 <sup>1)</sup>	100,0 ml/rev	150,0	144,5	141,3 <sup>2)</sup>	2,8	36,5	54,4 <sup>2)</sup>	

<sup>1)</sup> B25 - B28 - B31 = 2500 R.P.M. max.      <sup>2)</sup> B28 - B31 = 210 bar max. int.  
 - Not to use because internal leakage greater than 50% theoretical flow.

Port connection can be furnished with metric threads.



**Ordering Code**

**Model No.**

T6DC\* W - B38 - B22 - 1 R 00 - C 1

Series M = Mobile 1 shaft seal  
Series P = Mobile 2 shaft seals  
Use for severe duty shaft only\*



**Cam ring for "P1"**  
(Delivery at 0 bar & 1500 r.p.m.)  
B14 = 71,4 l/min      B35 = 166,5 l/min  
B17 = 87,3 l/min      B38 = 180,4 l/min  
B20 = 99,0 l/min      B42 = 204,0 l/min  
B24 = 119,3 l/min      B45 = 218,5 l/min  
B28 = 134,5 l/min      B50 = 237,0 l/min  
B31 = 147,4 l/min

**Cam ring for "P2"**  
(Delivery at 0 bar & 1500 r.p.m.)  
B03 = 16,2 l/min      B17 = 87,4 l/min  
B05 = 25,8 l/min      B20 = 95,7 l/min  
B06 = 31,9 l/min      B22 = 105,4 l/min  
B08 = 39,6 l/min      B25 = 118,9 l/min  
B10 = 51,1 l/min      B28 = 133,2 l/min  
B12 = 55,6 l/min      B31 = 150,0 l/min  
B14 = 69,0 l/min

**Modification**

**Seal Class**

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

**Design letter**

00 = standard

**Direct. of rotation (view on shaft end)**

- R = clockwise
- L = counter-clockwise

**Type of shaft**

**P version**  
3 = splined (no SAE)

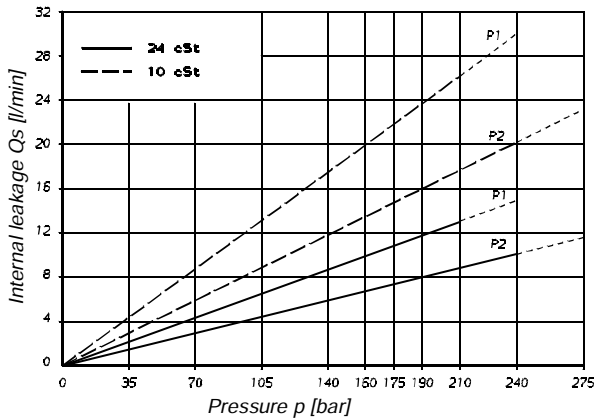
**Type of shaft**

**M version**  
1 = keyed (SAE C)  
2 = keyed (no SAE)  
3 = splined (SAE C)  
4 = splined (no SAE)

**MW severe duty**

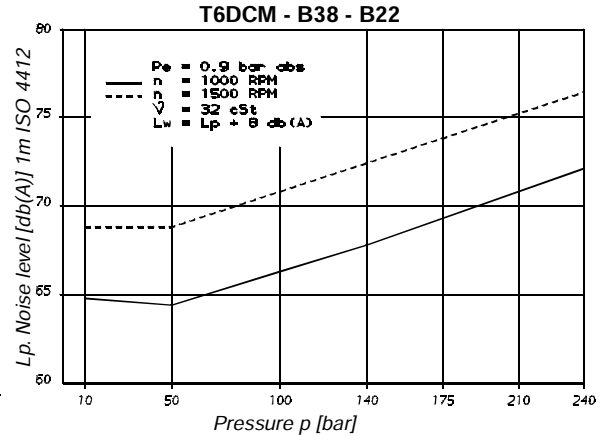
- \*5 = keyed (no SAE)
- \*T = splined (SAE J718c)

