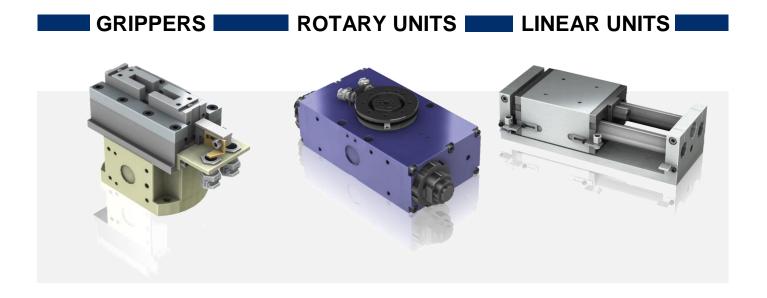


FIBRO LÄPPLE TECHNOLOGY

HIGH QUALITY MODULES



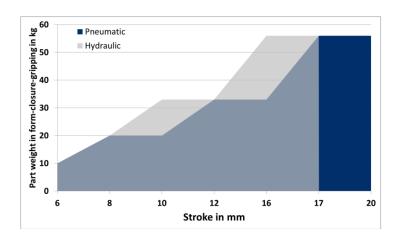


STANDARDISED MODULES FOR INDIVIDUAL SOLUTIONS



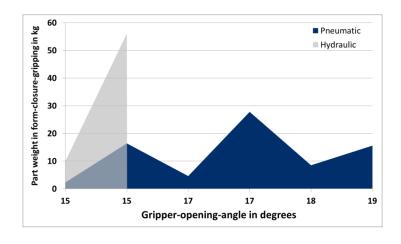
FLT offers perfectly planned, individually designed module solutions for automation in the most varied industries. Transport and logistics, as well as installation and handling are the most important areas of application.

Our units for linear motion, rotation and gripping can be combined in a variety of ways with the most varied devices and systems – from simple pick-&-place units to multi-axis robots.



PARALLEL GRIPPERS

Various versions of compact 2 or 3 finger parallel grippers are available. Grippers can be supplied with or without gripping force safety device, spline or fixed finger.*



ANGULAR GRIPPERS

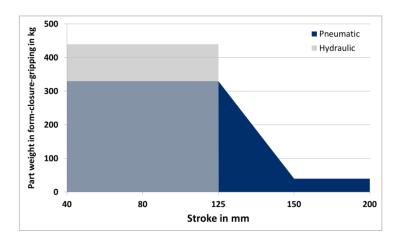
Various versions of compact swivel grippers are available. Grippers can be supplied with or without gripping force safety device, spline or fixed finger.*



STANDARDISED MODULES FOR INDIVIDUAL SOLUTIONS

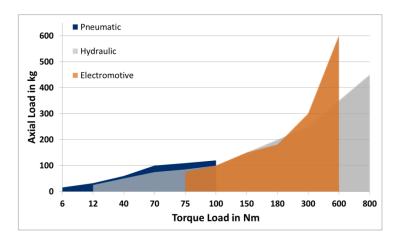
LONG-STROKE GRIPPERS

Long stroke grippers are available in pneumatic or hydraulic versions. They are designed for large strokes and high clamping forces.*



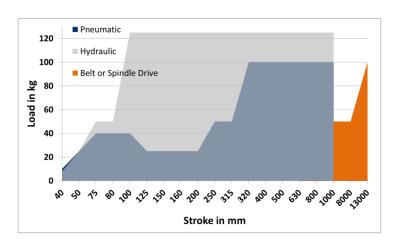
ROTARY UNITS

The powerful and compact units can be used for example as rotation-axis for grippers or as basic axis for module systems. The design guarantees an optimal rotation speed and positioning accuracy.*



LINEAR UNITS

The compact linear motion units are especially suitable for moving axes to load and unload of machines in the assembly area.*



^{*} The graph shows the exemplary application area of the units. The feasibility of the final application has to be analyzed in detail by FLT before usage.





