IRONCORE LINEAR MOTOR LMG20-050/MWD+

		Winding codes	3QB	3QD		
MOTOR PERFORMANCE		UNIT	FREE AIR COOLING	FREE AIR COOLING		
Fp	Peak force	N	2030	2030		
Fc	Continuous force	N	423	423		
Fs	Standstill force	N	320	320		
Ip	Peak current	Arms	30.1	60.2		
Ic	Continuous current	Arms	4.39	8.78		
Is	Standstill current	Arms	3.33	6.65		
vs	Rated low speed	mm/s	0.15	0.15		
Pc	Power dissipation @ Ic	W	198	198		
Fd	Max. detent force (average to peak)	N	27	27		
Fa	Attraction force	N	4510	4510		
MOTOR SETTING		UNIT				
Kt	Force constant	N/Arms	102	50.8		
Ku	Back EMF constant (*)	Vrms/(m/s)	61.3	30.7		
Km	Motor constant	N/√W	37.9	37.9		
R20	Electrical resistance at 20°C (*)	Ohm	4.80	1.20		
L	Electrical inductance (*)	mH	26.8	6.71		
τth	Thermal time constant	s	2120	2120		
Rth	Thermal resistance	K/W	0.551	0.551		
2τp	Magnetic period	mm	32	32		
mw	Magnetic way mass	kg/m	6.19	6.19		
mm	Motor mass	kg	3.17	3.17		
MOTOR ENVIRONMENT		UNIT				
Udc	Nominal DC bus voltage	VDC	600	600		
Gm	Mechanical gap	mm	0.90	0.90		
Ss	Stator exchange surface	m²	0.06	0.06		
x	Assumed stroke	m	0.69	0.69		
θamb	Ambient temperature	°C	20	20		
θmax	Maximum coil temperature	°C	130	130		

Notes: (*) terminal to terminal.
Hypotheses and tolerances are in ETEL Integration Manual.

Caution: Any use of the motor beyond speed/force limit could lead to hazardous voltage and serious injuries. Customer is responsible for setting safeties/limitations that will keep the motor in its safe operating area. ETEL cannot be held responsible if the motor is used in an improper way.

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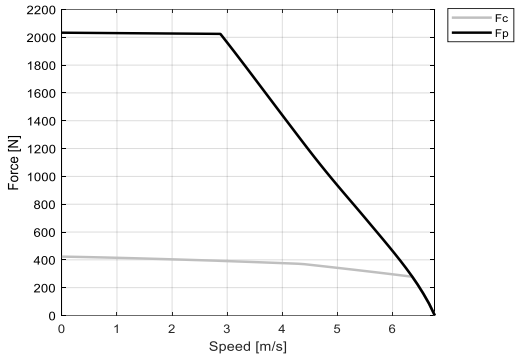
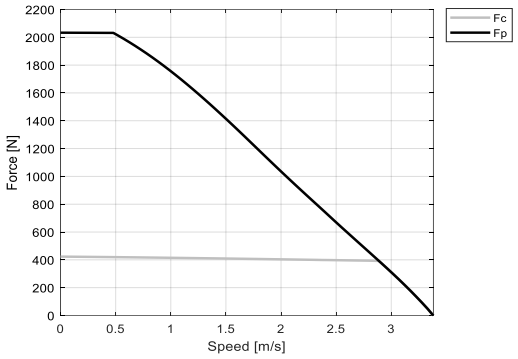
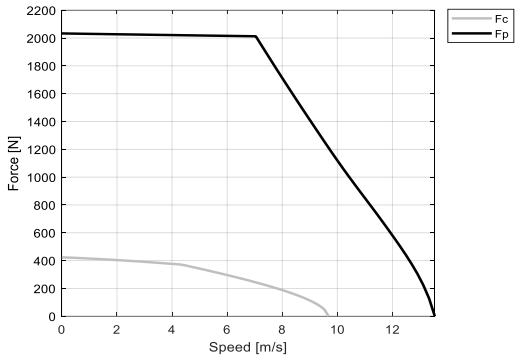
3QB - FREE AIR COOLING - 600V



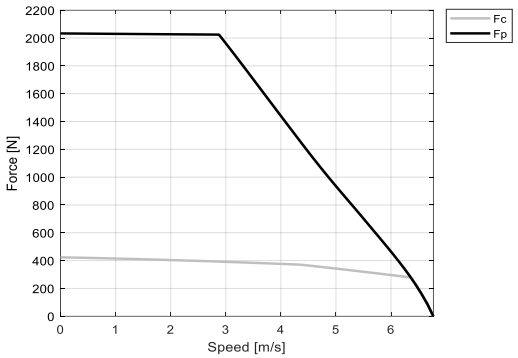
3QB - FREE AIR COOLING - 300V



3QD - FREE AIR COOLING - 600V



3QD - FREE AIR COOLING - 300V



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