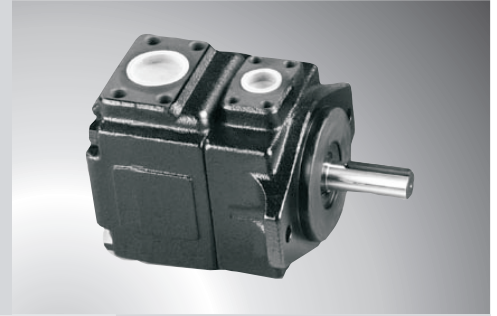


TH6C Vane Pump

Fixed Displacement Vane Pump
Single execution



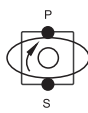
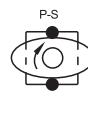
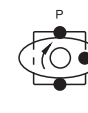

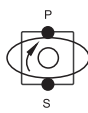
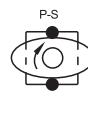
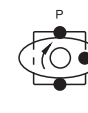

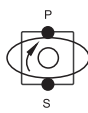
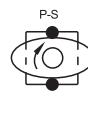
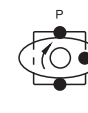

Features

- TH6C and TH6D Series are fixed displacement and balanced type single vane pumps. The pump is designed for higher operating pressure and greater flow at the same housing size.
- With a balanced pin-vane design, outlet pressure is continuously applied only the pin. The pin provides the steady light force against the vane. Top and bottom areas of the vane are subject to the same pressure, either inlet or outlet pressure, depending on the vane's location during rotor rotation. This pin-vane design minimizes noise level and improves volumetric efficiency.
- With the cartridge independent of the shaft, allowing for easy change of flow capacity and field servicing without removing the pump from its mounting.

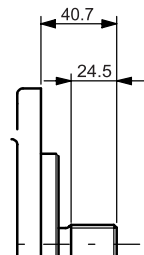
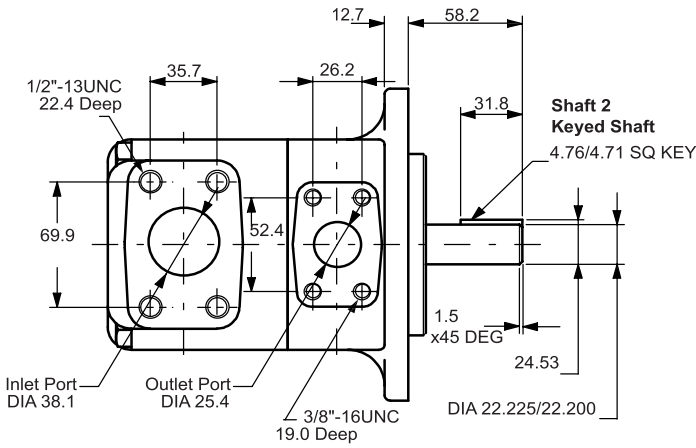
Single pump



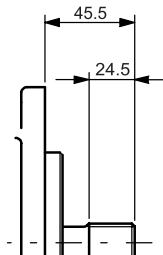
Ordering detail:

<p>Vane pumps" TH" Series ——— TH6C</p> <p>Bidirectional ——— B</p> <p>Y - Metric port connection, Omit for UNC ———</p> <p>Cam ring ——— 012</p> <p>Volumetric displacement cm³/rev (in³/rev)</p> <p>* 003/BO3 = 10.8 (0.66) 015/B15 = 50.5 (3.08)</p> <p>005/BO5 = 17.2 (1.66) 017/B17 = 58.3 (3.56)</p> <p>003/BO3 = 21.3 (1.30) 020/B20 = 63.8 (3.89)</p> <p>008/B08 = 26.4 (1.61) 022/B22 = 70.3 (4.29)</p> <p>010/B10 = 34.1 (2.08) 025/B25 = 79.3 (4.84)</p> <p>012/B12 = 37.1 (2.26) 028/B28 = 88.8 (5.42)</p> <p>014/B14 = 46.0 (2.81) 031/B31 = 100.0 (6.10)</p> <p>**0' - Uni - directional 'B' - Bi - directional</p>	<p>012 2 R 00 1 S</p>	<p>Modifications</p> <p>Seal Class</p> <p>1-S1 (For mineral oil)</p> <p>4-S4 (For fire resistant fluids)</p> <p>5-S5 (For mineral oil & Fire resistant fluids)</p> <p>Porting combination</p> <p>00 - standard</p> <table border="0"> <tr> <td style="text-align: center;">00</td> <td style="text-align: center;">01</td> <td style="text-align: center;">02</td> <td style="text-align: center;">03</td> </tr> <tr> <td style="text-align: center;"></td> <td style="text-align: center;"></td> <td style="text-align: center;"></td> <td style="text-align: center;"></td> </tr> </table> <p>S Suction port P- Pressure port</p> <p>Direction of rotation } R- clockwise (View on shaft end) } L- counter-clockwise</p> <p>Type of shaft</p> <p>1 - keyed (SAE B)</p> <p>2 - keyed (no SAE)</p> <p>3 - splined (SAE B)</p> <p>4 - splined (SAE BB)</p>	00	01	02	03				
00	01	02	03							
										

