

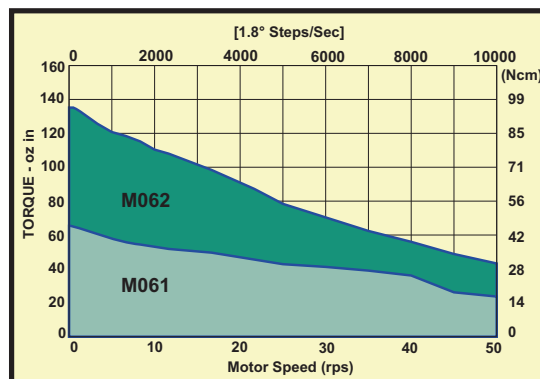
M06

Standard 60mm Frame Size (NEMA Size 23)



Performance Envelope

(see page DC11 for detailed torque-speed curves)



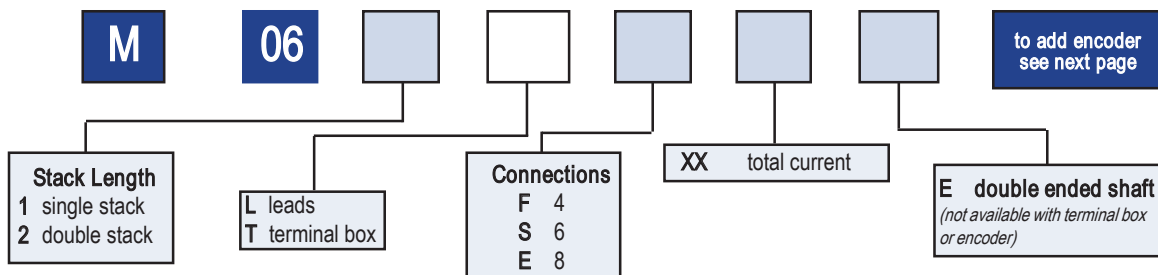
- ◆ Up to 150% rated torque reserve capacity
- ◆ ± 3% typical step accuracy
- ◆ Standard terminal box, encoders, and precision gearheads available
- ◆ Available with four, six or eight leads
- ◆ Customized configurations available



Motor Frame	Minimum Holding Torque		Rotor Inertia	Weight		Maximum Shaft Load		Minimum Residual Torque
	Unipolar 2Ø on	Bipolar 2Ø on		Net*	Ship*	Overhang	Thrust	
	oz-in (Ncm)	oz-in (Ncm)		oz-in-s ² (kg-cm ²)	lb (kg)	lb (kg)	lb (kg)	
M 061	60 (42)	75 (53)	0.0017 (0.12)	1.3 (0.57)	1.5 (0.68)	15 (6.8)	25 (11)	1.0 (0.71)
M 062	100 (71)	125 (88)	0.0034 (0.24)	2.0 (0.91)	2.5 (1.1)	15 (6.8)	25 (11)	1.4 (0.99)

* Weight for motor with leads

SLO-SYN® DC STEP MOTORS



See next page for detailed model number information

M06

4-CONNECTION STEP MOTORS					
Model Number [◇]		Winding Specifications			
New	Old (Leads)	Voltage VDC	Current Amperes	Resistance ohms	Inductance mH
See next page for options					
M061- ** F01	M061-LF-408	8.0	0.50	16	61
M061- ** F02	M061-FF-206	6.3	1.0	6.3	25
M062- ** F02	M062-LF-402	6.6	1.0	6.6	33
M062- ** F03	M062-FF-206	4.8	1.7	2.8	13

6-CONNECTION STEP MOTORS								
Model Number	Winding Specifications							
	Unipolar				Bipolar Series			
See next page for options	Voltage VDC	Current Amperes	Resistance ohms	Inductance mH	Voltage VDC	Current Amperes	Resistance ohms	Inductance mH
M061-□S01	11	0.44	23	38	16	0.30	45	150
M061-□S02	5.0	1.0	5.0	9.6	7.0	0.70	10	38
M061-□S08	1.3	3.8	0.33	0.64	1.8	2.7	0.66	2.5
M062-□S03	5.3	1.6	3.3	8.3	7.5	1.1	6.6	33
M062-□S04	4.2	1.9	2.2	5.9	5.9	1.3	4.4	24
M062-□S06	2.6	3.1	0.88	2.0	3.9	2.2	1.8	8.0
M062-□S09	1.7	4.7	0.35	0.80	2.3	3.3	0.7	3.2

