

EDA115

High-precision, high-load servo electric cylinder with customizable stroke EDA115

PRODUCT

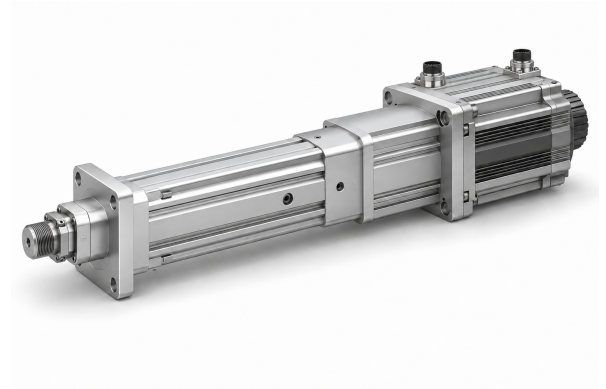
A servo electric cylinder for guided linear motion in a machine or production line.

TECHNICAL SPECIFICATIONS

Limit switch	Magnetic switch
Maximum allowed speed	≤ 250 mm/s
Maximum thrust allowed	≤ 50 kN
Rotation angle of piston rod	± 0.3 deg
Scalable length	≤ 2000 mm
internal diameter	$\phi 100$ mm

SELECTION

Choose thrust, stroke, and speed as one duty. A catalog maximum does not mean the other maximums apply at the same time. Confirm screw lead, motor mounting, gear reduction, and the load connection before ordering.



Product illustration

BASIC PARAMETERS

(Note: Thrust, stroke, and speed should be combined with actual usage, and the upper limit values of the three cannot be used together.)

Outer diameter	internal diameter	Maximum thrust allowed	Scalable length	Maximum allowed speed	Maximum allowed speed Rotation angle of piston rod Limit switch	Limit switch
112x112 mm	$\phi 100$ mm	≤ 50 kN	≤ 2000 mm	≤ 250 mm/s	± 0.3 deg	Magnetic switch

DRIVE AND MOTOR OPTIONS

Lead of ball screw	Synchronous wheel speed ratio (input: output)	Synchronous wheel speed ratio (input: output)	Synchronous wheel speed ratio (input: output)	Motor specifications that can be directly installed	Motor specifications that can be directly installed	Reducers that can be matched	Reducers that can be matched
05mm	1:1	1.5:1	2:1	13A	180A	115A	80A 100A , , 130A, 180A
10mm	1:1	1.5:1	2:1	13A	180A	115A	80A 100A , , 130A, 180A
20mm	1:1	1.5:1	2:1	13A	180A	142A	130A, 180A
40mm	1:1	1.5:1	2:1	13A	180A	142A	130A, 180A

BALL-SCREW PARAMETERS

(Note: The parameters of the ball screw are applicable to strokes ≤ 300 mm. For strokes greater than 300 mm, please consult our technical personnel.)

Ball screw model	Type	Diameter	Lead of ball screw	Ca (KN)	Coa (KN)	Ball screw rigidity	Ball diameter	Screw shaft	Slenderness ratio	Accuracy Positioning accuracy level	Accuracy Positioning accuracy level
SFNU4005-4	Ball screw	40 mm	05mm	20.6 KN	78.3 KN	63Kg/um	3.175mm	35K10	1:50	C5/+/-0.01	C7/+/-0.02
SFNU4010-4	Ball screw	40 mm	10mm	52.9 KN	152 KN	73Kg/um	6.35mm	35K10	1:50	C5/+/-0.01	C7/+/-0.02

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Electric Cylinders

BALL-SCREW PARAMETERS (CONTINUED)

Ball screw model	Type	Diameter	Lead of ball screw	Ca (KN)	Coa (KN)	Ball screw rigidity	Ball diameter	Screw shaft	Slenderness ratio	Accuracy Positioning accuracy level	Accuracy Positioning accuracy level
SFA4020-2.8	Ball screw	40 mm	20mm	38.8 KN	105 KN	54Kgf/um	6.35mm	35K10	1:50	C5/+/-0.01	C7/+/-0.02
SFA4040-1.8	Ball screw	40 mm	40mm	25.3 KN	65 KN	34Kgf/um	6.35mm	35K10	1:50	C5/+/-0.01	C7/+/-0.02
SFA4040-1.8	Ball screw	40 mm	40mm	37 KN	101.4 KN	52Kgf/um	6.35mm	35K10	1:50	C5/+/-0.01	C7/+/-0.02

BEARING PARAMETERS

Bearing model	Cr (KN)	Cor (KN)
angular contact ball bearing 7009C/DT	24.4 KN	19.3 KN
Flat thrust bearing 51309	80 KN	163 KN

TIMING PULLEYS AND BELT

Synchronous wheel speed ratio	Driving gear specifications	Driven gear specifications	Number of active gear teeth	Number of driven wheel teeth	Center distance of synchronous wheel	Synchronous belt circumference	Synchronous belt width
1:1	8M50T59	8M50T59	40	40	176mm	672	50mm
1.5:1	8M50T59	8M50T59	30	45	176mm	656	50mm
2:1	8M50T59	8M50T59	30	60	176mm	720	50mm

DIMENSION CORRESPONDENCE TABLE (MM)

Load connection type	phiA	phiB	phiC	C	D	E	F	H	G	M
External thread	phi90	phi75	-	60	110	5	14	-	-	M40x1.5
Internal thread	phi90	phi75	-	40	30	5	-	-	-	M24
Type I connector	phi90	phi75	phi35	-	215	5	35	55	-	-
Fisheye bearing	phi90	phi75	phi35	-	140	5	25	-	-	-
Y-joint	phi90	phi75	phi35	-	215	5	35	73	70	-