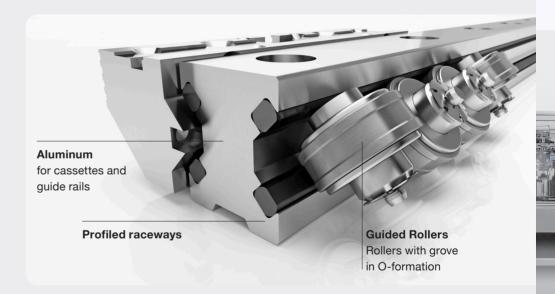
# Low Weight as well as smooth and easy running

Franke Aluminum Linear Systems are the best solution when it comes to speed and lightweight construction. The design principle of Franke Linear Systems makes them highly dynamic, quiet and maintenance-free. Franke Linear Systems can be modified individually to suit customer needs, thanks to their modular structure.

Franke Linear Systems can be modified individually to suit customer needs, thanks to their modular structure. You will always receive a solution that is ideally tailored to match your specific applications due to the use of various rail profiles and roller shoes, special cassettes, variable track widths or an integrated direct drive.

- · Lightweight designs
- · Homogeneous material properties in assemblies with aluminium profiles
- · Low moved masses
- · Low drive energy required
- · High dynamism and speed





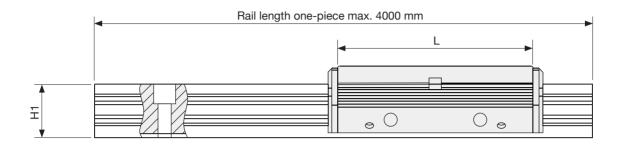


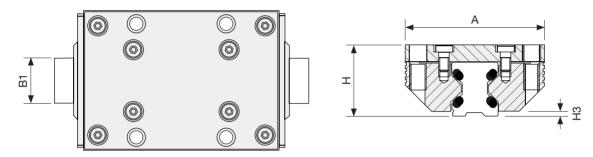
### **Linear Guides**

### Type FD

### Double Rail / Cassette







#### **Dimensions**

Size			Dimens mn		Available Types		
	A	B1	Н	H1	H3	L	
12	37	12,0	19	14,7	1,4	64	FDA, FDB, FDC, - , FDE, FDG, -
15	47	15,5	24	18,7	2,0	78	FDA, FDB, FDC, - , FDE, FDG, -
20	63	21,0	30	22,6	2,0	92	FDA, FDB, FDC, - , FDE, FDG, -
25	70	23,0	36	27,0	2,5	98	FDA, FDB, FDC, FDD, FDE, FDG, FDH
35	100	32,0	48	37,0	3,5	135	FDA, FDB, FDC, - , FDE, FDG, FDH
45	120	45,0	60	46,0	4,0	165	FDA, FDB, FDC, - , FDE, FDG, FDH

### **Characteristics**

Franke Aluminum Linear Systems are the best solution when it comes to speed and lightweight construction. The design principle of Franke Linear Systems makes them highly dynamic, quiet and maintenance-free. Franke Linear Systems can be modified individually to suit customer needs, thanks to their modular structure. The slide resistance of the cassettes can be adjusted individually. The guide rails are available in one piece up to 4000mm and can coupled to endless stroke lengths.

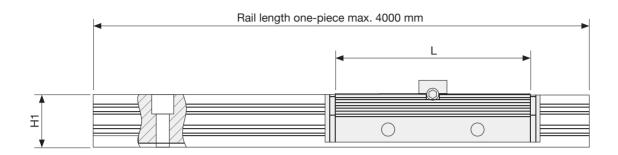
Material	Cassette plate, roller shoes and rail body: Aluminum; Rollers and raceways according to type: steel, non-corrosive steel, amagn. steel
Temperature in use	e –10 °C to +80 °C
Vmax	10 m/s
<b>Mounting position</b>	any
Lubrication	lifetime lubricaton, maintenance-free

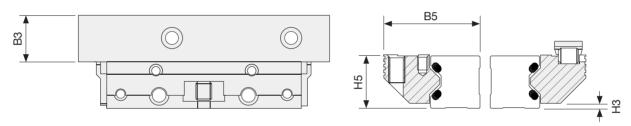
### **Linear Guides**

### Type FD

# Pair of Single Rails / Pair of Roller Shoes







#### **Dimensions**

Size			Dimens mn		Available Types		
	B3	B5	H1	H3	H5	L	
12	12,00	24,4	14,7	1,4	15,0	64	FDA, FDB, FDC, - , FDE, FDG, -
15	15,25	30,9	18,7	2,0	19,0	78	FDA, FDB, FDC, - , FDE, FDG, -
20	20,00	40,9	22,6	2,0	23,0	92	FDA, FDB, FDC, - , FDE, FDG, -
25	25,00	48,4	27,0	2,5	27,5	98	FDA, FDB, FDC, FDD, FDE, FDG, FDH
35	35,00	68,9	37,0	3,5	37,5	135	FDA, FDB, FDC, - , FDE, FDG, FDH
45	45,00	82,4	46,0	4,0	46,5	165	FDA, FDB, FDC, - , FDE, FDG, FDH

