

TECNOTION®

direct drive in motion

TxX series - 18 % more force higher acceleration

Transform your system's performance with the all-new TxX series iron core linear motors. Designed with an optimized force constant, these motors boost efficiency, enabling your system to handle heavier loads and achieve higher accelerations with ease.

The TxX Series features stronger magnet plates, allowing for a compact motor design that takes up less space in your system.

Are you ready to give your applications a serious power-up?
Reach out today for detailed information on how the TxX Series can drive your system to new levels of performance!

TMX, TLX, TBX, TBWX series:

- Improved efficiency
- Higher force density - up to 18% more force
- Approved for CSA, CE, REACH and RoHS

Parameter	TM & TL	TB & TBW
Fu, Fp, Fc (N)	+18%	+15%
S (N ² /W)	+39%	+32%

NEW



www.tecnotion.com/ironcore



Iron core TxX series

Parameter	Remarks	Sym	Unit	TM18	TMX18	TL18	TLX18	TB18	TBX18	TBW18	TBW18
Winding type				N	N	N	N	N	N	N	N
Ultimate force @ 10°C/s increase	magnet @ 25°C	F_u	N	720	848	1350	1590	2700	3097	2700	3097
Peak force @ 6°C/s increase	magnet @ 25°C	F_p	N	630	742	1200	1414	2400	2753	2400	2753
Continuous force watercooled	coils @ 100°C	F_c	N			630	742			1200	1376
Continuous force*	coils @ 100°C	F_c	N	360	424	600	707	1140	1308	1140	1308
Maximum speed **	@ 560V	v_{max}	m/s	5.5	5.1	4.8	4.4	2.4	2.2	2.4	2.2
Motor force constant	mount. sfc. @ 20°C	K	N/A _{rms}	79	93	93	110	186	213	186	213
Motor constant	coils @ 25°C	S	N ² /W	578	802	1196	1660	2746	3612	2621	3448
Back EMF phase-phase _{peak}		B_{emf}	V/m/s	65	77	76	90	152	174	152	174
Induction per phase		L_{ph}	mH	23	24	18	19	34	35	35	36
Electrical time constant*	$I < 0.6I_p$	τ_e	ms	6.5	6.7	7.5	7.73	8	8.24	8	8.24
Motor attraction force	rms @ 0 A	F_a	N	1300	1800	2450	3350	4900	6300	4900	6300

All specifications $\pm 10\%$. * These values are only applicable when the mounting surface is at 20°C and the motor is driven at maximum continuous current. If these values differ in your application, please check the Simulation tool at www.tecnotion.com/simtool. ** Actual values depend on bus voltage. Please check the F/v diagram in our simulation tool.

TMX magnet plate	Article number	TLX magnet plate	Article number	TBX magnet plate	Article number
TMX 96mm	118239	TLX 192mm	118252	TBX 192mm	118256
TMX 144mm	118244	TLX 288 mm	117485	TBX 288mm	118260
TMX 384mm	118248				

Visit www.tecnotion.com/linear for more information about all new motors.

Tecnotion Headquarters

Newton 10
7609 RR Almelo
The Netherlands

Tel. +31 (0)546 536 300
sales@tecnotion.com

Tecnotion N-W Europe

High Tech Systems Park
Building N
Haaksbergerstraat 67
7554 PA Hengelo
The Netherlands
Tel. +31 (0)546 536 300
sales@tecnotion.com

Tecnotion D-A-CH

Elsenheimerstraße 59
80687 Munich
Germany

Tel. +49 89 381537-400

Fax +49 89 381537-409

info@tecnotion.de

Tecnotion East Europe

Ul. Ryzowa 49
02-495 Warsaw
Poland

Tel. +48 606 544 046

info@tecnotion.pl

Tecnotion Rep. of Korea

Room #909,
DongJin IT Tower,
30, Sangwon 12-gil
Seongdong-gu
Seoul South Korea

Tel. +82 (0)10 4540 5599

korea@tecnotion.com

Tecnotion USA

200 Broadhollow Rd -
Suite 207
Melville, NY, 11747
United States

Tel. +01 (631) 983-2833

salesusa@tecnotion.com

Tecnotion China

Building 15
369 Lushan Road
SND NEP, Suzhou
China

Tel. +86-512-68760183

sales@tecnotion.com.cn