

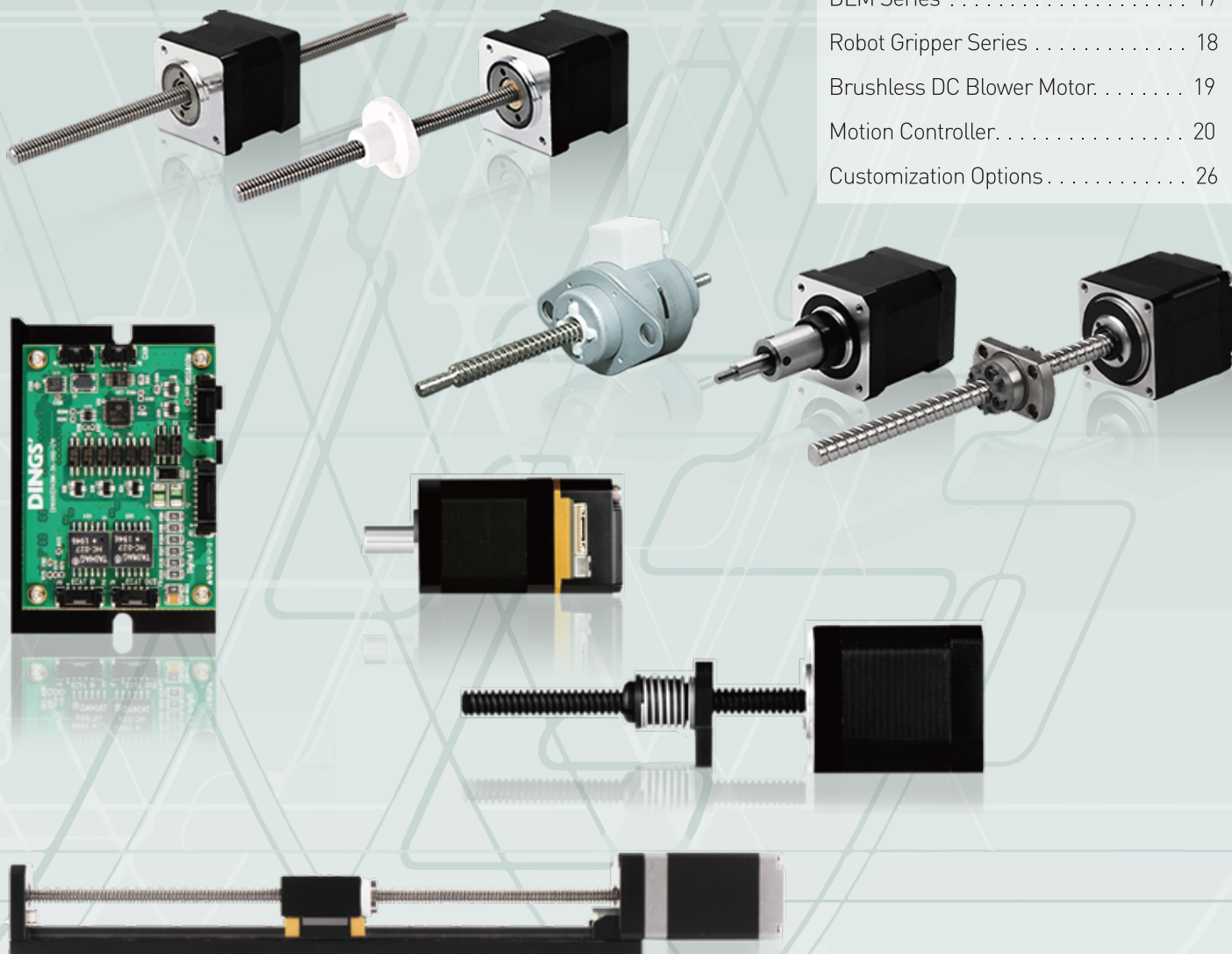
DINGS'

Precision Motion Specialists

SHORT FORM CATALOG

PRODUCTS 2023

Stepper Lead Screw Linear Actuator .	04
Stepper Ball Screw Linear Actuator . .	06
PM Stepper Linear Actuator.	08
Voice Coil Motor.	09
Hybrid Rotary Stepper Motor	10
Hollow Shaft Stepper Motor.	12
Slotless Brushless DC Motor	14
Brushless DC Motor.	16
DLM Series	17
Robot Gripper Series	18
Brushless DC Blower Motor.	19
Motion Controller.	20
Customization Options	26



2023

DINGS' MOTION USA

Since its establishment in 2008:

DINGS' Motion is a world class precision motion solutions supplier.

