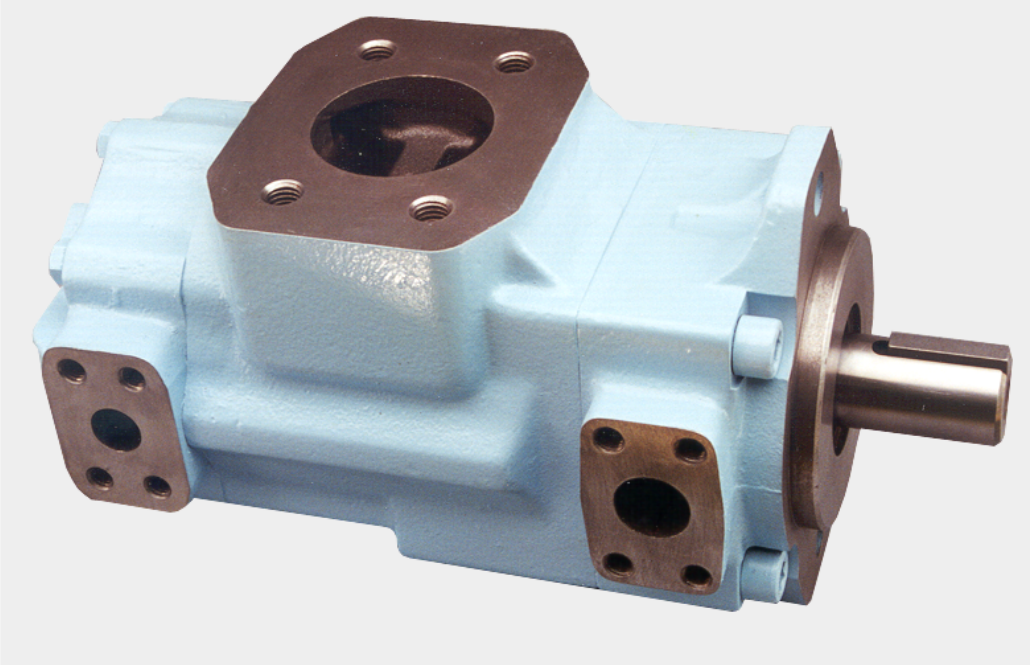
DENISON HYDRAULICS
vane double pump
series T6CCZ - mobile application



Publ. 1 - EN0706 - A 11 / 99 / 3000 / FB Replace : 1 - EN 080 - B L13 - 10706 - 1

DENISON Hydraulics

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Model N°. **T6CCZ . - B22 - B10 - X R 00 - A - 1 00 -**

Series - SAE B 2 bolts
Mounting flange J 744 c

One letter can be added to specify special parts in series

Cam ring for "P1" and "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
X = keyed
V = keyed
W = keyed

Modifications

Mounting W/ connection variables

	P1 = 1"		S = 3"	
	UNC		Metric	
P2	1"	3/4"	1"	3/4"
Code	00	01	0M	WO

	P1 = 1"		S = 2"1/2	
	UNC		Metric	
P2	1"	3/4"	1"	3/4"
Code	10	11	1M	W1

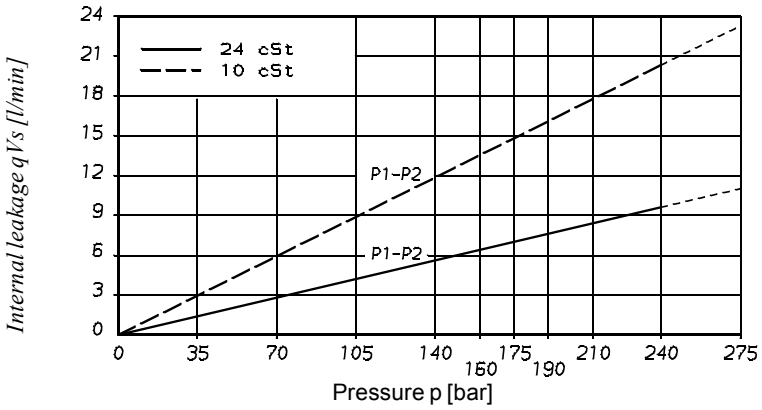
Seal class
1 = S1 (for mineral oil)

