

Model No. T7DB or T7DBS - B42 - B10 - 1 R 00 - A 1 M1 - ..

T7DB series - 125 A2 HW
ISO 2 bolts 3019-2 mounting flange

T7DBS series - SAE C 2 bolts
J744 mounting flange

Displacement P1

Volumetric displacement (ml/rev.)
B14 = 44,0 B31 = 99,2
B17 = 55,0 B35 = 113,4
B20 = 66,0 B38 = 120,6
B22 = 70,3 B42 = 137,5
B24 = 81,1 045 = 145,7
B28 = 90,0 050 = 158,0

Displacement P2

Volumetric displacement (ml/rev.)
B02 = 5,8 B09 = 28,0
B03 = 9,8 B10 = 31,8
B04 = 12,8 B11 = 35,0
B05 = 15,9 B12 = 41,0
B06 = 19,8 B14 = 45,0
B07 = 22,5 B15 = 50,0
B08 = 24,9

Type of shaft T7DBS

1 = keyed (SAE C) 3 = splined (SAE C) 14 teeth
2 = keyed (non SAE) 4 = splined (spec. SAE C)

Type of shaft T7DB - T7DBS

5 = keyed (ISO 3019 -2 - G32 M)

Modifications

Mounting w/connection variables

4 bolts SAE flanges J518

	Metric thread T7DB - T7DBS		UNC thread T7DBS	
	M0	M1	00	01
P1	1.1/4"	1.1/4"	1.1/4"	1.1/4"
P2	1"	3/4"	1"	3/4"
S	3"	3"	3"	3"

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

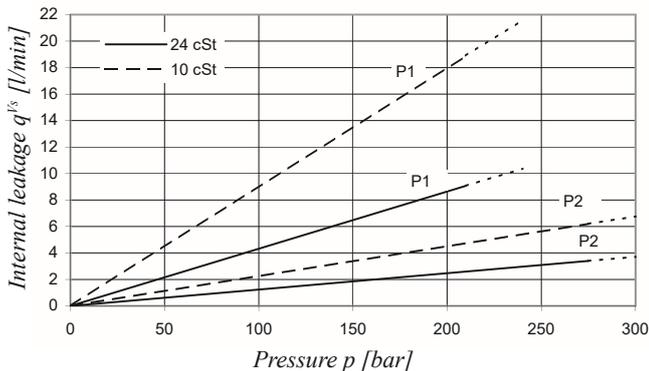
Porting combination (see page 72)

00 = standard

Direction of rotation (shaft end view)

R = Clockwise
L = Counter-clockwise

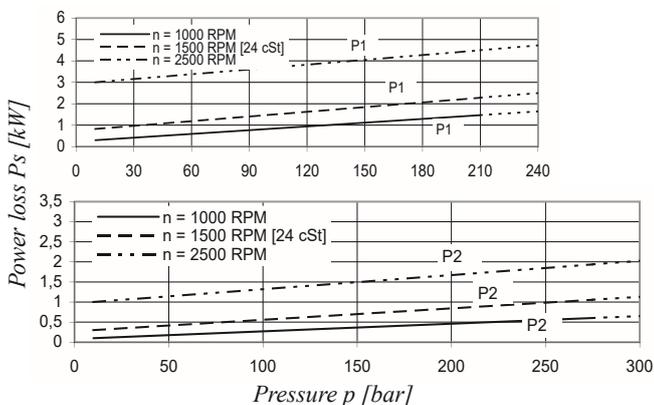
INTERNAL LEAKAGE (TYPICAL)



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

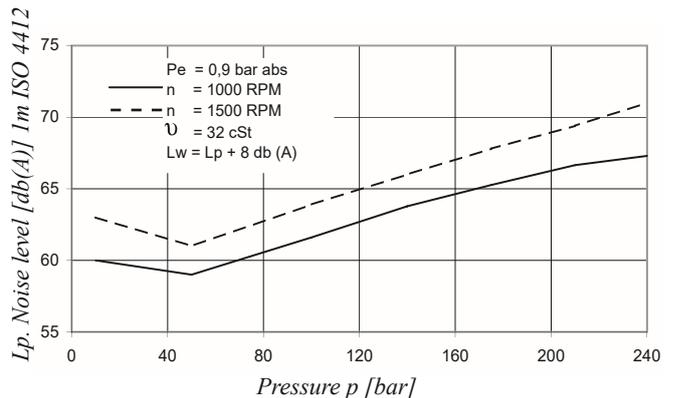
Total leakage is the sum of each section loss under its respective operating conditions.

POWER LOSS HYDROMECHANICAL (TYPICAL)



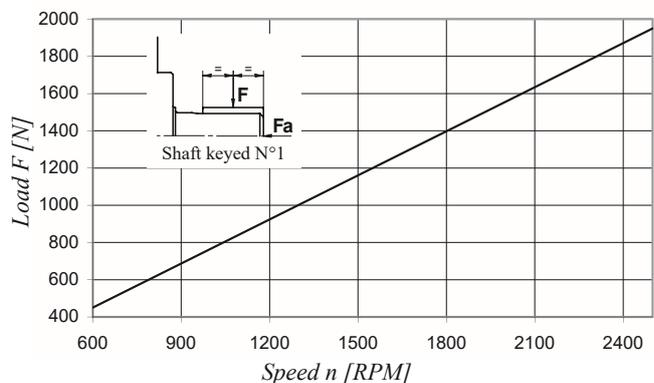
Total hydromechanical power loss is the sum of each section loss under its respective operating conditions.

