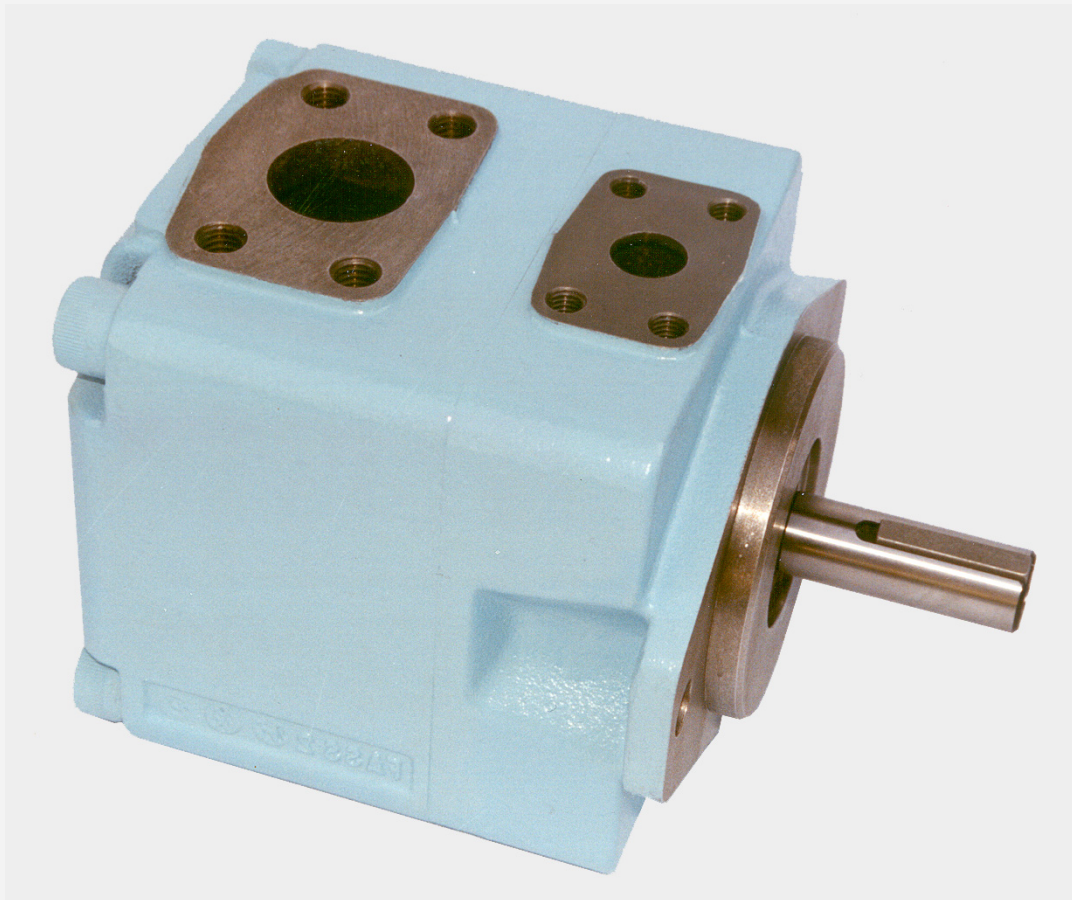


DENISON HYDRAULICS
high performance hydraulic vane pumps
single, double, triple
T7 and T67 industrial application



Publ. 1 - EN 079 - B 01 / 97 / 3000 / FB Replaces : 1 - EN 079 - A

DENISON Hydraulics

ORDERING CODE & OPERATING CHARACTERISTICS - T67DCB SERIES

Model No. T67DCB - 038 - 028 - B10 - 1 R 00 - A 1 - M1 -

Series - SAE C 2 bolts
Mounting flange J744c

P1

P2

P3

Modifications

Mounting w/connection variables

01 = 4 bolts SAE flanges
(J518c) UNC thread
M1 = 4 bolts SAE flanges
(J518c) Metric thread

Seal class

1 = S1 (for mineral oil)
4 = S4 (for fire resistant fluids)
5 = S5 (for mineral oil and fire resistant fluids)

Design letter

Porting combination (see pages 30 & 31)

00 = standard

Direction of rotation (view on shaft end)

