

SANMOTION F

2-Phase Stepping motor



High-Torque NEMA 34
1.8° Stepping Motor
New lineup

UL/CE Recognition

Class-F
IP40

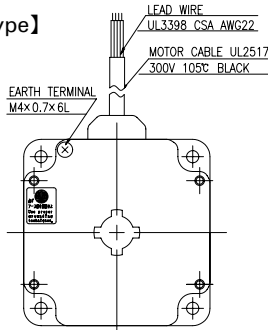
Standard
UL1004
EN60034-1
EN60034-5

Specifications (For Bipolar drive)

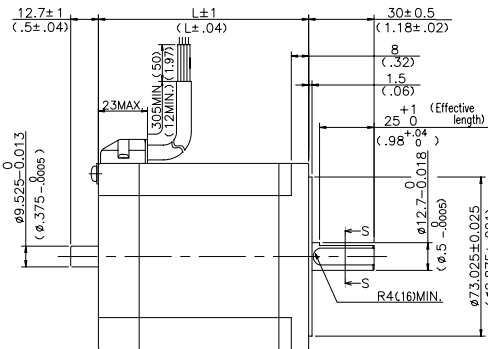
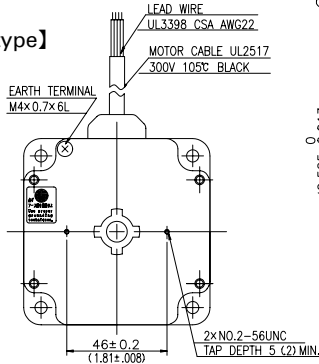
| Model | | Holding torque at 2-phase energization | Rated current | Winding resistance | Winding inductance | Rotor inertia | Mass |
|--------------|--------------|--|---------------|--------------------|--------------------|--|-------------|
| Single shaft | Double shaft | N-m (oz-in) MIN. | A/phase | Ω/phase | mH/phase | $\times 10^{-4}$ kg-m ² (oz-in ²) | kg (lbs) |
| SM2861-5052 | -5022 | 3.3(467.3) | 2 | 2.2 | 15 | 1.48 (8.09) | 1.75 (3.92) |
| SM2861-5152 | -5122 | 3.3(467.3) | 4 | 0.56 | 3.7 | 1.48 (8.09) | 1.75 (3.92) |
| SM2861-5252 | -5222 | 3.3(467.3) | 6 | 0.29 | 1.7 | 1.48 (8.09) | 1.75 (3.92) |
| SM2862-5052 | -5022 | 6.4(906.3) | 2 | 3.2 | 25 | 3 (16.4) | 2.9 (6.5) |
| SM2862-5152 | -5122 | 6.4(906.3) | 4 | 0.83 | 6.4 | 3 (16.4) | 2.9 (6.5) |
| SM2862-5252 | -5222 | 6.4(906.3) | 6 | 0.36 | 2.8 | 3 (16.4) | 2.9 (6.5) |
| SM2863-5052 | -5022 | 9 (1274.5) | 2 | 4 | 32 | 4.5 (24.6) | 4 (8.96) |
| SM2863-5152 | -5122 | 9 (1274.5) | 4 | 1 | 7.9 | 4.5 (24.6) | 4 (8.96) |
| SM2863-5252 | -5222 | 9 (1274.5) | 6 | 0.46 | 3.8 | 4.5 (24.6) | 4 (8.96) |

Dimensions

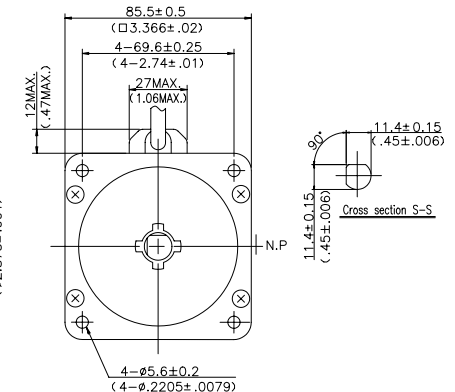
[Single shaft type]



[Double shaft type]



| Model | | Motor length |
|--------------|--------------|--------------|
| Single shaft | Double shaft | mm (inch) |
| SM2861-5052 | -5022 | 66 (2.6) |
| SM2861-5152 | -5122 | 66 (2.6) |
| SM2861-5252 | -5222 | 66 (2.6) |
| SM2862-5052 | -5022 | 96.5 (3.8) |
| SM2862-5152 | -5122 | 96.5 (3.8) |
| SM2862-5252 | -5222 | 96.5 (3.8) |
| SM2863-5052 | -5022 | 127 (5) |
| SM2863-5152 | -5122 | 127 (5) |
| SM2863-5252 | -5222 | 127 (5) |



■ Pulse Rate-Torque Characteristics

Common Driving Conditions

Sanyo standard circuit

Source voltage: 100VAC

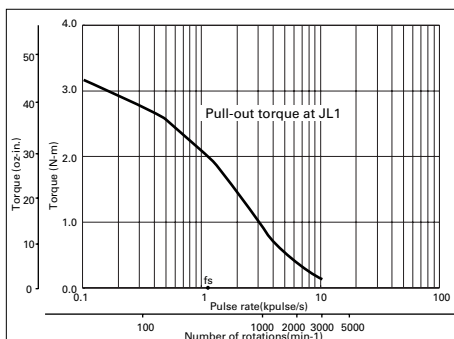
Driving method: 2-phase energization (full-step)