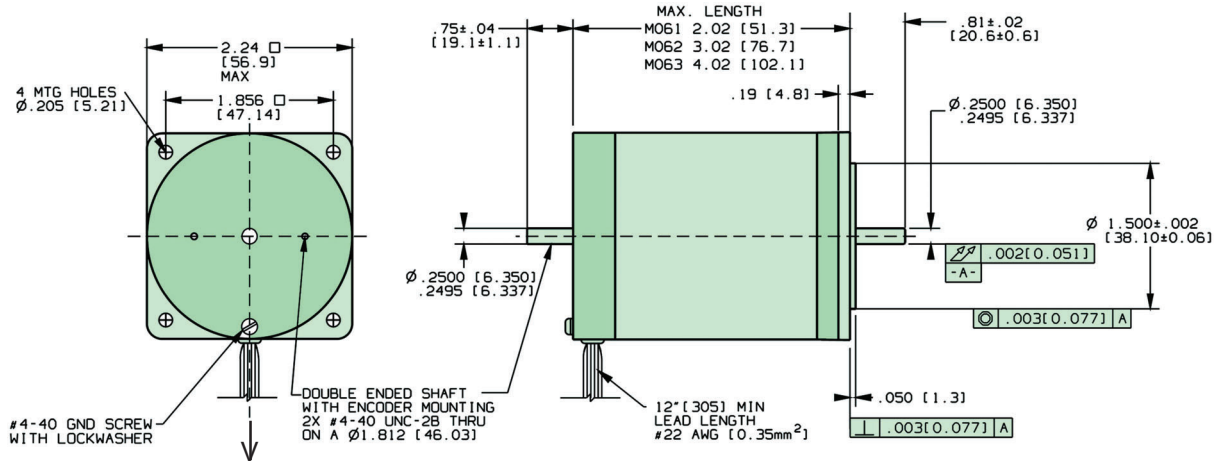
*Old Model # is: M061-□S-301

8-CONNECTION STEP MOTORS								
Model Number	Winding Specifications							
	Unipolar				Bipolar Parallel [◆]			
See next page for options	Voltage VDC	Current Amperes	Resistance ohms	Inductance mH	Voltage VDC	Current Amperes	Resistance ohms	Inductance mH
M061-□E02	5.0	1.0	5.0	9.6	3.5	1.4	2.5	9.6
M061-□E08	1.3	3.8	0.33	0.64	0.89	5.4	0.16	0.64
M061-□E04	4.2	1.9	2.2	5.9	3.0	2.7	1.1	5.9
M062-□E06	2.6	3.1	0.88	2.0	1.9	4.4	0.44	2.0
M062-□E09	1.7	4.7	0.35	0.80	1.2	6.7	0.18	0.80

[◇] nameplate may reference old model number

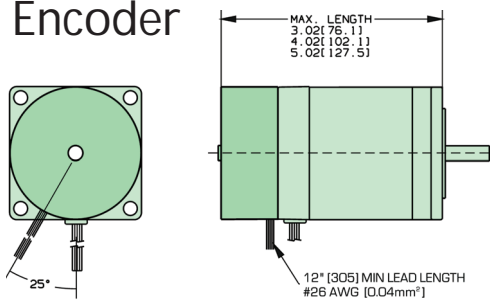
[◆] see 6-lead table for 8-lead bipolar series ratings

Motor Dimensions

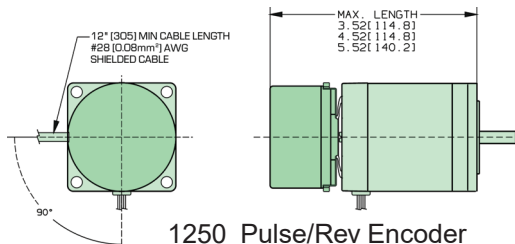


Add "E" to model number for double ended shaft. Example: M062-LS03E

Encoder



200, 400, 500 Pulse/Rev Encoders



Add to Model Number:

C

500

6

Pulses per Revolution

200, 400, 500, or 1250

Number of Outputs

2 A, B (not available with 1250)
3 A, B, Index (not available with 1250)
6 A, B, Index, A, B, Index
Differential Line Drivers supplied with 6 outputs

M061-LE08C2003

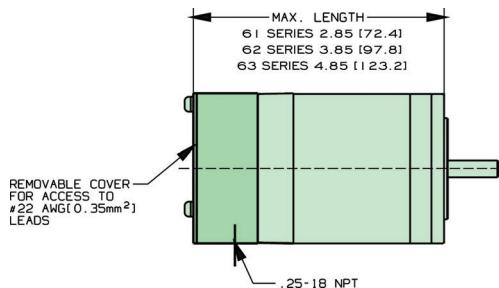
single stack, eight leads, 8 amps, 200 pulse encoder with A, B outputs

M062-LS09C12506

double stack, six leads, 9 amps, 1250 pulse encoder with 6 outputs.

