

M4D SERIES VANE MOTOR

High performance motors,
max pressure up to 175 bar.

HIGH PERFORMANCE VANE MOTOR M4D / M4SD

M4*D1
M4*D - 138 - 1 N 00 - B 1 02 *

Series external drain ————

Series internal drain ————

Torque

062 = 1.04 Nm/bar
074 = 1.22 Nm/bar
088 = 1.45 Nm/bar
102 = 1.68 Nm/bar
113 = 1.86 Nm/bar
128 = 2.11 Nm/bar
138 = 2.30 Nm/bar

Type of shaft

1 - keyed (SAE C)
3 - splined (SAE C)
S - splined (SAE J718c)

Rotation

N - Bi-directional

Modifications

Port connections

01 = SAE threaded port
SAE drain
02 = SAE 4 bolt flange
UNC threaded - SAE drain
04 = SAE 4 bolt flange
UNC threaded - BSPP drain
M4 = SAE 4 bolt flange
metric threaded - BSPP drain

Seal class

1 - S1 (VM4D)
5 - S5 (VM4SD)

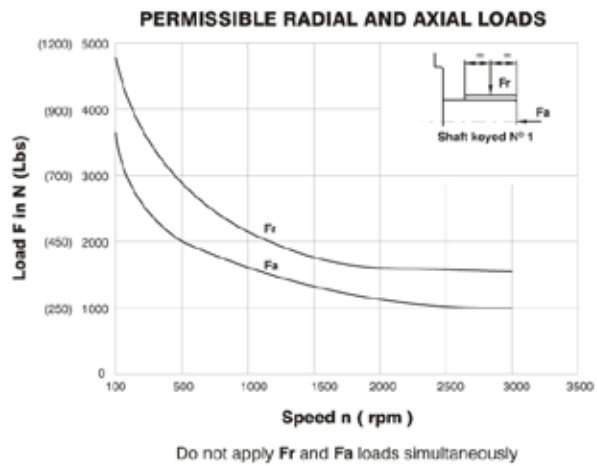
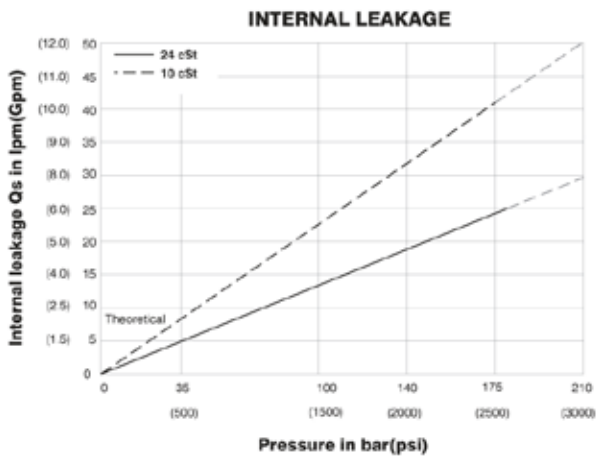
Design letter

Porting combination

00 - standard

* S = Severe duty motor
VM4D1-VM4SD1 : Drain port is plugged

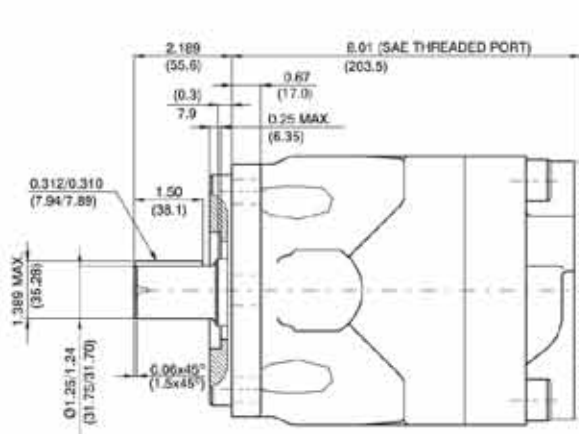
View from shaft end:
CW rotation A = inlet B = outlet
CCW rotation A = outlet B = inlet



