

ORDERING CODE

VST7EDC - 062 - B28 - B10 1 R 00 - A 1 - 01 *

Series

Cam ring for "P1"

Volumetric displacement cm^3/rev (in^3/rev)

- 042 = 132.3 (8.07)
- 045 = 142.4 (8.69)
- 050 = 158.5 (9.67)
- 052 = 164.8 (10.06)
- 057 = 180.7 (11.02)
- 062 = 196.7 (12.00)
- 066 = 213.3 (13.02)
- 072 = 227.1 (13.86)
- 085 = 268.7 (16.40)

Cam ring for "P2"

Volumetric displacement cm^3/rev (in^3/rev)

- 014 = 43.9 (2.68) 028 = 89.9 (5.49)
- 017 = 55.0 (3.36) 031 = 99.1 (6.05)
- 020 = 66.0 (4.03) 035 = 113.4 (6.92)
- 022 = 70.3 (4.29) 038 = 120.6 (7.36)
- 024 = 81.1 (4.95) 042 = 137.5 (8.39)

Cam ring for "P3"

Volumetric displacement cm^3/rev (in^3/rev)

- B02 = 5.7 (0.35) B11 = 34.9 (2.13)
- B03 = 9.8 (0.60) B12 = 40.9 (2.50)
- B04 = 12.8 (0.78) B14 = 45.1 (2.75)
- B05 = 15.9 (0.97) B15 = 50.0 (3.05)
- B06 = 19.8 (1.21) B17 = 58.3 (3.56)
- B07 = 22.5 (1.37) B20 = 63.8 (3.89)
- B08 = 24.9 (1.52) B22 = 70.3 (4.29)
- B09 = 28.0 (1.71) B25 = 79.3 (4.84)
- B10 = 31.8 (1.94)

Modifications

Mounting W/connection Variables

4 bolts SAE flange (J518)

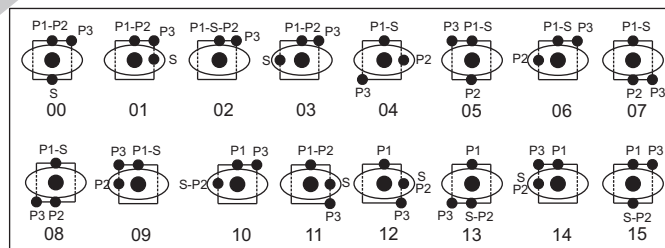
P1 = 1 1/2" P2 = 1 1/4" S = 4"			
	P3	UNC	METRIC
VST7EDC	1"	00	M0
	3/4"	01	M1

Seal Class

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

Design Letters

Porting Combination



Direction of rotation (view on shaft end)

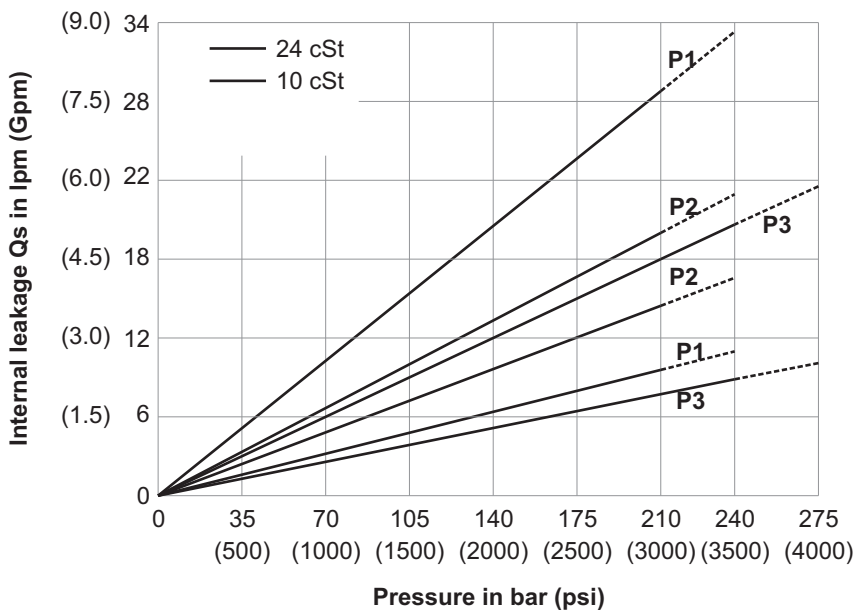
- R - clockwise
- L - Counter - Clockwise