JL1: 83.65 oz-in² (Uses rubber coupling)

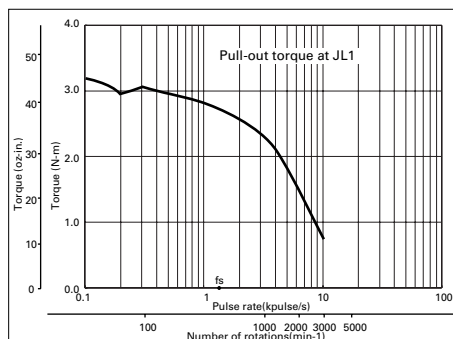
JL2: 240.6 oz-in² (Uses rubber coupling)

fs: No load maximum starting pulse rate

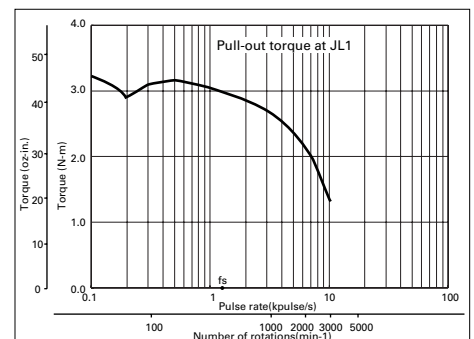
SM2861-5052(Single shaft)
SM2861-5022(Double shaft)
Input current: 2A/phase



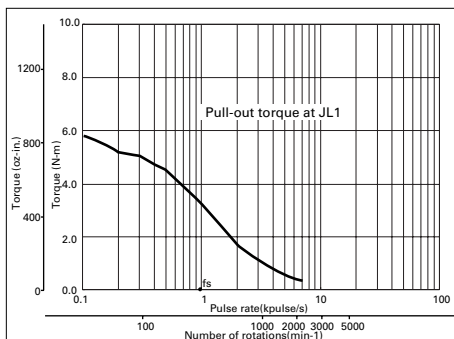
SM2861-5152(Single shaft)
SM2861-5122(Double shaft)
Input current: 4A/phase



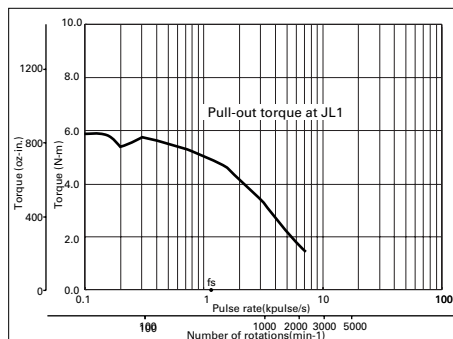
SM2861-5252(Single shaft)
SM2861-5222(Double shaft)
Input current: 6A/phase



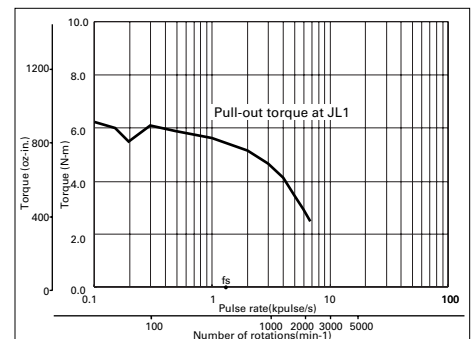
SM2862-5052(Single shaft)
SM2862-5022(Double shaft)
Input current: 2A/phase



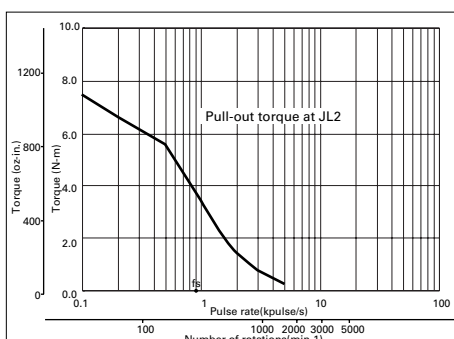
SM2862-5152(Single shaft)
SM2862-5122(Double shaft)
Input current: 4A/phase



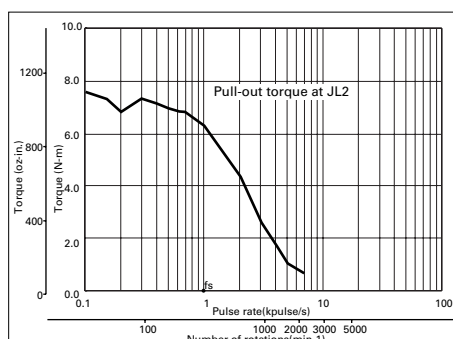
SM2862-5252(Single shaft)
SM2862-5222(Double shaft)
Input current: 6A/phase



SM2863-5052(Single shaft)
SM2863-5022(Double shaft)
Input current: 2A/phase



SM2863-5152(Single shaft)
SM2863-5122(Double shaft)
Input current: 4A/phase



SM2863-5252(Single shaft)
SM2863-5222(Double shaft)
Input current: 6A/phase