DINGS' provides precision stepper motor actuators, brushless DC motors and motion controllers.

Size

DINGS' Motion has over 200,000 square feet of design and manufacturing facilities.



Qualifications

DINGS' Motion was listed on the NEEQ stock market in June 2021.

In addition, DINGS' products have RoHS, CE, REACH and other certifications as ISO9001 and ISO14001. DINGS' has more than 80 invention patents.



Growth

- 2008** Established company and registered DINGS' Brand
- 2010** Established DINGS' MOTION USA
- 2016** Established DINGS' Korea
- 2019** Became part of LEILI group of Companies
- 2021** Company expanded to new industrial park
Listed on the new third board, NEEQ stock market
- 2022** Creation of Engineering Technology Research Center
Established Changzhou Enterprise Technology Center
Established R&D Center in Korea
- 2023** Establishment of DINGS' Europe
Listed on the Beijing Stock Exchange
- 2024** Relocation of Headquarters to expanded facility



Product Warranty Statement

DINGS' provides product quality certificates, when requested, during shipping, and customers are to inspect product according to technical drawings and/or related requirements.

DINGS's product warranty period is 2 years, calculated from delivery date, and customers are to refer to the product manual for proper storage and usage of the product.

During the service life or warranty period, if our products are damaged or do not work properly due to quality problems, DINGS' provides no-charge repairs OR replacements.

Competitive advantages include:

- Customization is standard
- Quick turn prototypes
- Very competitive pricing
- Easy to do business with

Advantages of partnering with DINGS' Motion USA:

- Easy to do business with
- Quick turn prototyping
- Quality with competitive pricing
- Product customization solutions welcomed
- Excellent production lead times
- High standards of customer support



Stepper Lead Screw Linear Actuator

Note: anti-backlash nuts are available on all linear actuators

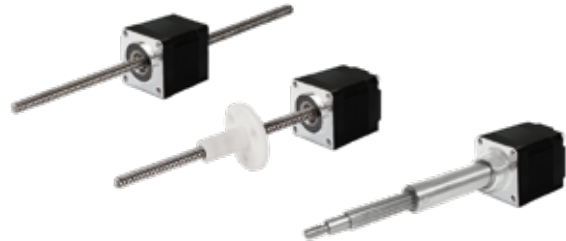
NEMA Size 6 [14mm]



14mm Stepper lead screw linear actuator

External / Non-Captive / Kaptive Type
 Max. 19N Thrust force
 Max. 4096CPR Encoder options
 Teflon coating options
 Screw end machining options

NEMA Size 8 [20mm]



20mm Stepper lead screw linear actuator

External / Non-Captive / Kaptive Type
 Max. 70N Thrust force
 Max. 2048CPR Encoder options
 Teflon coating options
 Anti-backlash nut options
 Screw end machining options

NEMA Size 11 [28mm]



28mm Stepper lead screw linear actuator

External / Non-Captive / Kaptive / Captive Type
 Max. 150N Thrust force
 Max. 2048CPR Encoder options
 Teflon coating options
 Anti-backlash nut options
 Screw end machining options
 Power-off brake options

NEMA Size 14 [35mm]



35mm Stepper lead screw linear actuator

External / Non-Captive / Kaptive / Captive Type
 Max. 300N Thrust force
 Max. 5000CPR Encoder options
 Teflon coating options
 Anti-backlash nut options
 Screw end machining options
 Power-off brake options

Note: anti-backlash nuts are available on all linear actuators

NEMA Size 17 [42mm]



42mm Stepper lead screw linear actuator

External / Non-Captive / Kaptive / Captive Type
Max. 600N Thrust force
Max. 5000CPR Encoder options
Teflon coating options
Anti-backlash nut options
Screw end machining options
Power-off brake options

NEMA Size 23 [57mm]



57mm Stepper lead screw linear actuator

External / Non-Captive / Kaptive / Captive Type
Max. 1300N Thrust force
Max. 10000CPR Encoder options
Teflon coating options
Anti-backlash nut options
Screw end machining options
Power off brake options

NEMA Size 24 [60mm]



60mm Stepper lead screw linear actuator

External / Non-Captive / Kaptive / Captive Type
Max. 1560N Thrust force
Max. 10000CPR Encoder options
Teflon coating options
Screw end machining options
Power-off brake options

NEMA Size 34 [86mm]



86mm Stepper lead screw linear actuator

External / Non-Captive Type
Max. 2400N Thrust force
Max. 10000CPR Encoder options
Teflon coating options
Screw end machining options
Power-off brake options

Stepper Ball Screw Linear Actuator

NEMA Size 6 [14mm]