(consult factory for encoder with terminal box)

Terminal Box



Change Model Number:

Example: M062-TE09 (double stack, terminal box, eight leads, 9 amp winding)

(consult factory for encoder with terminal box)

SLO-SYN[®] DC STEP MOTORS

M06

24 V Bipolar - Full Step

◆ 24 volt data measured with SD200 Modular Drive Module or the SS2000MD4 Modular Drive.

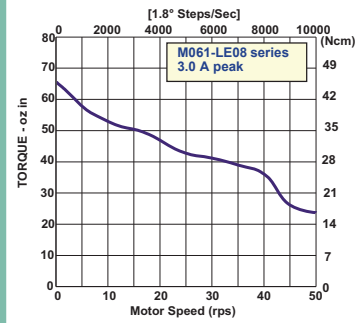
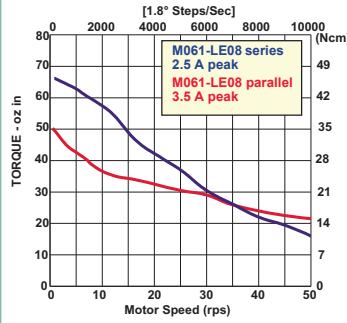
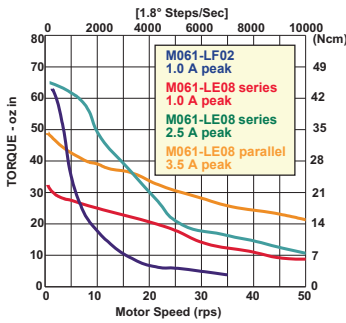
36 V Bipolar - Full Step

◆ 36 volt data measured with SD200 Modular Drive Module or the SS2000MD4 Modular Drive.

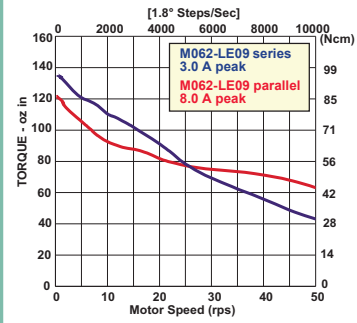
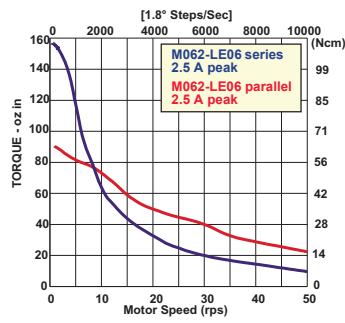
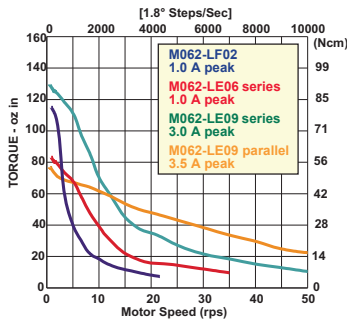
72 V Bipolar - Full Step

◆ 72 volt data measured with MD808 Modular Drive

M061



M062

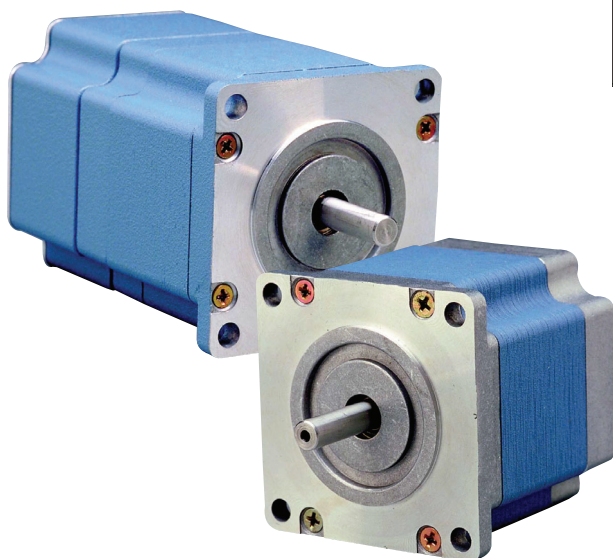
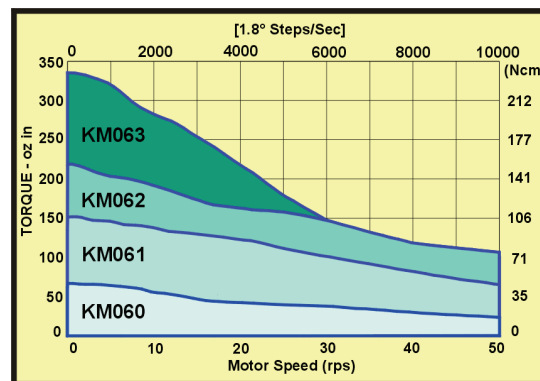


- ◆ The curves do not show system resonances which will vary with system mechanical parameters.
- ◆ Duty cycle is dependent on torque, speed, Drive parameters, and heat sink conditions. Maximum case temperature is 100°C.