R = clockwise

L = counter-clockwise

Type of shaft

1 = keyed (non SAE)

2 = keyed (SAE CC)

3 = splined (SAE C)

Cam ring for "P1"

(Delivery at 0 bar & 1500 RPM)

014 = 71,4 l/min 035 = 166,5 l/min

020 = 99,0 l/min 038 = 180,4 l/min

024 = 119,3 l/min 042 = 204,0 l/min

028 = 134,5 l/min 045 = 218,5 l/min

031 = 147,4 l/min 050 = 237,0 l/min

Cam ring for "P2" (Delivery at 0 bar & 1500 RPM)

003 = 16,2 l/min 017 = 87,7 l/min

005 = 25,8 l/min 020 = 95,7 l/min

006 = 31,9 l/min 022 = 105,4 l/min

008 = 39,6 l/min 025 = 118,9 l/min

010 = 51,1 l/min 028 = 133,2 l/min

012 = 55,6 l/min 031 = 150,0 l/min

014 = 69,0 l/min

Cam ring for "P3" (Delivery at 0 bar & 1500 RPM)

B02 = 8,7 l/min B06 = 29,7 l/min B12 = 61,5 l/min

B03 = 14,7 l/min B07 = 33,7 l/min B15 = 75,0 l/min

B04 = 19,2 l/min B08 = 37,4 l/min

B05 = 23,8 l/min B10 = 47,7 l/min

OPERATING CHARACTERISTICS - TYPICAL [24 CST]

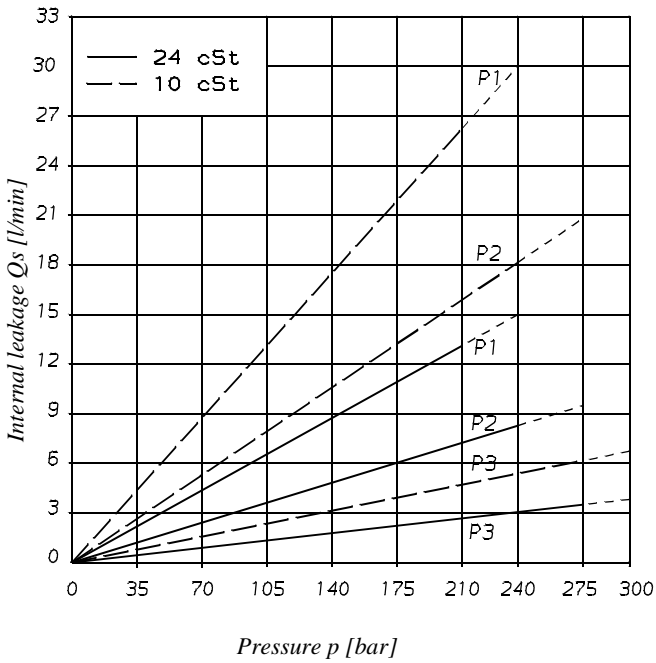
Pressure port	Series	Volumetric displacem. Vi	Flow q _v [l/min] & n = 1500 RPM			Input power P [kW] & n = 1500 RPM		
			p = 0 bar	p = 140 bar	p = 240 bar	p = 7 bar	p = 140 bar	p = 240 bar
P1	014	47,6 ml/rev	71,4	62,1	55,9	2,3	18,5	30,6
	020	66,0 ml/rev	99,0	89,7	83,5	2,8	24,9	41,7
	024	79,5 ml/rev	119,3	110,0	103,8	3,0	29,6	49,8
	028	89,7 ml/rev	134,5	125,2	119,0	3,2	33,2	55,9
	031	98,3 ml/rev	147,4	138,1	131,9	3,3	36,2	61,0
	035	111,0 ml/rev	166,5	157,2	151,0	3,5	40,7	68,7
	038	120,3 ml/rev	180,4	171,1	164,9	3,7	43,9	74,3
	042*	136,0 ml/rev	204,0	194,7	188,5	4,0	49,4	83,7
	045*	145,7 ml/rev	218,5	209,2	203,0	4,1	52,8	89,5
	050*	158,0 ml/rev	237,0	227,7	224,0***	4,4	57,0	85,0***
P2			p = 0 bar	p = 140 bar	p = 275 bar	p = 7 bar	p = 140 bar	p = 275 bar
	003	10,8 ml/rev	16,2	11,2	-	1,3	5,3	-
	005	17,2 ml/rev	25,8	20,8	16,1	1,4	7,5	13,9
	006	21,3 ml/rev	31,9	26,9	22,2	1,5	8,9	16,8
	008	26,4 ml/rev	39,6	34,6	29,9	1,6	10,7	20,3
	010	34,1 ml/rev	51,1	46,1	41,4	1,7	13,4	25,6
	012	37,1 ml/rev	55,6	50,6	45,9	1,7	14,4	27,6
	014	46,0 ml/rev	69,0	64,0	59,3	1,9	17,6	33,7
	017	58,3 ml/rev	87,4	82,4	77,7	2,1	21,9	42,2
	020	63,8 ml/rev	95,7	90,7	86,0	2,2	23,8	46,0
	022	70,3 ml/rev	105,4	100,4	95,7	2,3	26,1	50,4
	025**	79,3 ml/rev	118,9	113,9	109,2	2,5	29,2	56,6
	028**	88,8 ml/rev	133,2	128,2	125,8***	2,8	32,7	48,5***
031**	100,0 ml/rev	150,0	145,0	142,6***	2,8	36,5	54,4***	
P3			p = 0 bar	p = 140 bar	p = 300 bar	p = 7 bar	p = 140 bar	p = 300 bar
	B02	5,8 ml/rev	8,7	7,0	5,1	0,5	2,6	5,1
	B03	9,8 ml/rev	14,7	13,0	11,1	0,6	4,0	8,1
	B04	12,8 ml/rev	19,2	17,5	15,6	0,6	5,0	10,4
	B05	15,9 ml/rev	23,9	22,2	20,2	0,7	6,1	12,7
	B06	19,8 ml/rev	29,7	28,0	26,1	0,7	7,5	15,6
	B07	22,5 ml/rev	33,7	32,0	30,2	0,8	8,5	17,6
	B08	24,9 ml/rev	37,4	35,7	33,7	0,8	9,3	19,5
	B10	31,8 ml/rev	47,7	46,0	44,1	0,9	11,7	24,6
	B12	41,0 ml/rev	61,5	59,8	57,9	1,1	14,9	31,5
B15	50,0 ml/rev	75,0	73,3	71,6****	1,3	18,1	35,7****	

