

High-precision motion control



Lexium stepper drives and motors

For motion control

- Lexium SD2 - two-phase range up to 9.2 Nm
- Lexium SD3 - three-phase range up to 19.7 Nm

Make the most of your energy

Simpler
More precise
More compact
More flexible



A compact drive combined with a stepper motor

Lexium stepper drives and motors: performance and efficiency

- Excellent speed stability, designed for applications such as scanning, pick & place, etc.
- High torque at low rotation speeds: the stepper motor is particularly suitable for positioning over short distances (labelling).
- High holding torque: optimum solution for material handling applications.

A choice of 2 Lexium Stepper ranges

- Lexium SD2: A two-phase range for small machines:
 - Small labelling machine
 - Medical and laboratory machines
 - Electronic card assembly machines
 - Spinning machines, etc.
- Lexium SD3: A three-phase range for higher power machines:
 - Printing machines
 - Material handling machines
 - Milling machines, turning machines, etc.
 - Scanners
 - Packaging machines, etc.



Plug & Play

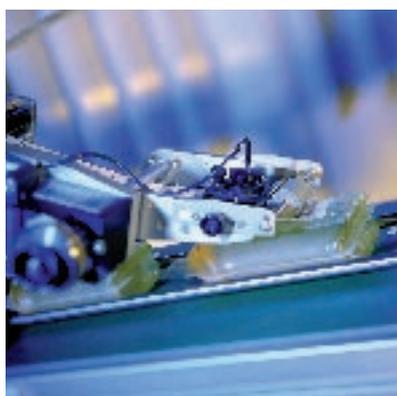
Plug in and set the step resolution: your application is ready to use!



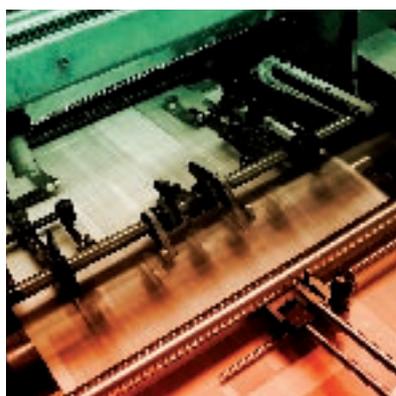
High precision

of positioning over short distances

- No vibration when the step is activated
- Withstands significant variations in the load



Labelling



Printing



Material handling

Simplicity of use, and greater efficiency

Simplicity

Plug in, start up, everything you need is included:

- Encoderless control
- Instant start-up without a software interface
- High torque avoiding the need to use a gearbox in the majority of applications
- Easy configuration: customisable menu
- Automatic current reduction

High performance

- High-precision positioning (0.036° to 1.8°)
- Better motor efficiency: with Lexium stepper drives and motor sinusoidal switching, operation is free of any resonance
- Optimised applications: a wide range of motors (torque from 0.07 to 16.5 Nm) to meet your installation requirements as closely as possible
- Synchronised positioning via CANmotion (on the Lexium SD3 28A)



Textiles



Material handling



Material working

Enhanced communication and ease of integration

More flexibility and dialogue

- Enhanced communication
 - Different types of links possible with control products
 - Very easy to mount: less wiring, easily integrated in an enclosure, etc.
- For two-phase applications: Lexium SD2
 - Numerous communication interfaces for programming or control: RS 485, CANopen, Pulse/Direction
 - Compatible with the Lexium BRS2 range of two-phase stepper motors (up to 9.2 Nm)
 - For three-phase applications: Lexium SD3
 - More powerful for working with large machines
 - More openness to networks: CANopen, Modbus, PROFIBUS DP and CANmotion (on Lexium SD3 28)
 - Integrated EMC filter to protect the installation and generate savings
 - "Safe Torque Off" function integrated in the Lexium SD3 28 for greater safety
 - Compatible with the Lexium BRS3 range of three-phase stepper motors (up to 19.7 Nm)



