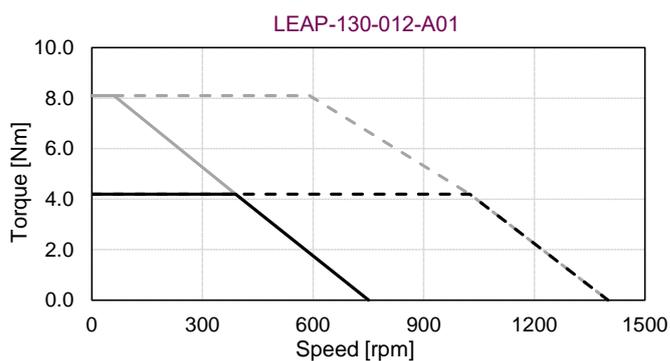
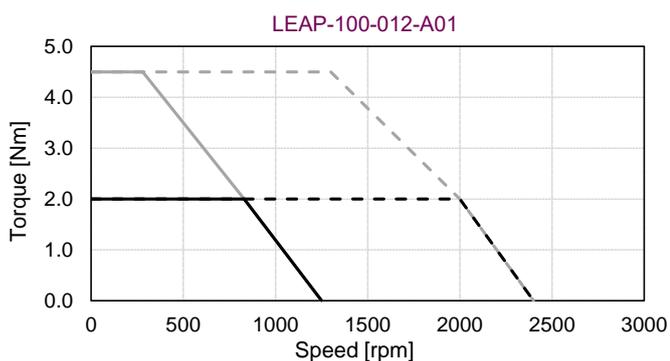
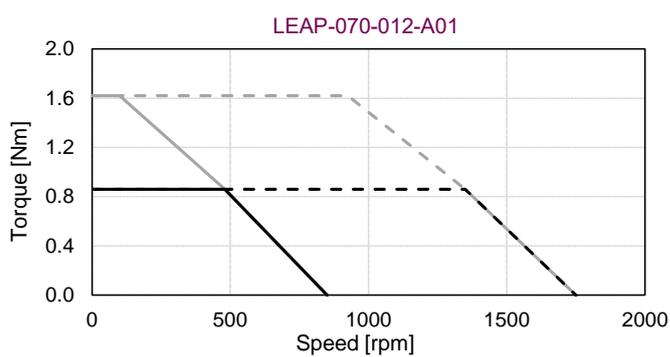
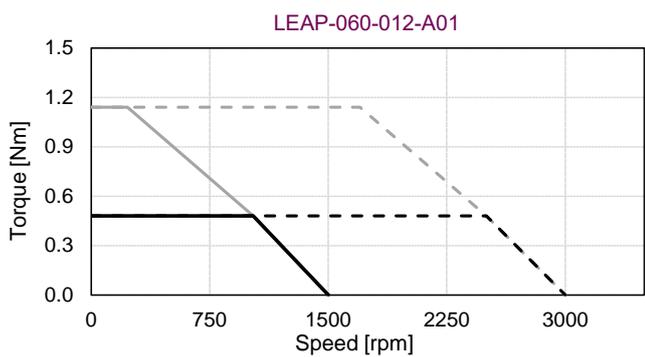


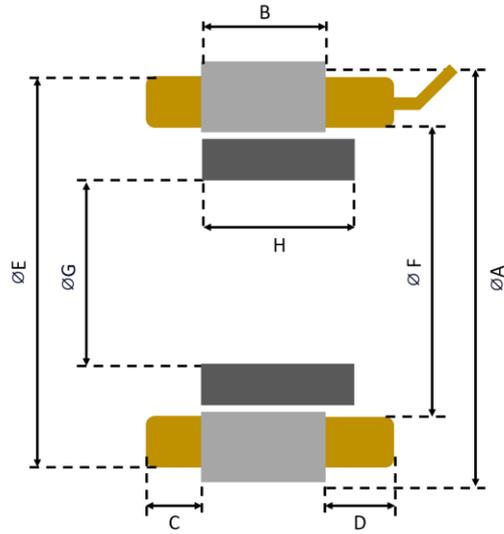
Motor Parameters	Symbols	Units	LEAP-060-012-A01		LEAP-070-012-A01		LEAP-100-012-A01		LEAP-130-012-A01		
PERFORMANCE	DC Bus Voltage	V_{DC}	V	24	48	24	48	24	48	24	48
	Rated Torque	T_r	Nm	0.48		0.86		2.0		4.2	
	Peak Torque	T_p	Nm	1.14		1.62		4.5		8.1	
	Rated Speed	N_r	rpm	1025	2500	480	1350	830	2000	395	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	$R_{LL@25^\circ C}$	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 OD		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