NOISE LEVEL (TYPICAL) - T7DBS - B31 - B10

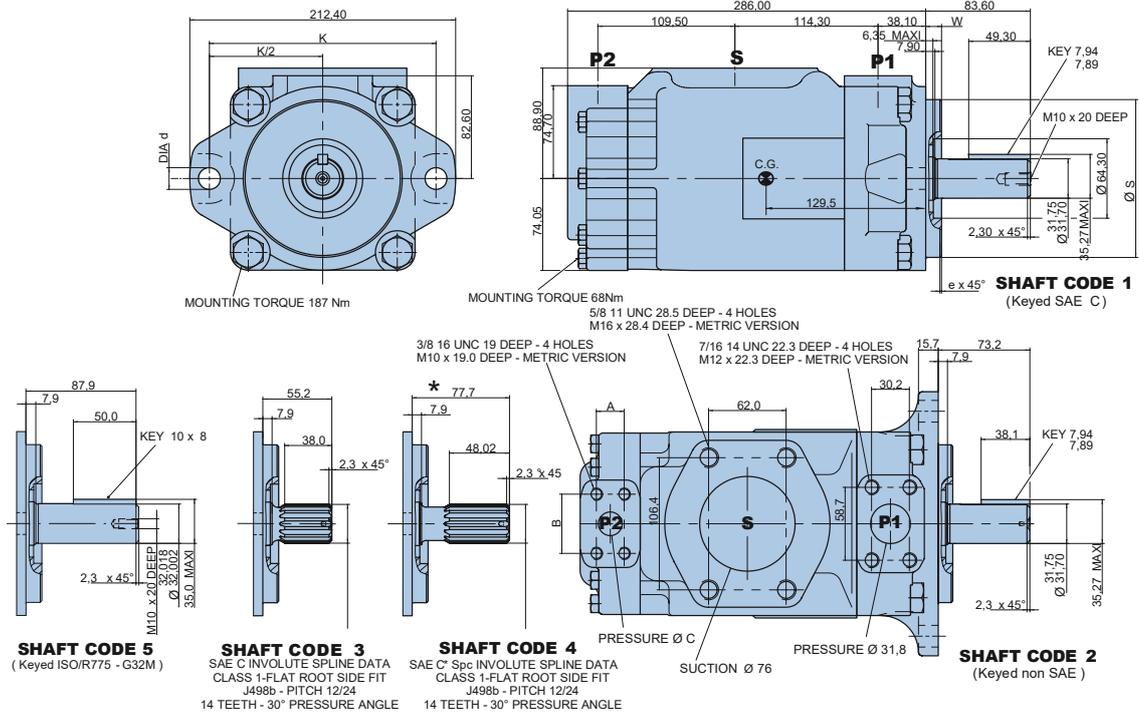


Double pump noise level is given with both stages discharging at the pressure value indicated on the curve.

PERMISSIBLE RADIAL LOAD



Maximum permissible axial load Fa = 1200 N



Alternate mounting flange						
	Dia S		e x 45°	W	K	Dia d
	Max.	Min.				
T7DB	125,000	124,937	2,0	9,5	180,0	18,0
T7DBS	127,000	126,950	1,3	12,7	181,0	17,5

Alternate connect. variables		
	00 & M0	01 & M1
A	26,20	22,20
B	52,35	47,6
C	25,00	19,0

Shaft torque limits [ml/rev. x bar]			
Shaft	Vi x p max.	Shaft	Vi x p max.
1	43240	4	61200
2	34590	5	42500
3	61200		

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 = 250 bar	p = 7 bar	p = 140 bar	p = 250 bar
P1	B14	44,0 ml/rev	66,0	59,4	54,2	1,5	16,6	29,0
	B17	55,0 ml/rev	82,5	75,9	70,7	1,7	20,4	35,8
	B20	66,0 ml/rev	99,0	92,4	87,2	1,9	24,3	42,7
	B22	70,3 ml/rev	105,5	98,8	93,7	2,0	25,8	45,4
	B24	81,1 ml/rev	121,7	115,0	109,9	2,2	29,5	52,1
	B28	90,0 ml/rev	135,0	128,4	123,2	2,3	32,7	57,7
	B31	99,2 ml/rev	148,8	142,2	137,0	2,5	35,9	63,5
	B35	113,4 ml/rev	170,1	163,5	158,3	2,7	40,8	72,3
	B38	120,6 ml/rev	180,9	174,3	169,1	2,9	43,4	76,8
	B42	137,5 ml/rev	206,3	199,6	194,5	3,2	49,3	87,4
	045	145,7 ml/rev	218,6	209,2	202,6 ¹⁾	4,1	52,8	89,5 ¹⁾
	050	158,0 ml/rev	237,0	227,7	223,0 ²⁾	4,4	57,1	85,0 ²⁾
P2			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
	B09	28,0 ml/rev	42,0	40,3	38,4	0,9	10,4	21,8
	B10	31,8 ml/rev	47,7	46,0	44,1	0,9	11,7	26,2
	B11	35,0 ml/rev	52,5	50,8	48,9	1,0	12,8	27,0
	B12	41,0 ml/rev	61,5	59,8	57,9	1,1	14,9	31,5
	B14	45,0 ml/rev	67,5	65,8	63,9	1,2	16,3	34,5
B15	50,0 ml/rev	75,0	73,3	71,6 ³⁾	1,3	18,1	35,7 ³⁾	

¹⁾ 045 = 240 bar max. int. ²⁾ 050 = 210 bar max. int. ³⁾ B15 = 280 bar max. int.