FLT GRIPPER ADVANTAGES

- Compact Design
- Variety of module sizes for a huge stroke range
- Integrated gripping force safety function available
- High security during handling movements
- Versatile finger fixtures and positioning
- Variety of standardized accessories available
- Applications for two or three fingers
- Available with pneumatic or hydraulic drive

气动机械手 PNEUMATIC GRIPPERS

5

4

两爪平动机械手 2-JAW PARALLEL GRIPPER 型号 摩擦锁合力 限位锁合力 大小 每爪行程/张角 Part weight in force closure gripping Part weight in form closure gripping Stroke/Opening angle per jaw Type 52.81. 6 mm 4,6 kg 2 8 mm 8,5 kg 20 kg 3 12 mm 15,6 kg 33 kg 4 17 mm 27,8 kg 56 kg 53.81. 2 6 mm 2,3 kg 5 kg 4,6 kg 10 kg 3 8 mm 10 mm 8,5 kg 20 kg 5 15,6 kg 33 kg 16 mm 56 kg 6 20 mm 27,8 kg 三爪平动机械手 3-JAW PARALLEL GRIPPER 52.81. 6 mm 4,6 kg 10 kg 20 kg 2 8 mm 8,5 kg 3 12 mm 15,6 kg 33 kg 4 17 mm 27,8 kg 56 kg 53.81. 2 6 mm 2,3 kg 5 kg 3 8 mm 4,6 kg 10 kg 4 10 mm 8,5 kg 20 kg

15,6 kg

27,8 kg

16,4 kg

两	爪张角机	城手 2-JAW AN	GULAR GRIPPER		
5	2.71.	1	15°	5,1 kg	10 kg
		2	15°	11,0 kg	20 kg
		3	15°	16,4 kg	33 kg

16 mm

20 mm

15°



33 kg

56 kg

56 kg





GRIPPERS

53.71.	2	15°	2,3 kg	5 kg
	3	17°	4,6 kg	10 kg
	4	18°	8,5 kg	20 kg
	5	19°	15,6 kg	33 kg
	6	17°	27,8 kg	56 kg



MOTORGRIP 两爪平动机械手 2-JAW PARALLEL GRIPPER

52.87.	1	40 / 80 / 125 mm	11 kg	50 kg
	2	40 / 80 / 125 mm	17 kg	77 kg
	3	40 / 80 / 125 mm	25 kg	110 kg
	4	40 / 80 / 125 mm	75 kg	330 kg



两爪平动机械手 2-JAW PARALLEL GRIPPER

FGH	62	40 / 80 / 100 mm	13,0 kg	20,0 kg
	64	100 / 150 / 200 mm	32,0 kg	40,0 kg
FGP	30	5 mm	0,6 kg	0,9 kg
	45	5 mm	0,8 kg	1,2 kg



回转式双机械手 SWIVELLING DOUBLE GRIPPER

SDGP	12	6 mm	4,6 kg	10 kg
	24	8 mm	8,5 kg	20 kg
	80	12 mm	15,6 kg	33 kg



液压机械手 HYDRAULIC GRIPPERS

两爪平动机械手 2-JAW PARALLEL GRIPPER

型号 Type	大小 Size		每爪行程/张角 Stroke / Opening angle per jaw	摩擦锁合力 Part weight in force closure gripping	限位锁合力 Part weight in form closure gripping
52.85.		1	6 mm	5,1 kg	10 kg
		2	8 mm	11,0 kg	20 kg
		3	12 mm	16,4 kg	33 kg
		4	17 mm	16,4 kg	56 kg





三爪平动机械手 3-JAW PARALLEL GRIPPER

52.85.	1	6 mm	5,1 kg	10 kg
	2	8 mm	11,0 kg	20 kg
	3	12 mm	16,4 kg	33 kg
	4	17 mm	16,4 kg	56 kg





两爪张角机械手 2-JAW ANGULAR GRIPPER

52.75.	1	15°	4,6 kg	10 kg
	2	15°	9,8 kg	20 kg
	3	15°	16,6 kg	33 kg
	4	15°	30,8 kg	56 kg

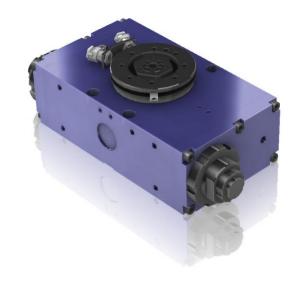


MOTORGRIP 两爪平动机械手 2-JAW PARALLEL GRIPPER

52.87.	1	40 / 80 / 125 mm	17 kg	78 kg
	2	40 / 80 / 125 mm	25 kg	110 kg
	3	40 / 80 / 125 mm	50 kg	220 kg
	4	40 / 80 / 125 mm	100 kg	440 kg







