



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.

Model N°.

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

T6CCZ - B22 - B10 - X R 00 - A - 1 00 -



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

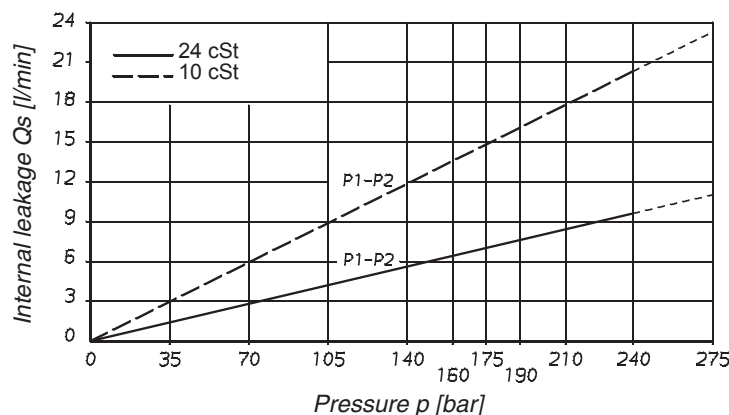
Porting combination (see page 3)

Direction of rotation (view on shaft end)

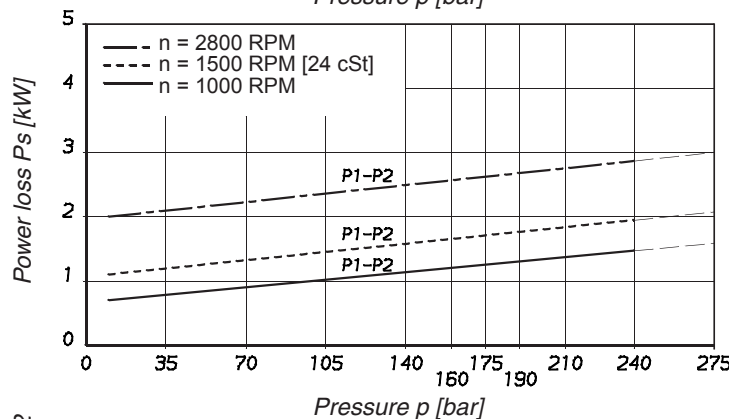
R = clockwise

L = counter-clockwise

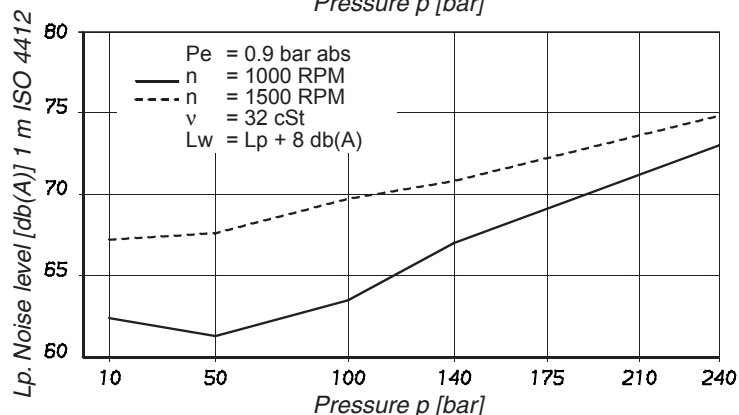
INTERNAL LEAKAGE (TYPICAL)



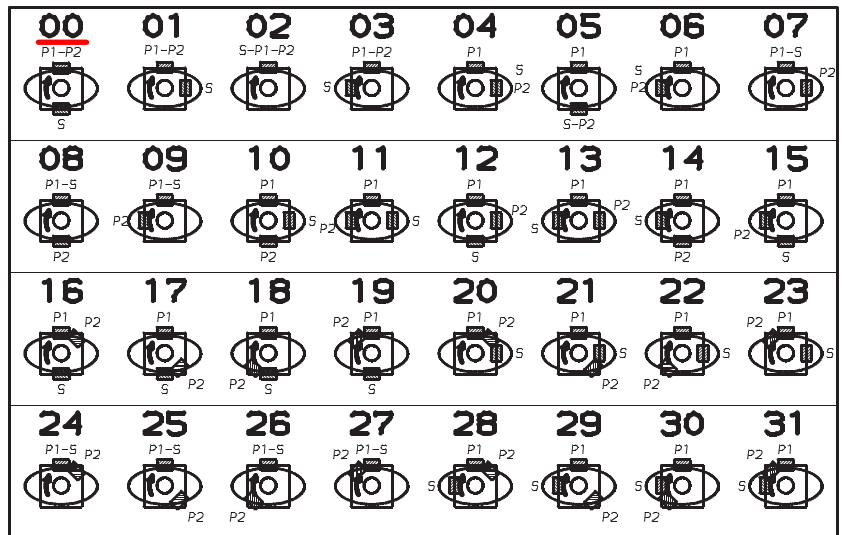
POWER LOSS HYDROMECHANICAL (TYPICAL)



