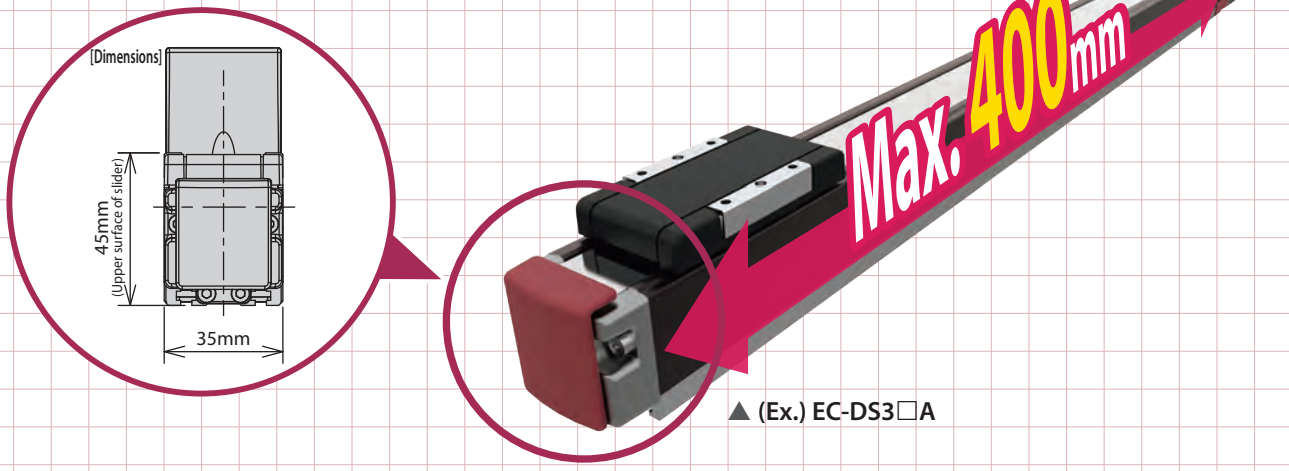
ELECYLINDER

Slider type
Long stroke supported

Feature 1

Compact with long stroke

**Longer stroke has been achieved while keeping the housing compact.
Usable even in locations with limited installation space.**

