

VT6BB - B09 - B11 - 1 R 00 - A 1 00 *

Series

Cam ring for "P1" & "P2"

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

B02 = 5.8 (0.35)
 B03 = 9.8 (0.59)
 B04 = 12.8 (0.78)
 B05 = 15.9 (0.97)
 B06 = 19.8 (1.21)
 B07 = 22.5 (1.37)
 B08 = 24.9 (1.52)
 B09 = 28.0 (1.71)
 B10 = 31.8 (1.94)
 B11 = 34.9 (2.13)
 B12 = 41.0 (2.50)
 B14 = 45.0 (2.75)

Type of Shaft

1 - Keyed (Non SAE)
 3 - Splined

Direction of rotation (view on shaft end)

R - clockwise
 L - counter-clockwise

Porting combination

00 - standard

Modifications

Port connections

CODE	S	P1 & P2
00	2" SAE 4 bolt (UNC)	SAE 12 1 1/16" 12 UNF-2B
01		3/4" SAE 4 bolt (UNC)
M0	2" SAE 4 bolt (METRIC)	3/4" SAE 4 bolt (METRIC)

Seal class

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

Design letter

00 P1 - P2 	01 P1 - P2 	02 S - P1 - P2 	03 P1 - P2 	04 P1 	05 P1 	06 P1 	07 S - P1
08 S - P1 	09 P1 	10 P1 	11 P1 	12 S - P1 	13 P1 	14 P1 	15 P1

S - Suction port

P - Pressure port

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

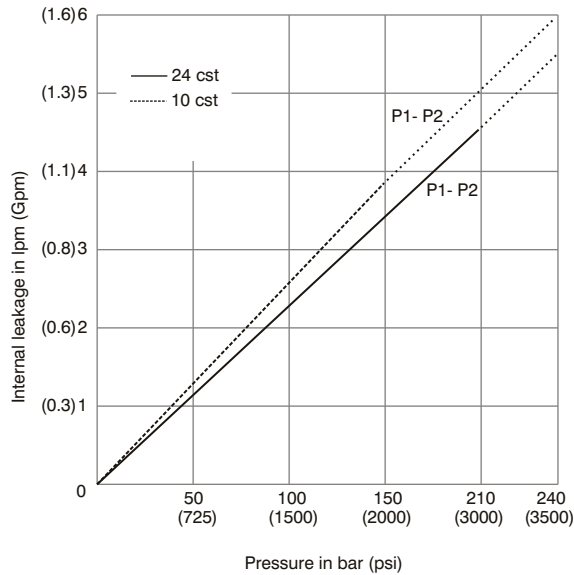
Pressure port	Series	Volumetric Displacement V_p		Flow q & $n = 1500 \text{ rpm}$						Input power p & $n = 1500 \text{ rpm}$					
				$p = 0 \text{ bar (0 psi)}$		$p = 140 \text{ bar (2000 psi)}$		$p = 210 \text{ bar (3000 psi)}$		$p = 7 \text{ bar (100 psi)}$		$p = 140 \text{ bar (2000 psi)}$		$p = 210 \text{ bar (3000 psi)}$	
		in^3/rev	cm^3/rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1 & P2	B02	0.35	5.8	2.30	8.7	1.4	5.9	--	--	0.53	0.4	2.81	2.1	--	--
	B03	0.59	9.8	3.88	14.7	2.9	11.9	2.7	10.5	0.67	0.5	3.62	2.7	--	--
	B04	0.78	12.8	5.08	19.2	4.33	16.4	3.97	15.0	0.93	0.7	5.23	3.9	10.06	7.5
	B05	0.97	15.9	6.31	23.8	5.55	21.0	5.18	19.6	1.00	0.75	6.64	4.9	11.2	8.3
	B06	1.21	19.8	7.85	29.7	7.12	26.9	6.66	25.2	1.07	0.8	8.05	6.0	12.34	9.2
	B07	1.37	22.5	8.92	33.7	8.17	30.9	7.80	29.5	1.20	0.9	9.05	6.7	14.02	10.4
	B08	1.52	24.9	9.89	37.4	9.15	34.6	8.78	33.2	1.34	1.0	10.05	7.5	15.69	11.7
	B09	1.71	28.0	11.11	42.0	10.37	39.2	10.00	37.8	1.47	1.1	11.94	8.9	23.60	17.6
	B10	1.94	31.8	12.61	47.7	11.87	44.9	11.51	43.5	1.6	1.2	13.0	9.7	26.0	19.6
	B11	2.13	34.9	13.85	52.3	13.09	49.5	12.72	48.1	1.7	1.3	14.0	10.5	28.0	21.0
	B12	2.50	41.0	16.27	61.5	15.53	58.7	*	*	1.8	1.4	15.02	11.2	*	*
	B14	2.75	45.0	17.86	67.5	17.12	64.7	**	**	2.1	1.6	15.42	11.5	**	**

-- Not to use because internal leakage greater than 50% of theoretical flow.

