



# Mobile Hydraulic Pumps T6CCZ

Denison Vane Technology, fixed displacement

aerospace  
climate control  
electromechanical  
filtration  
fluid & gas handling  
**hydraulics**  
pneumatics  
process control  
sealing & shielding



ENGINEERING YOUR SUCCESS.

**Ordering Code**

Code: T6CCZ-B20-B14-WR03-A-111

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 = 2"	
	UNC		Metric	
P2	1"	3/4"	1"	3/4"
Code	00	01	0M	W0
	P1 = 1"		S = 2.1/2"	
	UNC		Metric	
P2	1"	3/4"	1"	3/4"
Code	10	11	1M	W1

Seal class

1 = S1 - BUNA N (for mineral oil)

Design letter

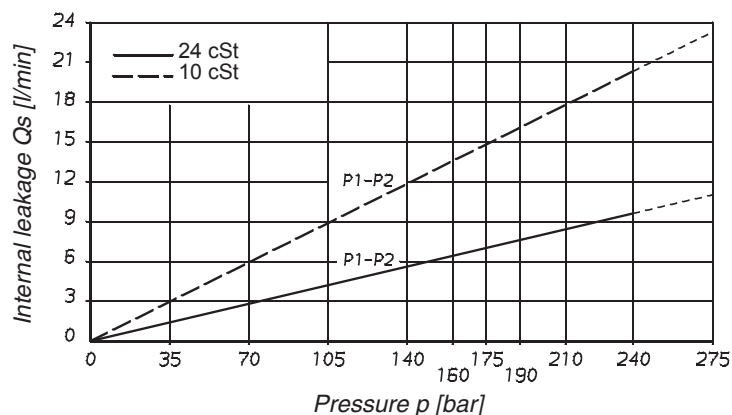
Porting combination (see page 3)

Direction of rotation (view on shaft end)

