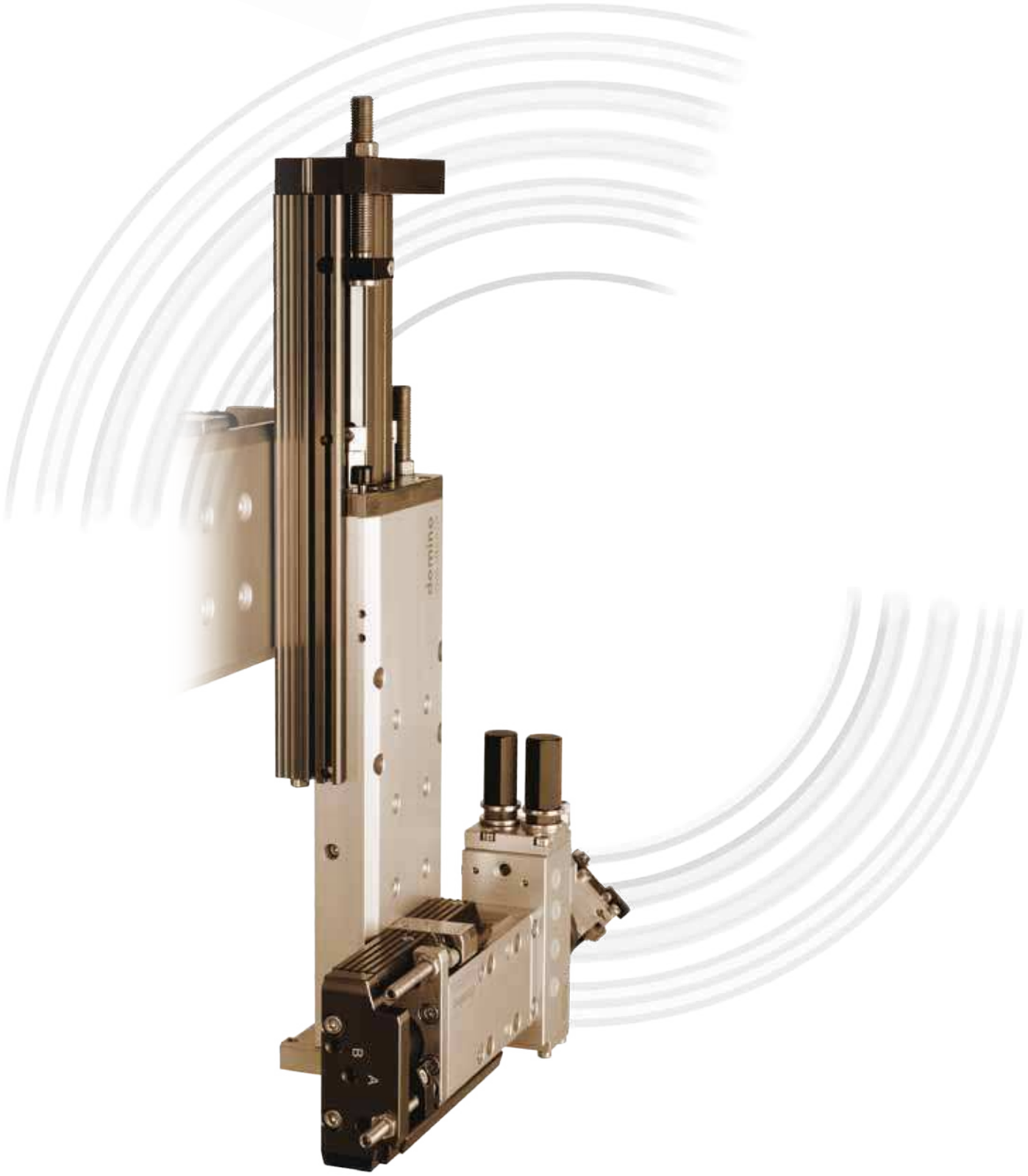
domino modul AG



components

Linear Modules

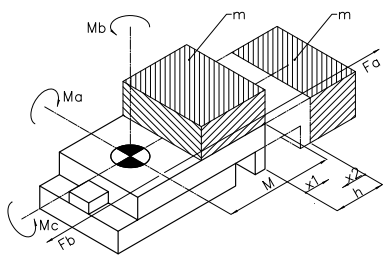
Technical Data – Summary FE Series

		Electric							
		LM 4 SE			LM 6 FE			LM 8 FE	
		SE-30	SE-60	SE-90	FE-90	FE-180	FE-270	FE-60	FE-240
Stroke lengths [mm]: h	**0-30**	●							
	0-60		●					●	
	0-90			●	●				
	0-180					●			
	0-240								●
	0-270						●		
Theor. force Fa/Fb [N]:	**47/47**	●	●	●					
	110/110				●	●	●		
	440/440							●	●
Max. permissible mass [kg]:	**2**	●	●	●					
	5				●	●	●		
	20							●	●
Weight [kg]:		1,1	1,2	1,3	3,3	3,9	4,4	6	8,5
Point of application of force for all torques [mm]:	**M**	65	65	65	82	82	82	138	138
Max. statische Torques [Nm]:	**Ma**	10	20	20	370	370	370	386	386
	Mb	10	20	20	370	370	370	784	784
