

# SANMOTION F

## 2-Phase Stepping motor



High-Torque NEMA 34  
1.8° Stepping Motor  
New lineup

UL/CE Recognition  
Class-F  
IP40

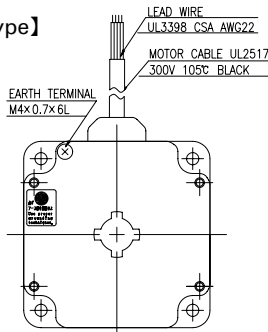
Standard  
UL1004  
EN60034-1  
EN60034-5

### Specifications (For Bipolar drive)

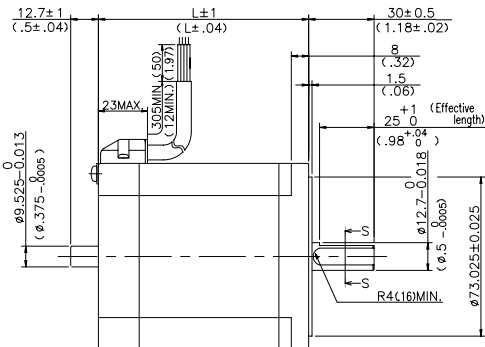
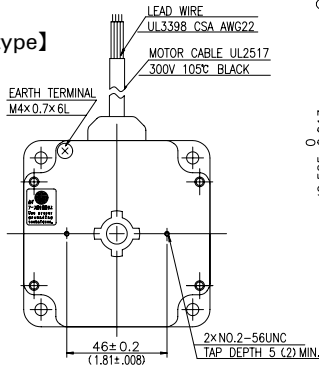
Model		Holding torque at 2-phase energization	Rated current	Winding resistance	Winding inductance	Rotor inertia	Mass
Single shaft	Double shaft	N-m (oz-in) MIN.	A/phase	Ω/phase	mH/phase	$\times 10^{-4}$ kg-m <sup>2</sup> (oz-in <sup>2</sup> )	kg (lbs)
SM2861-5052	-5022	3.3(467.3)	2	2.2	15	1.48 (8.09)	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

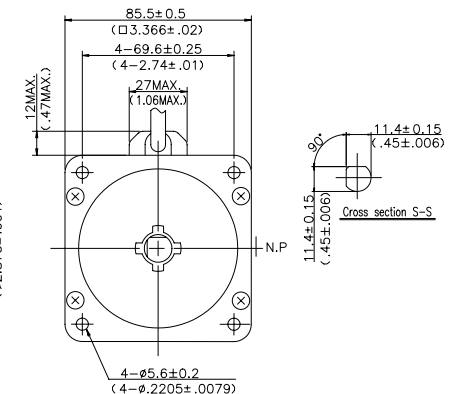
[Single shaft type]



[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

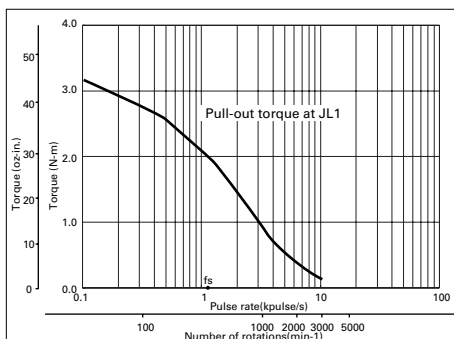
Driving method: 2-phase energization (full-step)

JL1: 83.65 oz-in<sup>2</sup> (Uses rubber coupling)

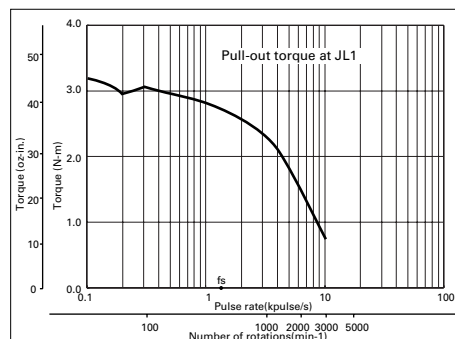
JL2: 240.6 oz-in<sup>2</sup> (Uses rubber coupling)