High Torque 60mm Frame Size (NEMA Size 23)

Performance Envelope

(see page DC15 for detailed torque-speed curves)



- ◆ Up to 200% rated torque reserve capacity
- ◆ ± 2% typical step accuracy
- ◆ Terminal box, encoders, precision gearheads and rear shafts available
- ◆ Available with four or six leads
- ◆ Customized configurations available

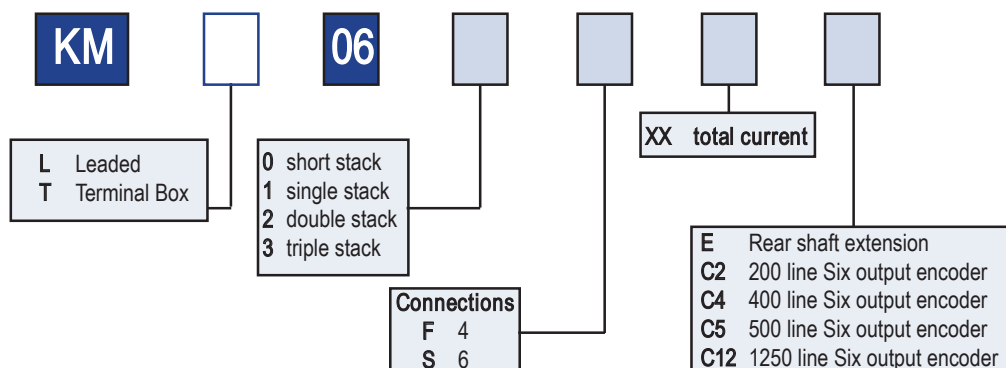
Washdown Motors Available see page DC 16



Motor Frame	Minimum Holding Torque		Rotor Inertia	Weight		Maximum Shaft Load		Minimum Residual Torque
	Unipolar 2Ø on	Bipolar 2Ø on		Net*	Ship*	Overhang	Thrust	
	oz-in (Ncm)	oz-in (Ncm)		oz-in-s ² (kg-cm ²)	lb (kg)	lb (kg)	lb (kg)	
KM 060	54 (38)	68 (48)	0.00154 (0.108)	1.03 (0.47)	1.1 (0.050)	15 (6.8)	25 (11)	2.0 (1.4)
KM 061	128 (90.4)	170 (120)	0.0034 (0.24)	1.6 (0.73)	1.7 (0.77)	15 (6.8)	25 (11)	3.0 (2.1)
KM 062	188 (133)	250 (177)	0.0056 (0.395)	2.3 (1.04)	2.5 (1.1)	15 (6.8)	25 (11)	6.0 (4.2)
KM 063	263 (186)	350 (247)	0.0084 (0.593)	3.2 (1.45)	3.4 (1.5)	15 (6.8)	25 (11)	7.0 (4.9)

* Weight for motor with leads (add approx. 0.2 lbs. for terminal box)

