

# Industrial Hydraulic Pumps T7EE, T7EES

Hydraulic Pumps

**Parker**



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**Model No.**

**T7EE or T7EES - 066 - 045 - 1 R 00 - A 1 0 00 - ..**

**T7EE series** - ISO 4 bolts 3019-2

Mounting flange 250 B4 HW

**T7EES series** - SAE E 4 bolts

J744 mounting flange

P1 P2

**Displacement P1 & P2**

Volumetric displacement (ml/rev.)

042 = 132,3    057 = 183,3

045 = 142,4    062 = 196,7

050 = 158,5    066 = 213,3

052 = 164,8    072 = 227,1

054 = 171,0    085 = 268,7

**Type of shaft T7EES**

1 = keyed (SAE CC)    4 = splined (SAE D & E) 13 teeth

3 = splined (SAE CC) 17 teeth    5 = keyed (SAE D & E)

**Type of shaft T7EE**

2 = keyed (ISO 3019-2 - G45N)

**Direction of rotation (shaft end view)**

R = Clockwise

L = Counter-clockwise

**Modifications**

**Mounting w/connection variables**

4 bolts SAE flanges J518

| P1 & P2 = 1.1/2" - S = 4" |               |            |
|---------------------------|---------------|------------|
|                           | T7EE - T7EES  | T7EES      |
| Type                      | Metric thread | UNC thread |
| Code                      | M0            | 00         |

**Coupling adaptor**

0 = none

2 = SAE B

3 = SAE BB

\* for SAE C, please contact Parker

**Seal class**

1 = S1 BUNA N - 0,7 bar max. (for mineral oil)

4 = S4 EPDM - 7 bar max. (for fire resistant fluids)

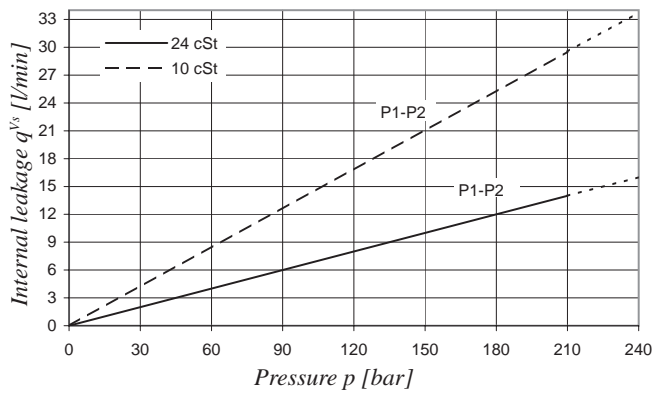
5 = S5 VITON® - 7 bar max. (for mineral oil and fire resistant fluids)

**Design letter**

**Porting combination (see page 72)**

00 = standard

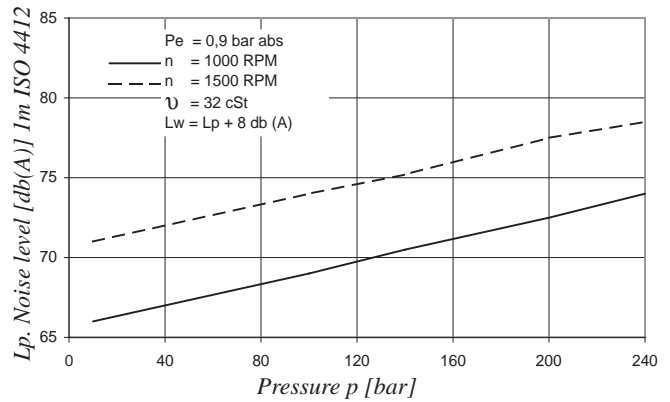
**INTERNAL LEAKAGE (TYPICAL)**



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

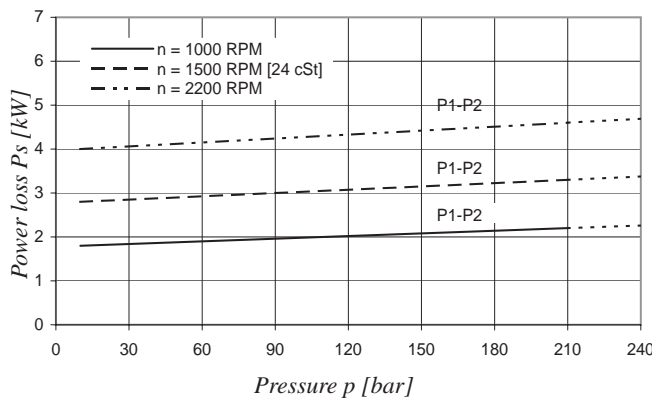
Total leakage is the sum of each section loss under its respective operating conditions.

**NOISE LEVEL (TYPICAL) - T7EE - 050 - 050**



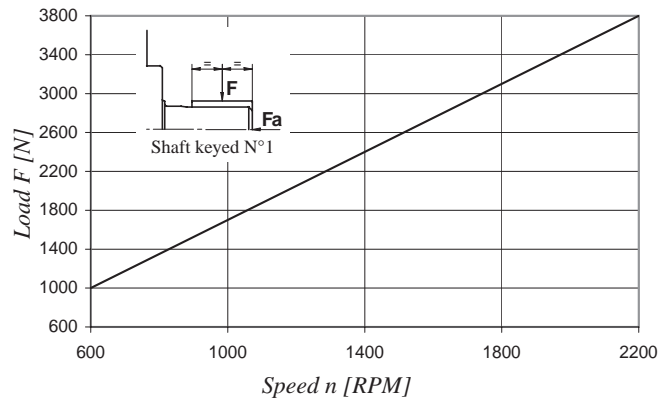
Double pump noise level is given with both stages discharging at the pressure value indicated on the curve.