14mm Stepper ball screw linear actuator

C7 Standard [C5 / C3 option]
 External Type
 Max. 12N Thrust force
 Max. 4096CPR Encoder options
 Screw end machining options

NEMA Size 8 [20mm]



20mm Stepper ball screw linear actuator

C7 Standard [C5 / C3 option]
 External Type
 Max. 25N Thrust force
 Max. 2048CPR Encoder options
 Screw end machining options

NEMA Size 11 [28mm]



28mm Stepper ball screw linear actuator

C7 Standard [C5 / C3 option]
 External Type
 Max. 180N Thrust force
 Max. 2048CPR Encoder options
 Screw end machining options
 Power-off brake options

NEMA Size 14 [35mm]



35mm Stepper ball screw linear actuator

C7 Standard [C5 / C3 option]
 External Type
 Max. 400N Thrust force
 Max. 5000CPR Encoder options
 Screw end machining options
 Power-off brake options

NEMA Size 17 [42mm]



42mm Stepper ball screw linear actuator

- C7 Standard [C5 / C3 option]
- External Type
- Max. 700N Thrust force
- Max. 5000CPR Encoder options
- Screw end machining options
- Power-off brake options

NEMA Size 23 [57mm]



57mm Stepper ball screw linear actuator

- C7 Standard [C5 / C3 option]
- External Type
- Max. 1700N Thrust force
- Max. 10000CPR Encoder options
- Screw end machining options
- Power-off brake options

NEMA Size 11 [28mm] DLG



28mm Stepper ball screw electric slide actuator

- C7 Standard
- Linear guide [DLG]
- Non-linear guide [DLS]
- 30mm Stroke
- Max. 180N Thrust force
- Max. 2048CPR Encoder options
- Power-off brake options

NEMA Size 17 [42mm] DLG



42mm Stepper ball screw electric slide actuator

- C7 Standard
- Linear guide [DLG]
- Non-linear guide [DLS]
- 40mm / 70mm Stroke
- Max. 700N Thrust force
- Max. 5000CPR Encoder options
- Power-off brake options

PM Stepper Linear Actuator

Size 20mm



20mm PM stepper linear actuator

External / Non-Captive / Kaptive Type
 Max. 45N Thrust force
 Teflon coating options
 Screw end machining options
 Hall sensor & magnet feedback options
 Incremental encoder options
 Neodymium magnet technology

Size 25mm



25mm PM stepper linear actuator

External / Non-Captive / Kaptive Type
 Max. 100N Thrust force
 Teflon coating options
 Screw end machining options
 Hall sensor & magnet feedback options
 Incremental encoder options
 Neodymium magnet technology

Size 36mm



36mm PM stepper linear actuator

External / Non-Captive / Kaptive Type
 Max. 160N Thrust force
 Teflon coating options
 Screw end machining options
 Hall sensor & magnet feedback options
 Incremental encoder options
 Neodymium magnet technology

Voice Coil Motor

Ø 25.4 Voice Coil Motor



■ 25.4mm Voice coil motor

Stroke customization options
Linear encoder options
Standard stroke 9.5mm
Continuous force 11N (9.5mm stroke)
Peak thrust force 31N (9.5mm Stroke)

Ø 30 Voice Coil Motor



■ 30mm Voice coil motor

Stroke customization options
Linear encoder options
Standard stroke 13/15mm
Continuous force 4.63N (13/15mm stroke)
Peak thrust force 29.4N (13/15mm Stroke)

Ø 38 Voice Coil Motor



■ 38mm Voice coil motor

Stroke customization options
Linear encoder options
Standard stroke 7.7mm
Continuous force 5N (7.7mm stroke)
Peak thrust force 22.5N (7.7mm Stroke)

See page 25 for compatible
motion controllers

Hybrid Rotary Stepper Motor

NEMA Size 6 [14mm]



■ 14mm Hybrid rotary stepper motor

Max. 0.005N·m Holding torque
 Max. 0.3A Current
 Max. 4096CPR Encoder options
 Shaft customization options

NEMA Size 8 [20mm]



■ 20mm Hybrid rotary stepper motor

Max. 0.02N·m Holding torque
 Max. 0.5A Current
 Max. 2048CPR Encoder options
 Max. 107:1 Planetary gearbox options
 Shaft customization options

NEMA Size 11 [28mm]



■ 28mm Hybrid rotary stepper motor

Max. 0.14N·m Holding torque
 Max. 1.0A Current
 Max. 2048CPR Encoder options
 Max. 72:1 Planetary gearbox options
 Shaft customization options
 Power-off brake options

NEMA Size 14 [35mm]