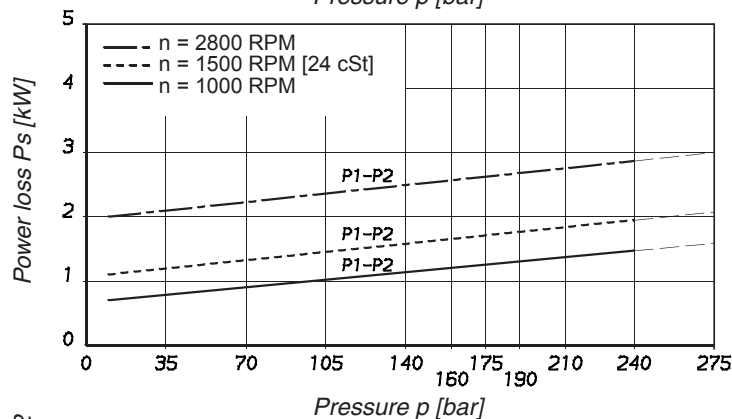
R = clockwise

L = counter-clockwise

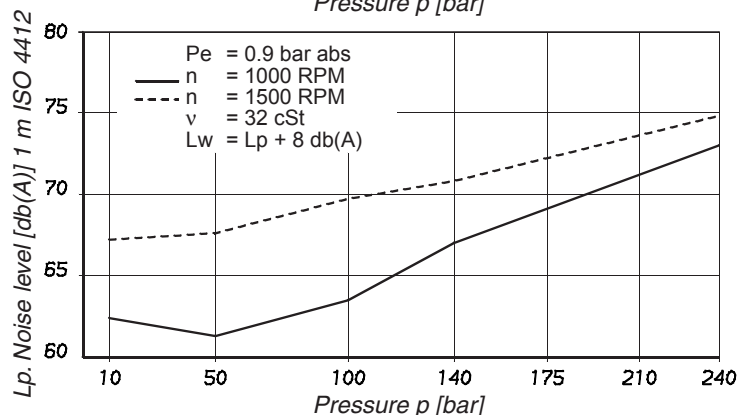
**INTERNAL LEAKAGE (TYPICAL)**



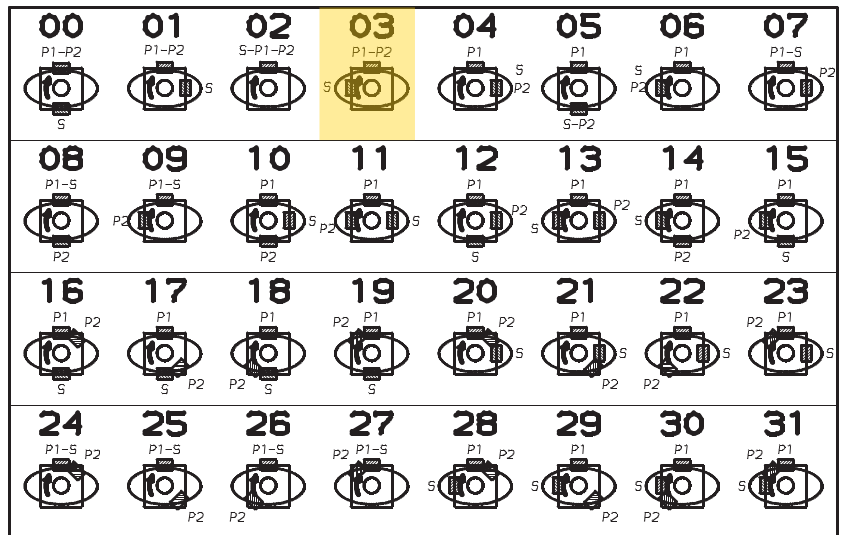
**POWER LOSS HYDROMECHANICAL (TYPICAL)**



**NOISE LEVEL (TYPICAL)**



**PORTING COMBINATION**



**GENERAL DESCRIPTION**

The T6CCZ pump incorporates Parker 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**

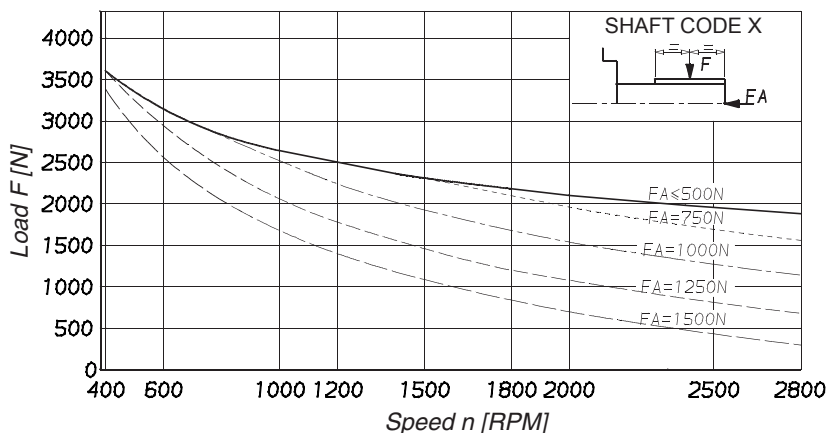
Up to 32 positions.

**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)

**Curves**

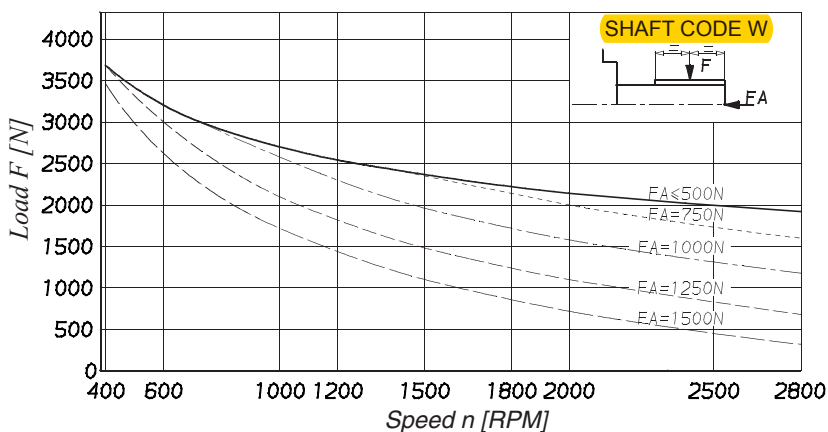
**PERMISSIBLE RADIAL LOAD  
SHAFT CODE X**