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

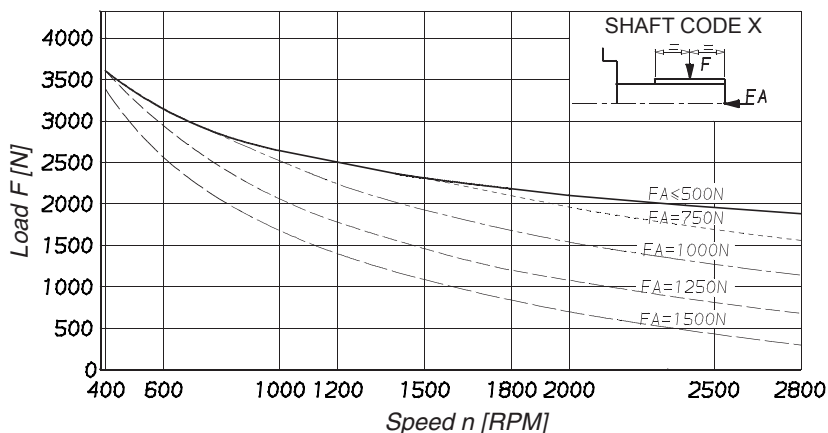
Up to 32 positions.

WIDER RANGE OF ACCEPTABLE VISCOSITY

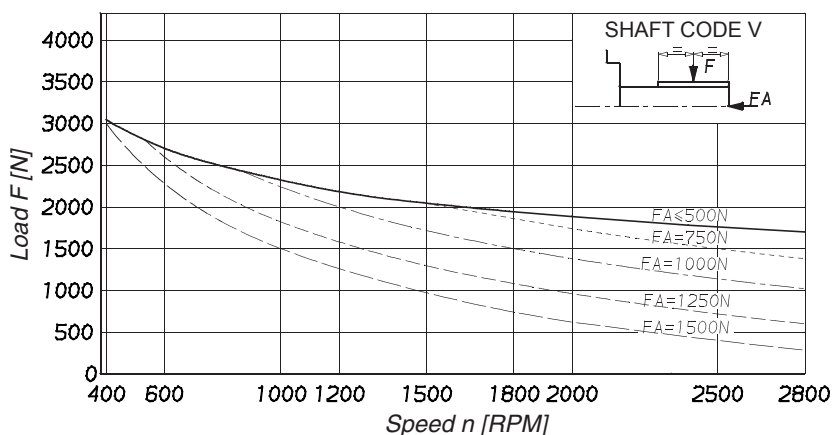
2000 cSt max. viscosity (cold start low speed and pressure).
 30 cSt optimum (max. life).
 10 cSt minimum (full speed and pressure)

Curves

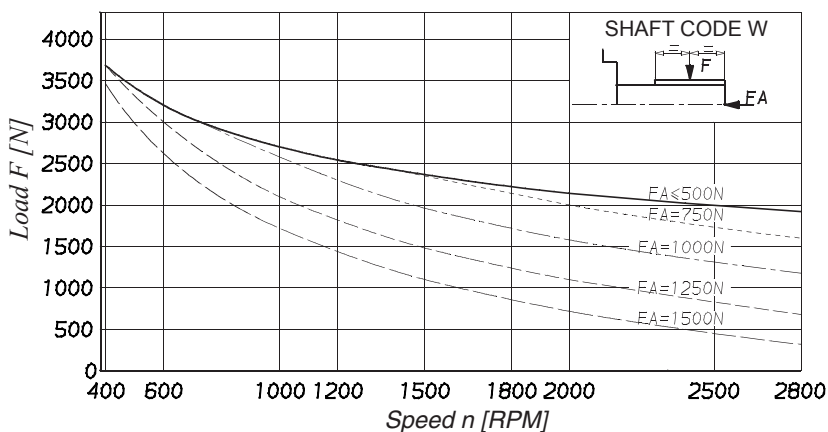
**PERMISSIBLE RADIAL LOAD
SHAFT CODE X**



