

VT7EDB or VT7EDBS - 062 - B28 - B10 - 1 R 00 - A 1 - 00 *

VT7EDB series-ISO 4 bolts ³ 019-2
mounting flange 250 B4 HW

VT7EDBS series- SAE E 4 bolts
Mounting flange J744c

Cam ring for "P1"

Volumetric displacement cm /rev (in /rev)

042 = 1 ³ 2.2 (8.07)	057 = 18 ³ .2 (11.18)
045 = 142.5 (8.70)	062 = 196.6 (12.0)
050 = 158.5 (9.67)	066 = 21 ³ .0 (1 ³ .0)
052 = 16 ³ .8 (10.0)	072 = 227.1 (1 ³ .86)
054 = 170.9 (10.4 ³)	085 = 268.7 (16.40)

Cam ring for "P2"

Volumetric displacement cm /rev (in /rev)

B14 = 4 ³ .9 (2.68)	B ³ 1 = 99.1 (6.05)
B17 = 55.0 (3 ³ .6)	B ³ 5 = 11 ³ .4 (6.92)
B20 = 66.0 (4.0 ³)	B ³ 8 = 120.6 (7 ³ .6)
B22 = 70 ³ .4 (2.29)	B42 = 1 ³ 7.5 (8 ³ .9)
B24 = 81.1 (4.95)	045 = 145.7 (8.89)
B28 = 89.9 (5.49)	050 = 157.9 (9.64)

Cam ring for "P3"

Volumetric displacement cm /rev (in /rev)

B02 = 5.7 (0 ³ .5)	B08 = 24.9 (1.52)	B12 = 40.9 (2.50)
B0 ³ = 9.8 (0.60)	B07 = 22.5 (1 ³ .7)	B14 = 45.1 (2.75)
B04 = 12.8 (0.78)	B09 = 28.0 (1.71)	B15 = 50.0 (3 ³ .05)
B05 = 15.9 (0.97)	B10 = 3 ³ 1.8 (1.94)	
B06 = 19.8 (1.21)	B11 = 3 ³ 4.9 (2.1 ³)	

Modifications**Mounting w/connection variables**

4 bolts SAE flange (J518)

	P1=1-1/2"	P2=1-1/4"	S = 4"
	P3	UNC	METRIC
VT7EDB	1"		M0
VT7EDB	3/4"		M1
VT7EDBS	1"	00	M0
VT7EDBS	3/4"	01	M1

Seal class

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

Design letter**Porting combination (see page CI-1-4,5)**

00 = Standard

Direction of rotation (view on shaft end)

- R - Clockwise
- L - Counter - clockwise

Type of Shaft VT7EDB

- 1 - Keyed (G45N-ISO ³ 019-2)

Type of Shaft VT7EDBS

- 2 - Keyed (SAE D & E)
- ³ - Splined (SAE D & E)

OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

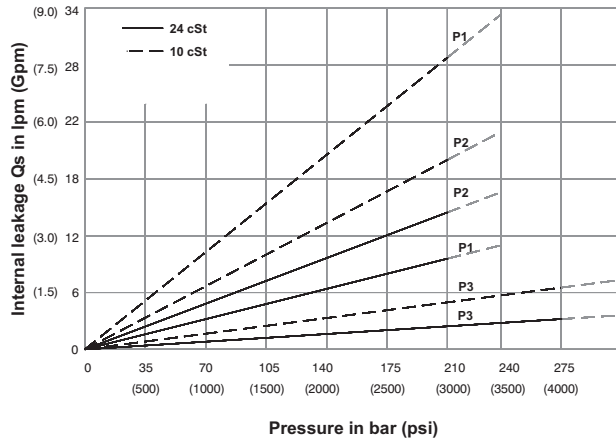
Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1800 rpm						Input power p & n = 1800 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in ³ /rev	cm ³ /rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1	042	8.07	132.2	62.92	237.8	60.37	228.2	58.52	221.2	8.09	6.03	78.44	58.49	133.80	99.77
	045	8.70	142.5	67.72	255.9	65.17	246.3	63.32	239.3	8.37	6.24	84.04	62.66	143.60	107.08
	050	9.67	158.5	75.38	284.9	72.83	275.3	70.98	268.3	8.82	6.58	92.97	69.32	159.24	118.75
	052	10.00	163.8	78.37	296.2	75.82	286.6	73.97	279.6	8.99	6.70	96.47	71.93	165.36	123.31
	054	10.43	170.9	81.27	307.2	78.72	297.6	76.87	290.6	9.17	6.83	99.75	74.38	177.46	132.33
	057	11.18	183.2	87.12	329.3	84.57	319.7	82.72	312.7	9.51	7.09	106.57	79.46	189.84	141.56
	062	12.00	196.6	93.54	353.6	90.99	343.9	89.14	336.9	9.88	7.36	114.17	85.13	196.34	146.41
	066	13.00	213.0	101.44	383.4	98.89	373.8	97.04	366.8	10.34	7.71	123.38	92.00	212.46	158.43
	072	13.86	227.1	108.00	408.2	105.45	398.6	103.60	391.6	10.72	7.99	131.04	97.71	225.86	168.42
	085 ¹⁾	16.40	268.7	127.79	483.0	126.13	476.7	--	--	11.88	8.85	101.66	75.80	--	--
P2				p = 0 bar (0 psi)	p = 140 bar (2000 psi)	p = 250 bar (3630 psi)	p = 7 bar (100 psi)	p = 140 bar (2000 psi)	p = 250 bar (3630 psi)						
	B14	2.68	43.9	20.92	79.1	19.18	72.5	17.81	67.3	3.46	2.6	27.77	20.7	47.03	35.07
	B17	3.36	55.0	26.16	98.8	24.41	92.3	23.04	87.0	3.77	2.8	33.88	25.3	57.71	43.03
	B20	4.03	66.0	31.39	118.6	29.64	112.0	28.27	106.8	4.07	3.0	39.98	29.8	68.39	50.99
	B22	4.29	70.3	33.43	126.4	31.69	119.8	30.32	104.6	4.19	3.1	42.37	31.6	72.57	54.12
	B24	4.95	81.1	38.57	145.8	36.82	139.2	35.45	134.0	4.49	3.4	48.36	36.1	83.06	61.93
	B28	5.49	89.9	42.80	161.8	41.06	155.2	39.69	150.0	4.74	3.5	53.30	39.7	91.70	68.38
	B31	6.05	99.1	47.18	178.3	45.43	171.7	44.06	166.5	4.99	3.7	58.41	43.6	100.63	75.03
	B35 ²⁾	6.92	113.4	53.93	203.9	52.18	197.2	50.81	192.0	5.39	4.0	66.29	49.4	114.42	85.32
	B38 ²⁾	7.36	120.6	57.35	216.8	55.61	210.2	54.24	204.9	5.59	4.2	70.28	52.4	121.42	90.54
	B42 ³⁾	8.39	137.5	65.39	247.2	63.65	240.6	62.28	235.4	6.05	4.5	79.66	59.4	137.83	102.77
P3	045 ⁴⁾	8.89	145.7	69.29	262.0	67.11	253.6	65.31	246.8	6.74	5.0	83.75	62.4	145.79	108.71
	050 ⁵⁾	9.64	157.9	75.14	284.0	72.96	275.8	71.78	271.3	7.08	5.3	90.58	67.5	154.50	115.33
				p = 0 bar (0 psi)	p = 140 bar (2000 psi)	p = 300 bar (4350 psi)	p = 7 bar (100 psi)	p = 140 bar (2000 psi)	p = 300 bar (4350 psi)						
	B02	0.35	5.7	2.76	10.4	2.33	8.8	1.80	6.8	0.74	0.55	4.02	2.99	8.10	6.04
	B03	0.60	9.8	4.66	17.6	4.23	15.9	3.70	14.0	0.85	0.63	6.24	4.65	12.93	9.64
	B04	0.78	12.8	6.09	23.0	5.66	21.4	5.13	19.4	0.94	0.70	7.90	5.89	16.55	12.34
	B05	0.97	15.9	7.56	28.6	7.13	26.9	6.60	25.0	1.02	0.76	9.62	7.17	20.29	15.13
	B06	1.21	19.8	9.42	35.6	8.99	33.9	8.46	32.0	1.13	0.84	11.79	8.79	25.00	18.64
	B07	1.37	22.5	10.70	40.4	10.27	38.8	9.74	36.8	1.20	0.89	13.29	9.91	28.26	21.07
	B08	1.52	24.9	11.84	44.7	11.41	43.1	10.88	41.1	1.27	0.95	14.62	10.90	31.15	23.23
	B09	1.71	28.0	13.31	50.3	12.87	48.6	12.35	47.0	1.36	1.02	16.35	12.19	34.92	26.03
	B10	1.94	31.8	15.12	57.2	14.69	55.5	14.16	53.5	1.46	1.09	18.45	13.76	39.48	29.44
	B11 ⁶⁾	2.13	34.9	16.64	62.9	16.19	61.2	15.68	59.3	1.55	1.16	20.17	15.04	43.22	32.22
	B12 ⁶⁾	2.50	40.9	19.50	73.7	19.07	72.1	18.54	70.1	1.72	1.28	23.55	17.56	50.58	37.71
	B14 ⁶⁾	2.75	45.1	21.40	80.8	20.95	79.2	20.44	77.0	1.83	1.36	25.80	19.23	55.48	41.37
	B15 ⁶⁾	3.05	50.0	23.78	89.8	23.35	88.3	22.88	86.5	1.97	1.47	28.55	21.28	57.35	42.76

1) 085 = 90 bar (1300 psi) max.int. & 085 = 2000 rpm max. 2) B35-B38 = 280 bar (4060 psi) max.int. 3) B42 = 260 bar (3770 psi) max.int. 4) 045 = 240 bar (3500 psi) max. int.