Design letter

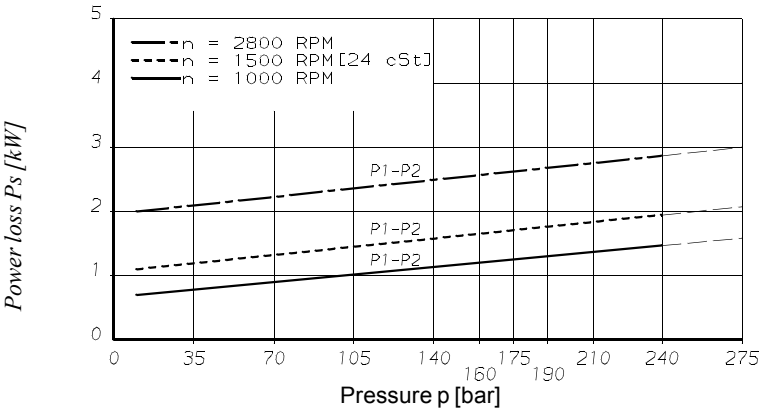
Porting combination (see page 3)

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

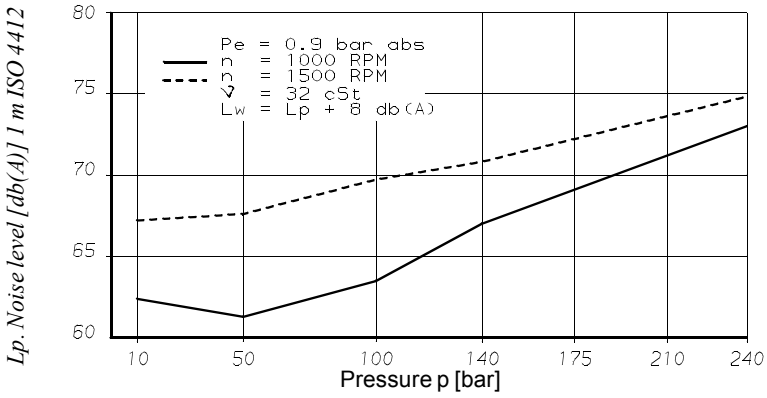
Internal leakage (typical)



Power loss hydromechanics (typical)



Noise level (typical)



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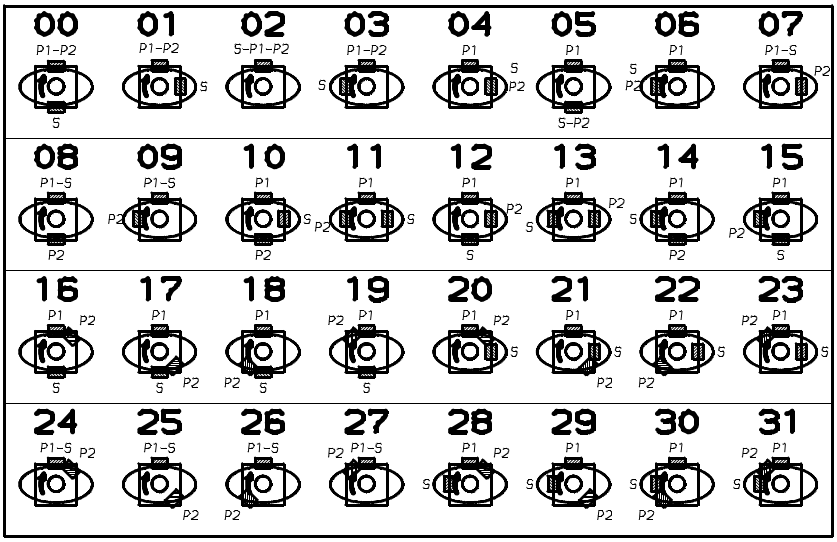
Porting combination



General Description

The T6CCZ pump incorporates DENISON Hydraulics high quality and performances of T6CC series vane pumps mobile application.
High maximum permissible shaft loads is particularly well adapted to applications of pump driven by cardan.
A double raw ball bearing and a needle bearing double the permissible radial load compare to standard T6CC bearing capability. (see page 4).

Greater Flow

3 to 31 GPM, 10 to 100 ml/rev.

Higher Pressure

275 bar maximum except B28 and B31 cartridge 210 bar.

Wider Speed Range

400 up to 2800 RPM with petroleum based antiwear R & O fluids which are the recommended fluids.(except B25, B28, B31 - 2500 RPM max. speed)

Better Efficiency

Better than 94 % for energy saving.

Mounting Flexibility

Up to 32 positions.