- We do not recommend to use this 003 at 275 bar & 1500 RPM as the internal leakage is over 50% of theoretical flow

* 042 - 045 - 050 = 2200 RPM max. ** 025 - 028 - 031 = 2500 RPM max.

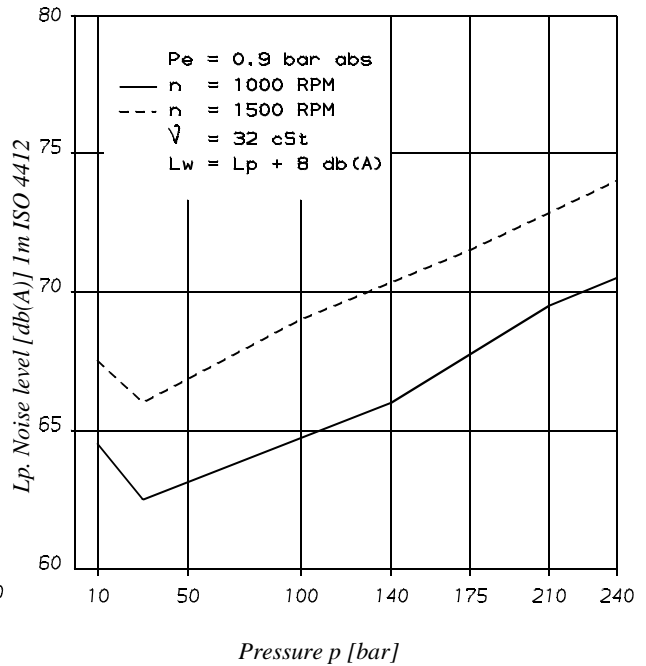
*** 028 - 031 - 050 = 210 bar max. int. **** B15 = 280 bar max. int.