SLO-SYN® DC STEP MOTORS



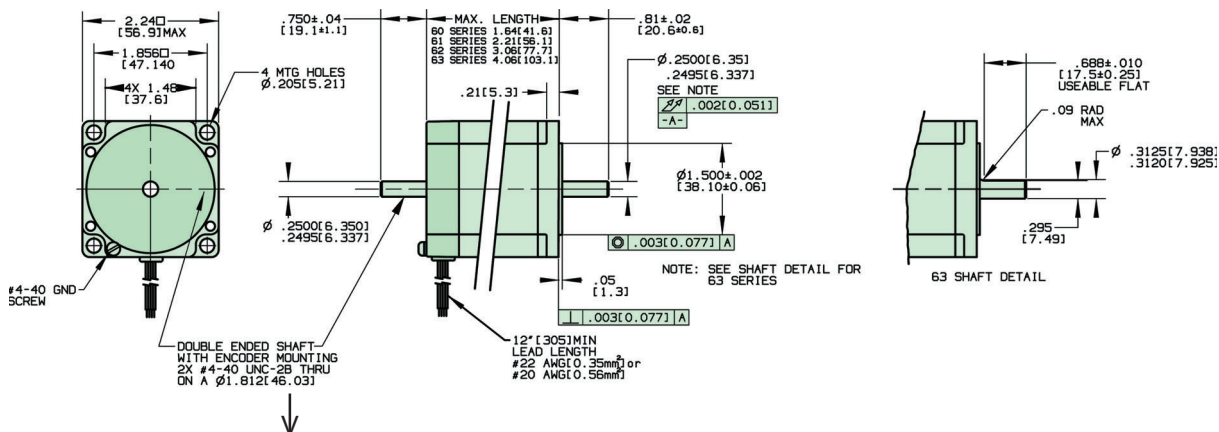
KM06

See next page for detailed model number information

4-CONNECTION STEP MOTORS				
Model Number	Winding Specifications			
See next page for options	Voltage (VDC)	Current (Amperes)	Resistance (ohms)	Inductance (mH)
KM□060F02	3.8	1.1	3.6	16
KM□060F05	1.7	2.7	0.64	2.5
KM□060F08	1.1	4.0	0.28	1.0
KM□060F11	1.0	5.3	0.19	0.63
KM□061F02	5.2	1.1	4.9	30
KM□061F03	4.2	1.4	3.0	16
KM□061F05	2.3	2.7	0.85	4.6
KM□061F08	1.4	4.1	0.33	1.8
KM□061F11	1.2	5.4	0.23	1.1
KM□062F03	4.4	1.5	2.9	17
KM□062F05	3.1	2.5	1.3	7.1
KM□062F07	2.5	3.3	0.75	3.4
KM□062F08	2.0	4.1	0.49	2.5
KM□062F13	1.3	6.6	0.20	0.85
KM□063F03	6.1	1.5	4.1	24
KM□063F04	5.0	1.8	2.8	17
KM□063F07	3.4	3.3	1.0	6.2
KM□063F08	2.6	4.1	0.64	3.9
KM□063F13	1.9	6.6	0.28	1.5

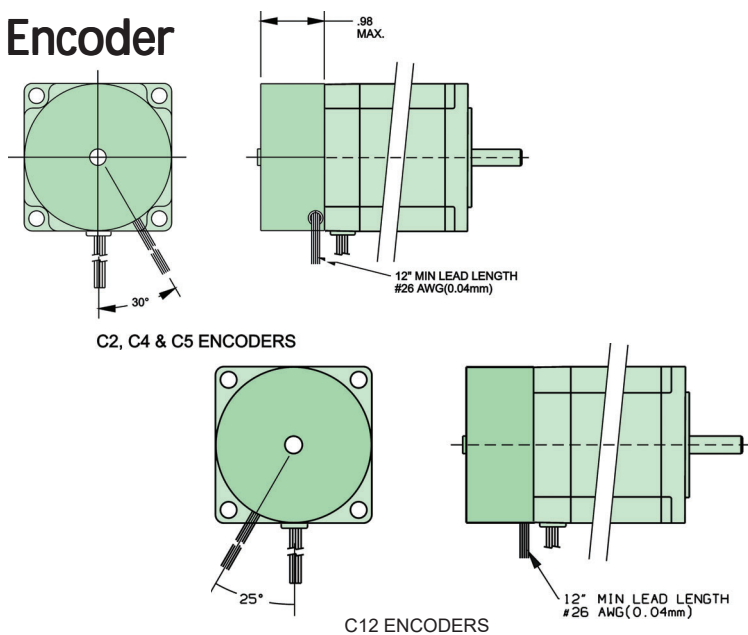
6-CONNECTION STEP MOTORS								
Model Number	Winding Specifications							
	Unipolar				Bipolar Series			
See next page for options	Voltage VDC	Current Amperes	Resistance ohms	Inductance mH	Voltage VDC	Current Amperes	Resistance ohms	Inductance mH
KM□060S03	2.9	1.5	1.9	4.0	4.0	1.0	3.9	16
KM□060S08	1.3	3.8	0.34	0.63	1.8	2.7	0.67	2.5
KM□061S02	6.4	1.0	6.4	18	9.0	0.70	13	70
KM□061S04	3.0	2.1	1.5	3.5	4.2	1.4	2.9	14
KM□061S08	1.7	3.8	0.46	1.1	2.4	2.7	0.92	4.4
KM□062S04	3.1	2.1	1.5	4.2	4.4	1.5	2.9	17
KM□062S06	2.8	3.0	0.94	2.5	3.9	2.1	1.9	10
KM□062S09	1.8	4.7	0.38	0.85	2.5	3.3	0.75	3.4
KM□063S04	4.3	2.1	2.0	6.0	6.0	1.5	4.0	24
KM□063S09	2.5	4.7	0.54	1.6	3.5	3.3	1.1	6.3

Motor Dimensions



Add "E" to model number for double ended shaft. Example: KML062F07E

Encoder



Add to Model Number:

C2	200 lines per rev.
C4	400 lines per rev.
C5	500 lines per rev.
C12	1250 lines per rev.

