

**VT6DR \* - 045 - 1 R 00 - A 1 0 - A 1 \***

**Series**

Y- Metric port connection, Omit for UNC

**Cam ring for**

Volumetric displacement cm<sup>3</sup>/rev (in<sup>3</sup>/rev)

*014/B14 = 47.6 (2.90)	035/B35 = 111.0 (6.77)
017/B17 = 58.2 (3.55)	038/B38 = 120.3 (7.34)
020/B20 = 66.0 (4.03)	042/B42 = 136.0 (8.30)
024/B24 = 79.5 (4.85)	045/B45 = 145.7 (8.89)
028/B28 = 89.7 (5.47)	050/B50 = 158.0 (9.64)
031/B31 = 98.3 (6.00)	061/B61 = 190.5 (11.62)

\*0' - Uni - directional 'B' - Bi - directional

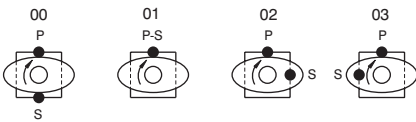
**Type of Shaft**

- 1 - Keyed (SAE C)
- 2 - Keyed (SAE CC)
- 3 - Splined (SAE C)
- 5 - Keyed (no SAE)

**Direction of rotation (view on shaft end)**

- R - Clockwise
- L - Counter - clockwise

**Porting combination**



**Modifications**

**Seal class**

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

**Design letter**

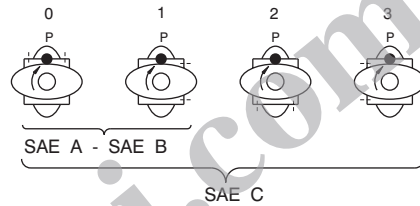
**Porting adapter**

**Coupling**

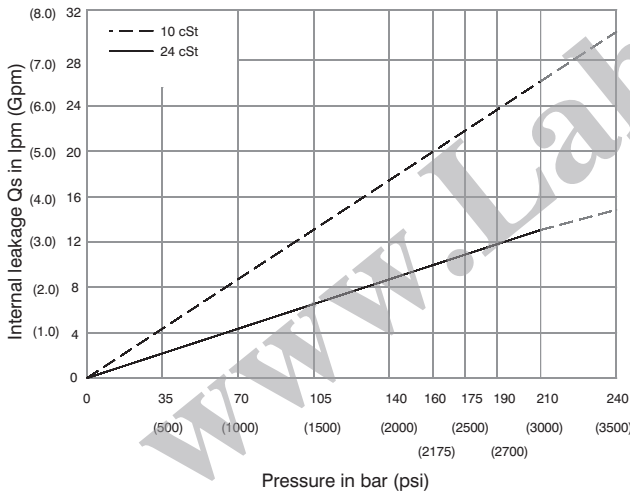
- 1 - SAE A
- 2 - SAE B
- 3 - SAE BB
- 4 - SAE C
- 5 - SAE J498b
- 16/32-11 teeth