INTERNAL LEAKAGE (TYPICAL)



NOISE LEVEL (TYPICAL)

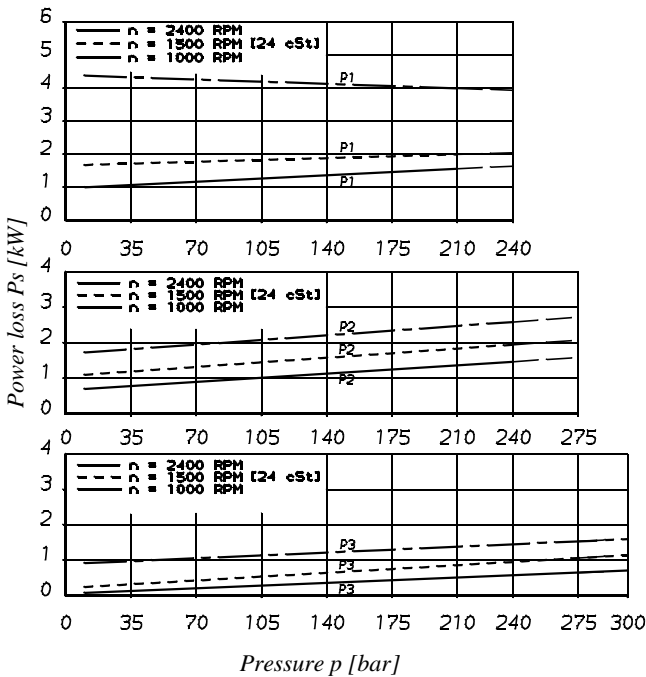
T67DCB - 038 - 022 - B02



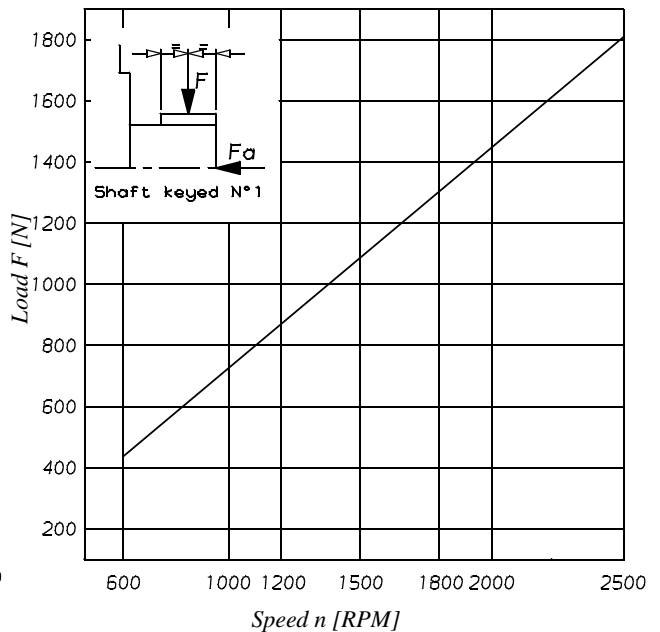
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is higher than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

Triple pump noise level is given with each section discharging at the pressure noted on the curve.

POWER LOSS HYDROMECHANICAL (TYPICAL)



PERMISSIBLE RADIAL LOAD

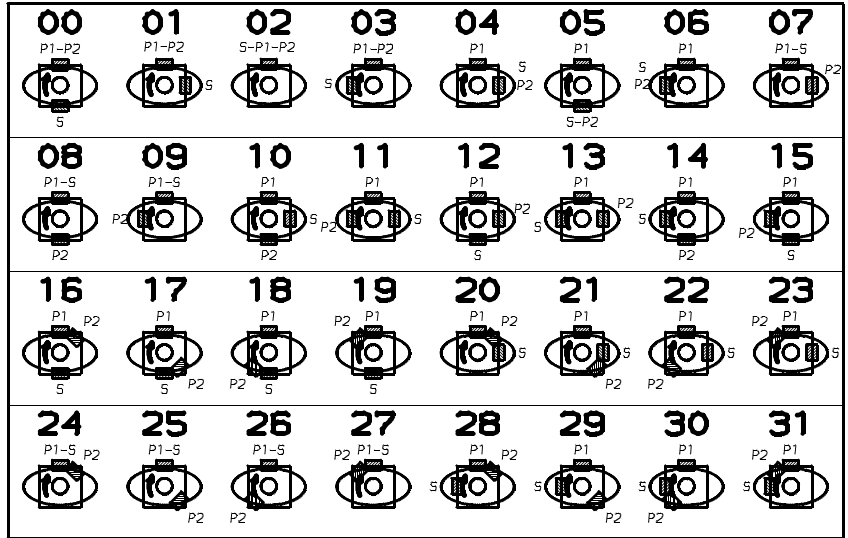


Total hydromechanical power loss is the sum of each section at its operating conditions.

