

# The Expert's experience

### Just imagine you want to buy a new car

Oh man, you really like these comfortable seats, the size and shape with the spacious boot in a manufacturer's model. The luggage during the next family holidays luggage would cease to be a problem. But at the same time, you love the user interface and low fuel consumption of your other car. What a pity, these elements cannot be combined.

Let's transfer this example to industrial automation with electric actuators. You need an axis for a specific workload and cycle time. Your control engineer is an expert for a specific PLC type and has vast experience in setting up a specific motor type. Unfortunately, this motor supplier does not provide a mechanical axis which fits your application.

You could now start to design your own mechanical axis with a lot of external parts, design, test and assembly input. However, this is not really appealing due to resources, procurement, and warranty issues. There is, nevertheless, a manufacturer, offering a perfect axis but with another motor brand which your control engineer has no experience with.



CLEMENS DOPPLER
TEAM LEAD ELECTRICAL TECHNOLOGY

## What a pity, these elements cannot be combined in the new actuator, can they?

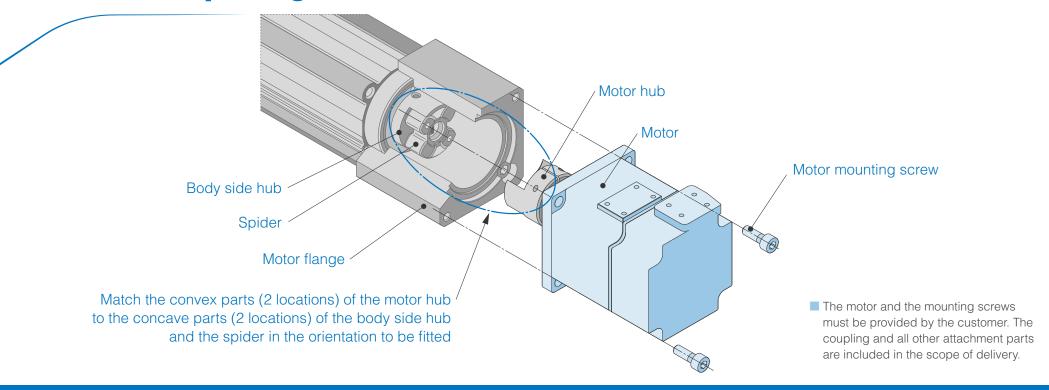
Yes, with motorless actuators you can very easily combine your favourite manufacturers' motors with a large portfolio of ready-to-use mechanical axes. With SMC in particular there is a plug-and-play solution for the most common motor manufacturers worldwide.

I would say that the benefits for machine builders are clear:

- Let your control engineer work with the system he knows best and is able to implement very quickly
- Keep your stock reduced with just one motor type for your machines
- Only one part number for procurement of the mechanical axis including all parts needed for pairing with the motor
- Ready-to-use sizing software for checking maximum workload, speed, acceleration and cycle time
- Different actuator types can be fitted with the same motor. (E.g., rod types or slider types).

Let SMC help you in your motorless experience

## What's in the package?-



## Your motor, our actuator

SMC solutions for motorless - Beckhoff

*	Slider type, ball screw drive – LEFS Series	р4	High precision table – LESYH Series	p8
	Slider type, belt drive – LEFB Series	p5	Rod type, ball screw – LEY Series	р9
	High rigidity slider type – LEJS Series	p6	Guide rod type, ball screw – LEYG Series	p10
	High rigidity and high precision slider type, ball screw – LEKFS Series	р7		

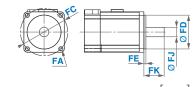
# Slider type, ball screw drive

**LEFS Series** 



## ① Your everyday transfer solution for high loads

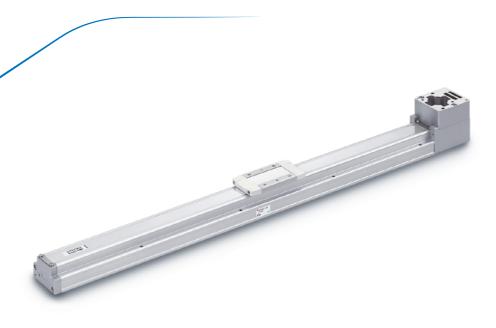
- High loads transfer & positioning, whatever the needs Ball screw drive, the best for high loads and repeatable accurate positioning
- Ensure perfect precision ±0.01 position repeatability
- Speed up your motion Up to 1500 mm/s
- Perfect strength-to-speed ratio Up to 60 kg.