Type of shaft

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



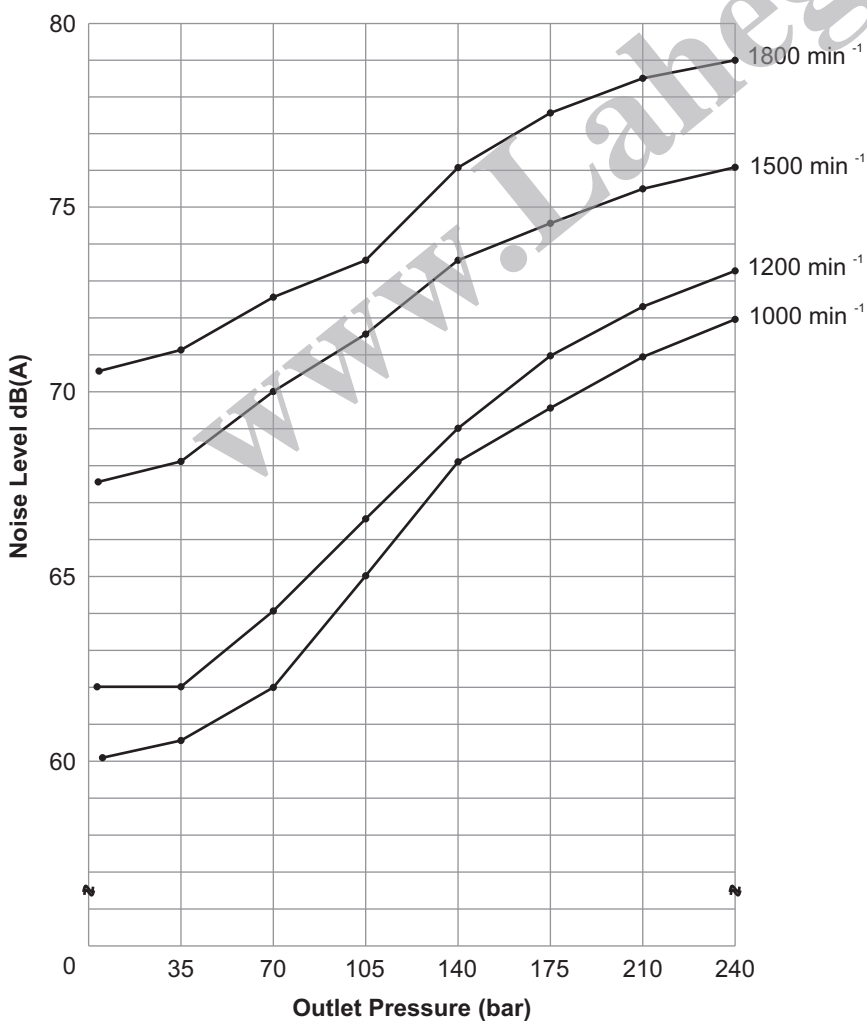
INTERNAL LEAKAGE (TYPICAL)



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.