### Characteristics

Franke Aluminum Linear Systems are the best solution when it comes to speed and lightweight construction. The design principle of Franke Linear Systems makes them highly dynamic, quiet and maintenance-free. Franke Linear Systems can be modified individually to suit customer needs, thanks to their modular structure. The slide resistance of the roller shoes can be adjusted individually. The guide rails are available in one piece up to 4000mm and can coupled to endless stroke lengths.

Material	Roller shoes and rail body: Aluminum; Rollers and raceways according to type: steel, non-corrosive steel, amagn. steel
Temperature in use	−10 °C to +80 °C
Vmax	10 m/s
Mounting position	any
Lubrication	lifetime lubricaton, maintenance-free

# **Linear Guides**

# Type FD

# Available Types



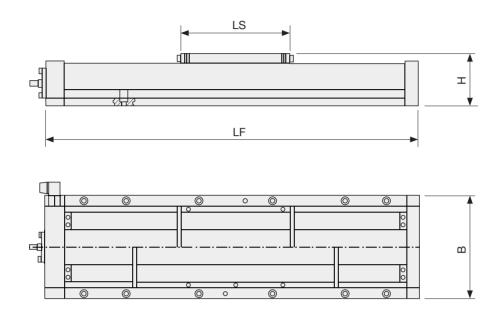
### Types

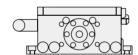
Туре	Characteristics	Recommended Application
FDA	<ul> <li>Aluminum roller guide in <b>Standard</b> version</li> <li>Integrated raceways made of steel</li> <li>Rollers with needle bearings for smooth and eays running</li> </ul>	Suitable for linear motion applications in almost all industries. Sealed rollers for maintenance-free operation over the entire service life. Light, clean run.
FDB	<ul> <li>Aluminum roller guide in Low-cost-design</li> <li>Integrated raceways made of steel</li> <li>Rollers with ball bearings</li> </ul>	Suitable for linear motion applications in almost all industries. Particularly suitable for cost-sensitive applications and reduced demands on load capacity and noise.
FDC	<ul> <li>Aluminum roller guide in Non-corrosive design</li> <li>Integrated raceways made of non-corrosive steel</li> <li>Rollers with needle bearings for smooth and easy running</li> </ul>	Suitable for linear motion applications in almost all industries. Insensitive to environmental influences such as moisture or cleaning agents.
FDD	<ul> <li>Aluminum roller guide in Non-magnetic design</li> <li>Integrated raceways made of non-magnetic steel</li> <li>Rollers in needle bearings for smooth and easy running</li> </ul>	Suitable for linear motion applications in almost all industries. Nonmagnetic guide rails without influence on prevailing magnetic fields (e.g., in medical or electronics manufacturing).
FDE	<ul> <li>Aluminum roller guide in Lubricant-free design</li> <li>Integrated raceways made of steel</li> <li>Lubricant-free rollers for smooth and clean running</li> </ul>	Suitable for linear motion applications in almost all industries. Special rollers without lubricants. Suitable for use in a vacuum or in clean rooms.
FDG	<ul> <li>Aluminum roller guide in Non-corrosive low cost design</li> <li>Integrated racewys made of non-corrosive steel</li> <li>Rollers with ball bearings</li> </ul>	Suitable for linear motion applications in almost all industries. Particularly suitable for cost-sensitive applications in harsh environments or when using cleaning agents.
FDH	<ul> <li>Aluminum roller guide in highly dynamic design</li> <li>Integrated raceways made of steel</li> <li>Rollers with angular ball bearings for high speed and acceleration</li> </ul>	Suitable for linear motion applications in almost all industries. Rollers with angular contact ball bearings for maximum acceleration and speed values, for example when using linear motors as the drive source.