Series	Mounting/ Special	Direction	Motor	Ø bolt pattern pitch FC	Bolt size <b>FA</b>	Ø circle diameter <b>FD</b>	Max surface depth <b>FE</b>	Ø diameter <b>FJ</b>	Length (±1 mm) <b>FK-FE</b>
LEFS25	NZ	Inline, parallel (R/L)	AM8012, AM8013, AM8111, AM8112, AM8113, AM3011, AM3012, AM3013	46	M4	30		8	25
LEFS32	NIV	lalina	AM8021, AM8022, AM8023, AM8121, AM8122, AM8123,	62	ME	40	3.5	0	00
LEFS40	NX	Inline	AMI8121, AMI8122, AMI8123, AM3021, AM3022, AM3023, AM3024	63	M5	40		9	20

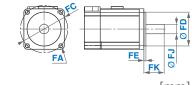
# Slider type, belt drive

**LEFB Series** 



## ① Your everyday transfer solution at high speed

- High speed transfer & positioning, whatever the needs Belt drive for smooth motion at higher speeds or longer movements
- Unbeatable for achieving great strokes Up to 3000 mm
- Enhance high-speed transfer capacity Up to 2000 mm/s
- Adapt to the needs Motor mounting type top or bottom.



Series	Mounting/ Special	Direction	Motor	Ø bolt pattern pitch FC	Bolt size <b>FA</b>	Ø circle diameter <b>FD</b>	Max surface depth <b>FE</b>	Ø diameter <b>FJ</b>	Length (±1 mm) FK-FE
LEFB25	NZ		AM8011, AM8012, AM8013, AM8111, AM8112, AM8113, AM3011, AM3012, AM3013	46	M4	30		8	25
LEFB32	NX	Bottom, top	AM8021, AM8022, AM8023, AM8121, AM8122, AM8123, AMI8121, AMI8122, AMI8123,	63	M5	40	3.5	9	20
LEFB40	IVA		AM3021, AM3022, AM3023, AM3024	03	CIVI	40		9	20

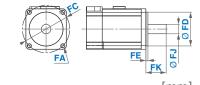
# High rigidity slider type -

**LEJS Series** 



## ① Our most rigid electric actuator

- Ensure robustness in your application It supports eccentric loads with high accelerations, double-guide system, improving the dynamic allowable moments
- Increase your workload Up to 85 kg.



Length
(±1 mm)
FK-FE

Series	Mounting/ Special	Direction	Motor	Ø bolt pattern pitch FC	Bolt size <b>FA</b>	Ø circle diameter <b>FD</b>	Max surface depth <b>FE</b>	Ø diameter <b>FJ</b>	Length (±1 mm) <b>FK-FE</b>	
LEJS40	NX	Inline	AM8021, AM8022, AM8023, AM8121, AM8122, AM8123, AMI8121, AMI8122, AMI8123, AM3021, AM3022, AM3023, AM3024	63	M5	40	3.5	9	20	
LEJS63			AM8022, AM8023, AM8122, AM8123							

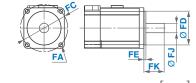
# High rigidity and high precision slider type, ball screw

**LEKFS Series** 



### ⊕ Foolproof precision transfer, no slack

- Get perfect rigidity & precision Reduced deflection and table displacement
- Boost product life & reduce maintenance time Dust seal band magnet (all sizes)
- Guarantee impeccable accuracy ±0.01 position repeatability.