5) 050 = 210 bar (3000 psi) max. int. 6) B11-B12-B14 = 300 bar (4350 psi) & B15 = 280 bar (4060 psi) max. int. And Max. Speed = 3000 rpm

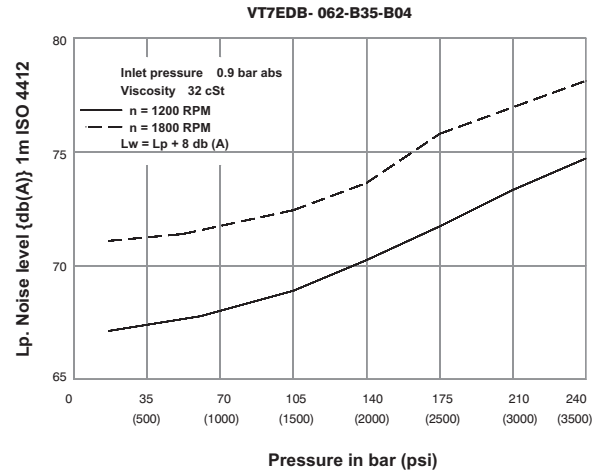
Note: Product details are liable to change without any notice

INTERNAL LEAKAGE (TYPICAL)



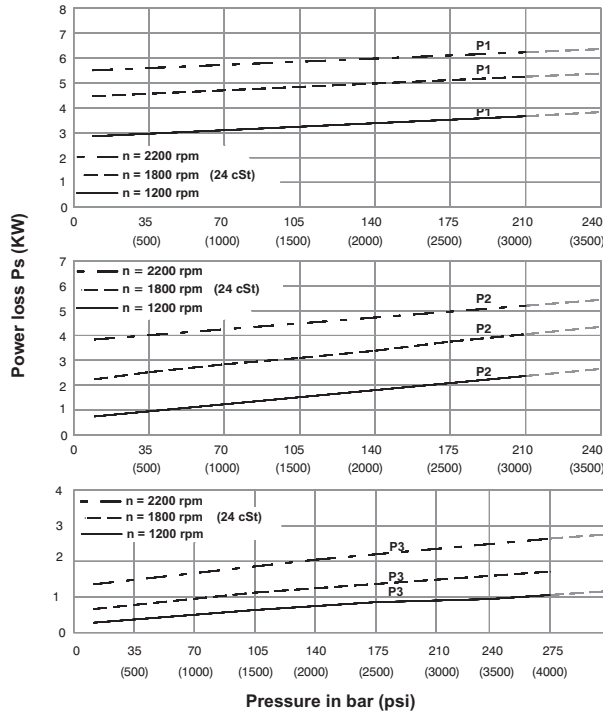
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

NOISE LEVEL (TYPICAL)



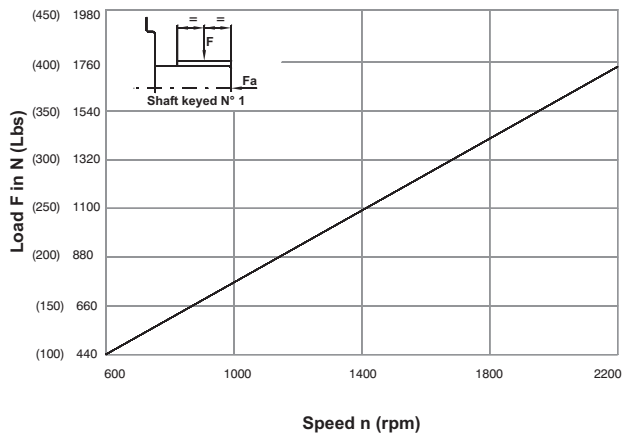
Triple pump noise level is given with each section discharging at the pressure noted on the curve.

HYDROMECHANICAL POWER LOSS (TYPICAL)



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

PERMISSIBLE RADIAL LOAD



Maximum permissible axial load $F_a = 2000$ N (449 Lbs)