**Adapter**

- 0 - None
- A - SAE A
- B - SAE B
- C - SAE C

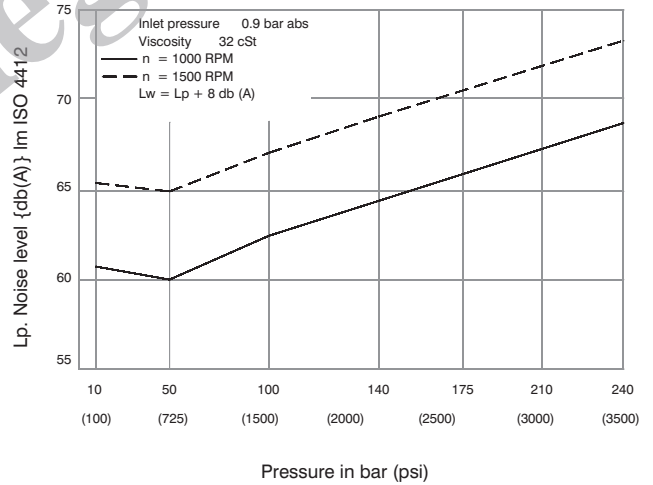


**INTERNAL LEAKAGE (TYPICAL)**

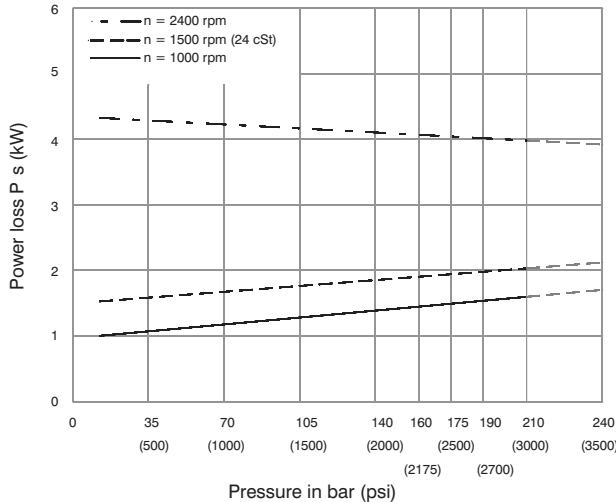


**NOISE LEVEL (TYPICAL)**

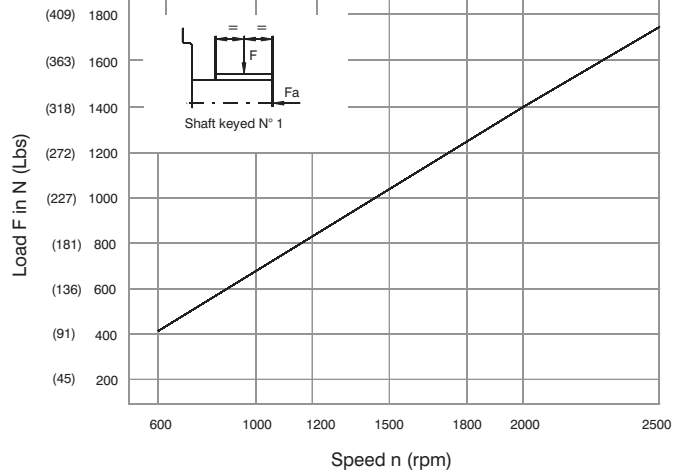
VT6DR- 038



**HYDROMECHANICAL POWER LOSS (TYPICAL)**

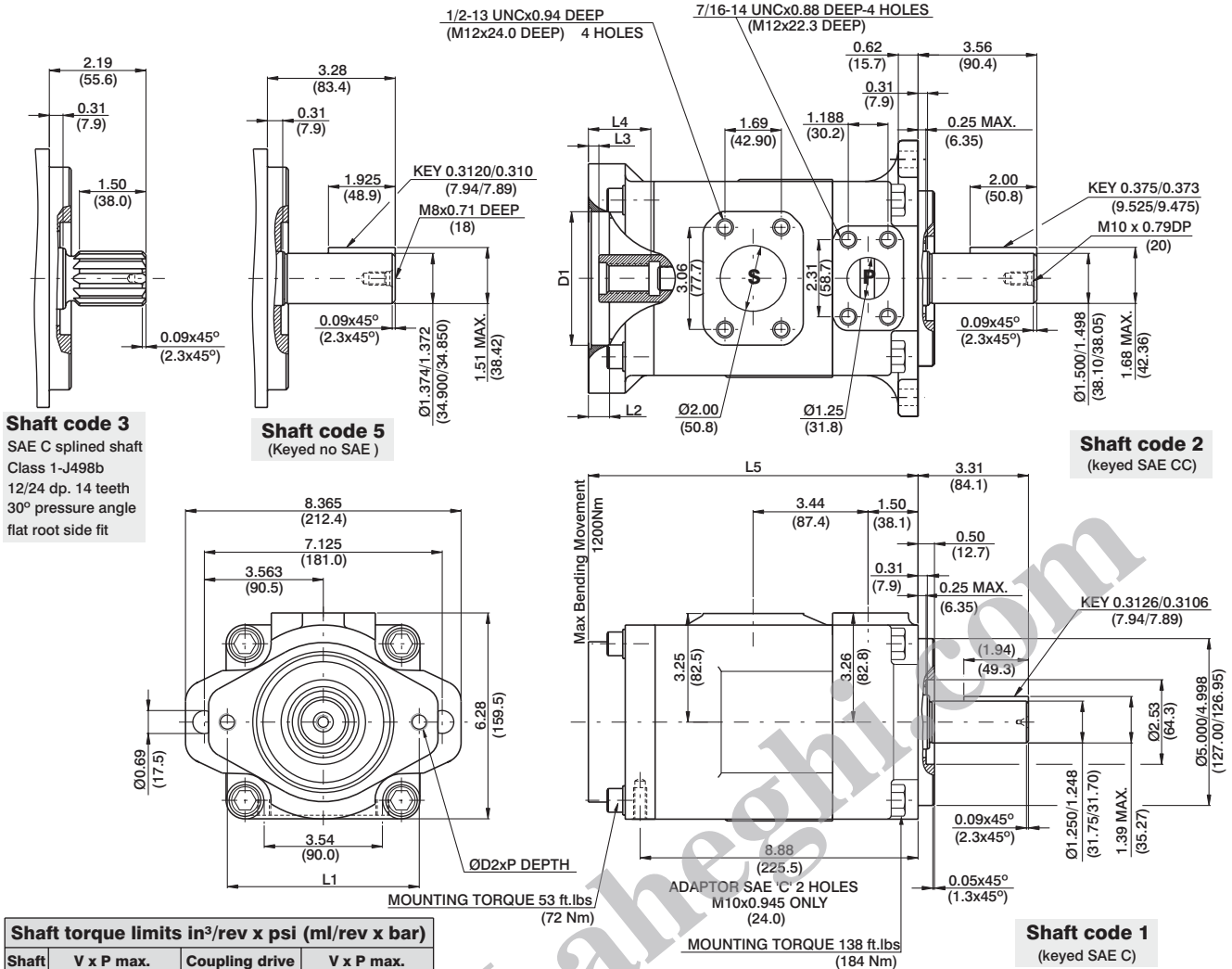


**PERMISSIBLE RADIAL LOAD**



Maximum permissible axial load Fa = 1200 N (270 Lbs)