■ 35mm Hybrid rotary stepper motor

Max. 0.2N·m Holding torque
 Max. 1.5A Current
 Max. 5000CPR Encoder options
 Max. 72:1 Planetary gearbox options
 Shaft customization options
 Power-off brake options

NEMA Size 17 [42mm]



■ 42mm Hybrid rotary stepper motor

- Max. 0.72N·m Holding torque
- Max. 2.0A Current
- Max. 5000CPR Encoder options
- Max. 99.5:1 Planetary gearbox options
- Shaft customization options
- Power-off brake options

NEMA Size 23 [57mm]



■ 57mm Hybrid rotary stepper motor

- Max. 2.0N·m Holding torque
- Max. 4.0A Current
- Max. 10000CPR Encoder options
- Max. 25:1 Planetary gearbox options
- Shaft customization options
- Power-off brake options

NEMA Size 24 [60mm]



■ 60mm Hybrid rotary stepper motor

- Max. 3.0N·m Holding torque
- Max. 5.0A Current
- Max. 10000CPR Encoder options
- Max. 25:1 Planetary gearbox options
- Shaft customization options
- Power-off brake options

NEMA Size 34 [86mm]



■ 86mm Hybrid rotary stepper motor

- Max. 7.0N·m Holding torque
- Max. 6.0A Current
- Max. 10000CPR Encoder options
- Shaft customization options
- Power-off brake options

Hollow Shaft Stepper Motor

NEMA Size 6 [14mm]



■ 14mm Hollow shaft stepper motor

Max. 0.005N·m Holding torque
 Max. 0.3A Current
 OD : 4mm / ID : 2mm
 Shaft customization options

NEMA Size 8 [20mm]



■ 20mm Hollow shaft stepper motor

Max. 0.02N·m Holding torque
 Max. 0.5A Current
 OD : 5mm / ID : 3mm
 Max. 2048CPR Encoder options
 Shaft customization options

NEMA Size 11 [28mm]



■ 28mm Hollow shaft stepper motor

Max. 0.1N·m Holding torque
 Max. 1.0A Current
 OD : 7mm / ID : 5mm
 Max. 5000CPR Encoder options
 Shaft customization options

NEMA Size 14 [35mm]



■ 35mm Hollow shaft stepper motor

Max. 0.36N·m Holding torque
 Max. 1.0A Current
 OD : 10mm ID : 8mm
 Max. 5000CPR Encoder options
 Shaft customization options

NEMA Size 17 [42mm]



■ 42mm Hollow shaft stepper motor

Max. 0.48N·m Holding torque
Max. 2.5A Current
OD : 10mm / ID : 8mm
Max. 5000CPR Encoder options
Shaft customization options

NEMA Size 23 [57mm]



■ 57mm Hollow shaft stepper motor

Max. 1.6N·m Holding torque
Max. 2.5A Current
OD : 15mm / ID : 12mm
Max. 10000CPR Encoder options
Shaft customization options

NEMA Size 24 [60mm]



■ 60mm Hollow shaft stepper motor

Max. 1.9Nm Holding Torque
Max. 4.0A Current
OD: 15mm / ID: 12mm
Max. 10000CPR Encoder options
Shaft customization options

NEMA Size 34 [86mm]



■ 86mm Hollow shaft stepper motor

Max. 4.5N·m Holding torque
Max. 3.0A Current
OD : 20mm / ID : 16mm
Max. 10000CPR Encoder options
Shaft customization options

Removing the slots drastically reduces detent torque which greatly reduces the noise created by the motor. In some cases, noise is lowered to less than 35 dB. Slotless motors also create less electromagnetic interference, allowing for high speeds and quick accelerations.

Slotless Brushless DC Motor

Ø 16 Slotless BLDC



■ 16mm Slotless BLDC Motor

40mm Motor length
 18 ~ 48 VDC
 1 pole pairs
 Max. 39W
 Max. 50000RPM Rated speed
 Max. 58000RPM No load speed
 Hall sensor
 Incremental encoder options

Ø 22 Slotless BLDC



■ 22mm Slotless BLDC Motor

48mm Motor length
 12 ~ 48 VDC
 1 pole pairs
 Max. 100W
 Max. 49600RPM Rated speed
 Max. 55000RPM No load speed
 Hall sensor
 Incremental encoder options

Ø 28 Slotless BLDC



■ 28mm Slotless BLDC Motor

52mm Motor length
 12 ~ 48 VDC
 1 pole pairs
 Max. 35W
 Max. 8430RPM Rated speed
 Max. 9680RPM No load speed
 Hall sensor
 Incremental encoder options