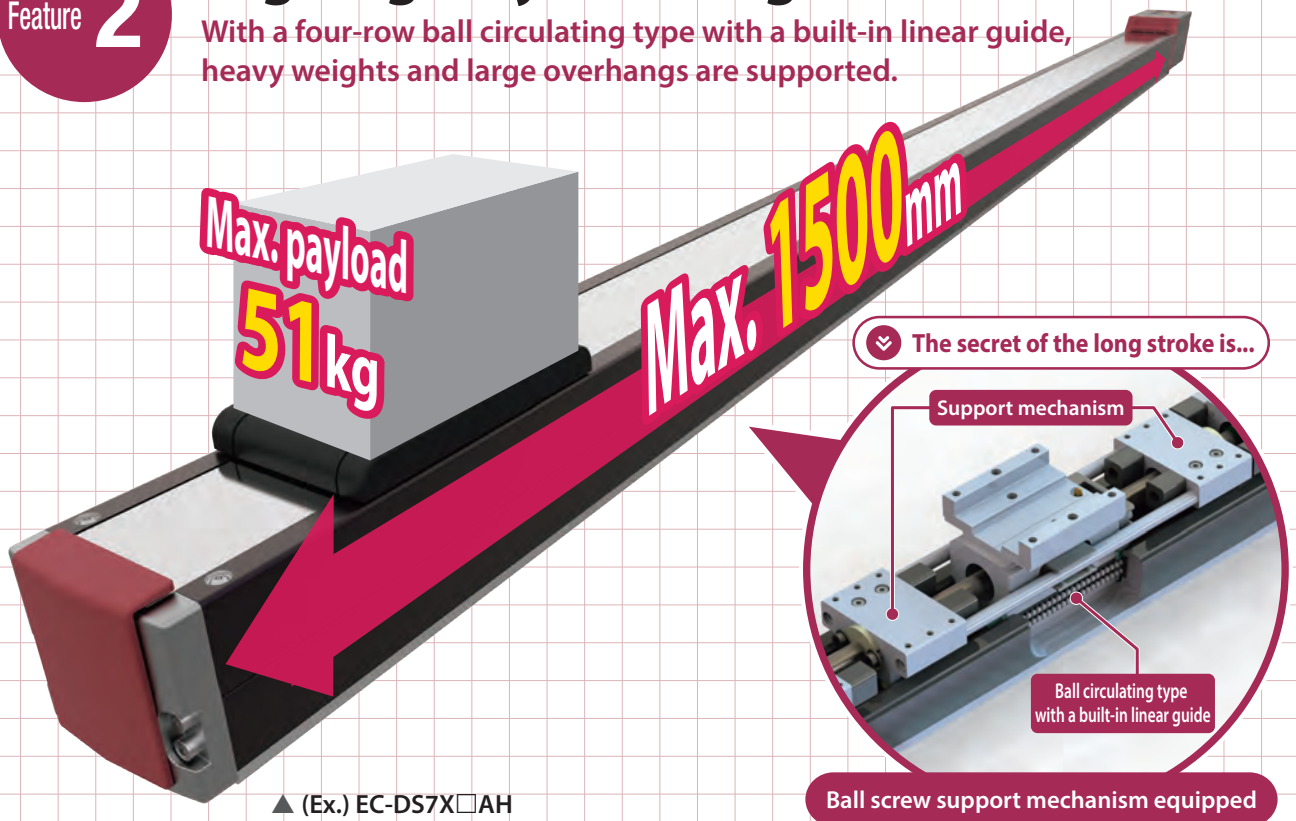


▲ (Ex.) EC-DS3□A

Feature 2

High rigidity and long stroke

**With a four-row ball circulating type with a built-in linear guide,
heavy weights and large overhangs are supported.**



▲ (Ex.) EC-DS7X□AH

Feature 3

All models compatible with digital speed controllers

Simply select and enter numbers. It just works!
Because the setting conditions can be grasped numerically, adjustment after startup is also simple.

Easy setting

Level	Speed (V)
Forward (F)	10
Backward (B)	8

Easy setup (10 levels)

AVD settings

%	A	V	D
F	30	70	20
B	80	100	50

AVD (acceleration/ velocity/deceleration)

Cycle time

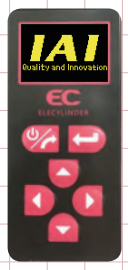
	Time (S)
Forward (F)	0.7
Backward (B)	1.2

Cycle time display

Possible with digital speed controller

- Basic settings (position, acceleration, speed, deceleration)
- Present position upload · Test runs
- Jogging · Brake release
- Motor power ON/OFF
- Cycle time confirmation
- Error display · Alarm reset