*B12 = 210bar (3000psi) Max. Int

**B14 = 175bar (2500psi) Max. Int

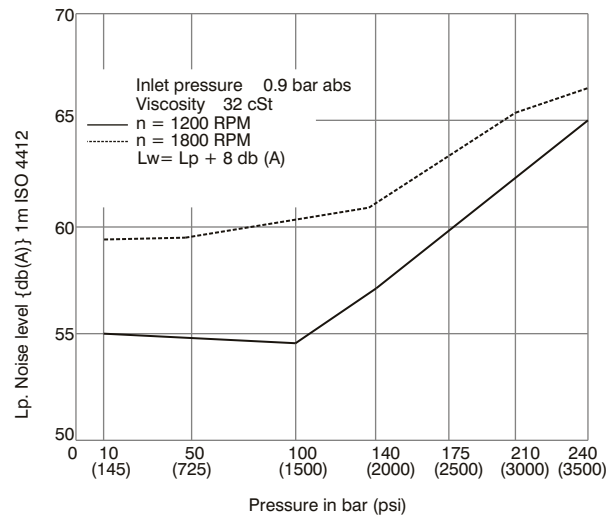
INTERNAL LEAKAGE (TYPICAL)



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)

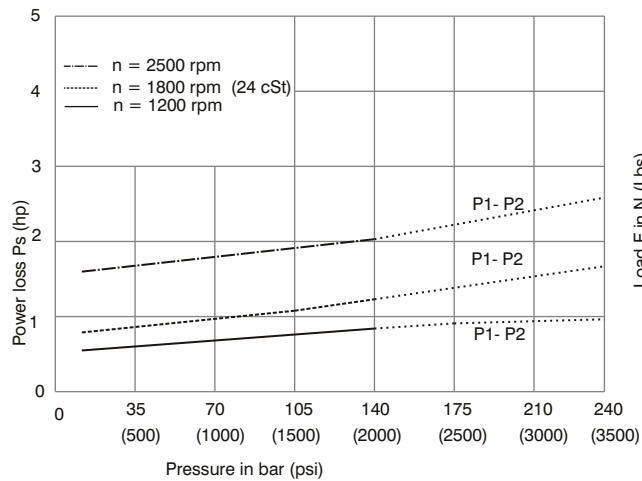
VT6BB- B10-B04



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

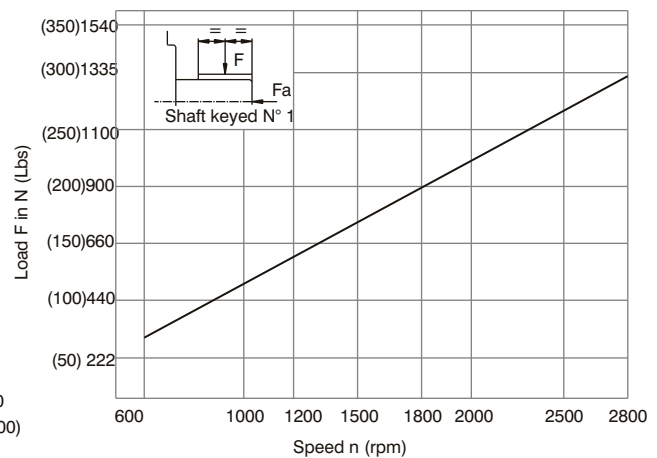
VP
DP

HYDROMECHANICAL POWER LOSS (TYPICAL)