	Mc	30	30	30	63	63	63	336	336
Repeat accuracy [mm]:		±0,01	±0,01	±0,01	±0,01	±0,01	±0,01	±0,01	±0,01

This applies to calculations:

* Ma/Ma max + Mb/Mb max + Mc/Mc max < 1
* For stresses during the drive of the carriage M max = 20% M max static

Torques



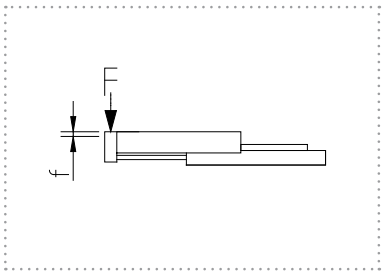
Linear Modules

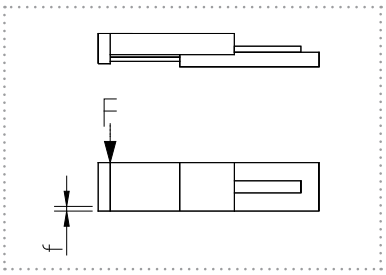
Load Diagrams

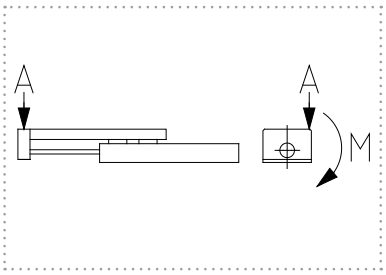
Axial Load
The graph shows the deflection f of the slide under the effect of the force F.

Transverse Load
The graph shows the deflection f of the slide under the effect of the force F.

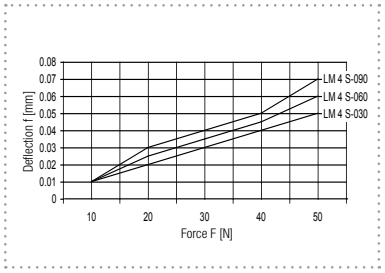
Lateral Load
The graph shows the deflection f of the slide at point A under the effect of the torque.