**INTERNAL LEAKAGE (TYPICAL)**



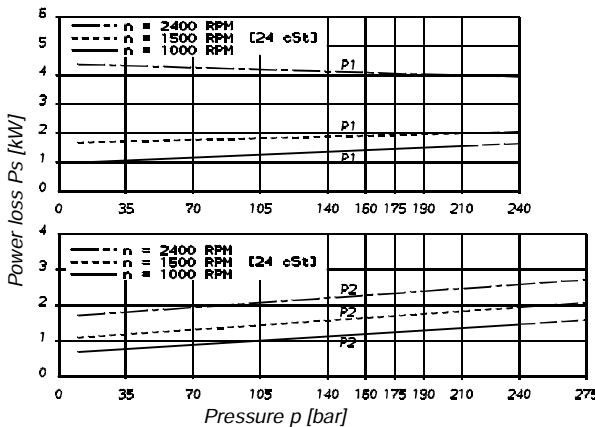
Do not operate the pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 % of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

**NOISE LEVEL (TYPICAL)**



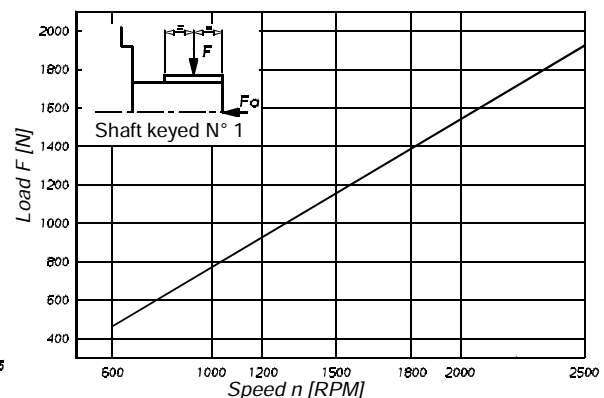
Double pump noise level is given with each section discharging at the pressure noted on the curve.

**POWER LOSS HYDROMECHANICAL (TYPICAL)**



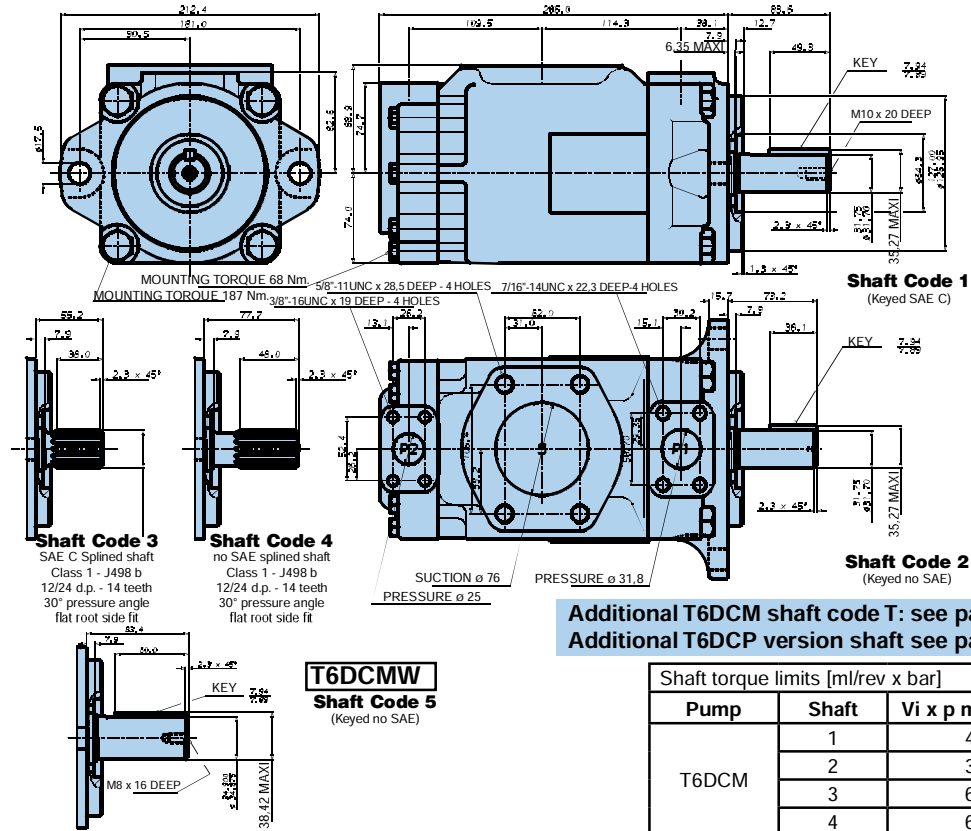
Total hydrodynamic power loss is the sum of each section at its operating conditions.