Ø 36 Slotless BLDC



■ 36mm Slotless BLDC Motor

60mm Motor length
 18 ~ 48 VDC
 1 pole pairs
 Max. 85W
 Max. 11700RPM Rated speed
 Max. 13000RPM No load speed
 Hall sensor
 Incremental encoder options

Ø 42 Slotless BLDC



42mm Slotless BLDC Motor

- 80mm Motor length
- 18 ~ 48 VDC
- 1 pole pairs
- Max. 160W
- Max. 12200RPM Rated speed
- Max. 13800RPM No load speed
- Hall sensor
- Incremental encoder options

Ø 22/28/36 Slotless BLDC External Actuator



22/28/36mm Slotless BLDC External Actuator

- 48 ~ 52mm Motor length - External type
- Lead screw integrated External linear actuator
- 24 VDC
- 1 pole pairs
- Max. 7000RPM Rated speed (Ø22)
- Max. 8430RPM Rated speed (Ø28)
- Max. 9340RPM Rated speed (Ø36)
- Hall sensor
- Incremental encoder options

Ø 22/28/36mm Slotless Hollow Shaft BLDC Motor



22/28/36mm Slotless Hollow Shaft BLDC Motor

- 48~52mm Motor Length
- 24VDC
- 1 pole pairs
- Max. 7000RPM Rated speed (Ø22)
- Max. 8430RPM Rated speed (Ø28)
- Max. 9340RPM Rated speed (Ø36)
- Hall Sensor
- Incremental Encoder Option

Brushless DC Motor

42mm BLDC



■ 42mm Brushless DC motor

5 pole pairs
 24VDC
 Max. 58.1W
 Max. 3000RPM Rated speed
 Max. 4000RPM No load speed
 Hall sensor
 Incremental encoder options
 Planetary gearbox options
 Power-off brake options

57mm BLDC



■ 57mm Brushless DC motor

5 pole pairs
 24VDC
 Max. 103.7W
 Max. 3000RPM Rated speed
 Max. 4000RPM No load speed
 Hall sensor
 Incremental encoder options
 Planetary gearbox options
 Power-off brake options

60mm BLDC



■ 60mm Brushless DC motor

5 pole pairs
 24VDC
 Max. 144.5W
 Max. 3000RPM Rated speed
 Max. 3500RPM No load speed
 Hall sensor
 Incremental encoder options
 Planetary gearbox options
 Power-off brake options

86mm BLDC

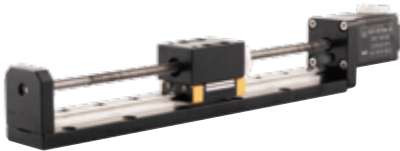


■ 86mm Brushless DC motor

5 pole pairs
 48VDC
 Max. 471.2W
 Max. 3000RPM Rated speed
 Max. 3300RPM No load speed
 Hall sensor
 Incremental encoder options
 Planetary gearbox options
 Power-off brake options

DLM Series

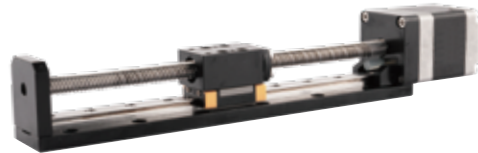
NEMA Size 8 [20mm]



20mm Stepper lead screw linear module

- Min. 20mm stroke
- Max. 150mm stroke
- 7 different lead screw selections
- Max. 70N Thrust force
- Incremental encoder solution
- Ball screw options available

NEMA Size 11 [28mm]



28mm Stepper lead screw linear module

- Min. 20mm stroke
- Max. 250mm stroke
- 6 different lead screw selections
- Max. 150N Thrust force
- Incremental encoder solution
- Power-off brake solution
- Ball screw options available

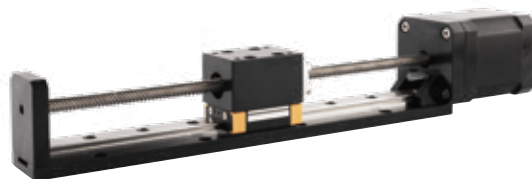
NEMA Size 14 [35mm]



35mm Stepper lead screw linear module

- Min. 50mm stroke
- Max. 400mm stroke
- 18 different lead screw selections
- Max. 300N Thrust force
- Incremental encoder solution
- Power-off brake solution
- Ball screw options available

NEMA Size 17 [42mm]

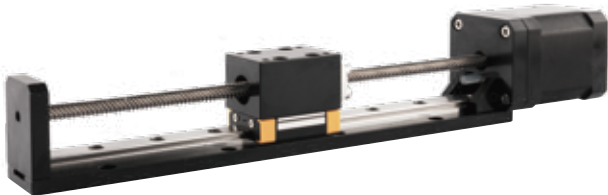


42mm Stepper lead screw linear module

- Min. 50mm stroke
- Max. 500mm stroke
- 18 different lead screw selections
- Max. 600N Thrust force
- Incremental encoder solution
- Power-off brake solution
- Ball screw options available