Wider range of acceptable viscosity

2000 cSt max. viscosity (cold start low speed and pressure).
30 cSt optimum (max. life).
10 cSt minimum (full speed and pressure)

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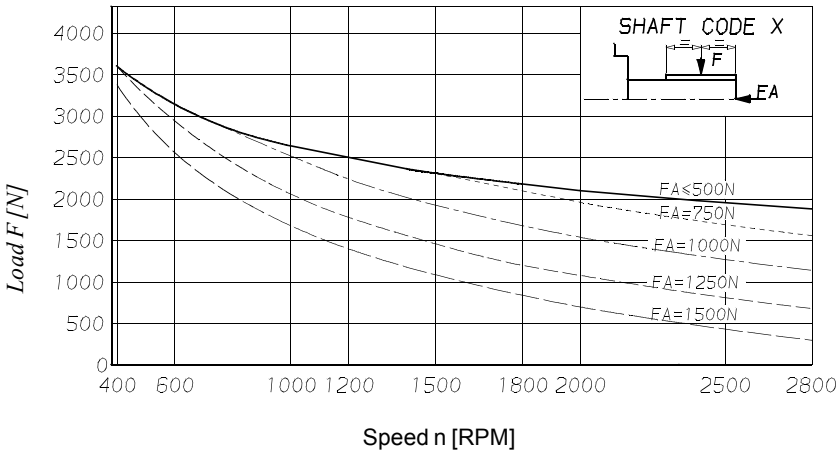
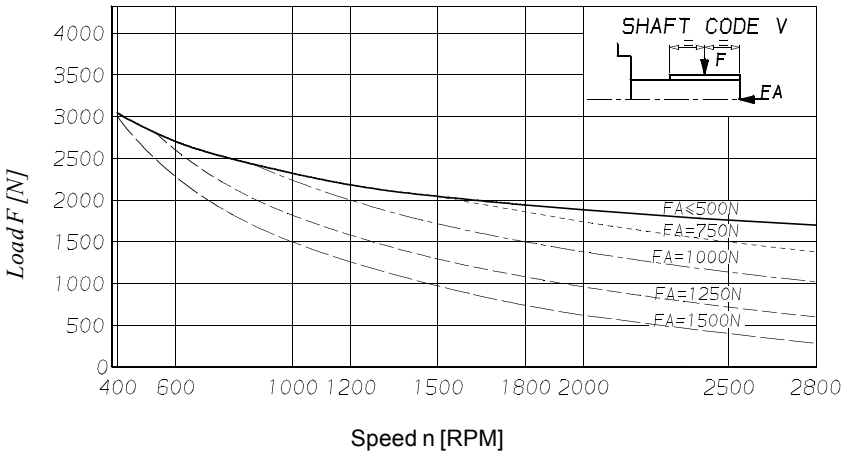
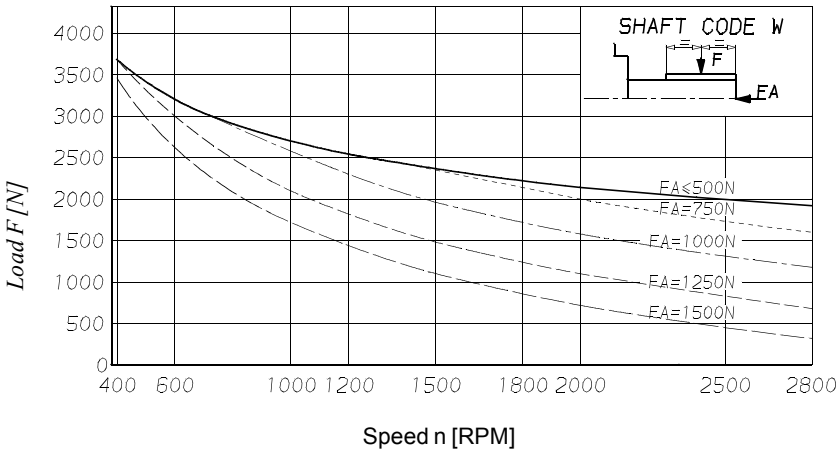
Permissible radial load
Shaft code X



Permissible radial load
Shaft code V



Permissible radial load
Shaft code W



These curves permit to simultaneously check the maximum permissible radial and axial load on the shaft involved. Those load value are determined for 10 000 hours bearing lifetime at operating under Fa and F given to get information for a different lifetime the radial load corrected is.
If Fa is smaller than minimum axial force on the curves then

$$\text{Correct F} = \frac{F\ curve}{3{,}33\sqrt{\frac{L\ H\ Required}{10000}}}$$