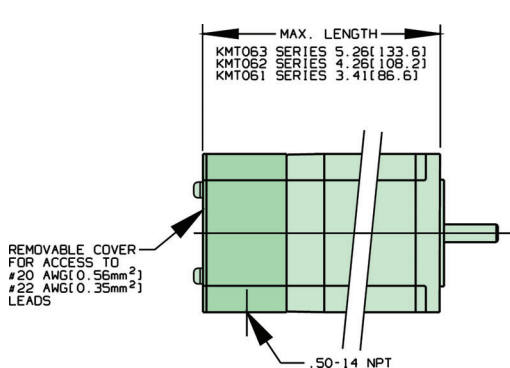
Outputs: A, B, Index,
A, B, Index

Differential Line Drivers supplied

Example: KML063S09C5

(consult factory for encoder with terminal box)

Terminal Box



Change Model Number:

Example: KMT063S09 (triple stack, terminal box, six leads, 9 amp winding)

KMCT062F05 (double stack, CE conform terminal box, four leads, 5 amp winding)

(consult factory for encoder with terminal box)

SLO-SYN® DC STEP MOTORS

24 V Bipolar - Full Step

36 V Bipolar - Full Step

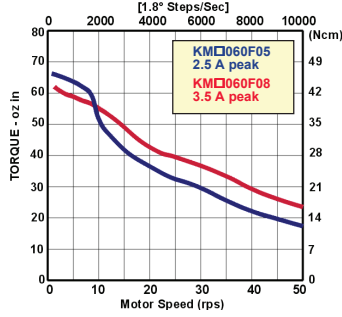
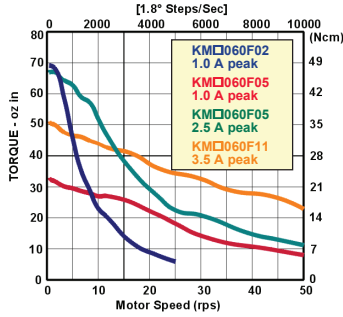
72 V Bipolar - Full Step

◆ 24 and 36 volt data measured with SD200 Modular Drive Module or the SS200MD4 Modular Drive.

◆ 72 volt data measured with MD808 Modular Drive

KM06

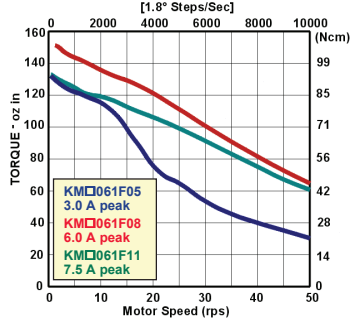
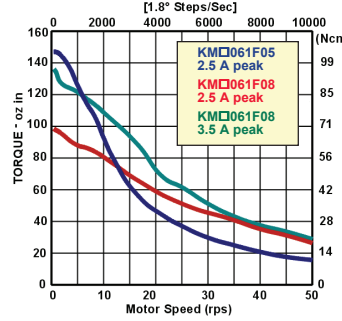
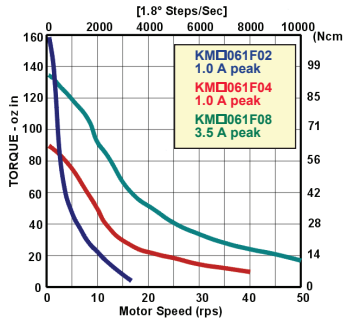
KMn060



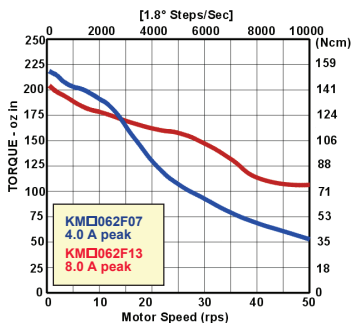
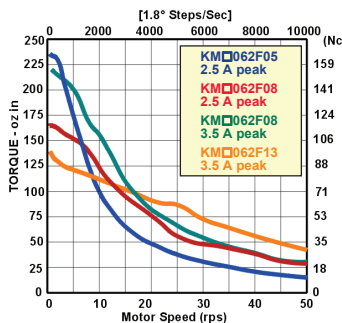
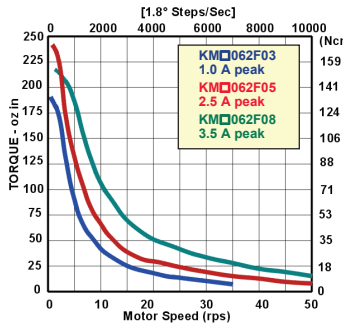
◆ The curves do not show system resonances which will vary with system mechanical parameters.

◆ Duty cycle is dependent on torque, speed, Drive parameters, and heat sink conditions. Maximum case temperature is 100°C.

