IRONCORE LINEAR MOTOR LMG15-030/MWD+

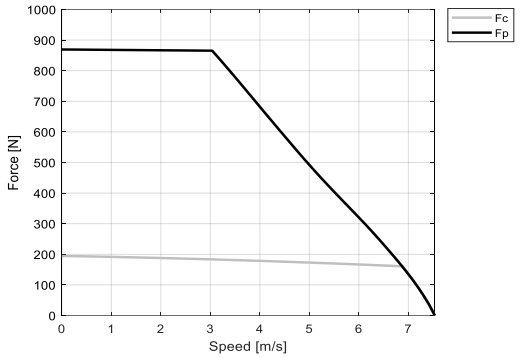
		Winding codes	3QA	3QC		
MOTOR PERFORMANCE		UNIT	FREE AIR COOLING	FREE AIR COOLING		
Fp	Peak force	N	869	869		
Fc	Continuous force	N	194	194		
Fs	Standstill force	N	147	147		
Ip	Peak current	Arms	15.1	45.2		
Ic	Continuous current	Arms	2.23	6.68		
Is	Standstill current	Arms	1.69	5.06		
vs	Rated low speed	mm/s	0.17	0.17		
Pc	Power dissipation @ Ic	W	111	111		
Fd	Max. detent force (average to peak)	N	12	12		
Fa	Attraction force	N	2060	2060		
MOTOR SETTING		UNIT				
Kt	Force constant	N/Arms	91.1	30.4		
Ku	Back EMF constant (*)	Vrms/(m/s)	55.1	18.4		
Km	Motor constant	N/√W	23.0	23.0		
R20	Electrical resistance at 20°C (*)	Ohm	10.5	1.17		
L	Electrical inductance (*)	mH	48.7	5.42		
τth	Thermal time constant	s	1850	1850		
Rth	Thermal resistance	K/W	0.982	0.982		
2τp	Magnetic period	mm	32	32		
mw	Magnetic way mass	kg/m	3.51	3.51		
mm	Motor mass	kg	1.61	1.61		
MOTOR ENVIRONMENT		UNIT				
Udc	Nominal DC bus voltage	VDC	600	600		
Gm	Mechanical gap	mm	0.90	0.90		
Ss	Stator exchange surface	m²	0.03	0.03		
x	Assumed stroke	m	0.51	0.51		
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.

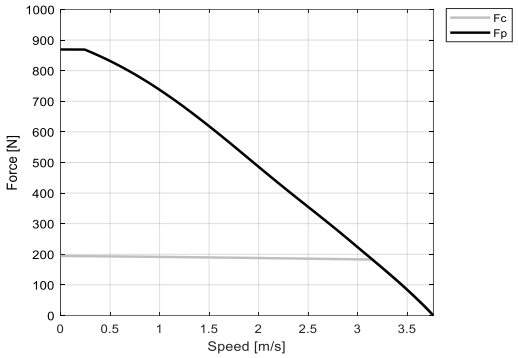
Caution: Any use of the motor beyond speed/force limit could lead to hazardous voltage and serious injuries. Customer is responsible for setting safeties/limitations that will keep the motor in its safe operating area. ETEL cannot be held responsible if the motor is used in an improper way.

ETEL S.A. Zone Industrielle, CH-2112 Môtiers, Switzerland
T +41 (0)32 862 01 00 • F +41 (0)32 862 01 01 • etel@etel.ch • www.etel.ch

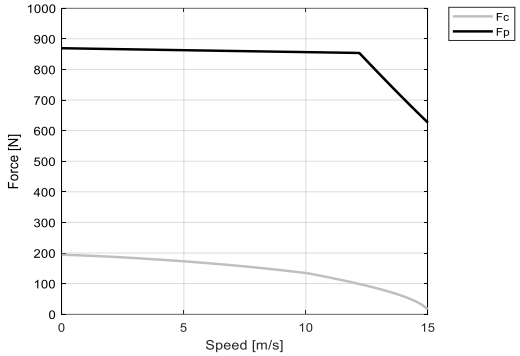
3QA - FREE AIR COOLING - 600V



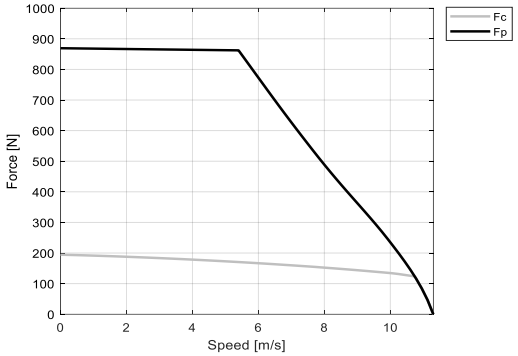
3QA - FREE AIR COOLING - 300V



3QC - FREE AIR COOLING - 600V



3QC - FREE AIR COOLING - 300V



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