DLM Series

NEMA Size 23 [57mm]



57mm Stepper lead screw linear module

- Min. 50mm stroke
- Max. 600mm stroke
- 15 different lead screw resolution selections
- Max. 1300N Thrust force
- Incremental encoder solution
- Power-off brake solution
- Ball screw options available

Robot Gripper Series

NEMA Size 14/17 [35mm and 42mm]



35mm/42mm 3-Finger Gripper

- Incremental / Absolute Encoder Option
- DS-CLS9-FRS4-01 Force Control Driver

NEMA Size 8 [20mm]



20mm Gripper

- 6mm Gripping stroke
- 7 different lead screw selections
- Max. Gripping force : 70N
- Recommended gripping force : 35N
- Incremental encoder option for Force control
- DS-CLS9-FRS4-01 Force control driver

NEMA Size 11 [28mm]

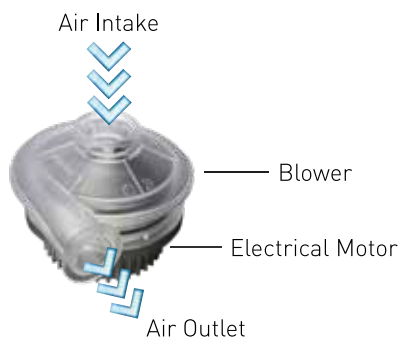


28mm Gripper

- 6/12mm Gripping stroke
- 6 different lead screw selections
- Max. Gripping force : 150N
- Recommended gripping force : 70N
- Incremental encoder option for Force control
- DS-CLS9-FRS4-01 Force control driver

Brushless DC Blower Motor

C6002-24V Series



■ C6002-24V series

Max. Flow rate : 420LPM
 Rated flow rate : 184LPM
 Max. Flow speed : 48.9m/s
 Max. Static pressure : 6.5kPa
 Rated static pressure : 5.1kPa
 Inlet dimension : ID 16mm
 Outlet dimension : ID 13.5mm

C6002-24V Series



■ C6002-24V series applications

Automation equipment application
 Blower / Ventilator to remove dust or smoke
 Medical equipment application
 Ventilator / Aspirator / Sterilization / Cleaner
 Automotive application
 Air conditioning / Cooling engine / Tire inflation

C6002-24V Series



Base model



Extension inlet pipe



Extension outlet pipe



Extension intake/outlet pipe

■ C6002-24V series applications

Commercial & household application
 Air fresh / Refrigerator / Cleaner / Sweeper
 Garden machinery application
 Leaf & snow blower / Cleaning
 Agricultural & Fishery application
 Transplanter / Fruit sorter / Oxygen generator

Controller



■ Controller

Rated voltage : 24V [14 ~ 28V]
 Max. continuous current : 10A
 Max. peak current : 20A
 Peak power : 240W
 Half-Commutation
 200Hz PWM frequency (10 ~ 90% adjustment)

Motion Controller

Note: All drivers and controllers **CE** compliant.

DS-OLS2-FPD



■ DS-OLS2-FPD

- 18 ~ 36 VDC
- 0.3 ~ 2.2A Dip switch current setting
- Dip switch microstep resolution setting
- 1 Pulse Step & Direction
- 2 Pulse CW/CCW
- 3 Differential inputs
- 1 Differential output

DS-OLS22-FPD



■ DS-OLS22-FPD

- 12 ~ 48 VDC
- 0.3 ~ 3.0A Dip switch current setting
- Dip switch microstep resolution setting
- 1 Pulse Step & Direction
- 2 Pulse CW/CCW
- 3 Differential inputs

DS-OLS4-FPD



■ DS-OLS4-FPD

- 20 ~ 50 VDC
- 1.0 ~ 4.2A Dip switch current setting
- Dip switch microstep resolution setting
- 1 Pulse Step & Direction
- 2 Pulse CW/CCW
- 3 Differential inputs
- 2 Digital outputs

DS-OLS8-FPD

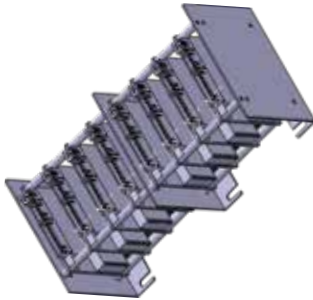


■ DS-OLS8-FPD

- 24 ~ 72 VDC
- 2.8 ~ 7.8A Dip switch current setting
- Dip switch microstep resolution setting
- 1 Pulse Step & Direction
- 2 Pulse CW/CCW
- 3 Differential inputs
- 1 Digital output

Note: All drivers and controllers **CE** compliant.