### **Linear Tables**

# Type FTB

# Spindle Drive / Metal Cover





### **Dimensions**

Size		Dimensi mm	ons		Load rating N		ent load Im	Weight kg	
	Hub	В	Н	LF	LS	С	$M_{cx}$	${\rm M_{cy}/M_{cz}}$	
FTB06A	100-1500	155	70	315-1715	165	15000	670	220	6,4 - 21,8
FTB06B	100-1500	155	70	430-1830	280	30000	1380	1930	7,5 - 22,9

### Characteristics

Franke type FTB linear tables are lightweight, compact, ready-to-install positioning units. They are highly resilient and have excellent positioning accuracy. Franke type FTB linear tables are equipped with an integrated aluminum roller guide, preloaded ball screw drive and a metal cover.

Material	Base plate: AIZnMgCu05, integrated roller guide: AIZnMgCu05, raceways: steel, rollers: steel, covers:
	non-corrosive steel
Temperature in use	-10 °C to +80 °C
Vmax	15 m/min
Mounting position	any
Lubrication	lifetime lubrication, mainenance-free

### **Linear Modules**

## **Type FTC**

# Spindle Drive / Belt Drive

Version with Belt Drive

Version with Spindle Drive

#### **Dimensions**

Größe			Dimensions Tragzah				Mor N	Weight kg	
	Hub	В	Н	LF	LS	С	M <sub>cx</sub>	${\rm M_{cy}/M_{cz}}$	
Belt Drive									
FTC15	100-3400	72,5	73,5	360-3660	154	4200	81	190	3,0-13,9
FTC20	100-3400	91,0	88,0	411-3711	197	5400	133	338	5,5-28,6
FTC25	100-3200	117,0	118,5	524-3624	276	13500	483	922	12,4-43,4
Spindle Di	rive								
FTC15	100-1100	72,5	73,5	300-1300	154	4200	81	190	3,0-7,0
FTC20	100-2000	91,0	88,0	350-2250	197	5400	133	338	5,6-18,9
FTC25	100-3200	117,0	118,5	500-3600	276	13500	483	922	12,6-53,2

LF

### Characteristics

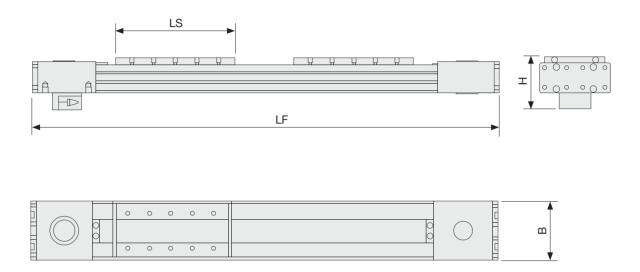
Franke liner modules type FTC are lightweight, compact, ready-to-install positioning units. They are particularly suitable for fast, dynamic movement tasks. The external guide system is moved by an internal spindle or toothed belt drive. Franke linear modules type FTC are versatile. The guide cassette can be customized to meet customer requirements.

Material	Housing: AlZnMgCu05, external roller guide: AlZnMgCu05, racewasy/rollers: steel, optional steel spindle
	or plastic toothed belt
Temperature in use	-10 °C to +80 °C
Vmax	5 m/s
<b>Mounting position</b>	any
Lubrication	lifetime lubrication, maintenance-free

### **Linear Modules**

# **Type FTD**

### **Belt Drive**



#### **Dimensions**

Size		Dimens mn				Load rating N		ments Nm	Weight kg
	Hub	В	Н	LF	LS	С	$M_{ex}$	${\rm M_{cy}/M_{cz}}$	
FTD15	100-7000	93	52,5	536-7436	178	4200	45	274	5,2-35
FTD20	100-7000	116	66,5	624-7524	218	5400	76	460	10,3-56,5
FTD35	100-7000	175	92,5	794-7694	263	12500	294	1233	28,8-133,7

### Characteristics

Franke FTD linear modules are lightweight, compact, ready-to-install positioning units. They are extremely space-saving and combine the guide system and the toothed belt drive protected within the module housing. Franke linear modules of the type FTD are versatile and also bridge large stroke ranges of up to 7 meters in length.

Material	Housing: AlZnMgCu05, integrated roller guide: AlZnMgCu05, raceways/rollers: steel, toothed belt:
	plastics
Temperature in use	–10 °C to +80 °C
Vmax	10 m/s
Mounting position	any
Lubrication	lifetime lubrication, maintenance-free

# Lightweight Bearings, Direct Drive Systems and Special Bearings for innovations



Franke GmbH
Obere Bahnstraße 64
73431 Aalen, Germany
Tel. +49 7361 920-0
Fax +49 7361 920-120
info@franke-gmbh.de

www.franke-gmbh.com www.light-weight-bearings.com