**PERMISSIBLE RADIAL LOAD**



Maximum permissible axial load Fa = 1200 N

**Dimensions and Characteristics**



**OPERATING CHARACTERISTICS - TYPICAL [24 cSt]**

Pressure port	Series	Volumetric Displacement Vi	Flow Q [l/min] & n = 1500 RPM			Input power P [kW] & n = 1500 RPM		
			p = 0 bar	p = 140 bar	p = 240 bar	p = 7 bar	p = 140 bar	p = 240 bar
P1	B14	47,6 ml/rev	71,4	62,1	55,9	2,3	18,5	30,6
	B17	58,2 ml/rev	87,3	78,0	71,8	2,5	22,2	37,0
	B20	66,0 ml/rev	99,0	89,7	83,5	2,8	24,9	41,7
	B24	79,5 ml/rev	119,3	110,0	103,8	3,0	29,6	49,8
	B28	89,7 ml/rev	134,5	125,2	119,0	3,2	33,2	55,9
	B31	98,3 ml/rev	147,4	138,1	131,9	3,3	36,2	61,0
	B35	111,0 ml/rev	166,5	157,2	151,0	3,5	40,7	68,7
	B38	120,3 ml/rev	180,4	171,1	164,9	3,7	43,9	74,3
	B42 <sup>2)</sup>	136,0 ml/rev	204,0	194,7	188,5	4,0	49,4	83,7
	B45 <sup>2)</sup>	145,7 ml/rev	218,5	209,2	203,0	4,1	52,8	89,5
B50 <sup>2)</sup>	158,0 ml/rev	237,0	227,7	224,0 <sup>1)</sup>	4,4	57,0	85,0 <sup>1)</sup>	
P2	B03	10,8 ml/rev	16,2	10,7	-	1,3	5,3	-
	B05	17,2 ml/rev	25,8	20,3	15,8	1,4	7,5	12,2
	B06	21,3 ml/rev	31,9	26,5	22,0	1,5	8,9	14,7
	B08	26,4 ml/rev	39,6	34,1	29,6	1,6	10,7	17,7
	B10	34,1 ml/rev	51,1	45,7	41,2	1,7	13,4	22,3
	B12	37,1 ml/rev	55,6	50,2	45,7	1,7	14,4	24,1
	B14	46,0 ml/rev	69,0	63,5	59,0	1,9	17,6	29,5
	B17	58,3 ml/rev	87,4	82,0	77,5	2,1	21,9	36,9
	B20	63,8 ml/rev	95,7	90,2	85,7	2,2	23,8	40,2
	B22	70,3 ml/rev	105,4	100,0	95,5	2,3	26,1	44,1
	B25	79,3 ml/rev	118,9	113,5	109,0	2,5	29,2	49,5
	B28	88,8 ml/rev	133,2	127,7	124,5 <sup>1)</sup>	2,8	32,7	48,5 <sup>1)</sup>
	B31	100,0 ml/rev	150,0	144,5	141,3 <sup>1)</sup>	2,8	36,5	54,4 <sup>1)</sup>

<sup>1)</sup> B28 - B31 - B50 = 210 bar max. int.      <sup>2)</sup> B42 - B45 - B50 = 2200 R.P.M. max

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

Port connection can be furnished with metric threads.

Model No.

