IRONCORE LINEAR MOTOR LMG05-030/MWD+

		Winding codes	3QA			
MOTOR PERFORMANCE		UNIT	FREE AIR COOLING			
Fp	Peak force	N	321			
Fc	Continuous force	N	73.7			
Fs	Standstill force	N	55.8			
Ip	Peak current	Arms	17.4			
Ic	Continuous current	Arms	2.50			
Is	Standstill current	Arms	1.90			
vs	Rated low speed	mm/s	0.20			
Pc	Power dissipation @ Ic	W	46.9			
Fd	Max. detent force (average to peak)	N	9.0			
Fa	Attraction force	N	767			

MOTOR SETTING		UNIT				
Kt	Force constant	N/Arms	30.5			
Ku	Back EMF constant (*)	Vrms/(m/s)	18.5			
Km	Motor constant	N/√W	13.3			
R20	Electrical resistance at 20°C (*)	Ohm	3.50			
L	Electrical inductance (*)	mH	14.6			
τth	Thermal time constant	s	1570			
Rth	Thermal resistance	K/W	2.32			
2τp	Magnetic period	mm	32			
mw	Magnetic way mass	kg/m	3.51			
mm	Motor mass	kg	0.586			

MOTOR ENVIRONMENT		UNIT				
Udc	Nominal DC bus voltage	VDC	600			
Gm	Mechanical gap	mm	0.90			
Ss	Stator exchange surface	m²	0.01			
x	Assumed stroke	m	0.29			
θamb	Ambient temperature	°C	20			
θmax	Maximum coil temperature	°C	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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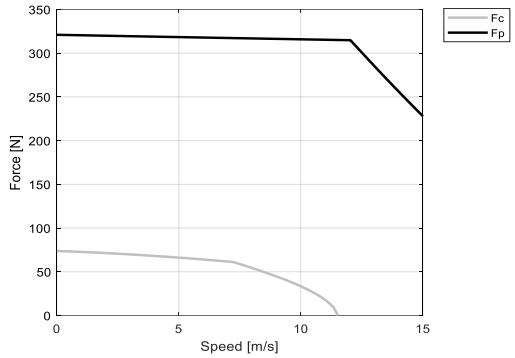
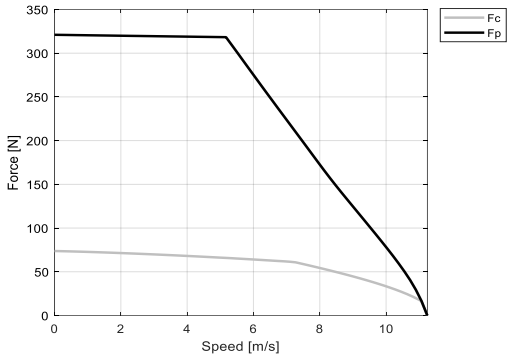
3QA - FREE AIR COOLING - 600V



3QA - FREE AIR COOLING - 300V



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