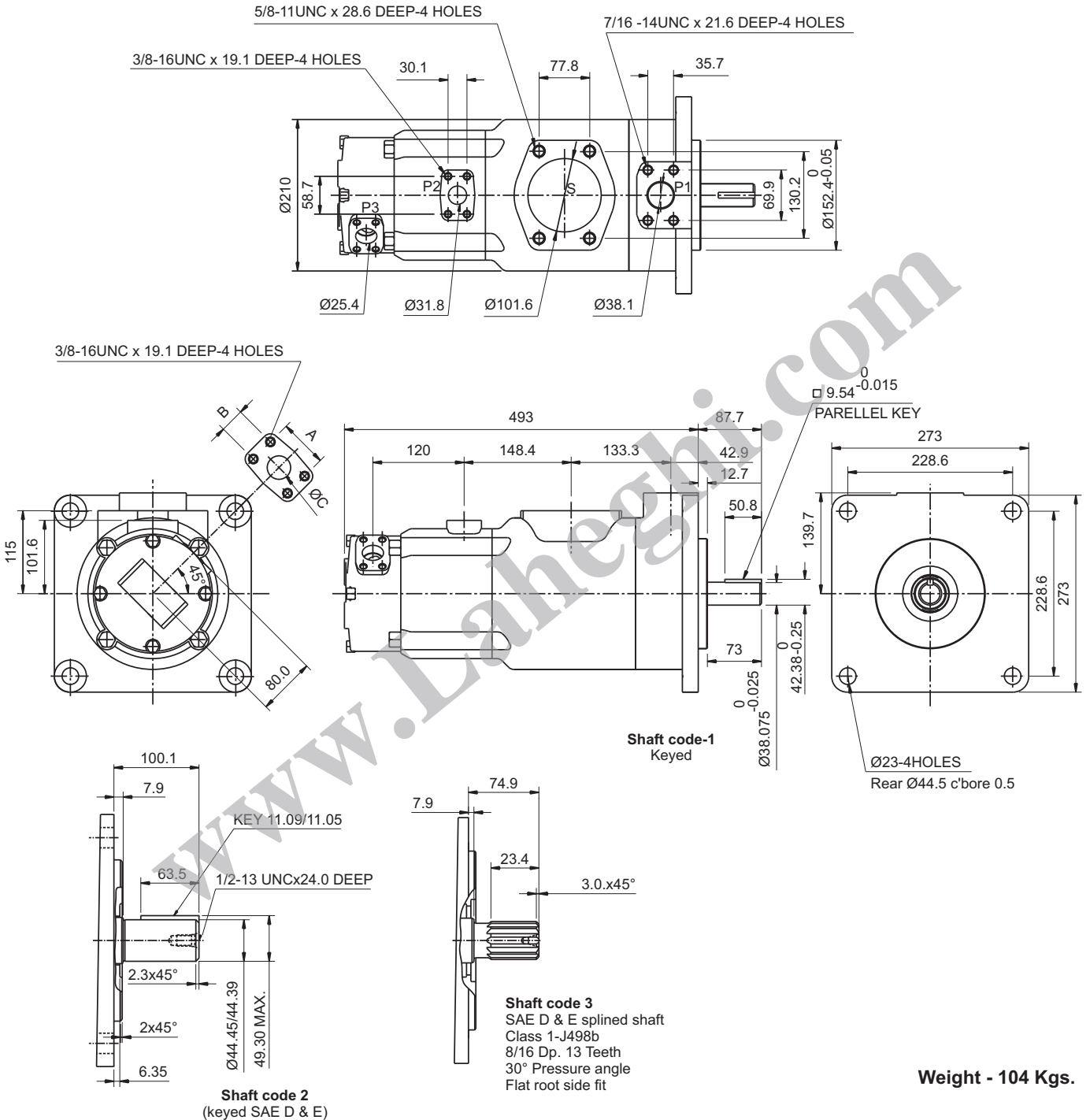
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NOISE LEVEL (TYPICAL) VST7EDC-050-031-B08



Measurement Conditions:
ISO VG32 oil at 50°C and measured 1m from rear of pump cover

