

## M4E SERIES VANE MOTOR

High performance motors,  
max pressure up to 175 bar.

## HIGH PERFORMANCE VANE MOTOR M4E / M4SE

**M4\*E1**  
**M4\*E - 214 - 1 N 00 - B 5 02 \***

**Series external drain** \_\_\_\_\_

**Series internal drain** \_\_\_\_\_

**Torque** \_\_\_\_\_  
 153 = 2.52 Nm/bar  
 185 = 3.05 Nm/bar  
 214 = 3.53 Nm/bar

**Type of shaft** \_\_\_\_\_  
 1 - keyed (SAE C)  
 3 - splined (SAE C)

**Rotation** \_\_\_\_\_  
 N - Bi-directional

\*S = Severe duty motor  
 VM4E1-VM4SE1 : Drain port is plugged

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

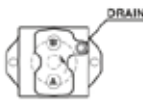
**Modifications**

**Port connections**  
 01 = SAE threaded port  
       SAE drain  
 02 = SAE 4 bolt flange  
       UNC threaded - SAE drain  
 04 = SAE 4 bolt flange  
       UNC threaded - BSSP drain

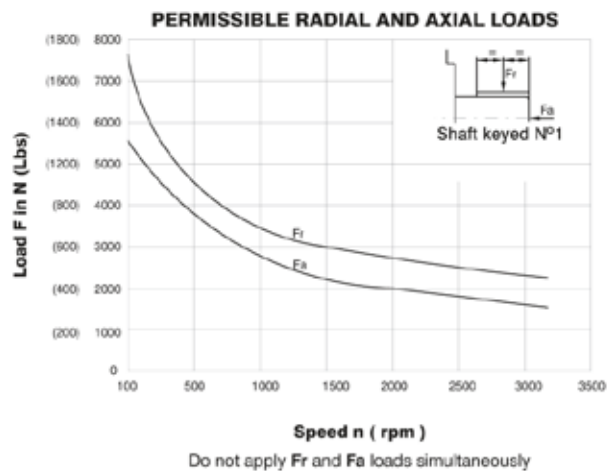
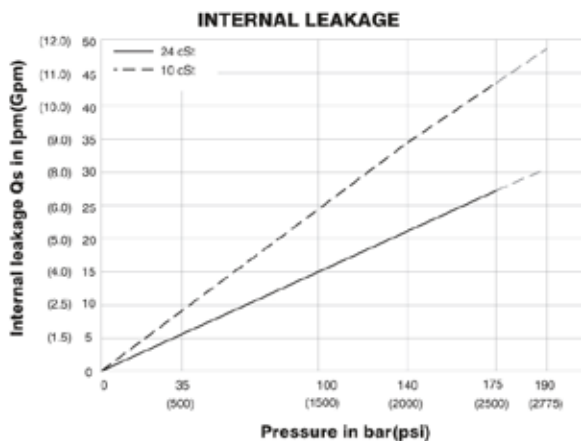
**Seal class**  
 5 - S5