DS-OLC8-FPD



DS-OLC8-FPD

Scaleable multi-axis Systems to customer specs

- 18 ~ 36 VDC
- 0.3 ~ 2.2A Dip switch current setting
- Dip switch microstep resolution setting
- 1 Pulse Step & Direction
- 2 Pulse CW/CCW
- 3 Differential inputs (per Axis)
- 1 Differential output (per Axis)

DS-OLS7-FRS4



DS-OLS7-FRS4

- 24 ~ 48 VDC
- 0.1 ~ 3.2A
- Pulse (1/2 pulse) or RS485 ModBus RTU
- 2 Differential inputs
- 1 Digital output
- Max. 30 Axes connection control
- Max. 102,400 microstep resolution

DS-OLS8-FRS4



DS-OLS8-FRS4

- 24 ~ 72 VDC
- 0.1 ~ 6.5A
- Pulse (1/2 pulse) or RS485 ModBus RTU
- 2 Differential inputs
- 1 Digital output
- Max. 30 Axes connection control
- Max. 102,400 microstep resolution

DS-OLS10-FSC



DS-OLS10-FSC

- Speed Controller
- 24 ~ 48 VDC
- 1.0 ~ 4.5A Dip switch current setting
- Analog input stepper driver (0~10VDC)
- Dip switch velocity setting
- 3 Digital inputs

Motion Controller

Note: All drivers and controllers **CE** compliant.

DS-CLS9-FRS4



■ DS-CLS9-FRS4

- 24 ~ 48 VDC
- 0 ~ 4.5A
- Pulse (1/2 pulse) or RS485 ModBus RTU
- 2 Differential inputs
- 5 Digital inputs
- 2 Digital outputs
- 3 Encoder signal outputs (Differential)
- Max. 30 Axes connection control
- 2 Homing functions

DS-CLS9-FRS4-01



■ DS-CLS9-FRS4-01

- 24 ~ 48 VDC
- 0 ~ 4.5A
- Pulse (1/2 pulse) or RS485 ModBus RTU
- 2 Differential inputs
- 5 Digital inputs
- 2 Digital outputs
- 3 Encoder signal outputs (Differential)
- Max. 30 Axes connection control
- 6 Homing functions + Force control

DS-CLS9-FETC



■ DS-CLS9-FETC

- 24 ~ 48 VDC
- 6.5A
- EtherCAT
- 2 Differential inputs
- 5 Digital inputs
- 3 Digital outputs
- Support PP, PV, HM, CSP, CVS

DS-CLS9-FCAO



■ DS-CLS9-FCAO

- 24 ~ 48 VDC
- 6.5A
- CANOpen
- 2 Differential inputs
- 5 Digital inputs
- 3 Digital outputs
- Support PP, PV, HM, PT

Note: All drivers and controllers **CE** compliant.

DS-OL42-IPD/IRS4



■ DS-OL42-IPD/IRS4

24 ~ 36 VDC
0.5 ~ 3.0A
Pulse input / RS485 ModBus RTU
2 Differential inputs
2 Digital inputs
1 Digital output
Max. 25,600 microstep resolution

DS-OL42-ICA0



■ DS-OL42-ICA0

24 ~ 36 VDC
0.5 ~ 3.0A
CANOpen
4 Digital inputs
Max. 25,600 microstep resolution

ServoTrack Integrated Systems



■ ServoTrack Integrated Systems

12-48 VDC
Rotary Torque Control
Linear Force Control
4 Amps/Phase RMS
Dynamic Closed Loop or Open Loop
3 Digital Inputs (5V-24V)
3 Digital Outputs (5V-24V)
1 16-Bit Analog Input
Up to 256 μ steps/step

ServoTrack St484 Stand Alone Version



■ SERVOTRACK ST484 Stand Alone Version

12-48 VDC
Rotary Torque Control
Linear Force Control
4 Amps/Phase RMS
Dynamic Closed Loop or Open Loop
3 Digital Inputs (5V-24V)
3 Digital Outputs (5V-24V)
1 16-Bit Analog Input
Up to 256 μ steps/step

Motion Controller

Note: All drivers and controllers **CE** compliant.