INSTALLATION DRAWING
FLANGE MOUNTING

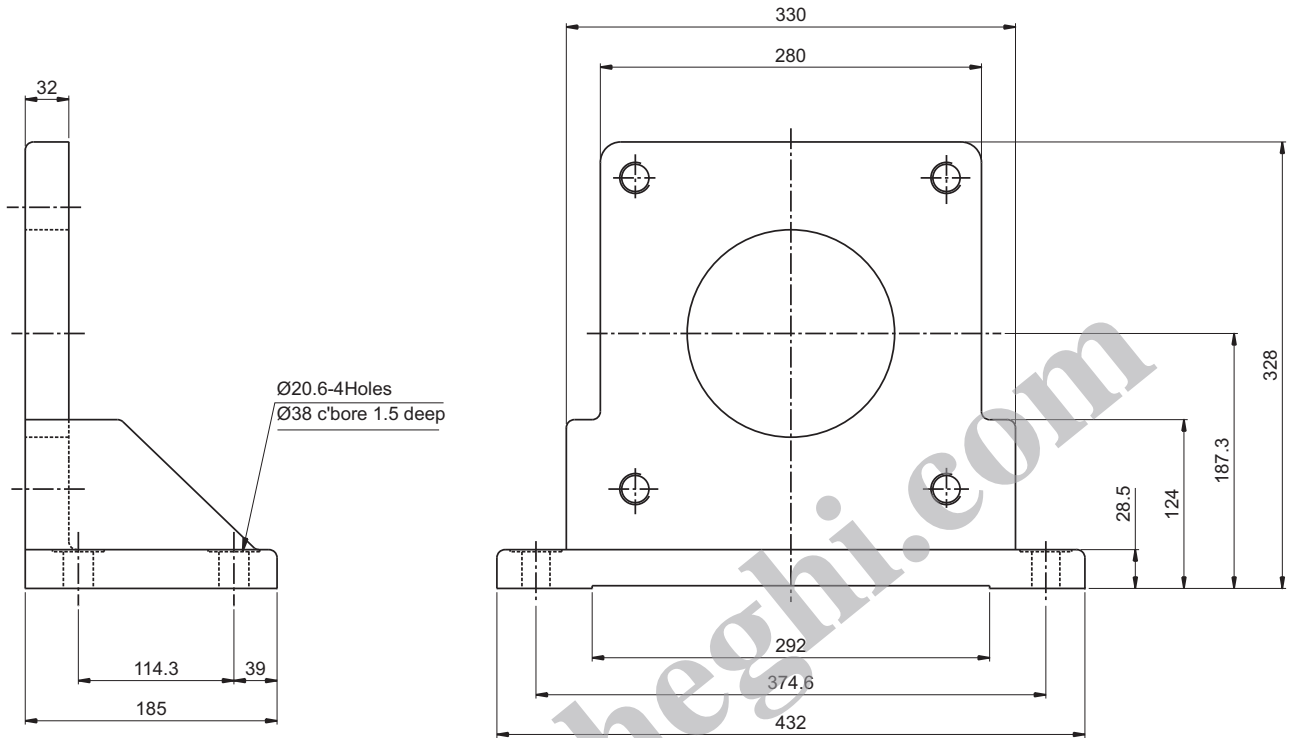


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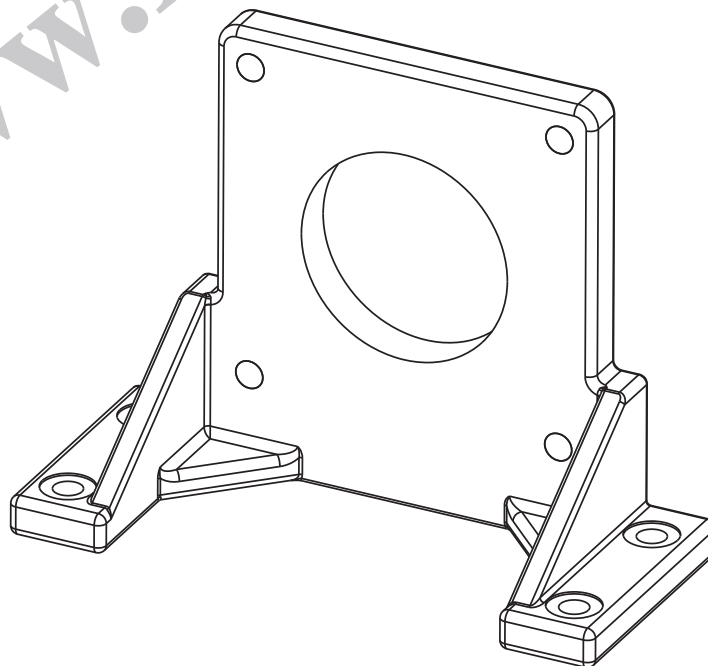
Shaft torque limits in ³ / rev x psi (ml / rev x bar)	
Shaft	Vp x p max. (P1+P2+P3)
1	101506 (114715)
2	104818 (118458)
3	112312 (126928)

PORT	CODE	A	B	ØC
P3	00 & M0	2.06 (52.4)	1.03 (26.2)	1.00 (25.4)
	01 & M1	1.874 (47.6)	0.874 (22.2)	0.75 (19.0)

INSTALLATION DRAWING
FOOT MOUNTING



TP



Weight - 25 Kgs.