**Design letter**

**Porting combination**  
 00 - standard



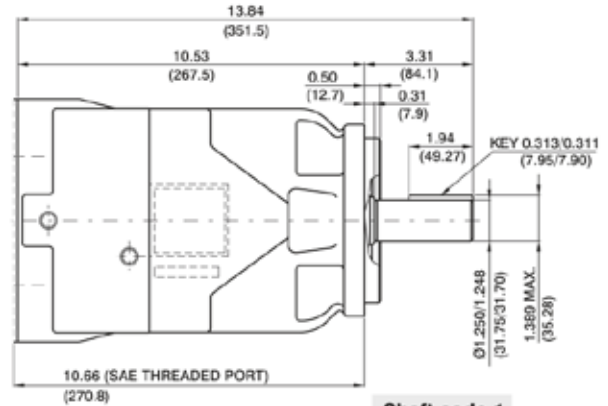
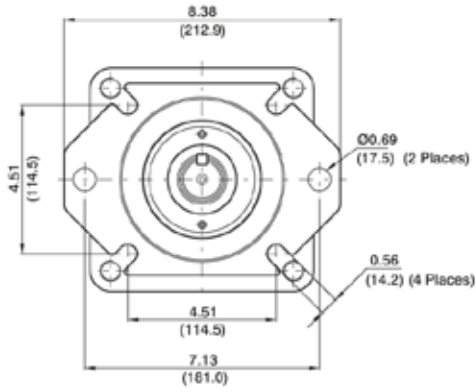
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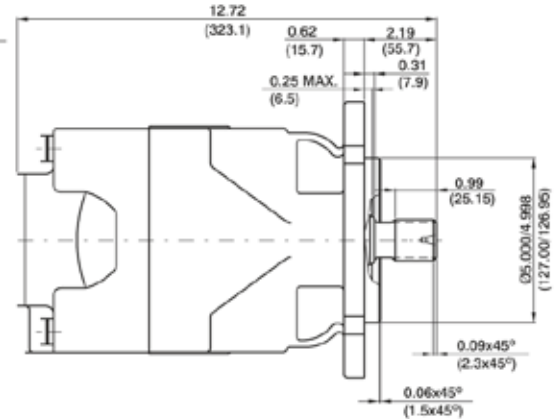
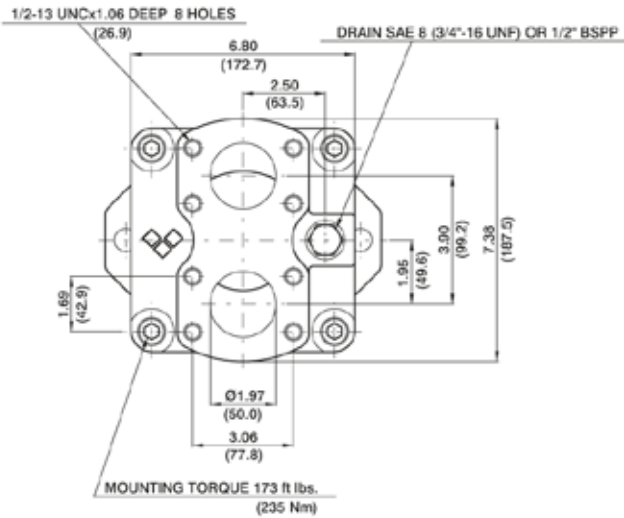
### OPERATING CHARACTERISTICS - TYPICAL (24 cSt)

| 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    |
| M4E-M4SE | 153    | 9.67                       | 158.5                | 83.7                       | 316.4 | 90.6                     | 343.0 | 3522.0                   | 398.0 | 111.8                        | 83.4  |
|          | 185    | 11.69                      | 191.6                | 101.2                      | 382.5 | 108.0                    | 409.0 | 4283.2                   | 484.0 | 136.0                        | 101.4 |
|          | 214    | 13.55                      | 222.0                | 117.3                      | 443.4 | 124.2                    | 470.0 | 5017.7                   | 567.0 | 159.3                        | 118.8 |

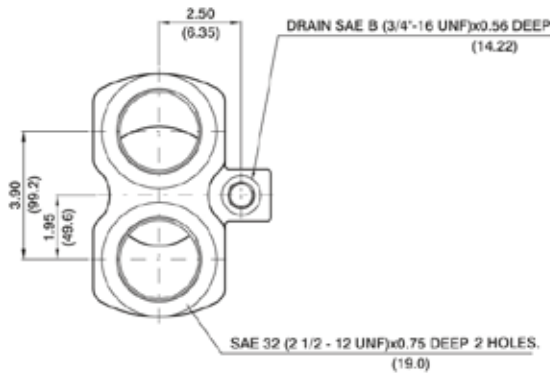
# HIGH PERFORMANCE VANE MOTOR M4E / M4SE



**Shaft code 1**  
(Keyed SAE C)



**Shaft code 3**  
SAE C splined shaft  
Class 1-J498b  
12/24 dp, 14 teeth  
30° pressure angle  
Flat root side fit



**SAE THREADED PORT**