



# DTA

Damen Technical Agencies



## Industrial Hydraulic Pumps T7EE, T7EES

Denison Vane Technology, fixed displacement

### Hydraulic Pumps

- Hydraulic Motors
- Hydraulic Valves
- Hydraulic Cylinders
- Hydraulic Filtration
- Hydraulic Accumulators



ENGINEERING YOUR SUCCESS.

## We are doing our parts to keep you moving!

DTA your 1 Stop Shop for Hydraulics, Pneumatics and Power Transmissions.

# DECLARATION OF CONFORMITY

DTA Hydraulics is a tradename of Damen Technical Agencies BV, supplying hydraulic parts to various industries since 1990. As a Certified Distributor Hydraulics by Parker Hannifin and Authorized Denison Vane Pump Assembler, we guarantee the use of original parts and components. As such we provide you with vane pumps of the same level of quality and warranty conditions as the factory does.

We highly recommend to **use genuine Denison Hydraulics spare parts only** in order to ensure smooth operation and longer service life. Spare parts that we have on stock include pump cartridge kits, shaft and bearing assemblies, seal kits and non-wearing parts of both the T6 and T7 series vane pumps.



**ALL VANE PUMPS SUPPLIED OR REPAIRED BY  
DTA HYDRAULICS HAVE BEEN ASSEMBLED ACCORDING  
TO THE LATEST FACTORY SPECIFICATIONS WITH  
BRAND NEW AND GENUINE DENISON HYDRAULICS PARTS**

We are able to provide you a large variety of options of the original Parker Denison single, double, and triple vane pumps. We can build any customized vane pump from our stock of genuine parts. You can now easily configure that vane pump yourself with the Denison Hydraulics Vane Pump Configurator.

[vanepump.eu/vanepumps](http://vanepump.eu/vanepumps)

Use advanced search to filter results based on configurable options and select any of the 25,000 vane pumps that are listed in our online catalogue. Most of the models are available from stock and ready for shipment to any place in the world instantly. We can supply **Any part, Anytime, Anywhere!**



**Model No.** T7EE or T7EES - 066 - 045 - 1 R 00 - A 1 0 0 0 - ..

**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
<b>Type</b>	<b>Metric thread</b>	<b>UNC thread</b>
<b>Code</b>	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)

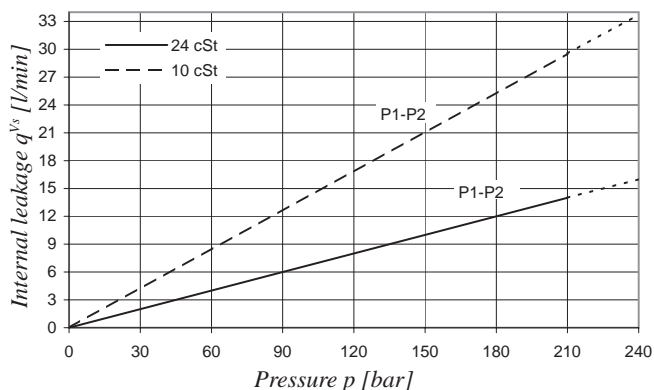
5 = S5 VITON® - 7 bar max. (for mineral oil and fire resistant fluids)

**Design letter**

**Porting combination (see page 72)**

00 = standard

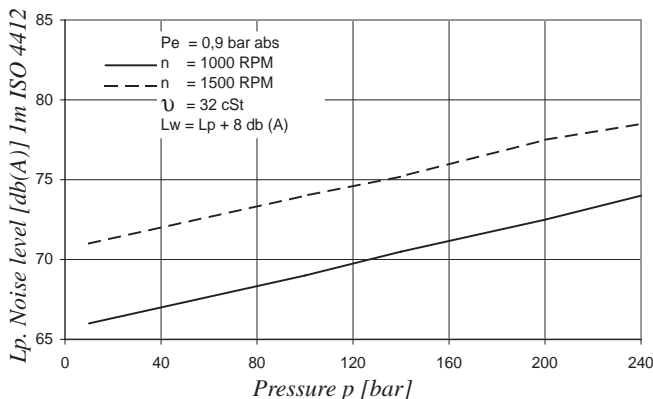
**INTERNAL LEAKAGE (TYPICAL)**



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

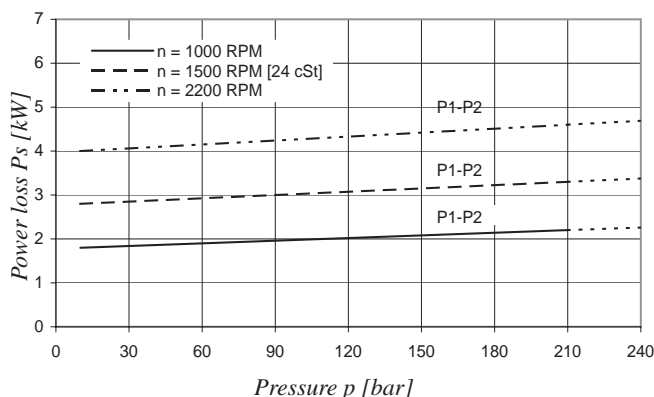
Total leakage is the sum of each section loss under its respective operating conditions.