OPERATING CHARACTERISTICS (24 cSt)

Pressure port	Series	Volumetric Displacement Vp		Flow q (lpm) & n = 1500 rpm					
				p = 0 bar (0 psi)		p=140bar(2000psi)		p=240bar(3500psi)	
		in ³ /rev	cm ³ /rev	gpm	lpm	gpm	lpm	gpm	lpm
P1	042	8.07	132.3	52.50	198.5	49.87	188.5	47.96	181.3
	045	8.69	142.4	56.51	213.6	53.86	203.6	51.98	196.5
	050	9.67	158.5	62.88	237.7	60.24	227.7	58.36	220.6
	052	10.06	164.8	65.40	247.2	62.75	237.2	60.87	230.1
	057	11.02	180.7	71.71	271.1	69.07	261.1	67.19	254.0
	062	12.00	196.7	78.04	295.0	75.40	285.0	73.52	277.9
	066	13.02	213.3	84.63	319.9	81.98	309.9	80.11	302.8
	072	13.86	227.1	90.11	340.6	87.46	330.6	85.58	323.5
	085	16.40	268.7	107.00	404.7	--	--	--	--



Pressure port	Series	Volumetric Displacement Vp		Input power p & n = 1500 rpm					
				p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in ³ /rev	cm ³ /rev	hp	kw	hp	kw	hp	kw
P1	042	8.07	132.3	6.97	5.2	66.25	49.4	110.77	82.6
	045	8.69	142.4	7.24	5.4	70.94	52.9	118.95	88.7
	050	9.67	158.5	7.64	5.7	78.45	58.5	131.82	98.3
	052	10.06	164.8	7.78	5.8	81.53	60.8	136.92	102.1
	057	11.02	180.7	8.18	6.1	89.04	66.4	143.35	106.9
	062	12.00	196.7	8.58	6.4	96.42	71.9	162.67	121.3
	066	13.02	213.3	8.98	6.7	104.20	77.7	175.94	131.2
	072	13.86	227.1	9.25	6.9	110.77	82.6	187.07	139.5
	085	16.40	268.7	9.78	7.3	--	--	--	--

* Max, int. pressure 240 bar

* Max, cont. pressure 210 bar

Measurement Conditions: ISO VG32 oil at 50°C

Note : 085 = 90 bar (1300 psi) max. int. & 085 = 2000 rpm max.

OPERATING CHARACTERISTICS (24 cSt)

Pressure port	Series	Volumetric Displacement Vp		Flow q (lpm) & n = 1500 rpm					
				p = 0 bar (0 psi)		p=140bar(2000psi)		p=240bar(3500psi)	
		in ³ /rev	cm ³ /rev	gpm	lpm	gpm	lpm	gpm	lpm
P2	014	2.68	43.9	18.88	71.40	16.42	62.10	14.78	55.95
	017	3.36	55.0	23.10	87.30	20.60	78.00	18.99	71.88
	020	4.03	66.0	26.19	99.00	23.73	89.70	22.08	83.58
	022	4.29	70.3	28.85	109.21	26.41	99.97	25.31	95.81
	024	4.95	81.1	31.56	119.3	29.10	110.00	27.46	103.95
	028	5.49	89.9	35.58	134.50	33.12	125.20	31.48	119.16
	031	6.05	99.1	39.00	147.50	36.53	138.10	34.89	132.07
	035	6.92	113.4	44.04	166.50	41.58	157.20	39.94	151.18
	038	7.36	120.6	47.72	180.40	45.26	171.10	43.62	165.12
	042	8.39	137.5	53.96	204.00	51.50	194.70	49.86	188.74

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Pressure port	Series	Volumetric Displacement Vp		Input power p & n = 1500 rpm					
				p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in ³ /rev	cm ³ /rev	hp	kw	hp	kw	hp	kw
P2	014	2.68	43.9	3.08	2.3	24.81	18.5	41.03	30.6
	017	3.36	55.0	3.35	2.5	29.77	22.2	49.62	37.0
	020	4.03	66.0	3.75	2.8	33.39	24.9	55.92	41.7
	022	4.29	70.3	4.00	2.9	36.50	27.7	63.80	46.6
	024	4.95	81.1	4.02	3.0	39.69	29.6	66.78	49.8
	028	5.49	89.9	4.29	3.2	44.52	33.2	74.96	55.9
	031	6.05	99.1	4.42	3.3	48.54	36.2	81.80	61.0
	035	6.92	113.4	4.69	3.5	54.58	40.7	92.13	68.7
	038	7.36	120.6	4.96	3.7	58.87	43.9	99.64	74.3
	042	8.39	137.5	5.36	4.0	66.25	49.4	112.24	83.7

