

Linear Synchronous iron-less two-phase Motor series LSIM-P-40-172*50

Overall and join dimensions

Parameter	Symbol	Unit	
			LSIM-P-40-172*50
			FE
Peak force (coil at 20°C)	Fp	N	384
Continuous force (coil at 120°C), water cooling	Fw	N	175
Continuous force (coil at 120°C), air cooling	Fa	N	87
Recommended supply voltage DC	Us	V	155
Motor constant (coil at 20°C)	Ko	N/√W	122
Peak power dissipation (coil at 20°C)	Pp	W	1190
Continuous power dissipation (coil at 120°C), water cooling	Pw	W	247
Continuous power dissipation (coil at 120°C), air cooling	Pa	W	62
Coolant flow for temperature difference 5°C by power Pw	Cf	L/min	0.7
Maximum velocity at Fp and Us (Coil at 20°C)	Vp	m/s	2.5
Maximum velocity at Fw and Us (Coil at 20°C)	Vw	m/s	4.0
Maximum velocity at Fa and Us (Coil at 20°C)	Va	m/s	4.6
Peak current (RMS) at Fp and V=0	Ip	Arms	10.6
Continuous current at 120°C with water cooling at Fw and V=0	Iw	Arms	4.8
Continuous current at 120°C with air cooling at Fa and V=0	Ia	Arms	2.4
Efficiency at Mw and 540V DC (Coil at 20°C)	Ew	%	73.9
Back EMF constant (*) (peak phase-phase)	Ku	V/(m/s)	25.5
Electrical resistance at 20°C (*)	R	Ohm	5.34
Electrical inductance (*)	L	mH	2.80

* value «terminal-terminal»