IRONCORE LINEAR MOTOR LMG10-030/MWD+

		Winding codes	3QA	3QB		
MOTOR PERFORMANCE		UNIT	FREE AIR COOLING	FREE AIR COOLING		
Fp	Peak force	N	594	594		
Fc	Continuous force	N	136	136		
Fs	Standstill force	N	103	103		
Ip	Peak current	Arms	15.7	31.3		
Ic	Continuous current	Arms	2.34	4.68		
Is	Standstill current	Arms	1.77	3.55		
vs	Rated low speed	mm/s	0.18	0.18		
Pc	Power dissipation @ Ic	W	82.0	82.0		
Fd	Max. detent force (average to peak)	N	9.5	9.5		
Fa	Attraction force	N	1320	1320		
MOTOR SETTING		UNIT				
Kt	Force constant	N/Arms	60.4	30.2		
Ku	Back EMF constant (*)	Vrms/(m/s)	36.6	18.3		
Km	Motor constant	N/√W	18.7	18.7		
R20	Electrical resistance at 20°C (*)	Ohm	7.00	1.75		
L	Electrical inductance (*)	mH	35.5	8.88		
τth	Thermal time constant	s	1750	1750		
Rth	Thermal resistance	K/W	1.33	1.33		
2τp	Magnetic period	mm	32	32		
mw	Magnetic way mass	kg/m	3.51	3.51		
mm	Motor mass	kg	1.10	1.10		
MOTOR ENVIRONMENT		UNIT				
Udc	Nominal DC bus voltage	VDC	600	600		
Gm	Mechanical gap	mm	0.90	0.90		
Ss	Stator exchange surface	m²	0.02	0.02		
x	Assumed stroke	m	0.47	0.47		
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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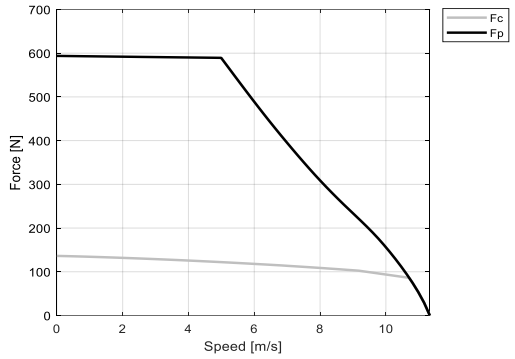
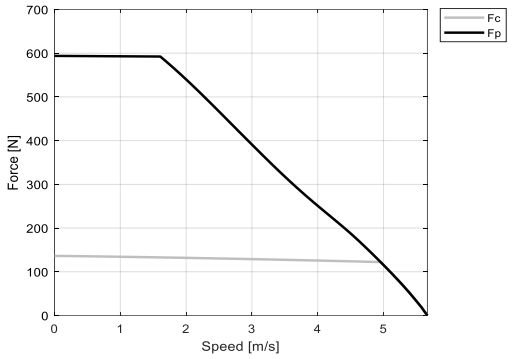
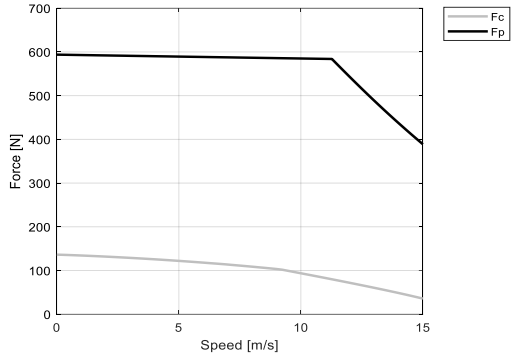
3QA - FREE AIR COOLING - 600V



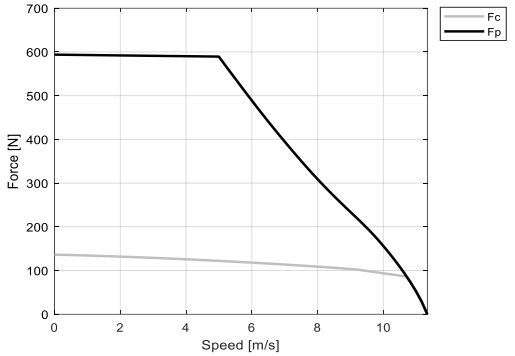
3QA - FREE AIR COOLING - 300V



3QB - FREE AIR COOLING - 600V



3QB - FREE AIR COOLING - 300V



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