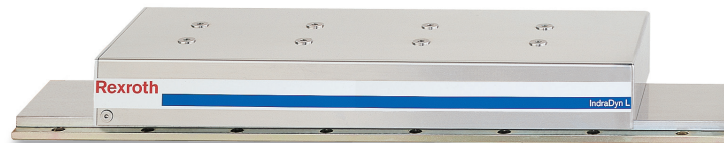


Motors and Gearboxes

Linear motors

IndraDyn L - for maximum dynamics



Linear motors ■ IndraDyn L - for maximum dynamics**Documentation**

- Project Planning Manual

**High dynamics and precision**

- Maximum force of up to 21,500 N
- Maximum velocity up to 600m/min
- Compact dimensions
- Low force ripple
- Heat dissipation minimized by thermal encapsulation

Compact construction, high dynamics and maximum forces of up to 21,500 N – these are the challenges to which our IndraDyn L synchronous linear motors are admirably equipped to meet. Given their exceptionally low force ripple, these motors are particularly suitable for applications with maximum demands in terms of acceleration and accuracy. There is a choice of sizes geared to typical requirements supplied in standard encapsulation or thermal encapsulation for maximum temperature stability.

The motors are fully encapsulated in a stainless steel/titanium alloy sheet metal case, and they can be installed right in the machining area. The combination of several linear motors – whether in series or parallel – gives rise to completely new machine concepts with greatly enhanced machining force.

Technical data**Electric data**

Type	Continous nominal force	Maximum force	Nominal velocity	Max. velocity with F Max	Rated current	Maximum current
	F_N	F_{Max}	V_N	$V_{F Max}$		
	[N]	[N]	[m/min]	[m/min]	I_N	I_{Max}
MLP040A-0300	250	800	500	300	4.2	20
MLP040B-0150	370	1150	300	150		
MLP040B-0250			400	250		
MLP040B-0300			500	300	6	35
MLP070A-0150	550	2000	200	150	5.5	36
MLP070A-0220			360	220	6.3	42
MLP070A-0300			450	300	10.5	55
MLP070B-0100	820	2600	200	100	5.5	28
MLP070B-0120			220	120	5.8	42
MLP070B-0150			260	150	6.2	48
MLP070B-0250			400	250	10	55
MLP070B-0300			450	300	12	70
MLP070C-0120	1200	3800	180	120	8.9	55
MLP070C-0150			250	150	11.7	70
MLP070C-0240			350	240	13	90
MLP070C-0300			450	300	19	110

Motors and Gearboxes

Linear motors ■ IndraDyn L - for maximum dynamics**Electric data**

Type	Continuous nominal force	Maximum force	Nominal velocity	Max. velocity with F Max	Rated current	Maximum current
	F_N	F_{Max}	V_N	$V_{F Max}$	I_N	I_{Max}
	[N]	[N]	[m/min]	[m/min]	[A]	[A]
MLP100A-0090	1180	3750	150	90	6.6	38
MLP100A-0120			190	120	8	44
MLP100A-0150			220	150	10	55
MLP100A-0190			290	190	12	70
MLP100B-0120	1785	5600	190	120	22	130
MLP100B-0250			350	250		
MLP100C-0090	2310	7150	170	90	13	90
MLP100C-0120			190	120	15	85
MLP100C-0190			290	190	23	140
MLP140A-0120	1680	5200	190	120	12	70
MLP140B-0090	2415	7650	160	90	15	85
MLP140B-0120			190	120	18	105
MLP140C-0050	3150	10000	110	50	13	70
MLP140C-0120			190	120	21	125
MLP140C-0170			250	170	29	140
MLP140C-0350			400	350	53	260
MLP200A-0090	2415	7450	170	90	13	70
MLP200A-0120			190	120	16	88
MLP200B-0040	3465	10900	100	40	13	70
MLP200B-0120			190	120	22	130
MLP200C-0090	4460	14250	170	90	23.3	120
MLP200C-0120			190	120	30	175
MLP200C-0170			220	170	46	210
MLP200D-0060	5560	17750	140	60	28	140
MLP200D-0100			180	100	46	210
MLP200D-0120			190	120	53	225
MLP300A-0090	3350	11000	160	90	19	110
MLP300A-0120			190	120	23	138
MLP300B-0070	5150	16300	140	70	28	140
MLP300B-0120			190	120	35	205
MLP300C-0060	6720	21500	110	60	29	140
MLP300C-0090			150	90	37	212

All the specifications relate to operation with liquid cooling and 540 V DC bus voltage.

Dimensions

Motors and Gearboxes

Linear motors ■ IndraDyn L - for maximum dynamics



Motors and Gearboxes

Linear motors ■ IndraDyn L - for maximum dynamics

Type	A	B	C	Weight	A Thermal encapsulation	B Thermal encapsulation	C Thermal encapsulation	Weight Thermal						
	[mm]	[mm]	[mm]	[kg]	[mm]	[mm]	[mm]	[kg]						
MLP040A-0300	61.4	100	210	4.7	73.9	108	235	6.1						
MLP040B-0150			6.1	285			8.4	310	8.1					
MLP040B-0250														
MLP040B-0300														
MLP070A-0150			130							360	10.4	138	385	13.4
MLP070A-0220														
MLP070A-0300														
MLP070B-0100														
MLP070B-0120														
MLP070B-0150														
MLP070B-0250		510		14.3		535	18.4							
MLP070B-0300														
MLP070C-0120														
MLP070C-0150														
MLP070C-0240														
MLP070C-0300														
MLP100A-0090		160	360	13.5		168	385	17						
MLP100A-0120														
MLP100A-0150														
MLP100A-0190														
MLP100B-0120									510	18.7	535	23.3		
MLP100B-0250														
MLP100C-0090			660	24			685	29.7						
MLP100C-0120														
MLP100C-0190														
MLP140A-0120													200	360
MLP140B-0090									510	24.5	535	30.1		
MLP140B-0120									660	32	685	38.9		
MLP140C-0050														
MLP140C-0120														
MLP140C-0170														
MLP140C-0350														
MLP200A-0090		268	360	23		385	28.3							
MLP200A-0120														
MLP200B-0040	510				33			535	40					
MLP200B-0120														
MLP200C-0090										660	42	685		50.7
MLP200C-0120														
MLP200C-0170														
MLP200D-0060			810	51		835	61.3							
MLP200D-0100														
MLP200D-0120														

Motors and Gearboxes

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Type	A	B	C	Weight	A ^{Thermal} encapsulation	B ^{Thermal} encapsulation	C ^{Thermal} encapsulation	Weight Ther- mal
	[mm]	[mm]	[mm]	[kg]	[mm]	[mm]	[mm]	[kg]
MLP300A-0090	0	0	0	0	87	368	385	40.8
MLP300A-0120								
MLP300B-0070							535	58.3
MLP300B-0120								
MLP300C-0060							685	74.9
MLP300C-0090								

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The data specified above only serve to describe the product.

As our products are constantly being further developed, no statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.