**PERMISSIBLE RADIAL LOAD
SHAFT CODE V**



**PERMISSIBLE RADIAL LOAD
SHAFT CODE W**



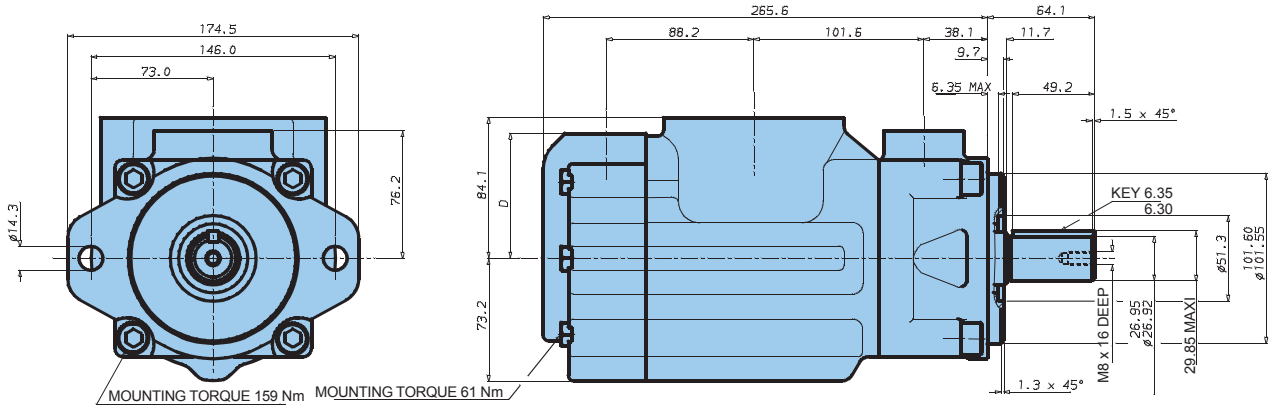
These curves permit to simultaneously check the maximum permissible radial and axial load on the shaft involved. Those load value are determined for 10 000 hours bearing lifetime at operating under F_a and F given to get information for a different lifetime the radial load corrected is.

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

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

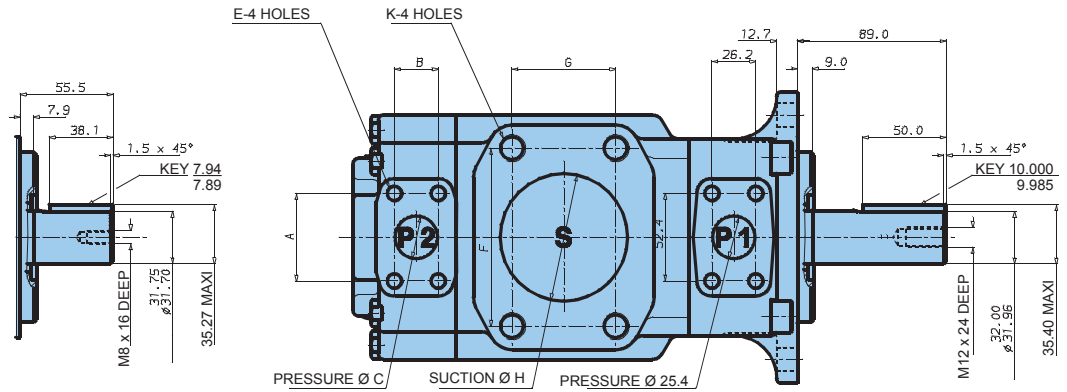
If F_a is higher than minimum axial force then F radial load is :

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



MOUNTING TORQUE 159 Nm MOUNTING TORQUE 61 Nm

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 |
| W | 32670 |

| 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 ¹⁾ | 0M | M0 ¹⁾ | 10 | 11 ¹⁾ | 1M | M1 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 |
| 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 | |

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 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 | 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 |
| | 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 |
| | 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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