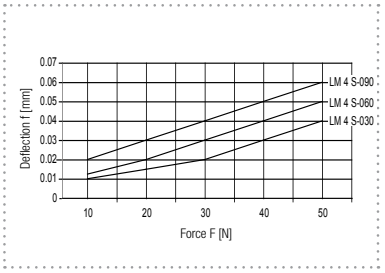


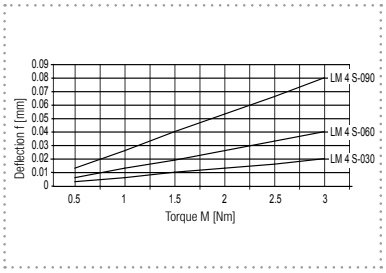




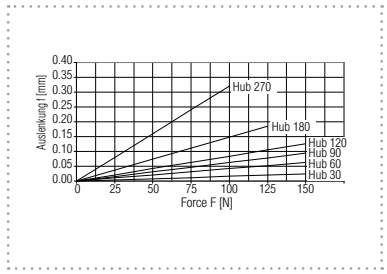
LM 4 SE

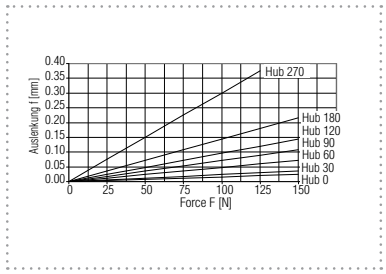


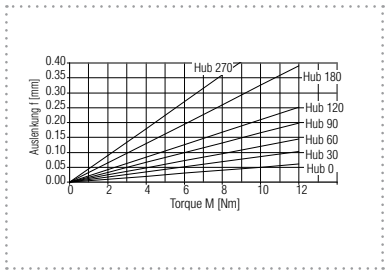




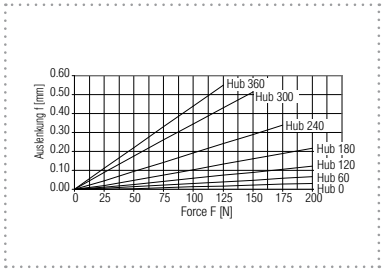
LM 6 FE

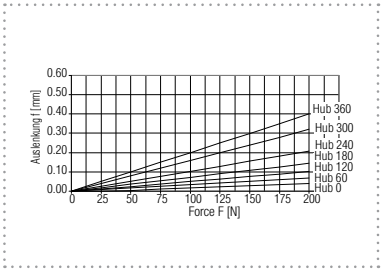


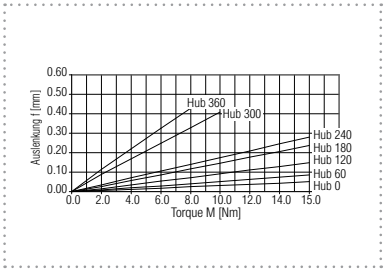




LM 8 FE





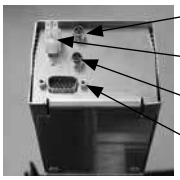


Linear Modules

LM 6 FE – Electrical Linear Module

LM 6 FE

Electrical Connections



Technical Data, stroke-independent

Spherical spindle lead		Ø 10x10 mm
Toothed belt ratio		1:1,25
Travel per motor revolution		8 mm
Theor. force	Fa, Fb	110 N
Theor. permissible force	Fa, Fb	350 N
Max. speed (LM 6 FE-90 / LM 6 FE-180)		0,75 m/s
Max. speed (LM 6 FE-270)		0,5 m/s
Max. acceleration/deceleration horizontal		10 m/s^2
Servomotor*		AKM 12C (Danaher Motion)
Motor nominal output		230 W
Nominal speed		8000 min^{-1}
Nominal torque		0,28 Nm
Static torque		0,31 Nm
Standstill current		1,51 A
Peak current		6,06 A
Electrical connection		230 V AC
Comcoder / Incremental sensor with reverb.		2048 increments/revolution
Brake		24 V DC, 5 W
Temperature range		0 to 60° C
Repeat accuracy		-/+ 0,01 mm
Max. permissible mass		5 kg