fs: No load maximum starting pulse rate

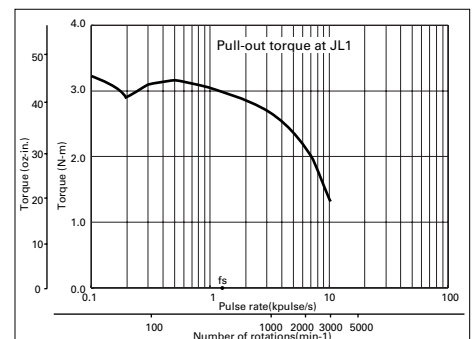
SM2861-5052(Single shaft)  
SM2861-5022(Double shaft)  
Input current: 2A/phase



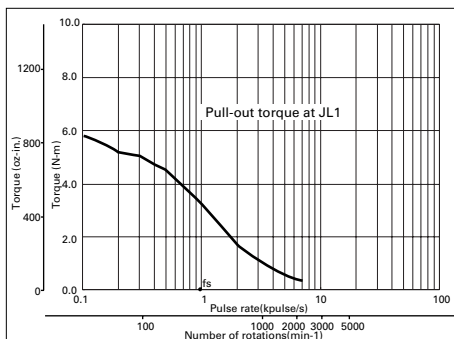
SM2861-5152(Single shaft)  
SM2861-5122(Double shaft)  
Input current: 4A/phase



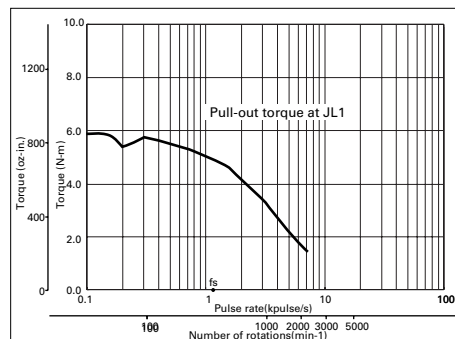
SM2861-5252(Single shaft)  
SM2861-5222(Double shaft)  
Input current: 6A/phase



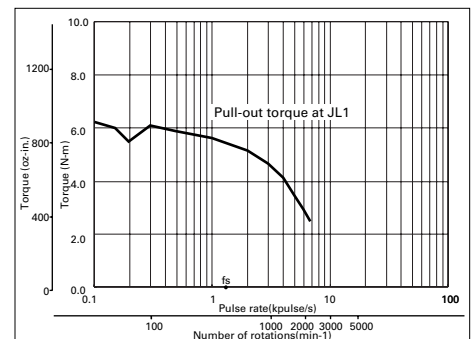
SM2862-5052(Single shaft)  
SM2862-5022(Double shaft)  
Input current: 2A/phase



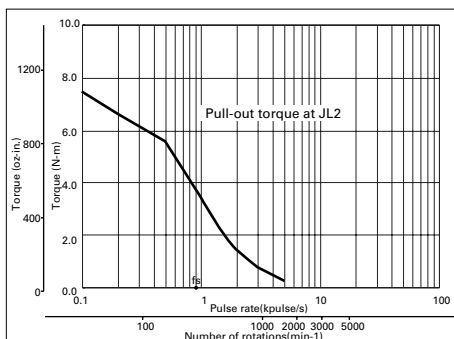
SM2862-5152(Single shaft)  
SM2862-5122(Double shaft)  
Input current: 4A/phase



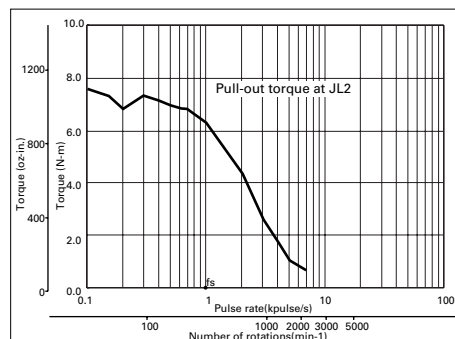
SM2862-5252(Single shaft)  
SM2862-5222(Double shaft)  
Input current: 6A/phase



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

