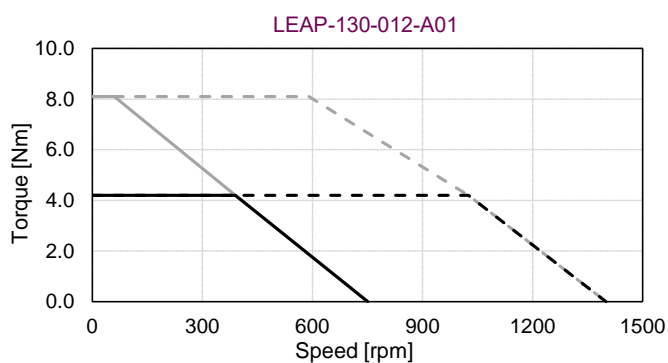
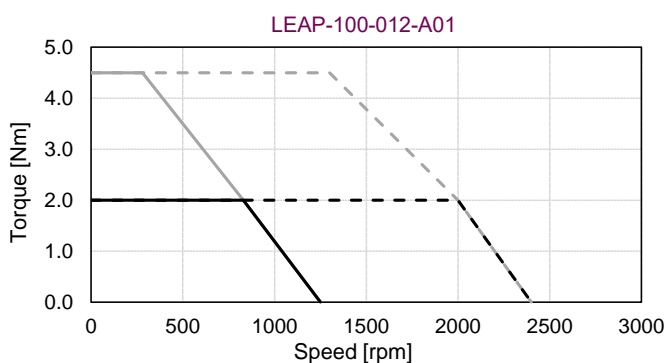
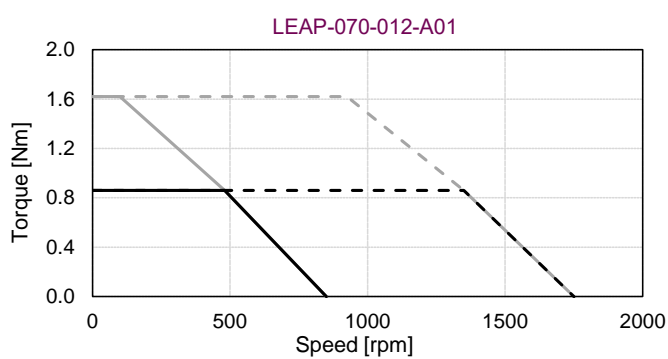
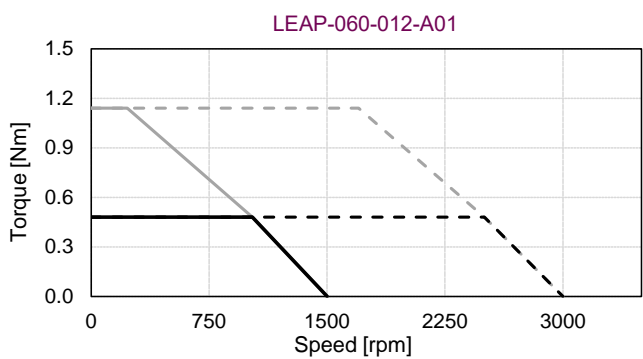