T6EC\* - 066 - B22 - 1 R 00 - C 1 -

Series M = Mobile 1 shaft seal  
Series P = Mobile 2 shaft seals

**Cam ring for "P1"**  
(Delivery at 0 bar & 1500 r.p.m.)  
042 = 198,5 l/min      062 = 295,0 l/min  
045 = 213,6 l/min      066 = 319,9 l/min  
050 = 237,7 l/min      072 = 340,6 l/min  
052 = 247,2 l/min

**Cam ring for "P2"**  
(Delivery at 0 bar & 1500 r.p.m.)  
B03 = 16,2 l/min      B17 = 87,4 l/min  
B05 = 25,8 l/min      B20 = 95,7 l/min  
B06 = 31,9 l/min      B22 = 105,4 l/min  
B08 = 39,6 l/min      B25 = 118,9 l/min  
B10 = 51,1 l/min      B28 = 133,2 l/min  
B12 = 55,6 l/min      B31 = 150,0 l/min  
B14 = 69,0 l/min

Modification

Seal Class

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

Design letter

Porting combination (see page 34)

00 = standard

Direct. of rotation (view on shaft end)

- R = clockwise
- L = counter-clockwise

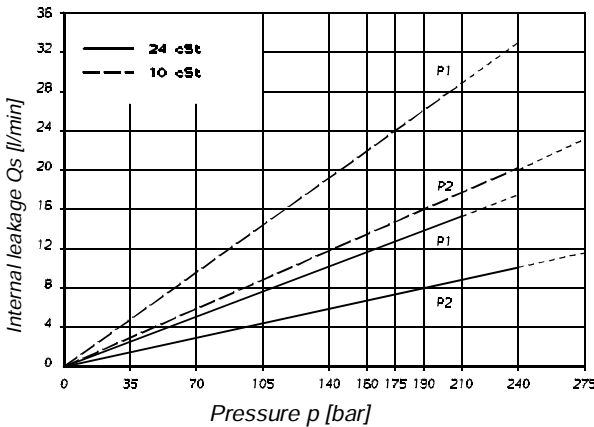
Type of shaft

**P version**  
3 = splined (non SAE)

Type of shaft

- M version**
- 1 = keyed (SAE CC)
  - 2 = keyed (no SAE)
  - 3 = splined (SAE C)
  - 4 = splined (SAE CC)
  - T = splined (SAE J718c)

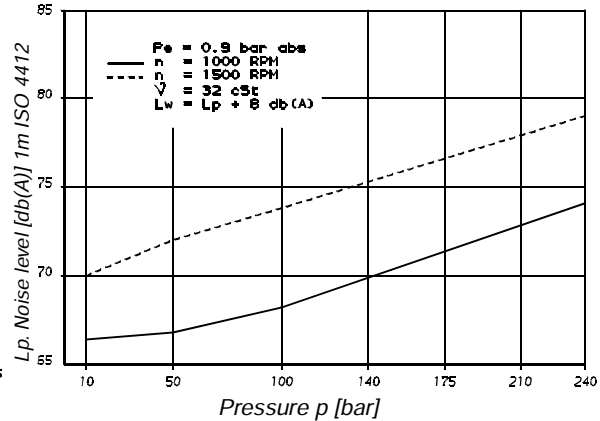
INTERNAL LEAKAGE (TYPICAL)



Do not operate the 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.

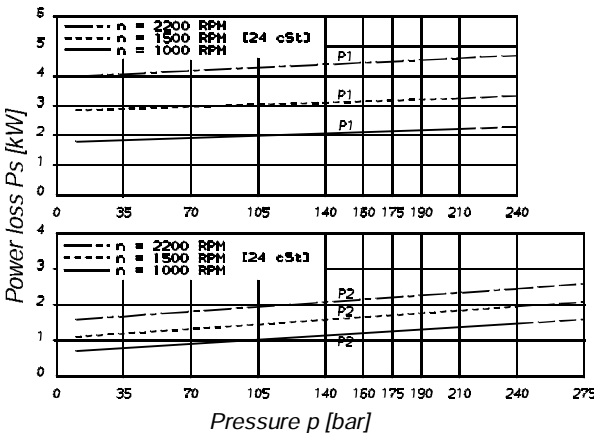
NOISE LEVEL (TYPICAL)