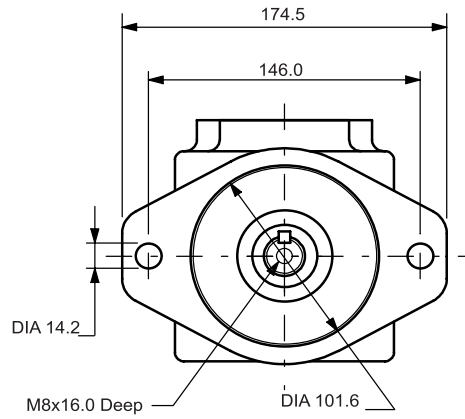
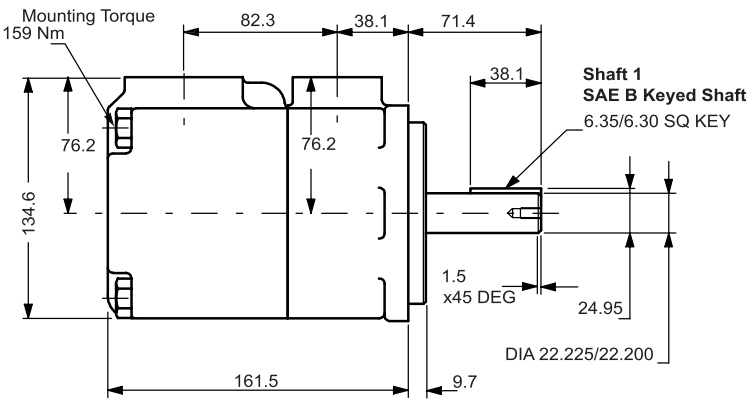
Unit Dimensions TH6C



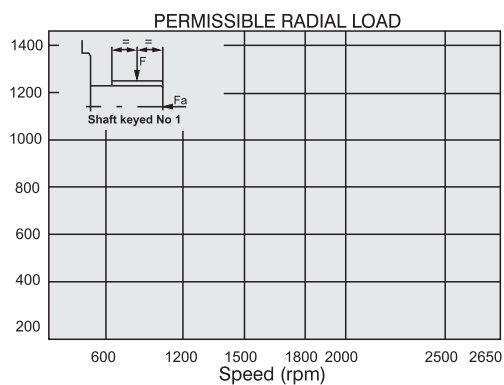
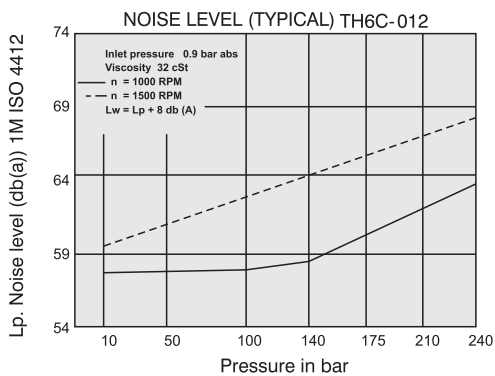
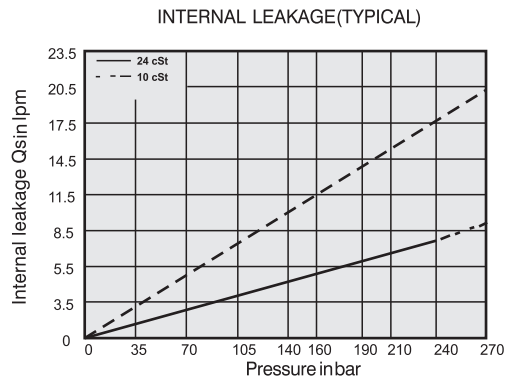
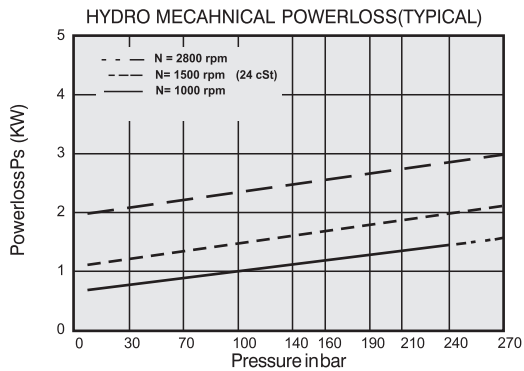
**Shaft 3
SAE B Splined Shaft**
Class 1-J498b 13 Teeth
30 Deg Pressure Angle
16/32 Pitch
Major Dia
21.79/21.54 (.858/.848)
Minor Dia
18.62/18.34 (.733/.722)
Flat root side fit



