

# M4E Ordering Code

**M4\*E\ M4\*E1 - 214 - 1 N 00 - B 5 02 \***  
 ①            ②            ③    ④⑤⑥    ⑦⑧    ⑨    ⑩

① **Series external drain**

② **Series internal drain**

③ **Torque**

153 = 2.52 Nm/bar  
 185 = 3.05 Nm/bar  
 214 = 3.53 Nm/bar

④ **Type of shaft**

1-Keyed (SAE C)  
 3-Splined (SAE C)

⑤ **Rotation**

N - Bi-directional

\*S = Severe duty motor

M4E1- M4SE1 : Drain port is plugged

### View from shaft end

CW rotation    A = inlet    B = outlet

CCW rotation    A = outlet    B = inlet

⑥ **Porting combination**

00-standard

⑦ **Design letter**

⑧ **Seal class**

5-S5

⑨ **Port connections**

01 = SAE threaded port  
 SAE drain

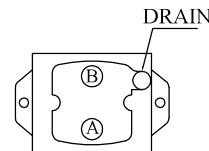
02 = SAE 4 bolt flange

UNC threaded - SAE drain

04 = SAE 4 bolt flange

UNC threaded - BSPP drain

⑩ **Modifications**



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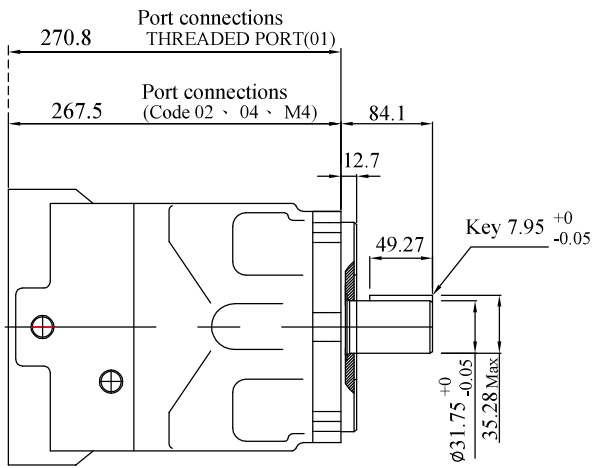
**Porting combination**

00-standard

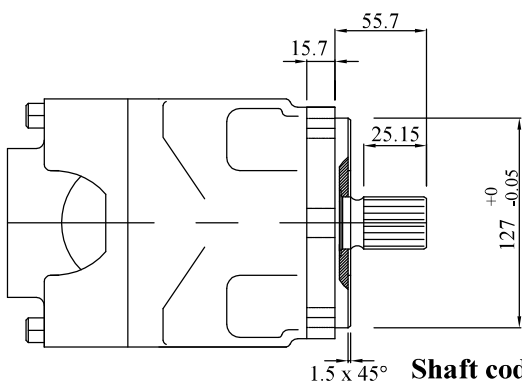
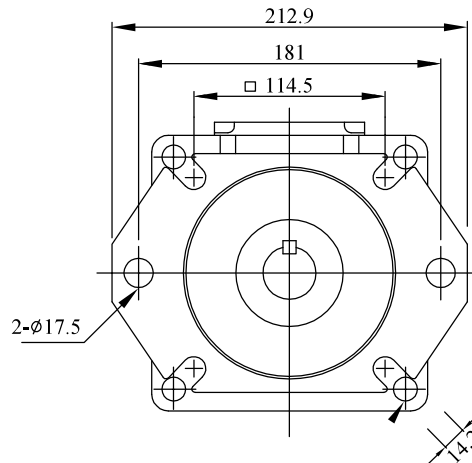
## OPERATING CHARACTERISTICS - TYPICAL (24 cST)

MODEL	Series	Volumetric Displacement Vi ml/rev	Input flow at n=2000 rpm		Torque T n =2000 rpm		Power output n =2000 rpm		Max Pressure Kg/cm <sup>2</sup>	Max Speed r.p.m
			Theoretical	at 175 bar (2500psi) Δ p	at 175 bar (2500psi) Δ p		at 175 bar (2500psi) Δ p			
			ℓ / min	ℓ / min	in.lbf	Nm	HP	Kw		
M4E M4SE	153	158.5	316.4	343.0	3522.0	398.0	111.8	83.4	175	3600
	185	191.6	382.5	409.0	4283.2	484.0	136.0	101.4		
	214	222.0	443.4	470.0	5017.7	567.0	159.3	118.8		