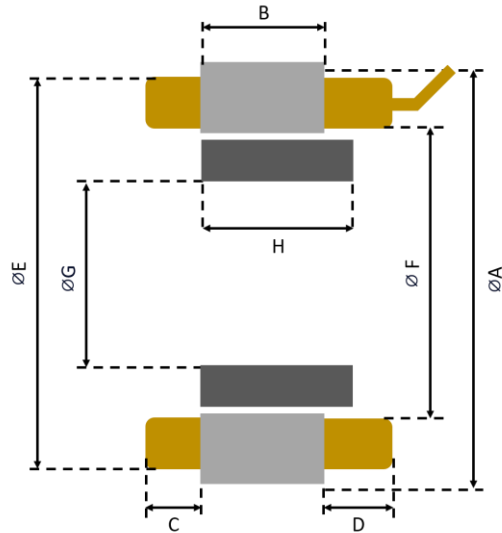
Motor Parameters	Symbols	Units	LEAP-060-012-A01		LEAP-070-012-A01		LEAP-100-012-A01		LEAP-130-012-A01		
PERFORMANCE	DC Bus Voltage	V _{DC}	V	24	48	24	48	24	48	24	48
	Rated Torque	T _r	Nm	0.48		0.86		2.0		4.2	
	Peak Torque	T _p	Nm	1.14		1.62		4.5		8.1	
	Rated Speed	N _r	rpm	1025	2500	480	1350	830	2000	395	1025
	No-Load Speed	N _{no-load}	rpm	1500	3000	850	1750	1250	2400	750	1400
	Torque Constant	K _t	Nm/A _{rms}	0.16		0.29		0.20		0.35	
	Voltage Constant	K _v	V/krpm	13.92		24.02		18.02		31.55	
	Max. Cogging Torque	T _{cog}	%	<1							
	Torque Ripple	T _{ripple}	%	<1							
ELECTRICAL	Number of Pole	2p	--	14	16	22	26				
	Rated Current	I _r	A _{rms}	3.0		3.0		10.0		12.0	
	Peak Current	I _p	A _{rms}	7.5		6.0		25.0		30.0	
	Line Resistance	R _{LL@25°C}	Ohm	1.39 (±20%)		1.80 (±20%)		0.37 (±20%)		0.35 (±20%)	
	Line Inductance	L _{LL@60Hz}	mH	1.29 (±30%)		1.94 (±30%)		0.43 (±30%)		1.04 (±30%)	
MECHANICAL & THERMAL	Total Weight	W _{total}	kg	0.186		0.24		0.45		0.74	
	Mech. Time Constant	K _{mech}	ms	1.22		0.93		1.53		1.11	
	Thermal Resistance ⁽²⁾	R _{th}	°C/W	4.54	4.28	3.75	3.59	1.63	1.51	1.64	1.18
	Heat Sink ⁽²⁾	--	mm	130x130x10		150x150x10		250x250x12.5		375x375x12.5	
	Inertia	J	kg.m ²	1.87E-05		3.40E-05		1.42E-04		3.40E-04	
	Motor Constant	K _m	Nm/√W	0.067		0.131		0.151		0.319	
	Rotor ID		mm	31		38		60		78	
Stator OD		mm	60		70		100		130		

1. All performance and electrical specifications are obtained at 25°C ambient and may change ±10%.
2. Housed version of motors mounted to aluminum heat sink (maximum winding temperature is 130°C).
3. All data referenced to sinusoidal commutation.
4. Higher torque and speed values as well as dimensions on request.

LEAP Series Torque-Speed Curves

Tr: Rated Torque @Tr 24V - - - @Tr 48V
 Tp: Peak Torque @Tp 24V - - - @Tp 48V





Model	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
LEAP-060-012-A01	60	12.5	5	6	56	46	31	15
LEAP-070-012-A01	70	12.5	5	6	66	50	38	15
LEAP-100-012-A01	100	12.5	5	6	95	76	60	15
LEAP-130-012-A01	130	12.5	6	7	125	95	78	15

Notes:

MOTOR LEADS:

LEAP-060-012-A01: #22 AWG Teflon® insulated, 300 mm (optional) length, 1-Red, 1-White, 1-Black.
 LEAP-070-012-A01: #22 AWG Teflon® insulated, 300 mm (optional) length, 1-Red, 1-White, 1-Black.
 LEAP-100-012-A01: #16 AWG Teflon® insulated, 300 mm (optional) length, 1-Red, 1-White, 1-Black.
 LEAP-130-012-A01: #14 AWG Teflon® insulated, 300 mm (optional) length, 1-Red, 1-White, 1-Black.

THERMISTOR LEADS:

#26 AWG Teflon® insulated, 300 mm (optional) length, 2-Brown or Blue