**Shaft 4
SAE BB Splined Shaft**
Class 1-J498b 15 Teeth
30 Deg Pressure Angle
16/32 Pitch
Major Dia
24.98/24.71 (.983/.973)
Minor Dia
21.80/21.53 (.858/.848)
Flat root side fit



Characteristic curve and performance



Operating Characteristics

Series	Volumetric Displacement		Speed rpm	Flow								Input Power			
				P= 0 bar (0 psi)		P= 140 bar (2000 psi)		P= 240 bar (3000 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
TH6C-003	0.66	10.8	1000	2.86	10.8	1.53	5.8	-	-	1.34	1.0	4.83	3.6	-	-
			1500	4.29	16.2	2.96	11.2	2.04	7.7	1.74	1.3	7.11	5.3	11.26	8.4
TH6C-005	1.05	17.2	1000	4.55	17.2	3.23	12.2	2.30	8.7	1.48	1.1	6.84	5.1	11.26	8.4
			1500	6.83	25.8	5.50	20.8	4.58	17.3	1.88	1.4	10.06	7.5	16.36	12.2
TH6C-006	1.30	21.3	1000	5.63	21.3	4.31	16.3	3.39	12.8	1.48	1.1	8.05	6.0	13.41	10.0
			1500	8.44	31.9	7.12	26.9	6.19	23.4	2.01	1.5	11.94	8.9	19.71	14.7
TH6C-008	1.61	26.4	1000	6.98	26.4	5.66	21.4	4.74	17.9	1.61	1.2	9.66	7.2	16.23	12.1
			1500	10.48	39.6	9.15	34.6	8.23	31.1	2.15	1.6	14.35	10.7	22.93	17.1
TH6C-0010	2.08	34.1	1000	9.02	34.1	7.70	39.1	6.77	25.6	1.74	1.3	11.94	8.9	20.25	15.1
			1500	13.52	51.1	12.20	46.1	11.27	42.6	2.28	1.7	18.64	13.9	29.90	22.3
TH6C-0012	2.26	37.1	1000	9.81	37.1	8.49	32.1	7.57	28.6	1.74	1.3	12.87	9.6	21.86	16.3
			1500	14.71	55.6	13.39	50.6	12.46	47.1	2.28	1.7	19.31	14.4	32.32	24.1
TH6C-0014	2.81	46.0	1000	12.17	46.0	10.85	41.0	9.92	37.5	1.88	1.4	15.69	11.7	26.69	19.9
			1500	18.25	69.0	16.93	64.0	16.00	60.5	2.55	1.9	23.60	17.6	39.56	29.5
TH6C-0017	3.56	58.3	1000	15.42	58.3	14.10	53.3	13.17	49.8	2.15	1.6	19.44	14.5	33.26	24.8
			1500	23.12	87.4	21.80	82.4	20.87	78.9	2.82	2.1	29.37	21.9	49.48	36.9
TH6C-0020	3.89	63.8	1000	16.88	63.8	15.56	58.8	14.63	55.3	2.15	1.6	21.19	15.8	36.21	27.0S
			1500	25.32	95.7	24.00	90.7	23.07	87.2	2.95	2.2	31.92	23.8	53.91	40.2
TH6C-0022	4.29	70.3	1000	18.60	70.3	17.28	65.3	16.35	61.8	2.28	1.7	23.20	17.3	39.69	29.6
			1500	27.88	105.4	26.56	100.4	25.63	96.9	3.08	2.3	35.00	26.1	59.14	44.1
TH6C-0025*	4.84	79.3	1000	20.98	79.3	19.66	74.3	18.73	70.8	2.41	1.8	25.88	19.3	44.52	33.2
			1500	31.46	118.9	30.13	113.9	29.21	110.4	3.35	2.5	39.16	29.2	66.38	49.5
TH6C-0028*	5.42	88.8	1000	23.49	88.8	22.22	84.0	-	-	2.55	1.9	29.37	21.9	-	-
			1500	35.24	133.2	33.91	128.2	-	-	3.57	2.8	43.85	32.7	-	-
TH6C-0031*	6.10	100.0	1000	26.46	100.0	25.13	95.0	-	-	2.68	2.0	32.72	24.4	-	-
			1500	39.68	150.0	38.36	145.0	-	-	3.57	2.8	48.95	36.5	-	-

* 025, 028, 031 - 2500 rpm max.
 * 028, 031 - 3000 psi (210 bar) max int.
 - Not to use because internal leakage is greater than 50% of theoretical flow.

Performance data dimensions & port details

Size	Displacement	Max Speed	Min Speed	Max Intermittent Pressure	Max Continuous Pressure	Weight
003	10.8	2800	600	280	240	15
005	17.2					
006	21.3					
008	26.4					
010	34.1					
012	37.1					
014	46.0					
017	58.3					
020	63.8					
022	70.3					
025	79.3	2500	600	210	160	
028	88.8					
031	100.0					