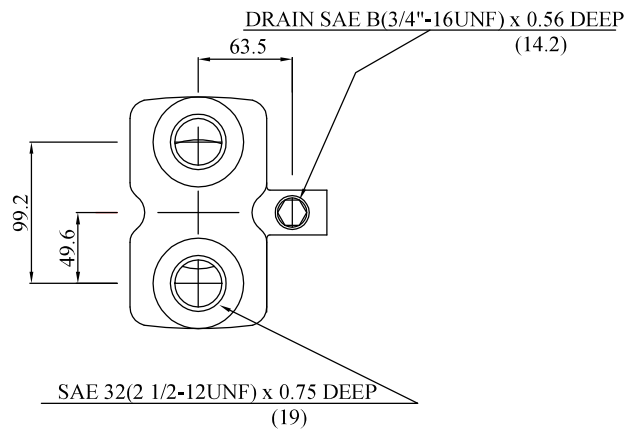
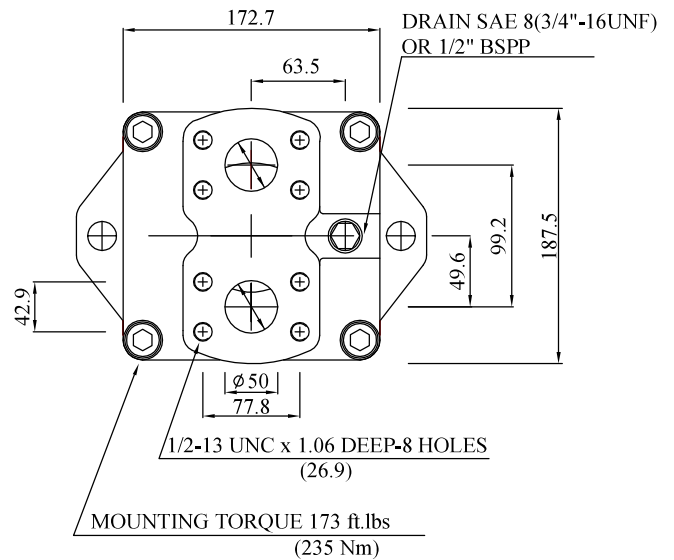
# M4E Dimensional Drawing



**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**

# M4D Ordering Code

**M4\*D\ M4\*D1 - 138 - 1 N 00 - B 1 02 \***  
 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10)

① **Series external drain**

② **Series internal drain**

③ **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

④ **Type of shaft**

1-Keyed (SAE C)  
 3-Splined (SAE C)  
 S-Splined (SAE J718C)

⑤ **Rotation**

N - Bi-directional

\*S = Severe duty motor

M4D1- M4SD1 : Drain port is plugged

### View from shaft end

CW rotation A = inlet B = outlet

CCW rotation A = outlet B = inlet

⑥ **Porting combination**

00-standard

⑦ **Design letter**

⑧ **Seal class**

1-S1 (M4D)

5-S5 (M4SD)

⑨ **Port connections**

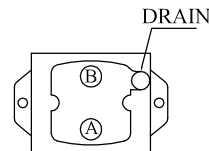
01 = SAE threaded port  
 SAE drain

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

⑩ **Modifications**



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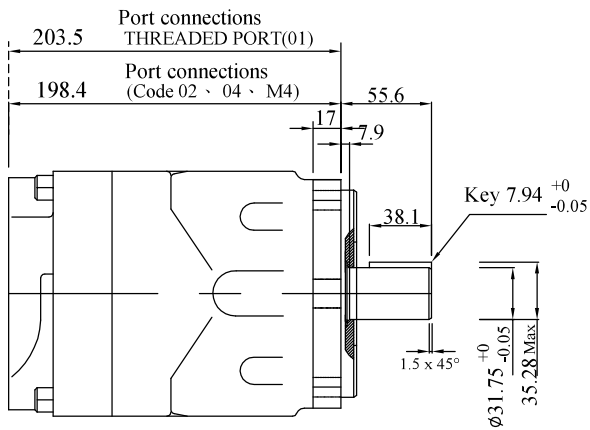
**Porting combination**