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



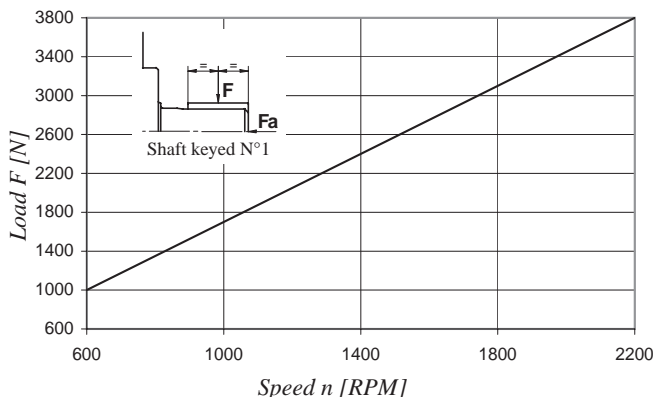
Double pump noise level is given with both stages discharging at the pressure value indicated on the curve.

**POWER LOSS HYDROMECHANICAL (TYPICAL)**



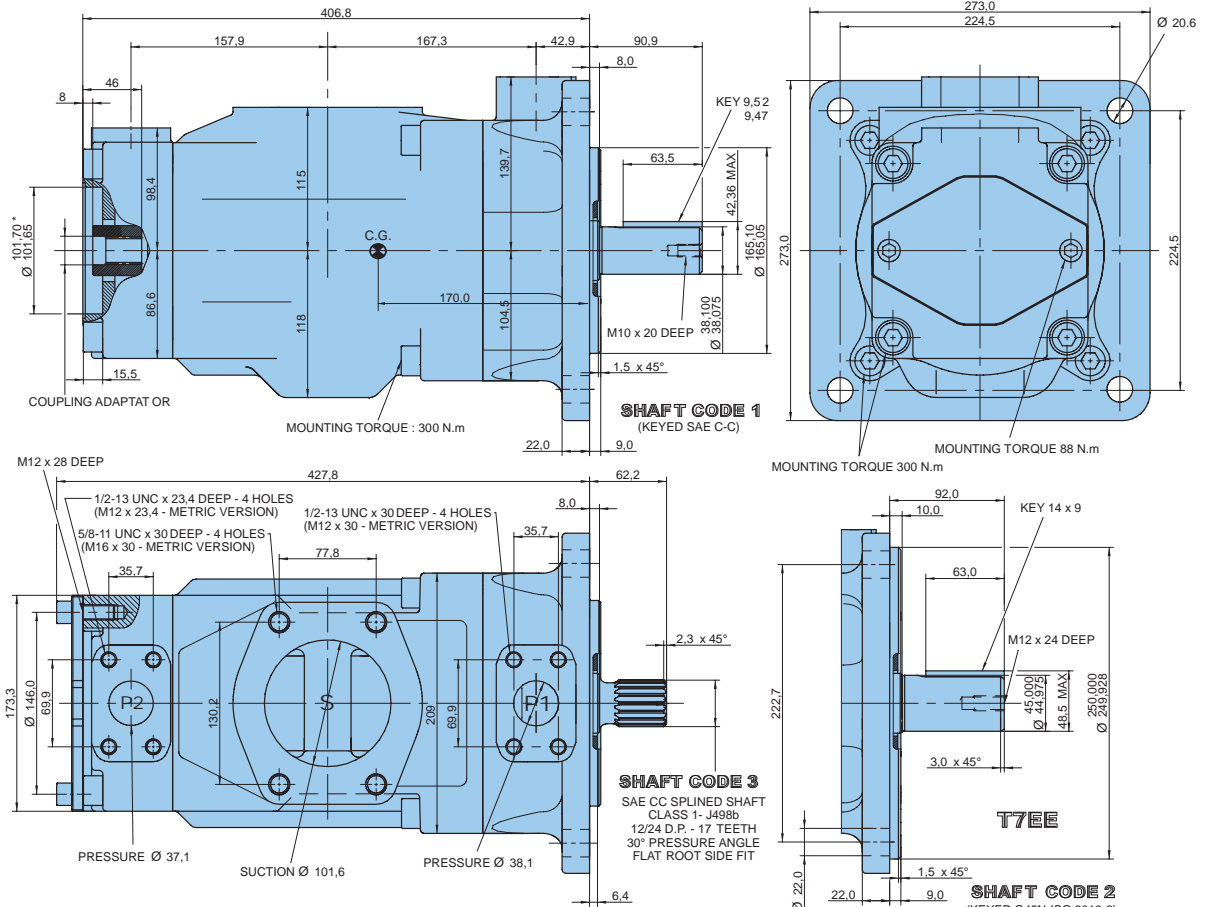
Total hydromechanical power loss is the sum of each section loss under its respective operating conditions.

**PERMISSIBLE RADIAL LOAD**



Maximum permissible axial load Fa = 2000 N





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



**ANY PART  
TIME  
WHERE**

we are doing our parts to keep you moving!

**Damen Technical Agencies B.V.**

Prins Willemstraat 10 - 4791 JR Klundert - The Netherlands

+31 - 168 - 407 144

info@vanepump.eu - vanepump.eu - dta.eu