FLT ROTARY UNIT ADVANTAGES

- Powerful
- Compact design
- Electromotive, hydraulic and pneumatic applications available
- High performance in acceleration, speed and positioning accuracy at the same time
- Standardized hydraulic and pneumatic rotary distributors available
- Standardized centering rings available
- Versatile
- Reliable

旋转模块 ROTARY UNITS

型号 Type	驱动 Drive	大小 Size	转角 Rotation angle	轴向荷载 Axial load	惯性矩 Interia moment	扭矩 Load moment
55.51.	气动 Pneumatic	2	90° / 180°	16 kg	0,2 kgm ²	6 Nm
		3	90° / 180°	32 kg	0,6 kgm²	12 Nm
		4	90° / 180°	60 kg	3,0 kgm ²	40 Nm
		5	90° / 180°	120 kg	6,0 kgm ²	100 Nm



型号 Type	驱动 Drive	大小 Size		转角 Rotation angle	轴向荷载 Axial load	惯性矩 Interia moment	扭矩 Load moment
56.51.	气动 Pneumatic		2	90° / 180°	16 kg	0,2 kgm²	6 Nm
			3	90° / 180°	32 kg	0,6 kgm²	12 Nm
			4	90° / 180°	48 kg	1,0 kgm²	40 Nm



型号 Type	驱动 Drive	大小 Size	转角 Rotation angle	轴向荷载 Axial load	惯性矩 Interia moment	扭矩 Load moment
52.55.	液压 Hydraulic		2 90° / 180°	25 kg	1,2 kgm²	12 Nm
			3 90° / 180°	75 kg	10 kgm²	70 Nm
			4 90° / 180°	200 kg	60,0 kgm²	180 Nm
			5 90° / 180°	450 kg	300,0 kgm ²	800 Nm



型号 Type	驱动 Drive	大小 Size	转角 Rotation angle	轴向荷载 Axial load	惯性矩 Interia moment	扭矩 Load moment
54.57.	电动 Electric	2	2 360°	75 kg	5 kgm²	75 Nm
		3	360°	150 kg	10 kgm²	150 Nm
		4	360°	300 kg	50 kgm²	300 Nm
			360°	600 kg	300 kgm²	600 Nm





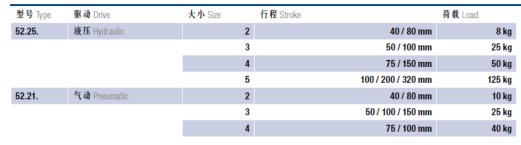
LINEAR UNITS



FLT LINEAR UNIT ADVANTAGES

- Compact design
- Hydraulic, pneumatic and electromotive applications available
- Perfectly suitable for loading and unloading machines and installations
- Variety of module sizes available for a huge stroke range
- Available with auxiliary cylinder for third position
- Fast and precise transportation
- Vertical and horizontal application

短行程模块 SHORT-STROKE UNITS







长行程模块 TRANSLATION MODULES

型号 Type	驱动 Drive	大小 Size	行程 Stroke	荷载 Load
52.15.	液压 / Hydraulic	1	125 / 160 / 200 / 250 / 315 / 400 mm	8 kg
		2	160 / 200 / 250 / 315 / 400 / 500 / 630 mm	25 kg
		3	250 / 315 / 400 / 500 / 630 / 800 / 1000 mm	50 kg
		4	315 / 400 / 500 / 630 / 800 / 1000 mm	125 kg
52.11.	气动 / Pneumatic	2	160 / 200 / 250 / 320 / 400 / 500 / 630 mm	25 kg
		3	250 / 320 / 400 / 500 / 630 / 800 mm	50 kg
		4	320 / 400 / 500 / 630 / 800 / 1000 mm	90 kg





微型线轨 MINI LINEAR AXES MINI

型号 Type	驱动 Drive	大小 Size	行程 Stroke		荷载 Load
FMZK	齿形带 Belt drive	040	Bis / up to	13000 mm	10 kg
		060	Bis / up to	13000 mm	50 kg
		090	Bis / up to	13000 mm	100 kg
FMSP		060	Bis / up to	8000 mm	50 kg
FMKR	主轴驱动 Spindle drive	040	Bis / up to	1000 mm	10 kg
		060	Bis / up to	1000 mm	50 kg
FMZS	齿形带 Belt drive	040	Bis / up to	13000 mm	10 kg
		060	Bis / up to	13000 mm	50 kg
		090	Bis / up to	13000 mm	100 kg





线轨 LINEAR AXES

型号 Type	驱动 Drive	大小 Size	行程 Stroke	荷载 Load	
52.31.	气动 / Pneumatic		2 250 / 320 / 400 / 500	0 / 630 / 800 / 1000 mm	50 kg
			3 320 / 400 / 500	0 / 630 / 800 / 1000 mm	100 kg



WE MOVE EVERYTHING FOR OUR CUSTOMERS



The vision of FIBRO LAEPPLE TECHNOLOGY GmbH reflects the obligation to customer orientation.