Max, int. pressure 240 bar
 Max, cont. pressure 210 bar
 Measurement Conditions: ISO VG32 oil at 50°C

OPERATING CHARACTERISTICS (24 cSt)

Pressure port	Series	Volumetric Displacement Vp		Flow q (lpm) & n = 1500 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in ³ /rev	cm ³ /rev	gpm	lpm	gpm	lpm	gpm	lpm
P3	B02	0.35	5.7	2.29	8.70	1.94	7.34	–	–
	B03	0.60	9.8	3.88	14.7	3.52	13.32	2.91	11.0
	B04	0.78	12.8	5.07	19.2	4.71	17.83	4.09	15.5
	B05	0.97	15.9	6.31	23.9	5.94	22.49	5.28	20.0
	B06	1.21	19.8	7.85	29.7	7.49	28.35	6.87	26.0
	B07	1.37	22.5	8.90	33.7	8.56	32.40	7.79	29.5
	B08	1.52	24.9	9.88	37.4	9.51	35.99	8.85	33.5
	B09	1.71	28.0	11.07	41.9	10.72	40.58	10.04	38.0
	B10	1.94	31.8	12.62	47.8	12.24	46.33	11.23	42.5
	B11	2.13	34.9	13.81	52.27	13.49	51.07	12.81	48.5
	B12	2.50	40.9	16.25	61.51	15.89	60.15	15.19	57.5
	B14	2.75	45.1	17.81	67.42	17.46	66.09	16.77	63.5
	B15	3.08	50.5	20.25	76.64	19.55	74.0	19.15	72.5
	B17	3.56	58.3	23.10	87.45	22.32	84.5	22.06	83.5
	B20	3.89	63.8	25.28	95.70	24.70	93.5	24.30	92.0
	B22	4.29	70.3	27.87	105.5	27.21	103.0	26.81	101.5
B25	4.84	79.3	31.44	119.0	31.04	117.5	30.64	116.0	