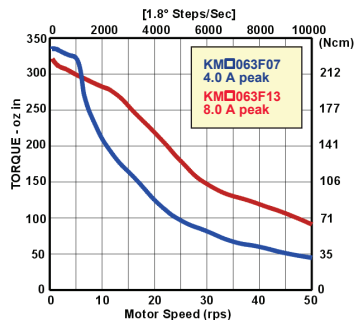
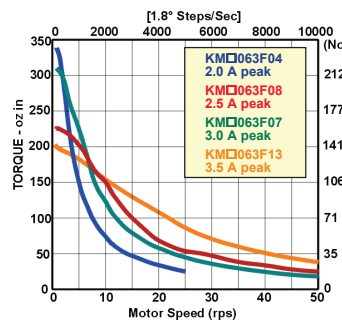
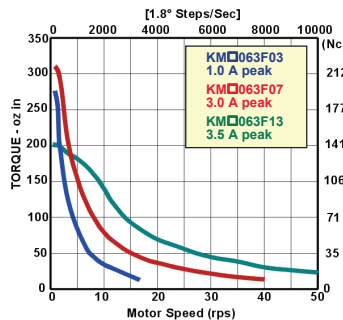
KMn061



KMn062



KMn063

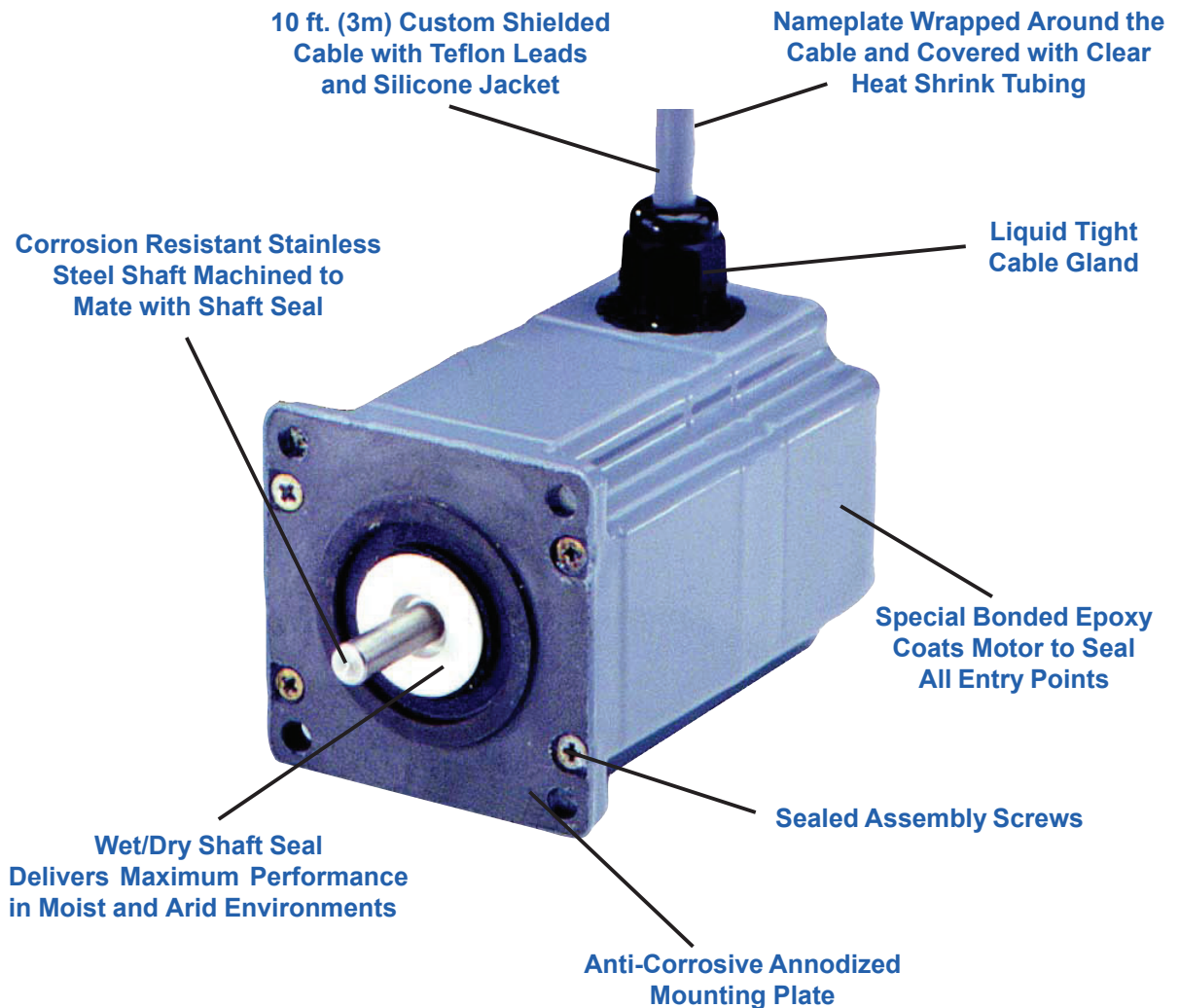


High Torque 60mm Washdown Motors

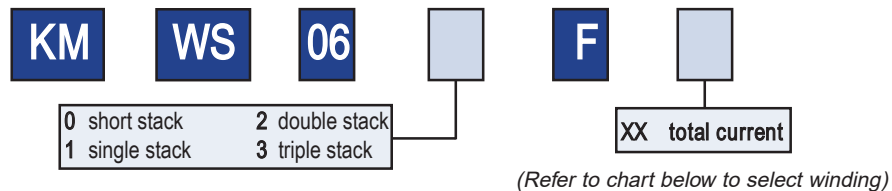
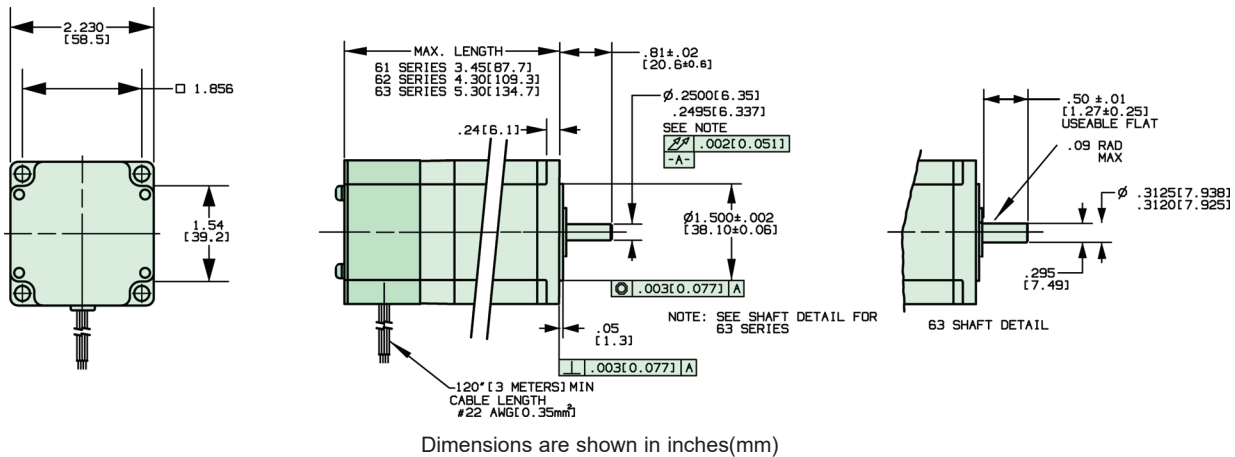
SLO-SYN® washdown motors are designed to deliver flawless motion control in both wet and arid conditions. They are dust protected and withstand powerful jets of fluid.

SLO-SYN® Washdown Motors Withstand IP 56 Conditions:

- ◆ Water & Salt Water
- ◆ Oil
- ◆ Grease
- ◆ Common Solvents
- ◆ Weak Acids
- ◆ Alcohol
- ◆ Dust
- ◆ Lint
- ◆ Fibers



Dimensions