Selection guide

	Lexium SD21..U20C	Lexium SD21..U50C	Lexium BRS2 two-phase stepper motors for the Lexium SD2 range	Lexium SD3 15	Lexium BRS3 three-phase stepper motors for Lexium SD3 15
Ranges					
Machines	Two-phase stepper drive with pulse/direction interface (Lexium SD215D), CANopen (Lexium SD218A) or programmable via RS485 (Lexium SD218P).			Three-phase stepper drive with pulse/direction interface for rack mounting.	
Applications	Medical and laboratory equipment, printed circuit board assembly machines, spinning machines, small labelling machines.			Sewing machine, embroidery machines, small numerical control machines, folding or finishing machines.	
Advantages	Format adjustment, pick and place, labelling.				
Motor/drive combinations	<ul style="list-style-type: none"> - Compact dimensions - Low-cost ready-to-use solution - Constant speed - High torque even at low speed 				
Technical information	24...48 VDC; 3 A	24...48 VDC; 5 A	Motors compatible with Lexium SD2	24...48 VDC; 10 A max.	Motors compatible with Lexium SD3 15
	Motor torque	Motor torque	Motor type	Type of motor with F winding	Motor type
	0.07 Nm		BRS236	0.46 Nm	BRS 364F
	0.23...0.53 Nm		BRS242	0.92 Nm	BRS 366F
	0.64...1.69 Nm	0.64...1.69 Nm	BRS257	1.50 Nm	BRS 368F
		2.96...9.20 Nm	BRS285	2.00 Nm	BRS 397F
				4.20 Nm	BRS 39AF
				5.55 Nm	BRS 39BF
					with H winding
				0.51 Nm	BRS 364H
				1.02 Nm	BRS 366H
				1.70 Nm	BRS 368F
				2.26 Nm	BRS 397H
				4.80 Nm	BRS 39AH
				6.50 Nm	BRS 39BH
	Voltage range: 24 to 48 VDC Power range: up to 120 W		Nominal voltage: 24...48 VDC	Voltage range: 24 to 48 VDC	Nominal voltage: 24 to 48 VDC
			Angle per step: 1,8°	Power range: up to 240 W	Angle per step: 1.8/0.9/0.2/0.36/0.18/0.09/0.072/0.036°
	Speed: up to 1000 rpm		Thermal class: 130 (B)	Speed: up to 1000 rpm	Thermal class: 155 (F)
	Torque: up to 9.2 Nm		Degree of protection: total IP 20	Torque: up to 6.0 Nm	Degree of protection: IP 56 excluding shaft end (IP 41)
Software	Lexium CT		None		
Accessories	Cables Sets of connectors		None	Cables Sets of connectors	Gearboxes

Lexium SD3 26xU25	Lexium SD3 26xU68	Lexium SD3 28xU25	Lexium SD3 28xU68	Lexium BRS3 three-phase stepper motors for Lexium SD3 26 and Lexium SD3 28
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Three-phase stepper drive with pulse/direction interface.

Three-phase stepper drive with fieldbus interface (CANopen, CANmotion, Profibus DP, Modbus).

Three-phase stepper motors (3 flange sizes).

Printing, material handling, material working and packaging machines.

Pick and place, labelling, engraving.

- Compact dimensions
- Low-cost ready-to-use solution
- Constant speed
- High torque even at low speed
- Integrated STO (Safe Torque Off) safety function - for Lexium SD3 28 only

**115 VAC/230 VAC; 2.5 A,
including mains filter**

**115 VAC/230 VAC; 6.8 A,
including mains filter and fan**

**115 V/230 V; 2.5 A,
including mains filter**

**115 VAC/230 VAC; 6.8 A,
including mains filter and fan**

**Motors compatible with
Lexium SD3 26 and SD3 28**

Motor torque

Motor torque

Motor torque

Motor torque

Type of motor with W winding

1.7 Nm

13.5 Nm

1.7 Nm

13.5 Nm

BRS368 W

2.3 Nm

19.7 Nm

2.3 Nm

19.7 Nm

BRS397...W

4.5 Nm

4.5 Nm

BRS39A...W

6.8 Nm

6.8 Nm

BRS39B...W

BRS3AC...W

BRS3AD...W

Voltage range: 115 to 240 VAC
Power range: up to 750 W

Nominal voltage: 325 VDC

Angle per step: 1.8/0.9/0.72/
0.36/0.18/0.09/0.072/0.036°

Speed: up to 1000 rpm

Thermal class: 155 (F)

Torque: up to 16.5 Nm

Degree of protection:
IP 56 excluding shaft end (IP 41)

Lexium CT

None

Cables
Sets of connectors

Gearboxes

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