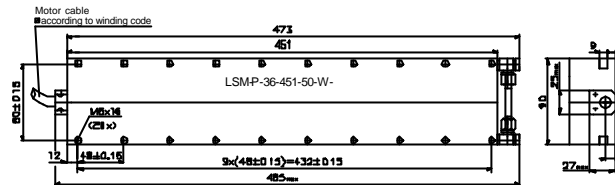


## Linear synchronous motor series LSM-P-36-451x50...



Parameter		Unit	50-...	
			FS	FT
Peak force (coil at 20°C)	Fp	N	1526	
Continuous force (coil at 120°C), water cooling	Fw	N	1253	
Continuous force (coil at 120°C), air cooling	Fa	N	643	
Detent force	Fd	N	18,3	
Attraction force of magnets	Fm	N	5500	
Recommended supply voltage DC	Us	V	540	
Motor constant (coil at 20°C)	Ko	N/ W	48,3	
Peak power dissipation (coil at 20°C)	Pp	W	1578	1622
Continuous power dissipation (coil at 120°C), water cooling	Pw	W	1049	1055
Continuous power dissipation (coil at 120°C), air cooling	Pa	W	267	294
Coolant flow for temperature difference 5°C by power Pw	Cf	L/min	2,7	2,8
Maximum velocity at Fp and Us (Coil at 20°C)	Vp	m/s	2,6	4,6
Maximum velocity at Fw and Us (Coil at 20°C)	Vw	m/s	2,9	5,3
Maximum velocity at Fa and Us (Coil at 20°C)	Va	m/s	4,0	7,0
Peak current (RMS) at Fp and V=0	Ip	Arms	14,0	24,2
Continuous current at 120°C with water cooling at Fw and V=0	Iw	Arms	11,1	19,3
Continuous current at 120°C with air cooling at Fa and V=0	Ia	Arms	5,5	9,5
Efficiency at Fw and US (Coil at 20°C)	Ew	%	77,7	86,2
Back EMF constant (*) (peak phase-phase)	Ku	V/(m/s)	96,1	55,5
Electrical resistance at 20°C (*)	R	Ohm	3,96	1,32
Electrical inductance (*)	L	mH	44,7	14,9