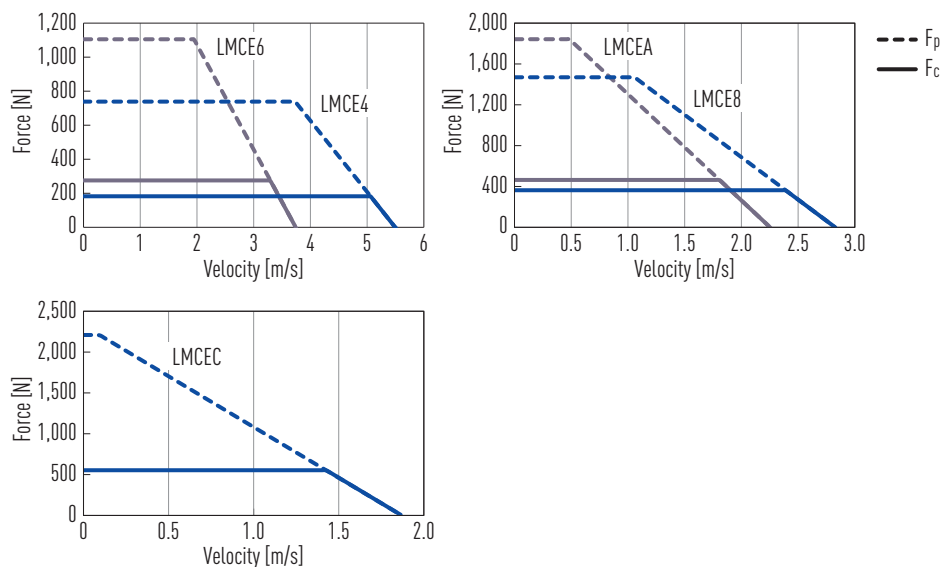


Specifications

Force-velocity curves (DC bus voltage: 330 VDC)



Technical data for LMCE							
	Symbol	Unit	LMCE4	LMCE6	LMCE8	LMCEA	LMCEC
Forces and electrical parameters							
Continuous force at T _{max}	F _c	N	184	276	368	460	552
Continuous current at T _{max}	I _c	A _{eff}	3.25	3.25	3.25	3.25	3.25
Peak force (for 1 s)	F _p	N	736	1,104	1,472	1,840	2,208
Peak current (for 1 s)	I _p	A _{eff}	13	13	13	13	13
Force constant	K _f	N/A _{eff}	56.6	84.9	113.2	141.5	169.8
Electrical time constant	K _e	ms	0.5	0.5	0.5	0.5	0.5
Resistance ¹⁾	R ₂₅	Ω	5.6	8.4	11.0	13.8	16.7
Inductance ¹⁾	L	mH	2.9	4.4	5.9	7.3	8.8
Back EMF constant	K _u	V _{eff} /(m/s)	35	53	70	88	106
Motor constant	K _m	N/√W	19.1	23.4	27.0	30.2	33.2
Thermal resistance	R _{th}	°C/W	0.68	0.45	0.34	0.27	0.23
Thermal switch			3 PTC SNM 100 in series				
Max. DC bus voltage		V	330				
Mechanical parameters							
Max. bending radius of motor cable	R _{bend}	mm	37.5				
Pole pair pitch	2τ	mm	60				
Max. winding temperature	T _{max}	°C	100				
Mounting holes (forcer)	n		7	10	13	16	19
Weight of forcer	M _F	kg	1.23	1.84	2.46	3.08	3.70
Length of forcer	L _F	mm	260	380	500	620	740
Unit mass of stator	M _S	kg/m	20				
Length of stator/Dimension N	L _S	mm	120 mm/N = 2; 300 mm/N = 5				

All the specifications in the table (except dimensions) are in $\pm 10\%$ of tolerance at $25^{\circ}C$ ambient temperature

¹⁾ Line to line

Technical drawing of the cable tray assembly, showing dimensions and labels:

- Top View:**
 - Overall width: 33.5
 - Top flange width: 16.7
 - Bottom flange width: 8.4
 - Distance from left edge to first hole: 30
 - Hole spacing: $(n-2) \times 40$
 - Hole diameter: $\varnothing$
 - Label: $2 \times (n-1) - M5 \times 0.8P \times 6DP$
- Side View:**
 - Overall length: L_F
 - Top flange thickness: 10
 - Bottom flange thickness: 3.5
 - Hole spacing: $(n-1) \times 40$
 - Label: $n - M4 \times 0.7P \times 8DP$
 - End dimension: (500)
- Detail View:**
 - Top flange thickness: 3.8
 - Bottom flange thickness: 6.5
 - Label: $2 - M3 \times 0.5P \times 4DP$
 - Overall height: 107.5

Technical drawing of a plate with N holes. The drawing shows a top view and a side view.

Top View Dimensions:

- Total length: L_s
- Distance from left edge to center of first hole: 30
- Distance between centers of adjacent holes: $(N-1) \times 60$
- Total width: 106.8
- Thickness: 7
- Hole diameter: $\text{N-}\varnothing 6.5 \text{ thru; } \varnothing 11 \times 8 \text{ DP}$

Side View Dimensions:

- Width: 33.5

Technical drawing of the Stator-Forcer assembly. The drawing shows a cross-section of the assembly with the following dimensions and tolerances:

- Overall height: 125 ± 0.1
- Height of the upper section: 106.8
- Height of the lower section: 1.2
- Overall width: 33.5
- Width of the upper section: 1 min.
- Width of the lower section: 1 min.
- Air gap (top): 0.4 min.
- Air gap (bottom): 0.4 min.
- Forcer diameter: 1 ± 0.05

LMCE motor cable assignment		
Motor cable	Signal	Diameter [mm]
Brown	U	7.5
White	V	
Grey	W	
Black	GND	
Yellow	T+	
Green	T-	