Series	Mounting/ Special	Direction	Motor	Ø bolt pattern pitch FC	Bolt size <b>FA</b>	Ø circle diameter <b>FD</b>	Max surface depth <b>FE</b>	Ø diameter <b>FJ</b>	Length (±1 mm) <b>FK-FE</b>
LEKFS25	NZ	Inline, parallel (R/L)	AM8011, AM8012, AM8013, AM8111, AM8112, AM8113, AM3011, AM3012, AM3013	46	M4	30		8	25
LEKFS32	NX	Inline	AM8021, AM8022, AM8023, AM8121, AM8122, AM8123,	63	M5	40	3.5	9	20
LEKFS40	IVA	II III I E	AMI8121, AMI8122, AMI8123, AM3021, AM3022, AM3023, AM3024	03	CIVI	40		9	20

## **High precision table**

**LESYH Series** 



### ① Extremely precise & compact, designed for transfer applications

- Successfully offer remarkable rigidity and precision Reduced deflection.
   ±0.01 mm position repeatability and great harshness. Lost motion reduction, 0.1 mm
- Boost your productivity Maximum speed of 400 mm/s and maximum acceleration of 5000 mm/s<sup>2</sup>
- Use it as you wish Vertical workload up to 20 kg and horizontal workload up to 12 kg.

# FA FE FK

[mm]
------

Series	Mounting/ Special	Direction	Motor	Ø bolt pattern pitch FC	Bolt size <b>FA</b>	Ø circle diameter <b>FD</b>	Max surface depth <b>FE</b>	Ø diameter <b>FJ</b>	Length (±1 mm) <b>FK-FE</b>
LESYH16	NIZ	Inline, parallel (R/L)	AM8011, AM8012, AM8013, AM8112	40	MA	20		0	05
LESYH25	NZ	Inline	AM8012, AM8013, AM8111, AM8112, AM8113, AM3011, AM3012, AM3013	46	M4	30	3.5	8	25
LESYH32	NX	Inline, parallel (R/L)	AM8021, AM8022, AM8023, AM8123	63	M5	40		9	20

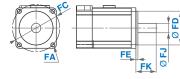
# **Rod type, ball screw**

**LEY Series** 



## ⊕ Your everyday pushing & pulling solution

- Meet any pushing or pulling challenge Rod design
- Work it any way Selectable motor mounting position, top, in-line, right and left mounting positions
- Optimal for achieving great strokes Up to 800 mm.



[mm]

Series	Mounting/ Special	Direction	Motor	Ø bolt pattern pitch FC	Bolt size <b>FA</b>	Ø circle diameter <b>FD</b>	Max surface depth <b>FE</b>	Ø diameter <b>FJ</b>	Length (±1 mm) <b>FK-FE</b>
LEY25	NZ	Inline, parallel (top)	AM8011, AM8012, AM8013, AM8111, AM8112, AM8113, AM3011, AM3012, AM3013	46	M4	30		8	25
LEY32	NX		AM8021, AM8022, AM8023, AM8121, AM8122, AM8123, AMI8121, AMI8122, AMI8123				3.5		
LE 132	NV	Inline	AM3021, AM3022, AM3023, AM3024	63	M5	40	3.3	9	20
LEY63	NX		AM812□, AM8021B/D, AM8021, AM8022, AM8023, AM8123						

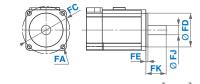
# **Guide rod type, ball screw**

**LEYG Series** 



## ① Your everyday pushing & pulling solution

- Discover the undeniable rigidity Three-guide system, high non-rotation accuracy ±0.01 mm
- Perfect to suit your application Sliding bearings & ball bushing types
- Work it any way Selectable motor, right and left mounting positions.



Series	Mounting/ Special	Direction	Motor	Ø bolt pattern pitch FC	Bolt size <b>FA</b>	Ø circle diameter <b>FD</b>	Max surface depth <b>FE</b>	Ø diameter <b>FJ</b>	Length (±1 mm) FK-FE
LEYG25	NZ	Inline, parallel (top)	AM8011, AM8012, AM8013, AM8111, AM8112, AM8113, AM3011, AM3012, AM3013	46	M4	30		8	25
LEYG32	NX		AM8021, AM8022, AM8023, AM8121, AM8122, AM8123, AMI8121, AMI8122, AMI8123	63	M5	40	3.5	9	20
LEYG32	NV	Inline	AM3021, AM3022, AM3023, AM3024	03	CIVI	40		9	20