T6ECM - 050 - B22



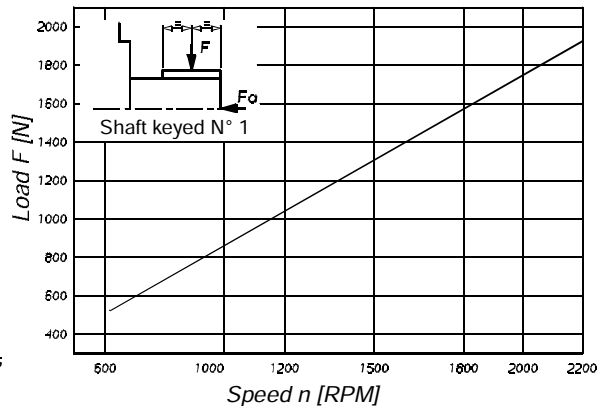
Double pump noise level is given with each section discharging at the pressure noted on the curve.

POWER LOSS HYDROMECHANICAL (TYPICAL)

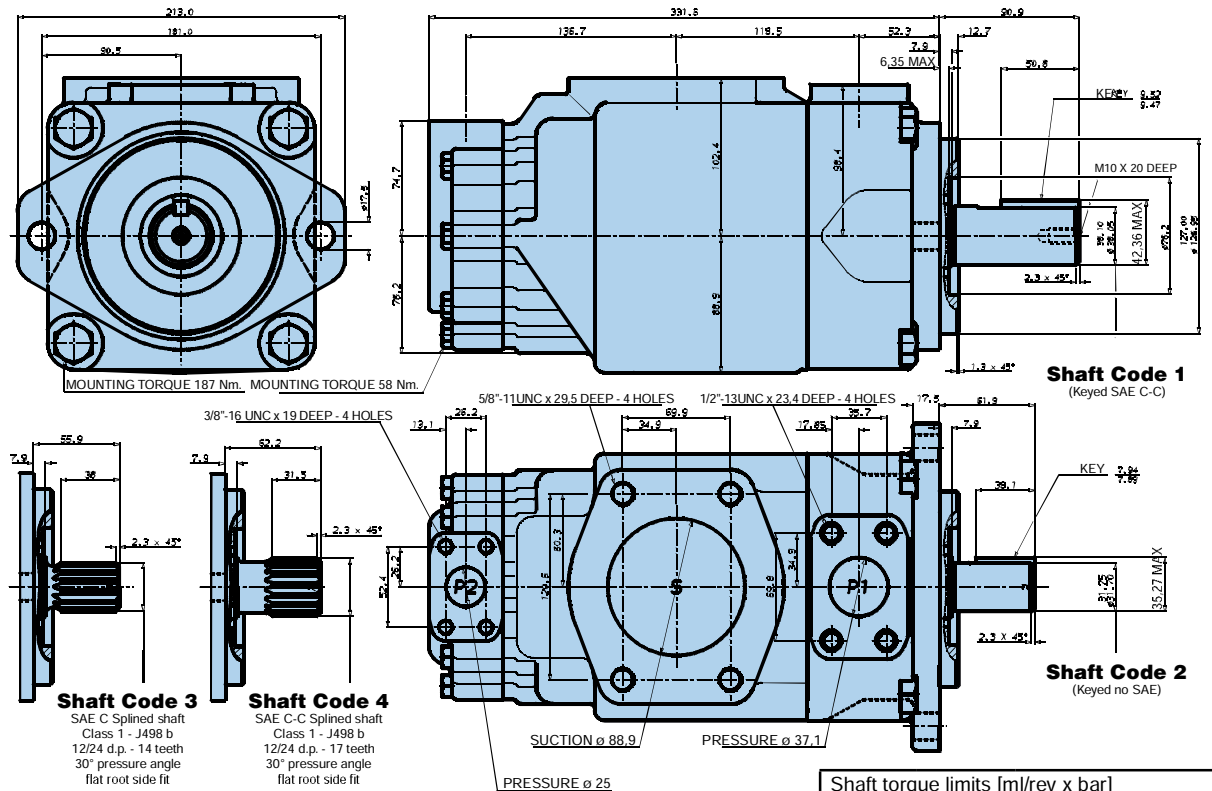


Total hydrodynamic power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Maximum permissible axial load Fa = 2000 N