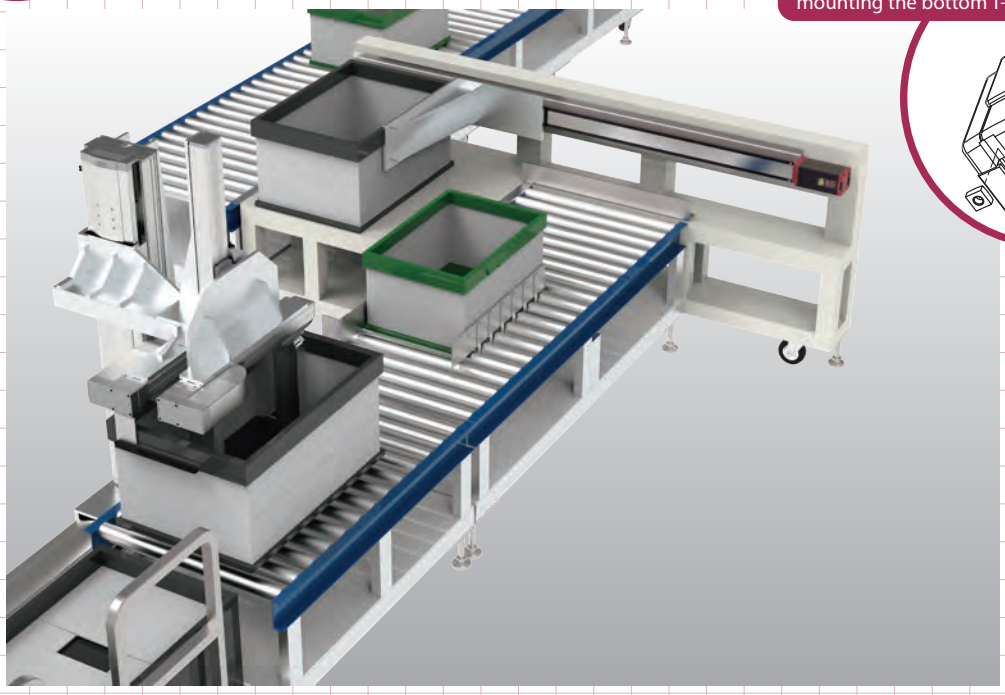
Digital speed controller



Feature 4

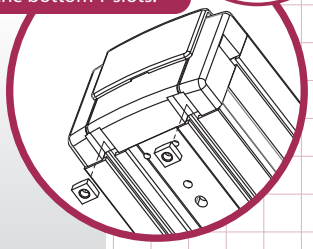
Unlimited installation orientation

The long-stroke model remains available for vertical, horizontal, and ceiling mounting.



▲ Side mounting example (container assembly/transfer equipment)

Fixing nut holders are included with the square nuts for mounting the bottom T-slots.



Video here

Long stroke slider type ELECYLINDER product page to view the demo video:

Model Specification Items

ELECYLINDER® Slider Type

EC – [ ] [ ] [ ] A – [ ] – [ ] – [ ]

Series | Digital speed controller | Type | Lead | Specifications | Stroke | Power I/O cable length | Options

Digital speed controller

Left blank	Without digital speed controller
D	With digital speed controller

Type

S3	Slider 35mm width
S4	Slider 44mm width
S6	Slider 63mm width
S7	Slider 73mm width

Specifications

A	Long stroke supported

Lead

<(D)S3□A>

L	Lead 2mm
M	Lead 4mm
H	Lead 6mm

<(D)S4□A>

L	Lead 2.5mm
M	Lead 5mm
H	Lead 10mm
S	Lead 16mm

<(D)S6□A>

L	Lead 3mm
M	Lead 6mm
H	Lead 12mm
S	Lead 20mm

<(D)S7□A>

L	Lead 4mm
M	Lead 8mm
H	Lead 16mm
S	Lead 24mm

Stroke

0	Without cable Power I/O connector included (Note)
(S)1	1 m
↕	↕
(S)10	10 m

(every 1m)

(S): 4-way connector cable
(Note): A power I/O connector is not included if RCON-EC connection specification (ACR) is selected

<(D)S3□A>

200	200mm
↕	↕
400	400mm

<(D)S4□A>

250	250mm
↕	↕
500	500mm

<(D)S6□A>

250	250mm
↕	↕
800	800mm

<(D)S7□A>

350	350mm
↕	↕
800	800mm

(every 50mm)

Power I/O cable length / Options

Left blank	Incremental encoder specification NPN specification, no options
ACR	RCON-EC connection specification*1
B	With brake
FT	Foot bracket
G1/G5	Designated grease specification*2
MOB	Motor mounting direction change (bottom)*3
MOL	Motor mounting direction change (left)*3
MOR	Motor mounting direction change (right)*3
MOT	Motor mounting direction change (top)*3
NM	Non-motor end specification
PN	PNP specification*1
SR	Slider part roller specification
TMD2	Split motor and controller power supply specification*1
W	Double slider specification*2*4
WA	Battery-less absolute encoder specification
WL	Wireless communication specification
WL2	Wireless axis operation specification

*1 "PN" and "TMD2" cannot be selected if "ACR" is selected.
*2 "G1/G5" and "W" cannot be used together.
*3 Available only for S3/S4 types.
Be sure to select one of the codes.
*4 Available only for S6/S7 types.