4-CONNECTION STEP MOTORS				
Model Number	Winding Specifications			
	Voltage (VDC)	Current (Amperes)	Resistance (ohms)	Inductance (mH)
KMWS060F02	3.8	1.1	3.6	16
KMWS060F05	1.7	2.7	0.64	2.5
KMWS060F08	1.1	4.0	0.28	1.0
KMWS060F11	1.0	5.3	0.19	0.63
KMWS061F02	5.2	1.1	4.9	30
KMWS061F03	4.2	1.4	3.0	16
KMWS061F05	2.3	2.7	0.85	4.6
KMWS061F08	1.4	4.1	0.33	1.8
KMWS061F11	1.2	5.4	0.23	1.1
KMWS062F03	4.4	1.5	2.9	17
KMWS062F05	3.1	2.5	1.3	7.1
KMWS062F07	2.5	3.3	0.75	3.4
KMWS062F08	2.0	4.1	0.49	2.5
KMWS062F13	1.3	6.6	0.20	0.85
KMWS063F03	6.1	1.5	4.1	24
KMWS063F04	5.0	1.8	2.8	17
KMWS063F07	3.4	3.3	1.0	6.2
KMWS063F08	2.6	4.1	0.64	3.9
KMWS063F13	1.9	6.6	0.28	1.5

KMWS06