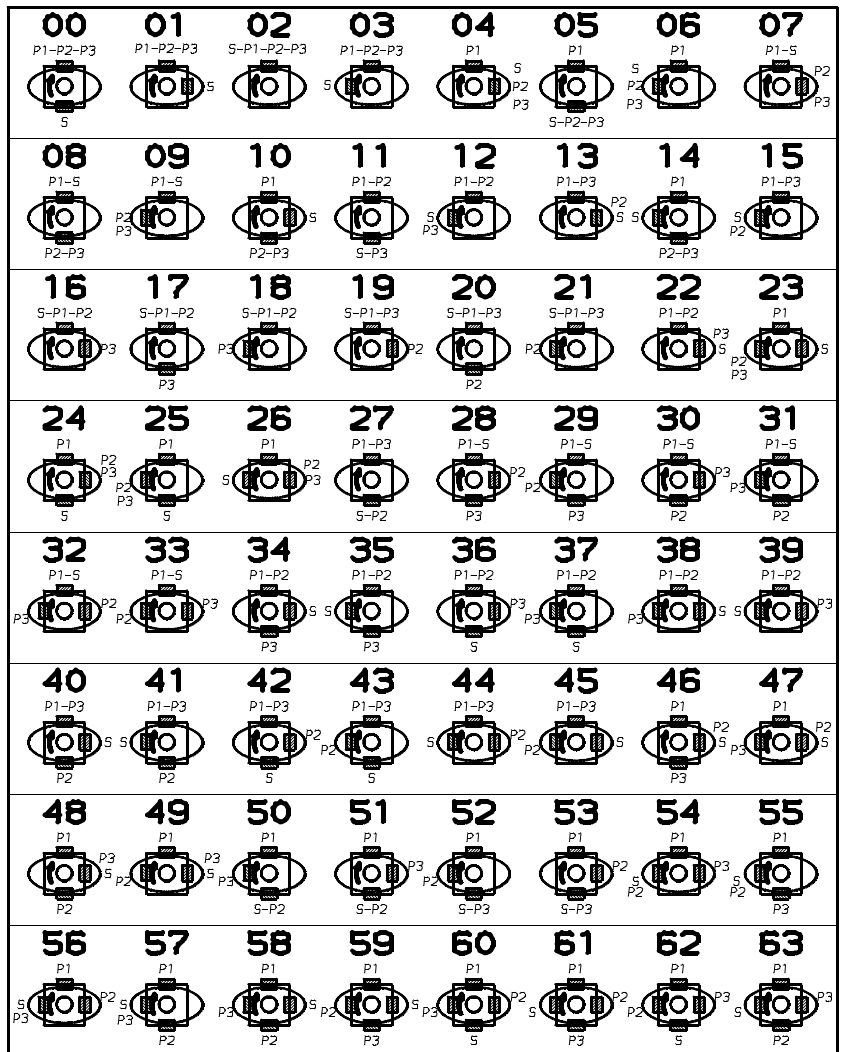
Maximum permissible axial load $F_a = 800 \text{ N}$

PORTING DIAGRAMS - T67 SERIES INDUSTRIAL APPLICATION

T67BB - T67CB - T67DB - T67EB

































































































T67DBB, T67DCB & T67EDB



T67DBB, T67DCB & T67EDB

P1


S	P2	P3				P2	P3			
		02	16	17	18		20	30	08	31
										
		19	07	28	32		21	33	29	09
										
		01	22	34	38		40	48	10	58
										
		13	04	46	47		45	49	59	23
										
		00	36	11	37		27	51	05	50
										
		42	24	53	60		43	62	52	25
										
		03	39	35	12		41	63	14	57
										
		44	26	61	56		15	54	55	06
	