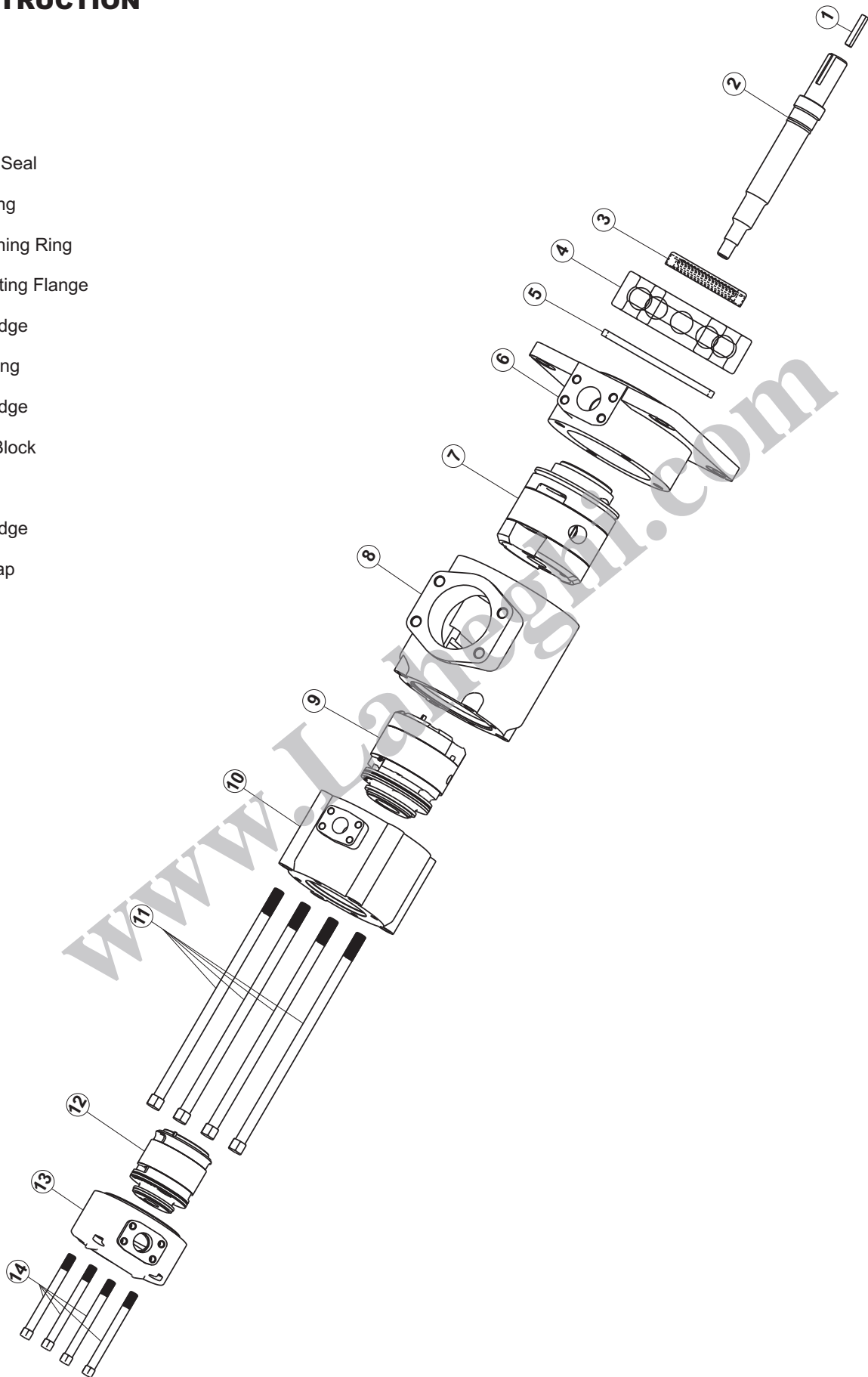
Pressure port	Series	Volumetric Displacement Vp		Flow q (lpm) & n = 1500 rpm					
				p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in ³ /rev	cm ³ /rev	hp	kw	hp	kw	hp	kw
P3	B02	0.35	5.7	0.62	0.46	3.08	2.30	–	–
	B03	0.60	9.8	0.71	0.53	4.96	3.70	8.35	6.23
	B04	0.78	12.8	0.78	0.58	6.37	4.75	10.77	8.03
	B05	0.97	15.9	0.86	0.64	7.78	5.80	13.18	9.83
	B06	1.21	19.8	0.95	0.71	9.49	7.08	16.40	12.23
	B07	1.37	22.5	1.01	0.75	10.74	8.01	18.28	13.63
	B08	1.52	24.9	1.06	0.79	12.00	8.95	20.42	15.23
	B09	1.71	28.0	1.14	0.85	13.39	9.99	22.84	17.03
	B10	1.94	31.8	1.23	0.92	15.13	11.28	25.25	18.83
	B11	2.13	34.9	1.30	0.97	16.69	12.45	28.46	21.23
	B12	2.50	40.9	1.45	1.08	19.51	14.55	33.29	24.83
	B14	2.75	45.1	1.54	1.15	21.23	15.83	36.52	27.23
	B15	3.08	50.5	1.68	1.25	24.21	18.05	41.34	30.83
	B17	3.56	58.3	1.85	1.38	27.49	20.50	47.24	35.23
	B20	3.89	63.8	1.98	1.48	30.31	22.60	51.80	38.63
	B22	4.29	70.3	2.13	1.59	33.27	24.81	56.89	42.43
B25	4.84	79.3	2.35	1.75	37.82	28.20	64.68	48.23	

Max, cont. pressure 240 bar upto B12, 210 bar from B14 - B25
 Measurement Conditions: ISO VG32 oil at 50°C



CONSTRUCTION

- 1. Key
- 2. Shaft
- 3. Shaft Seal
- 4. Bearing
- 5. Retaining Ring
- 6. Mounting Flange
- 7. Cartridge
- 8. Housing
- 9. Cartridge
- 10. Port Block
- 11. Bolts
- 12. Cartridge
- 13. Endcap
- 14. Bolts



TP