Additional T6ECM shaft code T: see page 33  
 Additional T6ECP version shaft see page 33

Shaft torque limits [ml/rev x bar]		
Pump	Shaft	Vi x p max. P1 + P2
T6ECM	1	72300
	2	34590
	3	61200
	4	76300

**OPERATING CHARACTERISTICS - TYPICAL [24 cSt]**

Pressure port	Series	Volumetric Displacement Vi	Flow Q [l/min] & n = 1500 RPM			Input power P [kW] & n = 1500 RPM		
			p = 0 bar	p = 140 bar	p = 240 bar	p = 7 bar	p = 140 bar	p = 240 bar
P1	042	132,3 ml/rev	198,5	188,5	181,3	5,2	49,4	82,6
	045	142,4 ml/rev	213,6	203,6	196,5	5,4	52,9	88,7
	050	158,5 ml/rev	237,7	227,7	220,6	5,7	58,5	98,3
	052	164,8 ml/rev	247,2	237,2	230,1	5,8	60,8	102,1
	062	196,7 ml/rev	295,0	285,0	277,9	6,4	71,9	121,3
	066	213,3 ml/rev	319,9	309,9	302,8	6,7	77,7	131,2
	072	227,1 ml/rev	340,6	330,6	323,5	6,9	82,6	139,5
P2	B03	10,8 ml/rev	16,2	10,7	-	1,3	5,3	-
	B05	17,2 ml/rev	25,8	20,3	15,8	1,4	7,5	12,2
	B06	21,3 ml/rev	31,9	26,5	22,0	1,5	8,9	14,7
	B08	26,4 ml/rev	39,6	34,1	29,6	1,6	10,7	17,7
	B10	34,1 ml/rev	51,1	45,7	41,2	1,7	13,4	22,3
	B12	37,1 ml/rev	55,6	50,2	45,7	1,7	14,4	24,1
	B14	46,0 ml/rev	69,0	63,5	59,0	1,9	17,6	29,5
	B17	58,3 ml/rev	87,4	82,0	77,5	2,1	21,9	36,9
	B20	63,8 ml/rev	95,7	90,2	85,7	2,2	23,8	40,2
	B22	70,3 ml/rev	105,4	100,0	95,5	2,3	26,1	44,1
	B25	79,3 ml/rev	118,9	113,5	109,0	2,5	29,2	49,5
	B28	88,8 ml/rev	133,2	127,7	124,5 <sup>1)</sup>	2,8	32,7	48,5 <sup>1)</sup>
	B31	100,0 ml/rev	150,0	144,5	141,3 <sup>1)</sup>	2,8	36,5	54,4 <sup>1)</sup>

<sup>1)</sup> B28 - B31 = 210 bar max. int. - Not to use because internal leakage greater than 50% theoretical flow  
 Port connection can be furnished with metric threads.

Ordering Code

Model No.

T6ED\* - 066 - B38 - 1 R 00 - C 1 -

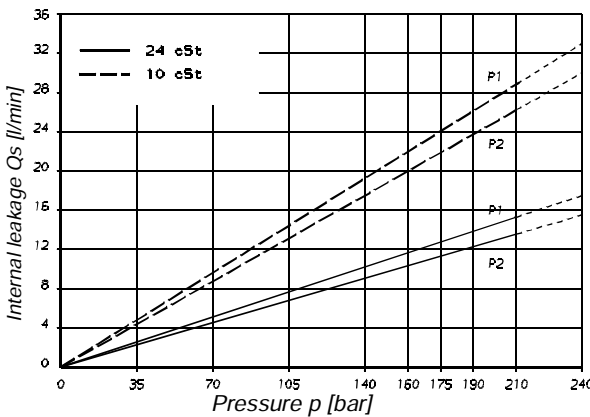
Series M = Mobile 1 shaft seal  
Series P = Mobile 2 shaft seals

**Cam ring for "P1"**  
(Delivery at 0 bar & 1500 r.p.m.)  
042 = 198,5 l/min    062 = 295,0 l/min  
045 = 213,6 l/min    066 = 319,9 l/min  
050 = 237,7 l/min    072 = 340,6 l/min  
052 = 247,2 l/min