FIBRO LAEPPLE TECHNOLOGY GmbH is the international leader in the development, production and marketing of automation solutions for the shape cutting and noncutting production.

We set ourselves apart from our competitors through **qualitative** and innovative leadership, by developing our employees and our know-how continuously.

FIBRO LAEPPLE TECHNOLOGY represents "German Engineering": Reliability and economic efficiency.

Our unique and wide range of products, which varies from **single components** to **turnkey solutions**, is preferably used in many branches of production.

EXCERPT OF CUSTOMERS

OEM Customers

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AUDI +++ Alfa Romeo +++ BMW +++ Chery Automobile +++ Chrysler +++ Citroen +++ DAF +++ Daimler +++

DODGE +++ EEA +++ IAT +++ Ford +++ FUSO +++ GM +++ SGM +++ SGM Wuling +++ SGM Dongque PT ++

Hyundai +++ NECO +++ Jaguar +++ Jeep +++ Lancia +++ MAN +++ Mercedes Benz +++ Mini +++ Mitsubishi

+++ Nissan +++ OPEL +++ Peugeot +++ Porsche +++ Renault +++ Rover +++ SAAB +++ SAIC +++ Sangyong
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Customers Mechanical Engineering

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BAYER +++ Bucher +++ EFD Induction +++ ELHA +++ EMCO +++ Fagor +++ Fontijne +++ Gehring +++
Gleason-Hurth +++ Gleason-Pfauter +++ Heess +++ Hofmann +++ Heller +++ Hendrickson +++ Hottinger +++
JW Froehlich +++ Kapp +++ Keilmann +++ Klink +++ KRAUSECO +++ LARU Lang +++ Licon +++ Lynson
+++ MAG Powertrain +++ Markert +++ Mauser +++ Nagel +++ Niles +++ Piller +++ Pittler +++ RETCO +++
Schenck-Rotec +++ STAMA +++ Stam +++ Starrag +++ SW +++ UNIOR +++ Vollert +++ Weisser
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Customers General Industry

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AEG +++ Aichelin +++ Anger +++ Atlas Copco +++ Benteler +++ BOSCH +++ Buderus +++ Burger +++ Comau +++ Continental +++ Danfoss +++ Deutz +++ FFT EDAG +++ Getrag +++ GKN +++ Heinz & Feld +++ Hottinger +++ IBM +++ INA +++ Kaeser +++ KS Kolbenschmidt +++ KUKA +++ Läpple +++ Liebherr +++ Linde +++ Lovc +++ LUK +++ Michelin +++ Miele +++ Müller Weingarten +++ NSM +++ Osram +++ Sandvik +++ Saint-Gobain +++ Schaeffler +++ Siemens +++ SMS Eumuco +++ Swarovski +++ Vaillant +++ Wagon +++ ZF
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FIBRO LÄPPLE TECHNOLOGY GMBH

August-Läpple-Weg 74855 Hassmersheim Deutschland

T +49 6266 73-0 F +49 6266 73-5238 info@fibro-laepple.de www.fibro-laepple.de

Fibro Laepple Technology Ltd.

6000 Rhodes Dr. Unit #2 Windsor, Ontario, N8N-2M1, Canada

T +1 519 945-5225 F +1 519 945-5234 info@fibro-laepple.ca www.fibro-laepple.com

Fibro Laepple Technology Inc.

1239 Chicago Rd. Troy, MI, 48083

T+1 (248) 591-4494

info@fibro-laepple.ca www.fibro-laepple.com

FIBRO LAEPPLE TECHNOLOGY Automation (Shanghai) Co. Ltd.

Dongfang Rd. Lane. 985, First Trade Building Rm.22D, 200122 Pudong Shanghai, China

T +86 21 68392636 F +86 21 68392637 xiaoli.li@fibro-china.com www.fibro-laepple.de