00-standard

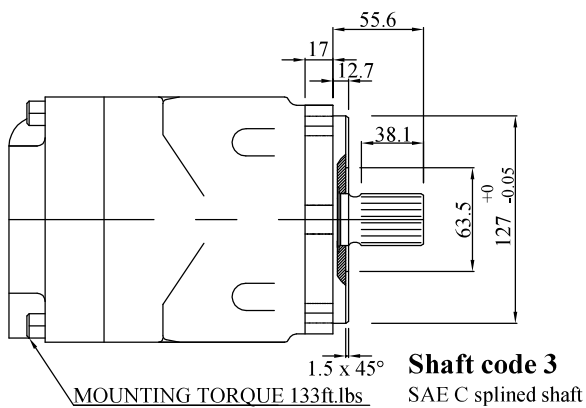
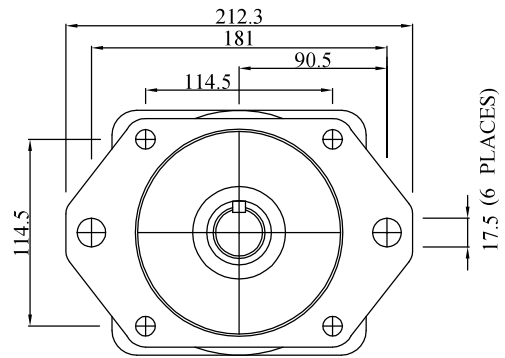
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			Theoretical	at 175 bar (2500psi) Δp	at 175 bar (2500psi) Δp		at 175 bar (2500psi) Δp			
			ml/rev	ℓ / min	ℓ / min	in.lbs	Nm	HP		
M4D ∩ M4SD	062	65.1	130.0	154.0	1460.0	165.0	46.4	34.6	175	4000
	074	76.8	154.0	178.0	1770.0	200.0	56.2	41.9		
	088	91.1	182.0	206.0	2088.5	236.0	66.2	49.4		
	102	105.5	211.0	241.0	2336.3	264.0	74.1	55.3		
	113	116.7	233.0	257.0	2655.0	300.0	84.2	62.8		
	128	132.4	265.0	289.0	3009.0	340.0	95.5	71.2		
	138	144.4	289.0	313.0	3292.0	372.0	104.5	77.9		

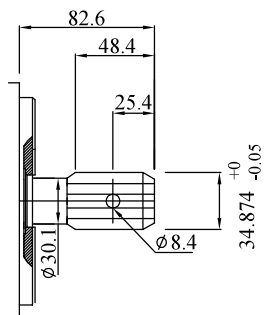
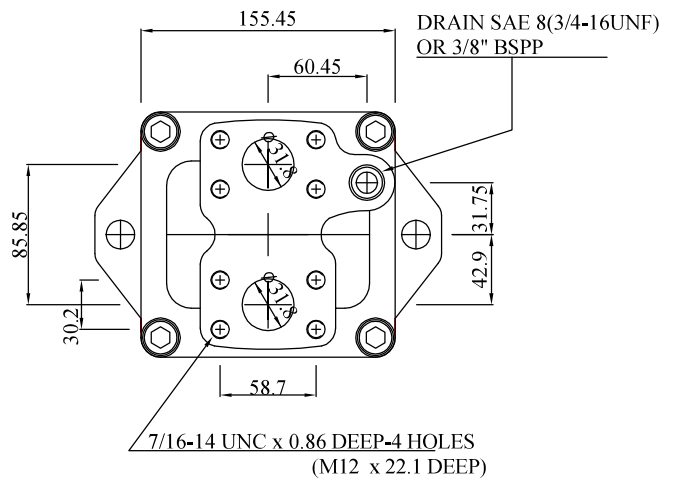
# M4D Dimensional Drawing



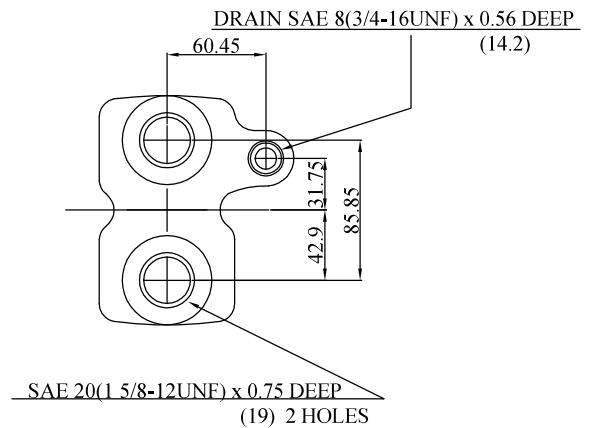
**Shaft code 1**  
(keyed SAE B)



**Shaft code 3**  
SAE C splined shaft  
(180 Class 1 - J498b)  
12/24 dp. 14 teeth  
30° pressure angle  
flat root side fit



**Shaft code S**  
ISO 500-3  
splined shaft  
16/32 dp. 21 teeth  
30° pressure angle  
flat root side fit.



**SAE THREADED PORT**

# M4E Ordering Code

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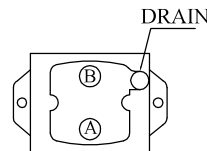
⑥ **Porting combination**  
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⑦ **Design letter**

⑧ **Seal class**  
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⑨ **Port connections**  
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      SAE drain  
 02 = SAE 4 bolt flange  
      UNC threaded - SAE drain  
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      UNC threaded - BSPP drain