**Cam ring for "P2"**  
(Delivery at 0 bar & 1500 r.p.m.)  
B14 = 71,4 l/min    B35 = 166,5 l/min  
B17 = 87,3 l/min    B38 = 180,4 l/min  
B20 = 99,0 l/min    B42 = 204,0 l/min  
B24 = 119,3 l/min    B45 = 218,5 l/min  
B28 = 134,5 l/min    B50 = 237,0 l/min  
B31 = 147,4 l/min

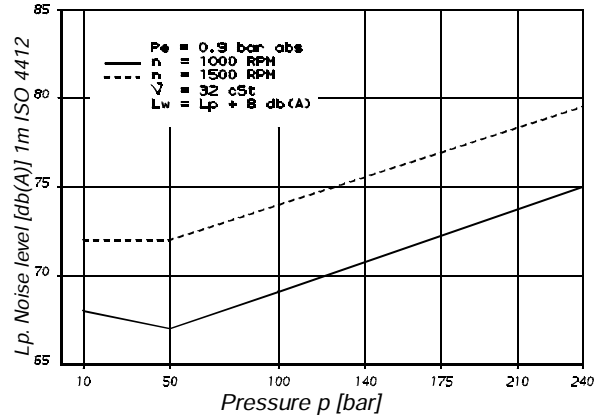
- Modification
- Seal Class
  - 1 = S1 (for mineral oil)
  - 4 = S4 (for the resistant fluids)
  - 5 = S5 (for mineral oil and fire resistant fluids)
- Design letter
- Porting combination (see page 34)  
00 = standard
- Direct. of rotation (view on shaft end)  
R = clockwise  
L = counter-clockwise
- Type of shaft
  - P version  
3 = splined (no SAE)
  - M version  
1 = keyed (SAE CC)  
2 = keyed (no SAE)  
3 = splined (SAE C)  
4 = splined SAE CC  
T = splined (SAE J718c)

INTERNAL LEAKAGE (TYPICAL)



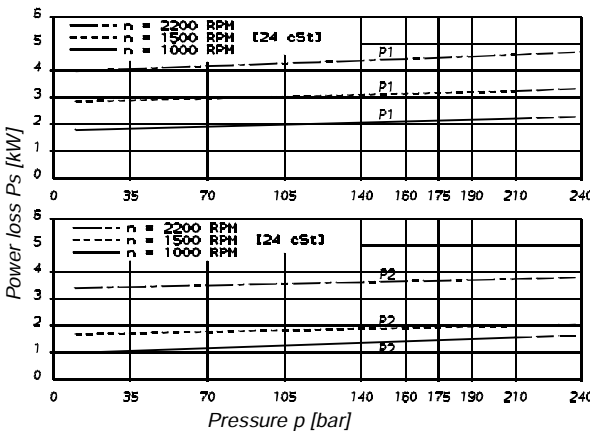
Total leakage is the sum of each section loss at its operating conditions.

NOISE LEVEL (TYPICAL)  
T6EDM - 050 - B38



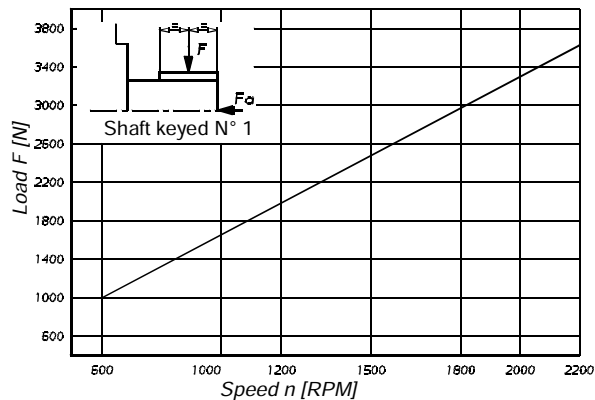
Double pump noise level is given with each section discharging at the pressure noted on the curve.

POWER LOSS HYDROMECHANICAL (TYPICAL)



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

PERMISSIBLE RADIAL LOAD



Maximum permissible axial load Fa = 2000 N