**POWER LOSS HYDROMECHANICAL (TYPICAL)**



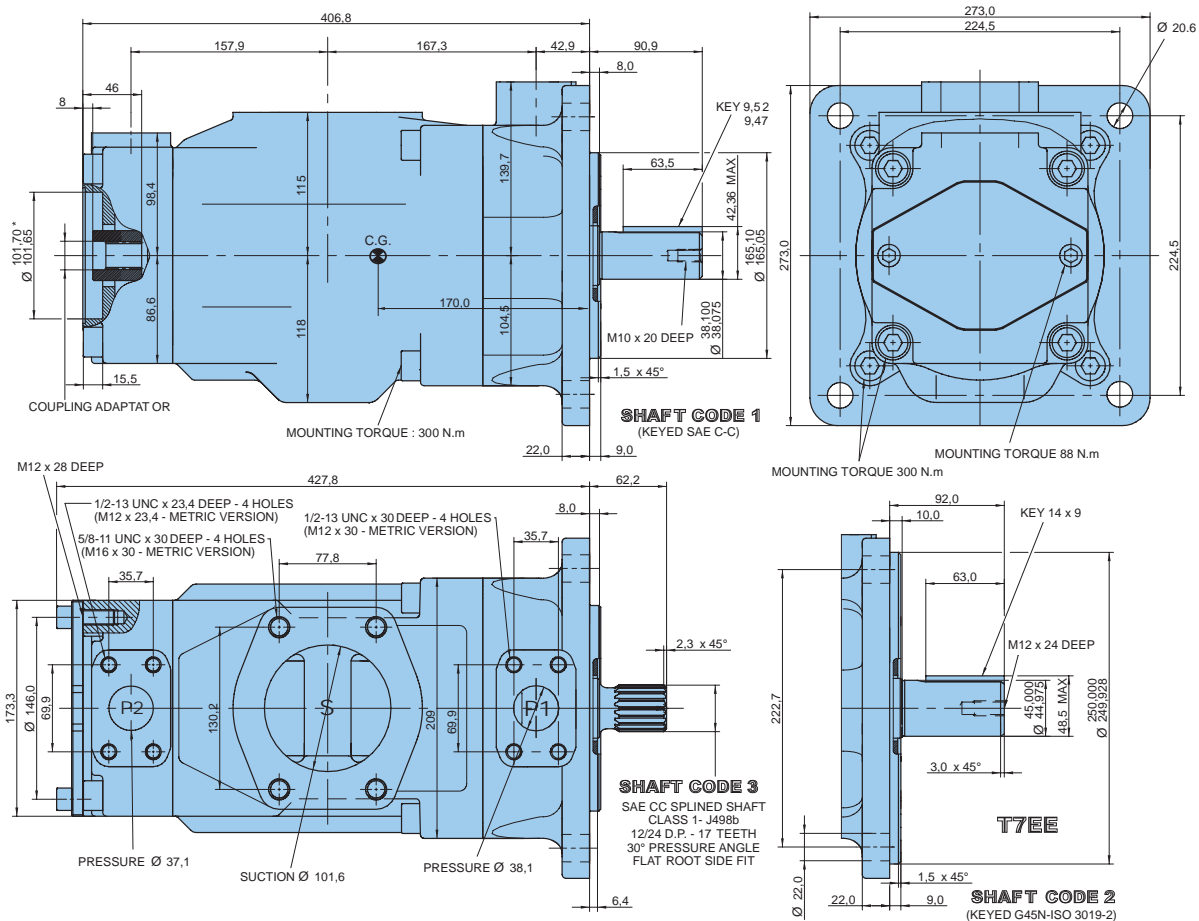
Total hydromechanical power loss is the sum of each section loss under its respective operating conditions.

**PERMISSIBLE RADIAL LOAD**



Maximum permissible axial load Fa = 2000 N





| Code | Coupling adaptor   |
|------|--|
| 0    | Without coupling   |
| 2    | SAE B - 13 teeth - Pitch 16/32<br>Major dia. (min) 22,225 - Minor dia. (min) 19,134    |
| 3    | SAE BB - 15 teeth - Pitch 16/32<br>Major dia. (min.) 25,400 - Minor dia. (min.) 22,268 |

| Shaft torque limits [ml/rev. x bar] |             |                |             |
|-------------------------------------|-------------|----------------|-------------|
| Shaft                               | Vi x p max. | Coupling drive | Vi x p max. |
| 1                                   | 90380       | SAE B          | 20600       |
| 2                                   | 114600      | SAE BB         | 32670       |
| 3                                   | 126800      |                |             |
| 4                                   | 126800      |                |             |
| 5                                   | 118340      |                |             |

### OPERATING CHARACTERISTICS - TYPICAL [24 cSt]

| Pressure port | Series       | Vi Volumetric displacement | Flow $q_v$ [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       | 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       |
|               | 054          | 171,0 ml/rev               | 256,5                             | 246,5       | 239,4       | 5,9                               | 63,0        | 105,8       |
|               | 057          | 183,3 ml/rev               | 275,0                             | 265,0       | 257,9       | 6,1                               | 67,3        | 113,2       |
|               | 062          | 196,7 ml/rev               | 295,0                             | 285,0       | 277,9       | 6,4                               | 71,9        | 121,3       |
|               | 066          | 213,3 ml/rev               | 319,9                             | 309,0       | 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       |
| 085           | 268,7 ml/rev | 403,0                      | 392,0 <sup>1)</sup>               | -           | 9,1         | 65,8 <sup>1)</sup>                | -           |             |

<sup>1)</sup> 085 = 90 bar max. int.

\* For SAE C, please contact Parker.