

## VM3B SERIES VANE MOTOR

High performance motors,  
max pressure up to 175 bar.

## HIGH PERFORMANCE VANE MOTOR M3B / M3B1

**M3B1**  
**M3B - 036 - 1 N 00 - B 1 01 \***

**Series external drain** →

**Series internal drain** →

**Torque**

009 = 0.130 Nm/bar  
012 = 0.186 Nm/bar  
018 = 0.304 Nm/bar  
027 = 0.485 Nm/bar  
036 = 0.624 Nm/bar

**Type of shaft**

1 - keyed (no SAE)  
3 - splined (SAE A)  
4 - splined (SAE B)

**Rotation**

N - bi-directional

**View from shaft end:**

CW rotation    A = inlet  
                    B = outlet

CCW rotation    A = outlet  
                    B = inlet

**Modifications**

**Port connections**

00 = SAE threaded port  
SAE drain

01 = SAE 4 bolt flange  
BSPP drain

02 = BSPP threaded port  
BSPP drain

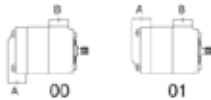
**Seal class**

1 - S1  
4 - S4  
5 - S5

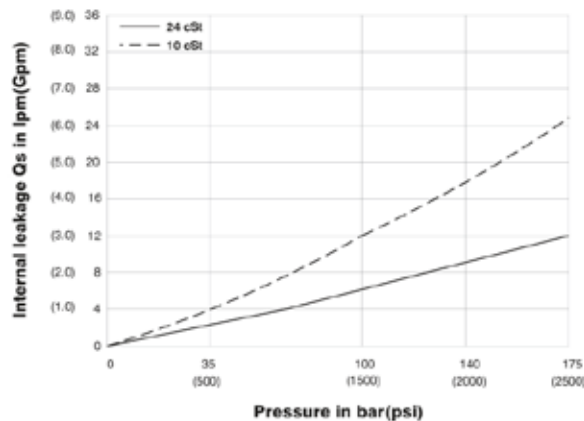
**Design letter**

**Porting combination**

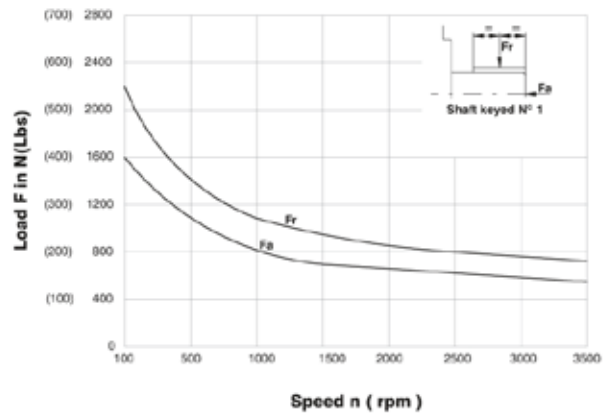
00 - standard



### INTERNAL LEAKAGE



### PERMISSIBLE RADIAL AND AXIAL LOADS



### OPERATING CHARACTERISTICS - TYPICAL (24 cSt)

Model	Series	Volumetric Displacement Vi		Input flow at n = 2000 rpm				Torque T at n = 2000 rpm		Power output at n = 2000 rpm	
				Theoretical		at 175 bar (2500 psi) Δp		at 175 bar (2500 psi) Δp		at 175 bar (2500 psi) Δp	
		in <sup>3</sup> /rev	cm <sup>3</sup> /rev	GPM	l/min	GPM	l/min	in.lbf	Nm	HP	KW
M3B	009	0.56	9.2	4.9	18.4	8.0	30.4	174.3	19.7	5.8	4.3
	012	0.75	12.3	6.5	24.6	9.7	36.6	236.3	26.7	7.8	5.8
	018	1.13	18.5	9.8	37.0	12.9	49.0	412.4	46.6	13.4	10.0
	027	1.70	27.8	14.7	55.6	17.8	67.6	680.5	77.4	21.8	16.3
	036	2.26	37.1	19.6	74.2	22.8	86.2	902.6	102.0	28.3	21.1

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