DS-OLBS2-FRS4



DS-OLBS2-FRS4

12 ~ 24 VDC
 Rated output current 5A [100W]
 RS485 ModBus RTU
 2 Digital inputs
 1 Analog output
 BLDC Motor velocity control drive

DS-OLBS4-FRS4



DS-OLBS4-FRS4

24 ~ 48 VDC
 Rated output current 10A [200W]
 RS485 ModBus RTU
 3 Digital inputs
 2 Digital outputs
 1 Analog input
 BLDC Motor velocity control drive

DS-OLBS6-FSC



DS-OLBS6-FSC

24 ~ 48 VDC
 Rated output current 15A [350~400W]
 RS485 ModBus RTU
 3 Digital inputs
 2 Digital outputs
 1 Analog input
 BLDC Motor velocity control drive

DS-OLBS8-FRS4



DS-OLBS8-FRS4

4 ~ 48 VDC
 Rated output current 30A [600~750W]
 RS485 ModBus RTU
 3 Digital inputs
 2 Digital outputs
 1 Analog input
 BLDC Motor velocity control drive

Note: All drivers and controllers **CE** compliant.

DS-CLBS8-FRS4



■ DS-CLBS8-FRS4

- 24 ~ 48 VDC
- Rated output current 17A [400W]
- RS485 ModBus RTU
- 2 Differential inputs
- 4 Digital inputs
- 3 Digital outputs
- 1 Analog input
- Support 42 / 57 / 60 / 86mm BLDC Motors

DS-BVM-FETC/FCAO



■ DS-BVM-FETC/FCAO

- 12 ~ 48 VDC
- Rated output current 3A (Max. 6A)
- FETC : EtherCAT / FCAO : CANOpen
- 6 Digital inputs
- 2 Digital outputs
- 1 Analog input
- BLDC, Slotless BLDC, Voice Coil Motor Drive

DS-BVS-FETC/FCAO



■ DS-BVS-FETC/FCAO

- 12 ~ 48 VDC
- Rated output current 10A (Max. 20A)
- FETC : EtherCAT / FCAO : CANOpen
- 6 Digital inputs
- 2 Digital outputs
- 1 Analog input
- BLDC, Slotless BLDC, Voice Coil Motor Drive

Standard Options

Note: custom products can be manufactured to your exact specifications.

Encoders



■ Encoders

5V Incremental encoder options
Hollow shaft encoder options are available
Min. Encoder size 16mm
Min. 50CPR Resolution
Max. 10000CPR Resolutions
A/B/Z Phase
Single ended / Differential output

Absolute Encoders



Absolute Encoders

Sensing Method: Magnetic Encoder
Main Supply Voltage: 5V +/- 10%
Battery Supply Voltage: 3.6V (3~5.5V)
Communication Interface: Biss-C
Air Gap: 0.4 +/- 0.1mm
Resolution (bit): Single Turn [16bit]
Multi-Turn [16bit]
Operation Temp: -10C ~ +85C

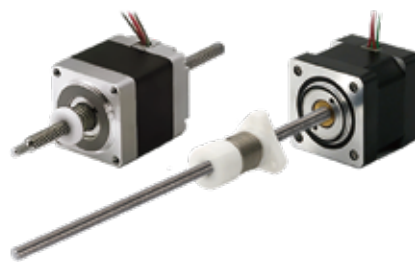
Power-Off Brake



- Power-off brake

28 / 35 / 42 / 57 / 60 / 86mm
Available for Stepper and BLDC
24VDC
Max. Hold torque 5N·m
Life cycle : 2 Mil.

Anti-backlash Nut



■ Anti-backlash nut

For External / Non-Captive linear actuator
 External linear actuator
 20 / 28 / 35 / 42 / 57mm
 Non-Captive linear actuator
 20 / 28 / 35 / 42 / 57mm
 According to lead screw selection,
 length of Anti-Backlash Nut can be changed

Note: custom cabling and connectors are available on all products.

Manual Knob



■ Manual knob

For External / Non-Captive linear actuator
Available for ball screw linear actuator
For quick pre-setting & origin movement
Convenience in applications
Laboratory
Optics
Laser
Positioning stage

Teflon Coating



■ Teflon coating

Greaseless screw and nut combination
Longer life cycle
Better thrust force generation
Available for External / Non-Captive linear actuator
Prevents particle adherence to screw

Planetary Gearbox



■ Planetary gearbox

22 / 28 / 32 / 42 / 57 / 60mm Frame size
36 different ratio selection
Sleeve bearing : 22mm
Ball bearing : 28 / 32 / 42 / 57 / 60mm
1 ~ 1.2° No load backlash
15 ~ 25 arcmin for 60mm gearbox
Max. 95% efficiency
Max. limit torque 40N·m

IP Rating



■ IP rating

Max. IP54 protection rating for
linear actuators and hollow shaft motors
Max. IP65 protection rating for
Hybrid rotary stepper motors



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