**PERMISSIBLE RADIAL LOAD  
SHAFT CODE V**



**PERMISSIBLE RADIAL LOAD  
SHAFT CODE W**



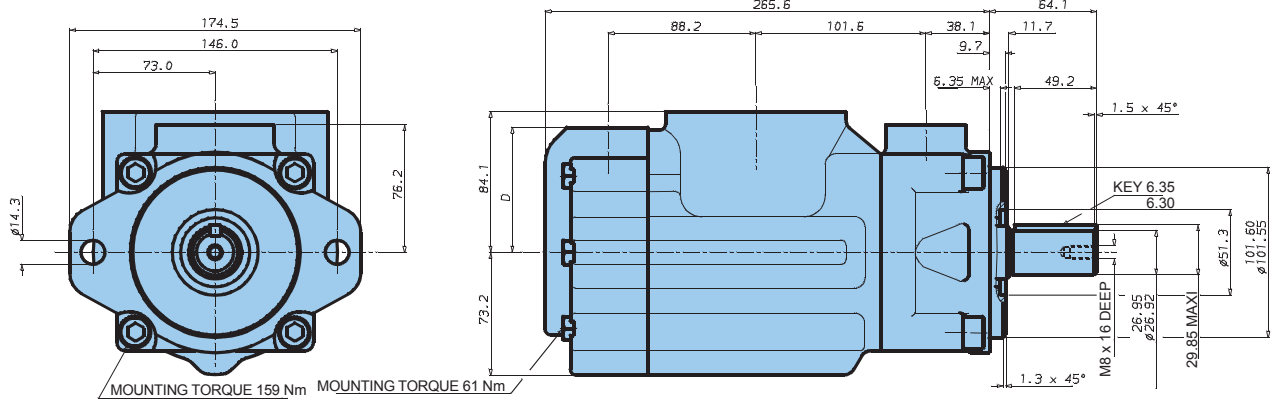
These curves permit to simultaneously check the maximum permissible radial and axial load on the shaft involved. Those load value are determined for 10 000 hours bearing lifetime at operating under  $F_a$  and  $F$  given to get information for a different lifetime the radial load corrected is.

If  $F_a$  is smaller than minimum axial force on the curves then

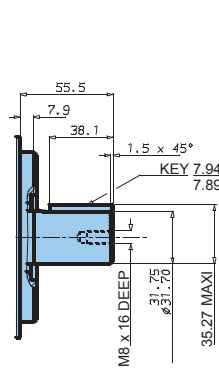
$$\text{Correct } F = \frac{F \text{ curve}}{3,33 \sqrt{\frac{LH \text{ Required}}{10000}}} \quad LH = \text{Lifetime in hours}$$

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

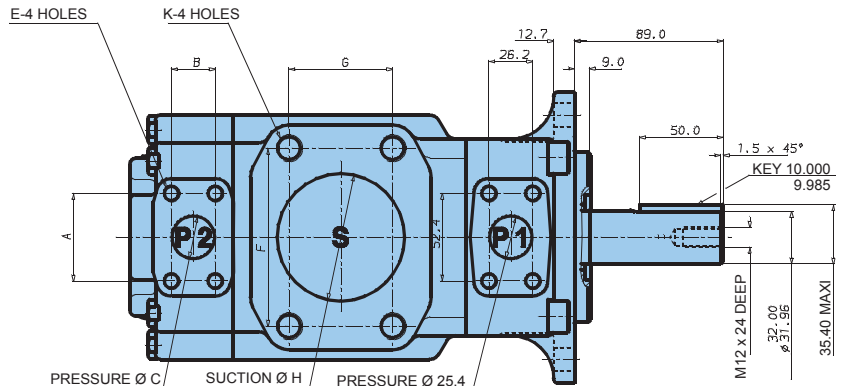
$$\text{Correct } F = \frac{F \text{ curve}}{3 \sqrt{\frac{LH \text{ Required}}{10000}}}$$



**Shaft Code X**



**Shaft Code W**



**Shaft Code V**

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

	Alternate Port							
	S = 3"				S = 2" 1/2 2)			
F	106,4				88,9			
G	61,9				50,8			
Ø H	76,2				63,5			
Code	00	01 <sup>1)</sup>	0M	M0 <sup>1)</sup>	10	<b>11 <sup>1)</sup></b>	1M	M1 <sup>1)</sup>
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
Ø 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	

<sup>1)</sup> max. cam 014

<sup>2)</sup> P1 + P2 = 126 cm<sup>3</sup> / rev max.

**OPERATING CHARACTERISTICS - TYPICAL (24 cSt)**

Pressure port	Series	Volumetric displ. Vi ml/rev.	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	
<b>P1</b>	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	
	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	
	<b>&amp;</b>	<b>B14</b>	<b>46,0</b>	<b>69,0</b>	<b>63,5</b>	<b>59,0</b>	<b>1,9</b>	<b>17,6</b>	<b>29,5</b>
	<b>P2</b>	B17	58,3	87,4	81,9	77,4	2,1	21,9	36,9
		<b>B20</b>	<b>63,8</b>	<b>95,7</b>	<b>90,7</b>	<b>85,7</b>	<b>2,2</b>	<b>23,8</b>	<b>40,2</b>
		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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