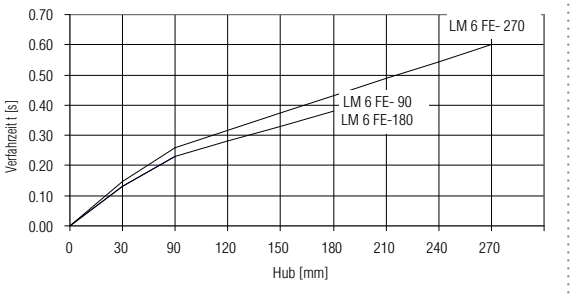
*Inquiry for other motors

Technical Data, stroke-independent

See page 56

Permissible travel time

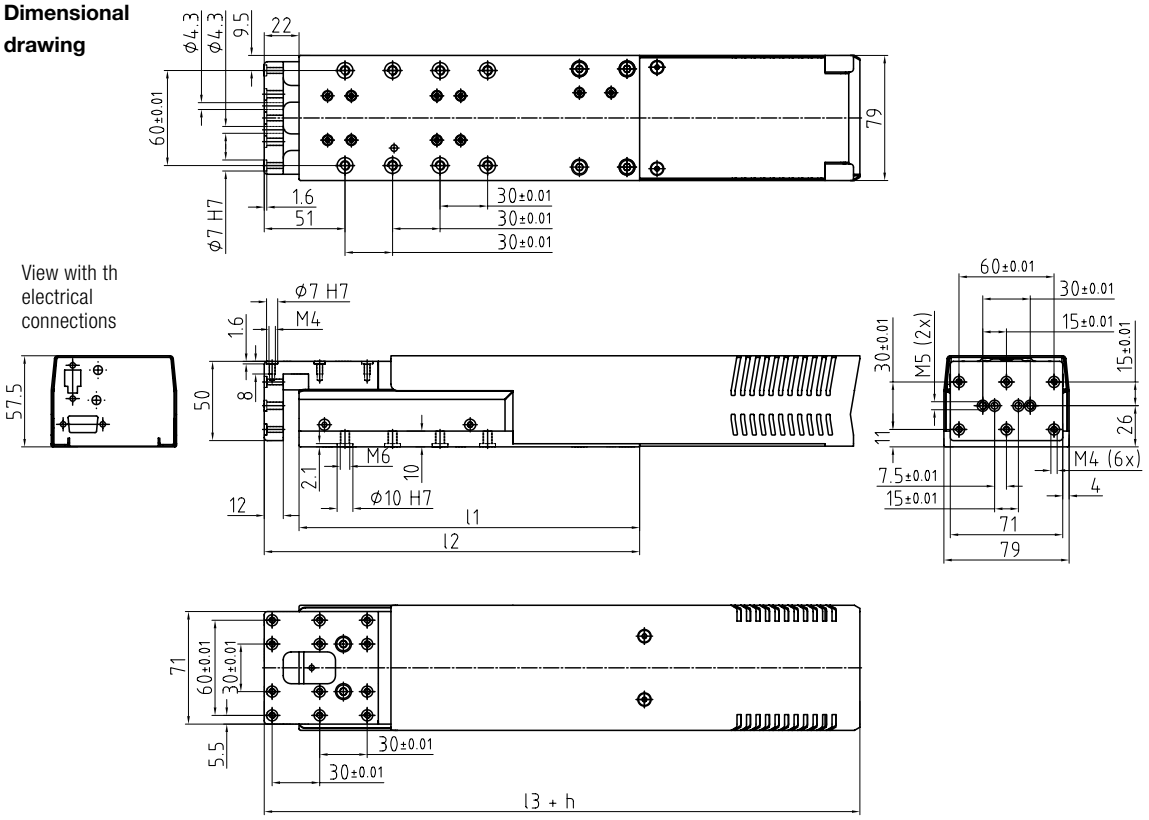
The travel time t determined from the diagram may not be undershot.



Linear Modules

LM 6 FE – Electrical Linear Module

Dimensional drawing



Designation	h	l_1	l_2	l_3
LM 6 FE-90	90	215	237	376
LM 6 FE-180	180	305	327	466
LM 6 FE-270	270	395	417	556

Designation	Order number	
LM 6 FE-90 C	300 8869	
LM 6 FE-180 C	300 8804	
LM 6 FE-270 C	300 8859	
LM 6 FE-90 CB	300 8871	incl. holding brake
LM 6 FE-180 CB	300 8851	incl. holding brake
LM 6 FE-270 CB	300 8861	incl. holding brake
LM 6 FE-90 R	300 9686	
LM 6 FE-180 R	300 9682	
LM 6 FE-270 R	300 9684	
LM 6 FE-90 RB	300 9688	incl. holding brake
LM 6 FE-180 RB	300 9683	incl. holding brake
LM 6 FE-270 RB	300 9685	incl. holding brake

incl. 4 Centering rings Ø 10

Options

Reference unit		300 9513
Drag chain cable Motor	L = 5 m	300 9514
Drag chain cable Motor	L = 10 m	300 9671
Drag chain cable Comcoder	L = 5 m	300 9512
Drag chain cable Comcoder	L = 10 m	300 9672
Drag chain cable Resolver	L = 5 m	300 9725
Drag chain cable Resolver	L = 10 m	300 9726

Accessories

Centering ring Ø 7	300 1521
Centering ring Ø 10	300 1522
Limit switch 8x8	301 5214
Limit switch M8x1	301 4955

See chapter Accessories

Scope of supply

Linear module LM 6 FE incl. servomotor

Scope of supply external

Power Unit

Recommendation:
Servostar 300 (Danaher Motion)
Servostar 400 with Resolver

Profi-Bus
Puls-direction
+/- 10V
CAN open
RS 232

Master Controller

Mains connection