LH = Lifetime in hours

If Fa is higher than minimum axial force then F radial load is :

$$\text{Correct F} = \frac{F\ curve}{3\sqrt{\frac{LH\ Required}{10000}}}$$

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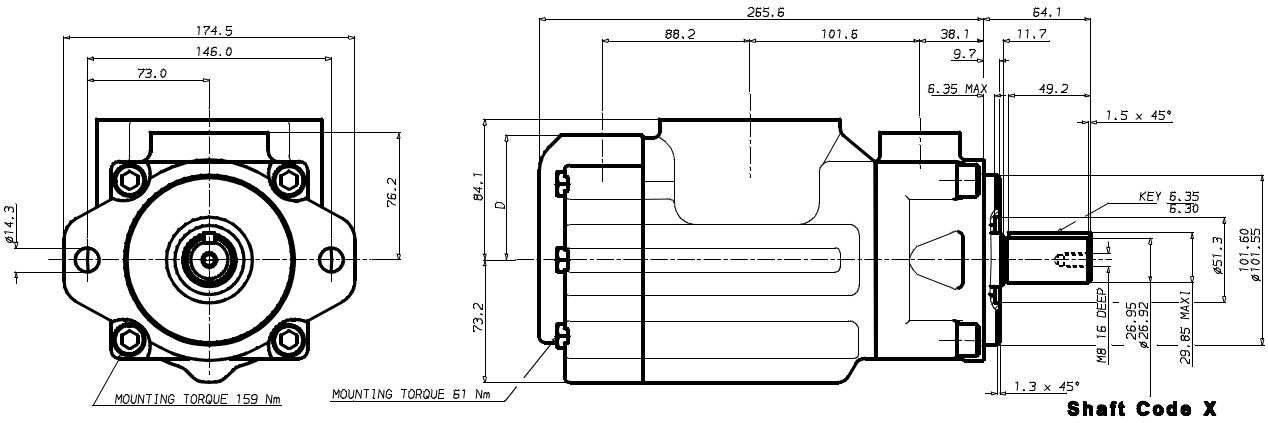

Shaft torque limits [ml/rev. x bar]	
Shaft	**Vi x p max P1 + P2**
X	25400
V	32670
W	32670

	Alternate Port							
	S = 3"				S = 2" 1/2 [2]			
F	106,4				88,9			
G	61,9				50,8			
∅H	76,2				63,5			
Code	00	01 [1]	0M	W0 [1]	10	11 [1]	1M	W1 [1]
A	52,4	47,7	52,4	47,7	52,4	47,7	52,4	47,7
B	26,2	22,4	26,2	22,4	26,2	22,4	26,2	22,4
∅C	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"-16 UNC x 19,0 deep		M10 x 19,0 deep		3/8"-16 UNC x 19,0 deep		M10 x 19,0 deep	
K	5/8"-11UNC x 28,4 deep		M16 x 28,4 deep		1/2"-13 UNC x 23,9 deep		M12 x 23,9 deep	

1) max. cam 014 *2) P1 + P2 = 126 cm³/rev max.*

Operating characteristics - typical (24 cSt)

Pressure port	Series	Volumetric displ. Vi ml/rev.	Flow qV [l/min] n = 1500 RPM - p at			Input power P [kW] n = 1500 RPM - p at		
			0 bar	140 bar	240 bar	7 bar	140 bar	240 bar
	B03	10,8	16,2	10,7	-	1,3	5,3	-
	B05	17,2	25,8	20,3	15,8	1,4	7,5	12,2
	B06	21,3	31,9	26,4	21,9	1,5	8,9	14,7
	B08	26,4	39,6	34,1	29,6	1,6	10,7	17,7
P1	B10	34,1	51,1	45,6	41,1	1,7	13,4	22,3
	B12	37,1	55,6	50,1	45,6	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	81,9	77,4	2,1	21,9	36,9
P2	B20	63,8	95,7	90,7	85,7	2,2	23,8	40,2
	B22	70,3	105,4	99,9	95,4	2,3	26,1	44,1
	B25*	79,3	118,9	113,4	108,9	2,5	29,2	49,5
	B28*	88,8	133,2	127,7	124,5**	2,8	32,7	48,5**
	B31*	100,0	150,0	144,5	141,3**	2,8	36,5	54,4**

** B25 - B28 - B31 = 2500 R.P.M. max.* *** B28 - B31 = 210 bar max. int.*
- Not to use because internal greater than 50 % theoretical flow.

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