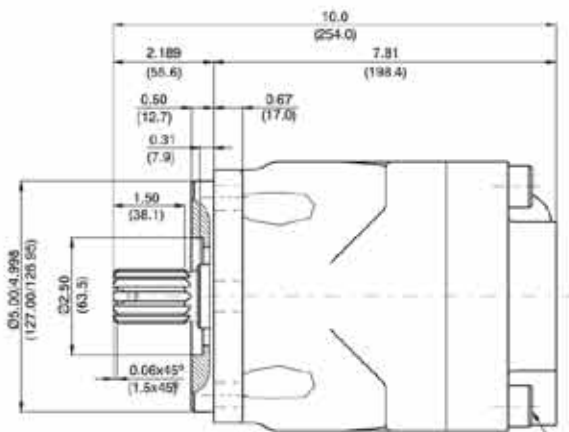
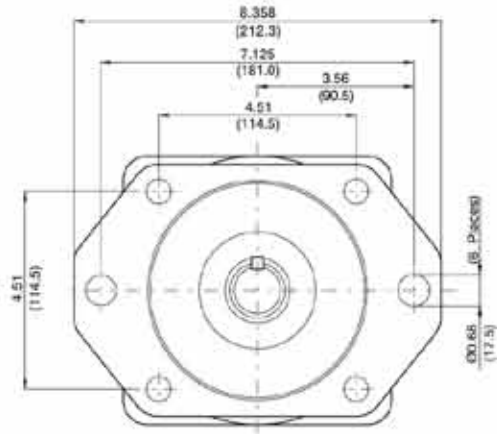
OPERATING CHARACTERISTICS - TYPICAL (24 cSt)

Model	Series	Volumetric Displacement V _i		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 ³ /rev	cm ³ /rev	GPM	l/min	GPM	l/min	in.lbf	Nm	HP	KW
M4D-M4SD	062	3.97	65.1	33.8	130.0	40.0	154.0	1460.0	165.0	45.4	34.6
	074	4.69	76.8	41.5	154.0	47.8	178.0	1770.0	200.0	56.2	41.9
	088	5.56	91.1	48.0	182.0	54.4	206.0	2088.5	236.0	66.2	49.4
	102	6.44	105.5	55.5	211.0	61.8	241.0	2336.3	264.0	74.1	55.3
	113	7.12	116.7	61.5	233.0	67.9	257.0	2655.0	300.0	84.2	62.8
	128	8.08	132.4	70.0	265.0	76.3	289.0	3009.0	340.0	95.5	71.2
	138	8.81	144.4	76.3	289.0	82.7	313.0	3292.0	372.0	104.5	77.9

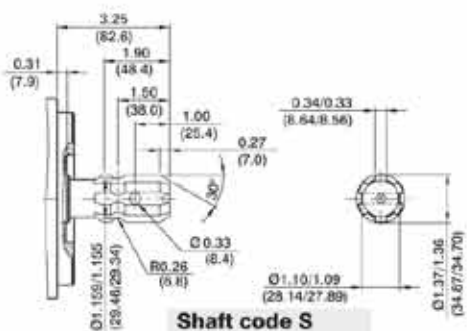
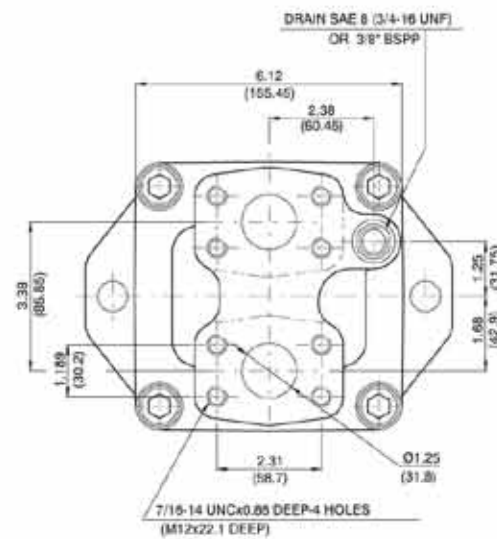
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Shaft code 1
(Keywd SAE C)

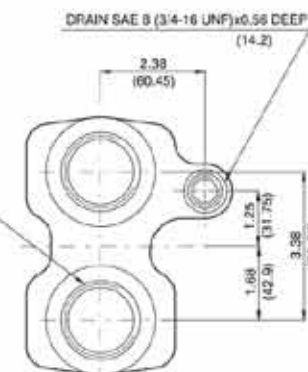


Shaft code 3
SAE C splined shaft
Class 1-J450b
12/24 dp 14 teeth
30° pressure angle
Flat root side fit



Shaft code S
SAE J710C
540 rpm power take-off
For Farm Tractor application

SAE 20(1 5/8-12 UNF)x0.75 DEEP (19.0) 2 HOLES



SAE THREADED PORT