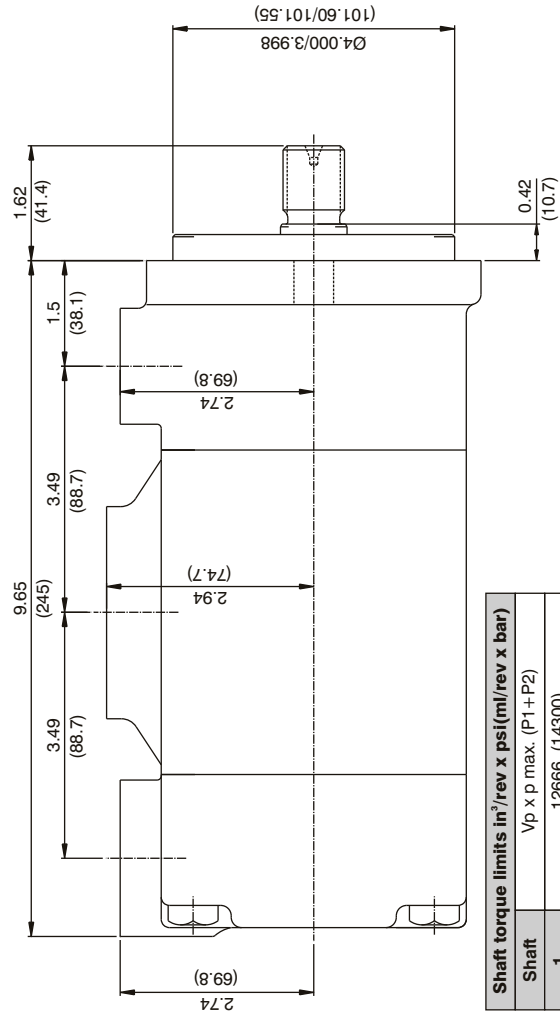
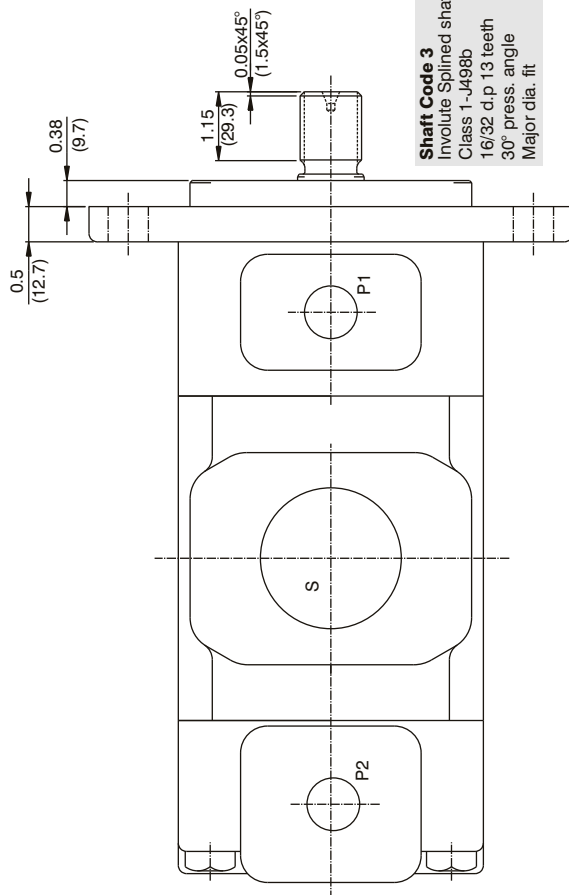
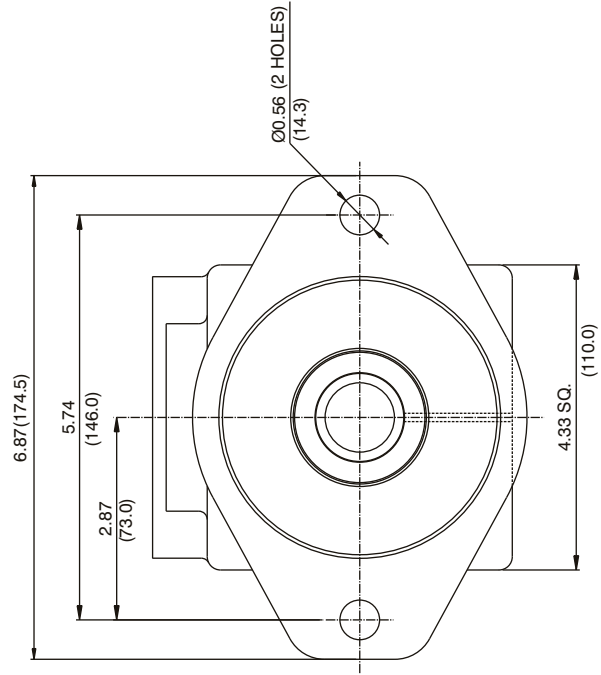
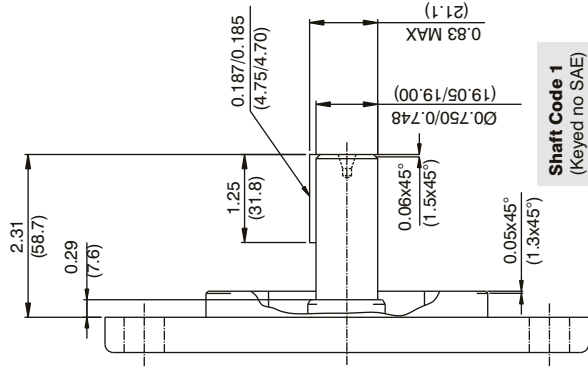


Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD

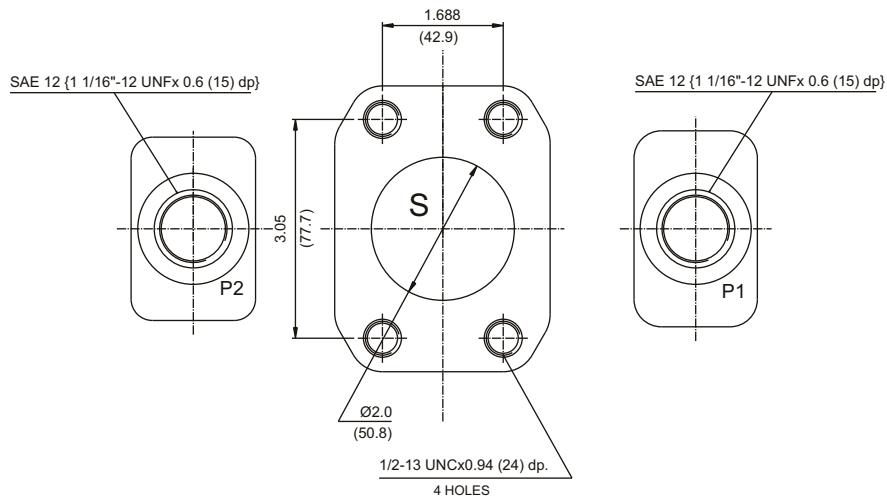


Maximum permissible axial load $F_a = 800\text{N}$ (180 lbs)



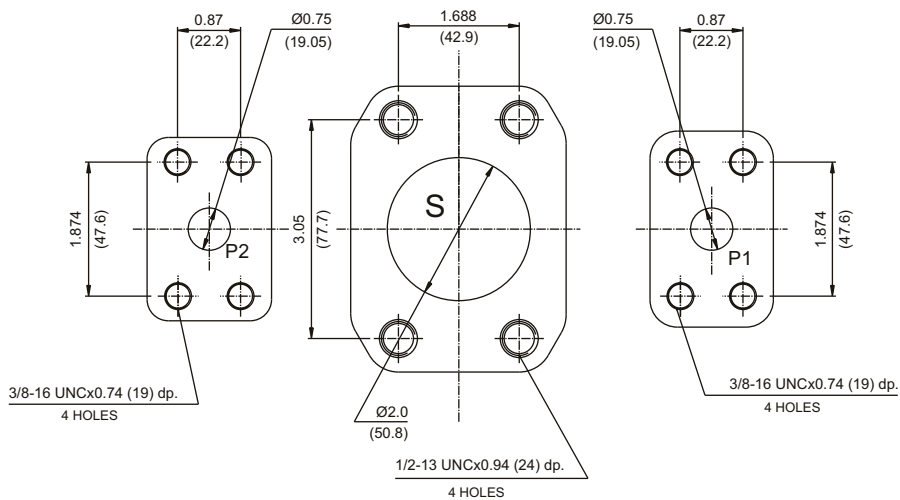
Shaft torque limits in ³ /rev x psi (ml/rev x bar)	
Shaft	Vp x p max. (P1 + P2)
1	12666 (14300)
3	18246 (20602)

Port Connection : 00



VP
DP

Port Connection : 01



Port Connection : M0