ELECYLINDER® High Rigidity Slider Type

EC – [ ] [ ] [ ] AH – [ ] – [ ] – [ ]

Series | Digital speed controller | Type | Lead | Specifications | Stroke | Power I/O cable length | Options

Digital speed controller

Left blank	Without digital speed controller
D	With digital speed controller

Type

S6X	Slider 63mm width (with support mechanism)
S7X	Slider 75mm width (with support mechanism)

Specifications

AH	High rigidity

Lead

<(D)S6X□AH>

L	Lead 3mm
M	Lead 6mm
H	Lead 12mm
S	Lead 20mm

<(D)S7X□AH>

L	Lead 4mm
M	Lead 8mm
H	Lead 16mm
S	Lead 24mm

Stroke

0	Without cable Power I/O connector included (Note)
(S)1	1 m
↕	↕
(S)10	10 m

(every 1m)

(S): 4-way connector cable
(Note): A power I/O connector is not included if RCON-EC connection specification (ACR) is selected

<(D)S6X□AH>
Lead L

450	450mm
↕	↕
1000	1000mm

Lead M

450	450mm
↕	↕
1400	1400mm

Lead H/S

450	450mm
↕	↕
1500	1500mm

<(D)S7X□AH>
Lead L

550	550mm
↕	↕
1100	1100mm

Lead M/H/S

550	550mm
↕	↕
1500	1500mm

(every 50mm)

Power I/O cable length / Options

Left blank	Incremental encoder specification NPN specification, no options
ACR	RCON-EC connection specification*1
B	With brake
G5	Designated grease specification
NM	Non-motor end specification
PN	PNP specification*1
SR	Slider part roller specification
TMD2	Split motor and controller power supply specification*1
WA	Battery-less absolute encoder specification
WL	Wireless communication specification
WL2	Wireless axis operation specification

*1 "PN" and "TMD2" cannot be selected if "ACR" is selected.

Specification Tables

Type	Lead		Stroke (mm) and max speed (mm/s) *Length of band = Stroke, * Numbers in band = Maximum speed by stroke, Numbers in < > are for vertical specification	Max. payload (kg)		Reference page
	Model	mm	200 250 300 350 400 450 500 550 600 650 700 750 800 850 900 950 1000 1050 1100 1150 1200 1250 1300 1350 1400 1450 1500	Horizontal	Vertical	
(D)S3□A	H	6	420	3.5	1.5	P7
	M	4	280	6	2.5	
	L	2	140	9	3.5	
(D)S4□A	S	16	800	7	1.5	P13
	H	10	700 600	12	2.5	
	M	5	350 300	15	5	
	L	2.5	175 <150> 150	18	6.5	
(D)S6□A	S	20	800 700 620	15	1	P19
	H	12	700 560 500 430 380 330	26	2.5	
	M	6	450 410 340 290 250 210 180 160	32	6	
	L	3	225 200 170 140 120 105 90 80	40	12.5	
(D)S7□A	S	24	860	37	3	P25
	H	16	700 620 550	46	8	
	M	8	420 410 350 305 275	51	16	
	L	4	210 <175> 190 <175> 170 145 125	51	19	
(D)S6X□AH	S	20	1280 <1120> 1120 970 940 860 790 730 640 610 580 540 470 450 430 400	15	1	P31
	H	12	900 <800> 860 <800> 770 680 620 560 510 460 425 380 360 330 315 285 270 250 235 220	26	2.5	
	M	6	450 430 380 340 310 280 255 230 210 185 175 165 140 135 125 115	32	6	
	L	3	225 210 190 165 145 135 125 115	40	16	
(D)S7X□AH	S	24	1230 <1080> 1160 <1080> 1080 990 920 850 770 735 680 635 565 550	37	3	P35
	H	16	980 <840> 920 <840> 835 760 700 645 590 555 510 470 440 420 375 355	46	8	
	M	8	420 375 345 310 285 255 245 230 215 190 180 170	51	16	
	L	4	195 <175> 175 165 150	51	25	

◎ **For 200mm stroke and lower slider types, refer to the IAI General Catalog 2021, Volume 2.**

Energy-Saving Setting

For ELECYLINDER®, parameter No. 8 enables selecting enabled/disabled for the energy-saving setting.

When enabled, the power capacity can be reduced by up to 40% compared to when the setting is disabled.
Elsewhere, the maximum speed, acceleration/deceleration, and payload will be lower than with the setting disabled.
When disabled, the maximum speed, acceleration/deceleration, and payload will be higher than with the setting enabled.
Refer to the "Table of Payload by Speed/Acceleration" and "Stroke and Max. Speed" on each product specification page for more details.

The energy-saving setting is disabled at shipping.

Mode	Parameter name/notation	Features
Power mode (Setting at shipping)	Energy-saving setting disabled	High specs
Energy-saving mode	Energy-saving setting enabled	High energy-saving effect