⑩ **Modifications**



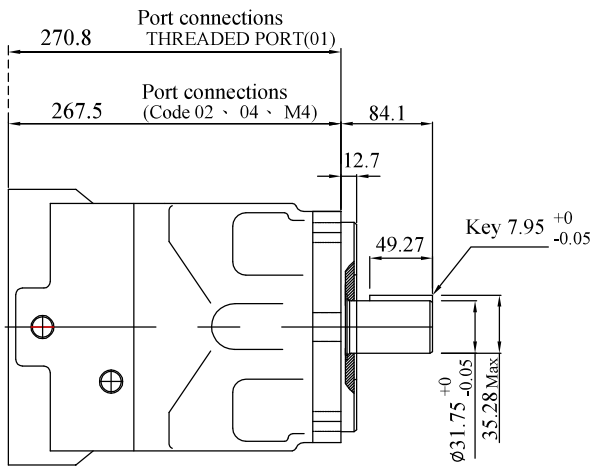
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**Porting combination**  
 00-standard

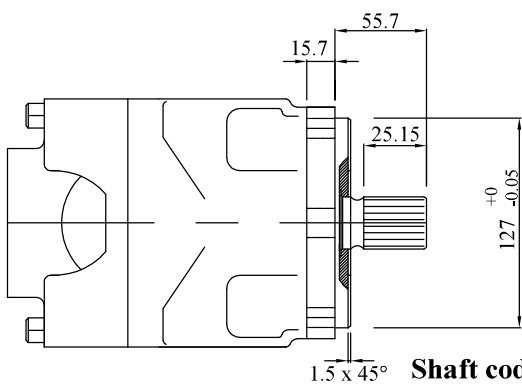
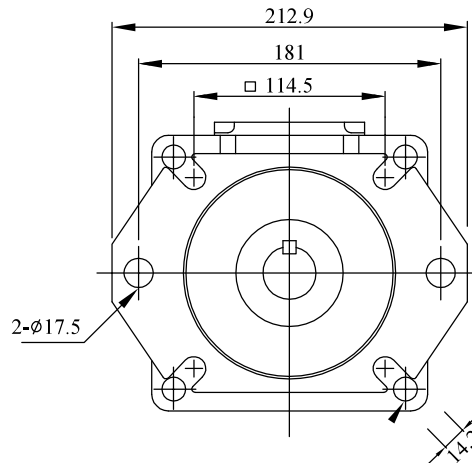
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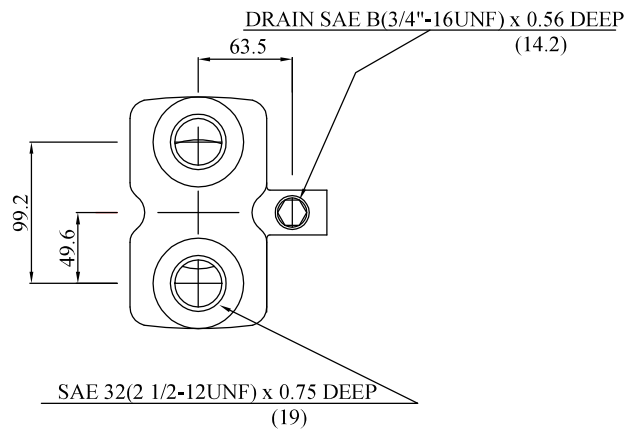
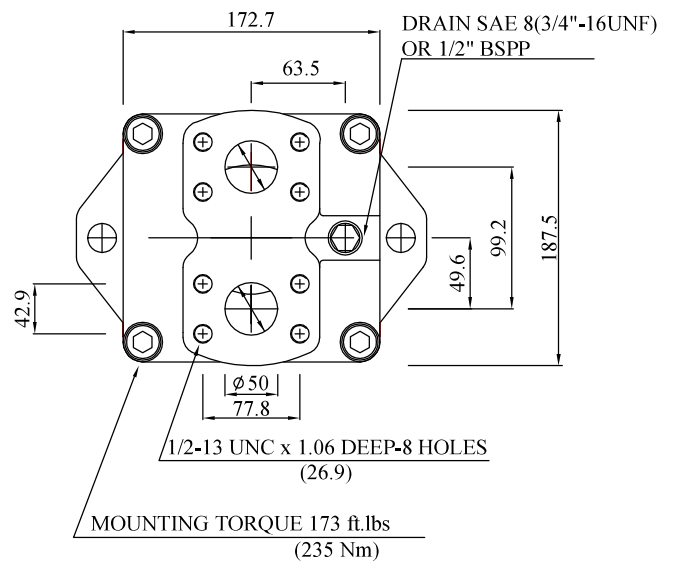
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**SAE THREADED PORT**