### Shaft torque limits in<sup>3</sup>/rev x psi (ml/rev x bar)

Shaft	V x P max.	Coupling drive	V x P max.
1	38300 (43240)	SAE"A"	9743 (11000)
2	58491 (66036)	SAE"B"	18246 (20600)
3	54207 (61200)	SAE"BB"	28937 (32670)
5	49247 (55600)	SAE"C"	33118 (37390)
		SAE"11teeth"	14039 (15850)

Adaptor	D1	D2	P	L1	L2	L3	L4	L5
SAE "A"	3.25 (82.60)	M10	0.94 (24)	4.19 (106.4)	0.43 (11)	0.31 (7.9)	1.26 (32)	9.33 (237)
SAE "B"	4.00 (101.65)	M12	1.10 (28)	5.75 (146.0)	0.63 (16)	0.31 (7.9)	1.81 (46)	9.88 (251)
SAE "C"	5.00 (127.10)	M16	-	7.12 (181.0)	0.63 (16)	0.31 (7.9)	2.20 (56)	10.27 (261)

Adaptor	SAE "A"			SAE "B"			SAE "C"
Coupling drive	SAE A	SAE (11teeth)	SAE B	SAE B	SAE BB	SAE C	
Number of teeth	9	11	13	13	15	14	
Pitch	16/32	16/32	16/32	16/32	16/32	12/24	
Pressure angle	30°	30°	30°	30°	30°	30°	
Major dia. (min)	0.625 (15.875)	0.750 (19.05)	0.875 (22.225)	0.875 (22.225)	1.00 (25.40)	1.250 (31.75)	
Minor dia. (min)	0.500 (12.70)	0.630 (16.00)	0.753 (19.134)	0.753 (19.134)	0.877 (22.268)	1.086 (27.585)	

### OPERATING CHARACTERISTICS - TYPICAL (24 cST)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1500 rpm						Input power p & n = 1500 rpm							
		in <sup>3</sup> /rev		cm <sup>3</sup> /rev		gpm		lpm		hp		kw		hp		kw	
		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)	p = 7 bar (100 psi)	p = 140 bar (2000 psi)	p = 240 bar (3500 psi)							
VT6DR	014	2.90	47.6	18.88	71.4	16.42	62.1	14.78	55.9	3.08	2.3	24.81	18.5	41.03	30.6		
	017	3.55	58.2	23.1	87.3	20.60	78.0	18.99	71.8	3.35	2.5	29.77	22.2	49.62	37.0		
	020	4.00	66.0	26.19	99.0	23.73	89.7	22.08	83.5	3.75	2.8	33.39	24.9	55.92	41.7		
	024	4.80	79.5	31.56	119.3	29.10	110.0	27.46	103.8	4.02	3.0	39.69	29.6	66.78	49.8		
	028	5.50	89.7	35.58	134.5	33.12	125.2	31.48	119.0	4.29	3.2	44.52	33.2	74.96	55.9		
	031	6.00	98.3	39.00	147.5	36.53	138.1	34.89	131.9	4.42	3.3	48.54	36.2	81.80	61.0		
	035	6.80	111.0	44.04	166.5	41.58	157.2	39.94	151.0	4.69	3.5	54.58	40.7	92.13	68.7		
	038	7.30	120.3	47.72	180.4	45.26	171.1	43.62	164.9	4.96	3.7	58.87	43.9	99.64	74.3		
	042 <sup>1)</sup>	8.30	136.0	53.96	204.0	51.50	194.7	49.86	188.5	5.36	4.0	66.25	49.4	112.24	83.7		
	045 <sup>1)</sup>	8.89	145.7	57.80	218.5	55.34	209.2	53.70	203.0	5.50	4.1	70.81	52.8	120.02	89.5		
	050 <sup>1)</sup>	9.64	158.0	62.69	237.0	60.23	227.7	59.25 <sup>2)</sup>	224.0 <sup>2)</sup>	5.90	4.4	76.44	57.0	113.98 <sup>2)</sup>	85.0 <sup>2)</sup>		
	061 <sup>1)</sup>	11.62	190.5	76.25	285.7	73.54 <sup>3)</sup>	278.0 <sup>3)</sup>	--	--	6.16	4.6	81.26 <sup>3)</sup>	60.6 <sup>3)</sup>	--	--		

1) 042-045-050-061 = 2200 RPM max.

2) 050 = 210 bar (3000 psi) max.

3) 061 = 120 bar (1740 psi) max. int, 061 = 80 bar (1160 psi) cont.